

Basic equipment, Golf Variant and Bora Variant from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

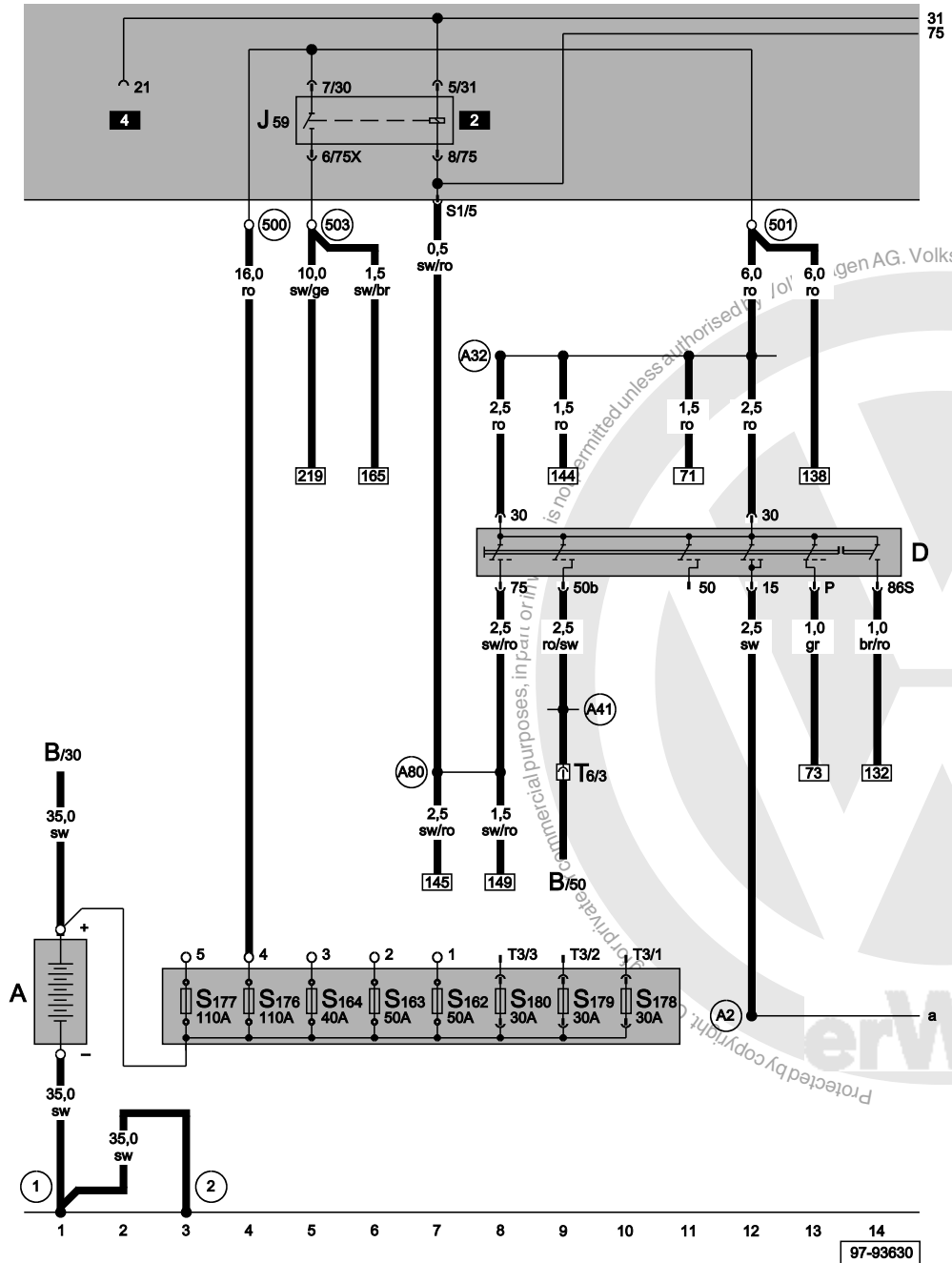
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding

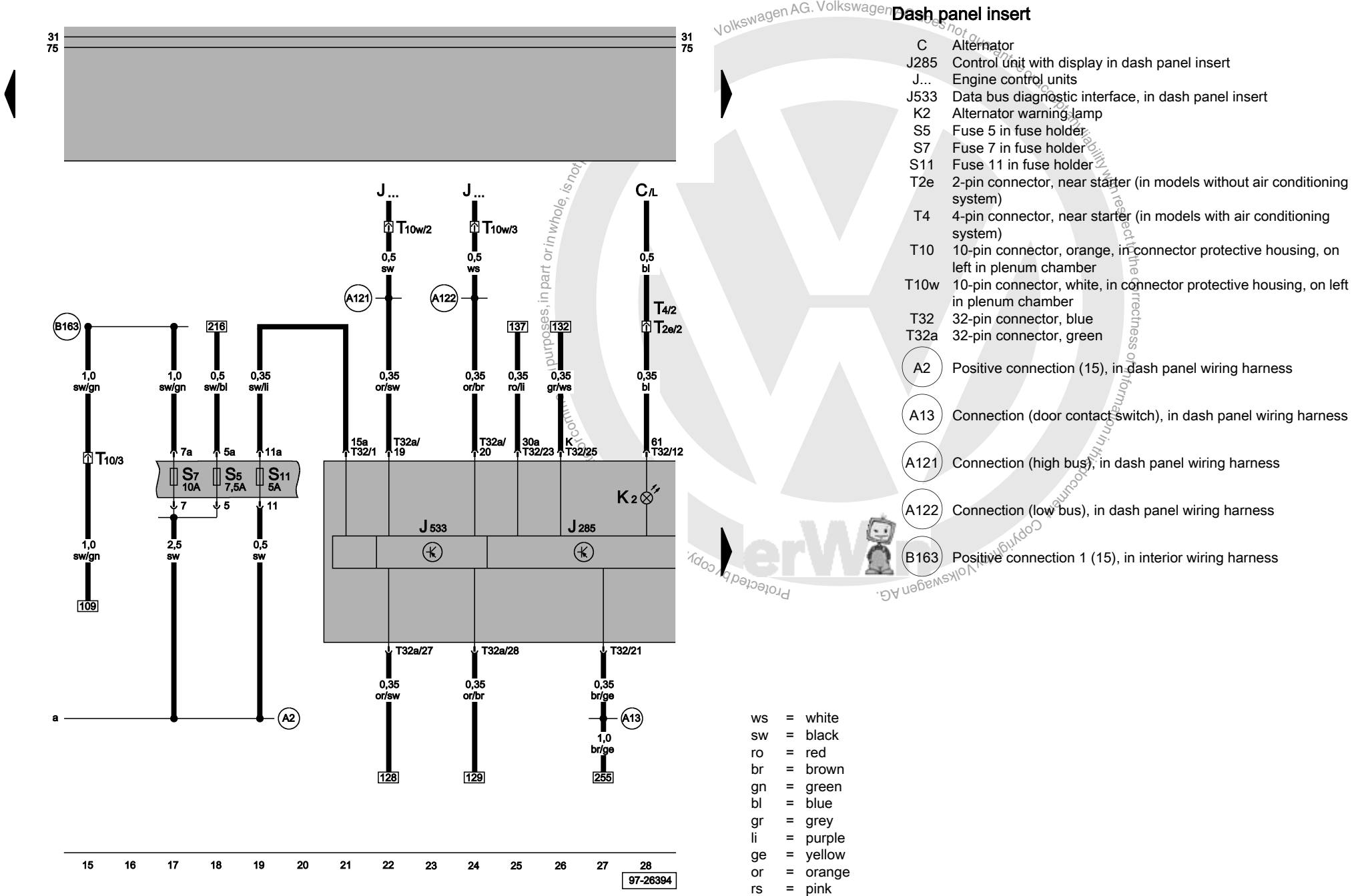




Battery, ignition/starter switch, X-contact relief relay

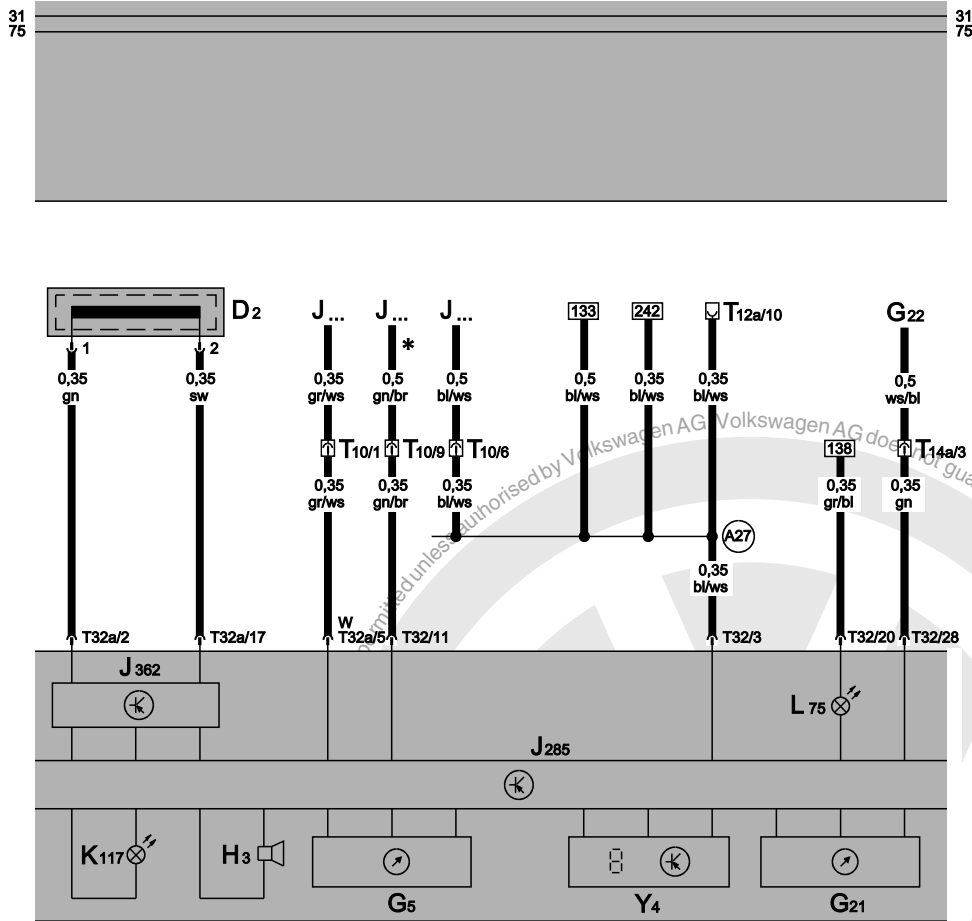
- A Battery
- B Starter
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S164 Fuse 3 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- S178 Fuse 6 (30), in fuse holder on battery
- S179 Fuse 7 (30), in fuse holder on battery
- S180 Fuse 8 (30), in fuse holder on battery
- T3 3-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 1 Earth strap, battery - body
- 2 Earth strap, gearbox - body
- 500 Screw connection 1 (30), on relay plate
- 501 Screw connection 2 (30), on relay plate
- 503 Screw connection (75x), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A41 Positive connection (50), in dash panel wiring harness, (models with petrol engine only)
- A80 Connection 1 (X), in dash panel wiring harness

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Dash panel insert, immobilizer, rev. counter, odometer display, speedometer

- D2 Immobilizer reader coil
 - G21 Speedometer
 - G5 Rev. counter
 - G22 Speedometer sender, in gearbox
 - H3 Warning buzzer
 - J285 Control unit with display in dash panel insert
 - J362 Immobilizer control unit
 - J... Engine control units
 - K117 Immobilizer warning lamp
 - L75 Digital display illumination bulb
 - T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
 - T12a 12-pin connector, Climatronic connection only
 - T14a 14-pin connector, in cable channel left in engine compartment
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
 - Y4 Odometer display
- (A27) Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit

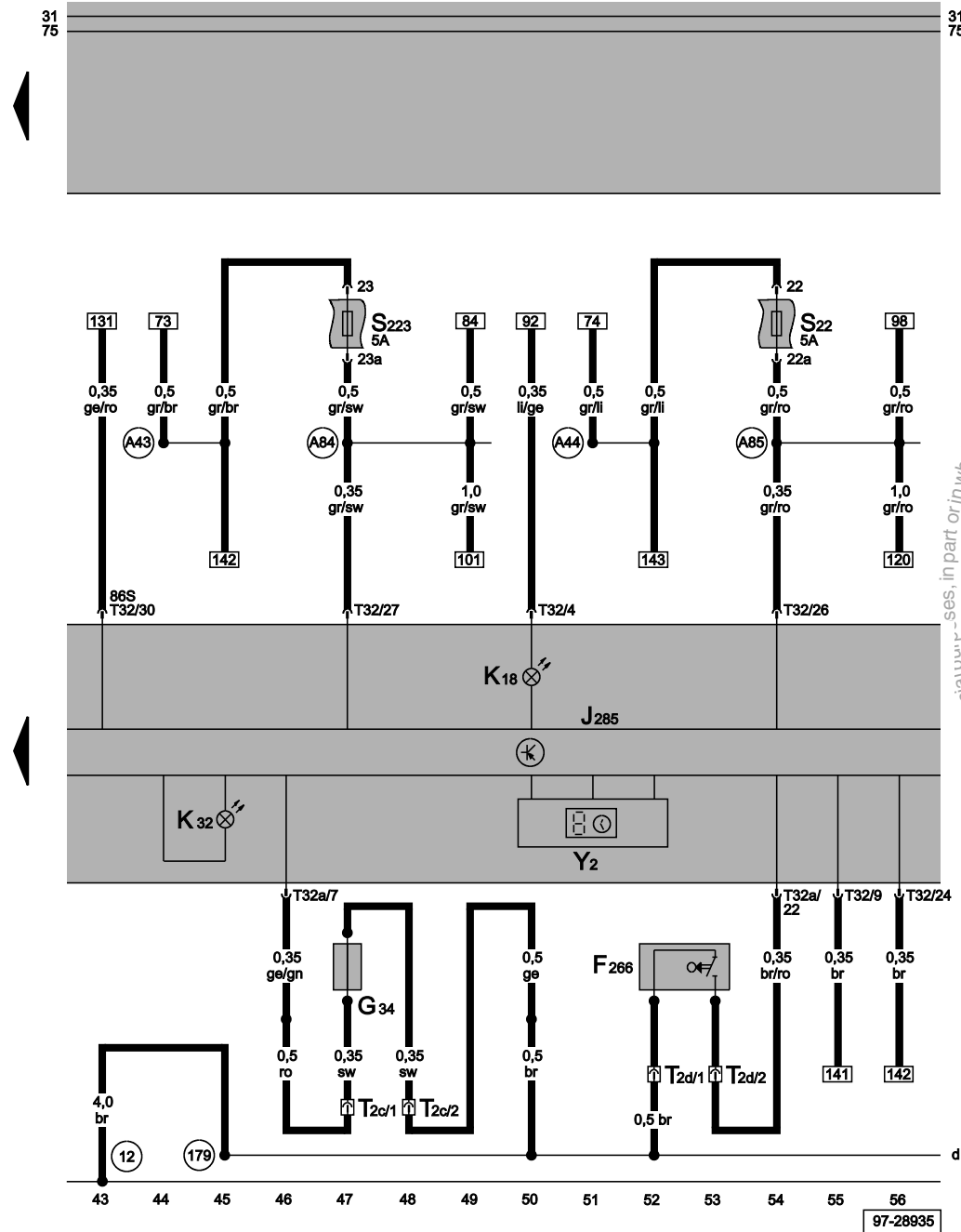


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Dash panel insert, trailer operation warning lamp, digital clock, bonnet contact switch, front left brake pad wear sender, front left brake pad wear sender, brake pad warning lamp

- F266 Bonnet contact switch, in lock part
- G34 Front left brake pad wear sender
- J285 Control unit with display in dash panel insert
- K18 Trailer operation warning lamp
- K32 Brake pad warning lamp
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T2c 2-pin connector, near front left brake pad wear sender
- T2d 2-pin connector, near right headlight
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- Y2 Digital clock

- 12 Earth point, on left in engine compartment
- 179 Earth connection, in left headlight wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness

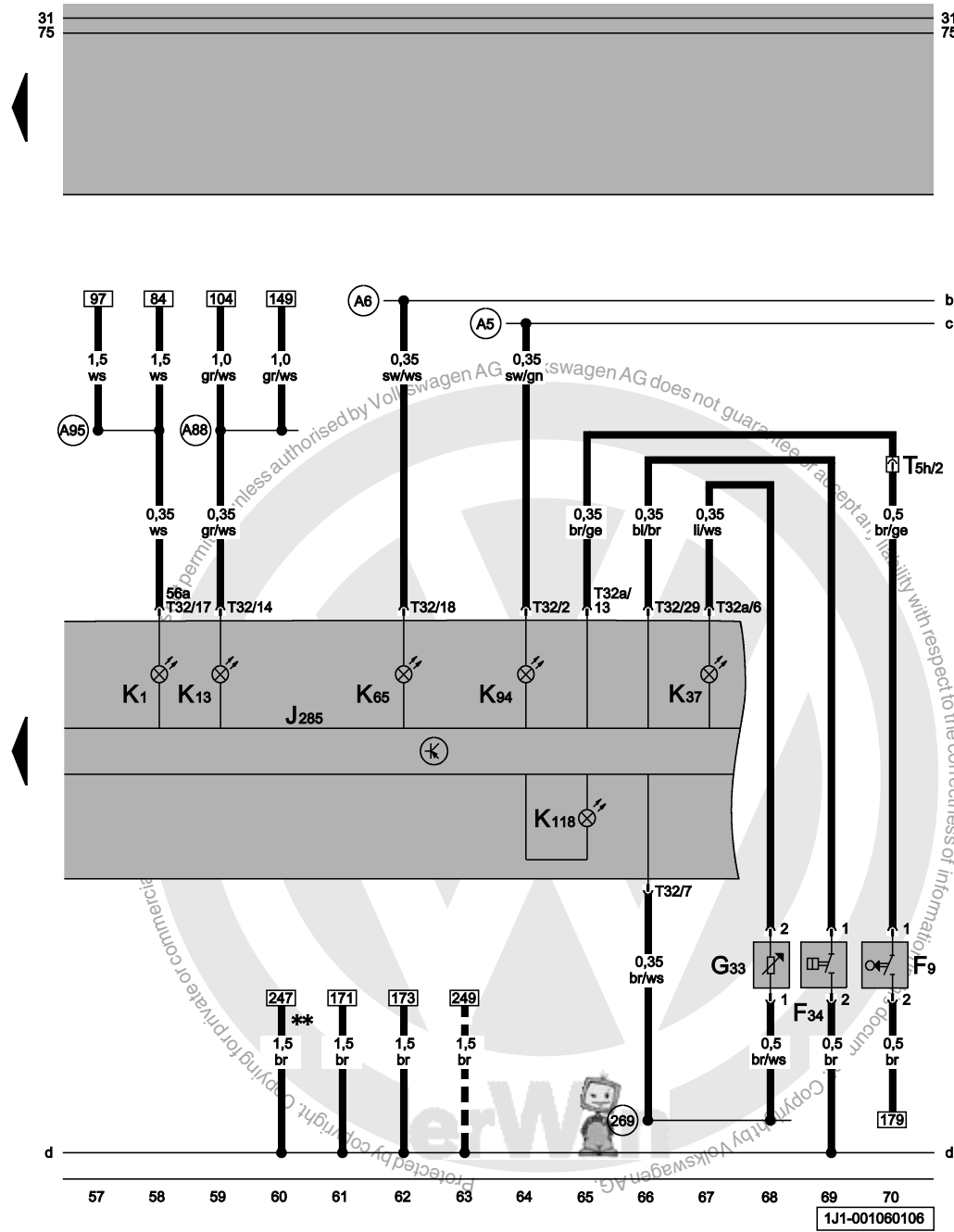


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Dash panel insert, brake system warning lamp, brake fluid level warning contact, turn signal warning lamps, main beam warning lamp, rear fog light warning lamp

- F9 Handbrake warning switch
- F34 Brake fluid level warning contact
- G33 Windscreen washer fluid level sender
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K13 Rear fog light warning lamp
- K37 Washer fluid level warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- K118 Brake system warning lamp
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- A88 Connection (RFL), in dash panel wiring harness
- A95 Connection 1 (56a), in dash panel wiring harness
- ** only models up to August 2000
- only models from September 2000



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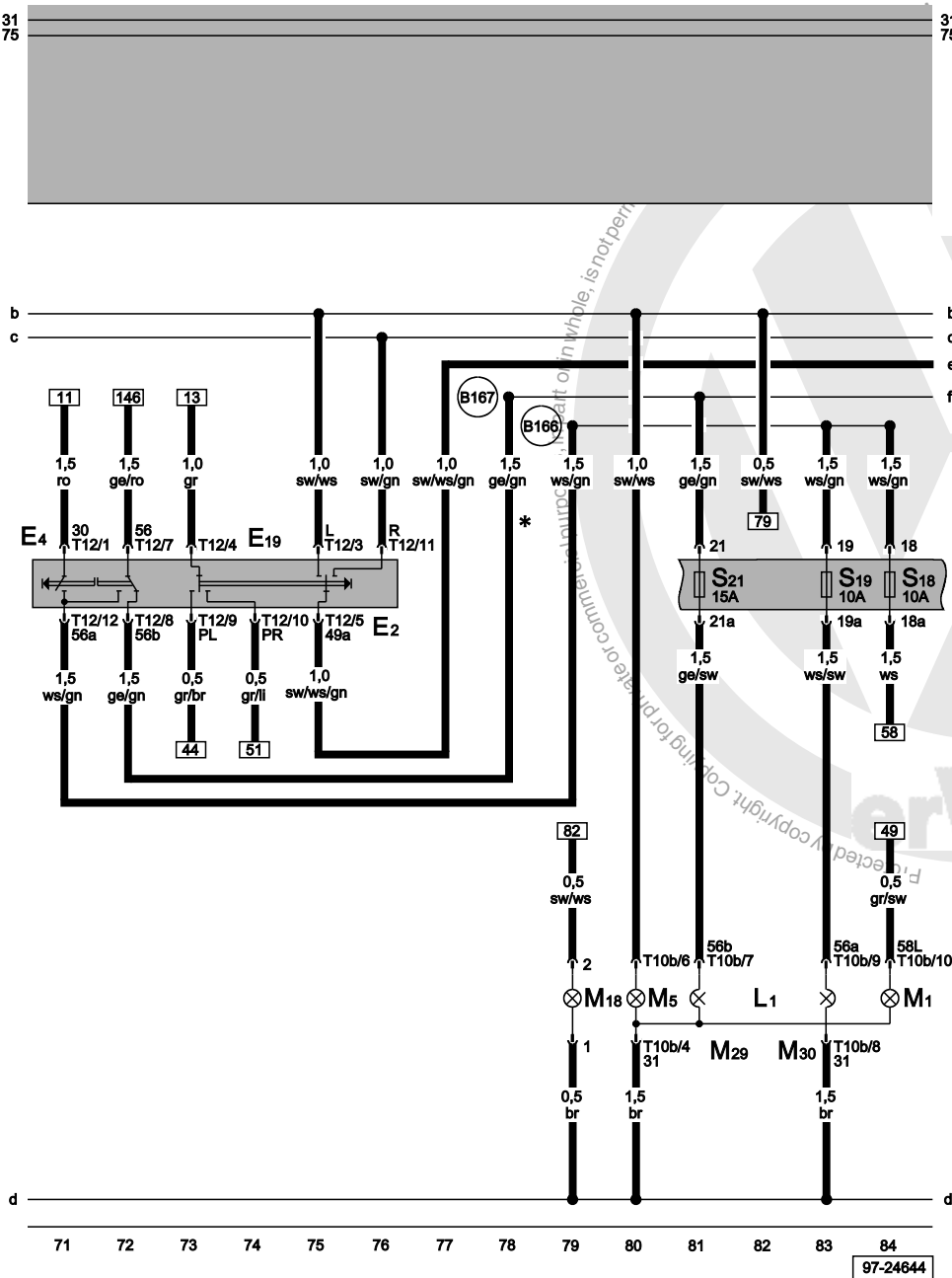
Turn signal switch, headlight dipper/flasher switch, parking light switch, front left headlight, front left turn signal

- E2 Turn signal switch
- E4 Headlight dipper/flasher switch
- E19 Parking light switch
- L1 Left twin filament bulb*
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left headlight dipped beam bulb (only Golf Variant)
- M30 Left headlight main beam bulb (only Golf Variant)
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

B166 Connection (56a), in interior wiring harness

B167 Connection (56b), in interior wiring harness

* only Bora Variant



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Hazard warning light switch, turn signal relay, front right headlight, front right turn signal

- E3 Hazard warning light switch
- J1 Turn signal relay
- K6 Hazard warning light system warning lamp
- L2 Right twin filament bulb*
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right headlight dipped beam bulb (only Golf Variant)
- M32 Right headlight main beam bulb (only Golf Variant)
- T8d 8-pin connector**
- T10c 10-pin connector, on right headlight

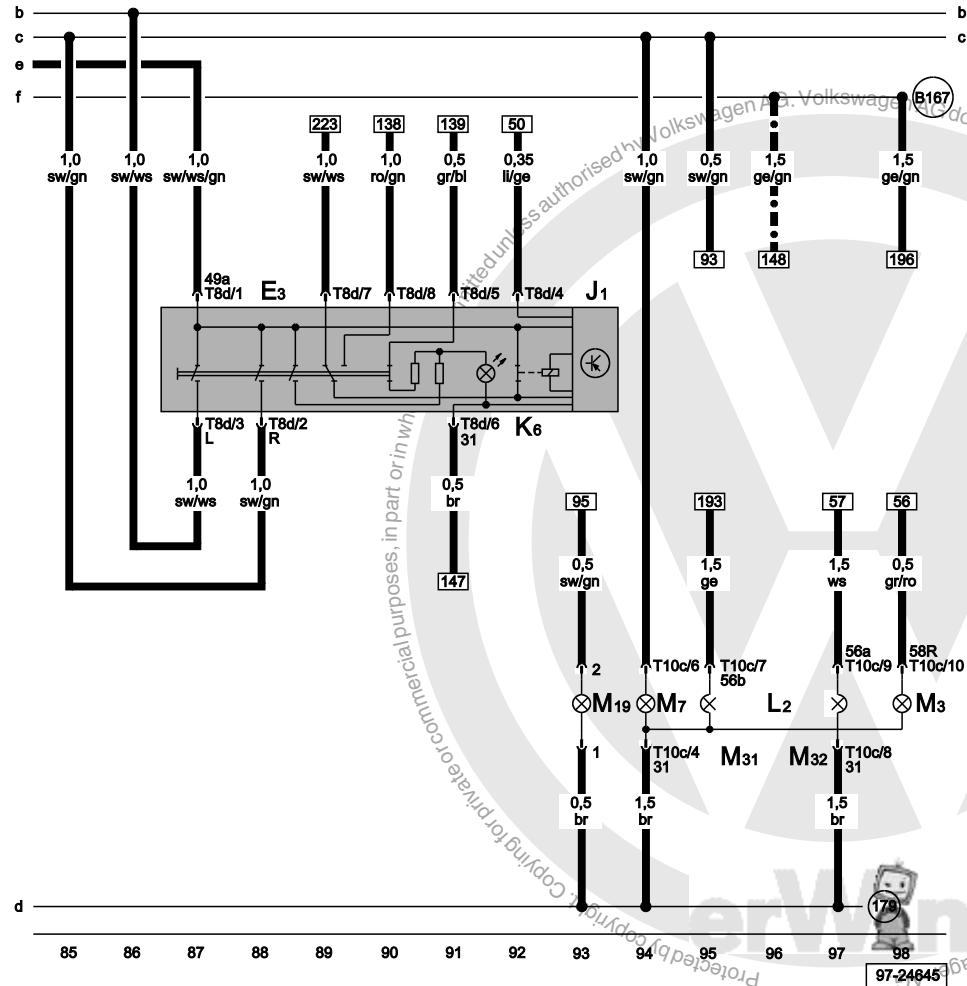
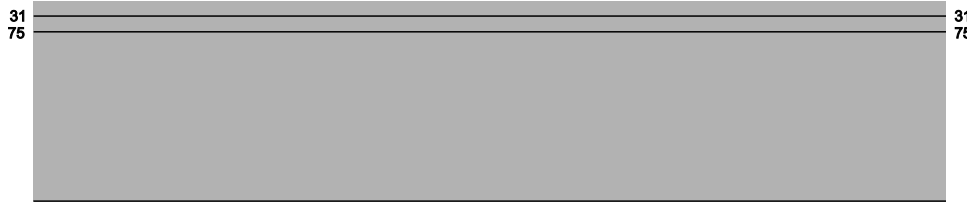
179 Earth connection, in left headlight wiring harness

B167 Connection (56b), in interior wiring harness

* only Bora Variant

** Connection numbering of turn signal relay can vary, see fault finding programme!

-●-●- only Golf Variant



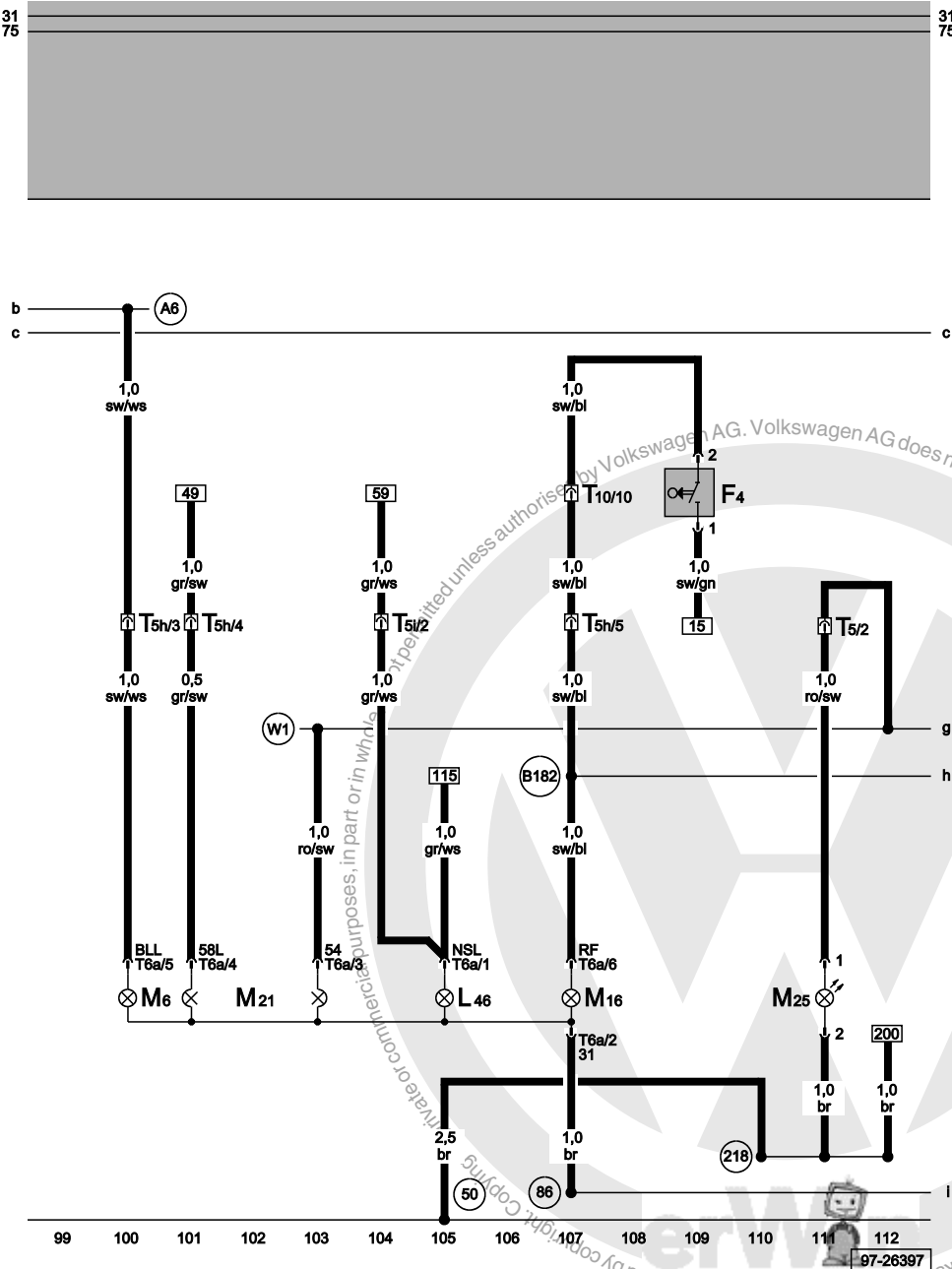
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Left tail light, left brake light, rear left turn signal, left reversing light, reversing lights switch, rear left fog light

- F4 Reversing light switch
- L46 Rear left fog light bulb
- M6 Rear left turn signal bulb
- M16 Left reversing light bulb
- M21 Left brake and tail light bulb
- M25 High level brake light bulb (18 LED's)
- T5 5-pin connector, black, coupling station left D-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

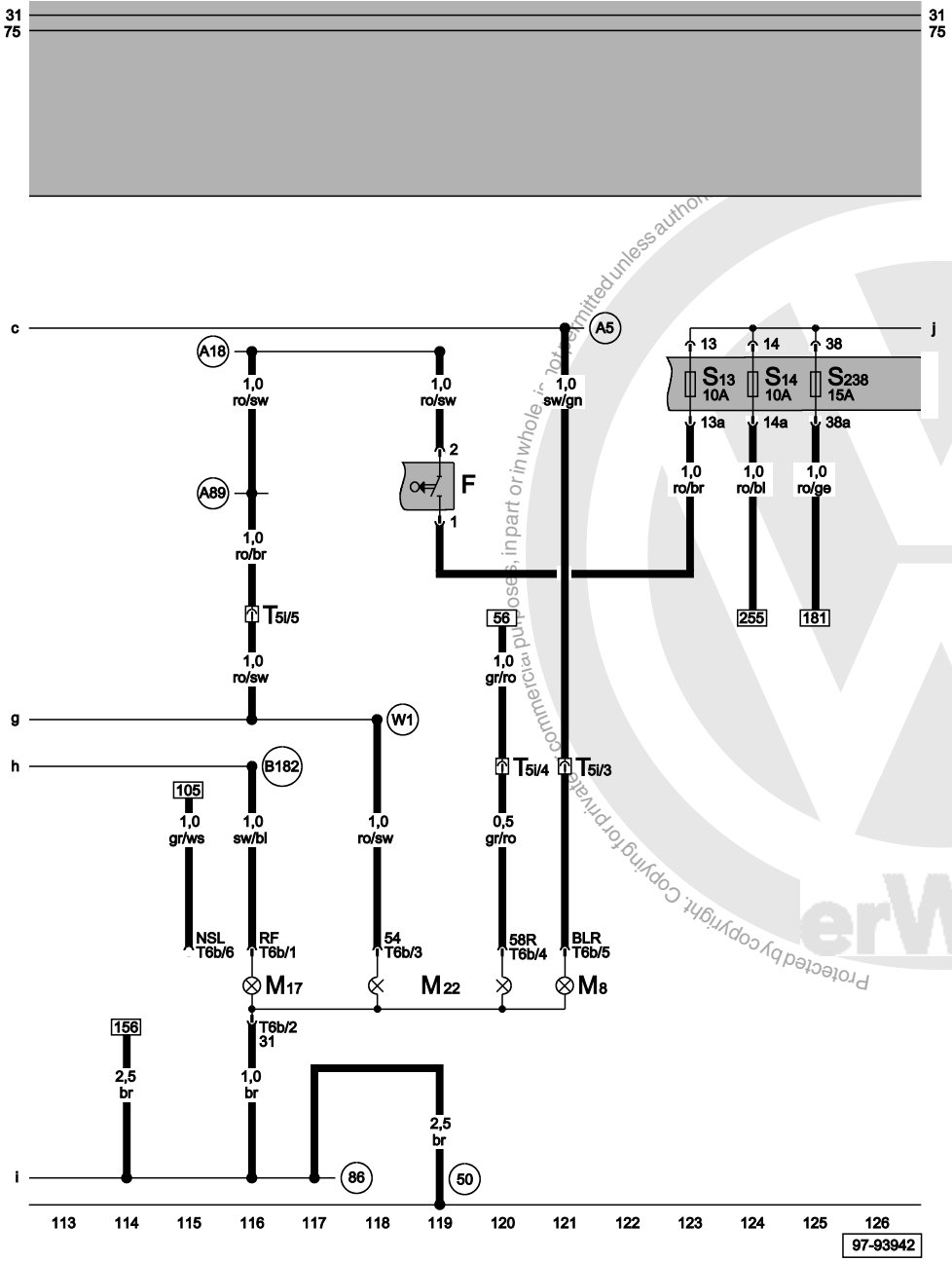
- (50) Earth point, on left in luggage compartment
- (86) Earth connection 1, in rear wiring harness
- (218) Earth connection -1-, in rear lid wiring harness
- (A6) Positive connection (left turn signal), in dash panel wiring harness
- (B182) Connection (RL), in interior wiring harness
- (W1) Positive connection (54), in rear wiring harness

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Right tail light, right brake light, rear right turn signal, right reversing light, brake light switch

- F Brake light switch
- M8 Rear right turn signal bulb
- M17 Right reversing light bulb
- M22 Right brake and tail light bulb
- S13 Fuse 13 in fuse holder
- S14 Fuse 14 in fuse holder
- S238 Fuse 38 in fuse holder
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6b 6-pin connector
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness

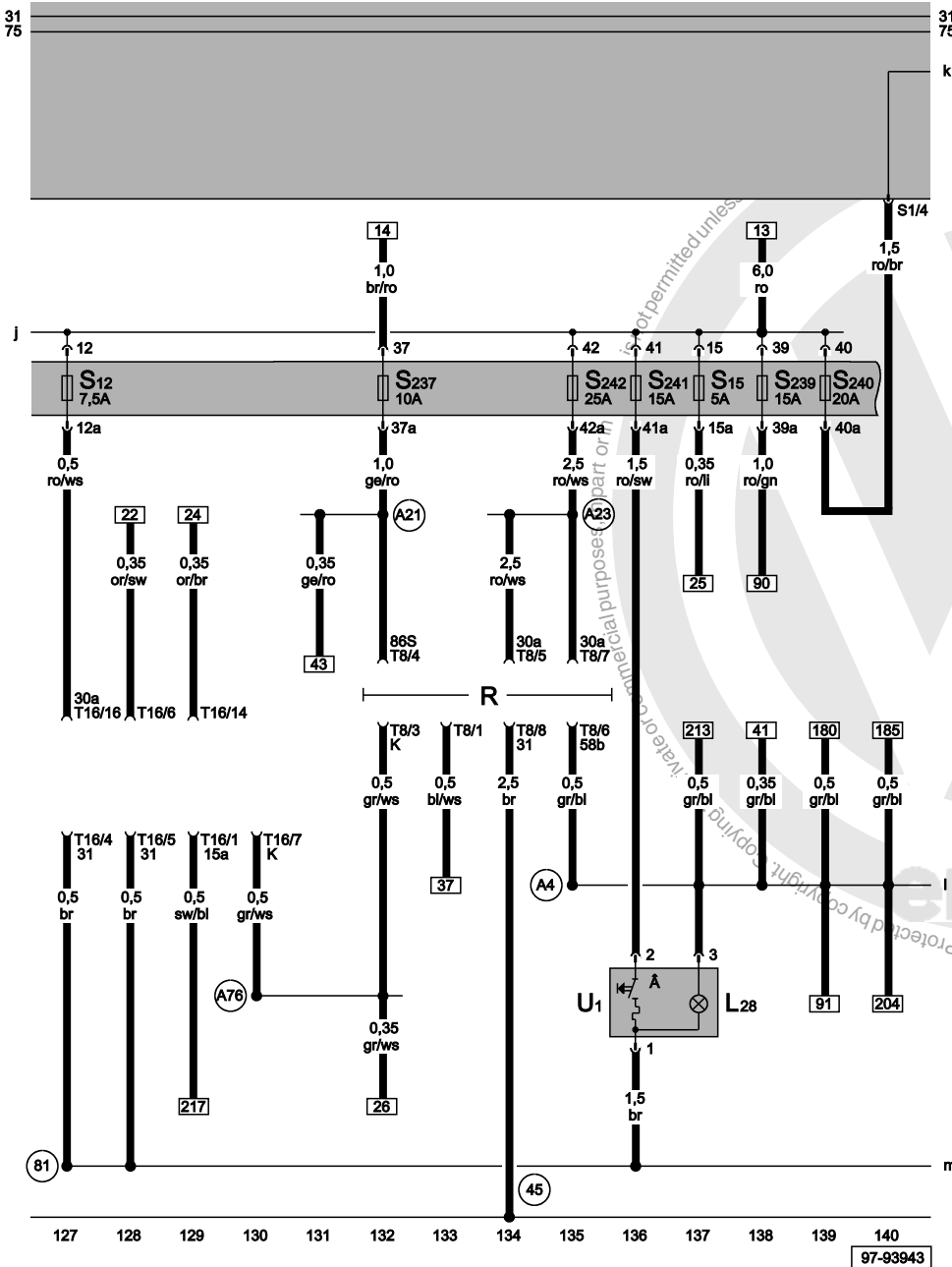


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Self-diagnosis connection, connection for radio, cigarette lighter

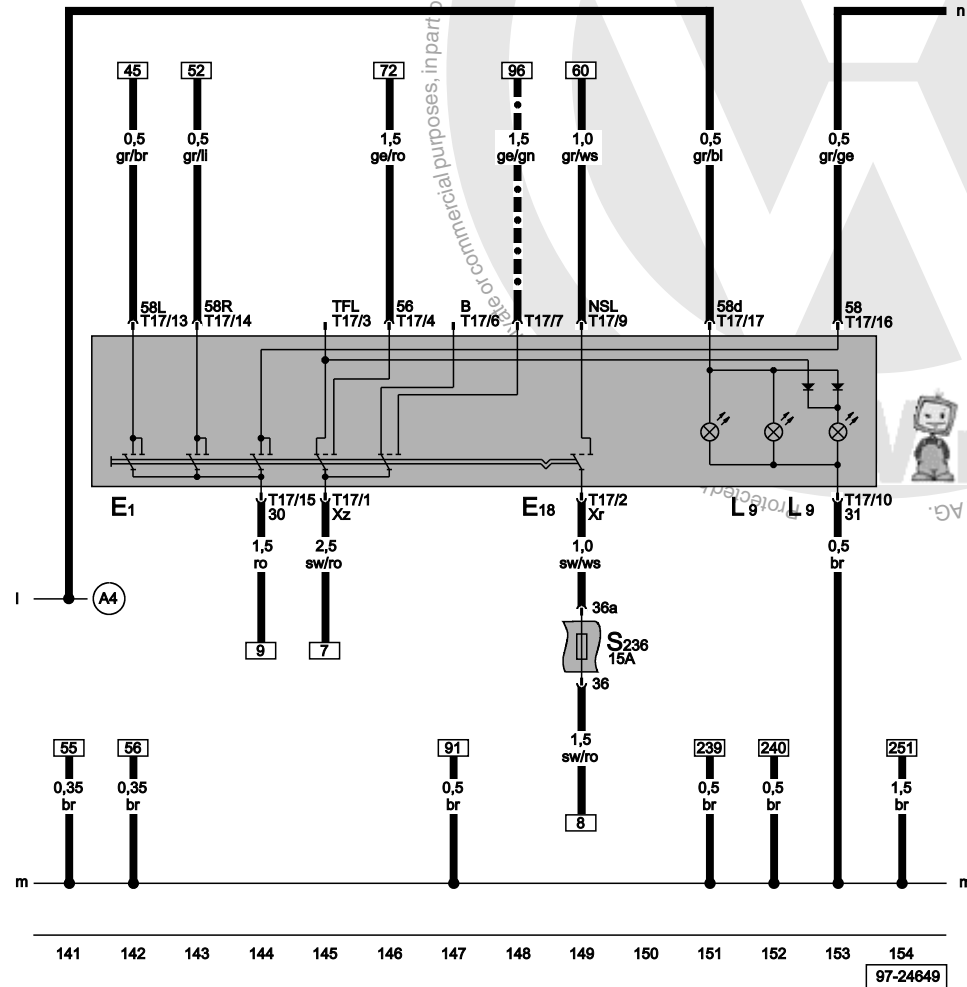
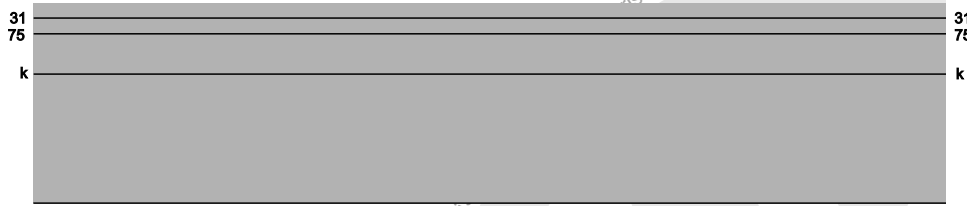
- L28 Cigarette lighter illumination bulb
 - R Radio
 - S12 Fuse 12 in fuse holder
 - S15 Fuse 15 in fuse holder
 - S237 Fuse 37 in fuse holder
 - S239 Fuse 39 in fuse holder
 - S240 Fuse 40 in fuse holder
 - S241 Fuse 41 in fuse holder
 - S242 Fuse 42 in fuse holder
 - T8 8-pin connector, on radio
 - T16 16-pin connector, in centre dash panel, self-diagnosis connection
 - U1 Cigarette lighter
- 45 Earth point, centre behind dash panel
 - 81 Earth connection 1, in dash panel wiring harness
 - A4 Positive connection (58b), in dash panel wiring harness
 - A21 Connection (86s), in dash panel wiring harness
 - A23 Connection (30a), in dash panel wiring harness
 - A76 Connection (diagnosis wire K), in dash panel wiring harness

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Light switch, rear fog light switch

- E1 Light switch
- E18 Rear fog light switch
- L9 Light switch illumination bulb
- S236 Fuse 36 in fuse holder
- T17 17-pin connector
- A4 Positive connection (58b), in dash panel wiring harness
- only Golf Variant

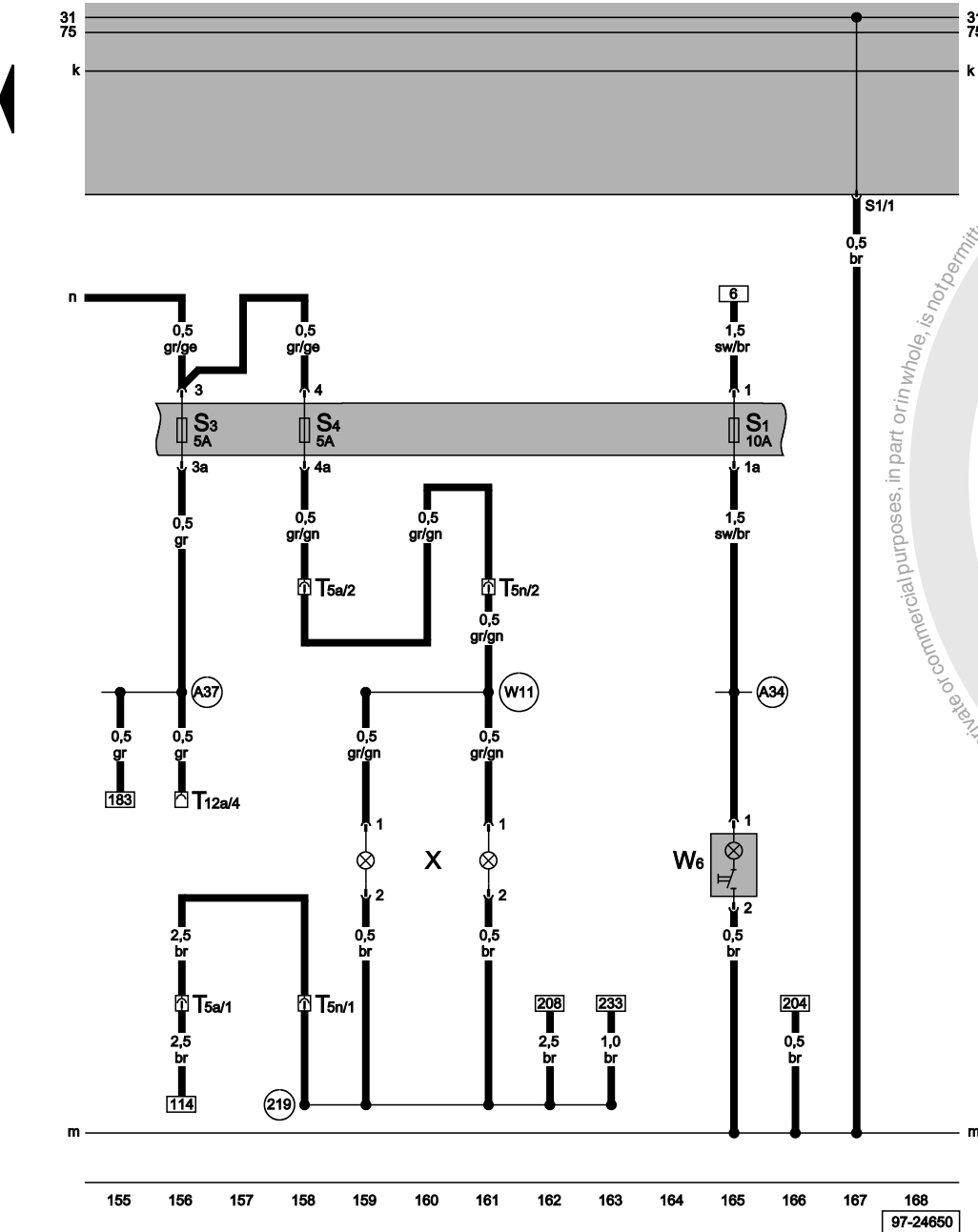


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Glove compartment light, number plate lights

- S1 Fuse 1 in fuse holder
- S3 Fuse 3 in fuse holder
- S4 Fuse 4 in fuse holder
- T5a 5-pin connector, pink, coupling station on right D-pillar
- T5n 5-pin connector, pink, in rear lid
- T12a 12-pin connector, Climatronic connection only
- W6 Glove compartment light
- X Number plate lights

- 219 Earth connection -2-, in rear lid wiring harness
- A34 Connection (75x), in dash panel wiring harness
- A37 Connection (58a), in dash panel wiring harness
- W11 Connection (58), in rear lid wiring harness



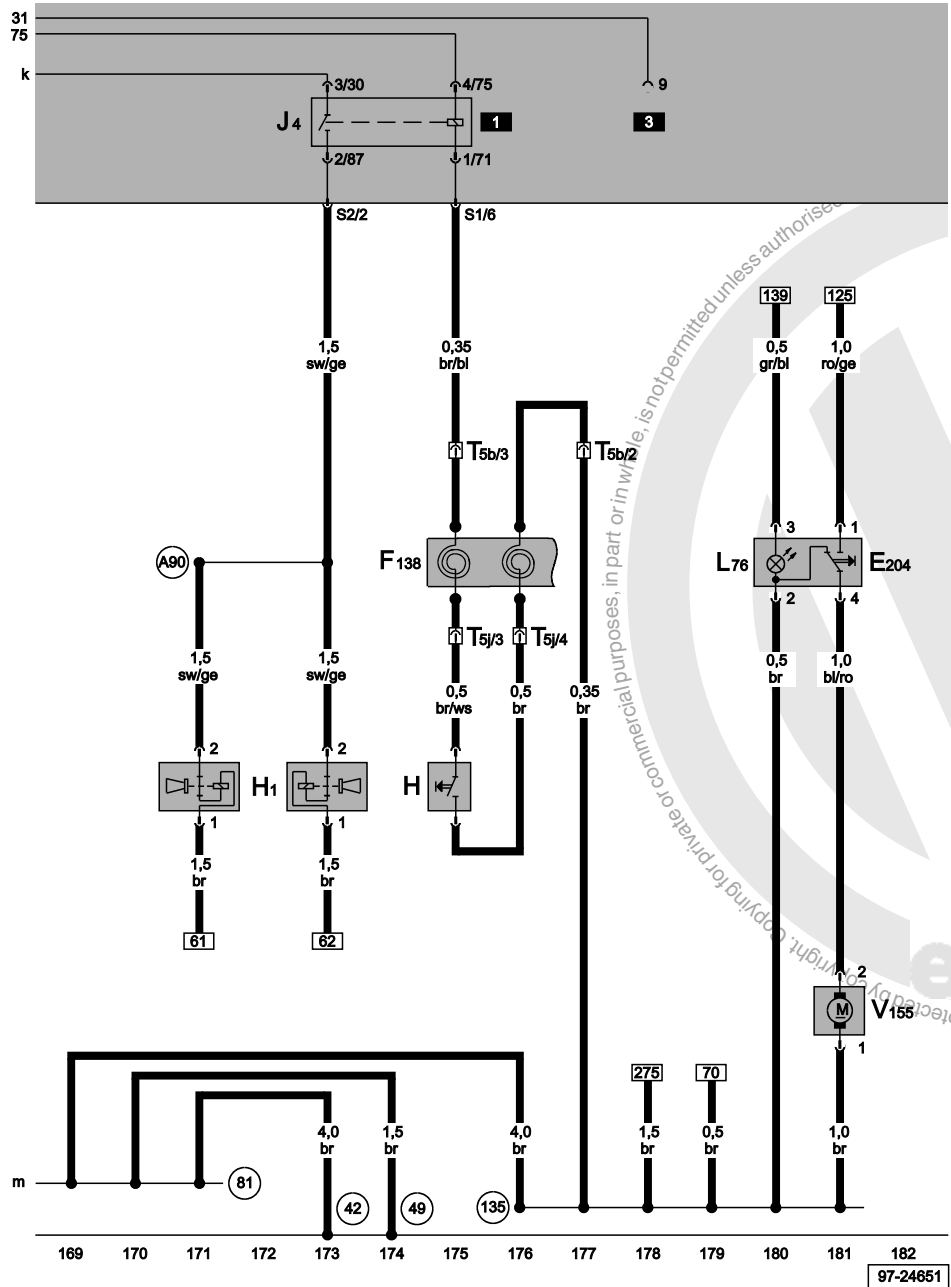
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Dual tone horn, tank filler flap remote release switch, horn plate

- E204 Tank filler flap remote release switch
- F138 Airbag coil connector
- H Horn plate
- H1 Dual tone horn
- J4 Dual tone horn relay
- L76 Button illumination bulb
- T5b 5-pin connector, next to steering column
- T5j 5-pin connector, in the steering wheel
- V155 Tank filler flap locking motor

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A90 Connection (dual tone horn), in dash panel wiring harness

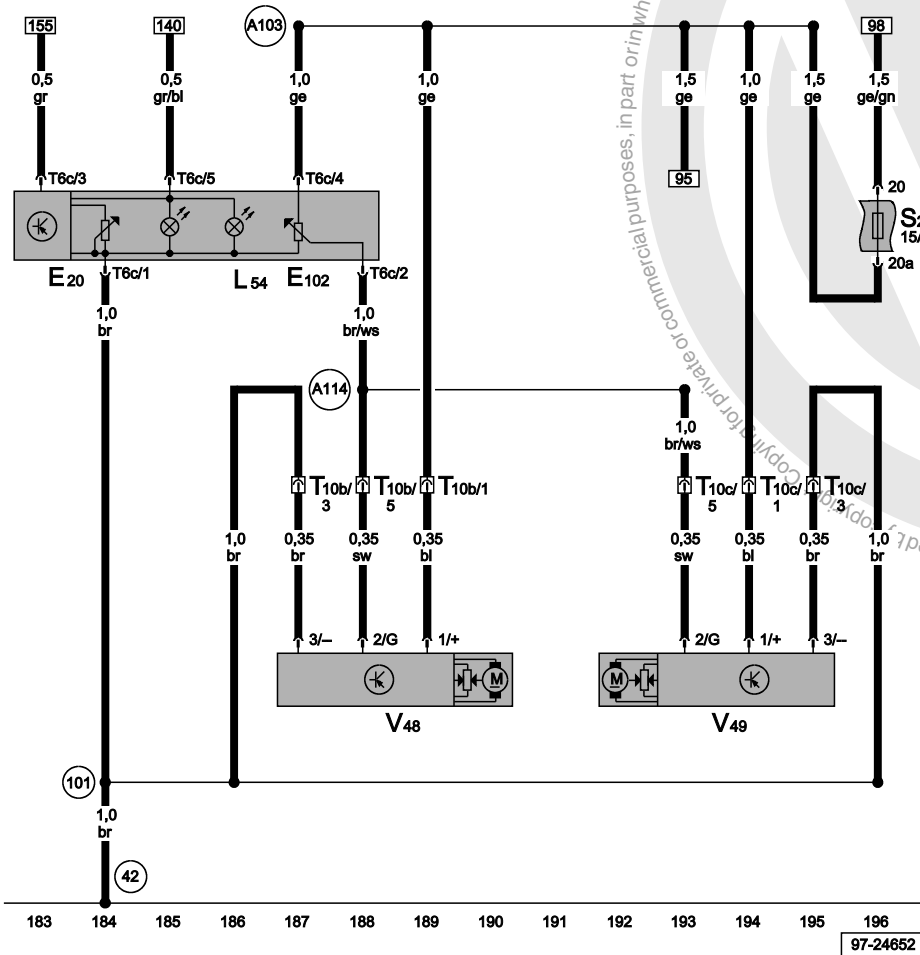
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Headlight range control regulator, headlight range control motor, illumination regulators - switches and instruments

- E20 Illumination regulators - switches and instruments
- E102 Headlight range control regulator
- L54 Headlight range control regulator illumination bulb
- S20 Fuse 20 in fuse holder
- T6c 6-pin connector
- T10b 10-pin connector, on left headlight
- T10c 10-pin connector, on right headlight
- V48 Left headlight range control motor
- V49 Right headlight range control motor

- 42 Earth point, next to steering column
- 101 Earth connection, in headlight range adjustment wiring harness
- A103 Connection 2 (56), in dash panel wiring harness
- A114 Connection (headlight range control), in dash panel wiring harness

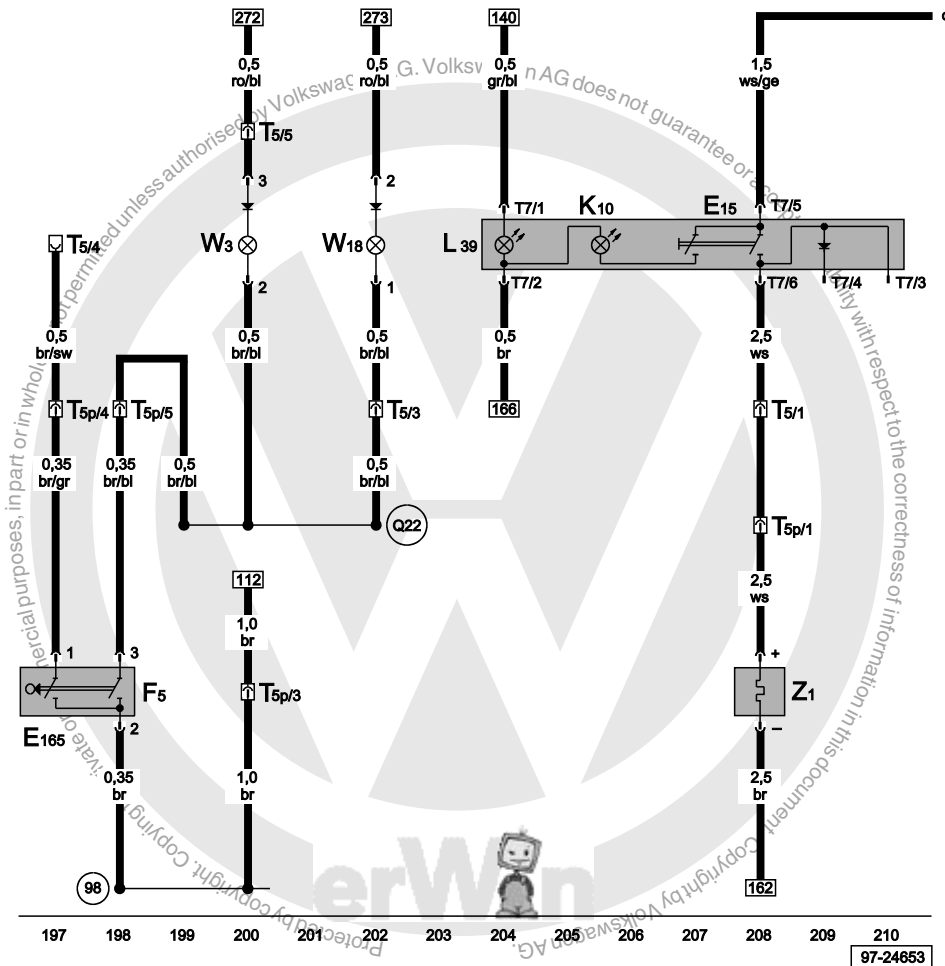


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Heated rear window switch, heated rear window, luggage compartment light

- E15 Heated rear window switch
- E165 Rear lid release switch
- F5 Luggage compartment light switch
- K10 Heated rear window warning lamp
- L39 Heated rear window switch illumination bulb
- T5 5-pin connector, black, coupling station left D-pillar
- T5p 5-pin connector, black, in rear lid
- T7 7-pin connector
- W3 Luggage compartment light
- W18 Luggage compartment light on left
- Z1 Heated rear window

- 98 Earth connection, in rear lid wiring harness
- Q22 Connection 1, in rear lid wiring harness



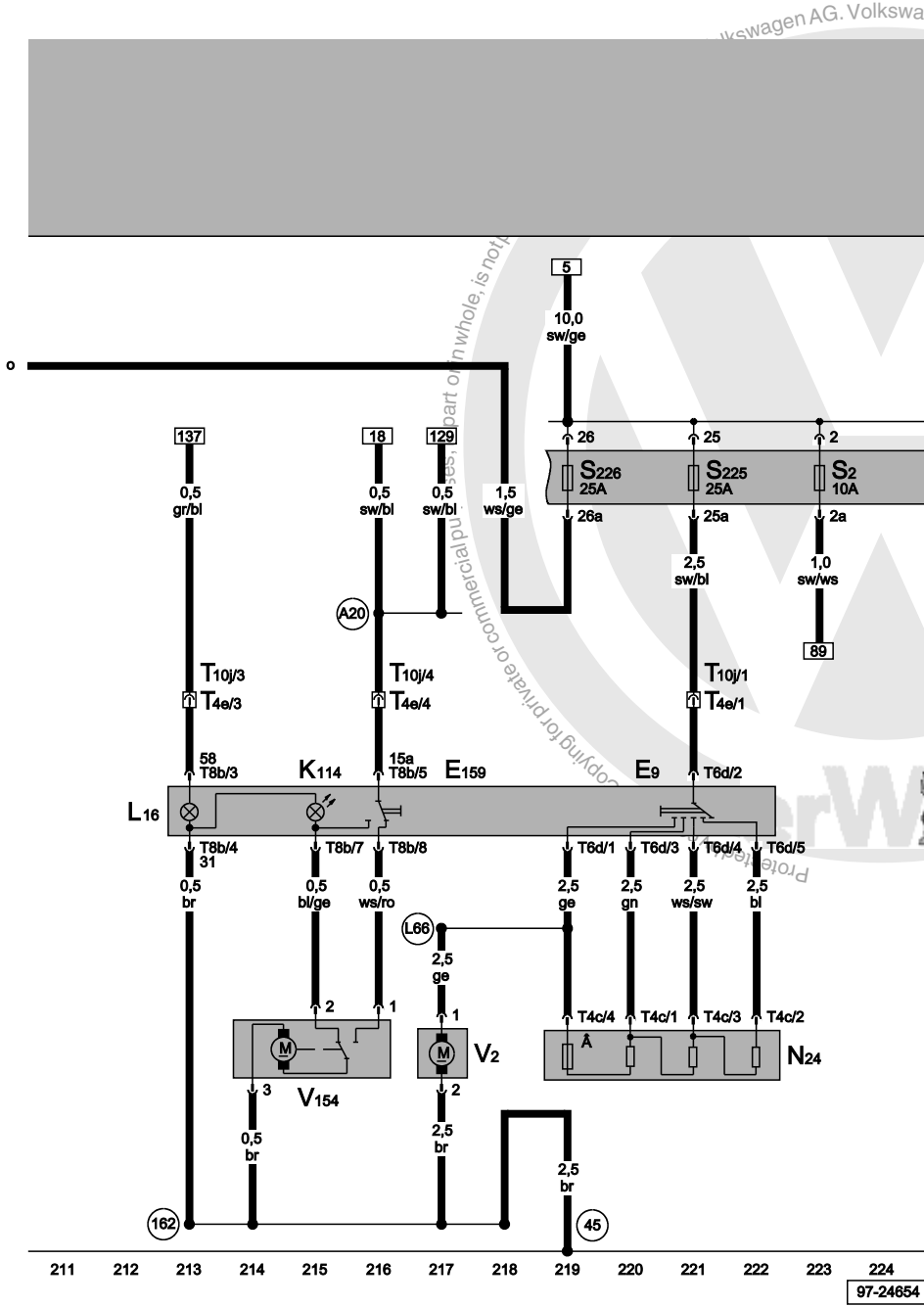
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Fresh air blower switch, fresh air/air recirculation flap switch, fresh air blower, fresh air/recirculated air flap control motor

- E9 Fresh air blower switch
- E159 Fresh air/air recirculation flap switch
- K114 Fresh air and air recirculation warning lamp
- L16 Fresh air regulator illumination bulb
- N24 Fresh air blower series resistor with overheating fuse
- S2 Fuse 2 in fuse holder
- S225 Fuse 25 in fuse holder
- S226 Fuse 26 in fuse holder
- T4c 4-pin connector
- T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
- T6d 6-pin connector
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel (models with air conditioning system)
- V2 Fresh air blower
- V154 Fresh air/recirculated air flap control motor

- 45 Earth point, centre behind dash panel
- 162 Earth connection, in blower motor wiring harness
- A20 Connection (15a), in dash panel wiring harness
- L66 Connection, in heater blower wiring harness

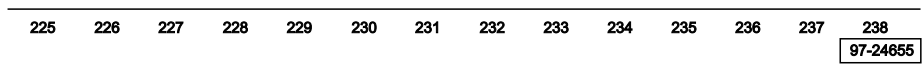
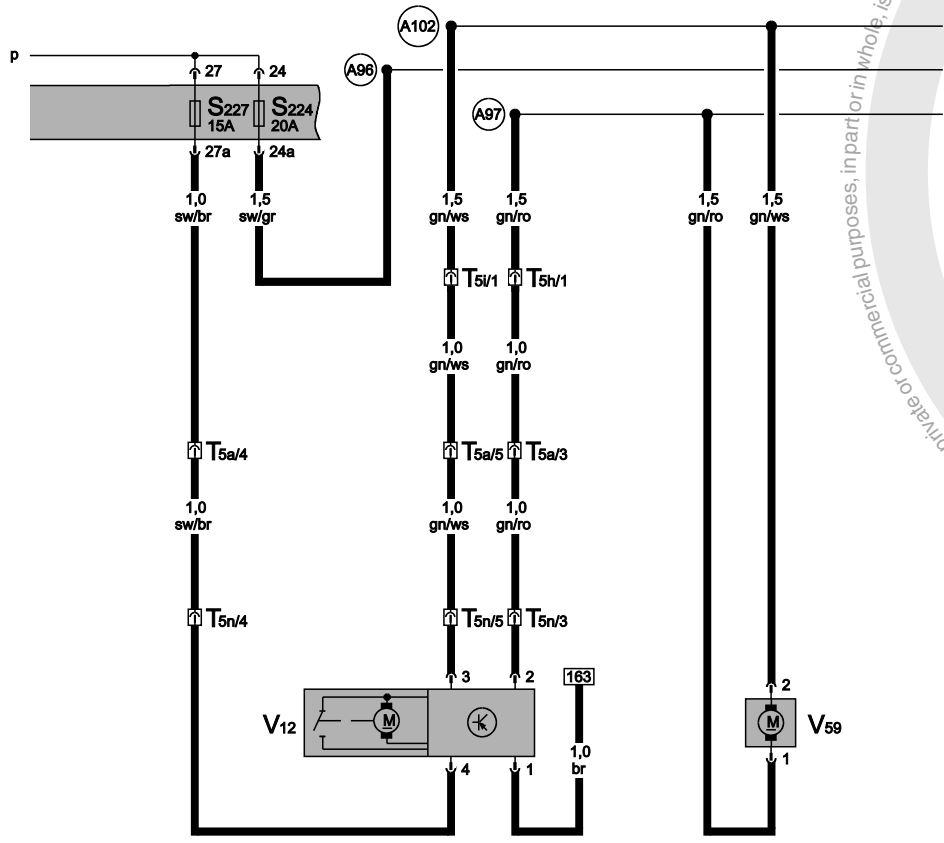
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Rear window wiper motor, windscreen and rear window washer pump

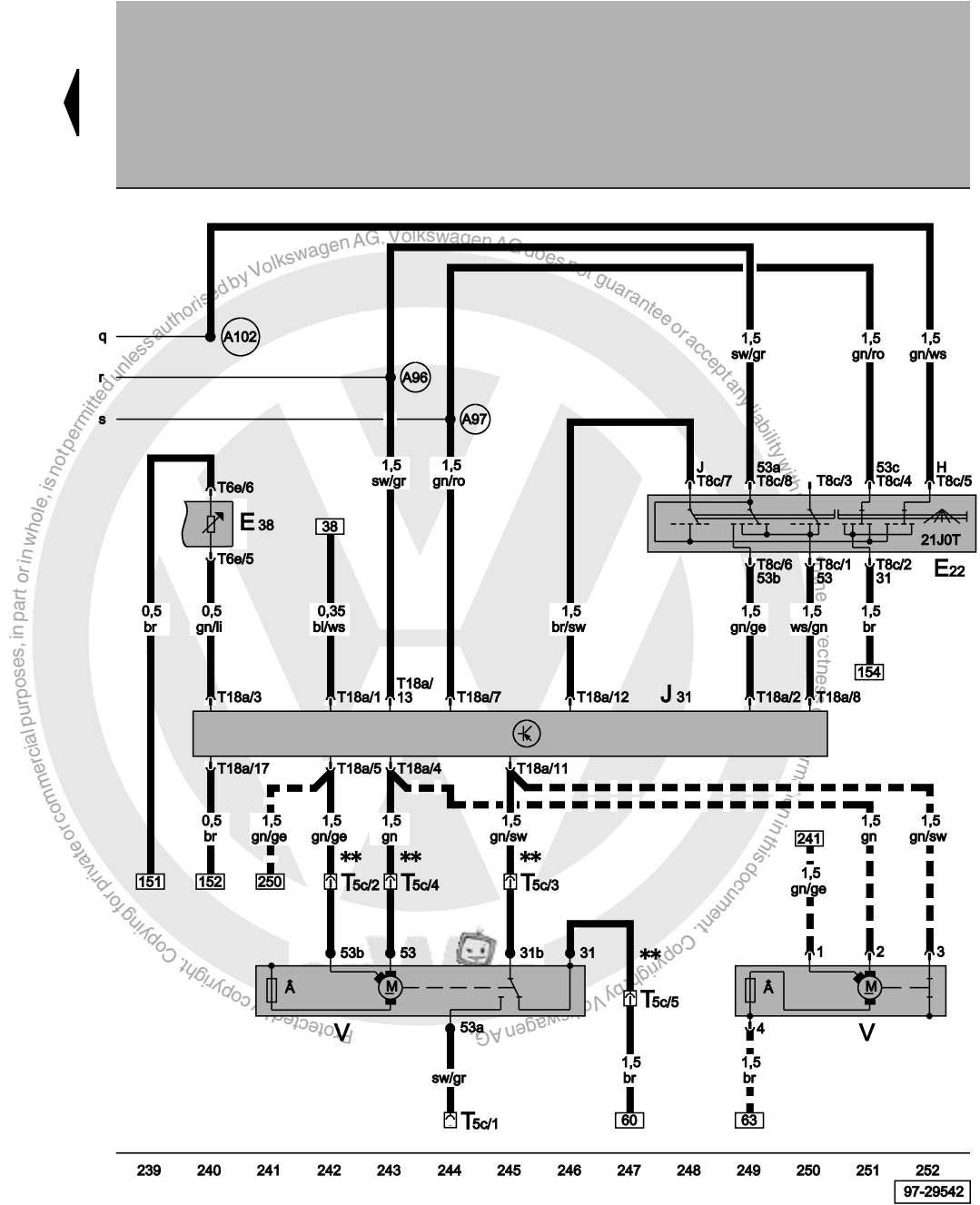
- S224 Fuse 24 in fuse holder
- S227 Fuse 27 in fuse holder
- T5a 5-pin connector, pink, coupling station on right D-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5n 5-pin connector, pink, in rear lid
- V12 Rear window wiper motor
- V59 Windscreen and rear window washer pump
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness



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Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash and wipe relay

- E22 Intermittent wiper switch
- E38 Intermittent wiper regulator
- J31 Automatic intermittent wash and wipe relay, on relay plate
- T5c 5-pin connector, on windscreen wiper motor
- T6e 6-pin connector
- T8c 8-pin connector
- T18a 18-pin connector
- V Windscreen wiper motor
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness
- ** only models up to August 2000
- only models from September 2000

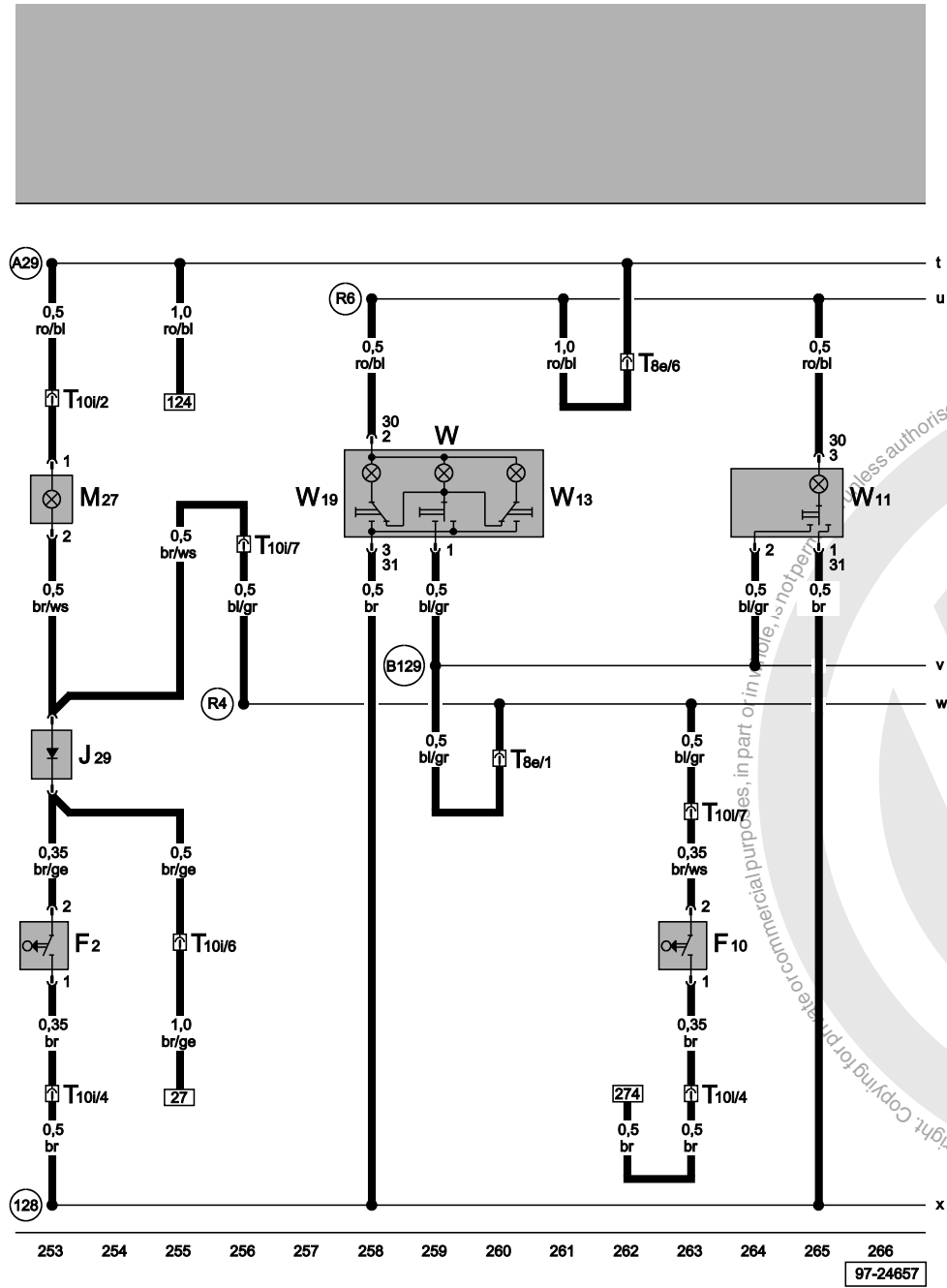


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Front interior light, reading light, left door warning lamp, driver door contact switch, rear left door contact switch

- F2 Driver door contact switch
- F10 Rear left door contact switch
- J29 Blocking diode
- M27 Left door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10l 10-pin connector, black, coupling station on left B-pillar
- W Front interior light
- W11 Rear left reading light
- W13 Front passenger side reading light
- W19 Driver side reading light

- 128 Earth connection 1, in interior light wiring harness
- A29 Connection (interior light), in dash panel wiring harness
- B129 Connection (interior light, 31), in interior wiring harness
- R4 Connection 1, in interior light/door contact switch wiring harness
- R6 Positive connection 1, in interior light wiring harness



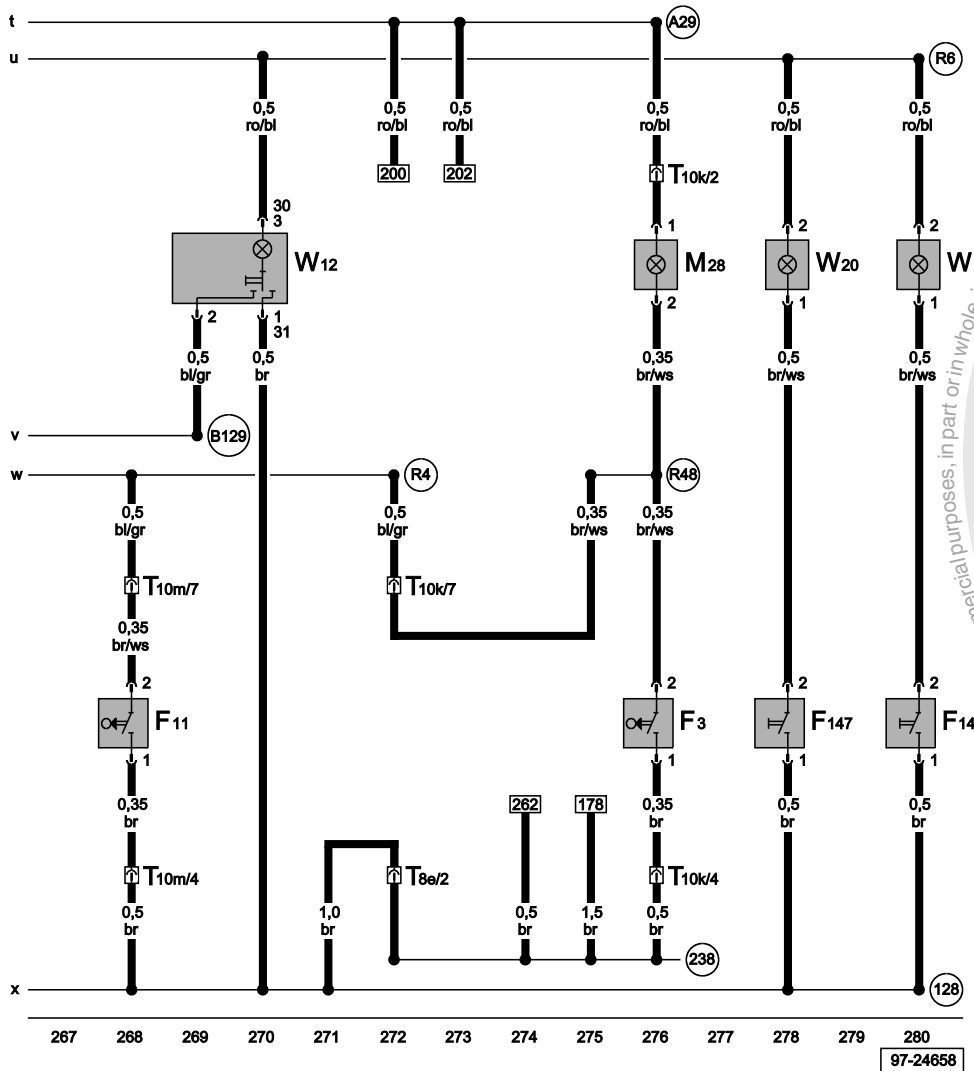
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97-24657

Rear right reading light, right door warning lamp, illuminated vanity mirror

- F3 Front passenger door contact switch
- F11 Rear right door contact switch
- F147 Driver vanity mirror contact switch
- F148 Front passenger vanity mirror contact switch
- M28 Right door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10k 10-pin connector, black, coupling station right A-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- W12 Rear right reading light
- W14 Illuminated vanity mirror (front passenger side)
- W20 Illuminated vanity mirror (driver side)

- (128) Earth connection 1, in interior light wiring harness
- (238) Earth connection 1, in interior wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (B129) Connection (interior light, 311), in interior wiring harness
- (R4) Connection 1, in interior light/door contact switch wiring harness
- (R6) Positive connection 1, in interior light wiring harness
- (R48) Connection, in front passenger side door wiring harness



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97-24658

Basic equipment, Golf and Bora

from May 1999

Notes:

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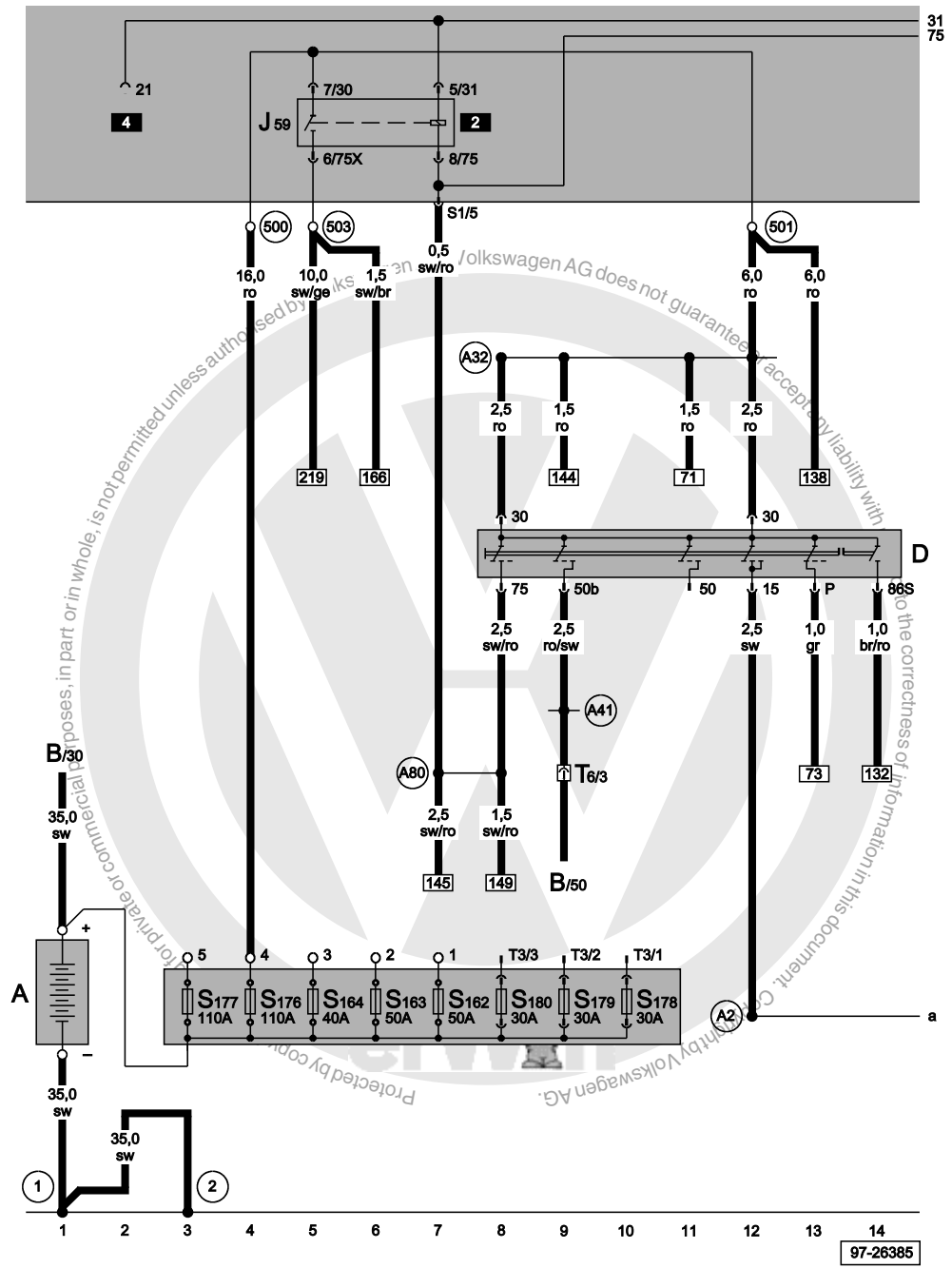
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- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

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Battery, ignition/starter switch, X-contact relief relay

- A Battery
 - B Starter
 - D Ignition/starter switch
 - J59 X-contact relief relay
 - S162 Fuse 1 (30), in fuse holder on battery
 - S163 Fuse 2 (30), in fuse holder on battery
 - S164 Fuse 3 (30), in fuse holder on battery
 - S176 Fuse 4 (30), in fuse holder on battery
 - S177 Fuse 5 (30), in fuse holder on battery
 - S178 Fuse 6 (30), in fuse holder on battery
 - S179 Fuse 7 (30), in fuse holder on battery
 - S180 Fuse 8 (30), in fuse holder on battery
 - T3 3-pin connector
 - T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 1 Earth strap, battery - body
 - 2 Earth strap, gearbox - body
 - 500 Screw connection 1 (30), on relay plate
 - 501 Screw connection 2 (30), on relay plate
 - 503 Screw connection (75x), on relay plate
 - A2 Positive connection (15), in dash panel wiring harness
 - A32 Positive connection (30), in dash panel wiring harness
 - A41 Positive connection (50), in dash panel wiring harness, (models with petrol engine only)
 - A80 Connection 1 (X), in dash panel wiring harness

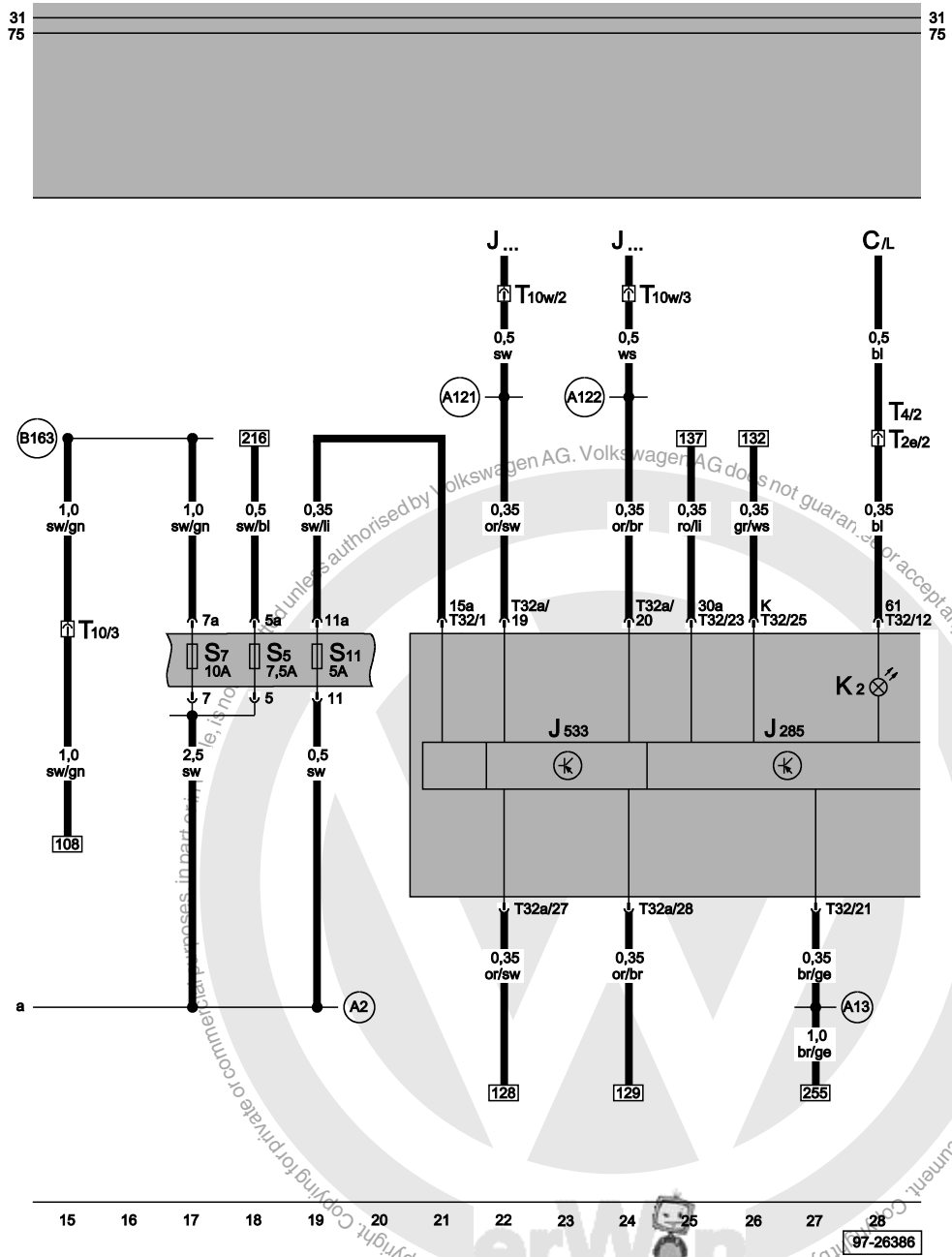
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- sw = black
- ro = red
- br = brown
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- gr = grey
- li = purple
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- or = orange
- rs = pink

Dash panel insert

- C Alternator
- J285 Control unit with display in dash panel insert
- J... Engine control units
- J533 Data bus diagnostic interface, in dash panel insert
- K2 Alternator warning lamp
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- S11 Fuse 11 in fuse holder
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- A2 Positive connection (15), in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness

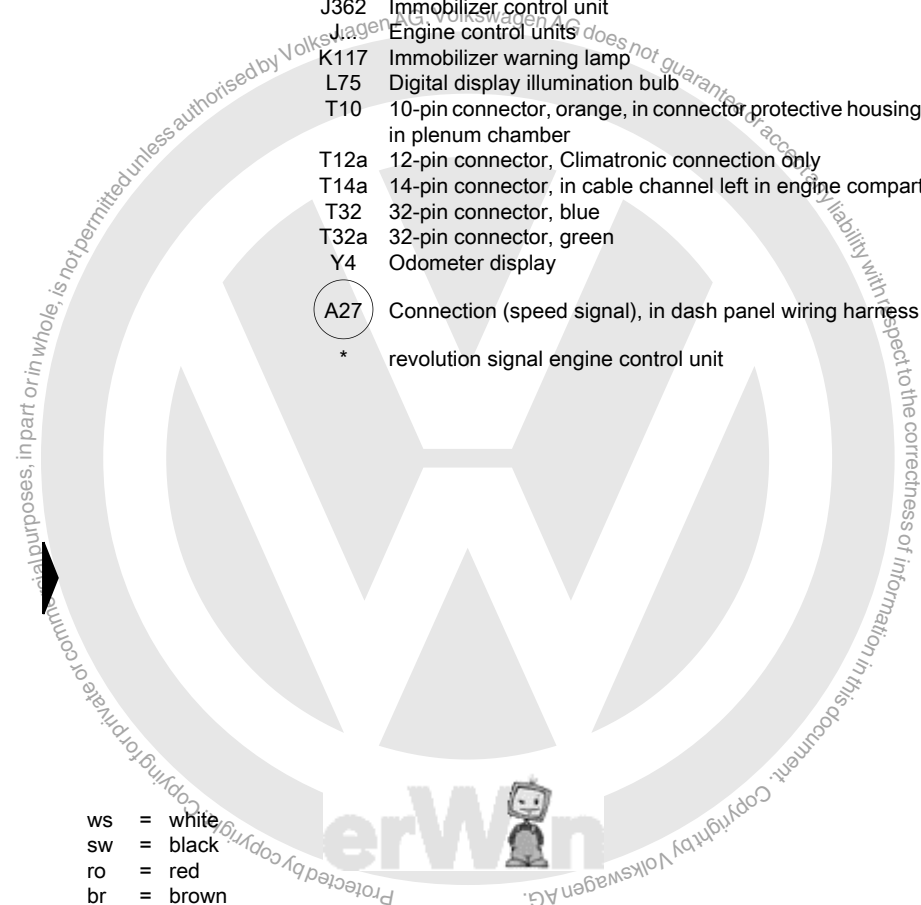
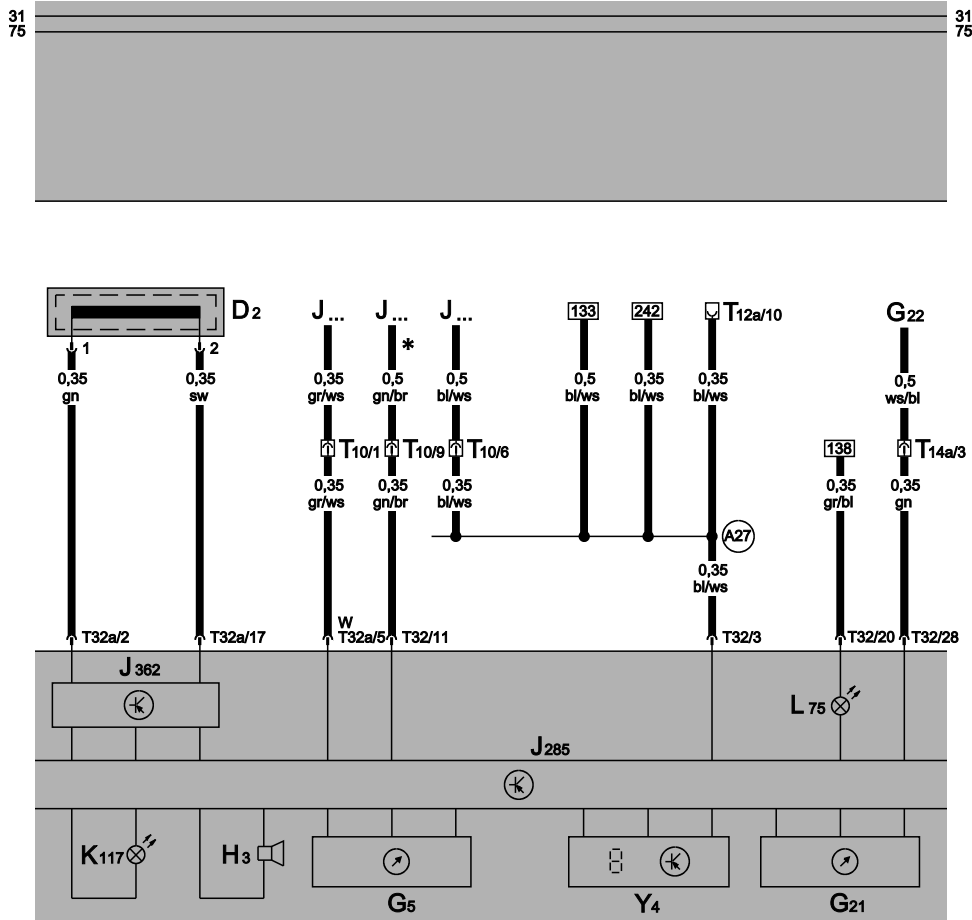
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97-26386

Dash panel insert, immobilizer, rev. counter, odometer display, speedometer

- D2 Immobilizer reader coil
- G21 Speedometer
- G5 Rev. counter
- G22 Speedometer sender, in gearbox
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- J362 Immobilizer control unit
- J... Engine control units
- K117 Immobilizer warning lamp
- L75 Digital display illumination bulb
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T12a 12-pin connector, Climatronic connection only
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- Y4 Odometer display
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit



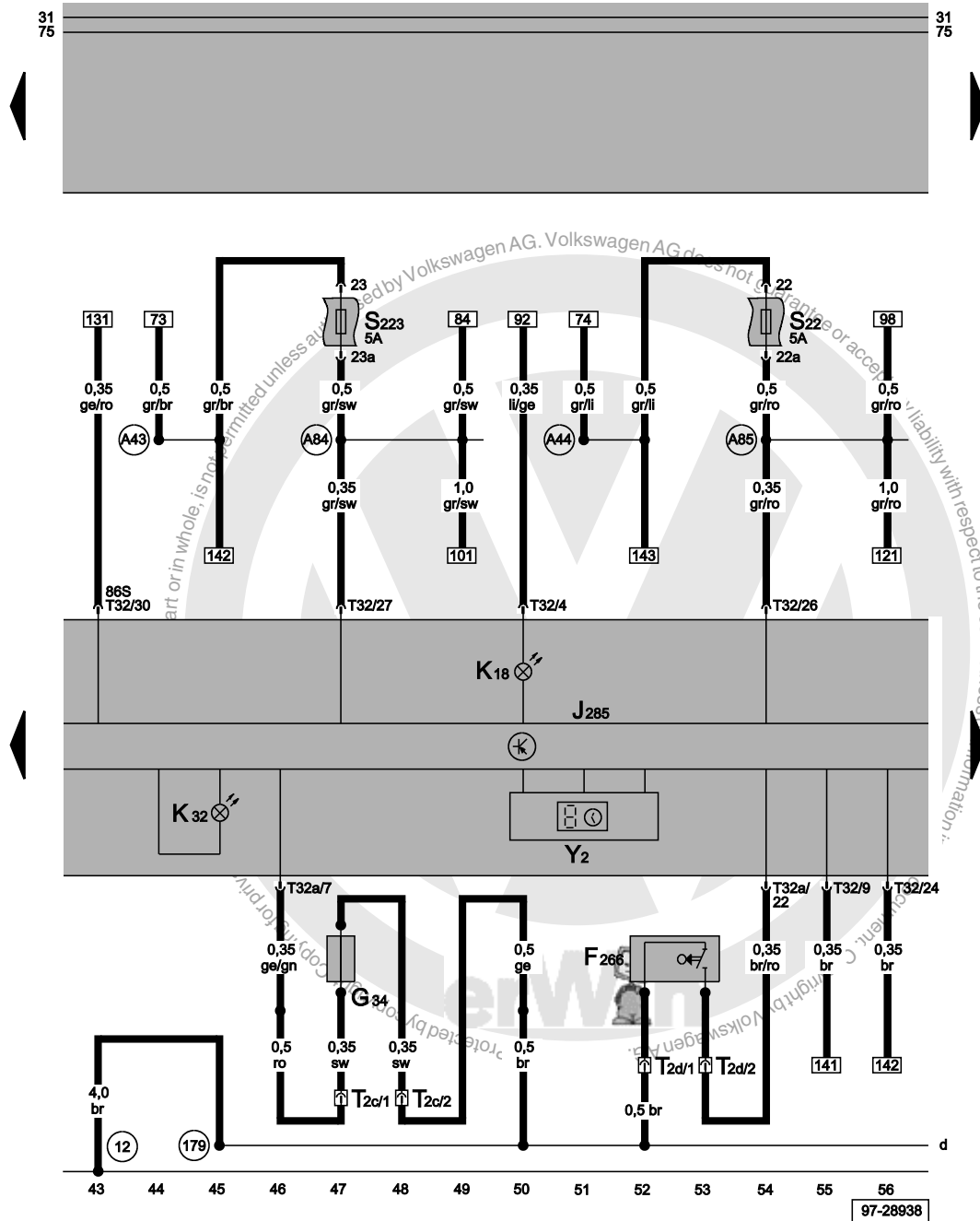
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Dash panel insert, trailer operation warning lamp, digital clock, bonnet contact switch, front left brake pad wear sender, brake pad warning lamp

- F266 Bonnet contact switch, in lock part
- G34 Front left brake pad wear sender
- J285 Control unit with display in dash panel insert
- K18 Trailer operation warning lamp
- K32 Brake pad warning lamp
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T2c 2-pin connector, near front left brake pad wear sender
- T2d 2-pin connector, near right headlight
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- Y2 Digital clock

- 12 Earth point, on left in engine compartment
- 179 Earth connection, in left headlight wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness

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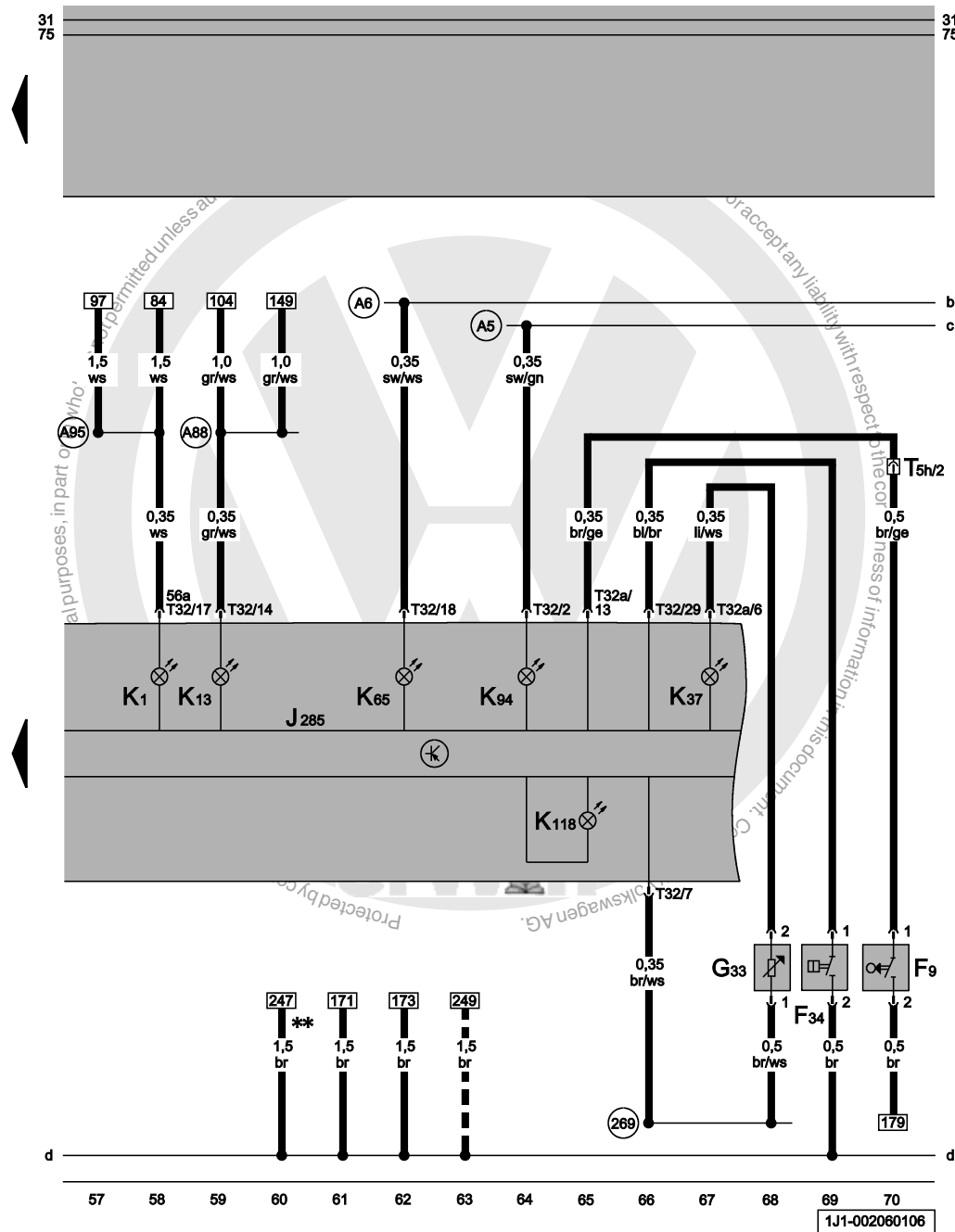


Dash panel insert, brake system warning lamp, brake fluid level warning contact, turn signal warning lamps, main beam warning lamp, rear fog light warning lamp

- F9 Handbrake warning switch
- F34 Brake fluid level warning contact
- G33 Windscreen washer fluid level sender
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K13 Rear fog light warning lamp
- K37 Washer fluid level warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- K118 Brake system warning lamp
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (A5) Positive connection (right turn signal), in dash panel wiring harness
- (A6) Positive connection (left turn signal), in dash panel wiring harness
- (A88) Connection (RFL), in dash panel wiring harness
- (A95) Connection 1 (56a), in dash panel wiring harness
- ** only models up to August 2000
- only models from September 2000

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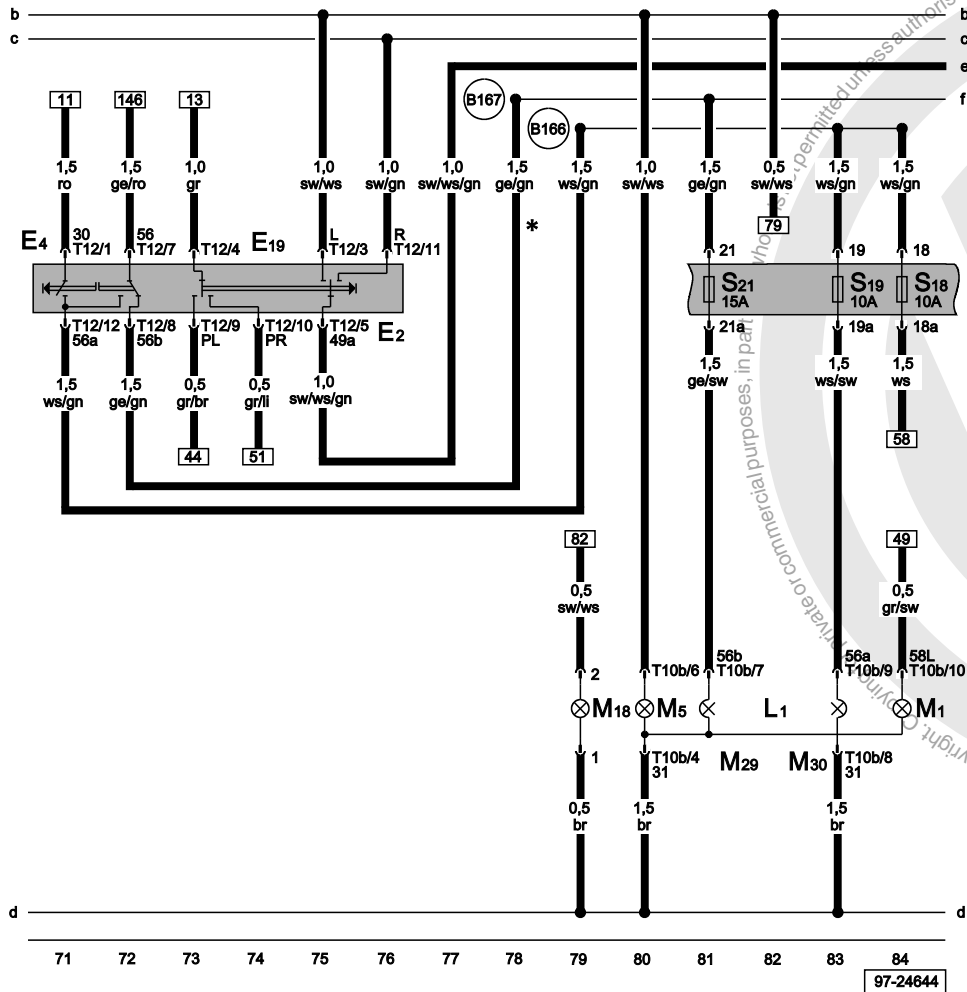
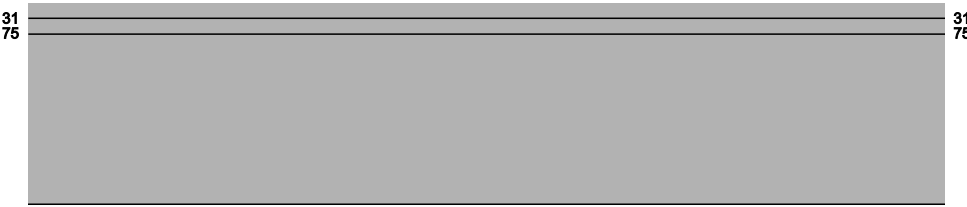


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Turn signal switch, headlight dipper/flasher switch, parking light switch, front left headlight, front left turn signal

- E2 Turn signal switch
- E4 Headlight dipper/flasher switch
- E19 Parking light switch
- L1 Left twin filament bulb*
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left headlight dipped beam bulb (only Golf)
- M30 Left headlight main beam bulb (only Golf)
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness
- * only Bora



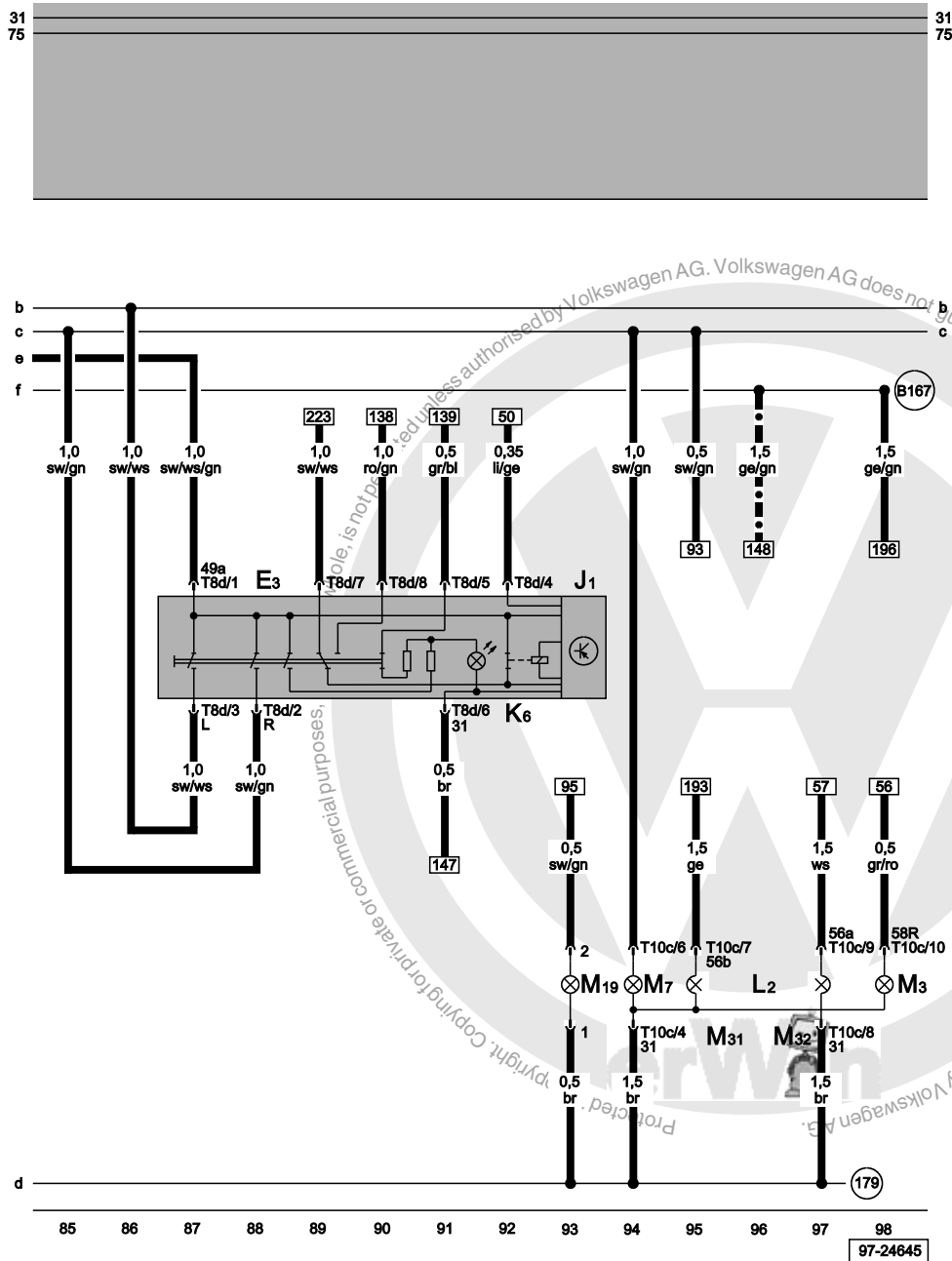
Hazard warning light switch, turn signal relay, front right headlight, front right turn signal

- E3 Hazard warning light switch
- J1 Turn signal relay
- K6 Hazard warning light system warning lamp
- L2 Right twin filament bulb*
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right headlight dipped beam bulb (only Golf)
- M32 Right headlight main beam bulb (only Golf)
- T8d 8-pin connector**
- T10c 10-pin connector, on right headlight

179 Earth connection, in left headlight wiring harness

B167 Connection (56b), in interior wiring harness

- * only Bora
- ** Connection numbering of turn signal relay can vary, see fault finding programme!
- only Golf



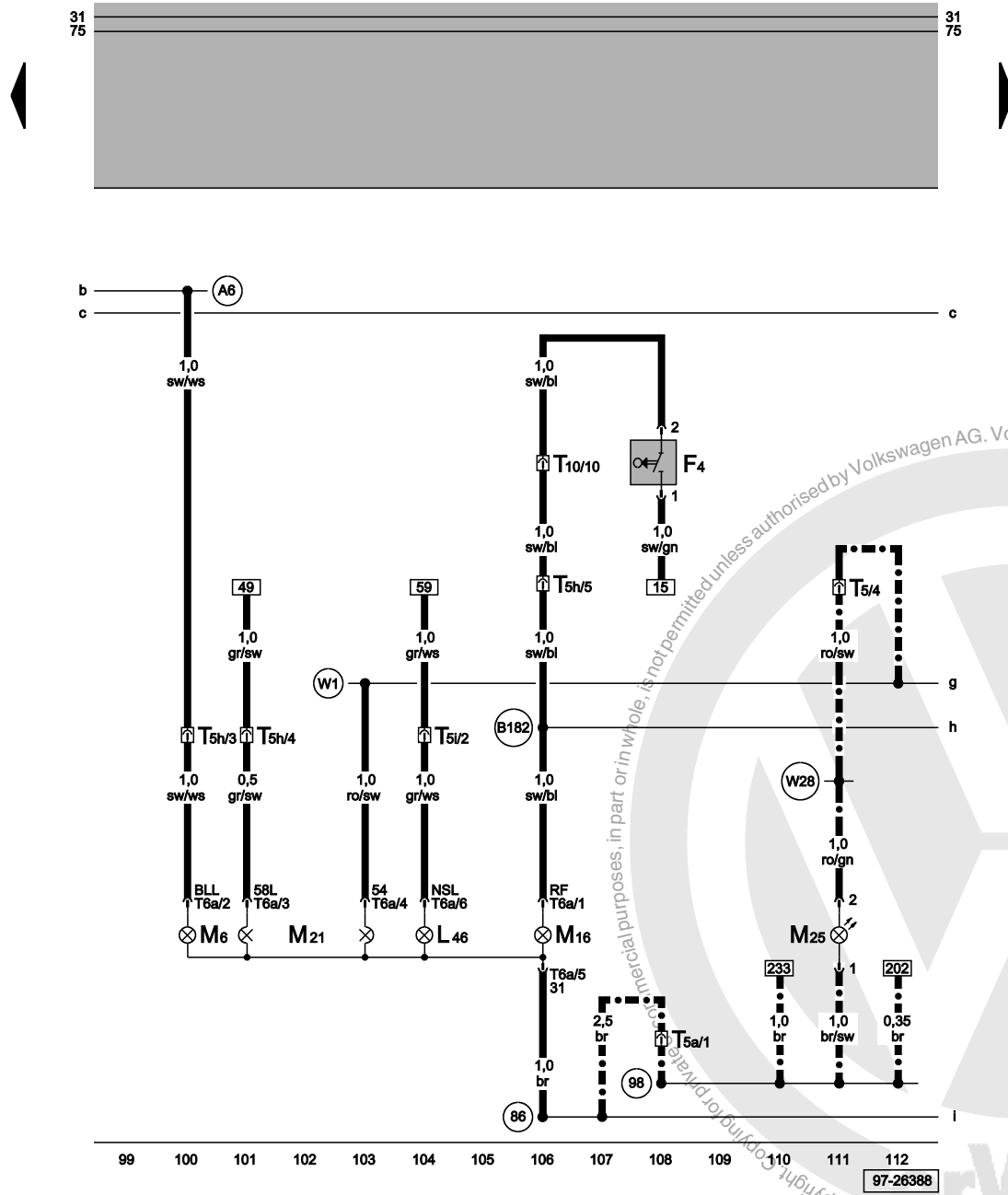
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Left tail light, left brake light, rear left turn signal, left reversing light, reversing lights switch, rear left fog light

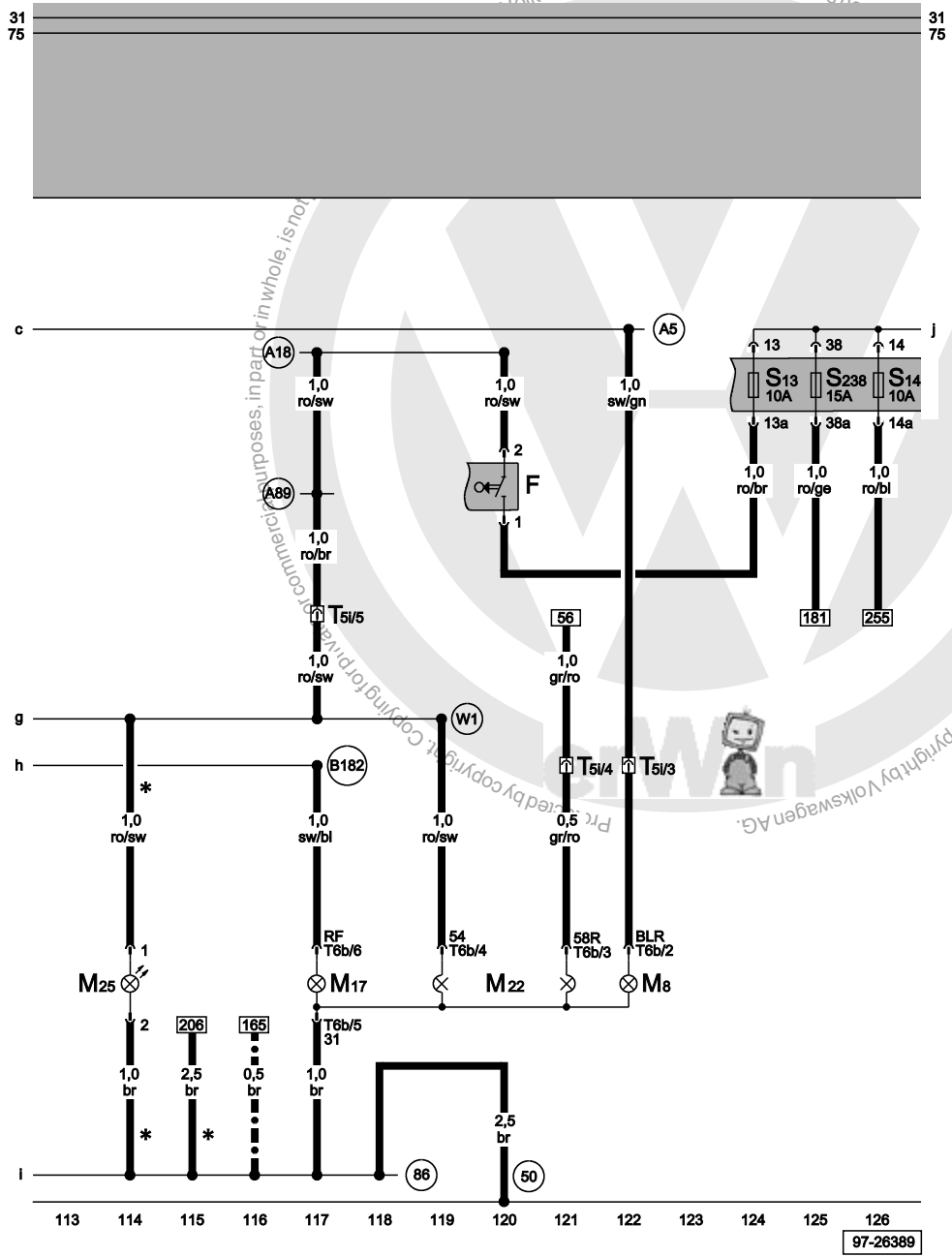
- F4 Reversing light switch
- L46 Rear left fog light bulb
- M6 Rear left turn signal bulb
- M16 Left reversing light bulb
- M21 Left brake and tail light bulb
- M25 High level brake light bulb (32 LED's)
- T5 5-pin connector, black, coupling station on left C-pillar
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

- 86 Earth connection 1, in rear wiring harness
- 98 Earth connection, in rear lid wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- W28 Positive connection 2 (54), in rear wiring harness
- .-.- only Golf

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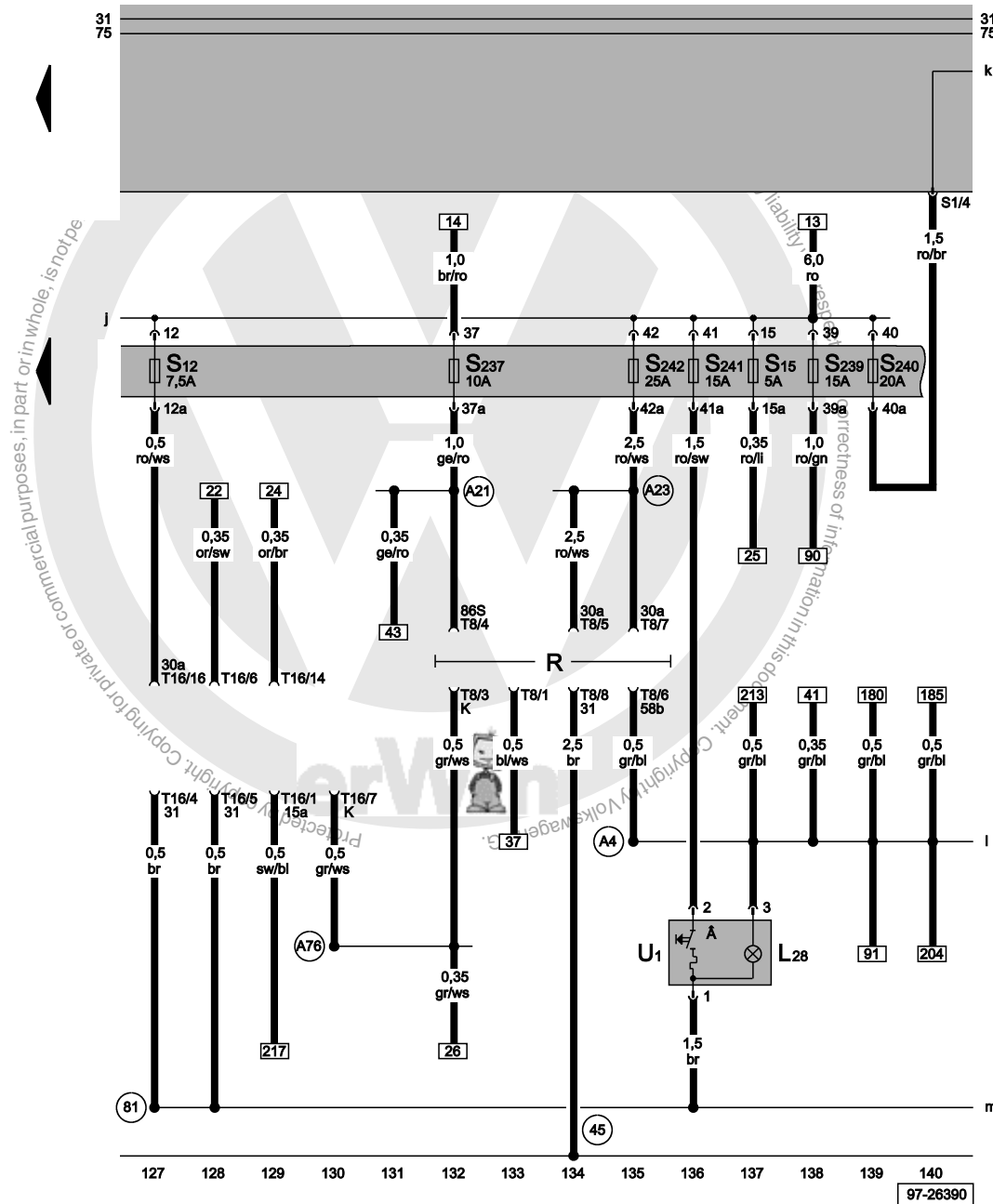
97-26388



Right tail light, right brake light, rear right turn signal, right reversing light, brake light switch

- F Brake light switch
- M8 Rear right turn signal bulb
- M17 Right reversing light bulb
- M22 Right brake and tail light bulb
- M25 High level brake light bulb (18 LED's)
- S13 Fuse 13 in fuse holder
- S14 Fuse 14 in fuse holder
- S238 Fuse 38 in fuse holder
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6b 6-pin connector
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- * only Bora
- only Golf

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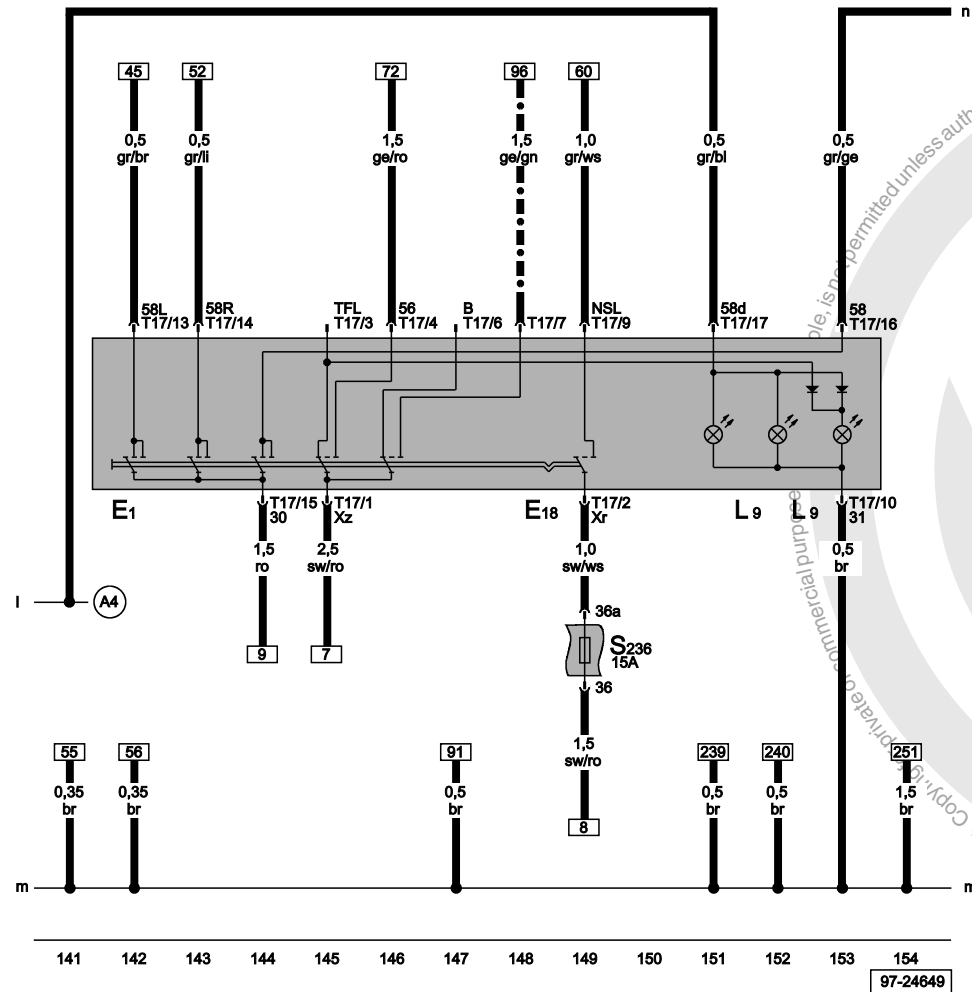
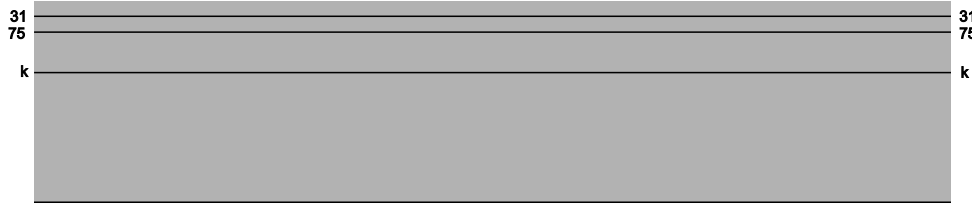
Self-diagnosis connection, connection for radio, cigarette lighter

- L28 Cigarette lighter illumination bulb
- R Radio
- S12 Fuse 12 in fuse holder
- S15 Fuse 15 in fuse holder
- S237 Fuse 37 in fuse holder
- S239 Fuse 39 in fuse holder
- S240 Fuse 40 in fuse holder
- S241 Fuse 41 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector, on radio
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- U1 Cigarette lighter

- 45 Earth point, centre behind dash panel
- 81 Earth connection 1, in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A23 Connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness

Light switch, rear fog light switch

- E1 Light switch
- E18 Rear fog light switch
- L9 Light switch illumination bulb
- S236 Fuse 36 in fuse holder
- T17 17-pin connector
- A4 Positive connection (58b), in dash panel wiring harness
- only Golf



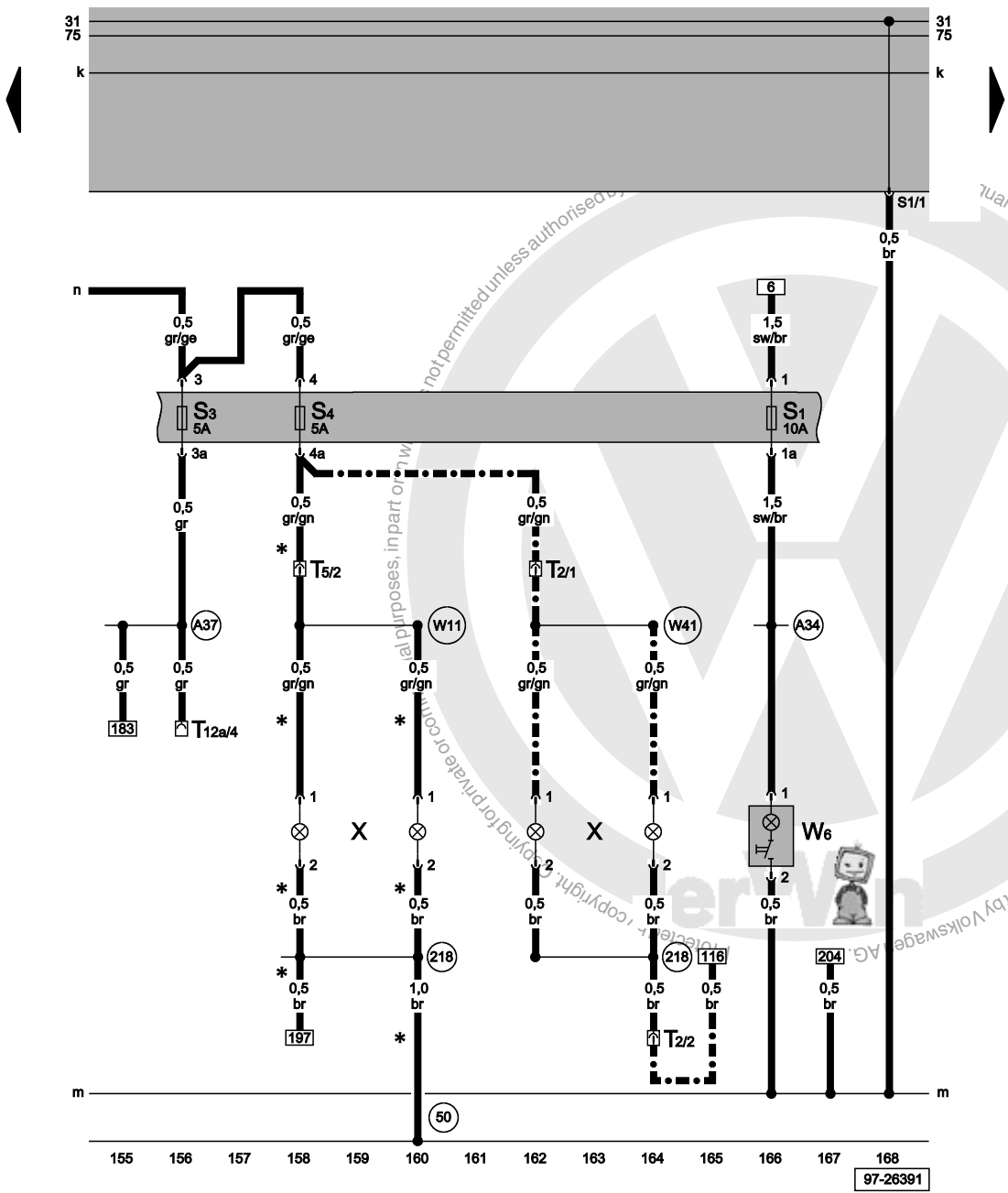
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97-24649

Glove compartment light, number plate lights

- S1 Fuse 1 in fuse holder
 - S3 Fuse 3 in fuse holder
 - S4 Fuse 4 in fuse holder
 - T2 2-pin connector, on left in luggage compartment
 - T5 5-pin connector, black, coupling station on left C-pillar
 - T5a 5-pin connector, pink, coupling station on right D-pillar
 - T12a 12-pin connector, Climatronic connection only
 - W6 Glove compartment light
 - X Number plate lights
-
- 50 Earth point, on left in luggage compartment
 - 218 Earth connection -1-, in rear lid wiring harness
 - A34 Connection (75x), in dash panel wiring harness
 - A37 Connection (58a), in dash panel wiring harness
 - W11 Connection (58), in rear lid wiring harness
 - W41 Positive connection (58), in licence plate lights wiring harness
- * only Bora
 -.-.- only Golf

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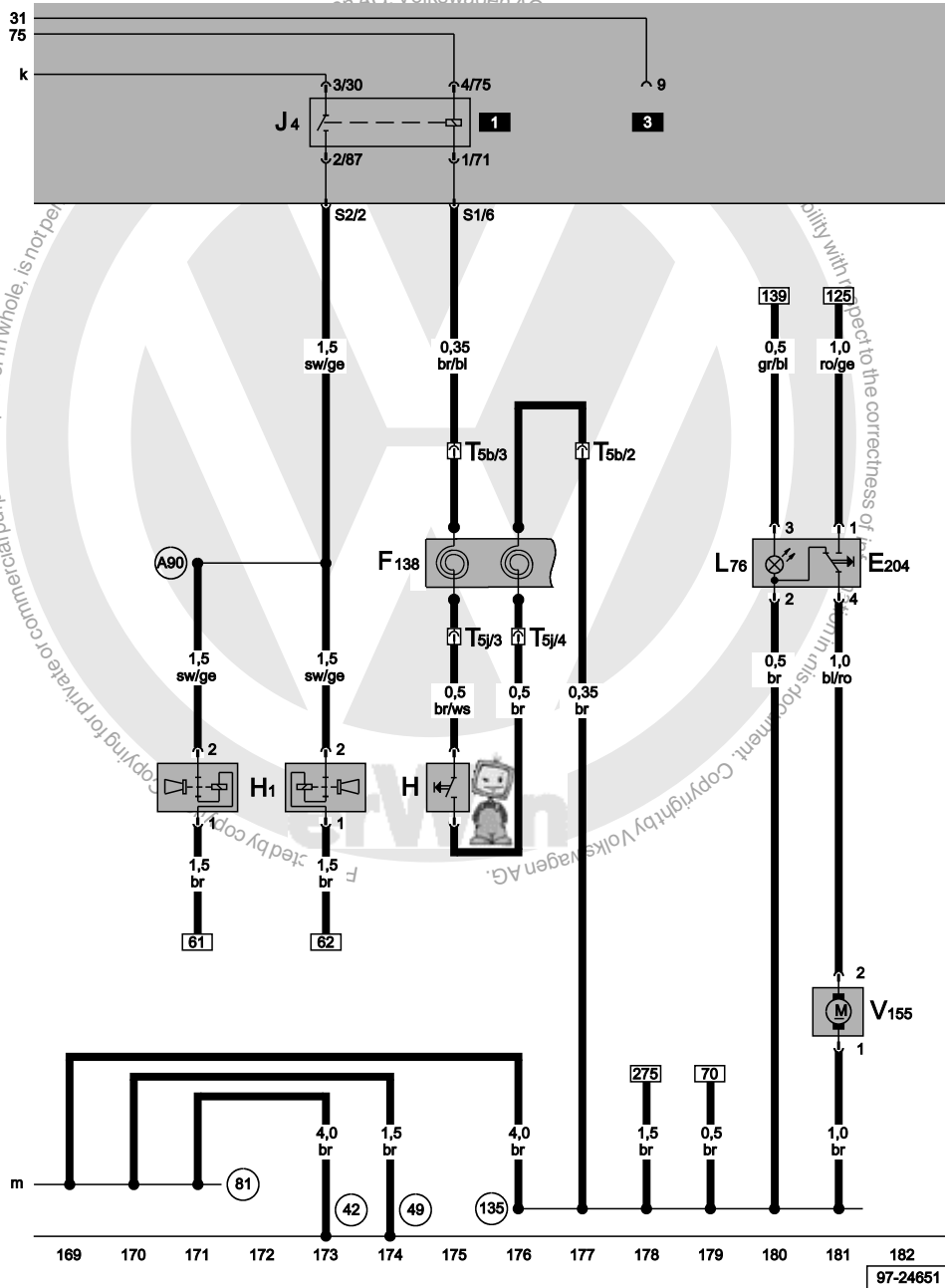


Dual tone horn, tank filler flap remote release switch, horn plate

- E204 Tank filler flap remote release switch
- F138 Airbag coil connector
- H Horn plate
- H1 Dual tone horn
- J4 Dual tone horn relay
- L76 Button illumination bulb
- T5b 5-pin connector, next to steering column
- T5j 5-pin connector, in the steering wheel
- V155 Tank filler flap locking motor

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A90 Connection (dual tone horn), in dash panel wiring harness

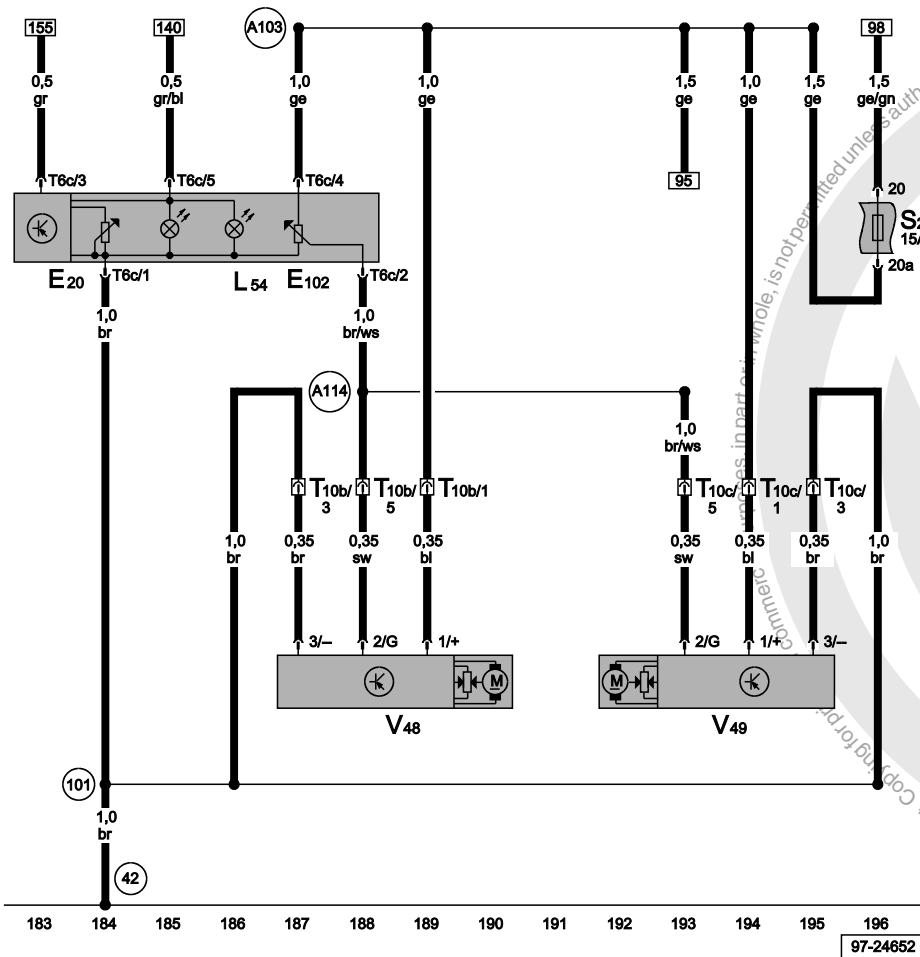
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Headlight range control regulator, headlight range control motor, illumination regulators - switches and instruments

- E20 Illumination regulators - switches and instruments
- E102 Headlight range control regulator
- L54 Headlight range control regulator illumination bulb
- S20 Fuse 20 in fuse holder
- T6c 6-pin connector
- T10b 10-pin connector, on left headlight
- T10c 10-pin connector, on right headlight
- V48 Left headlight range control motor
- V49 Right headlight range control motor

- 42 Earth point, next to steering column
- 101 Earth connection, in headlight range adjustment wiring harness
- A103 Connection 2 (56), in dash panel wiring harness
- A114 Connection (headlight range control), in dash panel wiring harness



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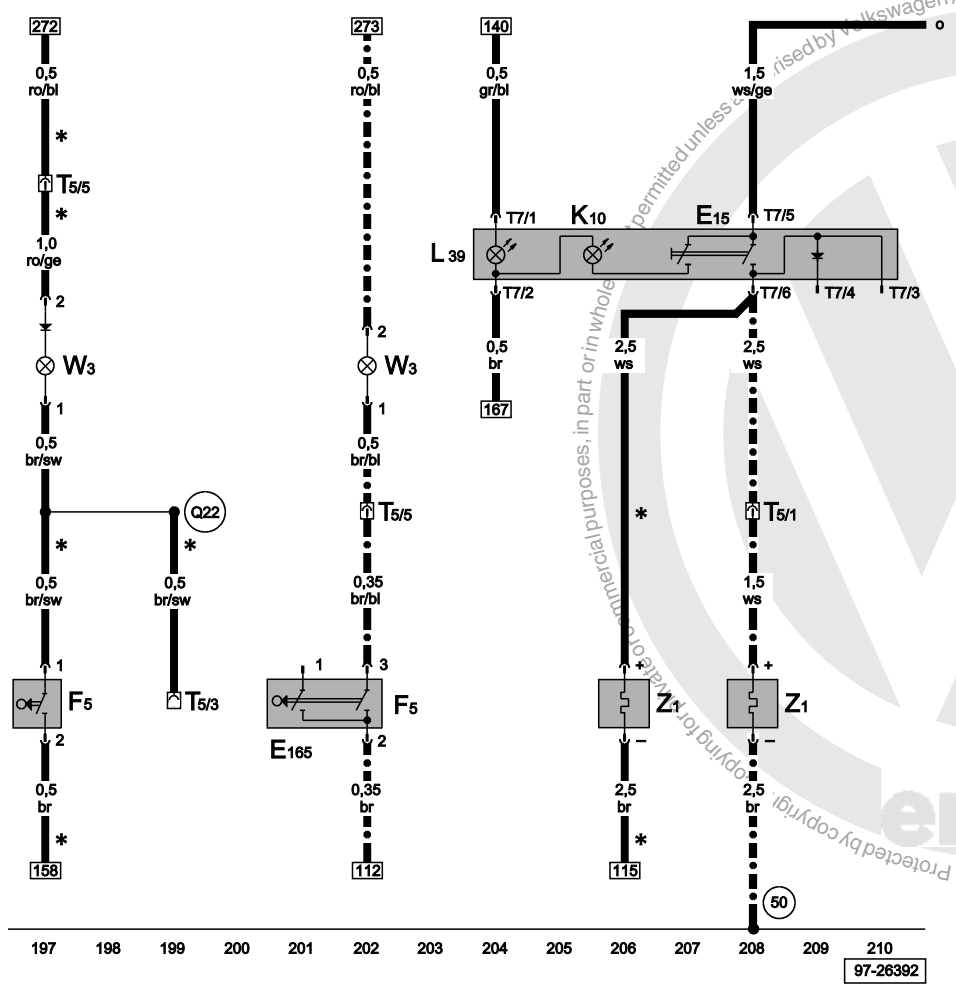
Heated rear window switch, heated rear window, luggage compartment light

- E15 Heated rear window switch
- E165 Rear lid release switch
- F5 Luggage compartment light switch
- K10 Heated rear window warning lamp
- L39 Heated rear window switch illumination bulb
- T5 5-pin connector, black, coupling station on left C-pillar
- T7 7-pin connector
- W3 Luggage compartment light**
- Z1 Heated rear window

50 Earth point, on left in luggage compartment

Q22 Connection 1, in rear lid wiring harness

- * only Bora
- .-.- only Golf
- ** see also convenience electrics/ central locking



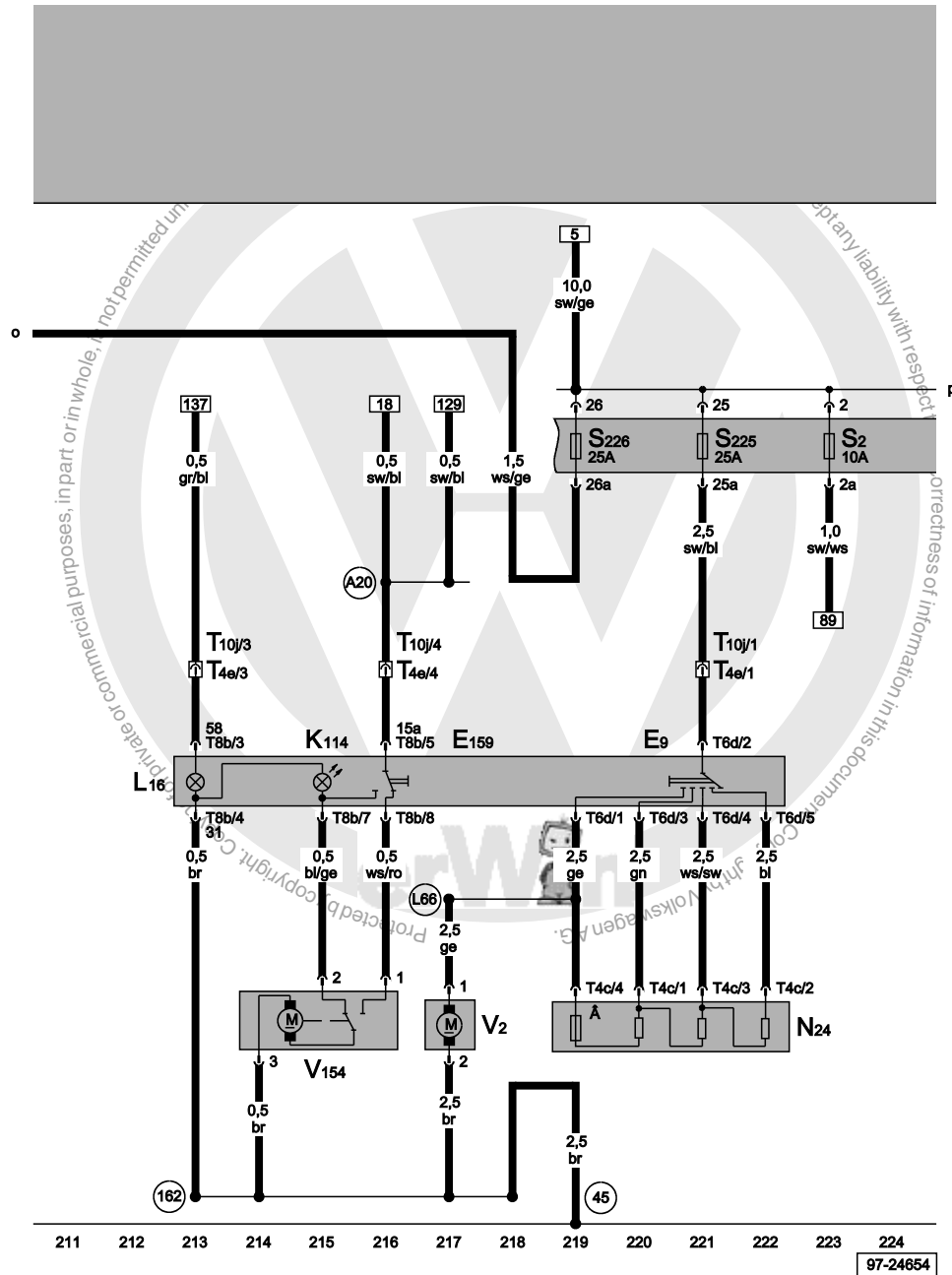
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Fresh air blower switch, fresh air/air recirculation flap switch, fresh air blower, fresh air/recirculated air flap control motor

- E9 Fresh air blower switch
- E159 Fresh air/air recirculation flap switch
- K114 Fresh air and air recirculation warning lamp
- L16 Fresh air regulator illumination bulb
- N24 Fresh air blower series resistor with overheating fuse
- S2 Fuse 2 in fuse holder
- S225 Fuse 25 in fuse holder
- S226 Fuse 26 in fuse holder
- T4c 4-pin connector
- T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
- T6d 6-pin connector
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel (models with air conditioning system)
- V2 Fresh air blower
- V154 Fresh air/recirculated air flap control motor

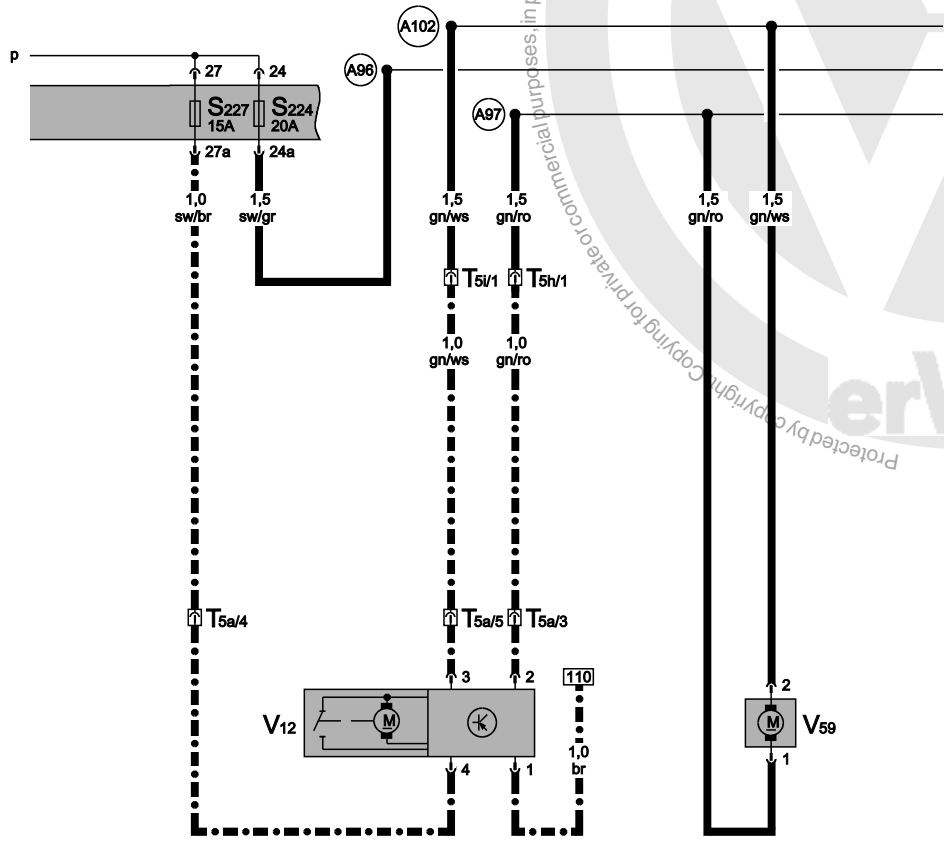
- 45 Earth point, centre behind dash panel
- 162 Earth connection, in blower motor wiring harness
- A20 Connection (15a), in dash panel wiring harness
- L66 Connection, in heater blower wiring harness

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Rear window wiper motor, windscreen and rear window washer pump

- S224 Fuse 24 in fuse holder
- S227 Fuse 27 in fuse holder
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- V12 Rear window wiper motor
- V59 Windscreen and rear window washer pump
- (A96) Connection (53a), in dash panel wiring harness
- (A97) Connection (53), in dash panel wiring harness
- (A102) Connection (windscreen wiper), in dash panel wiring harness
- only Golf

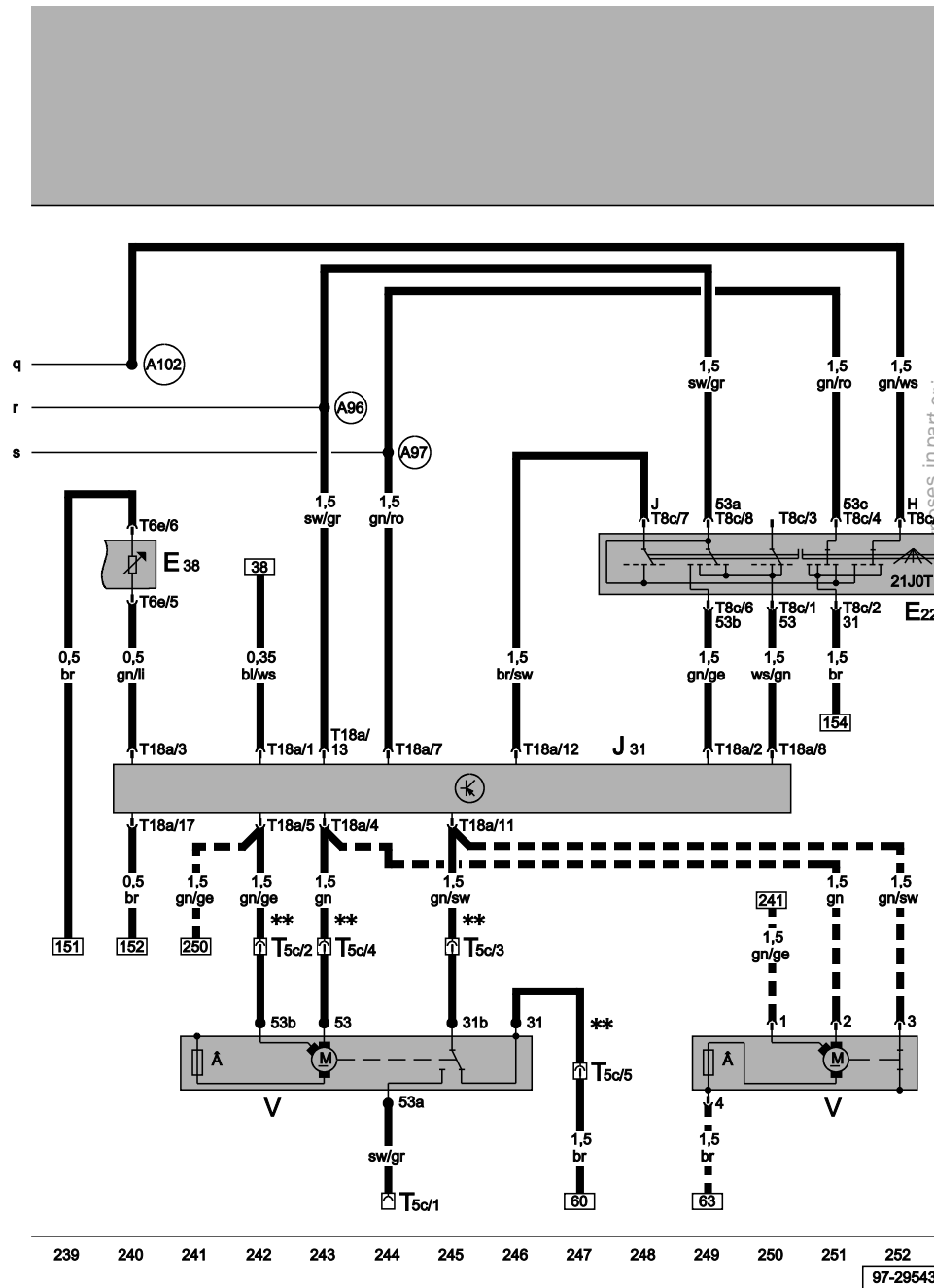


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 97-93631

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Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash and wipe relay

- E22 Intermittent wiper switch
- E38 Intermittent wiper regulator
- J31 Automatic intermittent wash and wipe relay, on relay plate
- T5c 5-pin connector, on windscreen wiper motor
- T6e 6-pin connector
- T8c 8-pin connector
- T18a 18-pin connector
- V Windscreen wiper motor
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness
- ** only models up to August 2000
- only models from September 2000

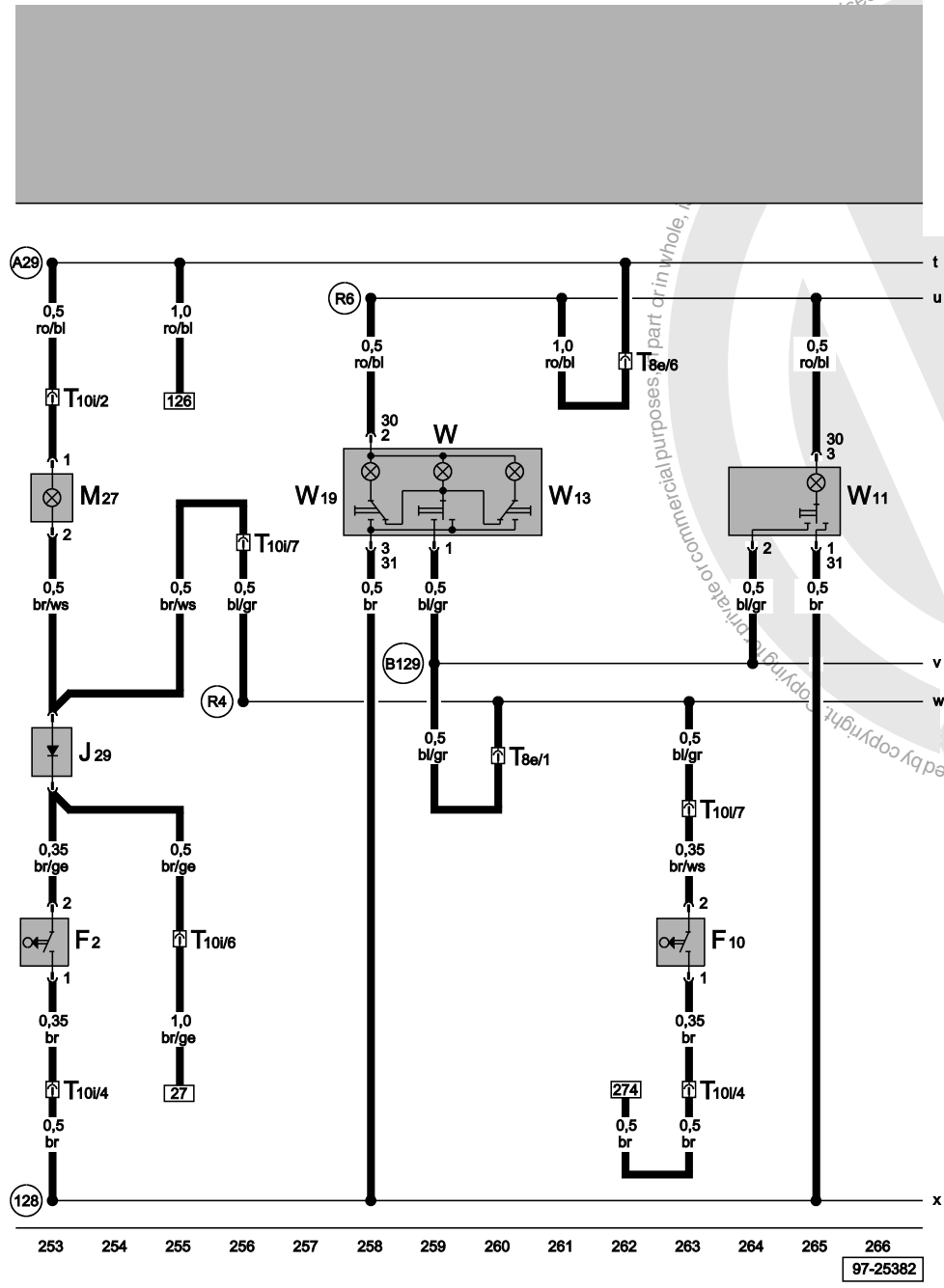


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Front interior light, reading light, left door warning lamp, driver door contact switch, rear left door contact switch

- F2 Driver door contact switch
- F10 Rear left door contact switch
- J29 Blocking diode
- M27 Left door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10l 10-pin connector, black, coupling station on left B-pillar
- W Front interior light
- W11 Rear left reading light
- W13 Front passenger side reading light
- W19 Driver side reading light

- 128 Earth connection 1, in interior light wiring harness
- A29 Connection (interior light), in dash panel wiring harness
- B129 Connection (interior light, 31), in interior wiring harness
- R4 Connection 1, in interior light/door contact switch wiring harness
- R6 Positive connection 1, in interior light wiring harness



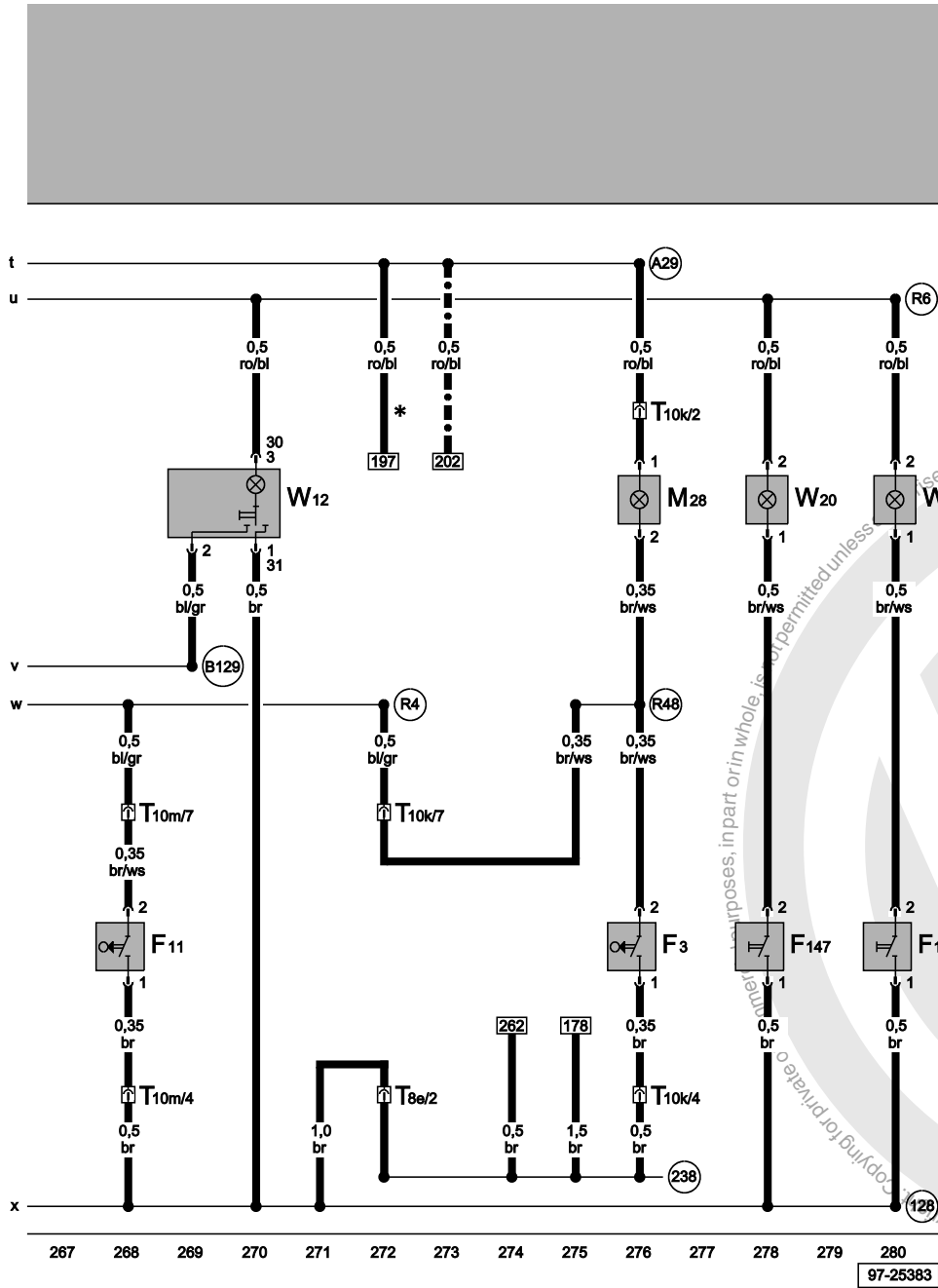
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97-25382

Rear right reading light, right door warning lamp, illuminated vanity mirror

- F3 Front passenger door contact switch
- F11 Rear right door contact switch
- F147 Driver vanity mirror contact switch
- F148 Front passenger vanity mirror contact switch
- M28 Right door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10k 10-pin connector, black, coupling station right A-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- W12 Rear right reading light
- W14 Illuminated vanity mirror (front passenger side)
- W20 Illuminated vanity mirror (driver side)

- (128) Earth connection 1, in interior light wiring harness
- (238) Earth connection 1, in interior wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (B129) Connection (interior light, 311), in interior wiring harness
- (R4) Connection 1, in interior light/door contact switch wiring harness
- (R6) Positive connection 1, in interior light wiring harness
- (R48) Connection, in front passenger side door wiring harness
- * only Bora
- only Golf



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97-25383

1.4 I/55 kW - 4AV, engine code AHW

from May 1999

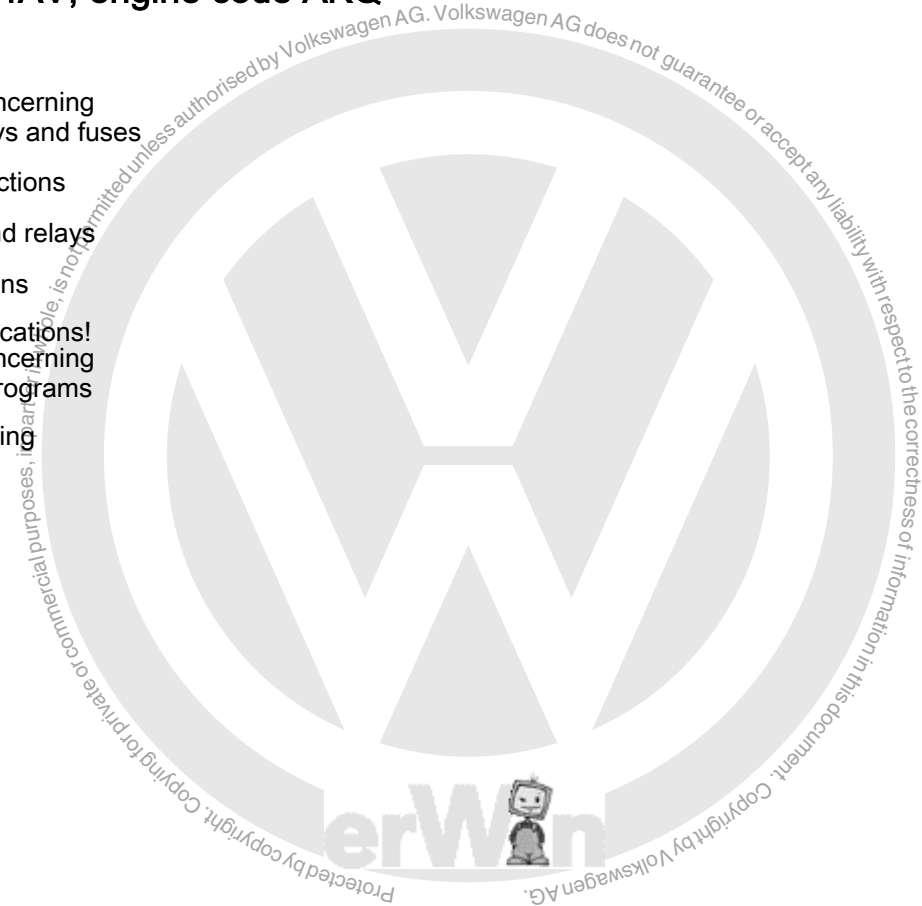
1.4 I/55 kW - 4AV, engine code AKQ

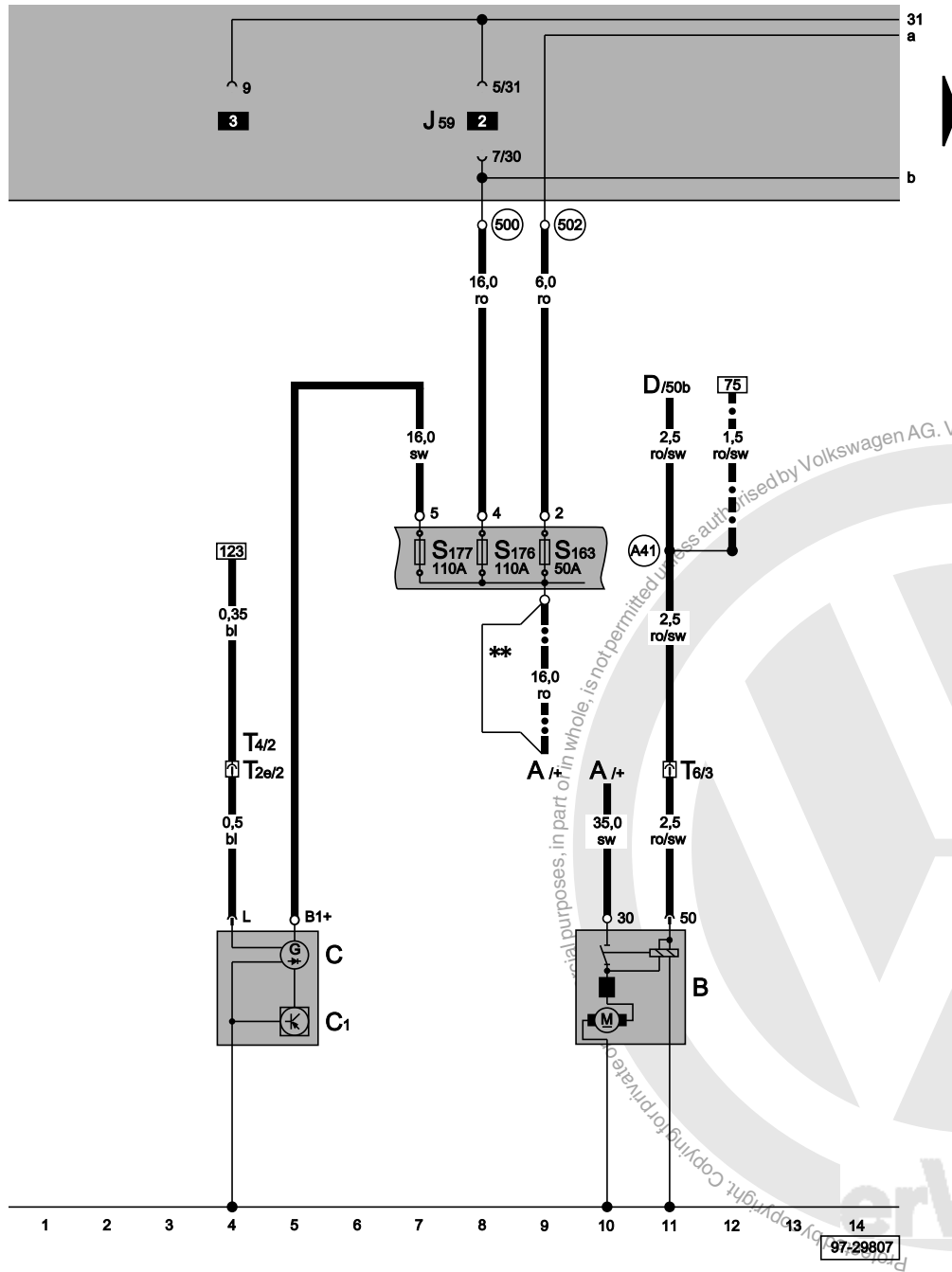
from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
 - ⇒ List of Fitting Locations!
- For information concerning
- ◆ Fault Finding Programs
 - ⇒ guided fault finding





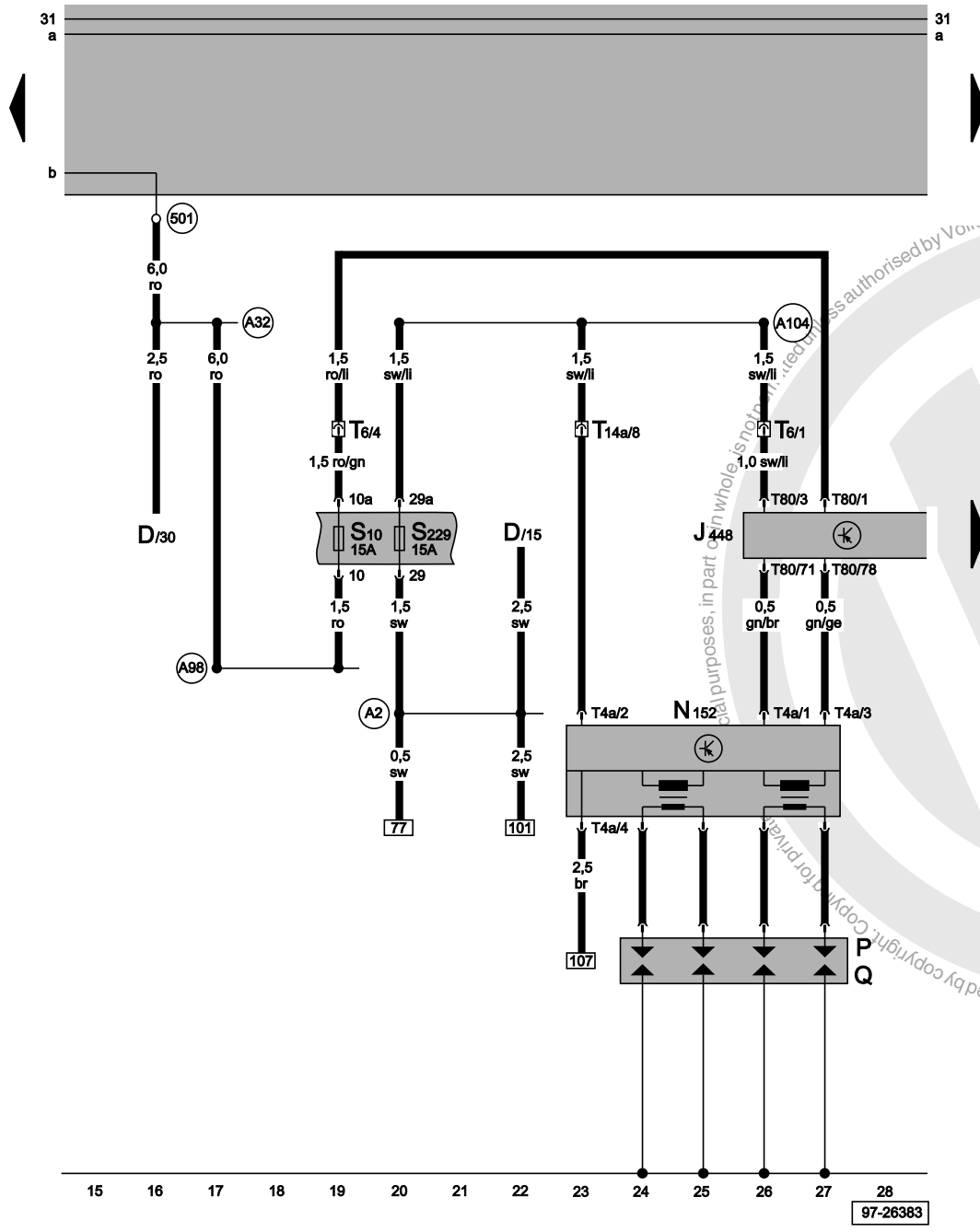
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
- ** up August 2000
- from September 2000
- up to April 2001

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- rs = pink

4AV injection system control unit, ignition system

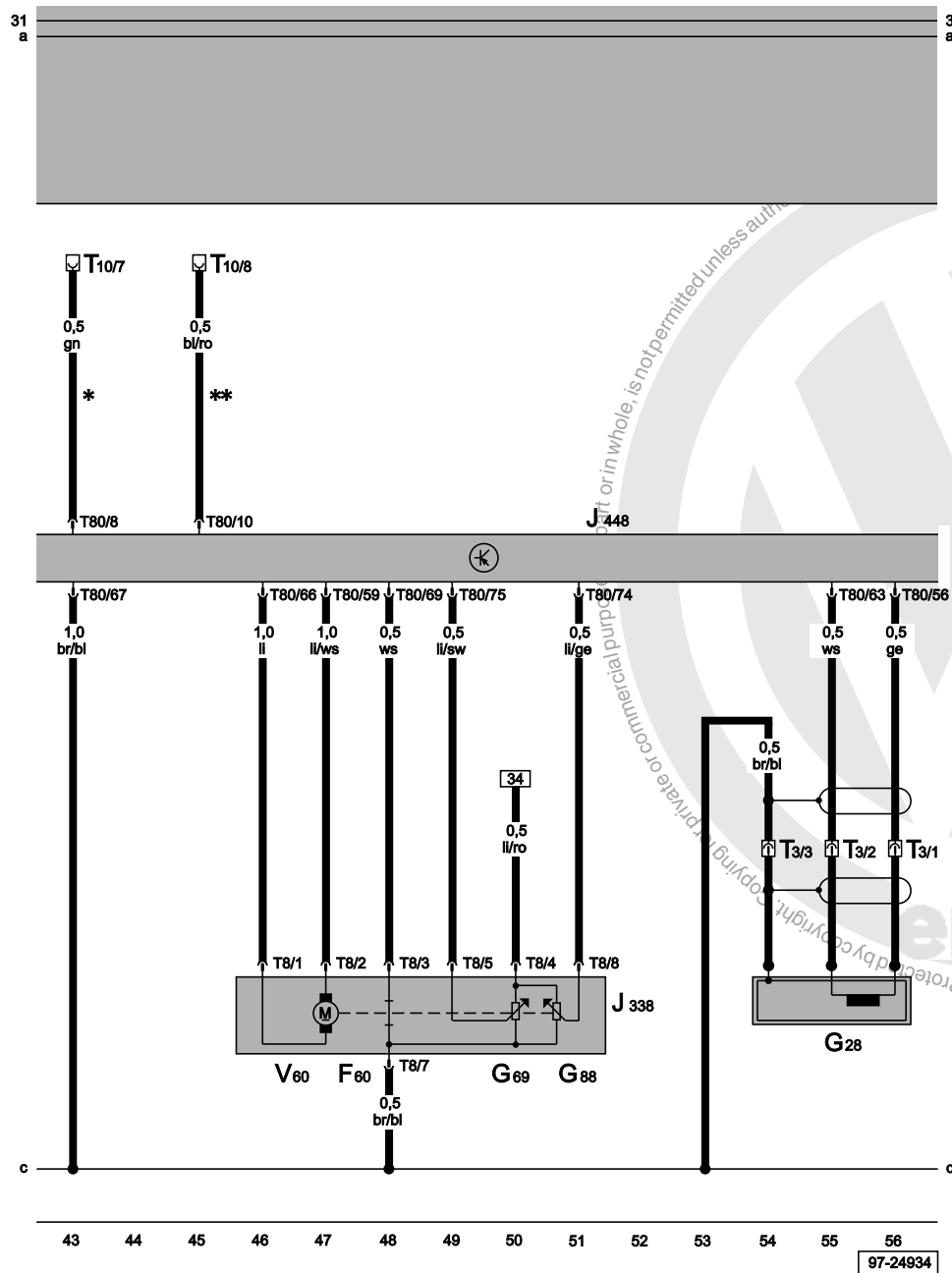
- D Ignition/starter switch
- J448 4AV injection system control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T4a 4-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T80 80-pin connector
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15) in dash panel wiring harness



- ws = white
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4CV injection system control unit, throttle valve module, engine speed sender

- F60 Idling speed switch
- G28 Engine speed sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J338 Throttle valve module
- J448 4AV injection system control unit, in centre plenum chamber
- T3 3-pin connector, near intake manifold
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T80 80-pin connector
- V60 Throttle valve positioner compressor switch-off
- * compressor switch-off
- ** air conditioner "ready" connection



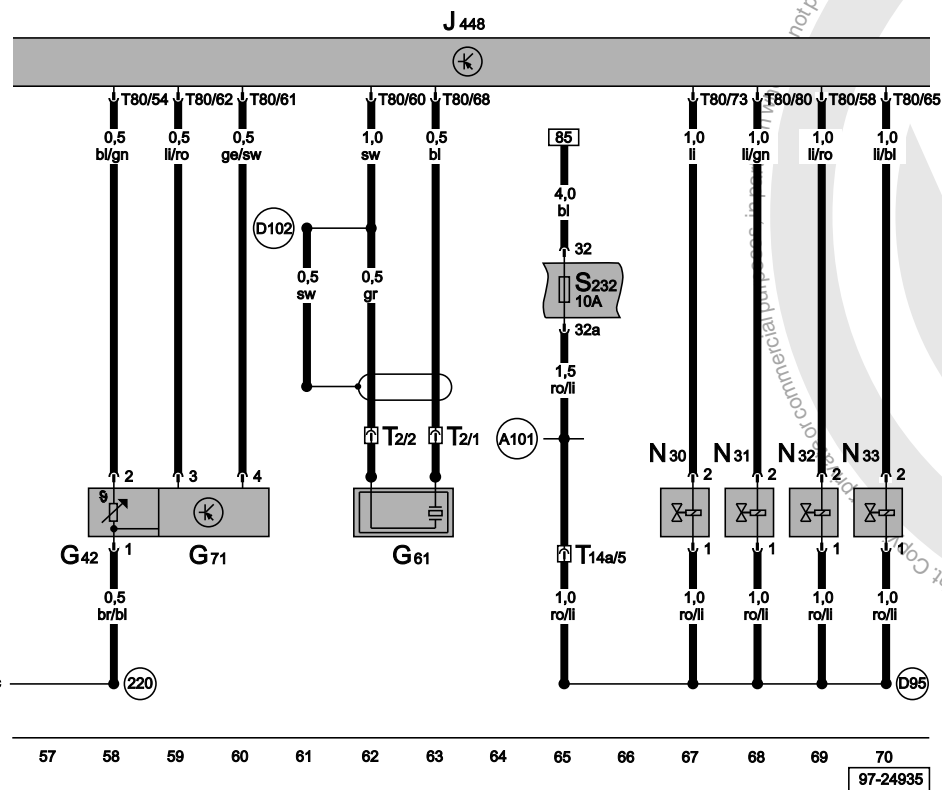
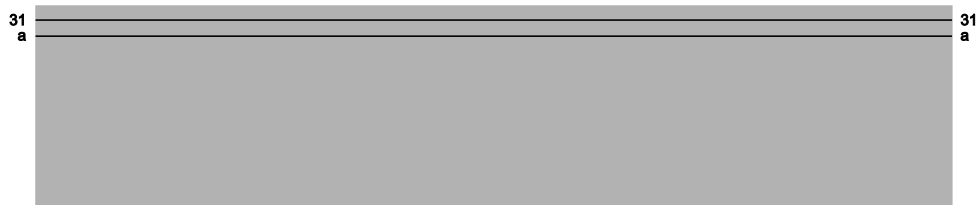
- ws = white
- sw = black
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- rs = pink

4avant and 4CV injection system control unit, intake manifold pressure sender, intake air temperature sender, knock sensor, injectors

- G42 Intake air temperature sender
- G61 Knock sensor
- G71 Intake manifold pressure sender
- J448 4AV injection system control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T2 2-pin connector, on left of cylinder head
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T80 80-pin connector

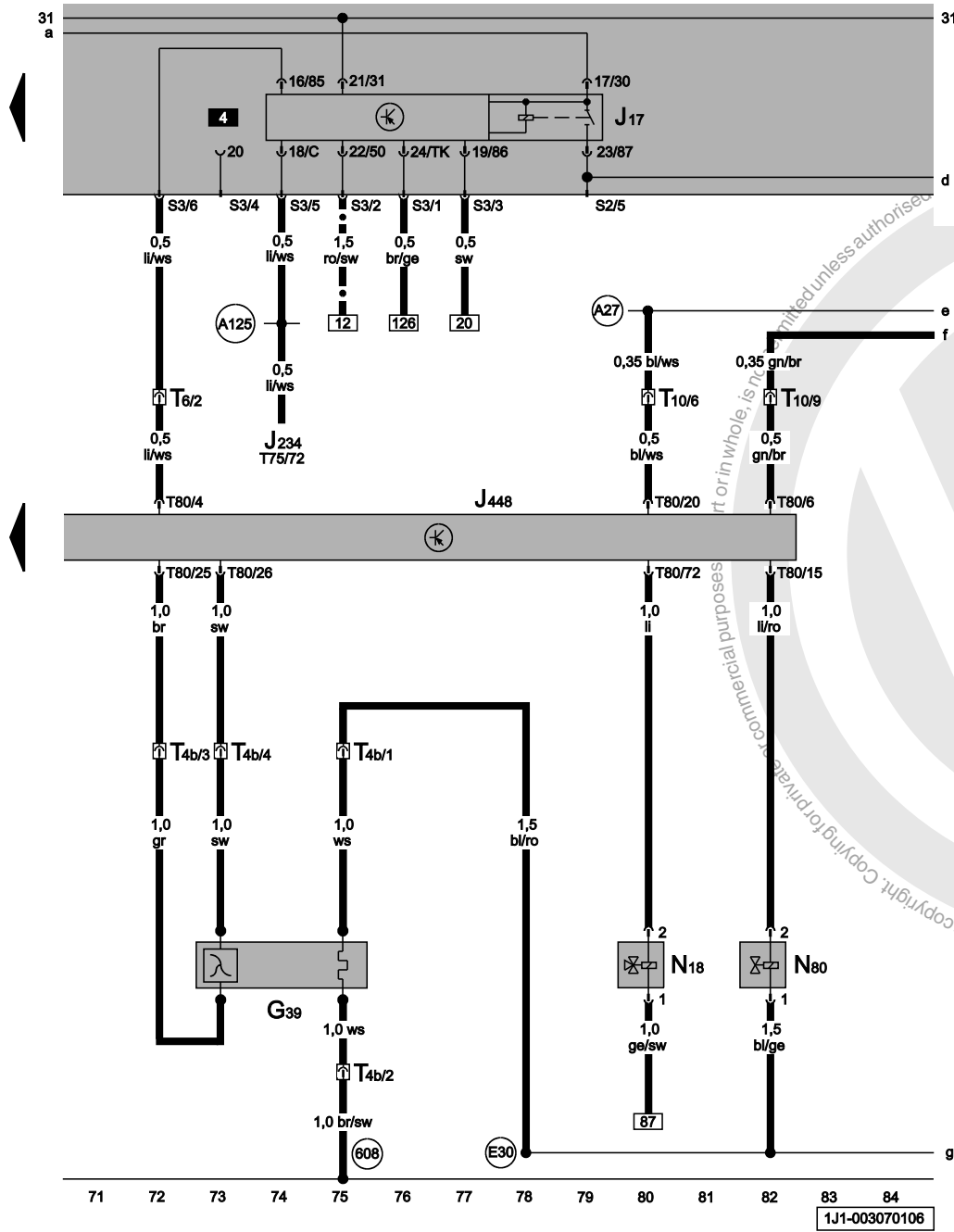
- (220) Earth connection (sender earth), in engine wiring harness
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection 2, in engine compartment wiring harness

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4avant and 4CV injection system control unit, lambda probe, activated charcoal filter system solenoid valve, exhaust gas recirculation valve, fuel pump relay

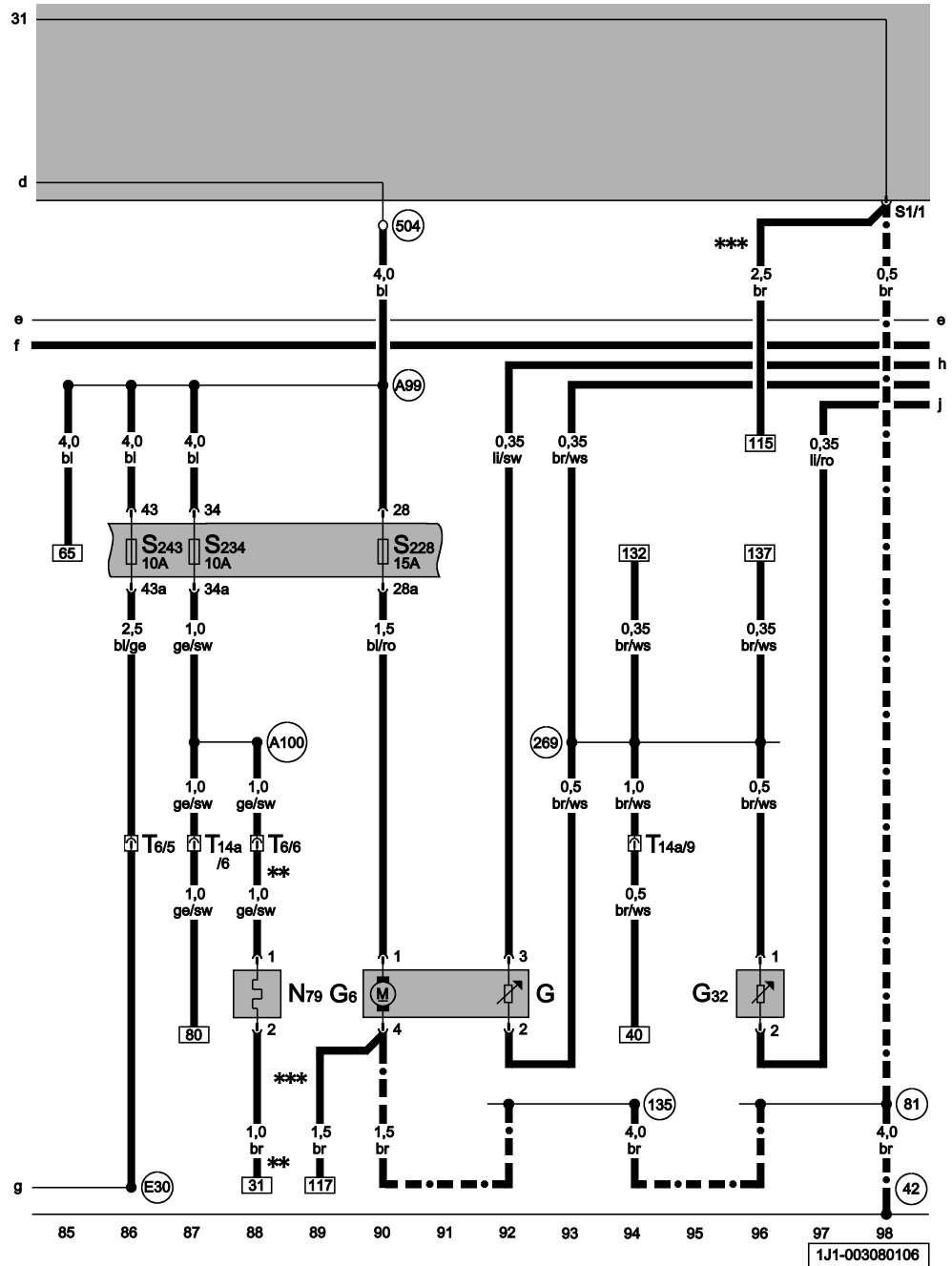
- G39 Lambda probe
- J17 Fuel pump relay
- J234 Airbag control unit, behind the lower console
- J448 4AV injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T80 80-pin connector
- 608 Earth point, in centre of plenum chamber
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- up to April 2001



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1J1-003070106

Fuel pump, fuel gauge sender, coolant shortage indicator sender, heater element for crankcase breather

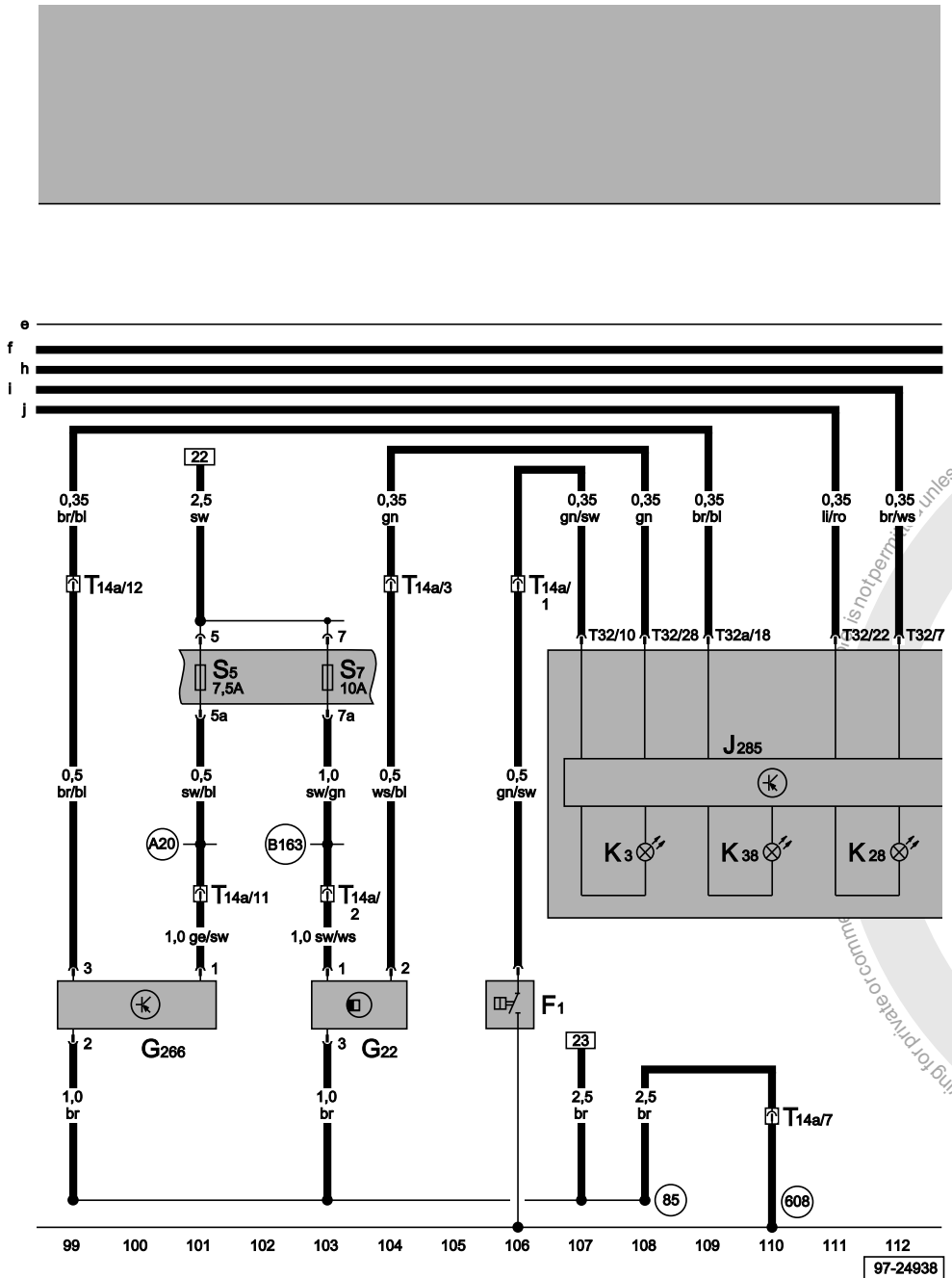


- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- N79 Heater element for crankcase breather
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- ** models with heater element for crankcase breather only
- *** from May 2000
- up to April 2000

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1- in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- * only flexible service interval display



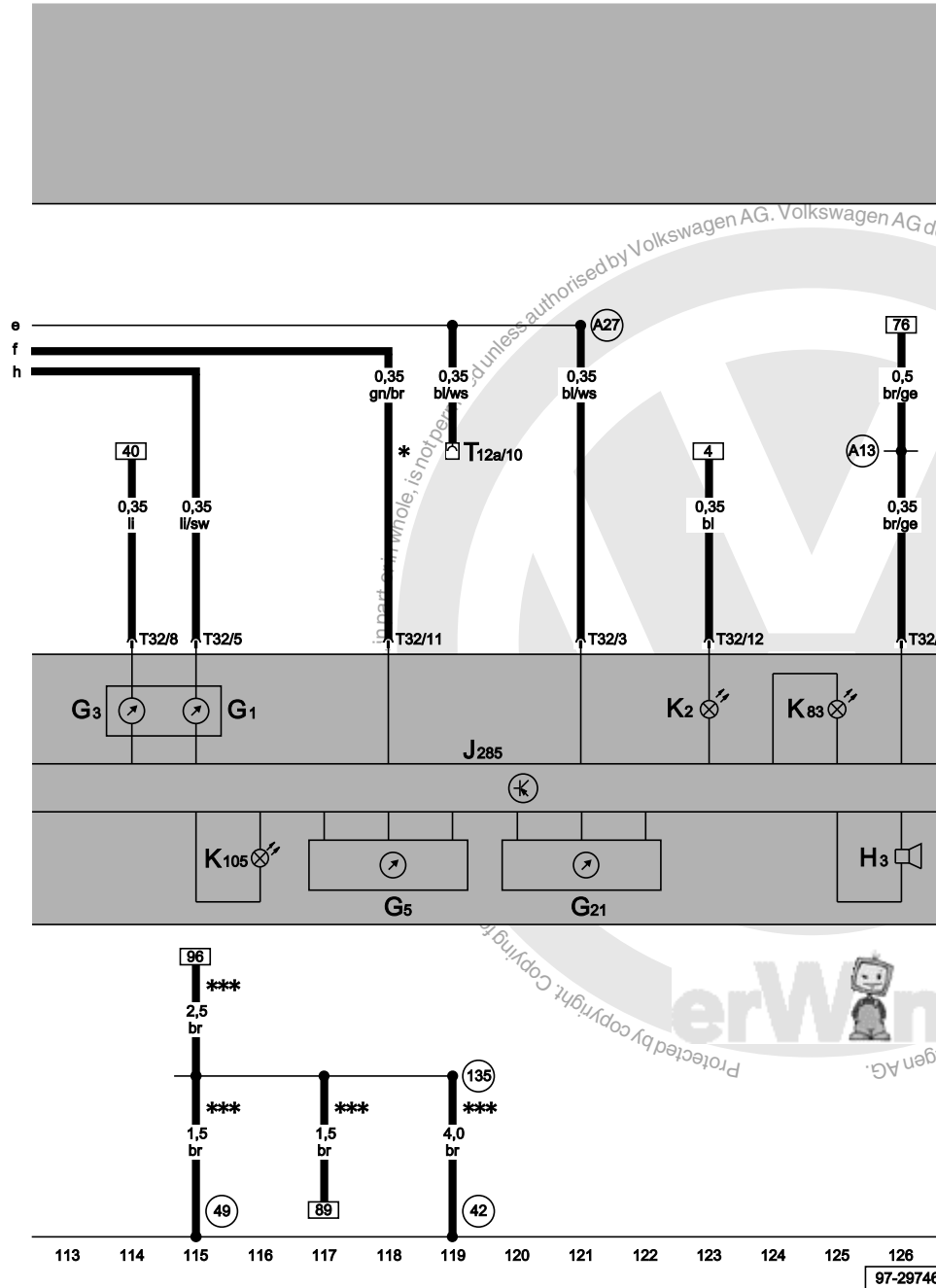
- ws = white
- sw = black
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-24938

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp, exhaust emissions warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K83 Exhaust emissions warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue

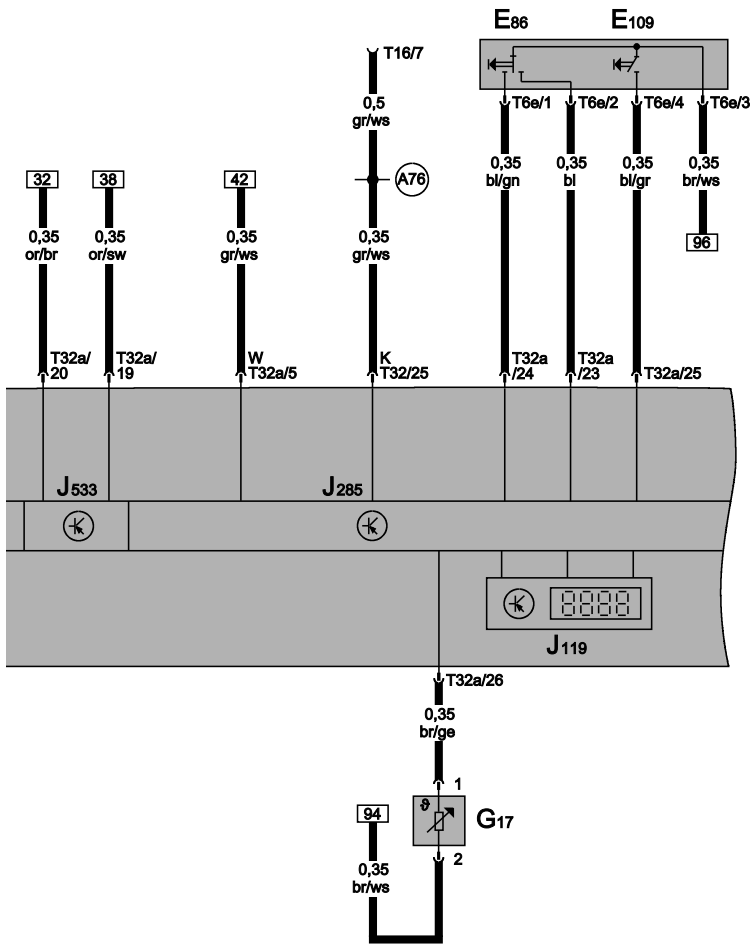
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit
- *** from May 2000



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- li = purple
- ge = yellow
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Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- or = orange
- rs = pink

127 128 129 130 131 132 133 134 135 136 137 138 139 140

1J1-003110106

1.6 I/74 kW Simos, engine code APF

from May 1999

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

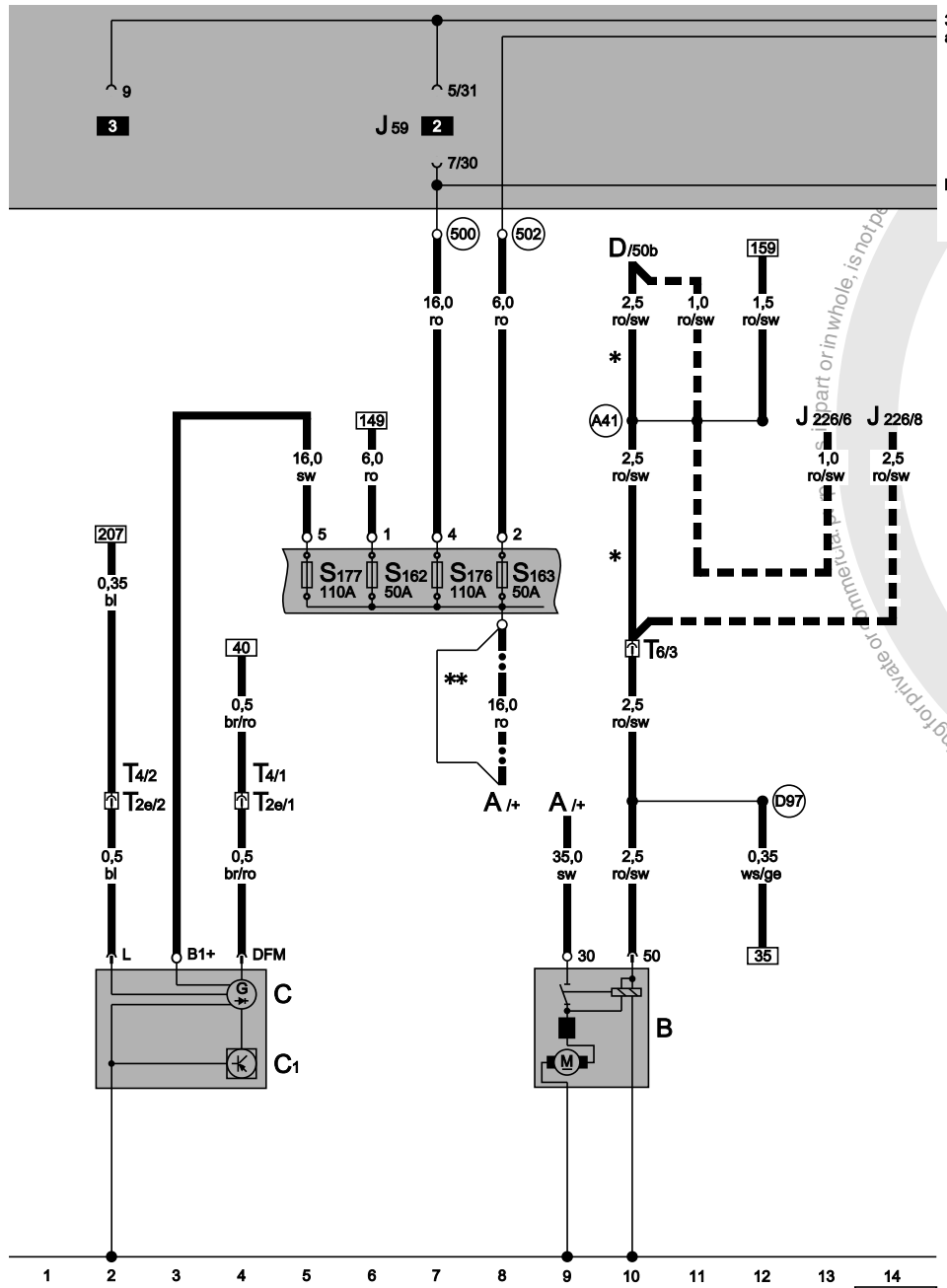
For information concerning

◆ Fault Finding Programs

⇒ guided fault finding



Alternator, starter



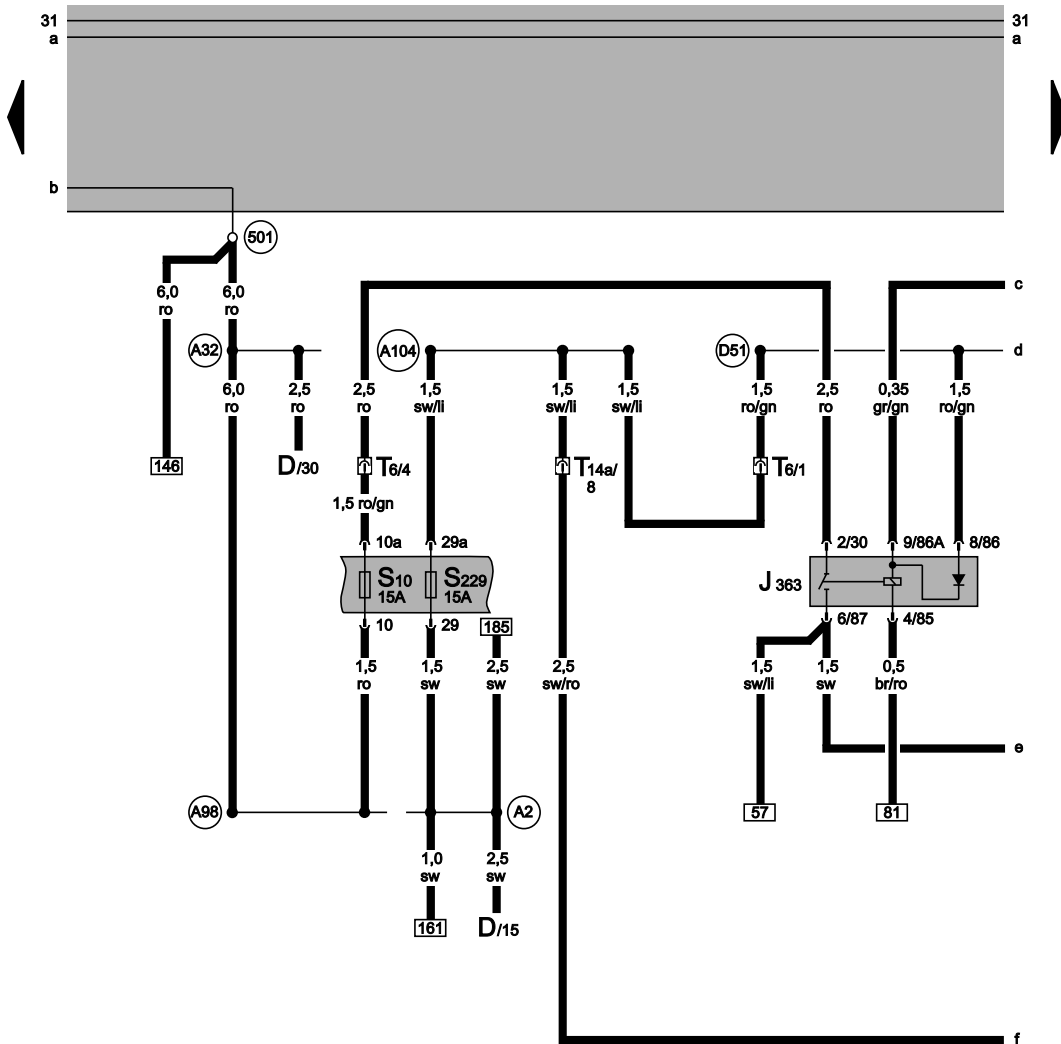
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness
- D97 Connection (50), in engine compartment wiring harness
- * only models with manual gearbox
- models with automatic gearbox only
- ** up August 2000
- from September 2000

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97-29834

Current supply relay for Simos control unit

- D Ignition/starter switch
- J363 Current supply relay for Simos control unit, in protective housing on left in engine compartment (control number 30)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)

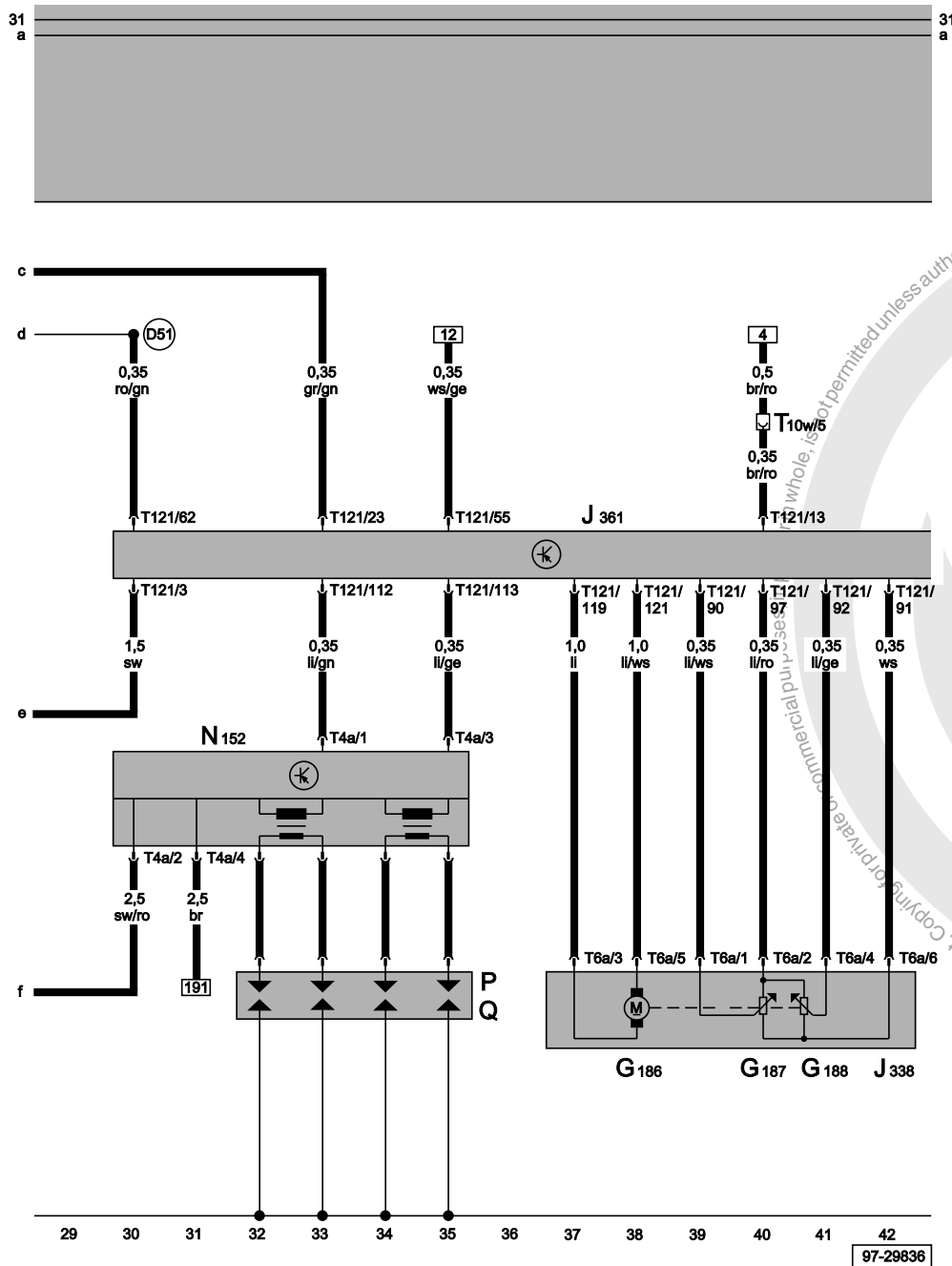


- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D51 Positive connection 1 (15), in engine compartment wiring harness

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Simos control unit, ignition system, throttle valve module, throttle valve drive angle sender for electric throttle

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J338 Throttle valve module
- J361 Simos control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T6a 6-pin connector
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- D51 Positive connection 1 (15), in engine compartment wiring harness

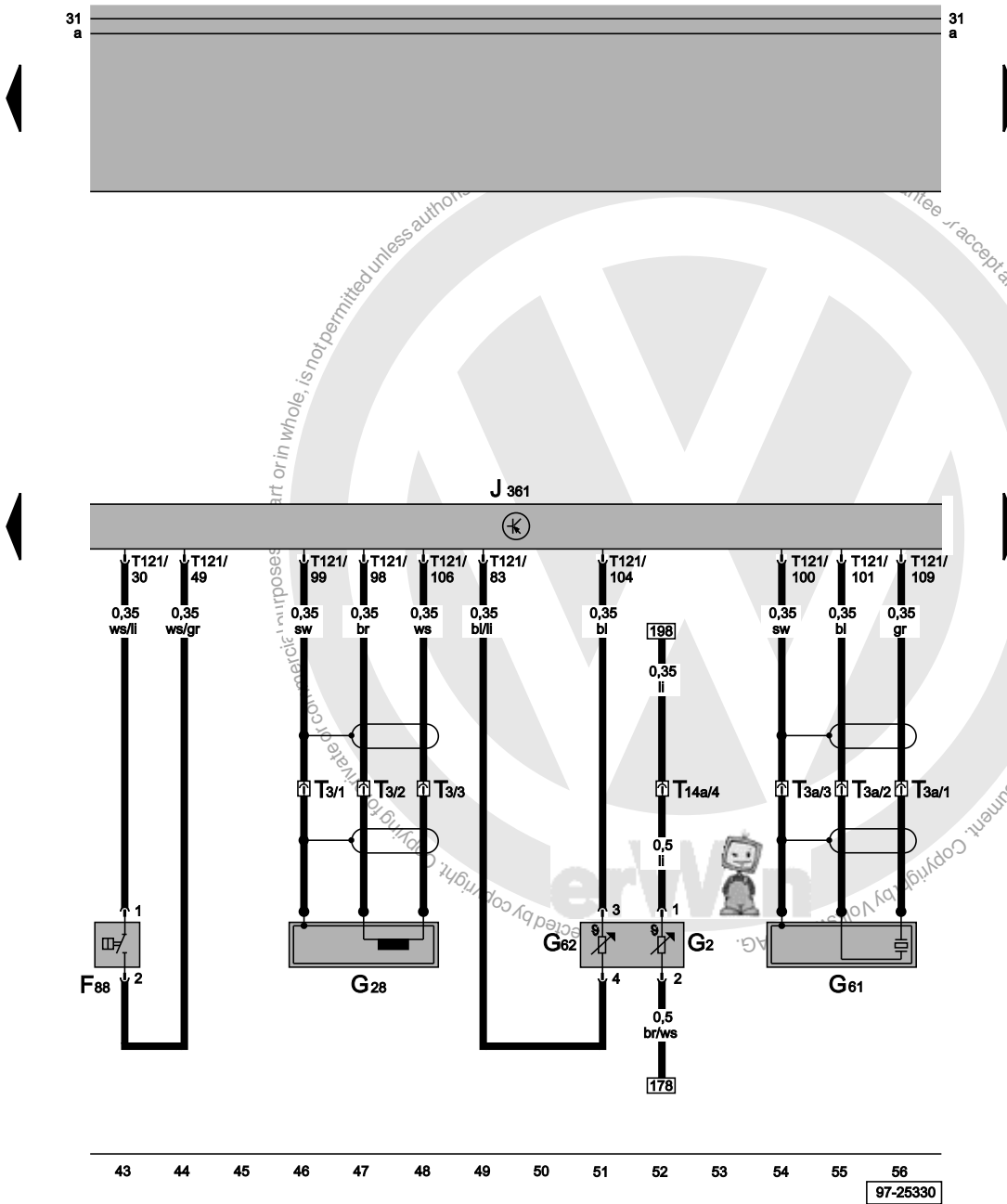


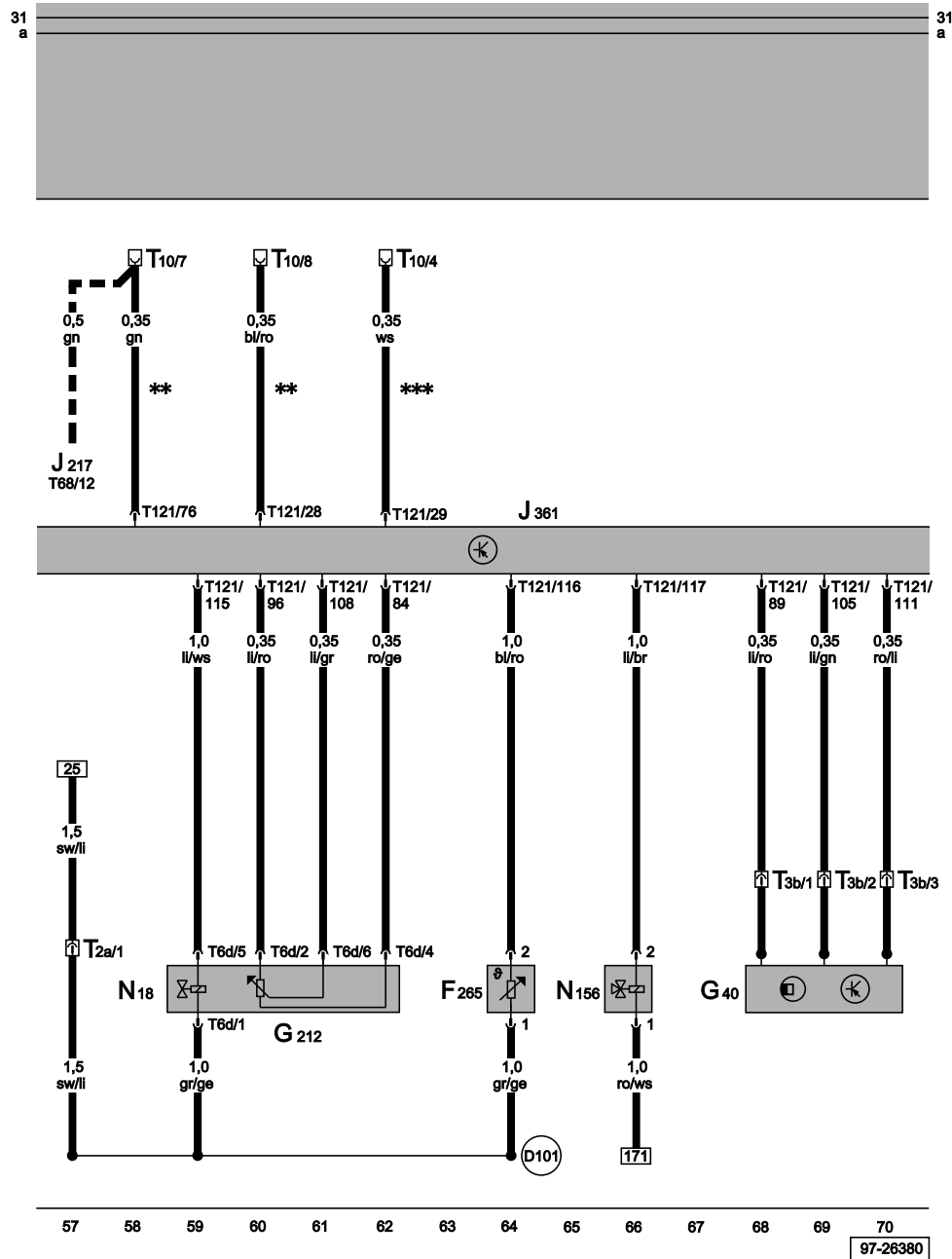
- ws = white
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97-29836

Simos control unit, engine speed sender, power assisted steering pressure switch, coolant temperature sender, knock sensor

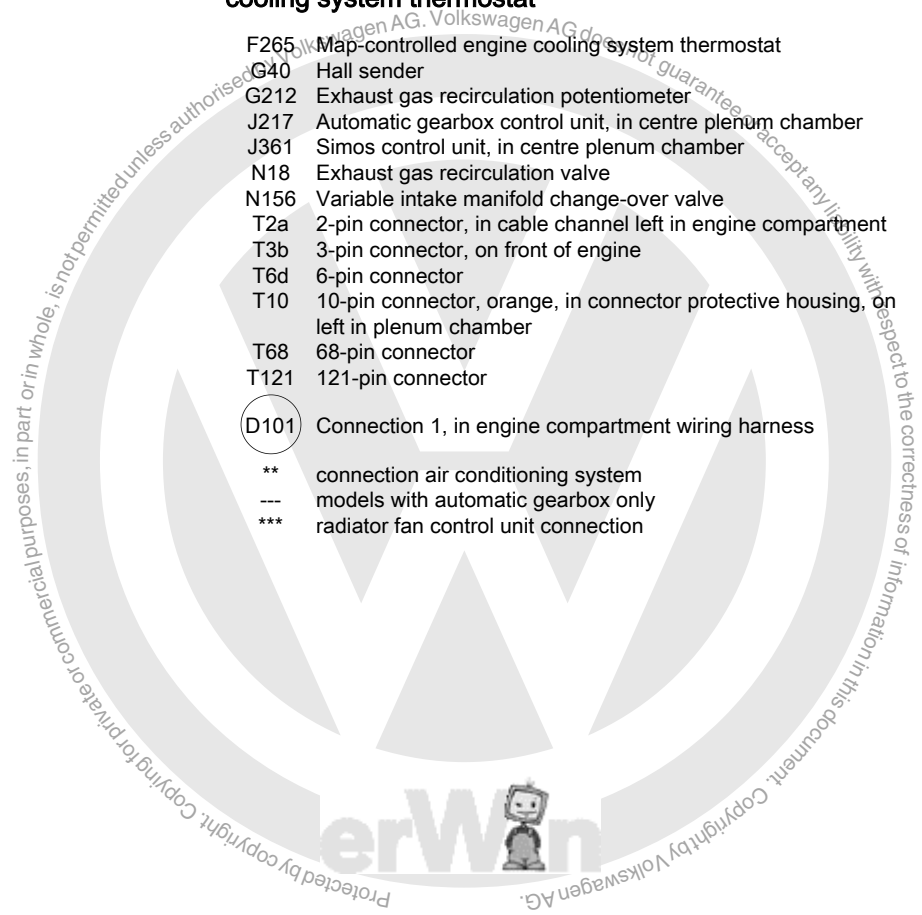
- F88 Power assisted steering pressure switch
- G2 Coolant temperature sender
- G28 Engine speed sender
- G61 Knock sensor 1
- G62 Coolant temperature sender
- J361 Simos control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T3a 3-pin connector, on front of engine
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector





Simos control unit, Hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, variable intake manifold change-over valve, map-controlled engine cooling system thermostat

- F265 Map-controlled engine cooling system thermostat
- G40 Hall sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit, in centre plenum chamber
- J361 Simos control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N156 Variable intake manifold change-over valve
- T2a 2-pin connector, in cable channel left in engine compartment
- T3b 3-pin connector, on front of engine
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector
- D101 Connection 1, in engine compartment wiring harness
- ** connection air conditioning system
- models with automatic gearbox only
- *** radiator fan control unit connection



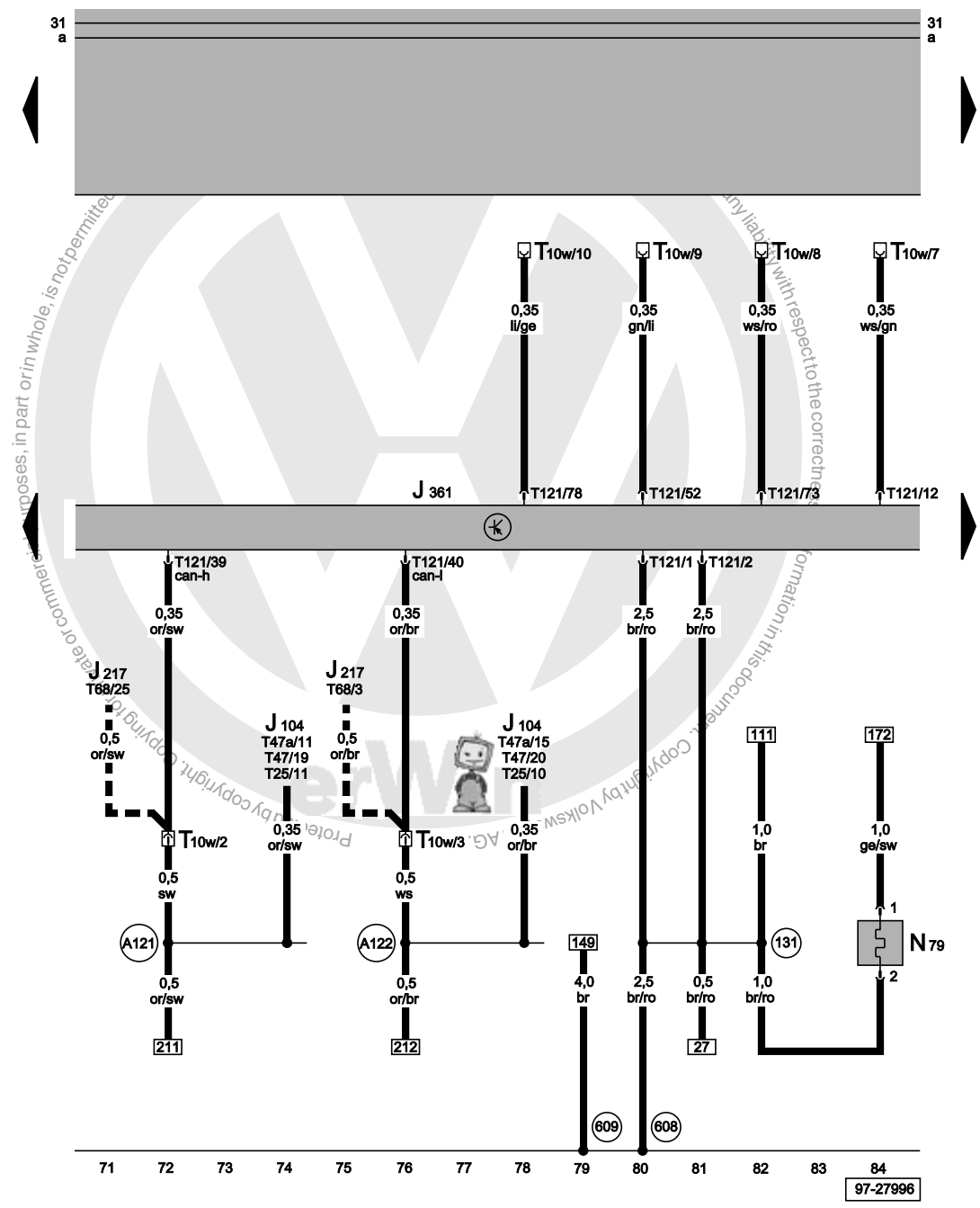
- ws = white
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Simos control unit, heater element for crankcase breather

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J361 Simos control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (from August 2000)
- T68 68-pin connector
- T121 121-pin connector

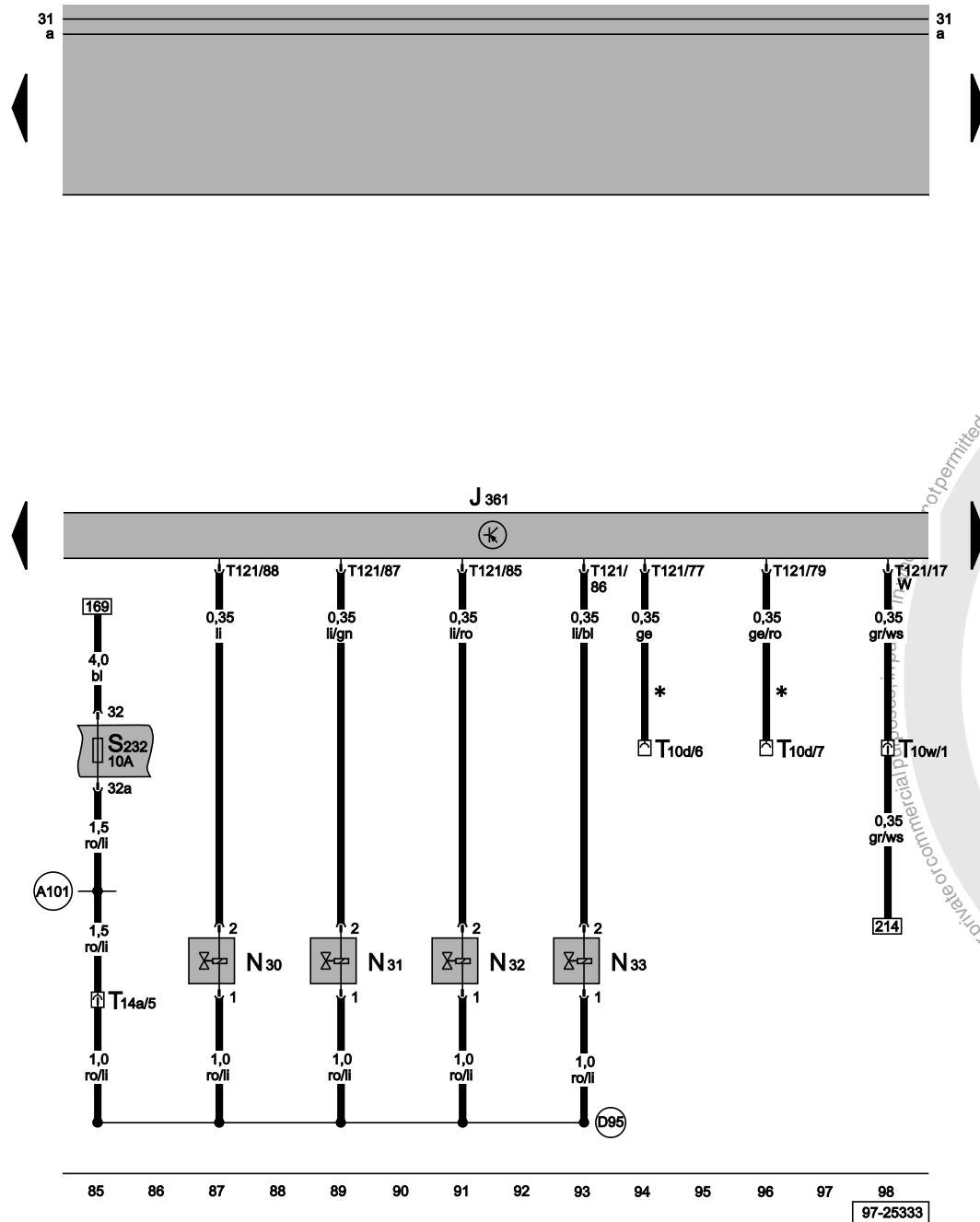
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only

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Simos control unit, injectors

- J361 Simos control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector
- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- * Radiator fan control unit connection



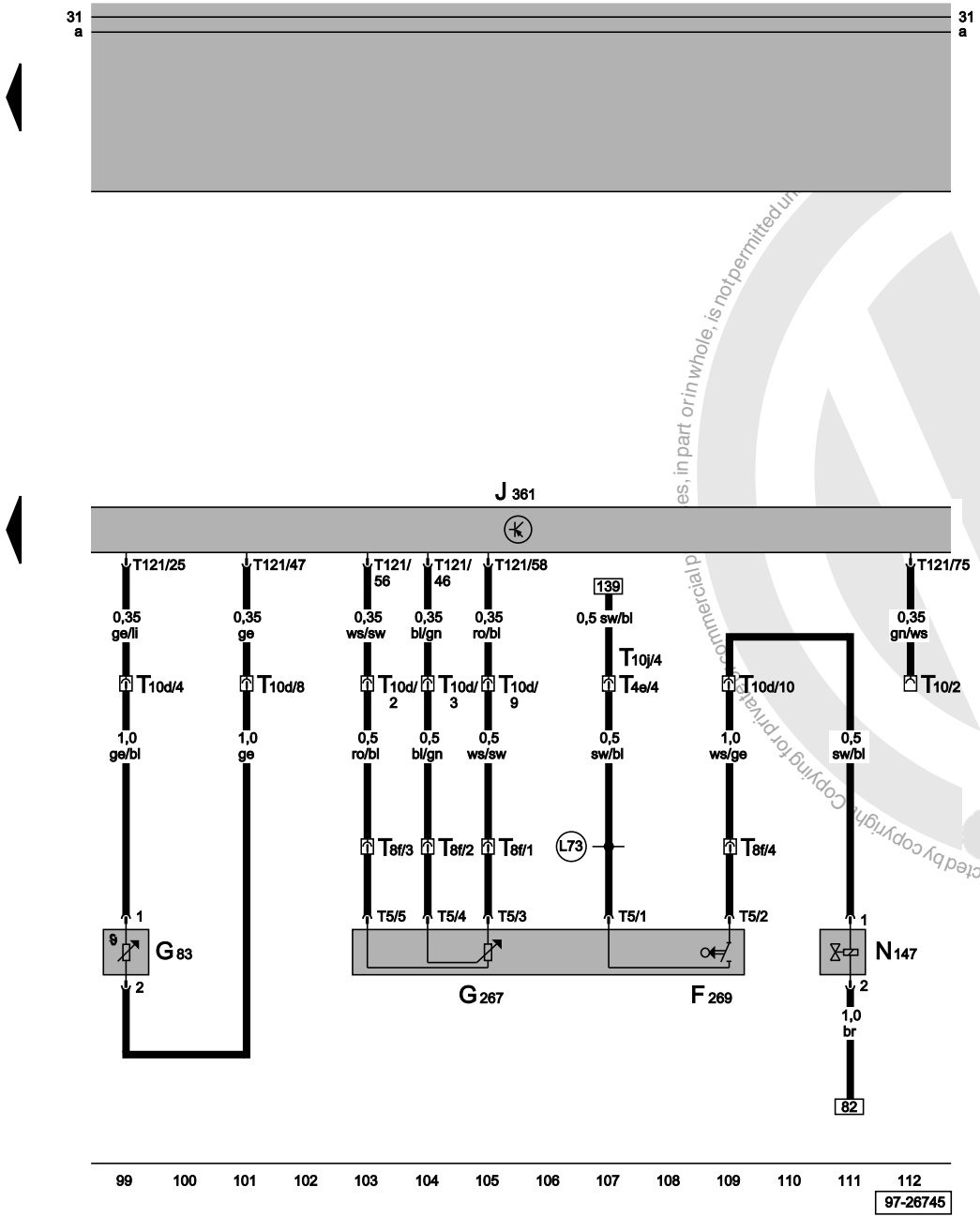
- ws = white
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Simos control unit, radiator outlet coolant temperature sender, potentiometer for temperature selection rotary knob, temperature flap position switch, 2-way valve for coolant shut-off valve

- F269 Temperature flap position switch*
- G83 Radiator outlet coolant temperature sender
- G267 Potentiometer, temperature selection rotary knob*
- J361 Simos control unit, in centre plenum chamber
- N147 2-way valve for coolant shut-off valve
- T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
- T5 5-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10j 10-pin connector, behind centre dash panel (models with air conditioning system)
- T121 121-pin connector

L73 Connection (15a), in fresh air blower wiring harness

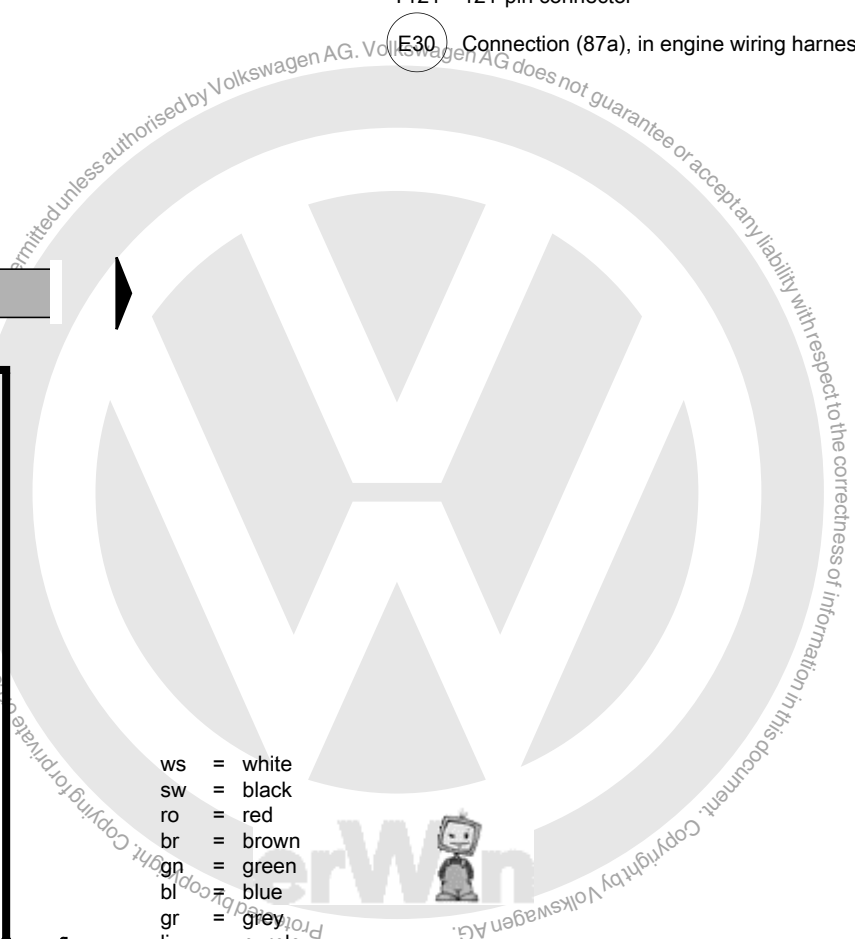
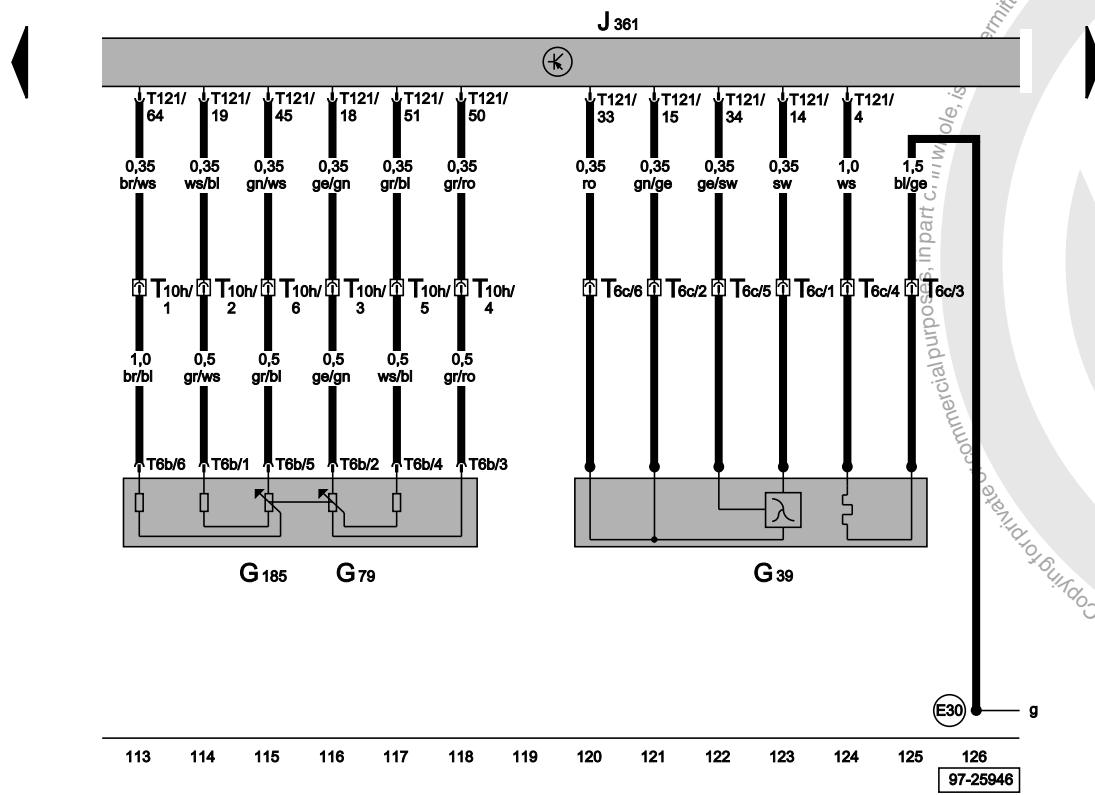
* F269 is closed when G267 is positioned on left limit stop. component not for Climatronic exist



Simos control unit, accelerator position sender, lambda probe

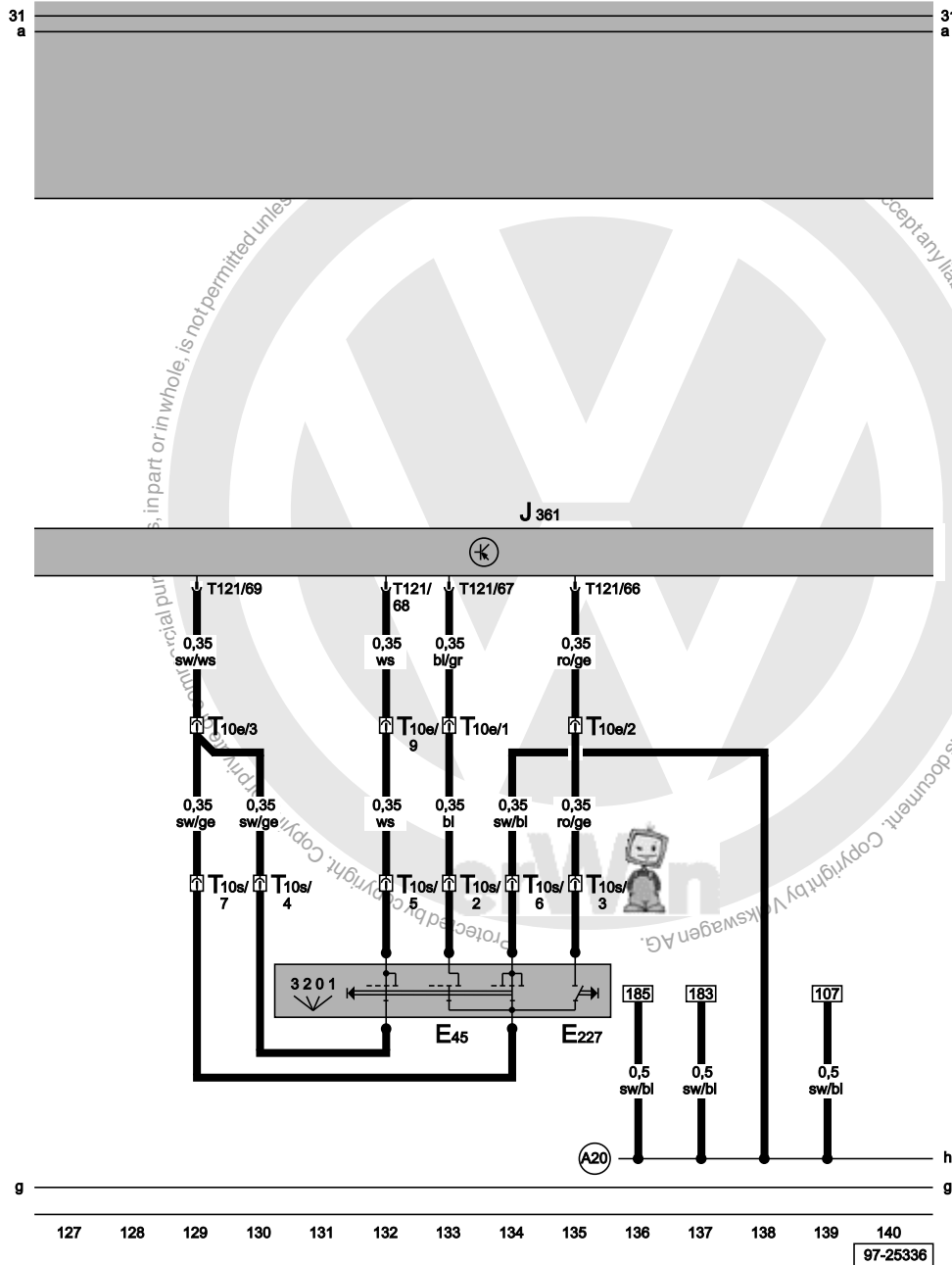
- G79 Accelerator position sender
- G39 Lambda probe
- G185 Accelerator position sender -2-
- J361 Simos control unit, in centre plenum chamber
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

E30 Connection (87a), in engine wiring harness



Simos control unit, cruise control system switch (GND)

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- J361 Simos control unit, in centre plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector
- A20 Connection (15a), in dash panel wiring harness
- ** only models with GND



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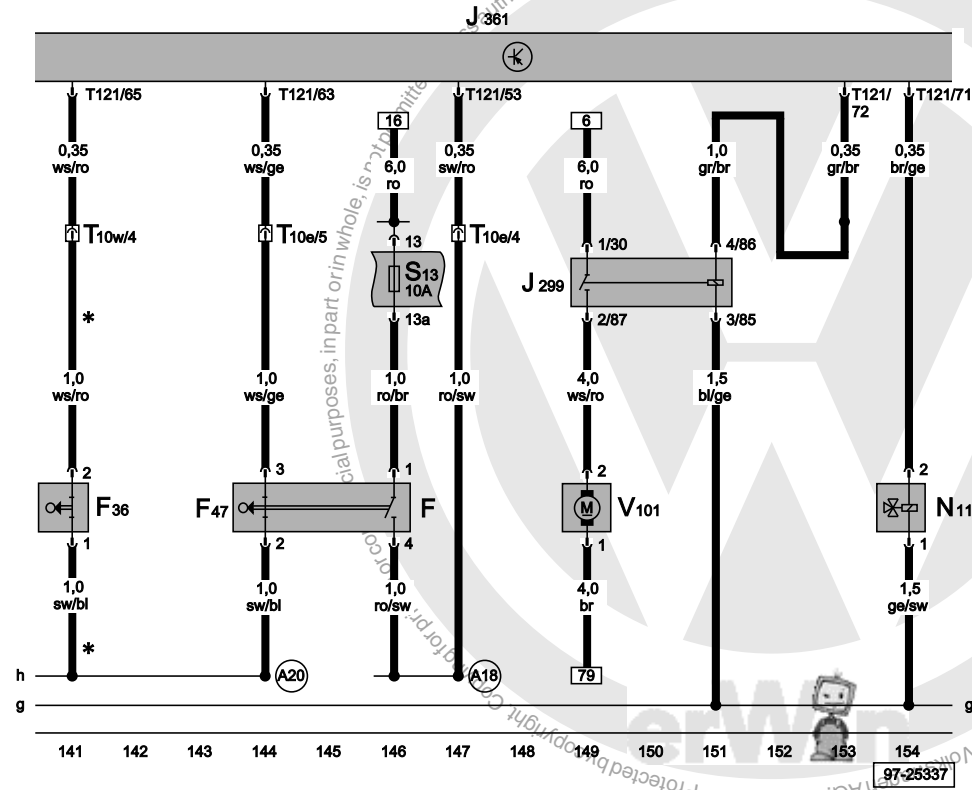
Simos control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- J361 Simos control unit, in centre plenum chamber
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

A18 Connection (54), in dash panel wiring harness

A20 Connection (15a), in dash panel wiring harness

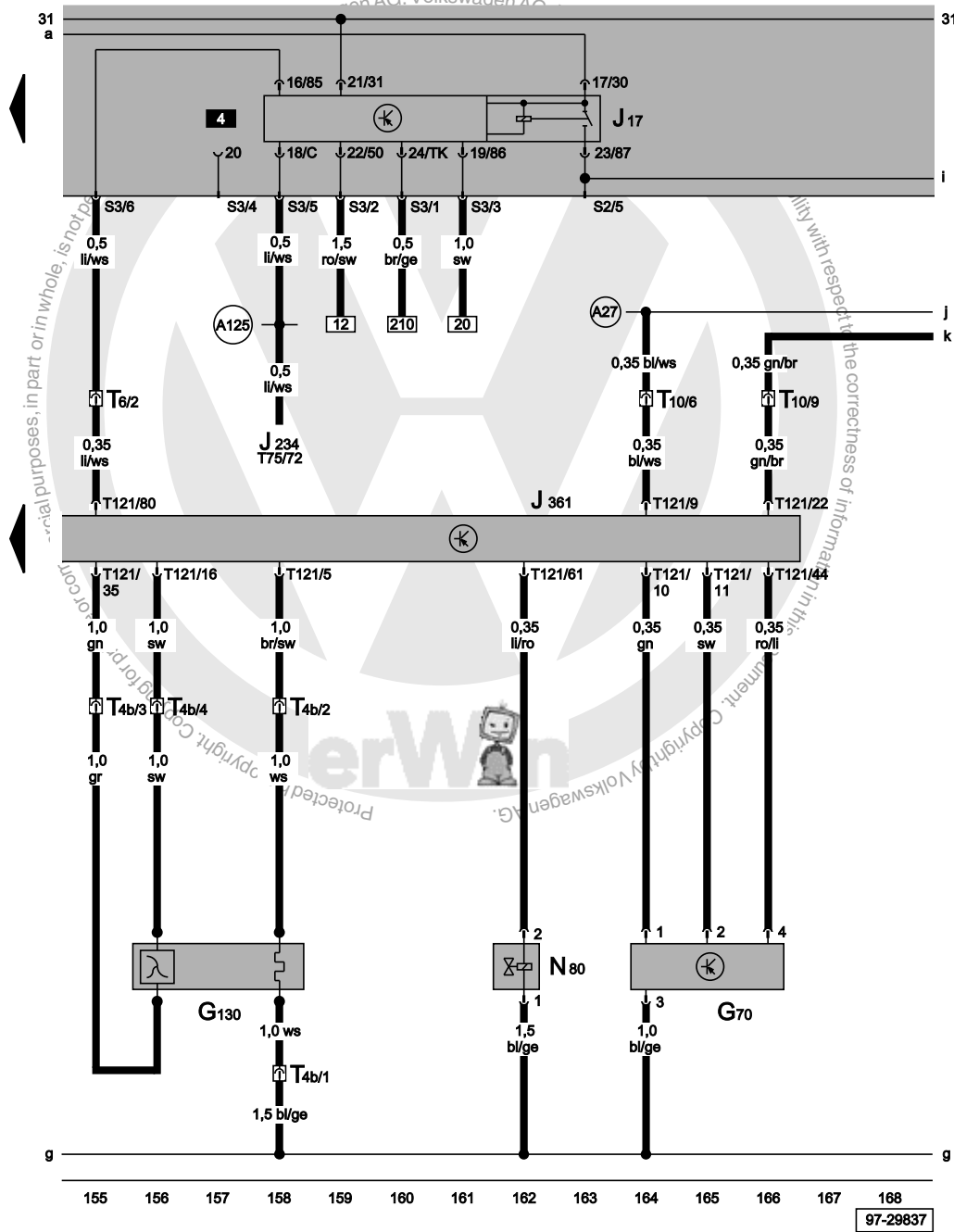
* only models with manual gearbox



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Simos control unit, lambda probe after catalytic converter, air mass meter, fuel pump relay, activated charcoal filter system solenoid valve

- G70 Air mass meter
- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit, behind the lower console
- J361 Simos control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness



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- li = purple
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- or = orange
- rs = pink

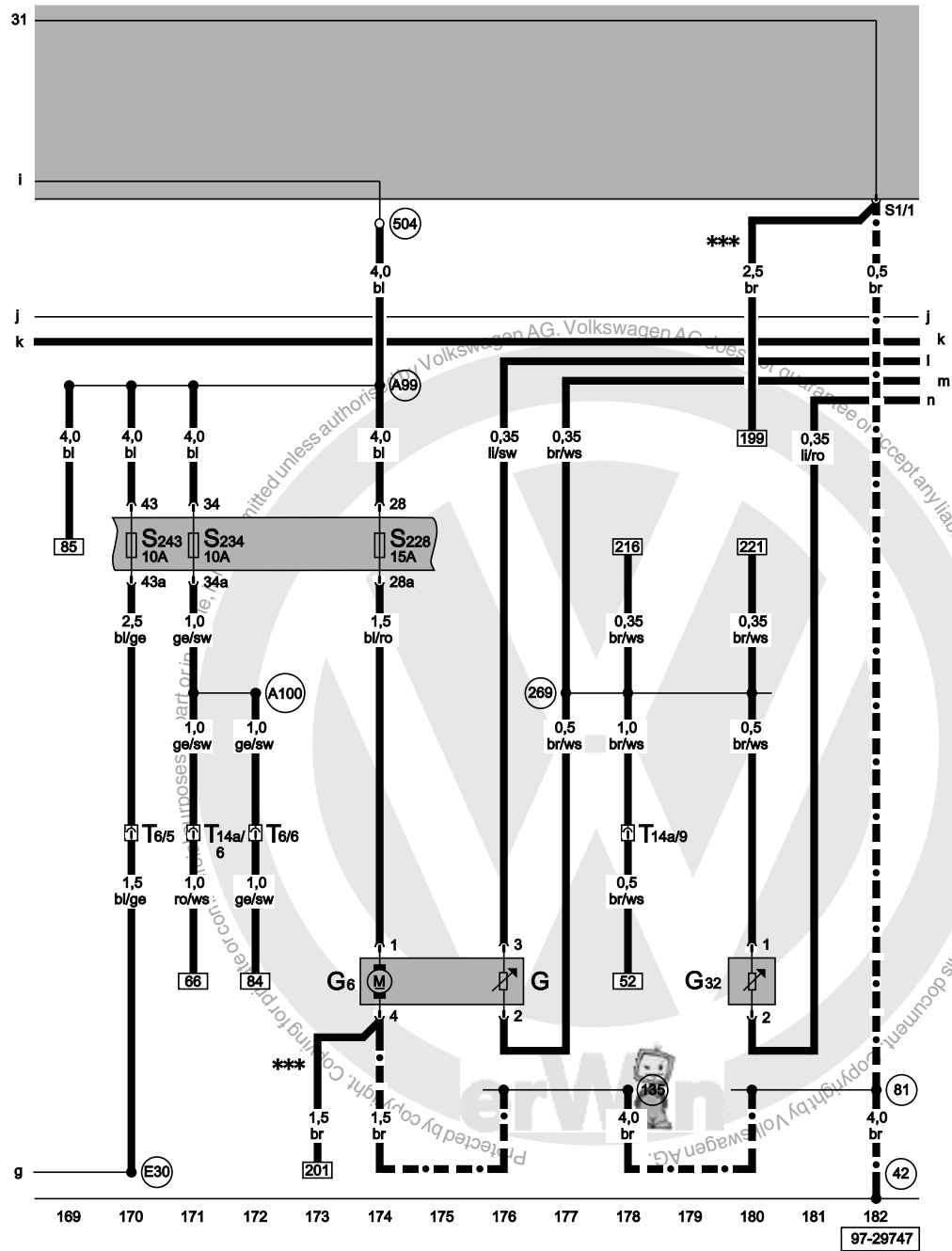
97-29837

Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)

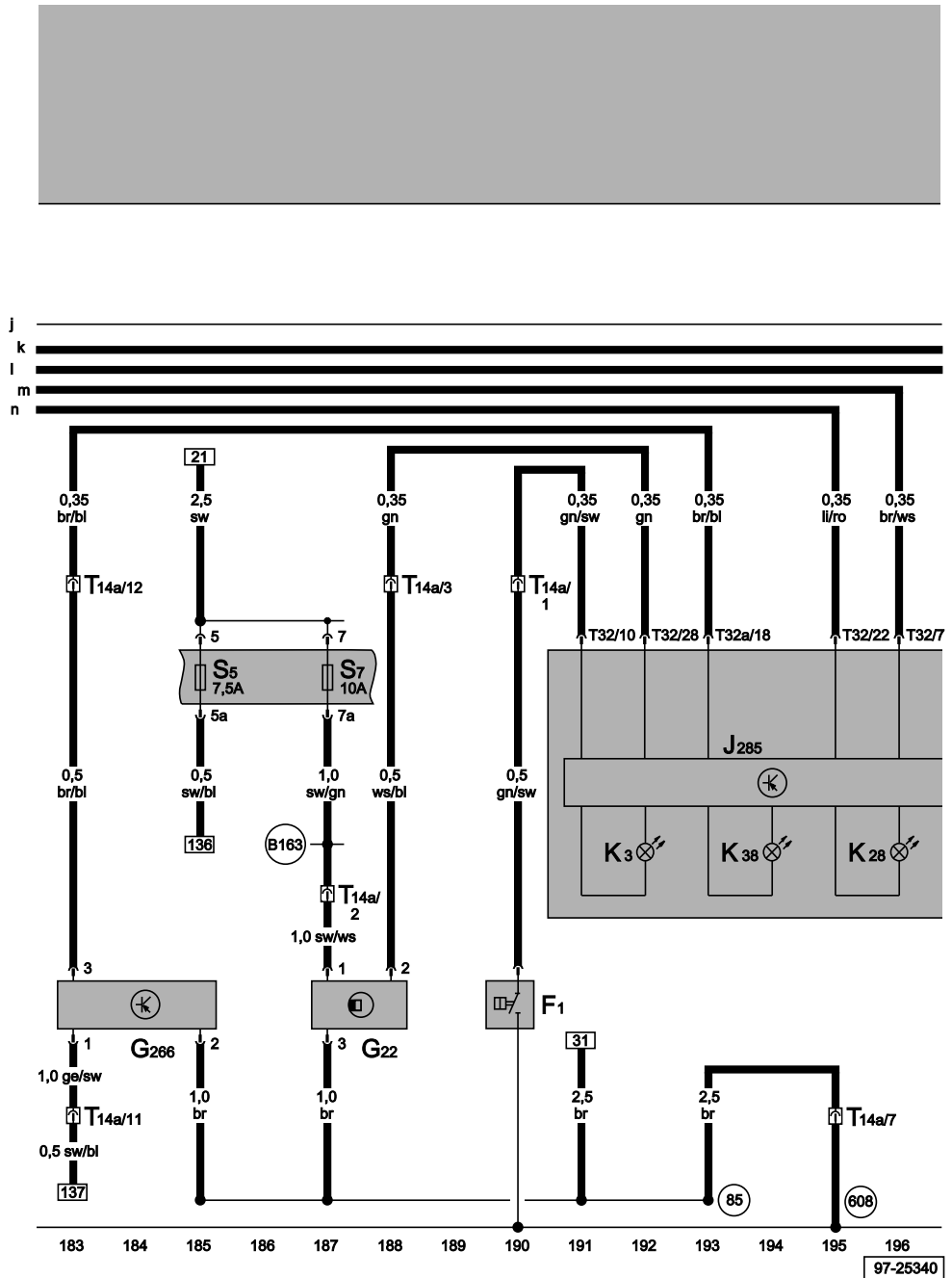
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** from May 2000
- .- up to April 2000

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- ge = yellow
- or = orange
- rs = pink



Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

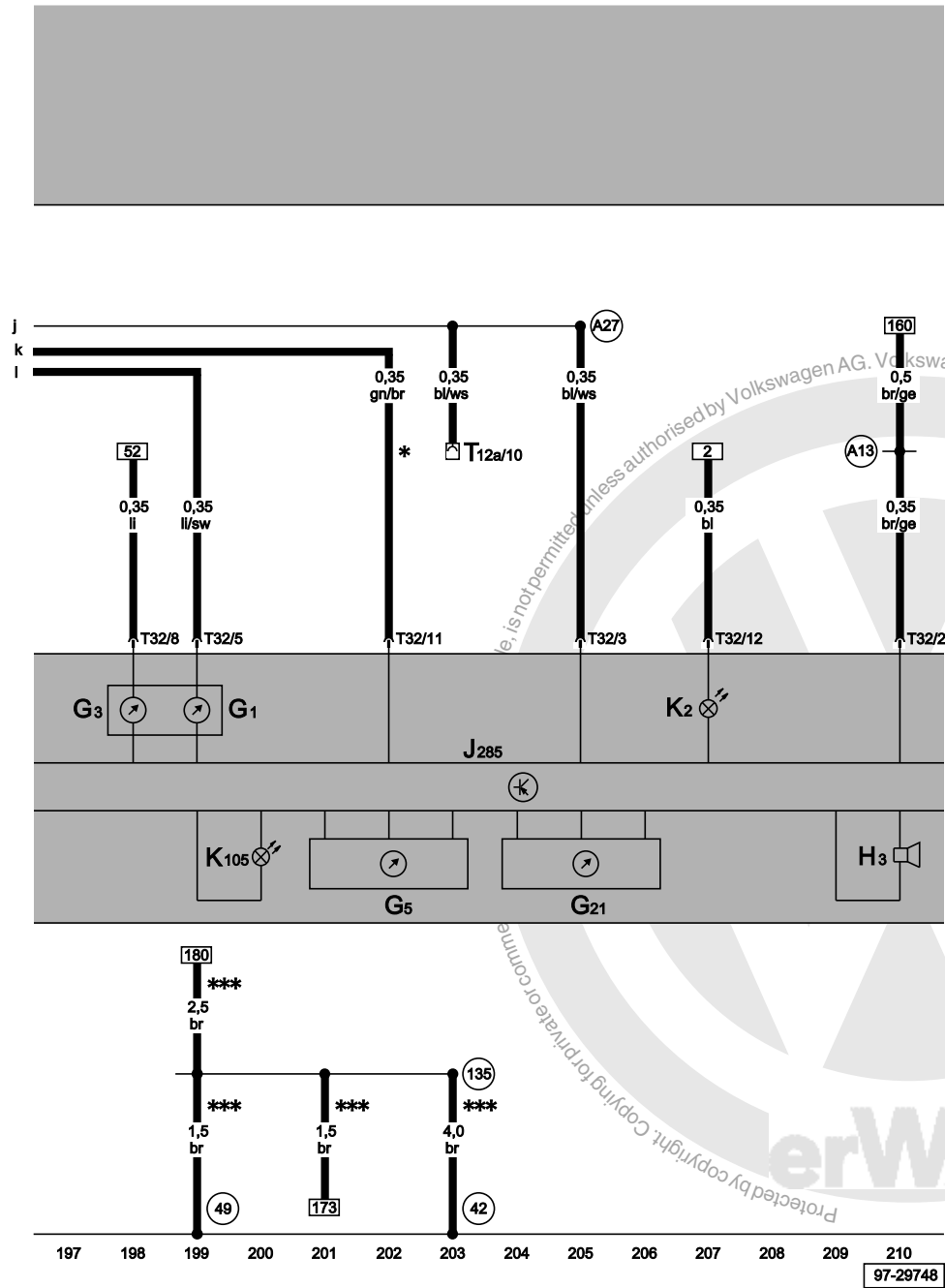
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness
- * only flexible service interval display



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
 - G3 Coolant temperature gauge
 - G5 Rev. counter
 - G21 Speedometer
 - H3 Warning buzzer
 - J285 Control unit with display in dash panel insert
 - K2 Alternator warning lamp
 - K105 Reserve fuel warning lamp
 - T12a 12-pin connector, Climatronic connection only
 - T32 32-pin connector, blue
- 42 Earth point, next to steering column
 - 49 Earth point, on steering column
 - 135 Earth connection 2, in dash panel wiring harness
 - A13 Connection (door contact switch), in dash panel wiring harness
 - A27 Connection (speed signal), in dash panel wiring harness
 - * revolution signal engine control unit
 - *** from May 2000

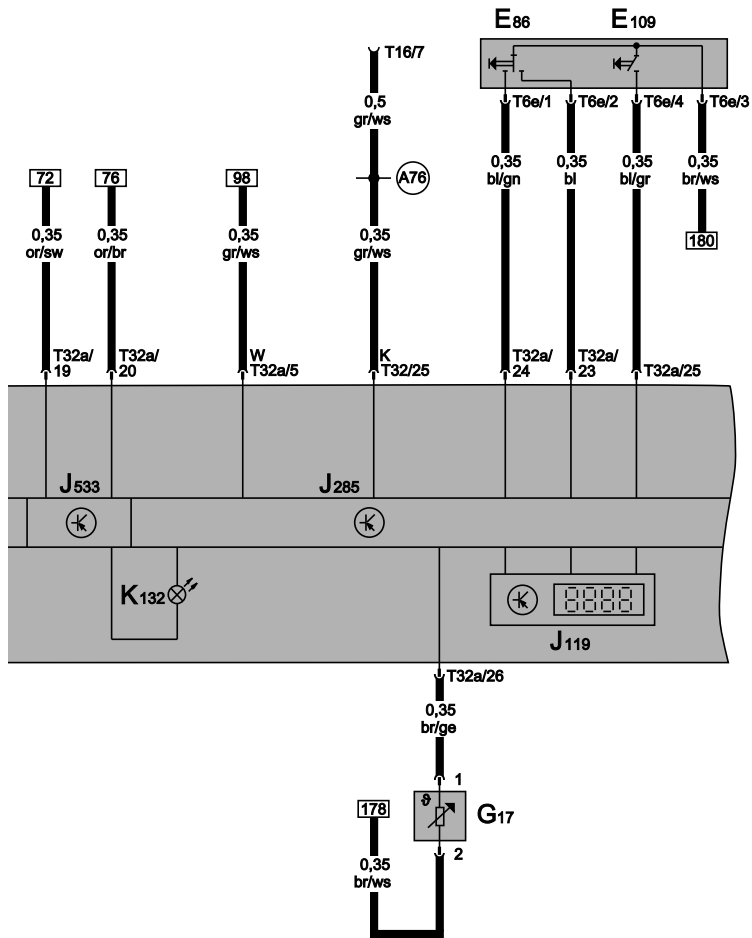


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29748

Dash panel insert, electric power control fault lamp, multifunction display, ambient temperature indicator, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1.8 litre/92 kW Motronic, engine codes AGN

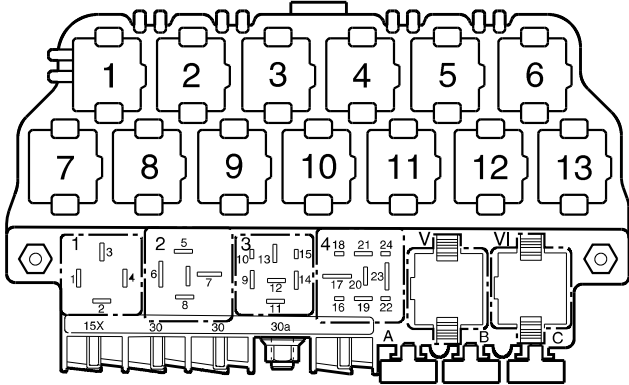
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



97--14163

4 - Fuel pump relay (409)



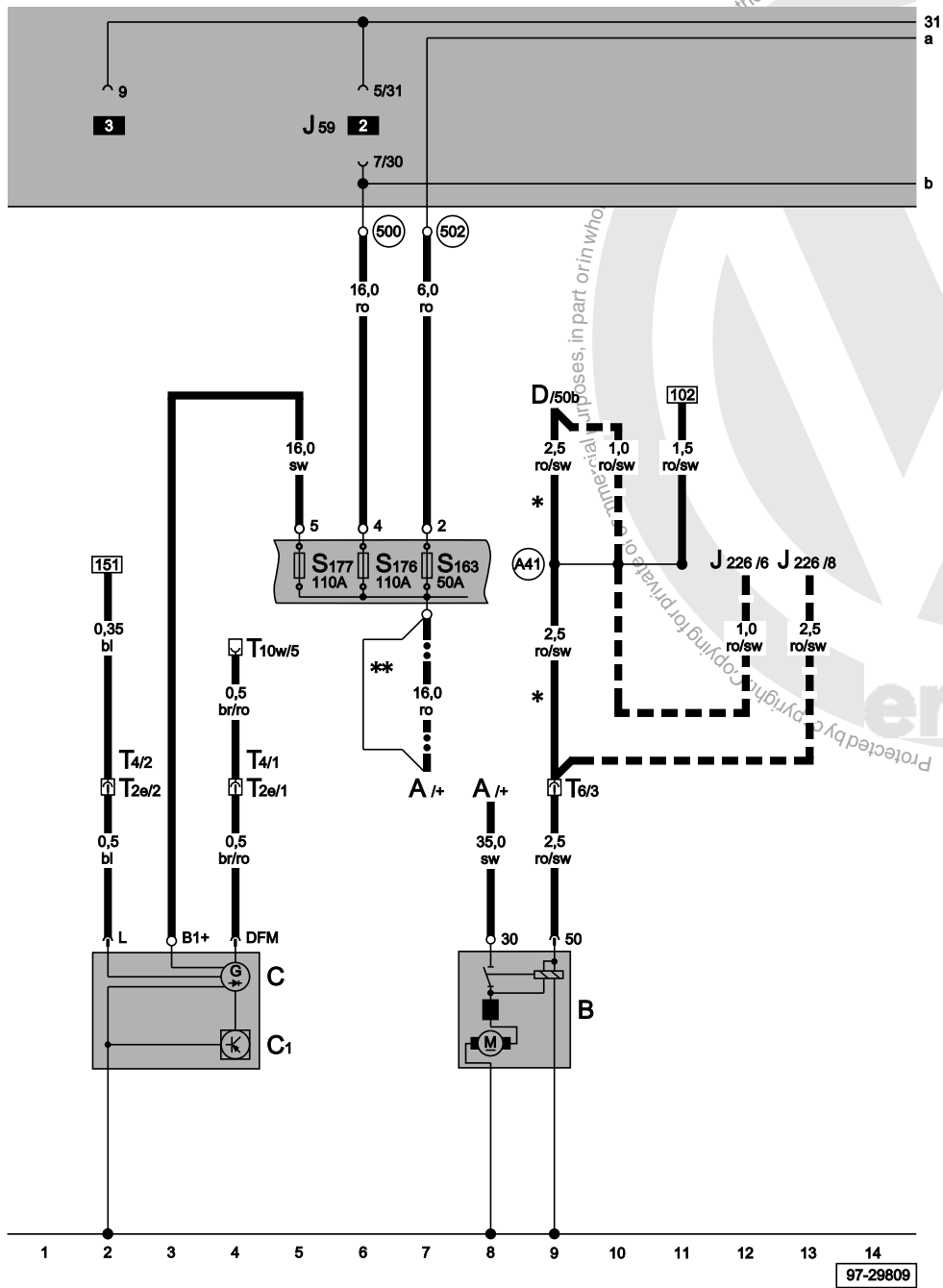
Notes:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S163 Fuse -2- (30) in fuse box/battery
- S176 Fuse -4- (30) in fuse box/battery
- S177 Fuse -5- (30) in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- A41 Positive (+) connection (50), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox
- ** Up to August 2000
- From September 2000

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

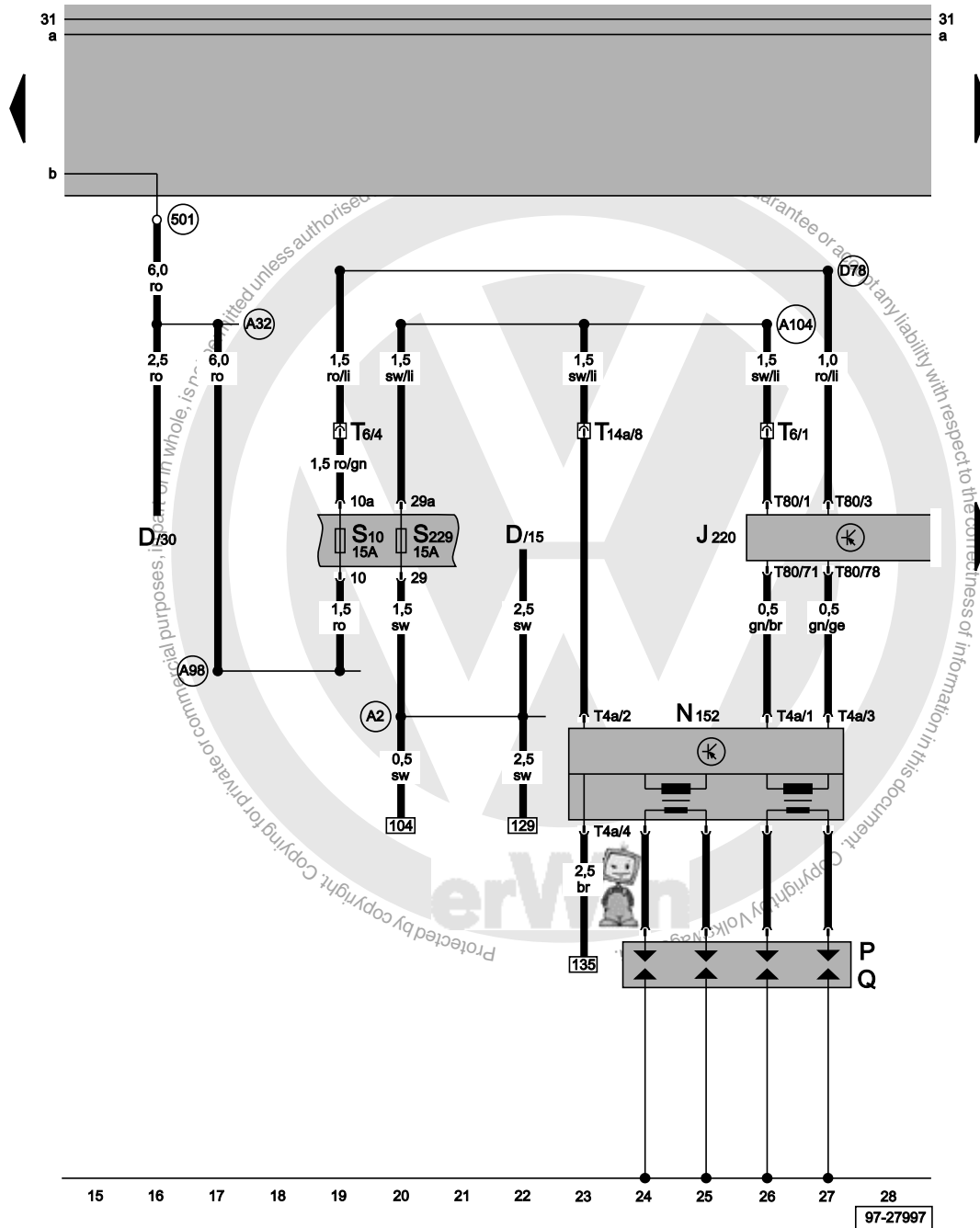
97-29809

Motronic control unit, ignition system

- D Ignition/starter switch
- J220 Motronic control unit, in plenum chamber, centre
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plug
- S10 Fuse in fuse box
- S229 Fuse in fuse box
- T4a 4-pin connector
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness
- D78 Positive (+) connection -1- (30a), in engine compartment wiring harness

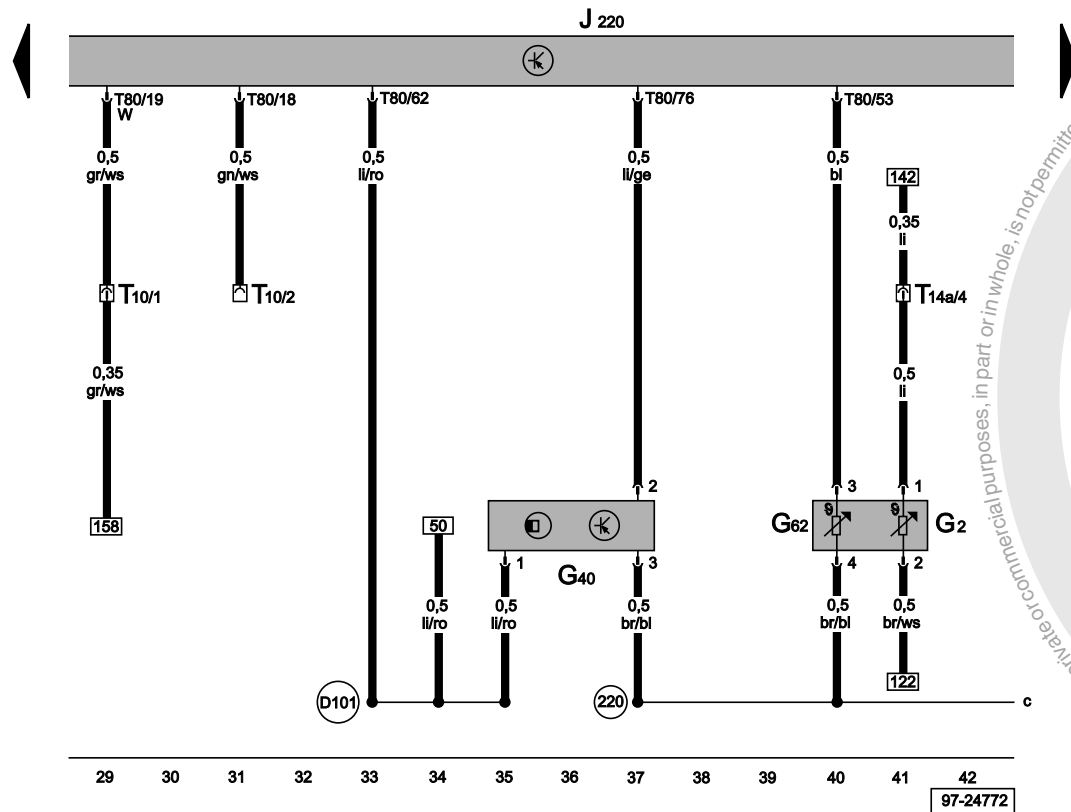
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Motronic control unit, coolant temperature sender, hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J220 Motronic control unit, in plenum chamber, centre
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

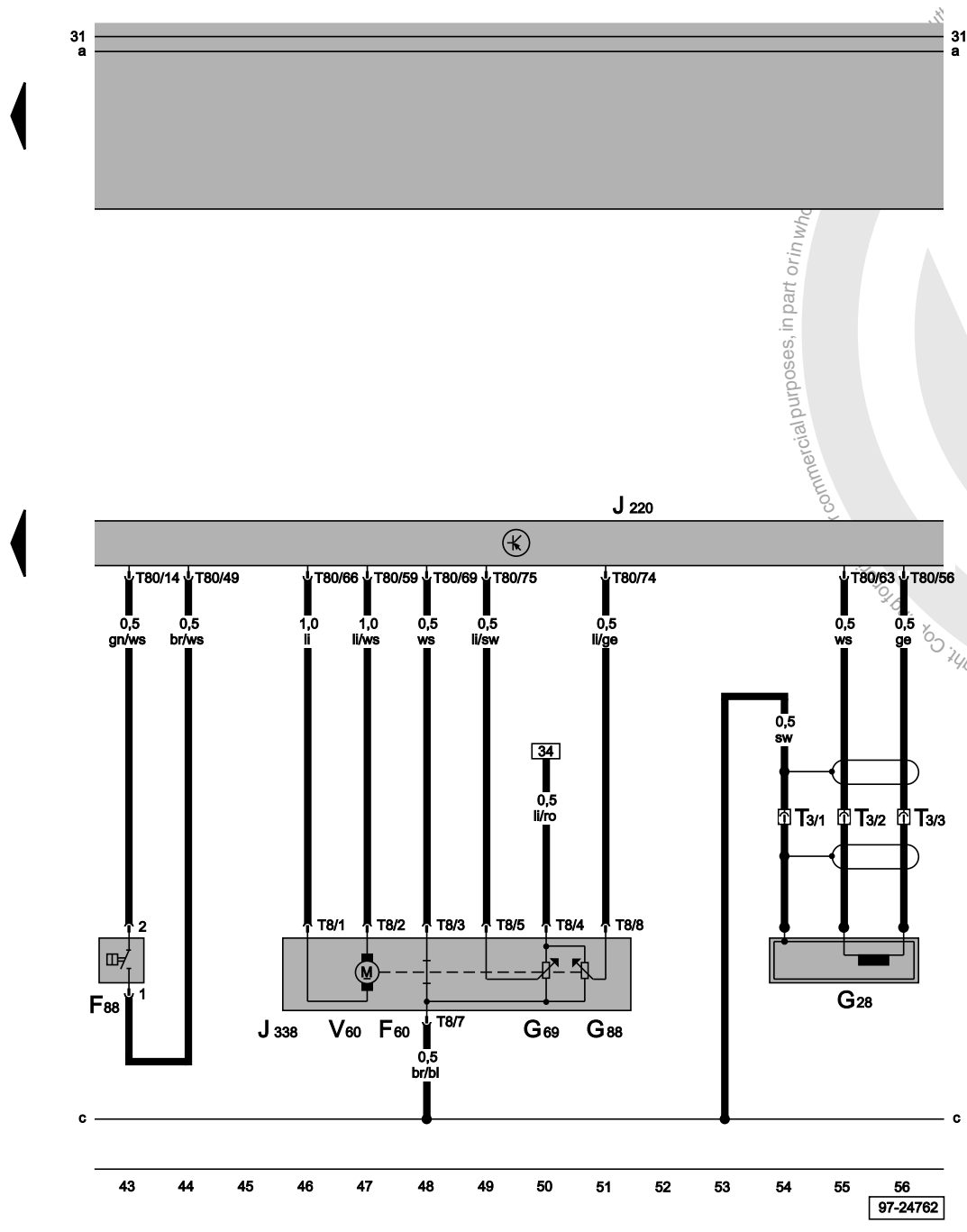
- (220) Earth connection (sender earth), in engine wiring harness
- (D101) Connection -1-, in engine wiring harness



- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, throttle valve control part, engine speed sensor, power steering pressure switch

- F60 Idling switch
- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J220 Motronic control unit, centre in plenum chamber
- J338 Throttle valve control unit
- T3 3-pin connector, near intake manifold
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner



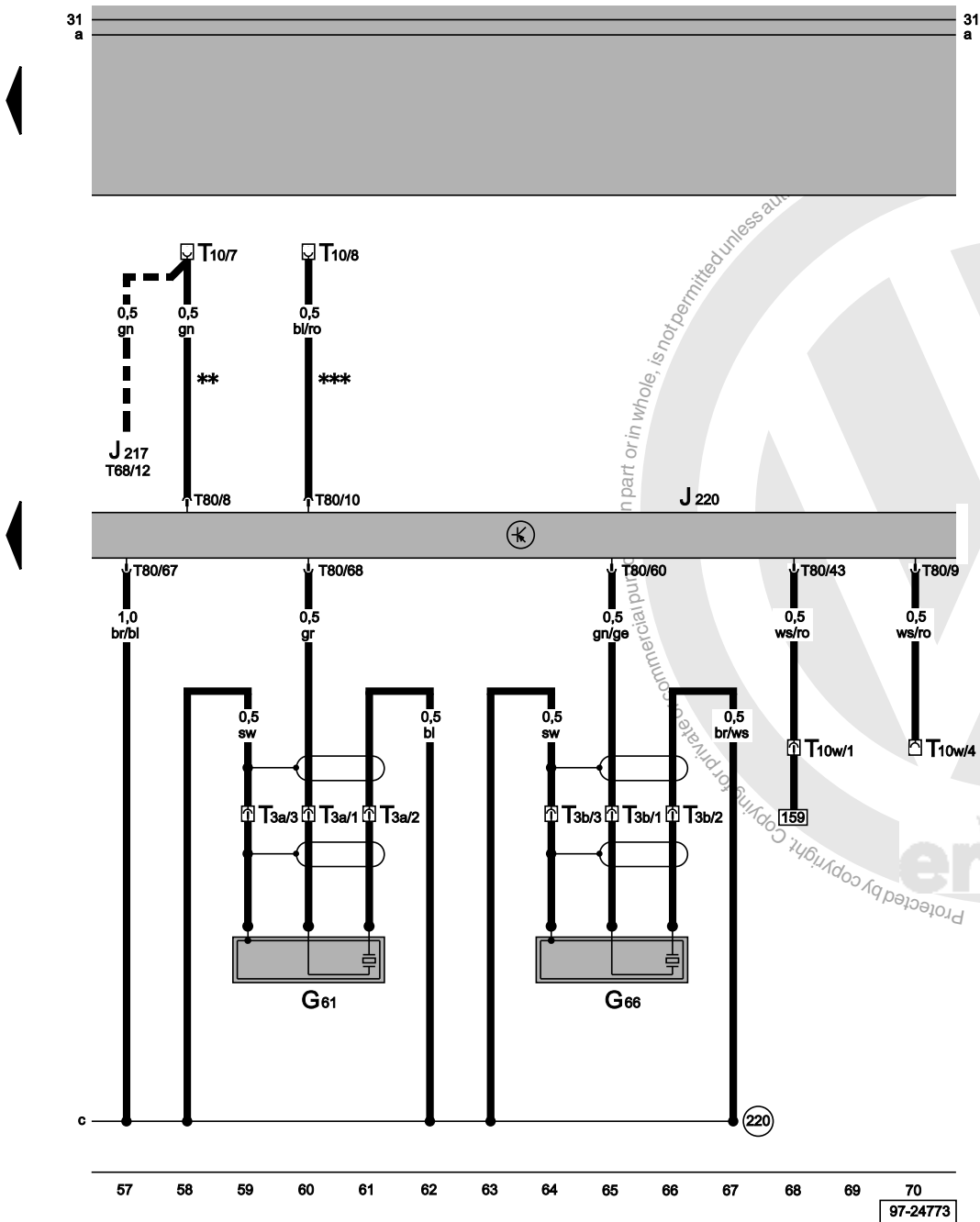
- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-24762

Motronic control unit, knock sensor I, knock sensor II

- G61 Knock sensor I
- G66 Knock sensor II
- J217 Automatic gearbox control unit
- J220 Motronic control unit, centre in plenum chamber
- T3a 3-pin connector, near intake manifold
- T3b 3-pin connector, near intake manifold
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, left in plenum chamber
- T68 68-pin connector
- T80 80-pin connector
- 220 Earth connection (sender earth), in engine wiring harness

- ** Compressor switch-off
- *** Connection compressor readiness
- For vehicles with automatic gearbox only

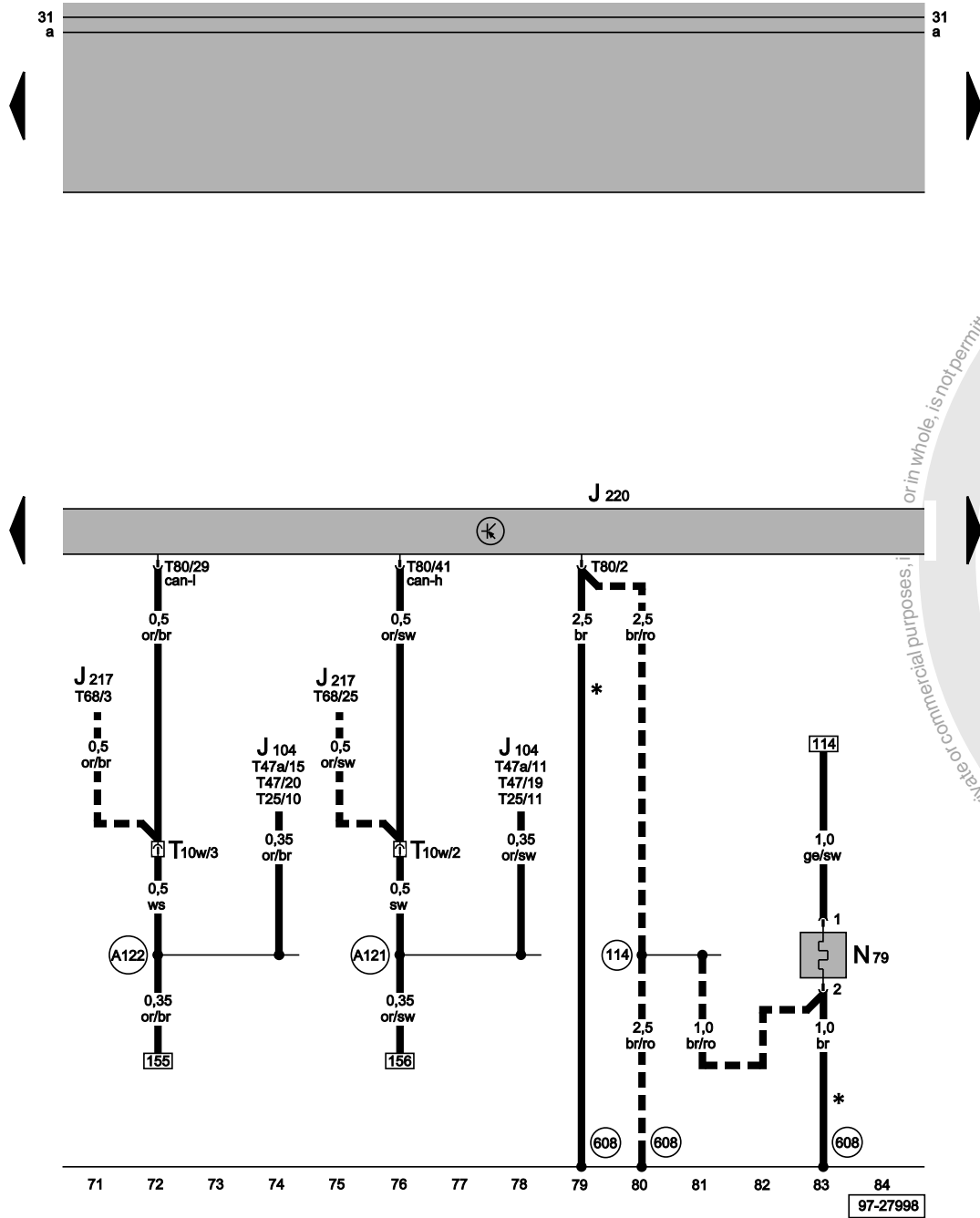


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, heater element (crankcase breather)

- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector
- T80 80-pin connector

- (114) Earth connection, in automatic gearbox wiring harness
- (608) Earth point, in plenum chamber, centre
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox

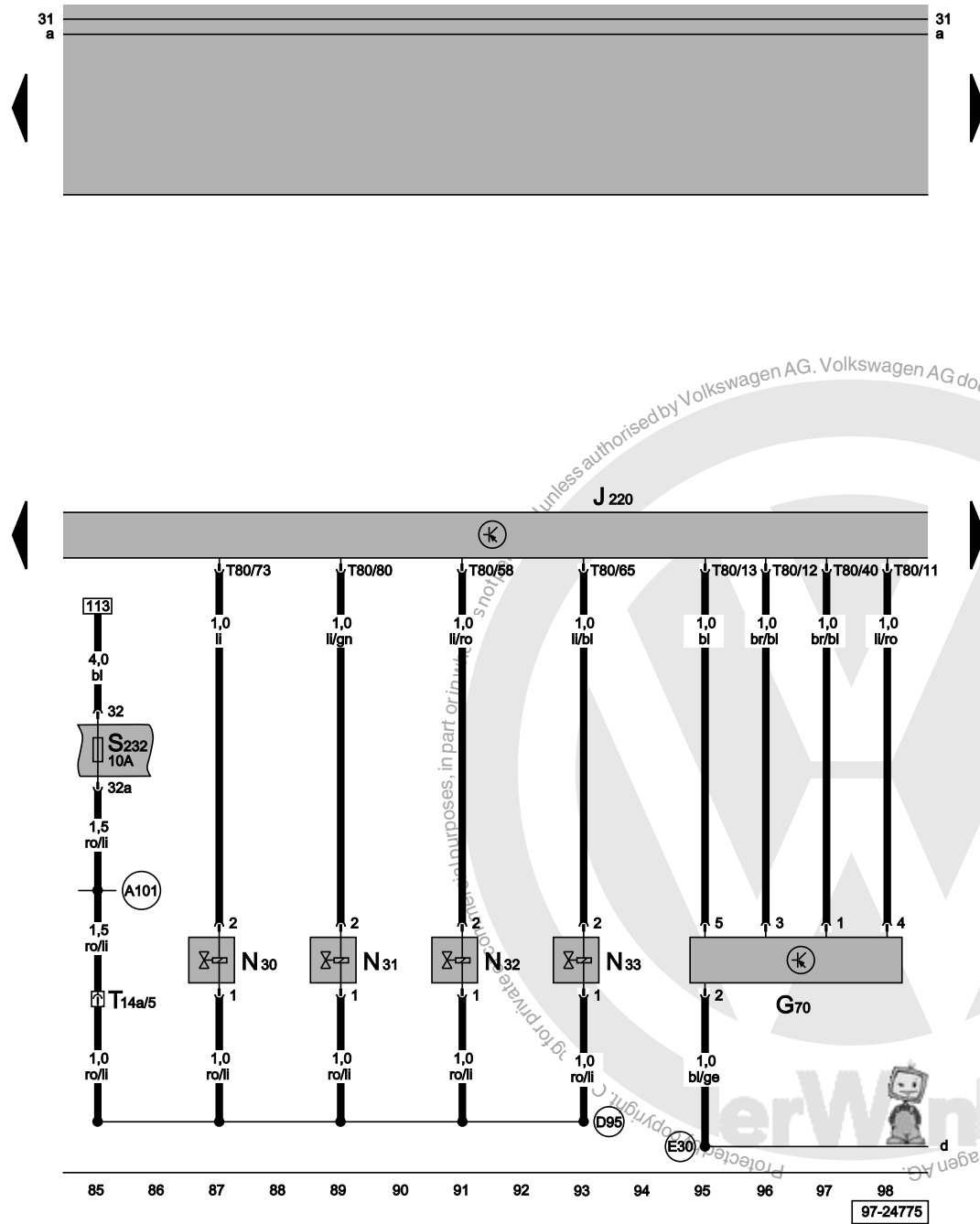


97-27998

Motronic control unit, injectors, air mass meter

- G70 Air mass meter
- J220 Motronic control unit, in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness

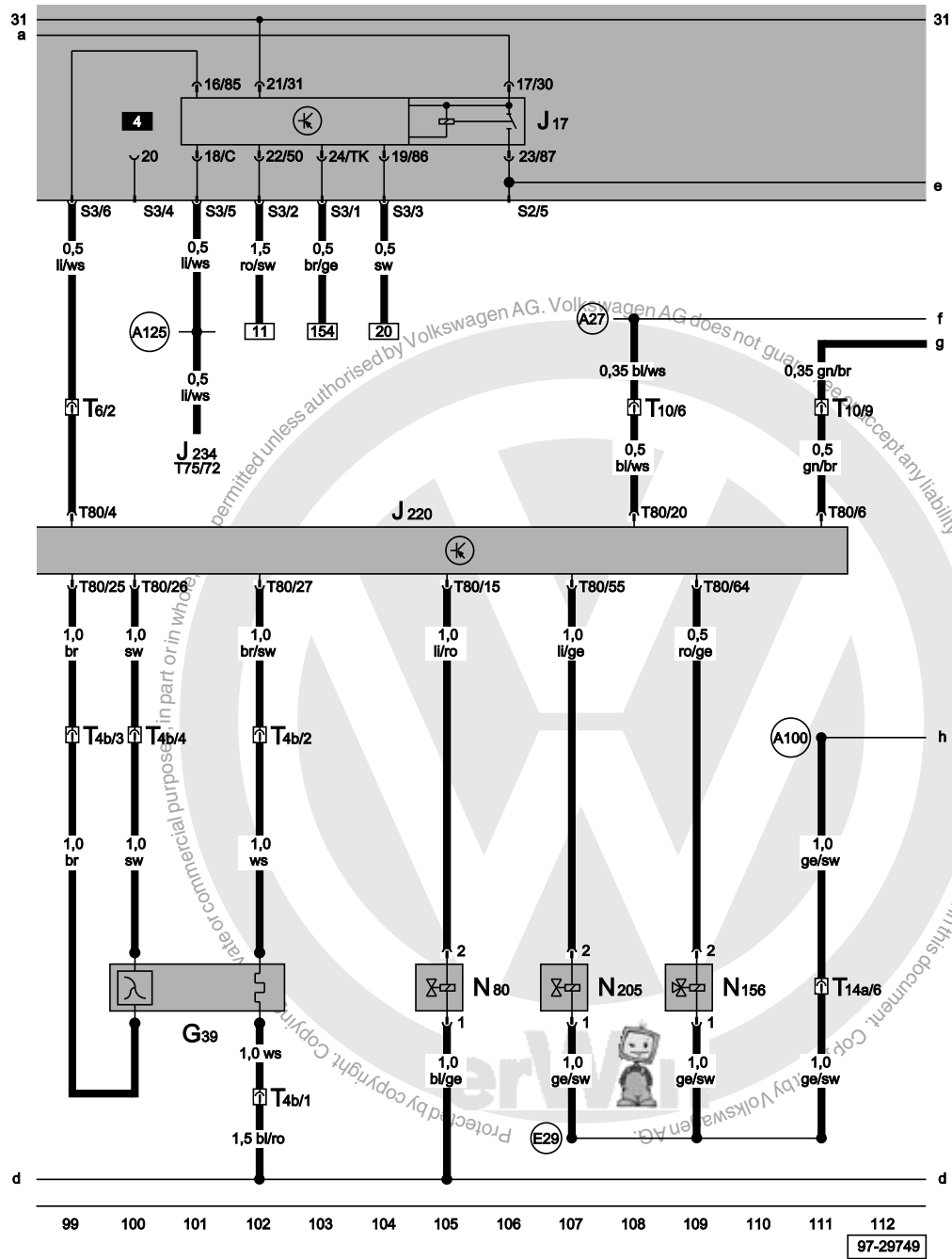


Motronic control unit, lambda probe, activated charcoal filter system solenoid valve, intake manifold change-over valve, inlet camshaft timing adjustment valve, fuel pump relay

- G39 Lambda probe
- J17 Fuel pump relay
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit, behind lower console
- N80 Activated charcoal filter system solenoid valve 1
- N156 Intake manifold change-over valve
- N205 Inlet camshaft timing adjustment valve
- T4b 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T75 75-pin connector
- T80 80-pin connector

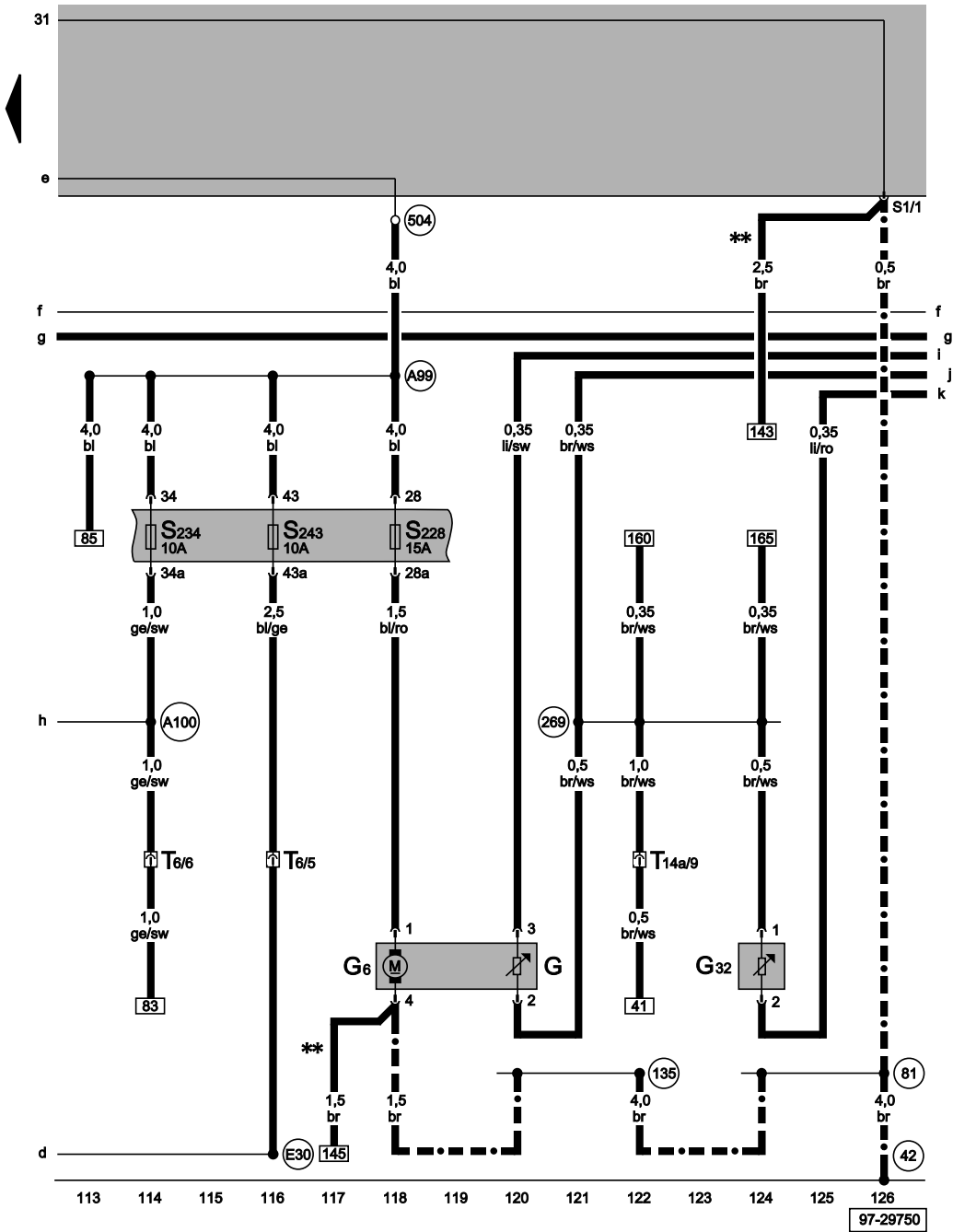
- A27 Connection (speed signal), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- E29 Connection, in engine wiring harness

- ws = white
- sw = black
- ro = red
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-29749

Fuel pump, fuel gauge sender, coolant shortage indicator sender

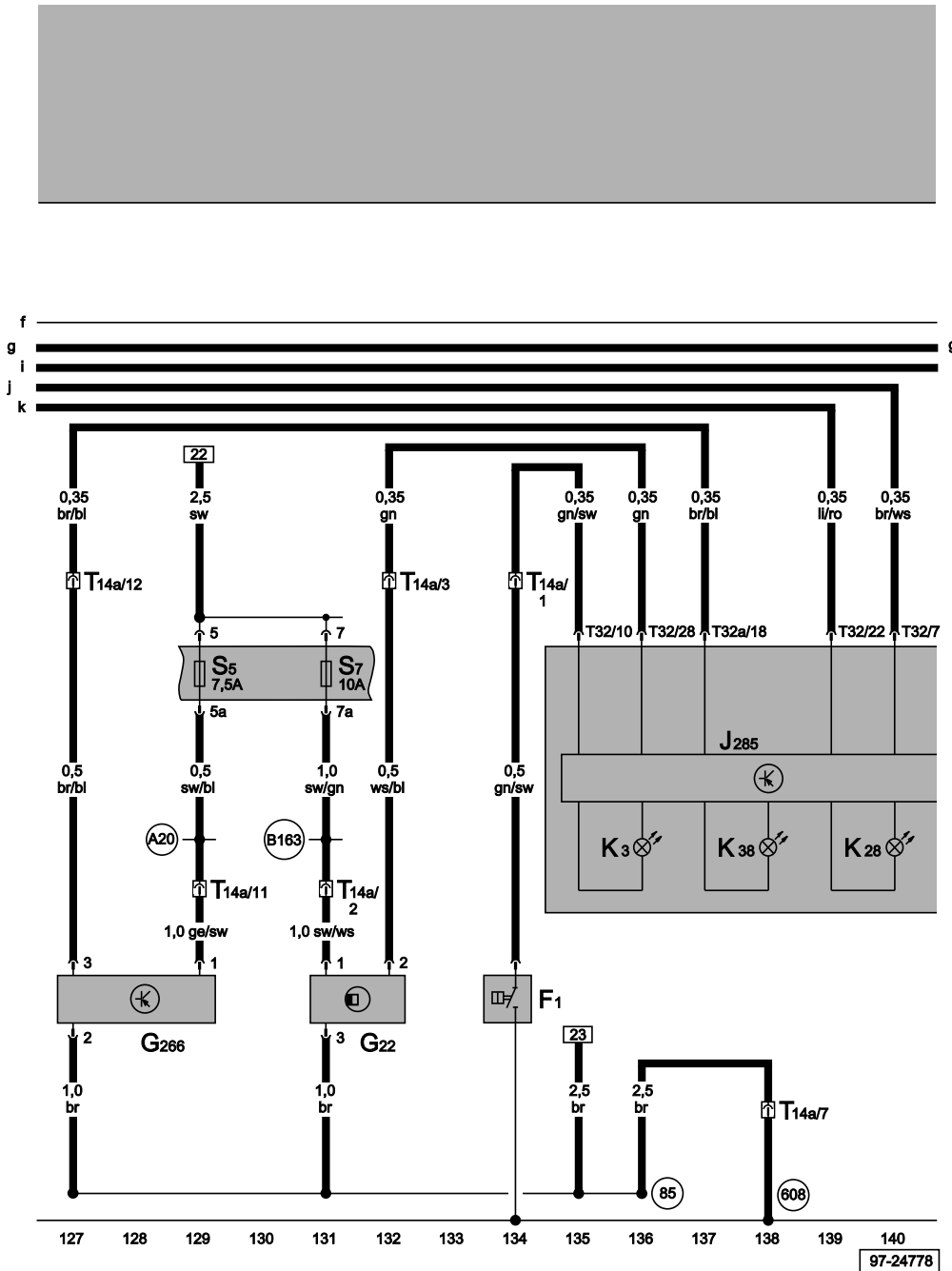


- G Fuel gauge sender***
- G6 Fuel pump***
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- ** From May 2000
- *** Up to April 2000
- **** Only models with four-wheel drive = Current flow diagram fourwheel drive (4 Motion)

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display



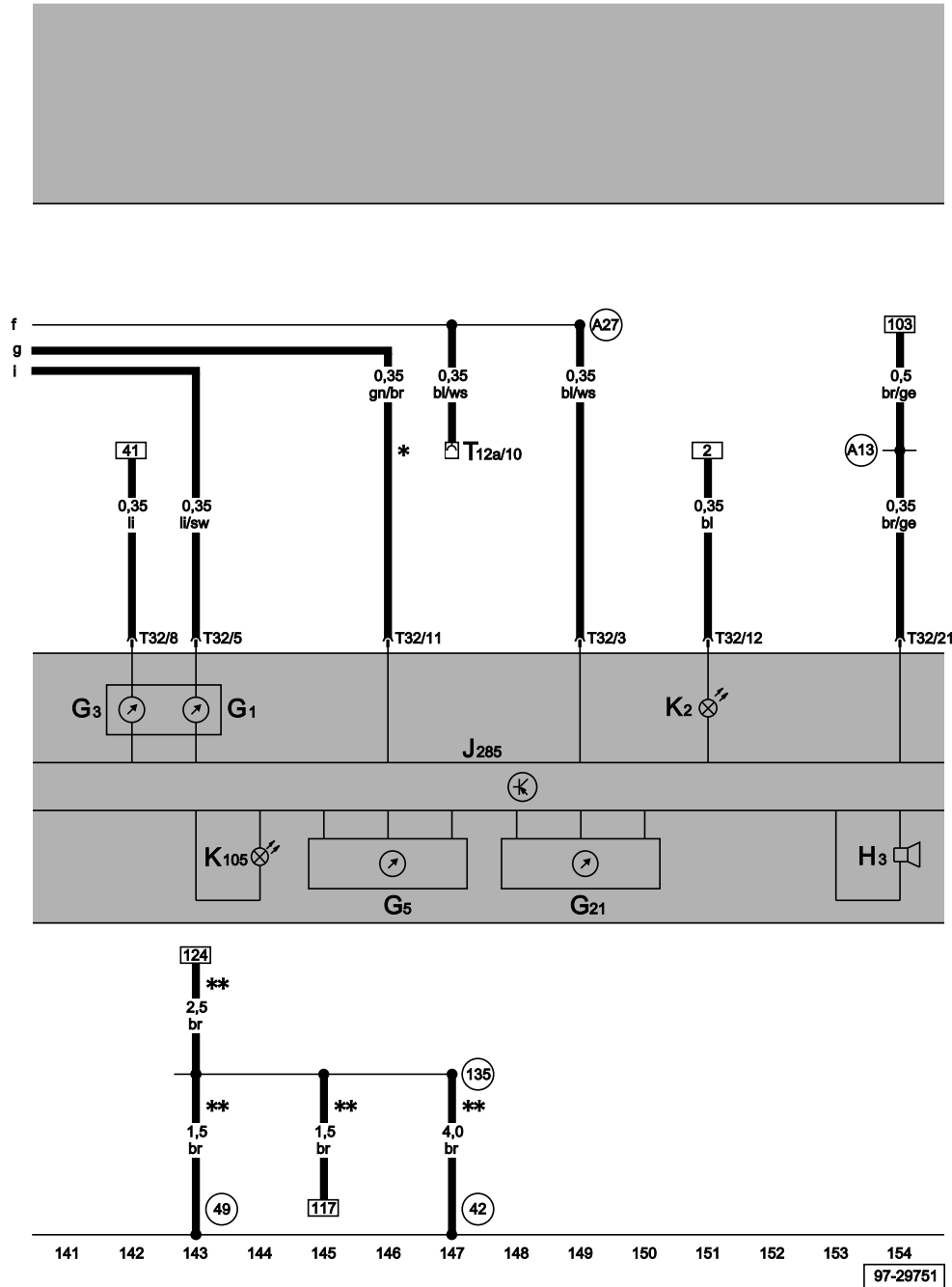
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-24778

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

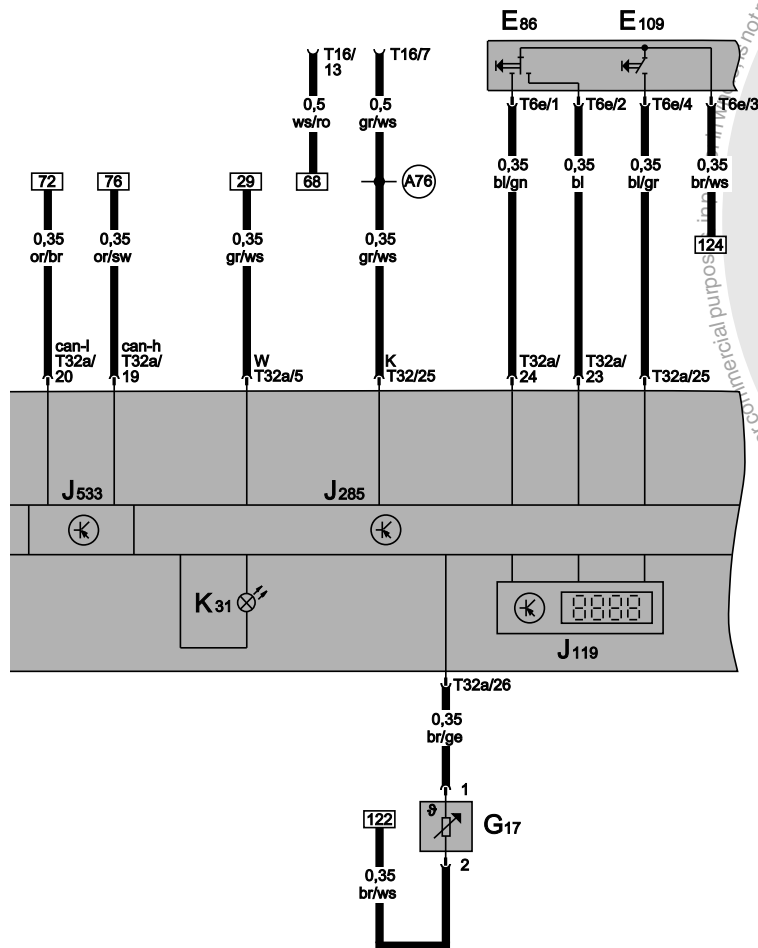
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- ** From May 2000



- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, multi-function display, ambient temperature indicator, self-diagnosis connection, cruise control system warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- sw = black
- ro = red
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

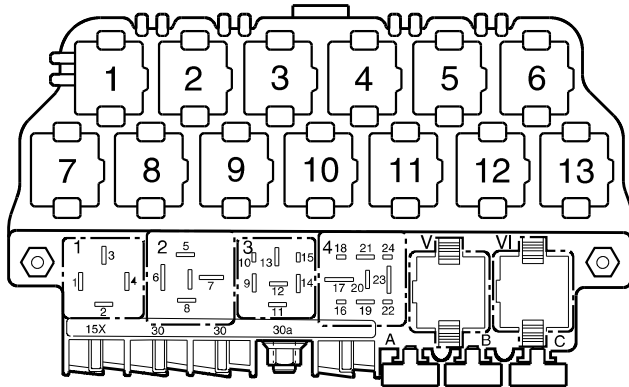
2.0 litre/85 kW Motronic, engine codes AQY

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)

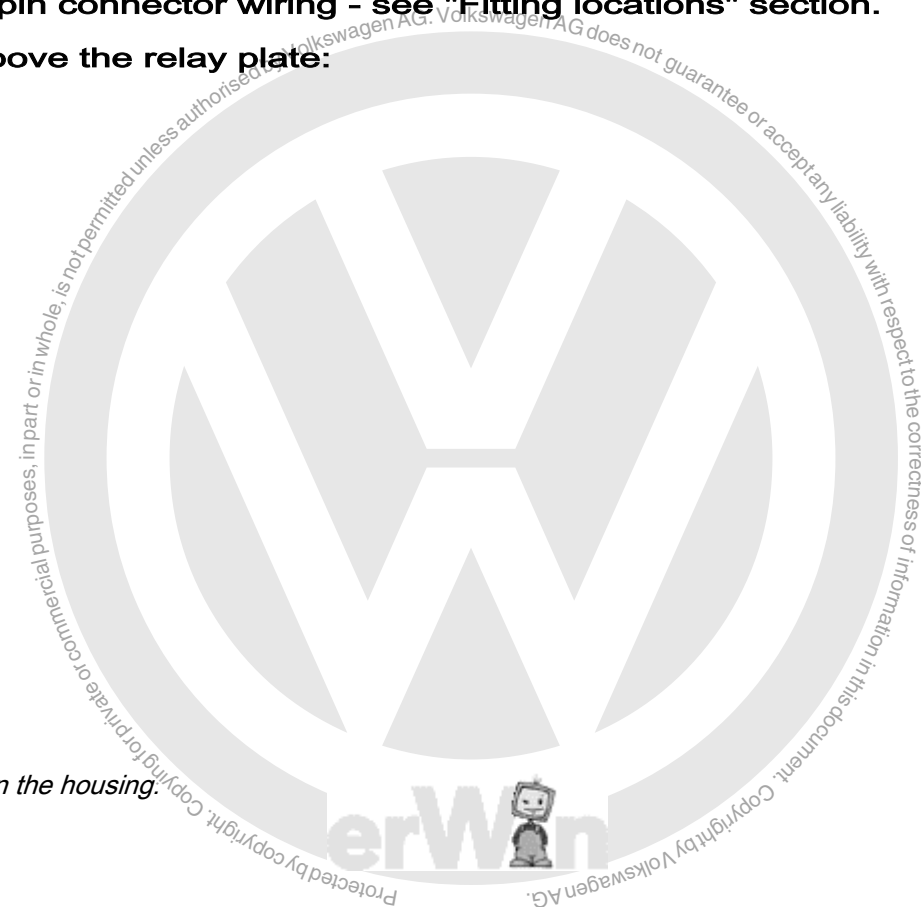


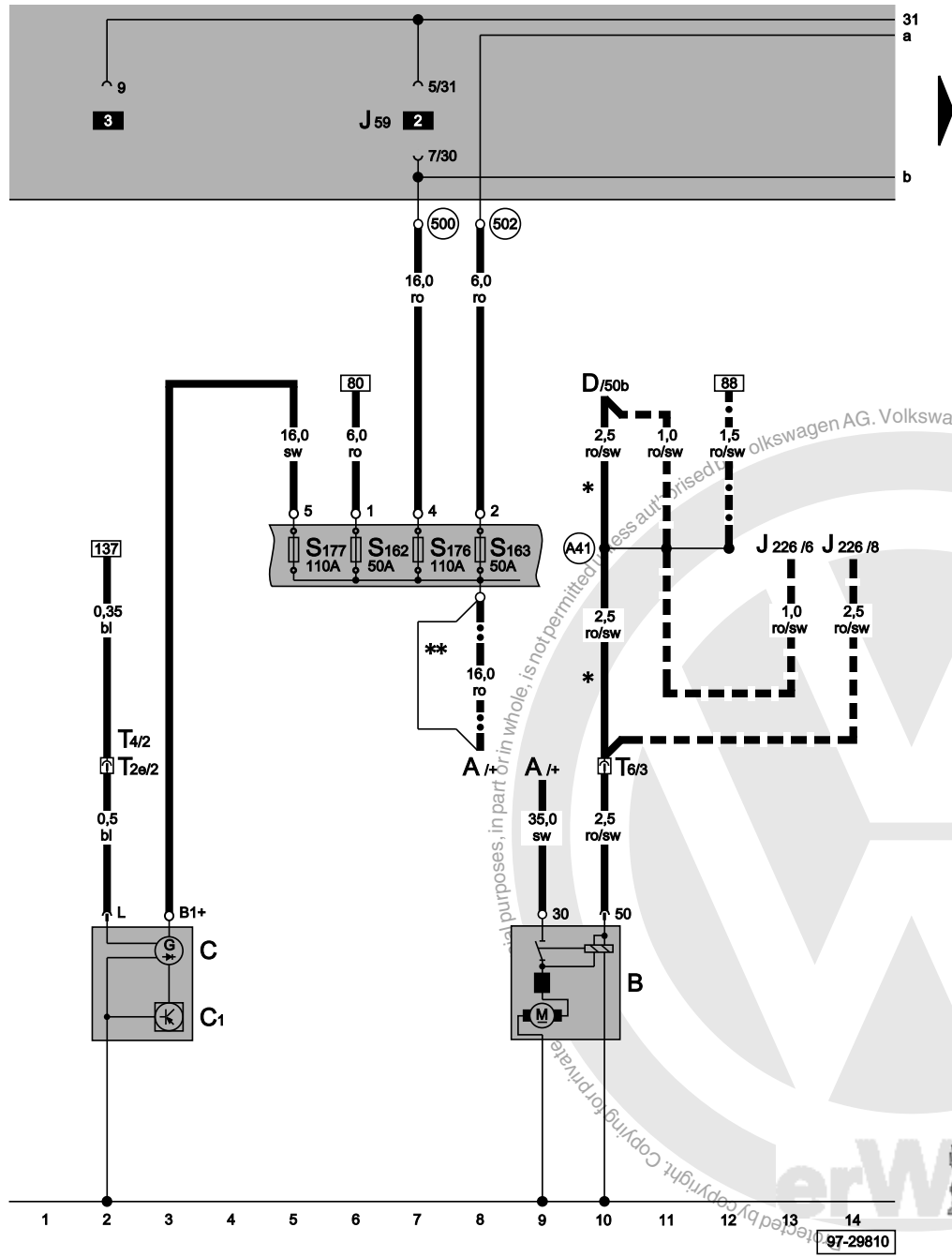
Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



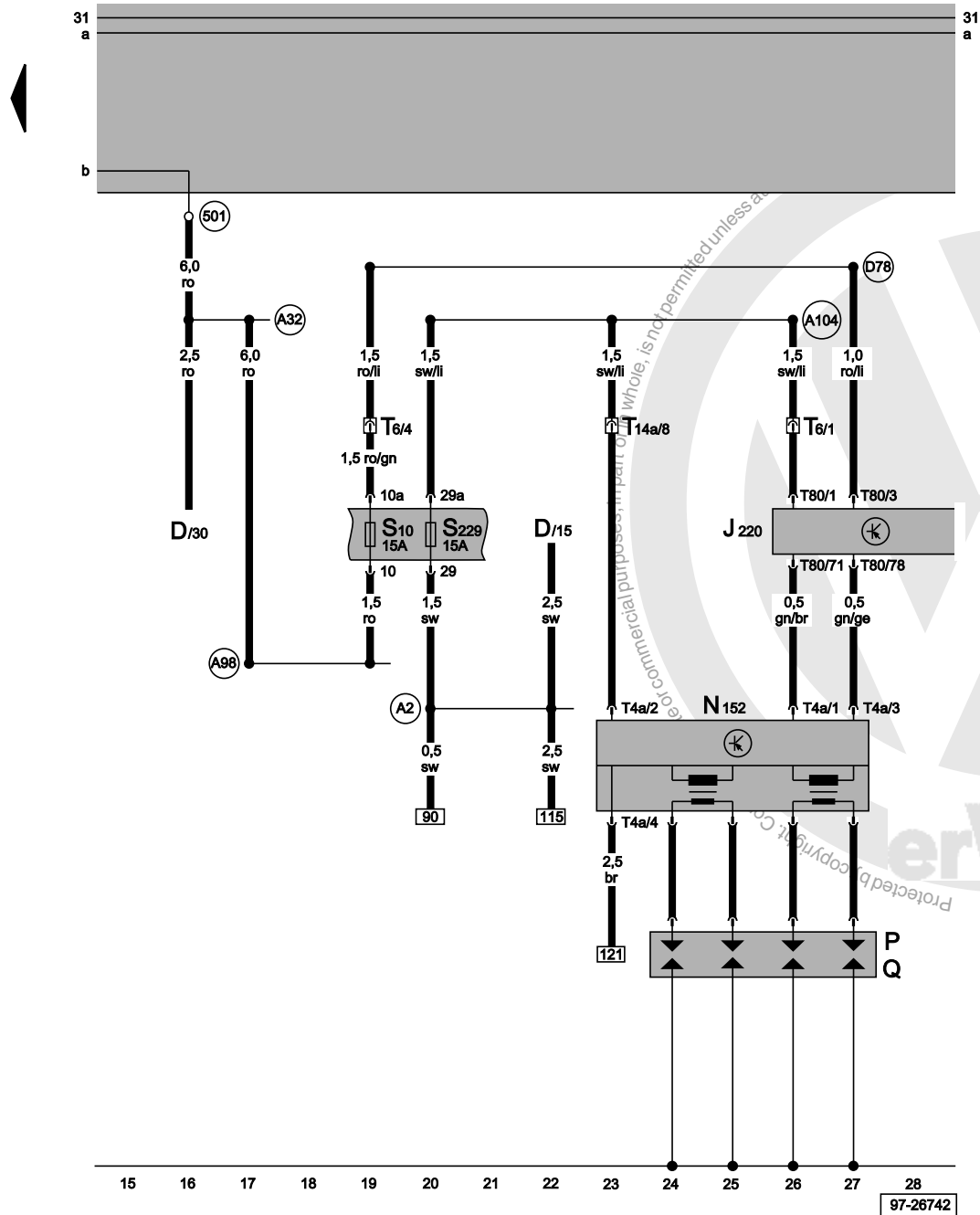


Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse -1- (30), in fuse box/battery
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- A41 Positive (+) connection (50), in dash panel wiring harness (up to April 2001)
- * Only models with manual gearbox
- Only models with automatic gearbox
- Up to April 2001
- ** Up to August 2000
- From September 2000

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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, ignition system

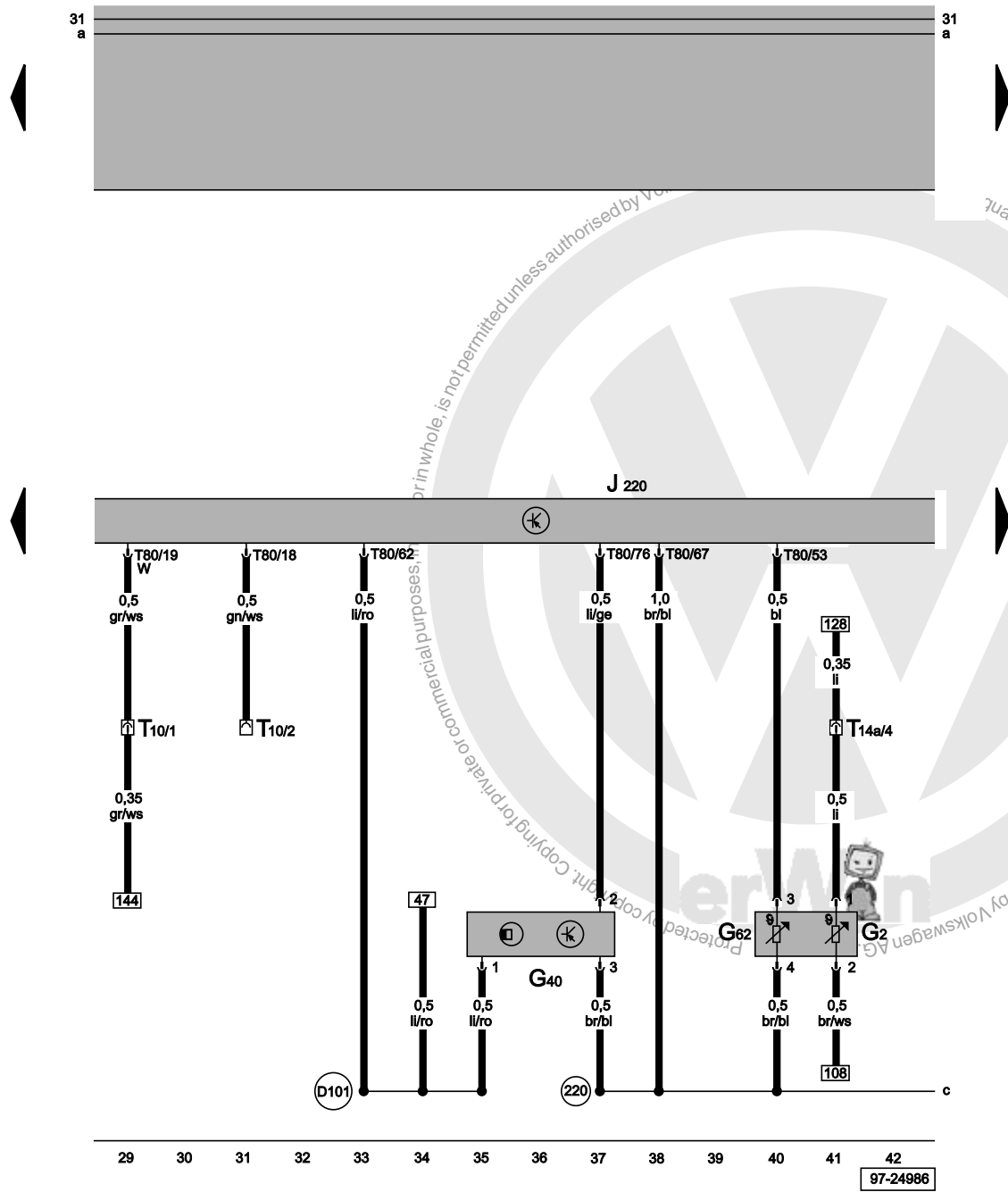


- D Ignition/starter switch
- J220 Motronic control unit, centre in plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Flame plug
- S10 Fuse in relay plate fuse box
- S229 Fuse in fuse holder
- T4a 4-pin connector
- T6 6-pin connector, brown, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- A104 Positive connection -2- (15), in dash panel wiring harness
- D78 Positive connection -1- (30a), in engine compartment wiring harness

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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

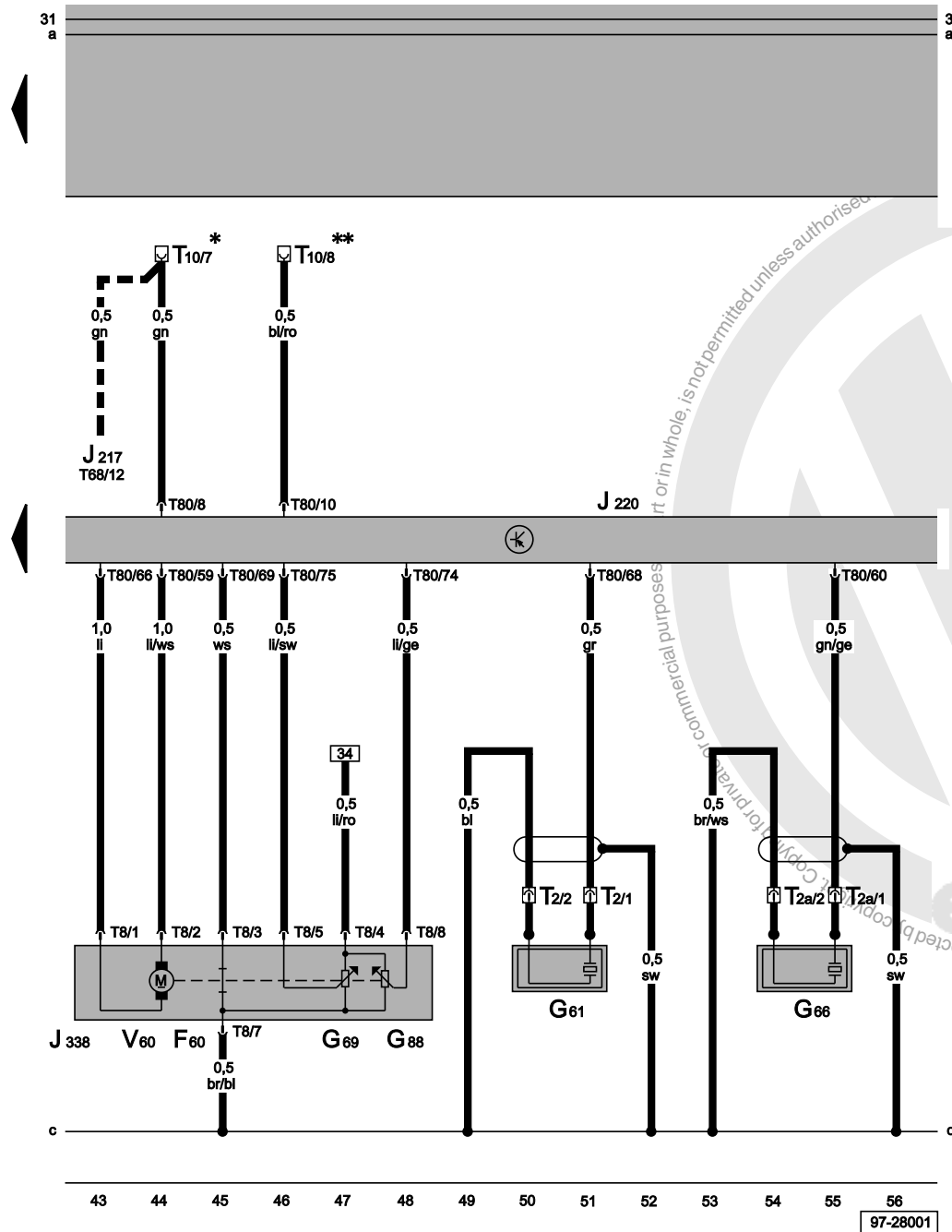
Motronic control unit, coolant temperature sender, Hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J220 Motronic control unit, centre in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- (220) Earth connection (sender earth), in engine wiring harness
- (D101) Connection -1-, in engine compartment wiring harness



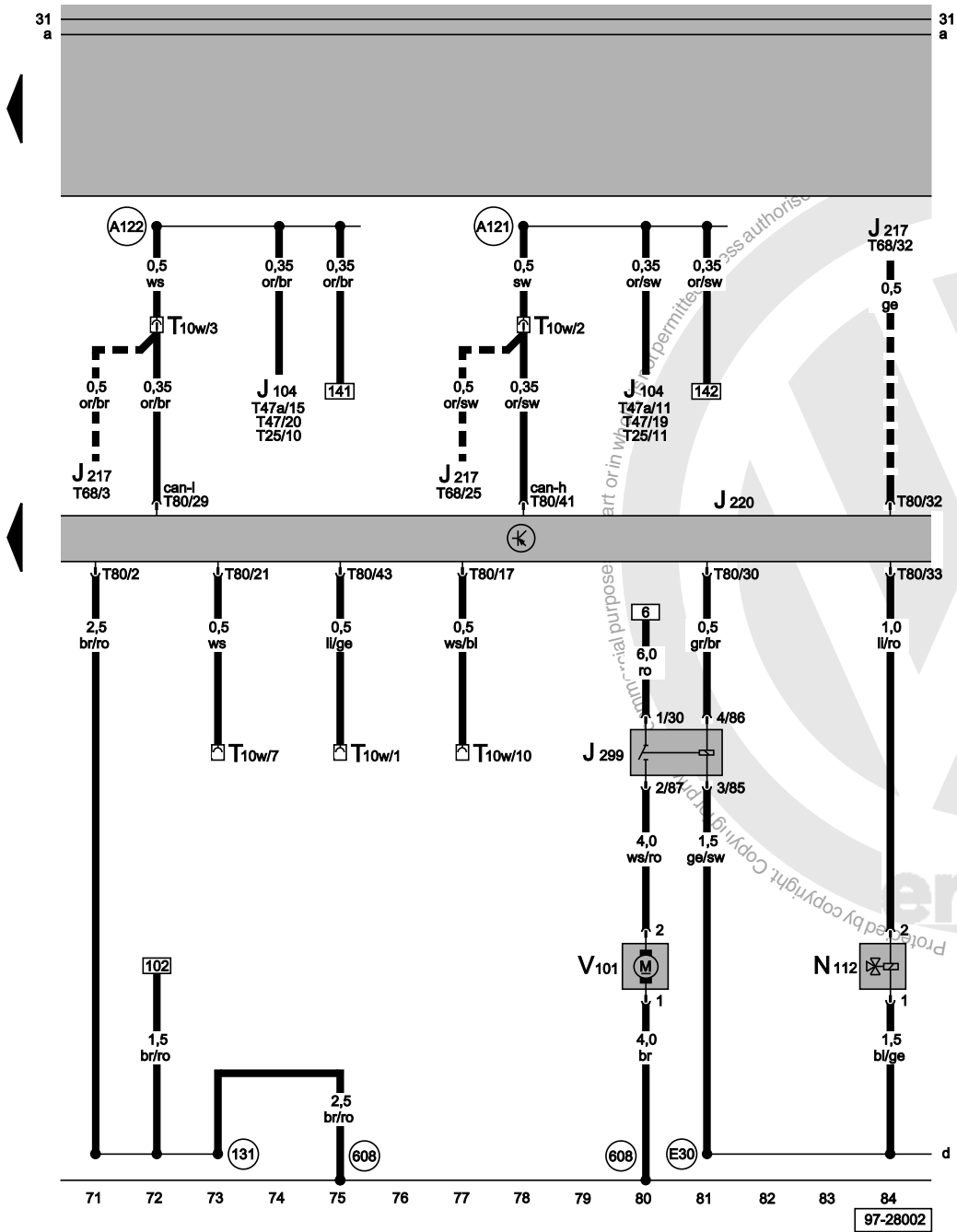
Motronic control unit, throttle valve control unit, knock sensor I, knock sensor II

- F60 Idling switch
- G61 Knock sensor I
- G66 Knock sensor II
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- J338 Throttle valve control unit
- T2 2-pin connector, in engine compartment, rear
- T2a 2-pin connector, in engine compartment, front
- T8 8-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T68 68-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- * Compressor switch-off
- ** Air conditioner 'ready' connection
- Only models with automatic gearbox



97-28001

Motronic control unit, secondary air pump motor, secondary air inlet valve



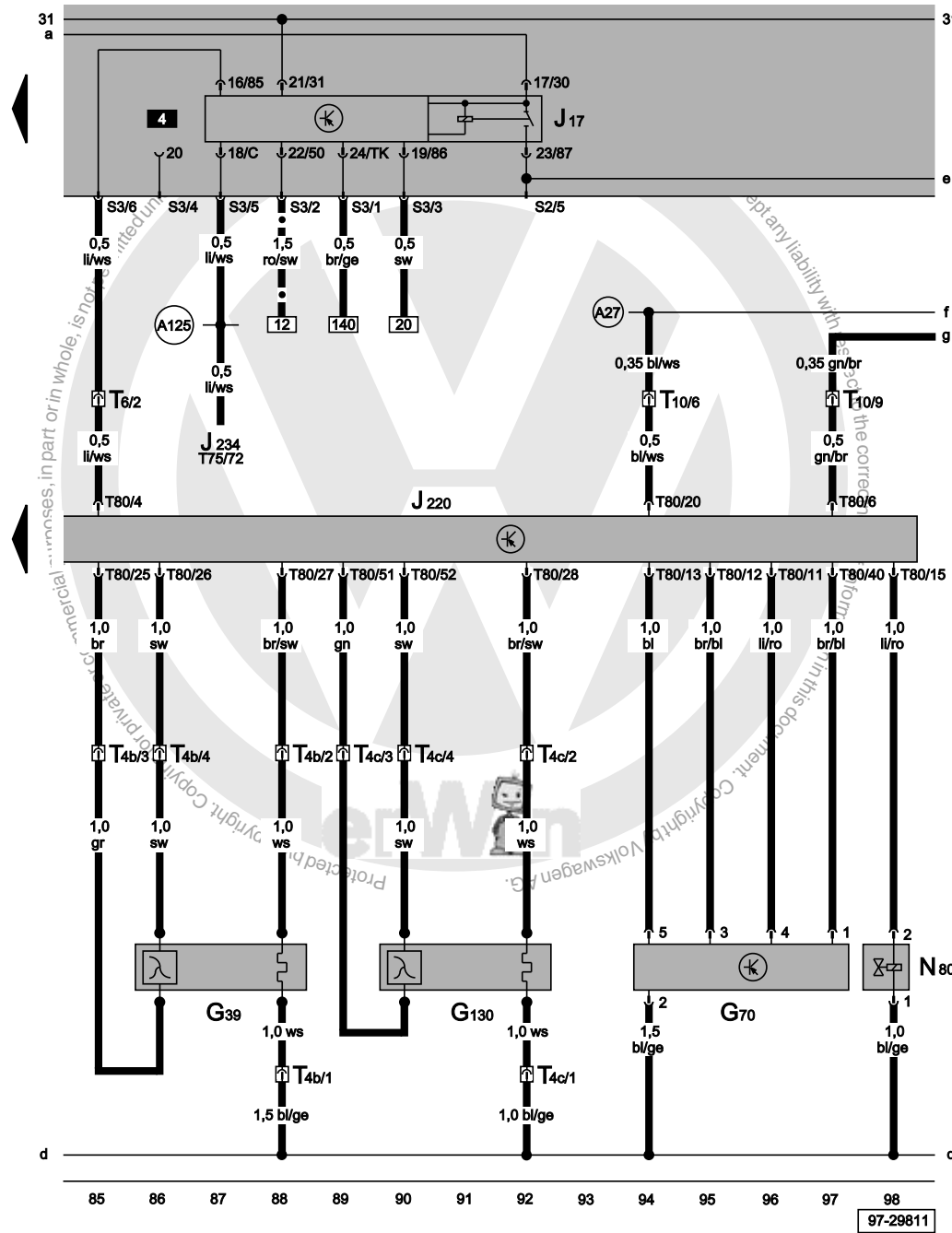
- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox fuse
- J220 Motronic control unit, in plenum chamber, centre
- J299 Secondary air pump relay, in protective housing in engine compartment, left (control number 100)
- N112 Secondary air inlet valve
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector
- T80 80-pin connector
- V101 Secondary air pump motor
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- E30 Connection (87a), in engine wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- Only models with automatic gearbox

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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-28002

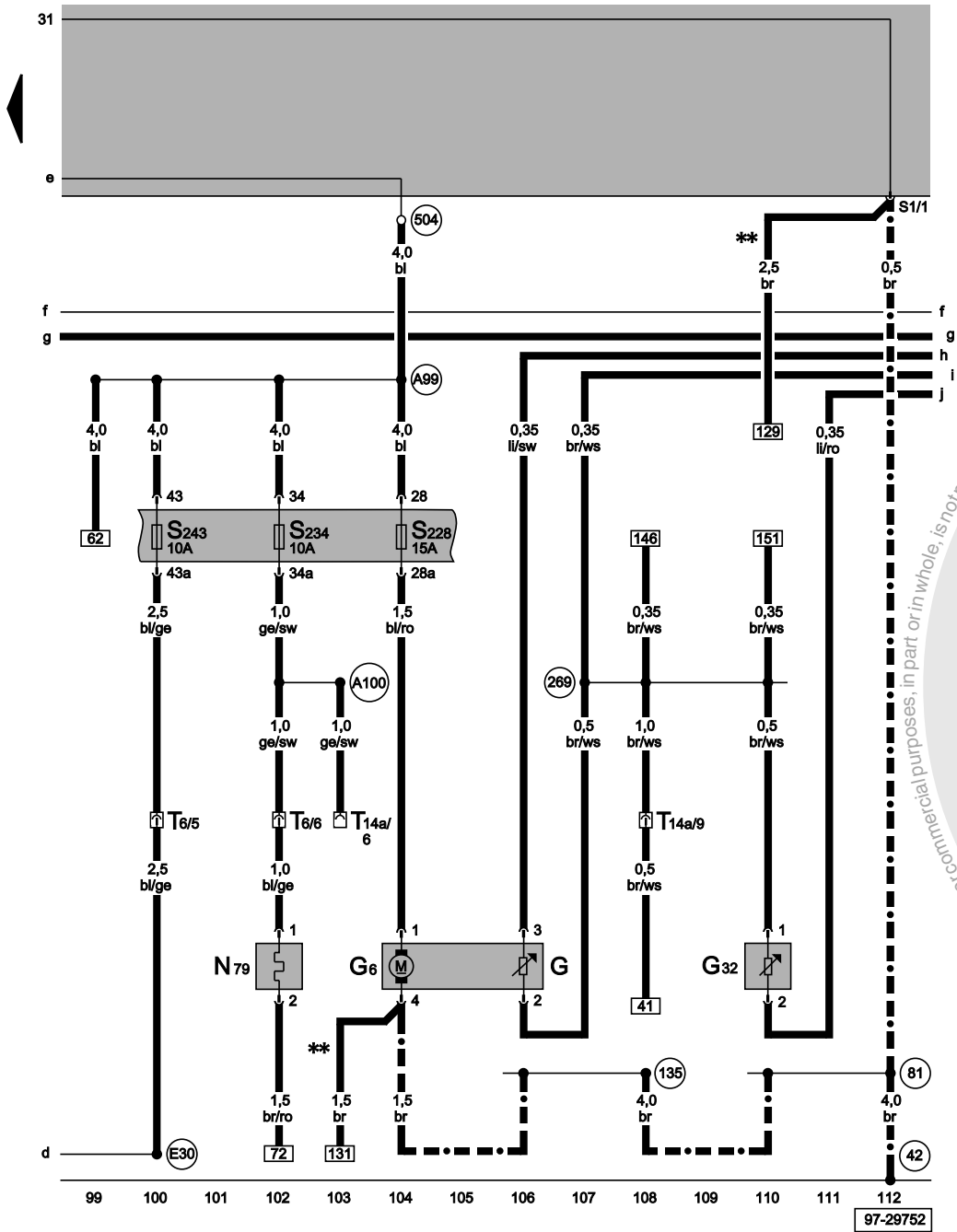
Motronic control unit, air mass meter, lambda probes, activated charcoal filter system solenoid valve, fuel pump relay

- G39 Lambda probe
- G70 Air mass meter
- G130 Lambda probe after catalytic
- J17 Fuel pump relay
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit, behind lower console
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalyst
- T4c 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T75 75-pin connector
- T80 80-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- Up to April 2001



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Fuel pump, fuel gauge sender, coolant shortage indicator sender, heater element (crankcase breather)



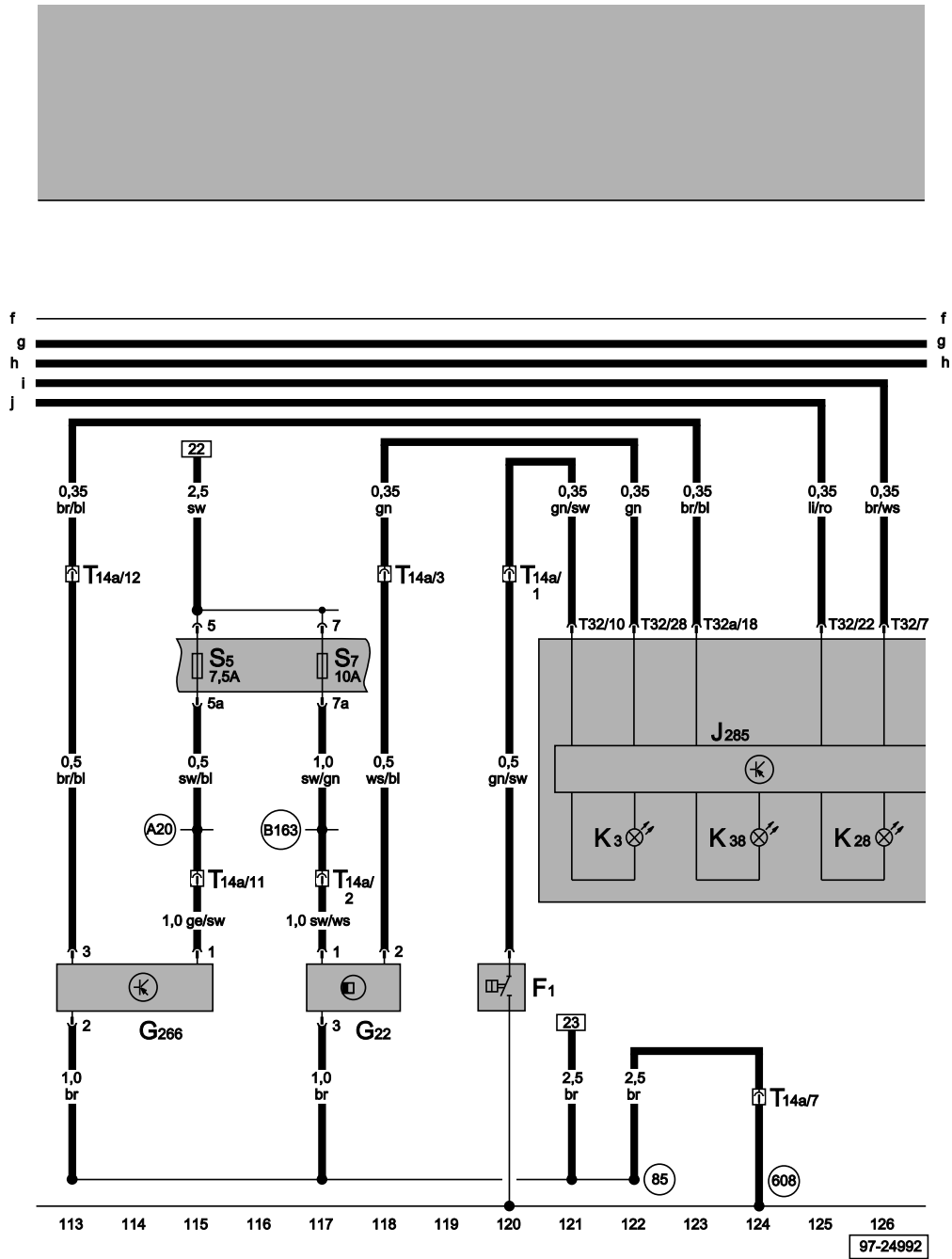
- G Fuel gauge sender***
- G6 Fuel pump***
- G32 Coolant shortage indicator sender
- N79 Heater element (crankcase breather)
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- ** From May 2000
- Up to April 2000
- *** Only models with four-wheel drive => Current flow diagram fourwheel drive (4 Motion)

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-24992

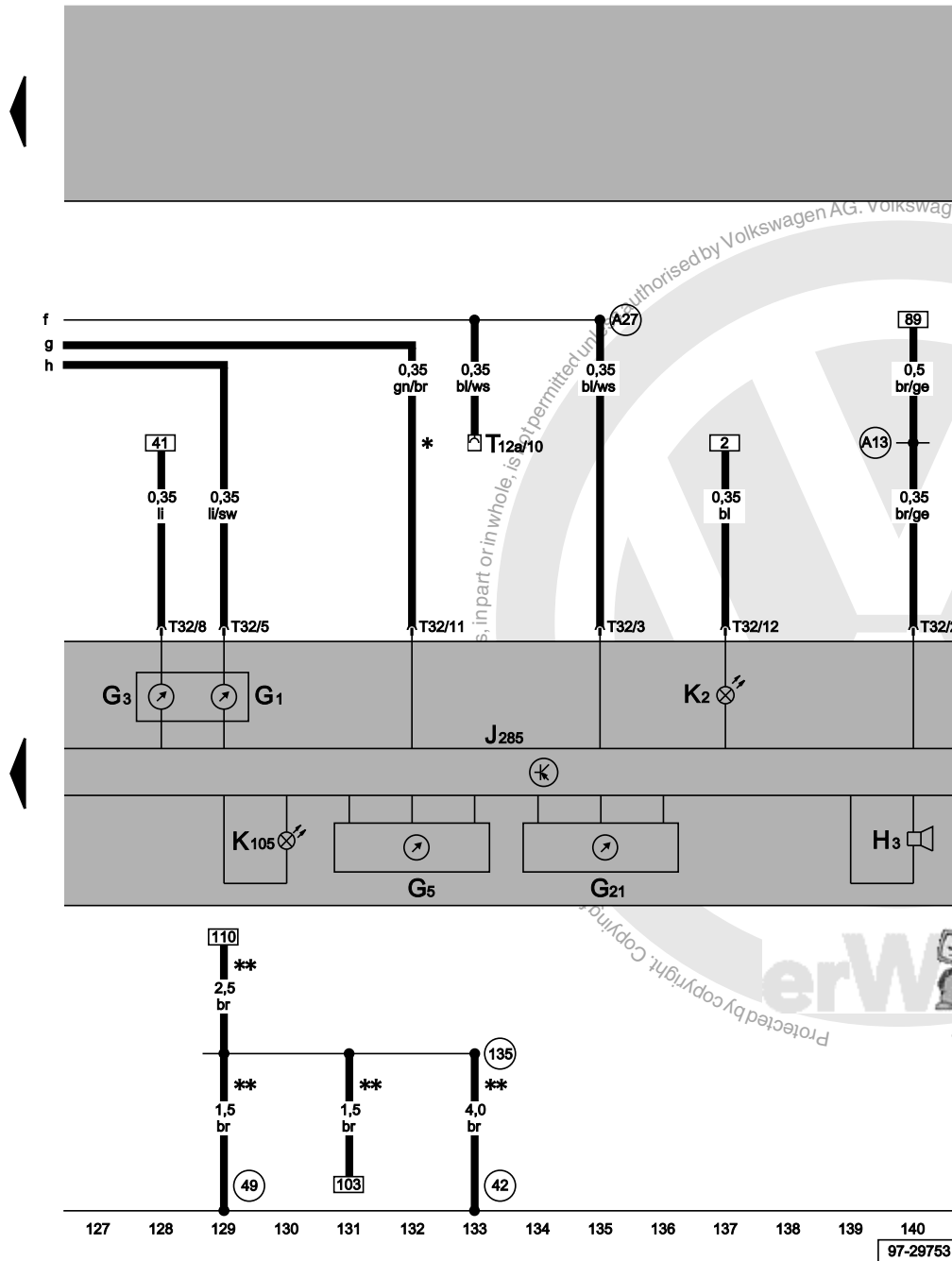
Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness

* Engine speed signal from engine control unit
 ** From May 2000

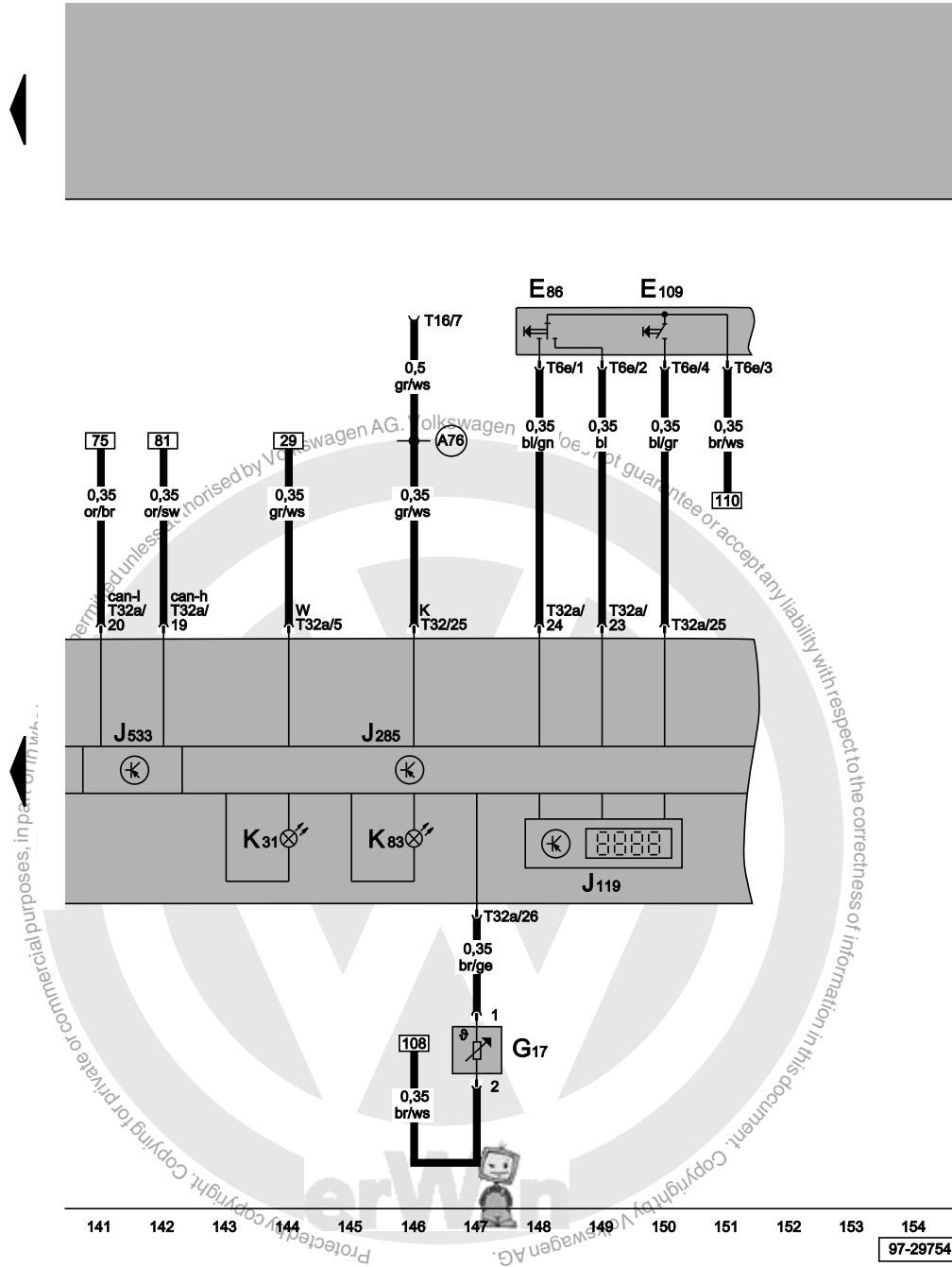
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-29753

Dash panel insert, multi-function display, ambient temperature indicator, self-diagnosis connection, cruise control system warning lamp, exhaust emissions warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

2.3 litre/110 kW Motronic, engine codes AGZ

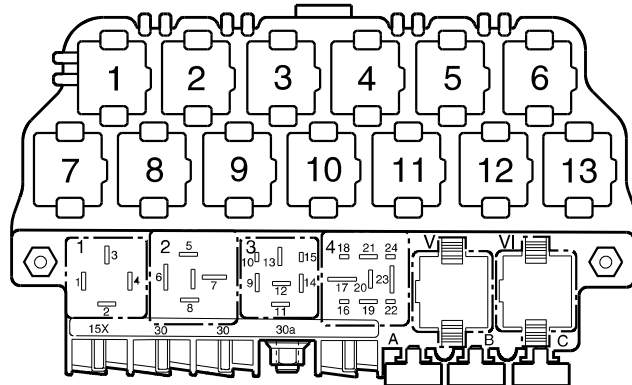
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



97--14163

4 - Fuel pump relay (409)

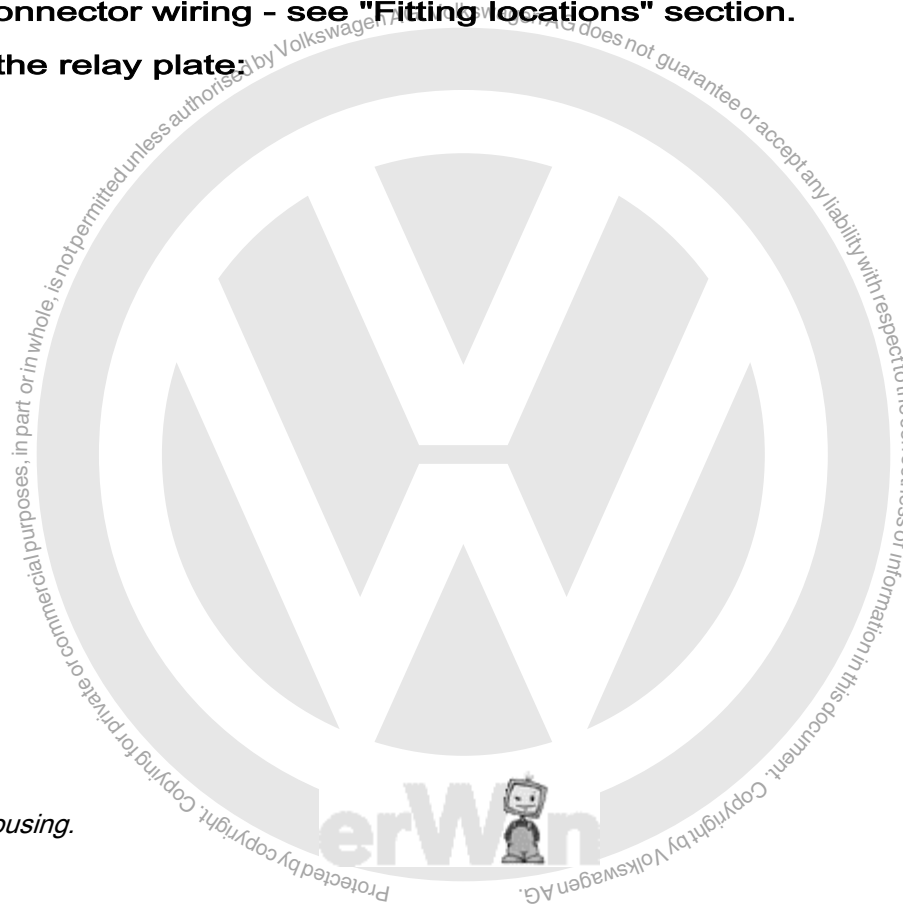


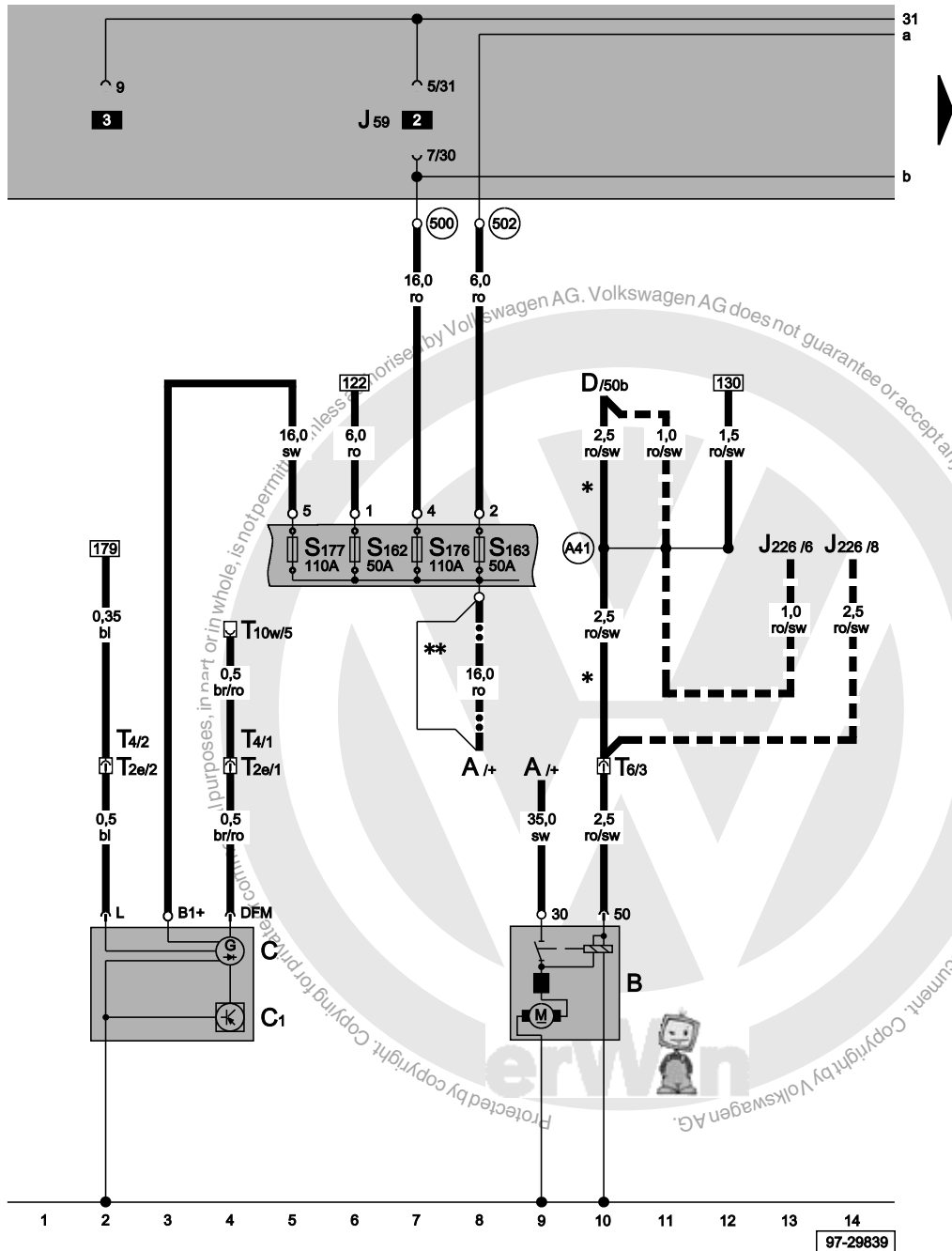
Notes:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse -1- (30), in fuse box/battery
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left

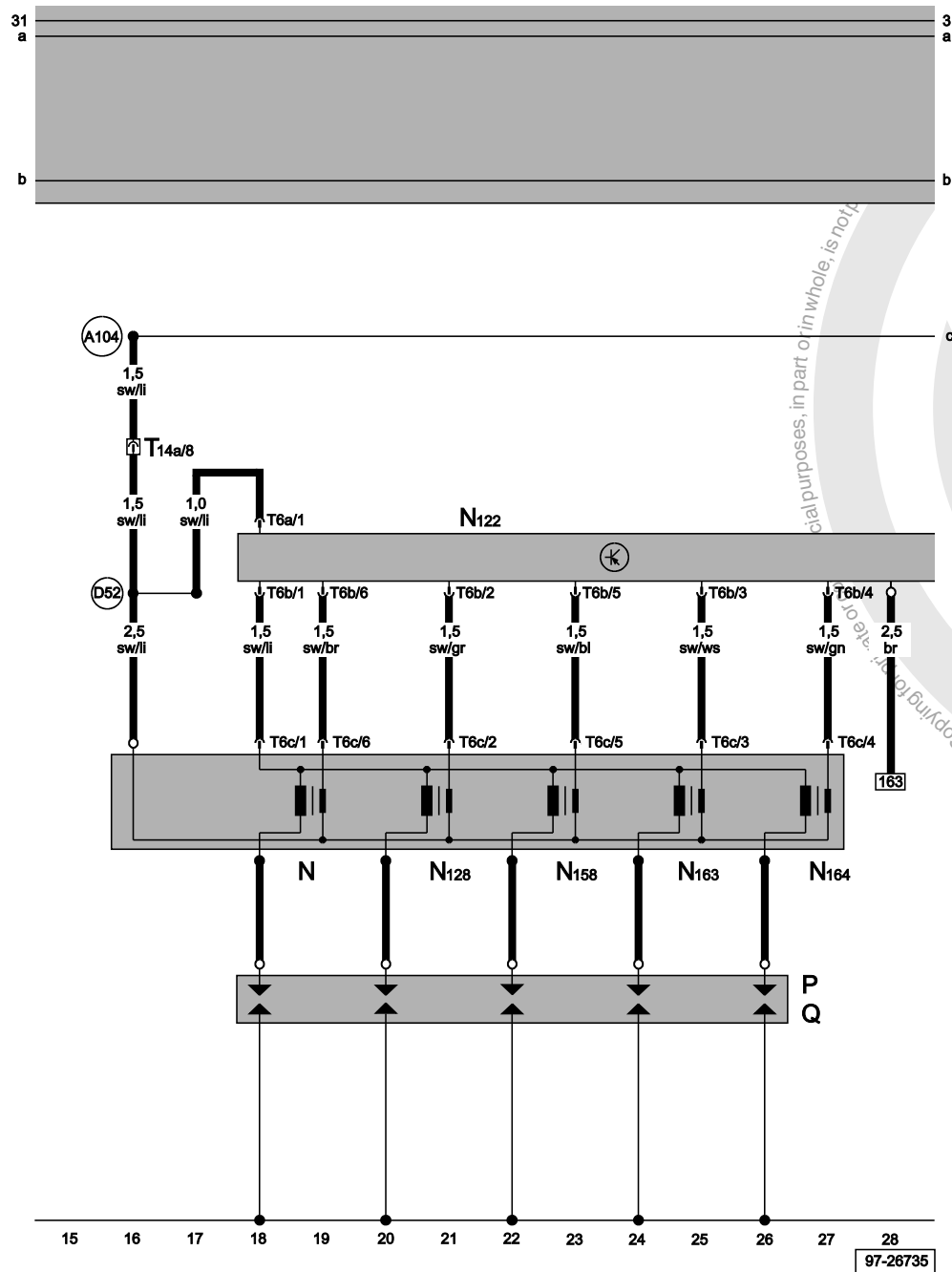
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- A41 Positive (+) connection (50), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox
- ** Up to August 2000
- ... From September 2000

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29839

Ignition system

- N Ignition coil 1, on cylinder head
- N122 Final output stage, rear of engine compartment
- N128 Ignition coil 2, on cylinder head
- N158 Ignition coil 3, on cylinder head
- N163 Ignition coil 4, on cylinder head
- N164 Ignition coil 5, left on cylinder head
- P Spark plug connector
- Q Flame plug
- T6a 6-pin connector
- T16b 6-pin connector
- T6c 6-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment
- A104 Positive connection -2- (15), in dash panel wiring harness
- D52 Positive connection (15a), in engine compartment wiring harness



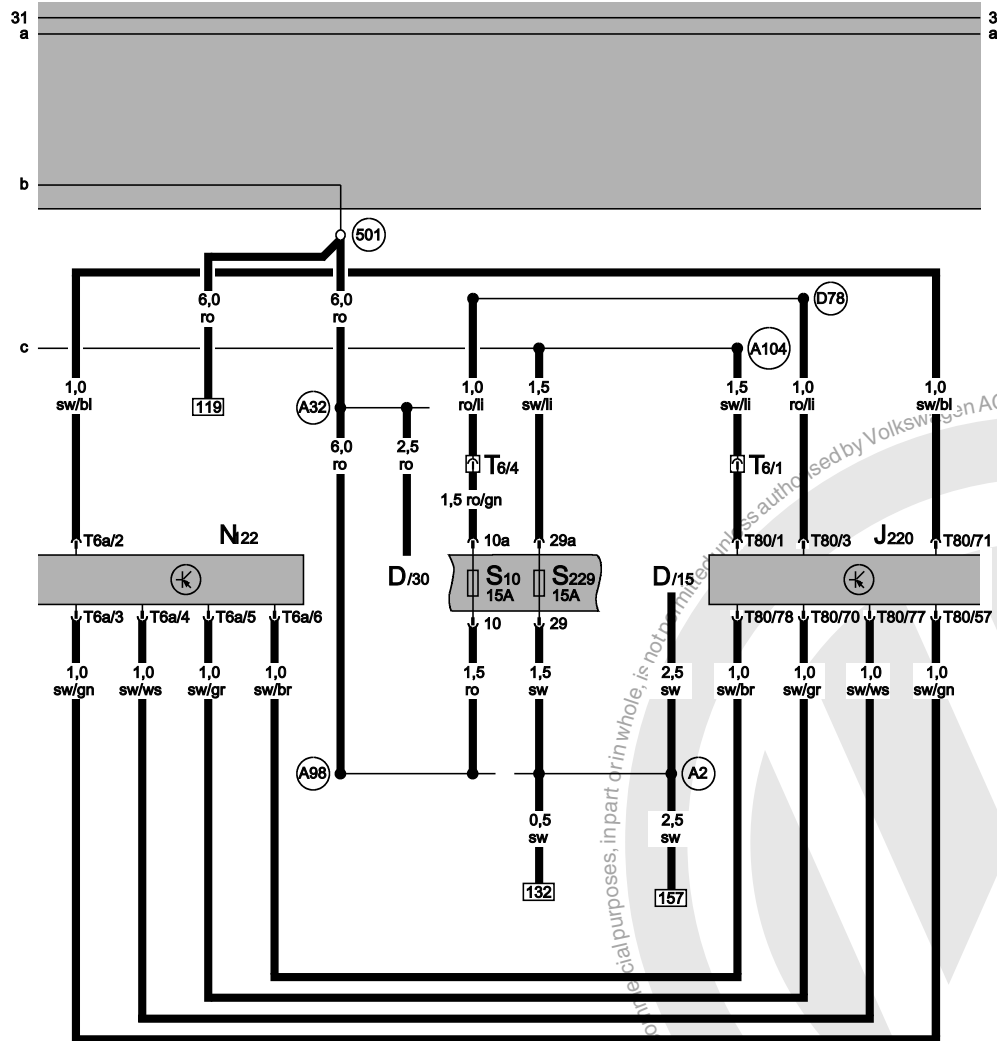
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-26735

Motronic control unit, ignition system

- D Ignition/starter switch
- J220 Motronic control unit, centre in plenum chamber
- N122 Final output stage, rear of engine compartment
- S10 Fuse in relay plate fuse box
- S229 Fuse in fuse holder
- T6 6-pin connector, brown, in protective housing for connectors, left in plenum chamber
- T6a 6-pin connector
- T80 80-pin connector

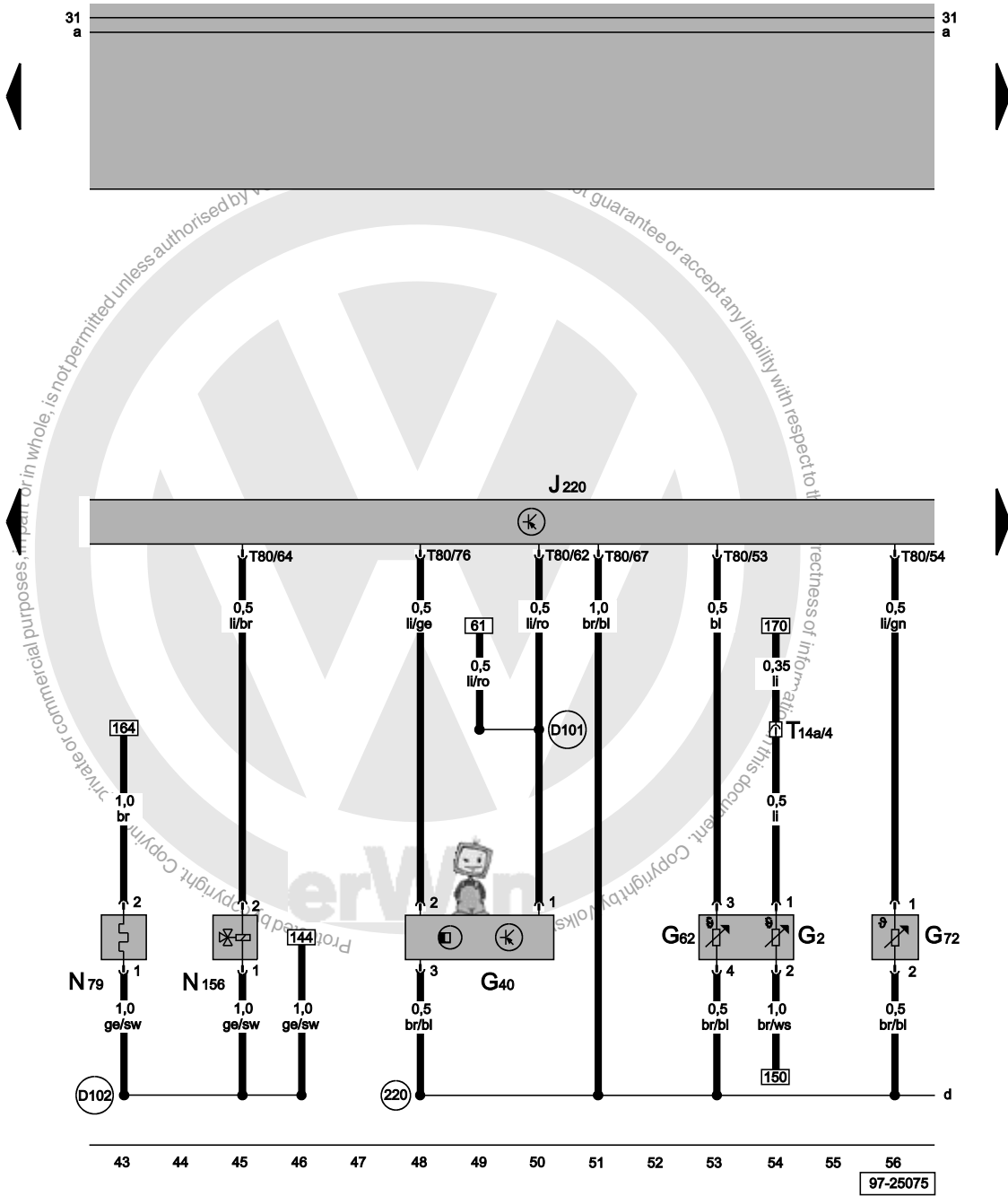
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- A104 Positive connection -2- (15), in dash panel wiring harness
- D78 Positive connection -1- (30a), in engine compartment wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- fi = purple
- ge = yellow
- or = orange
- rs = pink

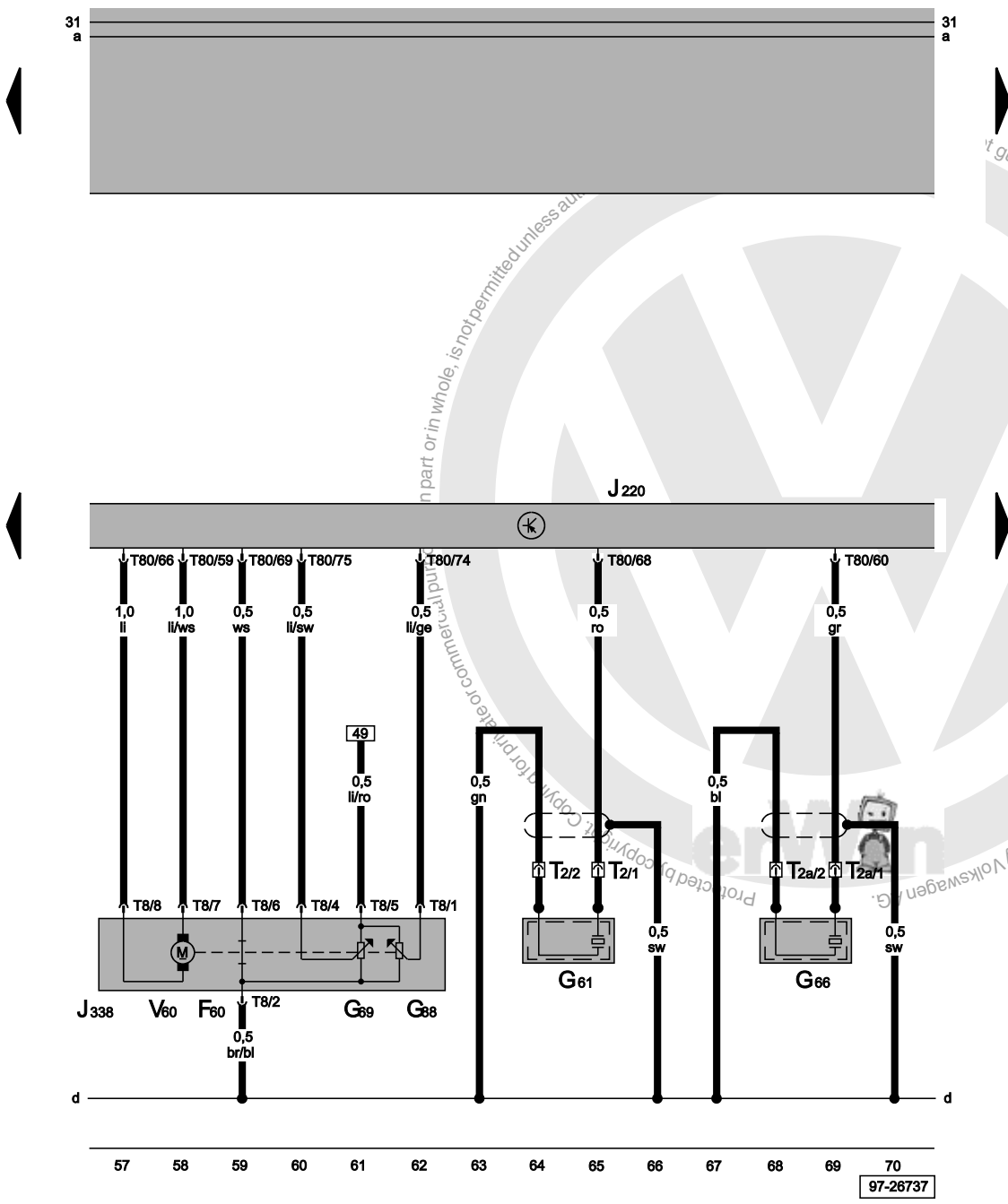
Motronic control unit, coolant temperature sender, intake manifold change-over valve, Hall sender, intake manifold temperature sender, heater element (crankcase breather)

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- G72 Intake manifold temperature sender
- J220 Motronic control unit, centre in plenum chamber
- N79 Heater element (crankcase breather)
- N156 Intake manifold change-over valve
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- D101 Connection -1-, in engine compartment wiring harness
- D102 Connection -2-, in engine wiring harness



Motronic control unit, throttle valve control part, knock sensor I, knock sensor II

- F60 Idling switch
- G61 Knock sensor I
- G66 Knock sensor II
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J220 Motronic control unit, centre in plenum chamber
- J338 Throttle valve control unit
- T2 2-pin connector, rear in engine compartment
- T2a 2-pin connector, front in engine compartment
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner



97-26737

Motronic control unit, engine speed sender

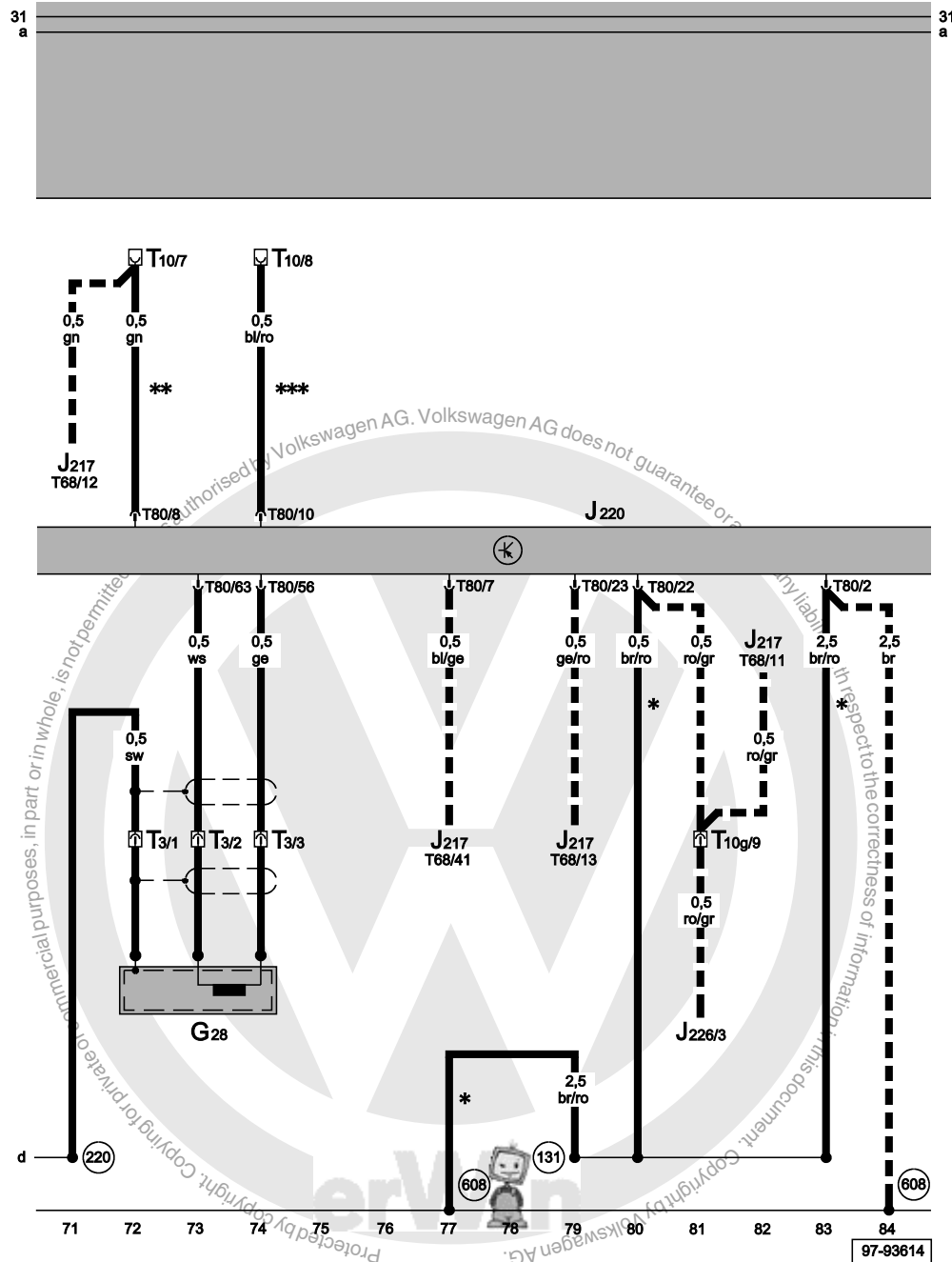
- G28 Engine speed sender
- J217 Automatic gearbox control unit, in plenum chamber, centre
- J220 Motronic control unit, in plenum chamber, centre
- J226 Starter inhibitor and reversing light relay, above the central electrics
- T3 3-pin connector, near intake manifold
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T68 68-pin connector
- T80 80-pin connector

131 Earth connection -2-, in engine compartment wiring harness

220 Earth connection (sender earth), in engine wiring harness

608 Earth point, in plenum chamber, centre

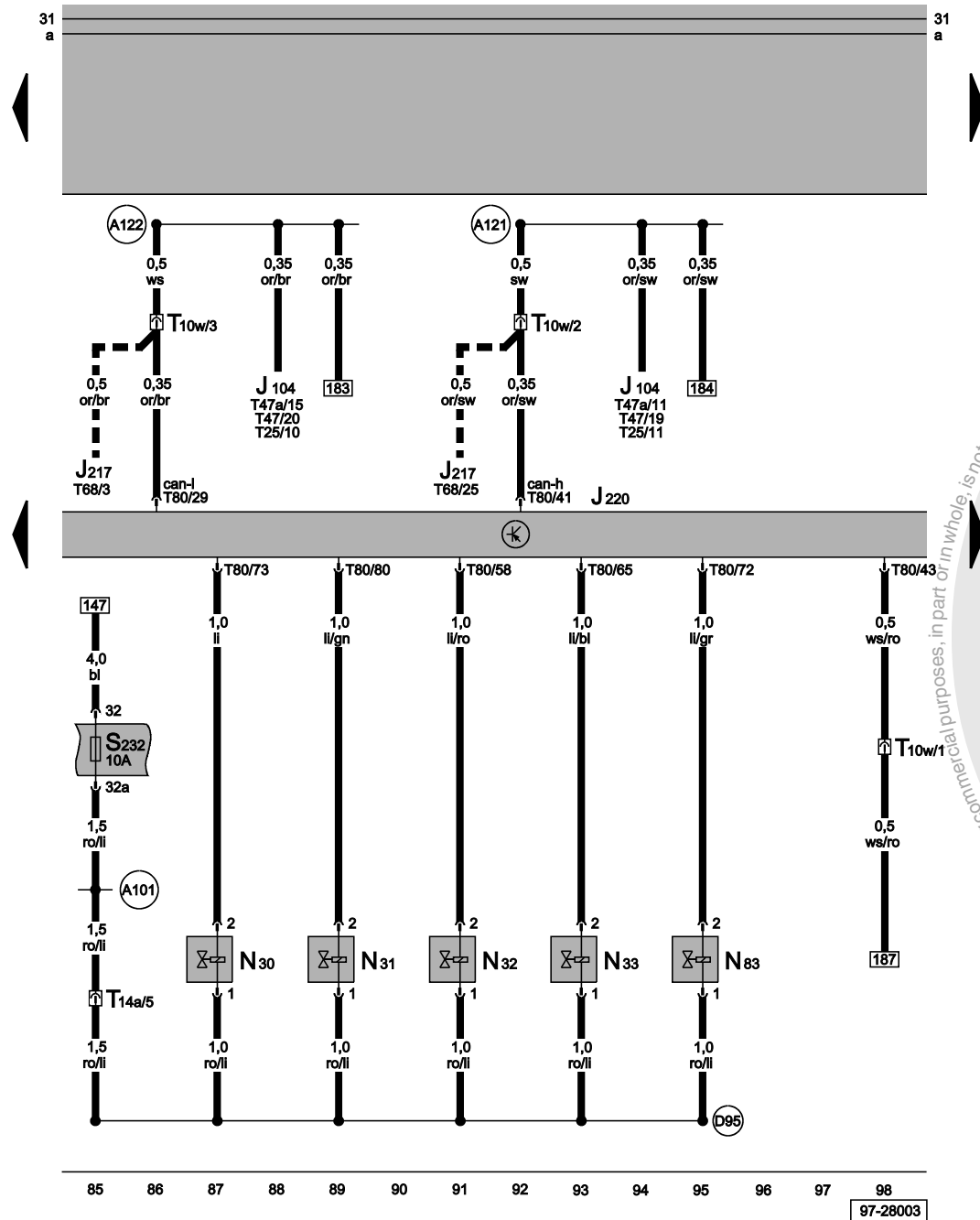
- * Only models with manual gearbox
- ** Compressor switch-off
- *** Air conditioner 'ready' connection
- Only models with automatic gearbox



97-93614

Motronic control unit, injectors

- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- S232 Fuse in fuse box
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector
- T80 80-pin connector
- A101 Connection -3- (87), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- Only models with automatic gearbox

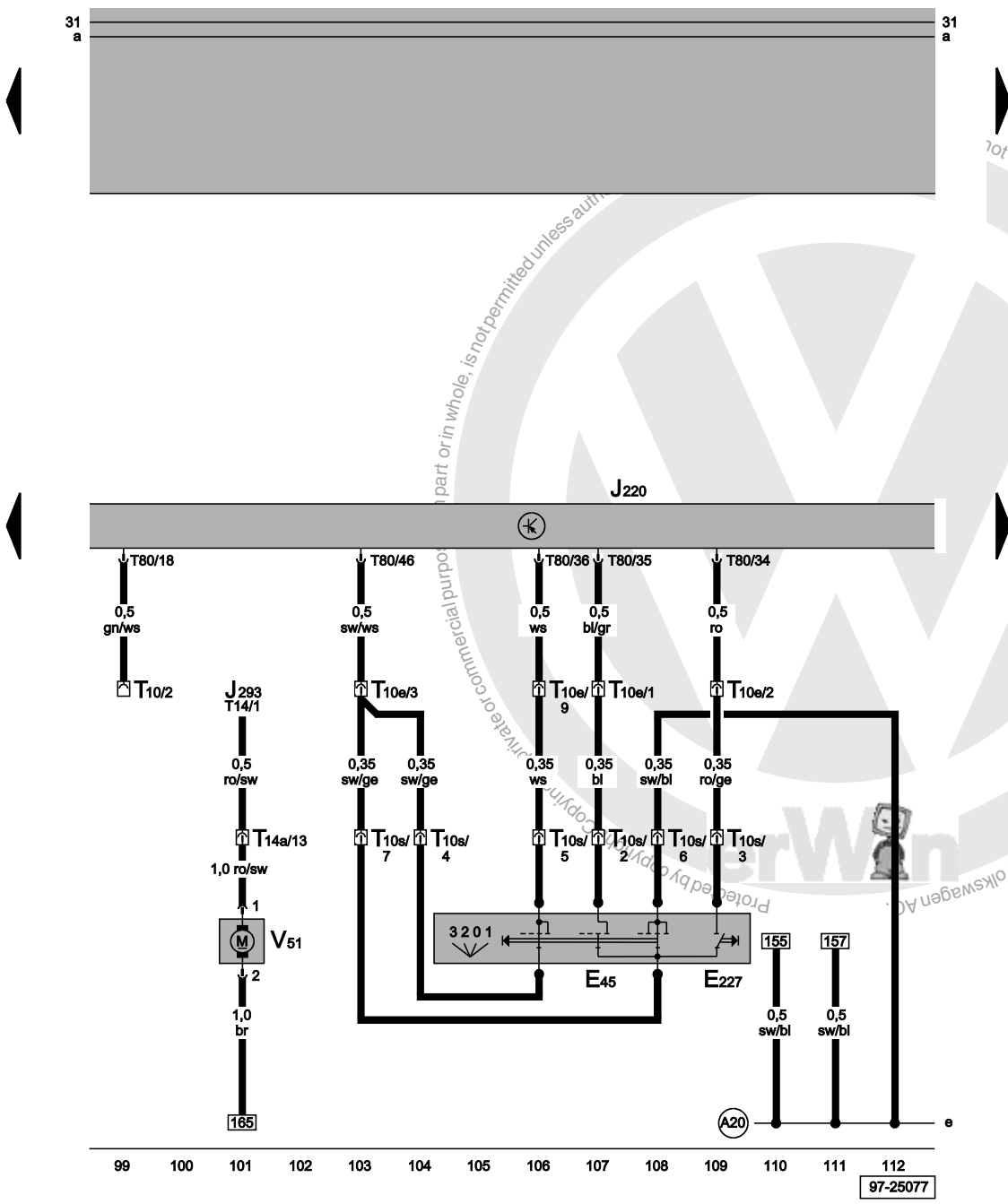


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-28003

Motronic control unit, cruise control system (CCS) switch, coolant continued circulation pump

- E45 Cruise control system switch
- E227 Cruise control system (CCS) button (Set)
- J220 Motronic control unit, centre in plenum chamber
- J293 Radiator fan control unit
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T14 14-pin connector, on radiator fan control unit
- T14a 14-pin connector, in cable channel left in engine compartment
- T10e 10-pin connector, black, in protective housing for connectors, left in plenum chamber
- T10s 10-pin connector, next to steering column
- T80 80-pin connector
- V51 Continued coolant circulation pump
- A20 Connection (15a), in dash panel wiring harness



- ws = white
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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

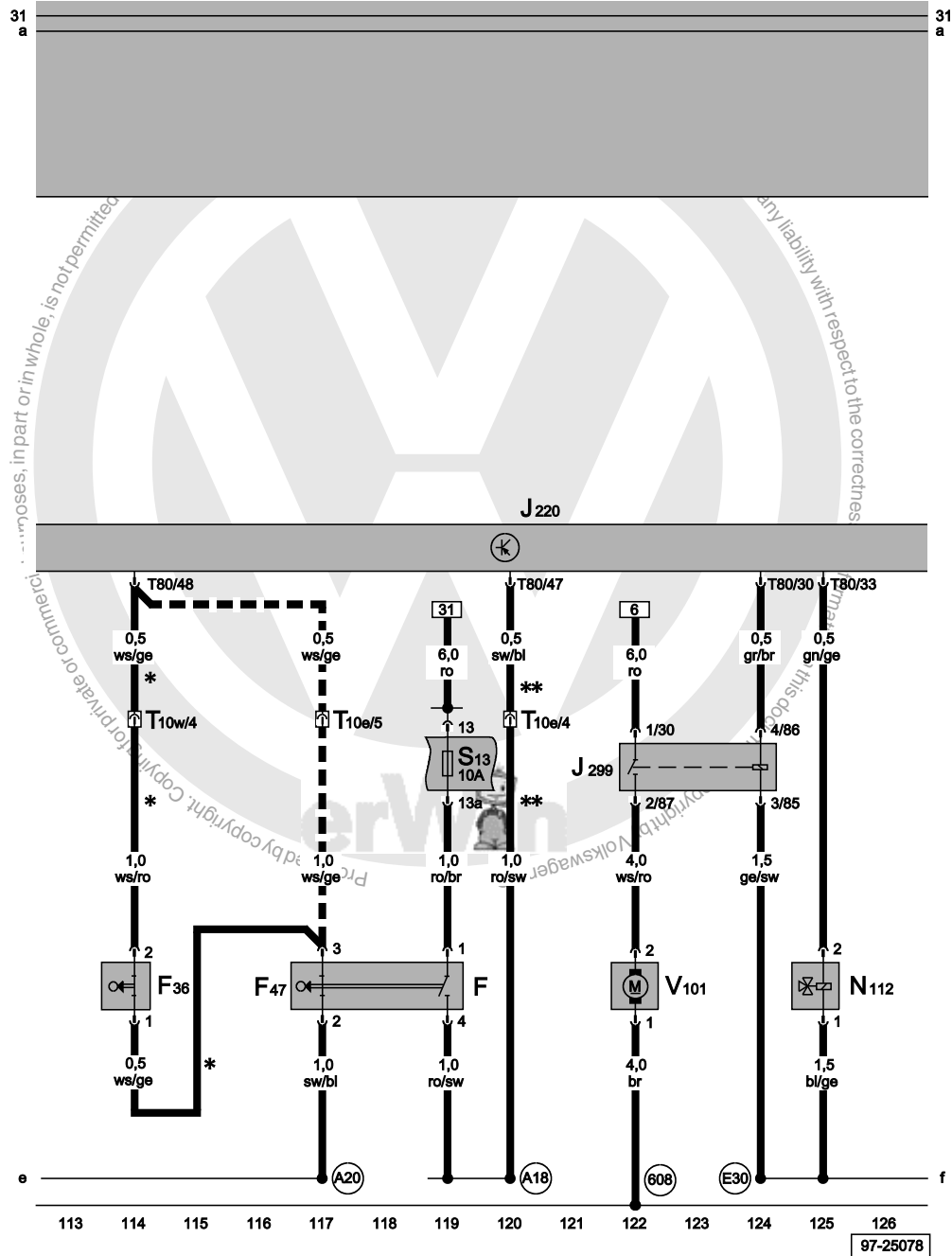
Motronic control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, brake pedal switch for CCS, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise cont. sys. brake pedal switch
- J220 Motronic control unit, centre in plenum chamber
- J299 Secondary air pump relay, in protective housing, left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse in relay plate fuse box
- T10e 10-pin connector, black, in protective housing for connectors, left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, left in plenum chamber
- T80 80-pin connector
- V101 Secondary air pump motor

- (608) Earth point, in centre of plenum chamber
- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness

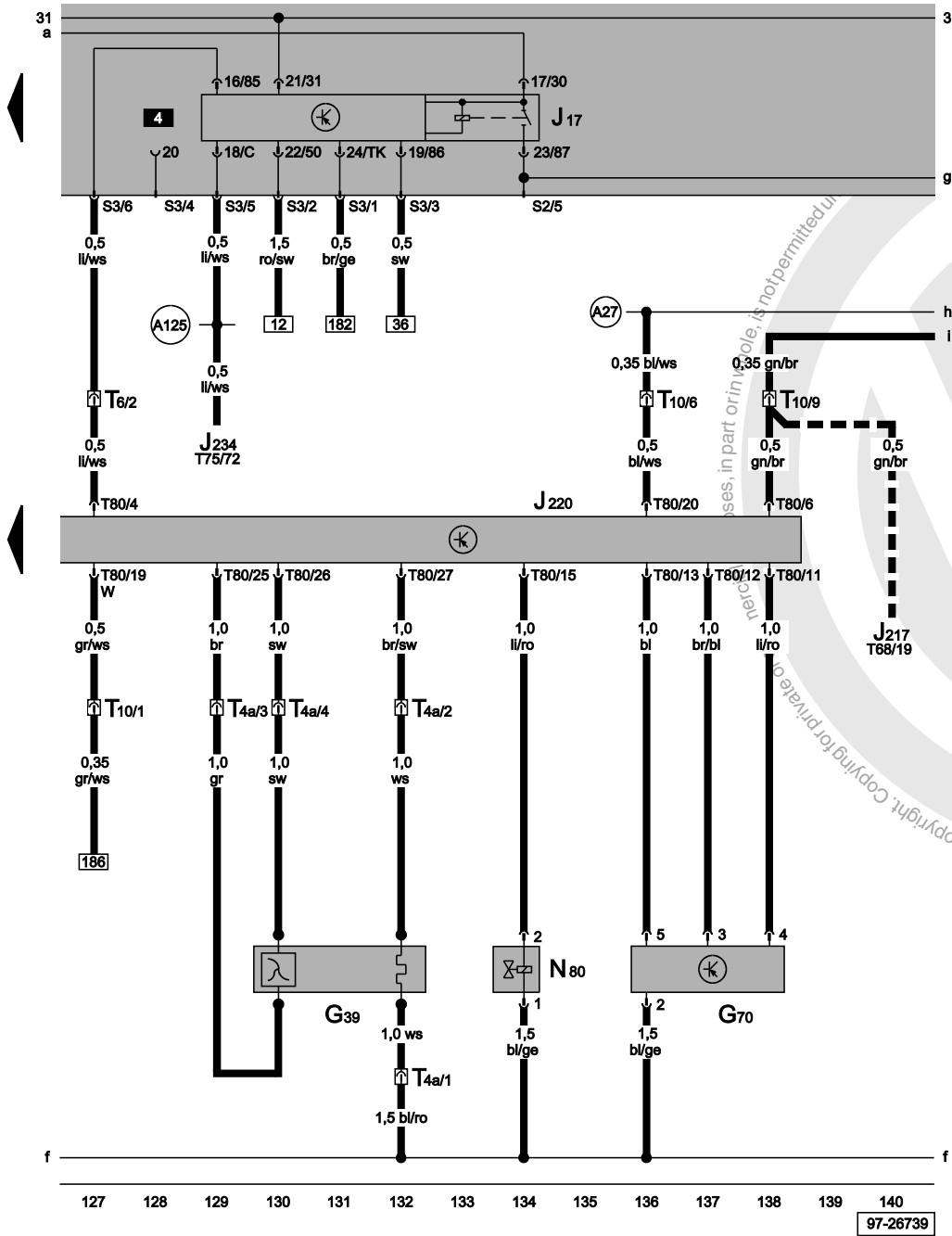
- * For vehicles with manual gearbox only
- For vehicles with automatic gearbox only
- ** For vehicles with CCS only

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-25078

Motronic control unit, lambda probe, air mass meter, activated charcoal filter system solenoid valve 1, fuel pump relay



- G39 Lambda probe
- G70 Air mass meter
- J17 Fuel pump relay
- J217 Automatic gearbox fuse
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit
- N80 Activated charcoal filter system solenoid valve 1
- T4a 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T68 68-pin connector
- T75 75-pin connector
- T80 80-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- Only models with automatic gearbox

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

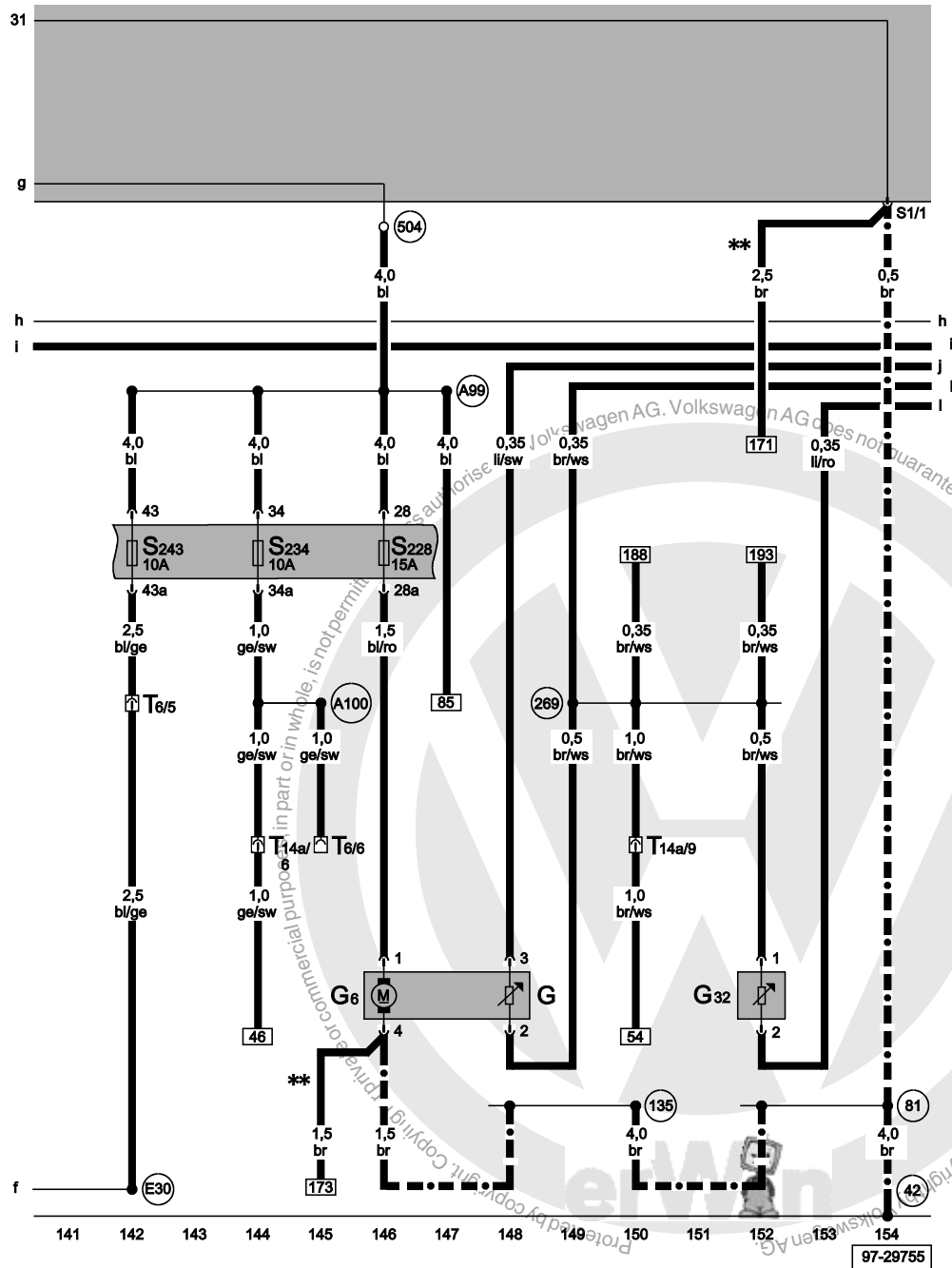
Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender***
- G6 Fuel pump***
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness

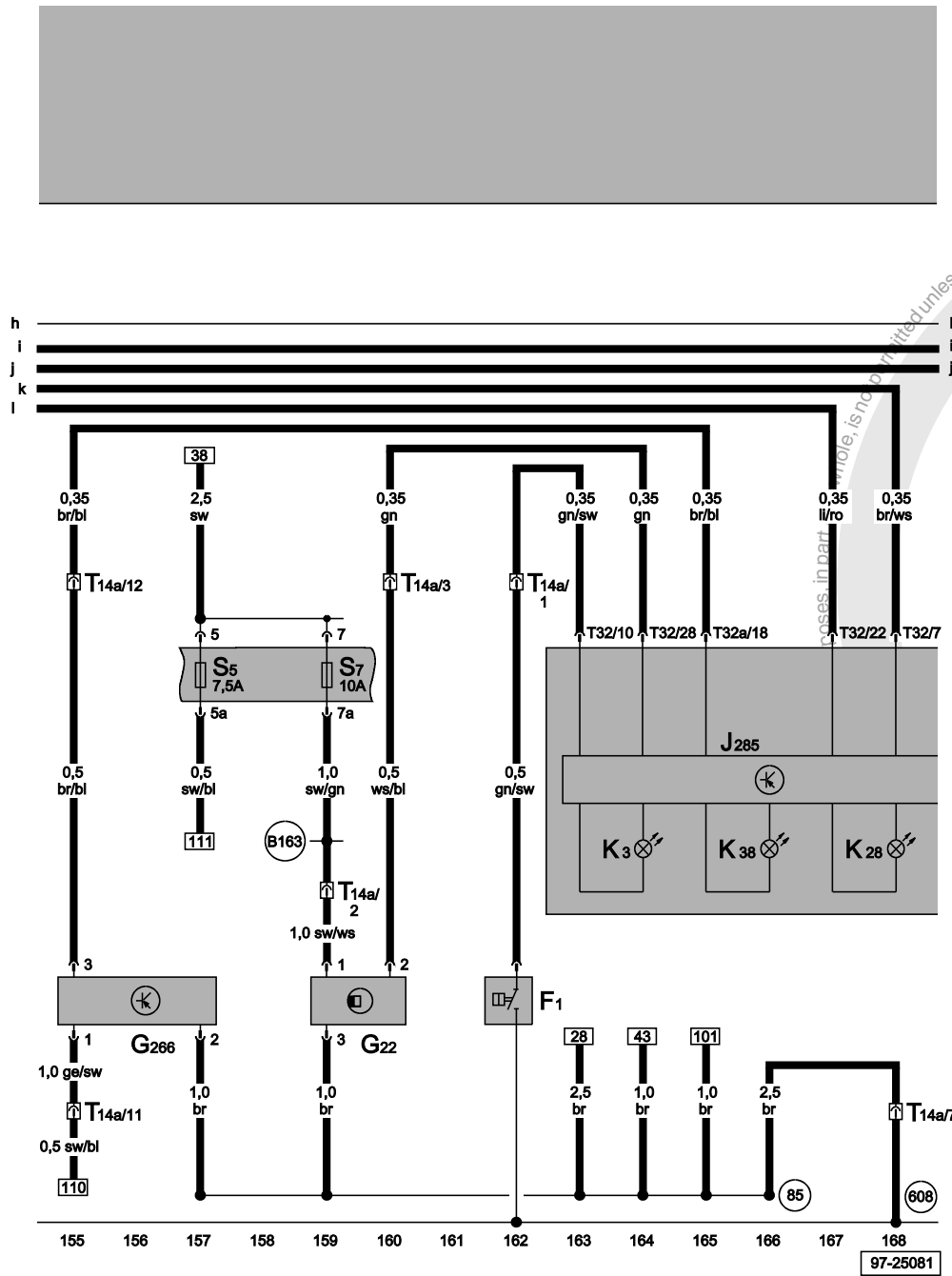
- ** From May 2000
- Up to April 2000
- *** Only models with four-wheel drive => Current flow diagram fourwheel drive (4 Motion)

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display

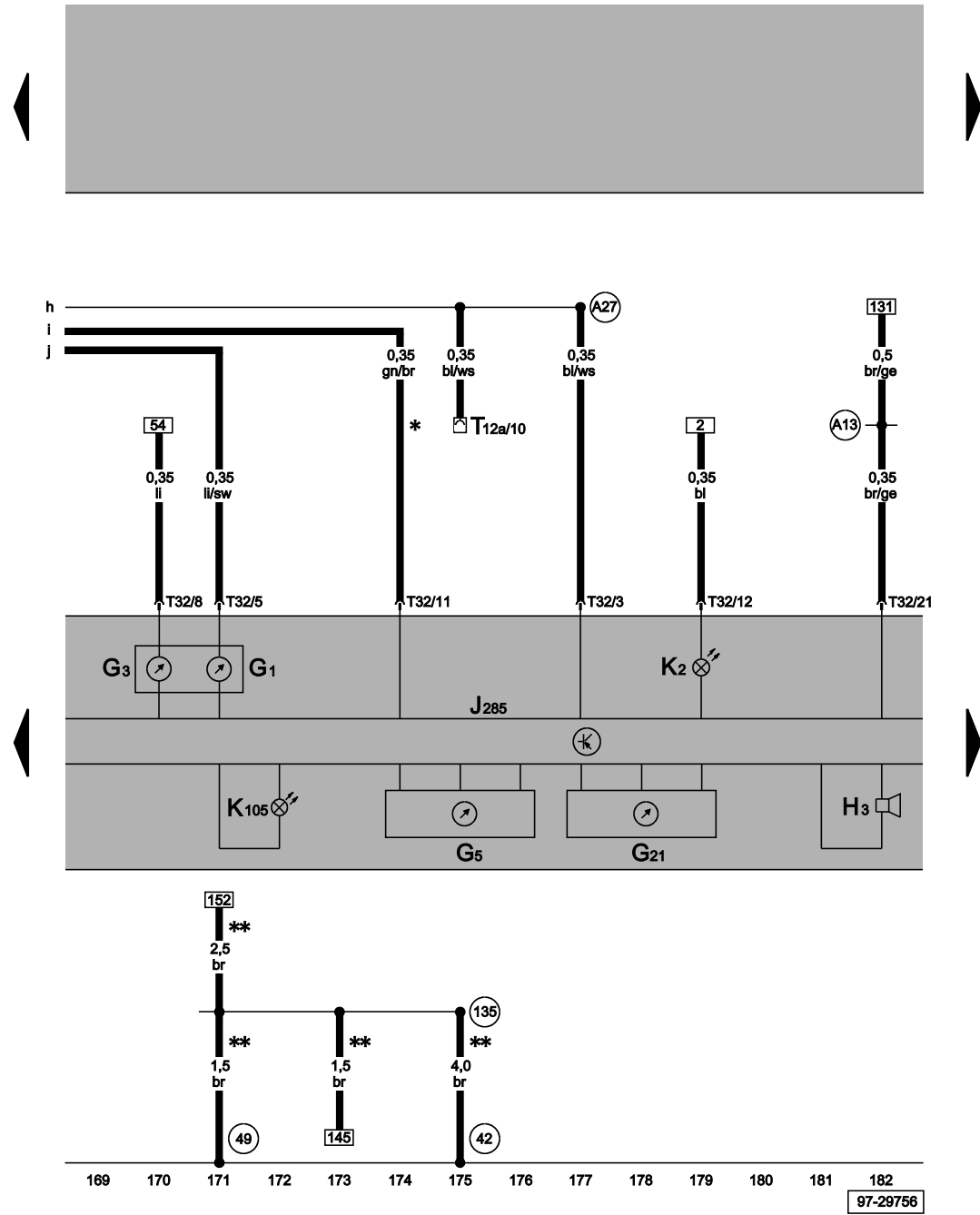


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

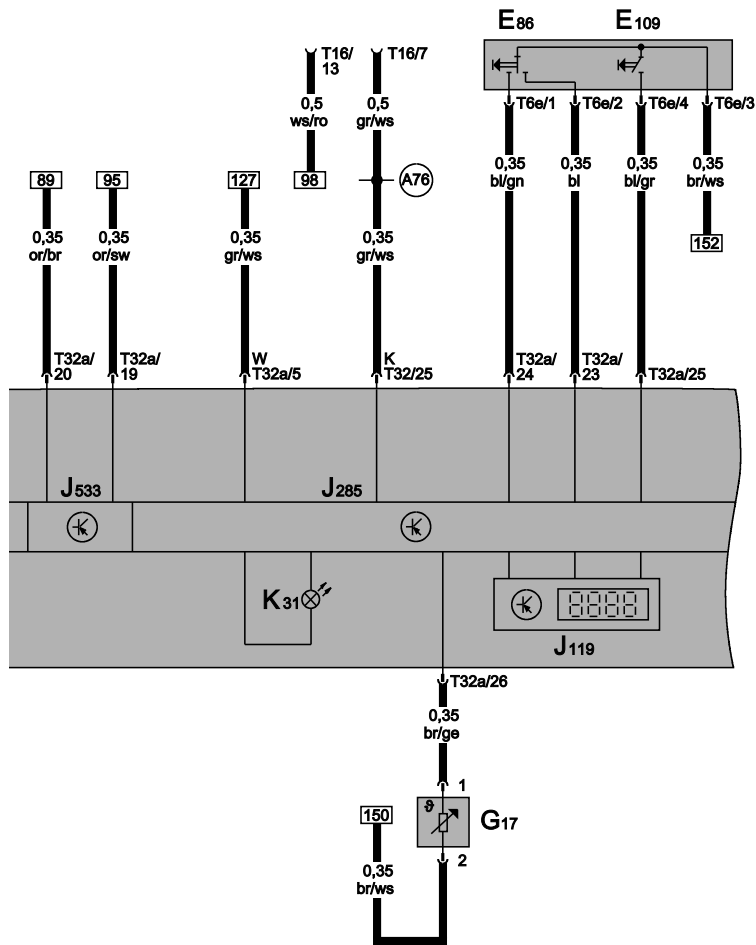
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- ** From May 2000



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, cruise control system warning lamp, multi-function display, ambient temperature display, self-diagnosis connection

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Diagnosis interface for data bus, in dash panel insert
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre of dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

2.8 litre/150 kW Motronic, engine codes AQP

From May 1999

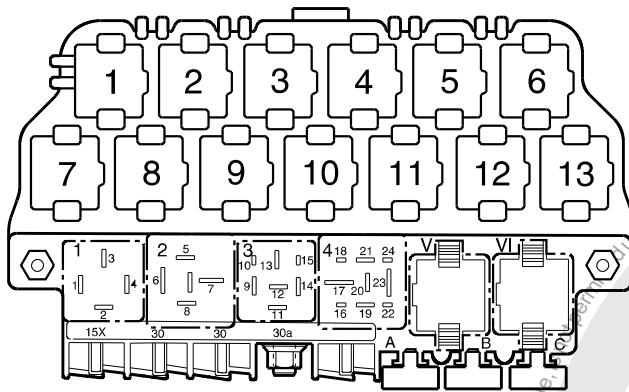
2.8 litre/150 kW Motronic, engine codes AUE

From February 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

30 A - green

25 A - white

20 A - yellow

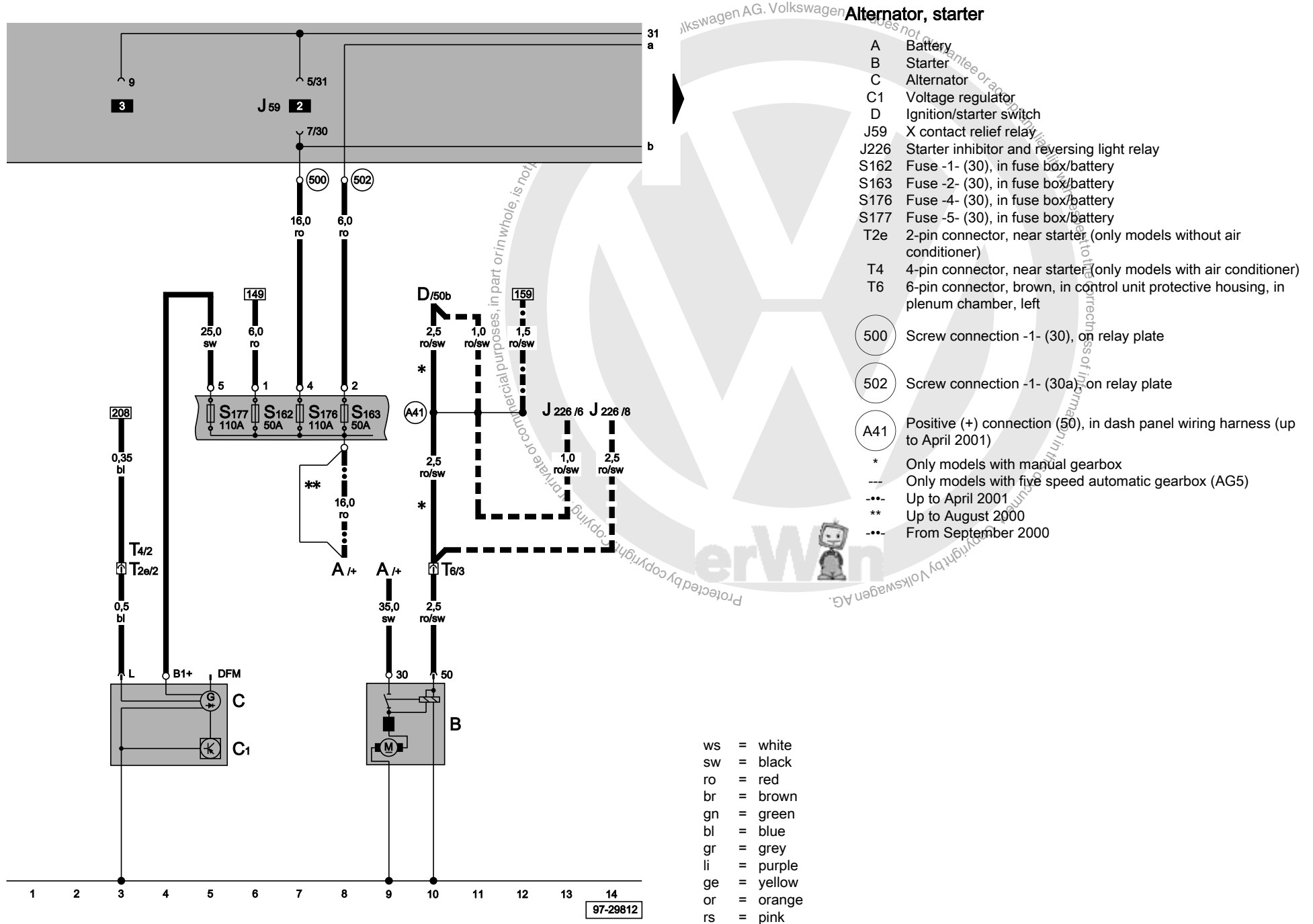
15 A - blue

10 A - red

7.5 A - brown

5 A - beige
3 A - lilac

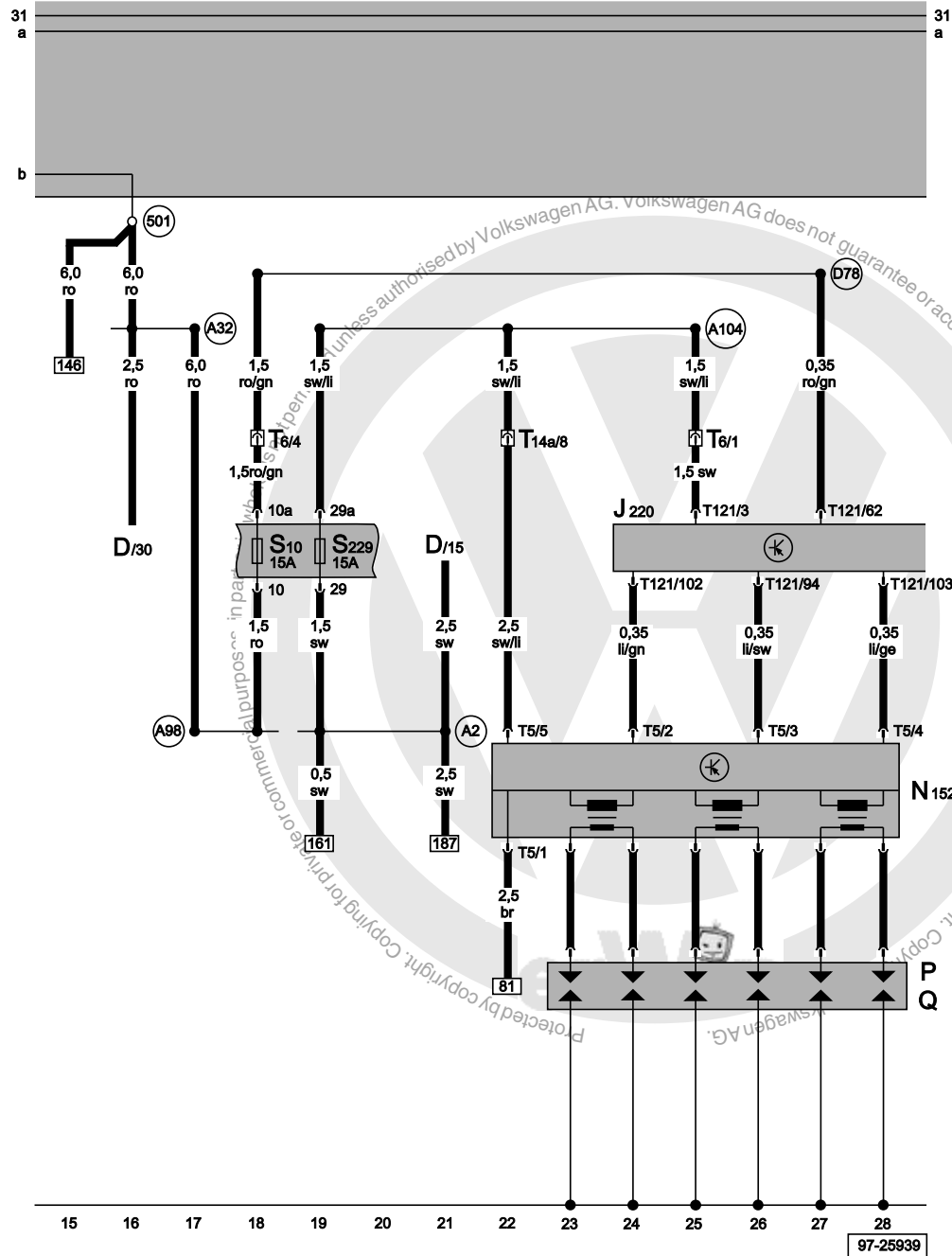




97-29812

Motronic control unit, ignition system

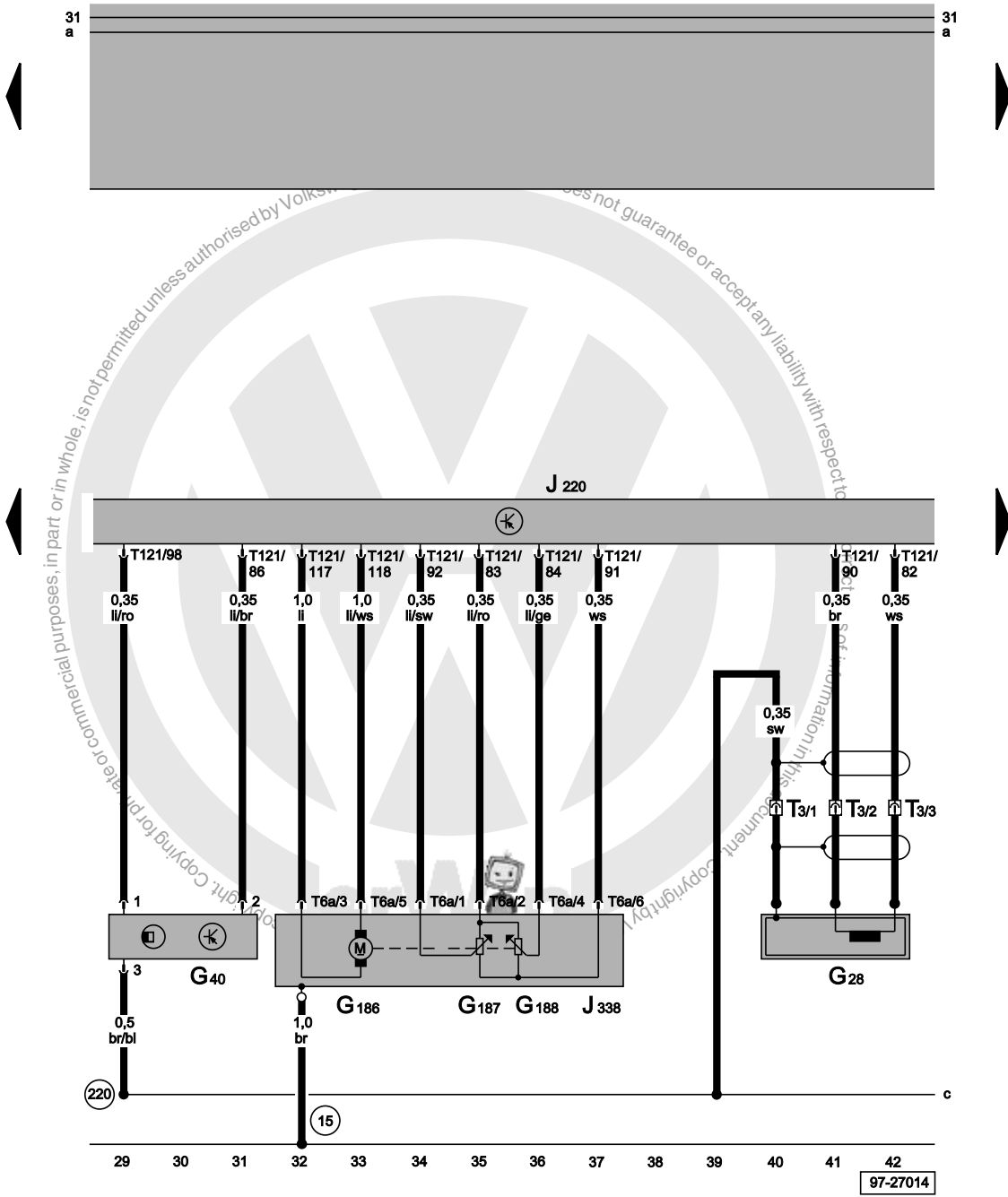
- D Ignition/starter switch
- J220 Motronic control unit, centre in plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Flame plug
- S10 Fuse in relay plate fuse box
- S229 Fuse in fuse holder
- T5 5-pin connector
- T6 6-pin connector, brown, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- A104 Positive connection -2- (15), in dash panel wiring harness
- D78 Positive connection -1- (30a), in engine compartment wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, throttle valve control unit, throttle valve drive angel sender (electric throttle operation), engine speed sender, Hall sender

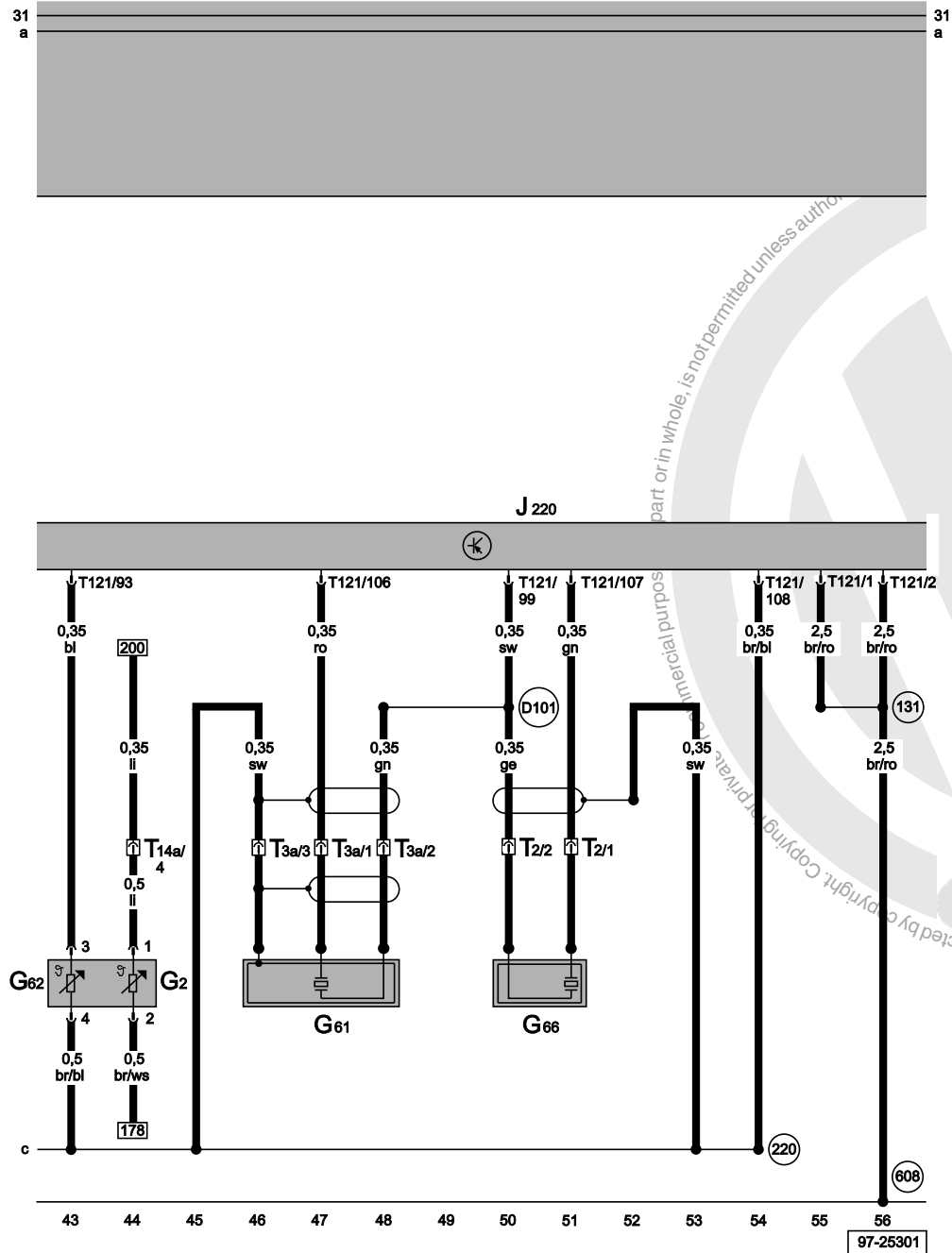
- G28 Engine speed sender
- G40 Hall sender
- G186 Throttle valve drive (electric throttle operation)
- G187 Throttle valve drive angle sender -1- (electric throttle operation)
- G188 Throttle valve drive angle sender -2- (electric throttle operation)
- J220 Motronic control unit, centre in plenum chamber
- J338 Throttle valve control unit
- T3 3-pin connector, near intake manifold
- T6a 6-pin connector
- T121 121-pin connector
- 15 Earth point, on cylinder head
- 220 Earth connection (sender earth), in engine wiring harness



97-27014

Motronic control unit, coolant temperature sender, knock sensor I, knock sensor II

- G2 Coolant temperature sender
- G61 Knock sensor I
- G62 Coolant temperature sender
- G66 Knock sensor II
- J220 Motronic control unit, centre in plenum chamber
- T2 2-pin connector, front in engine compartment
- T3a 3-pin connector, rear in engine compartment
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- 131 Earth connection -2-, in engine compartment wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber
- D101 Connection -1-, in engine compartment wiring harness

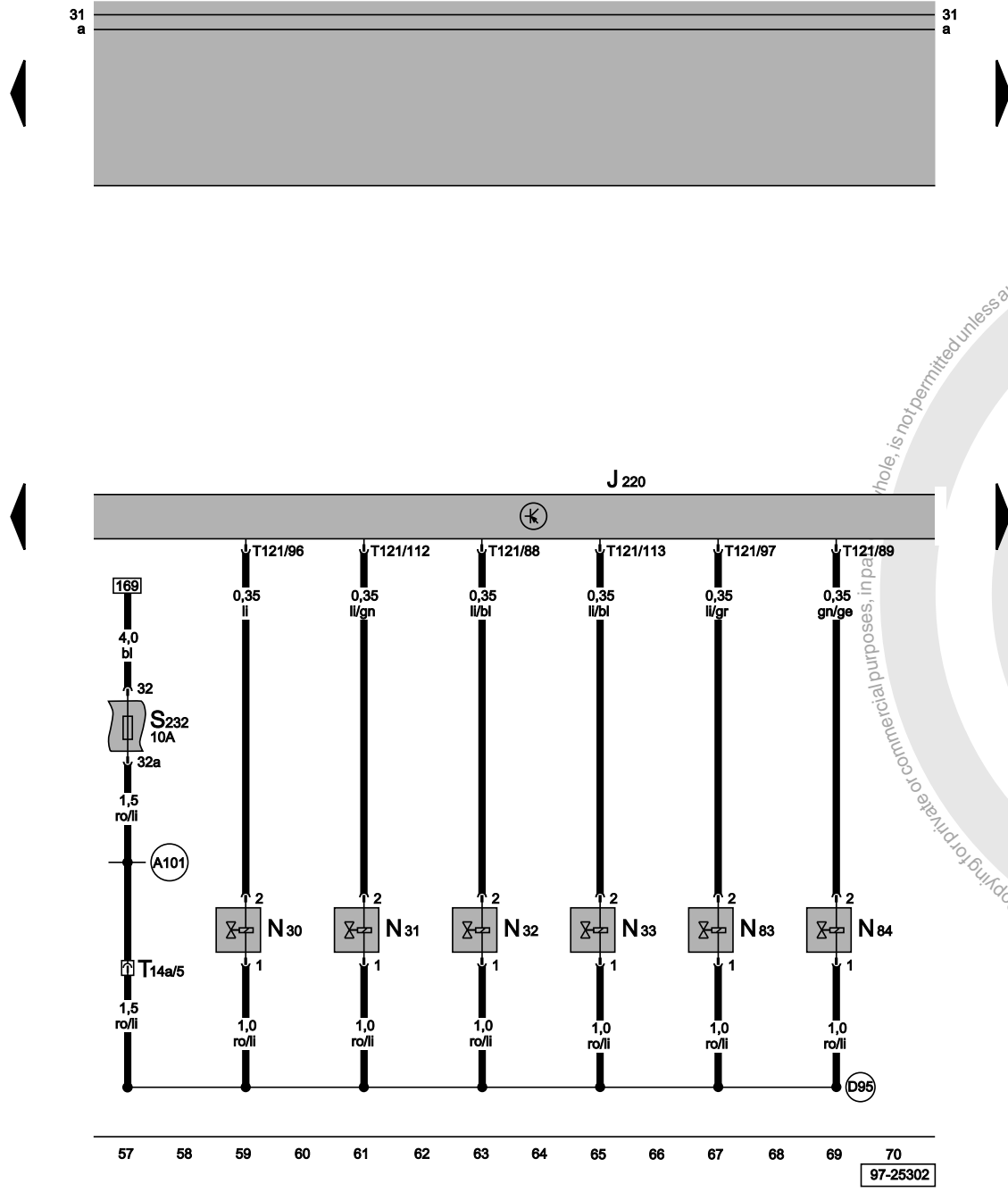


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25301

Motronic control unit, injectors

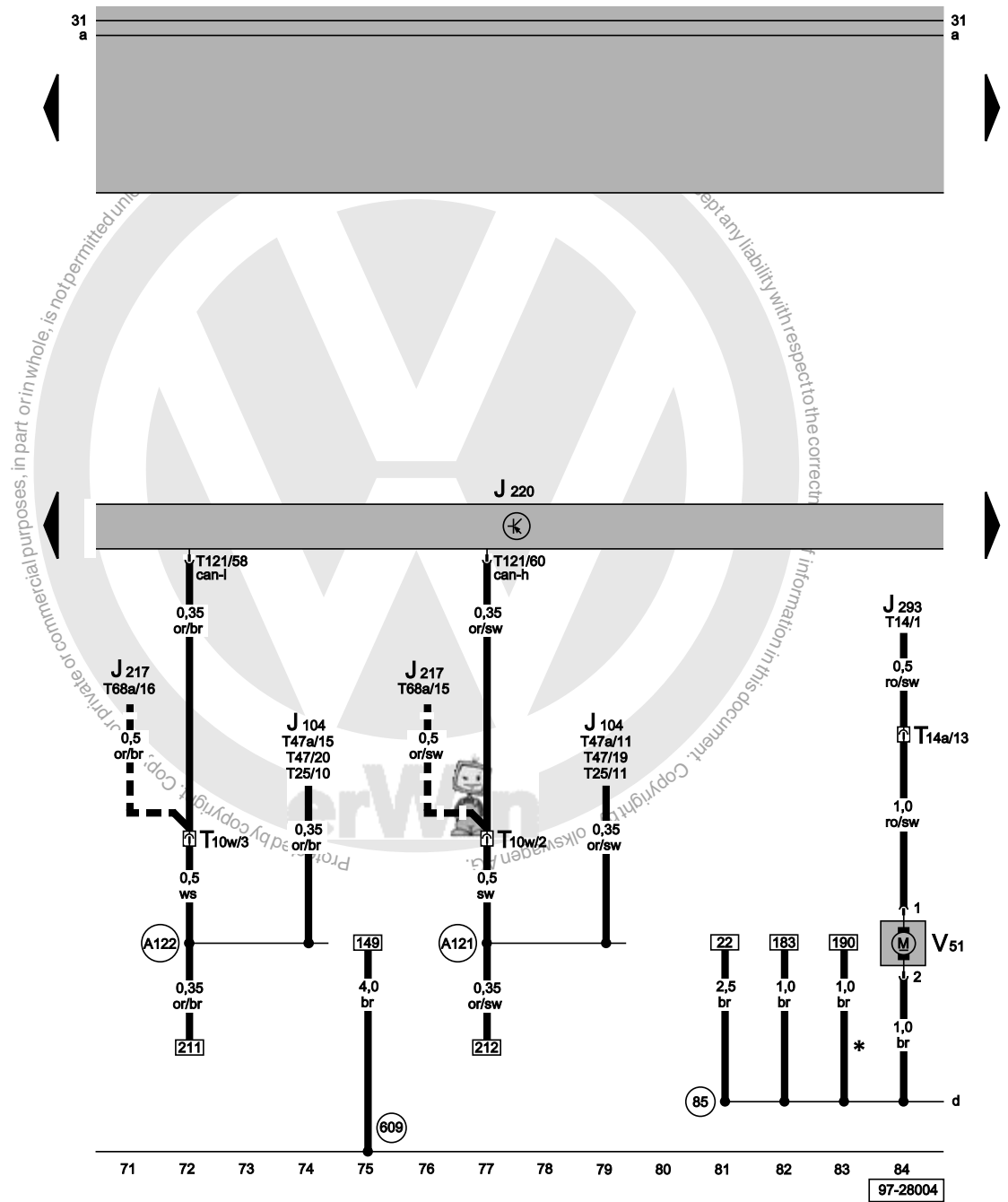
- J220 Motronic control unit, centre in plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- N84 Injector, cylinder 6
- S232 Fuse in fuse holder
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- A101 Connection -3- (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness



- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25302

Motronic control unit, continued circulation of coolant pump



- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- J293 Radiator fan control unit
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T14 14-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68a 68-pin connector
- T121 121-pin connector
- V51 Continued circulation of coolant pump

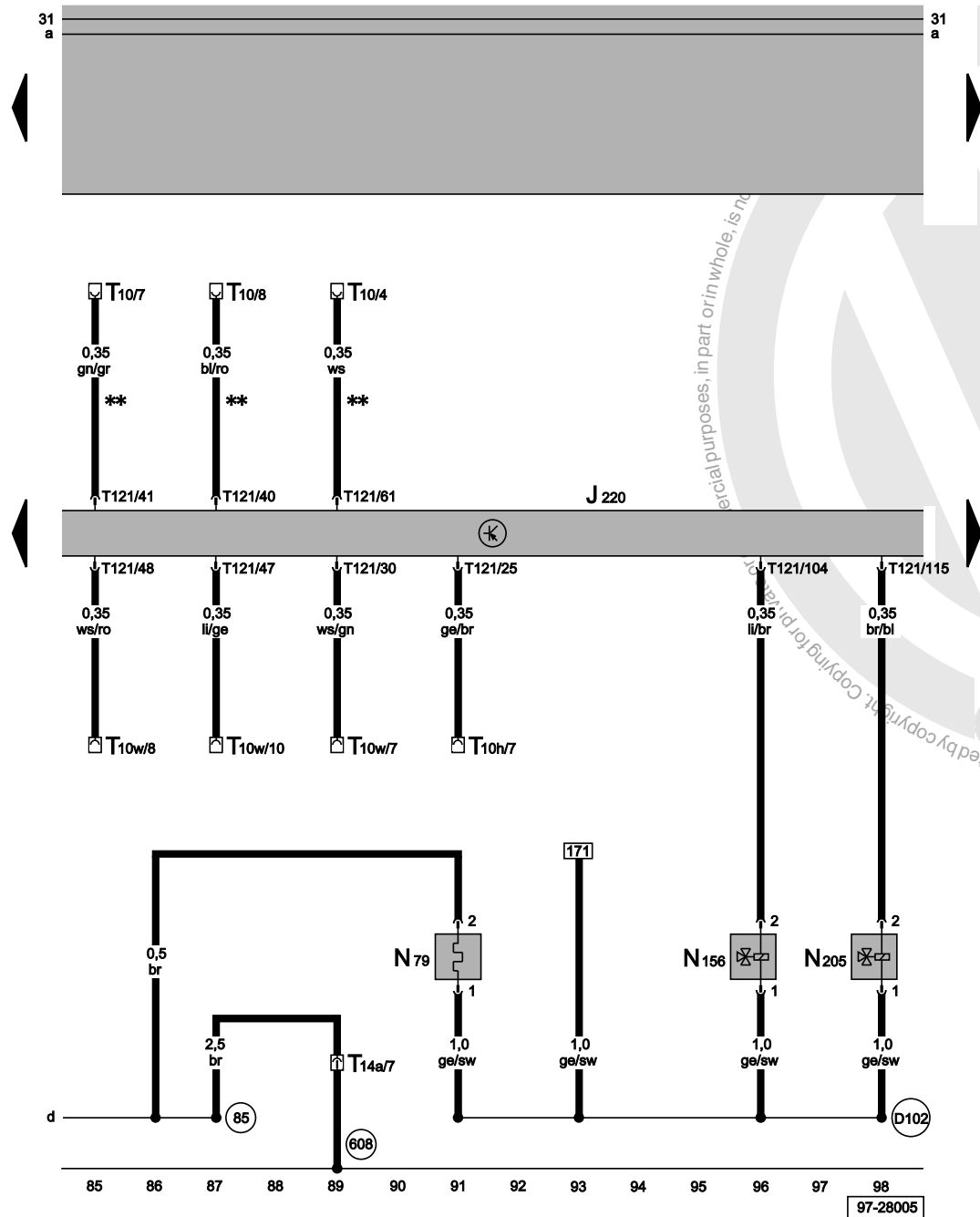
- (85) Earth connection -1-, in engine compartment wiring harness
- (609) Earth point, in plenum chamber, right
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with five speed automatic gearbox (AG5)

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Motronic control unit, intake manifold change-over valve, inlet camshaft timing adjustment valve, heater element (crankcase breather)

- J220 Motronic control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- N156 Intake manifold change-over valve
- N205 Inlet camshaft timing adjustment valve -1-
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- D102 Connection -2-, in engine wiring harness
- ** Connection for air conditioner



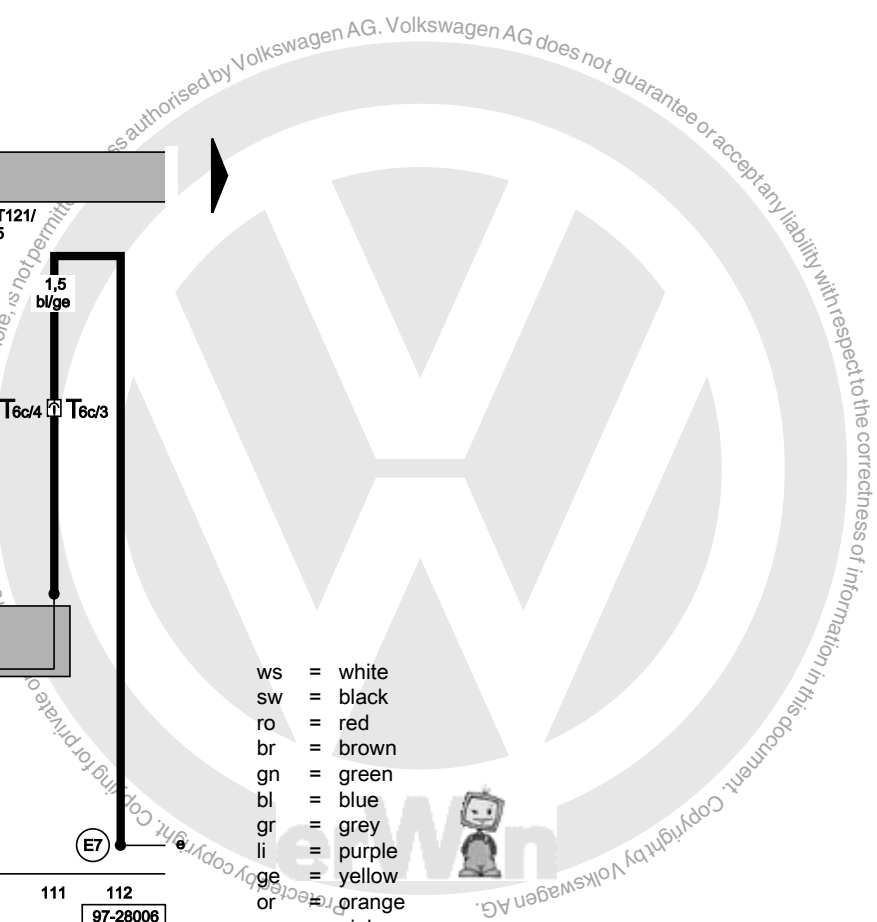
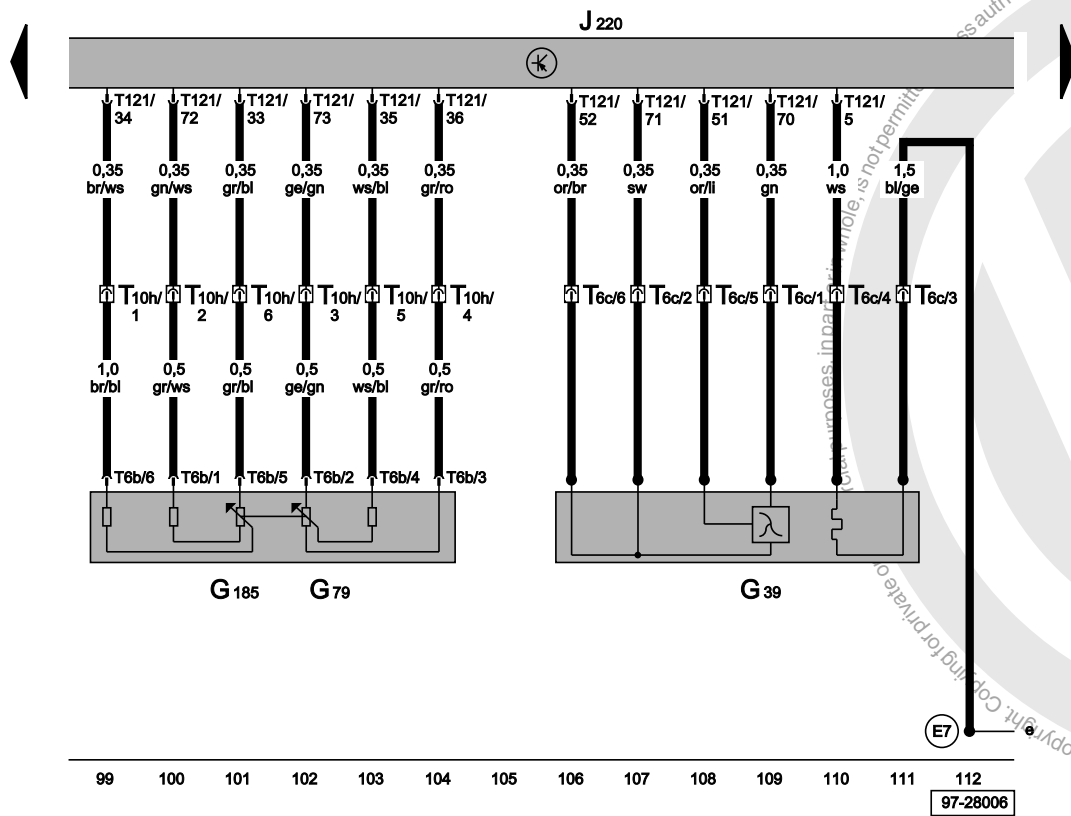
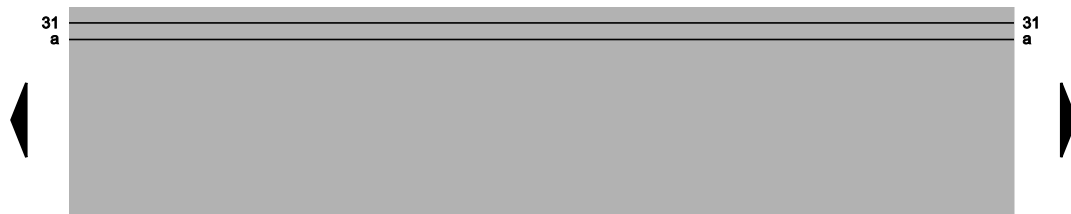
- ws = white
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- rs = pink

97-28005

Motronic control unit, accelerator pedal position sender, lambda probe

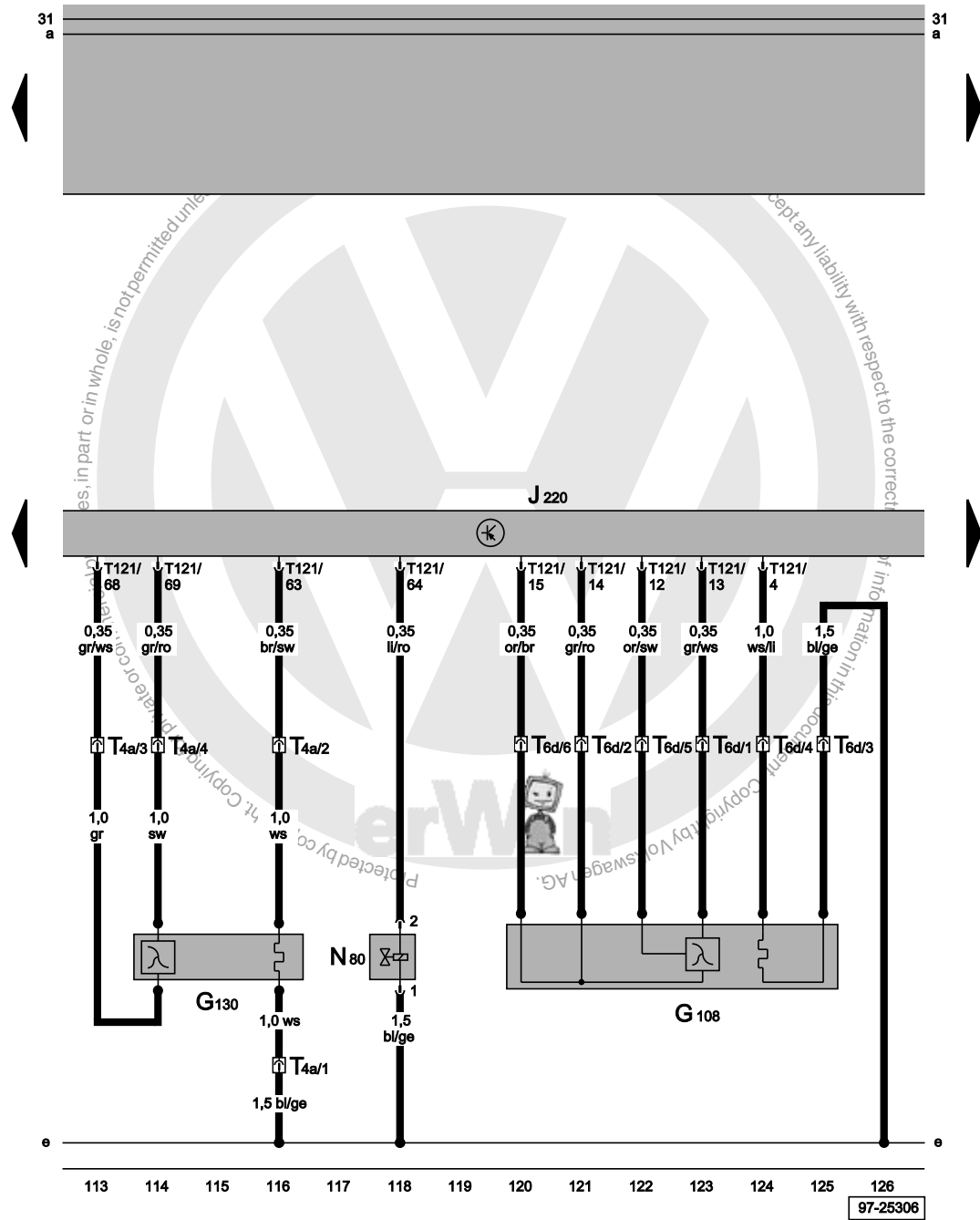
- G39 Lambda probe
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender-2-
- J220 Motronic control unit, in plenum chamber, centre
- T6b 6-pin connector
- T6c 6-pin connector, near catalyst
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T121 121-pin connector

(E7) Positive (+) connection (87a), in Motronic wiring harness



Motronic control unit, activated charcoal filter system solenoid valve 1, lambda probe after catalyst, lambda probe after catalyst II

- G108 Lambda probe II
- G130 Lambda probe after catalyst
- J220 Motronic control unit, in plenum chamber, centre
- N80 Activated charcoal filter system solenoid valve I
- T4a 4-pin connector, near catalyst
- T6d 6-pin connector, near catalyst
- T121 121-pin connector



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97-25308

Motronic control unit, cruise control switch (CCS),
Lambda probe II after catalyst

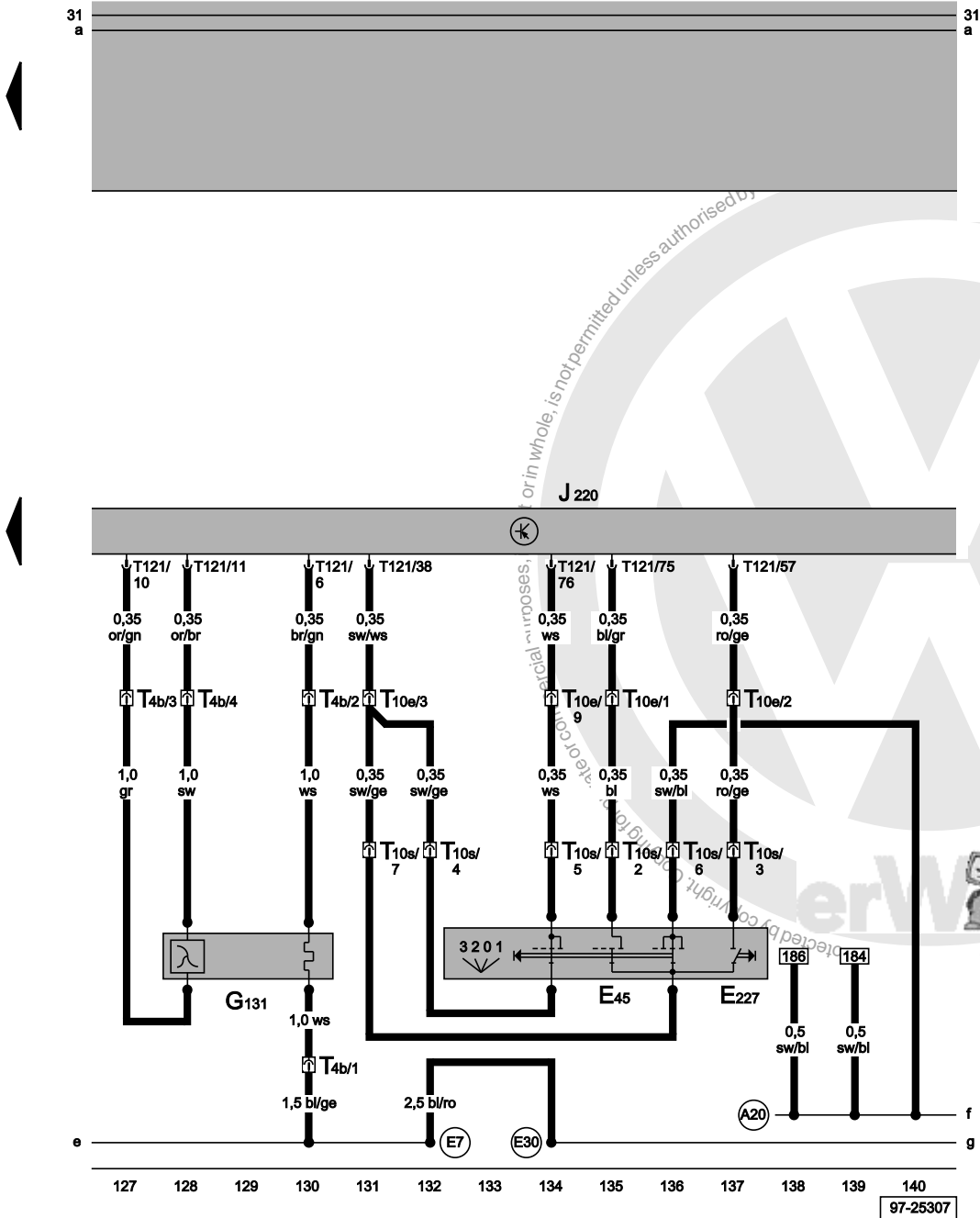
- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)
- G131 Lambda probe II after catalyst
- J220 Motronic control unit, centre in plenum chamber
- T4b 4-pin connector, near catalyst
- T10e 10-pin connector, black, in protective housing for connectors, left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector

(A20) Connection (15a), in dash panel wiring harness

(E7) Positive connection (87a), in Motronic wiring harness

(E30) Connection (87a), in engine wiring harness

** For vehicles with CCS only



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- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25307

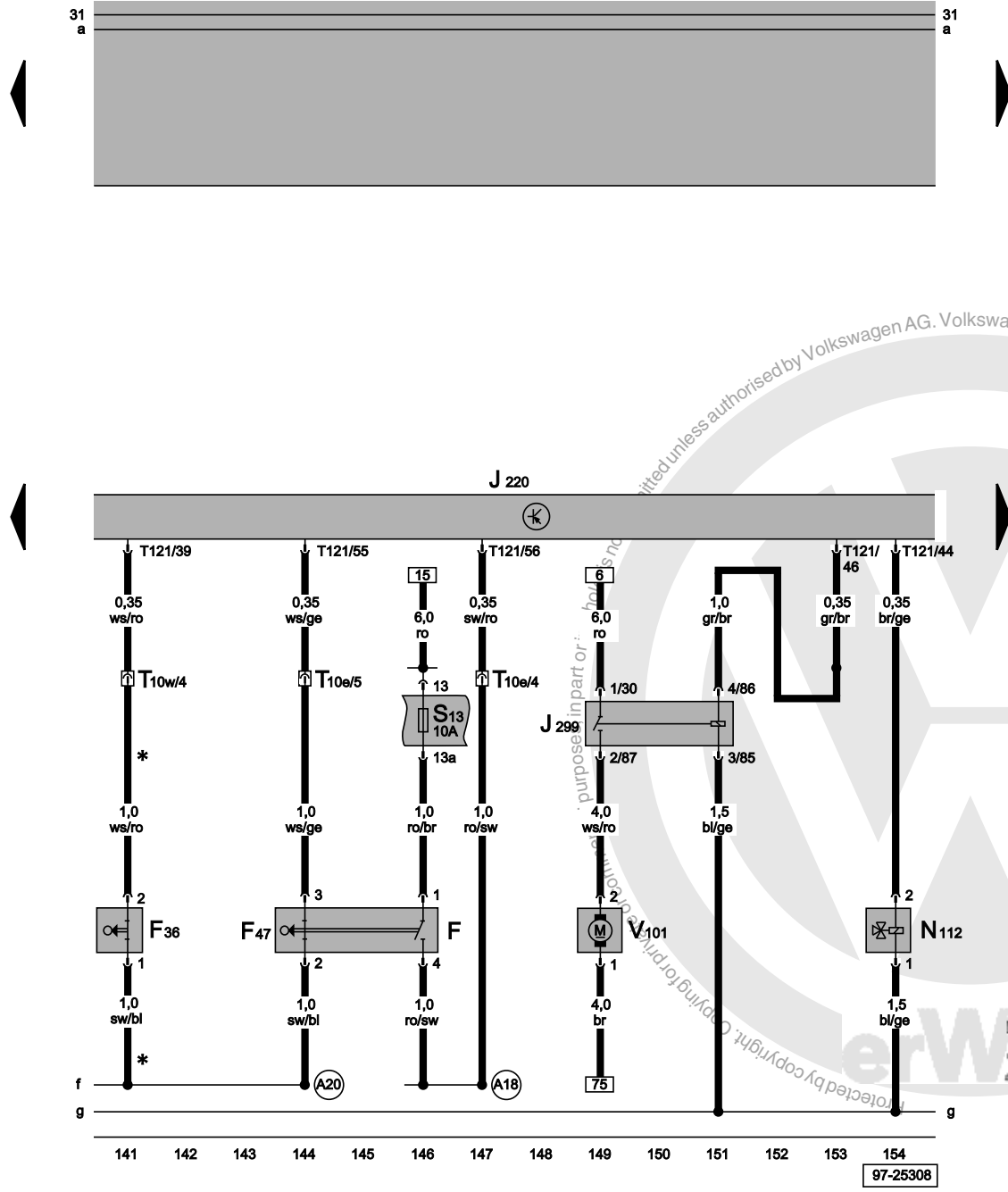
Motronic control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, brake pedal switch for CCS, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise cont. sys. brake pedal switch
- J220 Motronic control unit, centre in plenum chamber
- J299 Secondary air pump relay, in protective housing, left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse in relay plate fuse box
- T10e 10-pin connector, black, in protective housing for connectors, left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

A18 Connection (54), in dash panel wiring harness

A20 Connection (15a), in dash panel wiring harness

* For vehicles with manual gearbox only



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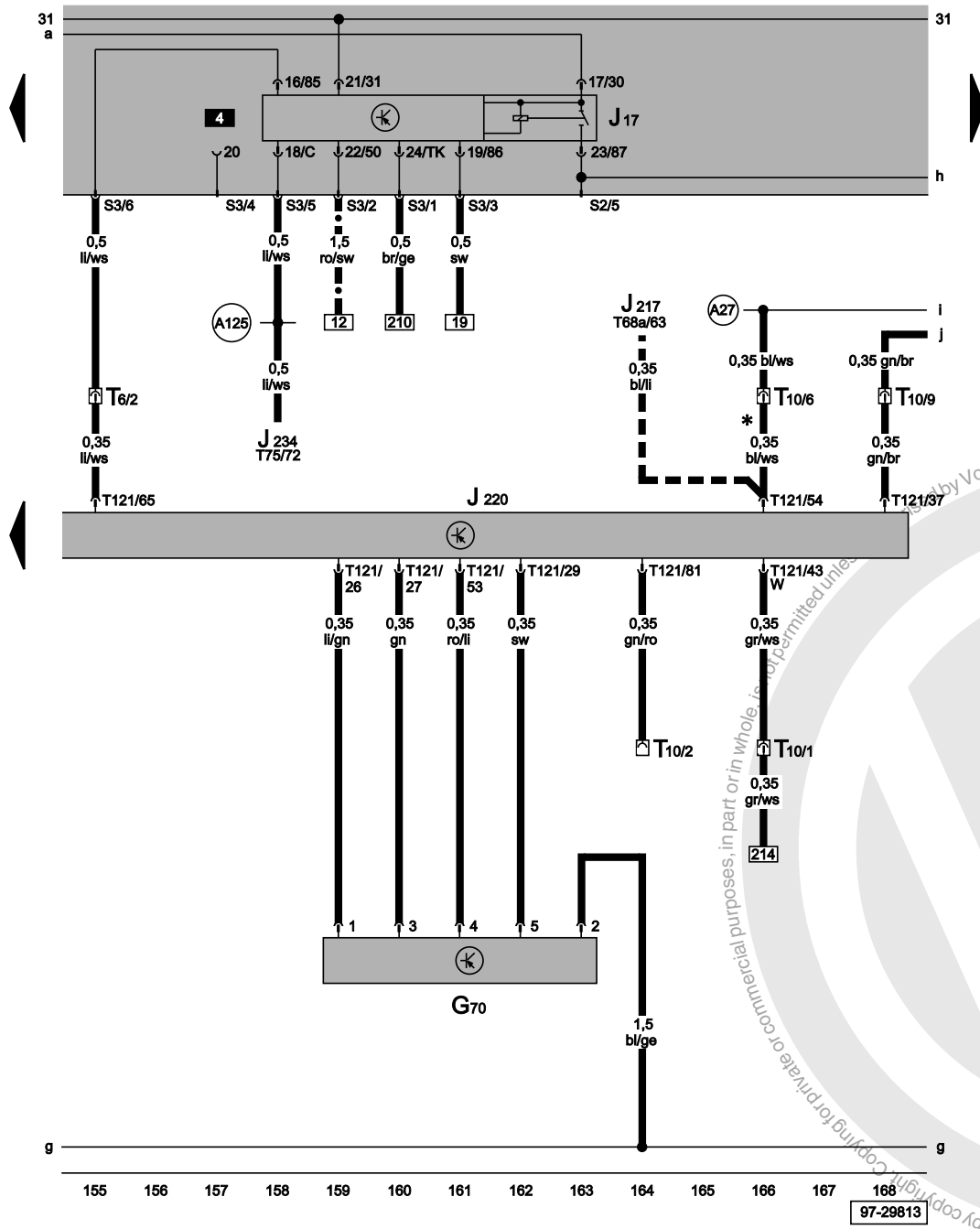
Motronic control unit, air mass meter, fuel pump relay

- G70 Air mass meter
- J17 Fuel pump relay
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit, behind lower console
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T68a 68-pin connector
- T75 75-pin connector
- T121 121-pin connector

(A27) Connection (speed signal), in dash panel wiring harness

(A125) Connection (crash signal), in dash panel wiring harness

- * Only models with manual gearbox
- Only models with five speed automatic gearbox (AG5)
- ... Up to April 2001



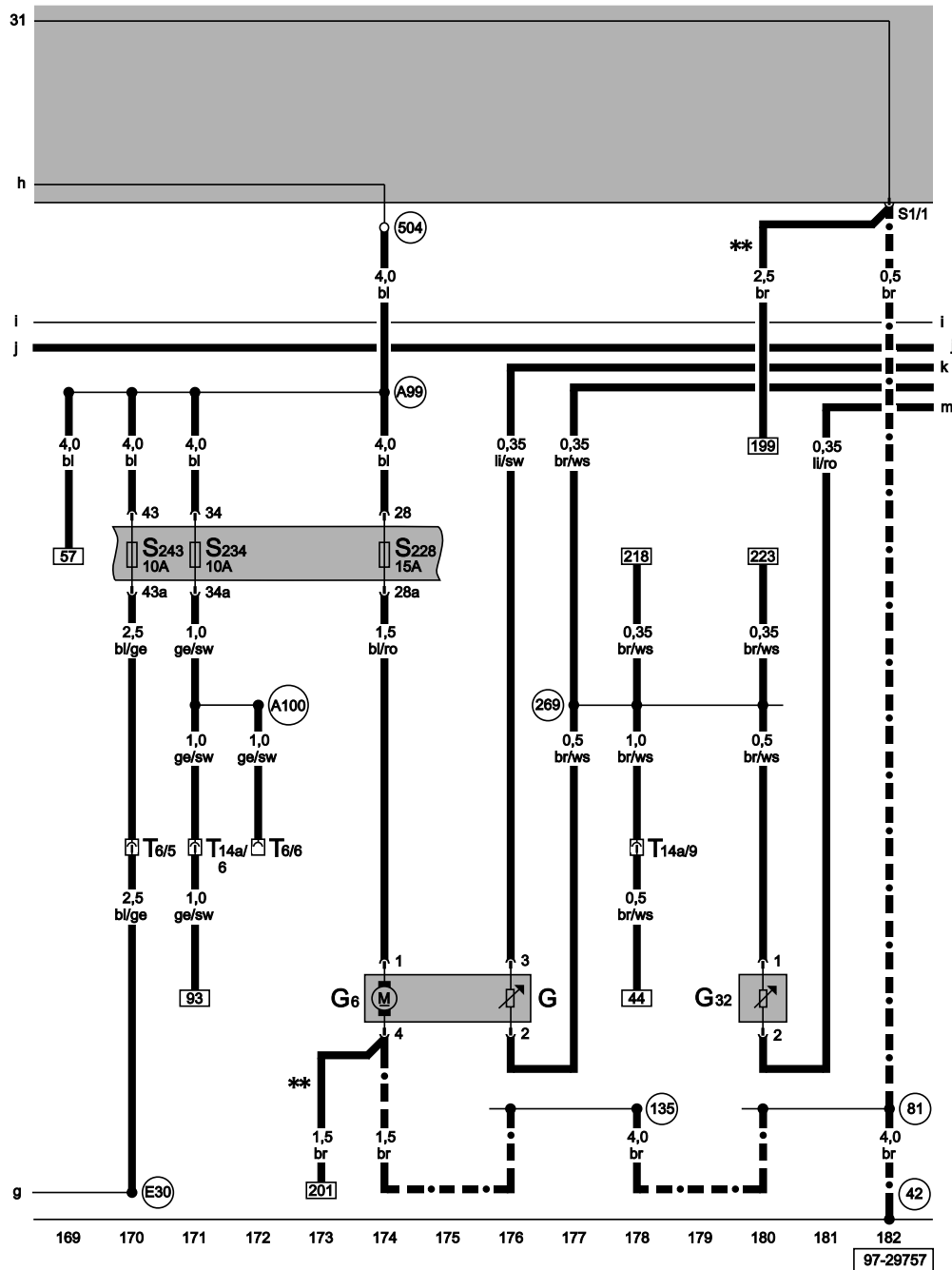
- ws = white
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Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender***
- G6 Fuel pump***
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- ** From May 2000
- Up to April 2000
- *** Only models with four-wheel drive => Current flow diagram fourwheel drive (4 Motion)

- ws = white
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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

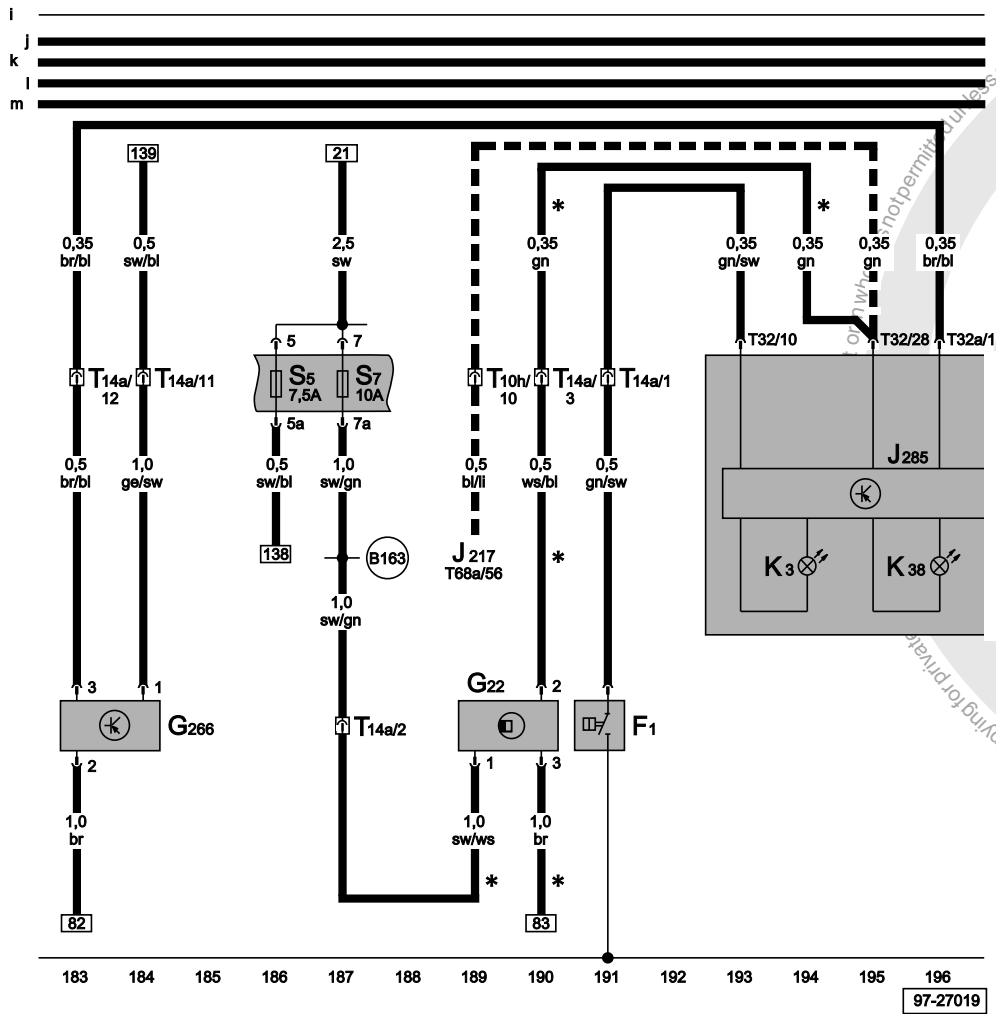


Dash panel insert, oil pressure warning lamp, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender**
- J217 Automatic gearbox control unit
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T68a 68-pin connector

B163 Positive (+) connection -1- (15), in interior wiring harness

- * Only models with manual gearbox
- ** Only with flexible service interval display
- Only models with five speed automatic gearbox (AG5)



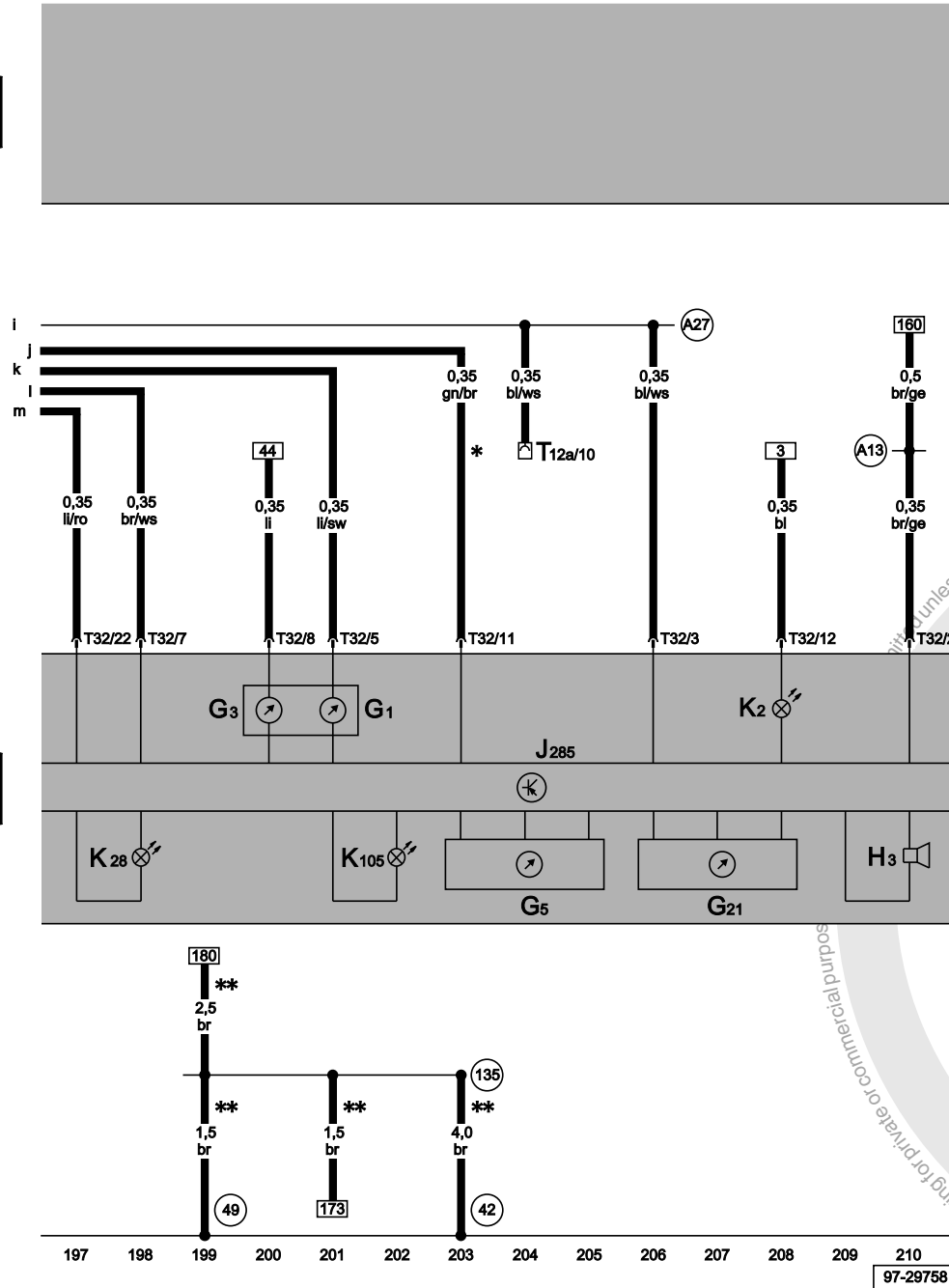
- ws = white
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- rs = pink

97-27019

Dash panel insert, coolant temperature gauge and fuel gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

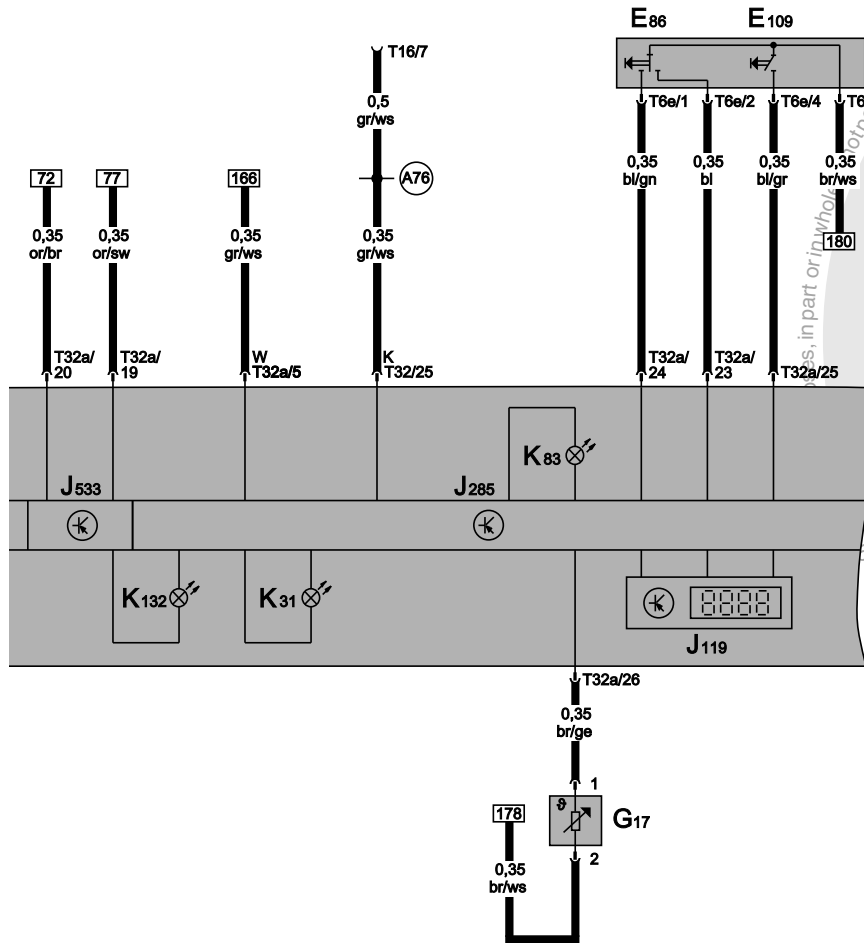
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- ** From May 2000



Dash panel insert, electric throttle control fault lamp, CCS warning lamp, multi-function display, ambient temperature display, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Diagnosis interface for data bus, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric throttle control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre of dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- or = orange
- rs = pink

1.9 I/50 kW - Naturally aspirated diesel engine, engine code AGP

from May 1999

1.9 I/50 kW - Naturally aspirated diesel engine, engine code AQM

from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

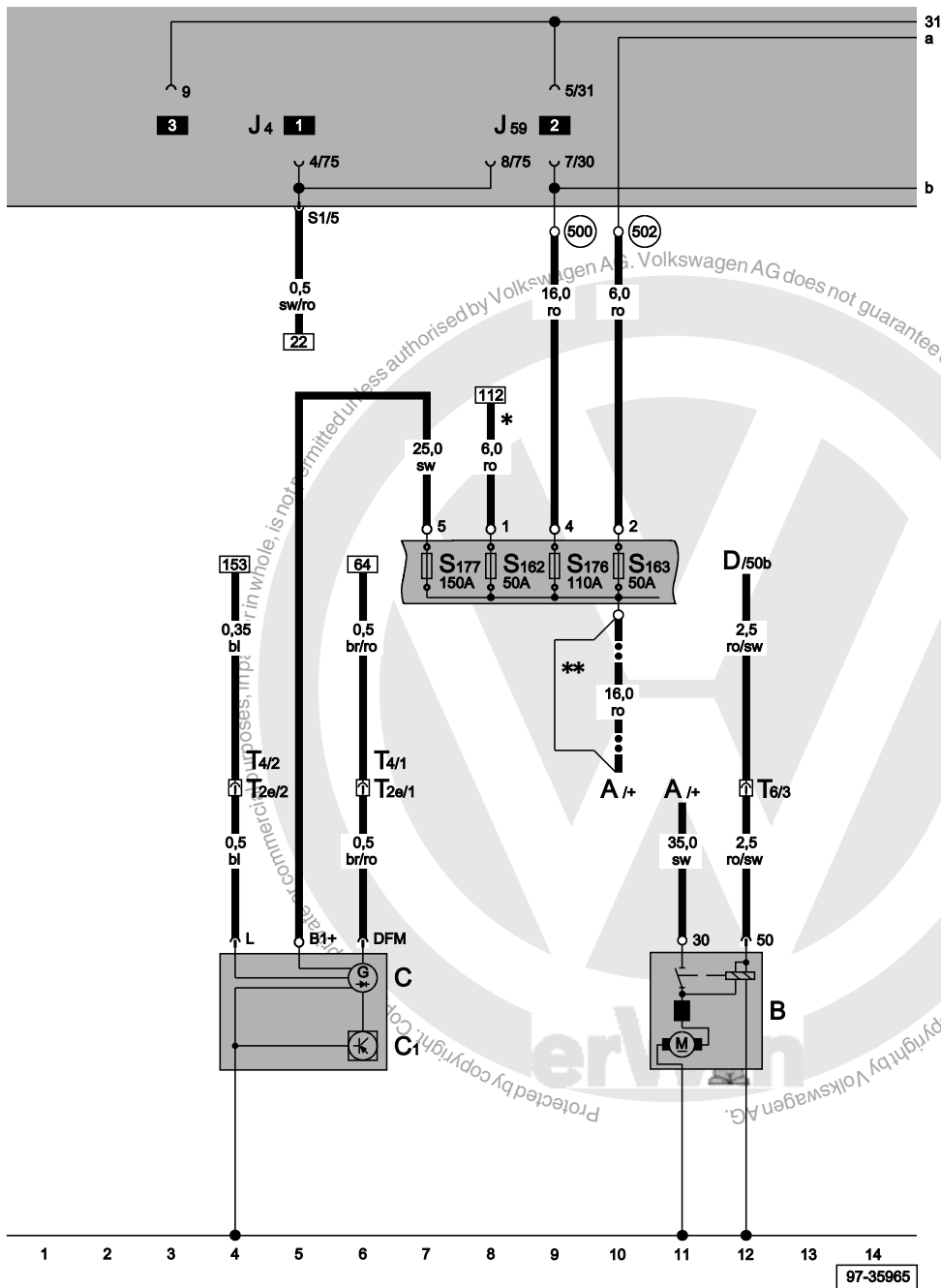
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding



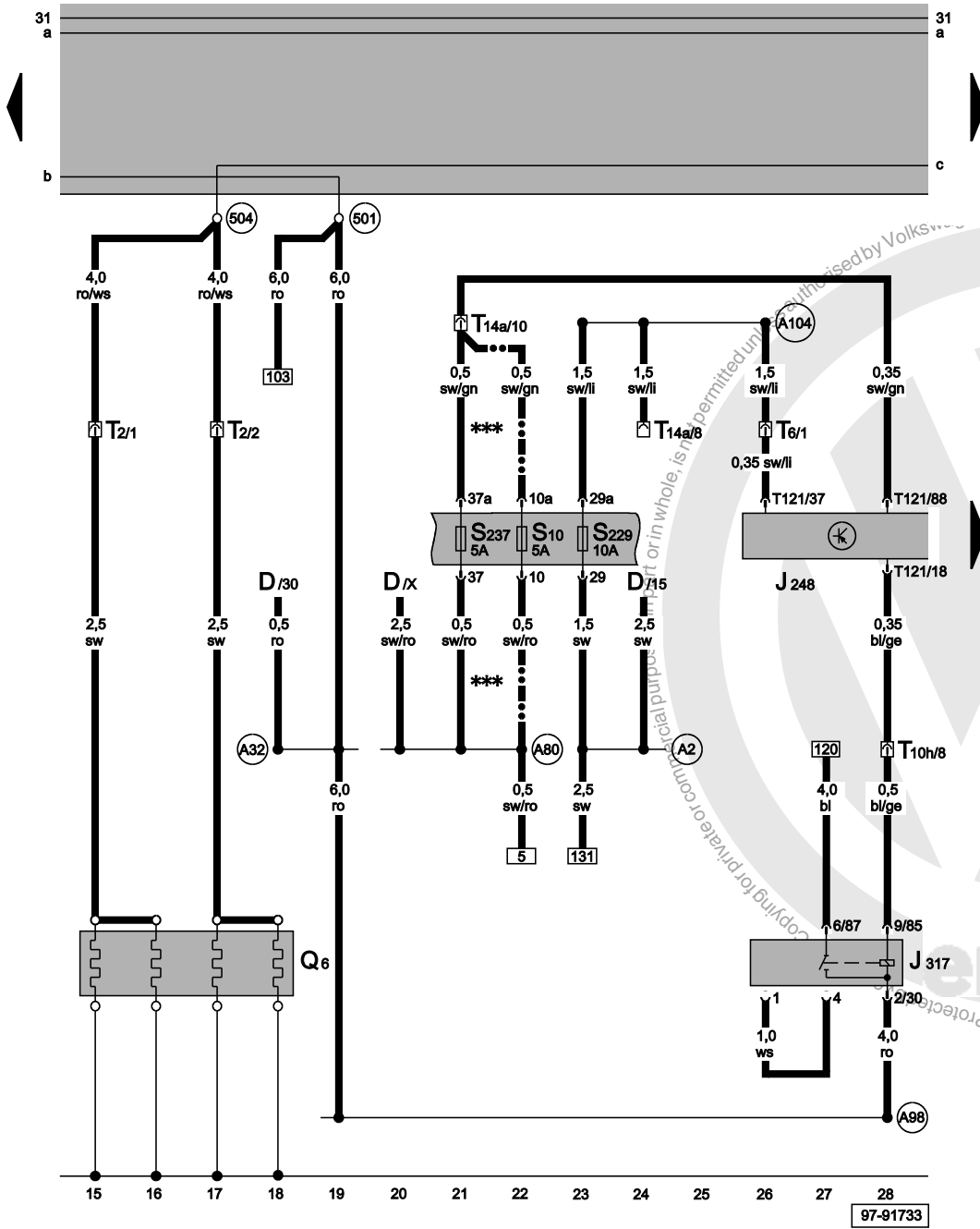


Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with heated pin heating for radiator fan
- ** up August 2000
- from September 2000

- ws = white
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- li = purple
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- or = orange
- rs = pink

Diesel direct injection system control unit, terminal 30 voltage supply relay, glow plugs - engine

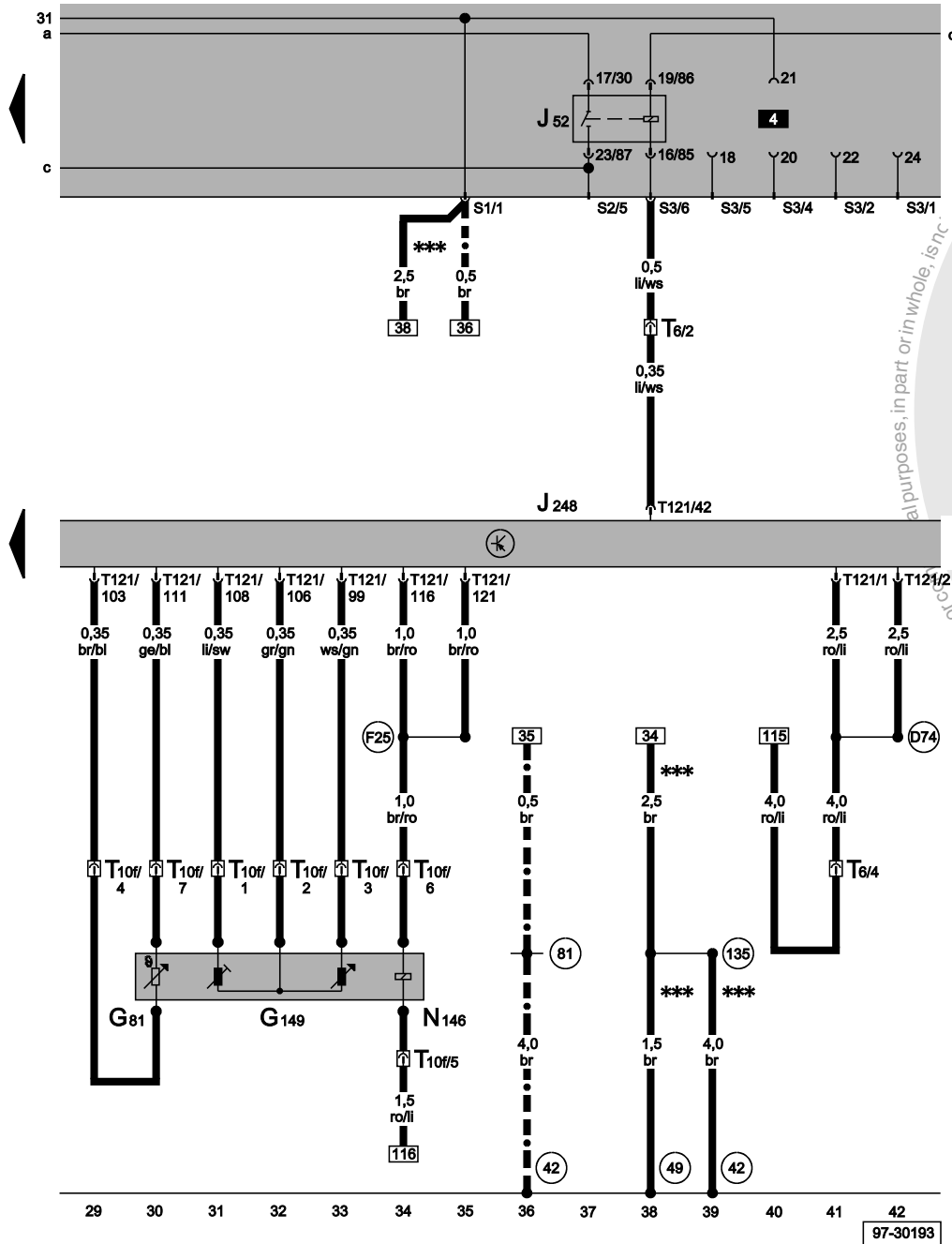


- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- Q6 Glow plugs, engine
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector
- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- ** from September 2000
- *** from November 2001
- up to October 2001

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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, glow plug relay, fuel temperature sender, metering adjuster, modulating piston movement sender

- G81 Fuel temperature sender
- G149 Modulating piston movement sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N146 Metering adjuster
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, on front of engine
- T121 121-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness
- F25 Connection 1, in diesel direct injection system wiring harness
- *** from May 2000
- up to April 2000



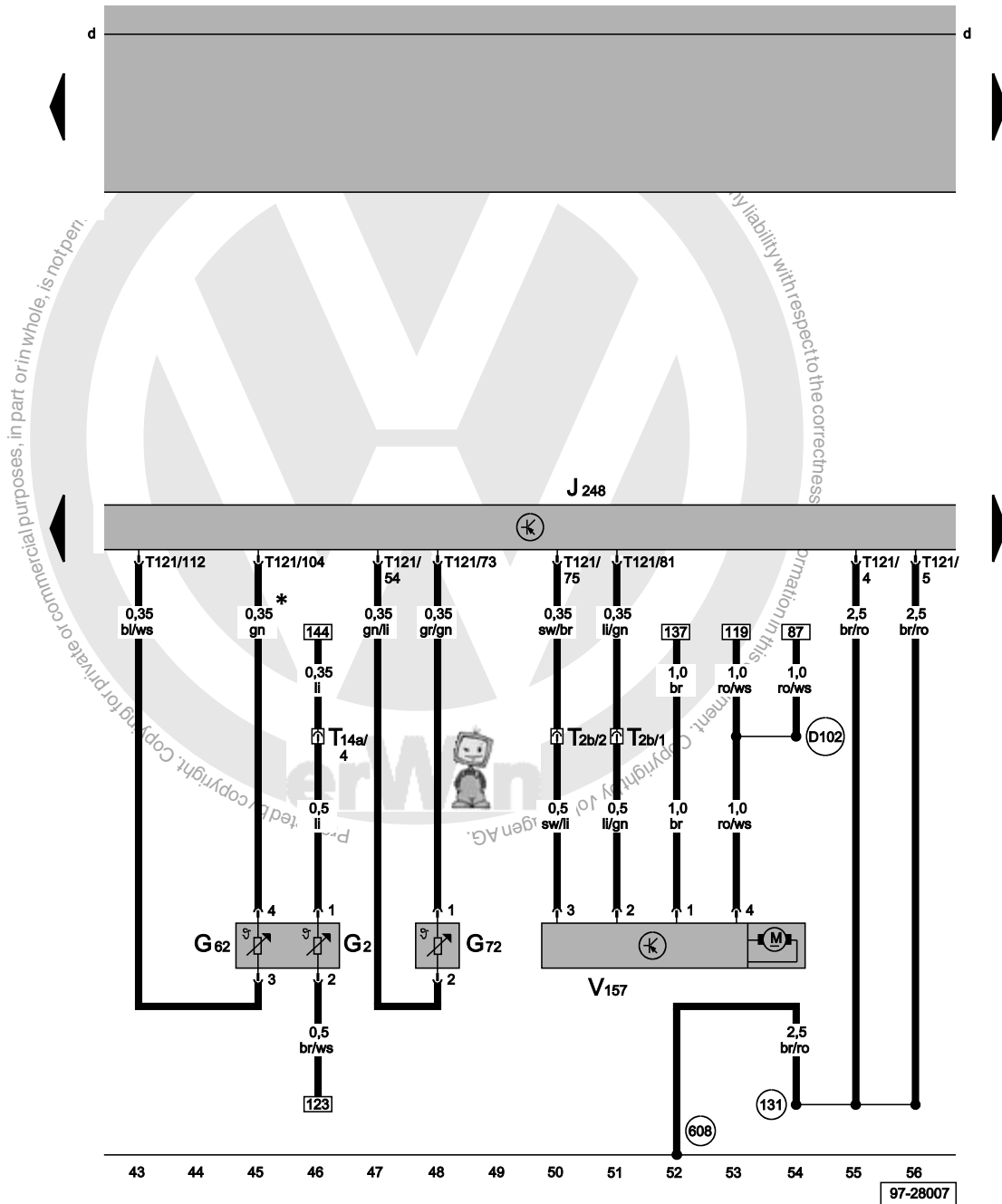
ws = white
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Diesel direct injection system control unit, intake manifold flap motor, intake manifold temperature sender, coolant temperature display sender

- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G72 Intake manifold temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T2b 2-pin connector, in cable channel left in engine compartment
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector
- V157 Intake manifold flap motor

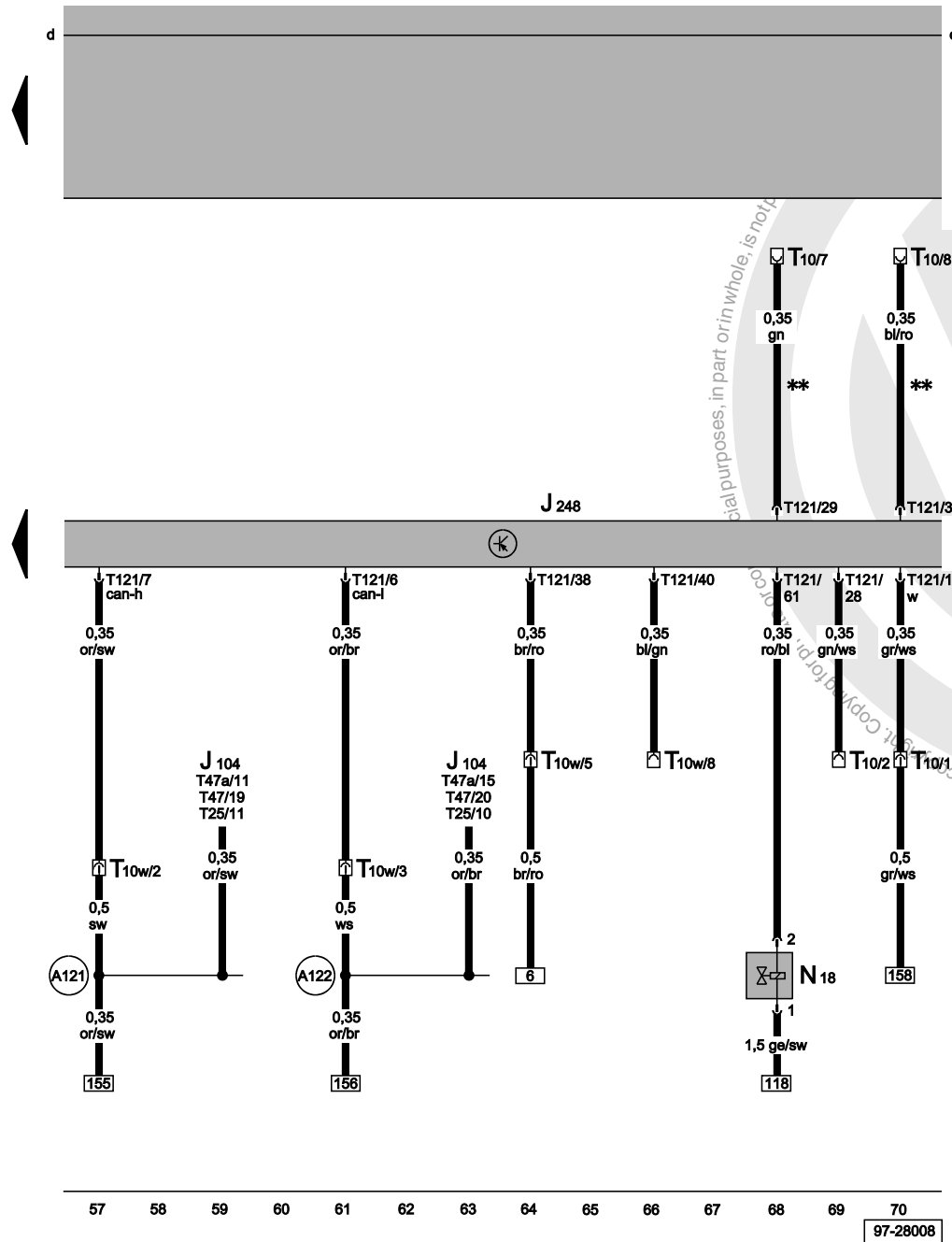
- (131) Earth connection 2, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (D102) Connection 2, in engine wiring harness

* War 0,35 br/bl



Diesel direct injection system control unit, exhaust gas recirculation valve

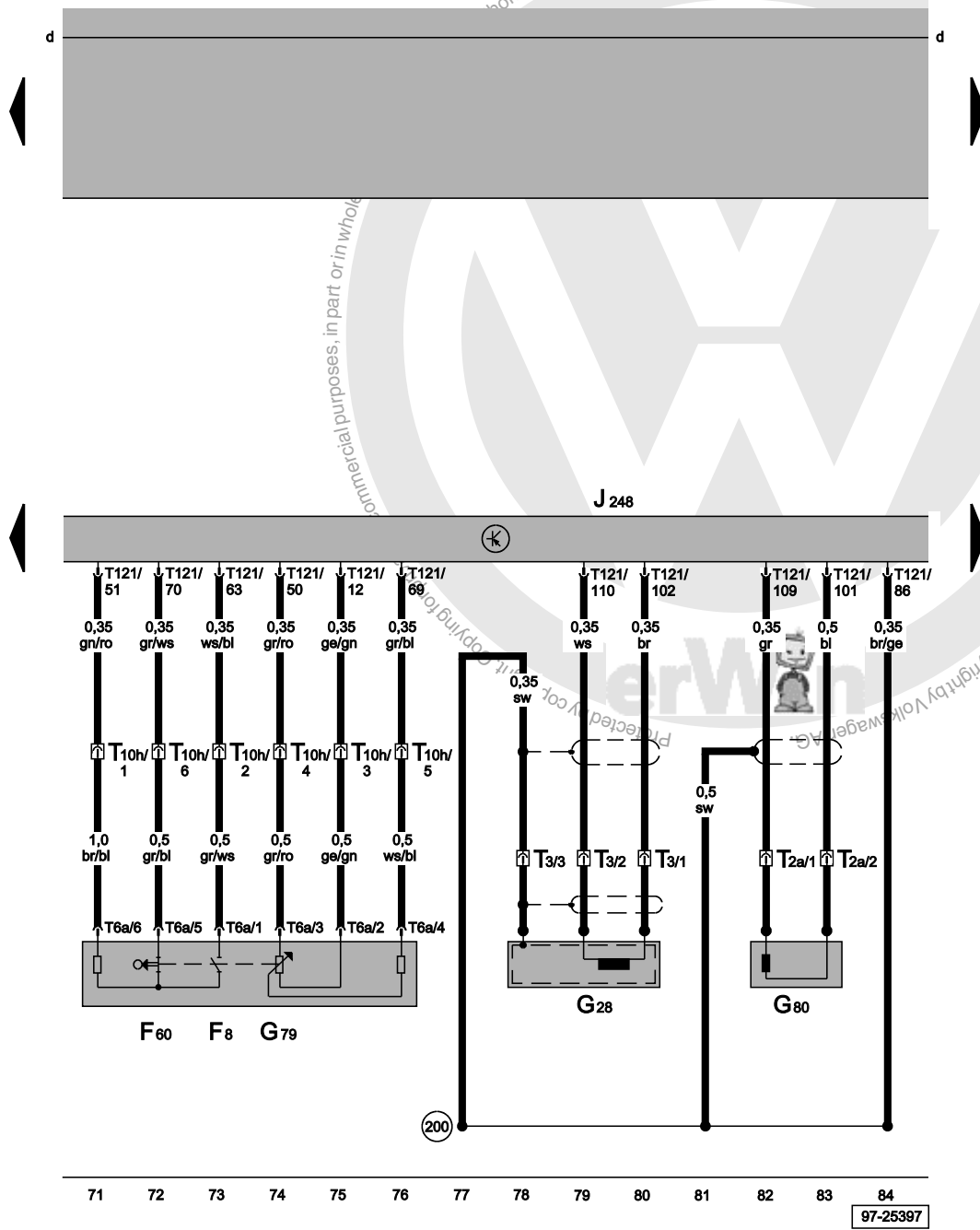
- J104 ABS/ABS control unit with EDL
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ABS with EDL control unit /TCS/ESP (from August 2000)
- T121 121-pin connector
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- ** connection air conditioning system



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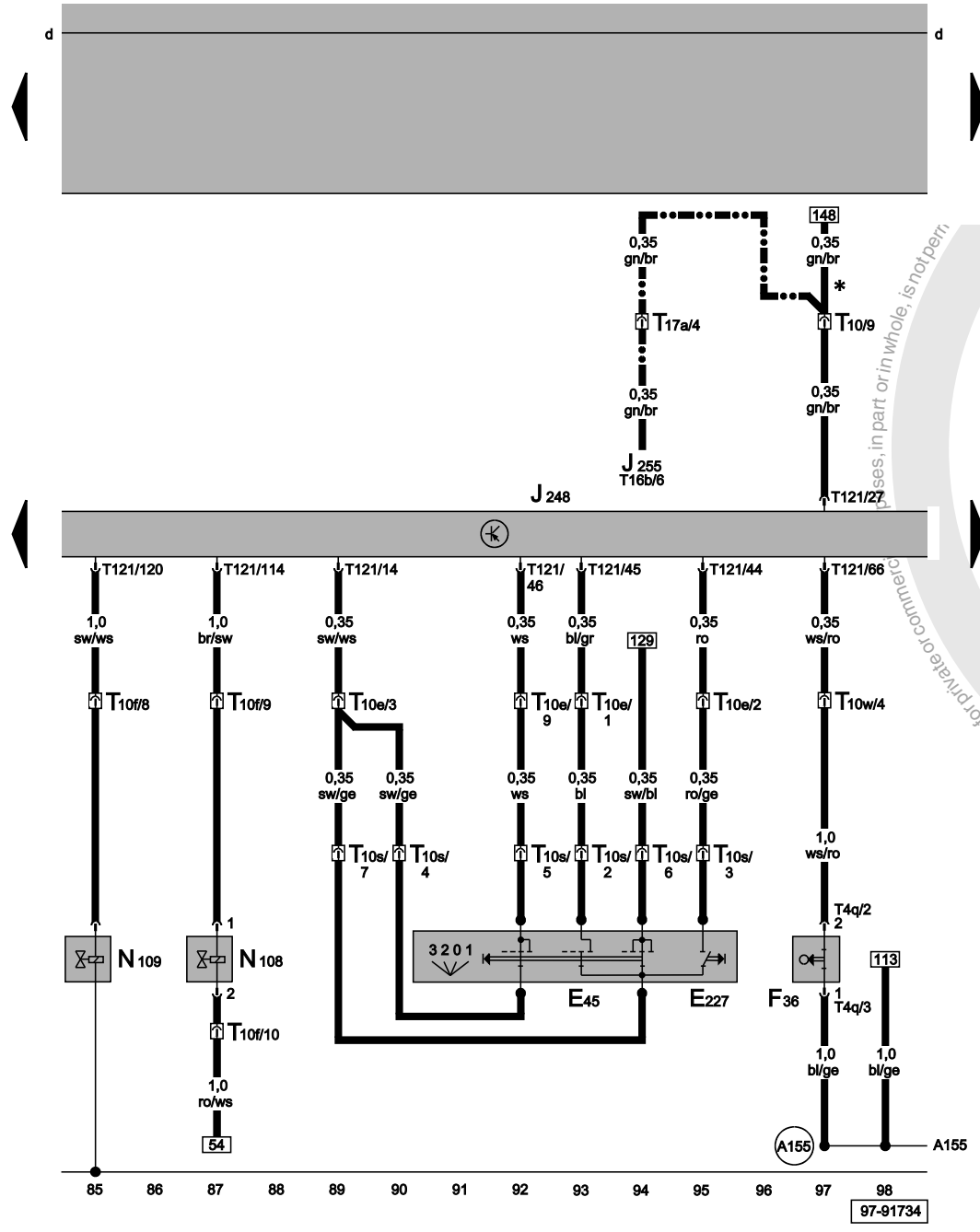
Diesel direct injection system control unit, accelerator position sender, kickdown switch, idling speed switch, engine speed sender, needle lift sender

- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- G80 Needle lift sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T2a 2-pin connector, on front of engine
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (200) Earth connection (screening), in engine compartment wiring harness



Diesel direct injection system control unit, cruise control system switch (GND), clutch pedal switch, commencement of injection valve, fuel shut-off valve

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J255 Climatronic control unit
- N108 Commencement of injection valve
- N109 Fuel shut-off valve
- T4q 4-pin connector (from May 2001)
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, on front of engine
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T121 121-pin connector
- A155 Connection 2 (86), in dash panel wiring harness
- * Revolution signal engine control unit up to April 2002
- only models with Climatronic from May 2002
- ** only models with GND

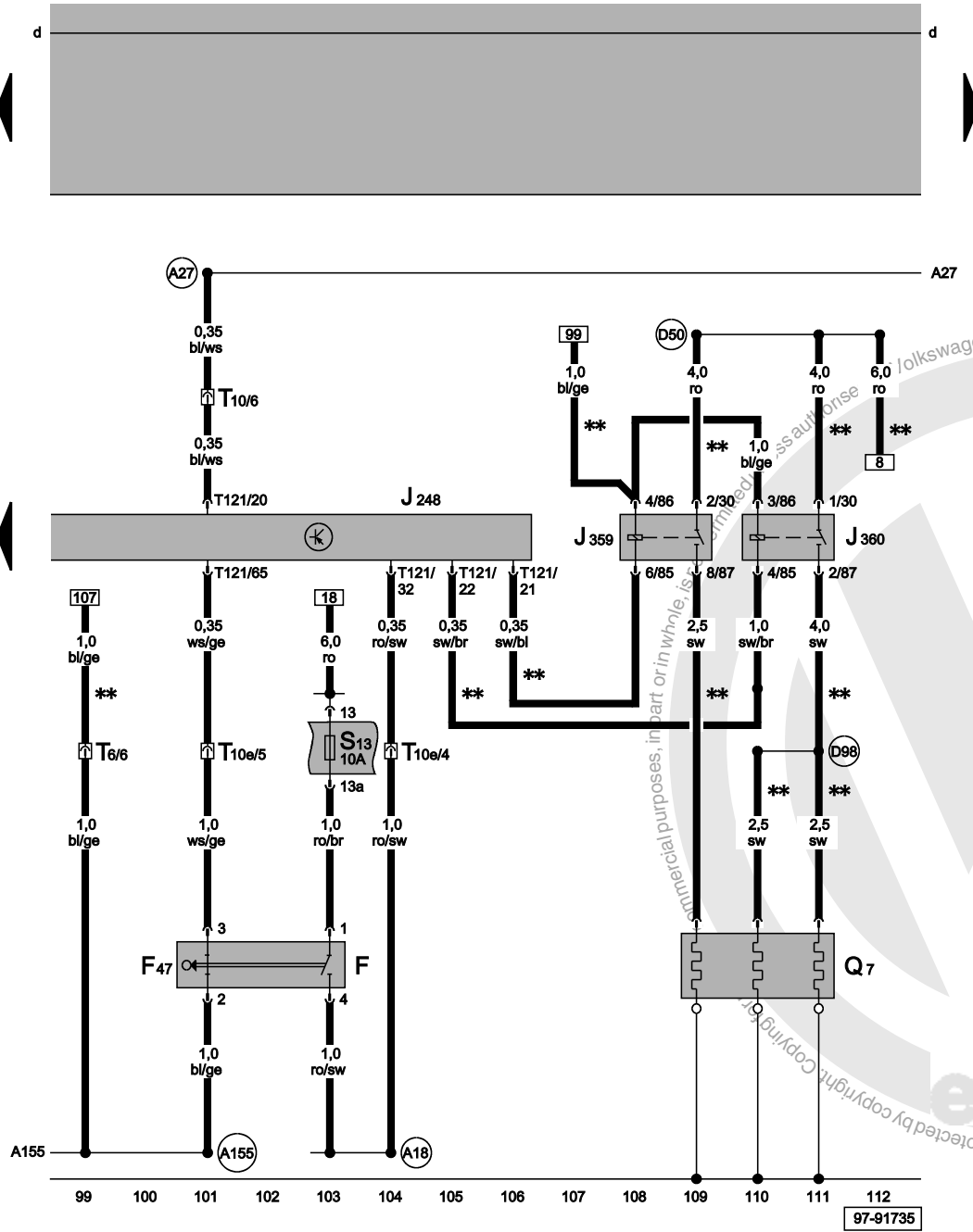


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Diesel direct injection system control unit, coolant heating element, brake pedal switch, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Brake pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay**, in protective housing on left in engine compartment (53)
- J360 High heat output relay**, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant**
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin Connector

- A18 Connection (54), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- ** only models with glow plugs coolant heating



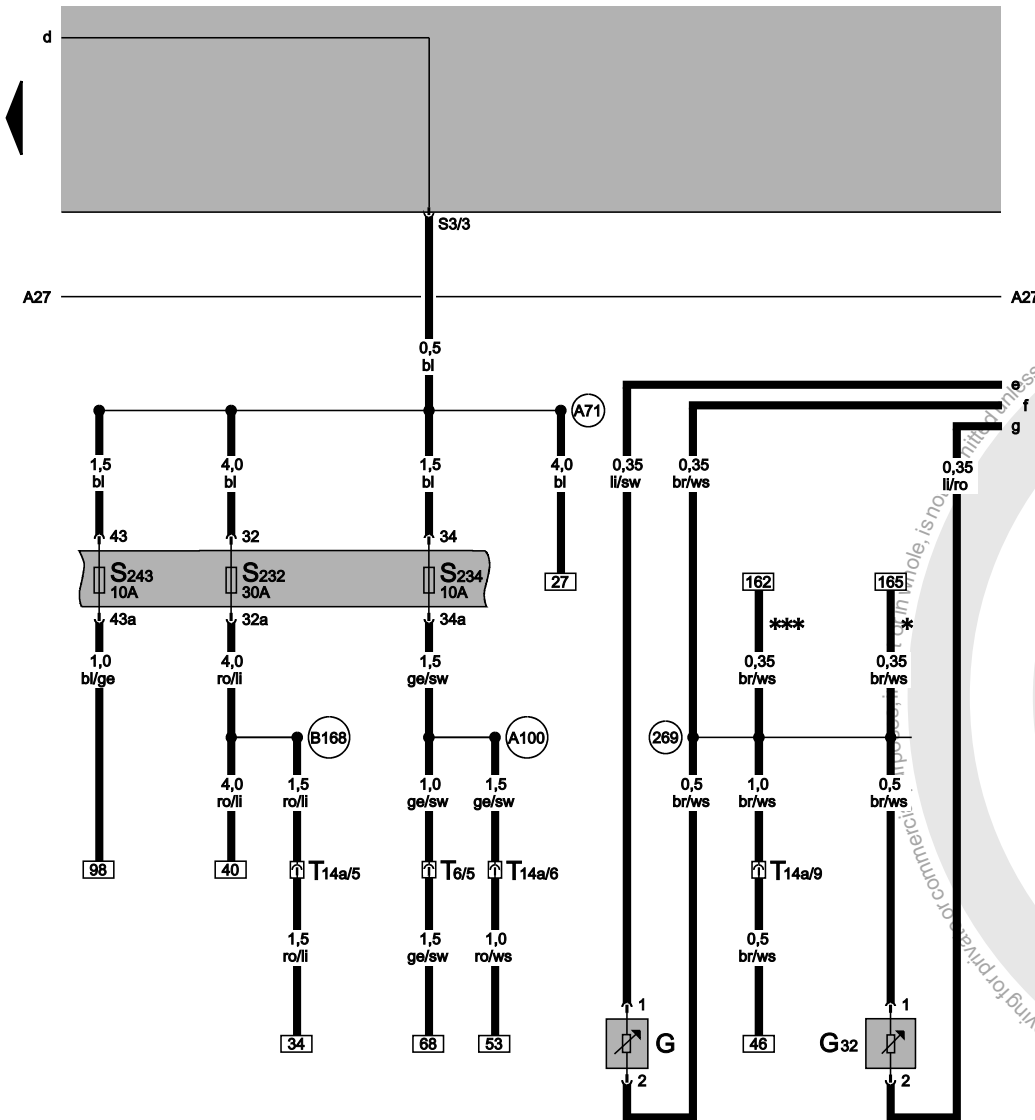
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97-91735

Fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G32 Coolant shortage indicator sender
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)

- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only

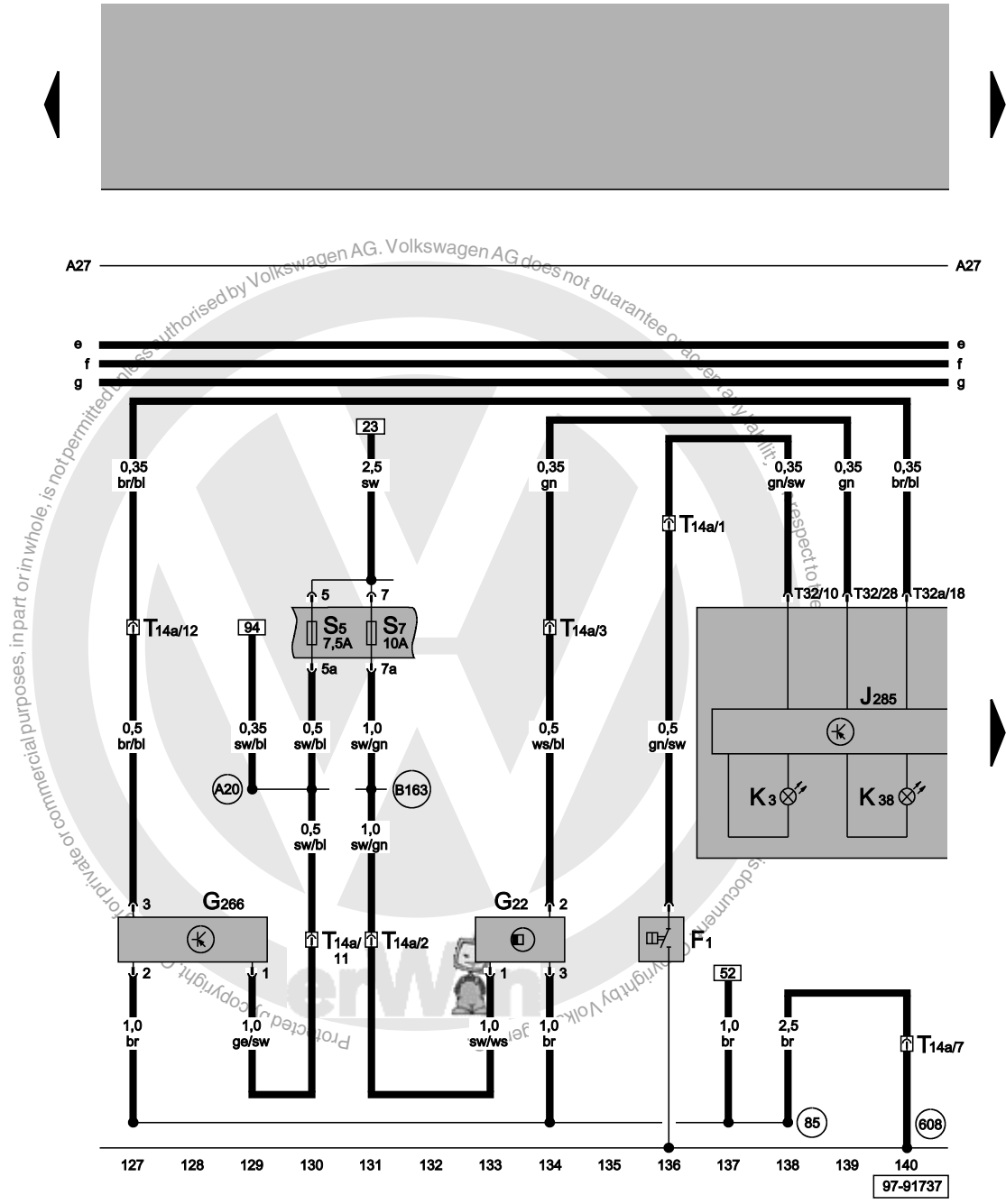


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender**
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- (85) Earth connection 1, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (A20) Connection (15a), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display



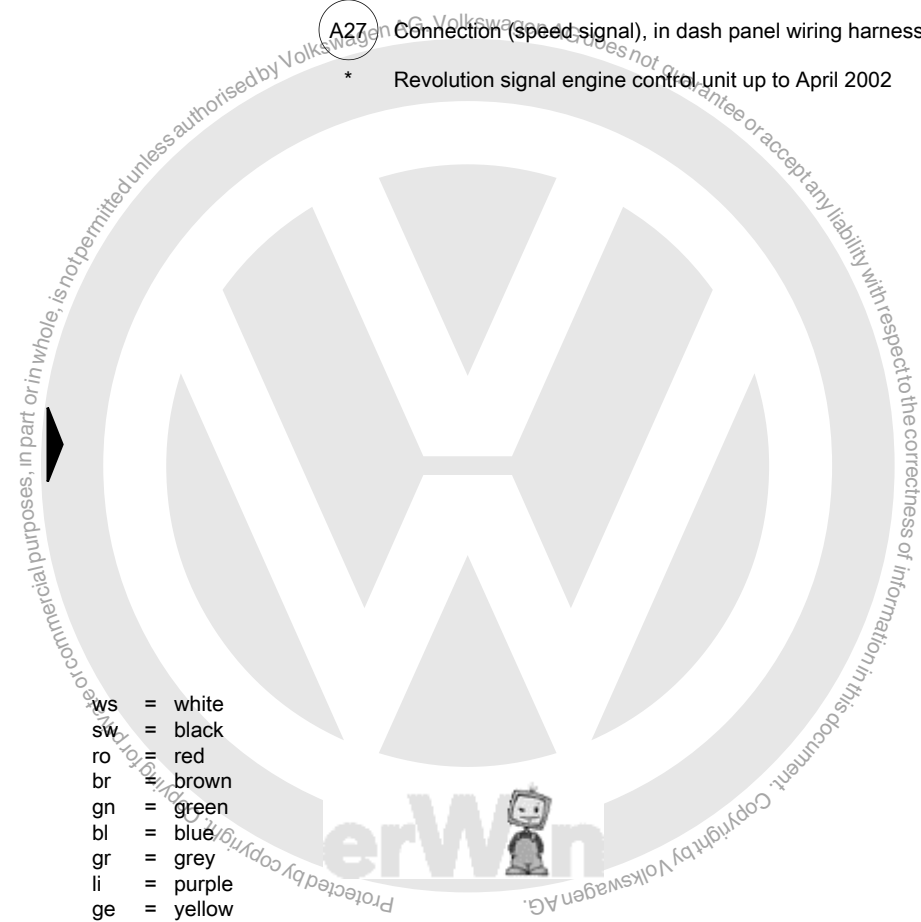
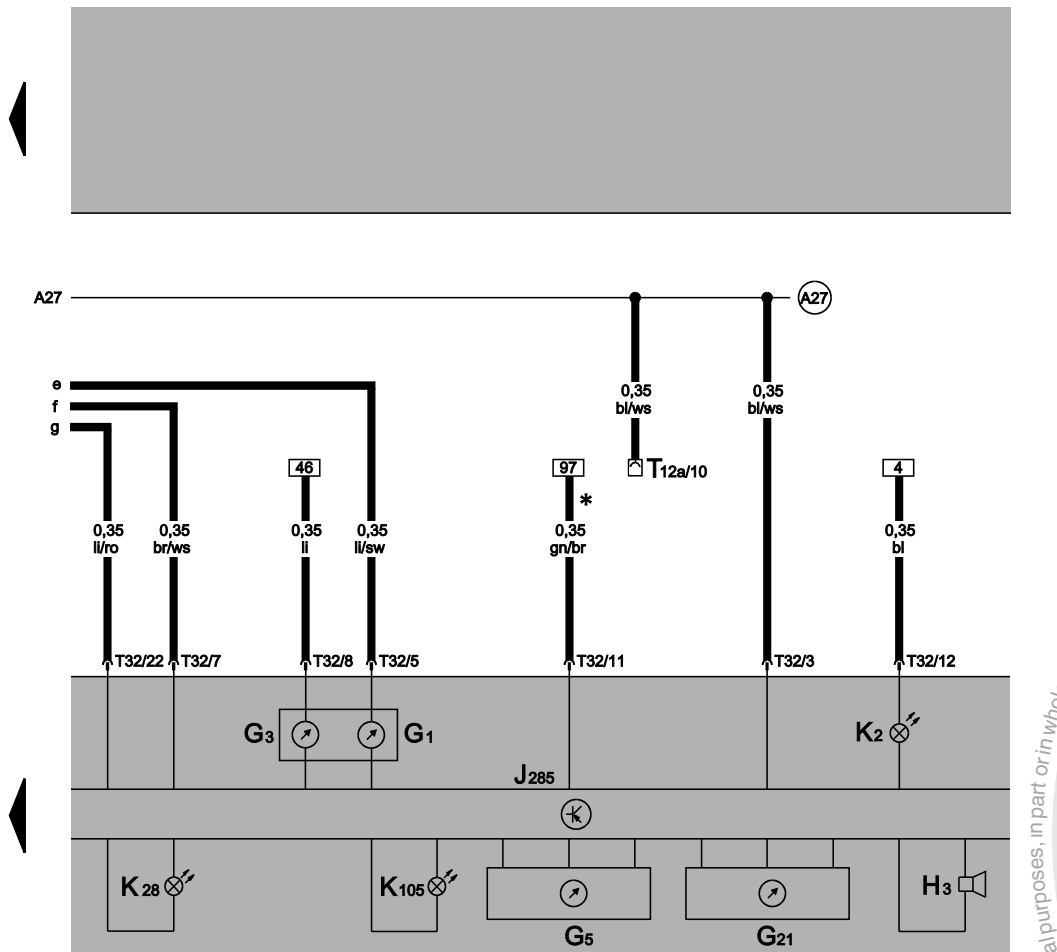
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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue

A27 Connection (speed signal), in dash panel wiring harness

* Revolution signal engine control unit up to April 2002



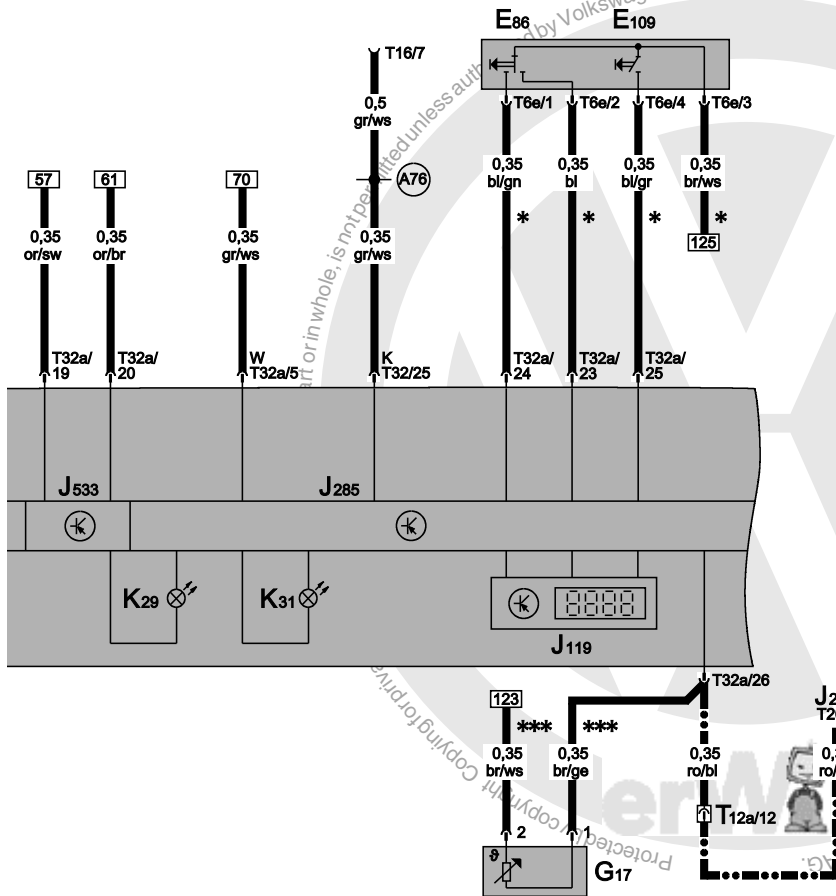
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Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, cruise control system warning lamp, glow period warning lamp

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K29 Glow period warning lamp
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness

- * only models with multifunction display
- only models with Climatronic
- *** models with multifunction display and without Climatronic only



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1.9 I/66 kW - Turbodiesel engine, engine code AGR
from May 1999

1.9 I/66 kW - Turbodiesel engine, engine code ALH
from May 1999

1.9 I/81 kW - Turbodiesel engine, engine code AHF
from May 1999

1.9 I/81 kW - Turbodiesel engine, engine code ASV
from September 1999

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

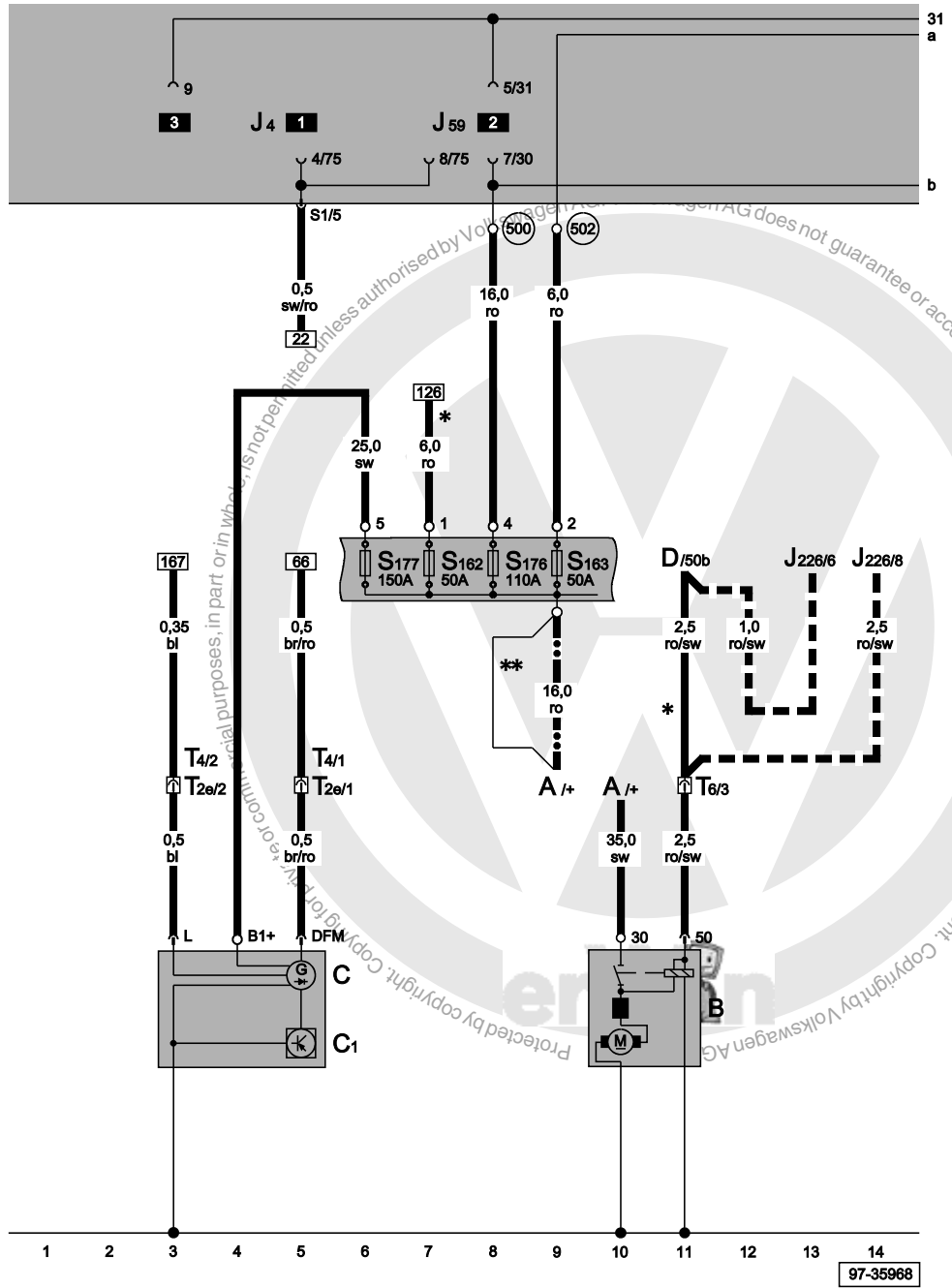
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding



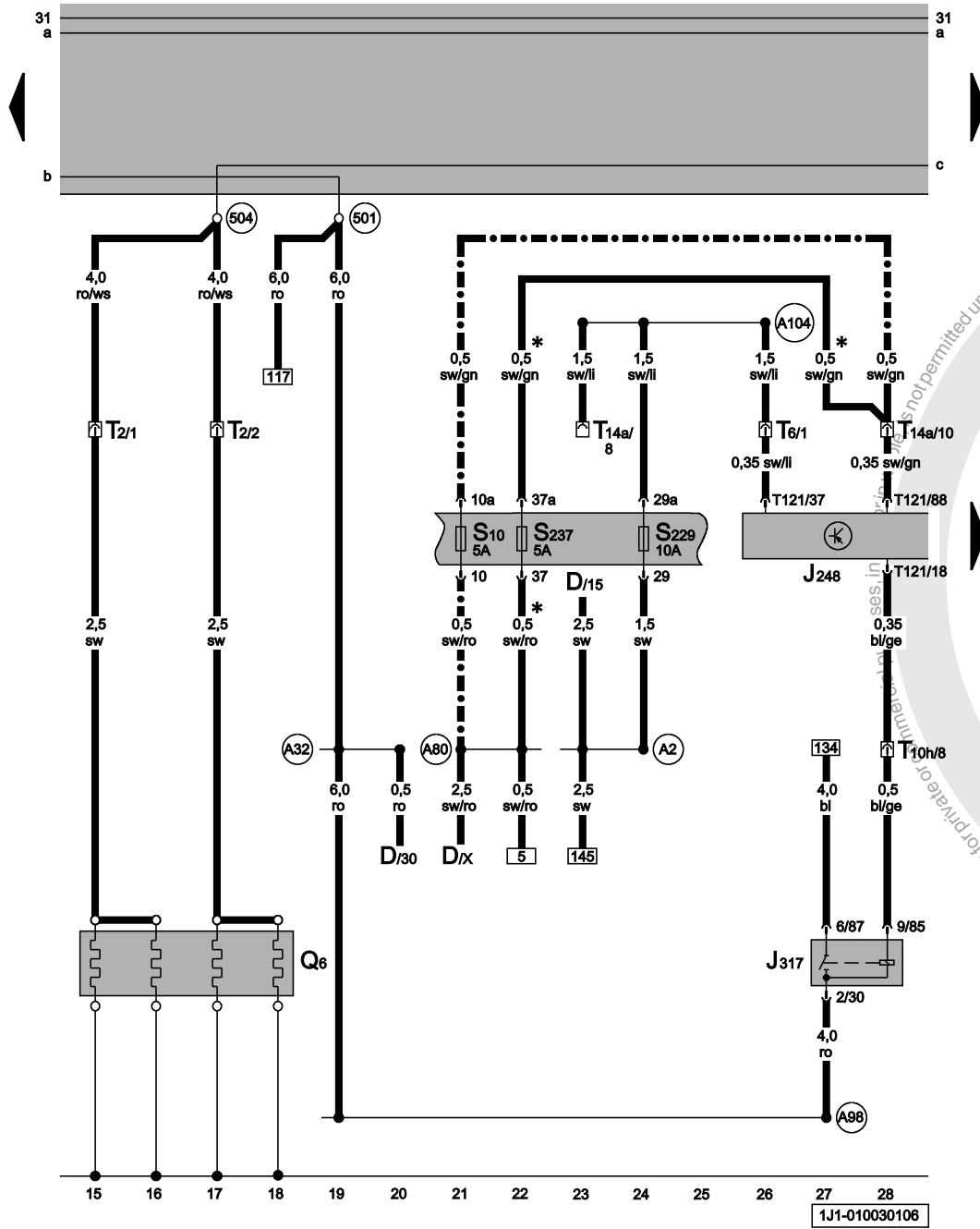


Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- models with automatic gearbox only
- ** up August 2000
- from September 2000

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Diesel direct injection system control unit, terminal 30 voltage supply relay, glow plugs - engine

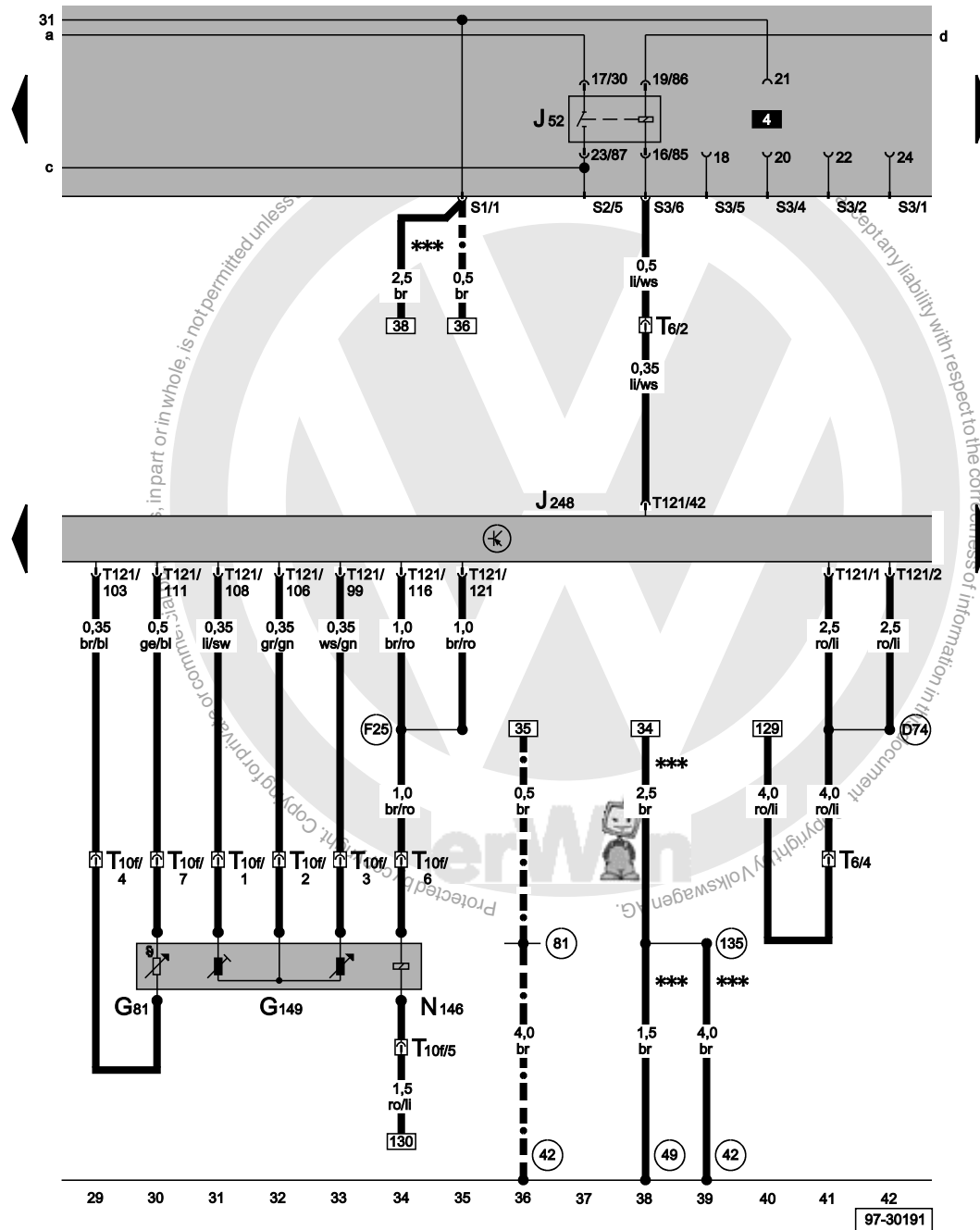


- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- Q6 Glow plugs - engine
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector
- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- * from November 2001
- .- from October 2001

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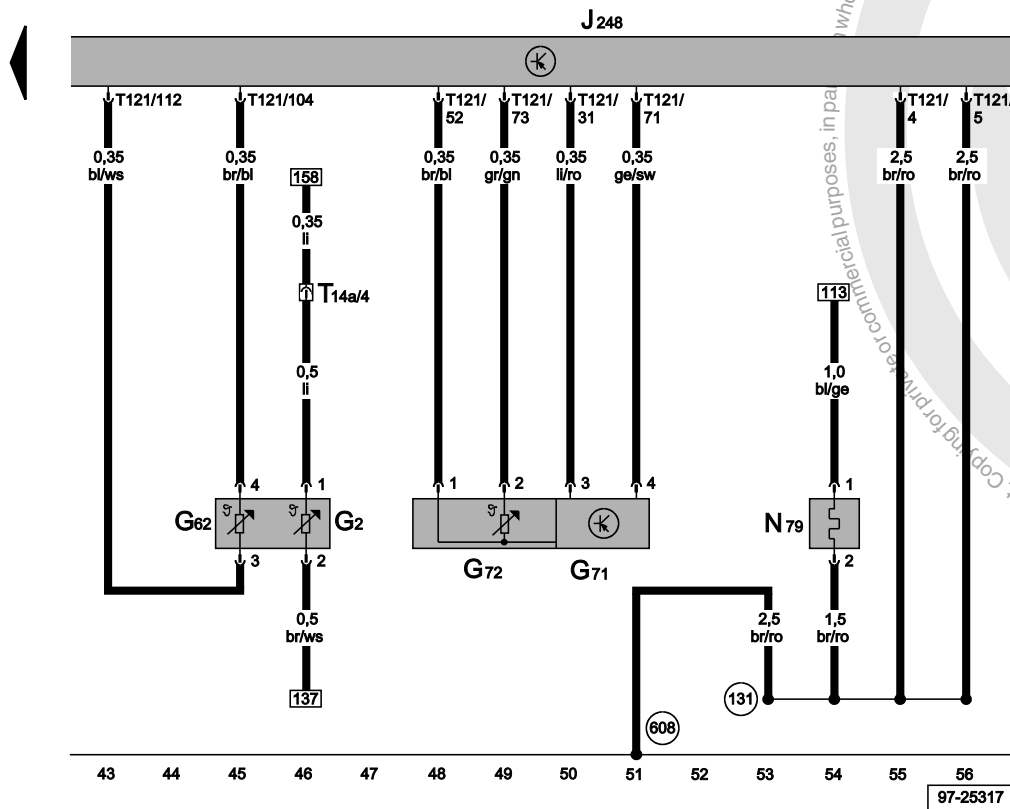
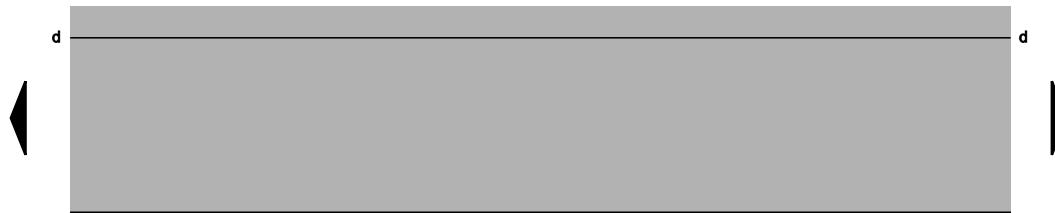
Diesel direct injection system control unit, glow plug relay, fuel temperature sender, metering adjuster, modulating piston movement sender

- G81 Fuel temperature sender
- G149 Modulating piston movement sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N146 Metering adjuster
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, on front of engine
- T121 121-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness
- F25 Connection 1, in diesel direct injection system wiring harness
- *** from May 2000
- up to April 2000



Diesel direct injection system control unit, coolant temperature display sender, intake manifold pressure sender, intake manifold temperature sender, heater element for crankcase breather

- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T121 121-pin connector
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber

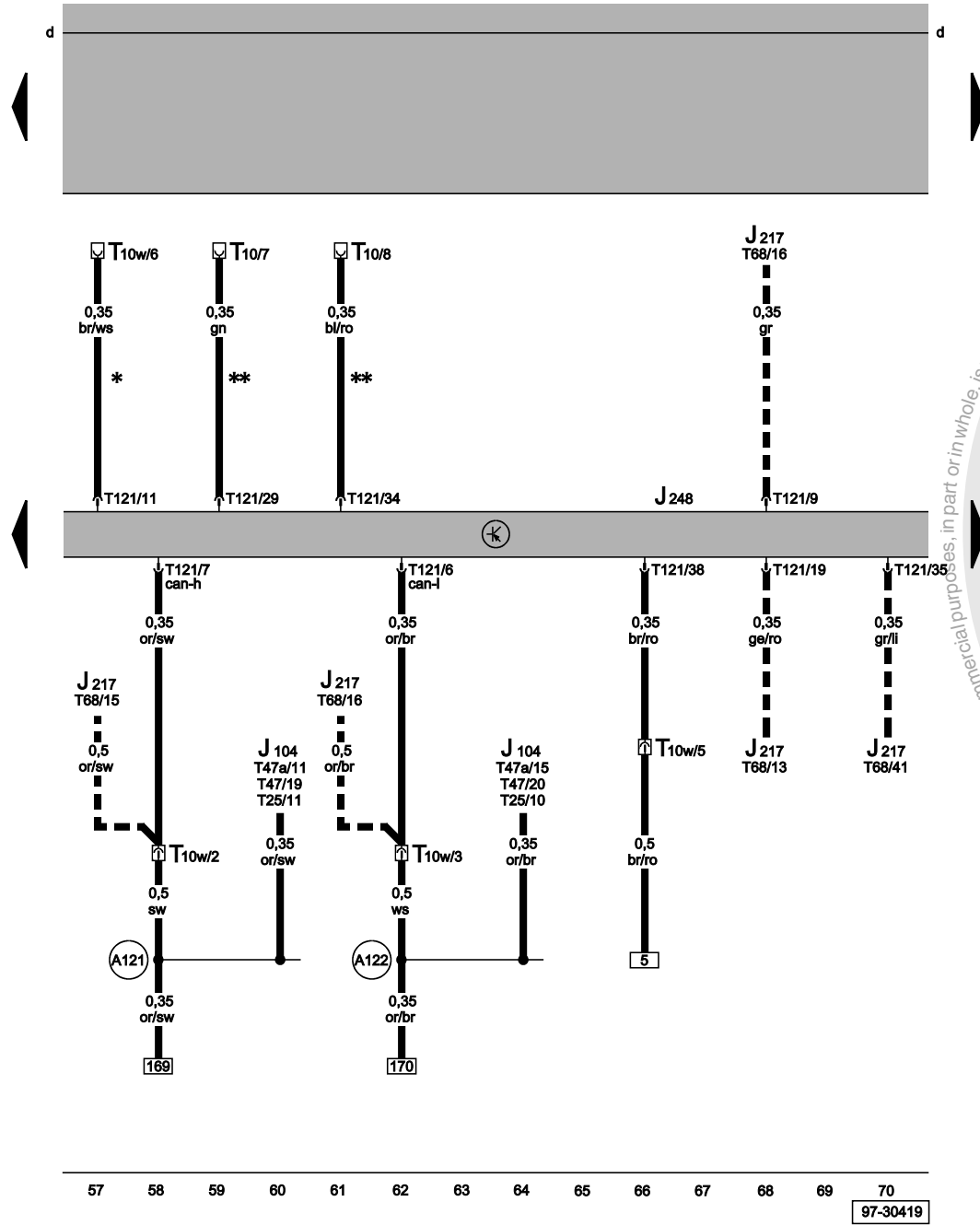


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97-25317

Diesel direct injection system control unit

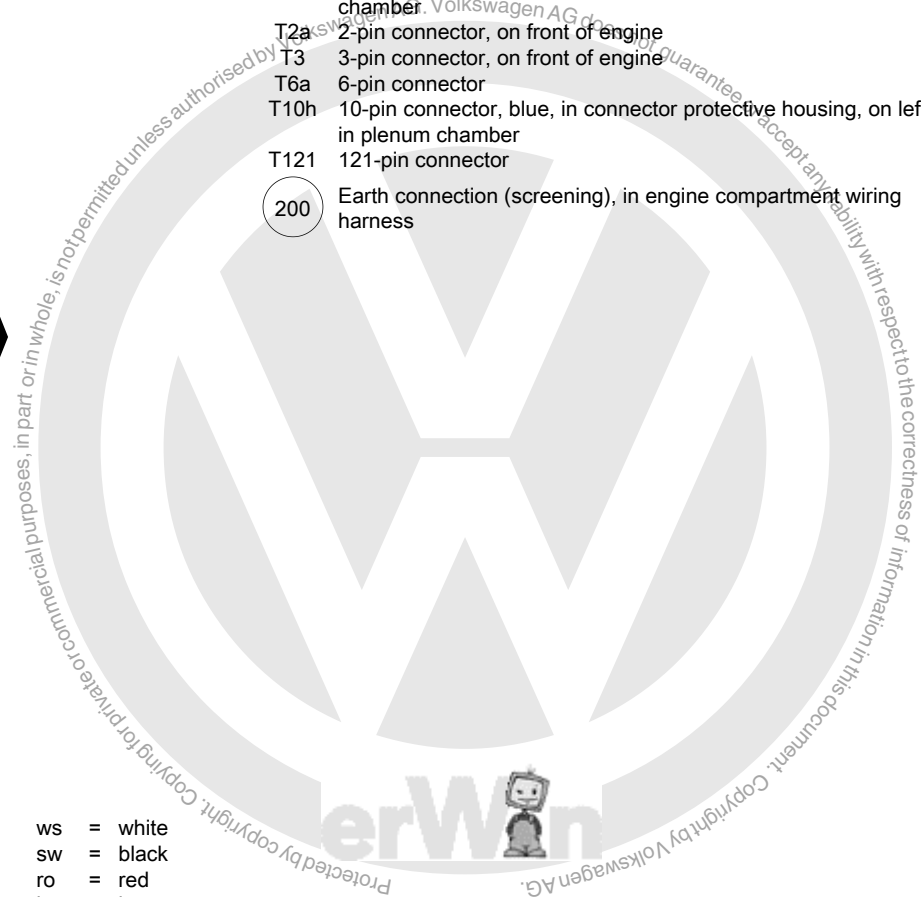
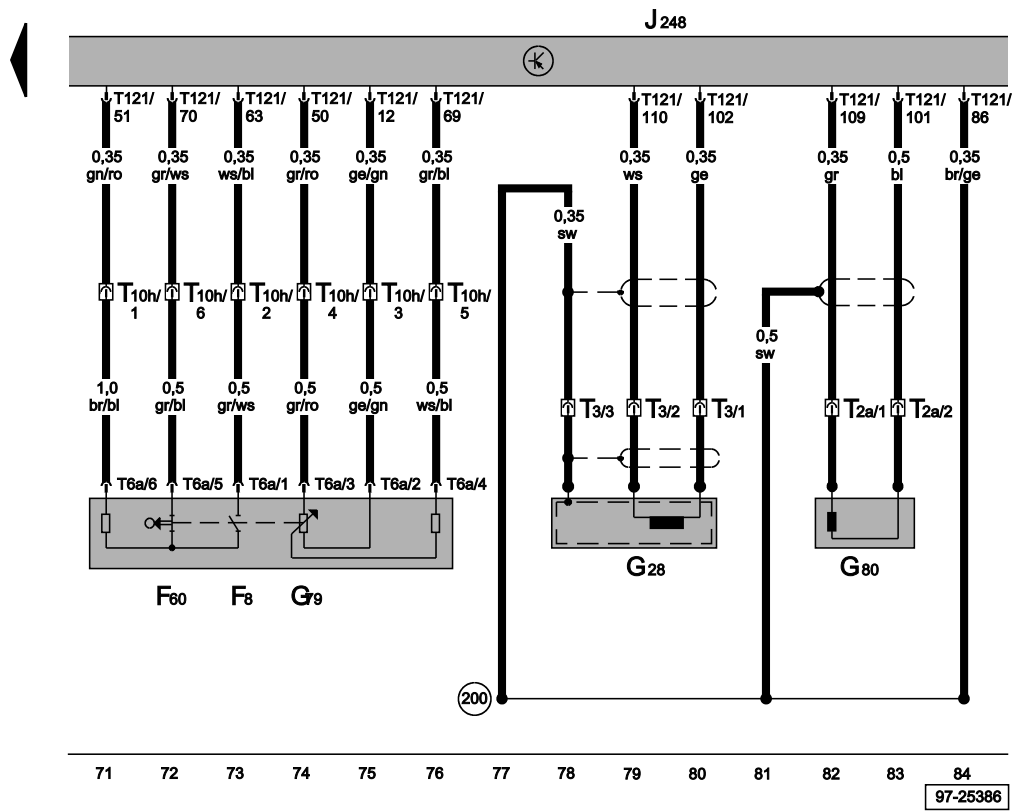
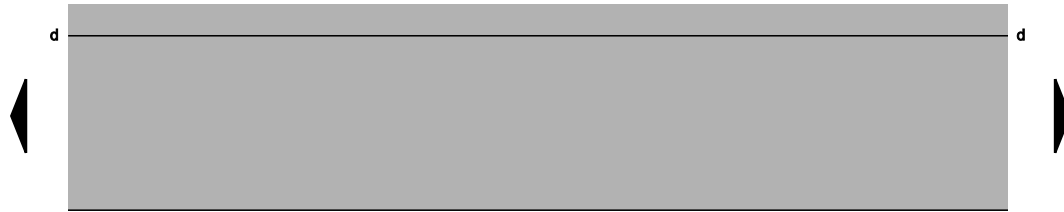
- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (from August 2000)
- T68 68-pin connector
- T121 121-pin connector
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- * connection for radiator fan control unit/ radiator fan relay
- ** connection air conditioning system
- models with automatic gearbox only



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Diesel direct injection system control unit, kickdown switch, engine speed sender, idling speed switch, accelerator position sender, needle lift sender

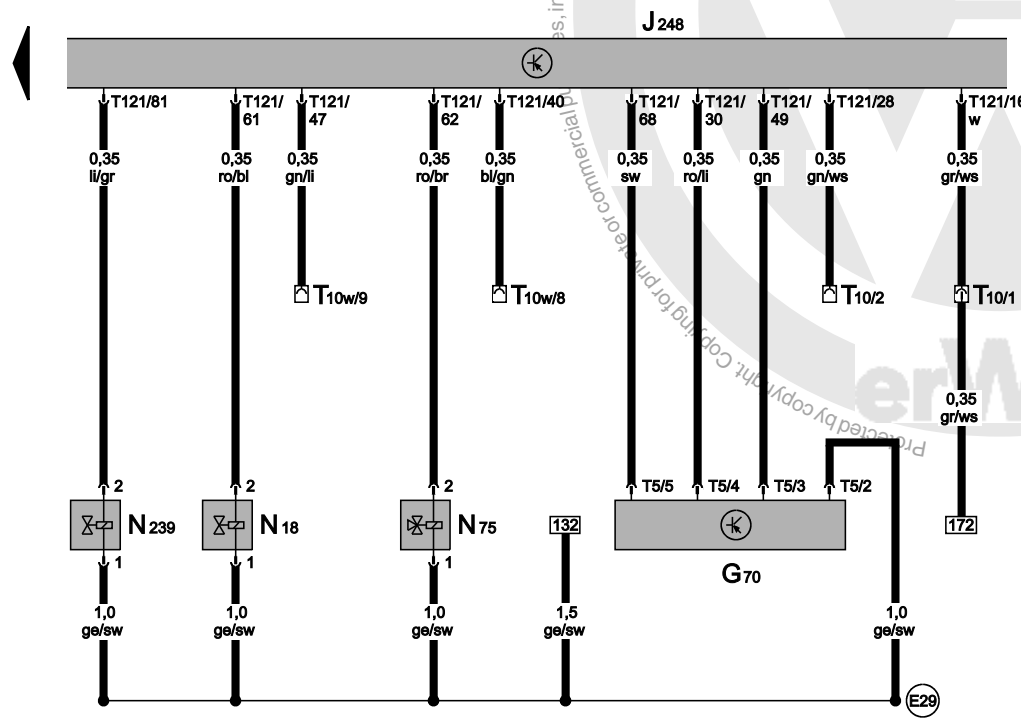
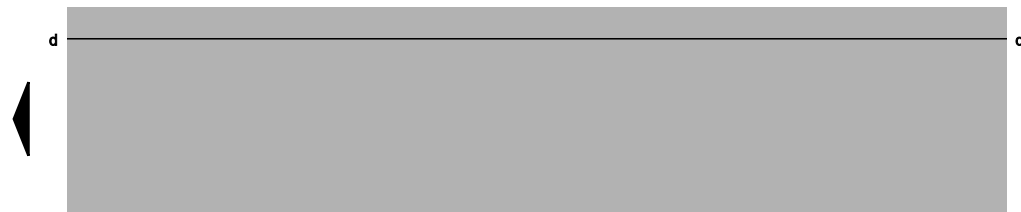
- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- G80 Needle lift sender
- J248 Diesel direct injection system control unit, in centre plenum chamber.
- T2a 2-pin connector, on front of engine
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 200 Earth connection (screening), in engine compartment wiring harness



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Diesel direct injection system control unit, air mass meter, exhaust gas recirculation valve, variable intake manifold flap change-over valve, exhaust gas recirculation valve, charge pressure control solenoid valve

- G70 Air mass meter
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N239 Variable intake manifold flap change-over valve
- T5 5-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E29 Connection, in engine wiring harness



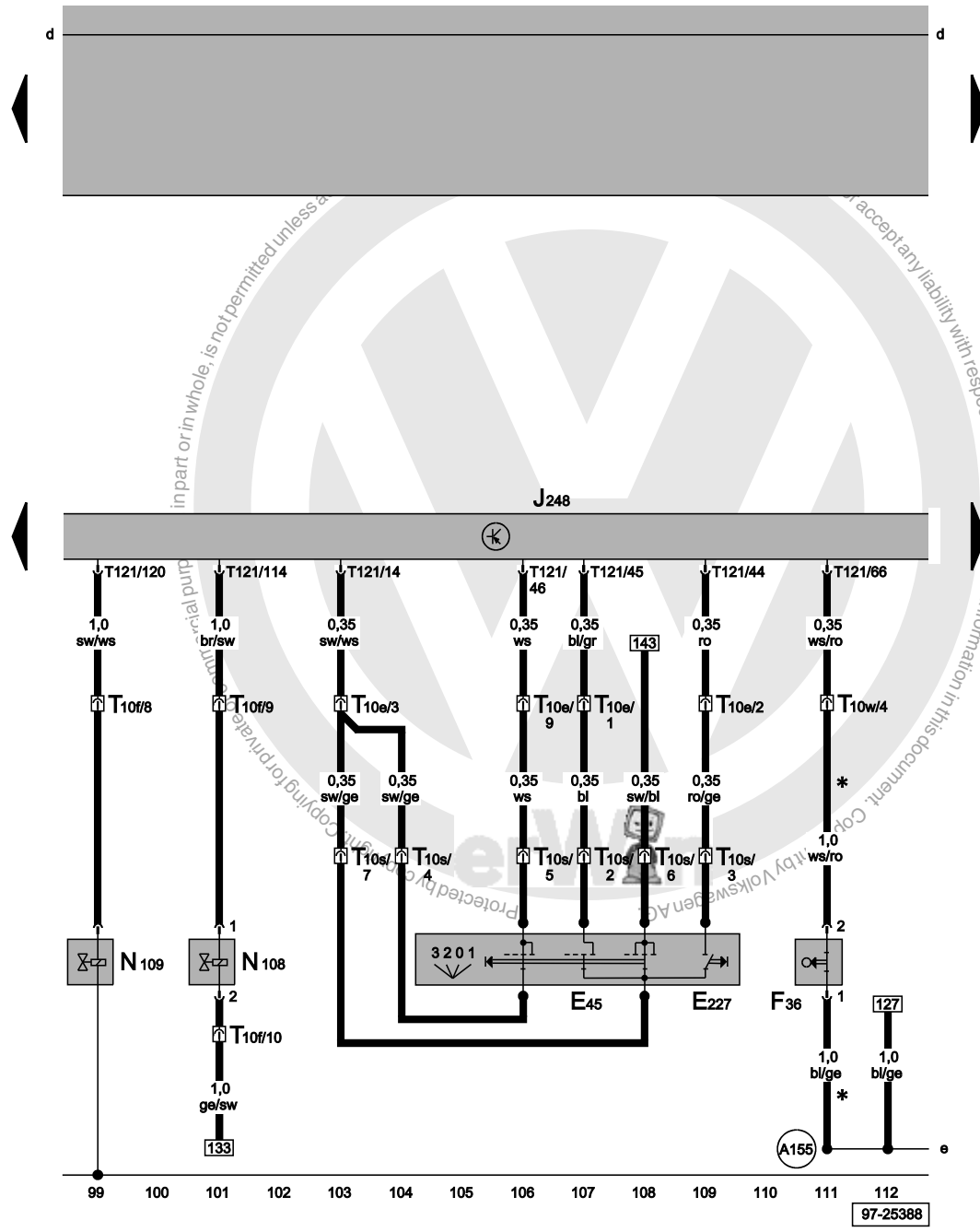
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Diesel direct injection system control unit, cruise control system switch (GND), clutch pedal switch, commencement of injection valve, fuel shut-off valve

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N108 Commencement of injection valve
- N109 Fuel shut-off valve
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, on front of engine
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(A155) Connection 2 (86), in dash panel wiring harness

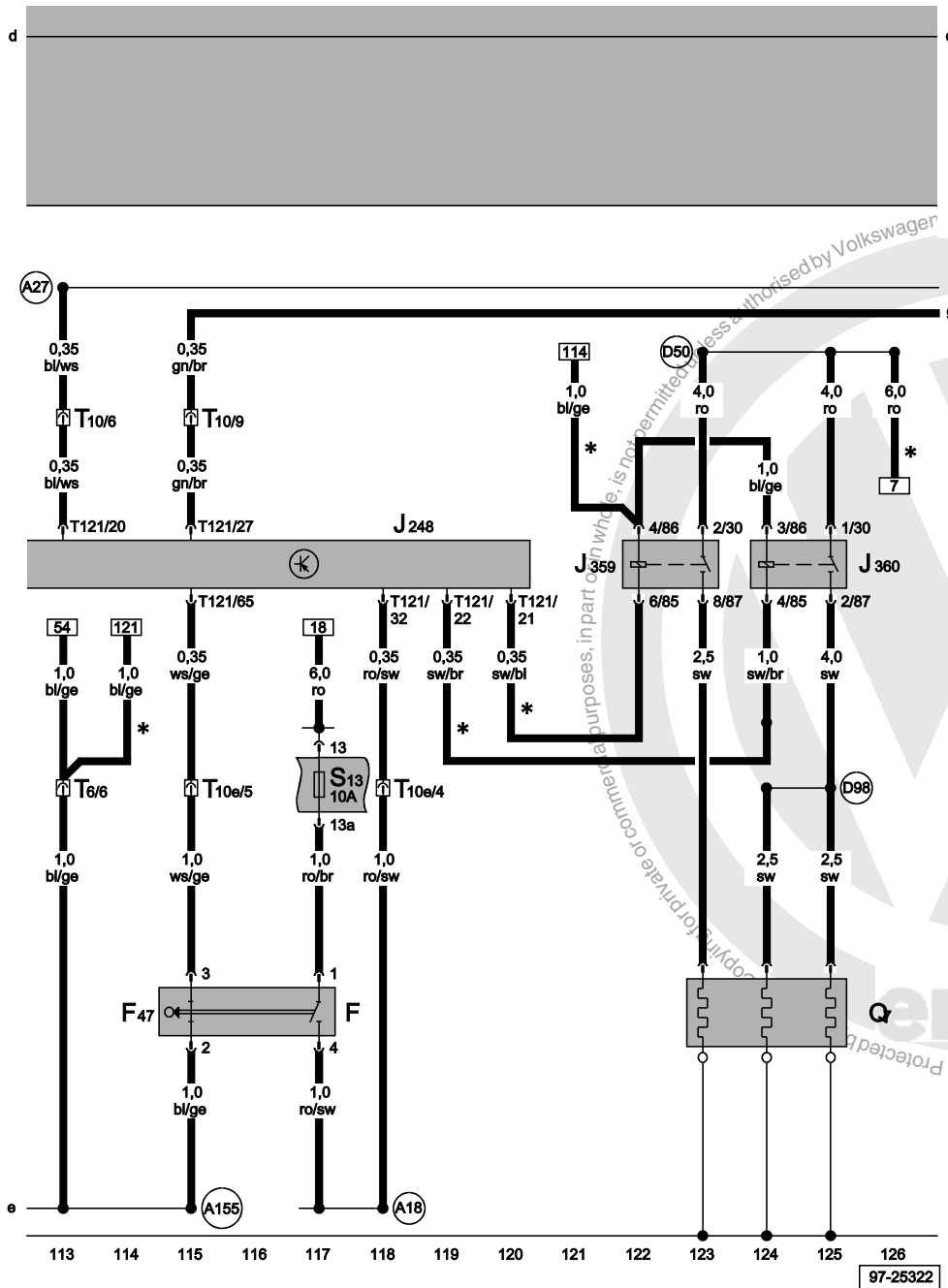
- * only models with manual gearbox
- ** only models with GND



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Diesel direct injection system control unit, coolant heating element, cruise control system brake pedal switch/diesel direct injection system, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Cruise control system brake pedal switch/diesel direct injection system
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay*, in protective housing on left in engine compartment (53)
- J360 High heat output relay*, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant*
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- * only models with manual gearbox

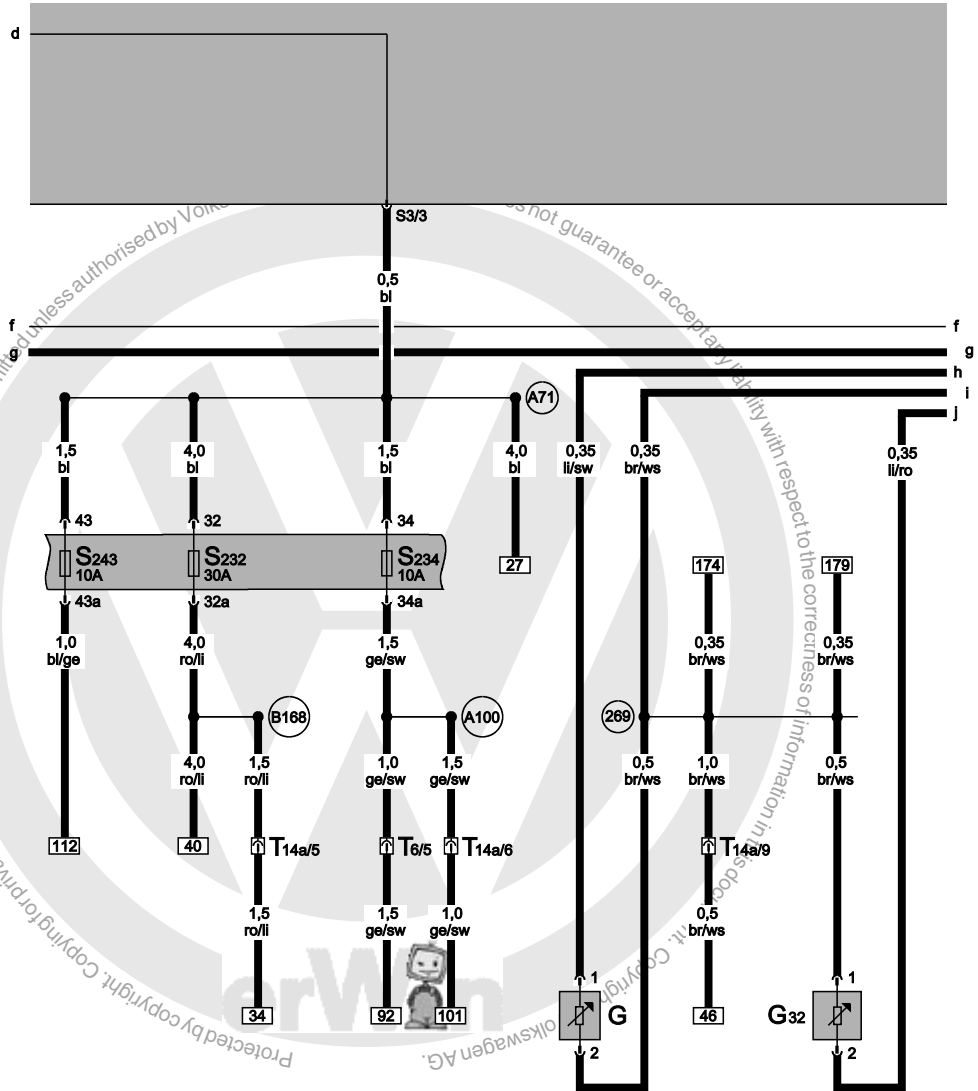


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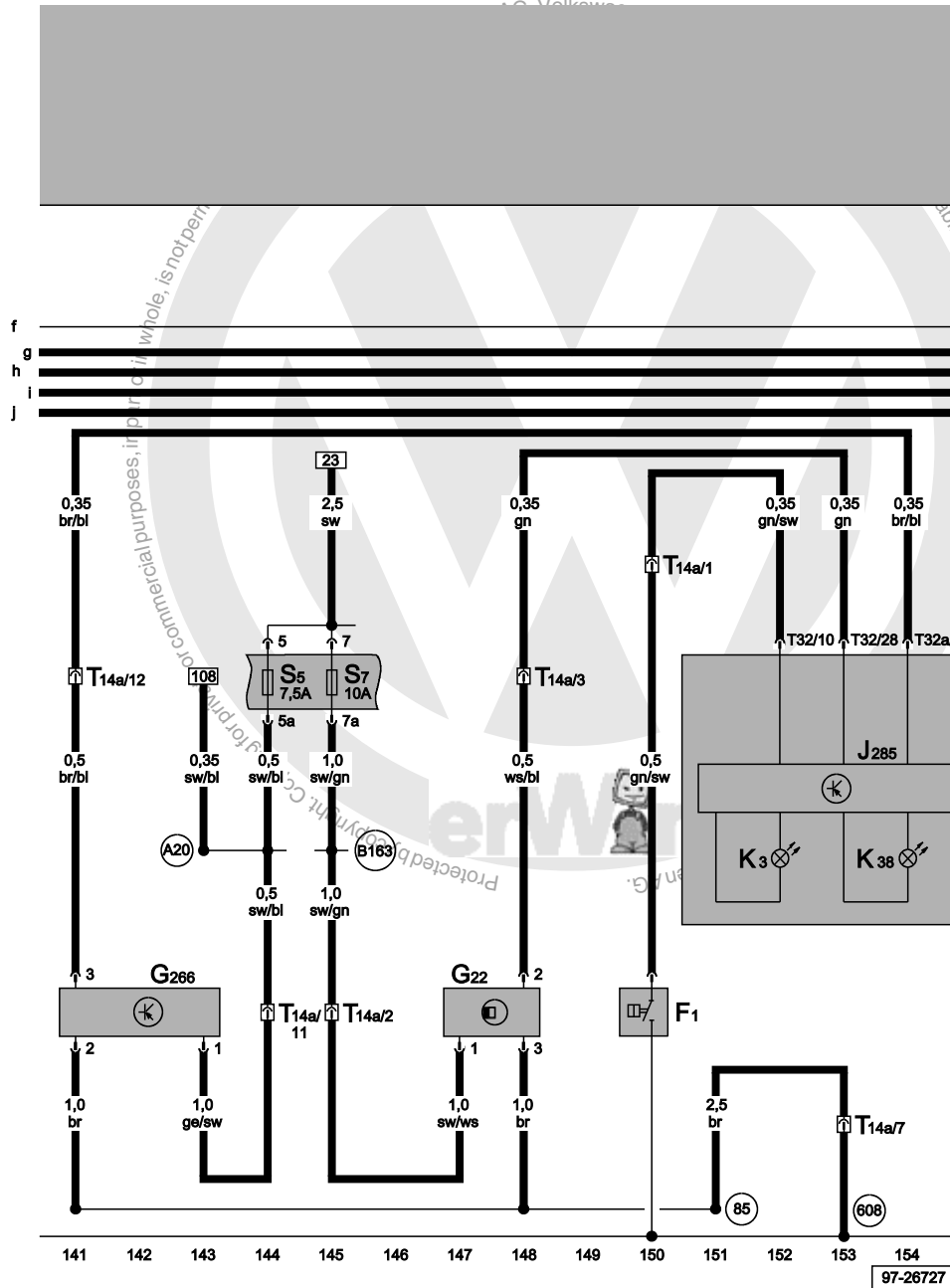
Fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G32 Coolant shortage indicator sender
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)

- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (A71) Connection (86), in dash panel wiring harness
- (A100) Connection 2 (87), in dash panel wiring harness
- (B168) Connection (86), in interior wiring harness



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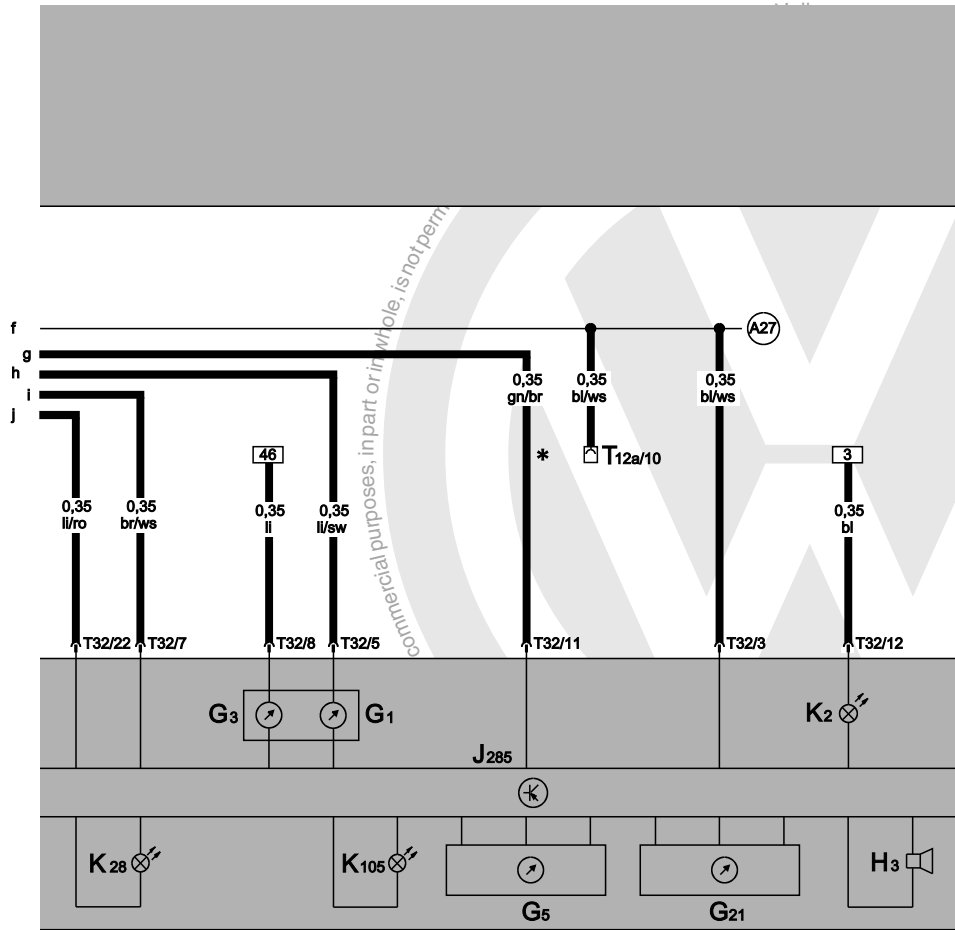
Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display

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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

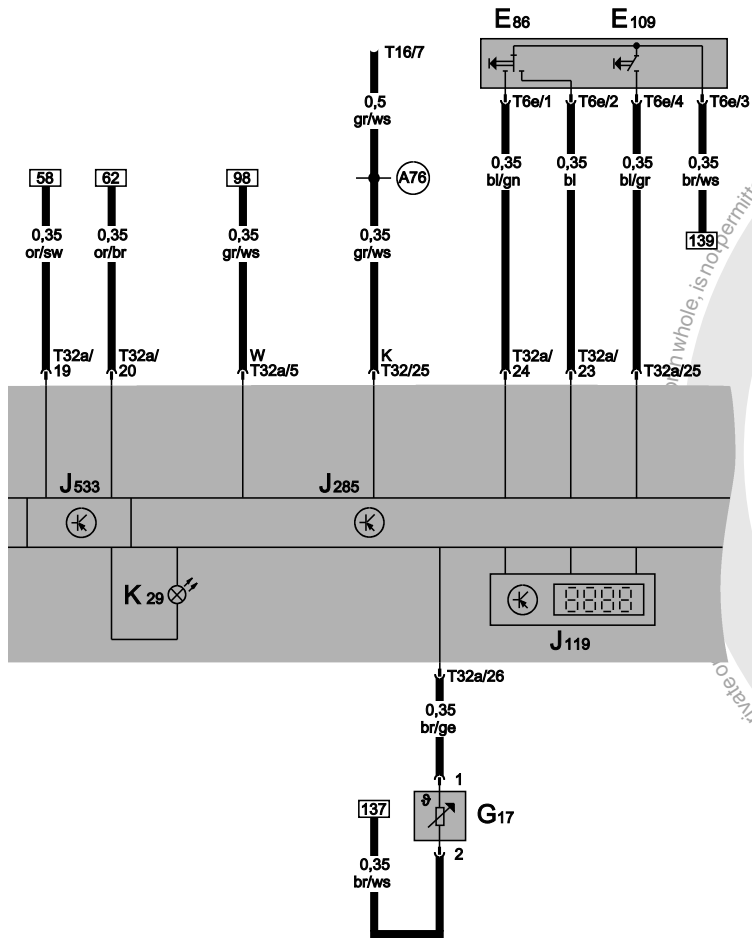
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit



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Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, cruise control system warning lamp, glow period warning lamp

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K29 Glow period warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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1.9 l/85 kW Turbo diesel engine with unit injectors, engine codes AJM

From May 1999

1.9 l/85 kW Turbo diesel engine with unit injectors, engine codes AUY

From July 2000

1.9 l/74 kW Turbo diesel engine with unit injectors, engine codes ATD

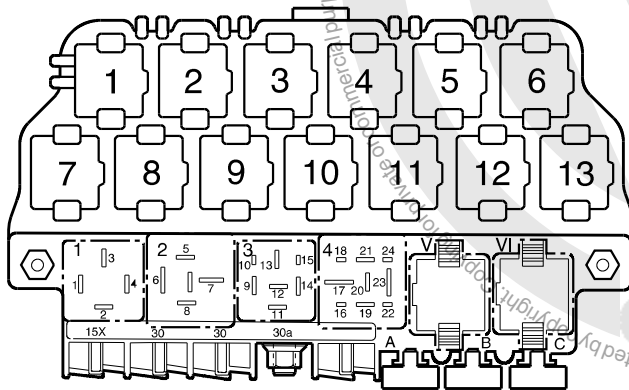
From September 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

- 10 - Fuel pump relay (167)
- 12 - Terminal 30 voltage supply relay (109)

Relay locations on relay plate:



97-14163

- 2 - X contact relief relay (100)
- 4 - Glow plug relay (103)



Note:

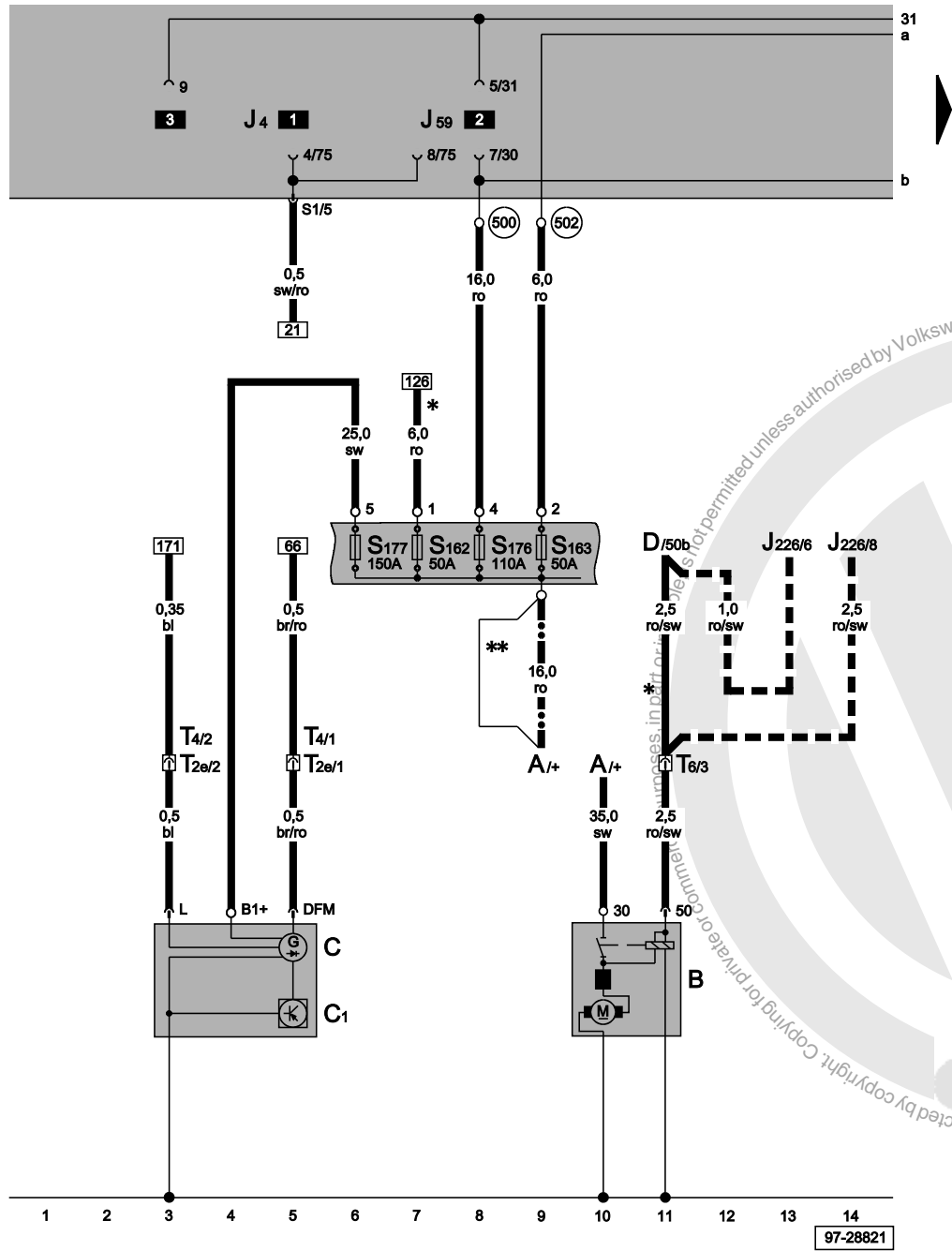
◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

30 A - green

- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple





Alternator, starter

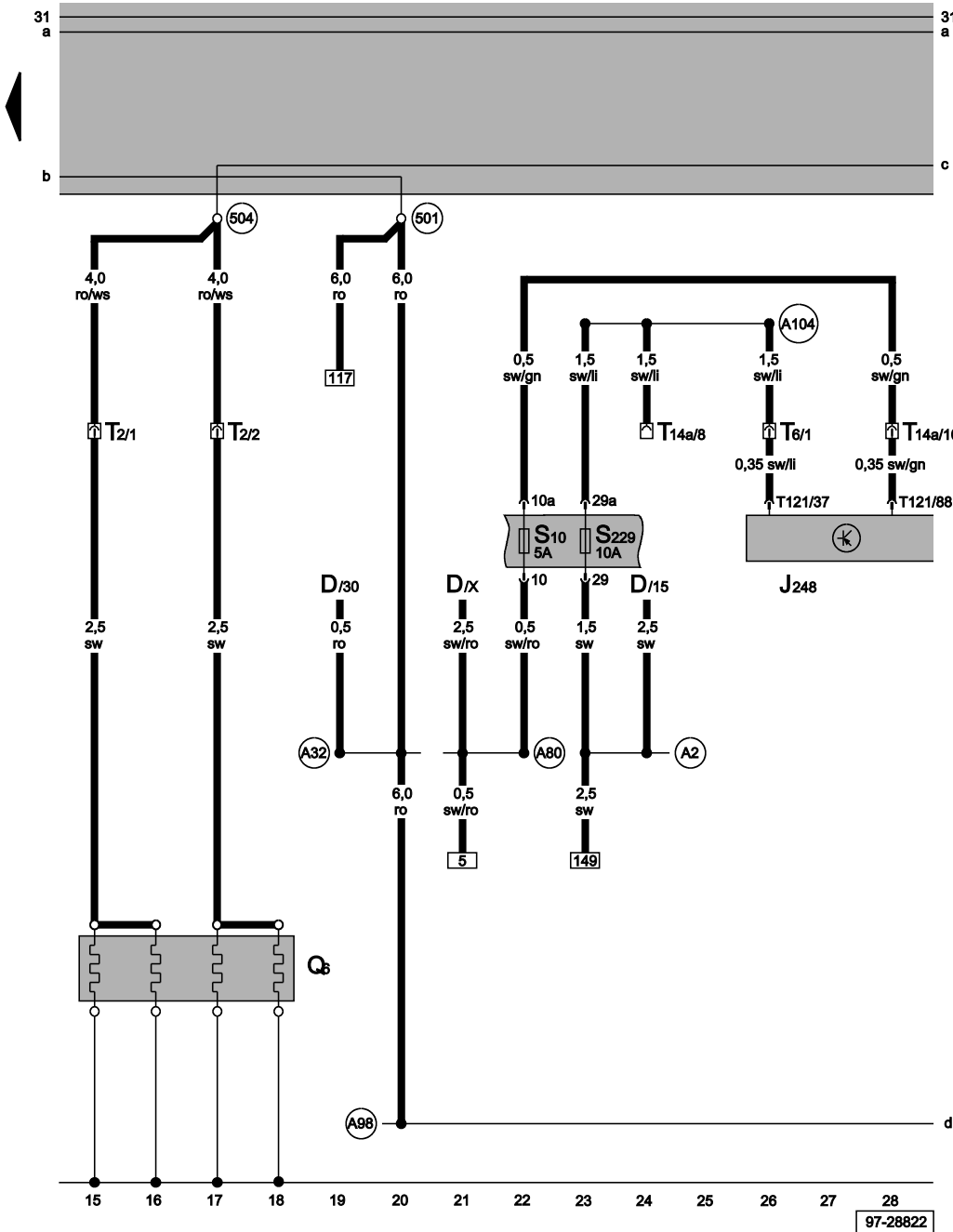
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse -1- (30), in fuse box/battery
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- * Only models with manual gearbox
- From September 2000
- ** Up to August 2000
- Only models with automatic gearbox

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97-28821

Diesel direct injection system control unit, glow plugs - engine

- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- Q6 Glow plugs - engine
- S10 Fuse in fuse box
- S229 Fuse in fuse box
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- 501 Screw connection -2- (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A80 Connection -1- (X), in dash panel wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness

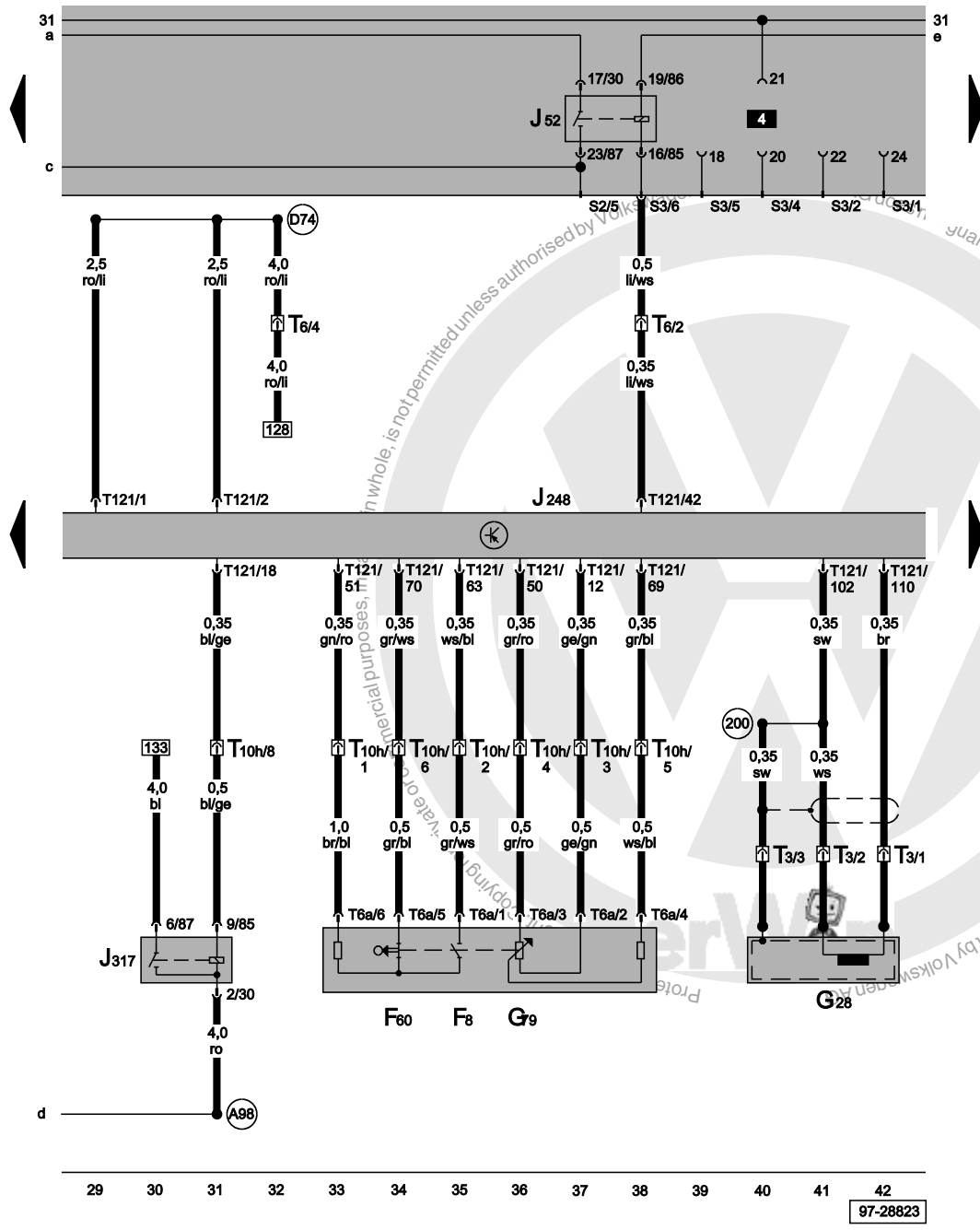


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97-28822

Diesel direct injection system control unit, glow plug relay, kick-down switch, engine speed sender, idling switch, accelerator pedal position sender, terminal 30 voltage supply relay

- F8 Kick-down switch
- F60 Idling switch
- G28 Engine speed sender
- G79 Accelerator pedal position sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- J317 Terminal 30 voltage supply relay, above the central electrics
- T3 3-pin connector, on engine front
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T6a 6-pin connector
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T121 121-pin connector
- 200 Earth connection (screening), in engine compartment wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

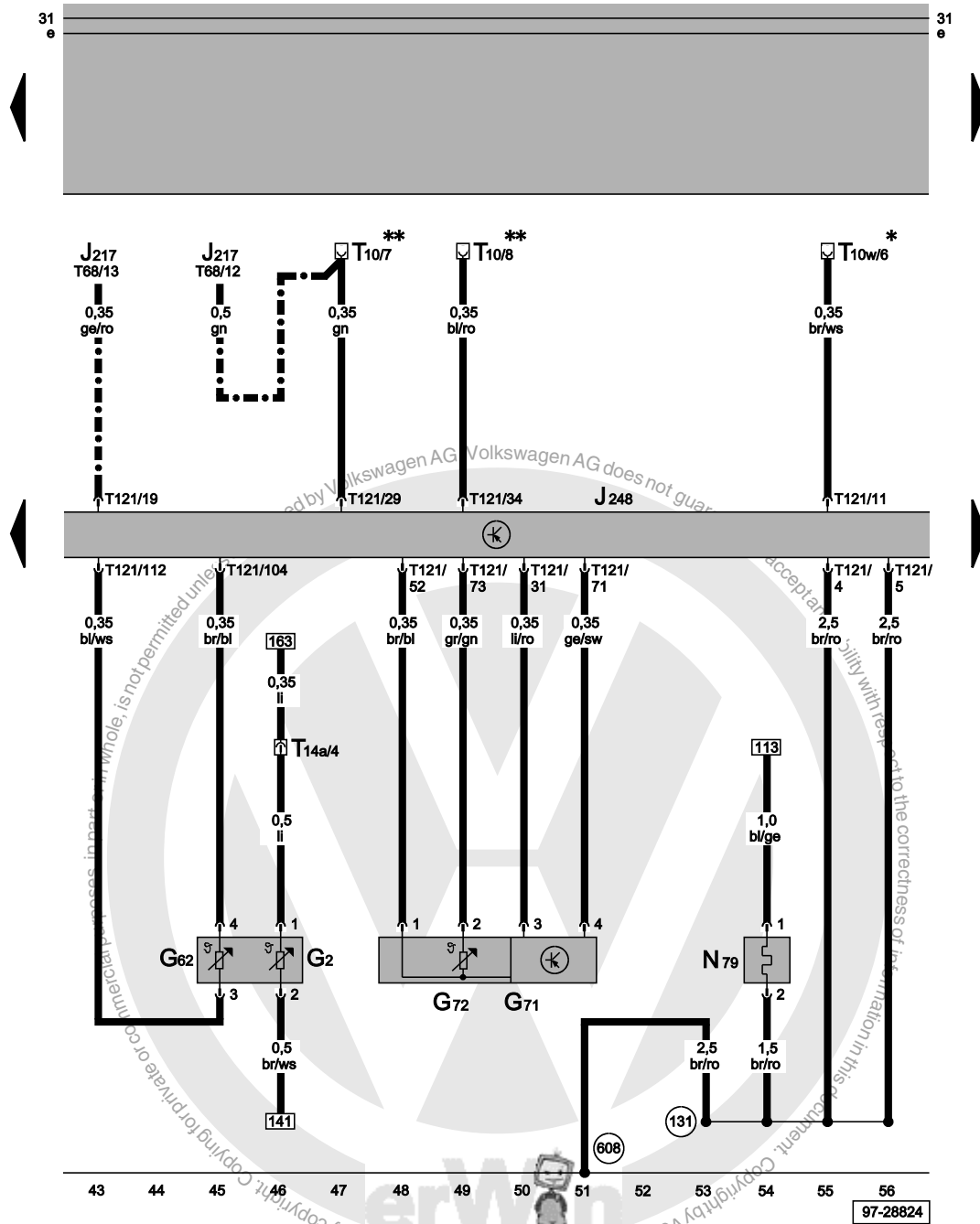
Diesel direct injection system control unit, coolant temperature sender, intake manifold pressure sender, intake manifold temperature sender, heater element (crankcase breather)

- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T68 68-pin connector
- T121 121-pin connector

131 Earth connection -2-, in engine compartment wiring harness

608 Earth point, in plenum chamber, centre

- * Radiator fan control unit/ radiator fan relay connection
- ** Connection for air conditioner
- Only models with four speed automatic gearbox (AG4)

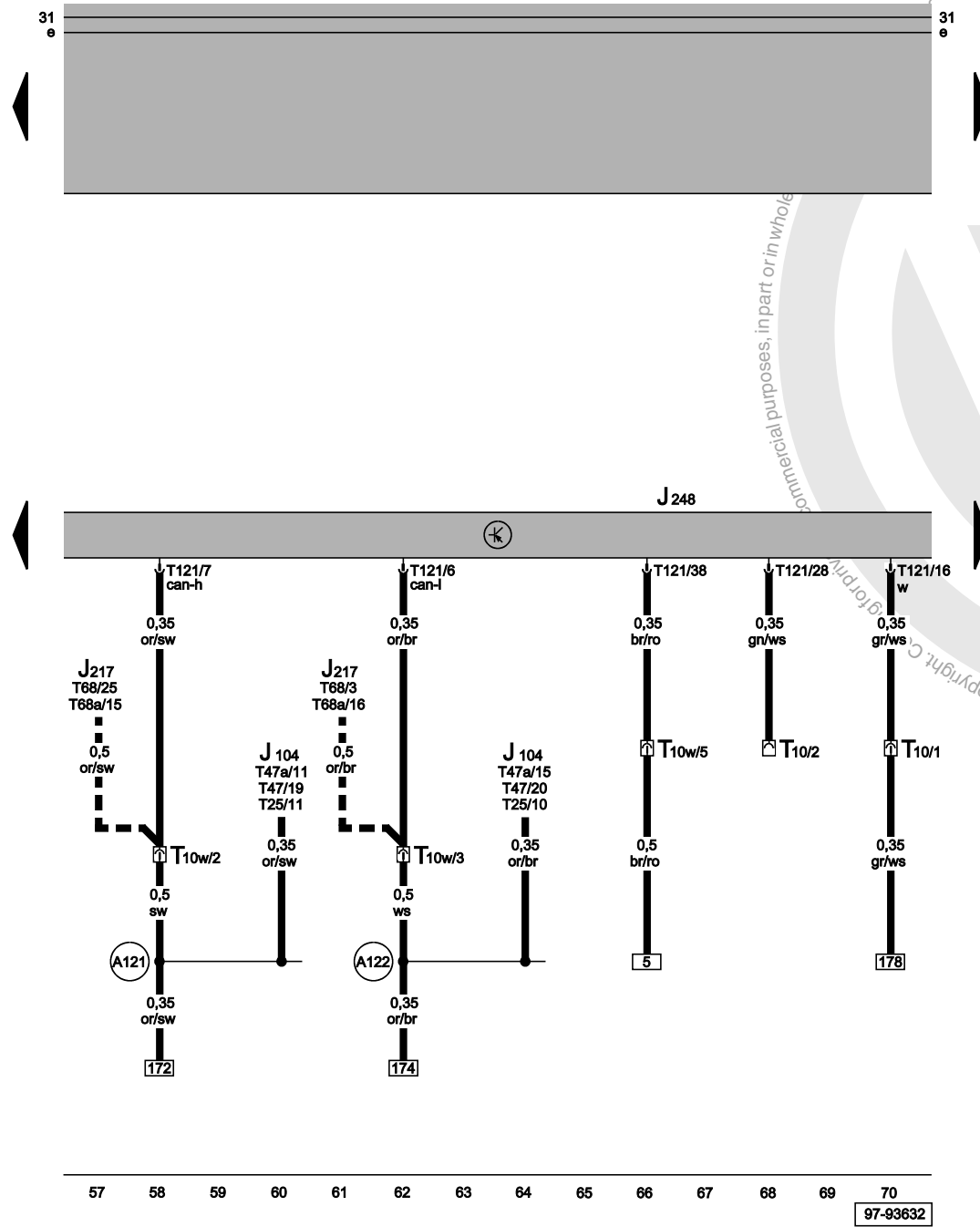


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Diesel direct injection system control unit

- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)
- T121 121-pin connector

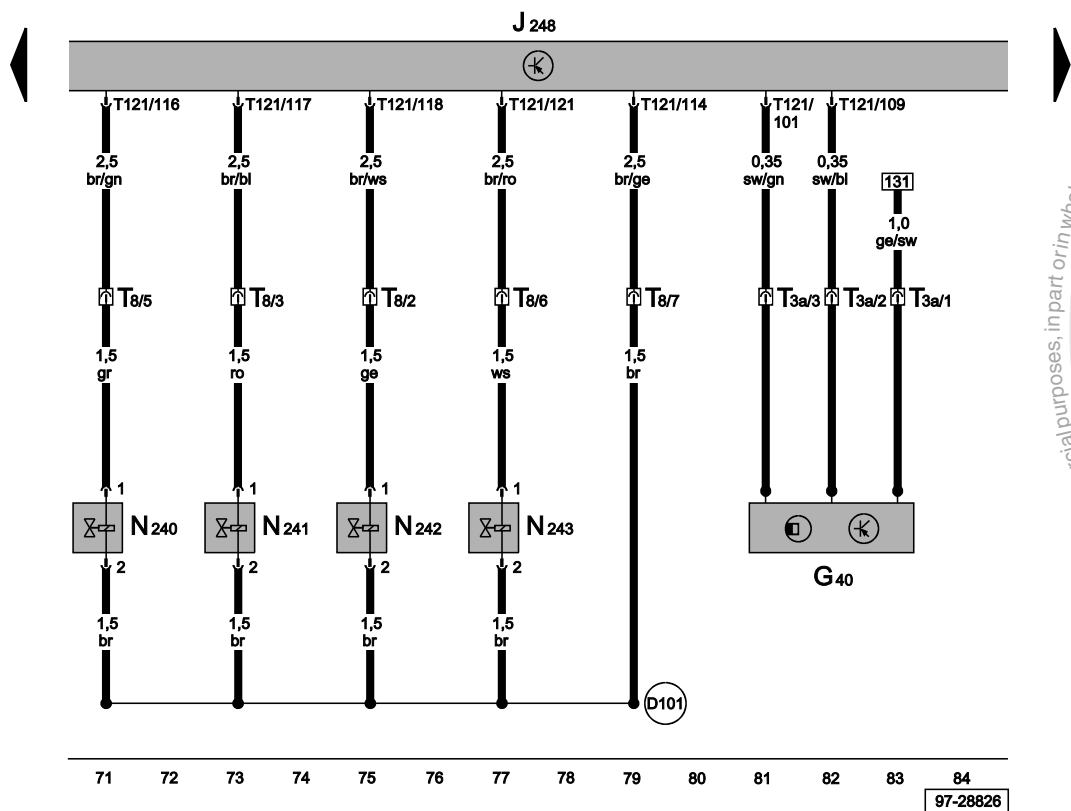
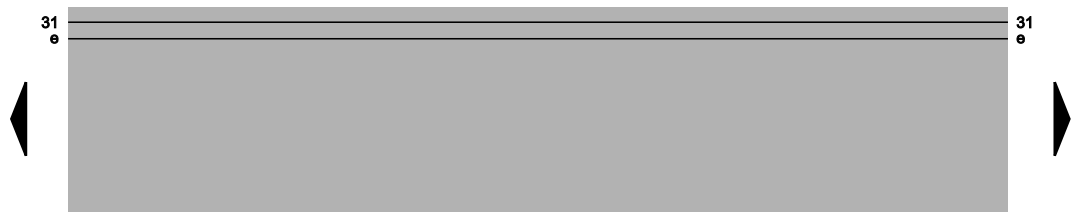
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- Only models with automatic gearbox



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Diesel direct injection system control unit, unit injector solenoid valves, hall sender (for camshaft position)

- G40 Hall sender (for camshaft position)
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- N240 Unit injector solenoid valve, No. 1 cyl.
- N241 Unit injector solenoid valve, No. 2 cyl.
- N242 Unit injector solenoid valve, No. 3 cyl.
- N243 Unit injector solenoid valve, No. 4 cyl.
- T3a 3-pin connector, on engine front
- T8 8-pin connector, in engine compartment, left
- T121 121-pin connector
- D101 Connection -1-, in engine compartment wiring harness



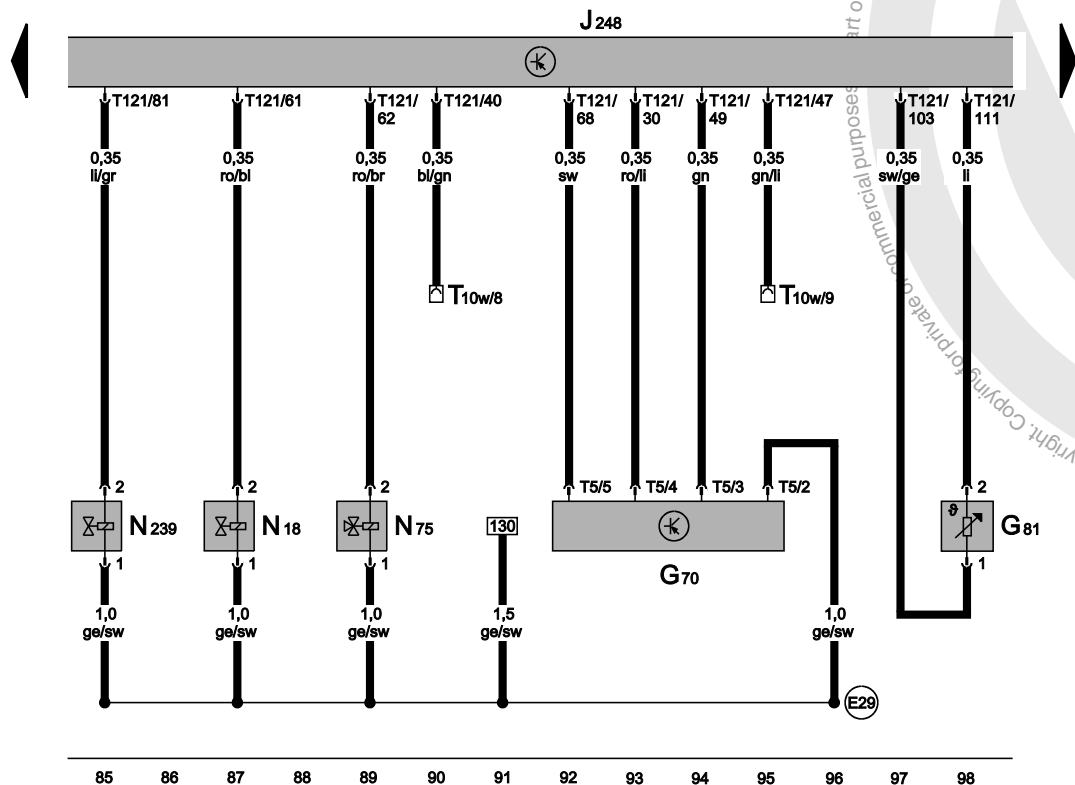
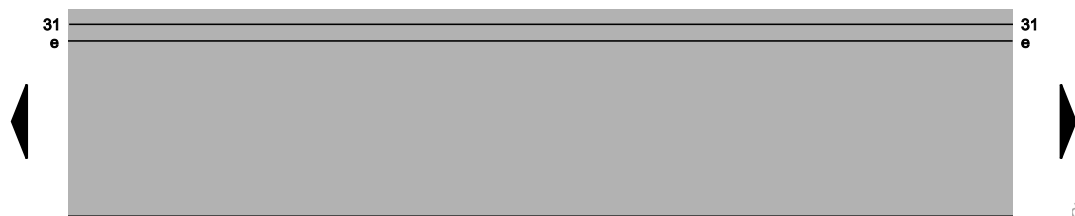
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ws = white
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Diesel direct injection system control unit, air mass meter, intake manifold flap change-over valve, fuel temperature sender, exhaust gas recirculation valve, charge pressure control solenoid valve

- G70 Air mass meter
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N239 Intake manifold flap change-over valve
- T5 5-pin connector
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector
- E29 Connection, in engine wiring harness

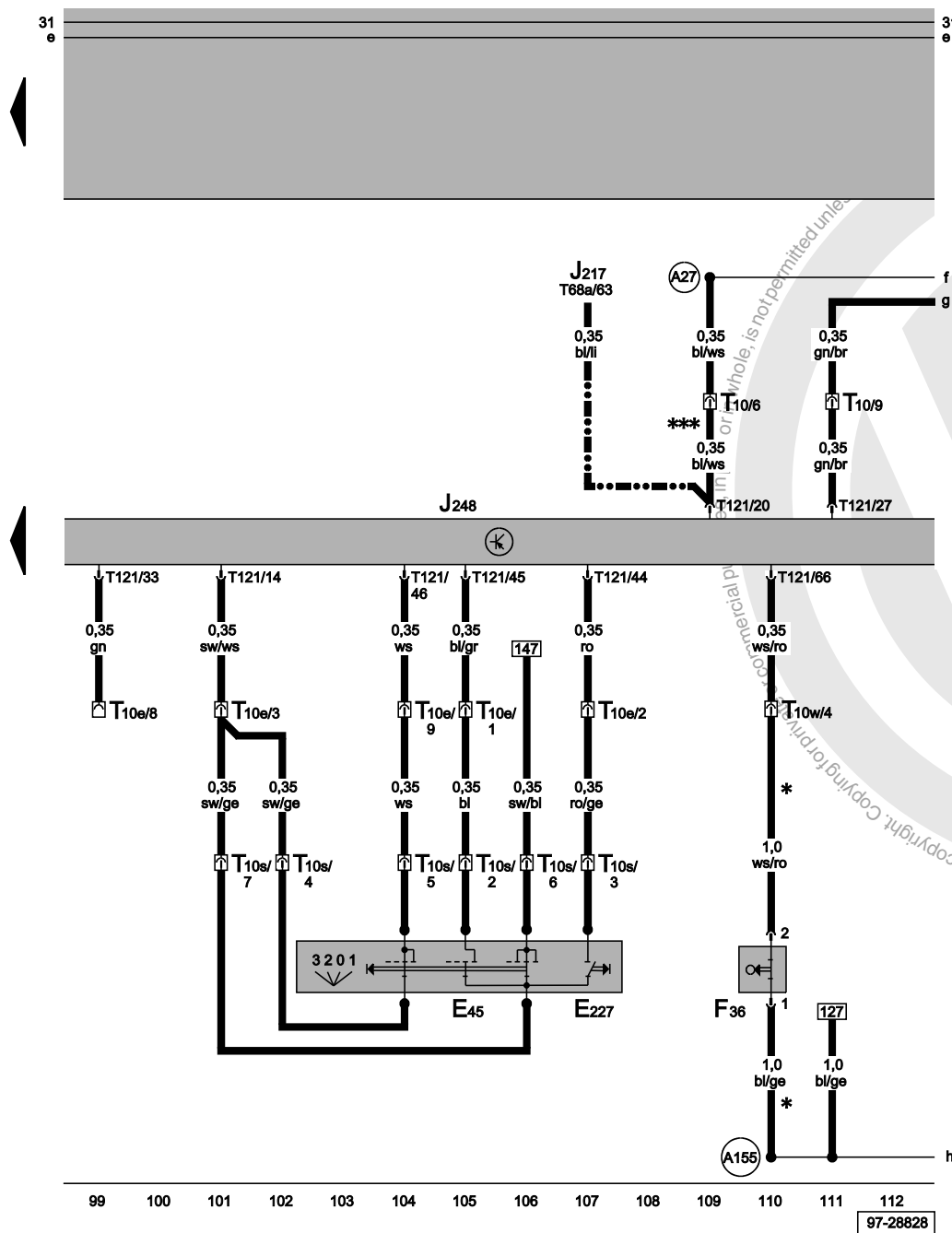


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97-28827

Diesel direct injection system control unit, cruise control system switch (CCS), clutch pedal switch

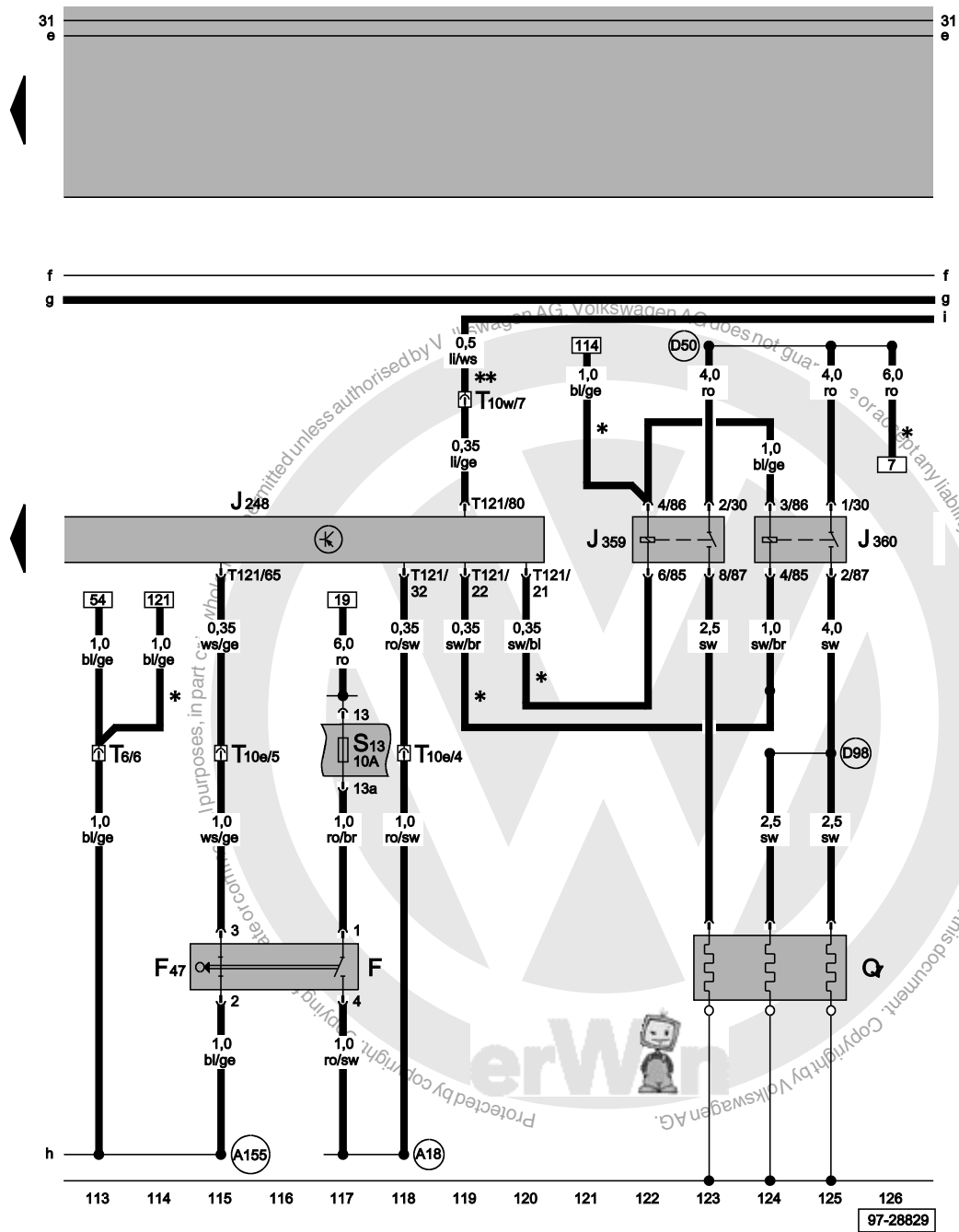
- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)**
- F36 Clutch pedal switch*
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T68a 68-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A155 Connection -2- (86), in dash panel wiring harness
- * Only models with manual gearbox
- ** Only models with CCS
- *** Only models with manual gearbox or four speed automatic gearbox (AG4)
- Only models with five speed automatic gearbox (AG5)



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Diesel direct injection system control unit, coolant heater element, cruise cont. sys. brake pedal switch (diesel direct inj. system), brake light switch, high and low heat output relay

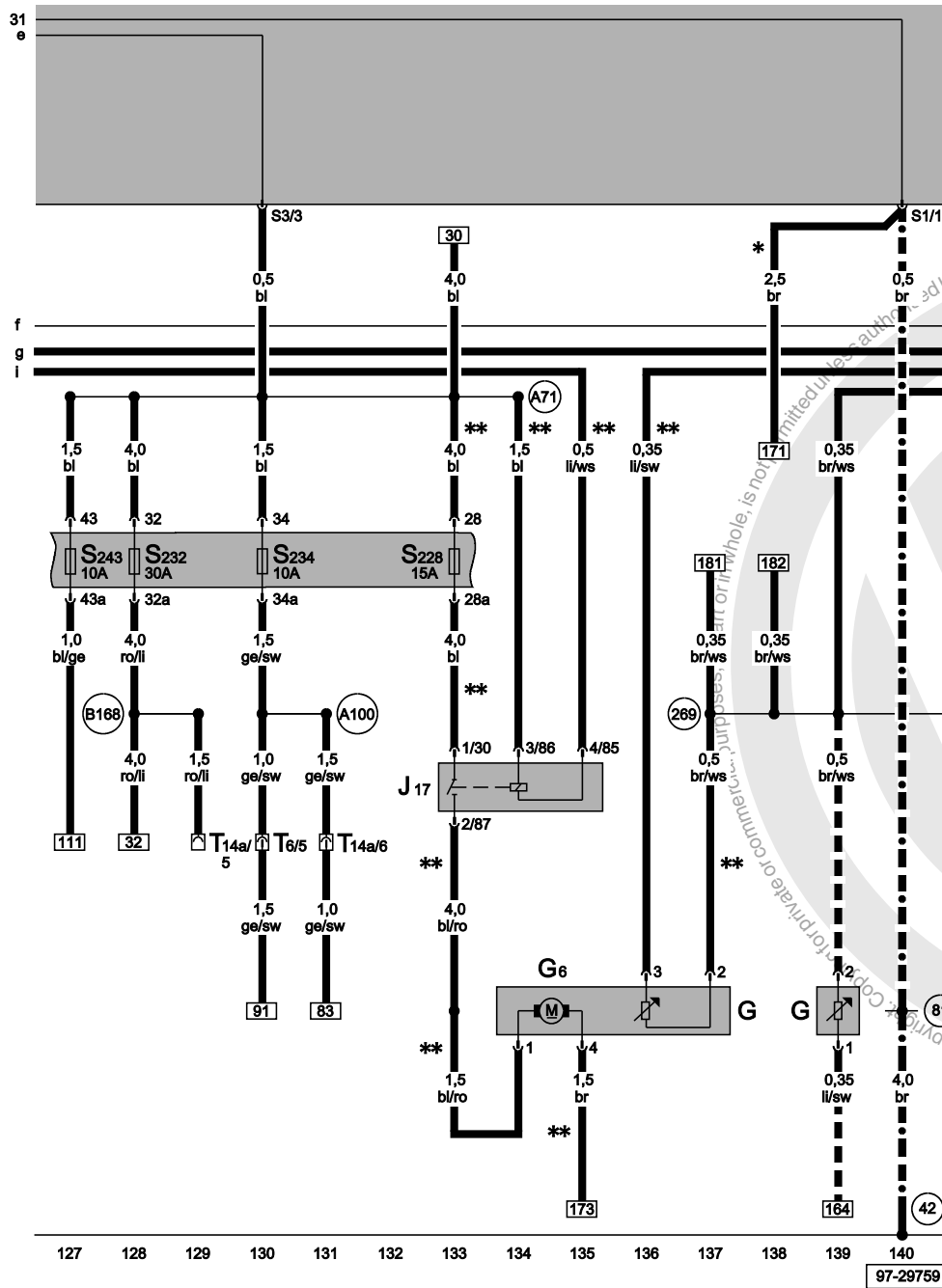
- F Brake light switch
- F47 Cruise control system brake pedal switch/diesel direct inj. system
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- J359 Low heat output relay*, in protective housing in engine compartment, left (53)
- J360 High heat output relay*, in protective housing in engine compartment, left (100)
- Q7 Coolant heating elements*
- S13 Fuse in fuse box
- T6 6-pin connector, brown, in protective housing for connectors, in plenum chamber, left
- T10e 10-pin connector, black, in protective housing for connectors, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A155 Connection -2- (86), in dash panel wiring harness
- D50 Positive (+) connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- * Only models with manual gearbox
- ** from September 2000



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97-28829

Fuel gauge sender, fuel pump relay, fuel pump (pre-supply pump)



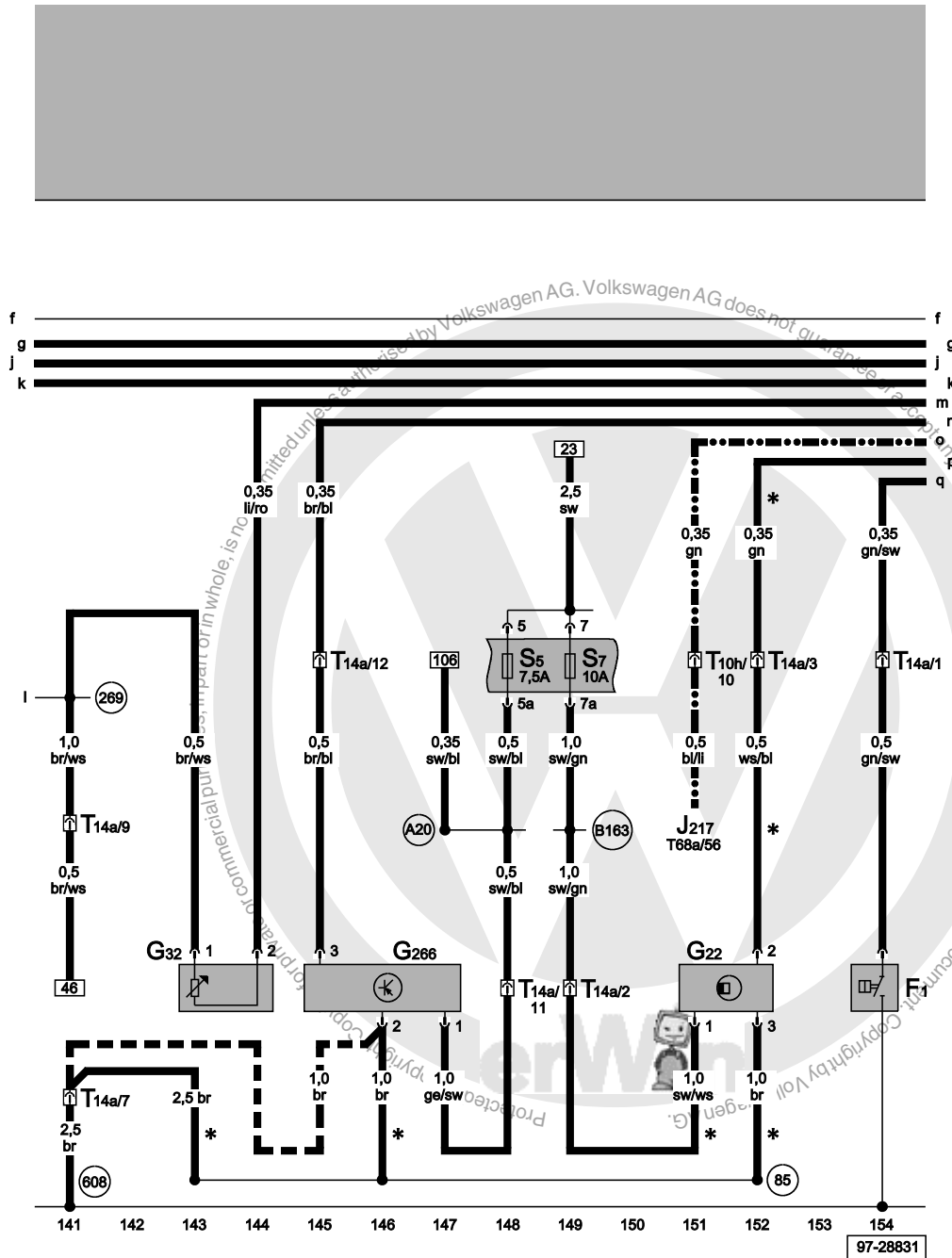
- G Fuel gauge sender***
- G6 Fuel pump (pre-supply pump)
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse box
- S232 Fuse 32 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 81 Earth connection -1- in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness
- * From May 2000
- ** From September 2000
- Up to April 2000
- Up to August 2000
- *** Only models with four-wheel drive => Current flow diagram four-wheel drive

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Oil level/oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

- F1 Oil pressure switch
- G22 Speedometer sender (hall sender, on gearbox)
- G32 Coolant shortage indicator sender
- G266 Oil level/oil temperature sender***
- J217 Automatic gearbox control unit
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, near battery
- T68a 68-pin connector

- (85) Earth connection -1-, in engine compartment wiring harness
- (269) Earth connection (sender earth) -1-, in dash panel wiring harness
- (608) Earth point, in plenum chamber, centre
- (A20) Connection (15a), in dash panel wiring harness
- (B163) Positive (+) connection -1- (15), in interior wiring harness
- * Only models with manual gearbox
- *** Only with flexible service interval display
- Only models with automatic gearbox (AG4)
- Only models with five speed automatic gearbox (AG5)

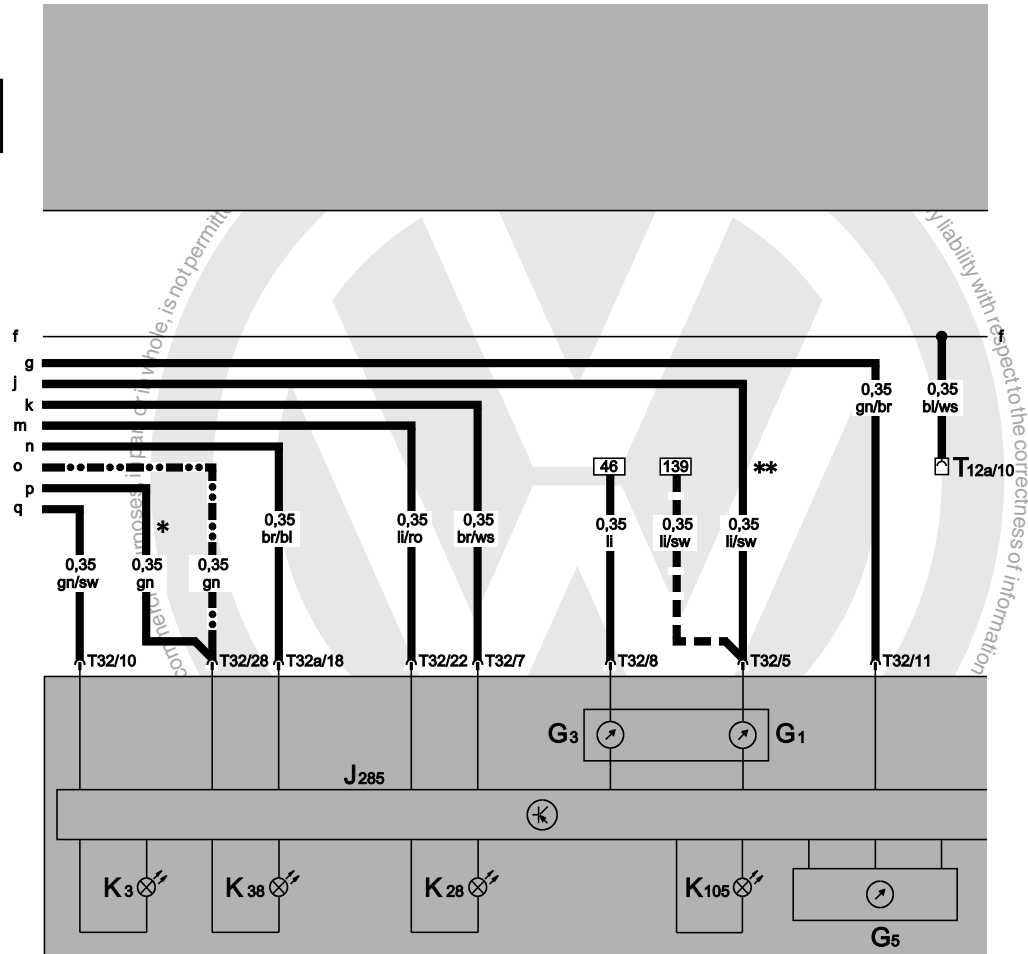


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97-28831

Dash panel insert, coolant temperature gauge and fuel gauge, fuel gauge, rev. counter, oil pressure warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- * Only models with manual gearbox
- ** From September 2000
- Up to August 2000
- *** Only with flexible service interval display
- Only models with five speed automatic gearbox (AG5)

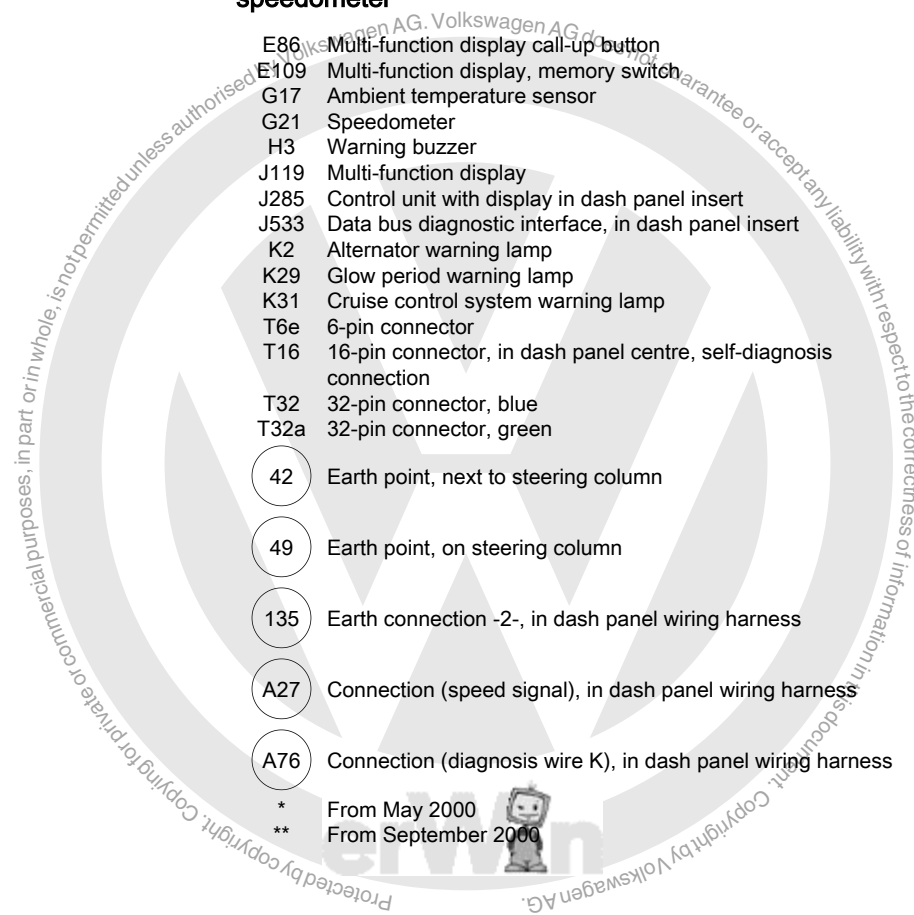
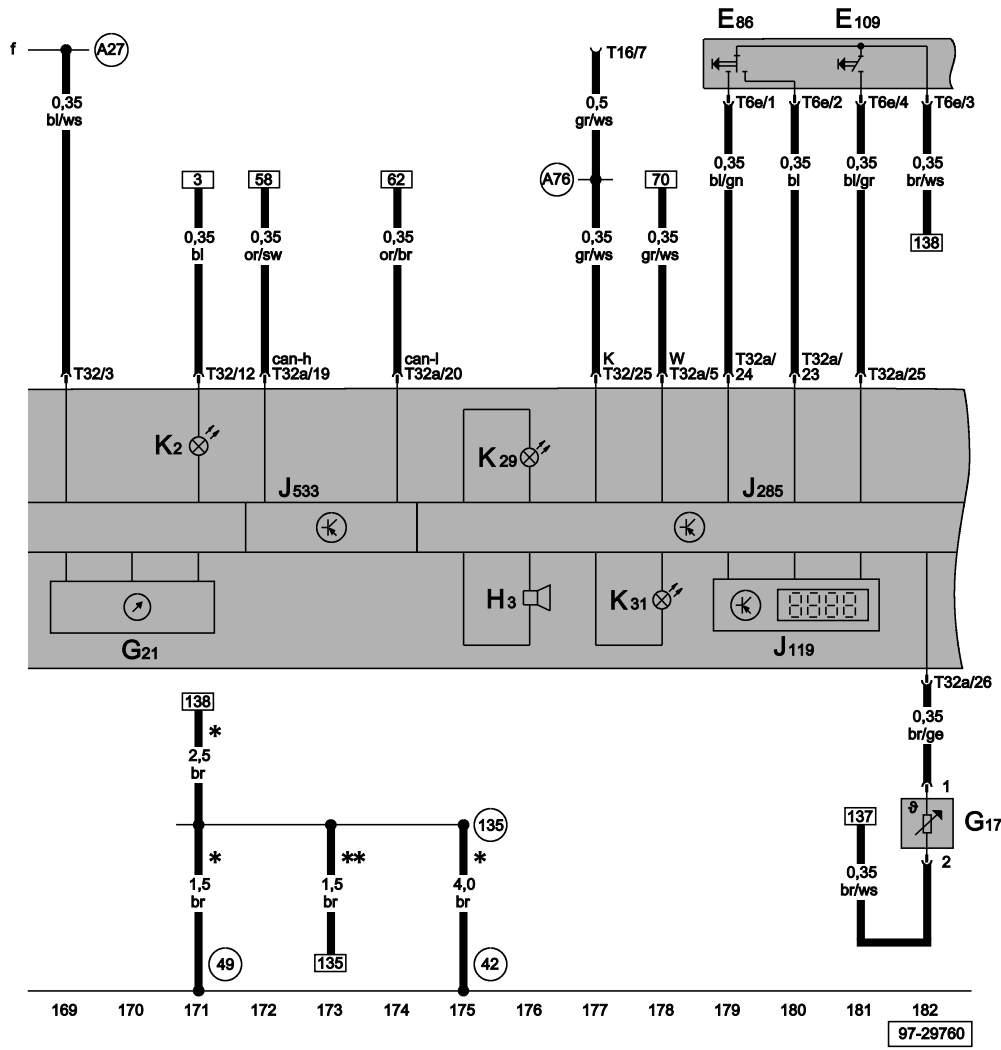


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Dash panel insert, multi-function display, ambient temperature indicator, self-diagnosis connection, glow period warning lamp, cruise control system warning lamp, speedometer

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- G21 Speedometer
- H3 Warning buzzer
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K2 Alternator warning lamp
- K29 Glow period warning lamp
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * From May 2000
- ** From September 2000



Anti-lock brake system (ABS), anti-locking brake system (ABS) with electronic differential lock (EDL) and traction control system (TCS)

from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

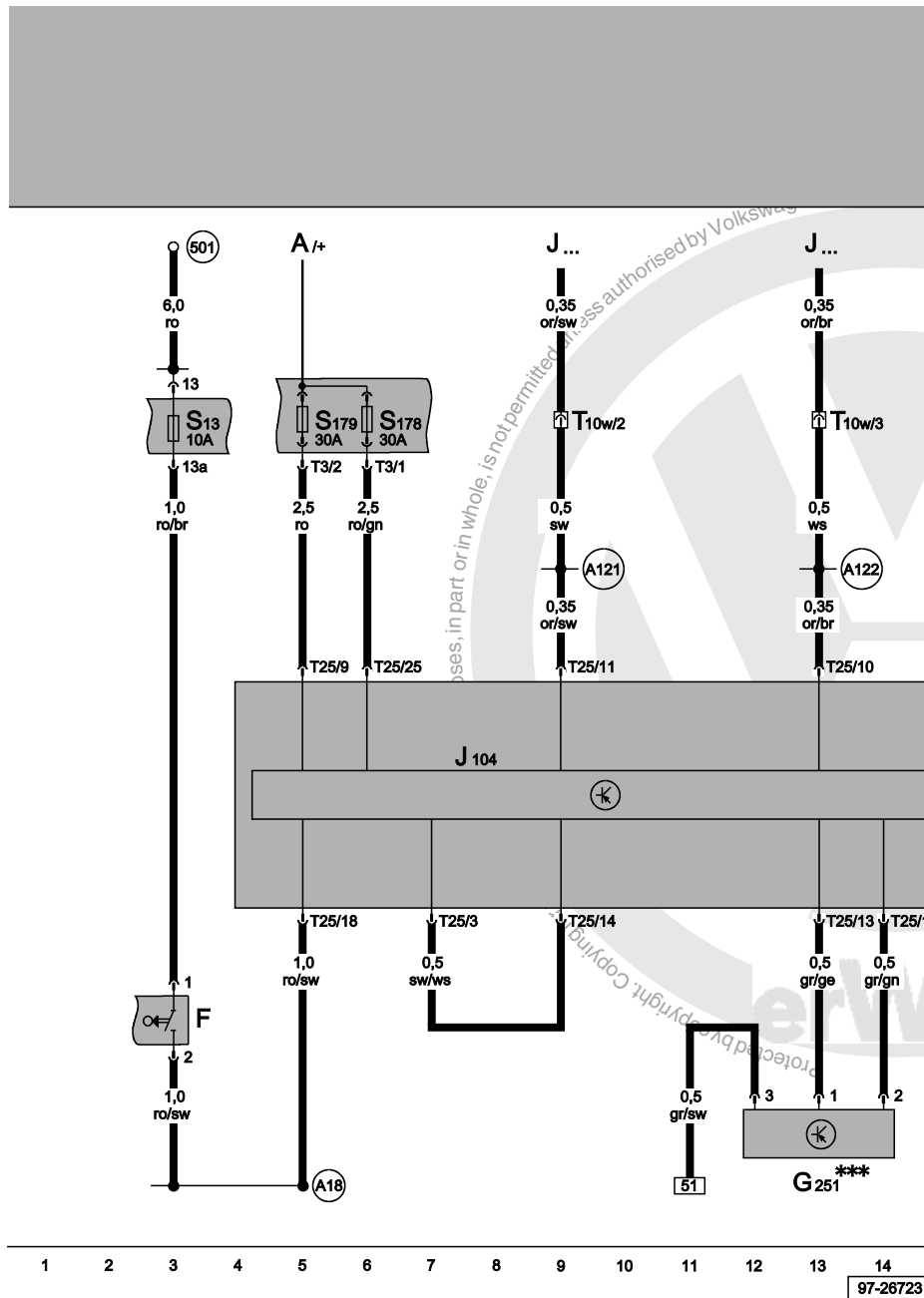
⇒ guided fault finding



ABS control unit with EDL, brake light switch, longitudinal acceleration sender

- A Battery
- F Brake light switch
- G251 Longitudinal acceleration sender, on right A-pillar***
- J104 ABS/ABS control unit with EDL, in left engine compartment
- J... Engine control units
- S13 Fuse 13 in fuse holder
- S178 Fuse 6 (30), in fuse holder on battery
- S179 Fuse 7 (30), in fuse holder on battery
- T3 3-pin connector
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector

- 501 Screw connection 2 (30), on relay plate
- A18 Connection (54), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- *** only models with central locking

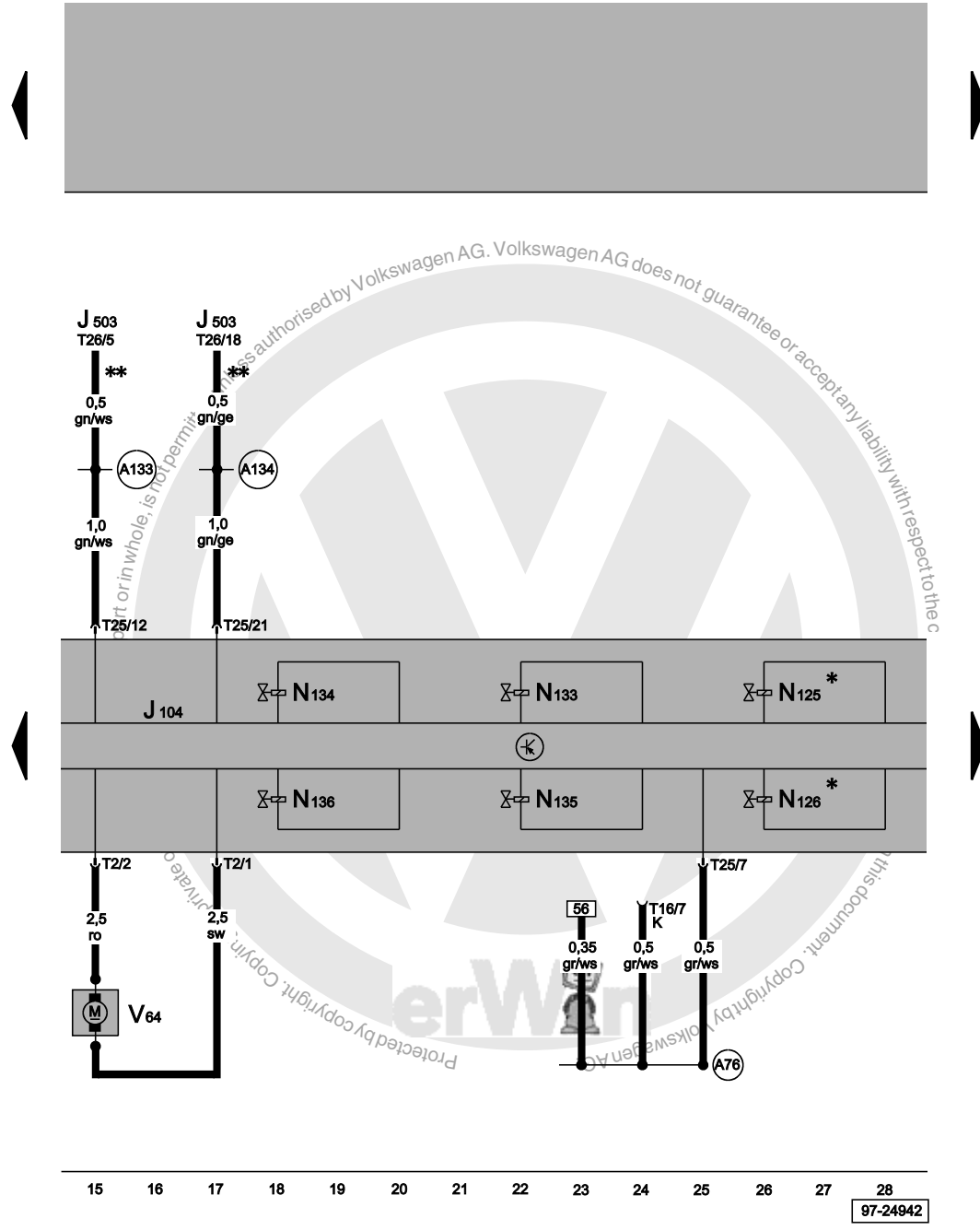


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97-26723

ABS control unit with EDL, ABS hydraulic pump

- J104 ABS/ABS control unit with EDL, in left engine compartment
- J503 Control unit with display for radio and navigation system**
- N125 Differential lock valve 1*
- N126 Differential lock valve 2*
- N133 Rear right ABS inlet valve
- N134 Rear left ABS inlet valve
- N135 Rear right ABS outlet valve
- N136 Rear left ABS outlet valve
- T2 2-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T25 25-pin connector
- T26 26-pin connector, on navigation system with CD changer control unit**
- V64 ABS hydraulic pump
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A133 Connection (left ABS impulse), in dash panel wiring harness
- A134 Connection (right ABS impulse), in dash panel wiring harness
- * only models with EDL/TCS
- ** only models with navigation

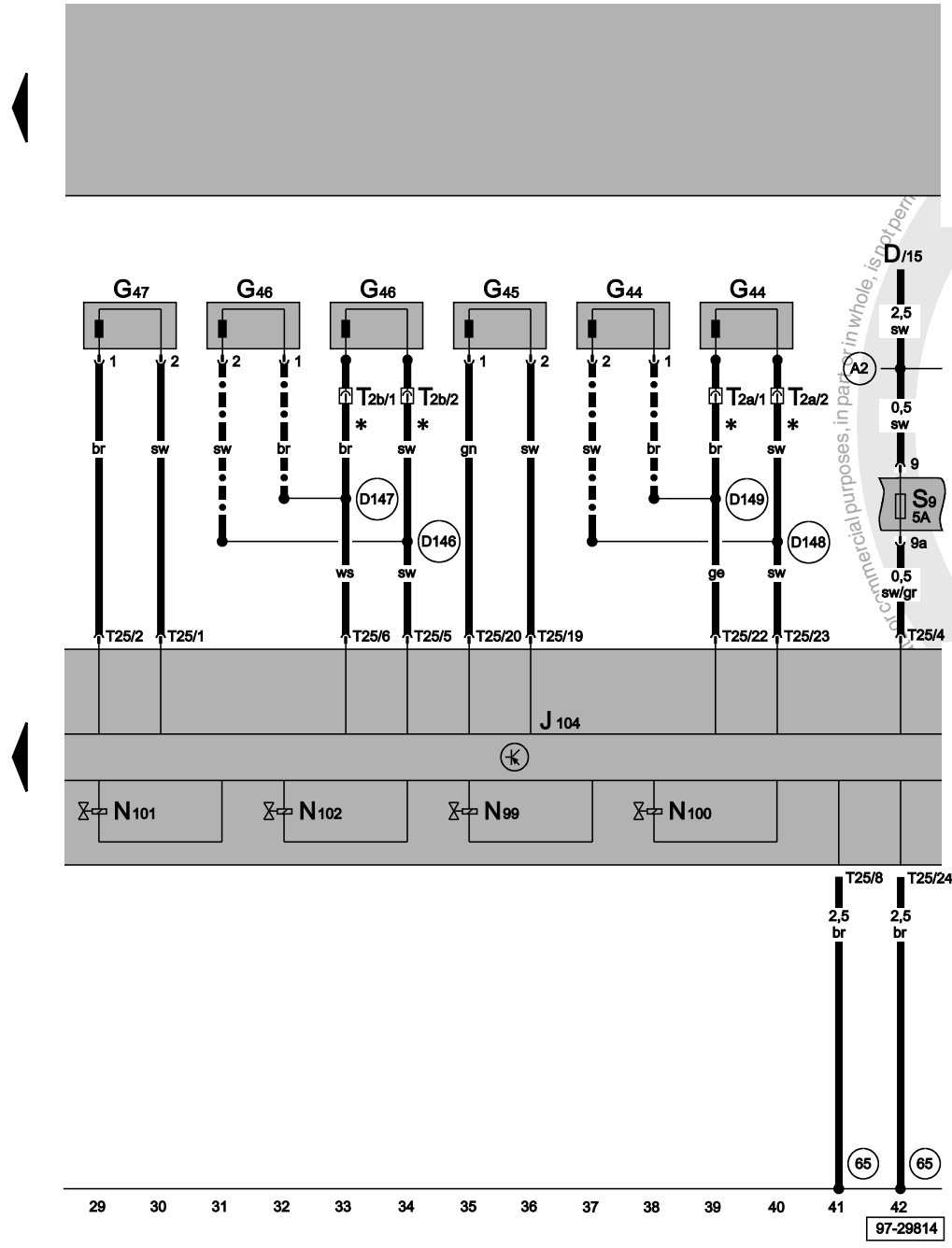


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ABS control unit with EDL, speed sensor

- D Ignition/starter switch
- G44 Rear right speed sensor
- G45 Front right speed sensor
- G46 Rear left speed sensor
- G47 Front left speed sensor
- J104 ABS/ABS control unit with EDL, in left engine compartment
- N99 Front right ABS inlet valve
- N100 Front right ABS outlet valve
- N101 Front left ABS inlet valve
- N102 Front left ABS outlet valve
- S9 Fuse 9 in fuse holder
- T2a 2-pin connector, near rear right speed sensor
- T2b 2-pin connector, near rear left speed sensor
- T25 25-pin connector

- (65) Earth point, on front of left longitudinal member
- (A2) Positive connection (15), in dash panel wiring harness
- (D146) Connection (rear left speed sensor +), in engine compartment wiring harness
- (D147) Connection (rear left speed sensor -), in engine compartment wiring harness
- (D148) Connection (rear right speed sensor +), in engine compartment wiring harness
- (D149) Connection (rear right speed sensor -), in engine compartment wiring harness
- * only models with central locking
- .-.- only models without central locking



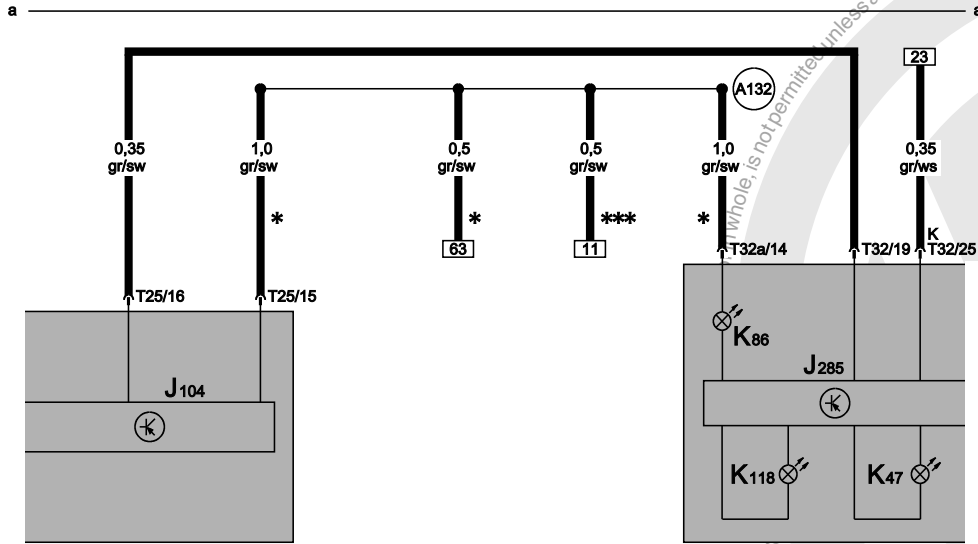
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ABS control unit with EDL, ABS warning lamp, brake system warning lamp, traction control system warning lamp

- J104 ABS/ABS control unit with EDL, in left engine compartment
- J285 Control unit with display in dash panel insert
- K47 ABS warning lamp
- K86 Traction control system warning lamp*
- K118 Brake system warning lamp
- T25 25-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A132 Connection (TCS), in dash panel wiring harness

- * only models with TCS
- *** only models with central locking



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43 44 45 46 47 48 49 50 51 52 53 54 55 56

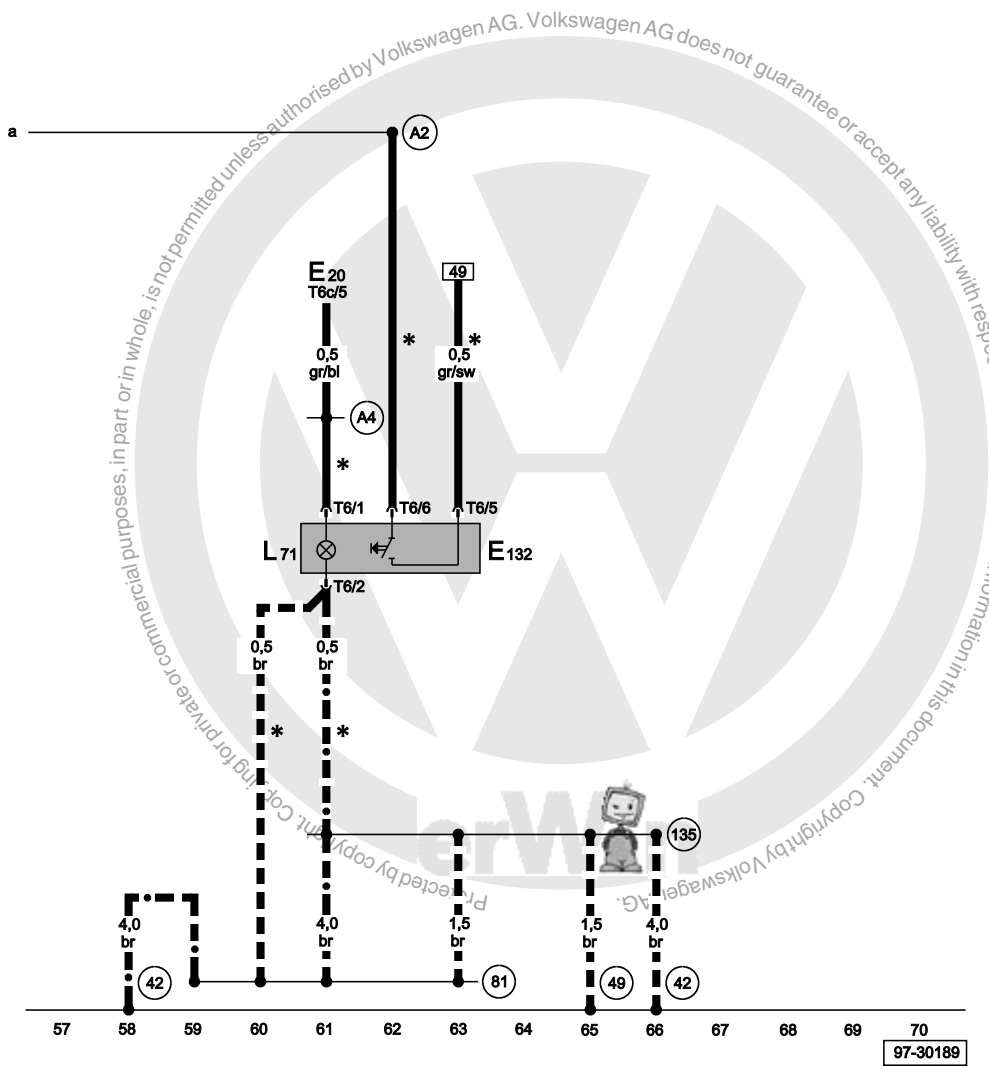
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Traction control system switch

- E20 Illumination regulators - switches and instruments
- E132 Traction control system switch*
- L71 Traction control switch illumination*
- T6 6-pin connector*
- T6c 6-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A2 Positive connection (15), in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- * only models with TCS
- from May 2000
- up to April 2000



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Anti-locking brake system (ABS) with electronic differential lock (EDL), traction control system (TCS) and electronic stability program (ESP)

from May 1999

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

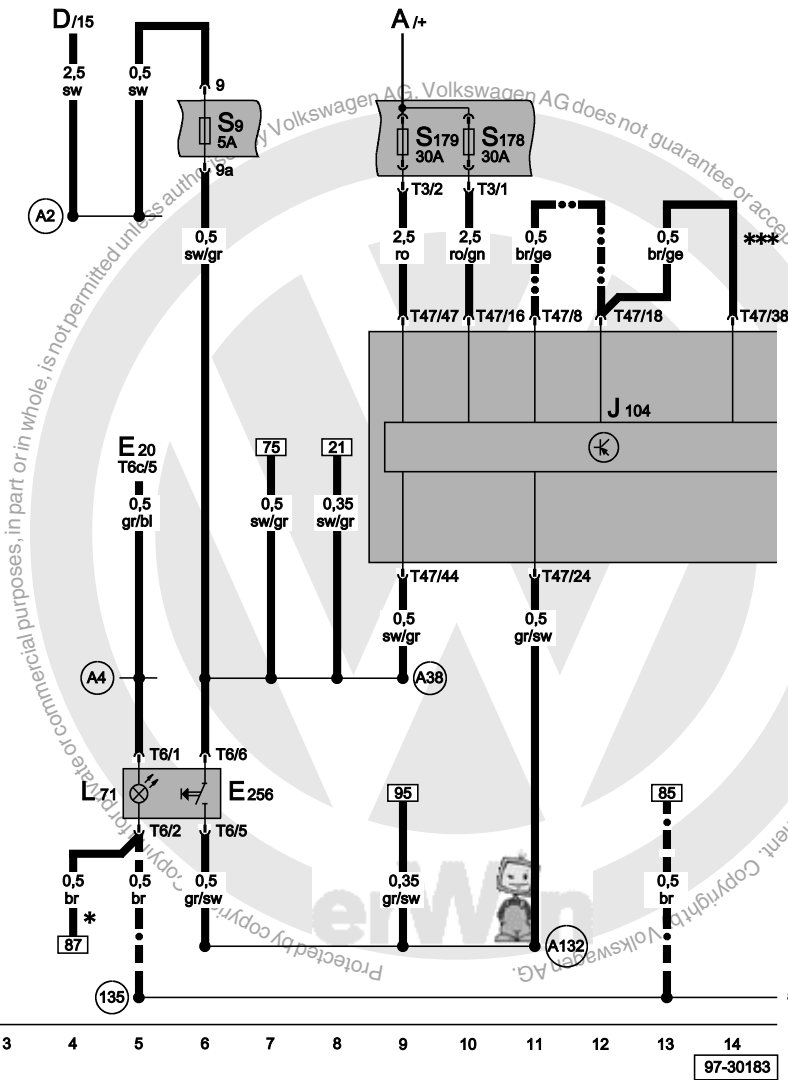
◆ Fault Finding Programs

⇒ guided fault finding



ABS/ABS control unit with EDL/ ASR/ ESP, TCS and ESP button

- A Battery
- D Ignition/starter switch
- E20 Illumination regulators - switches and instruments
- E256 TCS and ESP button
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- L71 Traction control switch illumination
- S9 Fuse 9 in fuse holder
- S178 Fuse 6 (30), in fuse holder on battery
- S179 Fuse 7 (30), in fuse holder on battery
- T3 3-pin connector
- T6 6-pin connector
- T6c 6-pin connector
- T47 47-pin connector

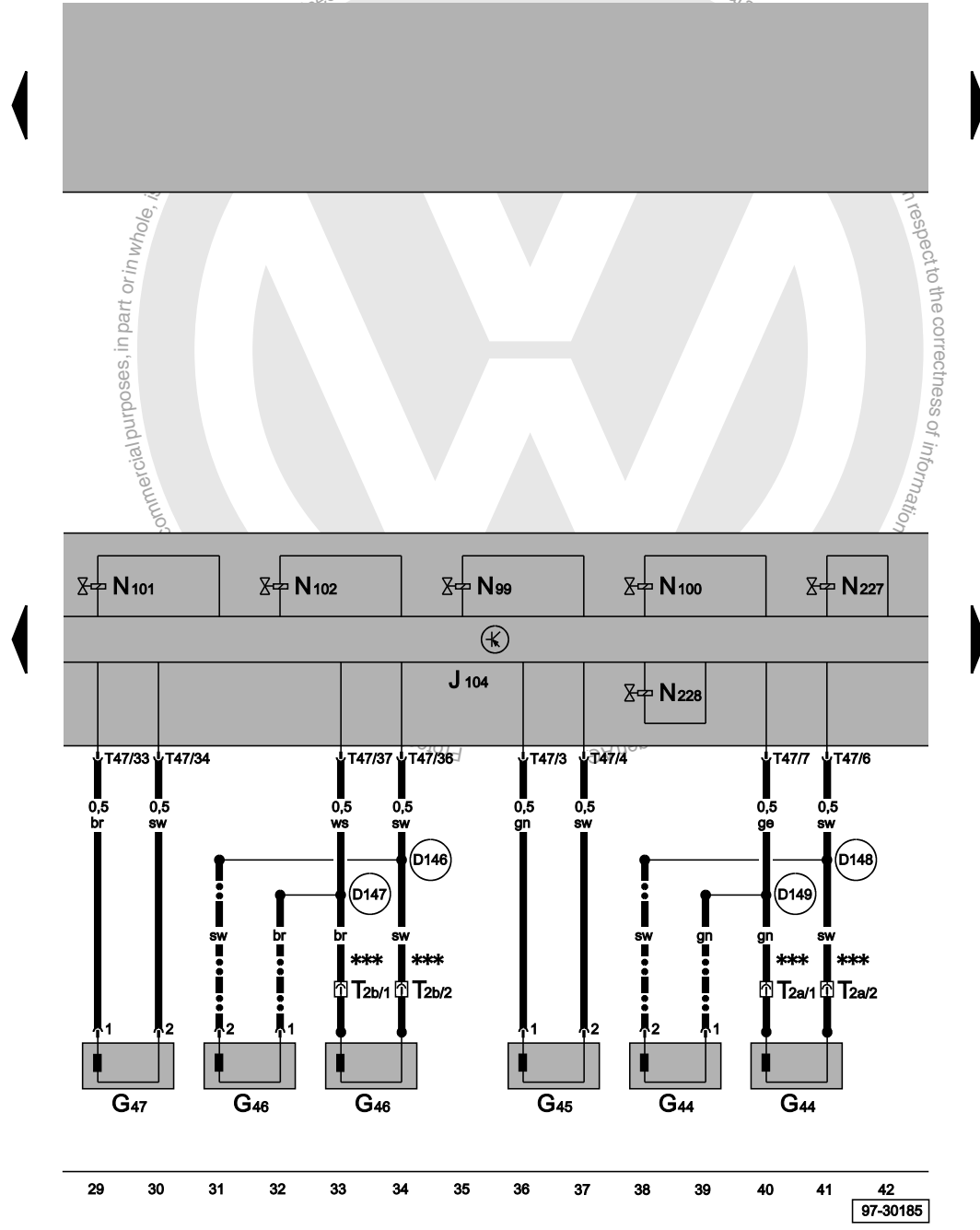


- (135) Earth connection 2, in dash panel wiring harness
- (A2) Positive connection (15), in dash panel wiring harness
- (A4) Positive connection (58b), in dash panel wiring harness
- (A38) Positive connection -2- (15a), in dash panel wiring harness
- (A132) Connection (TCS/ESP), in dash panel wiring harness
- *** only models with central locking
- only models with front-wheel drive
- * from May 2000
- up to April 2000

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ABS control unit with EDL/ ASR/ ESP, speed sensor

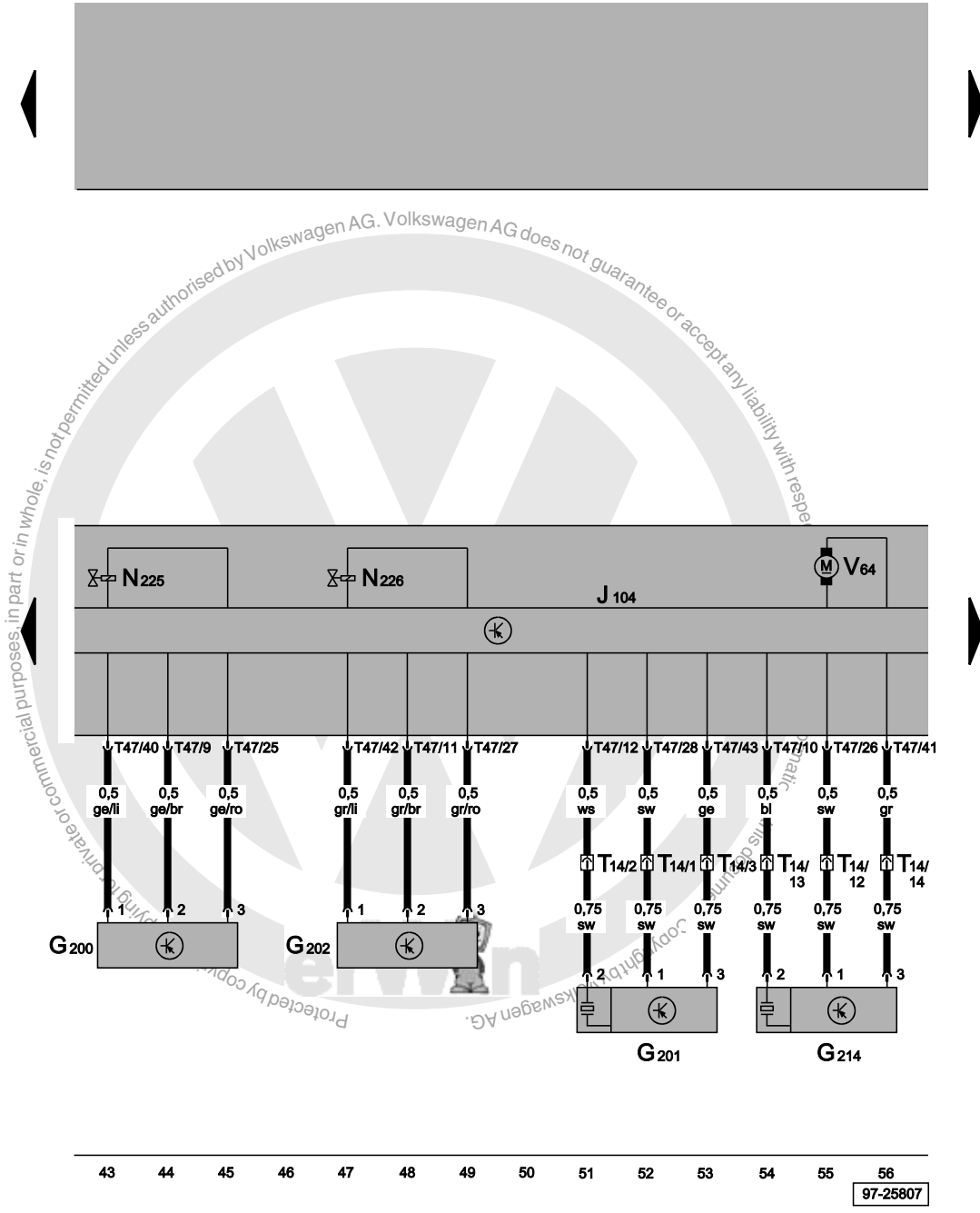
- G44 Rear right speed sensor
- G45 Front right speed sensor
- G46 Rear left speed sensor
- G47 Front left speed sensor
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- N99 Front right ABS inlet valve
- N100 Front right ABS outlet valve
- N101 Front left ABS inlet valve
- N102 Front left ABS outlet valve
- N227 Vehicle stabilization program high pressure valve 1
- N228 Vehicle stabilization program high pressure valve 2
- T2a 2-pin connector, near rear right speed sensor
- T2b 2-pin connector, near rear left speed sensor
- T47 47-pin connector
- D146 Connection (rear left speed sensor +), in engine compartment wiring harness
- D147 Connection (rear left speed sensor -), in engine compartment wiring harness
- D148 Connection (rear right speed sensor +), in engine compartment wiring harness
- D149 Connection (rear right speed sensor -), in engine compartment wiring harness
- *** only models with central locking
- only models with front-wheel drive



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ABS/ABS control unit with EDL/ ASR/ ESP, lateral acceleration sender, brake pressure sender, yaw rate sender, ABS hydraulic pump

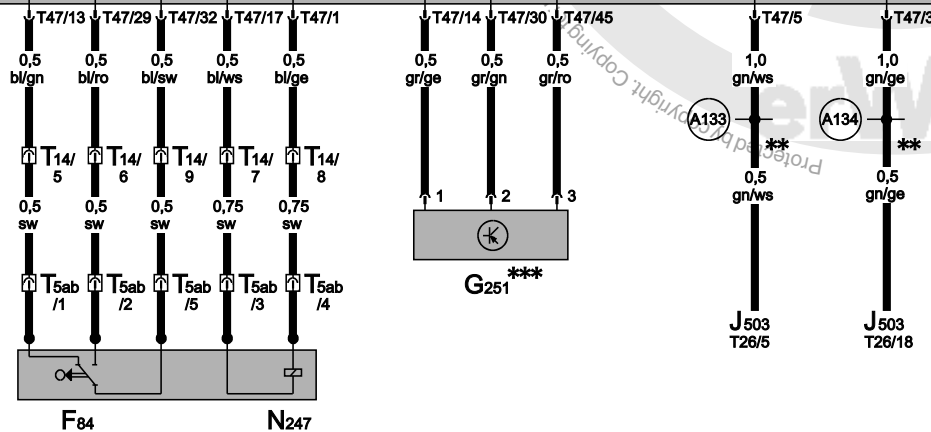
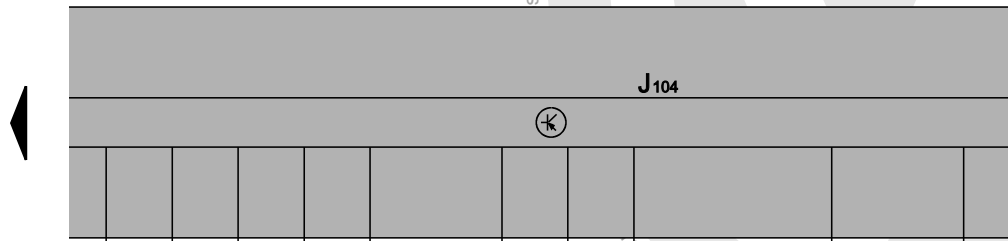
- G200 Lateral acceleration sender, next to steering column
- G201 Brake pressure sender 1, on brake master cylinder
- G202 Yaw rate sender, on steering column
- G214 Brake pressure sender 2, on brake master cylinder
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- N225 Vehicle stabilization program switch valve 1
- N226 Vehicle stabilization program switch valve 2
- T14 14-pin connector, in left engine compartment
- T47 47-pin connector
- V64 ABS hydraulic pump



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ABS control unit with EDL/ ASR/ ESP, longitudinal acceleration sender, brake pressure solenoid valve, brake pressure solenoid trip switch

- F84 Brake pressure solenoid trip switch
- G251 Longitudinal acceleration sender, on right A-pillar***
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- J503 Control unit with display for radio and navigation system
- N247 Brake pressure solenoid valve, in brake servo
- T5ab 5-pin connector, in rear engine compartment
- T14 14-pin connector, in left engine compartment
- T26 26-pin connector**
- T47 47-pin connector
- A133 Connection (left ABS impulse), in dash panel wiring harness
- A134 Connection (right ABS impulse), in dash panel wiring harness
- ** only models with navigation
- *** only models with central locking



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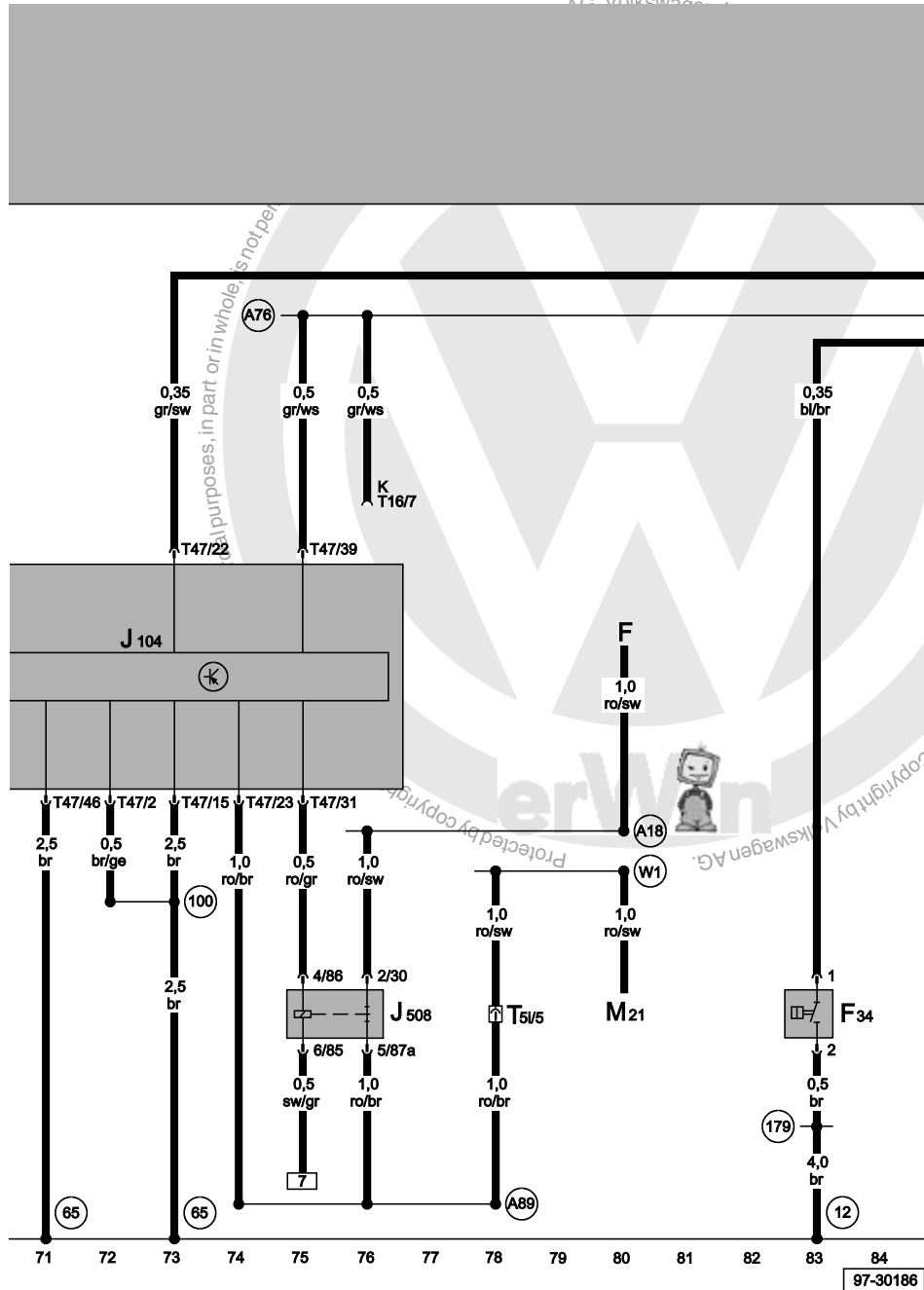
57 58 59 60 61 62 63 64 65 66 67 68 69 70

1J1-013060106

ABS/ABS control unit with EDL, brake fluid level warning contact, brake light suppression relay

- F Brake light switch
- F34 Brake fluid level warning contact
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- J508 Brake light suppression relay, on additional relay carrier above the relay plate
- M21 Left brake and tail light bulb
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T47 47-pin connector

- 12 Earth point, on left in engine compartment
- 65 Earth point, on front of left longitudinal member
- 100 Earth connection 1, in ABS wiring harness
- 179 Earth connection, in left headlight wiring harness
- A18 Connection (54), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- W1 Positive connection (54), in rear wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

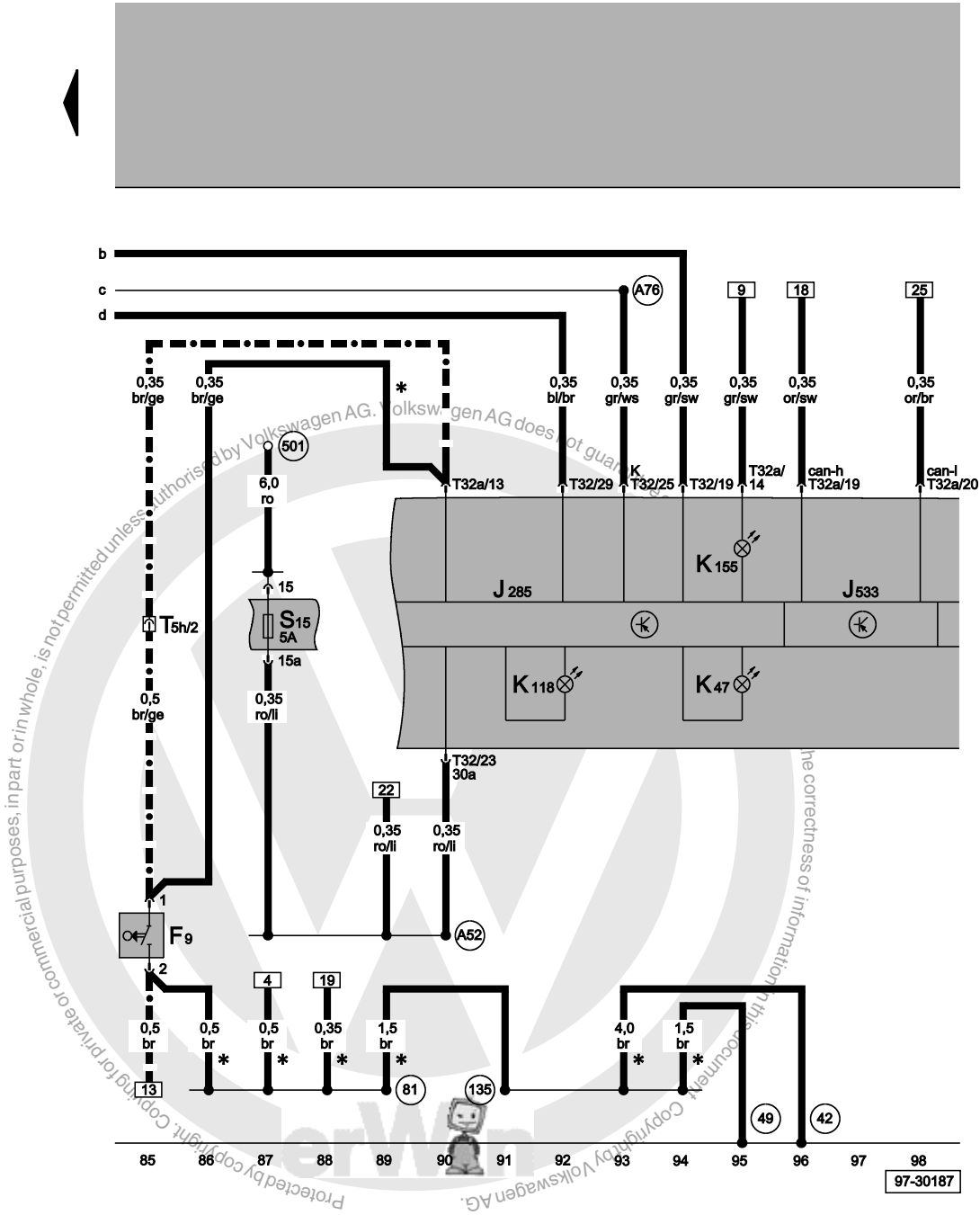
97-30186

Control unit with display in dash panel insert, brake system warning lamp, ABS warning lamp, TCS and ESP warning lamp, handbrake warning switch

- F9 Handbrake warning switch
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K47 ABS warning lamp
- K118 Brake system warning lamp
- K155 TCS and ESP warning lamp
- S15 Fuse 15 in fuse holder
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 501 Screw connection 2 (30), on relay plate
- A52 Positive connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2000
- up to April 2000

- ws = white
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- rs = pink



Airbag system

- ⇒ Driver`s and front passenger`s airbag
- ⇒ Seat belt tensioner
- ⇒ Curtain airbag
- ⇒ Side airbags

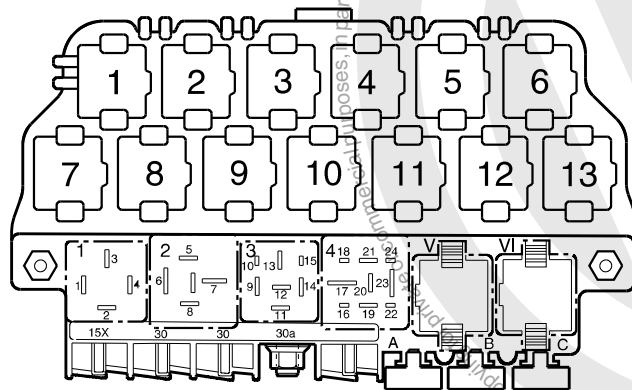
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on 13 position additional

relay carrier, above relay plate:

Relay locations on relay plate:



1 - Dual tone horn relay (53)



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

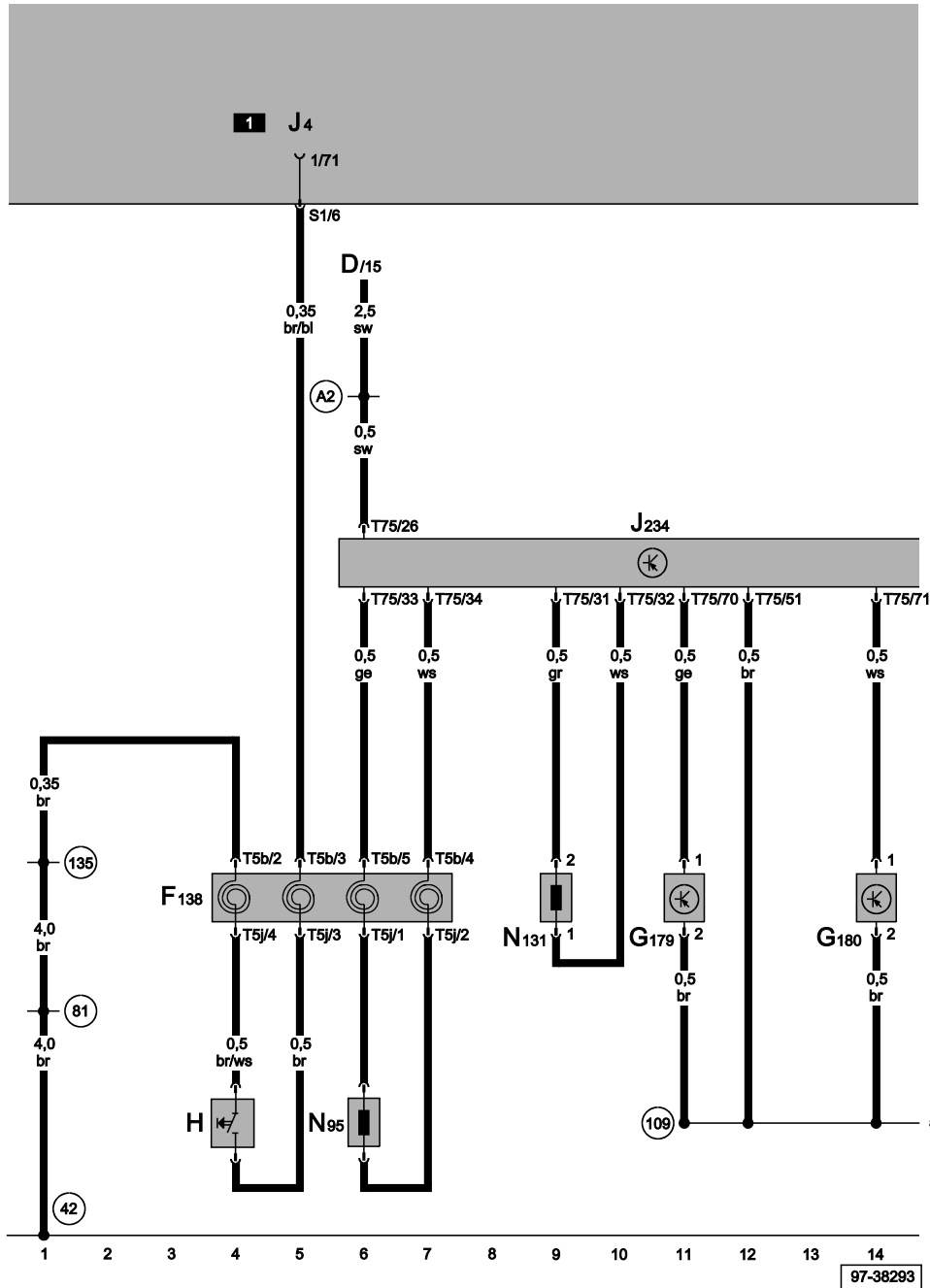
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red

7.5 A - brown

5 A - beige

3 A - lilac





Airbag control unit, airbag coil connector, front airbag igniter , side airbag crash sensors

- D Ignition and starter switch
- F138 Airbag coil connector and return ring with slip ring
- G179 Driver crash sensor for side airbag
- G180 Front passenger crash sensor for side airbag
- H Horn plate
- J4 Dual tone horn relay
- J234 Airbag control unit, behind lower console
- N95 Driver airbag igniter
- N131 Front passenger airbag igniter 1
- T5b 5-pin connector
- T5j 5-pin connector, in steering wheel
- T75 75-pin connector

- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 109 Earth connection, in airbag wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A2 Positive connection (15), in dash panel wiring harness

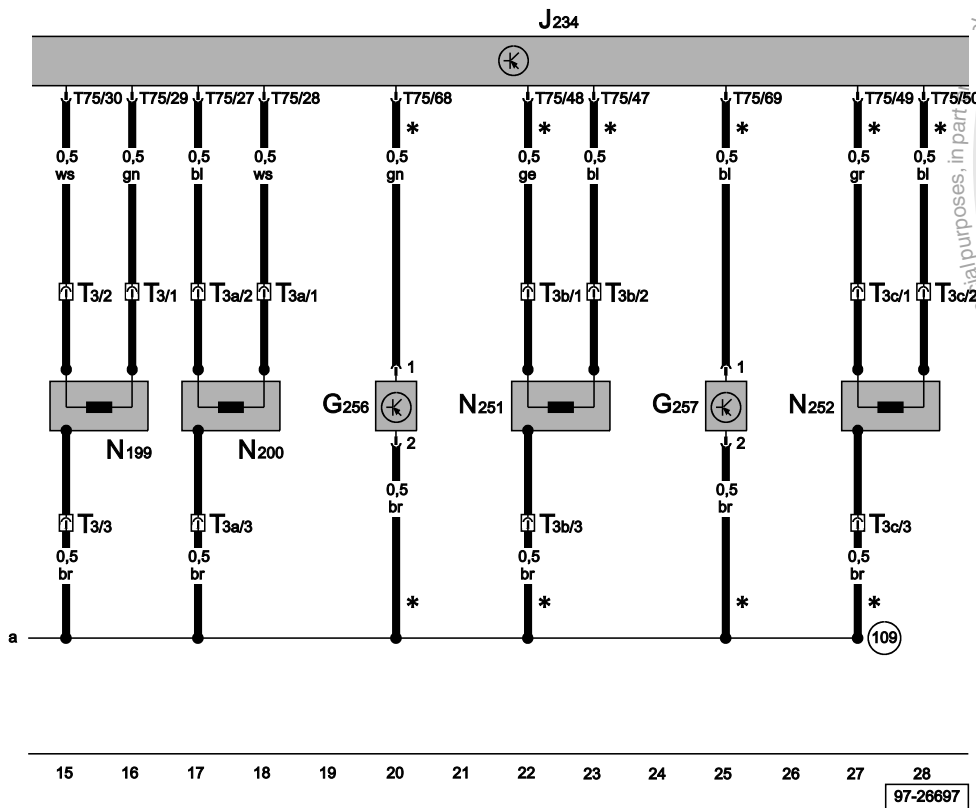
- ws = white
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- gn = green
- bl = blue
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- rs = pink

Airbag control unit, side airbag igniter, rear side airbag crash sensor, curtain airbag igniter

- G256 Rear side airbag crash sensor, driver's side*
- G257 Rear side airbag crash sensor, front passenger's side*
- J234 Airbag control unit, down behind console
- N251 Curtain airbag igniter, driver's side*
- N252 Curtain airbag igniter, front passenger's side*
- N199 Side airbag igniter, driver's side
- N200 Side airbag igniter, front passenger's side
- T3 3-pin connector, under driver's seat
- T3a 3-pin connector, under front passenger's seat
- T3b 3-pin connector
- T3c 3-pin connector
- T75 75-pin connector

109 Earth connection, in airbag wiring harness

* Applies to models with curtain airbags from November 1999

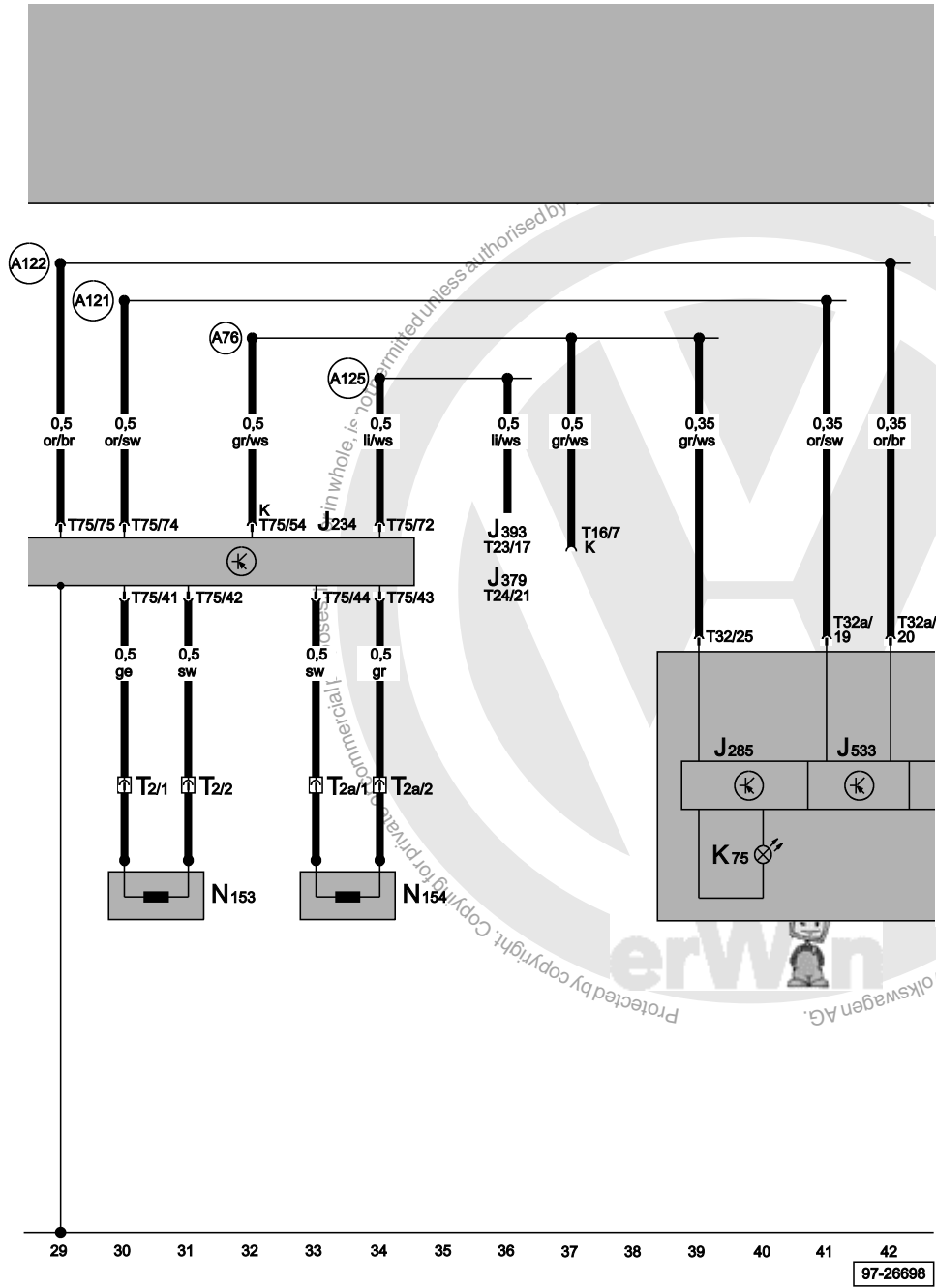


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- gn = green
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- li = purple
- ge = yellow
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- rs = pink

Airbag control unit, belt tensioner igniter, airbag warning lamp

- J234 Airbag control unit, behind lower console
- J285 Control unit in dash panel insert
- J379 Central locking and anti-theft alarm system control unit
- J393 Convenience system central control unit
- J533 Data bus diagnostic interface, in dash panel insert
- K75 Airbag warning lamp, in dash panel insert
- N153 Driver seat belt tensioner igniter 1
- N154 Front passenger seat belt tensioner igniter 1
- T2 2-pin connector, under driver seat
- T2a 2-pin connector, under driver seat
- T16 16-pin connector, in centre of dash panel, diagnostic socket
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T75 75-pin connector

- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (A121) Connection (high-bus), in dash panel wiring harness
- (A122) Connection (low-bus), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness



97-26698

1.4 litre/55 kW Motronic, engine codes APE

From May 1999

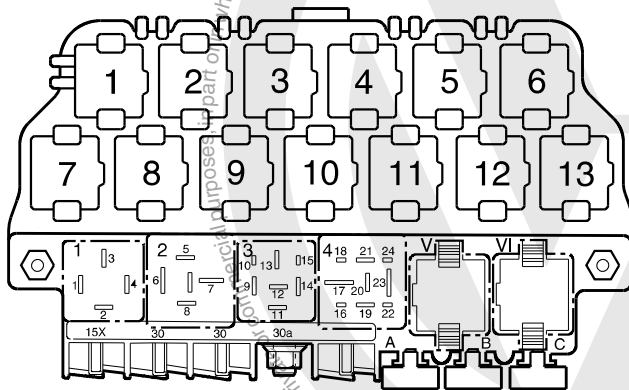
1.4 litre/55 kW Motronic, engine codes AXP

From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

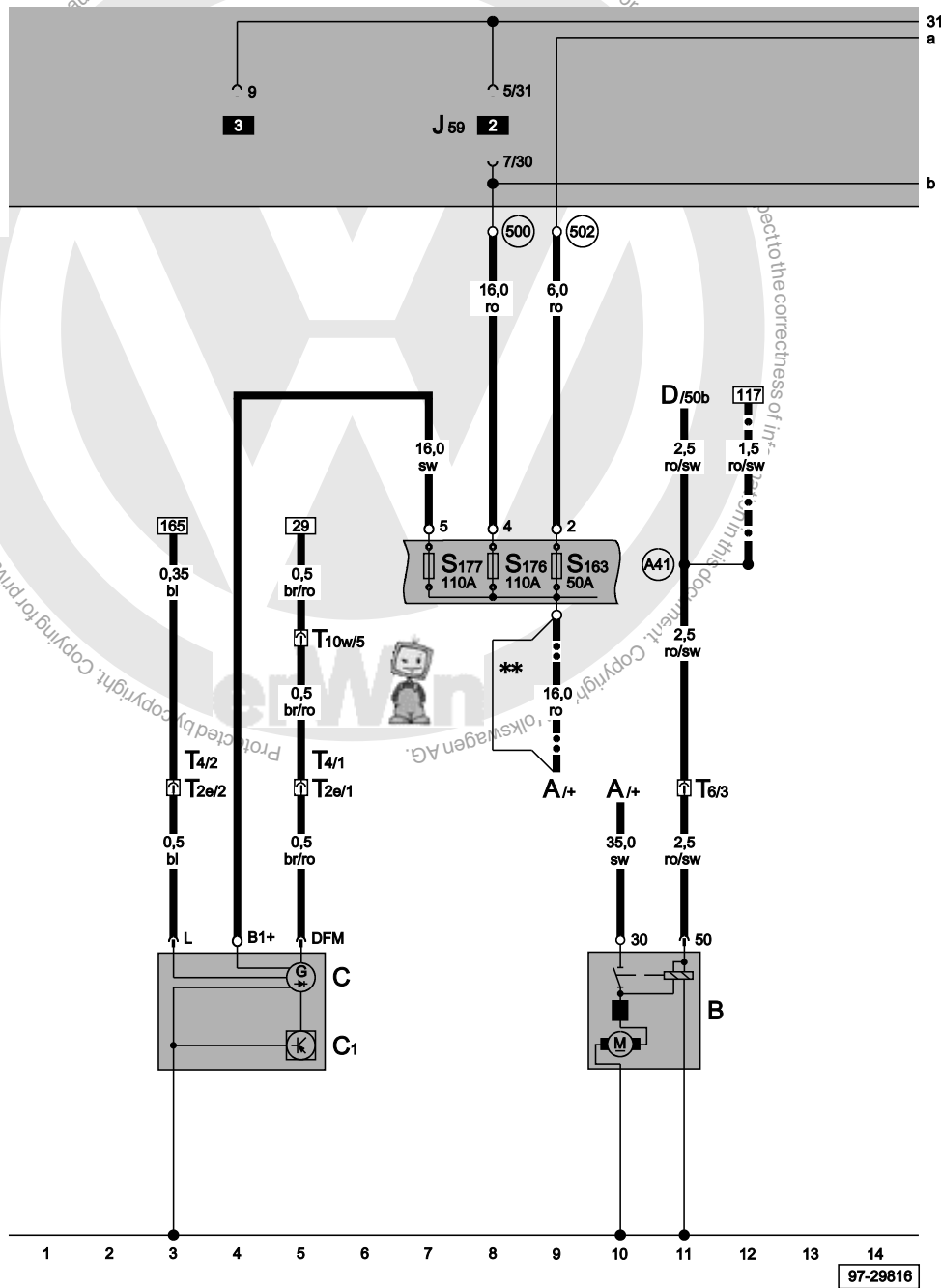
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown

5 A - beige

3 A - lilac





Alternator, starter

- A Battery
 - B Starter
 - C Alternator
 - C1 Voltage regulator
 - D Ignition/starter switch
 - J59 X contact relief relay
 - S163 Fuse -2- (30), in fuse box/battery
 - S176 Fuse -4- (30), in fuse box/battery
 - S177 Fuse -5- (30), in fuse box/battery
 - T2e 2-pin connector, near starter (only models without air conditioner)
 - T4 4-pin connector, near starter (only models with air conditioner)
 - T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
 - T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
 - 502 Screw connection -1- (30a), on relay plate
 - A41 Positive (+) connection (50), in dash panel wiring harness (up to April 2001)
 - From September 2000
 - ** Up to August 2000
 - Up to April 2001

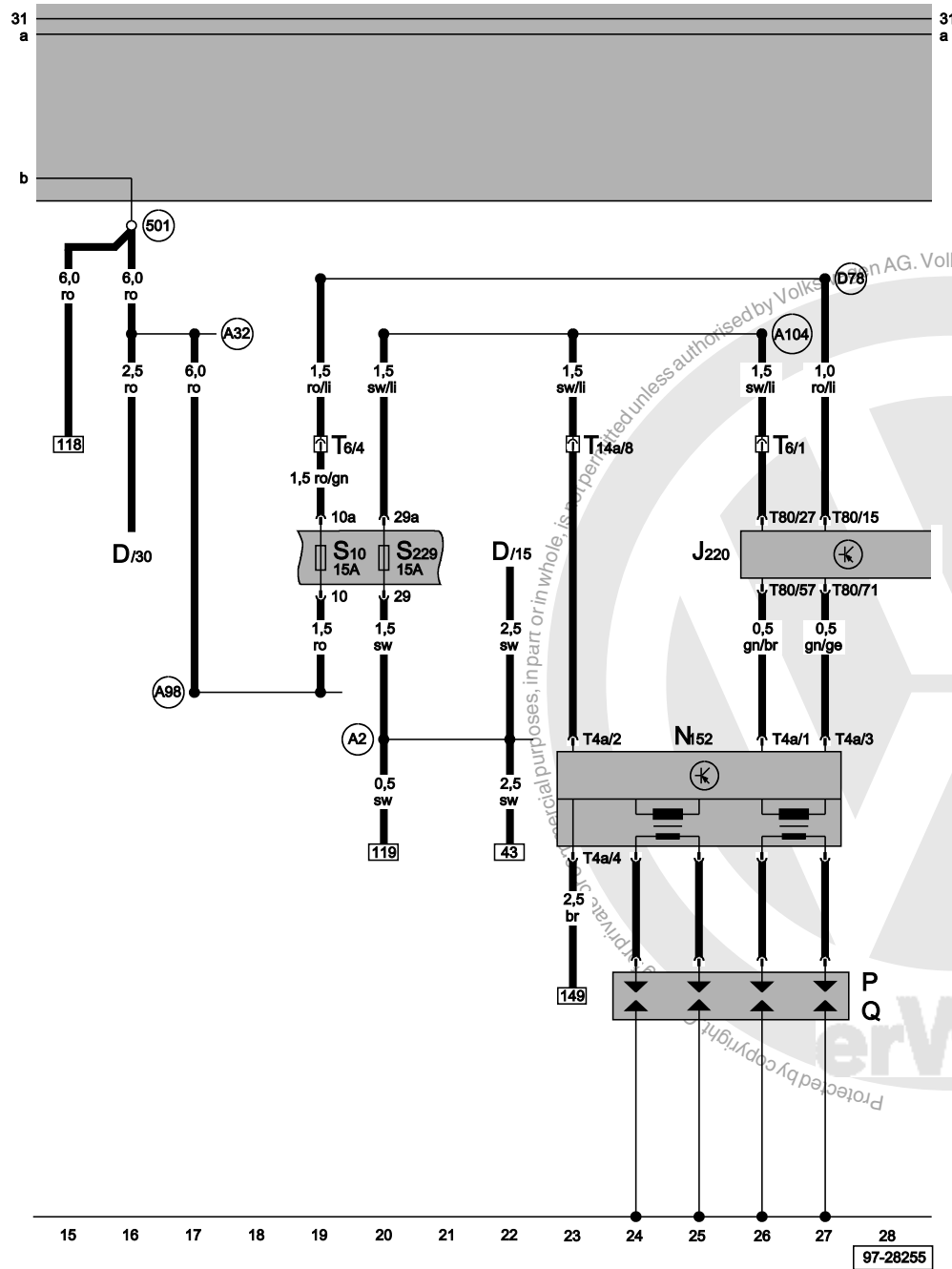
- ws = white
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- rs = pink

97-29816

Motronic control unit, ignition system

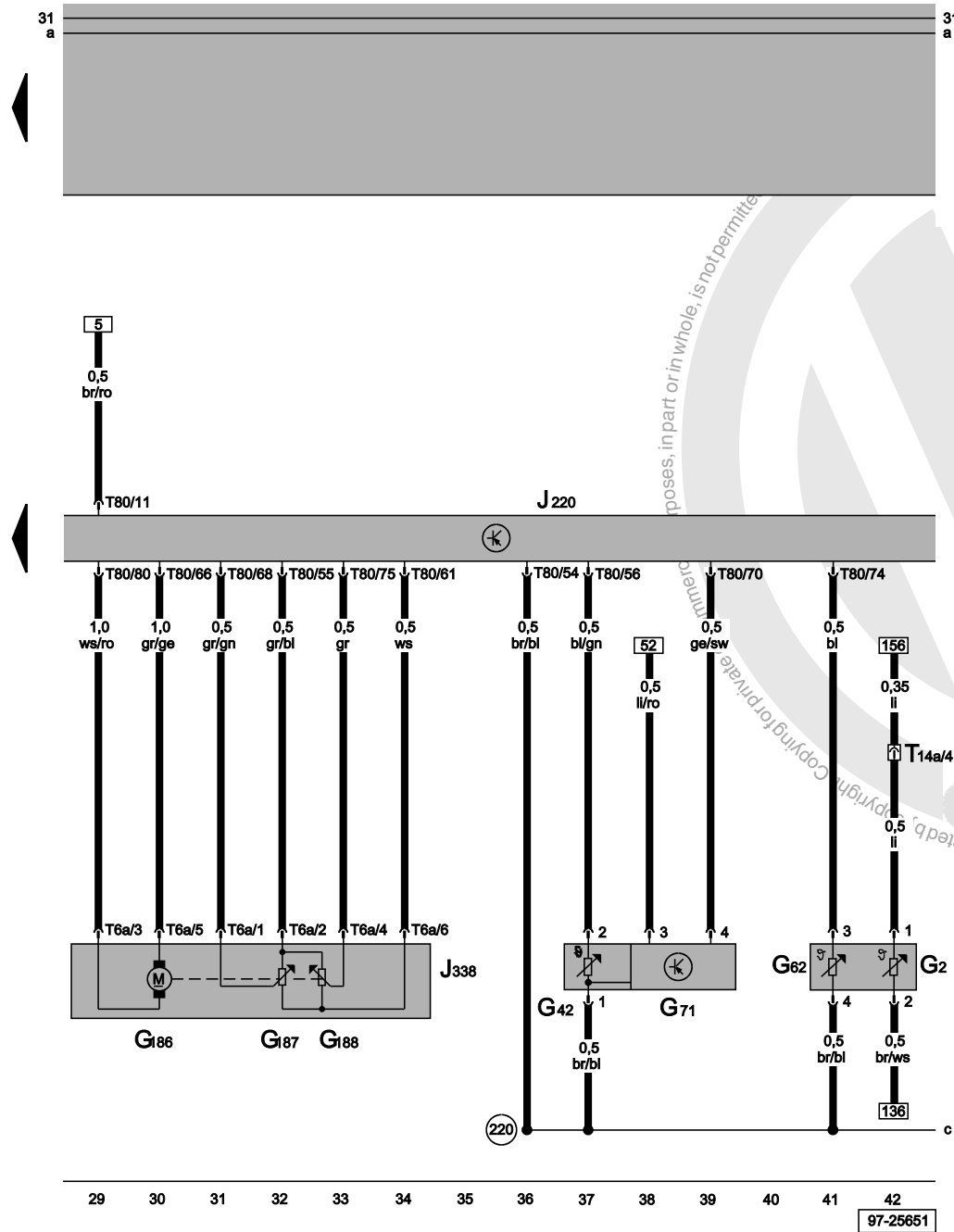
- D Ignition/starter switch
- J220 Motronic control unit, in plenum chamber, centre
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plug
- S10 Fuse in fuse box
- S229 Fuse in fuse box
- T4a 4-pin connector
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness
- D78 Positive (+) connection -1- (30a), in engine compartment wiring harness



Motronic control unit, throttle valve control unit, coolant temperature sender, intake air temperature sender, intake manifold pressure sender

- G2 Coolant temperature sender
- G42 Intake air temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G186 Throttle valve drive (electric throttle operation)
- G187 Throttle valve drive angle sender -1- (electric throttle operation)
- G188 Throttle valve drive angle sender -2- (electric throttle operation)
- J220 Motronic control unit, in plenum chamber, centre
- J338 Throttle valve control unit
- T6a 6-pin connector
- T80 80-pin connector
- 220 Earth connection (sender earth), in engine wiring harness

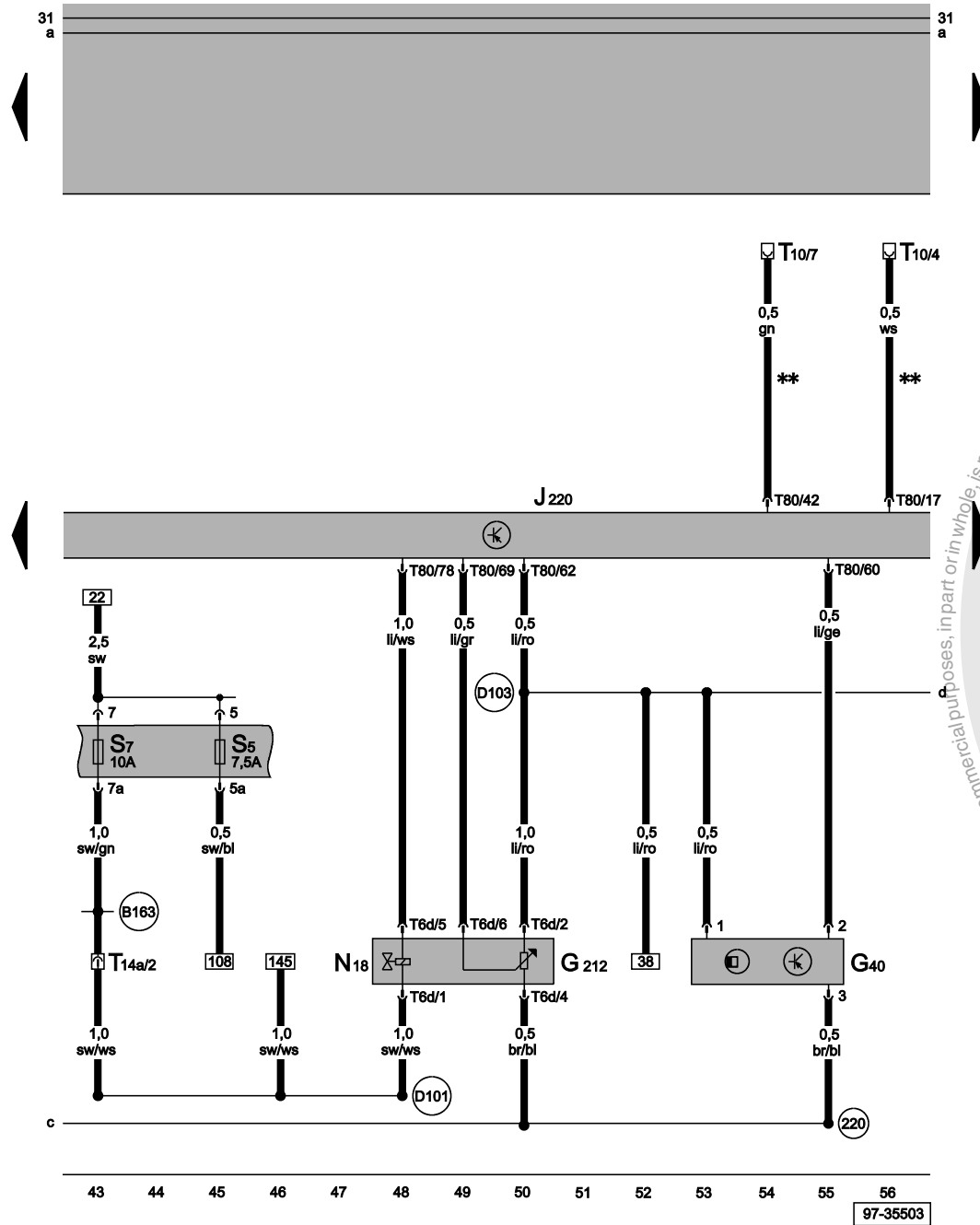


- ws = white
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- ge = yellow
- or = orange
- rs = pink

Motronic control unit, Hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve

- G40 Hall sender 1
- G212 Exhaust gas recirculation potentiometer
- J220 Motronic control unit, in plenum chamber, centre
- N18 Exhaust gas recirculation valve
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T6d 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- 220 Earth connection (sender earth), in engine wiring harness
- B163 Positive connection -1- (15), in interior wiring harness
- D101 Connection -1-, in engine compartment wiring harness
- D103 Connection -3-, in engine compartment wiring harness
- ** Connection for air conditioner



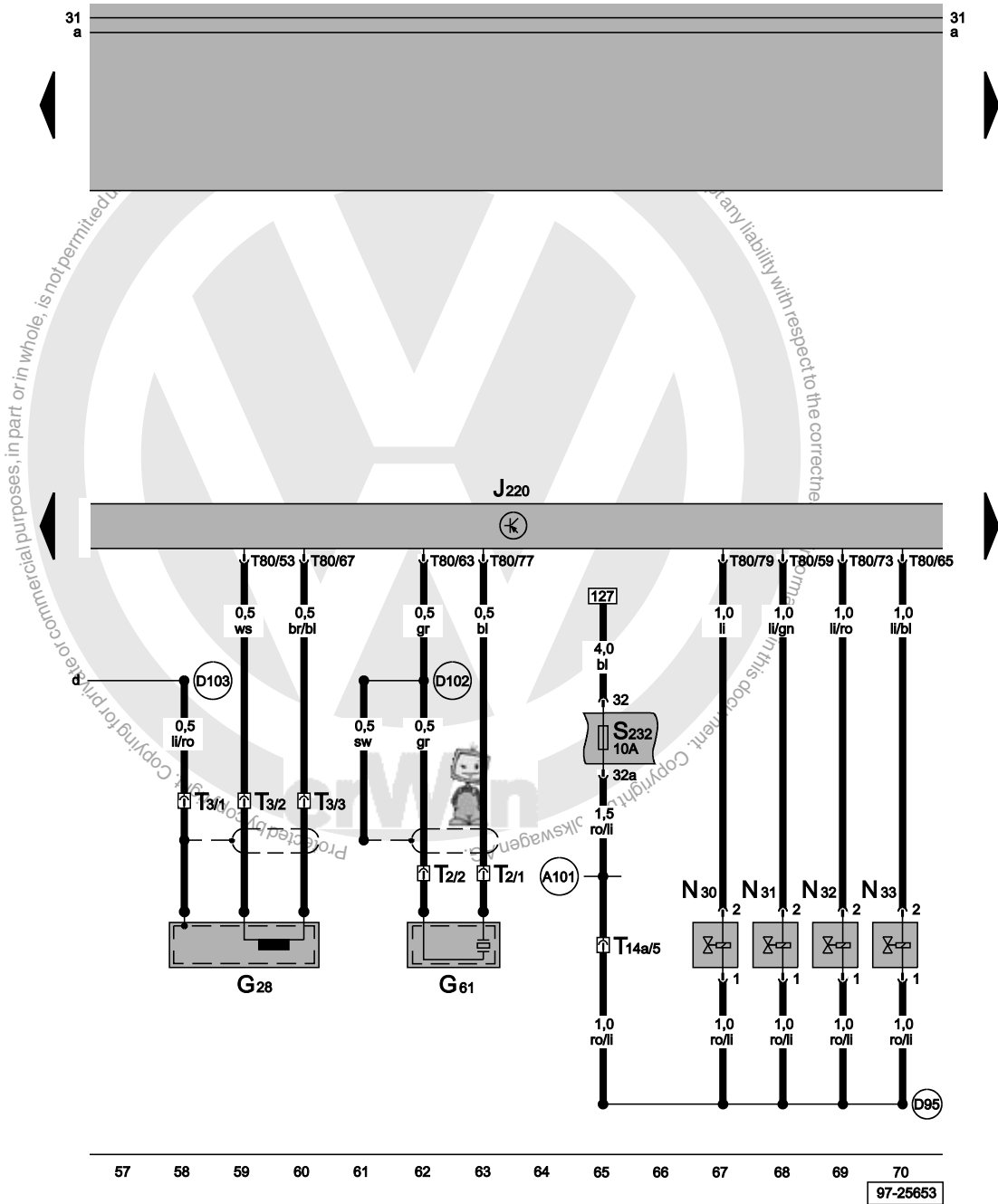
- ws = white
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- rs = pink

97-35503

Motronic control unit, knock sensor, engine speed sender, injectors

- G28 Engine speed sender
- G61 Knock sensor
- J220 Motronic control unit, in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T2 2-pin connector, on cylinder head, left
- T3 3-pin connector, on engine left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection -2-, in engine compartment wiring harness
- (D103) Connection -3-, in engine compartment wiring harness

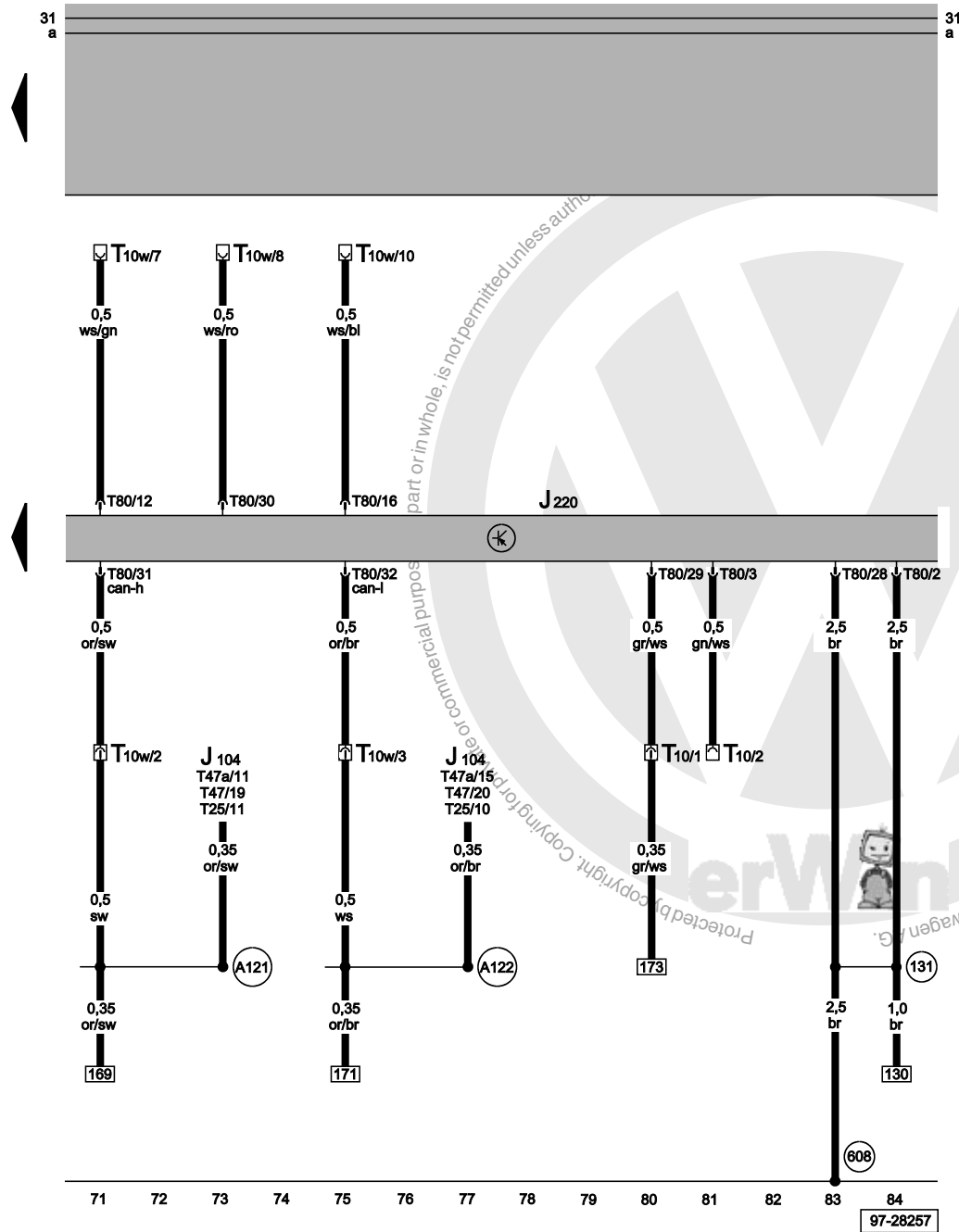


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit

- J104 ABS/ABS with EDL control unit
- J220 Motronic control unit, in plenum chamber, centre
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T80 80-pin connector

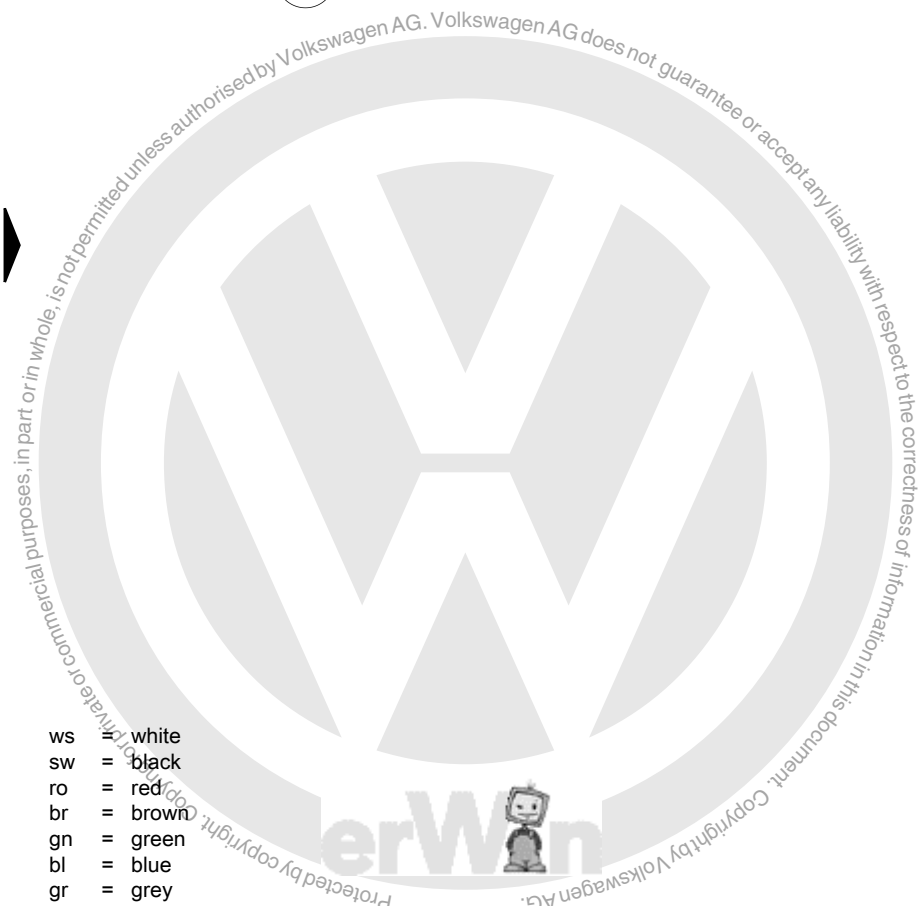
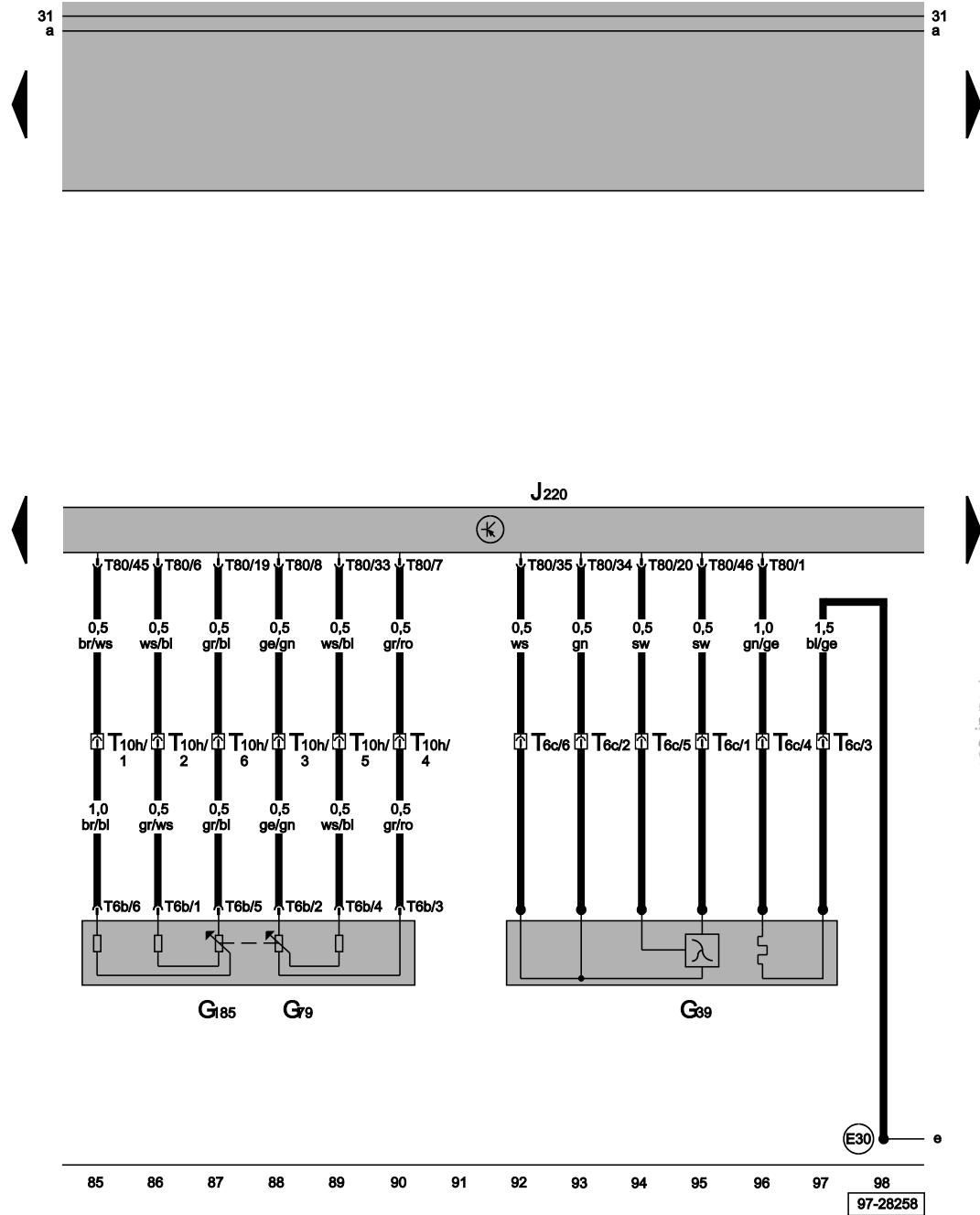
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



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- ge = yellow
- or = orange
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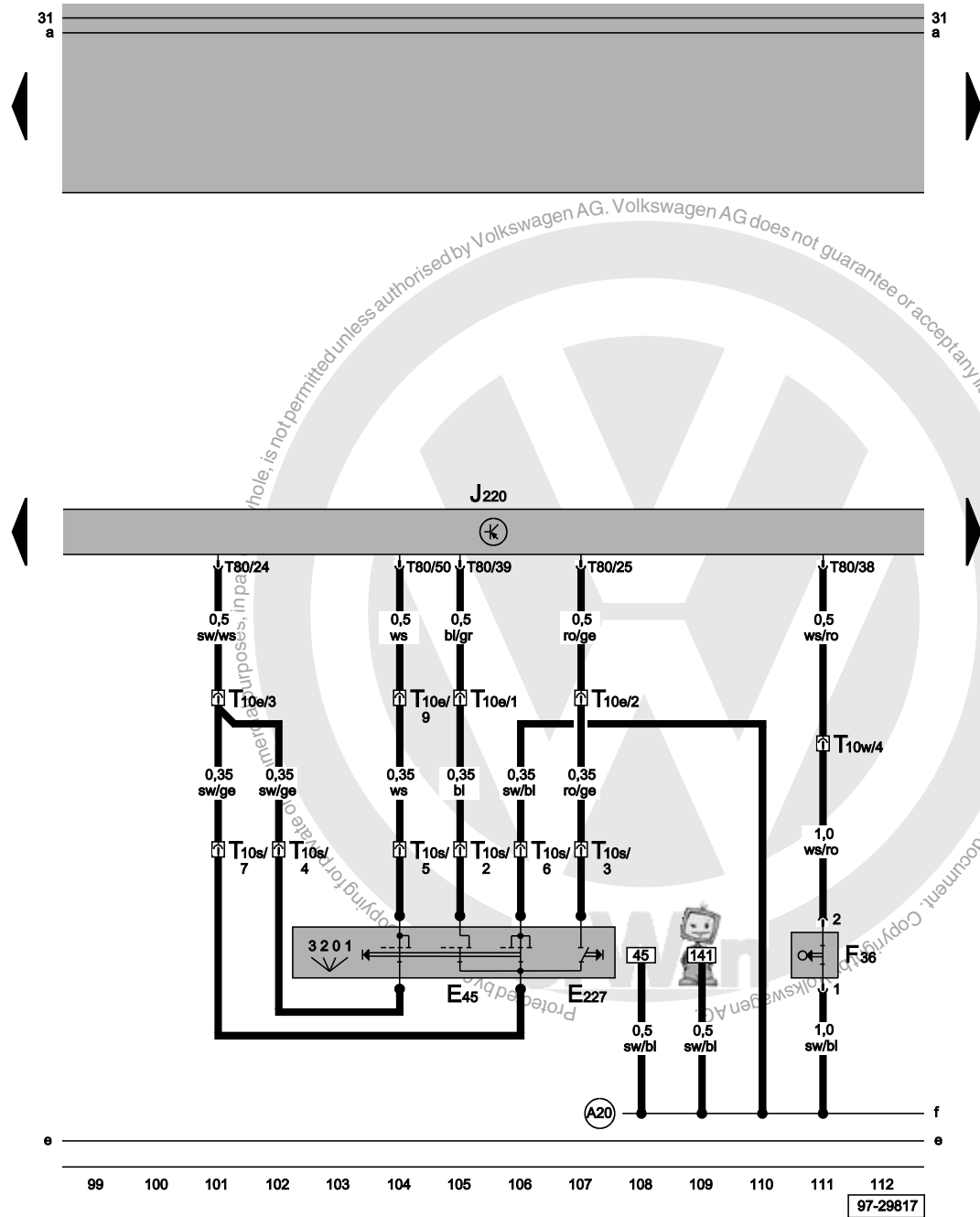
Motronic control unit, accelerator pedal position sender, lambda probe

- G39 Lambda probe
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender-2-
- J220 Motronic control unit, in plenum chamber, centre
- T6b 6-pin connector
- T6c 6-pin connector, near catalyst
- T10h 10-pin connector, blue, in control unit protective housing, in plenum chamber, left
- T80 80-pin connector
- (E30) Connection (87a), in engine wiring harness

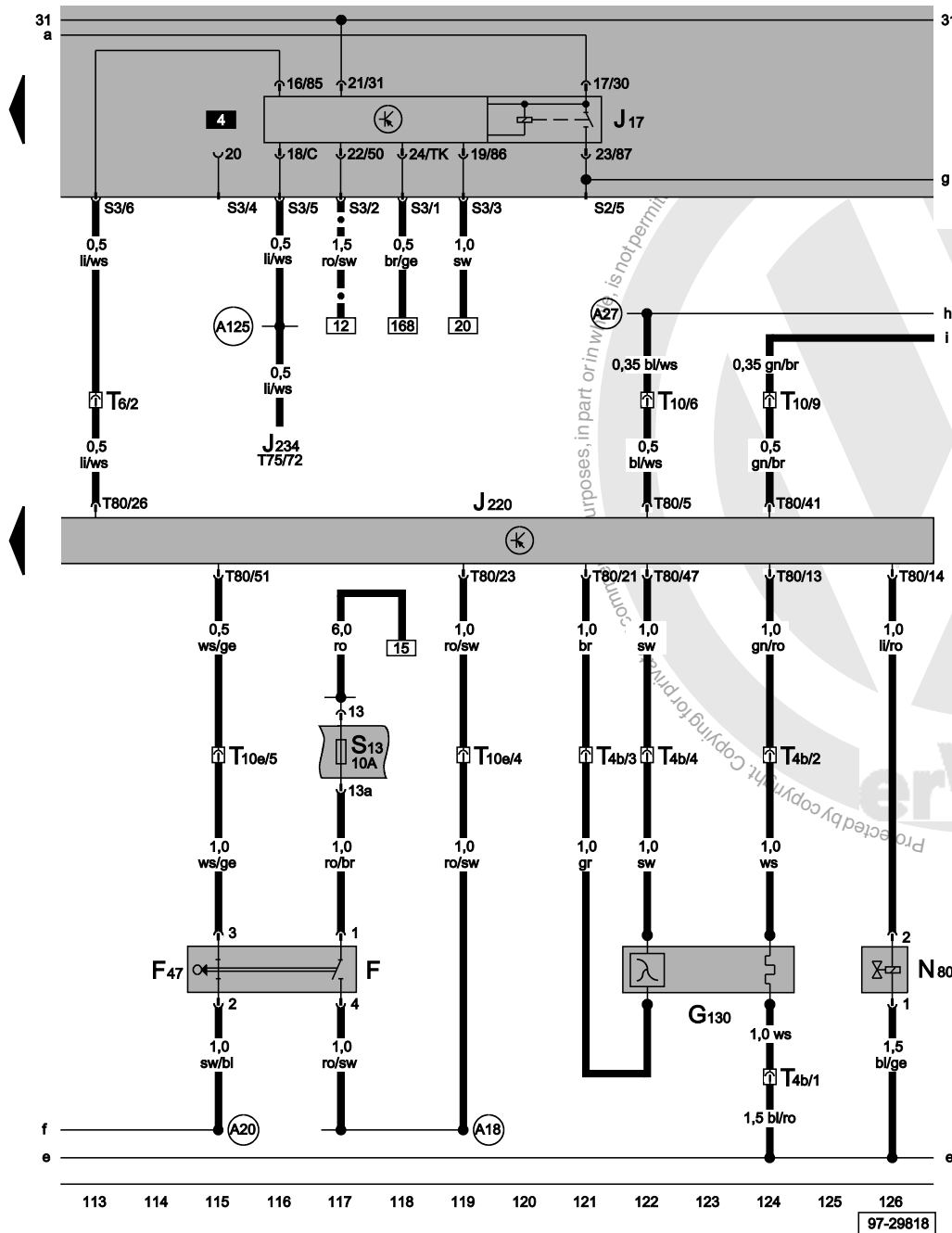


Motronic control unit, cruise control system switch (CCS), clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)**
- F36 Clutch pedal switch
- J220 Motronic control unit, in plenum chamber, centre
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T80 80-pin connector
- A20 Connection (15a), in dash panel wiring harness
- ** Only models with CCS



Motronic control unit, cruise control system brake pedal switch, brake light switch, lambda probe after catalyst, fuel pump relay, activated charcoal filter system solenoid valve



- F Brake light switch
- F47 Cruise control system brake pedal switch
- G130 Lambda probe after catalytic
- J17 Fuel pump relay
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit
- N80 Activated charcoal filter system solenoid valve 1
- S13 Fuse in fuse box
- T4b 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T75 75-pin connector
- T80 80-pin connector

- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness

Up to April 2001

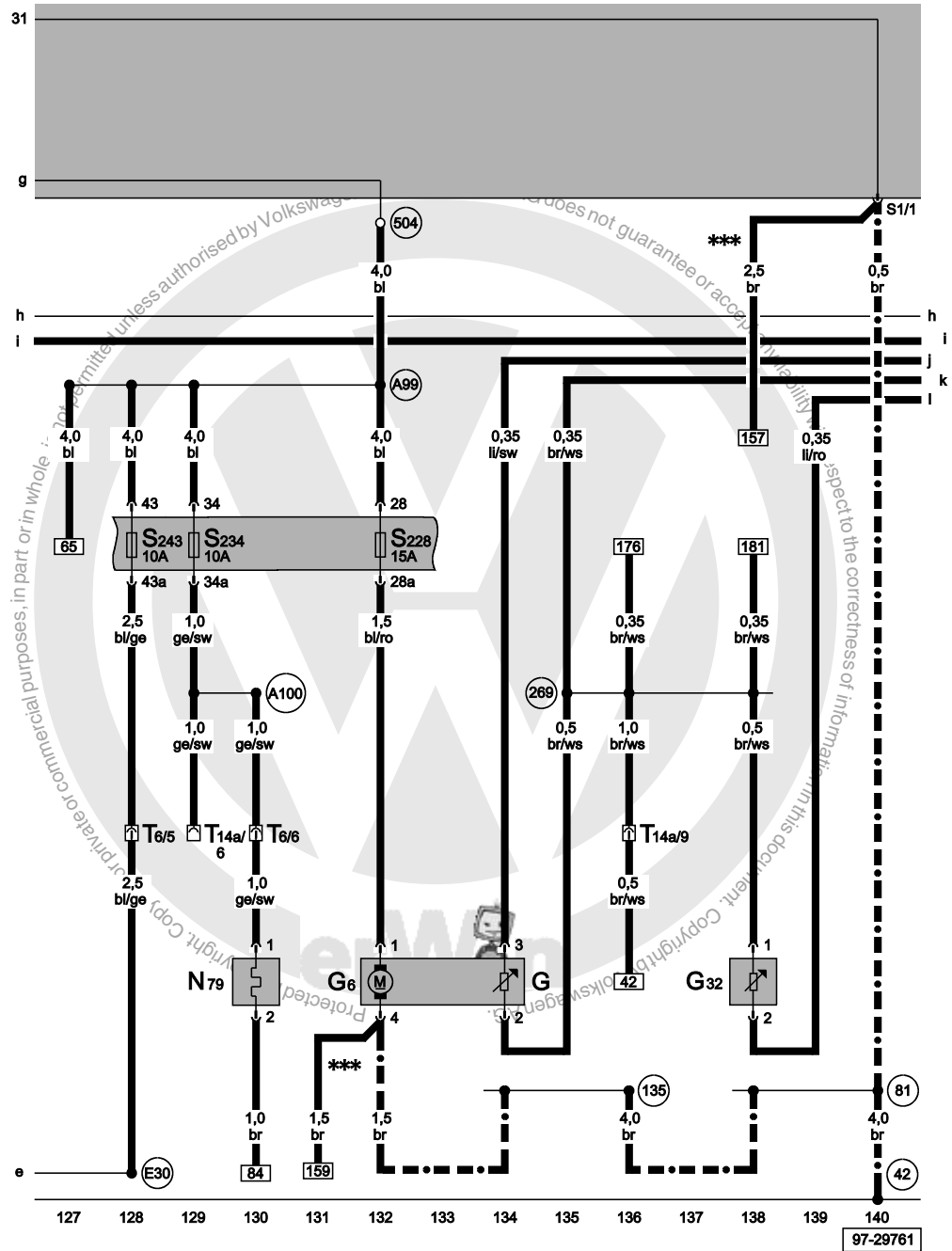
- ws = white
- sw = black
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- ge = yellow
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Fuel pump, fuel gauge sender, coolant shortage indicator sender, heater element (crankcase breather)

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- N79 Heater element (crankcase breather)
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

- (42) Earth point, next to steering column
- (81) Earth connection -1-, in dash panel wiring harness
- (135) Earth connection -2-, in dash panel wiring harness
- (269) Earth connection (sender earth) -1-, in dash panel wiring harness
- (504) Screw connection -1- (87F), on relay plate
- (A99) Connection -1- (87), in dash panel wiring harness
- (A100) Connection -2- (87), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness
- *** From May 2000
- .- Up to April 2000

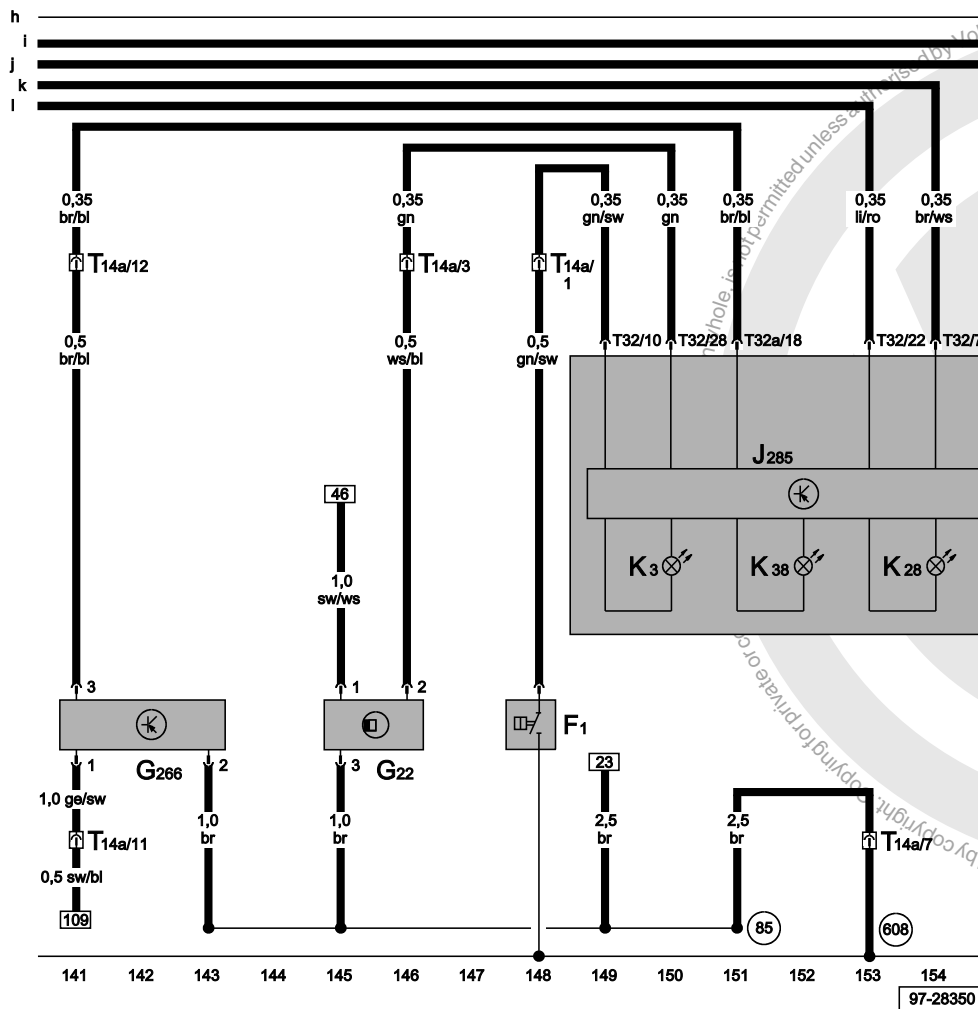
- ws = white
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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

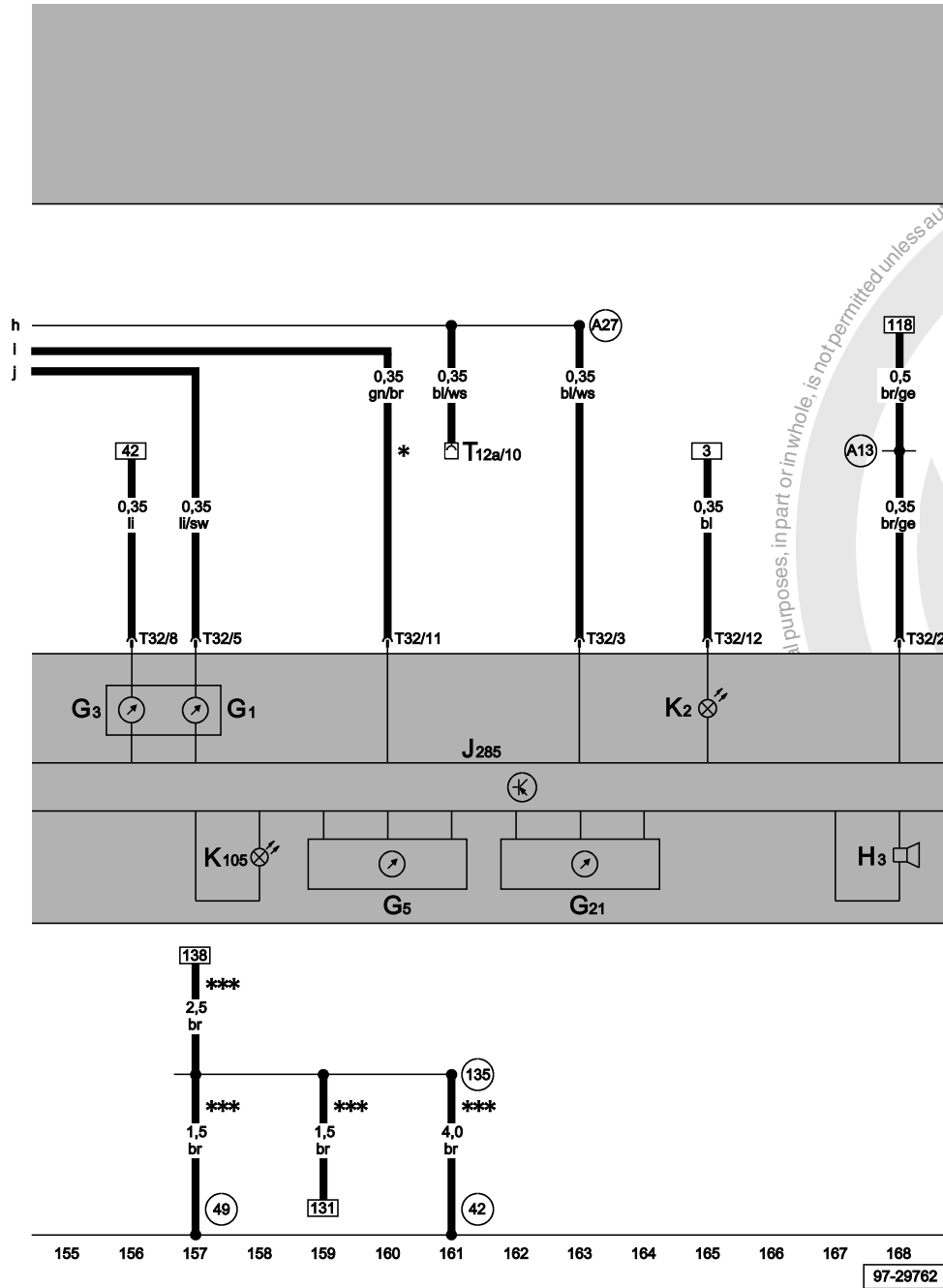
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- * Only with flexible service interval display



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- gn = green
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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- *** From May 2000



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- or = orange
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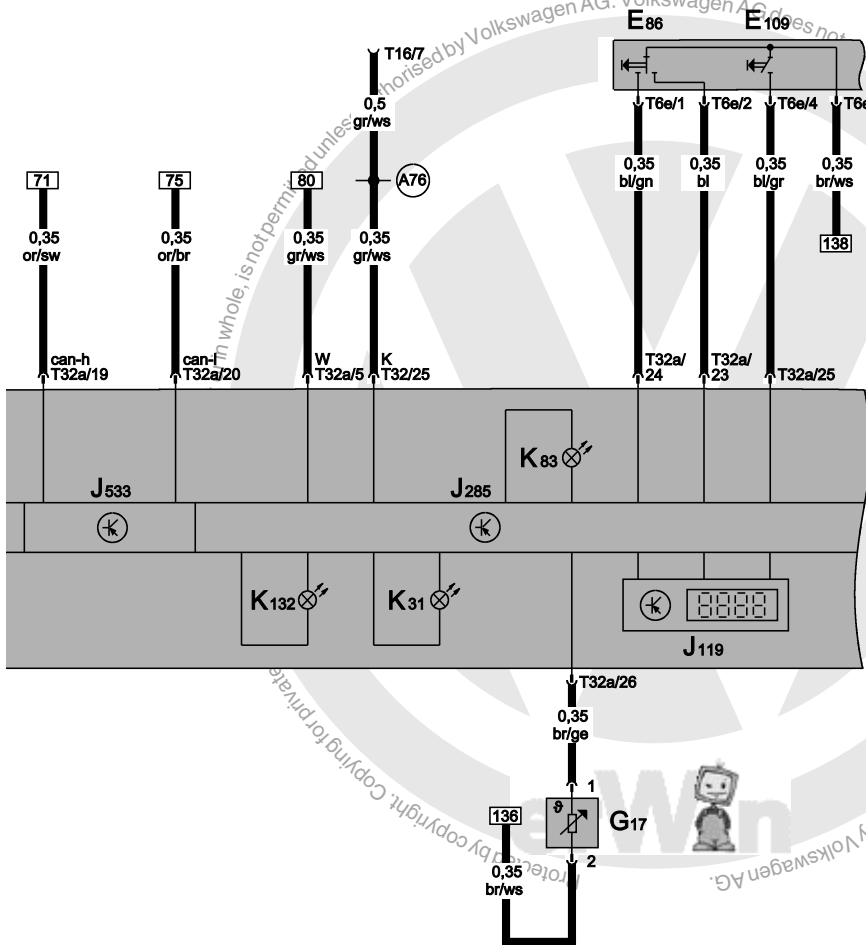
97-29762

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multi-function display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp**
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness

** Only engine codes AXP



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1.6 litre/74 kW Simos, engine codes AEH

From May 1999

1.6 litre/74 kW Simos, engine codes AKL

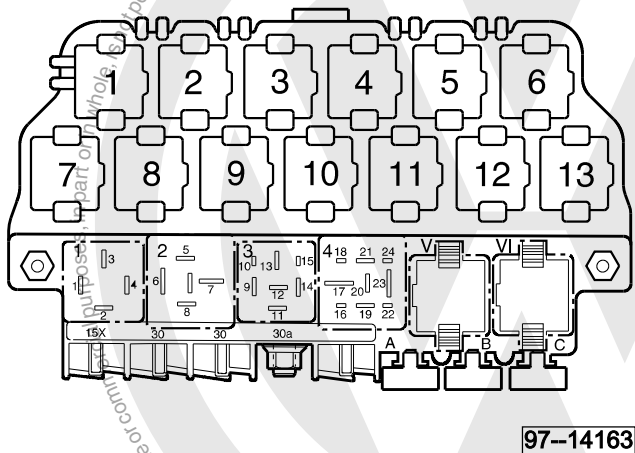
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



4 - Fuel pump relay (409)



Notes:

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

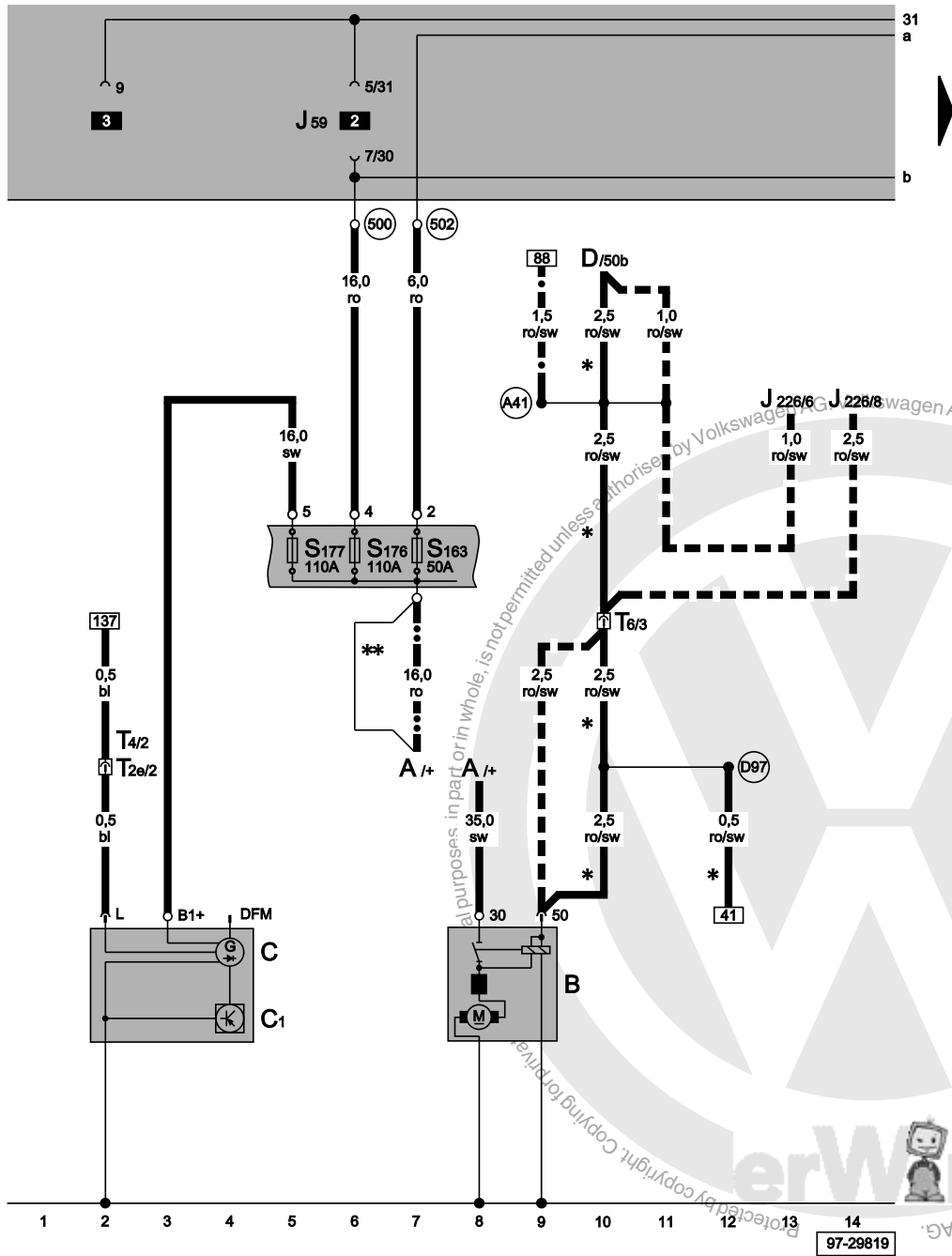
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red

7.5 A - brown

5 A - beige

3 A - lilac





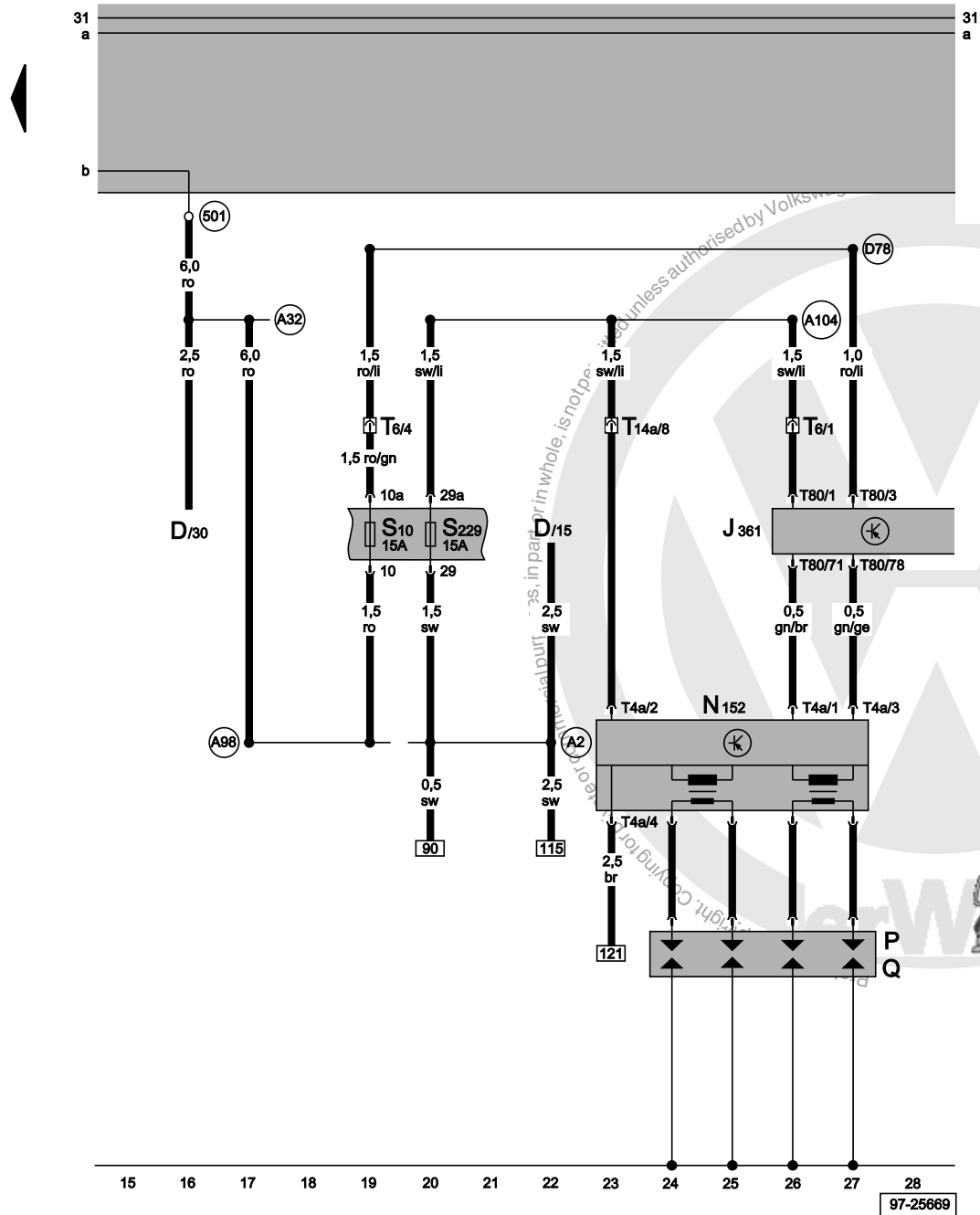
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left

- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- A41 Positive (+) connection (50), in dash panel wiring harness (up to April 2001)
- D97 Connection (50), in engine compartment wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox
- ... Up to April 2001
- ** Up to August 2000
- From September 2000

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Simos control unit, ignition system



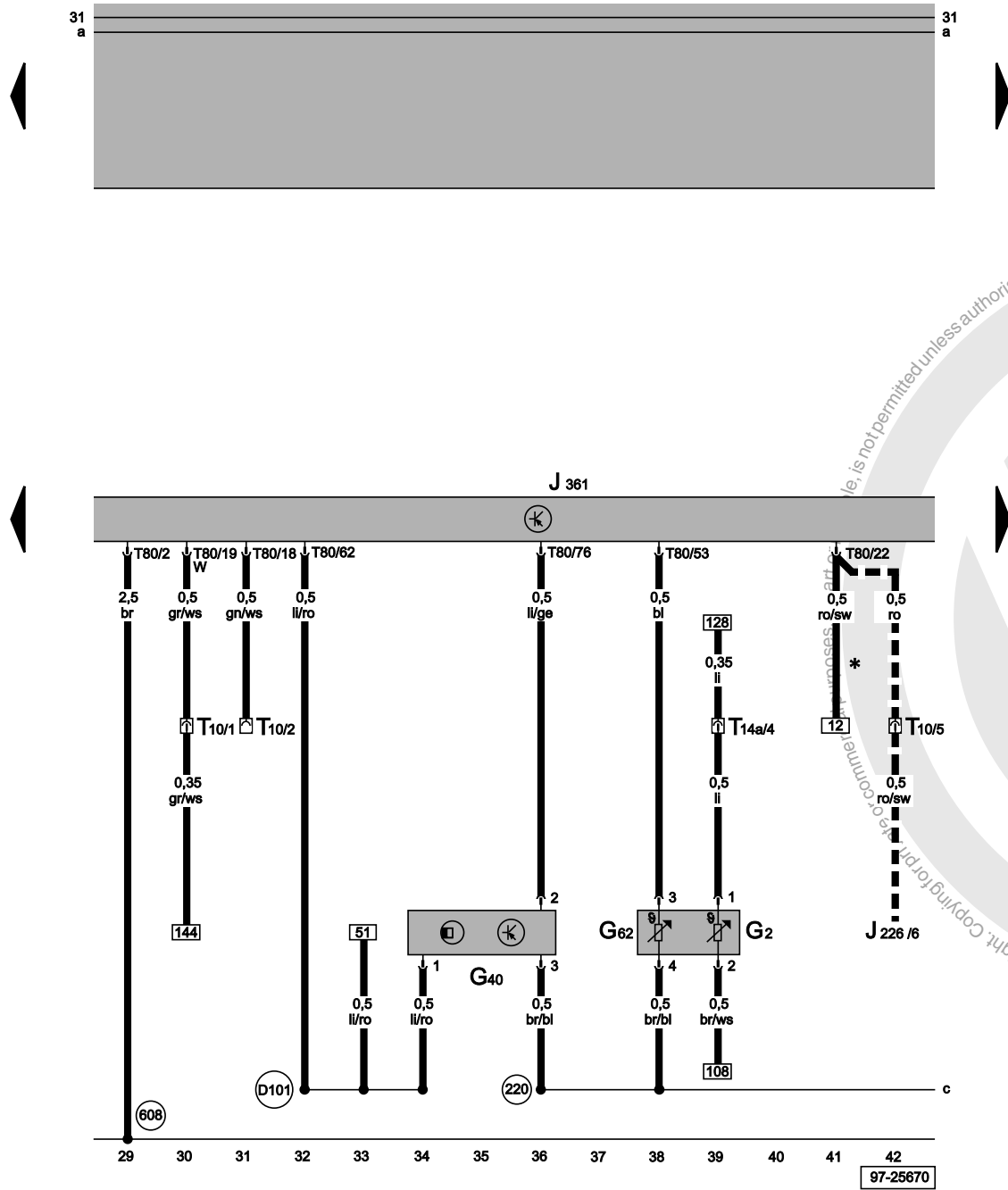
- D Ignition/starter switch
- J361 Simos control unit, centre in plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Flame plug
- S10 Fuse in relay plate fuse box
- S229 Fuse in fuse holder
- T4a 4-pin connector
- T6 6-pin connector, brown, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4-(30), in dash panel wiring harness
- A104 Positive connection -2- (15), in dash panel wiring harness
- D78 Positive connection -1- (30a), in engine compartment wiring harness

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- or = orange
- rs = pink

97-25669

Simos control unit, coolant temperature sender, Hall sender

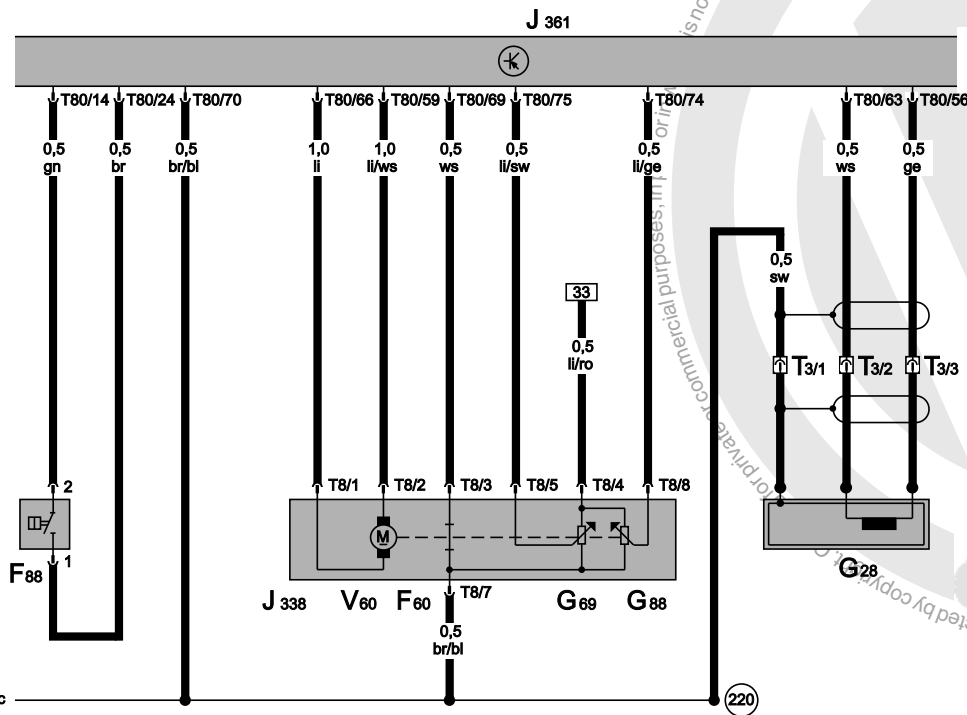
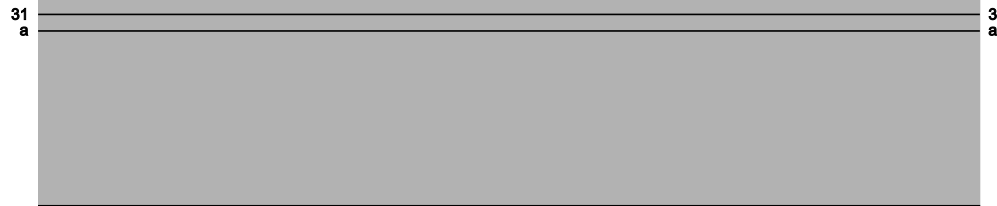
- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J226 Starter inhibitor and reversing light relay, above central electrics
- J361 Simos control unit, centre in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber
- D101 Connection -1-, in engine compartment wiring harness
- * For vehicles with manual gearbox only
- For vehicles with automatic gearbox only



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Simos control unit, throttle vane control part, engine speed sensor, power steering pressure switch

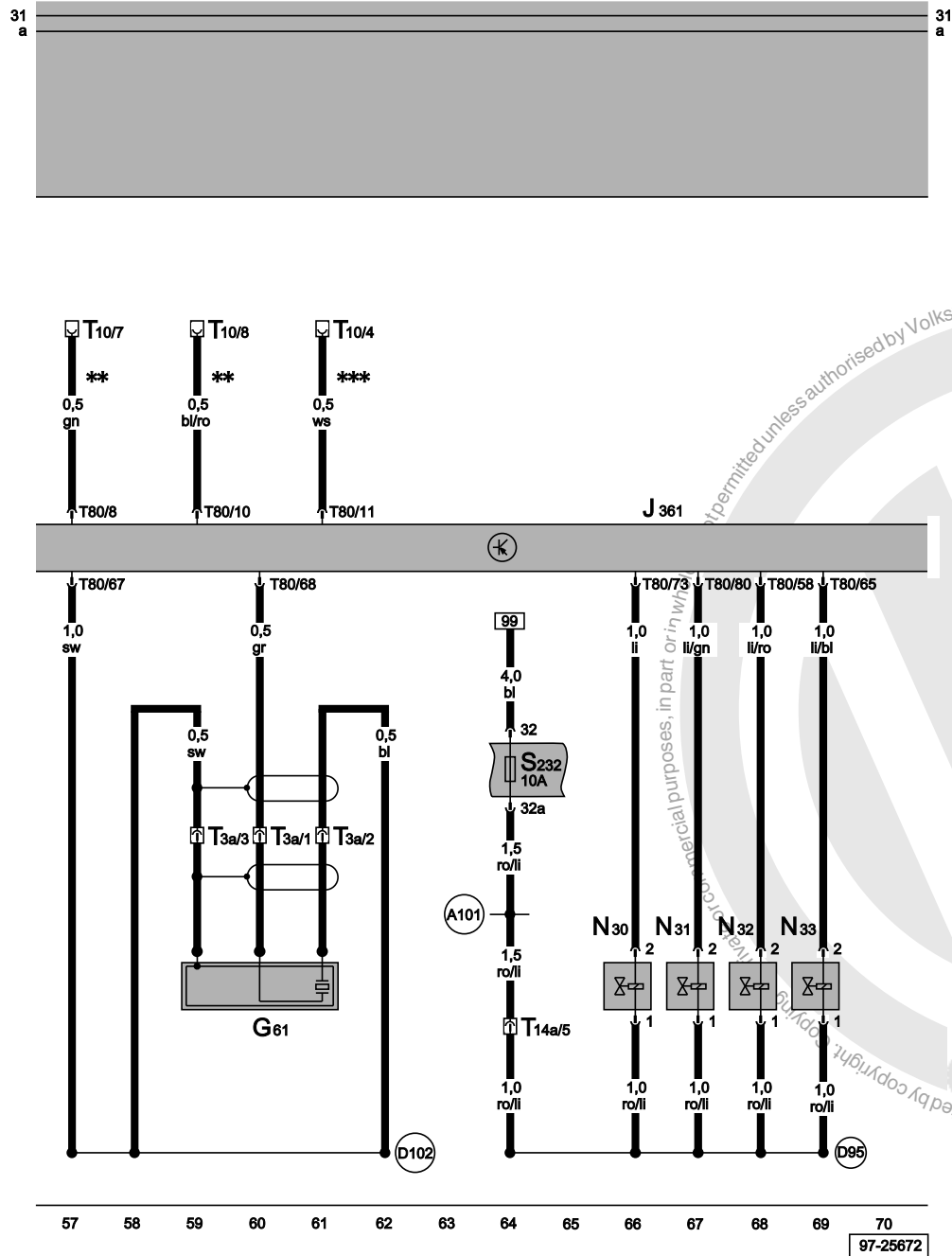
- F60 Idling switch
- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J338 Throttle valve control unit
- J361 Simos control unit, centre in plenum chamber
- T3 3-pin connector, near intake manifold
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- 220 Earth connection (sender earth), in engine wiring harness



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Simos control unit, knock sensor, injectors

- G61 Knock sensor I
- J361 Simos control unit, centre in plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse holder
- T3a 3-pin connector, near intake manifold
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector
- A101 Connection -3- (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- D102 Connection -2- in engine compartment wiring harness
- ** Air conditioning system
- *** Connection for radiator fan control unit



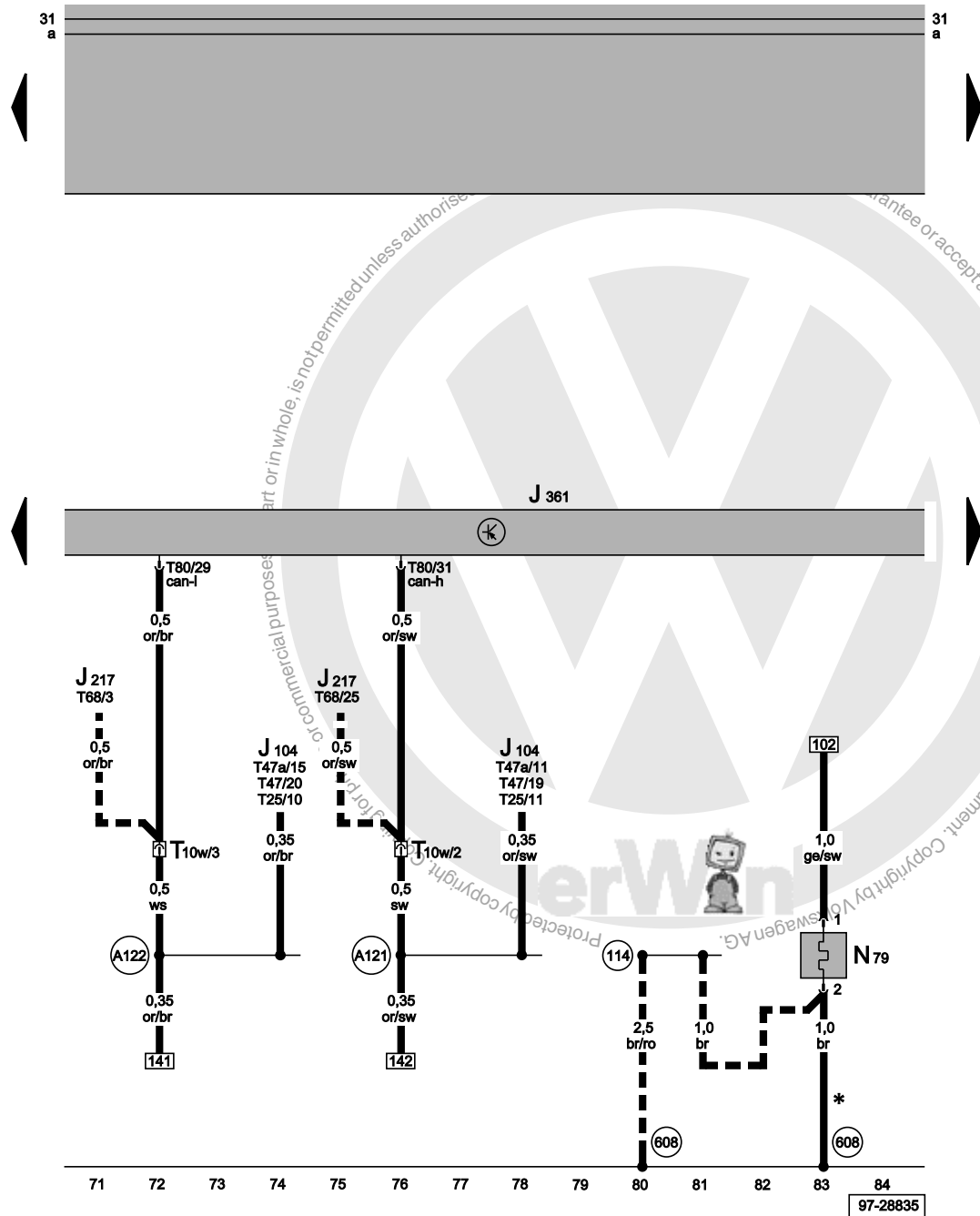
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97-25672

Simos control unit, heater element (crankcase breather)

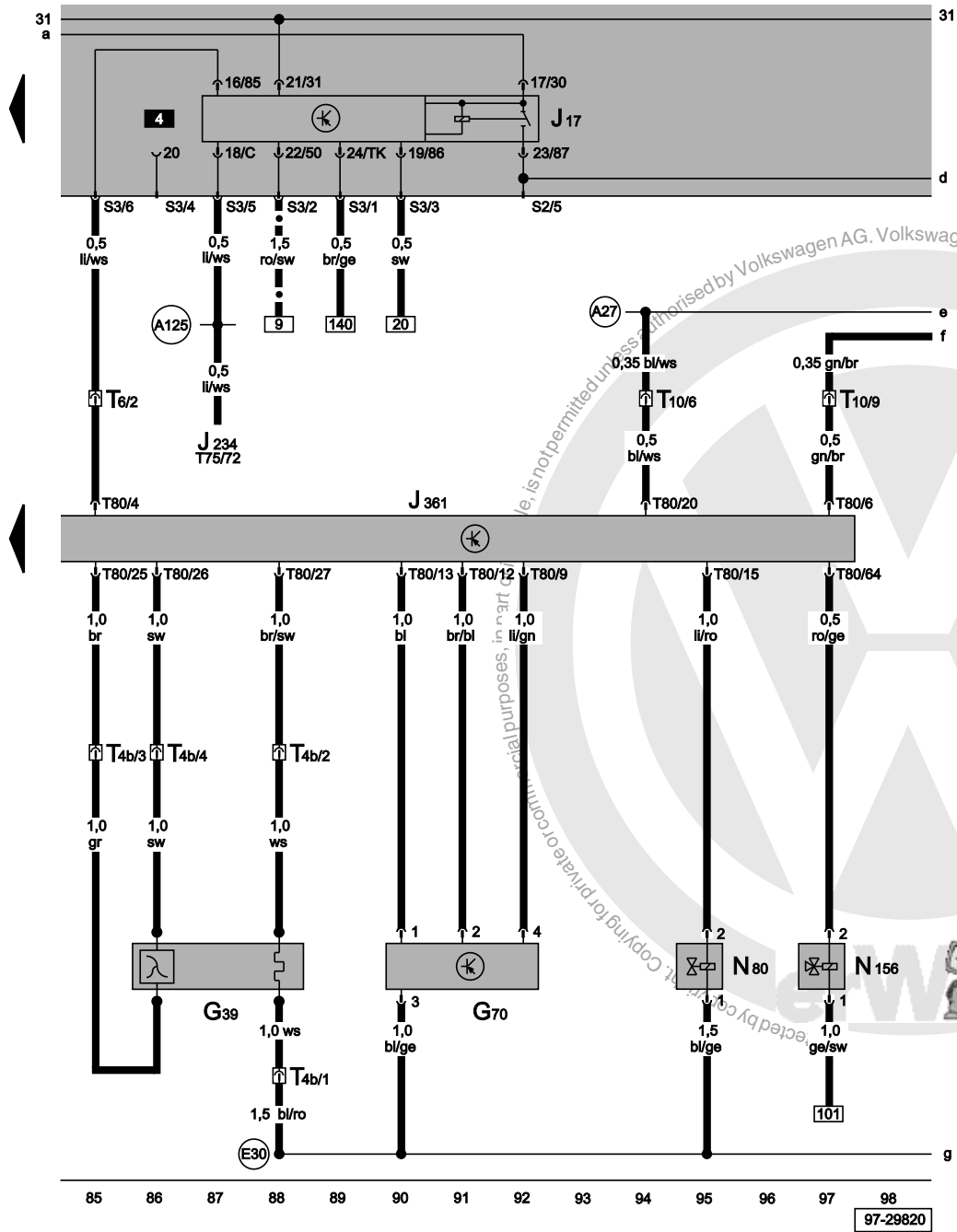
- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J361 Simos control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector
- T80 80-pin connector

- 114 Earth connection, in automatic gearbox wiring harness
- 608 Earth point, in plenum chamber, centre
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox



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Simos control unit, lambda probe, air mass meter, activated charcoal filter system solenoid valve, intake manifold change-over valve, fuel pump relay

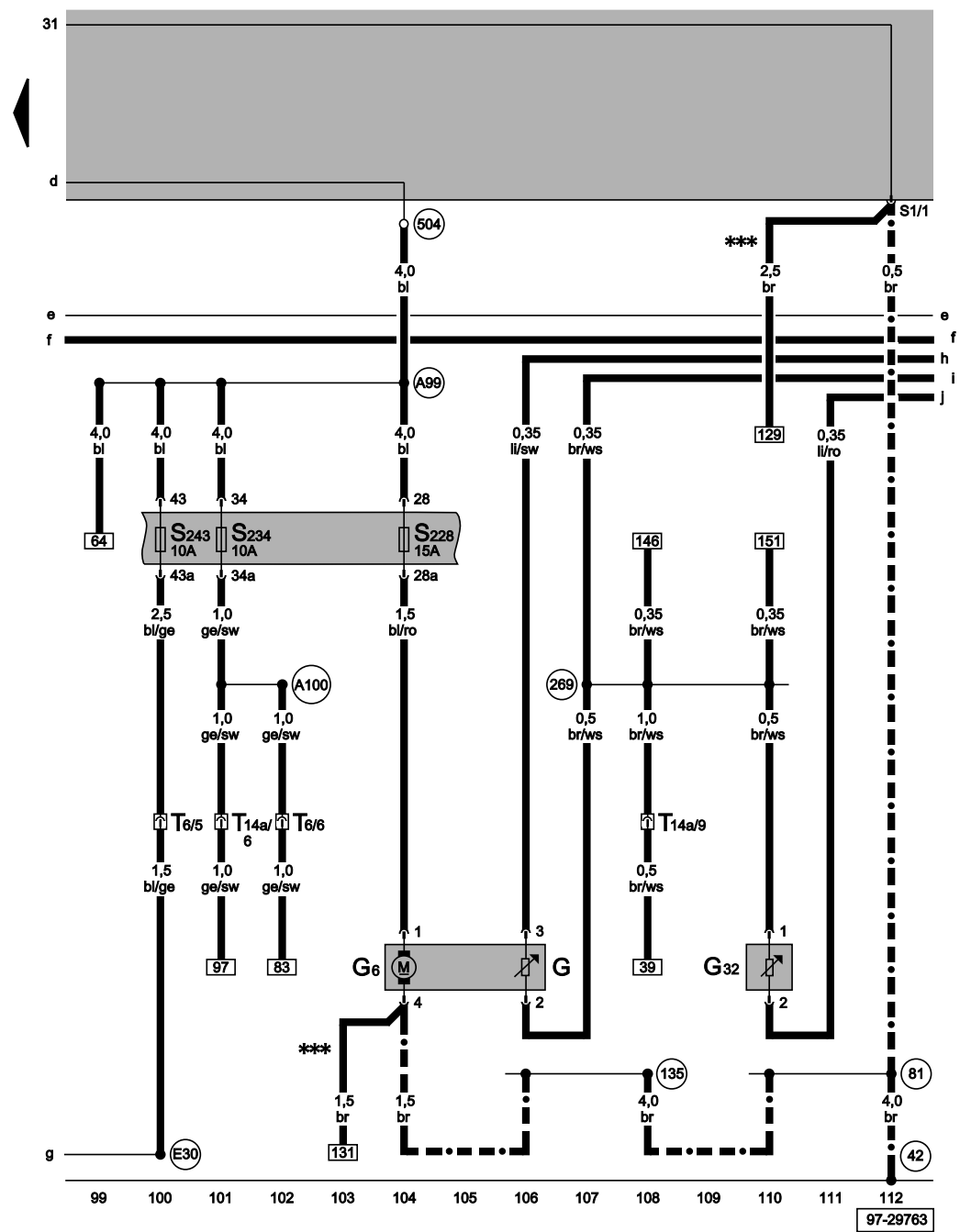


- G39 Lambda probe
- G70 Air mass meter
- J17 Fuel pump relay
- J234 Airbag control unit, behind lower console
- J361 Simos control unit, in plenum chamber, centre
- N80 Activated charcoal filter system solenoid valve 1
- N156 Intake manifold change-over valve
- T4b 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T75 75-pin connector
- T80 80-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- Up to April 2001

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- ge = yellow
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- rs = pink

Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** From May 2000
- Up to April 2000



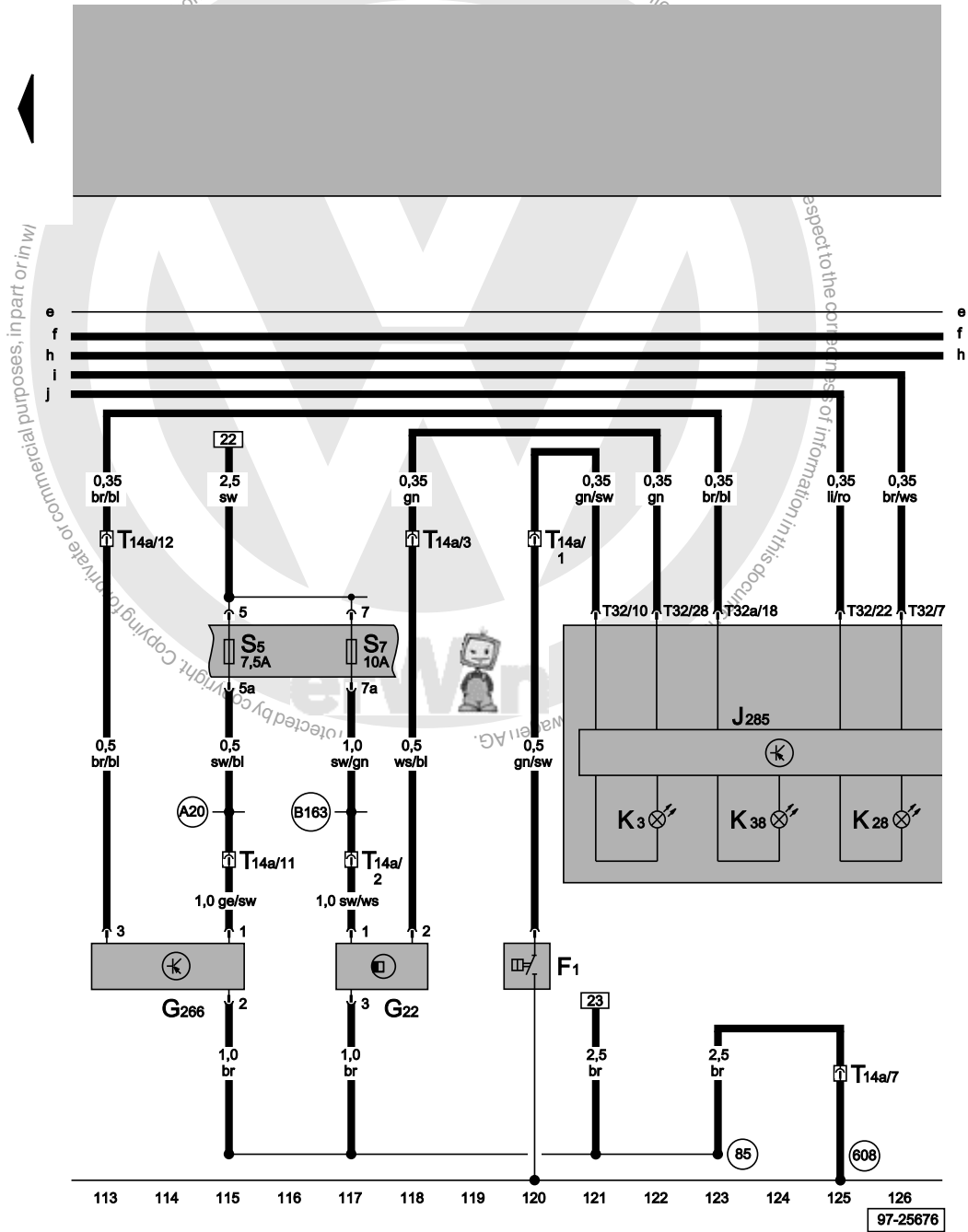
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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display

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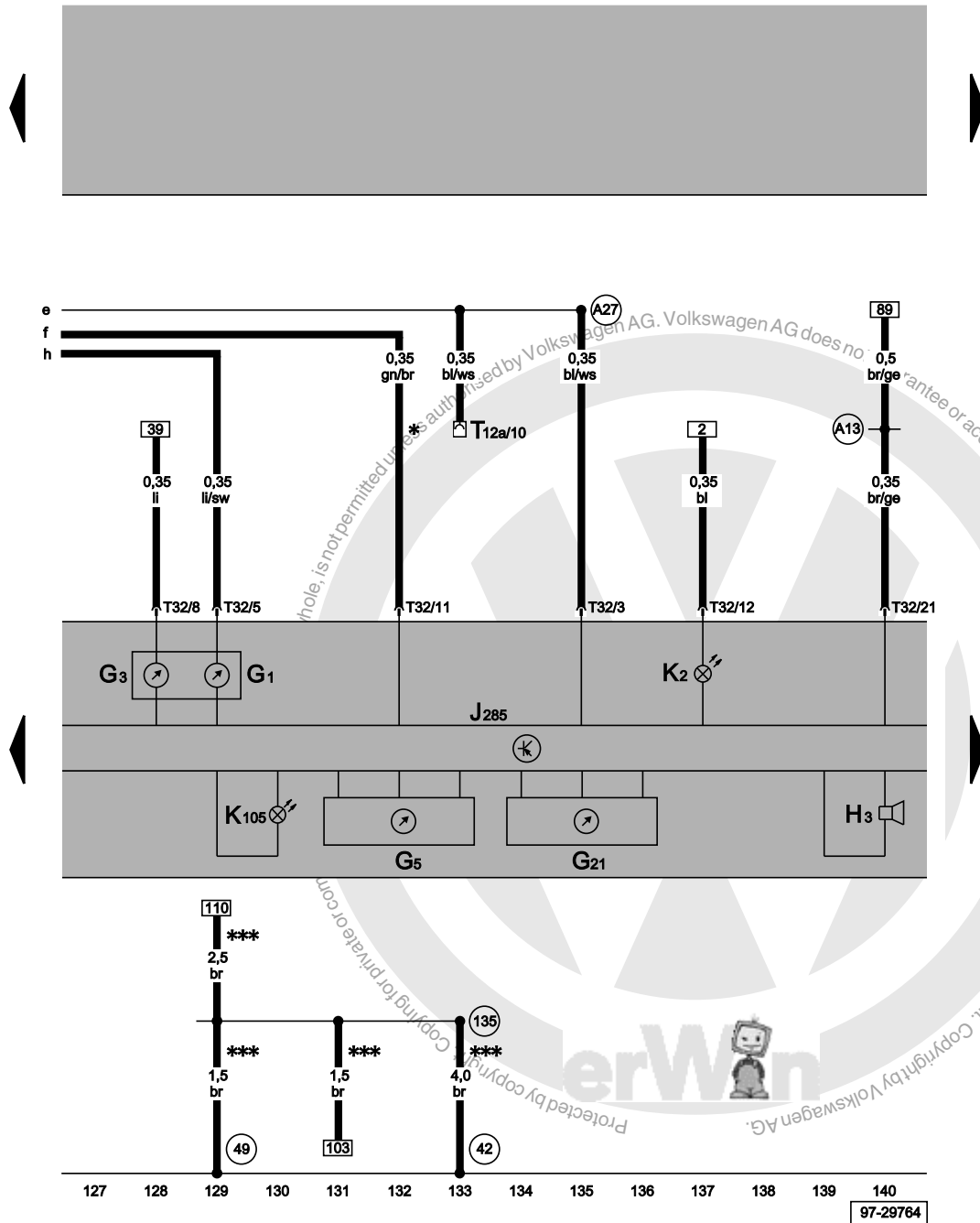


97-25676

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

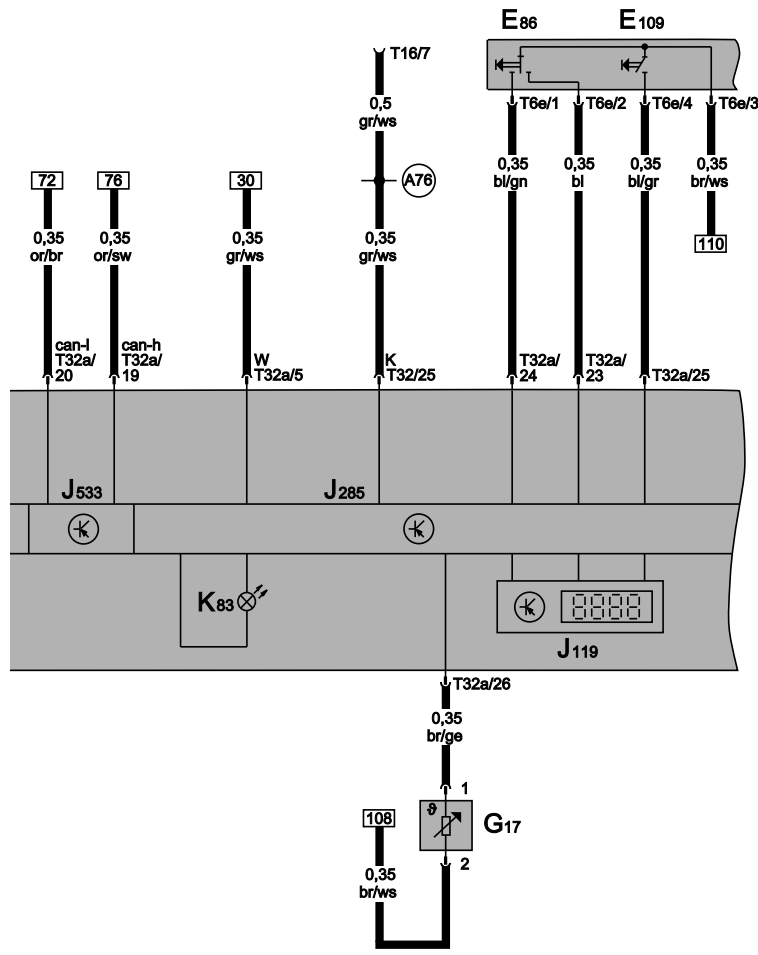
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- *** From May 2000



Dash panel insert, multi-function display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K83 Exhaust emissions warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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1.8 I/110 kW Motronic, engine code ARZ

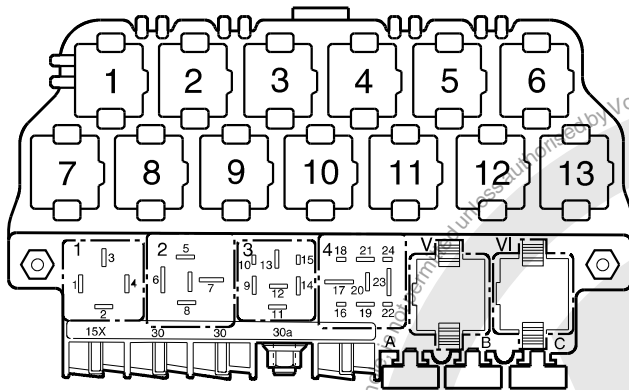
from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier

above the relay plate:

Relay locations on relay plate:



97-14163

2 - X-contact relief relay (100)

4 - Fuel pump relay (409)

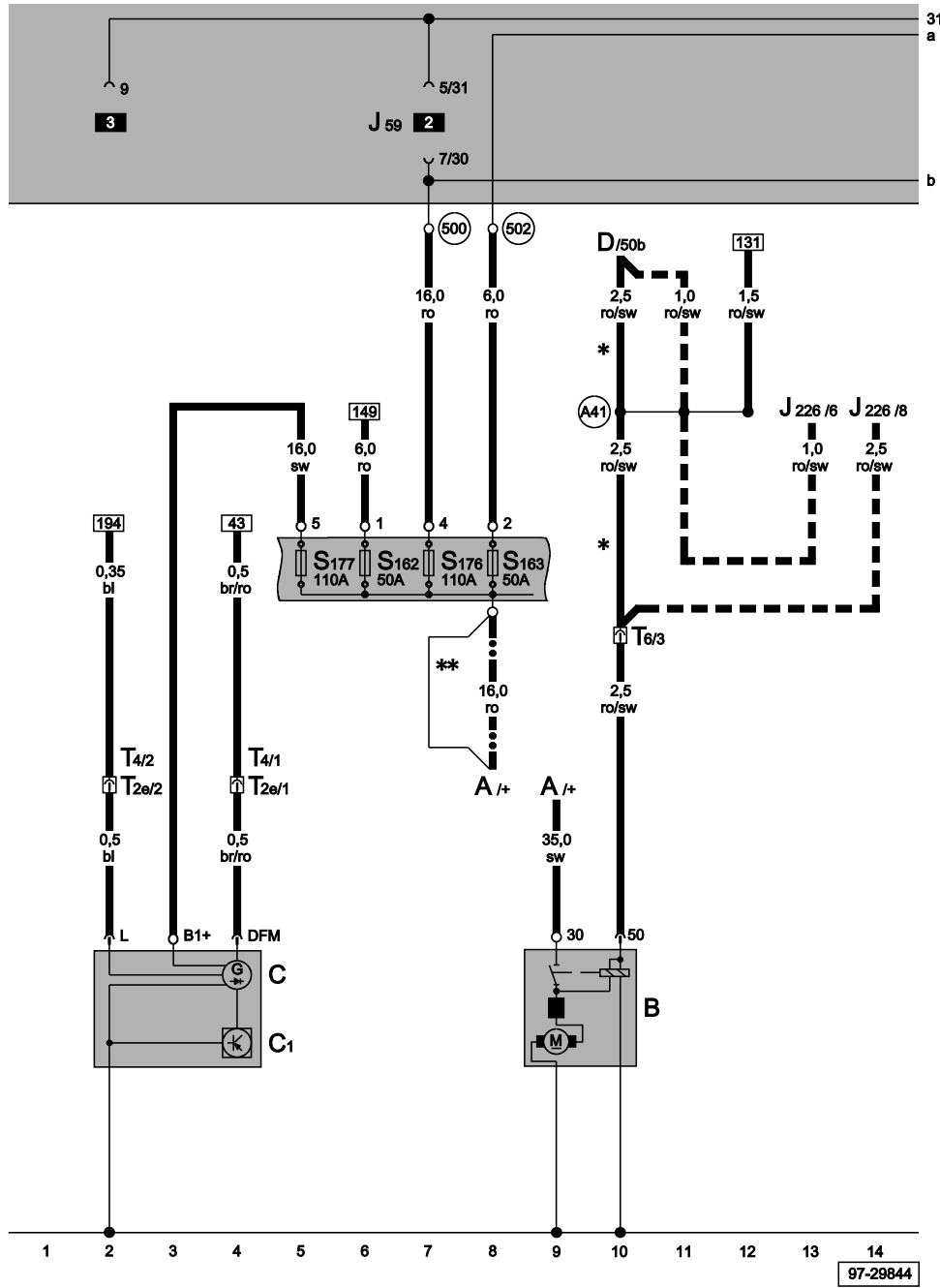


Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Alternator, starter

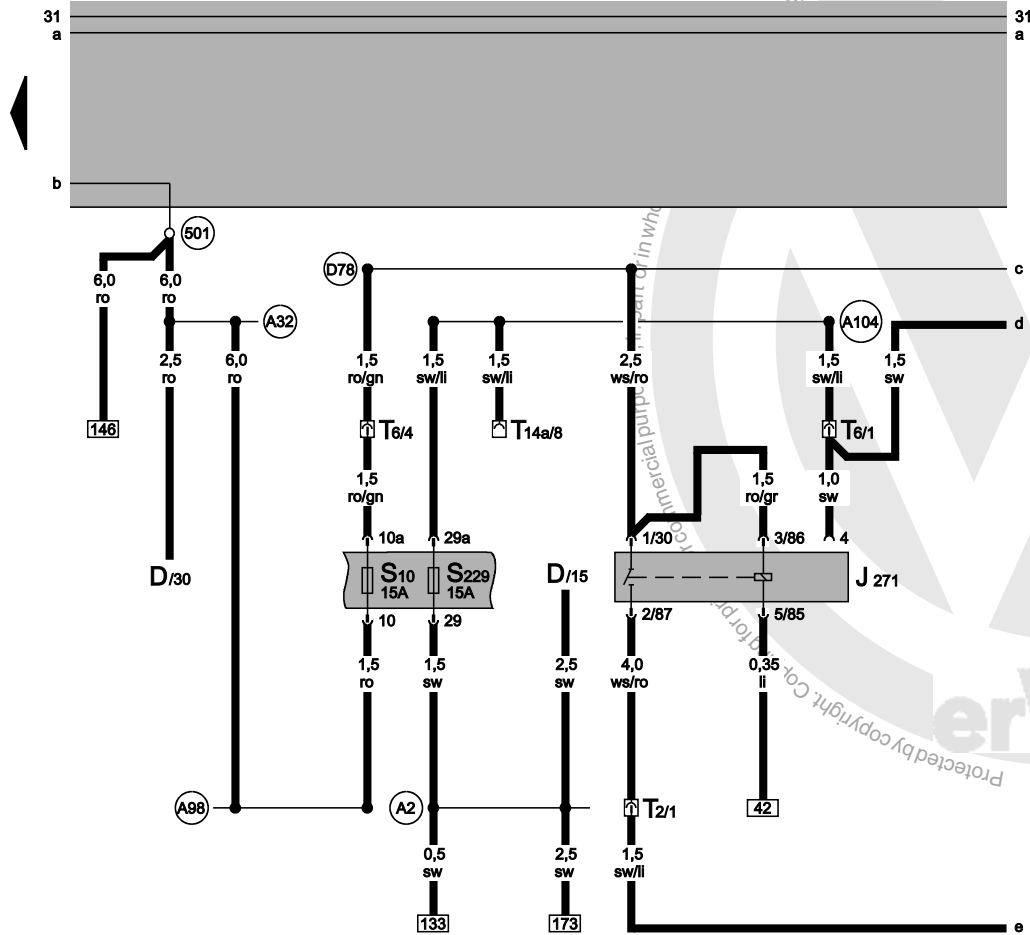
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness
- * only models with manual gearbox
- models with automatic gearbox only
- ** up August 2000
- ... from September 2000

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97-29844

Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness

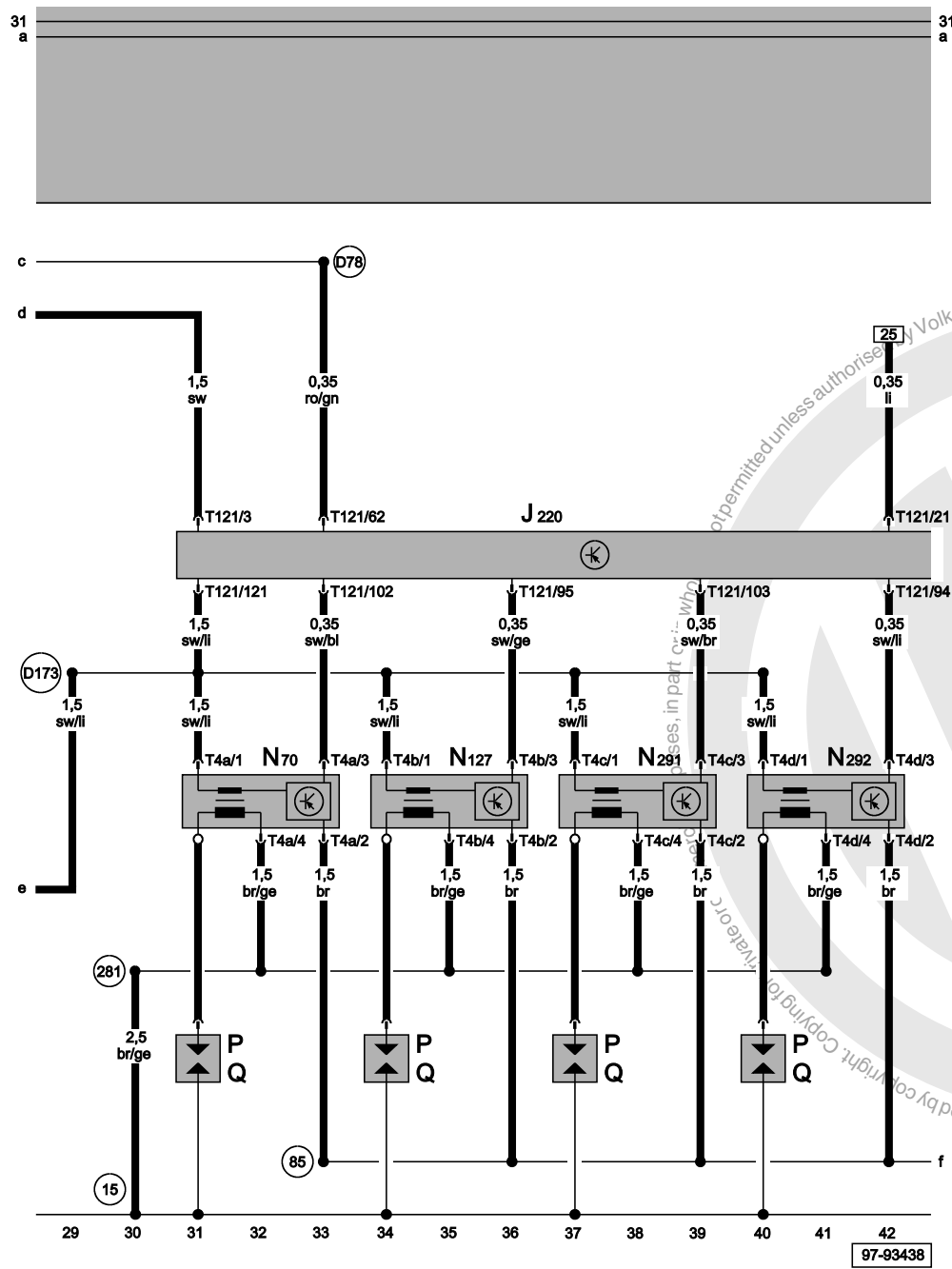


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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection 1, in engine wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness



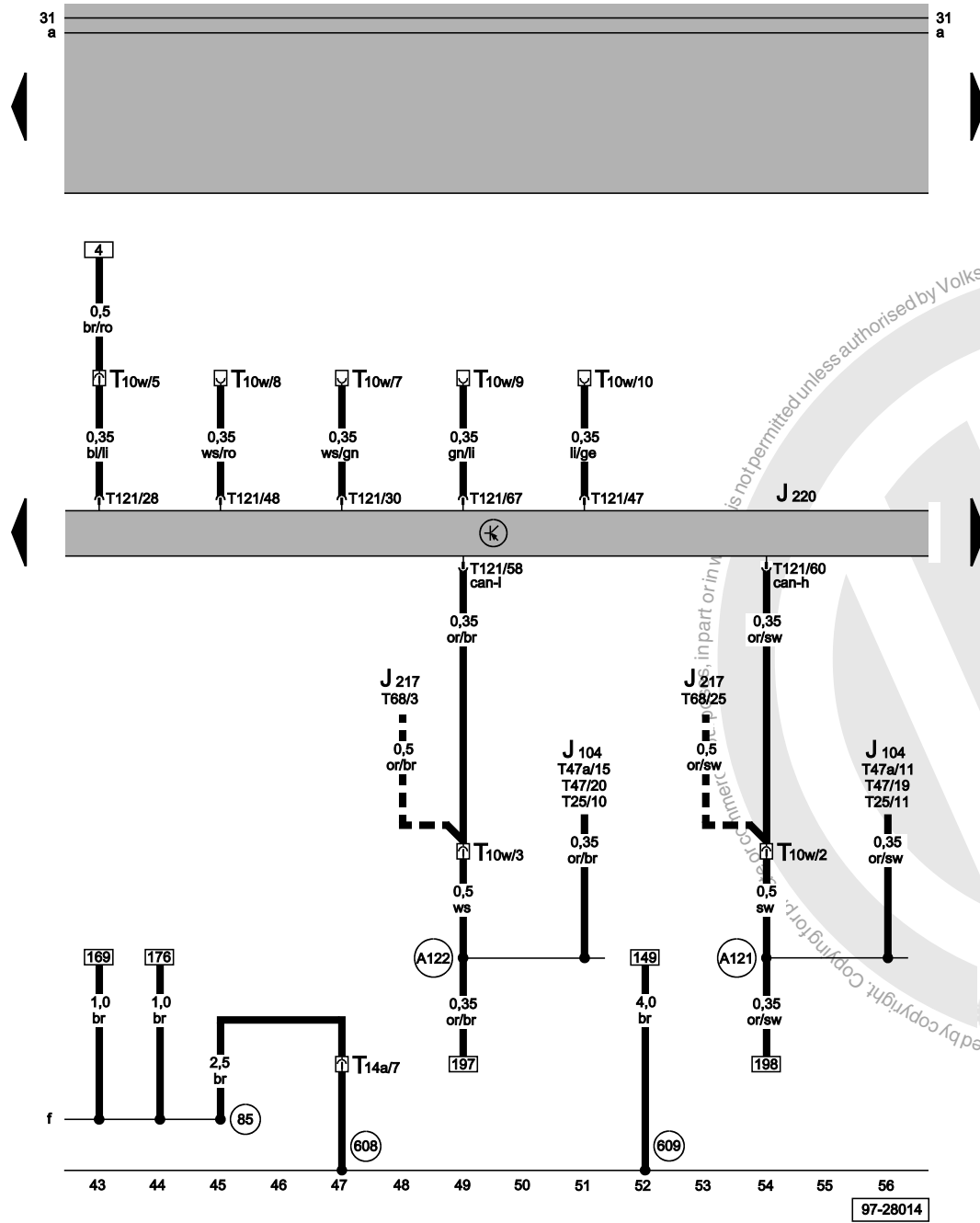
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97-93438

Motronic control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)
- T68 68-pin connector
- T121 121-pin connector

- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only



97-28014

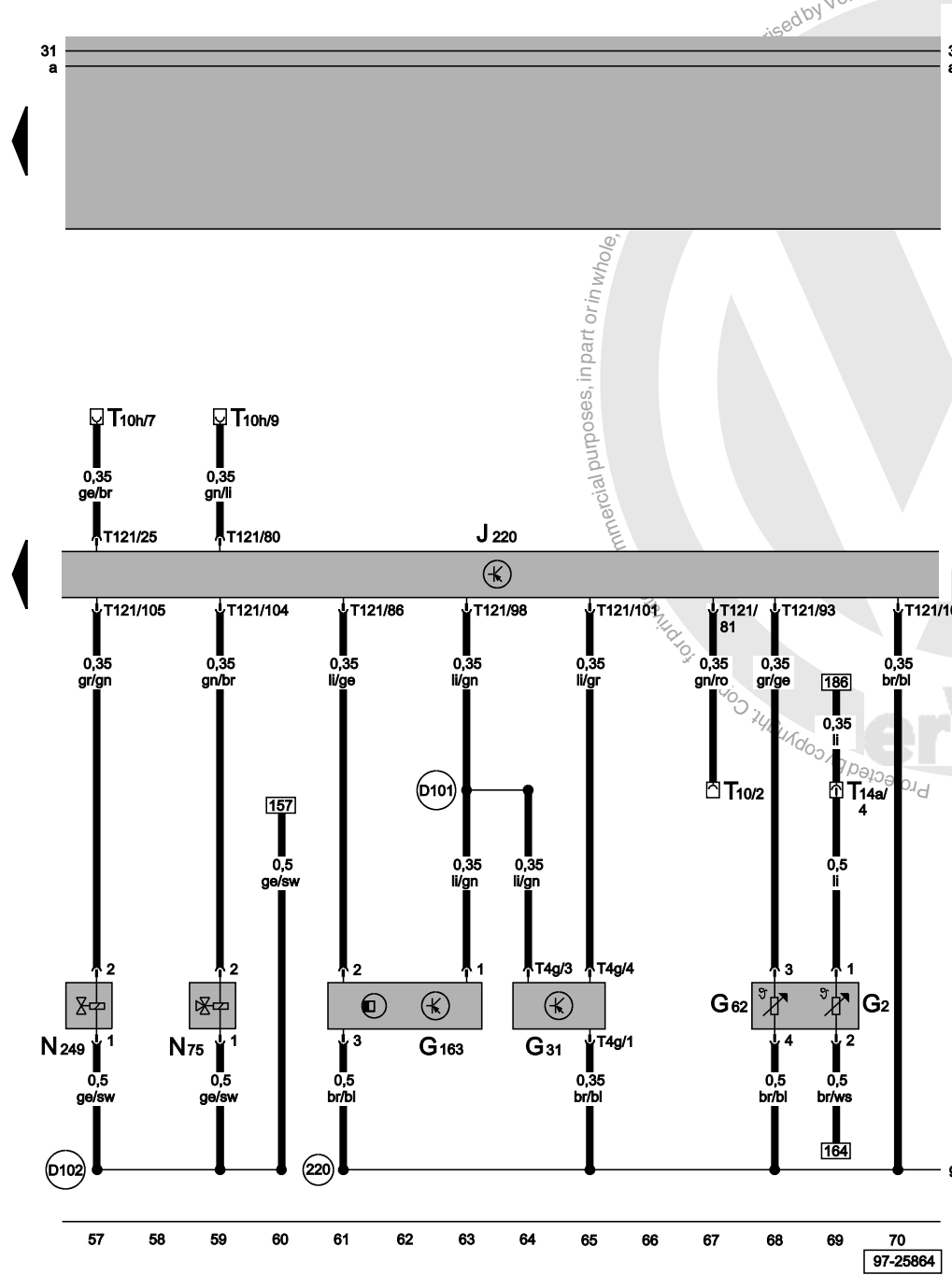
Motronic control unit, coolant temperature sender, Hall sender, charge air pressure sender, charge pressure control solenoid valve, turbocharger air recirculation valve

- G2 Coolant temperature sender
- G31 Charge air pressure sender
- G62 Coolant temperature sender
- G163 Hall sender
- J220 Motronic control unit, in centre plenum chamber
- N75 Charge pressure control solenoid valve
- N249 Turbocharger air recirculation valve
- T4g 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

(220) Earth connection (sender earth), in engine wiring harness

(D101) Connection 1, in engine compartment wiring harness

(D102) Connection 2, in engine compartment wiring harness

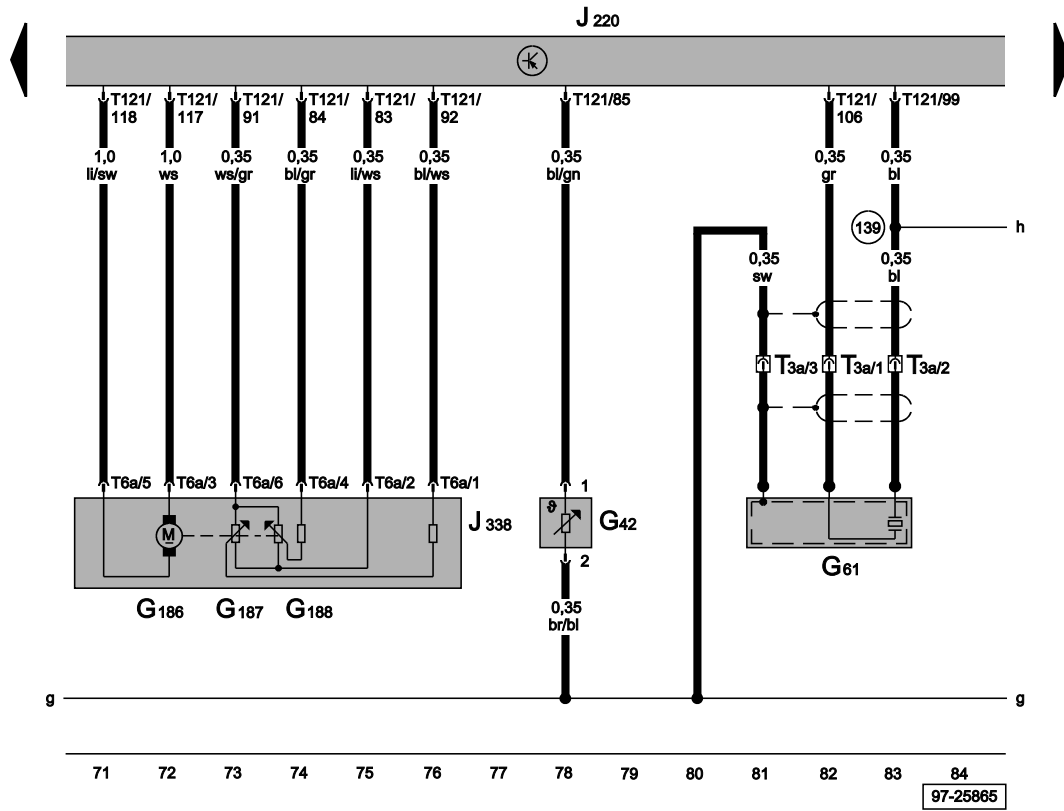
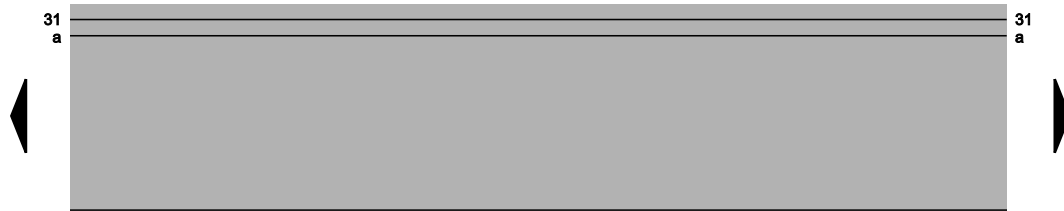


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Motronic control unit, throttle valve module, throttle valve drives angle sender (electric throttle), knock sensor 1, intake air temperature sender

- G42 Intake air temperature sender
- G61 Knock sensor 1
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T3a 3-pin connector, in rear engine compartment
- T6a 6-pin connector
- T121 121-pin connector

139 Earth connection (sender earth), in Motronic wiring harness



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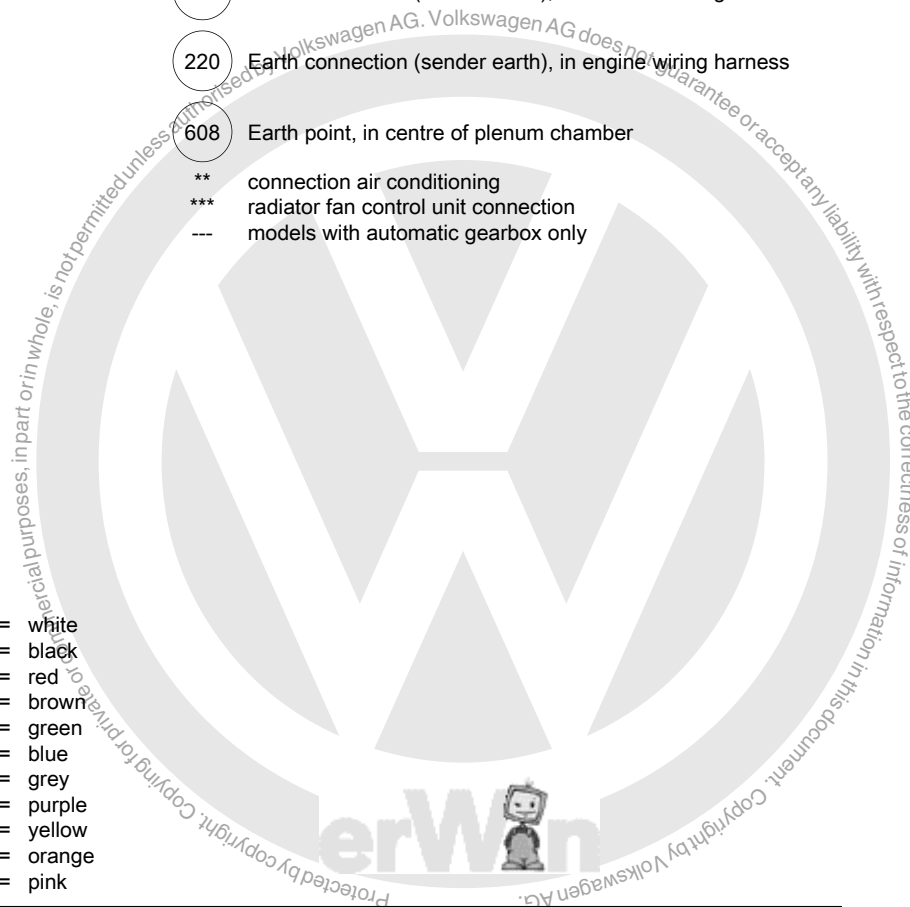
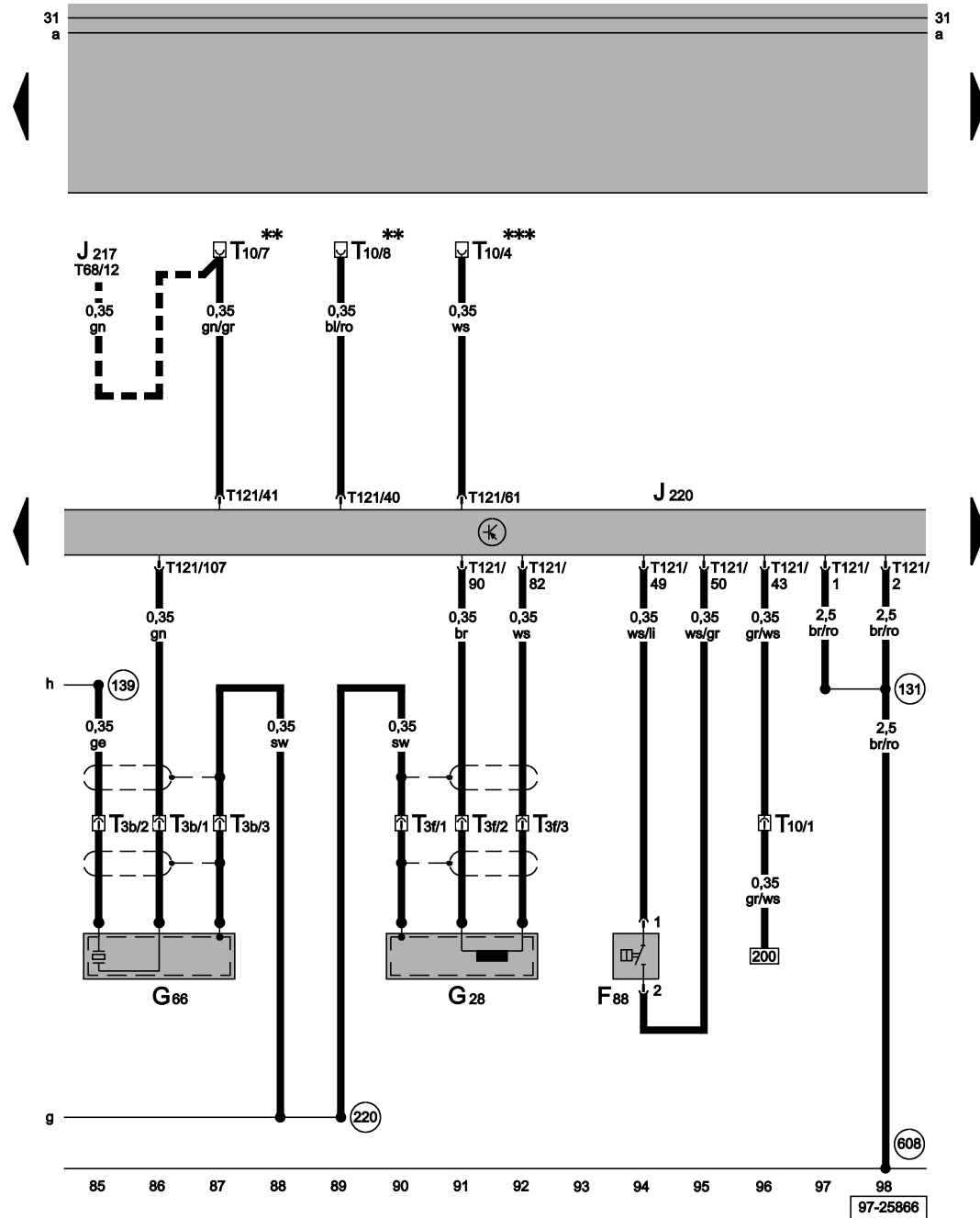
Motronic control unit, engine speed sender, knock sensor 2, power assisted steering pressure switch

- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G66 Knock sensor II
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T3b 3-pin connector, in front engine compartment
- T3f 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

- ** connection air conditioning
- *** radiator fan control unit connection
- models with automatic gearbox only

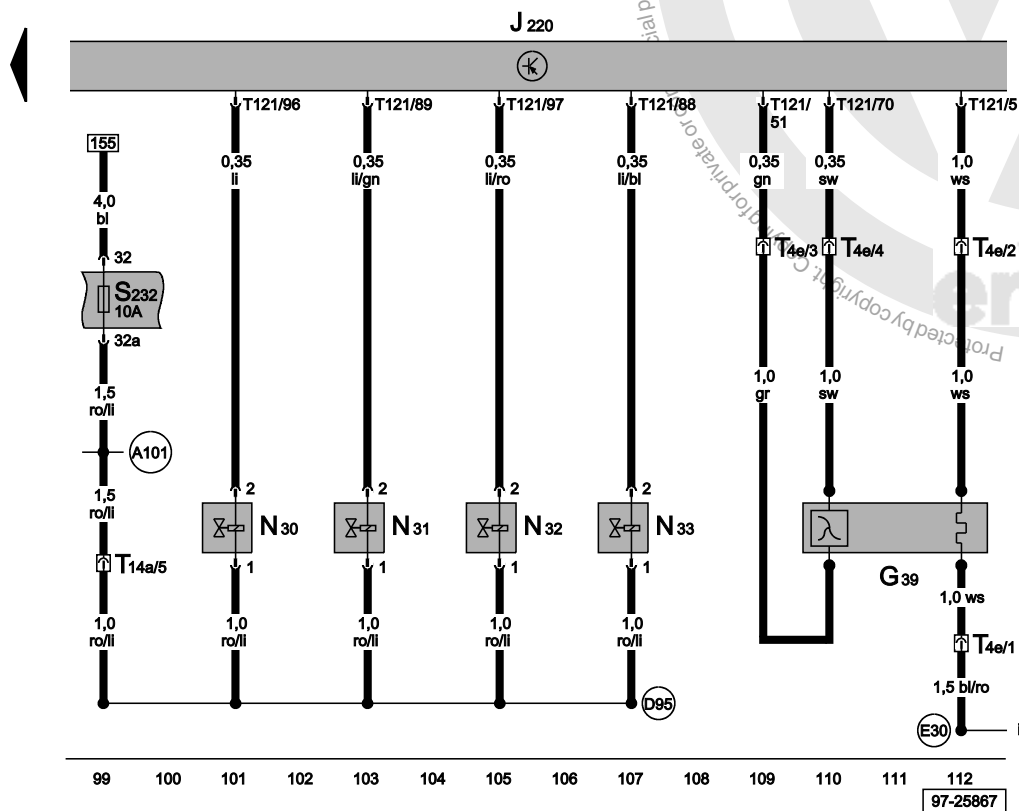
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Motronic control unit, injectors, lambda probe

- G39 Lambda probe
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4e 4-pin connector, near catalytic converter
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

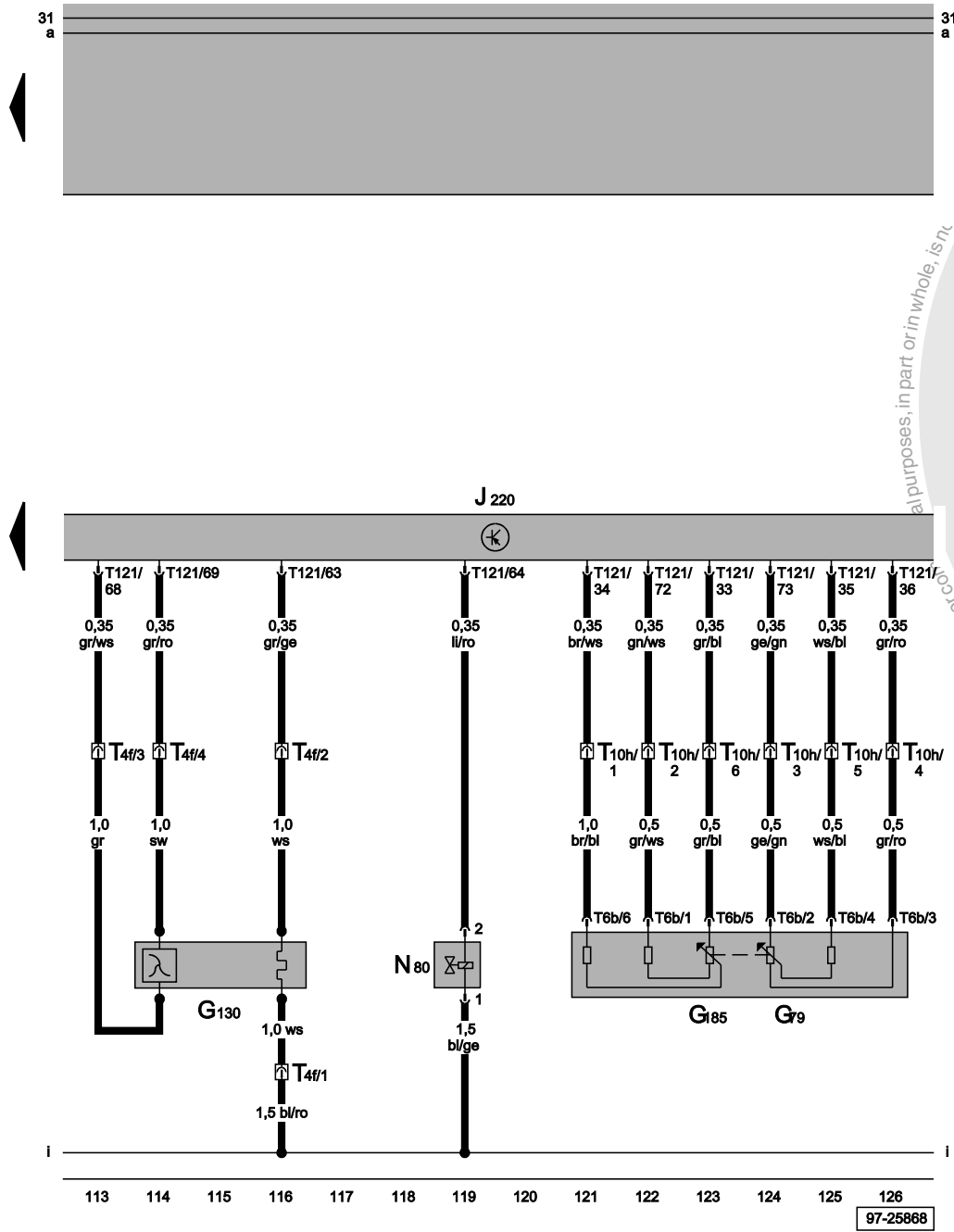
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness



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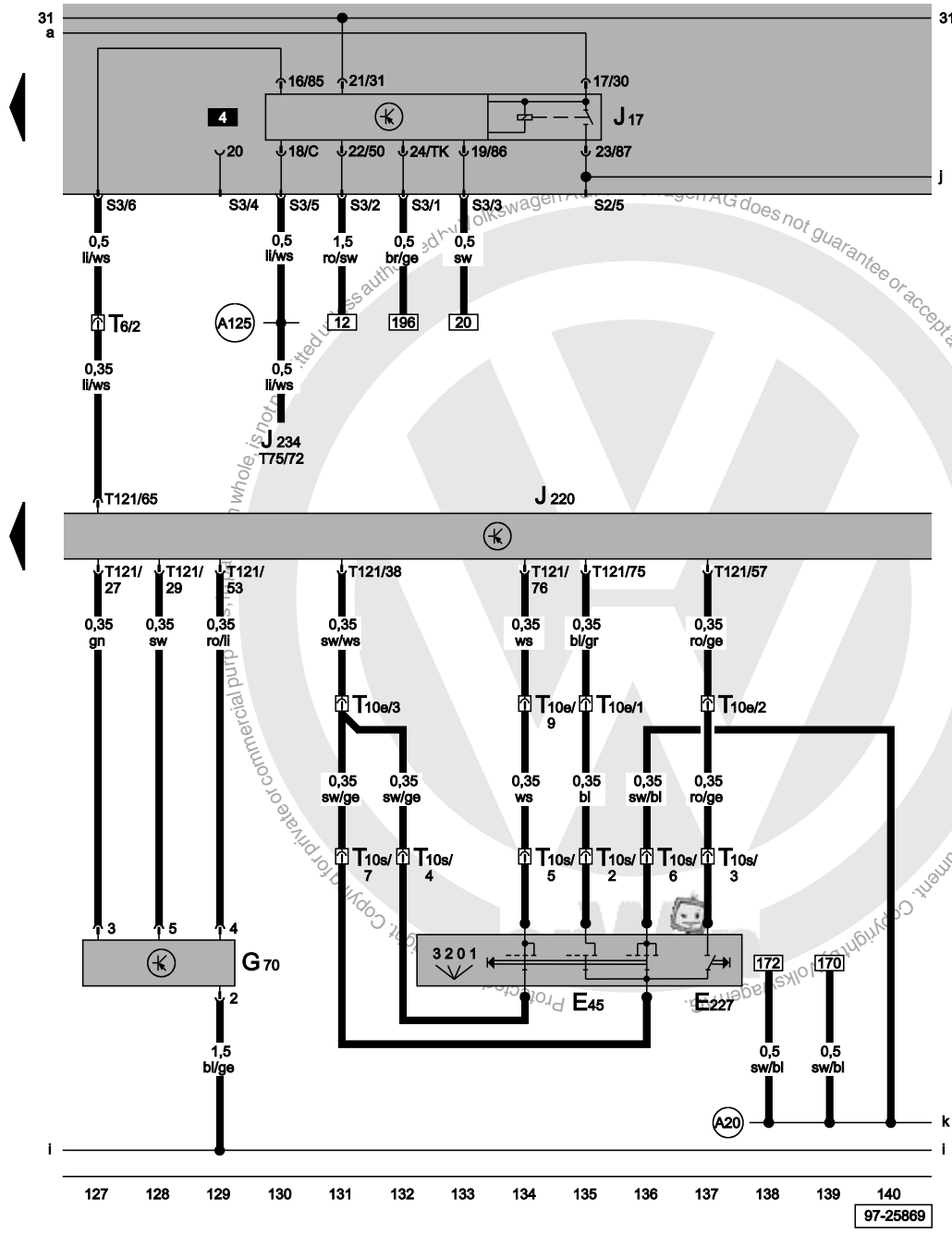
Motronic control unit, accelerator position sender, lambda probe after catalytic converter, active charcoal filter system solenoid valve 1

- G79 Accelerator position sender
- G130 Lambda probe after catalytic converter
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4f 4-pin connector, near catalytic converter
- T6b 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector



Motronic control unit, fuel pump relay, cruise control system switch (GND), air mass meter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T75 75-pin connector
- T121 121-pin connector
- A20 Connection (15a), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- ** only models with GND

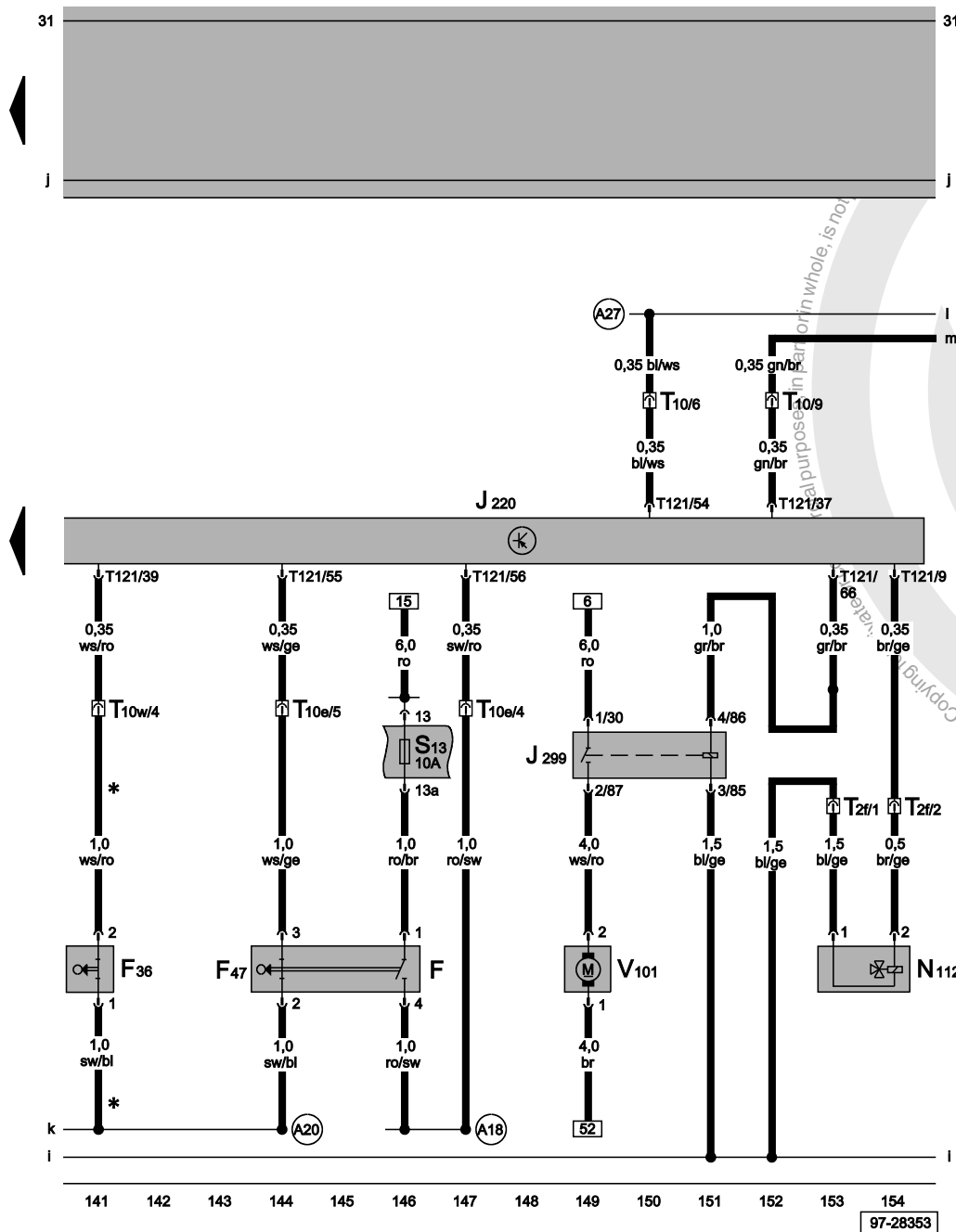


Motronic control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, cruise control system brake pedal switch, brake light switch

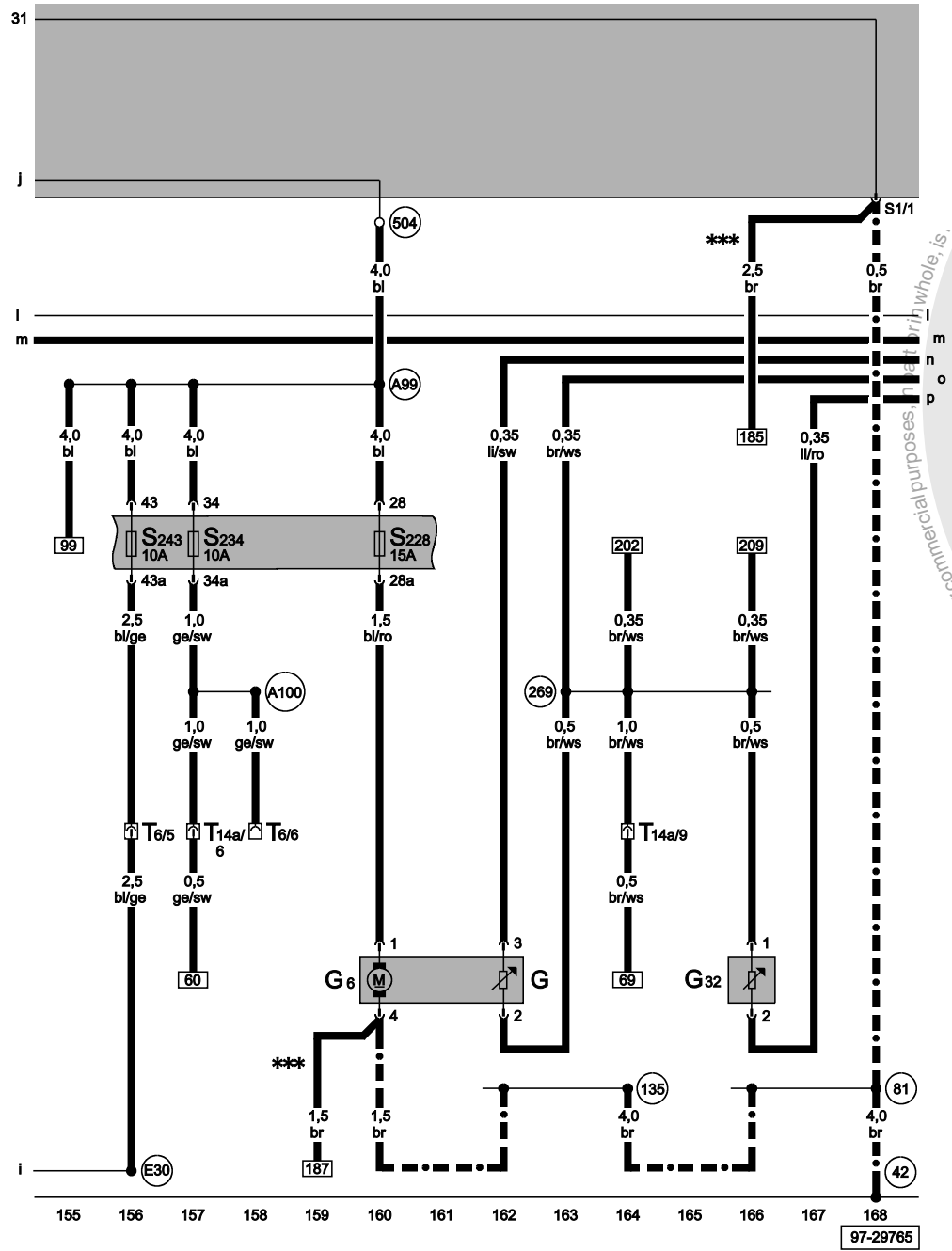
- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- T2f 2-pin connector, in left engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
only models with manual gearbox

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- ge = yellow
- or = orange
- rs = pink



Fuel pump, fuel-gauge sender, coolant shortage indicator sender



- G Fuel gauge sender
 - G6 Fuel pump
 - G32 Coolant shortage indicator sender
 - S228 Fuse 28 in fuse holder
 - S234 Fuse 34 in fuse holder
 - S243 Fuse 43 in fuse holder
 - T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
 - T14a 14-pin connector, in cable channel left in engine compartment
 - 42 Earth point, next to steering column
 - 81 Earth connection 1, in dash panel wiring harness
 - 135 Earth connection 2, in dash panel wiring harness
 - 269 Earth connection (sender earth) 1, in dash panel wiring harness
 - 504 Screw connection (87F), on relay plate
 - A99 Connection 1 (87), in dash panel wiring harness
 - A100 Connection 2 (87), in dash panel wiring harness
 - E30 Connection (87a), in engine wiring harness
- *** from May 2000
 --- up to April 2000

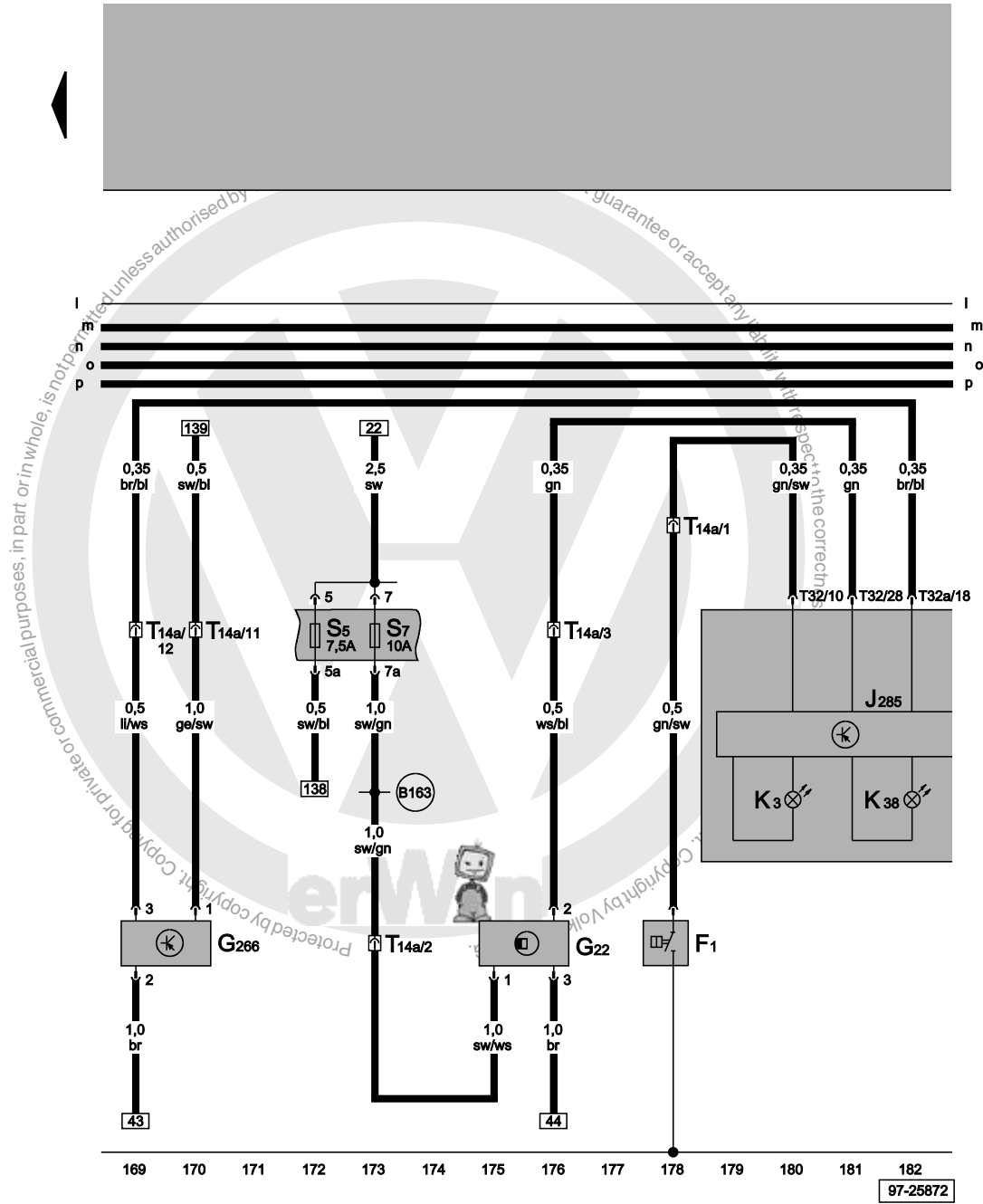
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

(B163) Positive connection 1 (15), in interior wiring harness

** only flexible service interval display

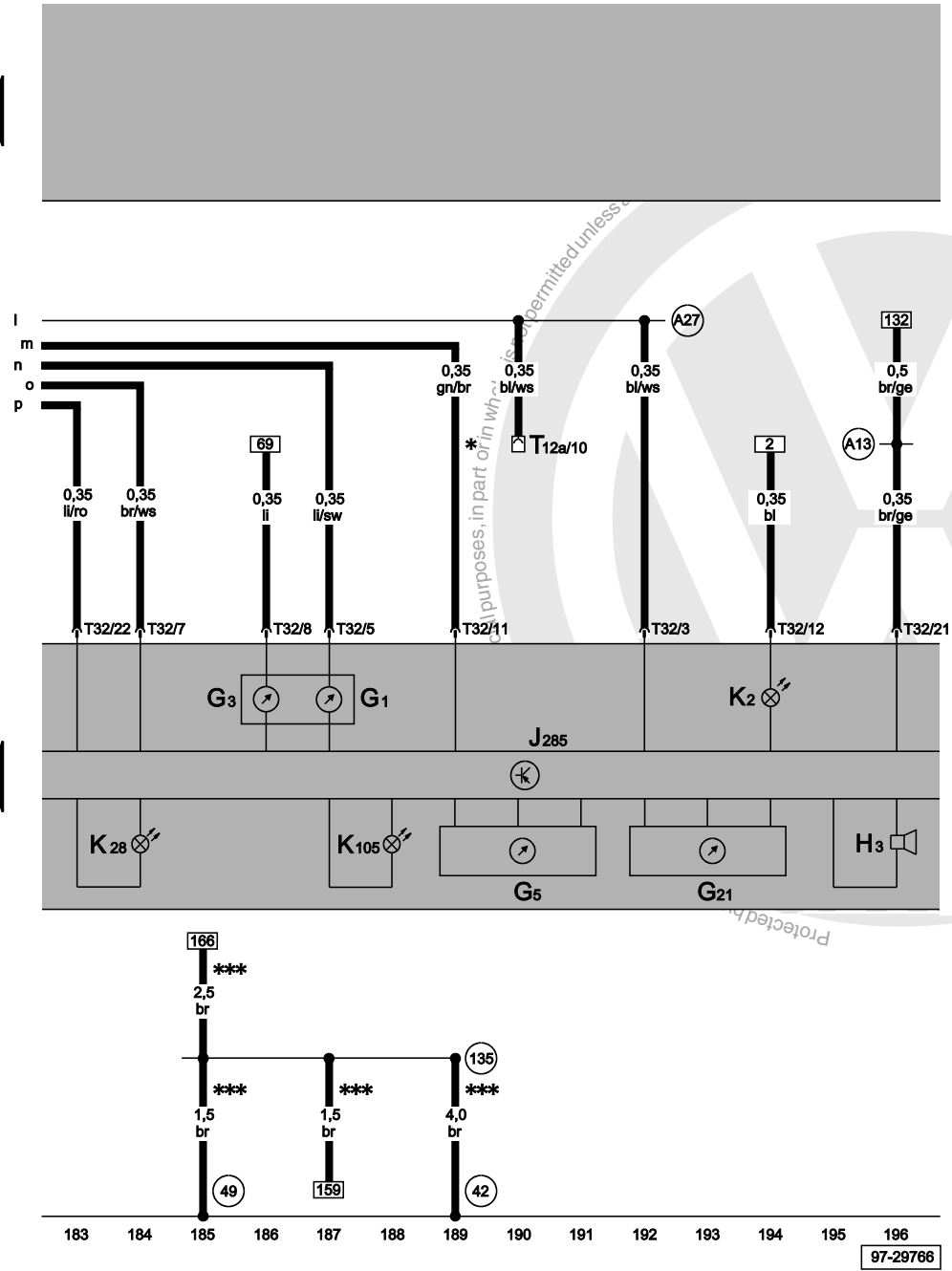


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue

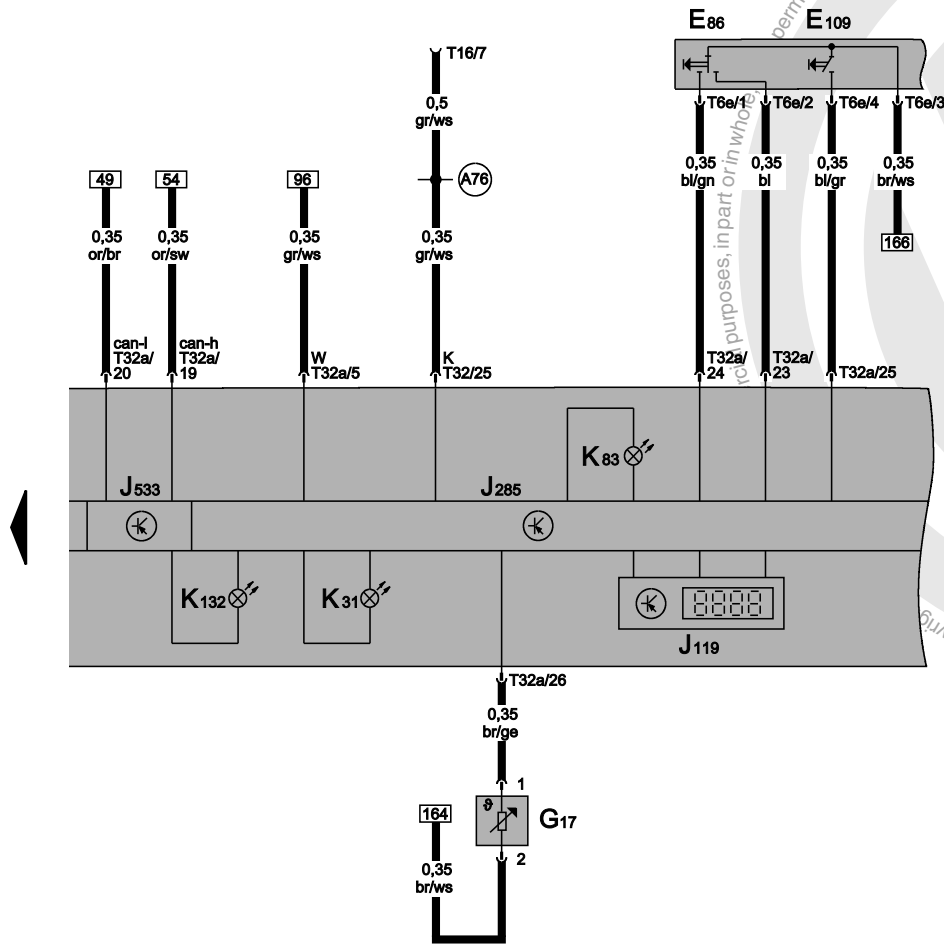
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit
- *** from May 2000



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, cruise control system warning lamp, multifunction display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp***
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** engine code AUM only



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Cruise control system (CCS)

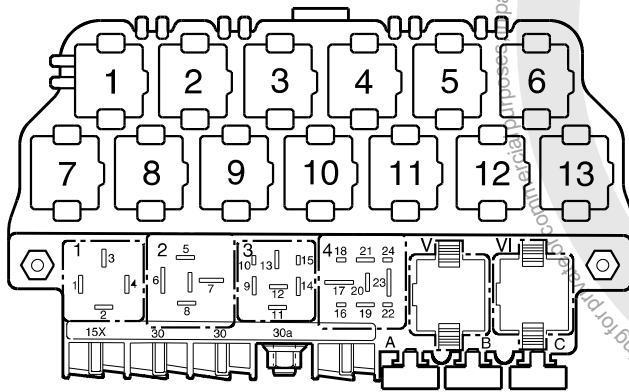
- ⇒ 1.6 litre/74 kW Simos, engine codes AEH
 - ⇒ 1.6 litre/74 kW Simos, engine codes AKL
- From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



97-14163



Note:

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

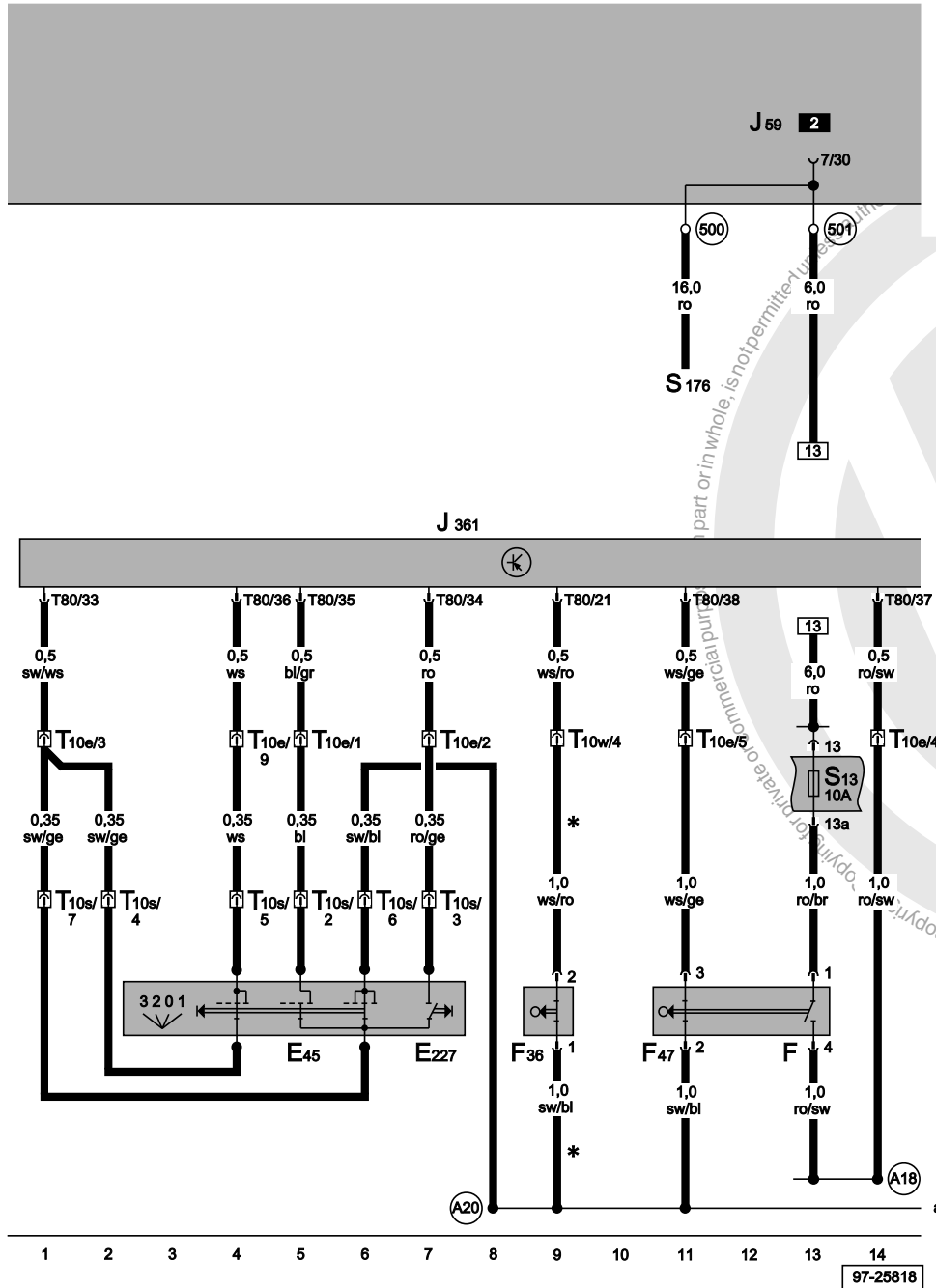
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige

3 A - lilac



Simos control unit, cruise control system switch, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- E45 Cruise control system switch
- E227 Cruise control system (CCS) button (Set)
- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J59 X contact relief relay
- J361 Simos control unit, in plenum chamber, centre
- S13 Fuse in fuse box
- S176 Fuse -4- (30), in battery fuse box
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T80 80-pin connector
- 500 Screw connection -1- (30), on relay plate
- 501 Screw connection -2- (30), on relay plate
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- * Only models with manual gearbox



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25818

Cruise control system (CCS)

⇒ 1.8 litre/92 kW Motronic, engine codes AGN

From May 1999

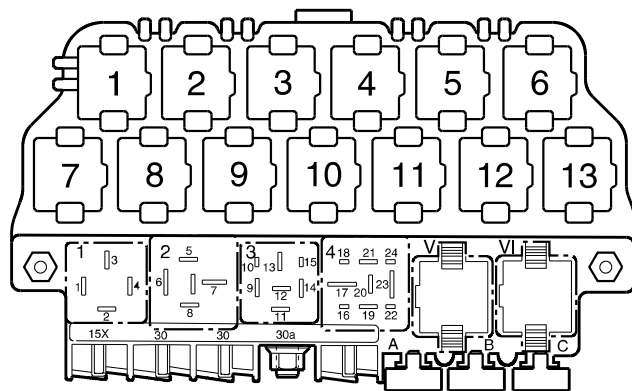
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

2 - X contact relief relay (18), (up to October 1998)

- X contact relief relay (100), (from November 1999)



97--14163



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

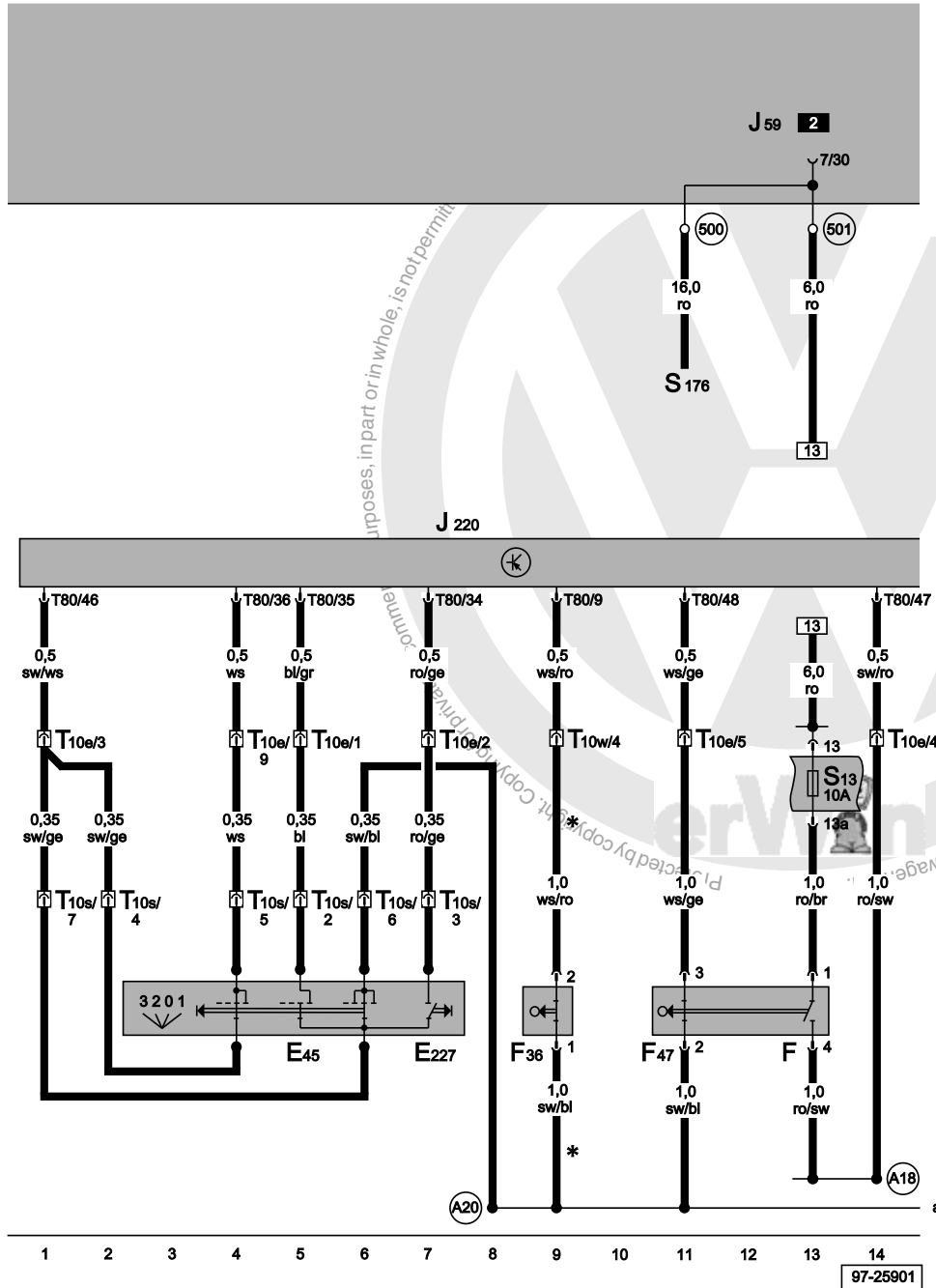
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Motronic control unit, cruise control system switch, clutch pedal switch, cruise control system brake pedal switch, brake light switch

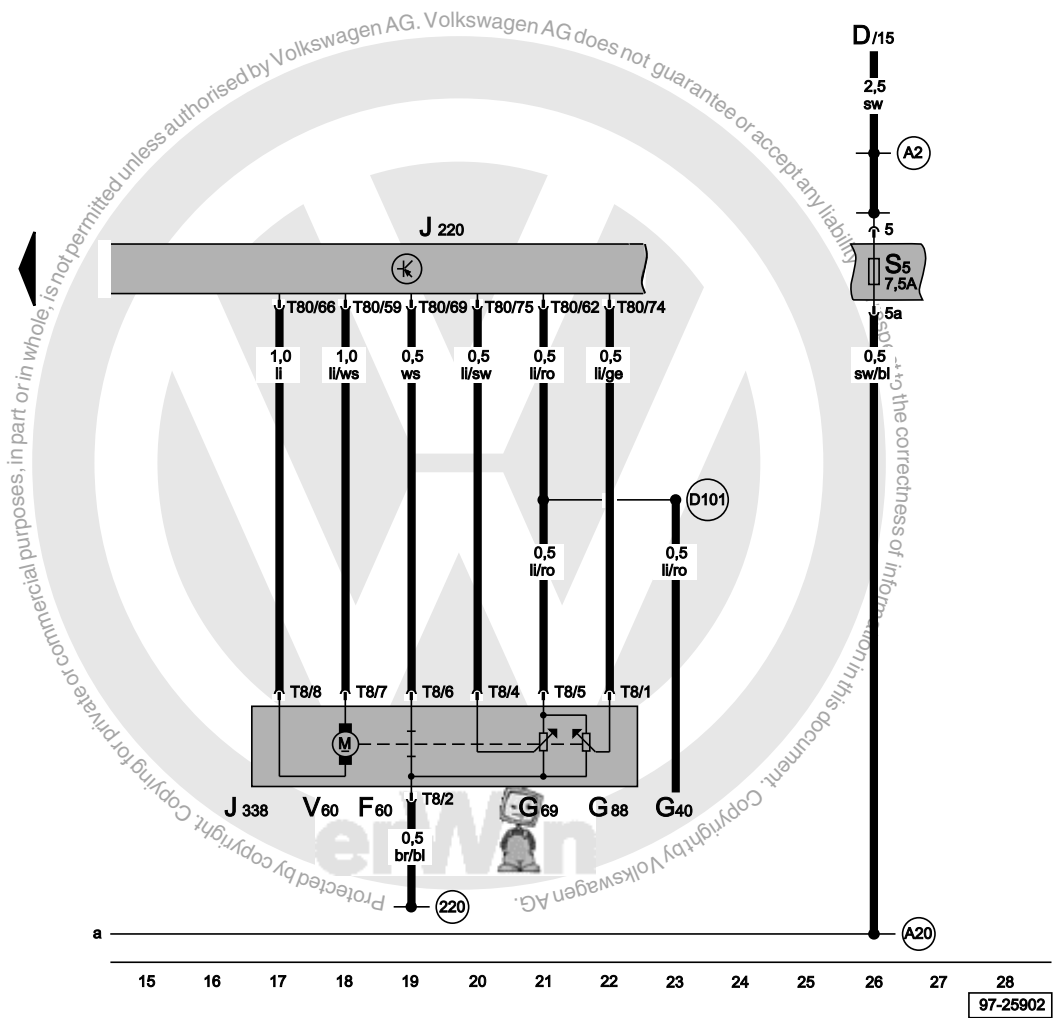
- E45 Cruise control system switch
- E227 Cruise control system (CCS) button (Set)
- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J59 X contact relief relay
- J220 Motronic control unit, in plenum chamber, centre
- S13 Fuse in fuse box
- S176 Fuse -4- (30), in battery fuse box
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T80 80-pin connector
- 500 Screw connection -1- (30), on relay plate
- 501 Screw connection -2- (30), on relay plate
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- * Only models with manual gearbox



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, throttle valve control part

- D Ignition/starter switch
- F60 Idling switch
- G40 Hall sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J338 Throttle valve control unit
- J220 Motronic control unit, centre in plenum chamber
- S5 Fuse in relay plate fuse box
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- 220 Earth connection (sender earth), in engine wiring harness, => Engine Current Flow Diagram
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- D101 Connection -1-, in engine compartment wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Cruise control system (CCS)

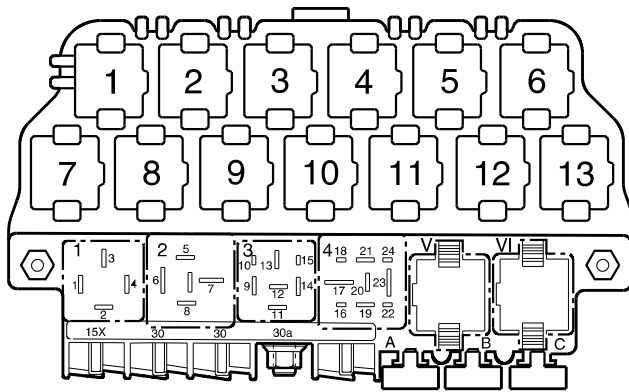
- ⇒ 2.0 litre/85 kW Motronic, engine codes AQY
 - ⇒ 2.0 litre/85 kW Motronic, engine codes APK
- From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



97-14163

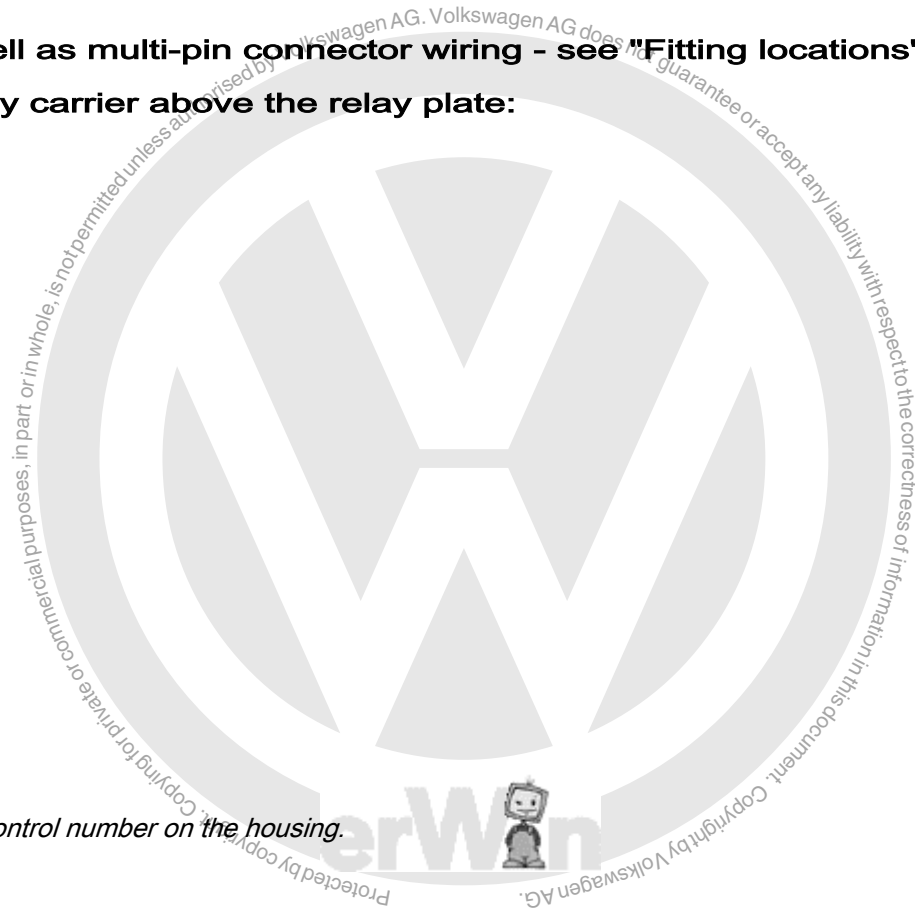


Note:

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige

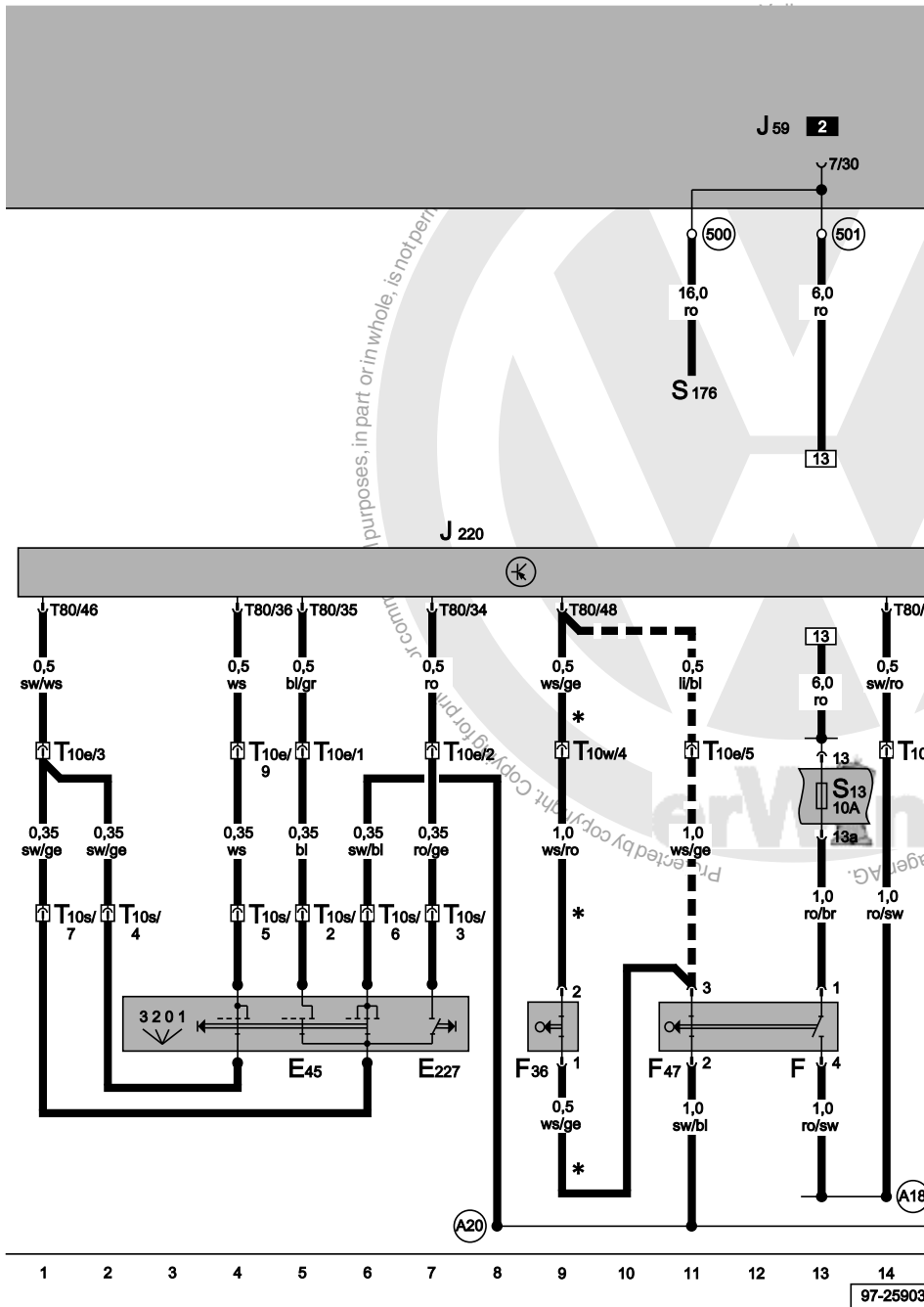


3 A - lilac



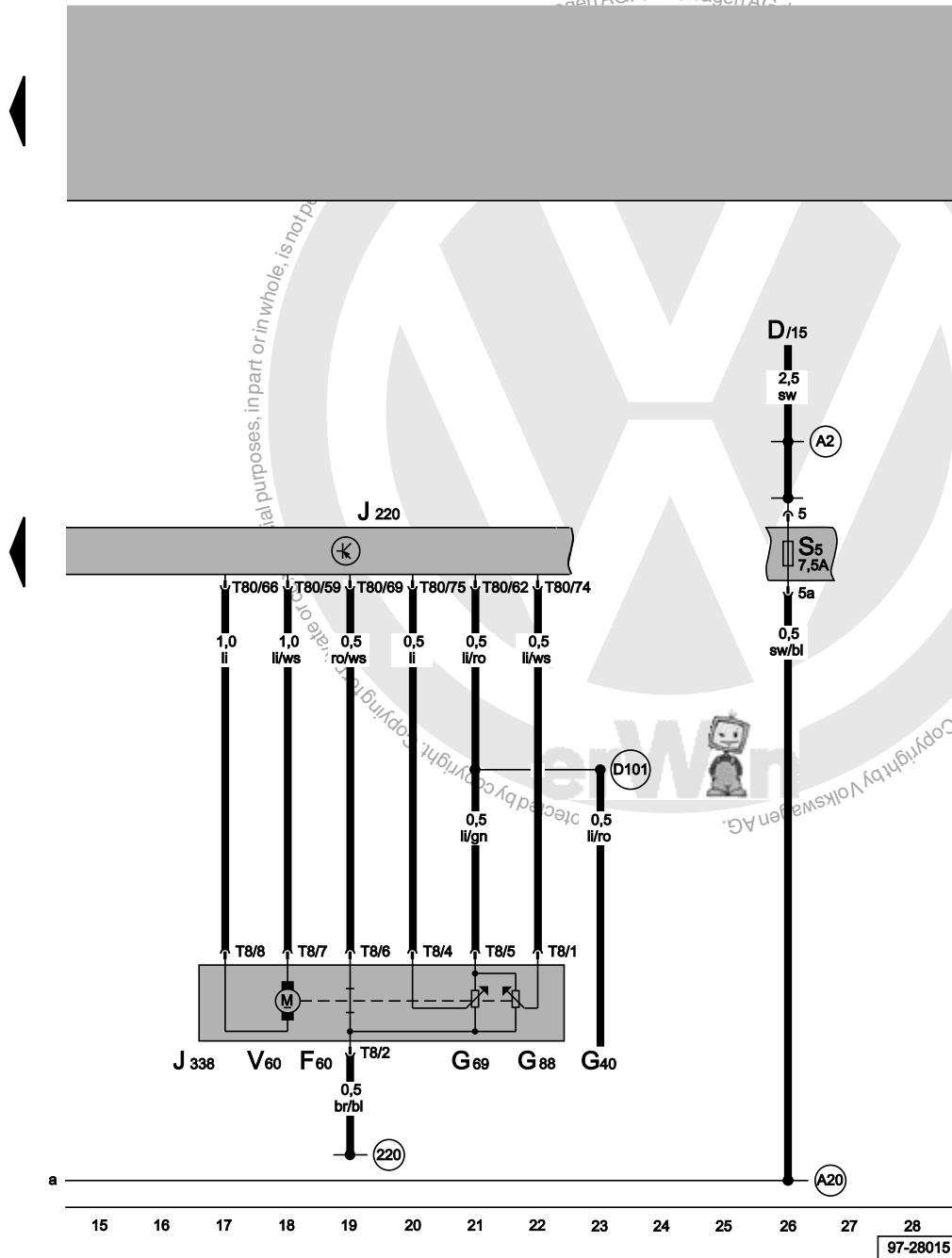
Motronic control unit, cruise control system switch, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- E45 Cruise control system switch
 - E227 Cruise control system (CCS) button (Set)
 - F Brake light switch
 - F36 Clutch pedal switch
 - F47 Cruise control system brake pedal switch
 - J59 X contact relief relay
 - J220 Motronic control unit, in plenum chamber, centre
 - S13 Fuse in fuse box
 - S176 Fuse -4- (30), in battery fuse box
 - T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
 - T10s 10-pin connector, next to steering column
 - T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
 - T80 80-pin connector
- (500) Screw connection -1- (30), on relay plate
 - (501) Screw connection -2- (30), on relay plate
 - (A18) Connection (54), in dash panel wiring harness
 - (A20) Connection (15a), in dash panel wiring harness
- * Only models with manual gearbox
 - Only models with automatic gearbox



Motronic control unit, throttle valve control unit

- D Ignition/starter switch
- F60 Idling switch
- G40 Hall sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J338 Throttle valve control unit
- J220 Motronic control unit, in plenum chamber, centre
- S5 Fuse in fuse box
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- (220) Earth connection (sender earth), in engine wiring harness, ⇒ Current flow diagram engine
- (A2) Positive (+) connection (15), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D101) Connection -1-, in engine wiring harness



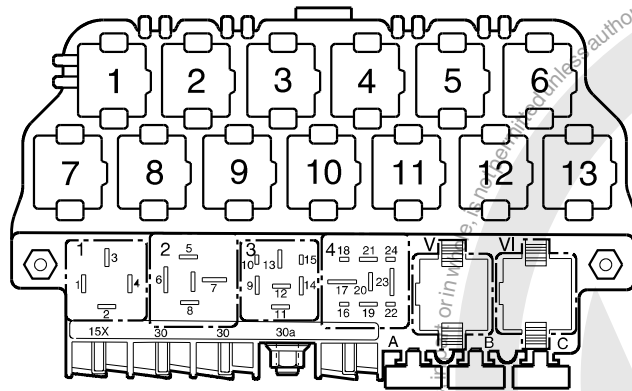
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-28015

Radiator fan, 2 speed

From May 1999

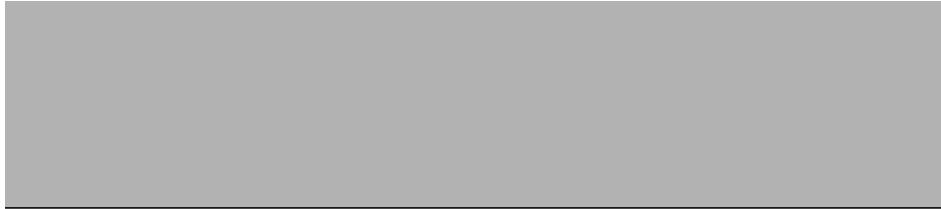
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

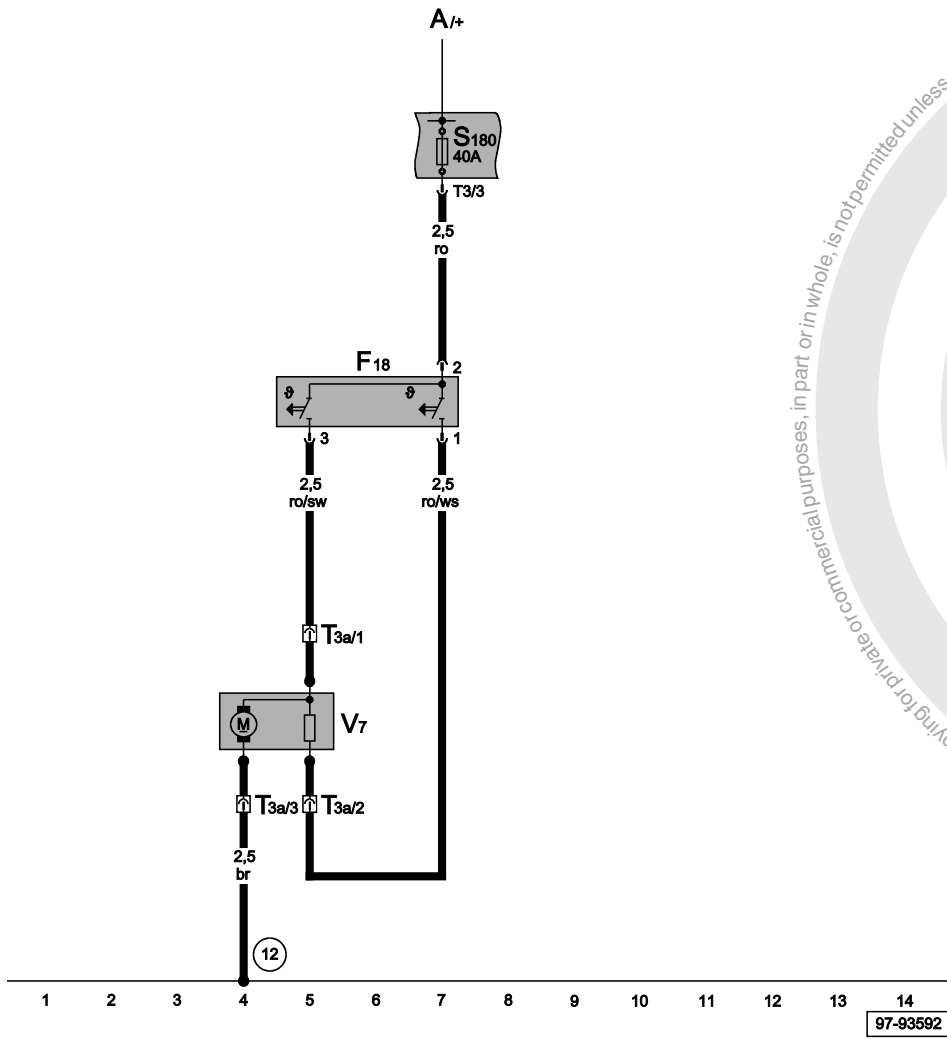
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Radiator fan, 2 speed

- A Battery
- F18 Radiator fan thermo-switch
- S180 Fuse -8- (30), in battery fuse holder
- T3 3-pin connector
- T3a 3-pin connector, front left in engine compartment
- V7 Radiator fan
- 12 Earth point, left in engine compartment



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan

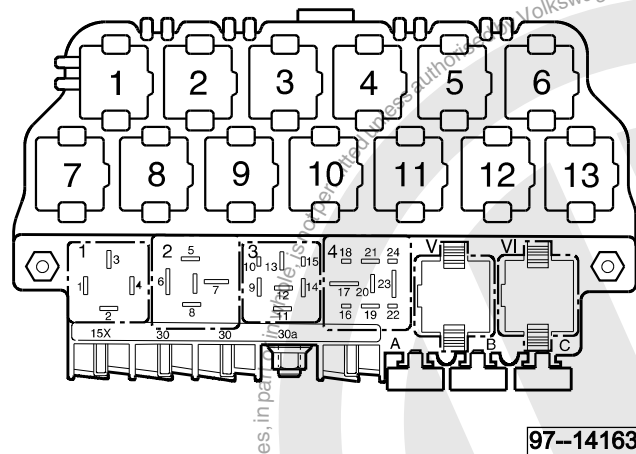
- ⇒ 1.6 litre/74 kW Simos, engine codes APF, (without air conditioner)
- ⇒ 1.6 litre/75 kW Simos, engine codes AVU, (without air conditioner)

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



2 - X contact relief relay (100)



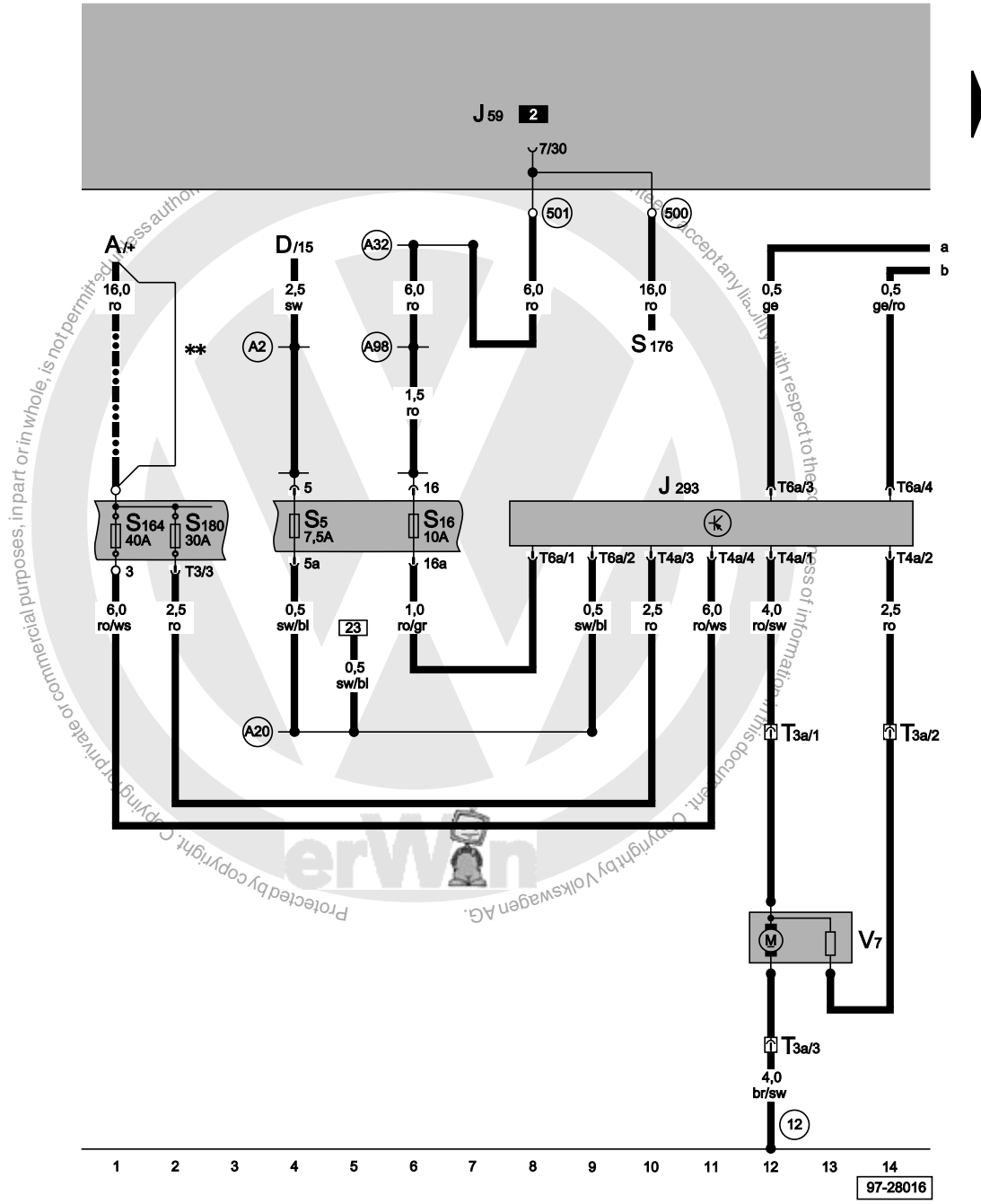
Note:

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

Radiator fan control unit, radiator fan



- A Battery
- D Ignition/starter switch
- J59 X contact relief relay
- J293 Radiator fan control unit, in engine compartment, front left
- S5 Fuse in fuse box
- S16 Fuse in fuse box
- S164 Fuse -3- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S180 Fuse -8- (30), in fuse box/battery
- T3 3-pin connector
- T3a 3-pin connector, in engine compartment, front left
- T4a 4-pin connector
- T6a 6-pin connector
- V7 Radiator fan
- 12 Earth point, in engine compartment, left
- 500 Screw connection -1- (30), on relay plate
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- ** Up to August 2000
- ... From September 2000

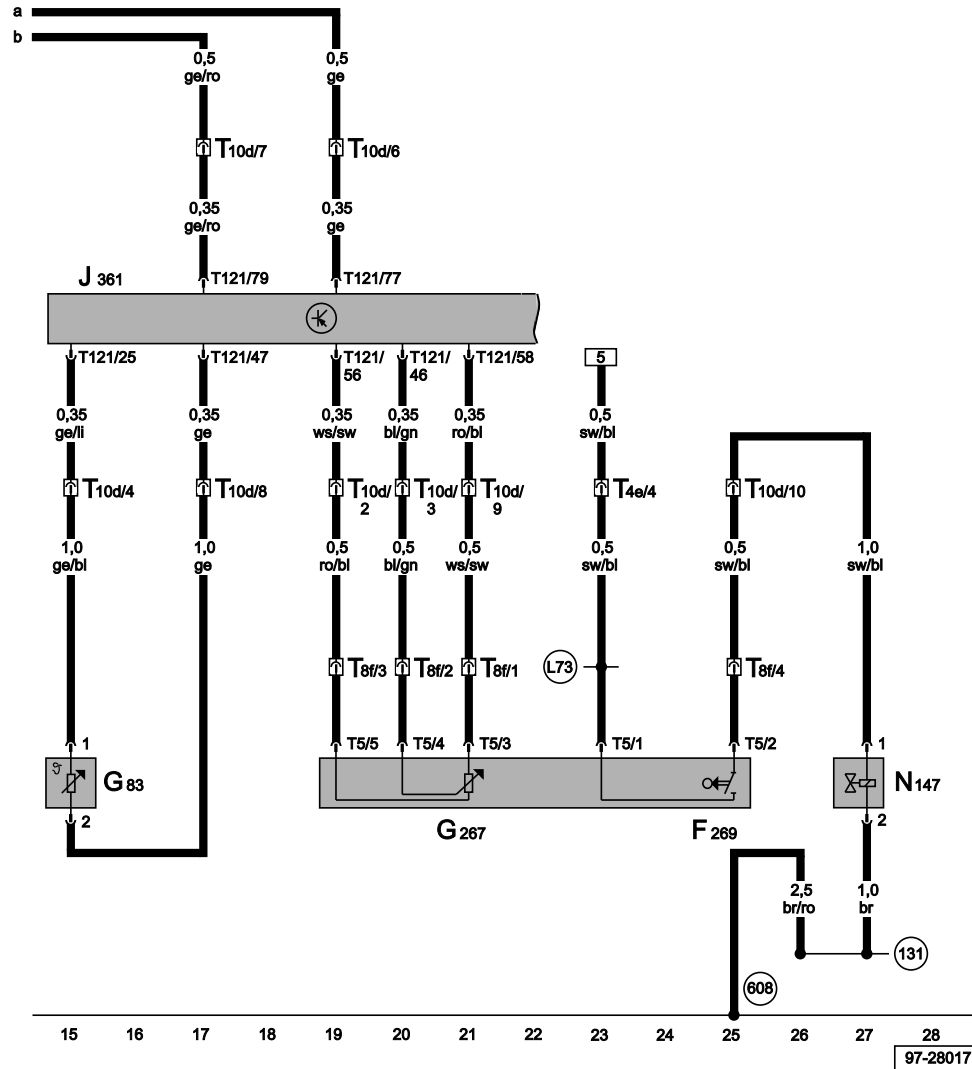
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Simos control unit, coolant temperature sender - radiator outlet, rotary knob temperature selection potentiometer, temperature flap position switch, coolant cut-off valve two-way valve

- F269 Temperature flap position switch*
- G83 Coolant temperature sender - radiator outlet
- G267 Rotary knob temperature selection potentiometer*
- J361 Simos control unit, in plenum chamber, centre
- N147 Coolant cut-off valve two-way valve
- T4e 4-pin connector, behind dash panel, centre (only models without air conditioner)
- T5 5-pin connector
- T8f 8-pin connector, behind dash panel, centre
- T10d 10-pin connector, green, in control unit protective housing, in plenum chamber, left
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- L73 Connection (15a), in fresh air blower wiring harness

* F269 is closed when G267 is positioned on left limit stop



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan, 2 speed, with radiator fan run-on

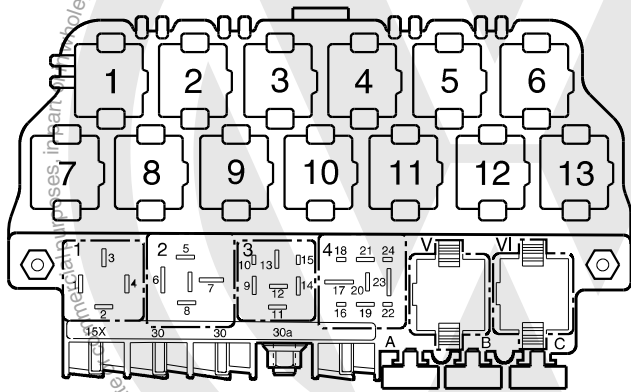
- ⇒ 2.3 ltr./110 kW Motronic, engine code AGZ
- ⇒ 2.3 ltr./125 kW Motronic, engine code AQN
- ⇒ 2.8 ltr./150 kW Motronic, engine code AQP, AUE

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)



Note:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

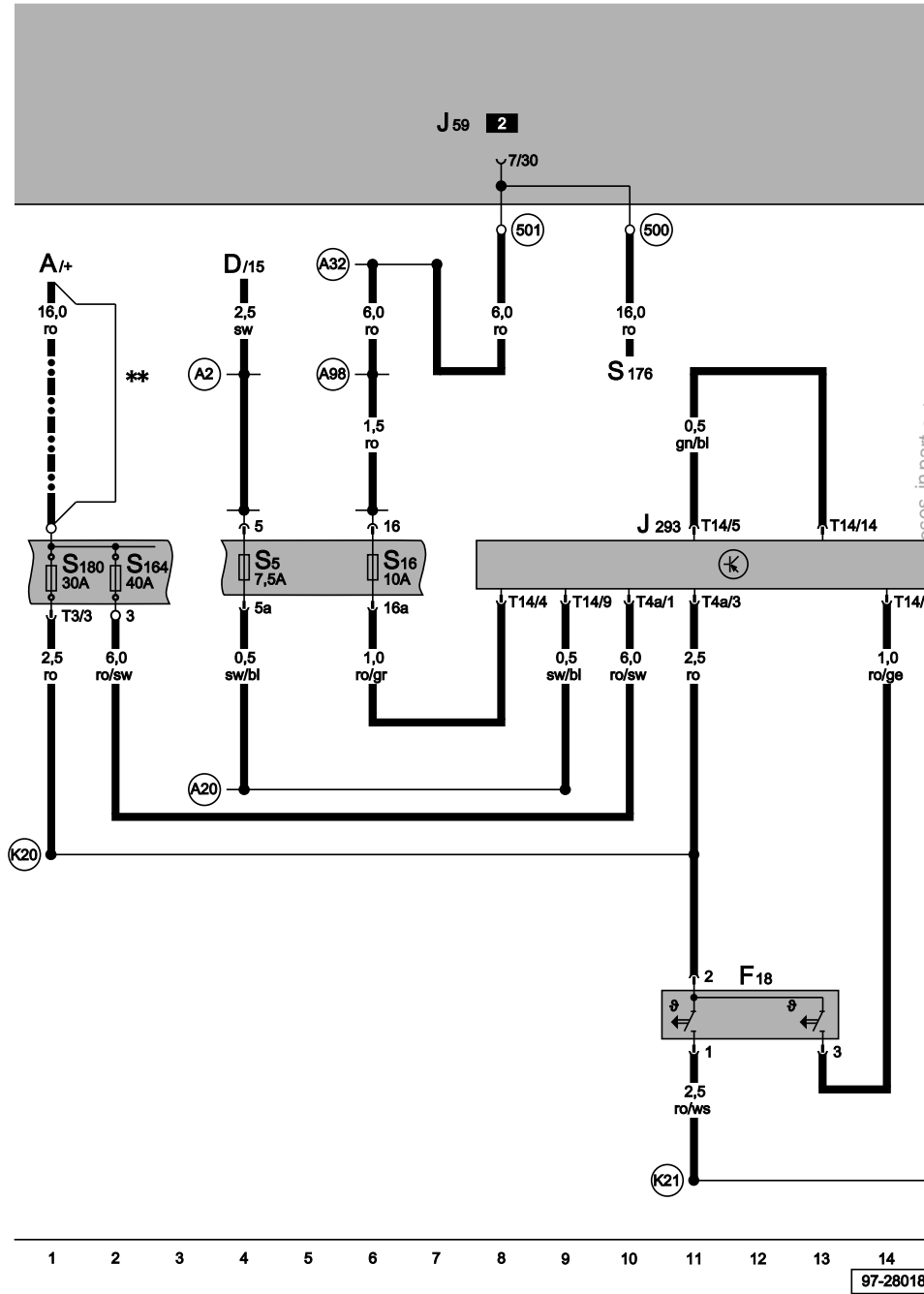
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red

- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Radiator fan control unit, radiator fan thermo-switch



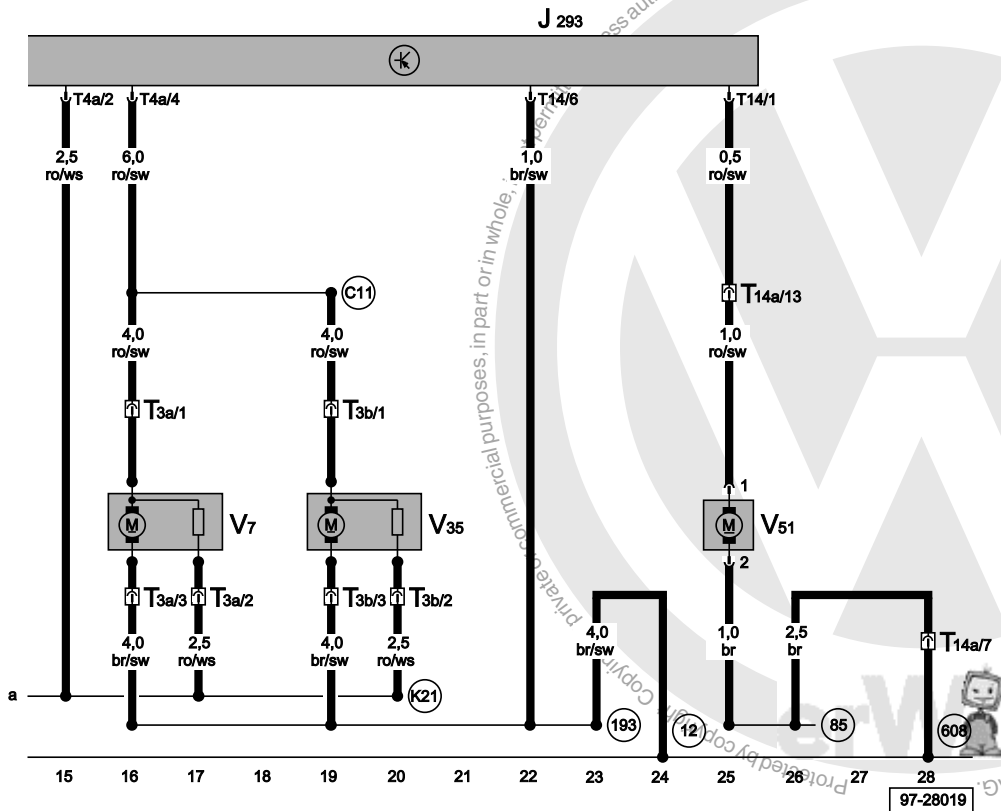
- A Battery
- D Ignition/starter switch
- F18 Radiator fan thermo-switch
- J59 X contact relief relay
- J293 Radiator fan control unit, in engine compartment, front left
- S5 Fuse in fuse box
- S16 Fuse in fuse box
- S164 Fuse -3- (30), in battery fuse box
- S176 Fuse -4- (30), in battery fuse box
- S180 Fuse -8- (30), in battery fuse box
- T4a 4-pin connector
- T14 14-pin connector
- 500 Screw connection -1- (30), on relay plate
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- K20 Positive (+) connection -1- (30), in radiator fan wiring harness
- K21 Connection -1-, in radiator fan wiring harness
- ** up to August 2000
- ** from September 2000

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, radiator fan, continued circulation of coolant pump

- J293 Radiator fan control unit, in engine compartment, front left
- T3a 3-pin connector, in engine compartment, front left
- T3b 3-pin connector, in engine compartment, front left
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment
- V7 Radiator fan
- V35 Radiator fan, right
- V51 Continued circulation of coolant pump

- 12 Earth point, in engine compartment, left
- 85 Earth connection -1-, in engine compartment wiring harness
- 193 Earth connection -1-, in radiator fan wiring harness
- 608 Earth point, in plenum chamber, centre
- C11 Connection in radiator fan wiring harness
- K21 Connection -1-, in radiator fan wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-28019

Radiator fan, 2 speed, (not for models with air conditioner)

- ⇒ 1.9 ltr./66 kW turbo-diesel engine, engine codes AGR, ALH
- ⇒ 1.9 ltr./74 kW turbo-diesel engine, engine codes ATD
- ⇒ 1.9 ltr./81 kW turbo-diesel engine, engine codes AHF, ASV
- ⇒ 1.9 ltr./85 kW Turbo diesel engine with unit injectors, engine code AJM, AUJ
- ⇒ 1.9 ltr./96 kW turbo-diesel engine, engine codes ASZ

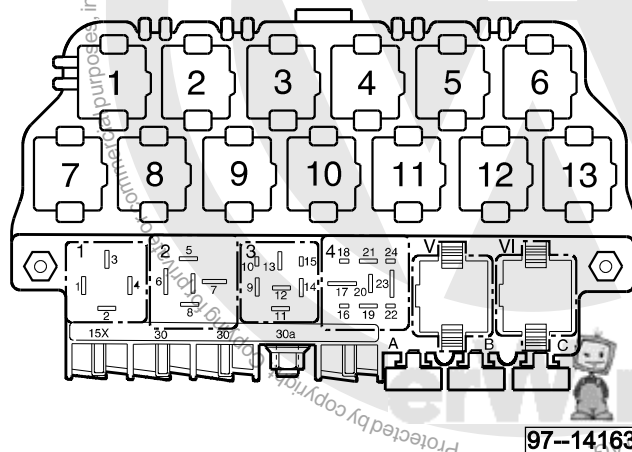
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

13 - Radiator fan run-on relay (53)

Relay locations on relay plate:



Note:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

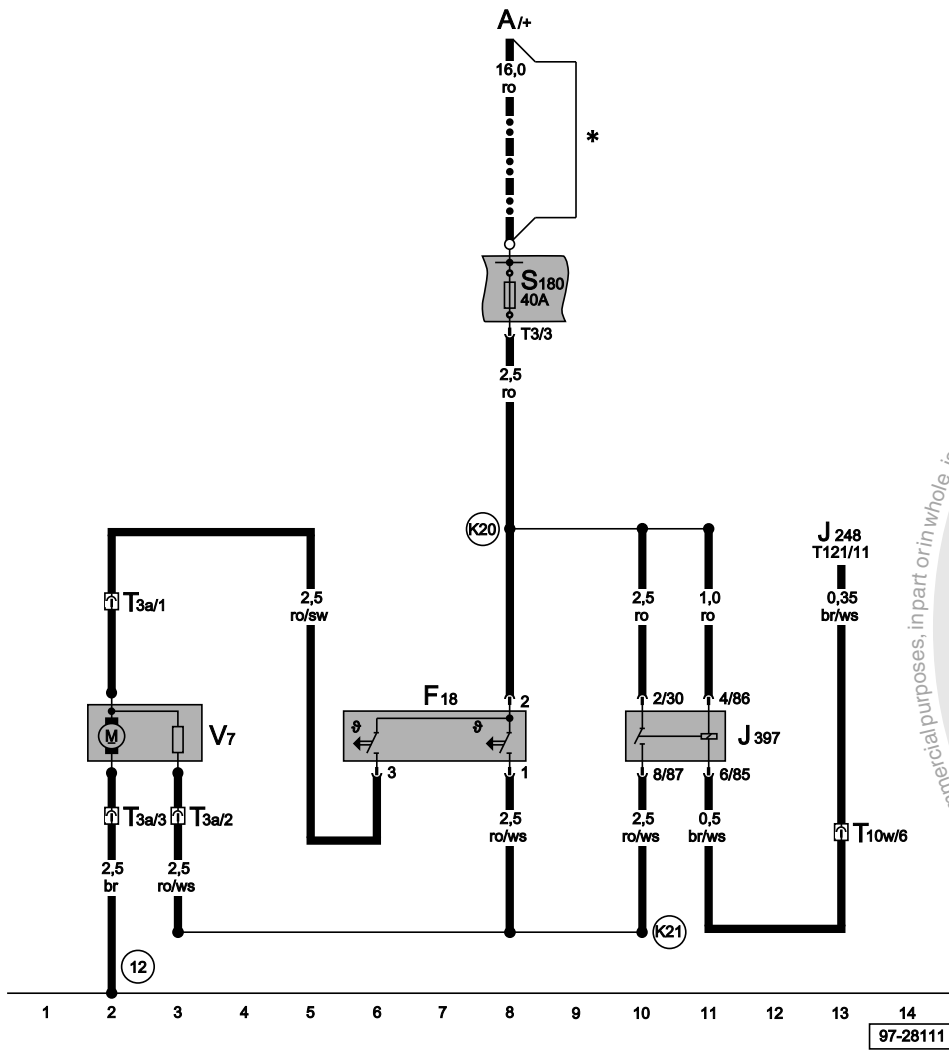




Radiator fan, radiator fan thermo-switch, radiator fan relay connection

- A Battery
- F18 Radiator fan thermo-switch
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- J397 Radiator fan run-on relay, on the position additional relay carrier above the relay plate
- S180 Fuse -8- (30), in battery fuse box
- T3 3-pin connector
- T3a 3-pin connector, in engine compartment, front left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector
- V7 Radiator fan
- 12 Earth point, in engine compartment, left
- K20 Positive (+) connection -1- (30), in radiator fan wiring harness
- K21 Connection -1-, in radiator fan wiring harness

* up to August 2000
 --- from September 2000



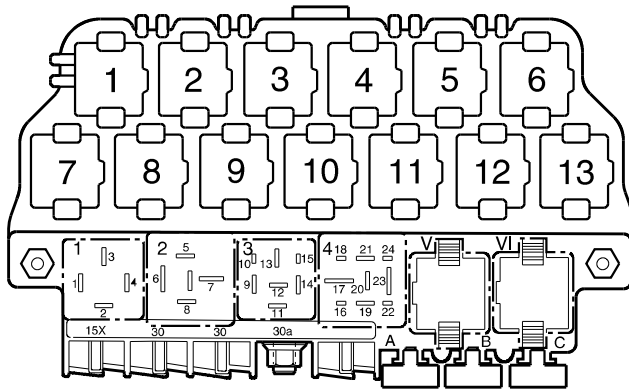
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-28111

Air conditioning system

⇒ not for engine codes APF, AVU, BFQ
from May 1999

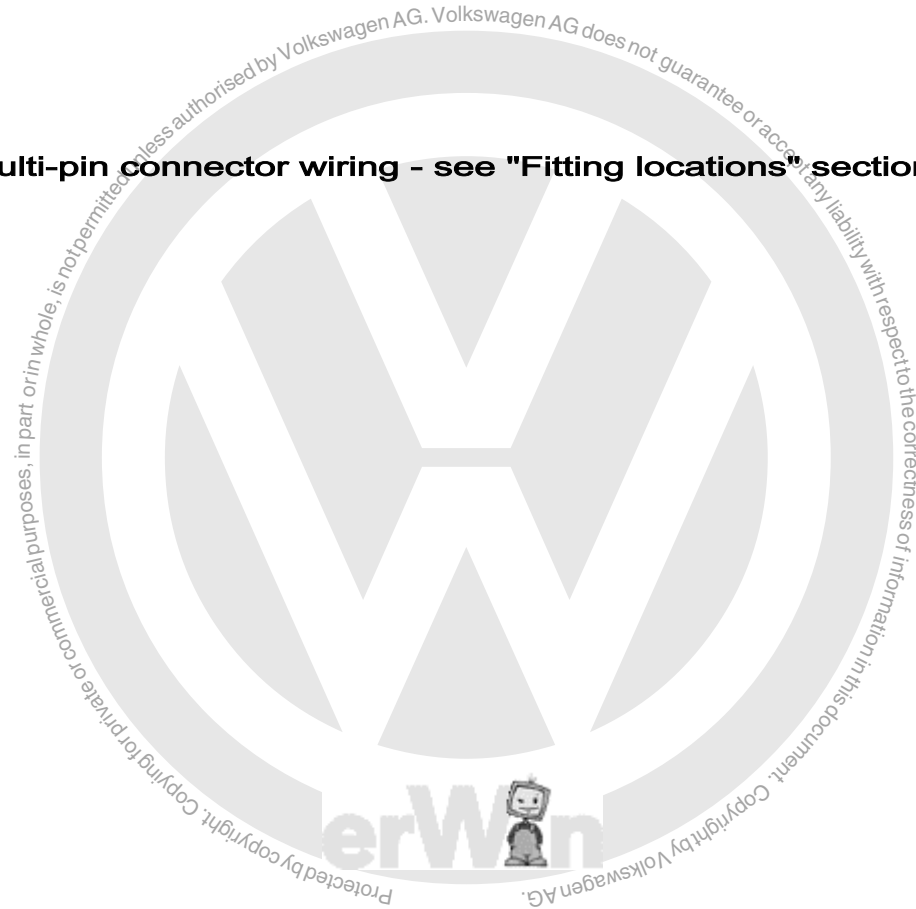
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



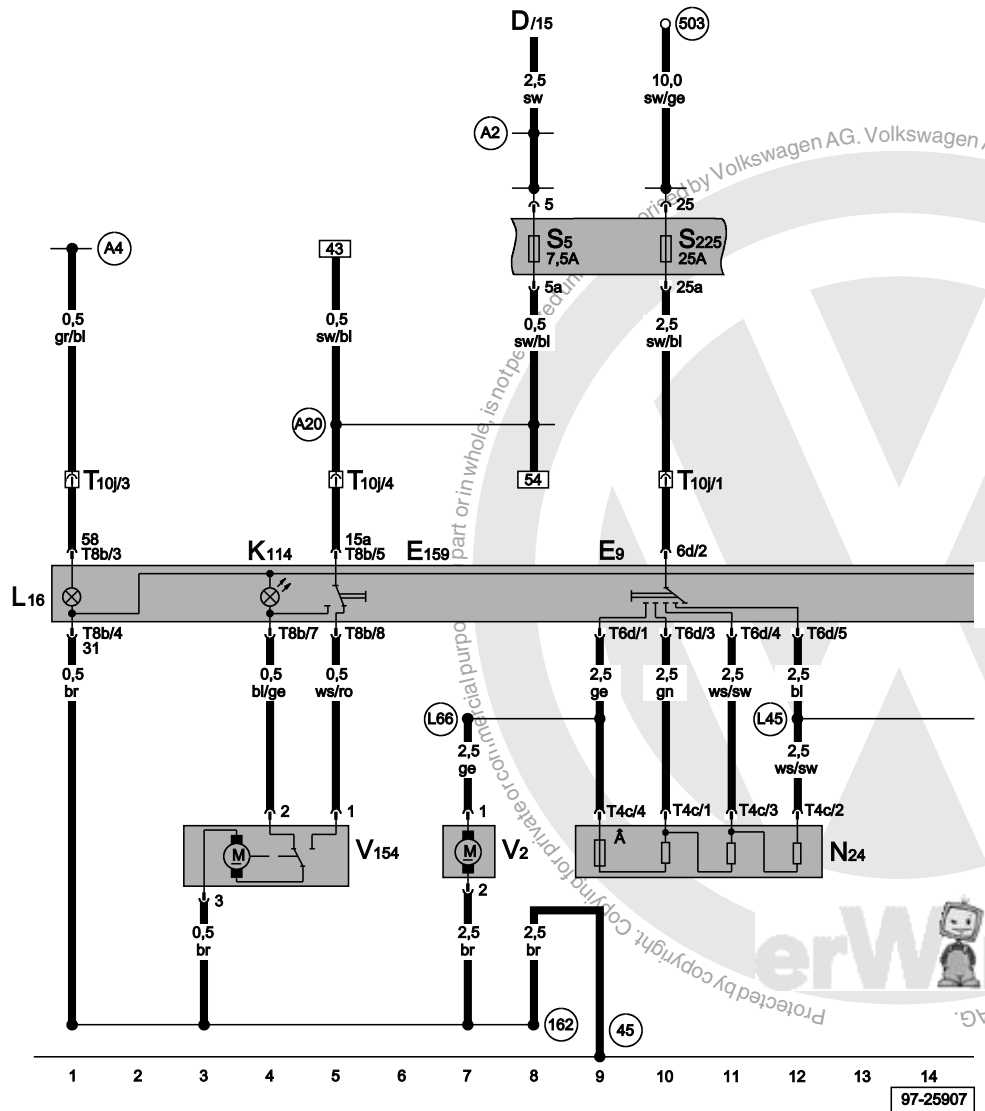
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Fresh air blower switch, fresh air/air recirculation flap switch, fresh air blower, fresh air/recirculated air flap control motor



- D Ignition/starter switch
- E9 Fresh air blower switch
- E159 Fresh air/air recirculation flap switch
- K114 Fresh air and air recirculation warning lamp
- L16 Fresh air regulator illumination bulb
- N24 Fresh air blower series resistor with overheating fuse
- S5 Fuse 5 in fuse holder
- S225 Fuse 25 in fuse holder
- T4c 4-pin connector
- T6d 6-pin connector
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel
- V2 Fresh air blower
- V154 Fresh air/recirculated air flap control motor

- 45 Earth point, centre behind dash panel
- 162 Earth connection, in blower motor wiring harness
- 503 Screw connection (75x), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- L45 Connection, in air conditioning system operating unit wiring harness
- L66 Connection, in heater blower wiring harness

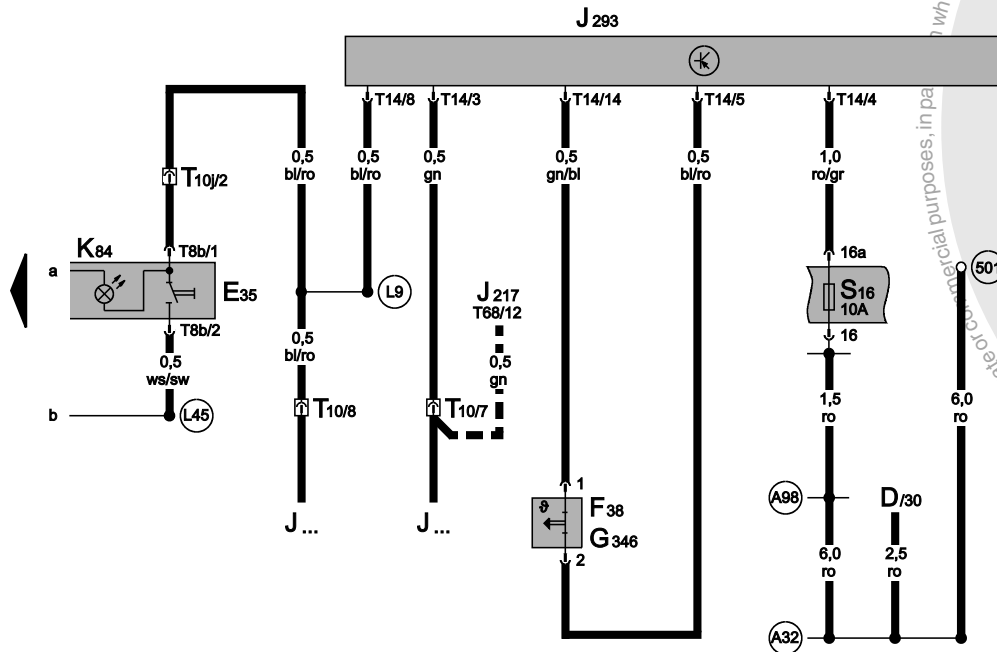
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25907

Radiator fan control unit, air conditioning system switch, ambient temperature switch, temperature sender for compressor switch-off

- D Ignition/starter switch
- E35 Air conditioning system switch
- F38 Ambient temperature switch (up to September 1999)
- G346 Temperature sender for compressor switch-off (from October 1999)
- J217 Automatic gearbox control unit
- J293 Radiator fan control unit, in engine compartment, front left
- J... Engine control units
- K84 Air conditioning system warning lamp
- S16 Fuse 16 in fuse holder
- T8b 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10j 10-pin connector, behind centre dash panel
- T14 14-pin connector
- T68 68-pin connector

- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- L9 Connection 1, in air conditioning system wiring harness
- L45 Connection, in air conditioning system operating unit wiring harness
- only engine codes ARZ, AGN, AQY, APK, AZH, ATF, AGZ, AZJ, AUM, AUQ, BFQ BCB



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- gn = green
- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, radiator fan, air conditioning system magnetic coupling, continued coolant circulation pump

- J285 Control unit in dash panel insert
- J293 Radiator fan control unit, in engine compartment, front left
- N25 Air conditioning system magnetic coupling
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment (from 2000 near battery)
- T32a 32-pin connector, green, on dash panel insert
- V7 Radiator fan
- V35 Right fan for radiator**
- V51 Continued coolant circulation pump

85 Earth connection 1, in engine compartment wiring harness

193 Earth connection 1, in coolant fan wiring harness

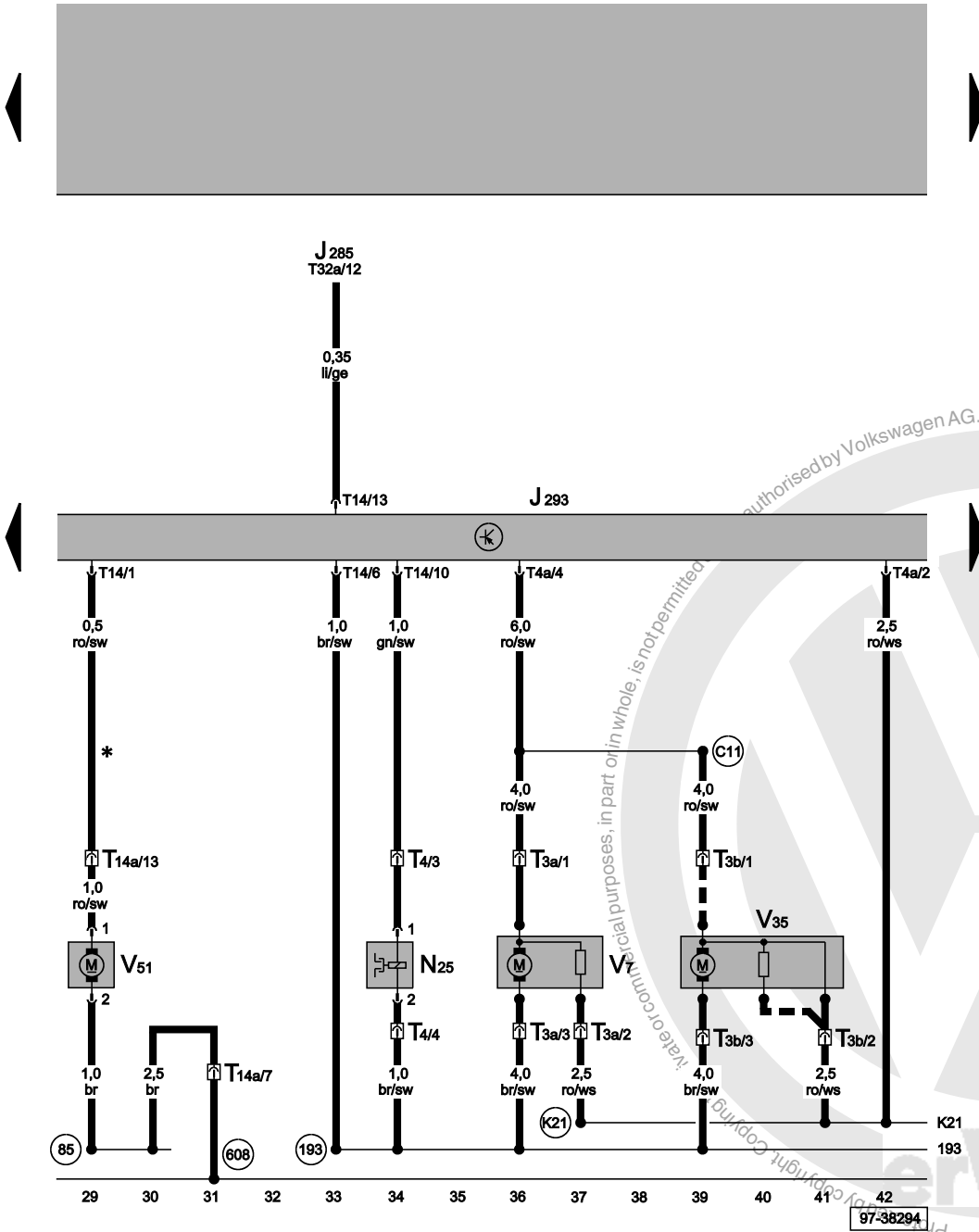
608 Earth point, in centre of plenum chamber

C11 Connection in radiator fan wiring harness

K21 Connection 1 in radiator fan wiring harness

* only models with 5 and 6-cylinder engines
 ** depending on engine with series resistor/ without series resistor
 --- not for all engine variants exist

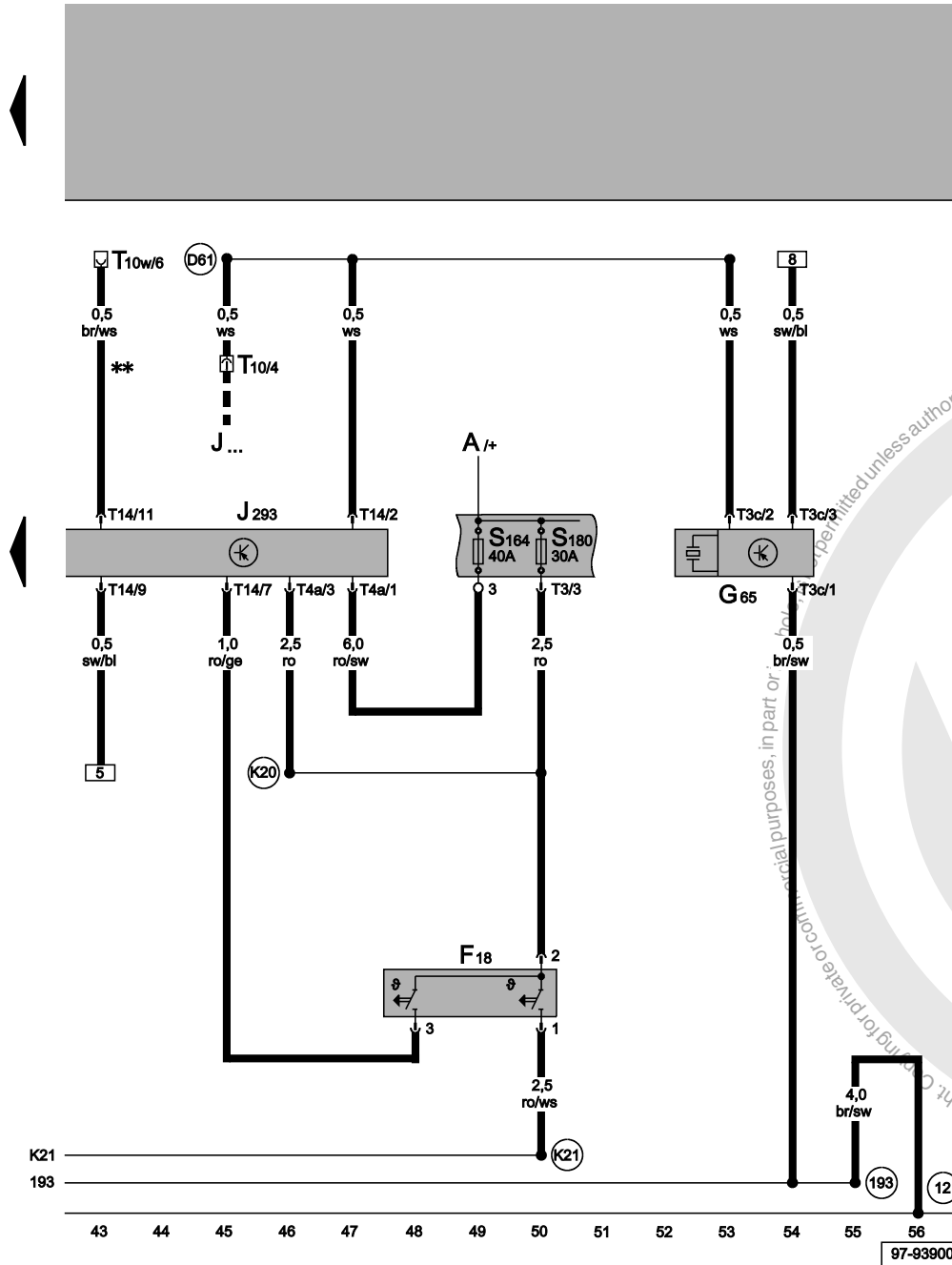
- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-38294

Radiator fan control unit, radiator fan, thermal switch for radiator fan, high pressure sender

- A Battery
- F18 Thermal switch for radiator fan
- G65 High pressure sender
- J293 Radiator fan control unit, in engine compartment, front left
- J... Engine control units
- S164 Fuse 3 (30) in fuse holder on battery
- S180 Fuse 8 (30) in fuse holder on battery
- T3 3-pin connector
- T3c 3-pin connector
- T4a 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in coolant fan wiring harness
- D61 Connection (air conditioning system), in engine compartment wiring harness
- K20 Positive connection 1 (30), in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- ** only TDI engines
- not applicable for all engine control units

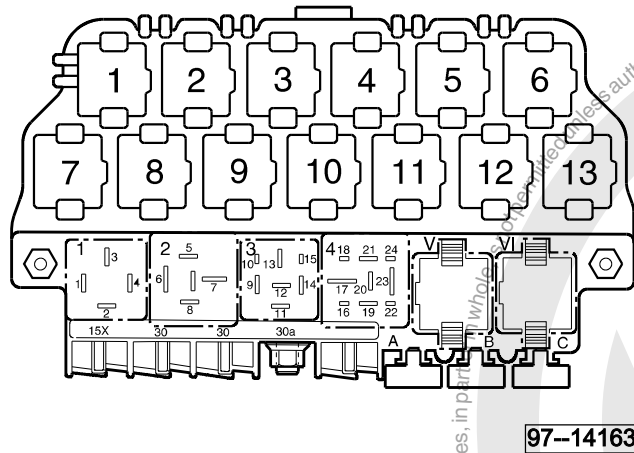


- ws = white
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Air conditioning system

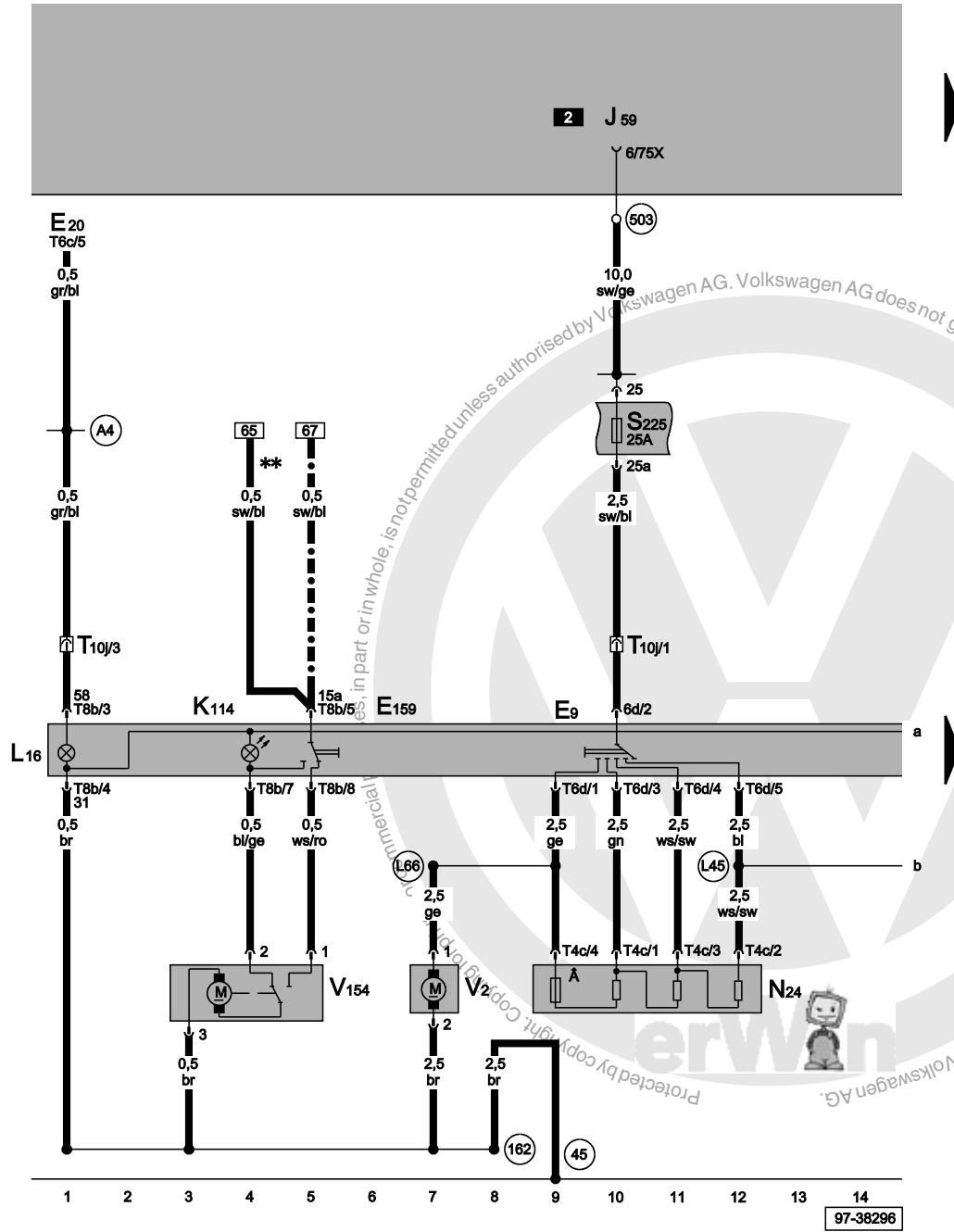
- ⇒ 1.6 l/74 kW Simos, engine code APF
 - ⇒ 1.6 l/75 kW Simos, engine code AVU
 - ⇒ 1.6 l/75 kW Simos, engine code BFQ
- from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Fresh air blower switch, fresh air/air recirculation flap switch, fresh air blower, fresh air/recirculated air flap control motor

- E9 Fresh air blower switch
- E20 Illumination regulators, switches, instruments
- E159 Fresh air/air recirculation flap switch
- J59 X-contact relief relay
- K114 Fresh air and air recirculation warning lamp
- L16 Fresh air regulator illumination bulb
- N24 Fresh air blower series resistor with overheating fuse
- S225 Fuse 25 in fuse holder
- T4c 4-pin connector
- T6c 6-pin connector
- T6d 6-pin connector
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel
- V2 Fresh air blower
- V154 Fresh air/recirculated air flap control motor

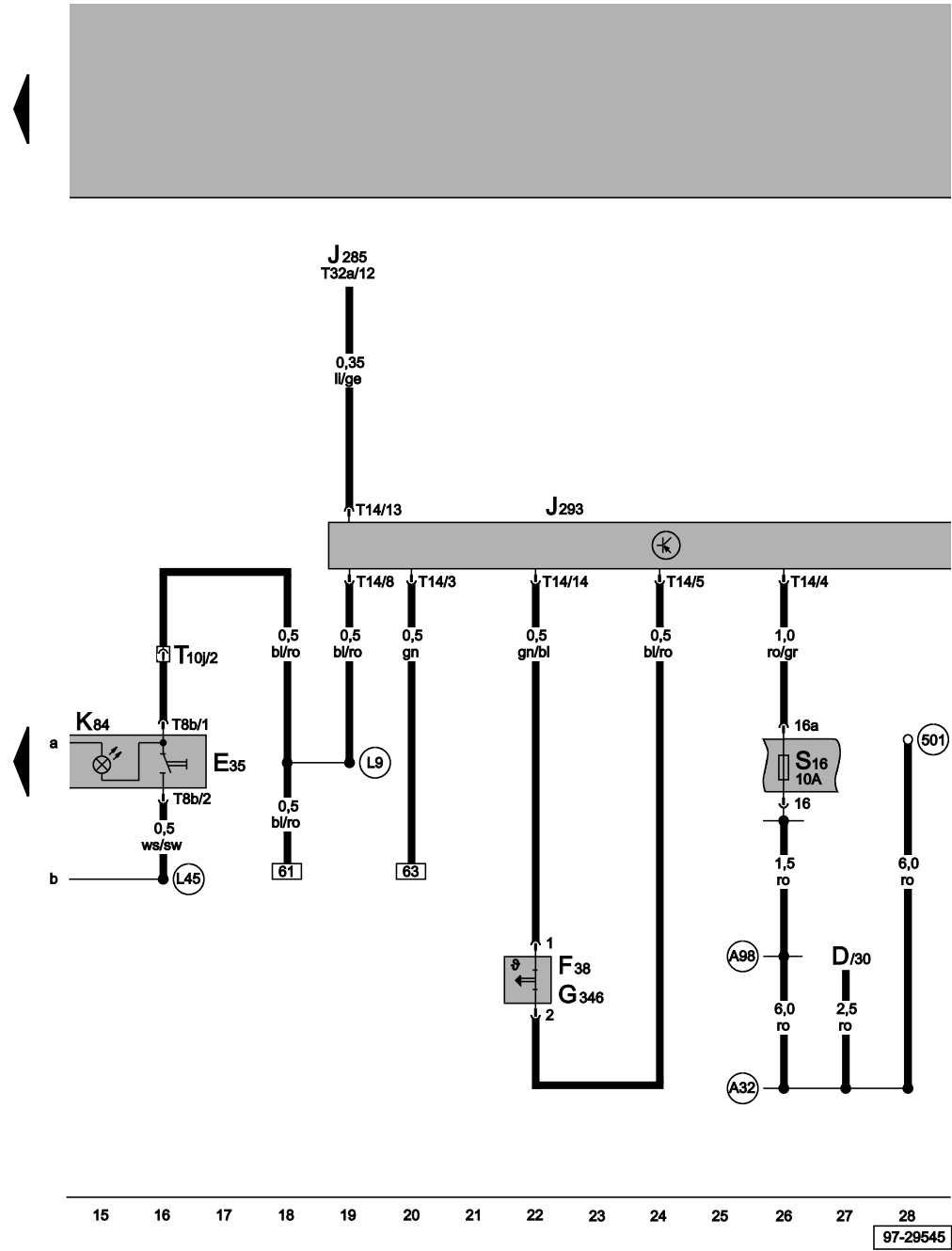
- 45 Earth point, centre behind dash panel
- 162 Earth connection, in blower motor wiring harness
- 503 Screw connection (75x), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- L45 Connection, in air conditioning system operating unit wiring harness
- L66 Connection, in heater blower wiring harness
- ** from May 2002
- up to April 2002

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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, air conditioning system switch, ambient temperature switch, temperature sender for compressor switch-off

- D Ignition/starter switch
- E35 Air conditioning system switch
- F38 Ambient temperature switch (up to September 1999)
- G346 Temperature sender for compressor switch-off (from October 1999)
- J285 Control unit with display in dash panel insert
- J293 Radiator fan control unit, in engine compartment, front left
- K84 Air conditioning system warning lamp
- S16 Fuse 16 in fuse holder
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel
- T14 14-pin connector
- T32a 32-pin connector, green, on dash panel insert

- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- L9 Connection 1, in air conditioning system wiring harness
- L45 Connection, in air conditioning system operating unit wiring harness



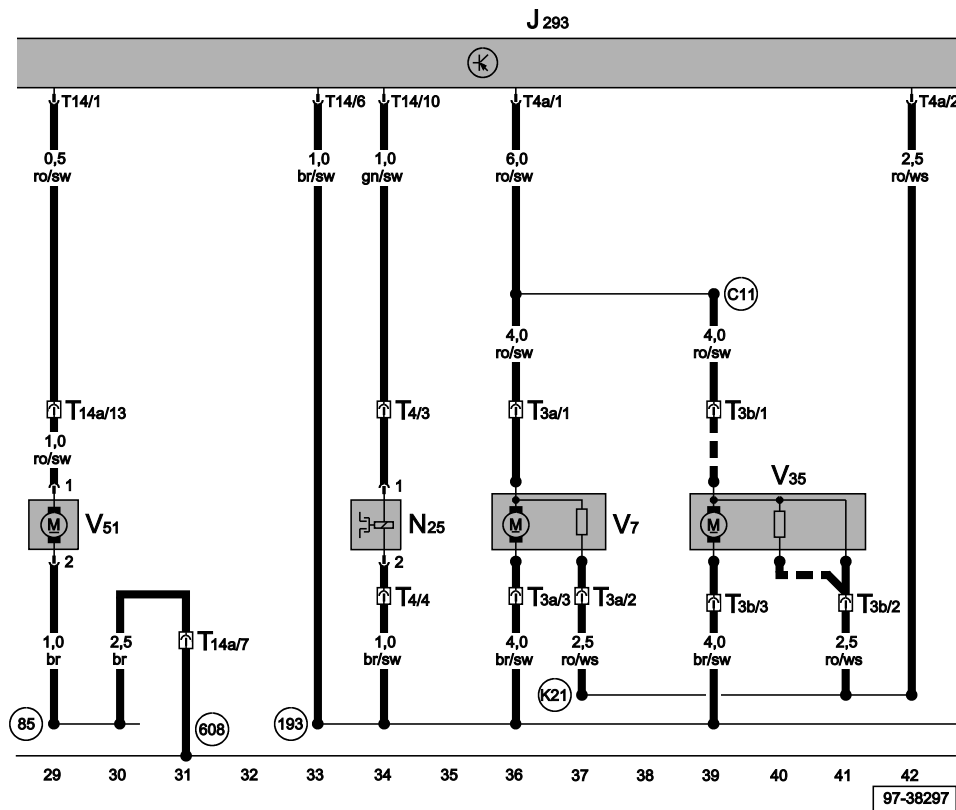
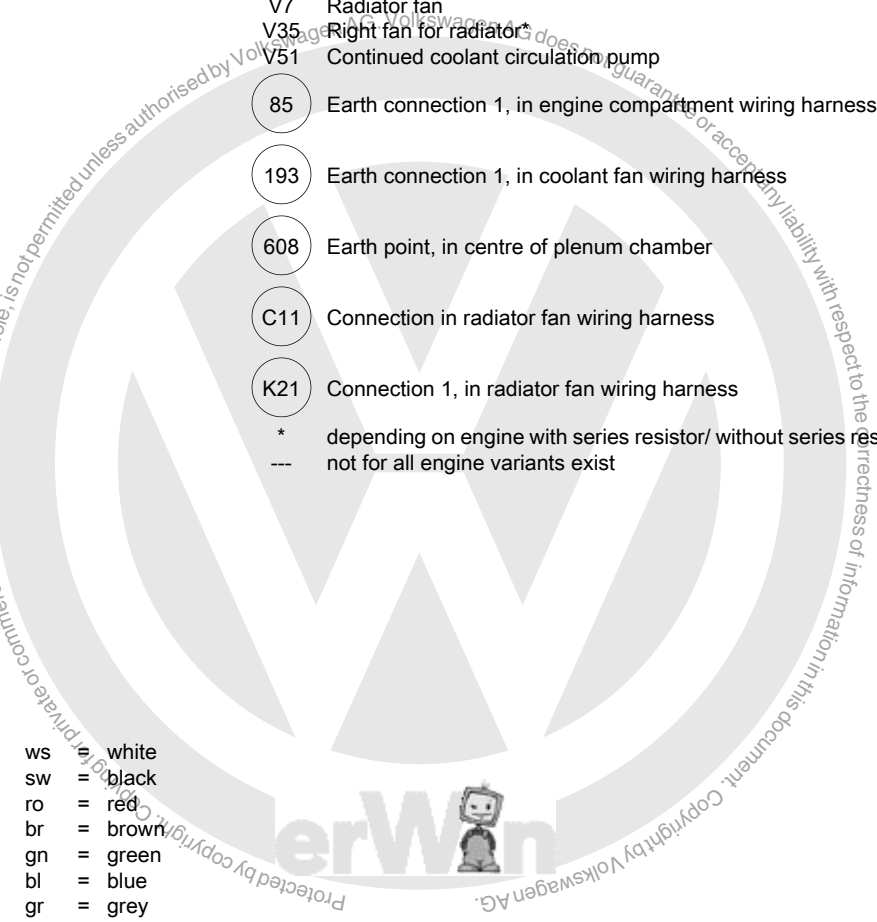
- ws = white
- sw = black
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, radiator fan, air conditioning system magnetic coupling, continued coolant circulation pump

- J293 Radiator fan control unit, in engine compartment, front left
- N25 Air conditioning system magnetic coupling
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment (from 2000 near battery)
- V7 Radiator fan
- V35 Right fan for radiator*
- V51 Continued coolant circulation pump

- 85 Earth connection 1, in engine compartment wiring harness
- 193 Earth connection 1, in coolant fan wiring harness
- 608 Earth point, in centre of plenum chamber
- C11 Connection in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness

* depending on engine with series resistor/ without series resistor
 --- not for all engine variants exist

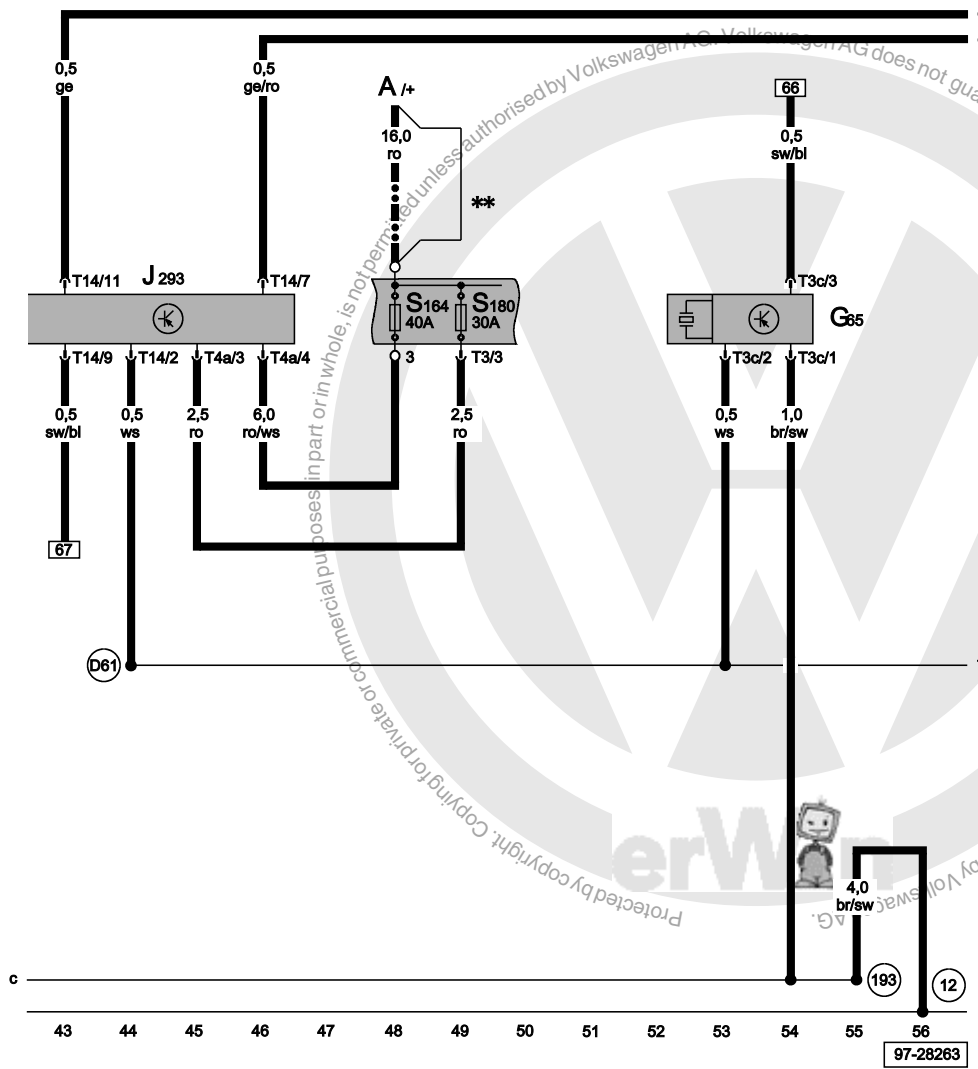


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

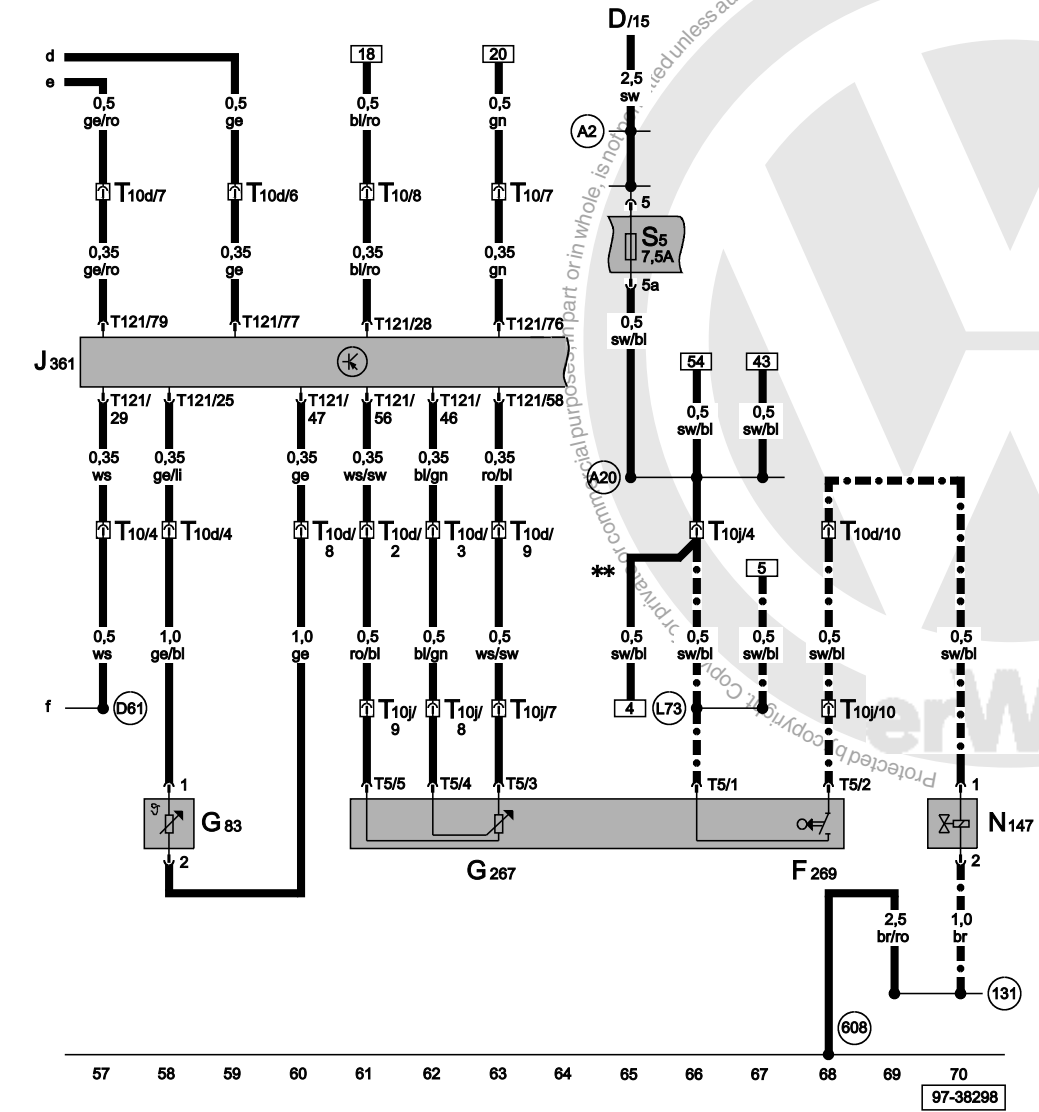
97-38297

Radiator fan control unit, high pressure sender

- A Battery
 - G65 High pressure sender
 - J293 Radiator fan control unit, in engine compartment, front left
 - S164 Fuse 3 (30), in fuse holder on battery
 - S180 Fuse 8 (30), in fuse holder on battery
 - T3 3-pin connector
 - T3c 3-pin connector
 - T4a 4-pin connector
 - T14 14-pin connector
- 12 Earth point, on left in engine compartment
 - 193 Earth connection 1, in coolant fan wiring harness
 - D61 Connection (air conditioning system), in engine compartment wiring harness
- ** up August 2000
 - from September 2000



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Simos control unit, radiator outlet coolant temperature sender, potentiometer for temperature selection rotary knob, temperature flap position switch, 2-way valve for coolant shut-off valve

- D Ignition/starter switch
- F269 Temperature flap position switch*
- G83 Radiator outlet coolant temperature sender
- G267 Potentiometer, temperature selection rotary knob*
- J361 Simos control unit, in centre plenum chamber
- N147 2-way valve for coolant shut-off valve
- S5 Fuse 5 in fuse holder
- T5 5-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10j 10-pin connector, behind centre dash panel
- T121 121-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- D61 Connection (air conditioning system), in engine compartment wiring harness
- L73 Connection (15a), in fresh air blower wiring harness
- * F269 is closed when G267 is positioned on left limit stop.
- ** from May 2002
- up to April 2002

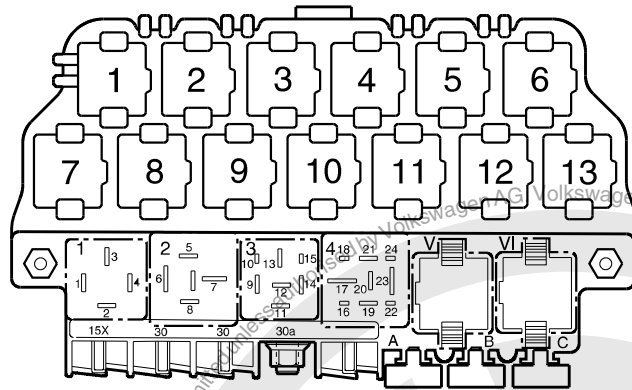
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Climatronic

⇒ Not for engine codes APF, AVU

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



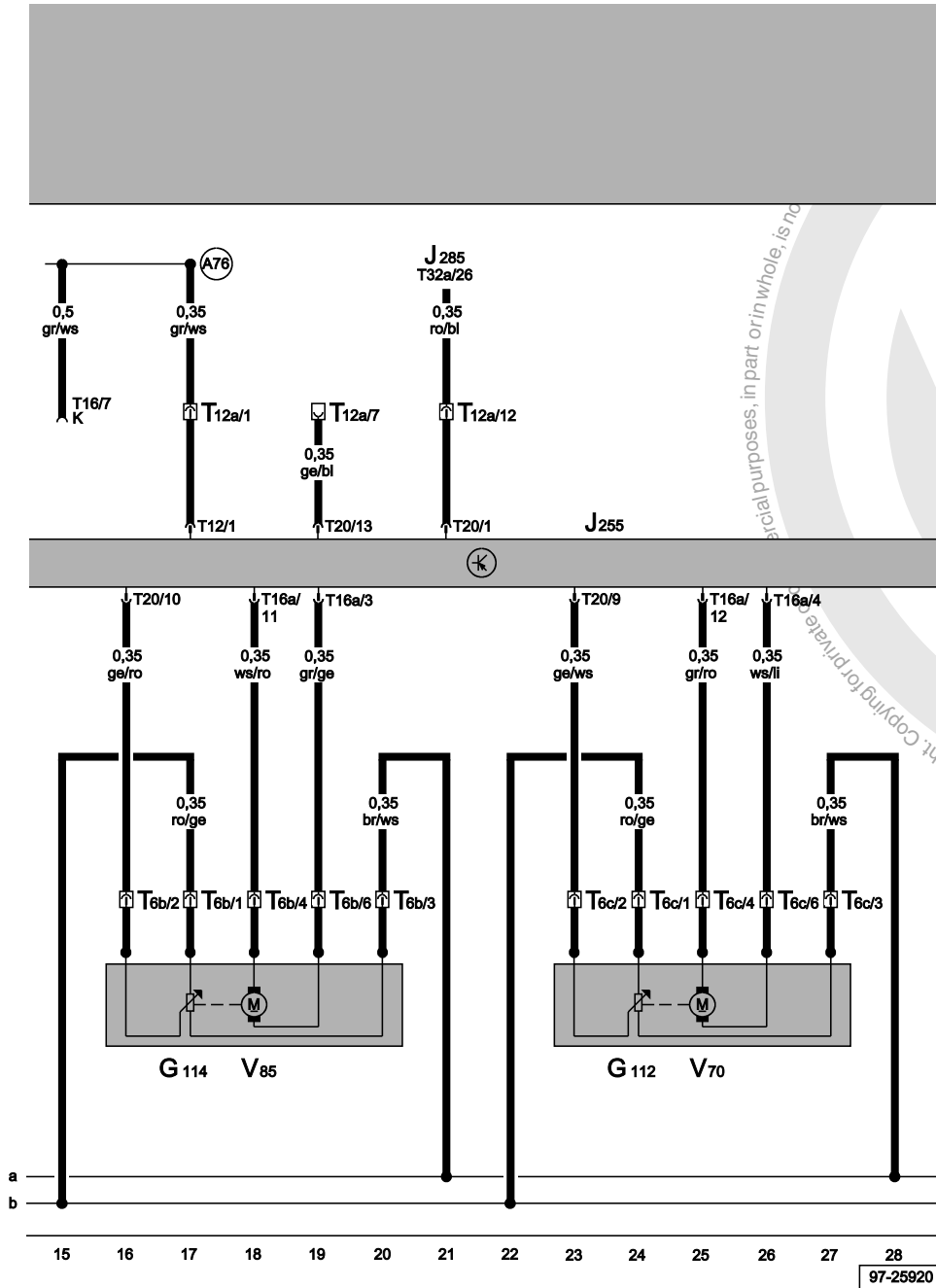
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Climatronic control unit, central flap control motor, footwell and defrost flap control motor

- G112 Central flap control motor potentiometer
- G114 Control motor potentiometer for footwell/defrost flap
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- T6b 6-pin connector, centre behind dash panel
- T6c 6-pin connector, centre behind dash panel
- T12 12-pin connector
- T12a 12-pin connector, centre behind dash panel
- T16 16-pin connector, in centre of dash panel, self-diagnosis connection
- T16a 16-pin connector
- T20 20-pin connector
- T32a 32-pin connector, green, on dash panel insert
- V70 Central flap control motor
- V85 Footwell/defroster flap control motor
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

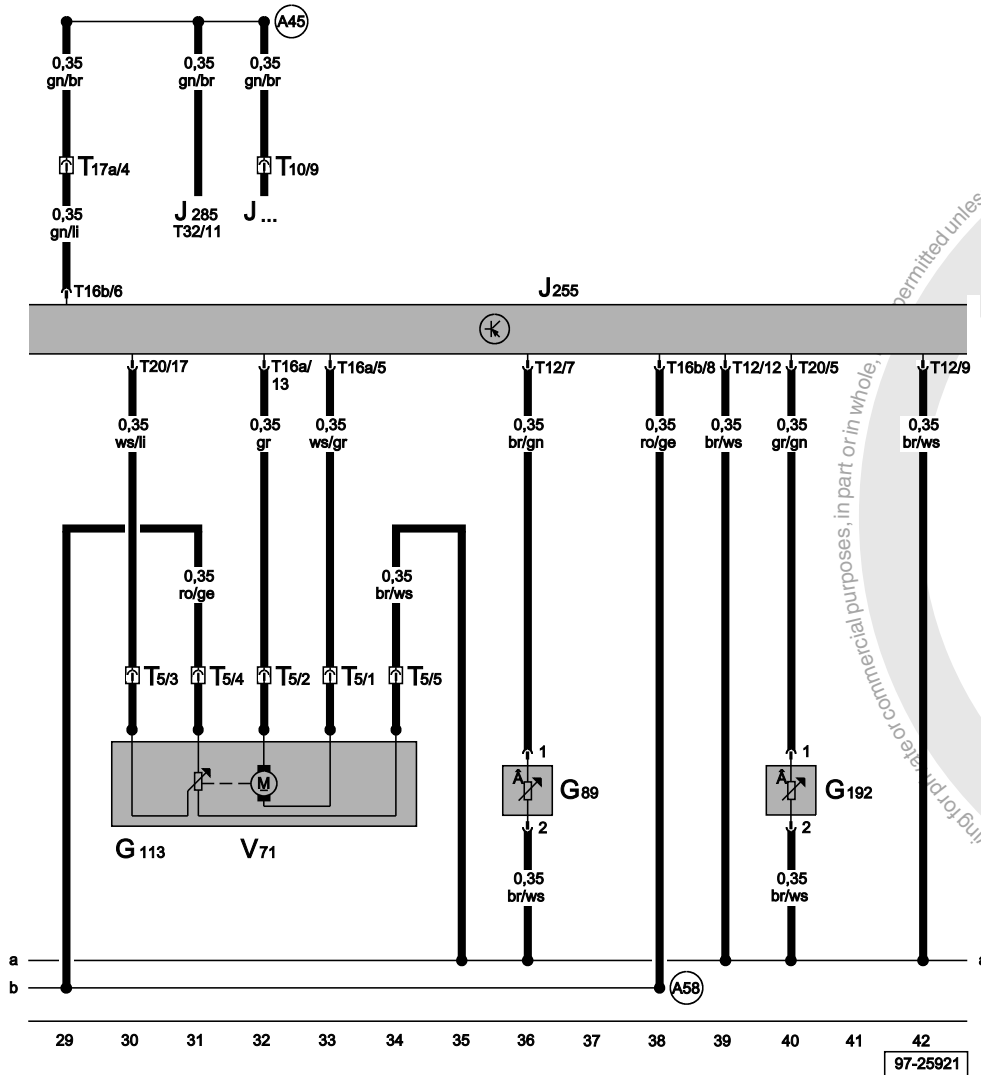
97-25920

Climatronic control unit, air flow flap control motor, vent temperature sender, fresh air intake duct temperature sensor

- G89 Fresh air intake duct temperature sensor, right under the dash panel
- G113 Air flow flap control motor potentiometer
- G192 Vent temperature sender, footwell
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J... Engine control unit
- T5 5-pin connector, centre behind dash panel
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T12 12-pin connector
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, centre behind dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert
- V71 Air flow flap control motor

(A45) Connection (engine speed signal), in dash panel wiring harness

(A58) Connection (5 Volt), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

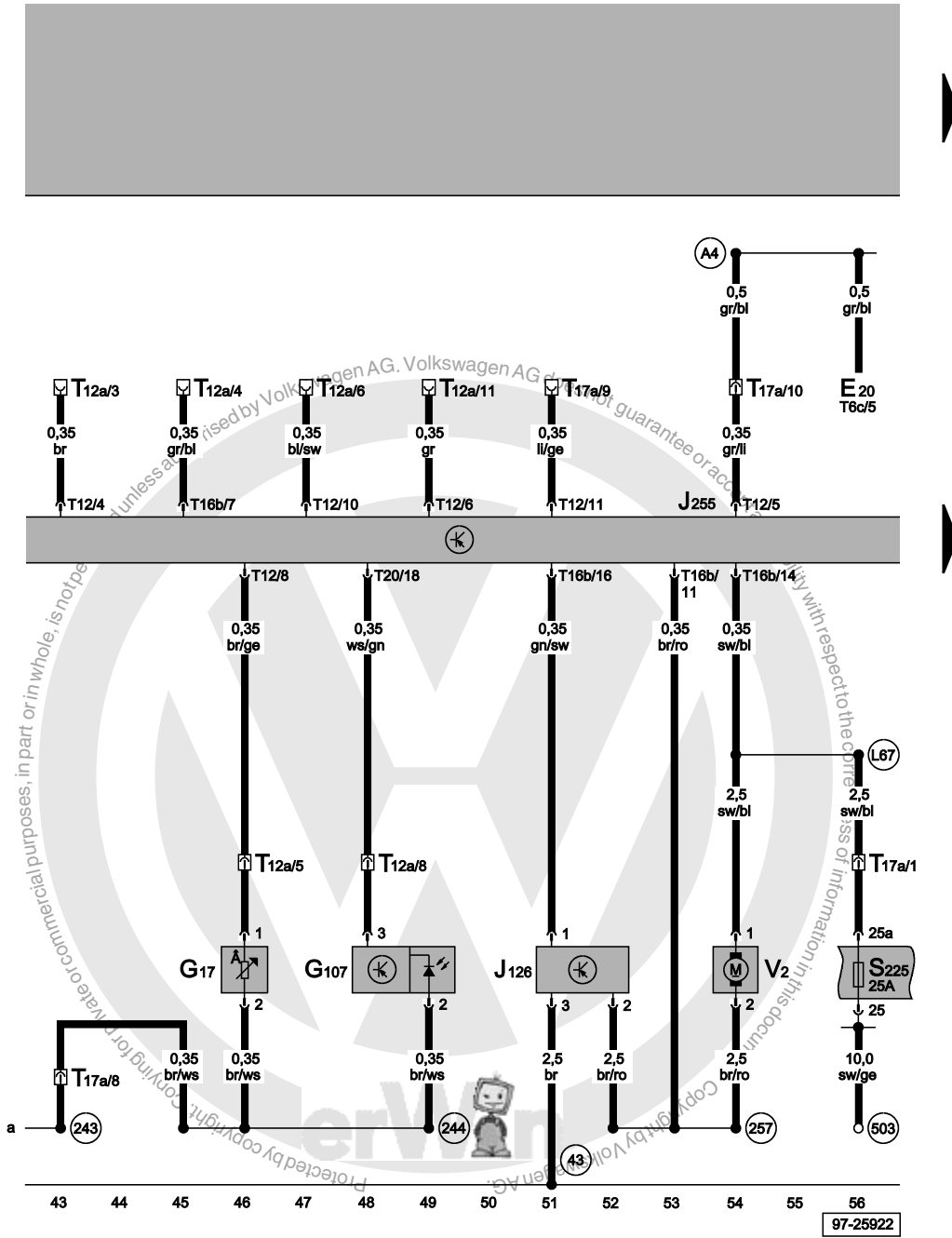
97-25921

Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, sunlight penetration photo-sensor

- E20 Switches and instruments, lighting control
- G17 Ambient temperature sensor, in front left bumper
- G107 Sunlight penetration photosensor, on dash panel centre
- J126 Fresh air blower control unit, on right under dash panel
- J255 Climatronic control unit
- S225 Fuse in fuse box
- T6c 6-pin connector
- T12 12-pin connector
- T12a 12-pin connector, behind dash panel, centre
- T16b 16-pin connector
- T17a 17-pin connector, behind dash panel, centre
- T20 20-pin connector
- V2 Fresh air blower

- 43 Earth point, lower part of right A-pillar
- 243 Earth connection -1-, in Climatronic wiring harness
- 244 Earth connection (sender earth), in Climatronic wiring harness
- 257 Earth connection -2-, in Climatronic wiring harness
- 503 Screw connection (75X), on relay plate
- A4 Positive (+) connection (58b), in dash panel wiring harness
- L67 Positive (+) connection (75X), in Climatronic wiring harness

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- bl = blue
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- or = orange
- rs = pink



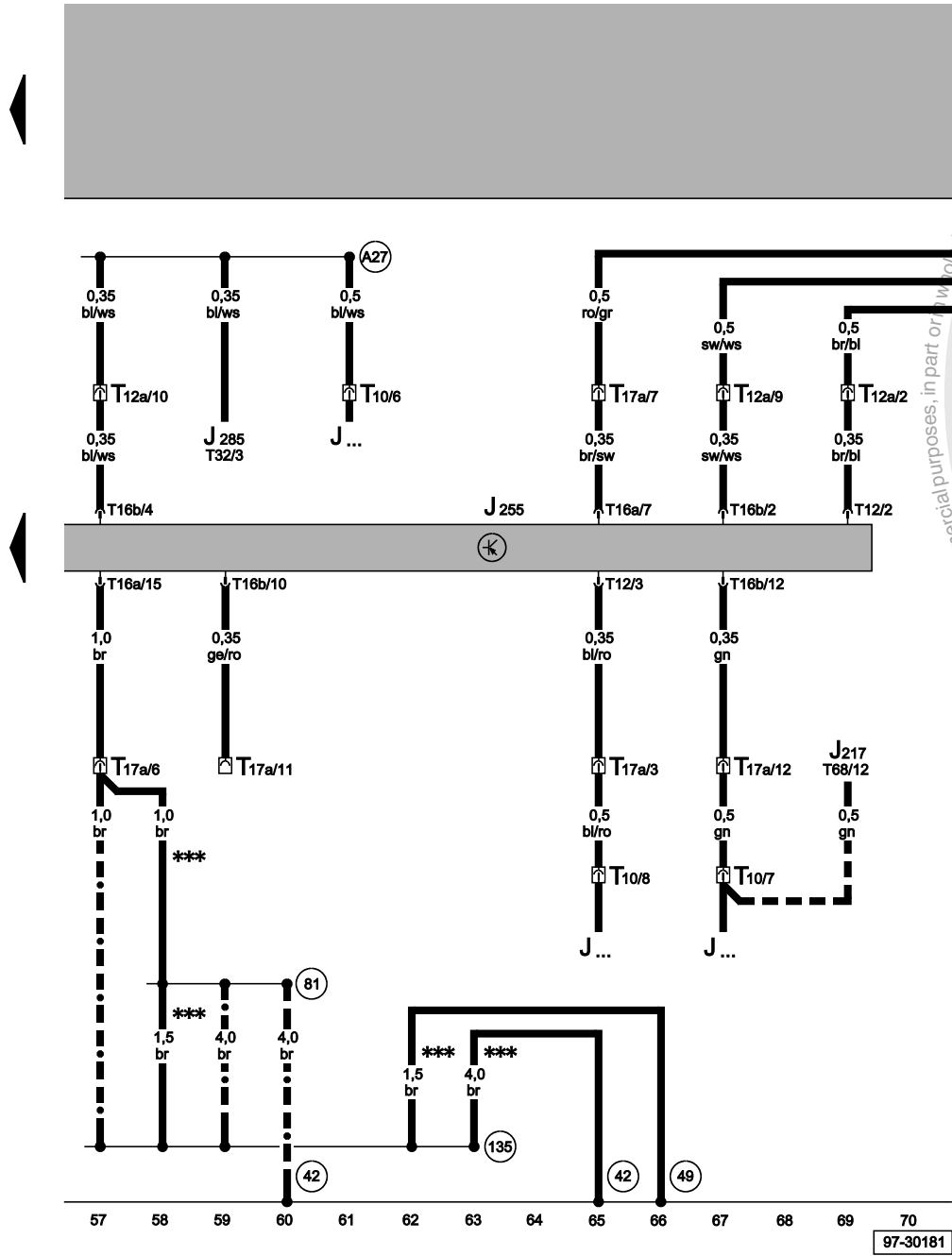
97-25922

Climatronic control unit

- J217 Automatic gearbox control unit
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J... Engine control unit
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T12 12-pin connector
- T12a 12-pin connector, in centre behind dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, in centre behind dash panel
- T32 32-pin connector, blue, on dash panel insert
- T68 68-pin connector

- (42) Earth point, next to steering column
- (49) Earth point, on steering column
- (81) Earth connection 1, in dash panel wiring harness
- (135) Earth connection 2, in dash panel wiring harness
- (A27) Connection (speed signal), in dash panel wiring harness
- Only models with automatic gearbox (AG4)
- *** From May 2000
- .-.- Up to April 2000

- ws = white
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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

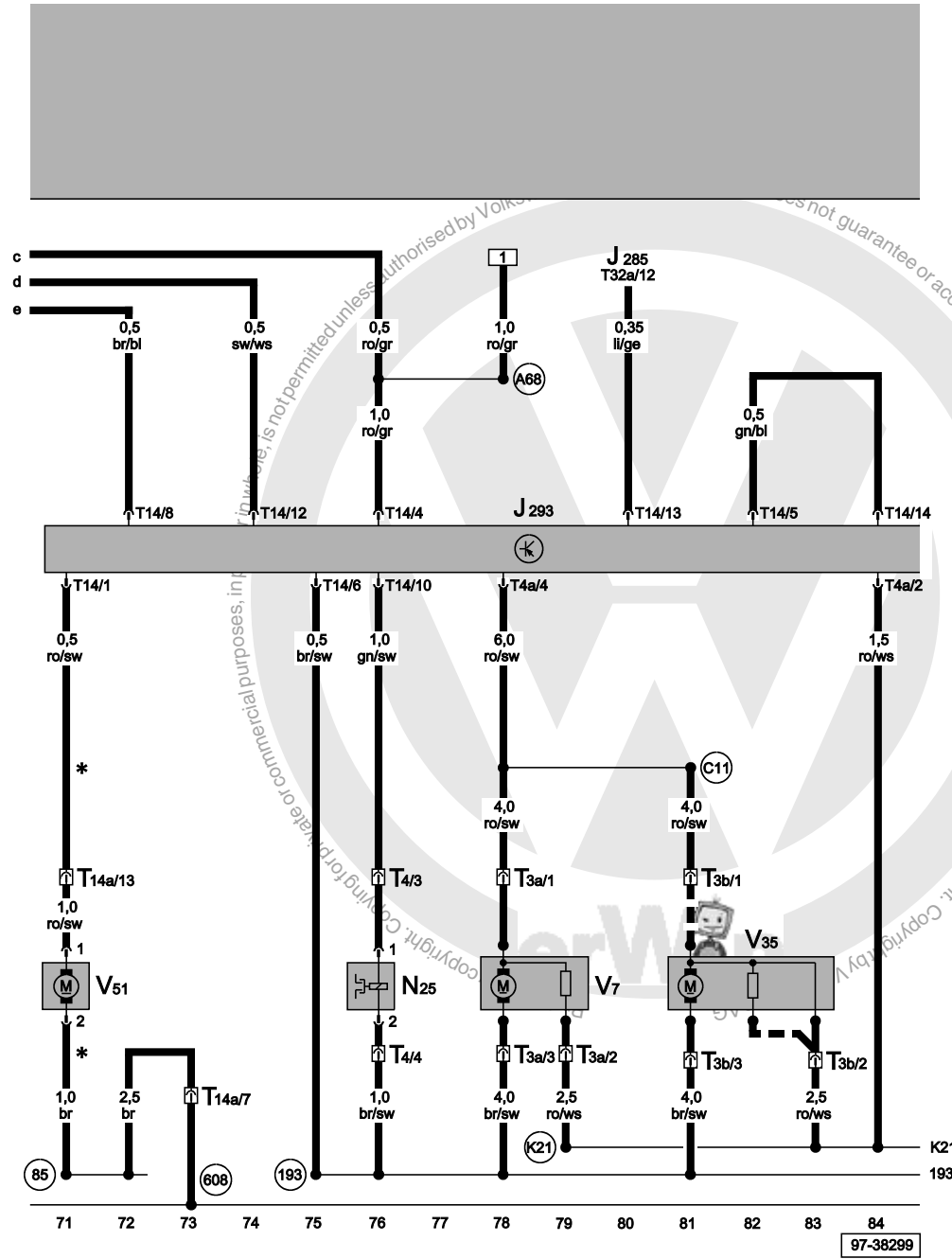


97-30181

Radiator fan control unit, radiator fan, air conditioner magnetic coupling, continued coolant circulation pump

- J285 Control unit in dash panel insert
- J293 Radiator fan control unit, on left in front of engine compartment
- N25 Air conditioner magnetic coupling
- T3a 3-pin connector, on left in front of engine compartment
- T3b 3-pin connector, on left in front of engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, near battery
- T32a 32-pin connector, green, on dash panel insert
- V7 Radiator fan
- V35 Right radiator fan**
- V51 Continued coolant circulation pump

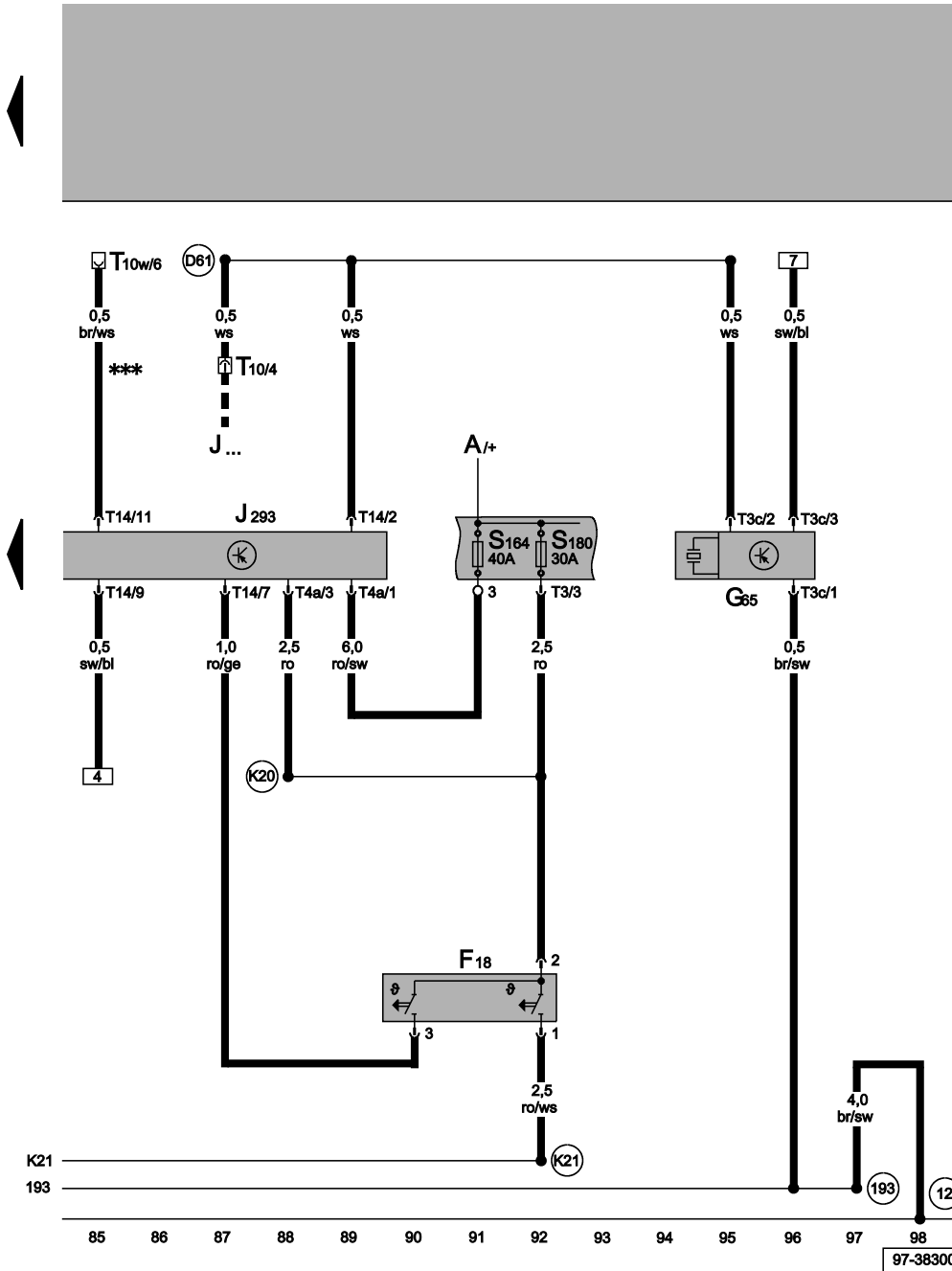
- 85 Earth connection 1, in engine compartment wiring harness
- 193 Earth connection 1, in radiator fan wiring harness
- 608 Earth point, in centre of plenum chamber
- A68 Connection (30, air conditioner), in dash panel wiring harness
- C11 Connection, in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- * Only models with 5 and 6-cylinder engines
- ** With/without series resistor depends on engine fitted
- Not fitted with all engines



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-38299

Radiator fan control unit, radiator fan thermal switch, high pressure sender



- A Battery
- F18 Radiator fan thermal switch
- G65 High pressure sender
- J293 Radiator fan control unit, on left in front of engine compartment
- J... Engine control unit
- S164 Fuse 3 (30), in battery fuse holder
- S180 Fuse 8 (30), in battery fuse holder
- T3 3-pin connector
- T3c 3-pin connector
- T4a 4-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T14 14-pin connector
- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in radiator fan wiring harness
- D61 Connection (air conditioner), in engine compartment wiring harness
- K20 Positive connection 1 (30), in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- ** Only with TDI engines
Not for all engine control units

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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Climatronic

- ⇒ 1.6 l/74 kW Simos, engine code APF
 - ⇒ 1.6 l/75 kW Simos, engine code AVU
- from May 1999

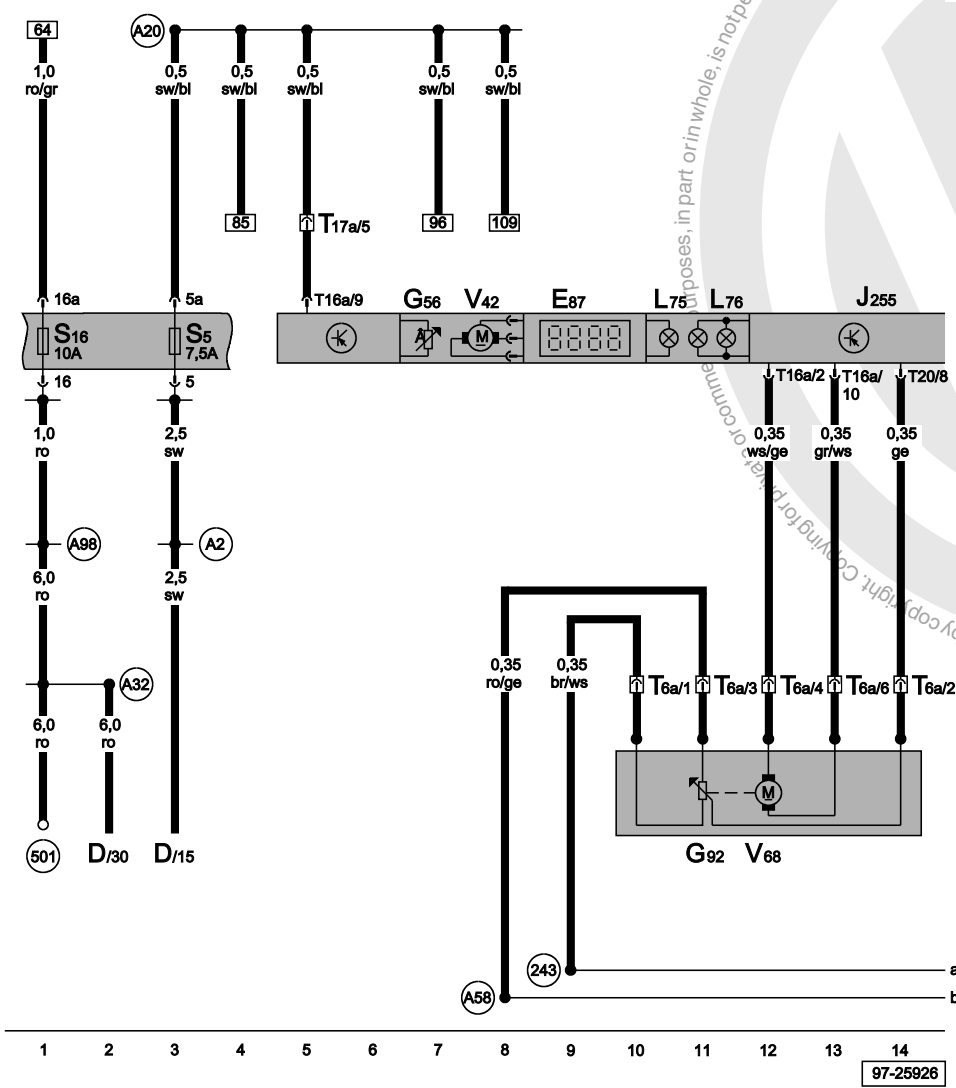
Notes:

For information concerning

- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
- ⇒ List of Fitting Locations!
For information concerning
- ◆ Fault Finding Programs
- ⇒ guided fault finding



Climatronic control unit, temperature flap control motor



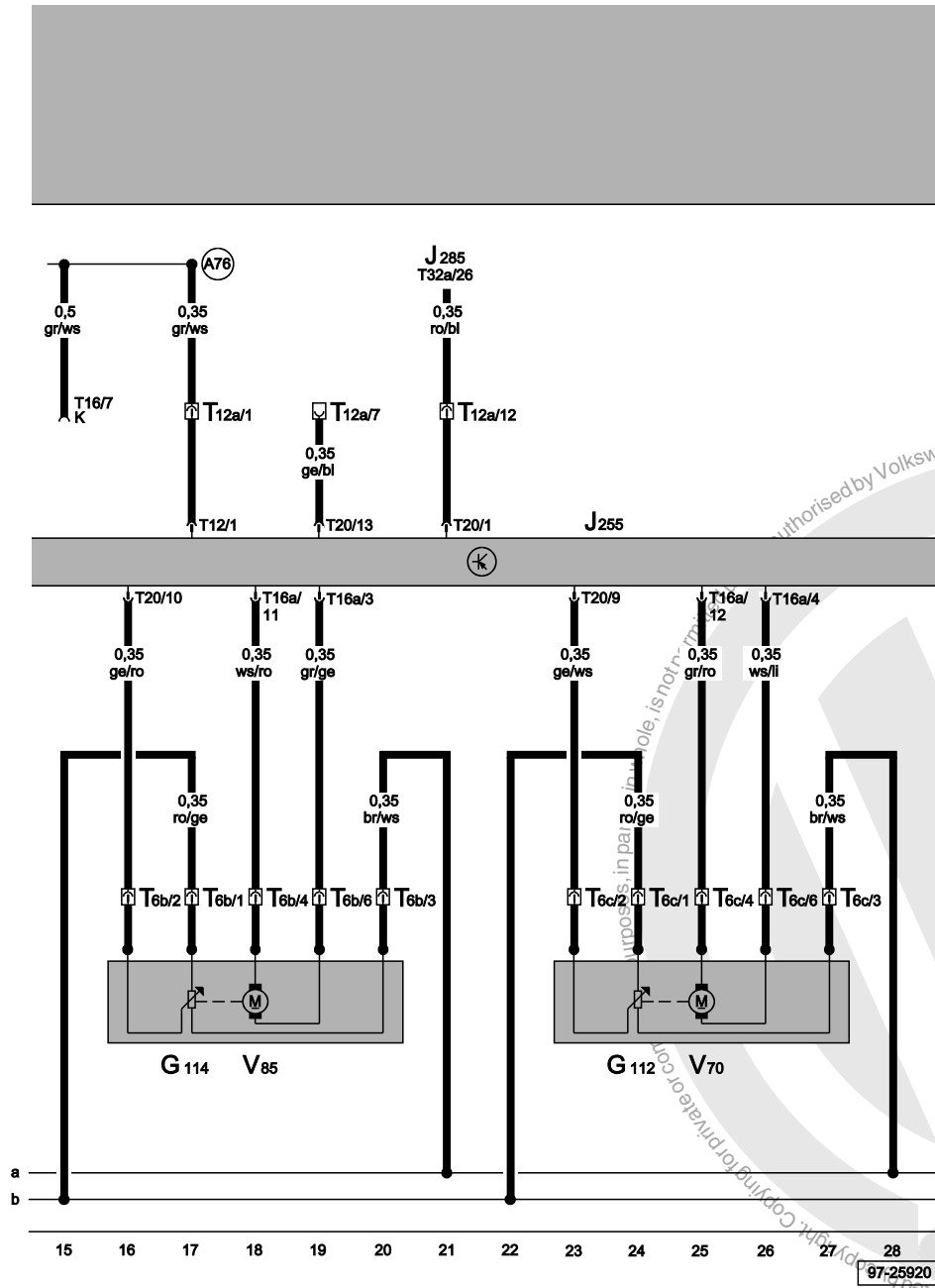
- D Ignition/starter switch
- E87 Rear Climatronic operating and display unit
- G56 Dash panel temperature sensor
- G92 Potentiometer for temperature flap control motor
- J255 Climatronic control unit
- L75 Digital display illumination bulb
- L76 Button illumination bulb
- S5 Fuse 5 in fuse holder
- S16 Fuse 16 in fuse holder
- T6a 6-pin connector, behind centre dash panel
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V42 Temperature sensor blower
- V68 Temperature flap control motor
- 243 Earth connection 1, in Climatronic wiring harness
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A58 Connection (5 volt), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness

- ws = white
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- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25926

Climatronic control unit, central flap control motor, footwell and defroster flap control motor

- G112 Central flap control motor potentiometer
 - G114 Footwell/defroster flap control motor potentiometer
 - J255 Climatronic control unit
 - J285 Control unit with display in dash panel insert
 - T6b 6-pin connector, behind centre dash panel
 - T6c 6-pin connector, behind centre dash panel
 - T12 12-pin connector
 - T12a 12-pin connector, behind centre dash panel
 - T16 16-pin connector, in centre dash panel, self-diagnosis connection
 - T16a 16-pin connector
 - T20 20-pin connector
 - T32a 32-pin connector, green, on dash panel insert
 - V70 Central flap control motor
 - V85 Footwell and defroster flap control motor
- (A76) Connection (diagnosis wire K), in dash panel wiring harness

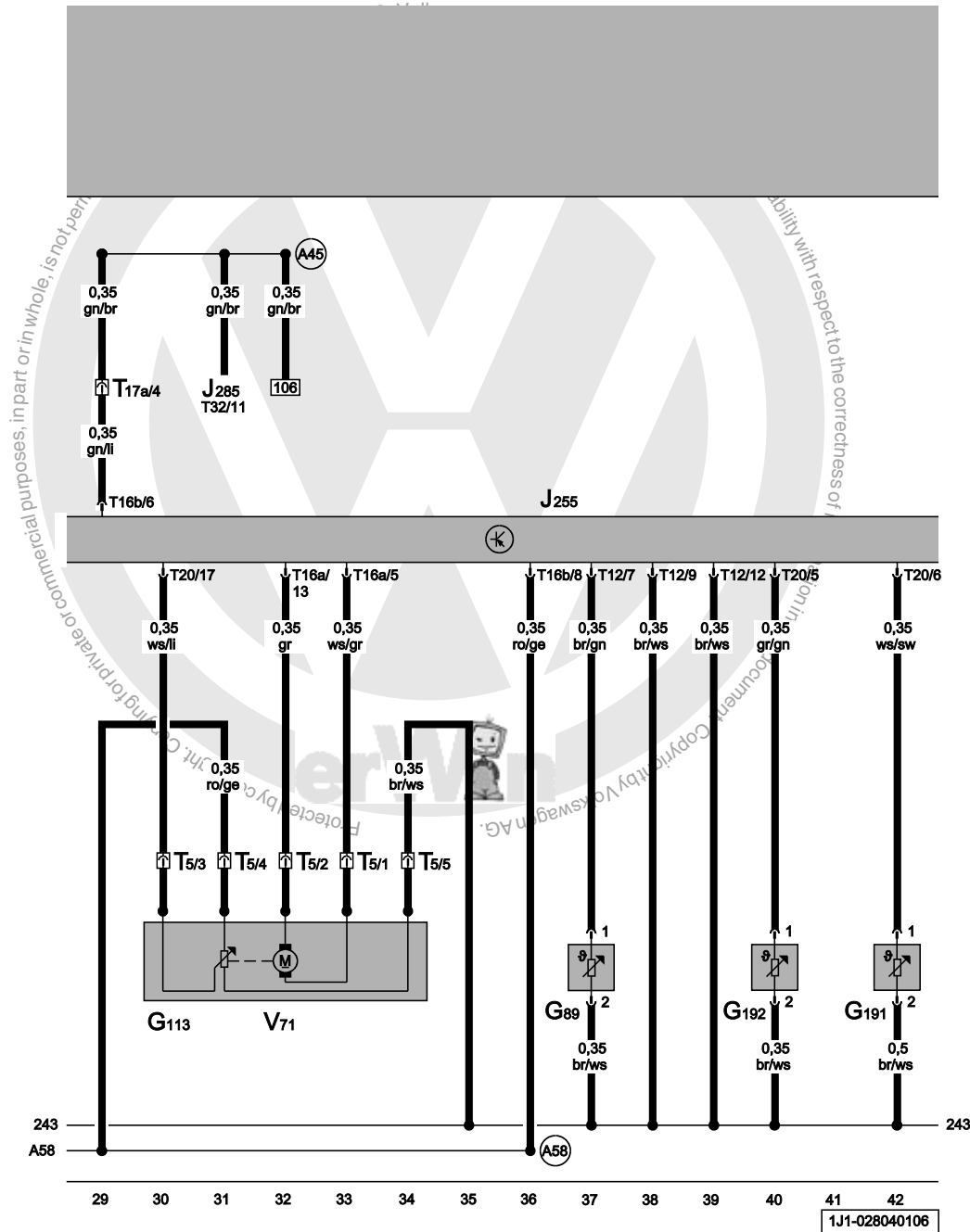


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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-25920

Climatronic control unit, air flow flap control motor, vent temperature sender, fresh air intake duct temperature sensor

- G89 Fresh air intake duct temperature sensor, below the dash panel on right
 - G113 Air flow flap control motor potentiometer
 - G191 Centre vent temperature sender
 - G192 Footwell vent temperature sender
 - J255 Climatronic control unit
 - J285 Control unit in dash panel insert
 - T5 5-pin connector, behind centre dash panel
 - T12 12-pin connector
 - T16a 16-pin connector
 - T16b 16-pin connector
 - T17a 17-pin connector, behind centre dash panel
 - T20 20-pin connector
 - T32 32-pin connector, blue, on dash panel insert
 - V71 Air flow flap control motor
- (A45) Connection (RPM signal), in dash panel wiring harness
- (A58) Connection (5 volt), in dash panel wiring harness

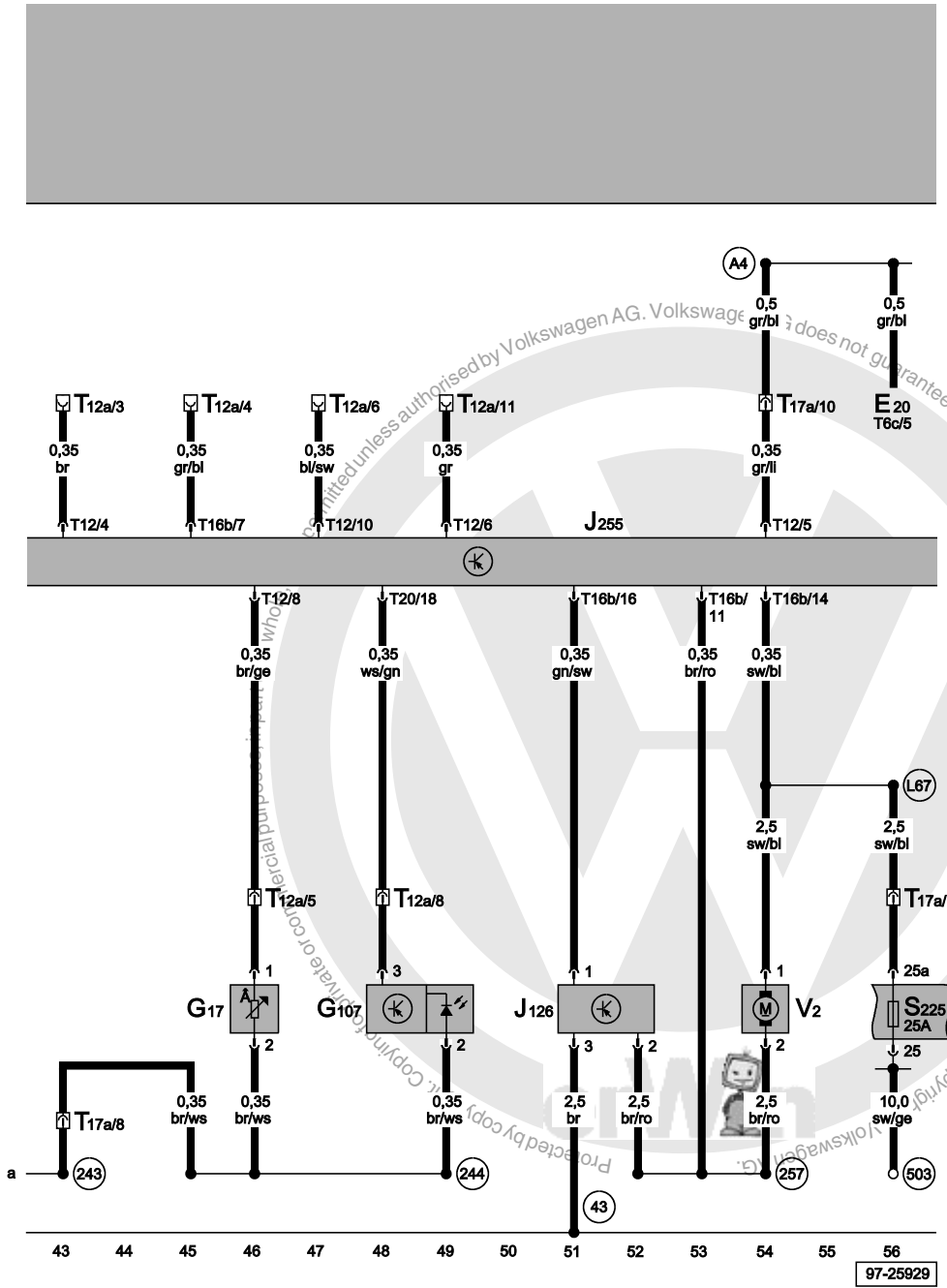


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, sunlight penetration photosensor

- E20 Illumination regulators - switches and instruments
- G17 Ambient temperature sensor, on bumper front left
- G107 Sunlight penetration photosensor, on centre dash panel
- J126 Fresh air blower control unit, below the dash panel on right
- J255 Climatronic control unit
- S225 Fuse 25 in fuse holder
- T6c 6-pin connector
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V2 Fresh air blower

- 43 Earth point, lower part of right A-pillar
- 243 Earth connection 1, in Climatronic wiring harness
- 244 Earth connection (sender earth), in Climatronic wiring harness
- 257 Earth connection 2, in Climatronic wiring harness
- 503 Screw connection (75x), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- L67 Positive connection (75x), in engine wiring harness



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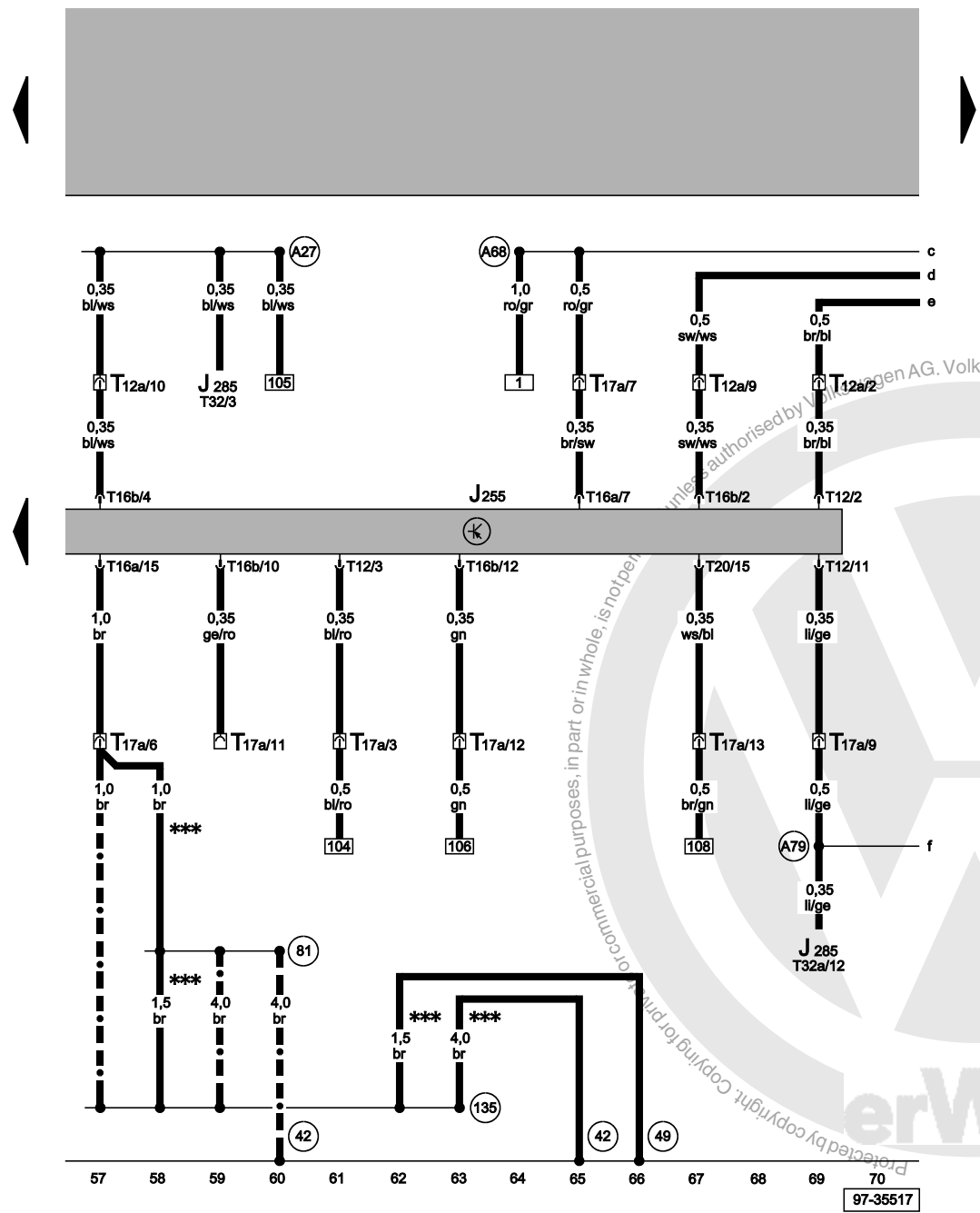
97-25929

Climatronic control unit

- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert
- T32a 32-pin connector, green, on dash panel insert

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- A79 Connection (hot light switch), in dash panel wiring harness
- *** from May 2000
- up to April 2000

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97-35517

Radiator fan control unit, radiator fan, air conditioning system magnetic coupling

- J293 Radiator fan control unit, in engine compartment, front left
- N25 Air conditioning system magnetic coupling
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, near battery (from May 2000), in cable channel left in engine compartment (up to April 2000)
- V7 Radiator fan
- V35 Right fan for radiator

12 Earth point, on left in engine compartment

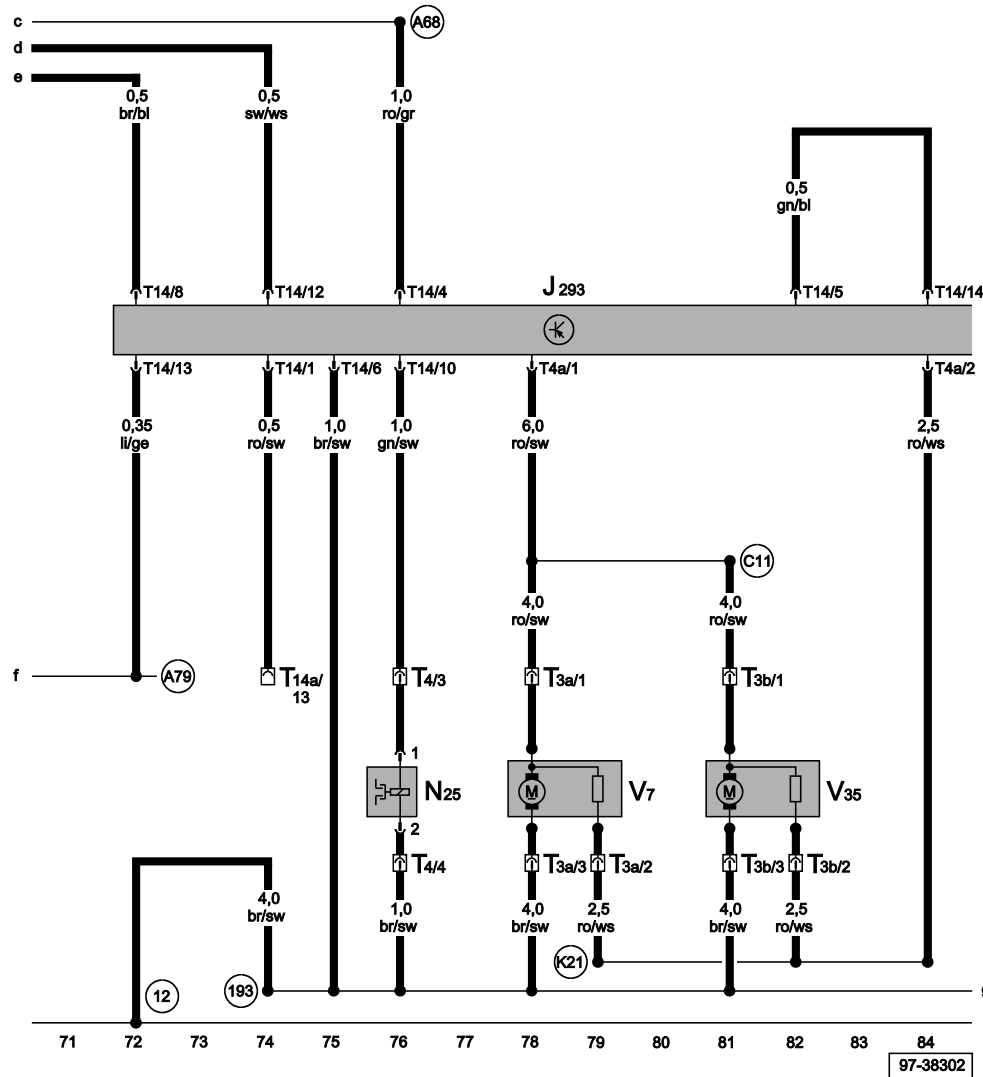
193 Earth connection 1, in coolant fan wiring harness

A68 Connection (30, air conditioning system), in dash panel wiring harness

A79 Connection (hot light switch), in dash panel wiring harness

C11 Connection in radiator fan wiring harness

K21 Connection 1, in radiator fan wiring harness

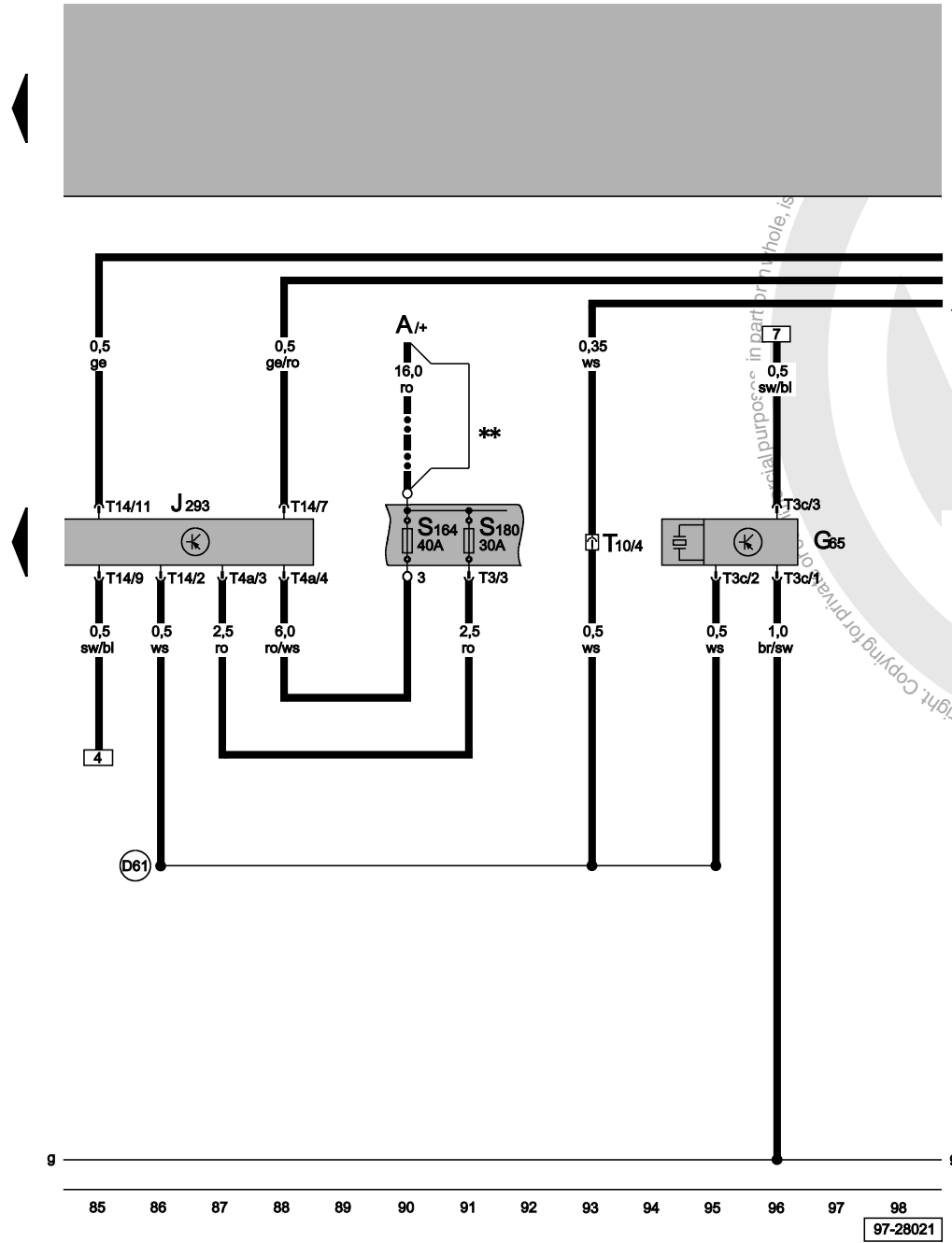


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-38302

Radiator fan control unit, high pressure sender

- A Battery
- G65 High pressure sender
- J293 Radiator fan control unit, in engine compartment, front left
- S164 Fuse 3 (30), in fuse holder on battery
- S180 Fuse 8 (30), in fuse holder on battery
- T3 3-pin connector
- T3c 3-pin connector
- T4a 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- (D61) Connection (air conditioning system), in engine compartment wiring harness
- ** up August 2000
- from September 2000



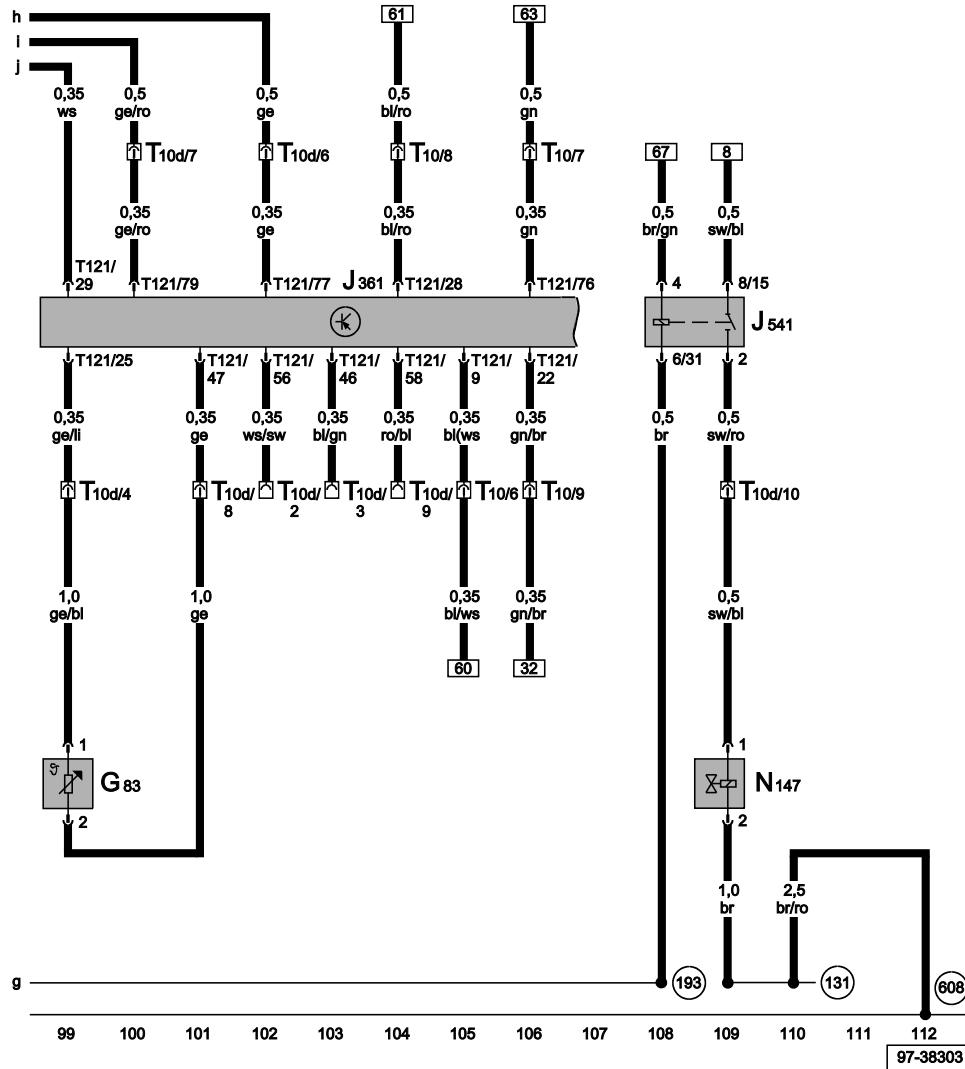
- ws = white
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- bl = blue
- gr = grey
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- rs = pink



Simos control unit, radiator outlet coolant temperature sender, 2-way valve for coolant shut-off valve, coolant shut-off valve relay

- G83 Radiator outlet coolant temperature sender
- J361 Simos control unit, in centre plenum chamber
- J541 Coolant shut-off valve relay, above the central electrics
- N147 2-way valve for coolant shut-off valve
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 193 Earth connection 1, in coolant fan wiring harness
- 608 Earth point, in centre of plenum chamber



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- rs = pink

4-speed automatic gearbox (AG4)

- ⇒ 2.3 l/110 kW Motronic, engine code AGZ
- ⇒ 1.6 l/74 kW Simos, engine code AEH, AKL, APF
- ⇒ 1.6 l/75 kW Simos, engine code AVU
- ⇒ 1.6 l/4LV/77 kW, engine code BCB
- ⇒ 1.8 l/92 kW Motronic, engine code AGN
- ⇒ 1.8 l/110 kW Motronic, engine code ARZ, AUM
- ⇒ 2.0 l/85 kW Motronic, engine codes AQY, APK, AZH
- ⇒ 2.0 l/88 kW Motronic, engine code ATF

from May 1999

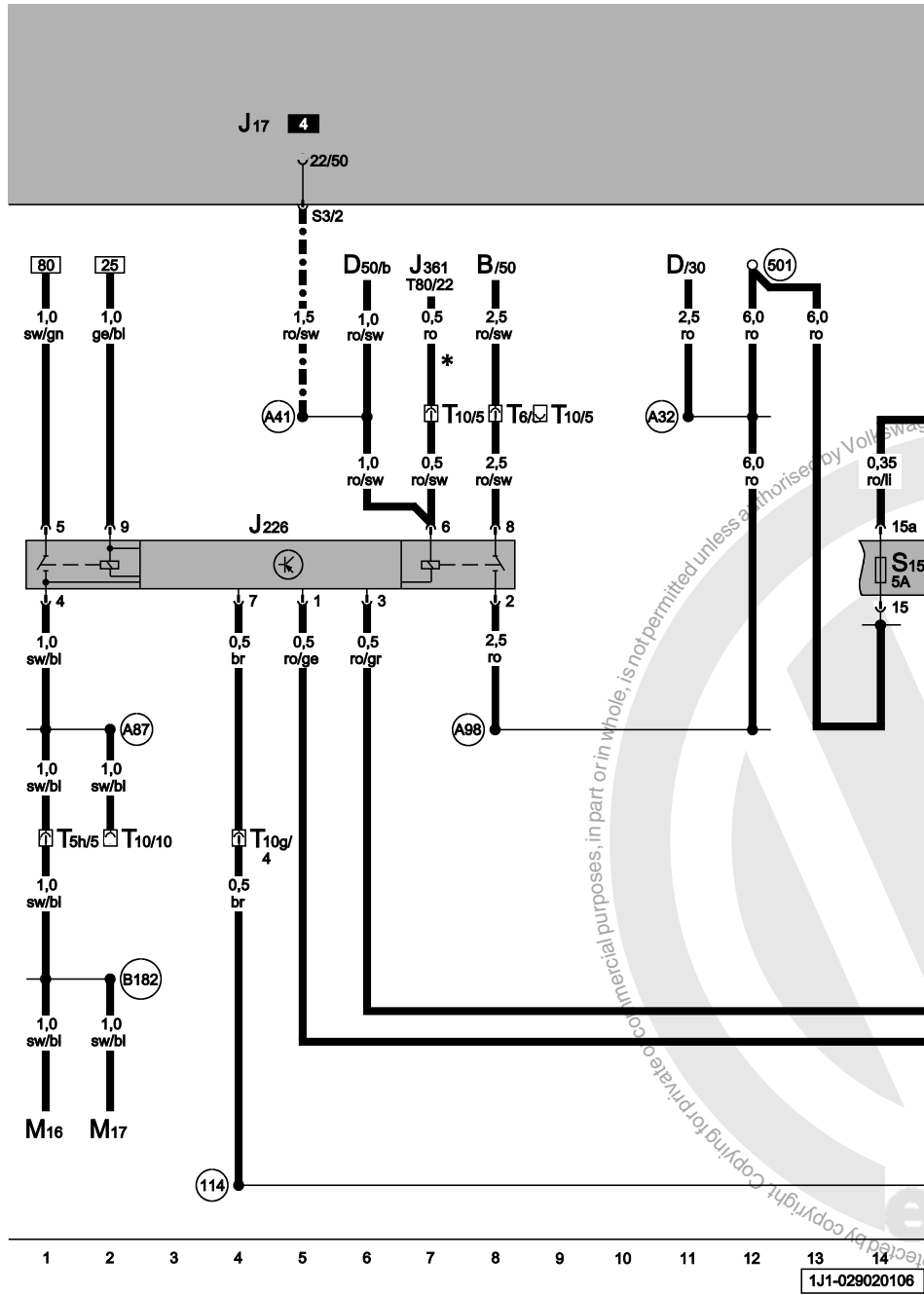
Notes:

For information concerning

- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
- ⇒ List of Fitting Locations!
For information concerning
- ◆ Fault Finding Programs
- ⇒ guided fault finding



Starter inhibitor and reversing light relay



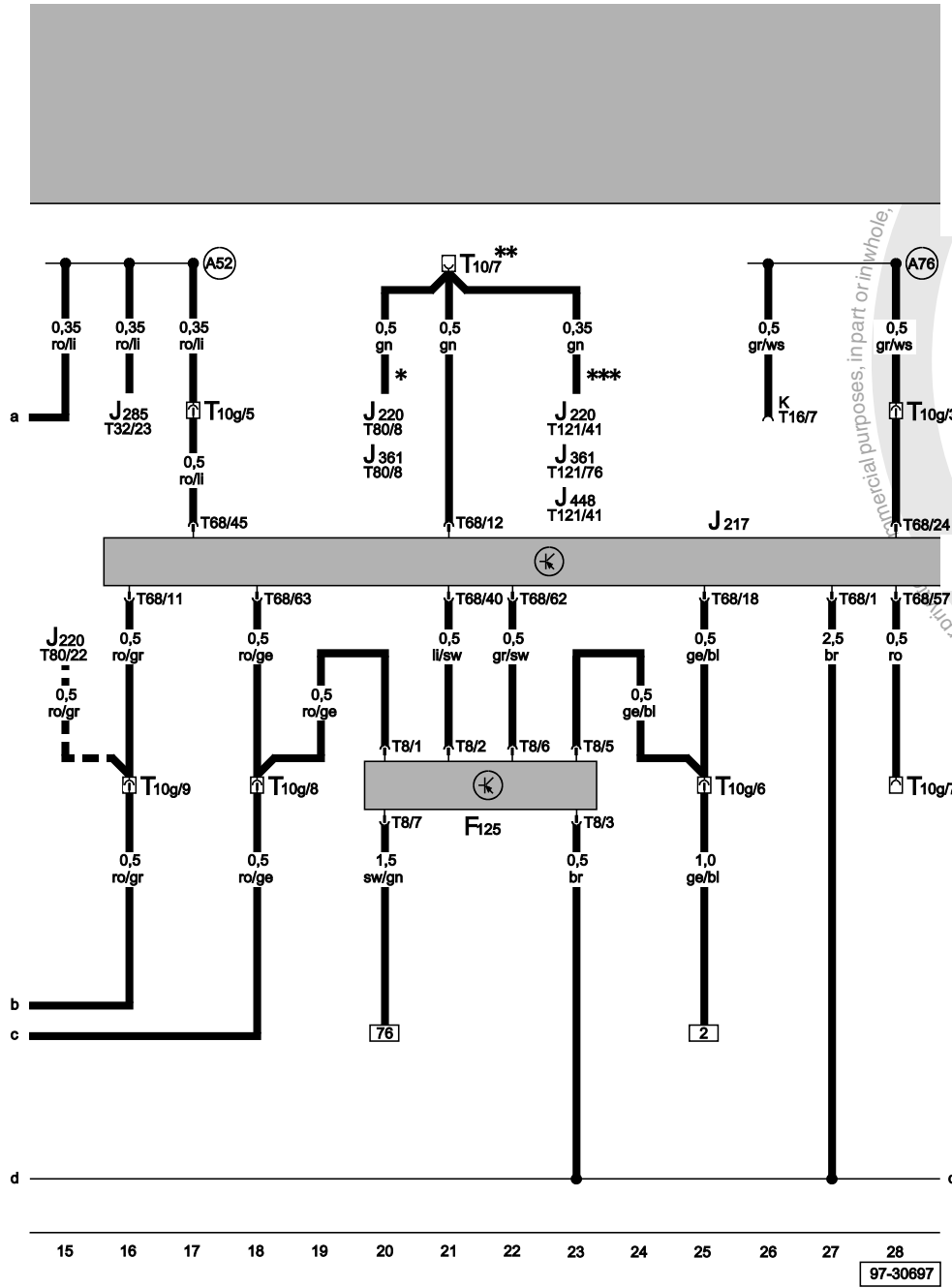
- B Starter
- D Ignition/starter switch
- J17 Fuel pump relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- J361 Simos control unit
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- S15 Fuse 15 in fuse holder
- T5h 5-pin connector, lower left A-pillar, entwined in wiring harness
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T80 80-pin connector
- 114 Earth connection, in automatic gearbox wiring harness
- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A41 Positive connection (50), in dash panel wiring harness, (models with petrol engine only)
- A87 Connection (RL), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- * engine codes AEH, AKL only
- up to April 2001

ws = white
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 gr = grey
 li = purple
 ge = yellow
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 rs = pink

Automatic gearbox control unit, multifunction switch

- F125 Multifunction switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- J285 Control unit with display in dash panel insert
- J361 Simos control unit
- J448 4LV injection system control unit
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T68 68-pin connector
- T80 80-pin connector
- T121 121-pin connector

- A52 Positive connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * engine codes AGZ, AQY, APK, AGN, AEH, AKL only
- ** connection air conditioning system
- *** engine codes APF, ARZ, ATF, AZH, AUM, AVU, BCB only
- engine codes AQY, APK, AGZ only



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- or = orange
- rs = pink

97-30697

Automatic gearbox control unit, solenoid valves, gearbox speed sender, kickdown switch, gearbox oil temperature sender

- F8 Kick-down switch
- G38 Gearbox output speed sender
- G93 Gearbox oil temperature sender
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- N88 Solenoid valve 1
- N89 Solenoid valve 2
- N90 Solenoid valve 3
- N91 Solenoid valve 4
- N92 Solenoid valve 5
- N93 Solenoid valve 6
- N94 Solenoid valve 7
- T2 2-pin connector, on gearbox
- T12 12-pin connector
- T68 68-pin connector
- T80 80-pin connector

114 Earth connection, in automatic gearbox wiring harness

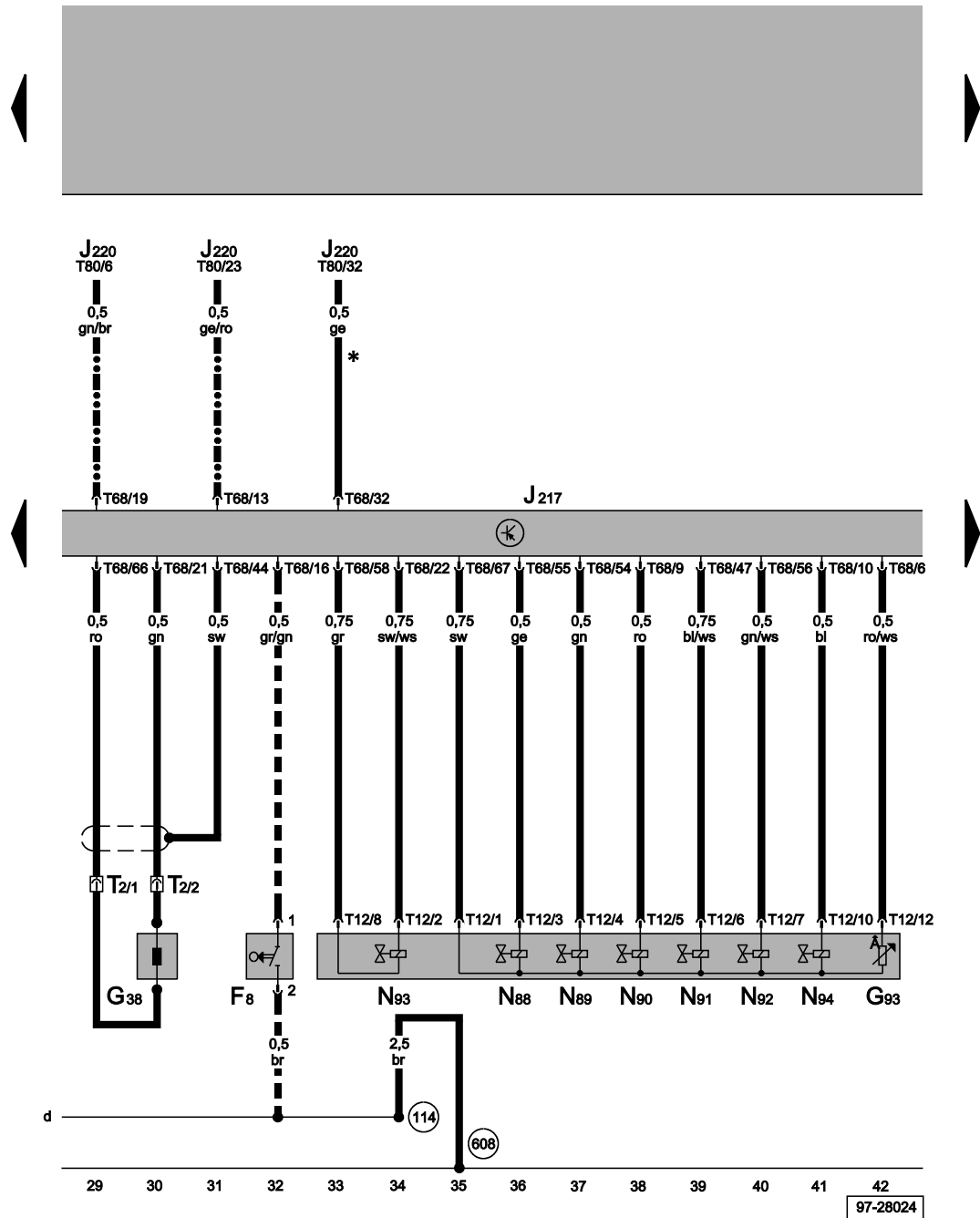
608 Earth point, in centre of plenum chamber

* engine codes AQY, APK only

-••- engine code AGZ only

--- engine codes AEH, AKL, AGZ, AQY, APK only

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- or = orange
- rs = pink

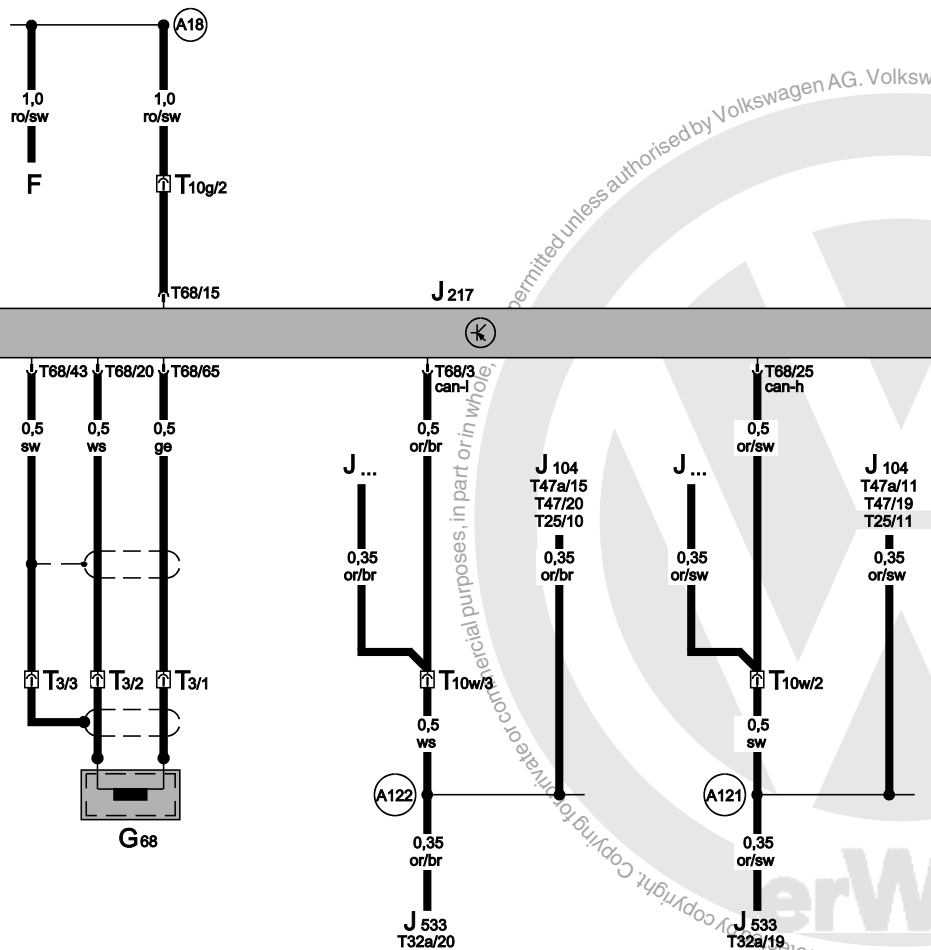


97-28024

Automatic gearbox control unit, vehicle speed sender

- F Brake light switch
- G68 Vehicle speed sender
- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit, in centre plenum chamber
- J533 Data bus diagnostic interface, in dash panel insert
- J... Engine control units
- T3 3-pin connector, on gearbox
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T32a 32-pin connector, green, on dash panel insert
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (from August 2000)
- T68 68-pin connector

- A18 Connection (54), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



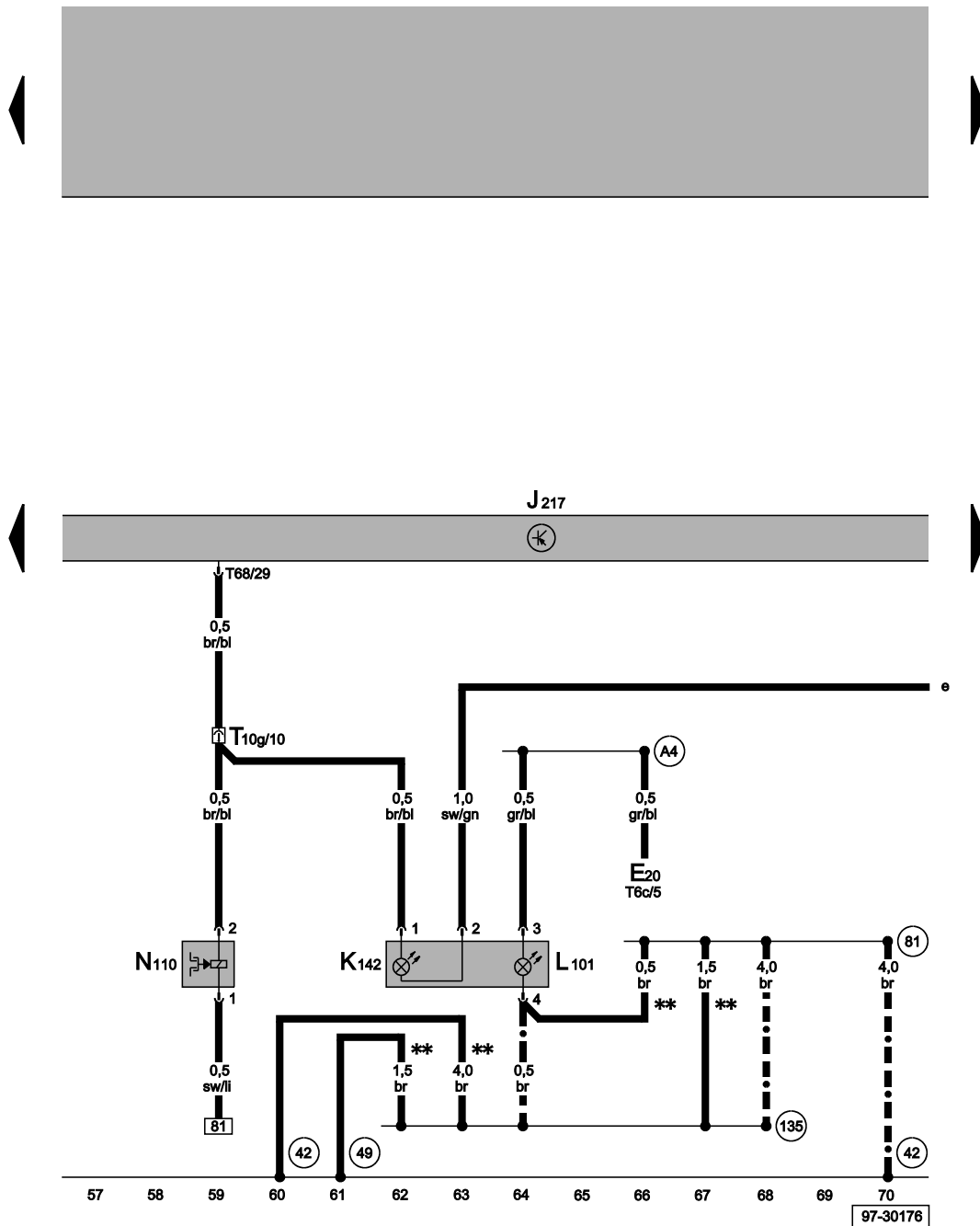
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Automatic gearbox control unit, selector lever lock solenoid

- E20 Illumination regulators - switches and instruments
- J217 Automatic gearbox control unit, in centre plenum chamber
- K142 Selector lever position P/N warning lamp
- L101 Selector lever display illumination bulb
- N110 Selector lever lock solenoid
- T6c 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T68 68-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness

- ** from May 2000
- up to April 2000

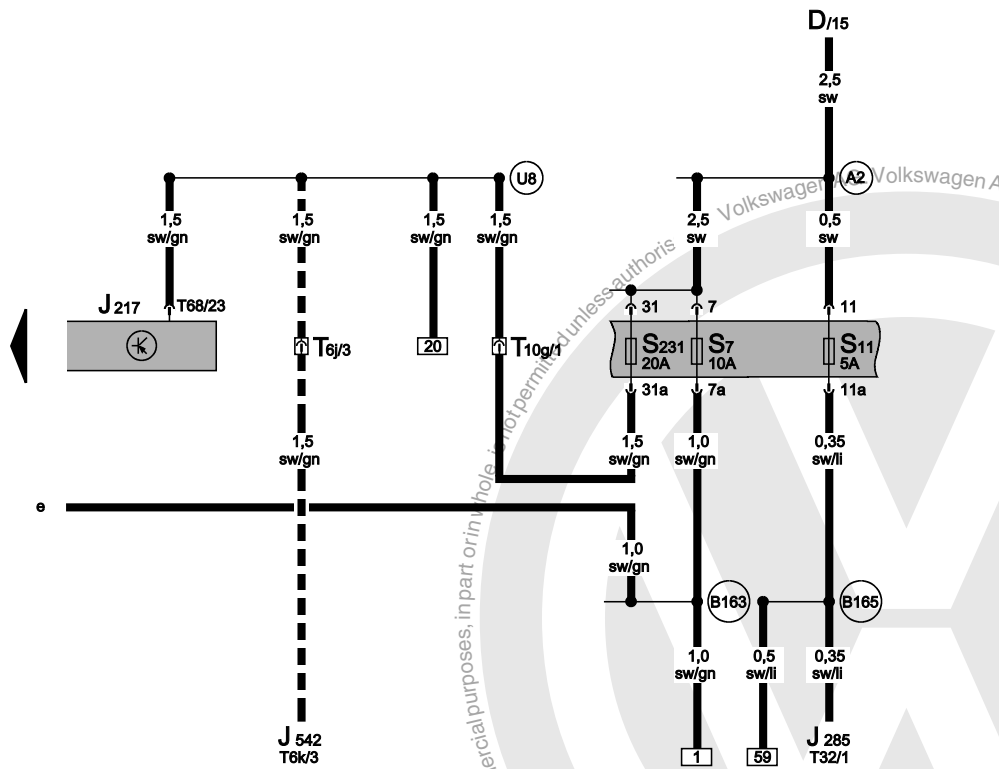


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Automatic gearbox control unit

- D Ignition/starter switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J285 Control unit in dash panel insert
- J542 Brake servo control unit
- S7 Fuse 7 in fuse holder
- S11 Fuse 11 in fuse holder
- S231 Fuse 31 in fuse holder
- T6j 6-pin connector, in left engine compartment
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- T68 68-pin connector

- (A2) Positive connection (15), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- (B165) Positive connection 2 (15), in interior wiring harness
- (U8) Connection (15a), in automatic gearbox wiring harness
- only models with brake servo control unit



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- gn = green
- bl = blue
- gr = grey
- lj = purple
- ge = yellow
- or = orange
- rs = pink

Four-speed automatic gearbox (AG4)

- ⇒ 1.9 l/81 kW turbo-diesel engine, engine codes ASV
- ⇒ 1.9 l/66 kW turbo-diesel engine, engine codes AGR
- ⇒ 1.9 l/66 kW turbo-diesel engine, engine codes ALH
- ⇒ 1.9 l/81 kW turbo-diesel engine, engine codes AHF

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

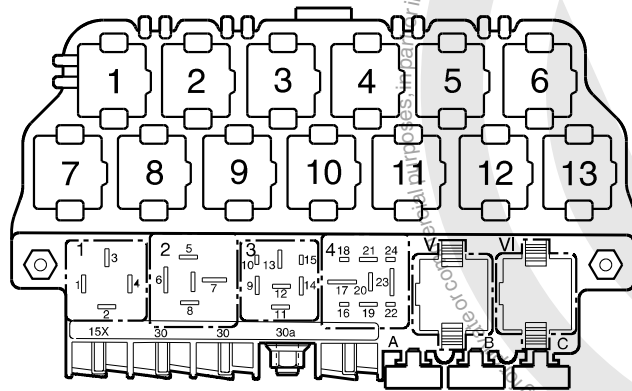
11 - Starter inhibitor and reversing light relay (175)

Relay locations on relay plate:



Notes:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*



97-14163

Fuse colours

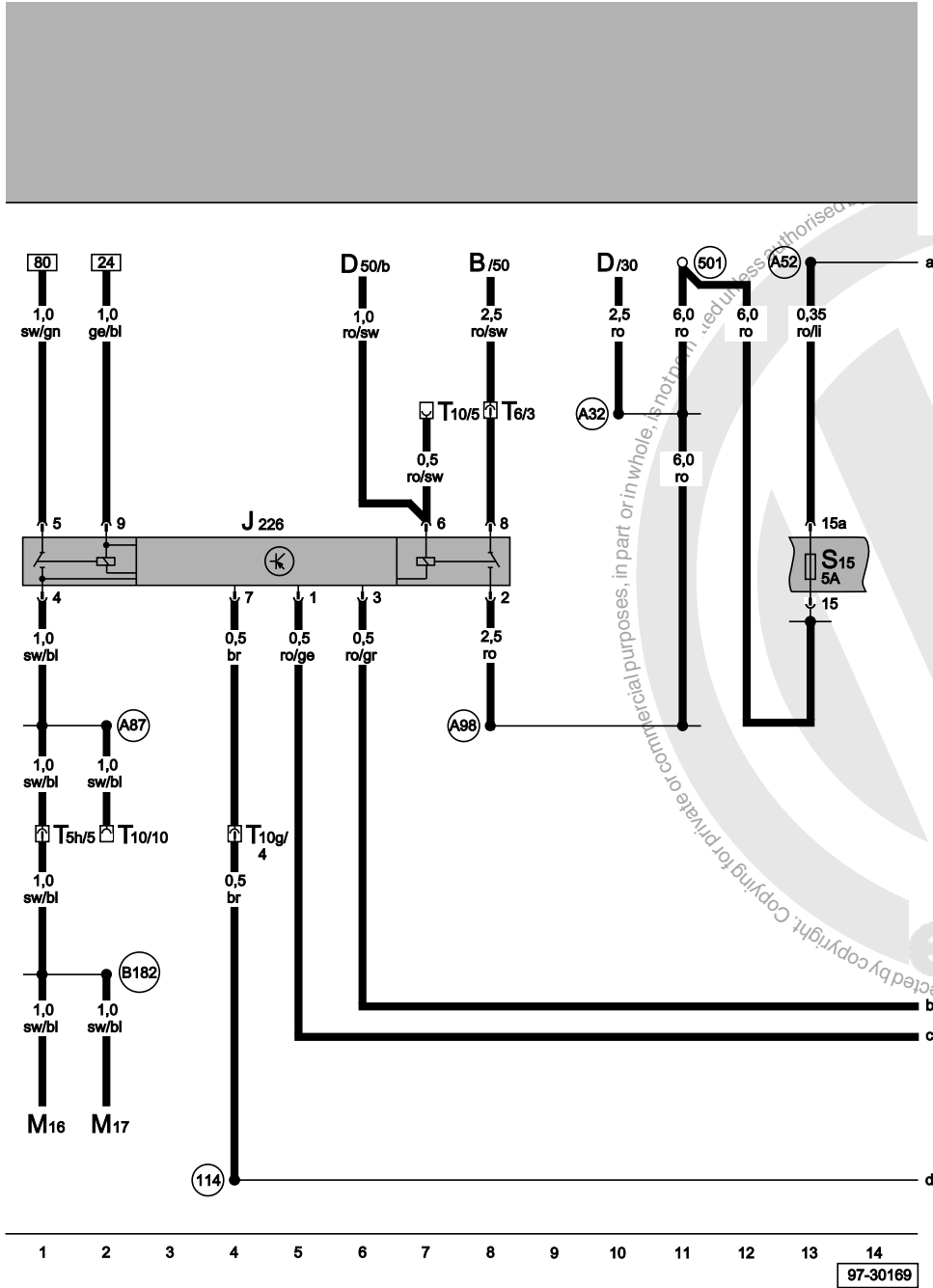
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue

- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Starter inhibitor and reversing light relay

- B Starter
- D Ignition/starter switch
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- M16 Reversing light bulb, left
- M17 Reversing light bulb, right
- S15 Fuse in fuse box
- T5h 5-pin connector, near lower part of left A- pillar, entwined in wiring harness
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left



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- ge = yellow
- or = orange
- rs = pink

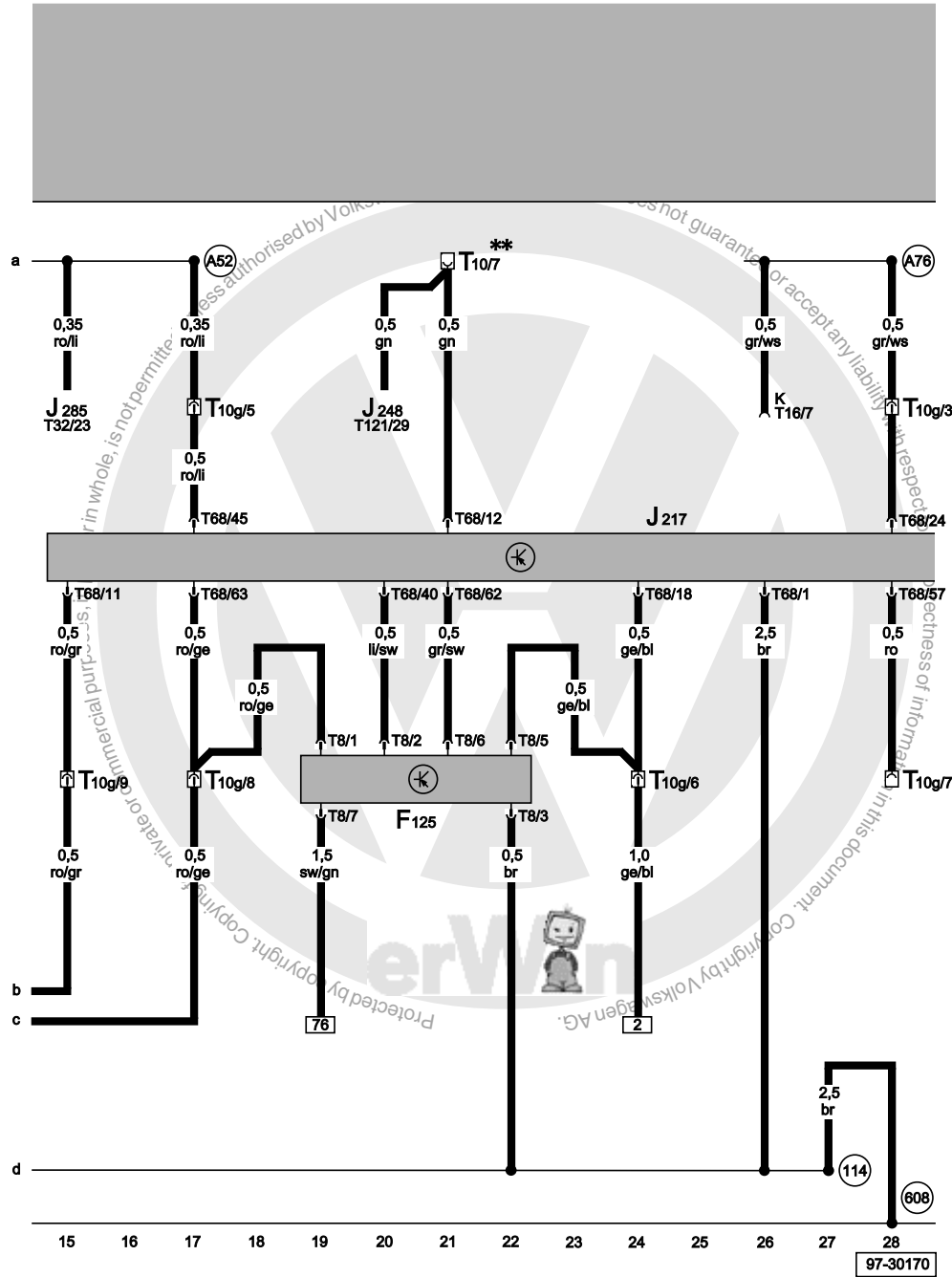
- 114 Earth connection, in automatic gearbox wiring harness
- 501 Screw connection 2- (30), on relay plate
- A32 Positive (+) connection (30), in dash panel wiring harness
- A52 Positive (+) connection (30a), in dash panel wiring harness
- A87 Connection (RF (reversing light)), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- B182 Connection (reversing light), in interior wiring harness

97-30169

Automatic gearbox control unit, multi-function switch

- F125 Multi-function switch
- J217 Automatic gearbox, in plenum chamber, centre
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- J285 Control unit with display in dash panel insert
- T8 8-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T68 68-pin connector
- T121 121-pin connector

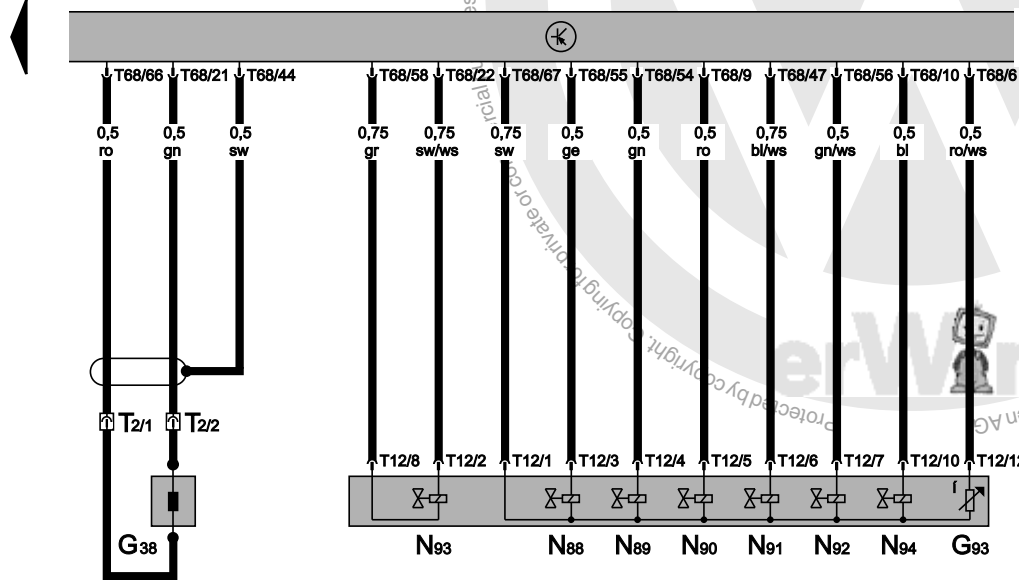
- (114) Earth connection, in automatic gearbox wiring harness
- (608) Earth point, in plenum chamber, centre
- (A52) Positive (+) connection (30a), in dash panel wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- ** Connection for air conditioner



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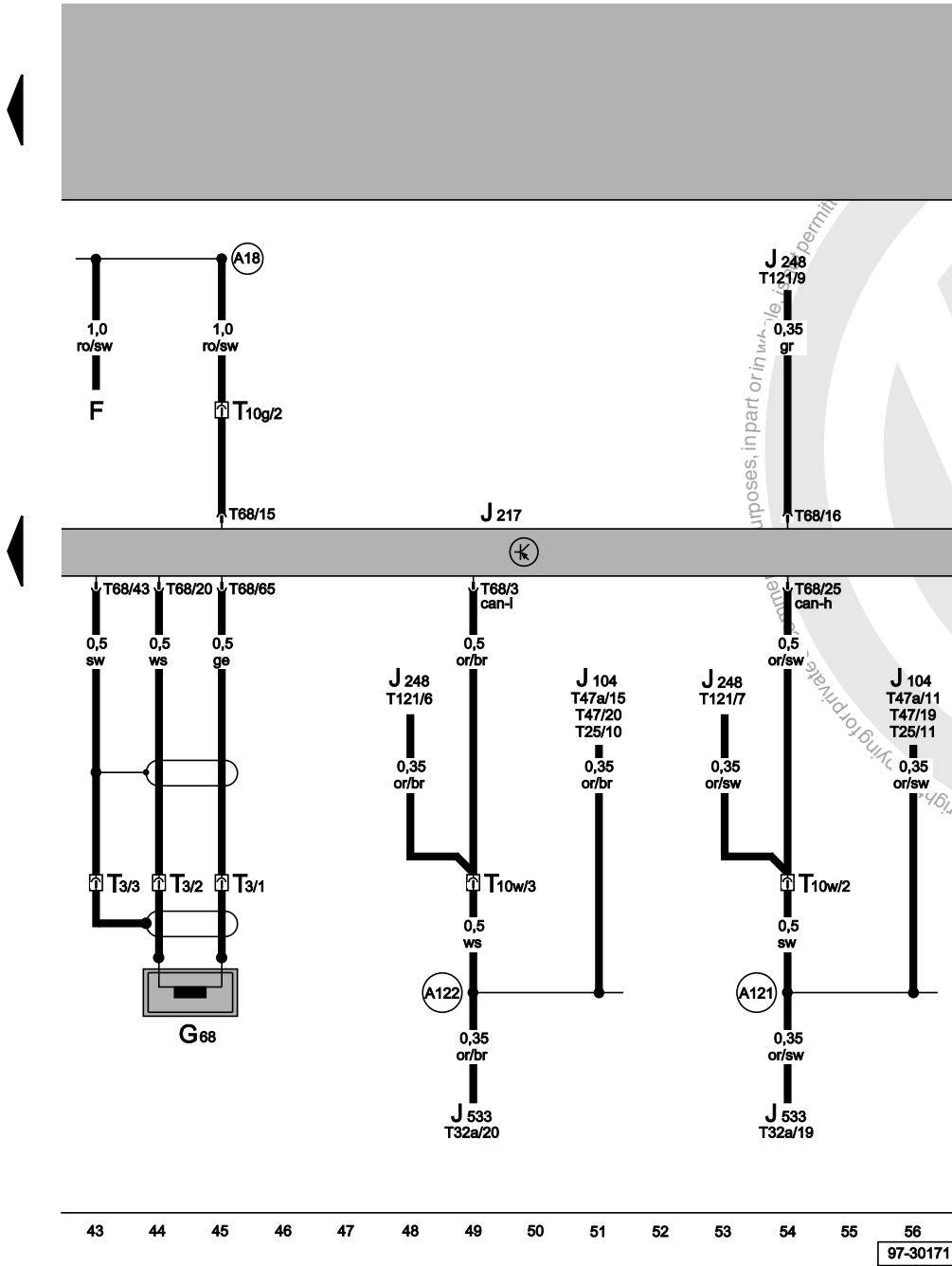
Automatic gearbox control unit, solenoid valve, gearbox speed sender, gearbox oil temperature sender

- G38 Gearbox speed sender
- G93 Gearbox oil temperature sender
- J217 Automatic gearbox, in plenum chamber, centre
- N88 Solenoid valve 1
- N89 Solenoid valve 2
- N90 Solenoid valve 3
- N91 Solenoid valve 4
- N92 Solenoid valve 5
- N93 Solenoid valve 6
- N94 Solenoid valve 7
- T2 2-pin connector, on gearbox
- T12 12-pin connector
- T68 68-pin connector



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- bl = blue
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- ge = yellow
- or = orange
- rs = pink

Automatic gearbox control unit, vehicle speed sender

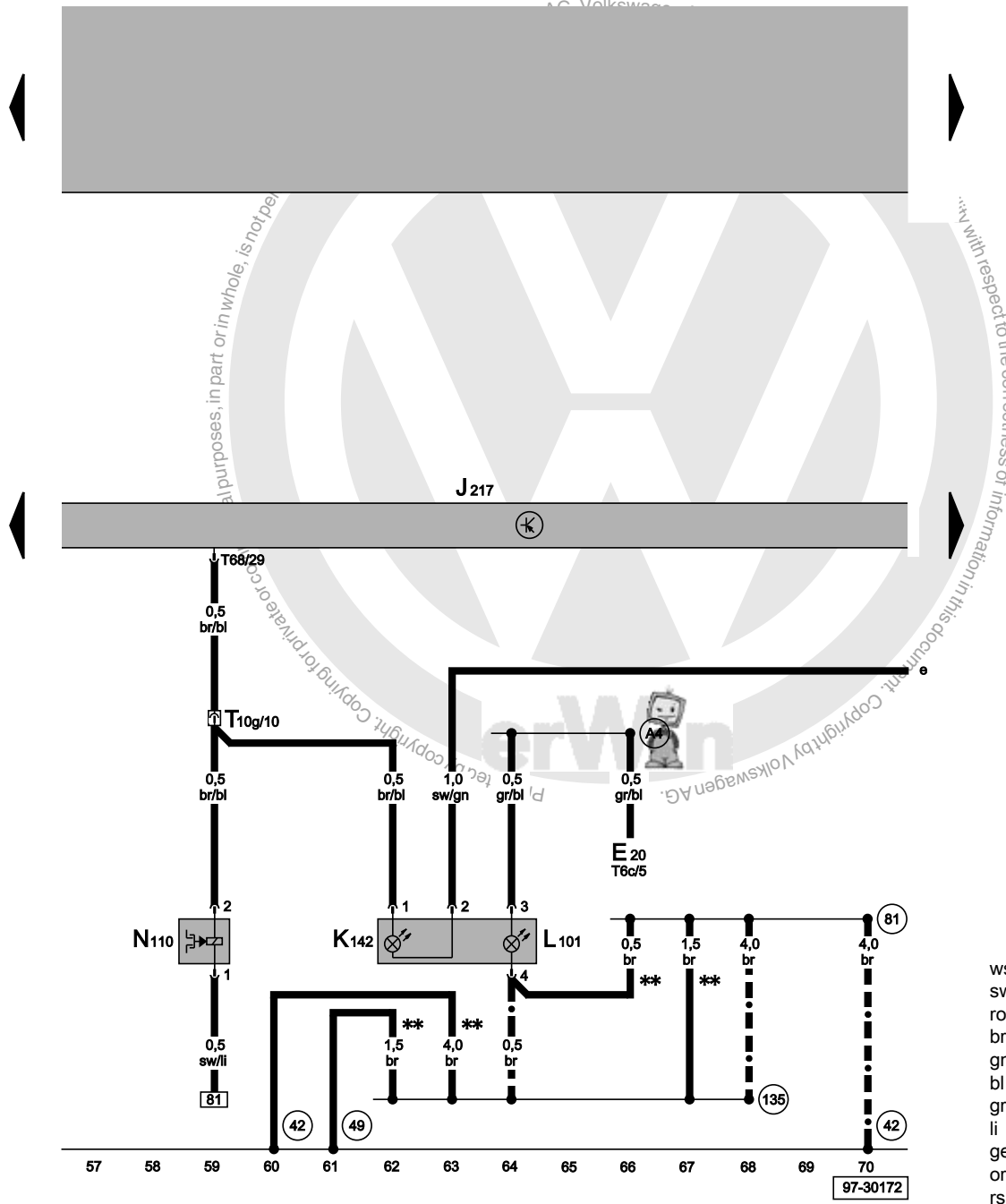


- F Brake light switch
- G68 Vehicle speed sender
- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox, in plenum chamber, centre
- J533 Data bus diagnostic interface, in dash panel insert
- J248 Diesel direct injection system control unit, in plenum chamber, centre
- T3 3-pin connector, on gearbox
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T32a 32-pin connector, green, on dash panel insert
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness

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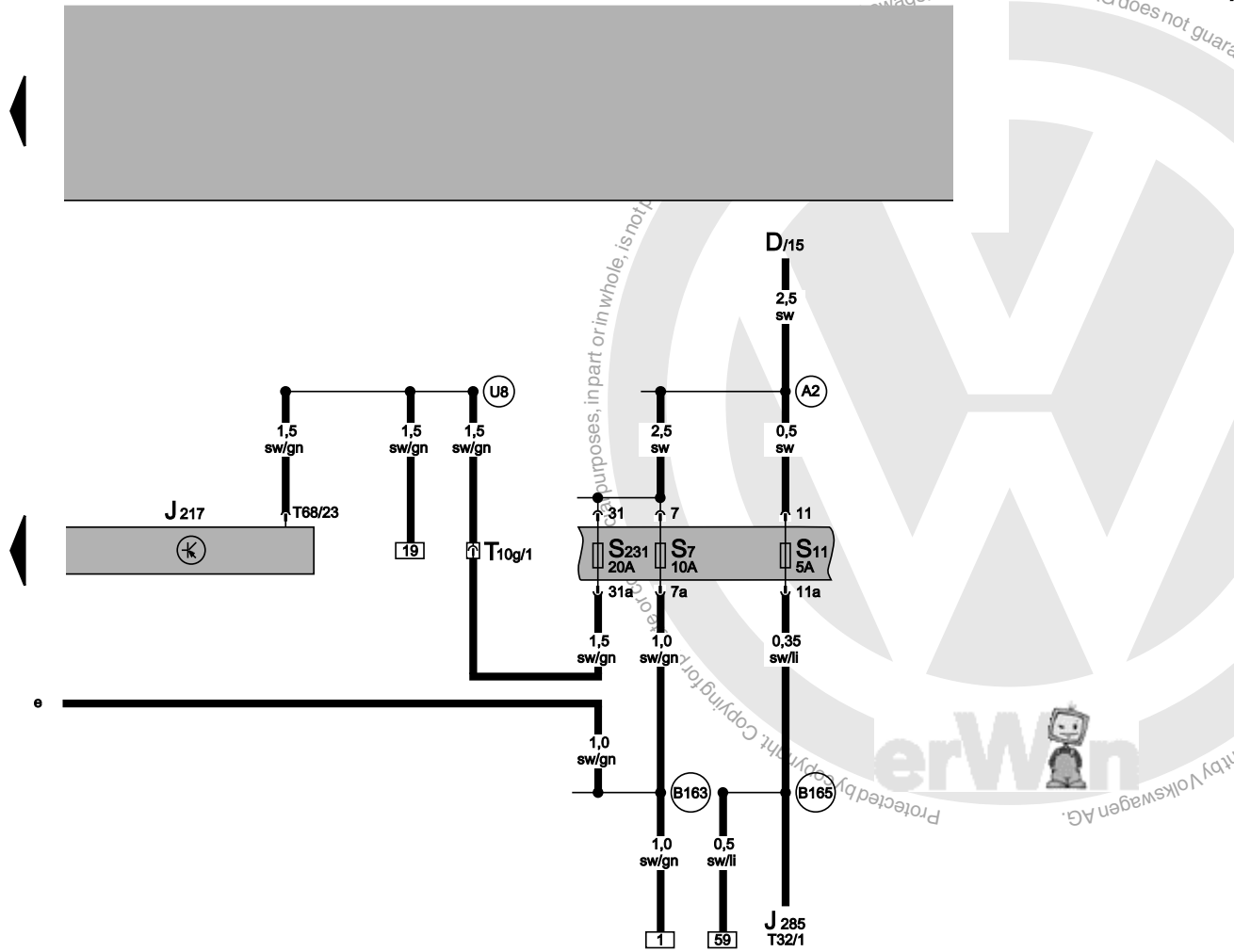
Automatic gearbox control unit, selector lever lock solenoid

- E20 Switches and instruments, lighting control
- J217 Automatic gearbox Gearbox, in plenum chamber, centre
- K142 Selector lever position P/N warning lamp
- L101 Selector lever display illumination
- N110 Selector lever lock solenoid
- T6c 6-pin connector
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T68 68-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- A4 Positive (+) connection (58b), in dash panel wiring harness
- ** From May 2000
- Up to April 2000



Automatic gearbox control unit

- D Ignition/starter switch
- J217 Automatic gearbox, in plenum chamber, centre
- J285 Control unit with display in dash panel insert
- S7 Fuse in fuse box
- S11 Fuse in fuse box
- S231 Fuse in fuse box
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T32 32-pin connector, blue
- T68 68-pin connector
- A2 Positive (+) connection (15), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- B165 Positive (+) connection -2- (15), in interior wiring harness
- U8 Connection (15a), in automatic gearbox wiring harness



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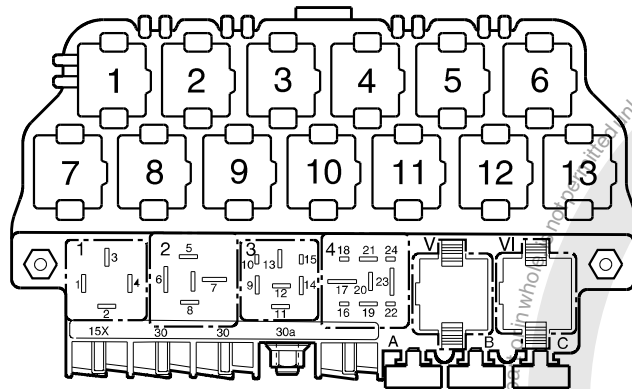
Four-wheel drive (4 Motion) with petrol engine

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

4 - Fuel pump relay (409)



Note:

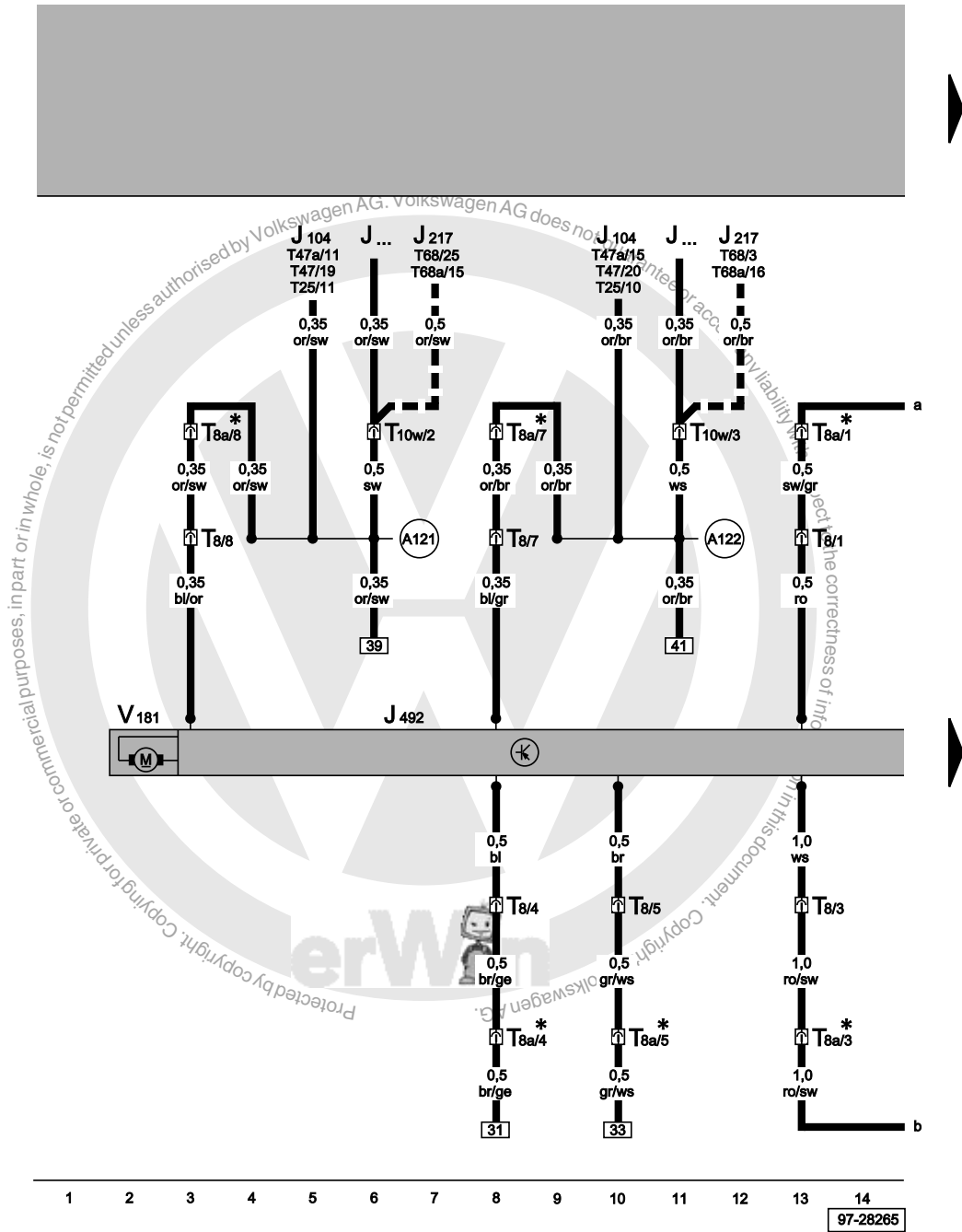
◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

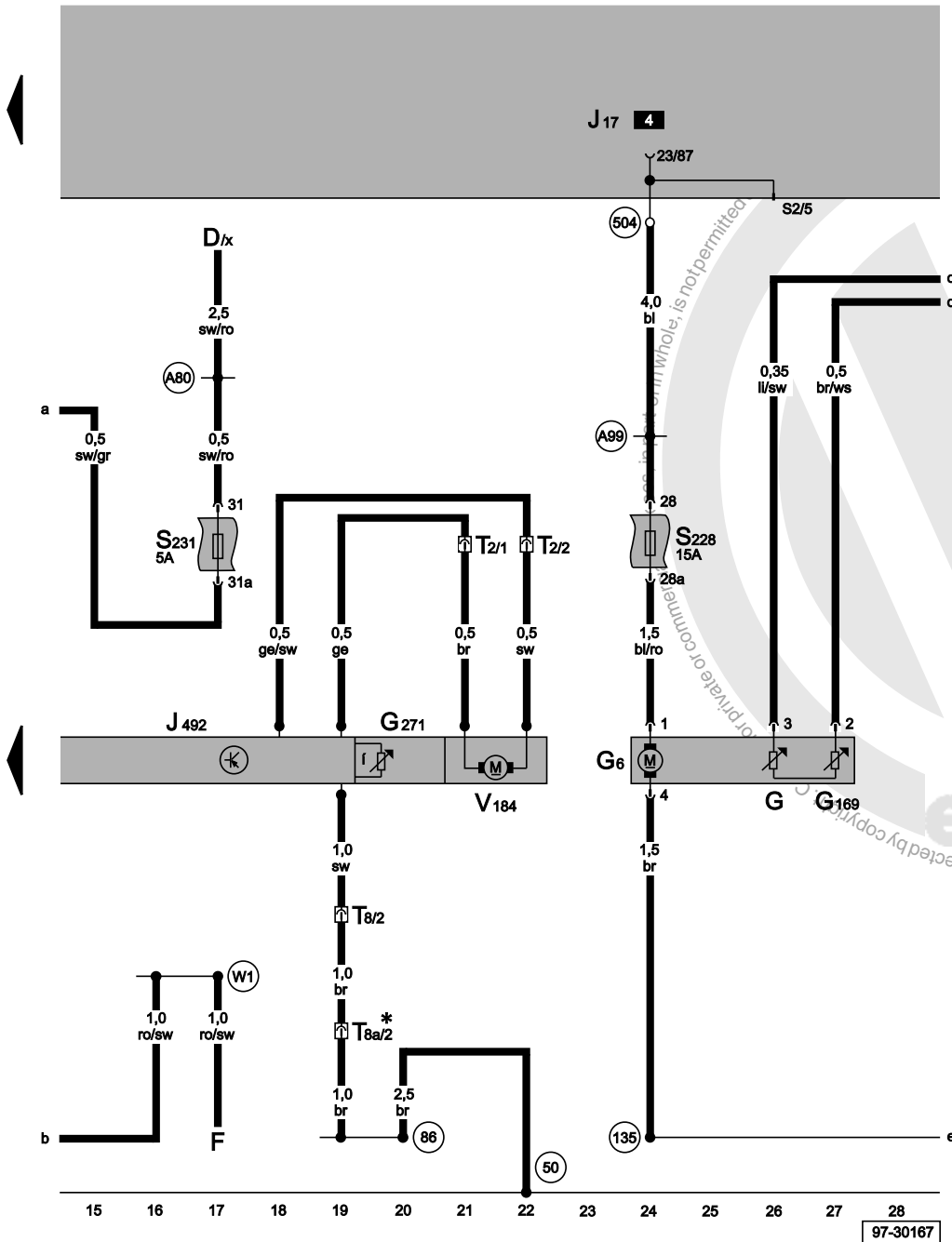
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

Four-wheel drive control unit, haldex coupling pump

- J104 ABS with EDL/ TCS/ ESP control unit
- J217 Automatic gearbox control unit
- J492 Four-wheel drive control unit, near rear final drive
- J... Engine control units
- T8 8-pin connector, on Haldex coupling
- T8a 8-pin connector, near Haldex coupling*
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)
- V181 Haldex coupling pump
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- * Only Golf estate/Bora estate
- Only models with automatic gearbox



Four-wheel drive control unit, hydraulic temperature sender, oil pressure control motor, fuel pump, fuel gauge sender



- D Ignition/starter switch
- F Brake light switch
- G Fuel gauge sender
- G6 Fuel pump
- G169 Fuel gauge sender -2-
- G271 Hydraulic temperature sender
- J17 Fuel pump relay
- J492 Four-wheel drive control unit, near rear final drive
- S228 Fuse in fuse box
- S231 Fuse in fuse box
- T2 2-pin connector, on four-wheel drive
- T8 8-pin connector, on Haldex coupling
- T8a 8-pin connector, near Haldex coupling*
- V184 Oil pressure control motor
- 50 Earth point, on left luggage compartment
- 86 Earth connection -1-, in rear wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A80 Connection -1- (X), in dash panel wiring harness
- A99 Connection -1- (87), in dash panel wiring harness
- W1 Positive (+) connection (54), in rear wiring harness
- * Only Golf Variant/ Bora Variant

ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

Dash panel insert, brake system warning lamp, fuel gauge, coolant temperature gauge, handbrake warning switch

- F9 Handbrake warning switch
- G1 Fuel gauge
- G2 Coolant temperature sender
- G3 Coolant temperature gauge
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K118 Brake system warning lamp
- T5h 5-pin connector, near lower part of left A-pillar, entwined in wiring harness

- T14a 14-pin connector, near battery
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

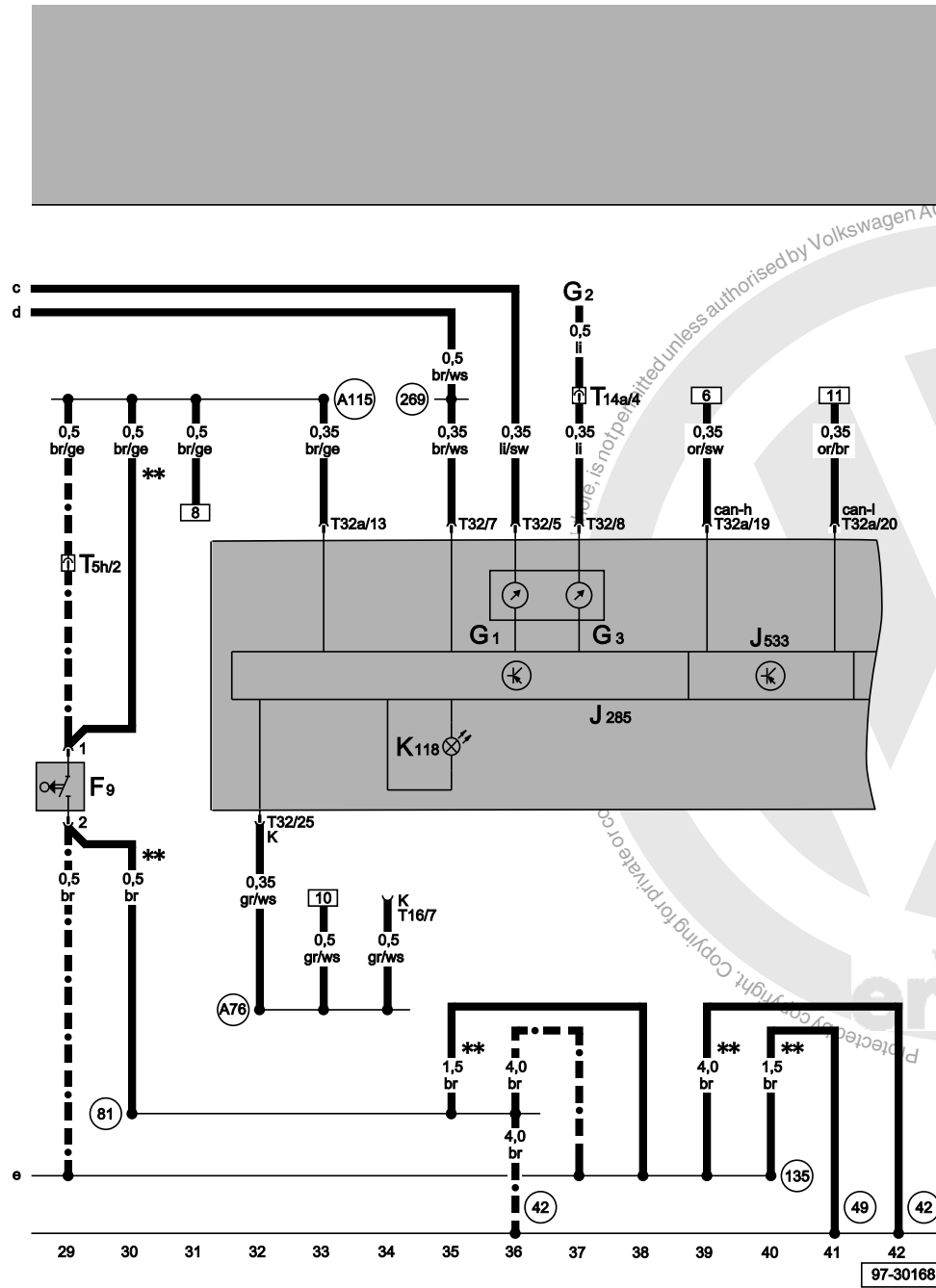
- 42 Earth point, next to steering column
- 49 Earth point, on steering column

- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness

- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness

- A115 Connection (handbrake warning), in dash panel wiring harness
- ** From May 2000
- Up to April 2000

- ws = white
- sw = black
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-30168

Four-wheel drive (4 Motion) with diesel engine

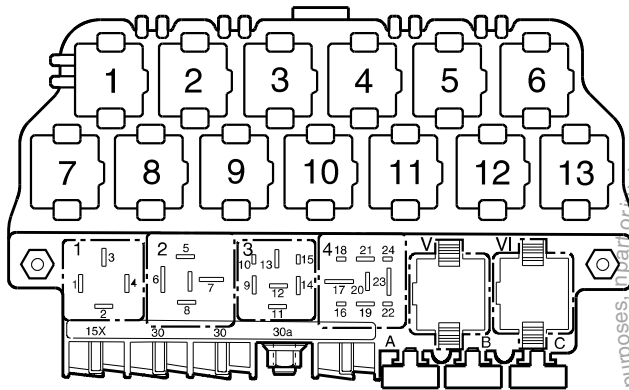
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

9 - Fuel pump relay (53)

Relay locations on relay plate:



97-14163

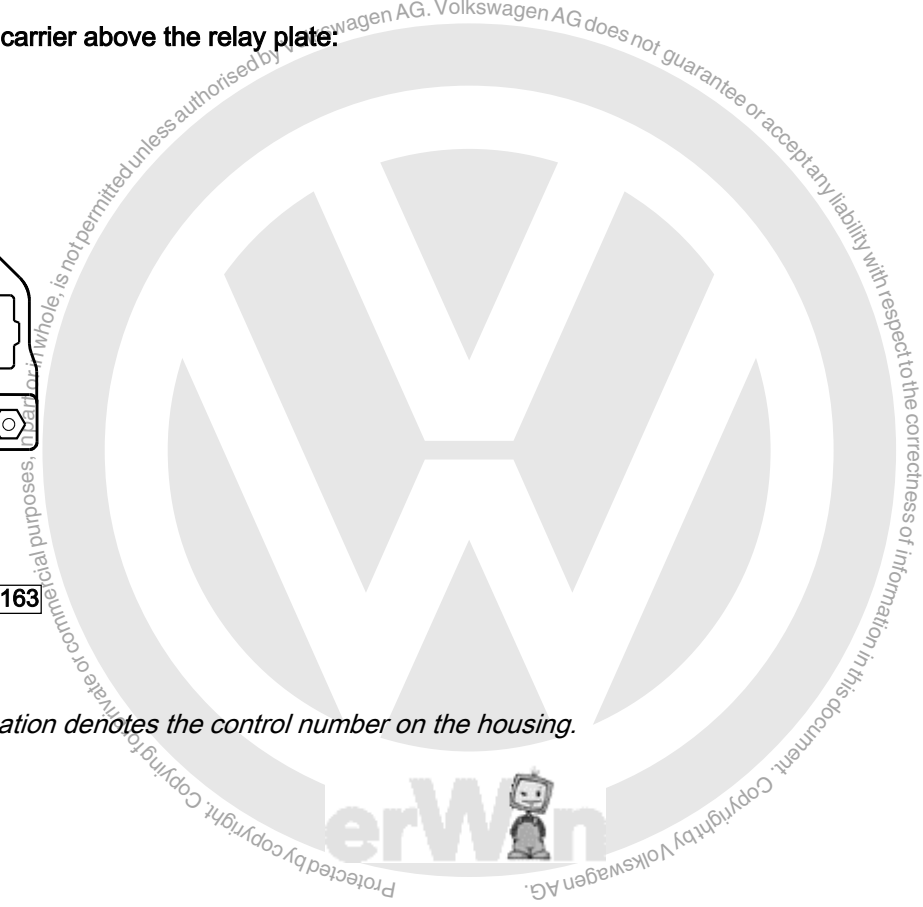


Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

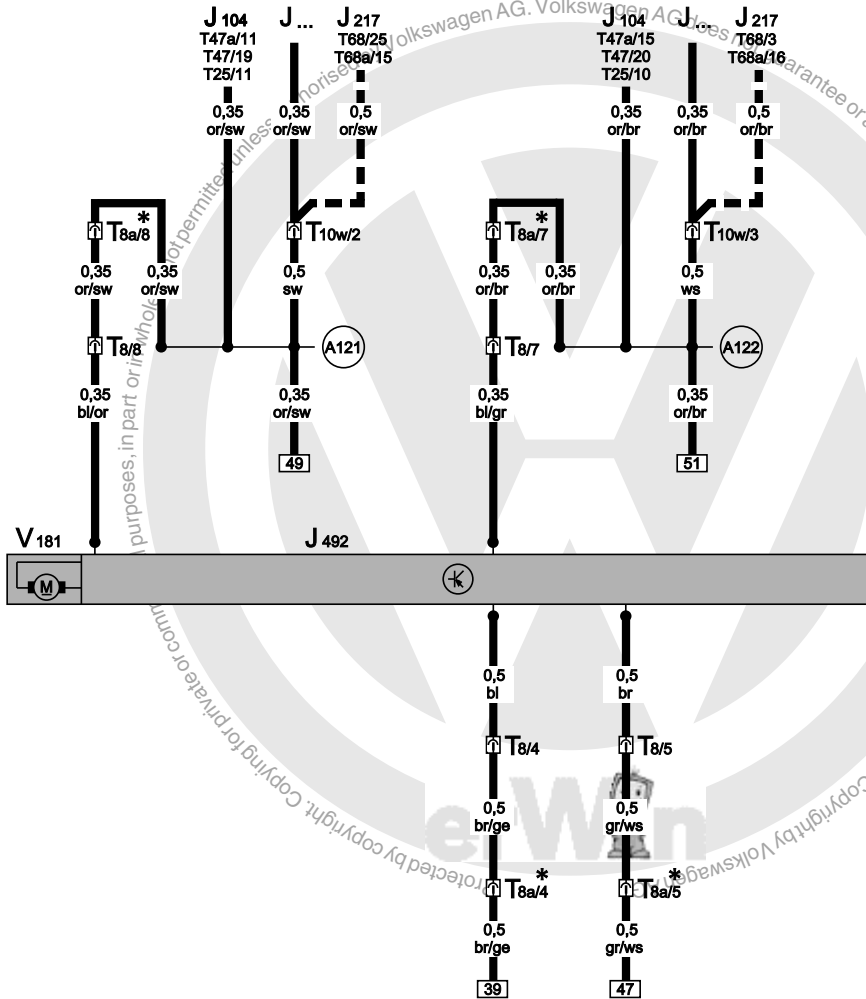
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Four-wheel drive control unit, haldex coupling pump

- J104 ABS with EDL/ TCS/ ESP control unit
- J217 Automatic gearbox control unit
- J492 Four-wheel drive control unit, near rear final drive
- J... Engine control units
- T8 8-pin connector, on Haldex coupling
- T8a 8-pin connector, near Haldex coupling*
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)
- V181 Haldex coupling pump
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- * Only Golf estate/Bora estate
- Only models with automatic gearbox

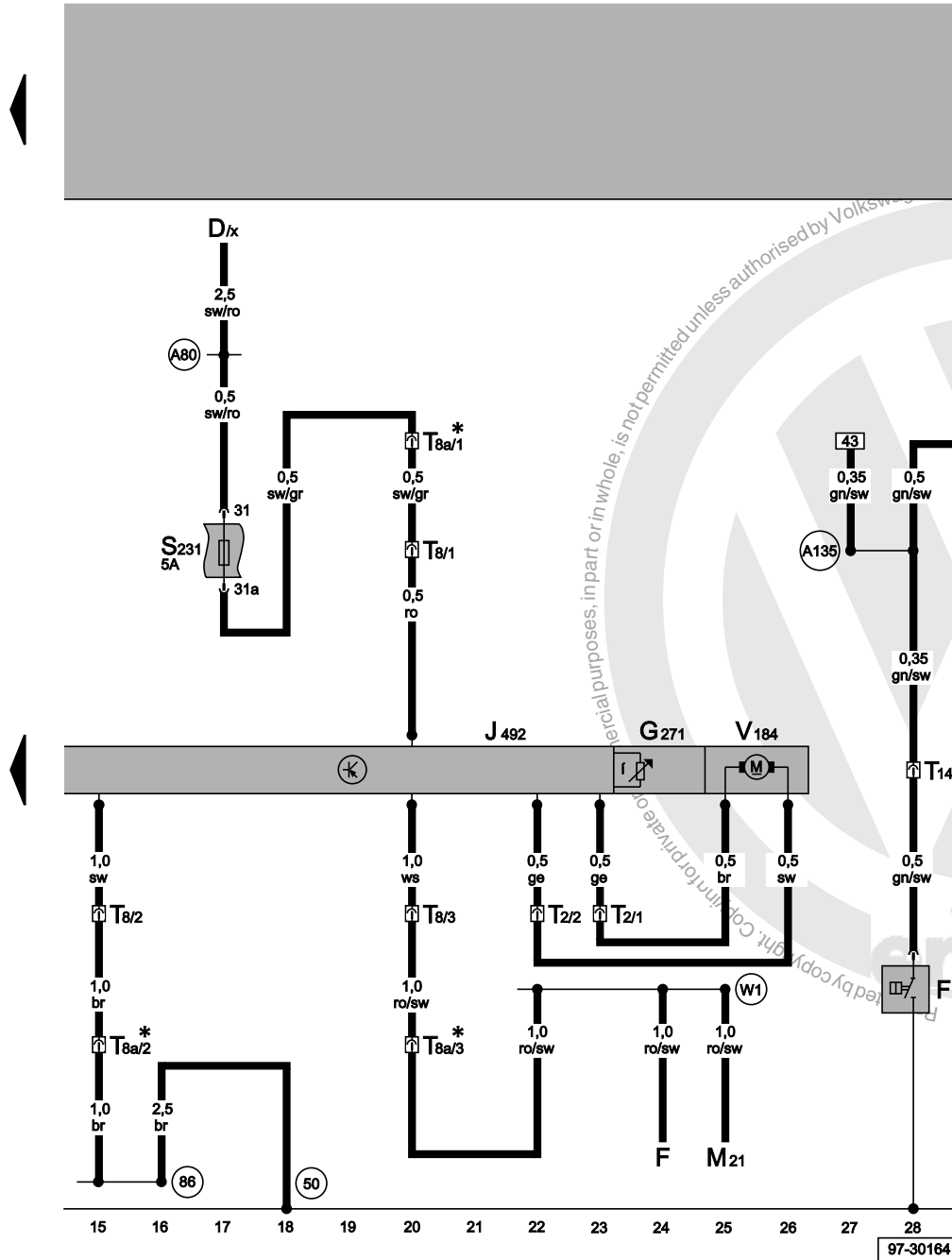


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Four-wheel drive control unit, hydraulic temperature sender, oil pressure control motor, oil pressure switch

- D Ignition/starter switch
- F Brake light switch
- F1 Oil pressure switch
- G271 Hydraulic temperature sender
- J492 Four-wheel drive control unit, near rear final drive
- M21 Brake and tail light bulb, left
- S231 Fuse in fuse box
- T2 2-pin connector, on four-wheel drive
- T8 8-pin connector, on Haldex coupling
- T8a 8-pin connector, near Haldex coupling*
- T14a 14-pin connector, near battery
- V184 Oil pressure control motor

- 50 Earth point, on left luggage compartment
- 86 Earth connection -1-, in rear wiring harness
- A80 Connection -1- (X), in dash panel wiring harness
- A135 Connection (oil pressure switch), in dash panel wiring harness
- W1 Positive (+) connection (54), in rear wiring harness
- * Only Golf Variant/ Bora Variant



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- ro = red
- br = brown
- ge = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

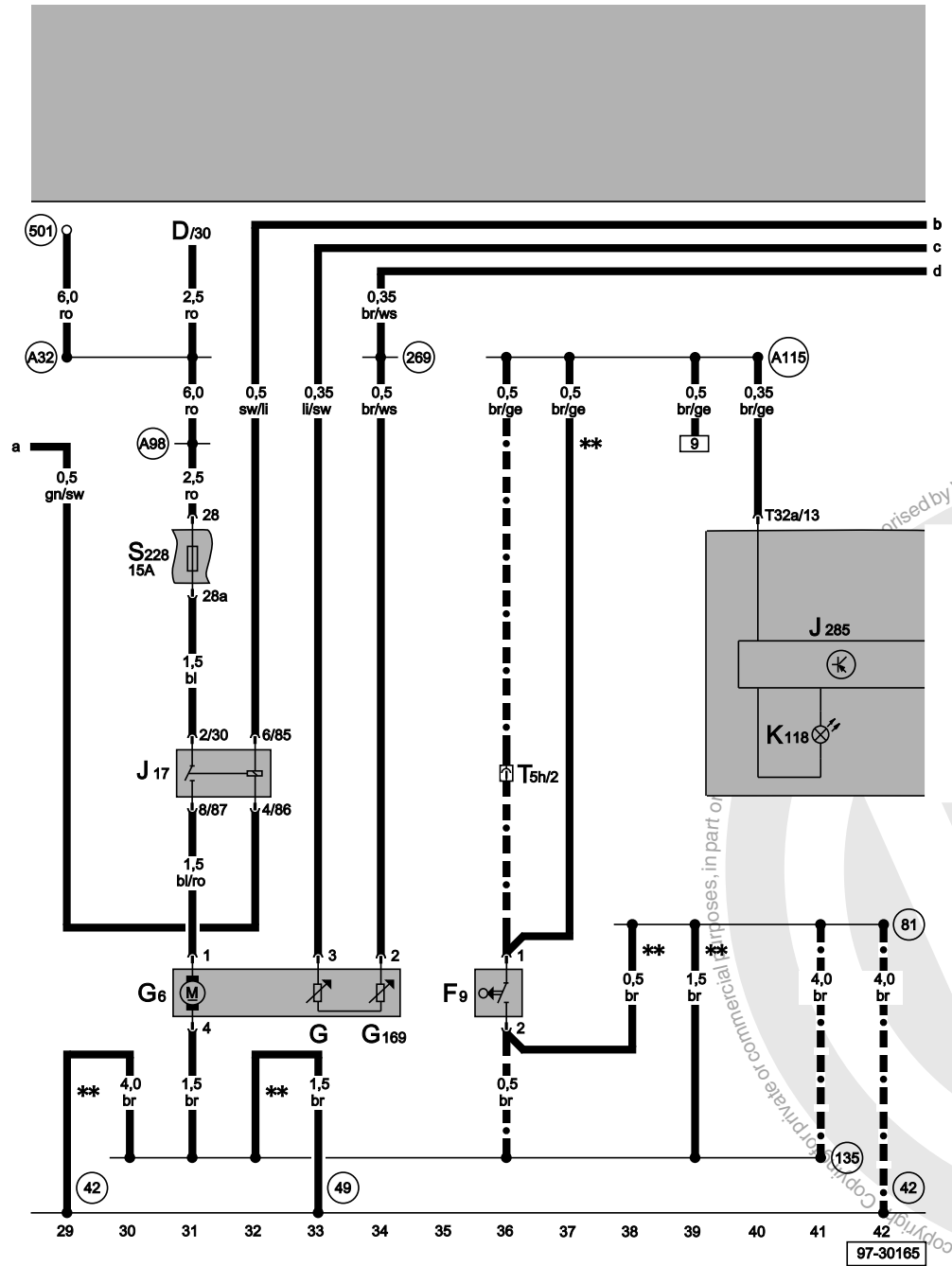
97-30164

Dash panel insert, brake system warning lamp, handbrake warning switch, fuel pump, fuel pump relay, fuel gauge sender

- D Ignition/starter switch
- F9 Handbrake warning switch
- G Fuel gauge sender
- G6 Fuel pump
- G169 Fuel gauge sender -2-
- J17 Fuel pump relay, above the central electrics
- J285 Control unit with display in dash panel insert
- S228 Fuse 28 in fuse box
- T5h 5-pin connector, near lower part of left A- pillar, entwined in wiring harness
- T32a 32-pin connector, green

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 501 Screw connection -2- (30), on relay plate
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- A115 Connection (handbrake warning), in dash panel wiring harness
- ** From May 2000
- Up to April 2000

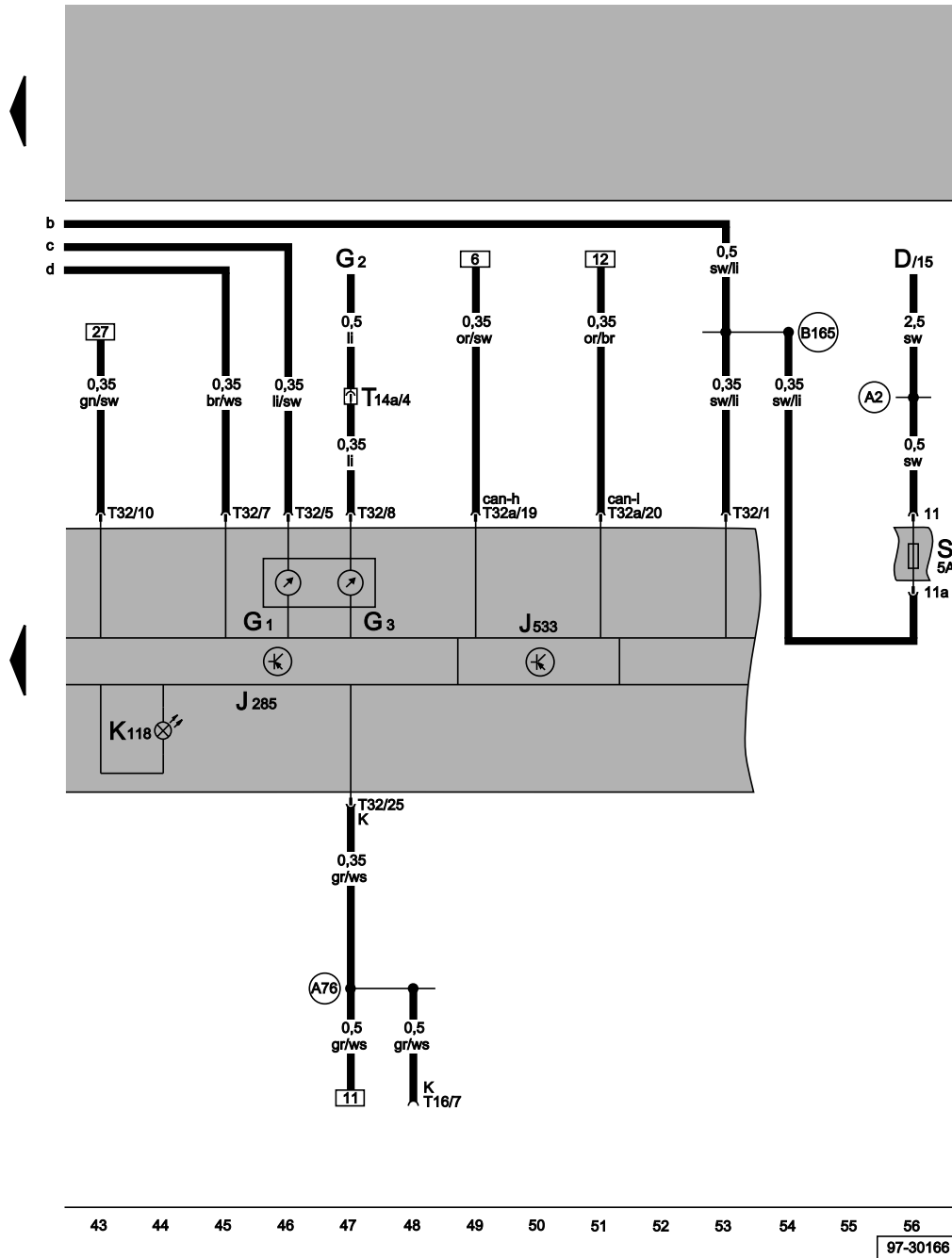
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- ls = pink



97-30165

Dash panel insert, fuel gauge, coolant temperature gauge

- D Ignition/starter switch
- G1 Fuel gauge
- G2 Coolant temperature sender
- G3 Coolant temperature gauge
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K118 Brake system warning lamp
- S11 Fuse in fuse box
- T14a 14-pin connector, near battery
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A2 Positive (+) connection (15), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- B165 Positive (+) connection -2- (15), in interior wiring harness



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- sw = black
- ro = red
- br = brown
- gr = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Fog light and rear fog light

from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

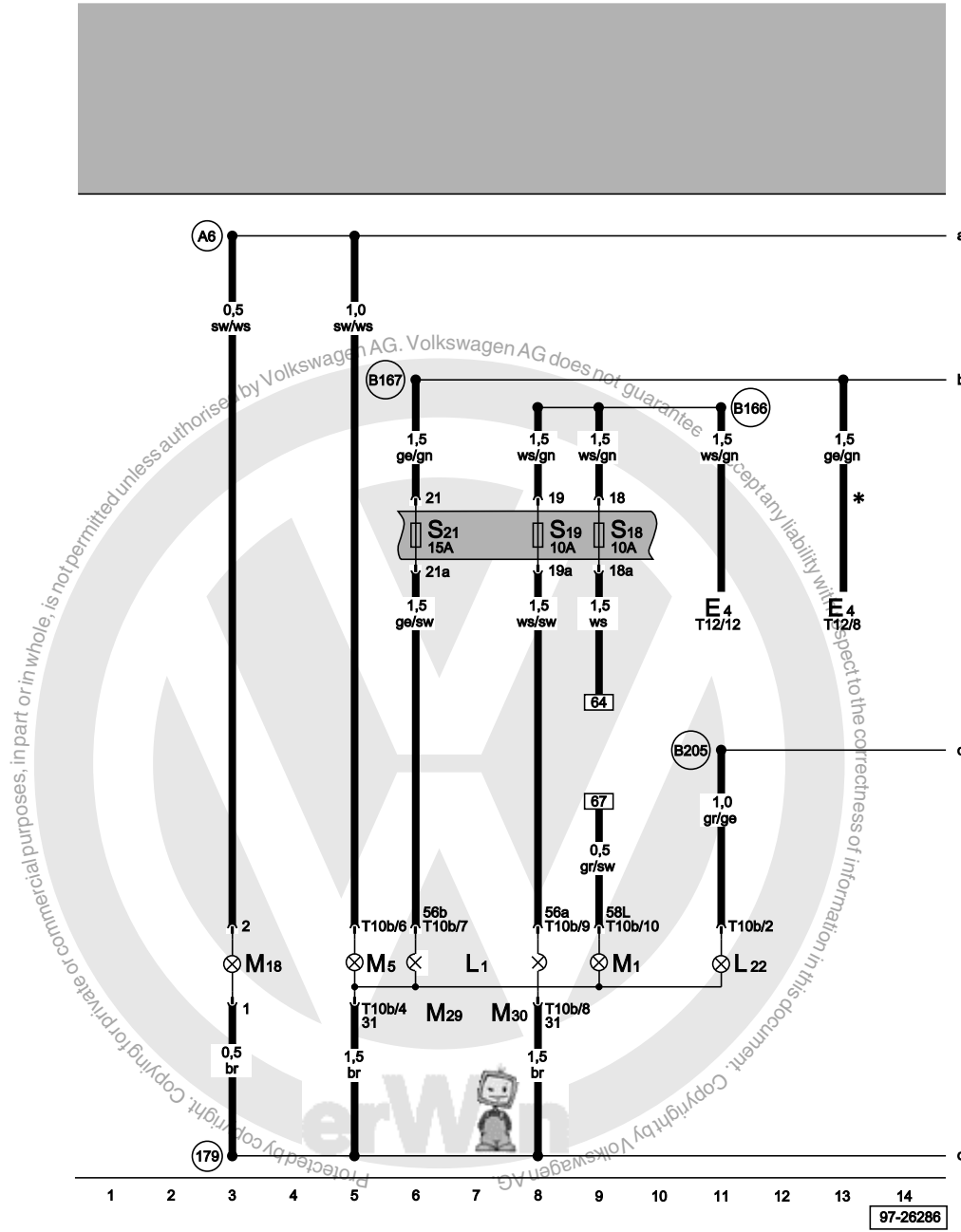
For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding



Left fog light, left headlight, left side light, front left turn signal



- E4 Headlight dipper/flasher switch
- L1 Left twin filament bulb*
- L22 Left fog light bulb
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left headlight dipped beam bulb (only Golf/ Golf Variant)
- M30 Left headlight main beam bulb (only Golf/ Golf Variant)
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

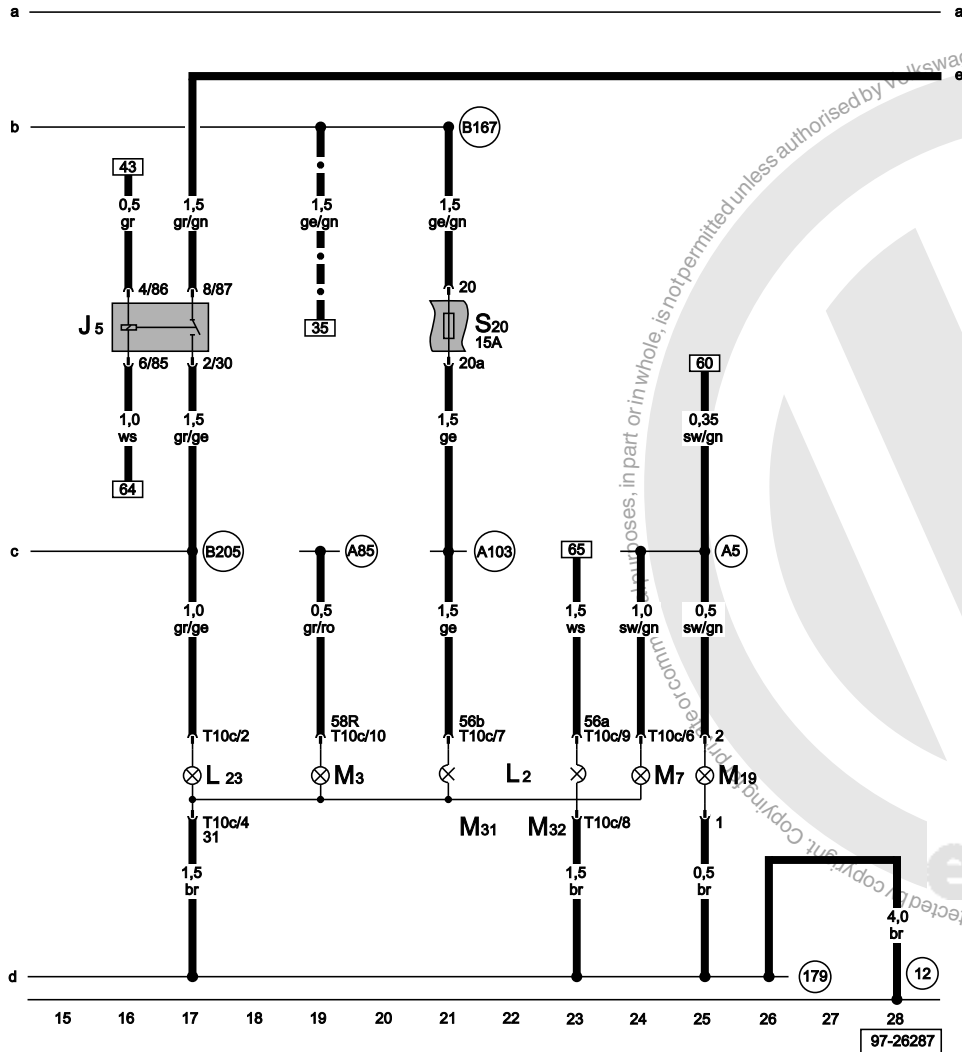
- 179 Earth connection, in left headlight wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness
- B205 Connection (FL), in interior wiring harness
- * only Bora/ Bora Variant

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- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Right fog light, fog light relay, right headlight, right side light, front right turn signal

- J5 Fog light relay, on additional relay carrier above the relay plate
- L2 Right twin filament bulb*
- L23 Right fog light bulb
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right headlight dipped beam bulb (only Golf/ Golf Variant)
- M32 Right headlight main beam bulb (only Golf/ Golf Variant)
- S20 Fuse 20 in fuse holder
- T10c 10-pin connector, on right headlight

- (12) Earth point, on left in engine compartment
- (179) Earth connection, in left headlight wiring harness
- (A5) Positive connection (right turn signal), in dash panel wiring harness
- (A85) Connection (58R), in dash panel wiring harness
- (A103) Connection 2 (56), in dash panel wiring harness
- (B167) Connection (56b), in interior wiring harness
- (B205) Connection (FL), in interior wiring harness
- * only Bora/ Bora Variant
- only Golf/ Golf Variant

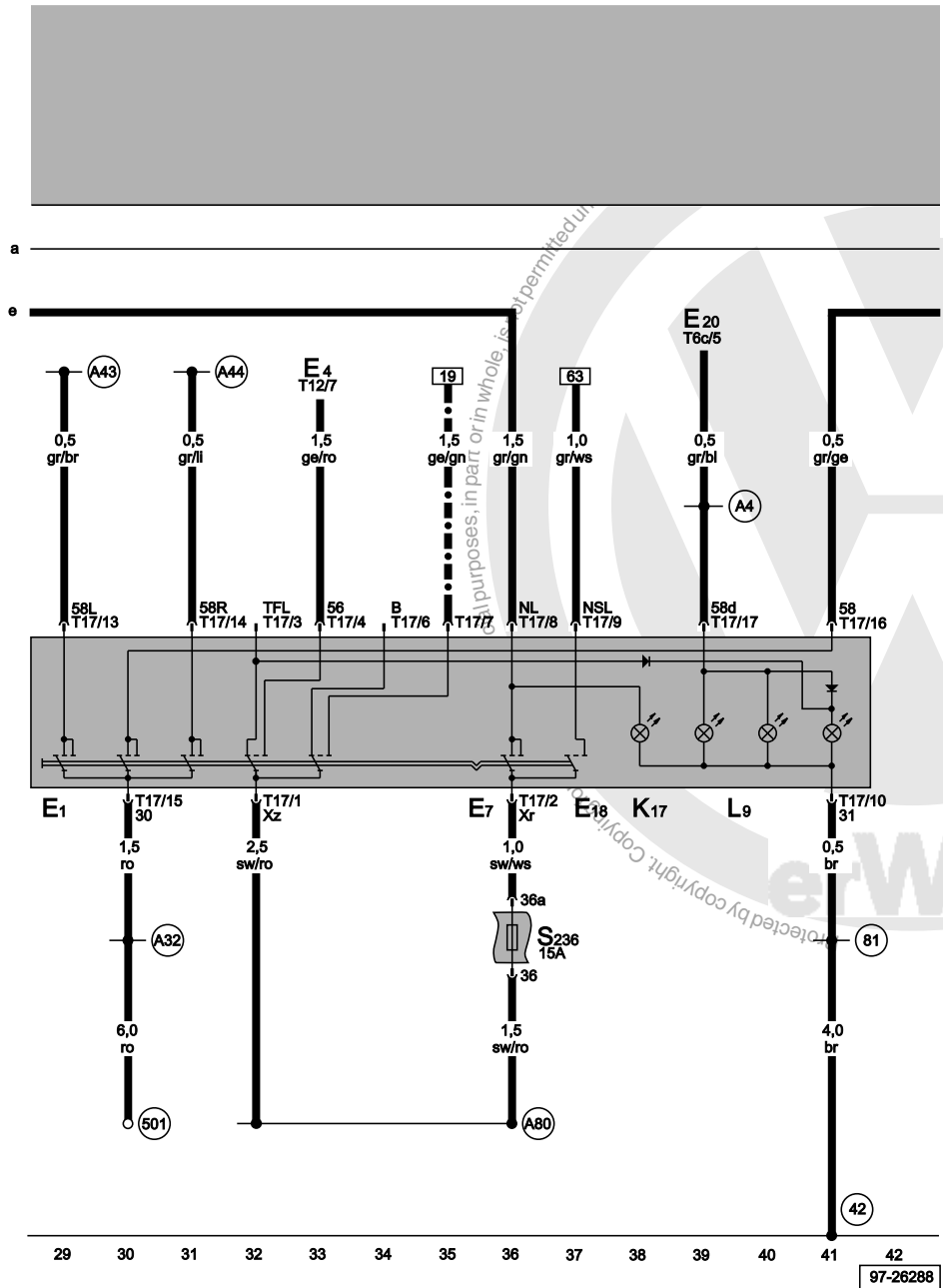


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Light switch, fog light switch, rear fog light switch

- E1 Light switch
- E4 Headlight dipper/flasher switch
- E7 Fog light switch
- E18 Rear fog light switch
- E20 Illumination regulators - switches and instruments
- K17 Fog light warning lamp
- L9 Light switch illumination bulb
- S236 Fuse 36 in fuse holder
- T6c 6-pin connector
- T12 12-pin connector
- T17 17-pin connector

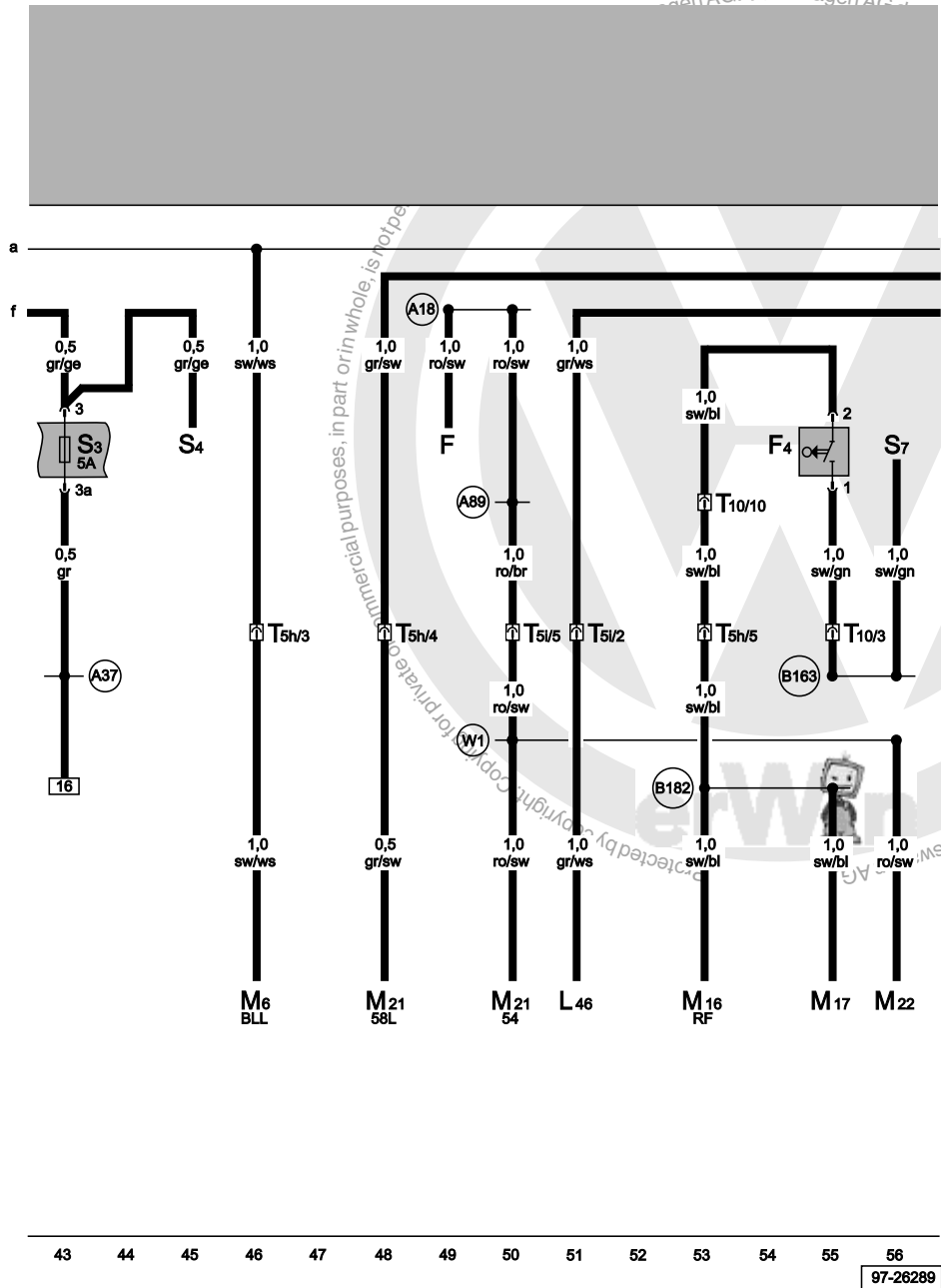
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 501 Screw connection 2 (30), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- only Golf/ Golf Variant



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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-26288

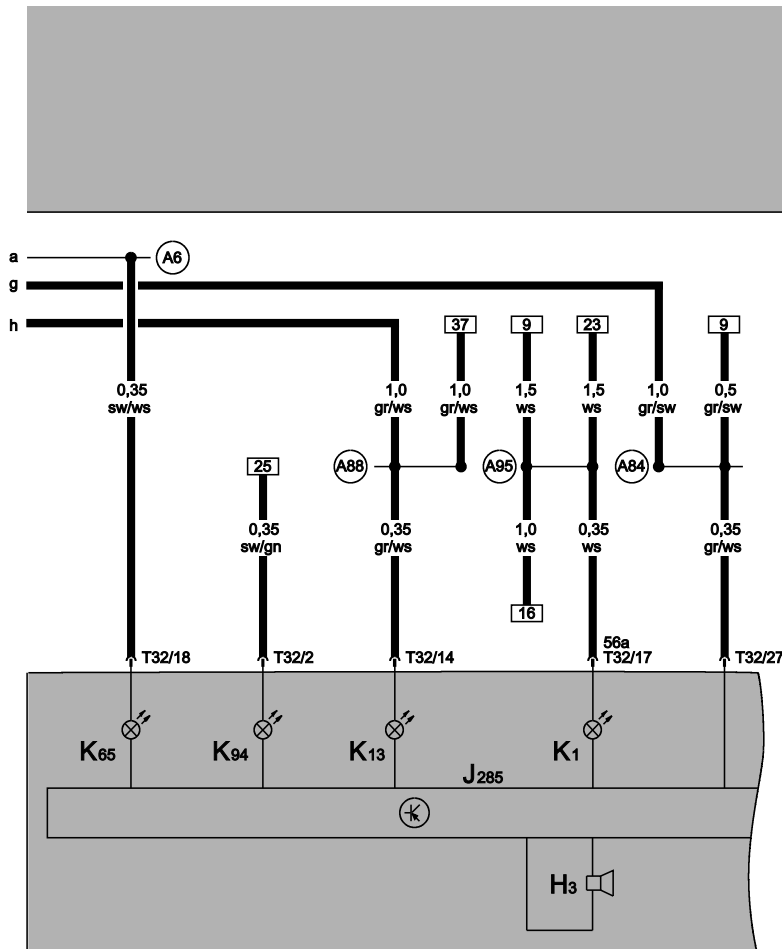
Rear fog light, left tail light, brake light, reversing light



- F Brake light switch
- F4 Reversing light switch
- L46 Rear left fog light bulb
- M6 Rear left turn signal bulb
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- M21 Left brake and tail light bulb
- M22 Right brake and tail light bulb
- S3 Fuse 3 in fuse holder
- S4 Fuse 4 in fuse holder
- S7 Fuse 7 in fuse holder
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- A18 Connection (54), in dash panel wiring harness
- A37 Connection (58a), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness

ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

Dash panel insert, turn signal warning lamps, main beam warning lamp, rear fog light warning lamp



- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K13 Rear fog light warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- T32 32-pin connector, blue

- A6 Positive connection (left turn signal), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A88 Connection (RFL), in dash panel wiring harness
- A95 Connection 1 (56a), in dash panel wiring harness

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Day driving light

from May 1999

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

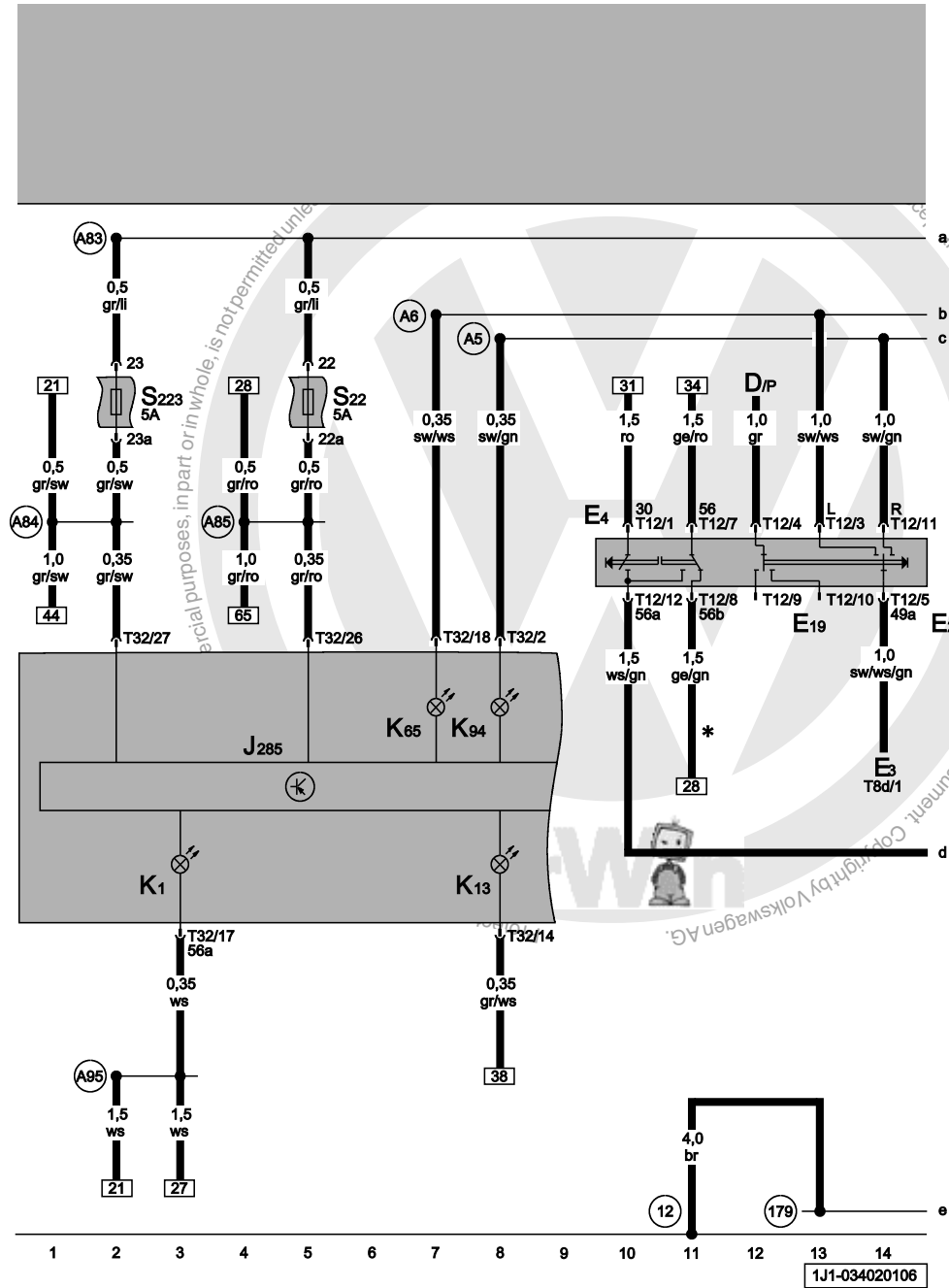
For information concerning

◆ Fault Finding Programs

⇒ guided fault finding



Dash panel insert, turn signal switch, headlight dipper/flasher switch, parking light switch



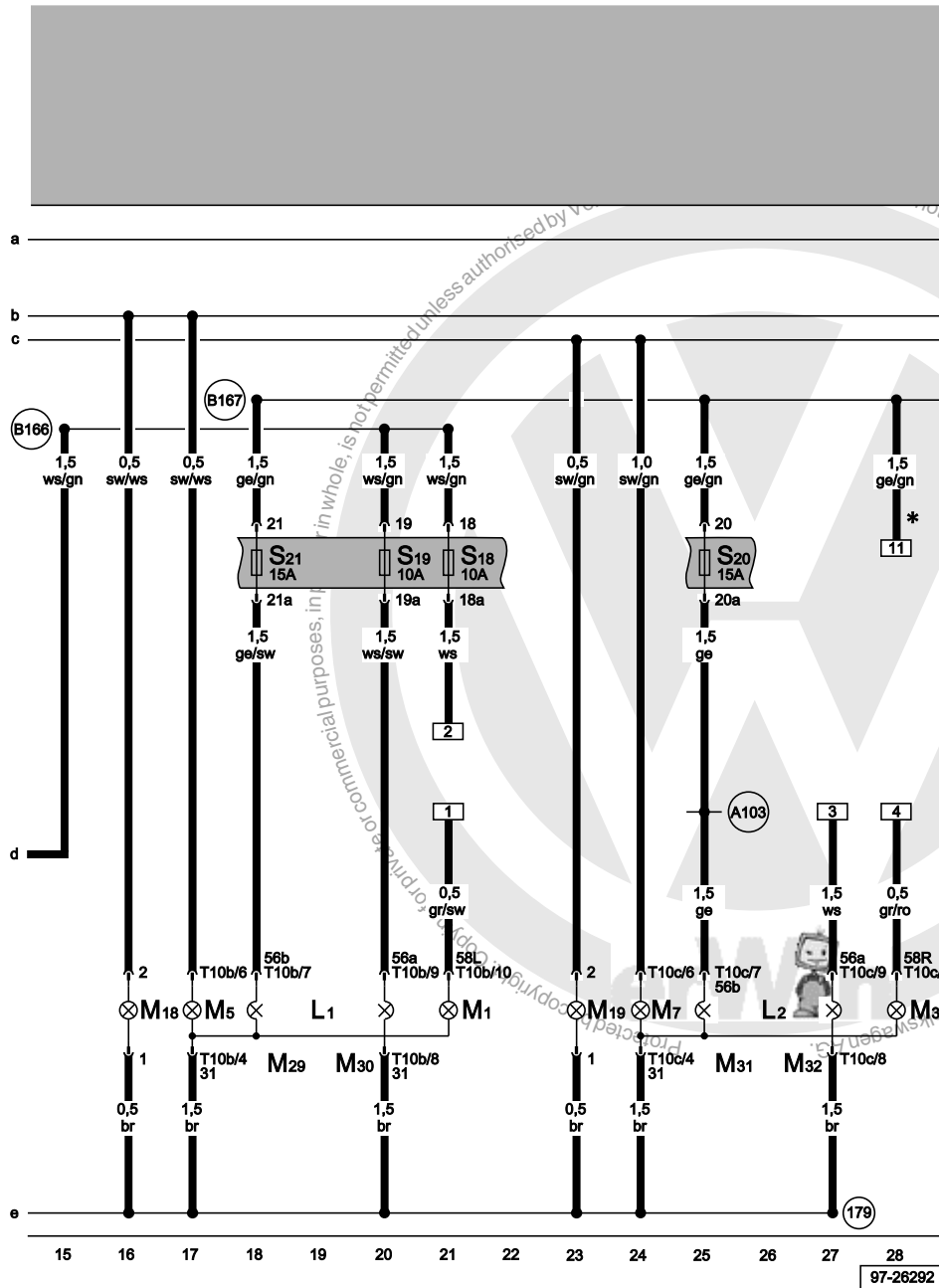
- D Ignition/starter switch
 - E2 Turn signal switch
 - E3 Hazard warning light switch
 - E4 Headlight dipper/flasher switch
 - E19 Parking light switch
 - J285 Control unit with display in dash panel insert
 - K1 Main beam warning lamp
 - K13 Rear fog light warning lamp
 - K65 Left turn signal warning lamp
 - K94 Right turn signal warning lamp
 - S22 Fuse 22 in fuse holder
 - S223 Fuse 23 in fuse holder
 - T8d 8-pin connector
 - T12 12-pin connector
 - T32 32-pin connector, blue
- 12 Earth point, on left in engine compartment
 - 179 Earth connection, in left headlight wiring harness
 - A5 Positive connection (right turn signal), in dash panel wiring harness
 - A6 Positive connection (left turn signal), in dash panel wiring harness
 - A83 Connection (day driving light), in dash panel wiring harness
 - A84 Connection (58L), in dash panel wiring harness
 - A85 Connection (58R), in dash panel wiring harness
 - A95 Connection 1 (56a), in dash panel wiring harness
- * only Bora/ Bora Variant

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- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Left headlight, left side light, front left turn signal, right headlight, right side light, front right turn signal

- L1 Left twin filament bulb*
- L2 Right twin filament bulb*
- M1 Left side light bulb
- M3 Right side light bulb
- M5 Front left turn signal bulb
- M7 Front right turn signal bulb
- M18 Left side mounted turn signal bulb
- M19 Right side mounted turn signal bulb
- M29 Left dipped beam bulb**
- M30 Left main beam bulb**
- M31 Right dipped beam bulb**
- M32 Right main beam bulb**
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S20 Fuse 20 in fuse holder
- S21 Fuse 21 in fuse holder
- T10b 10-pin connector, on left headlight
- T10c 10-pin connector, on right headlight

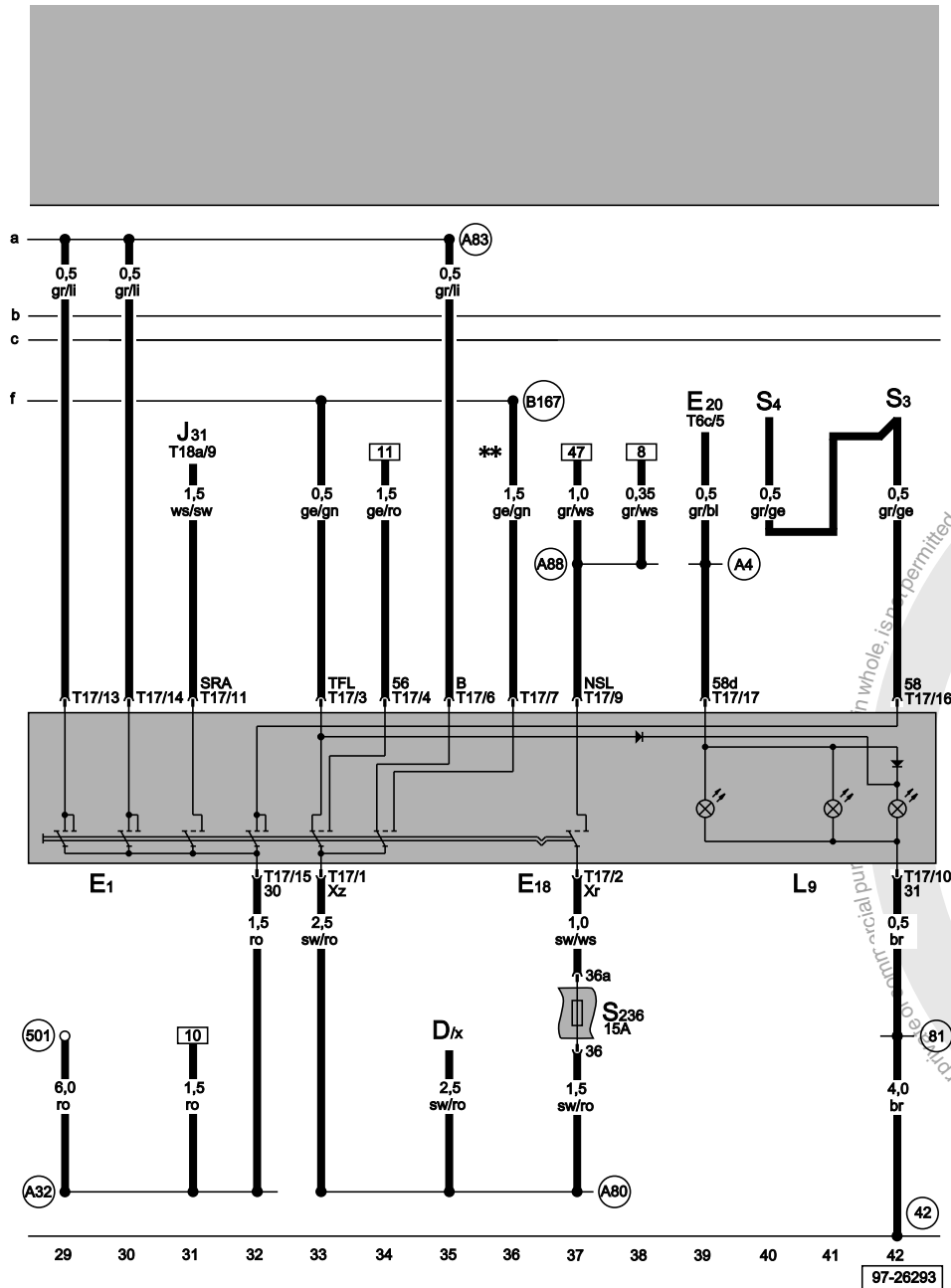
- (179) Earth connection, in left headlight wiring harness
- (A103) Connection 2 (56), in dash panel wiring harness
- (B166) Connection (56a), in interior wiring harness
- (B167) Connection (56b), in interior wiring harness
- * only Bora/ Bora Variant
- ** only Golf/ Golf Variant



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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Light switch, rear fog light switch

- D Ignition/starter switch
- E1 Light switch
- E18 Rear fog light switch
- E20 Illumination regulators - switches and instruments
- L9 Light switch illumination bulb
- J31 Automatic intermittent wash and wipe relay
- S3 Fuse 3 in fuse holder
- S4 Fuse 4 in fuse holder
- S236 Fuse 36 in fuse holder
- T6c 6-pin connector
- T17 17-pin connector
- T18a 18-pin connector



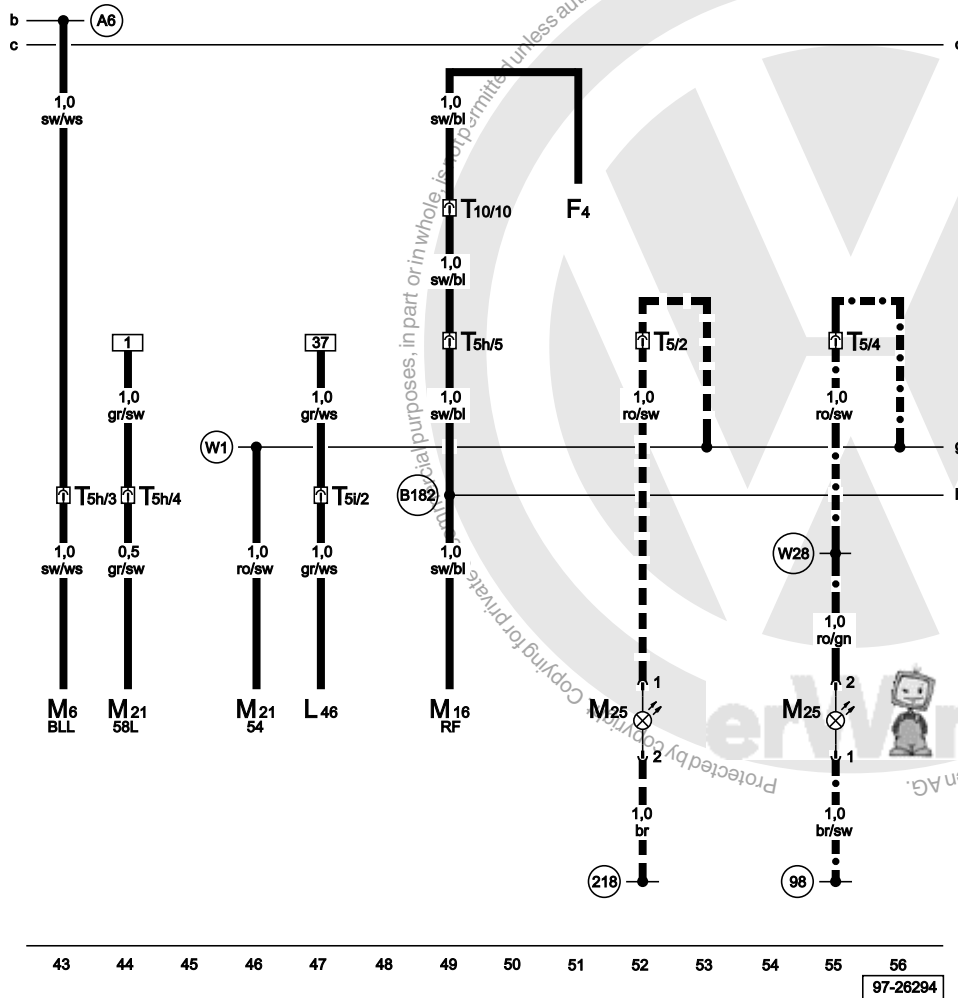
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 501 Screw connection 2 (30), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A83 Connection (day driving light), in dash panel wiring harness
- A88 Connection (RFL), in dash panel wiring harness
- B167 Connection (56b), in interior wiring harness
- ** only Golf/ Golf Variant

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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Left brake light, rear fog light, left reversing light, left tail light, rear left turn signal, high level brake light

- F4 Reversing light switch
- L46 Rear left fog light bulb
- M6 Rear left turn signal bulb
- M16 Left reversing light bulb
- M21 Left brake and tail light bulb
- M25 High level brake light bulb
- T5 5-pin connector, black, coupling station on left C-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

- 98 Earth connection, in rear lid wiring harness
- 218 Earth connection -1-, in rear lid wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- W28 Positive connection 2 (54), in rear wiring harness
- only Golf Variant/ Bora Variant
- only Golf

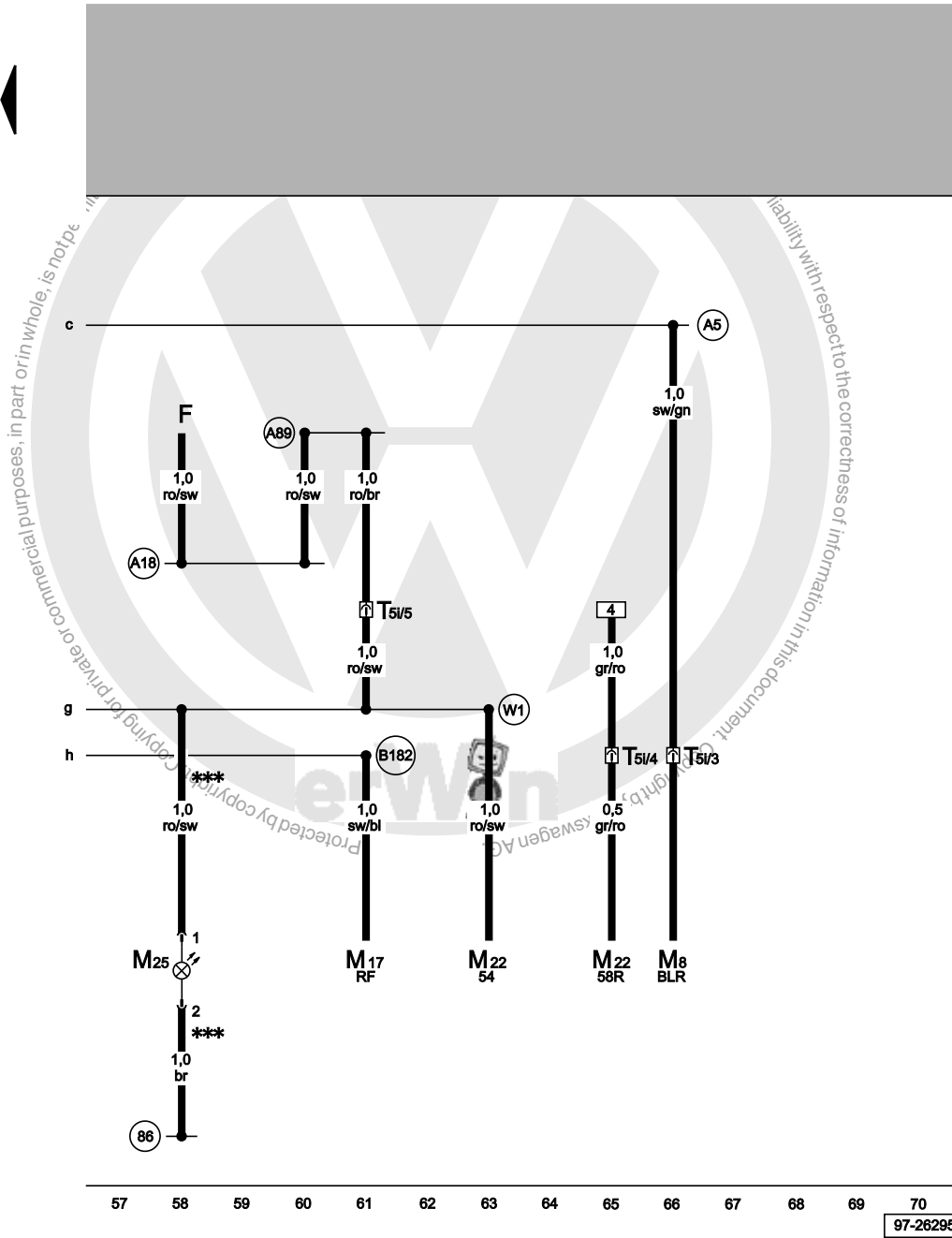


- ws = white
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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Right tail light, right brake light, rear right turn signal, right reversing light, high level brake light

- F Brake light switch
- M8 Rear right turn signal bulb
- M17 Right reversing light bulb
- M22 Right brake and tail light bulb
- M25 High level brake light bulb (18 LED's)
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness

- 86 Earth connection 1, in rear wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- *** only Bora



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- li = purple
- ge = yellow
- or = orange
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Headlight washer system

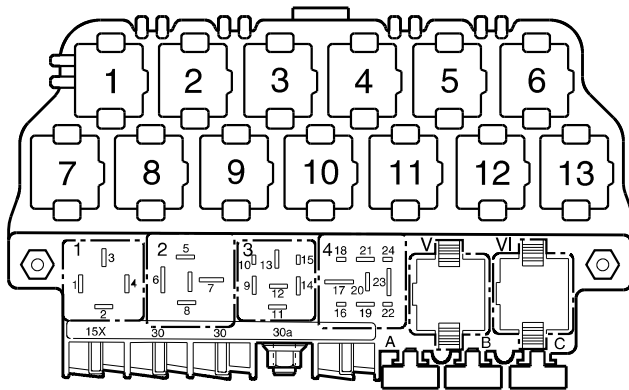
From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on 13 position additional

relay carrier, above relay plate:

Relay locations on relay plate:



97-14163

V, VI - Automatic intermittent wash/wipe relay (389)



Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

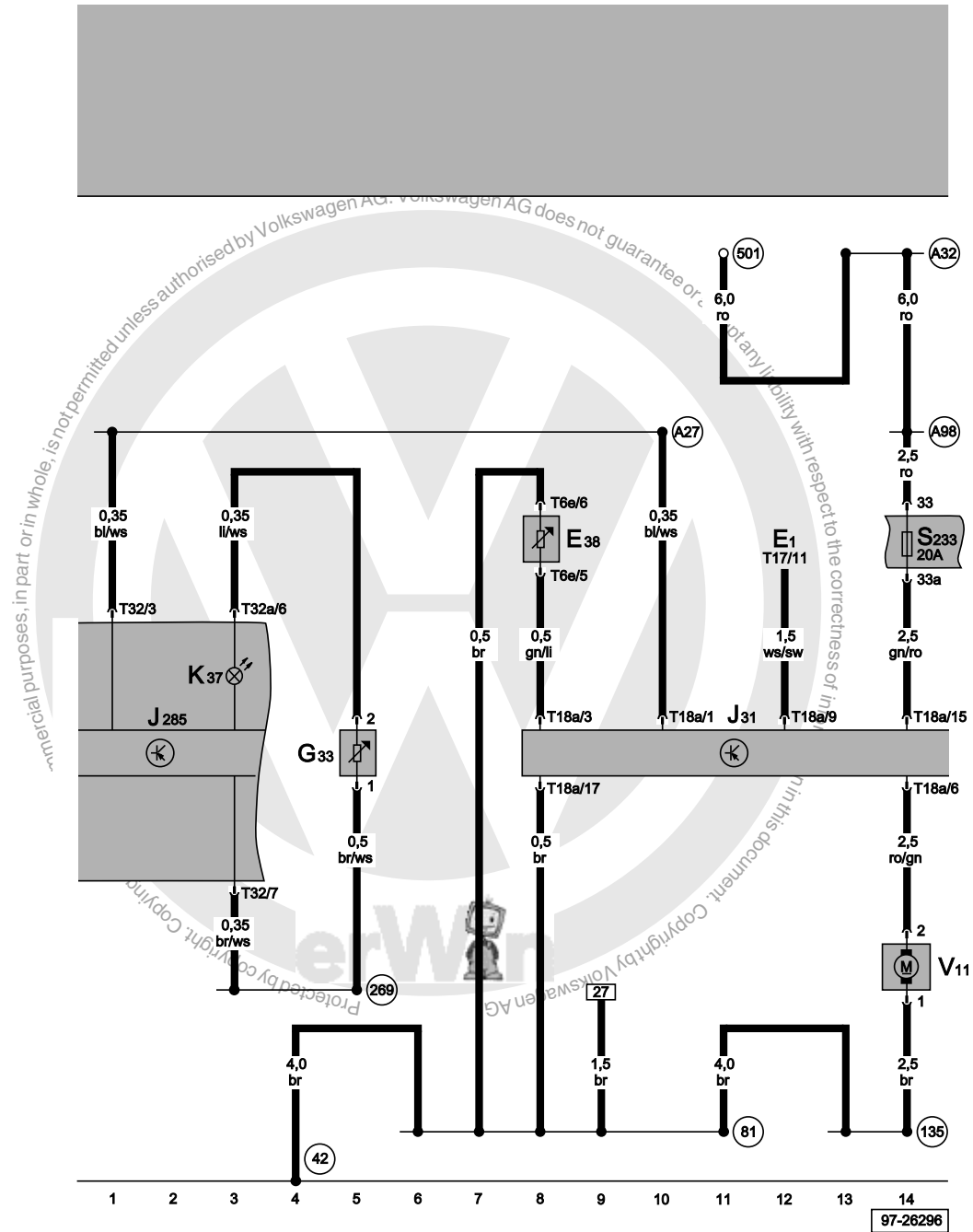
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Intermittent wash/wipe relay, intermittent wiper control, headlight washer system pump, windscreen washer fluid level sender

- E1 Lighting switch
 - E38 Intermittent wiper control
 - G33 Windscreen washer fluid level sender
 - J31 Automatic intermittent wash/wipe relay
 - J285 Control unit with display in dash panel insert
 - K37 Windscreen washer fluid level warning lamp
 - S233 Fuse in fuse holder
 - T6e 6-pin connector
 - T17 17-pin connector, on lighting switch
 - T18a 18-pin connector
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
 - V11 Headlight washer system pump
- 42 Earth point, next to steering column
 - 81 Earth connection -1-, in dash panel wiring harness
 - 135 Earth connection -2-, in dash panel wiring harness
 - 269 Earth connection (sender earth) -1-, in dash panel wiring harness
 - 501 Screw connection -2- (30), on relay plate
 - A27 Connection (speed signal), in dash panel wiring harness
 - A32 Positive connection (30), in dash panel wiring harness
 - A98 Positive connection -4- (30), in dash panel wiring harness

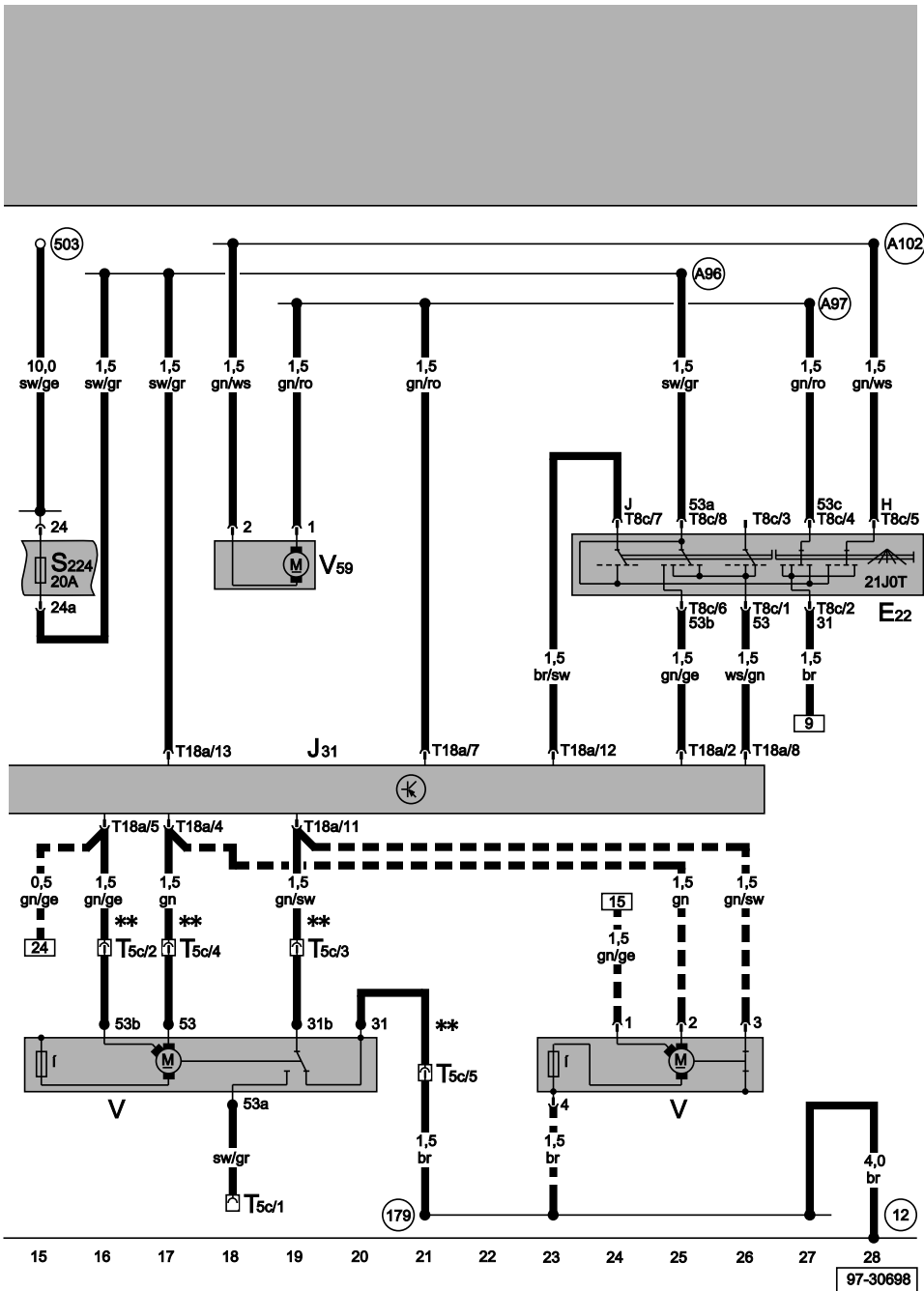


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash/wipe relay, windscreen and rear window washer pump

- E22 Intermittent wiper switch
- J31 Automatic intermittent wash/wipe relay, on relay plate
- S224 Fuse in fuse box
- T5c 5-pin connector, on windscreen wiper motor
- T8c 8-pin connector
- T18a 18-pin connector
- V Windscreen wiper motor
- V59 Windscreen and rear window washer pump

- 12 Earth point, in engine compartment, left
- 179 Earth connection, in left headlight wiring harness
- 503 Screw connection (75x), on relay plate
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness
- ** Only models up to August 2000
- Only models from September 2000



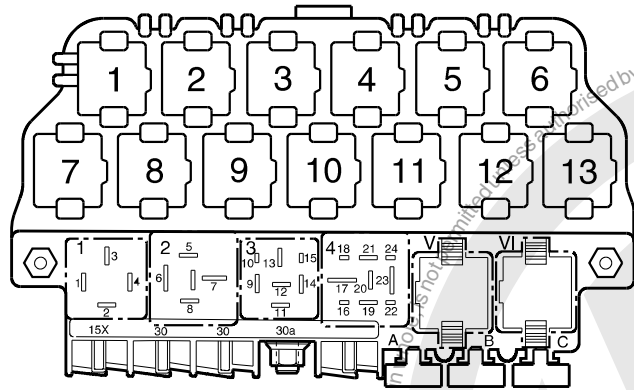
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Trailer towing

From May 1999

Trailer towing for estate models ⇒ Current flow diagram No. 37

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

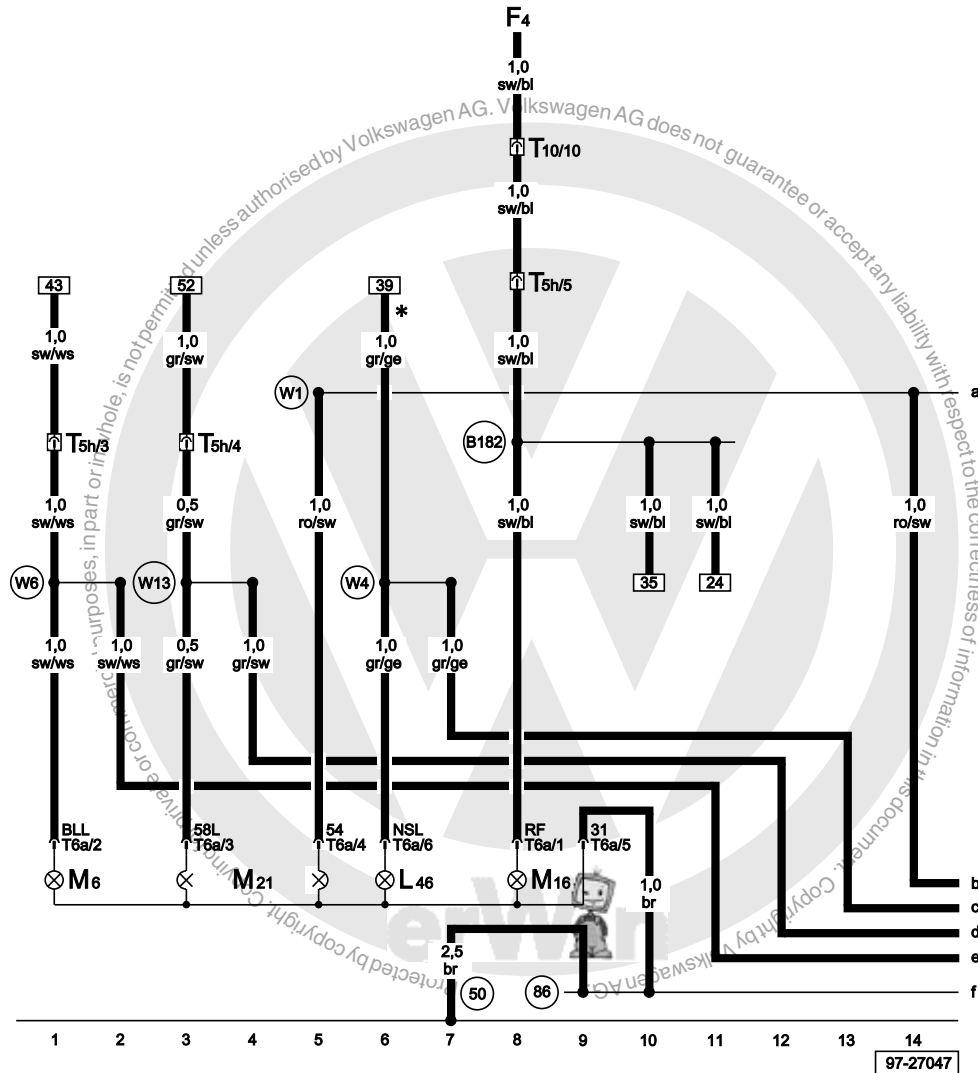
Rear left turn signal, left reversing light, left tail light, left brake light, rear fog light

- F4 Reversing light switch
- L46 Rear fog light bulb, left
- M6 Turn signal bulb, rear left
- M16 Reversing light bulb, left
- M21 Brake and tail light bulb, left
- T5h 5-pin connector, near lower left A-pillar, woven into wiring harness
- T6a 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber

- (50) Earth point, on left luggage compartment
- (86) Earth connection -1-, in rear wiring harness
- (B182) Connection (RL), in interior wiring harness
- (W1) Positive (+) connection (54), in rear wiring harness
- (W4) Connection -1- (rear fog light), in rear wiring harness
- (W6) Connection (left turn signal), in rear wiring harness
- (W13) Connection (58L), in rear wiring harness

* Only on Bora

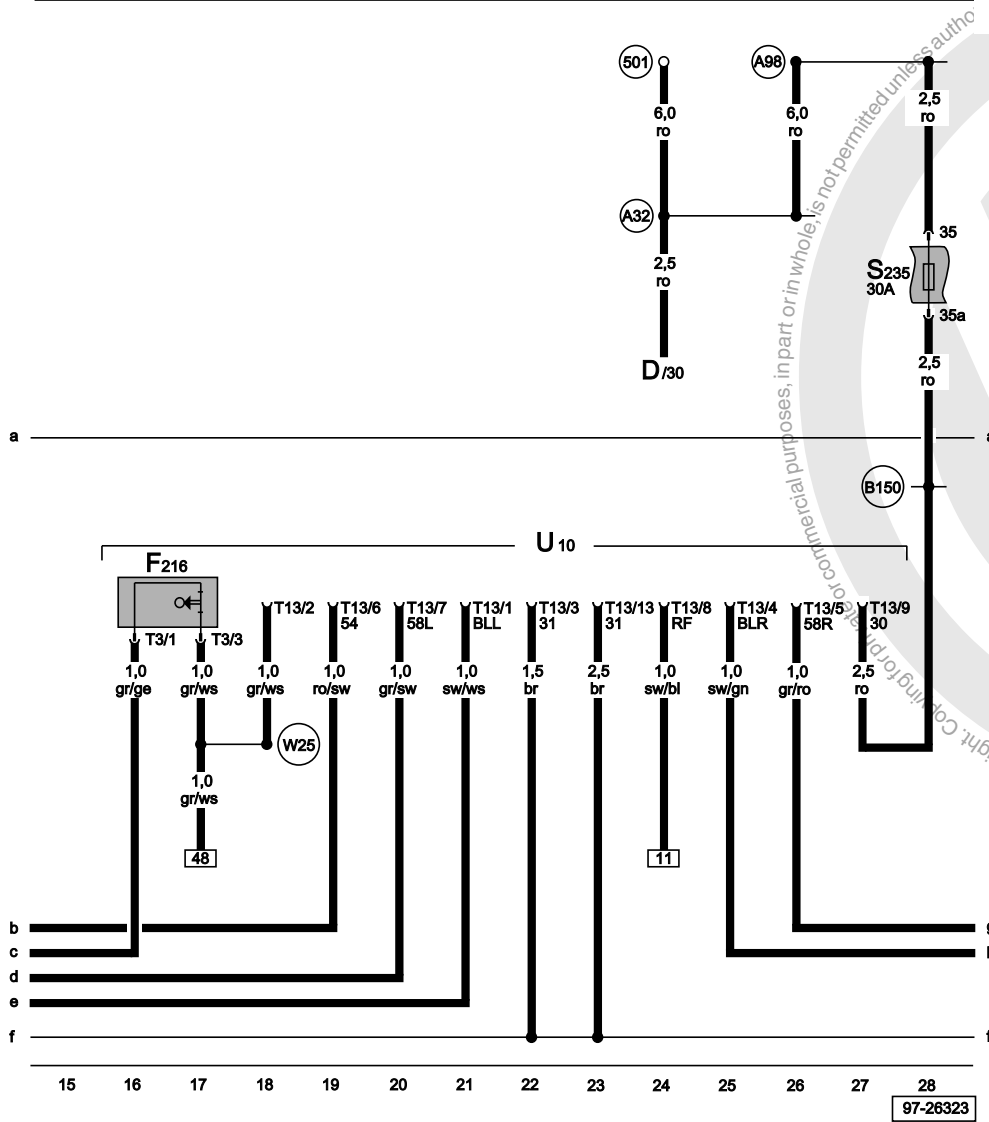
- ws = white
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- gn = green
- bl = blue
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- li = purple
- ge = yellow
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- rs = pink



Trailer towing socket, rear fog light cut-off

- D Ignition/starter switch
- F216 Rear fog light cut-out, contact switch, in trailer towing socket
- S235 Fuse in fuse holder
- T3 3-pin connector
- T13 13-pin connector
- U10 Trailer socket

- 501 Screw connection -2- (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- B150 Positive connection -2- (30a), in interior wiring harness
- W25 Connection -2- (rear fog light), in rear wiring harness



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-26323

Behind right turn signal, right tail light, right brake light, high level brake light, right reversing light

- F Brake light switch
- M8 Turn signal bulb, rear right
- M17 Reversing light bulb, right
- M22 Brake and tail light bulb, right
- M25 High level brake light bulb
- T5 5-pin connector, black, left C-pillar coupling station
- T5a 5-pin connector, pink, left C-pillar coupling station
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness

T16b 6-pin connector

86 Earth connection -1-, in rear wiring harness

98 Earth connection, in tailgate/boot lid wiring harness

A5 Positive (+) connection (right turn signal), in dash panel wiring harness

A18 Connection (54), in dash panel wiring harness

A89 Connection (54), in dash panel wiring harness

W1 Positive (+) connection (54), in rear wiring harness

W7 Connection (right turn signal), in rear- wiring harness

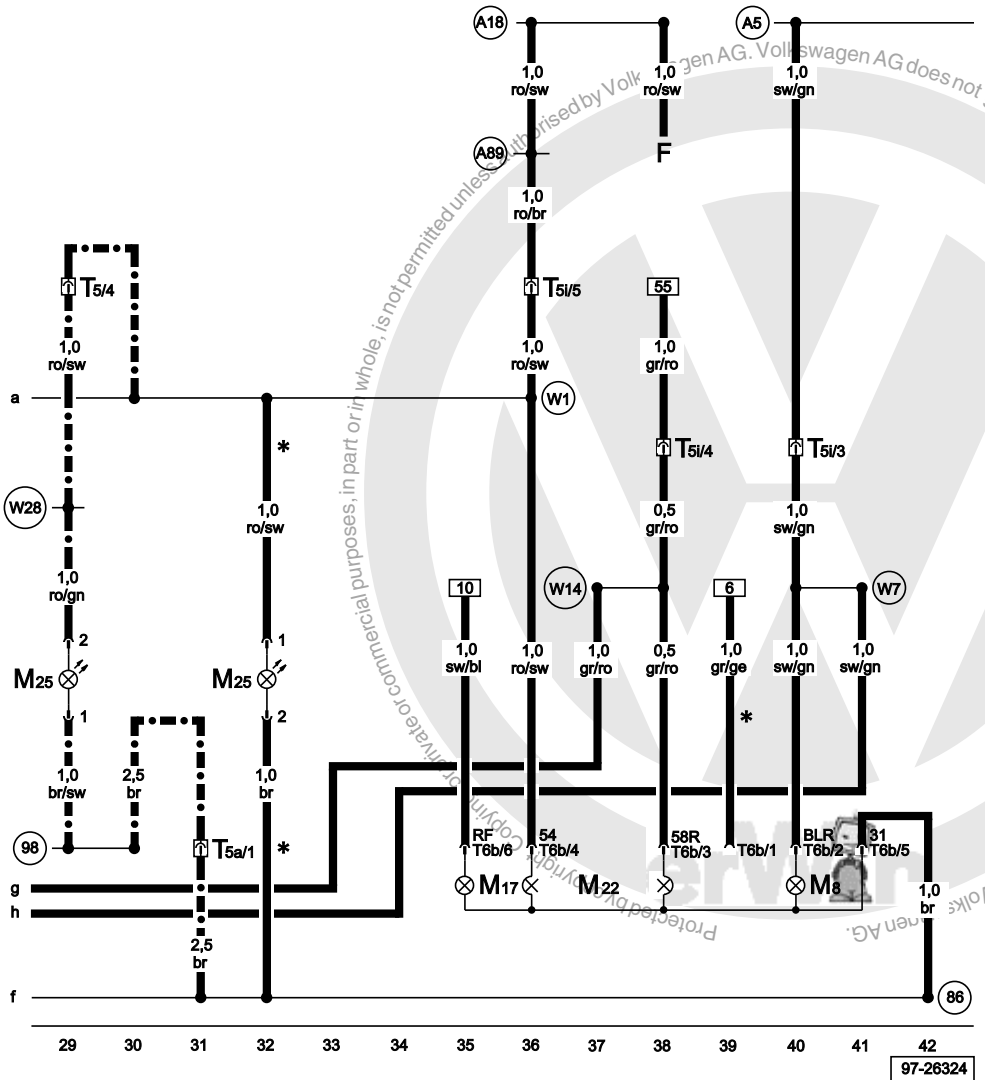
W14 Connection (58R), in rear wiring harness

W28 Positive connection -2- (54), in tail light wiring harness

* Only on Bora

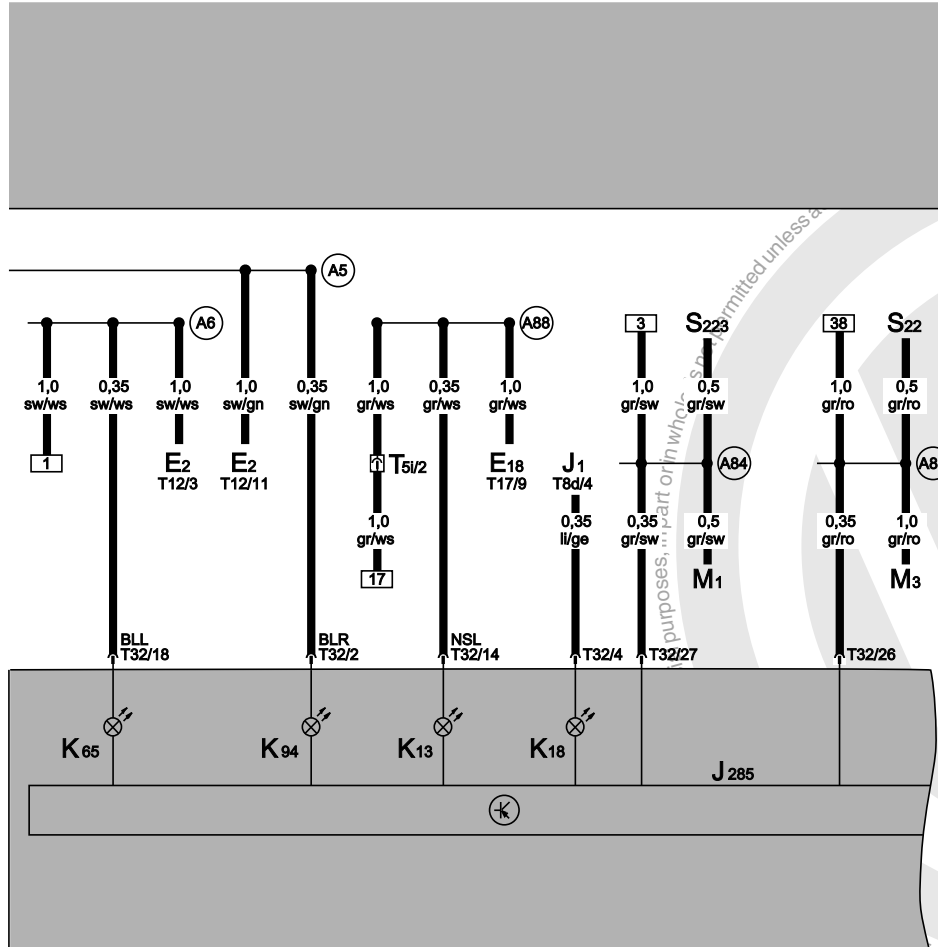
-.-.- Only on Golf

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-26324

Dash panel insert, trailer towing warning lamp, rear fog light warning lamp, turn signal warning lamp



- E2 Turn signal switch
- E18 Rear fog light switch
- J1 Turn signal relay
- J285 Control unit with display in dash panel insert
- K13 Rear fog light warning lamp
- K18 Trailer operation warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- M1 Side light bulb, left
- M3 Side light bulb, right
- S22 Fuse in relay plate fuse box
- S223 Fuse in fuse holder
- T5i 5-pin connector, near lower left A pillar, entwined in wiring harness
- T8d 8-pin connector
- T12 12-pin connector
- T17 17-pin connector, on lighting switch
- T32 32-pin connector, blue
- A5 Positive (+) connection (right turn signal), in dash panel wiring harness
- A6 Positive (+) connection (left turn signal), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness
- A88 Connection (RFL), in dash panel wiring harness

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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

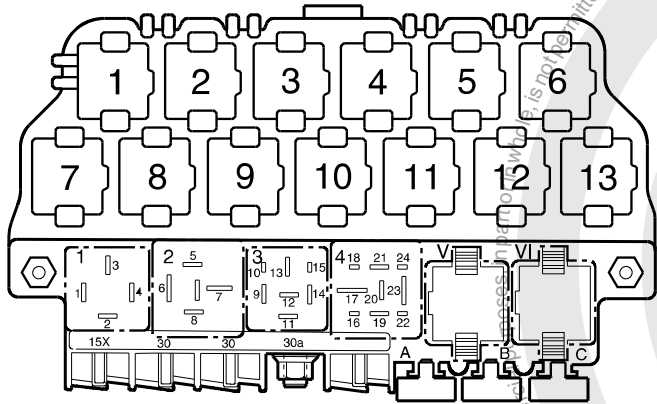
Trailer operation

from May 1999

Trailer operation saloon models → Current Flow Diagram 36

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



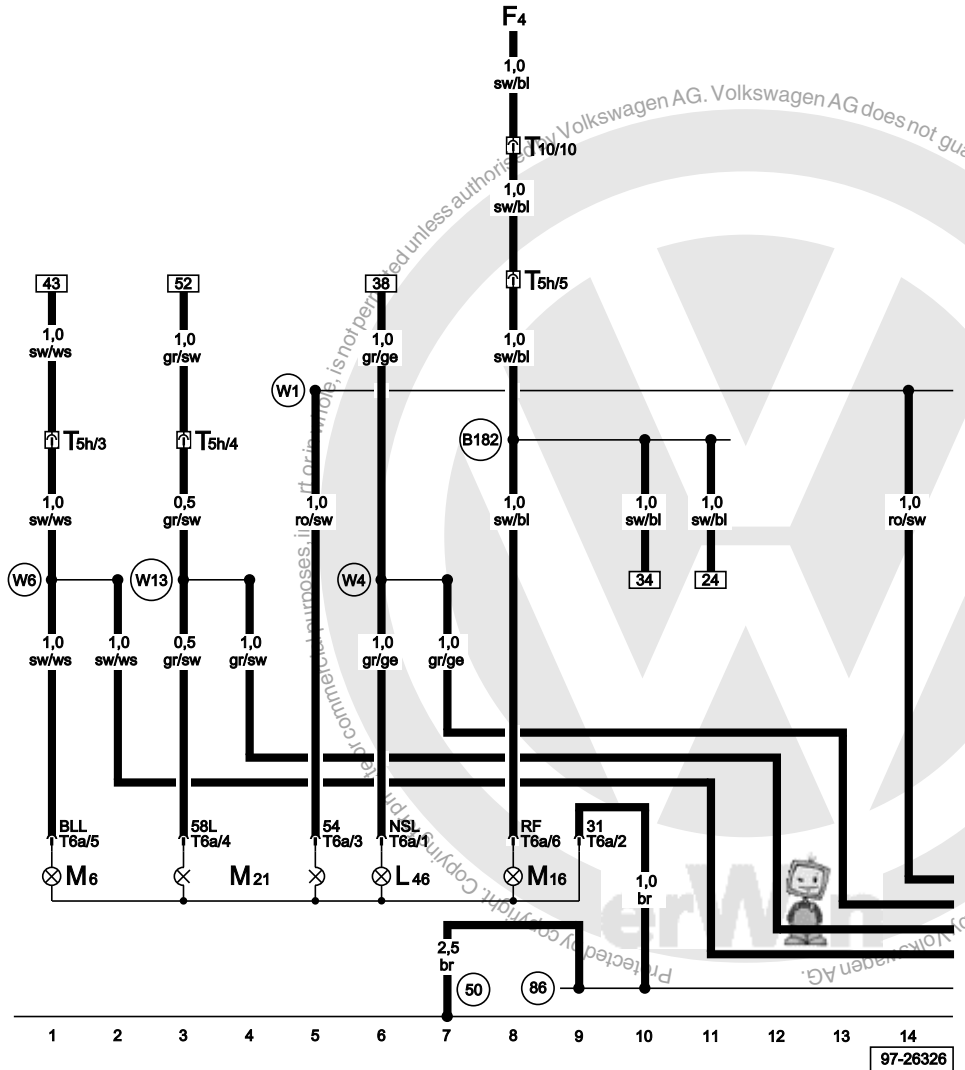
97-14163

Relay locations on relay plate:

Rear left turn signal, left reversing light, left tail light, left brake light, rear fog light

- F4 Reversing light switch
- L46 Rear left fog light bulb
- M6 Rear left turn signal bulb
- M16 Left reversing light bulb
- M21 Left brake and tail light bulb
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

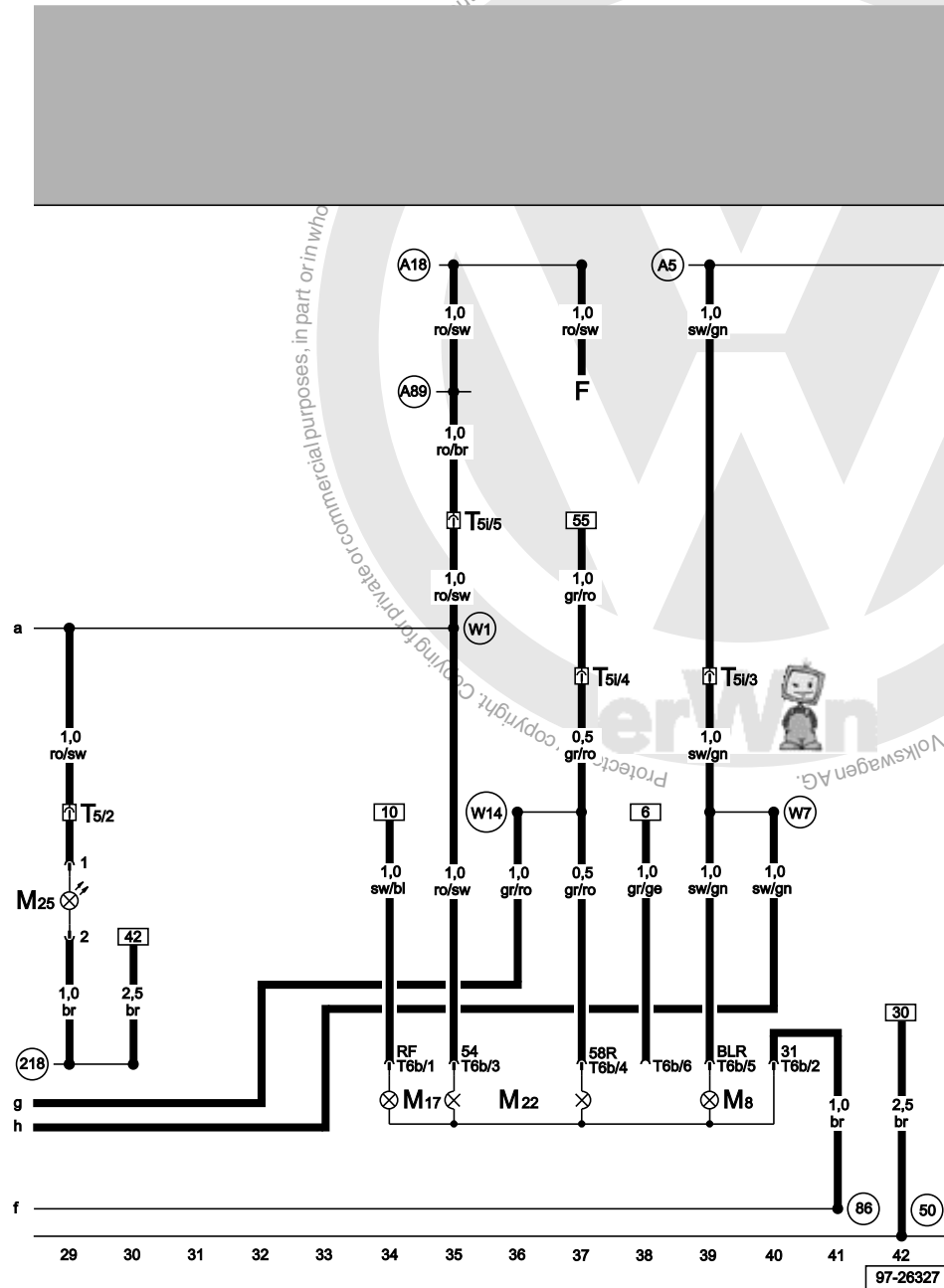
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- W4 Connection 1 (rear fog light), in rear wiring harness
- W6 Connection (left turn signal), in rear wiring harness
- W13 Connection (58L), in rear wiring harness



97-26326

Rear right turn signal, right tail light, right brake light, high level brake light, right reversing light

- F Brake light switch
- M8 Rear right turn signal bulb
- M17 Right reversing light bulb
- M22 Right brake and tail light bulb
- M25 High level brake light bulb
- T5 5-pin connector, black, coupling station left D-pillar
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6b 6-pin connector
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- 218 Earth connection -1-, in rear lid wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- A89 Connection (54), in dash panel wiring harness
- W1 Positive connection (54), in rear wiring harness
- W7 Connection (right turn signal), in rear wiring harness
- W14 Connection (58R), in rear wiring harness

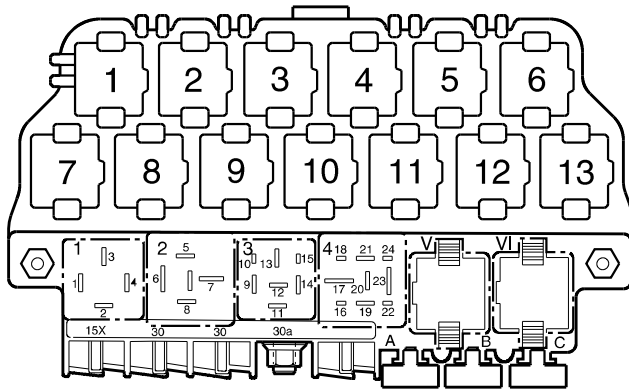


ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

Exterior mirror, electrically adjustable and heated

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

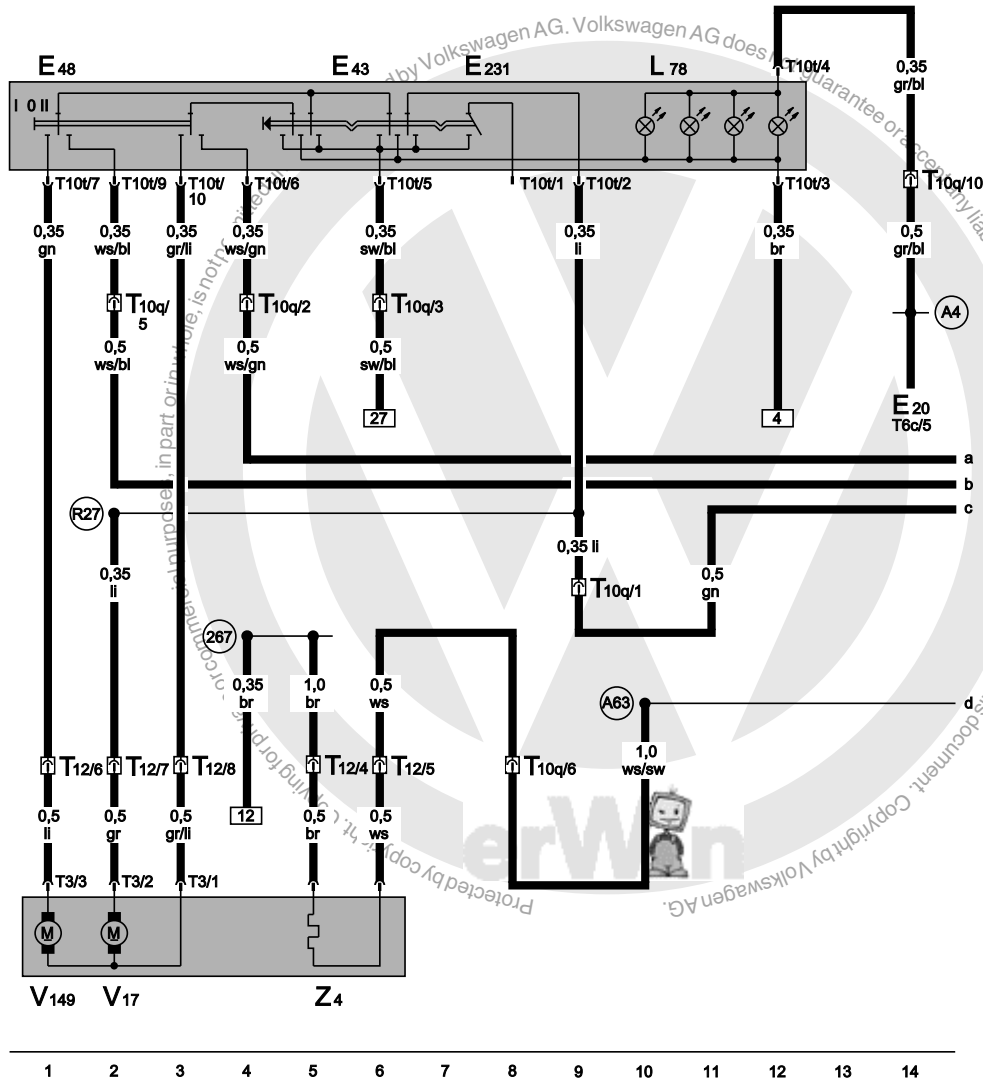
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Mirror adjustment switch, electrically adjustable exterior mirror for driver's door

- E20 Switches and instruments, lighting control
 - E43 Mirror adjustment switch
 - E48 Mirror adjustment change-over switch
 - E231 Exterior mirror heating button
 - L78 Mirror adjustment switch illumination
 - T3 3-pin connector
 - T6c 6-pin connector
 - T10q 10-pin connector, blue, connector point left A-pillar
 - T10t 10-pin connector
 - T12 12-pin connector, in driver's door
 - V17 Mirror adjustment motor, driver's side
 - V149 Mirror adjustment motor, driver's side
 - Z4 Heated exterior mirror, driver's side
- (267) Earth connection -2-, in door wiring harness - driver's side
 - (A4) Positive (+) connection (58b), in dash panel wiring harness
 - (A63) Connection (mirror heating), in dash panel wiring harness
 - (R27) Connection (mirror adjustment), in driver door wiring harness

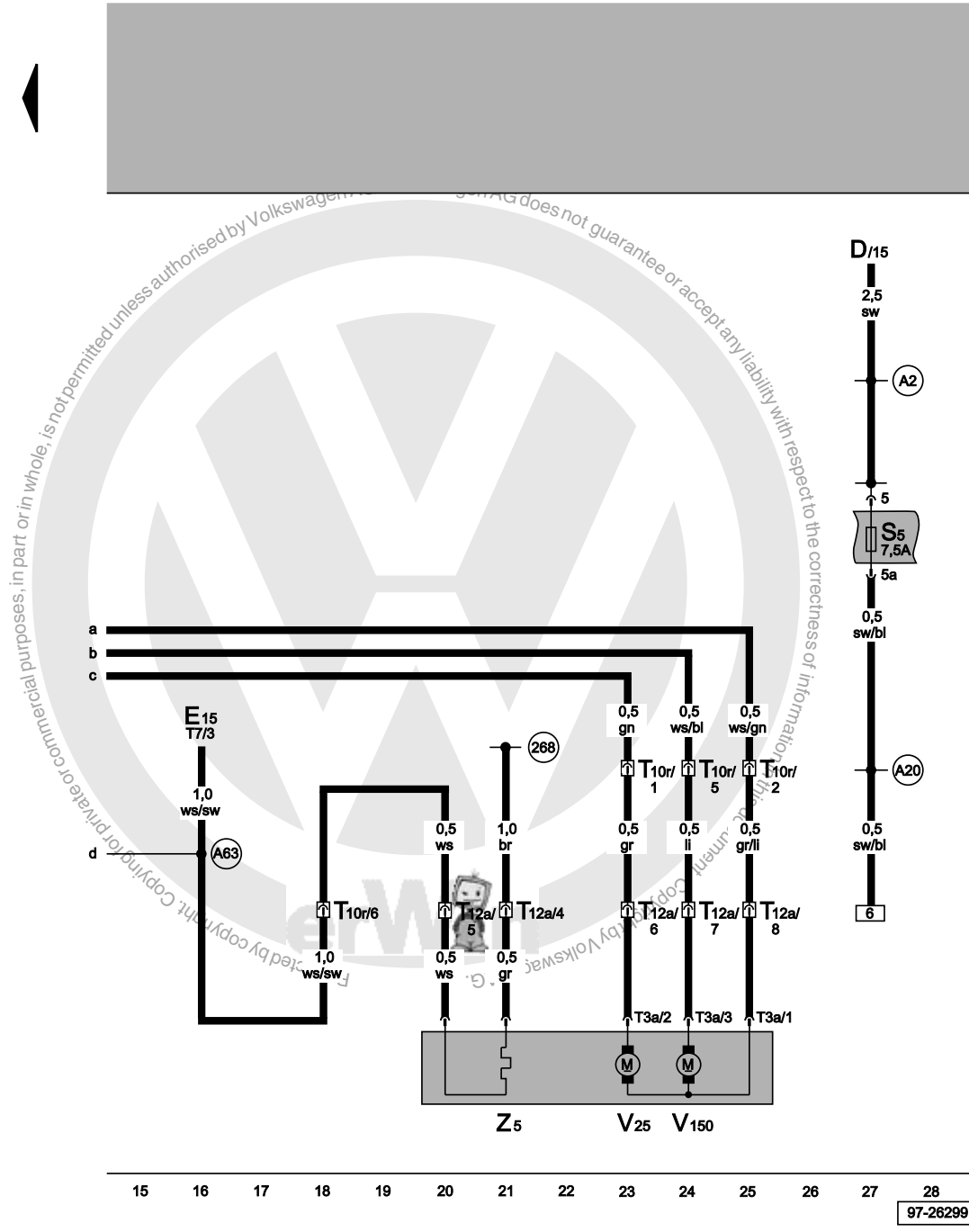


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Front passenger's door electrically adjustable exterior mirror

- D Ignition/starter switch
- E15 Heated rear window switch
- S5 Fuse in relay plate fuse box
- T3a 3-pin connector
- T7 7-pin connector
- T10r 10-pin connector, blue, right A-pillar coupling station
- T12a 12-pin connector, in driver's door
- V25 Mirror adjustment motor, front passenger side
- V150 Mirror adjustment motor, front passenger's side
- Z5 Heated exterior mirror, front passenger's side

- 268 Earth connection -2-, in front passenger's door wiring harness
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A63 Connection (mirror adjustment/heating), in dash panel wiring harness



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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Exterior mirror, electrically adjustable and separated heating

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

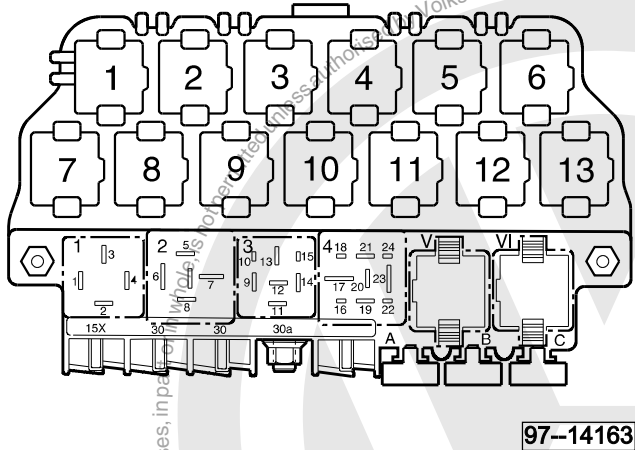
Relay locations on the 13 position additional relay carrier above the relay plate:

8 - Heated exterior mirror relay (53)

Relay locations on relay plate:

2 - X contact relief relay (18), (up to October 1998)

- X contact relief relay (100), (from November 1999)



Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige

3 A - purple

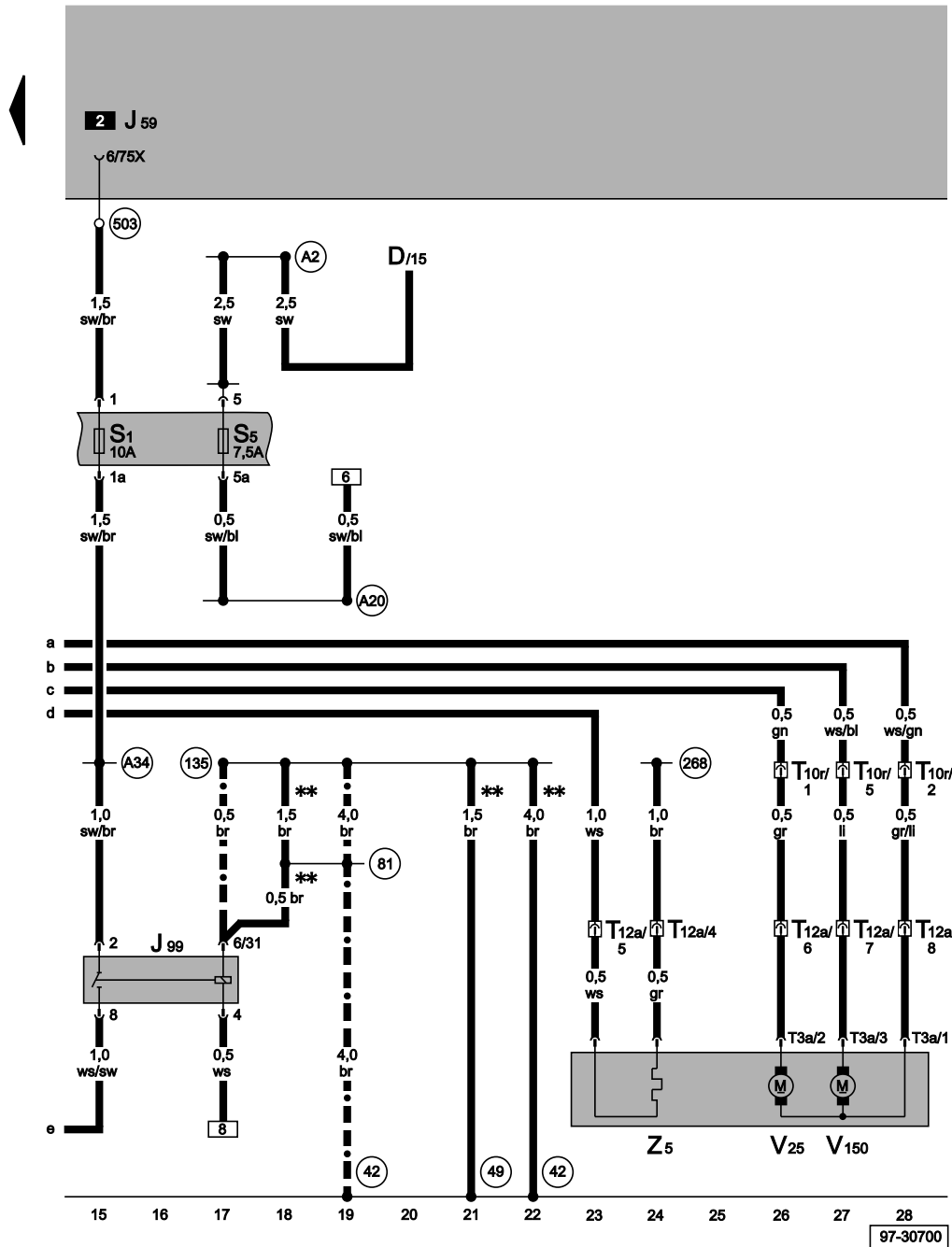


Electrically adjustable exterior mirror for front passenger's door, heated exterior mirror relay

- D Ignition/starter switch
- J59 X contact relief relay
- J99 Heated exterior mirror relay, on the position additional relay carrier above the relay plate
- S1 Fuse in fuse box
- S5 Fuse in fuse box
- T3a 3-pin connector
- T10r 10-pin connector, blue, connector point right A-pillar
- T12a 12-pin connector, in front passenger's door
- V25 Mirror adjustment motor, front passenger's side
- V150 Mirror adjustment motor, front passenger's side
- Z5 Heated exterior mirror, front passenger's side

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 268 Earth connection -2-, in door wiring harness - front passenger's side
- 503 Screw connection (75x), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A34 Connection (75x), in dash panel wiring harness
- ** From May 2000
- Up to April 2000

- ws = white
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Automatic anti-dazzle interior mirror, rain sensor

from May 1999

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

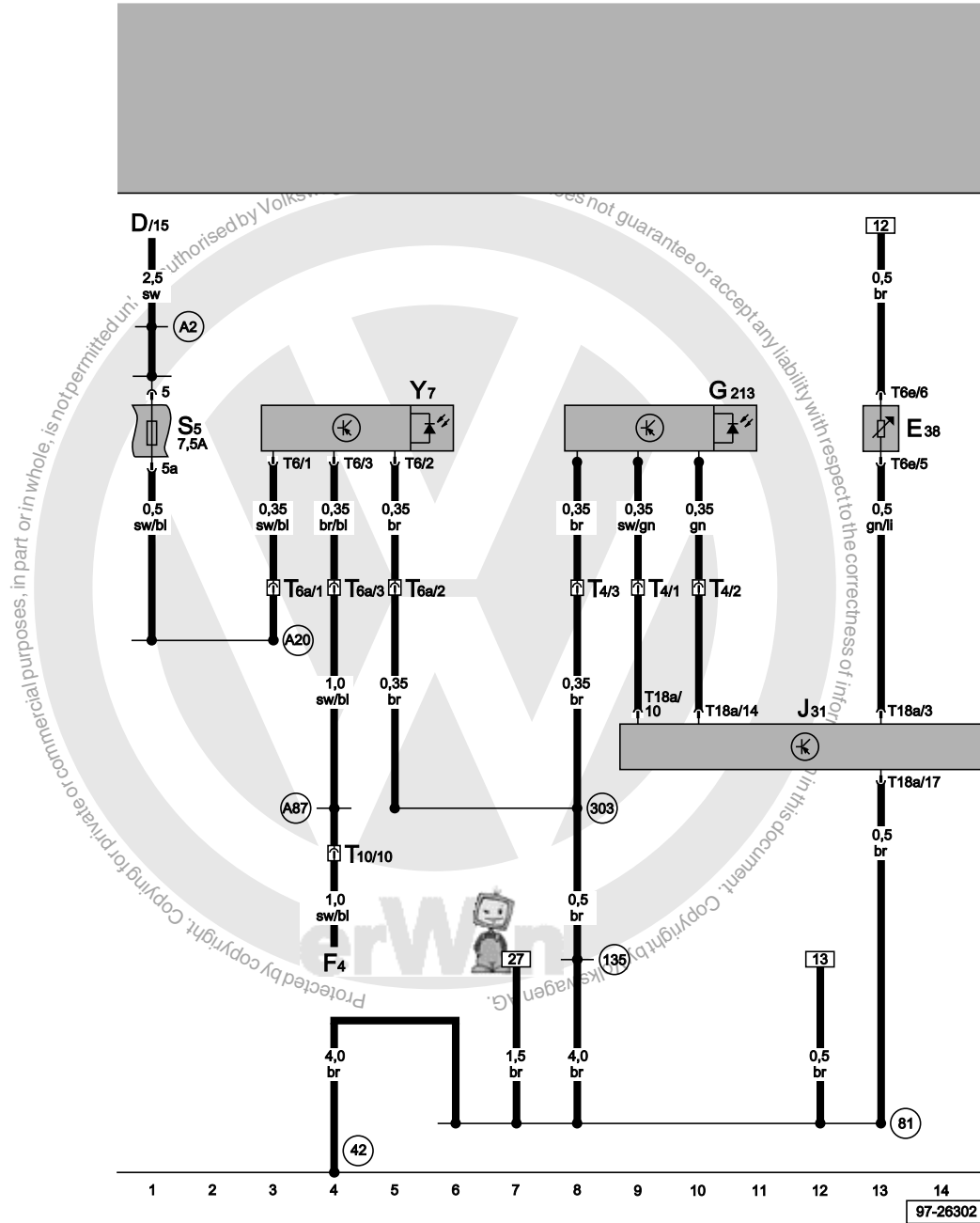
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs
- ⇒ guided fault finding



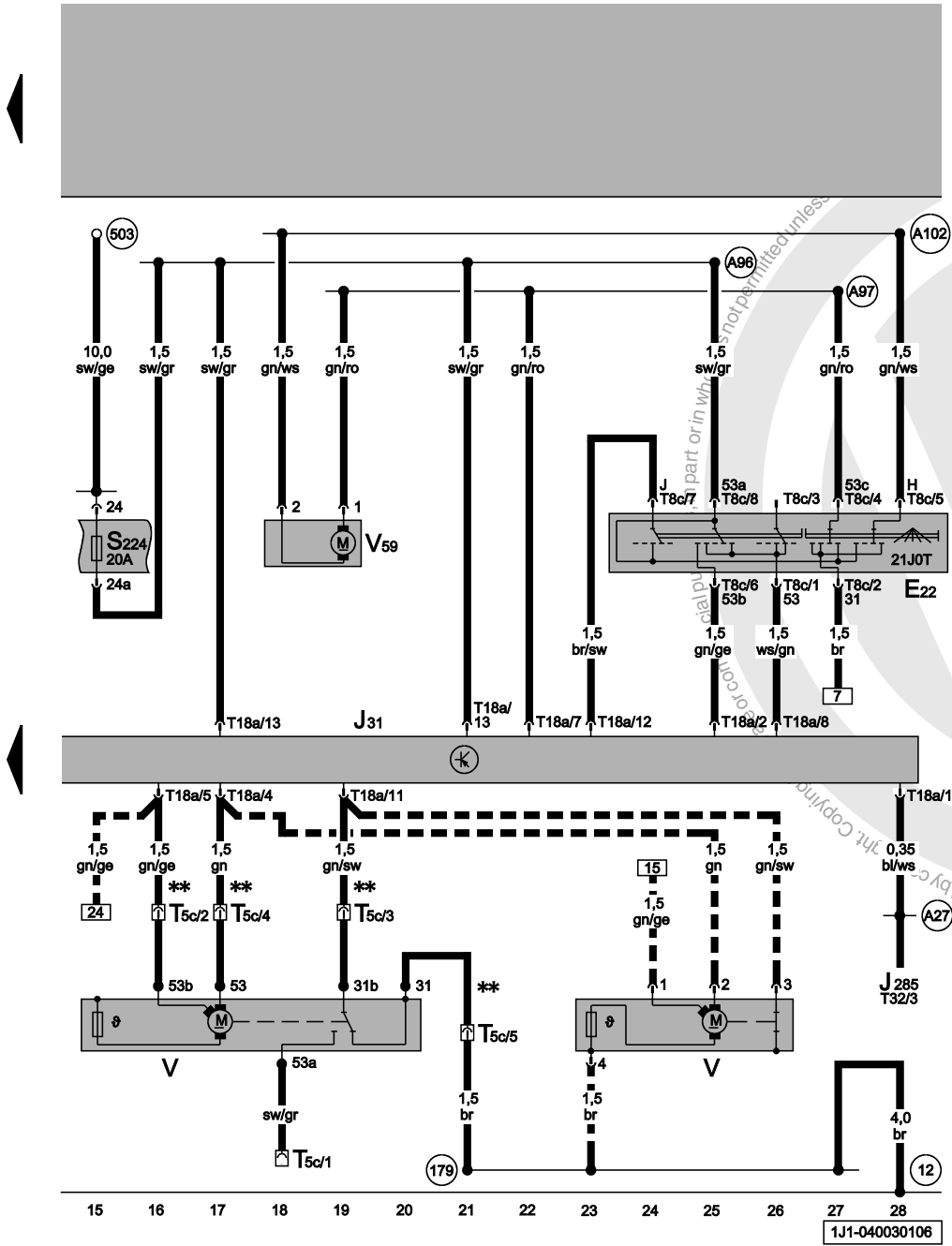
Automatic intermittent wash and wipe relay, automatic anti-dazzle interior mirror, rain sensor



- D Ignition/starter switch
- E38 Intermittent wiper regulator
- F4 Reversing light switch
- G213 Rain sensor
- J31 Automatic intermittent wash and wipe relay, on relay plate
- S5 Fuse 5 in fuse holder
- T4 4-pin connector, near front interior light
- T6 6-pin connector, near front interior light
- T6a 6-pin connector, near front interior light
- T6e 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T18a 18-pin connector
- Y7 Automatic anti-dazzle interior mirror
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 303 Earth connection 3, in driver side door wiring harness
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness

- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash and wipe relay, windscreen and rear window washer pump



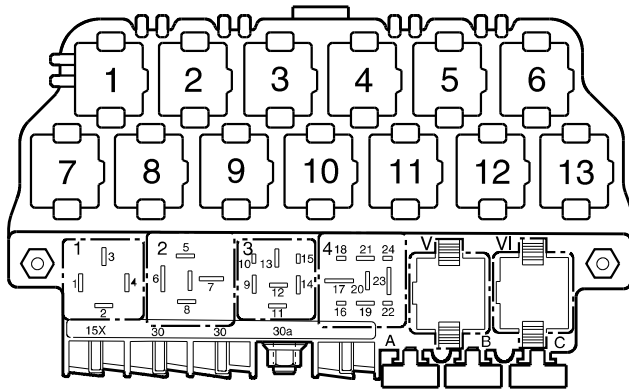
- E22 Intermittent wiper switch
- J31 Automatic intermittent wash and wipe relay, on relay plate
- J285 Control unit with display in dash panel insert
- S224 Fuse 24 in fuse holder
- T5c 5-pin connector, on windscreen wiper motor
- T8c 8-pin connector
- T18a 18-pin connector
- T32 32-pin connector, blue
- V Windscreen wiper motor
- V59 Windscreen and rear window washer pump
- 12 Earth point, on left in engine compartment
- 179 Earth connection, in left headlight wiring harness
- 503 Screw connection (75x), on relay plate
- A27 Connection (speed signal), in dash panel wiring harness
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness
- ** only models up to August 2000
- only models from September 2000

ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

12 V socket

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

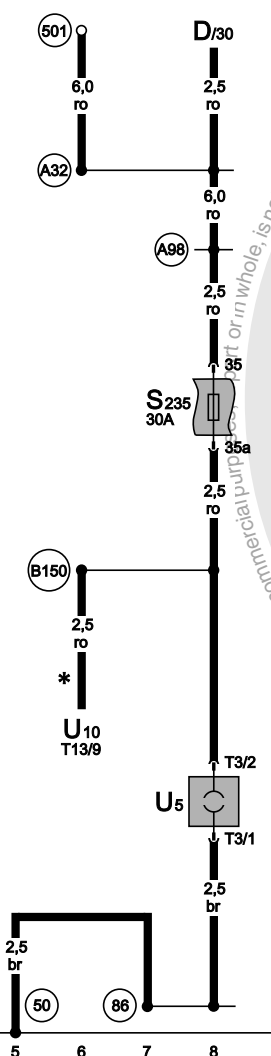


12 V socket

- D Ignition/starter switch
- S235 Fuse in fuse holder
- T3 3-pin connector
- T13 13-pin connector*
- U5 12 V-socket, in luggage compartment, right
- U10 Trailer socket*

- 50 Earth point, on left luggage compartment
- 86 Earth connection -1-, in rear wiring harness
- 501 Screw connection -2- (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- B150 Positive connection -2- (30a), in interior wiring harness**

* For vehicles fitted with a tow bar only



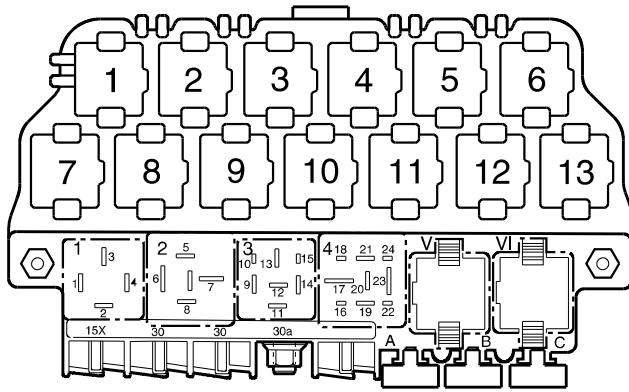
- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-26304

Telephone system

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



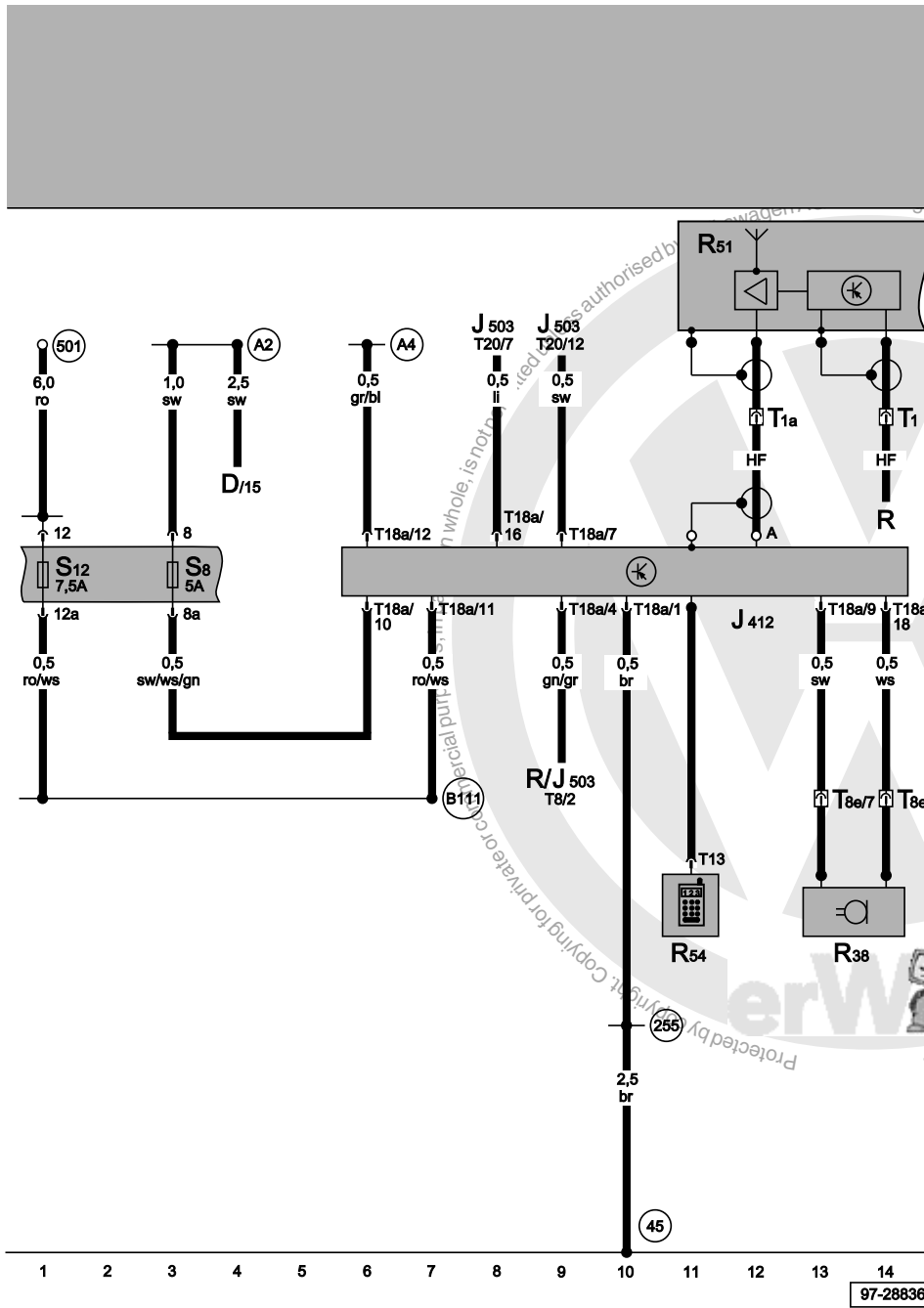
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Mobile phone operating electronics control unit, aerial, microphone



- D Ignition/starter switch
- J412 Mobile phone operating electronics control unit, next to handbrake lever
- J503 Control unit with display for radio and navigation*
- R Radio
- R38 Telephone microphone
- R51 Antenna per radio/telefono
- R54 Mobile telephone
- S8 Fuse in fuse box
- S12 Fuse in fuse box
- T1 1-pin connector, near sunroof aerial
- T1a 1-pin connector, near sunroof aerial
- T8 8-pin connector
- T8e 8-pin connector, behind dash panel, left
- T13 13-pin connector
- T18a 18-pin connector
- T20 20-pin connector, green

- 45 Earth point, behind dash panel - centre
- 255 Earth connection -1-, in radio wiring harness
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A4 Positive (+) connection (58b), in dash panel wiring harness
- B111 Positive (+) connection -1- (30a), in interior wiring harness
- * Only models with radio navigation system

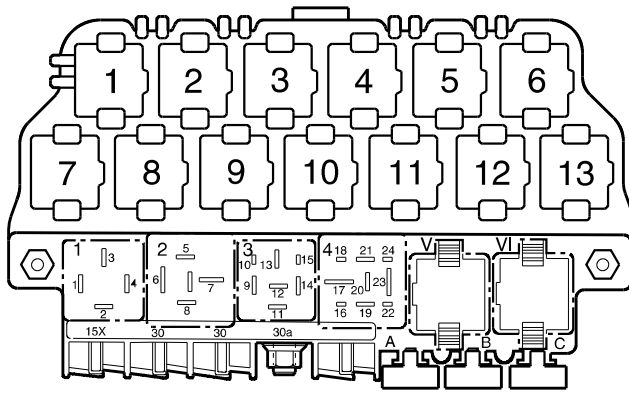
- ws = white
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- gn = green
- bl = blue
- gr = grey
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- ge = yellow
- or = orange
- rs = pink

97-28836

Radio and navigation system with black/white-display, radio navigation system (MFD) with colour display

from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



97-14163

Fuse colours

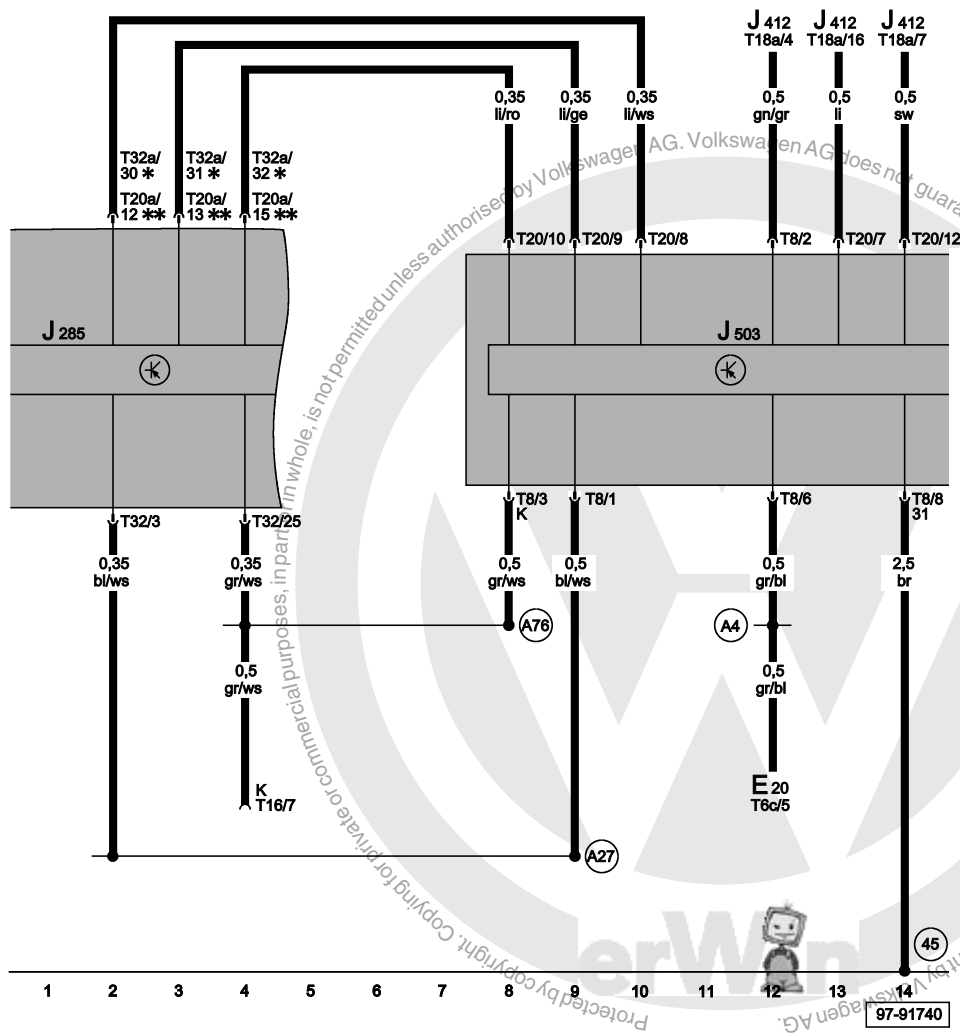
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Control unit with display for radio and navigation system,

- E20 Illumination regulators - switches and instruments
- J285 Control unit with display in dash panel insert
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- T6c 6-pin connector
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T18a 18-pin connector
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T32 32-pin connector, blue

- 45 Earth point, centre behind dash panel
- A4 Positive connection (58b), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2001
- ** up to April 2001

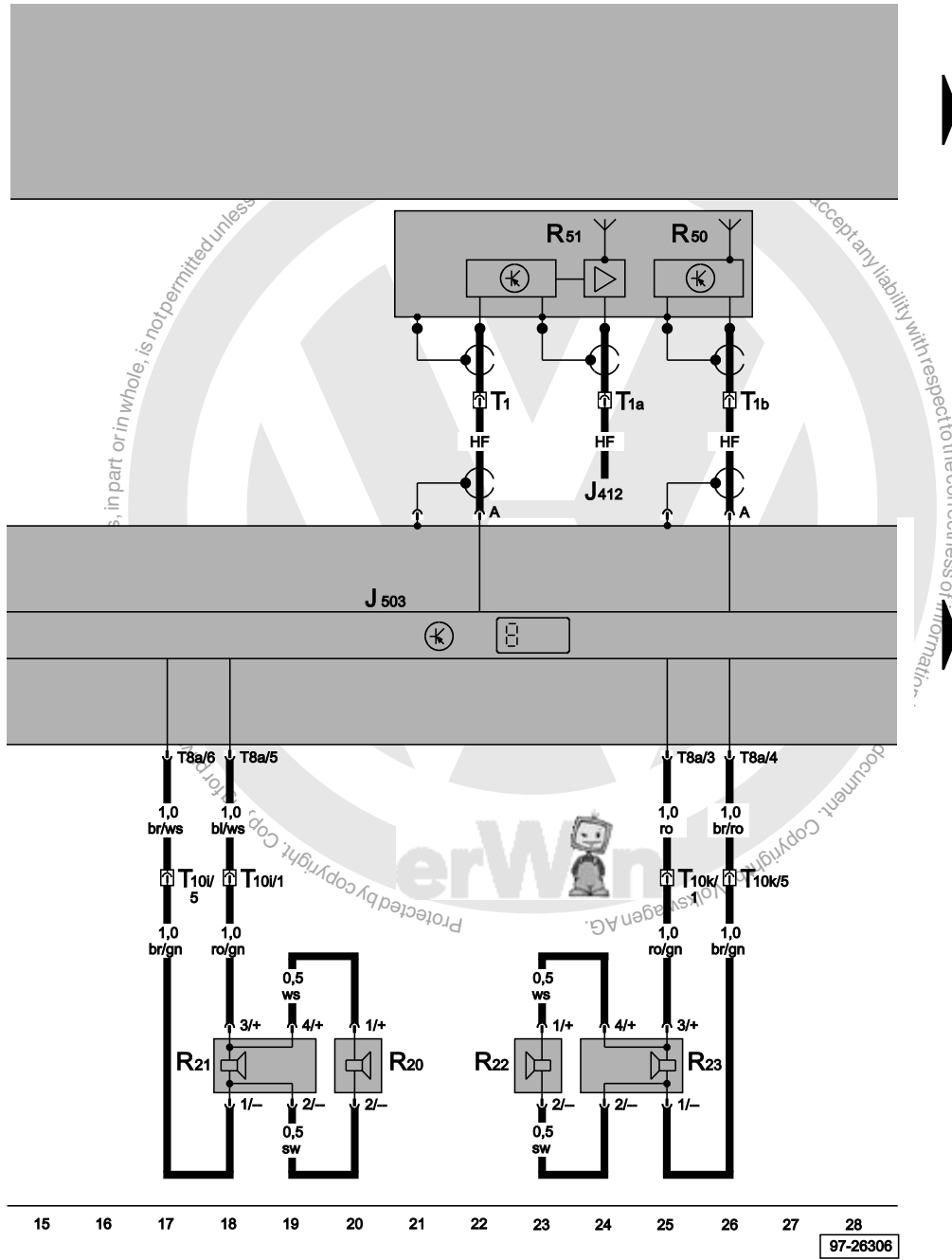


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-91740

Control unit with display for radio and navigation, front loudspeaker, radio, telephone and auxiliary heater aerial, navigation system aerial (GPS)

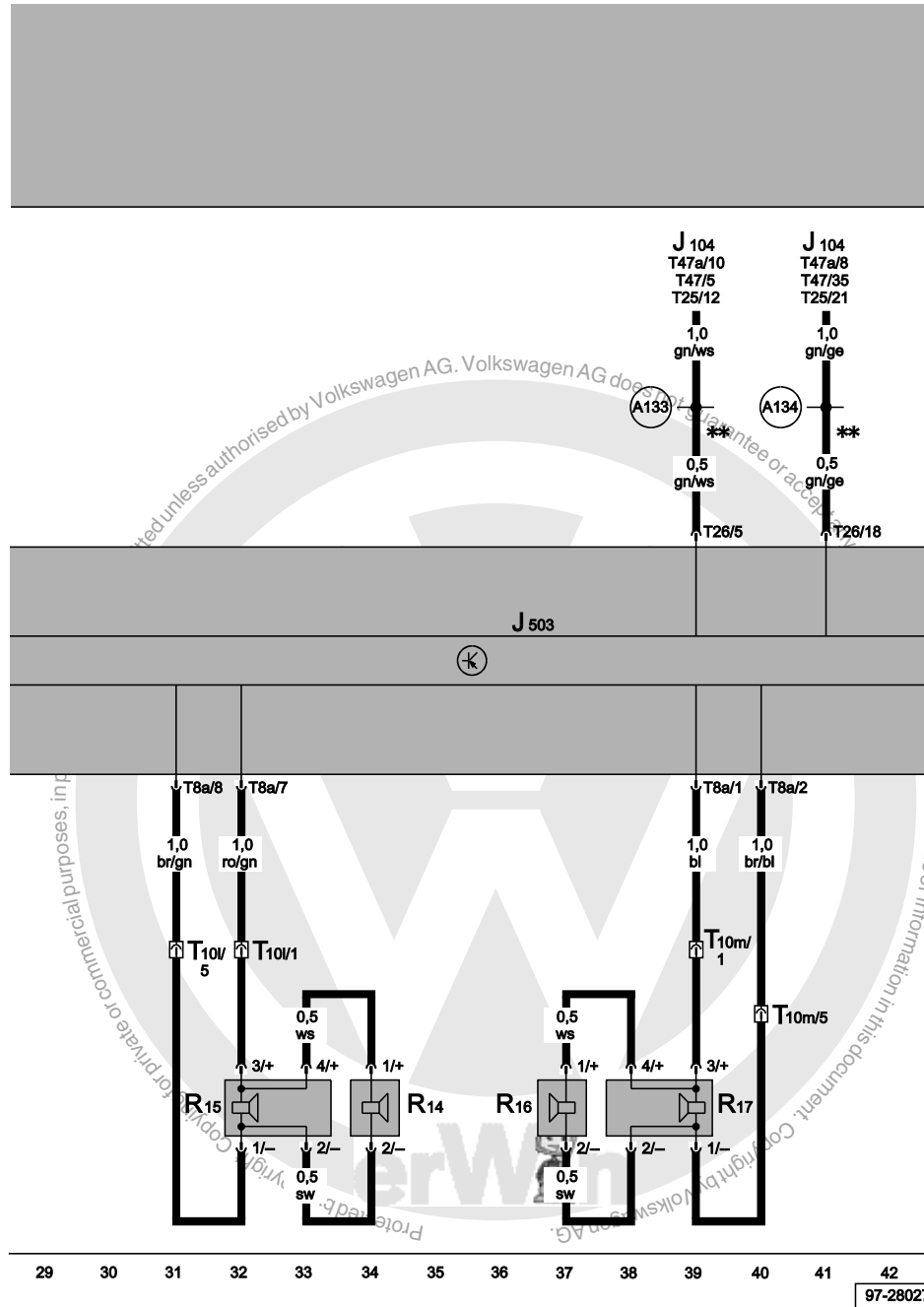
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- R20 Front left treble loudspeaker, in the door
- R21 Front left bass loudspeaker, in the door
- R22 Front right treble loudspeaker, in the door
- R23 Front right bass loudspeaker, in the door
- R50 Navigation system aerial (GPS)
- R51 Telephone and auxiliary heater aerial
- T1 Single connector, near roof aerial
- T1a Single connector, near roof aerial
- T1b Single connector, near roof aerial
- T8a 8-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10k 10-pin connector, black, coupling station right A-pillar



Control unit with display for radio and navigation system, rear loudspeaker

- J104 ABS/ABS control unit with EDL
- J503 Control unit with display for radio and navigation system
- R14 Rear left treble loudspeaker, in the door
- R15 Rear left bass loudspeaker, in the door
- R16 Rear right treble loudspeaker, in the door
- R17 Rear right bass loudspeaker, in the door
- T8a 8-pin connector
- T10l 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T26 26-pin connector**
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)

- A133 Connection (left ABS impulse), in dash panel wiring harness
- A134 Connection (right ABS impulse), in dash panel wiring harness
- ** radio and navigation system only with colour display

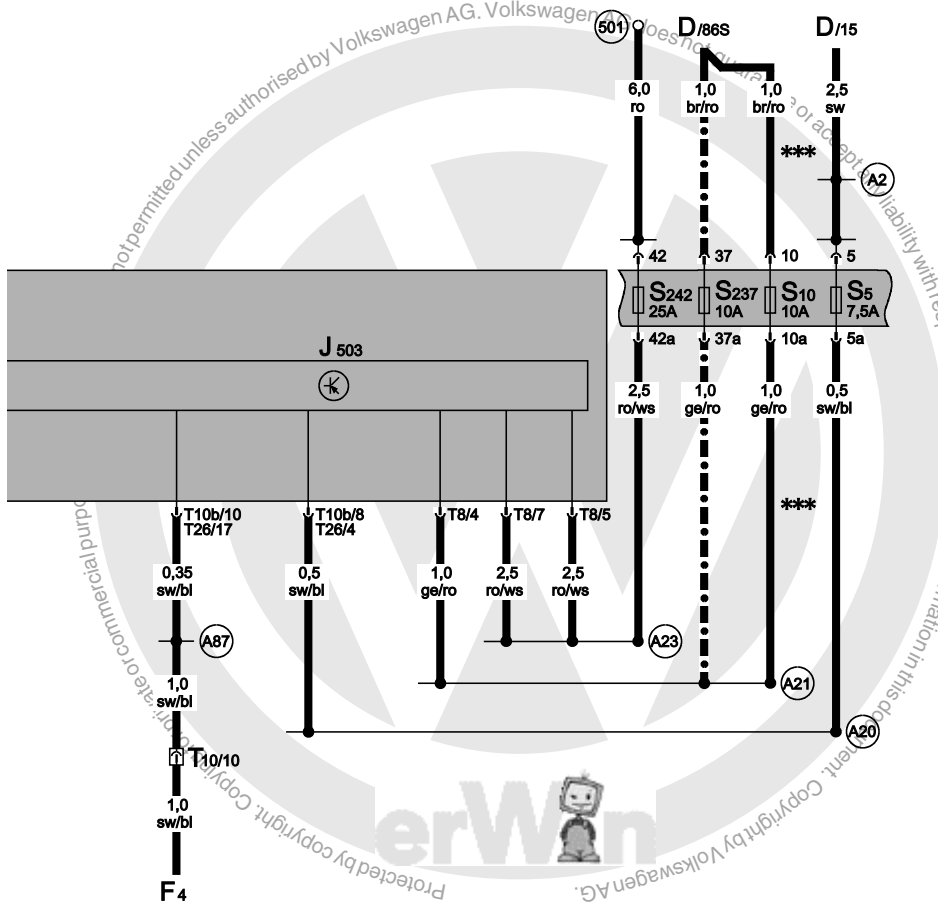


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Control unit with display for radio and navigation system

- D Ignition/starter switch
- F4 Reversing light switch
- J503 Control unit with display for radio and navigation system
- S5 Fuse 5 in fuse holder
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10b 10-pin connector *
- T26 26-pin connector**

- (501) Screw connection 2 (30), on relay plate
- (A2) Positive connection (15), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A21) Connection (86s), in dash panel wiring harness
- (A23) Connection (30a), in dash panel wiring harness
- (A87) Connection (RL), in dash panel wiring harness
- * radio and navigation system with black/white-display only
- ** radio and navigation system only with colour display
- *** from November 2001
- .-.- up to October 2001

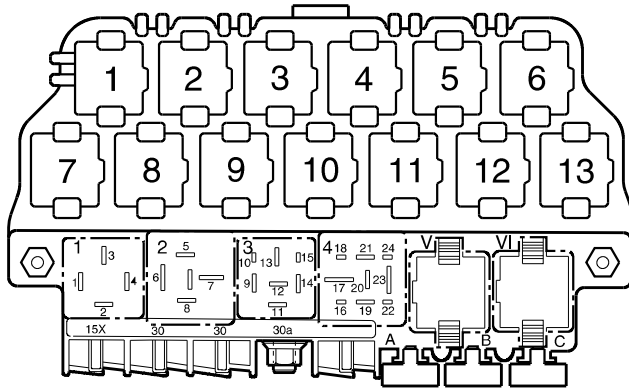


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radio and navigation system (black/white-display) with CD changer and 'digital sound package', radio and navigation system (MFD) (colour display) with CD changer and 'digital sound package'

from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



97-14163

Fuse colours

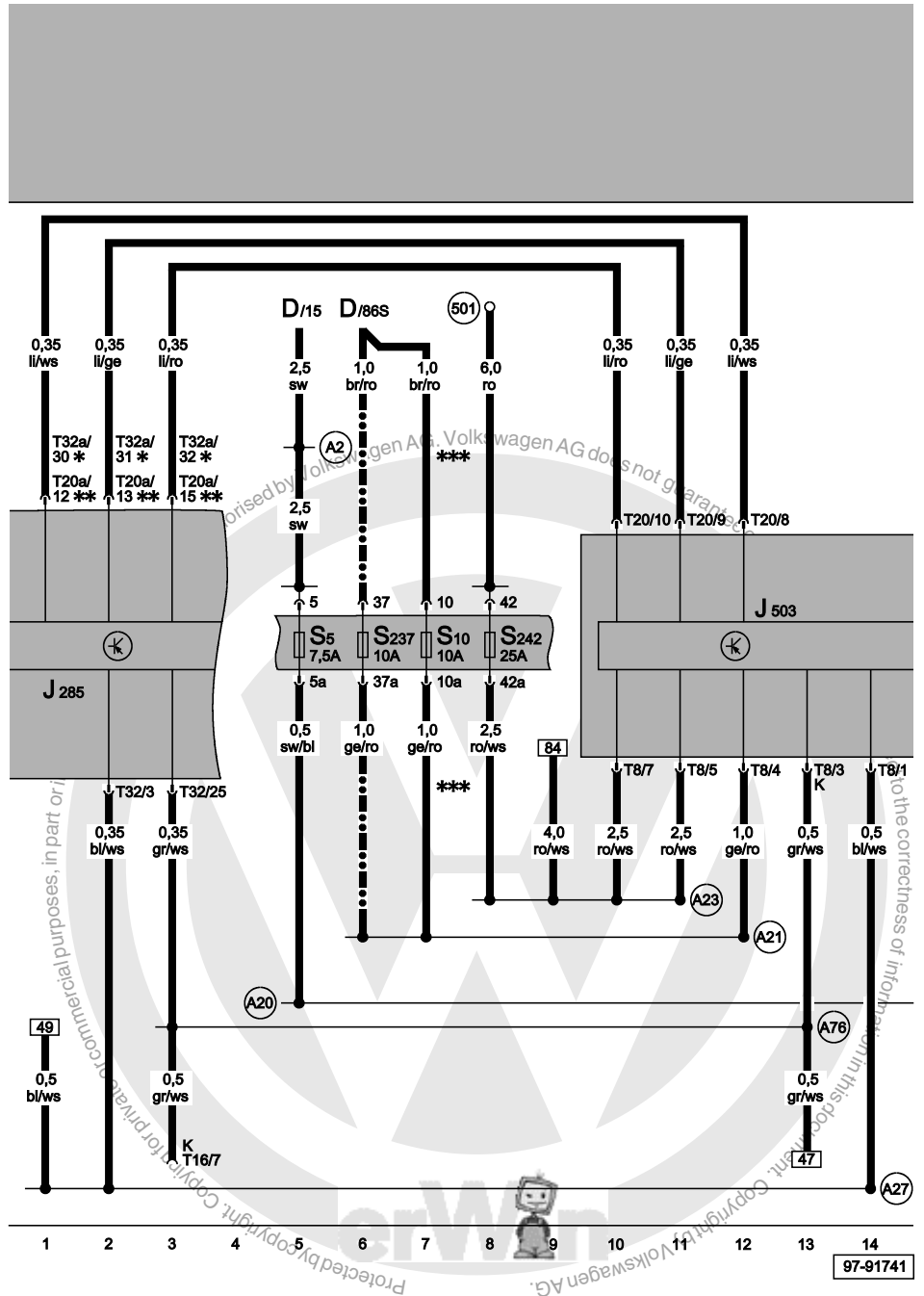
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Control unit with display for radio and navigation system,

- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J503 Control unit with display for radio and navigation system
- S5 Fuse 5 in fuse holder
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A23 Connection (30a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2001
- ** up to April 2001
- *** from November 2001
- .- up to October 2001



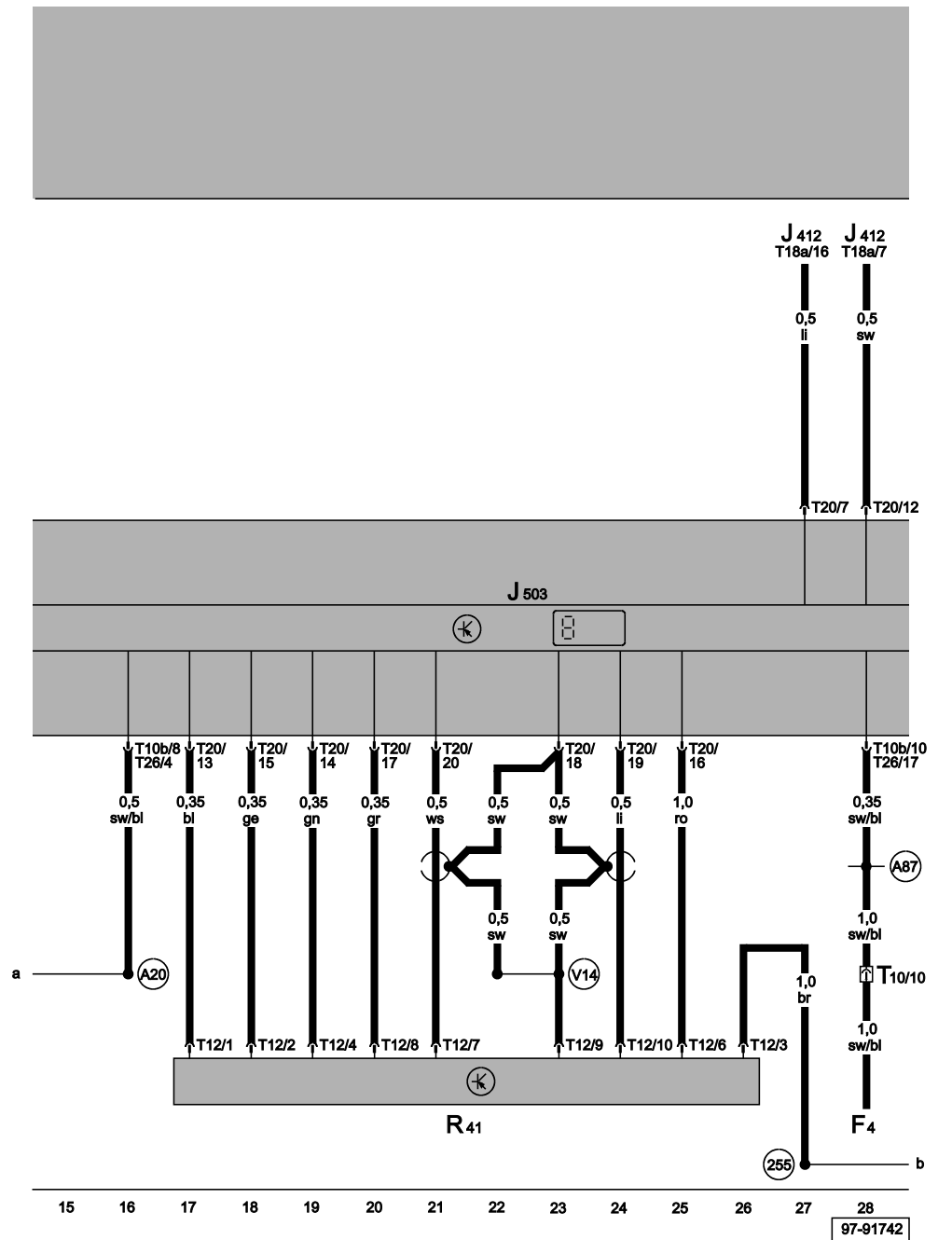
- ws = white
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- rs = pink

Control unit with display for radio and navigation system, CD changer

- F4 Reversing light switch
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- R41 CD changer
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10b 10-pin connector*
- T12 12-pin connector
- T18a 18-pin connector
- T20 20-pin connector, blue (LINE)
- T26 26-pin connector**

- 255 Earth connection 1, in radio wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness
- V14 Connection (screening), in CD changer wiring harness

* radio and navigation system with black/white-display only
 ** radio and navigation system only with colour display

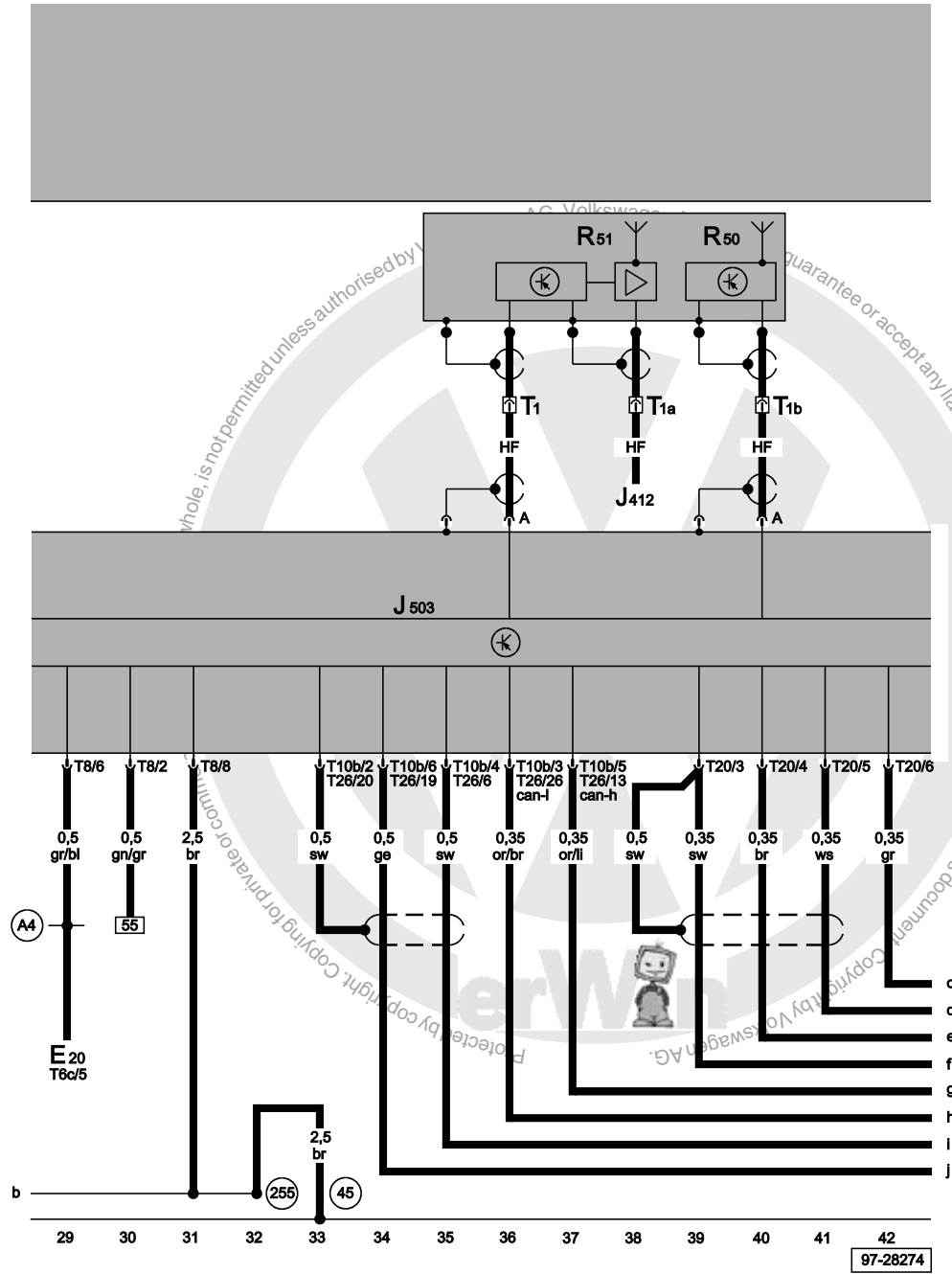


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- li = purple
- ge = yellow
- or = orange
- rs = pink

Control unit with display for radio and navigation, navigation system aerial (GPS), telephone and auxiliary heater aerial

- E20 Illumination regulators - switches and instruments
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- R50 Navigation system aerial (GPS)
- R51 Telephone and auxiliary heater aerial
- T1 Single connector, near roof aerial
- T1a Single connector, near roof aerial
- T1b Single connector, near roof aerial
- T6c 6-pin connector
- T8 8-pin connector
- T10b 10-pin connector*
- T20 20-pin connector, yellow (CD)
- T26 26-pin connector**

- 45 Earth point, centre behind dash panel
- 255 Earth connection 1, in radio wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- * radio and navigation system with black/white-display only
- ** radio and navigation system only with colour display



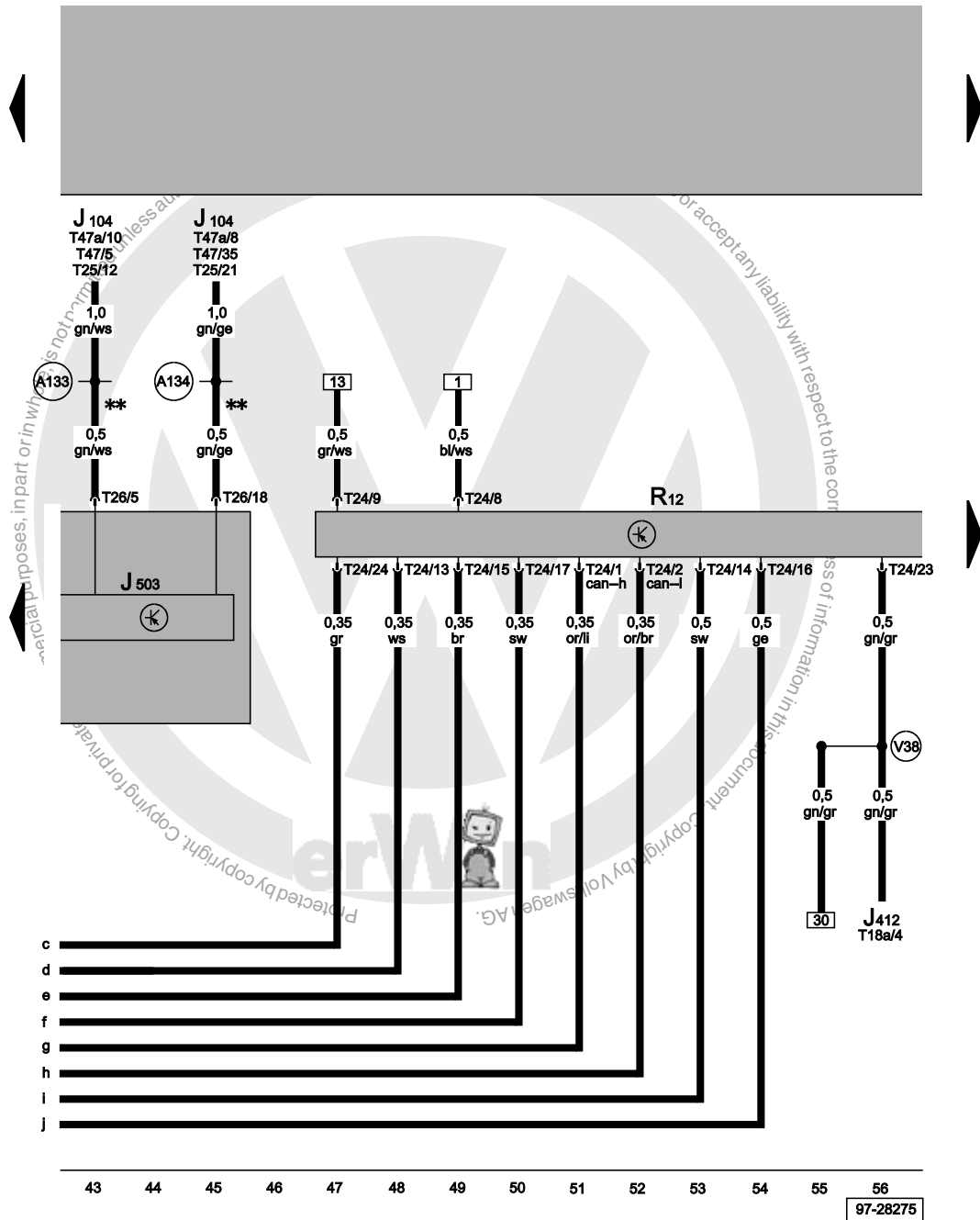
- ws = white
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97-28274

Control unit with display for radio and navigation system, amplifier 'digital sound package'

- J104 ABS/ABS control unit with EDL
- J412 Mobile telephone operating electronics control unit, next handbrake lever
- J503 Control unit with display for radio and navigation system
- R12 Amplifier, on left in luggage compartment
- T18a 18-pin connector
- T24 24-pin connector
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T26 26-pin connector**
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)

- (A133) Connection (left ABS impulse), in dash panel wiring harness
- (A134) Connection (right ABS impulse), in dash panel wiring harness
- (V38) Connection (mute circuit), in DSP/telephone wiring harness
- ** radio and navigation system only with colour display



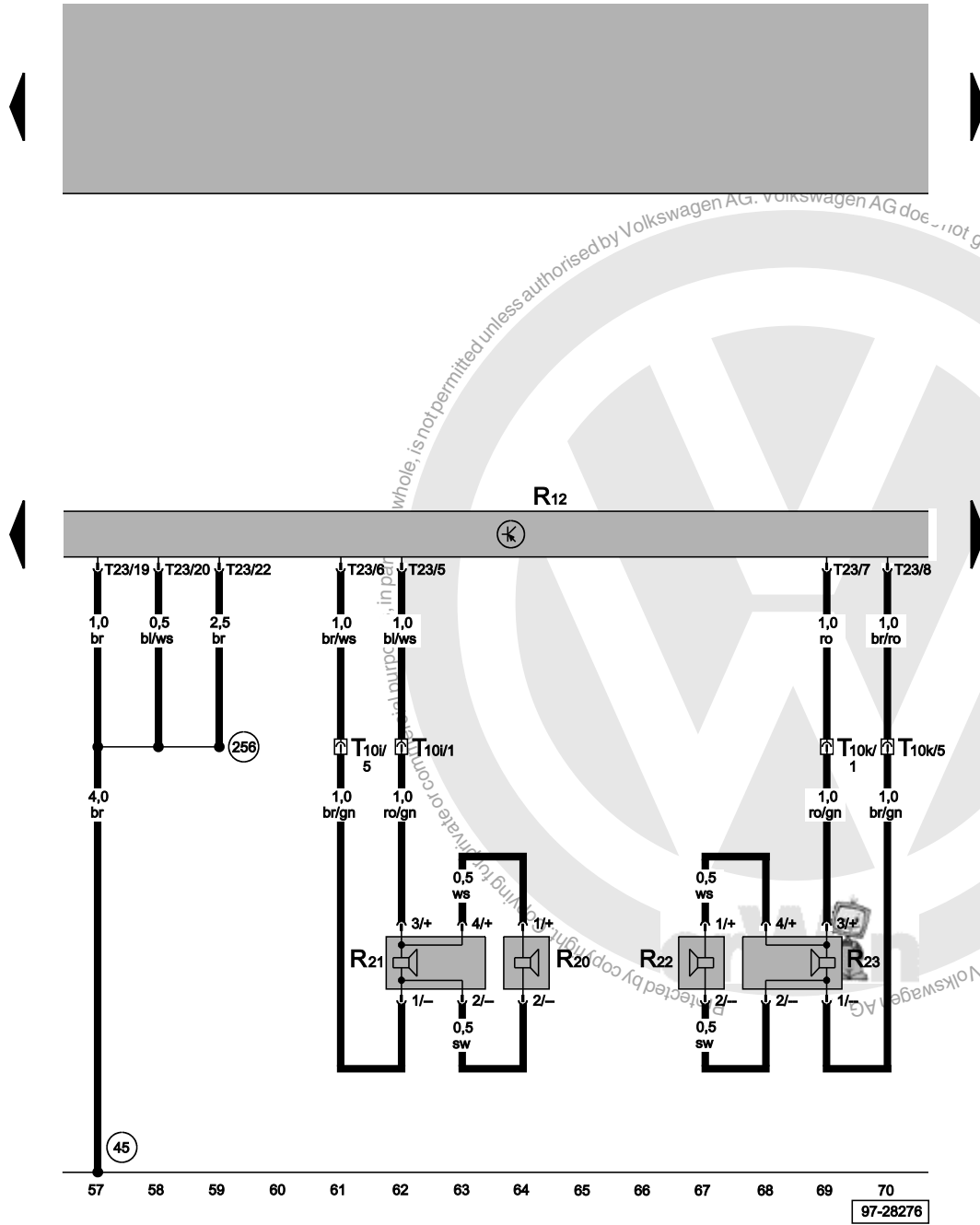
- ws = white
- sw = black
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Amplifier 'digital sound package', front right loudspeaker

- R12 Amplifier, on left in luggage compartment
- R20 Front left treble loudspeaker, in the door
- R21 Front left bass loudspeaker, in the door
- R22 Front right treble loudspeaker, in the door
- R23 Front right bass loudspeaker, in the door
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10k 10-pin connector, black, coupling station right A-pillar
- T23 23-pin connector

45 Earth point, centre behind dash panel

256 Earth connection 2, in radio wiring harness

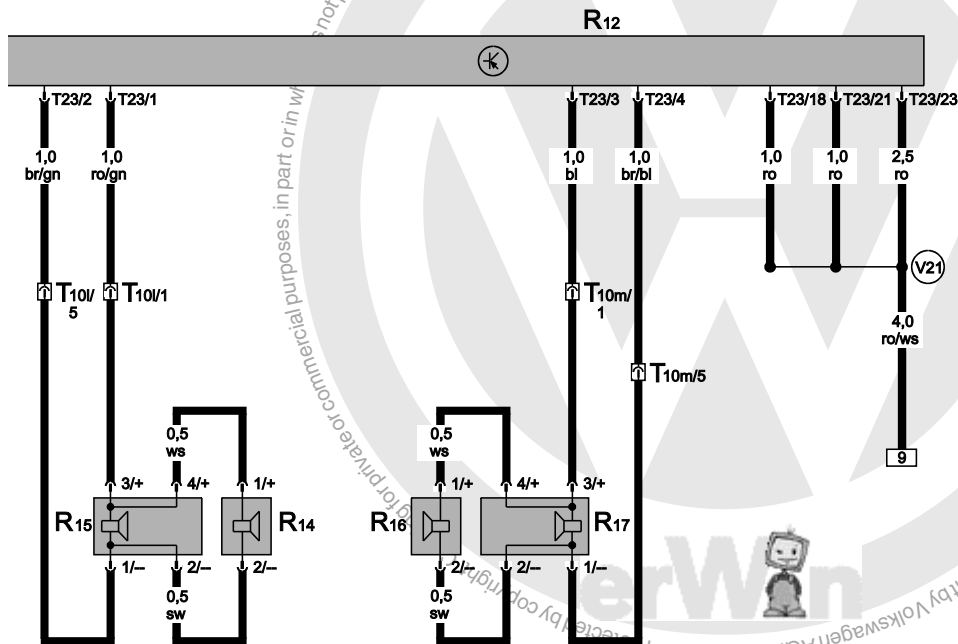


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- bl = blue
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97-28276

Amplifier 'digital sound package', rear right loudspeaker

- R12 Amplifier, on left in luggage compartment
- R14 Rear left treble loudspeaker, in the door
- R15 Rear left bass loudspeaker, in the door
- R16 Rear right treble loudspeaker, in the door
- R17 Rear right bass loudspeaker, in the door
- T10l 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T23 23-pin connector
- (V21) Positive connection (30), in radio - amplifier wiring harness



- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Central locking with remote control

- ⇒ Anti-theft alarm system
 - ⇒ Interior lights
 - ⇒ Luggage compartment light
 - ⇒ Sliding/tilting sunroof
- from May 1999

Notes:

For information concerning

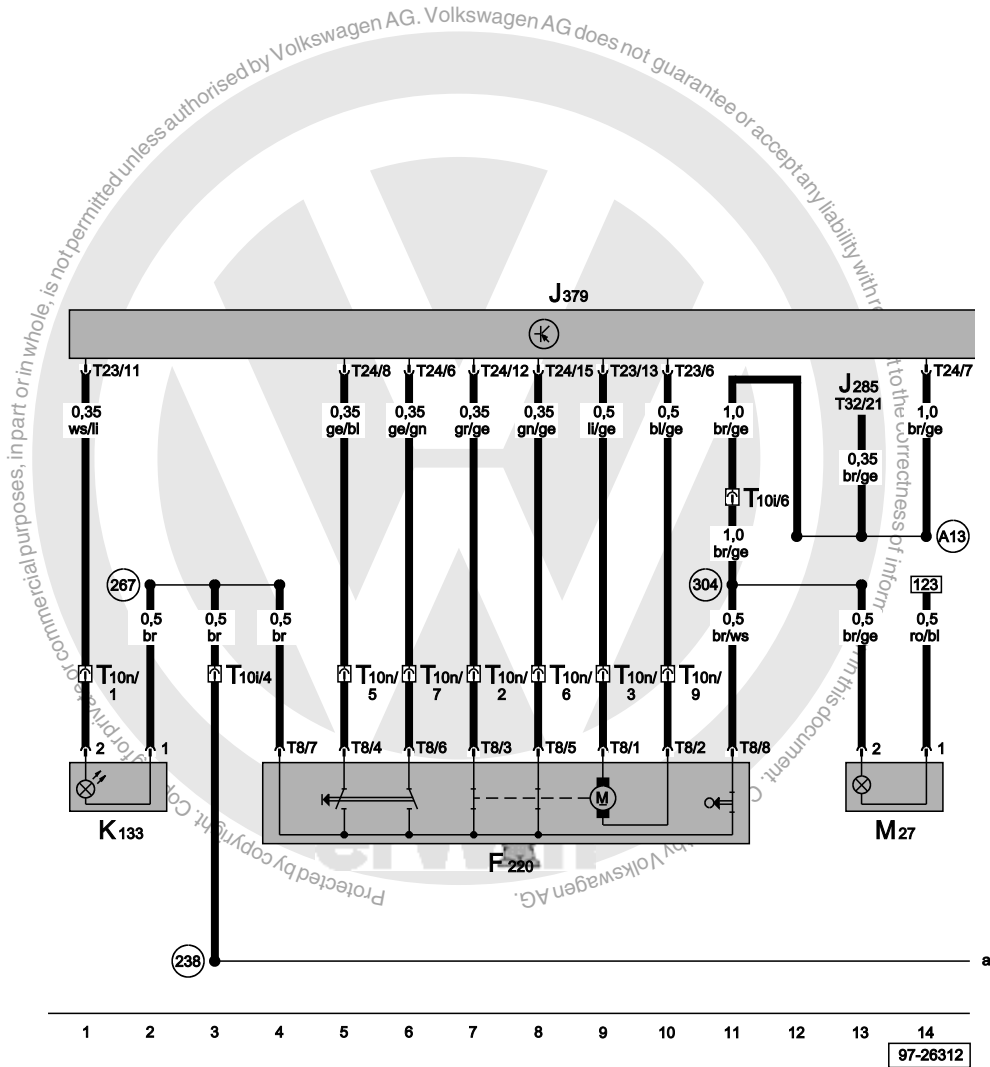
- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
- ⇒ List of Fitting Locations!
For information concerning
- ◆ Fault Finding Programs
- ⇒ guided fault finding



Central locking and anti-theft alarm system control unit, driver side central locking lock unit, left door warning lamp, central locking deadlock function warning lamp

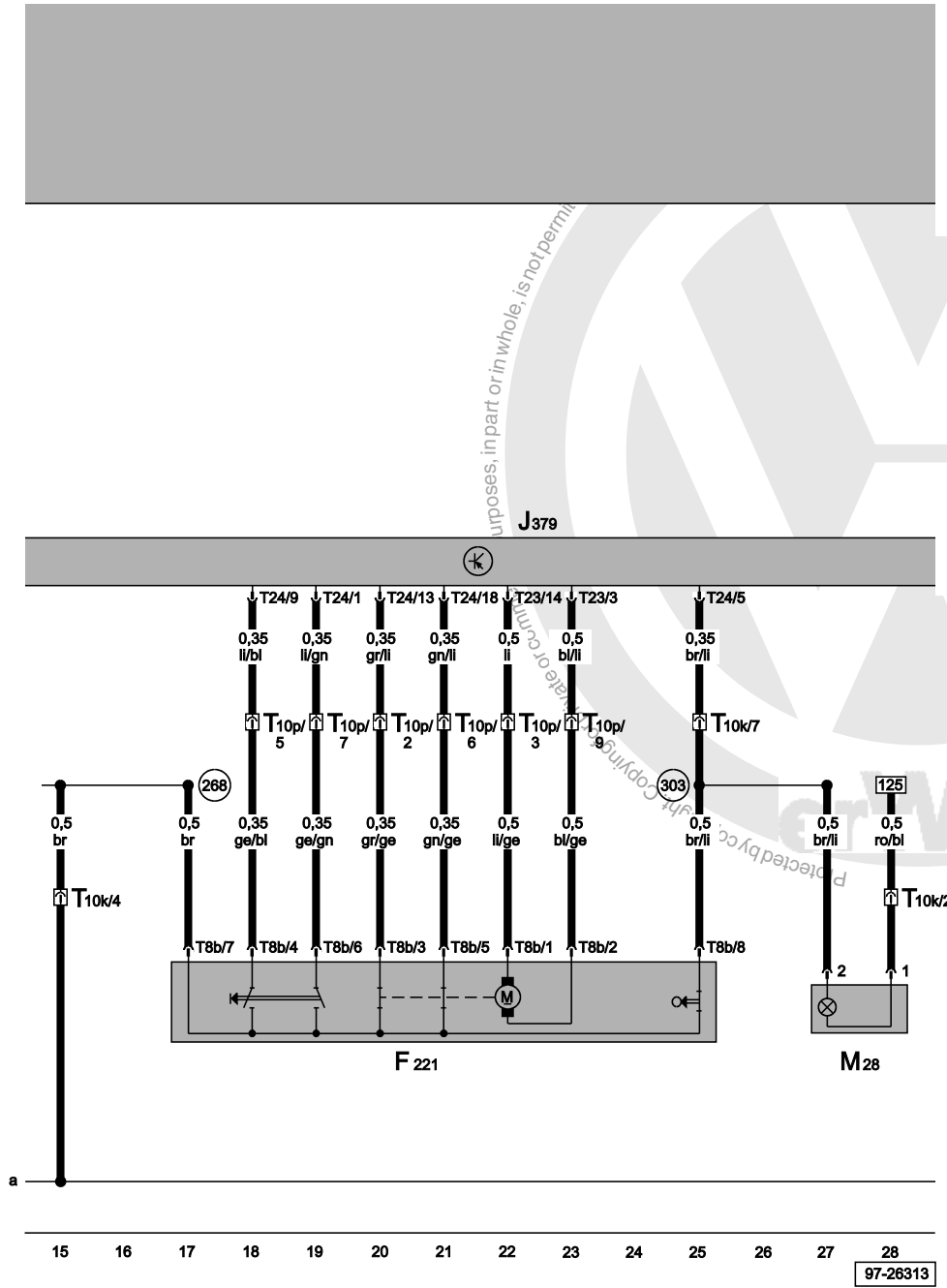
- F220 Driver side central locking lock unit
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- K133 Central locking deadlock function warning lamp
- M27 Left door warning lamp
- T8 8-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10n 10-pin connector, brown, coupling station on left of A-pillar
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue

- (238) Earth connection 1, in interior wiring harness
- (267) Earth connection 2, in driver door wiring harness
- (304) Earth connection 3, in driver door wiring harness
- (A13) Connection (door contact switch), in dash panel wiring harness



Central locking and anti-theft alarm system control unit, front passenger side central locking lock unit, right door warning lamp

- F221 Front passenger side central locking lock unit
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- M28 Right door warning lamp
- T8b 8-pin connector
- T10k 10-pin connector, black, coupling station right A-pillar
- T10p 10-pin connector, brown, coupling station right A-pillar
- T23 23-pin connector
- T24 24-pin connector
- 268 Earth connection 2, in front passenger door wiring harness
- 303 Earth connection 3, in front passenger door wiring harness



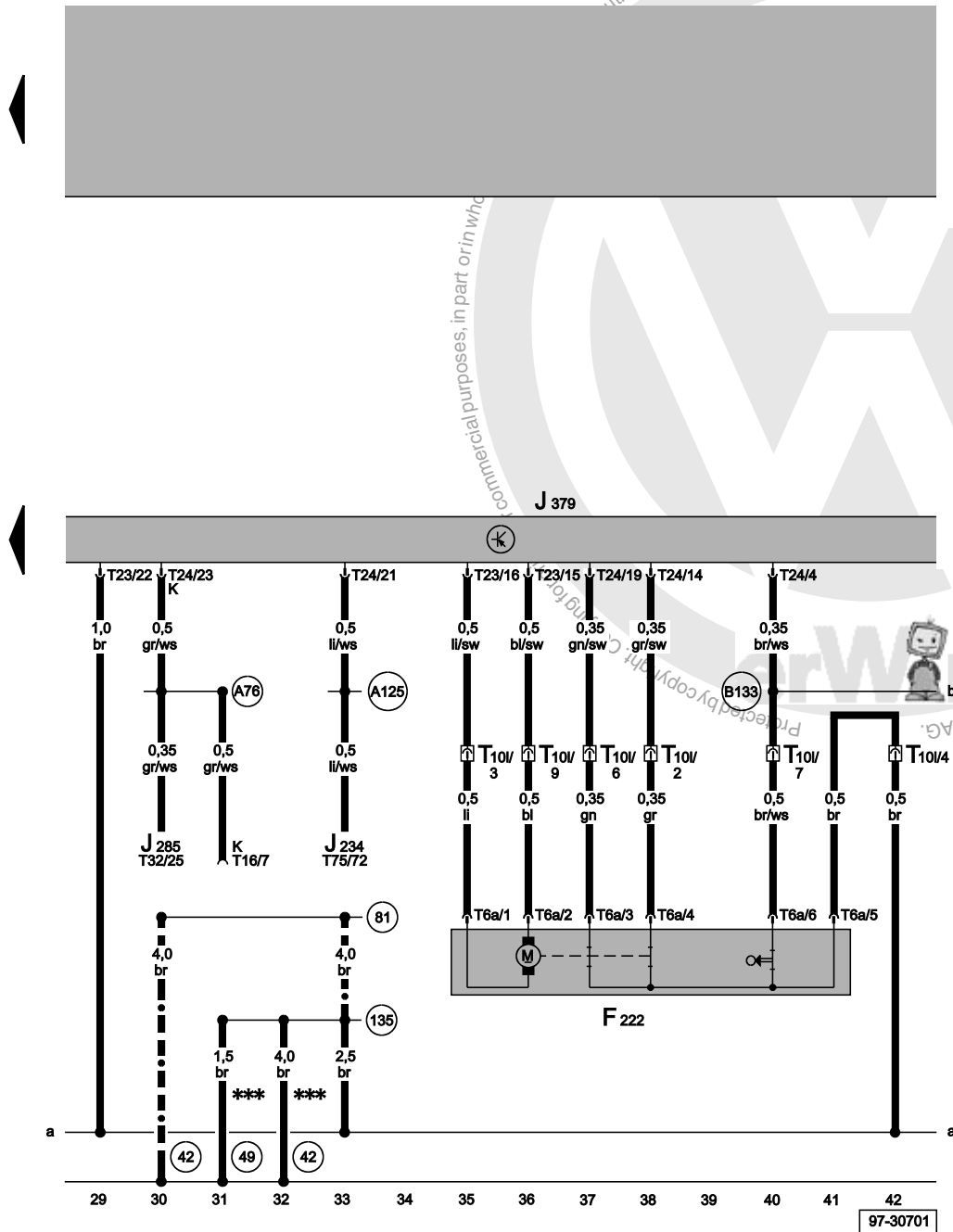
- ws = white
- sw = black
- ro = red
- br = brown
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Central locking and anti-theft alarm system control unit, rear left central locking lock unit

- F222 Rear left central locking lock unit
- J234 Airbag control unit
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- T6a 6-pin connector
- T10i 10-pin connector, black, coupling station on left B-pillar
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue
- T75 75-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- B133 Connection (central locking open), in interior wiring harness
- *** from May 2000
- .- up to April 2000

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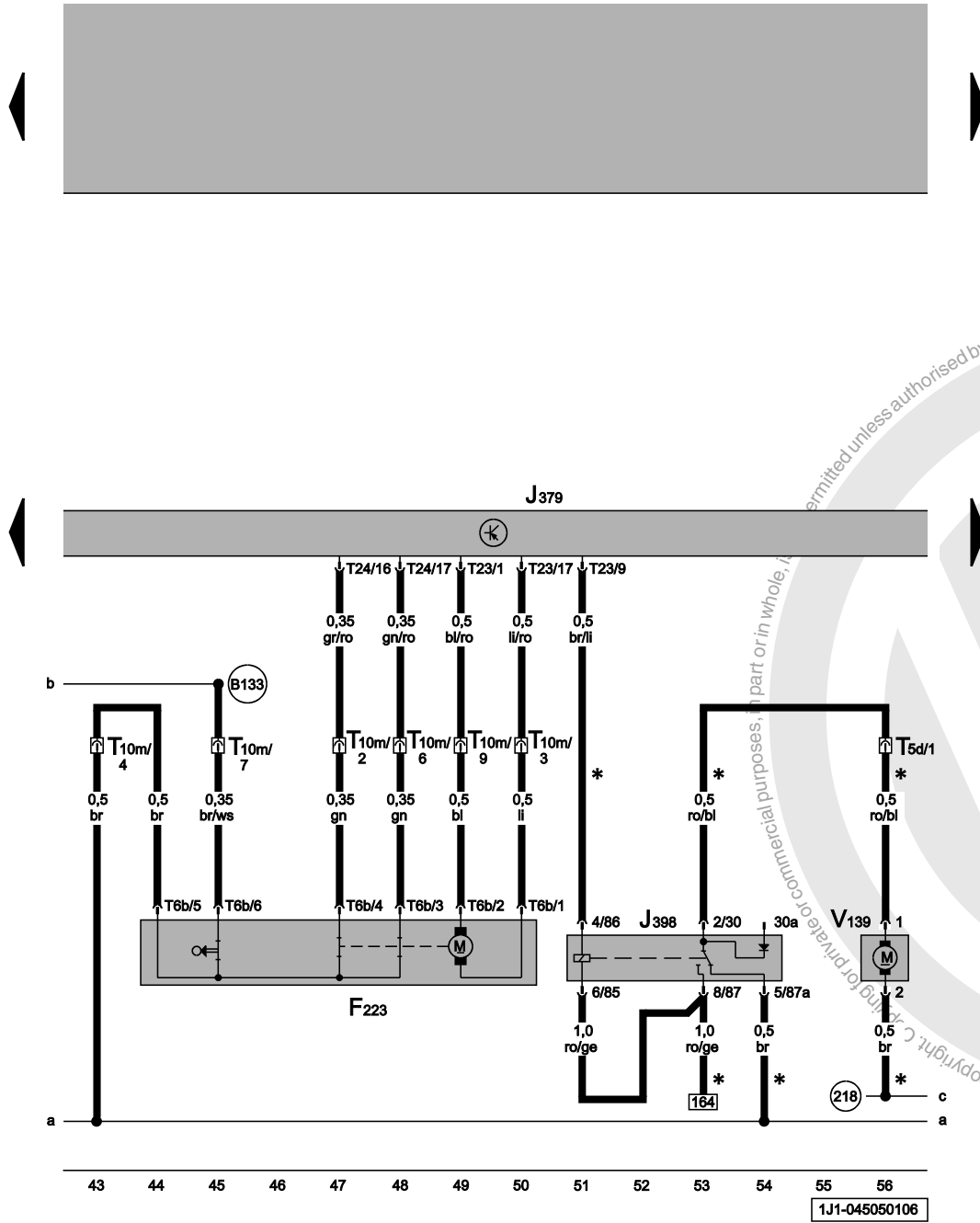
97-30701

Central locking and anti-theft alarm system control unit, rear right central locking lock unit, rear lid remote release relay, rear lid release motor

- F223 Rear right central locking lock unit
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J398 Rear lid remote release relay, on the 13 position additional relay carrier*
- T5d 5-pin connector, brown, coupling station on left C-pillar
- T6b 6-pin connector
- T10m 10-pin connector, black, coupling station right B-pillar
- T23 23-pin connector
- T24 24-pin connector
- V139 Rear lid release motor*

- 218 Earth connection -1-, in rear lid wiring harness
- B133 Connection (central locking open), in interior wiring harness

* only Bora
Rear lid release Variant models, => Current Flow Diagram No. 45/8



1J1-045050106

Central locking and anti-theft alarm system control unit, rear lid release switch, luggage compartment light

- E165 Rear lid release switch
- F5 Luggage compartment light switch
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- K116 Rear lid open warning lamp
- T5 5-pin connector, black, coupling station on left C-pillar
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T24 24-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light

50 Earth point, on left in luggage compartment

86 Earth connection 1, in rear wiring harness

98 Earth connection, in rear lid wiring harness

218 Earth connection -1-, in rear lid wiring harness

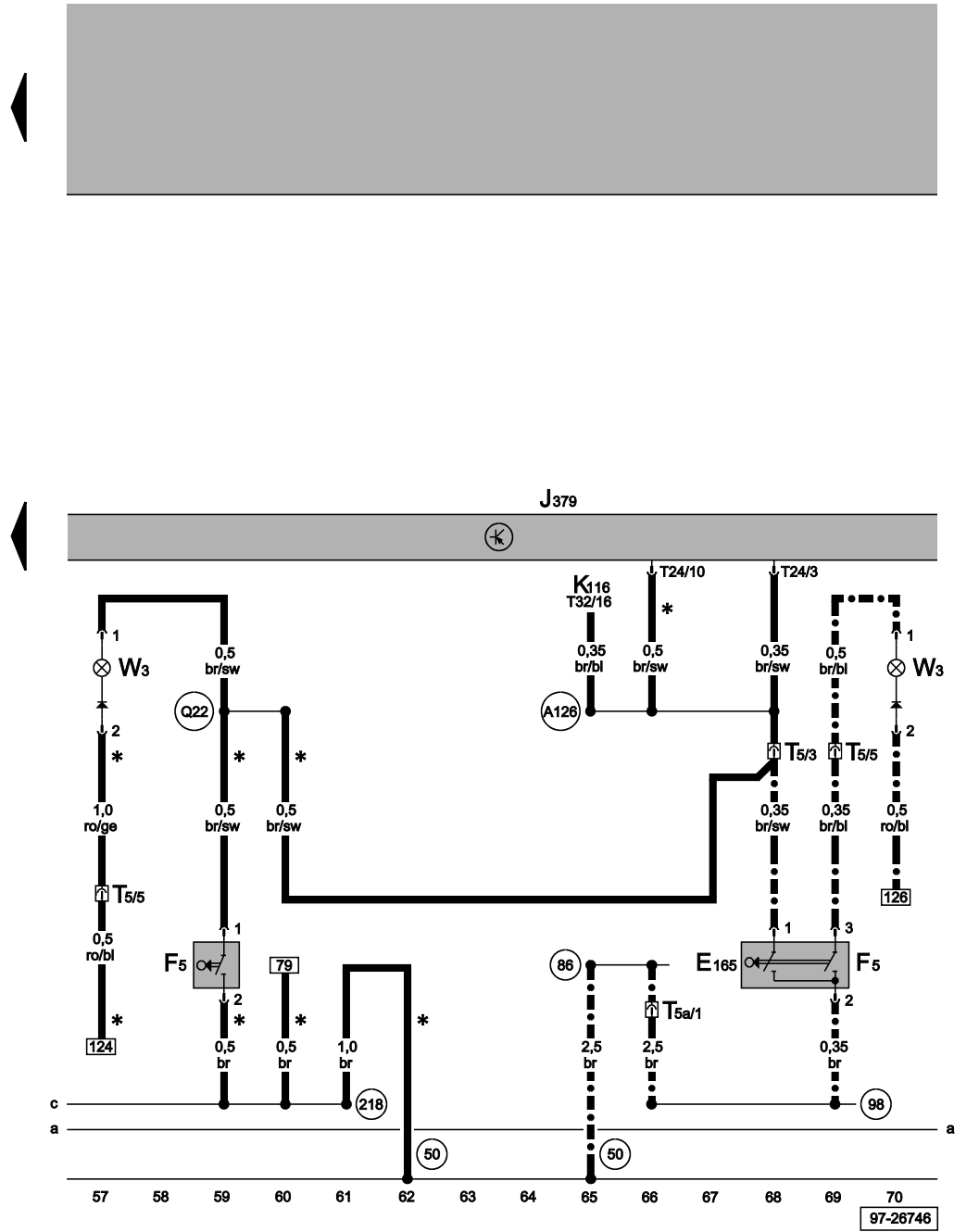
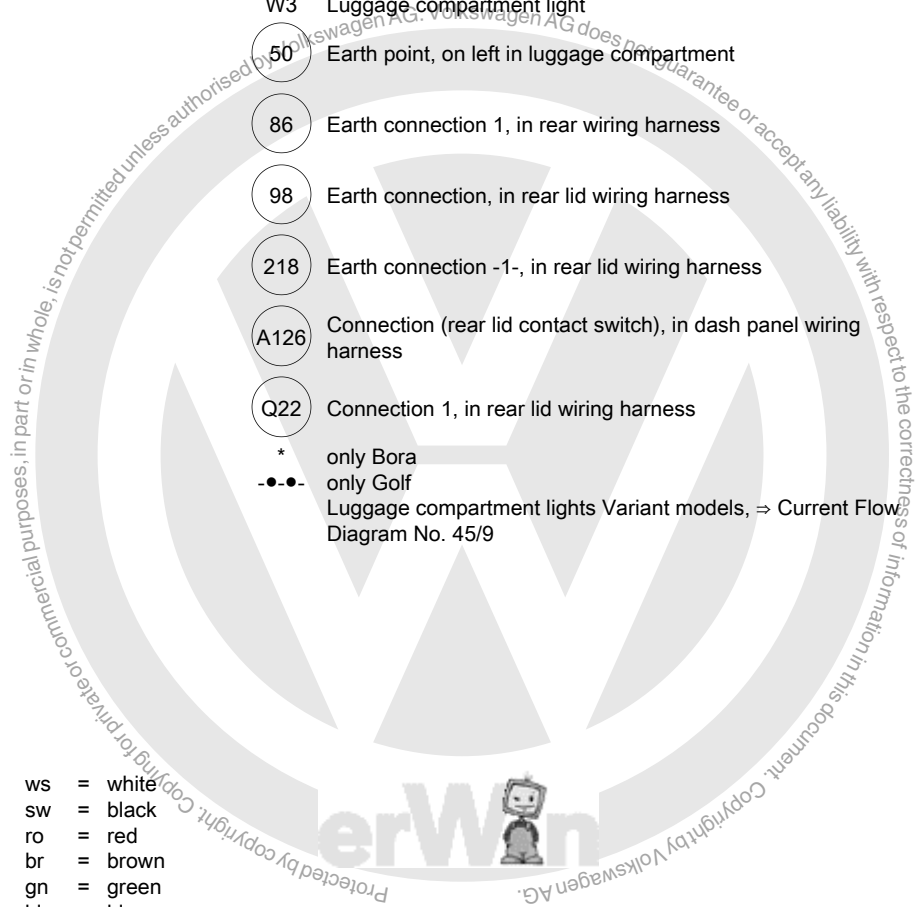
A126 Connection (rear lid contact switch), in dash panel wiring harness

Q22 Connection 1, in rear lid wiring harness

* only Bora

-.-.- only Golf

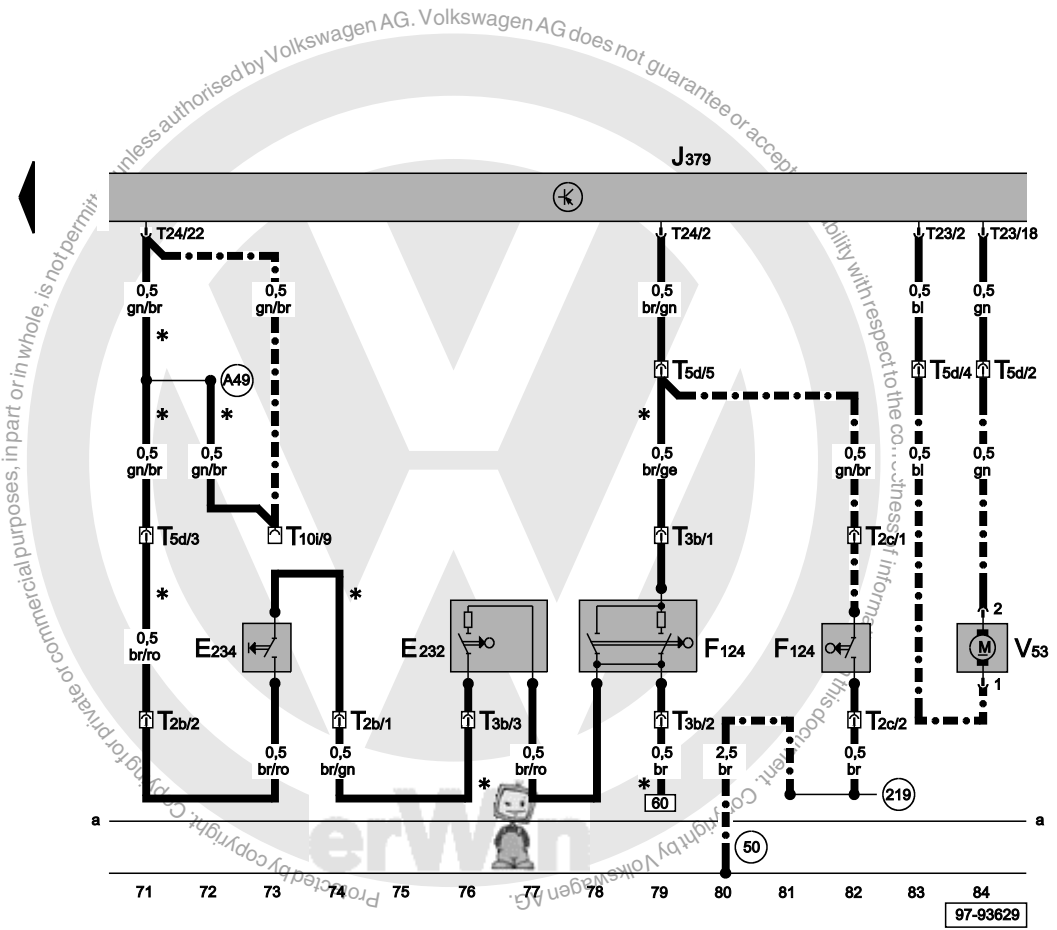
Luggage compartment lights Variant models, → Current Flow Diagram No. 45/9



- ws = white
- sw = black
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- li = purple
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- or = orange
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Central locking and anti-theft alarm system control unit, rear lid handle release button, key operated switch to block release of rear lid remote, rear lid central locking motor

- E232 Key operated switch to block release of rear lid remote*
 - E234 Rear lid handle release button*
 - F124 Contact switch in lock cylinder for rear lid/anti-theft alarm system/central locking system
 - J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
 - T2b 2-pin connector, in rear lid
 - T2c 2-pin connector, in rear lid
 - T3b 3-pin connector, in rear lid
 - T5d 5-pin connector, brown, coupling station on left C-pillar
 - T10i 10-pin connector, black, coupling station on left A-pillar
 - T23 23-pin connector
 - T24 24-pin connector
 - V53 Rear lid central locking motor
- (50) Earth point, on left in luggage compartment
 - (219) Earth connection -2-, in rear lid wiring harness
 - (A49) Connection 1 in dash panel wiring harness
- * only Bora
 -.-.- only Golf
 Rear lid release Variant models, => Current Flow Diagram No. 45/8



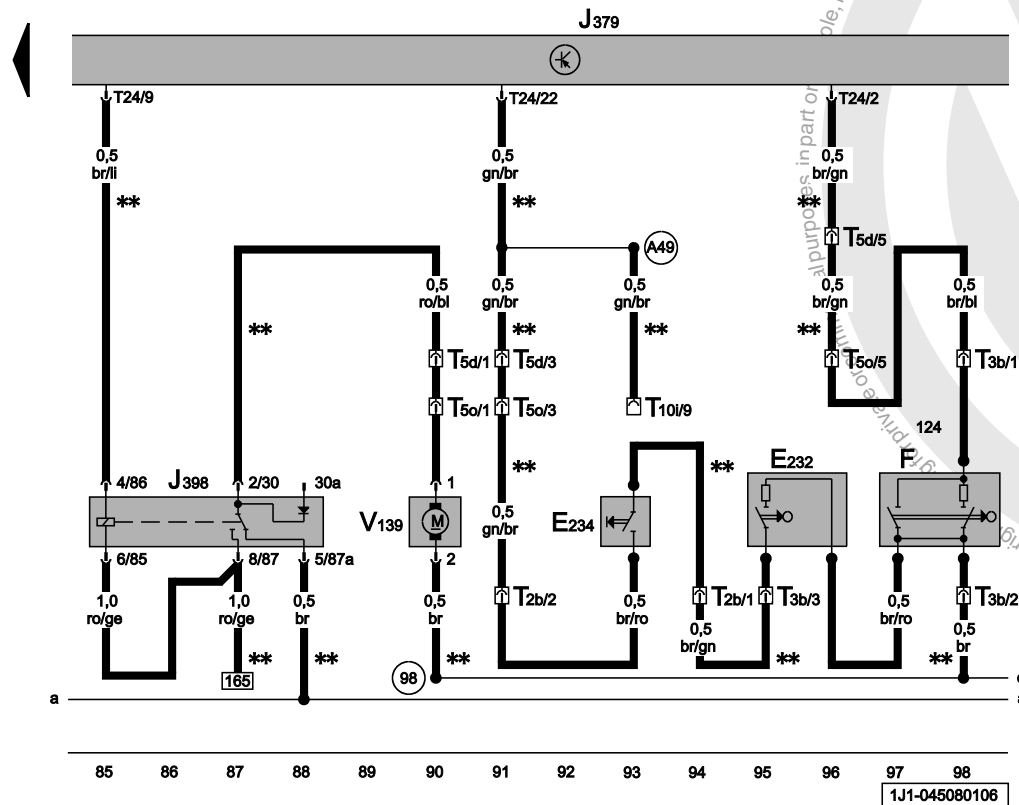
Central locking and anti-theft alarm system control unit, rear lid remote release relay, rear lid release motor, rear lid handle release button

- E232 Key operated switch to block release of rear lid remote**
- E234 Rear lid handle release button**
- F124 Contact switch in lock cylinder for rear lid/anti-theft alarm system/central locking system
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J398 Rear lid remote release relay, on the 13 position additional relay carrier
- T2b 2-pin connector, in rear lid
- T3b 3-pin connector, in rear lid
- T5d 5-pin connector, brown, coupling station right D-pillar
- T5o 5-pin connector, brown, in rear lid
- T10i 10-pin connector, black, coupling station on left A-pillar
- T24 23-pin connector
- V139 Rear lid release motor

98 Earth connection, in rear lid wiring harness

A49 Connection 1 in dash panel wiring harness

** only Golf Variant/ Bora Variant Rear lid release saloon models, => Current Flow Diagram No. 45/5 and No. 45/7



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- or = orange
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Central locking and anti-theft alarm system control unit, luggage compartment light (only Golf Variant/Bora Variant)

- E165 Rear lid release switch
- F5 Luggage compartment light switch
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- K116 Rear lid open warning lamp
- T5 5-pin connector, black, coupling station left D-pillar
- T5d 5-pin connector, brown, coupling station right D-pillar
- T5o 5-pin connector, brown, in rear lid
- T5p 5-pin connector, black, in rear lid
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light
- W18 Luggage compartment light on left

50 Earth point, on left in luggage compartment

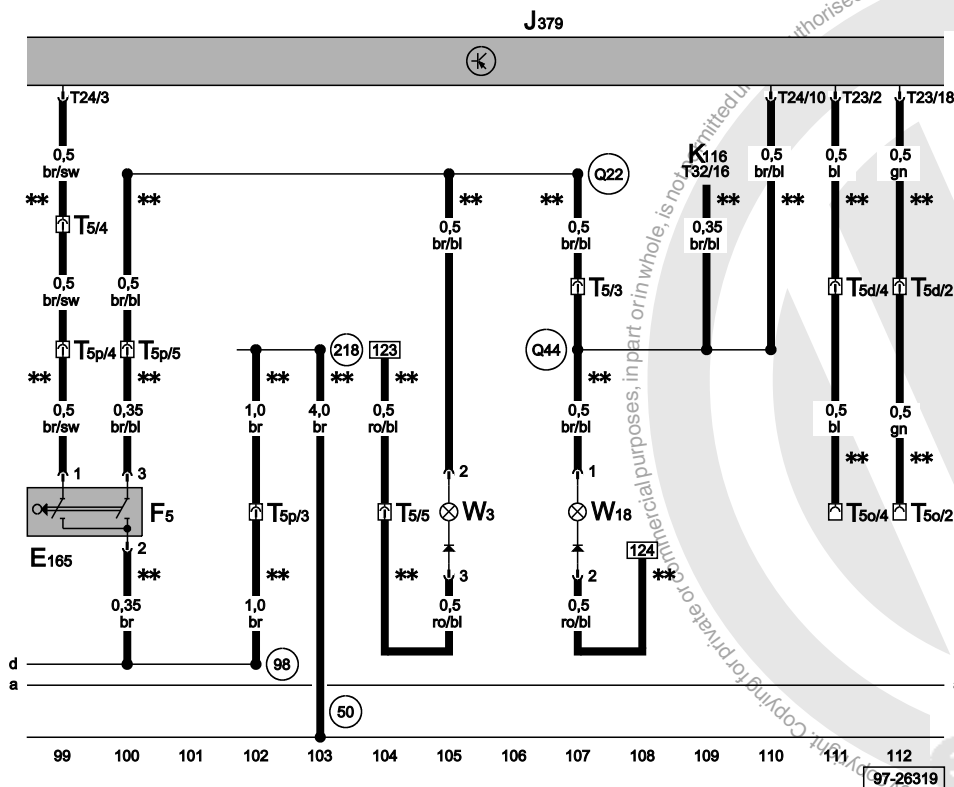
98 Earth connection, in rear lid wiring harness

218 Earth connection -1-, in rear lid wiring harness

Q22 Connection 1, in rear lid wiring harness

Q44 Connection 2, in rear lid wiring harness

** only Golf Variant/ Bora Variant
Luggage compartment light saloon models, ⇒ Current Flow Diagram No. 45/6

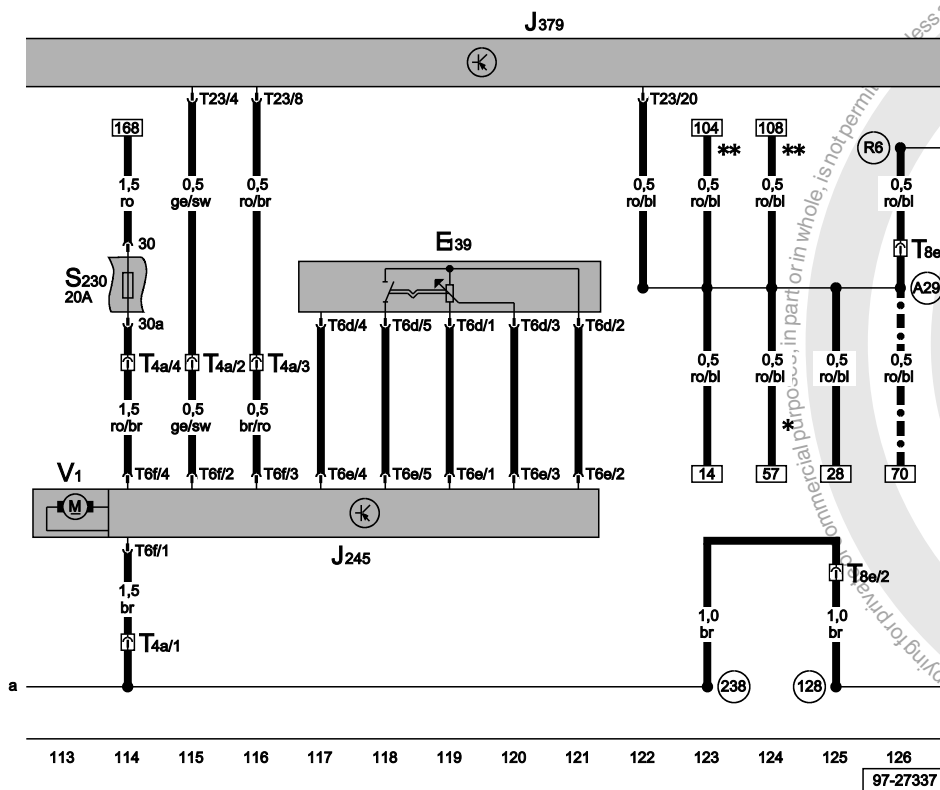


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- rs = pink

Convenience system central control unit, sliding sunroof adjustment regulator, sliding sunroof adjustment regulator

- E139 Sliding sunroof adjustment regulator
- J245 Sliding sunroof adjustment control unit
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- S230 Fuse 30 in fuse holder
- T4a 4-pin connector, behind left dash panel
- T6d 6-pin connector
- T6e 6-pin connector
- T6f 6-pin connector
- T8e 8-pin connector, behind left dash panel
- T23 23-pin connector
- V1 Sliding sunroof motor

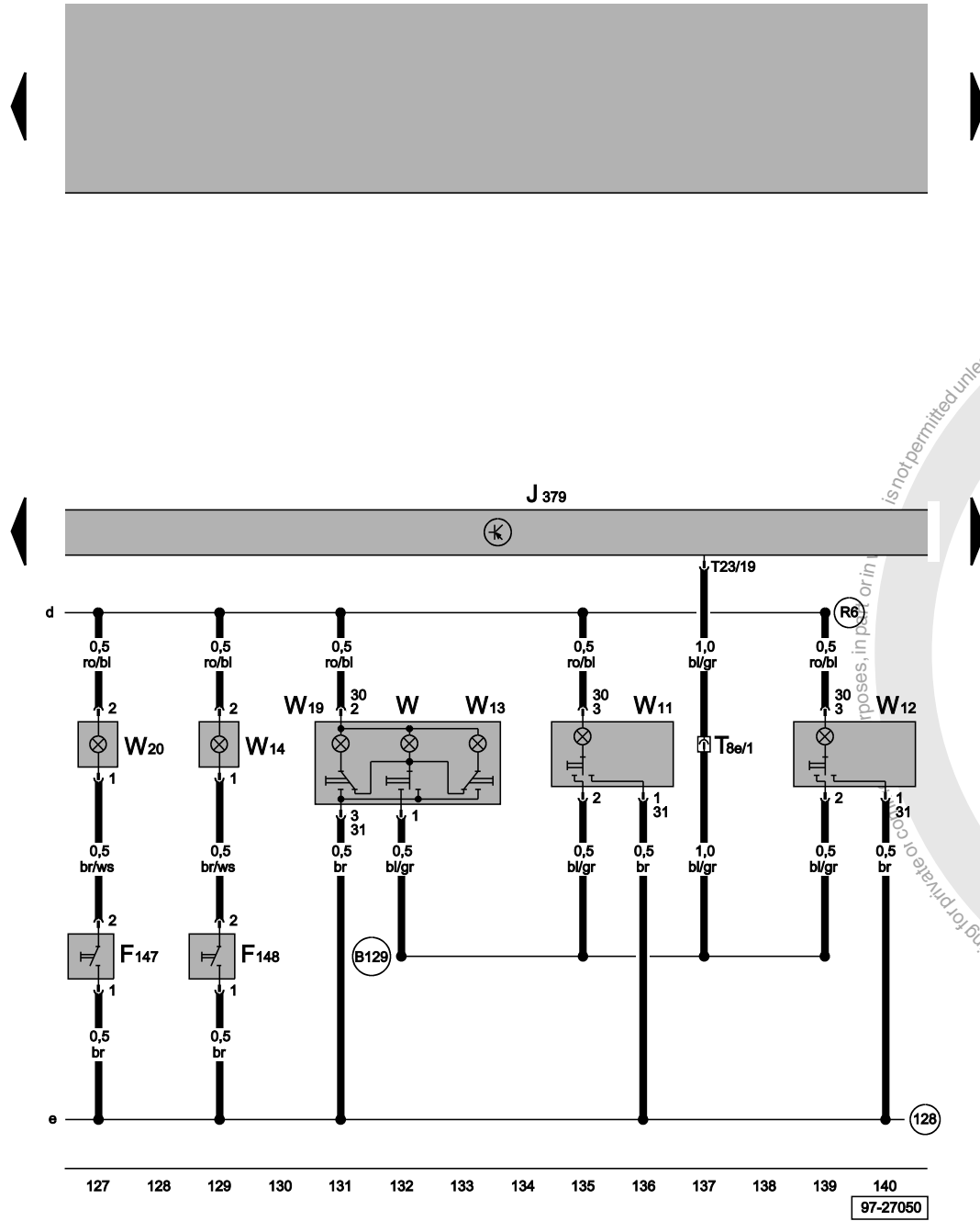
- 128 Earth connection 1, in interior light wiring harness
- 238 Earth connection 1, in interior wiring harness
- A29 Connection (interior light), in dash panel wiring harness
- R6 Positive connection 1, in interior light wiring harness
- * only Bora
- ** only Golf Variant/ Bora Variant
- only Golf



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Central locking and anti-theft alarm system control unit, front interior light, rear and front reading lights, illuminated vanity mirror (driver- and front passenger side)

- F147 Driver vanity mirror contact switch
- F148 Front passenger vanity mirror contact switch
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- T8e 8-pin connector, behind A-pillar trim on left
- T23 23-pin connector
- W Front interior light
- W11 Rear left reading light
- W12 Rear right reading light
- W13 Front passenger side reading light
- W14 Illuminated vanity mirror (front passenger side)
- W19 Driver side reading light
- W20 Illuminated vanity mirror (driver side)
- (128) Earth connection 1, in interior light wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R6) Positive connection 1, in interior light wiring harness



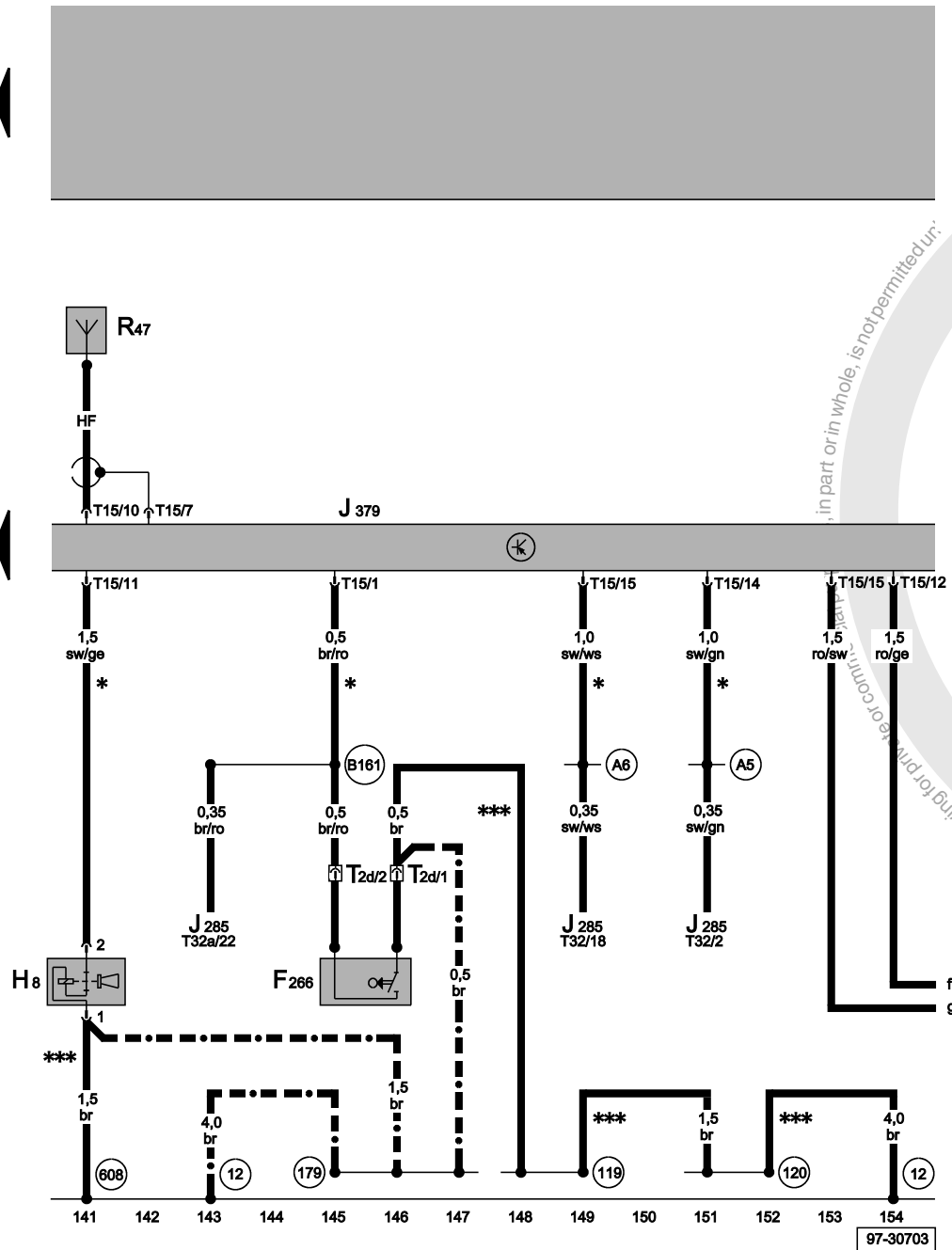
- ws = white
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- rs = pink

97-27050

Central locking and anti-theft alarm system control unit, anti-theft alarm system horn, central locking and anti-theft alarm system aerial, bonnet contact switch

- F266 Bonnet contact switch
- H8 Anti-theft alarm system horn*
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- R47 Central locking and anti-theft alarm system aerial
- T2d 2-pin connector, near right headlight
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- 608 Earth point, in centre of plenum chamber
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B161 Connection (ATA), in interior wiring harness
- * only models with anti-theft alarm
- *** from May 2000
- up to April 2000



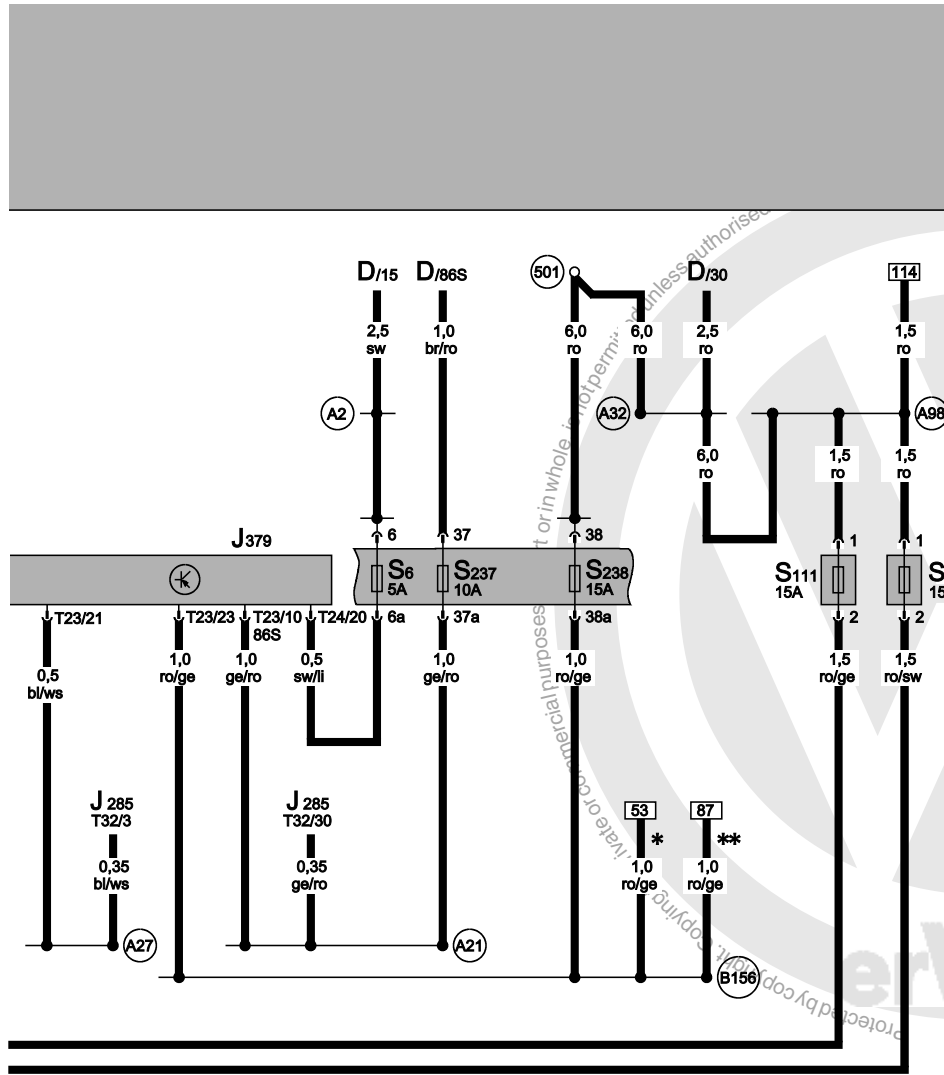
97-30703

Central locking and anti-theft alarm system control unit

- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- S6 Fuse 6 in fuse holder
- S111 Anti-theft alarm system fuse
- S144 Anti-theft alarm system central locking fuse
- S237 Fuse 37 in fuse holder
- S238 Fuse 38 in fuse holder
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B156 Positive connection (30a), in interior wiring harness

- * only Bora
- ** only Golf Variant/ Bora Variant



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Convenience system

- ⇒ Electrically adjustable and heated exterior mirrors
- ⇒ Anti-theft alarm system
- ⇒ Window regulator front and rear
- ⇒ Rear lid remote release
- ⇒ Interior lights
- ⇒ Luggage compartment light
- ⇒ Sliding/tilting sunroof
- ⇒ Central locking with remote control

from May 1999

Notes:

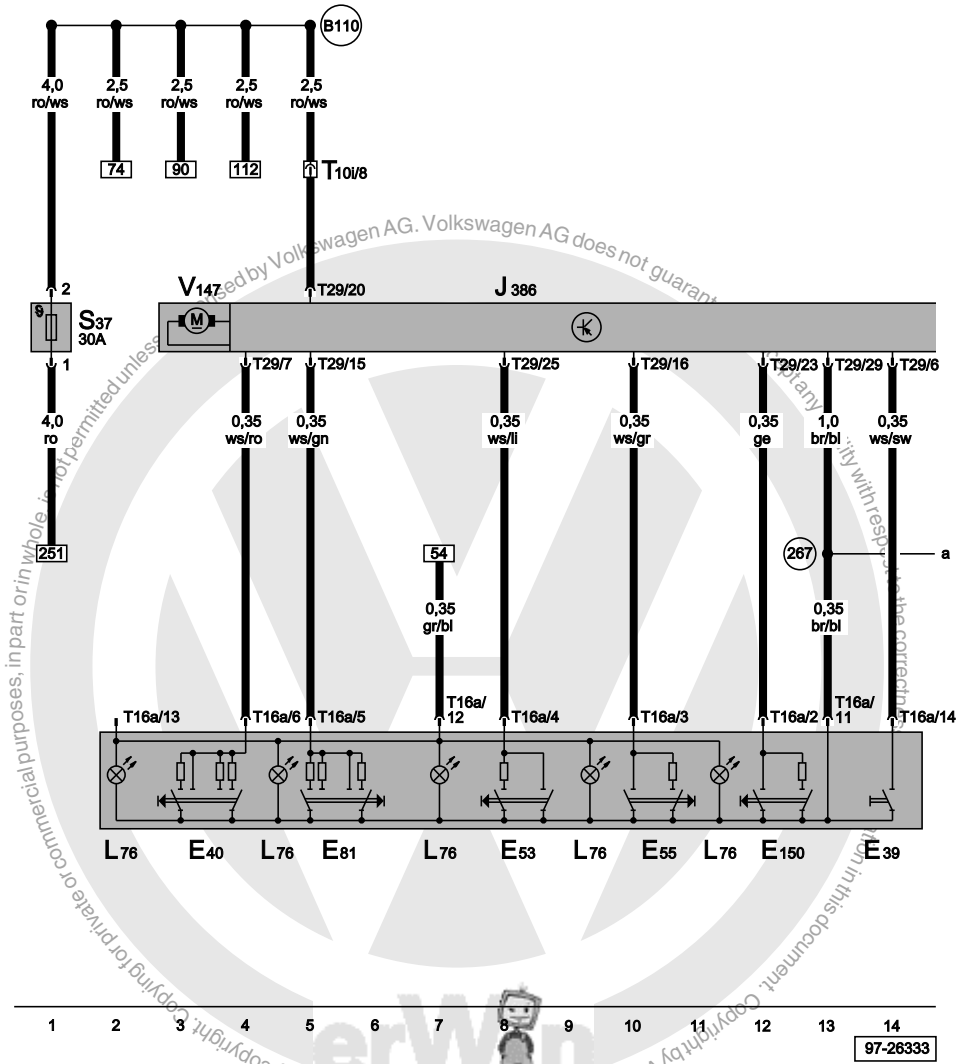
For information concerning

- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
 - ⇒ List of Fitting Locations
- For information concerning
- ◆ Fault Finding Programs
 - ⇒ guided fault finding



Driver door control unit, window regulator for driver door, interior locking switch, window regulator switch, rear window regulator isolation switch

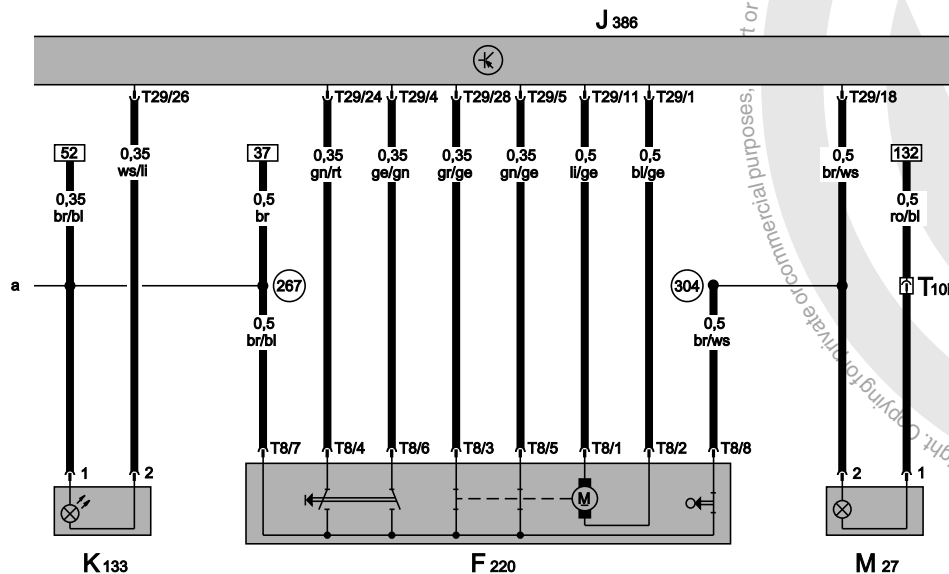
- E39 Rear window regulator isolation switch
- E40 Front left window regulator switch
- E53 Rear left window regulator switch, in driver door
- E55 Rear right window regulator switch, driver
- E81 Front right window regulator switch in driver door
- E150 Driver side interior locking switch
- J386 Driver door control unit
- L76 Button illumination bulb
- S37 Window regulator single fuse, on additional relay carrier above the relay plate
- T10i 10-pin connector, black, coupling station on left A-pillar
- T16a 16-pin connector
- T29 29-pin connector
- V147 Driver side window regulator motor
- 267 Earth connection 2, in driver door wiring harness
- B110 Connection (30, window regulator) in interior wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
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- gr = grey
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- ge = yellow
- or = orange
- rs = pink

Driver door control unit, driver side central locking lock unit, driver side central locking warning lamp, left door warning lamp

- F220 Driver side central locking lock unit
- J386 Driver door control unit
- K133 Central locking deadlock function warning lamp
- M27 Left door warning lamp
- T8 8-pin connector
- T29 29-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- 267 Earth connection 2, in driver door wiring harness
- 304 Earth connection 3, in driver door wiring harness



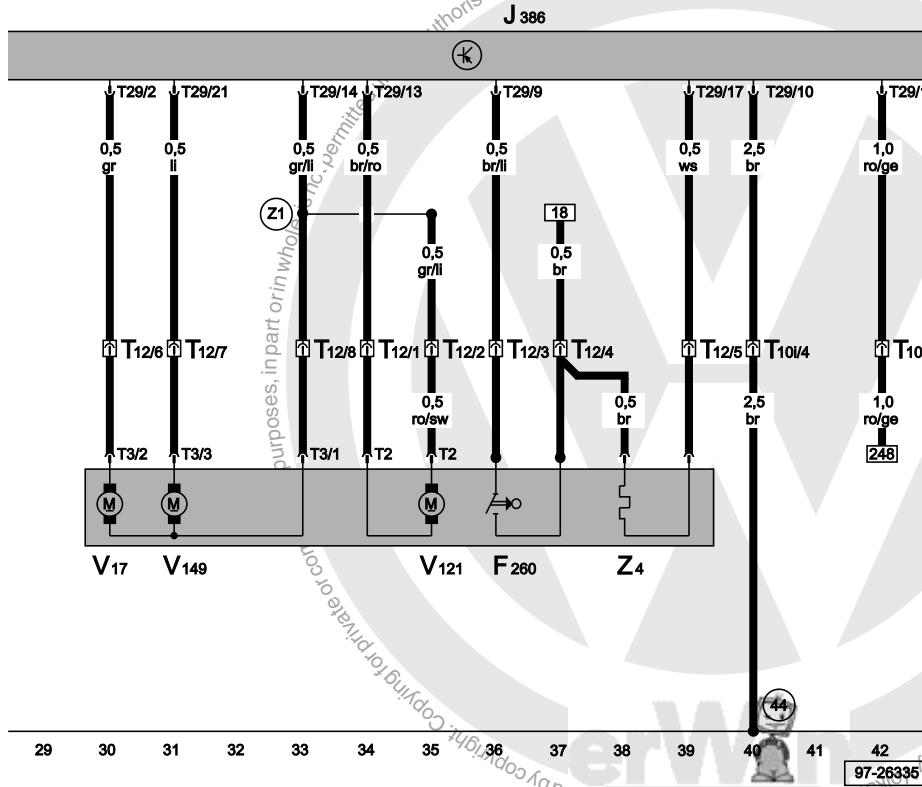
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15 16 17 18 19 20 21 22 23 24 25 26 27 28
97-26334

Driver door control unit, electrically adjustable exterior mirror for driver door

- F260 Driver side mirror fold-in feature contact switch**
- J386 Driver door control unit
- T2 2-pin connector
- T3 3-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T12 12-pin connector, in driver door
- T29 29-pin connector
- V17 Mirror adjustment motor (driver side)
- V121 Driver side folding mirror motor**
- V149 Driver side mirror adjustment motor
- Z4 Driver side heated exterior mirror

- 44 Earth point, lower part of left A-pillar
- Z1 Connection 1, in mirror adjustment/heating wiring harness
- ** fold-in feature only for some export countries

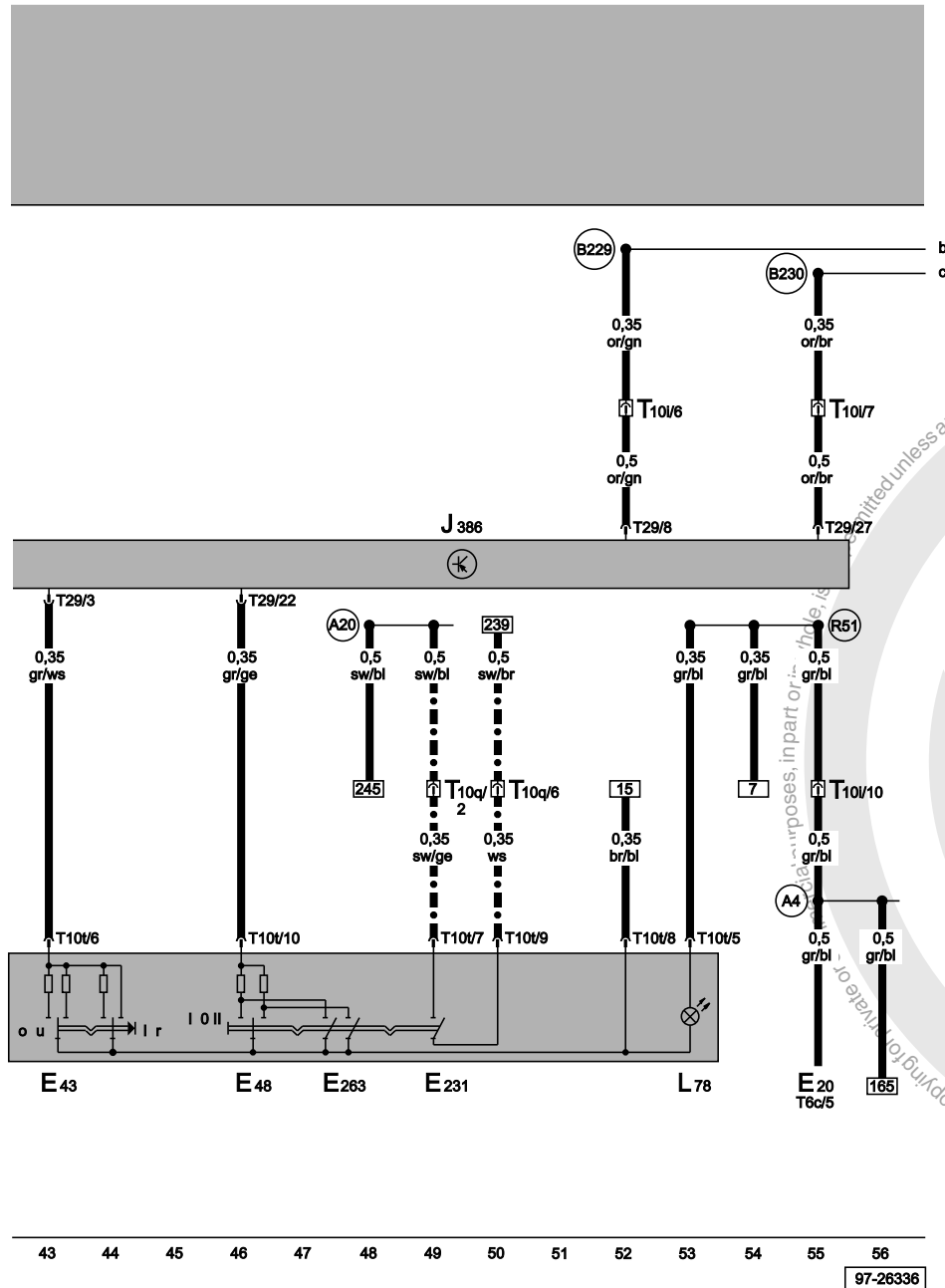


- ws = white
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Driver door control unit, mirror adjustment switch, exterior mirror heater button, mirror fold-in feature system switch

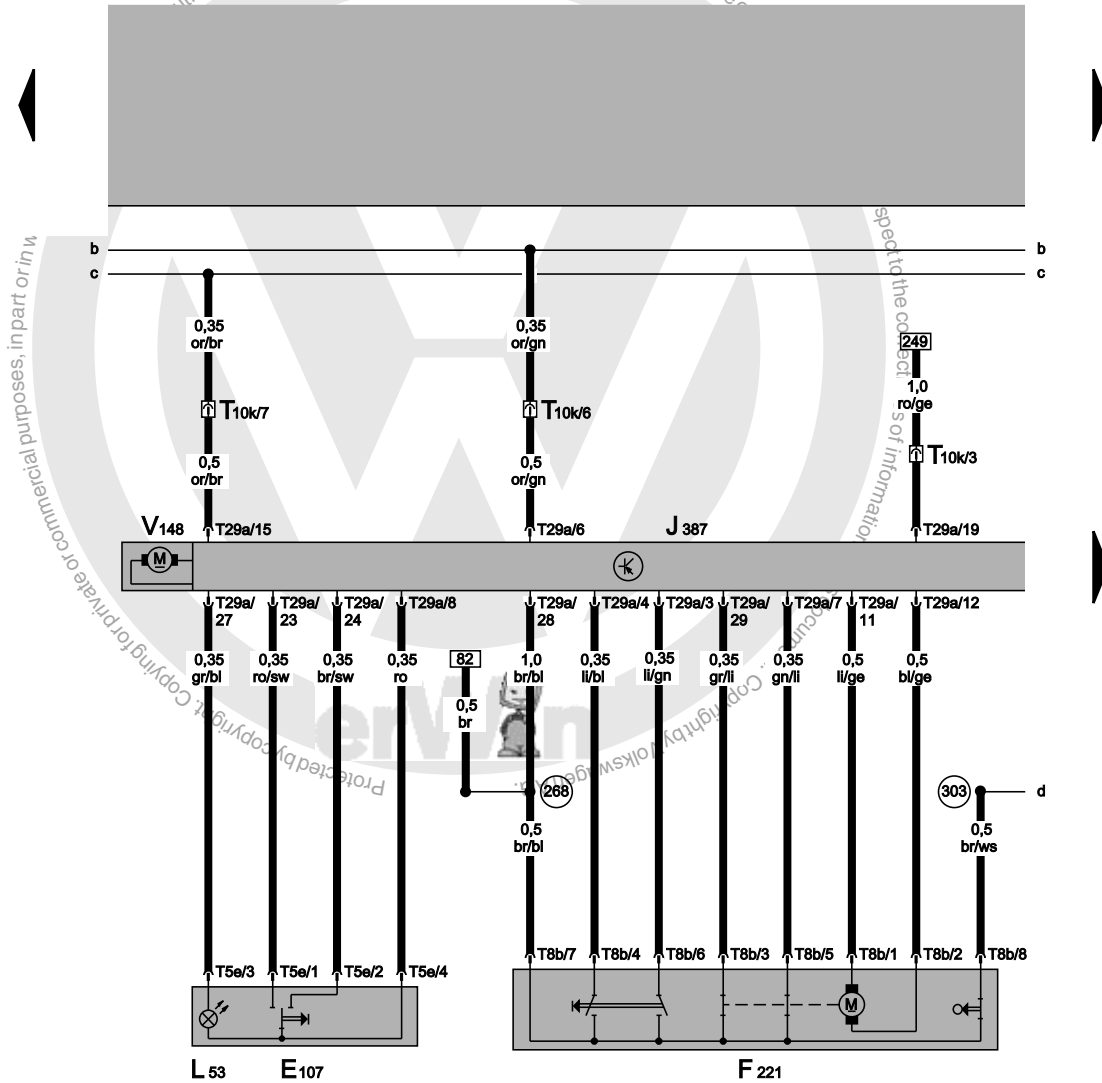
- E20 Illumination regulators - switches and instruments
- E43 Mirror adjustment switch
- E48 Mirror adjustment change-over switch
- E231 Exterior mirror heater button
- E263 Mirror fold-in feature system switch
- J386 Driver door control unit
- L78 Mirror adjustment switch illumination bulb
- T6c 6-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10q 10-pin connector, blue, coupling station on left of A-pillar
- T10t 10-pin connector
- T29 29-pin connector

- A4 Positive connection (58b), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness
- R51 Connection (58b), in driver side door wiring harness
- models with separate exterior mirror heater only



Front passenger door control unit, window regulator for front passenger door, front passenger side central locking lock unit

- E107 Window regulator switch, in front passenger door
- F221 Front passenger side central locking lock unit
- J387 Front passenger door control unit
- L53 Window regulator switch illumination bulb
- T5e 5-pin connector
- T8b 8-pin connector
- T10k 10-pin connector, black, coupling station right A-pillar
- T29a 29-pin connector
- V148 Front passenger side window regulator motor
- 268 Earth connection 2, in front passenger door wiring harness
- 303 Earth connection 3, in front passenger door wiring harness



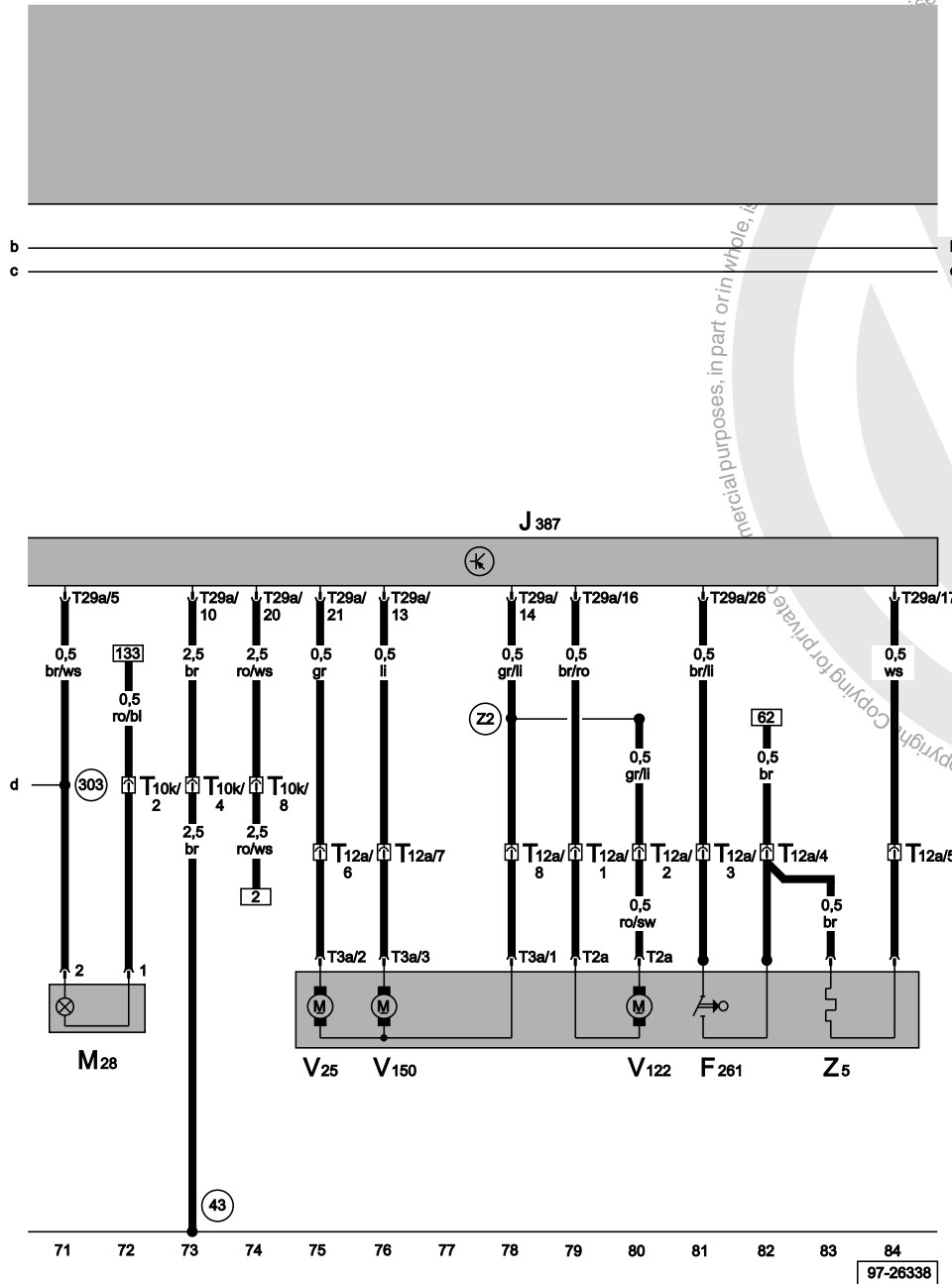
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Front passenger door control unit, electrically adjustable exterior mirror for front passenger door, right door warning lamp

- F261 Front passenger side mirror fold-in feature contact switch**
- J387 Front passenger door control unit
- M28 Right door warning lamp
- T2a 2-pin connector
- T3a 3-pin connector
- T10k 10-pin connector, black coupling station right A-pillar
- T12a 12-pin connector, in front passenger door
- T29a 29-pin connector
- V25 Mirror adjustment motor (front passenger side)
- V122 Front passenger side folding mirror motor**
- V150 Front passenger side mirror adjustment motor
- Z5 Front passenger heated exterior mirror

- 43 Earth point, lower part of right A-pillar
- 303 Earth connection 3, in front passenger door wiring harness
- Z2 Connection 2, in mirror adjustment/heating wiring harness

** fold-in feature only for some export countries

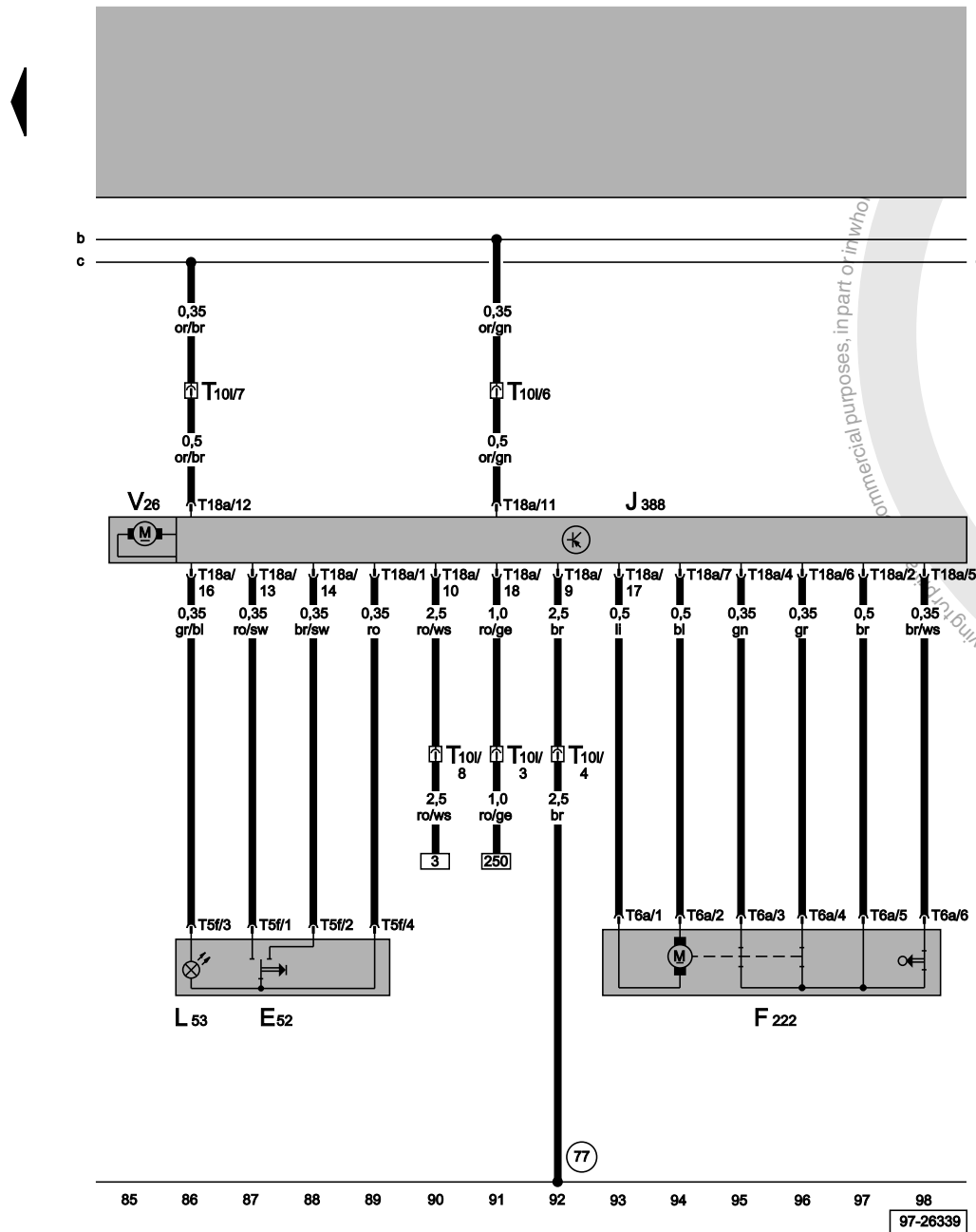


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- ro = red
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- gr = grey
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97-26338

Rear left door control unit, rear left door window regulator, rear left central locking lock unit

- E52 Rear left window regulator switch (in door)
- F222 Rear left central locking lock unit
- J388 Rear left door control unit
- L53 Window regulator switch illumination bulb
- T5f 5-pin connector
- T6a 6-pin connector
- T10l 10-pin connector, black, coupling station on left B-pillar
- T18a 18-pin connector
- V26 Rear left window regulator motor
- 77 Earth point, lower part of left B-pillar

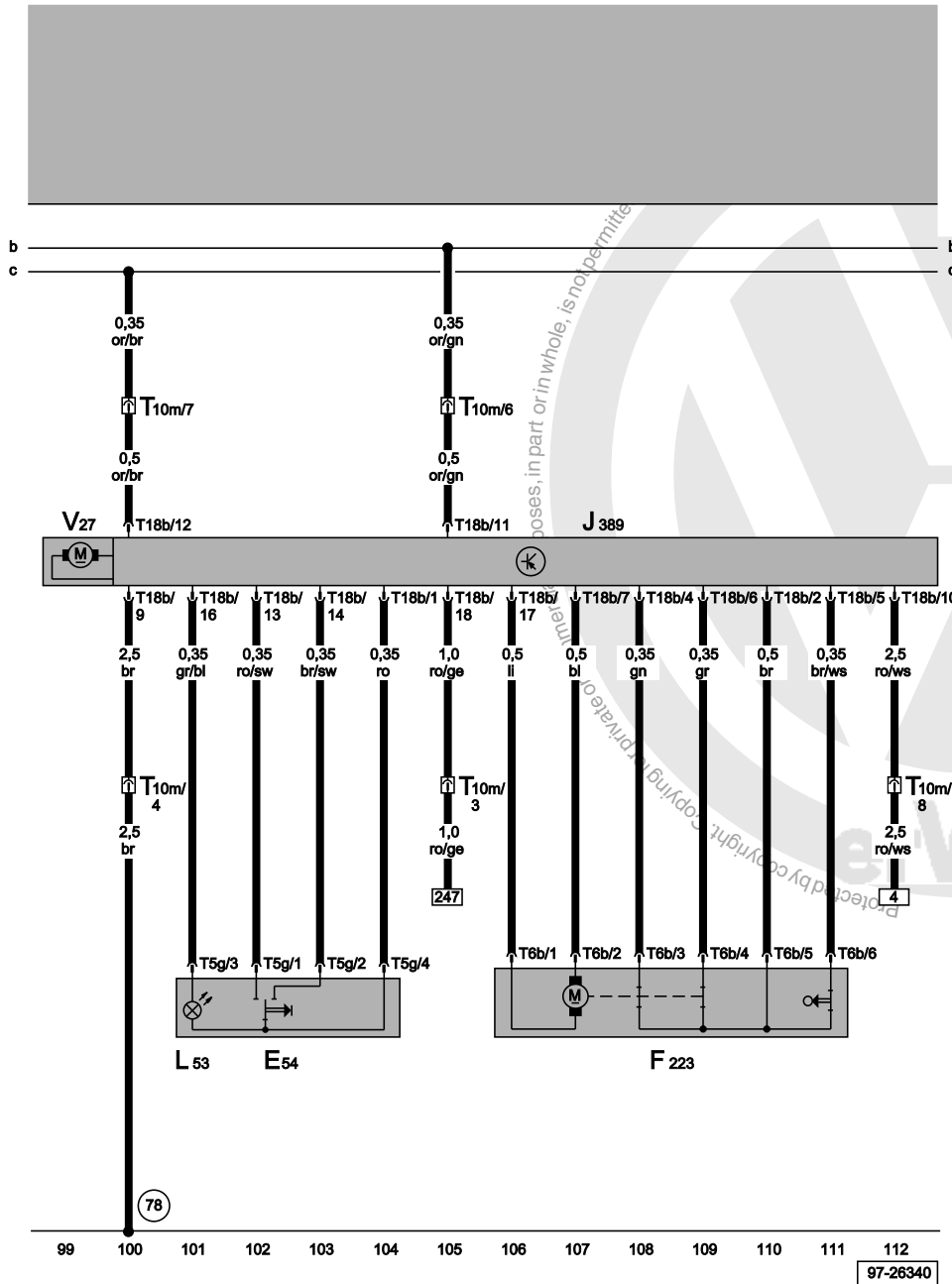


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97-26339

Rear right door control unit, rear right door window regulator, rear right central locking lock unit

- E54 Rear right window regulator switch (in door)
- F223 Rear right central locking lock unit
- J389 Rear right door control unit
- L53 Window regulator switch illumination bulb
- T5g 5-pin connector
- T6b 6-pin connector
- T10m 10-pin connector, black, coupling station right B-pillar
- T18b 18-pin connector
- V27 Rear right window regulator motor
- 78 Earth point, lower part of right B-pillar

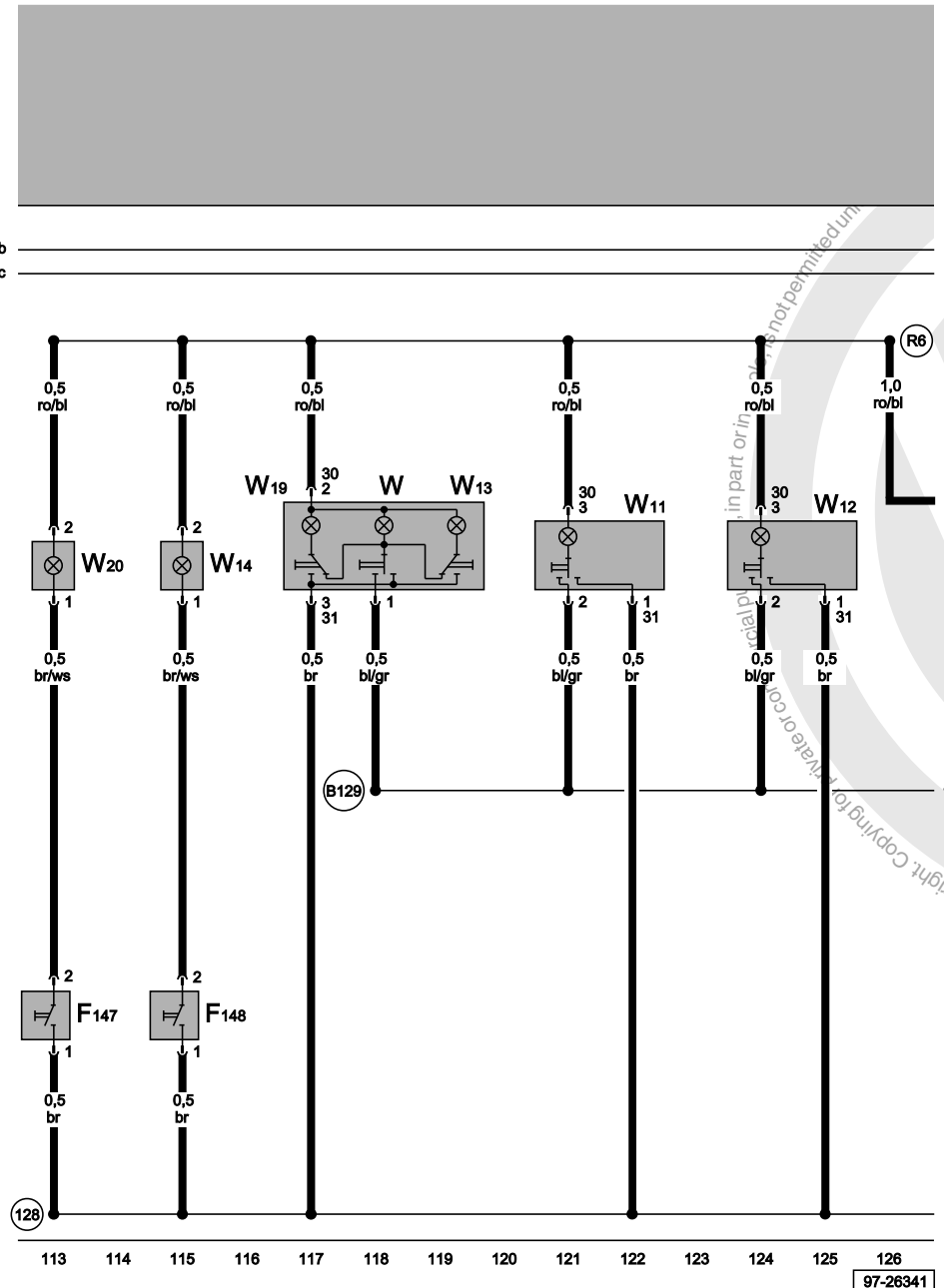


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Front interior light, rear and front reading lights, illuminated vanity mirror (driver- and front passenger side)

- F147 Driver vanity mirror contact switch
- F148 Front passenger vanity mirror contact switch
- W Front interior light
- W11 Rear left reading light
- W12 Rear right reading light
- W13 Front passenger side reading light
- W14 Illuminated vanity mirror (front passenger side)
- W19 Driver side reading light
- W20 Illuminated vanity mirror (driver side)

- (128) Earth connection 1, in interior light wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R6) Positive connection 1, in interior light wiring harness



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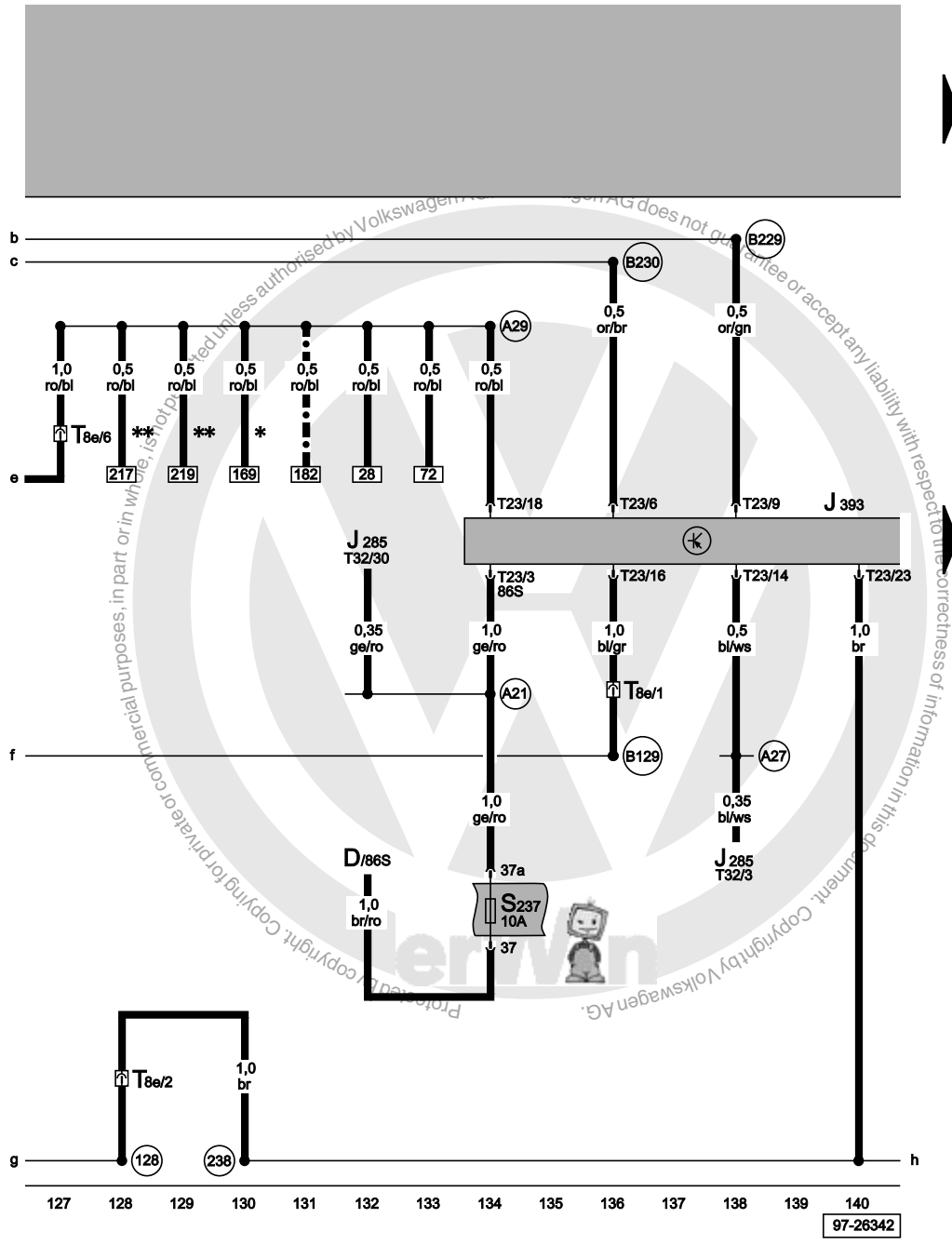
97-26341

Convenience system central control unit

- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind the dash panel, left
- S237 Fuse 37 in fuse holder
- T8e 8-pin connector, behind left dash panel
- T23 23-pin connector
- T32 32-pin connector, blue

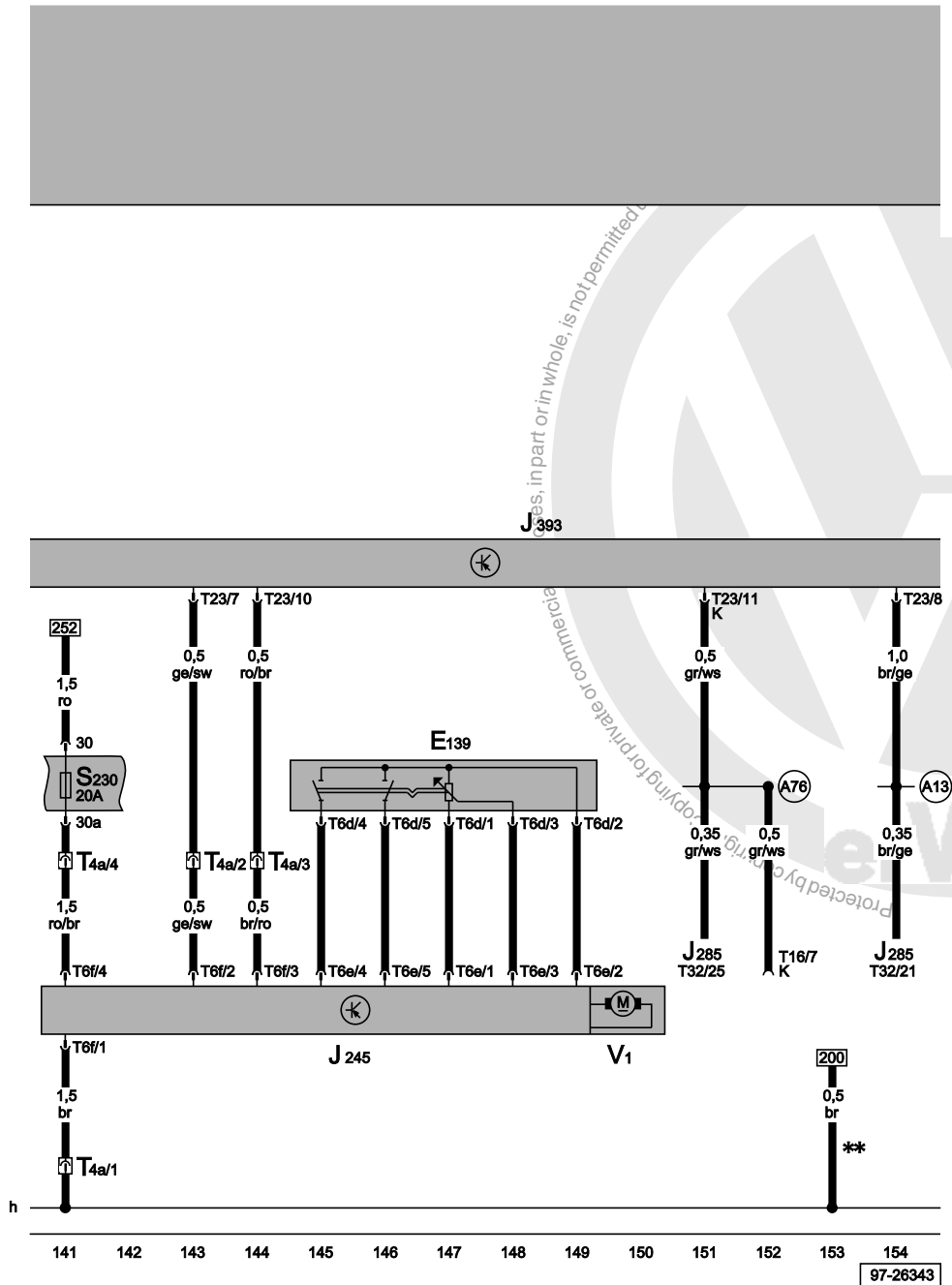
- (128) Earth connection 1, in interior light wiring harness
- (238) Earth connection 1, in interior wiring harness
- (A21) Connection (86s), in dash panel wiring harness
- (A27) Connection (speed signal), in dash panel wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (B129) Connection (interior light, 31I), in interior wiring harness
- (B229) Connection (high bus), in interior wiring harness
- (B230) Connection (low bus), in interior wiring harness
- * only Bora
- ** only Golf Variant/ Bora Variant
- only Golf

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Convenience system central control unit, sliding sunroof adjustment regulator, sliding sunroof adjustment regulator

- E139 Sliding sunroof adjustment regulator
- J245 Sliding sunroof adjustment control unit
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind the dash panel, left
- S230 Fuse 30 in fuse holder
- T4a 4-pin connector, behind left dash panel
- T6d 6-pin connector
- T6e 6-pin connector
- T6f 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T23 23-pin connector
- T32 32-pin connector, blue
- V1 Sliding sunroof motor
- A13 Connection (door contact switch), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** only Golf Variant/ Bora Variant

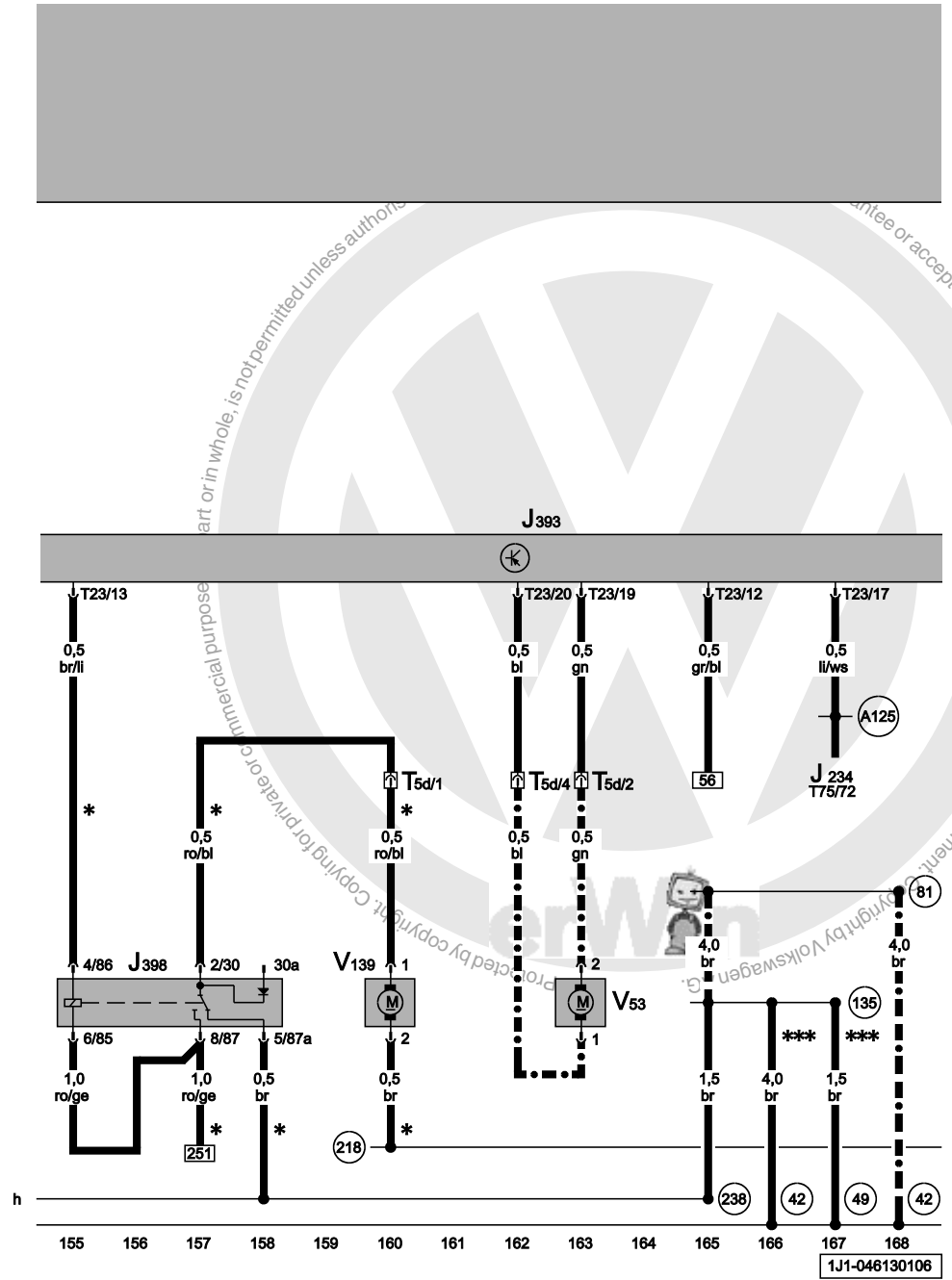


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Convenience system central control unit, rear lid central locking motor, rear lid remote release relay, rear lid release motor

- J234 Airbag control unit
- J393 Convenience system central control unit, behind the dash panel, left
- J398 Rear lid remote release relay, on the 13 position additional relay carrier*
- T5d 5-pin connector, brown, coupling station on left C-pillar
- T23 23-pin connector
- T75 75-pin connector
- V53 Rear lid central locking motor
- V139 Rear lid release motor*

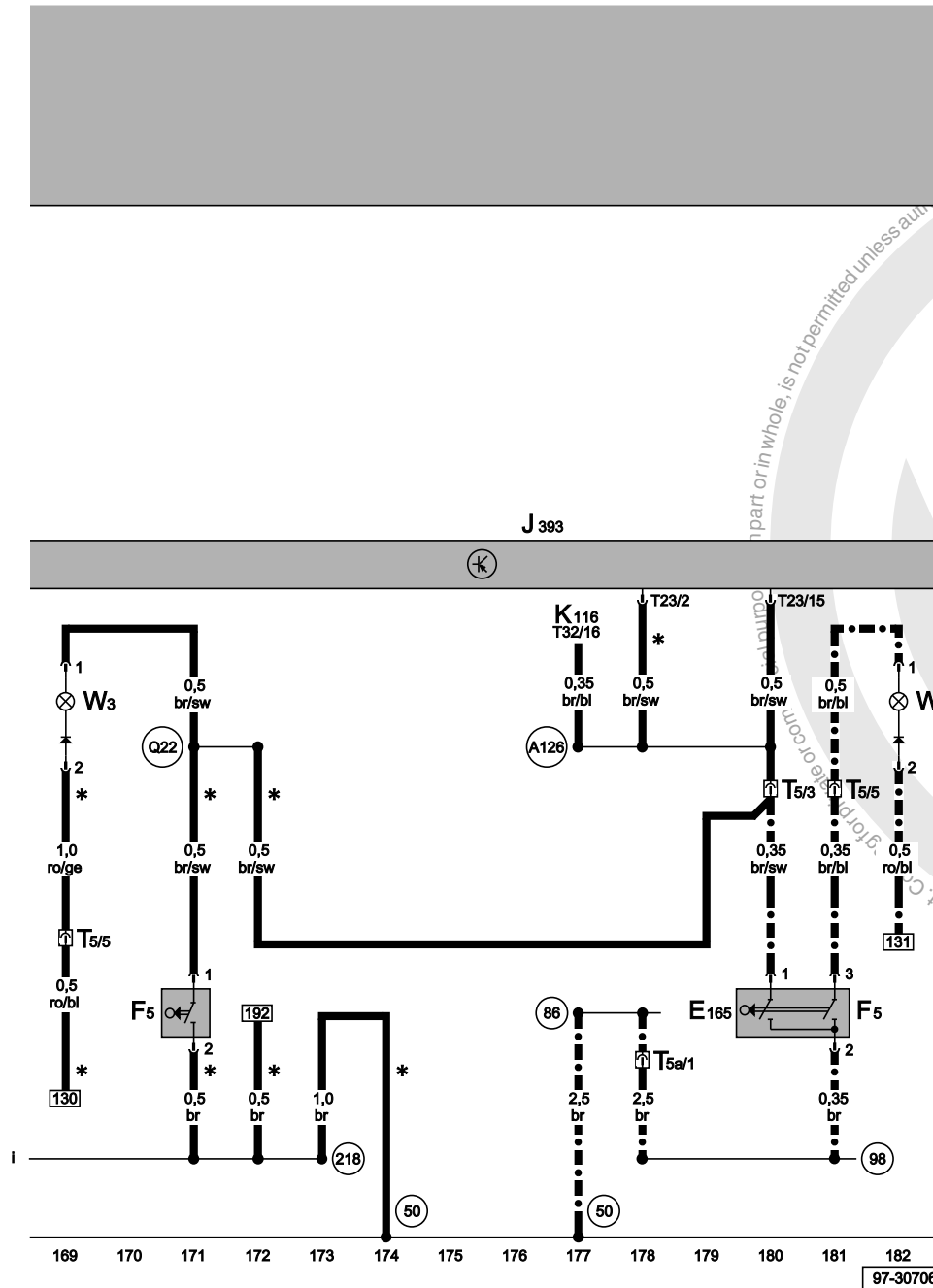
- (42) Earth point, next to steering column
 - (49) Earth point, on steering column
 - (81) Earth connection 1, in dash panel wiring harness
 - (135) Earth connection 2, in dash panel wiring harness
 - (218) Earth connection -1-, in rear lid wiring harness
 - (238) Earth connection 1, in interior wiring harness
 - (A125) Connection (crash signal), in dash panel wiring harness
- * only Bora
 -•-•- only Golf
 Rear lid release Variant models, ⇒ Current Flow Diagram No. 46/16
 *** from May 2000
 -•- up to April 2000



Convenience system central control unit, luggage compartment light (only Golf/ Bora)

- E165 Rear lid release switch
- F5 Luggage compartment light switch
- J393 Convenience system central control unit, behind the dash panel, left
- K116 Rear lid open warning lamp
- T5 5-pin connector, black, coupling station on left C-pillar
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light

- (50) Earth point, on left in luggage compartment
 - (86) Earth connection 1, in rear wiring harness
 - (98) Earth connection, in rear lid wiring harness
 - (218) Earth connection -1-, in rear lid wiring harness
 - (A126) Connection (rear lid contact switch), in dash panel wiring harness
 - (Q22) Connection 1, in rear lid wiring harness
 - * only Bora
 - .-.- only Golf
- Luggage compartment lights Variant models, ⇒ Current Flow Diagram No. 46/17



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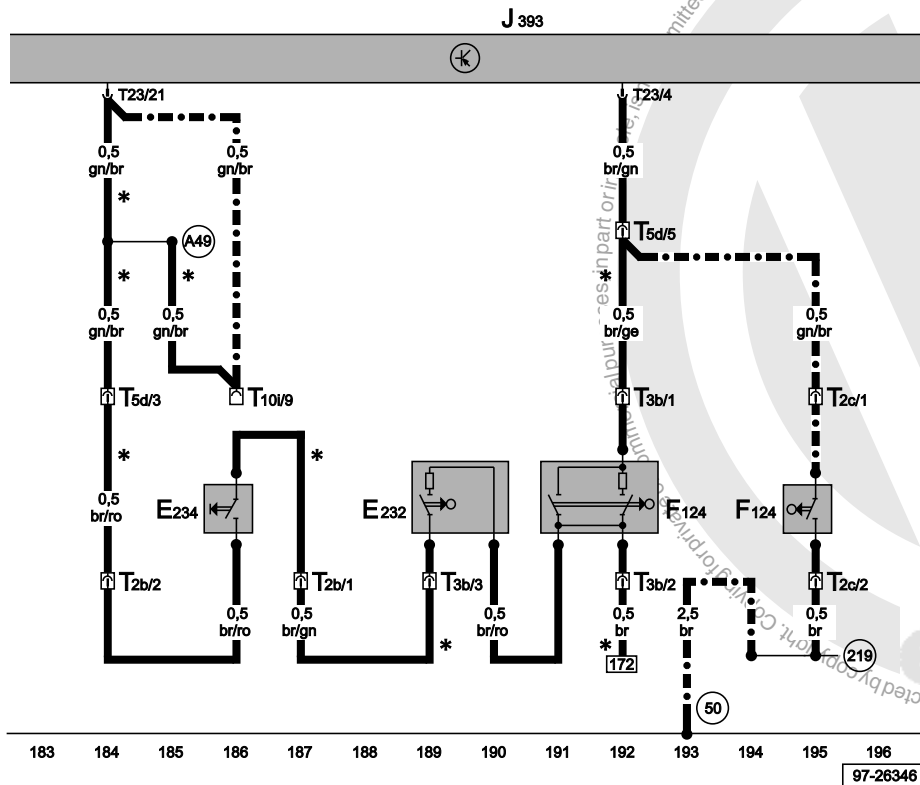
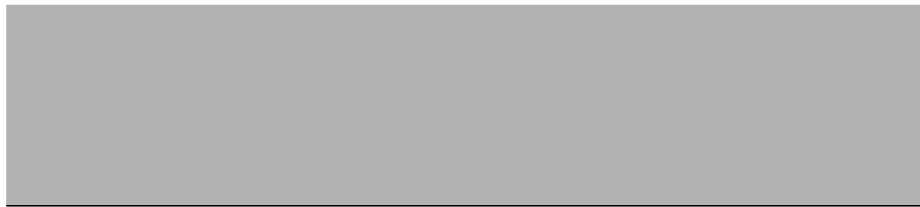
Convenience system central control unit, rear lid handle release button, key operated switch to block release of rear lid remote

- E232 Key operated switch to block release of rear lid remote*
- E234 Rear lid handle release button*
- F124 Contact switch in lock cylinder for rear lid/anti-theft alarm system/central locking system
- J393 Convenience system central control unit, behind the dash panel, left
- T2b 2-pin connector, in rear lid
- T2c 2-pin connector, in rear lid
- T3b 3-pin connector, in rear lid
- T5d 5-pin connector, brown, coupling station on left C-pillar
- T10i 10-pin connector, black, coupling station on left A-pillar
- T23 23-pin connector

- 50 Earth point, on left in luggage compartment
- 219 Earth connection -2-, in rear lid wiring harness
- A49 Connection 1 in dash panel wiring harness

- * only Bora
- .-.- only Golf
- Rear lid release Variant models, => Current Flow Diagram No. 46/16

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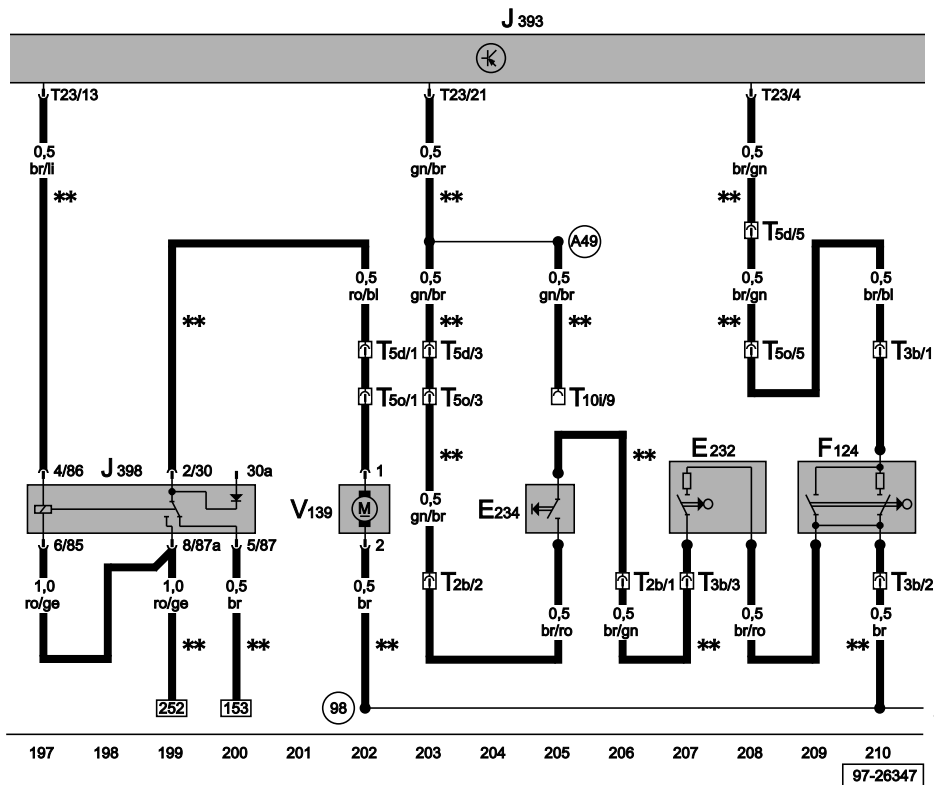


97-26346

Convenience system central control unit, rear lid remote release relay, rear lid release motor, rear lid handle release button

- E232 Key operated switch to block release of rear lid remote**
- E234 Rear lid handle release button**
- F124 Contact switch in lock cylinder for rear lid/anti-theft alarm system/central locking system
- J393 Convenience system central control unit, behind the dash panel, left
- J398 Rear lid remote release relay, on the 13 position additional relay carrier
- T2b 2-pin connector, in rear lid
- T3b 3-pin connector, in rear lid
- T5d 5-pin connector, brown, coupling station right D-pillar
- T5o 5-pin connector, brown, in rear lid
- T10i 10-pin connector, black, coupling station on left A-pillar
- T23 23-pin connector
- V139 Rear lid release motor

- 98 Earth connection, in rear lid wiring harness
- A49 Connection 1 in dash panel wiring harness
- ** only Golf Variant/ Bora Variant
Rear lid release saloon models, => Current Flow Diagram No. 46/13 and No. 46/15



- ws = white
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Convenience system central control unit, luggage compartment light (only Golf Variant/ Bora Variant)

- E165 Rear lid release switch
- F5 Luggage compartment light switch
- J393 Convenience system central control unit, behind the dash panel, left
- K116 Rear lid open warning lamp
- T5 5-pin connector, black, coupling station left D-pillar
- T5d 5-pin connector, brown, coupling station right D-pillar
- T5o 5-pin connector, brown, in rear lid
- T5p 5-pin connector, black, in rear lid
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light
- W18 Luggage compartment light on left

50 Earth point, on left in luggage compartment

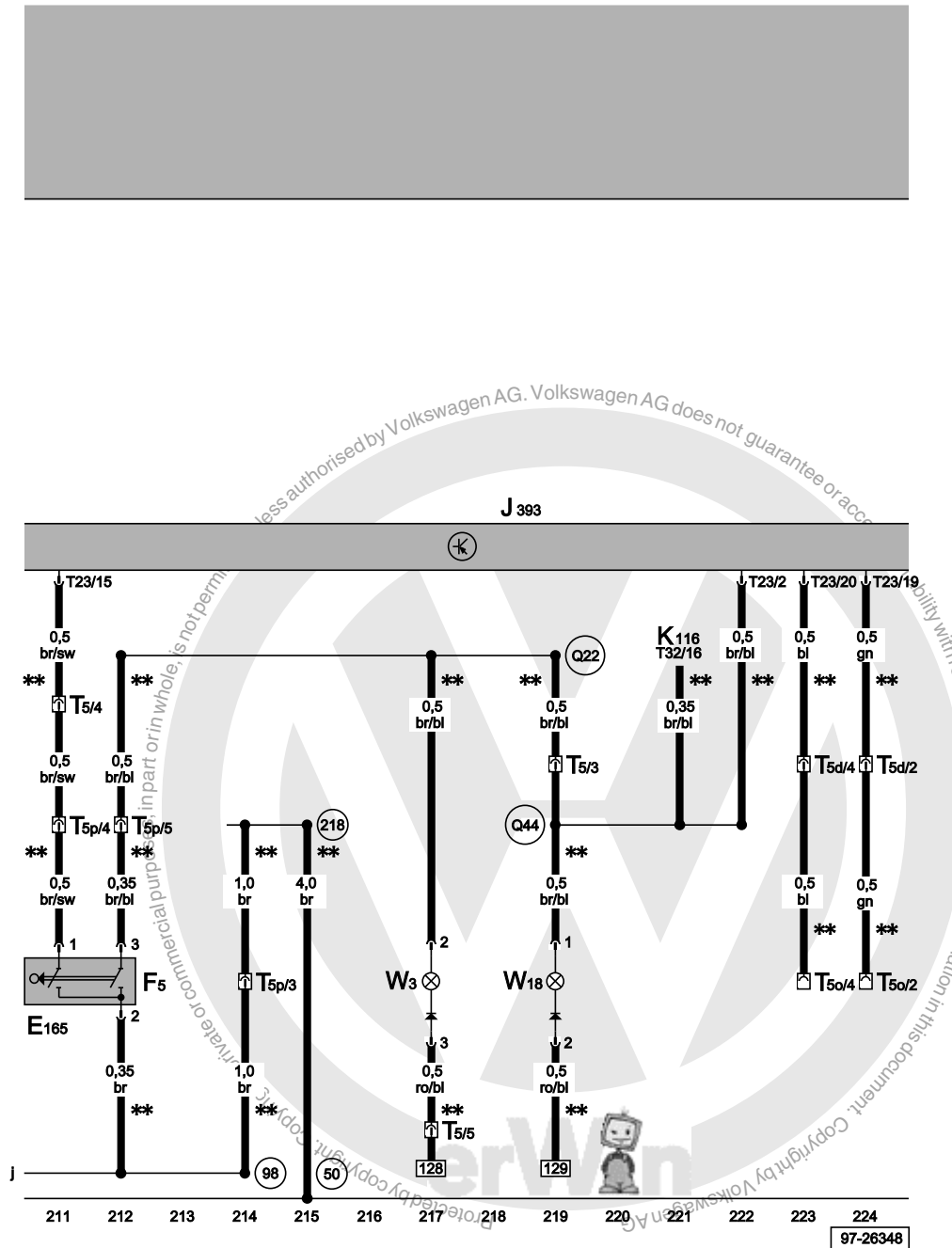
98 Earth connection, in rear lid wiring harness

218 Earth connection -1-, in rear lid wiring harness

Q22 Connection 1, in rear lid wiring harness

Q44 Connection 2, in rear lid wiring harness

** only Golf Variant/ Bora Variant
Luggage compartment light saloon models, ⇒ Current Flow Diagram No. 46/14

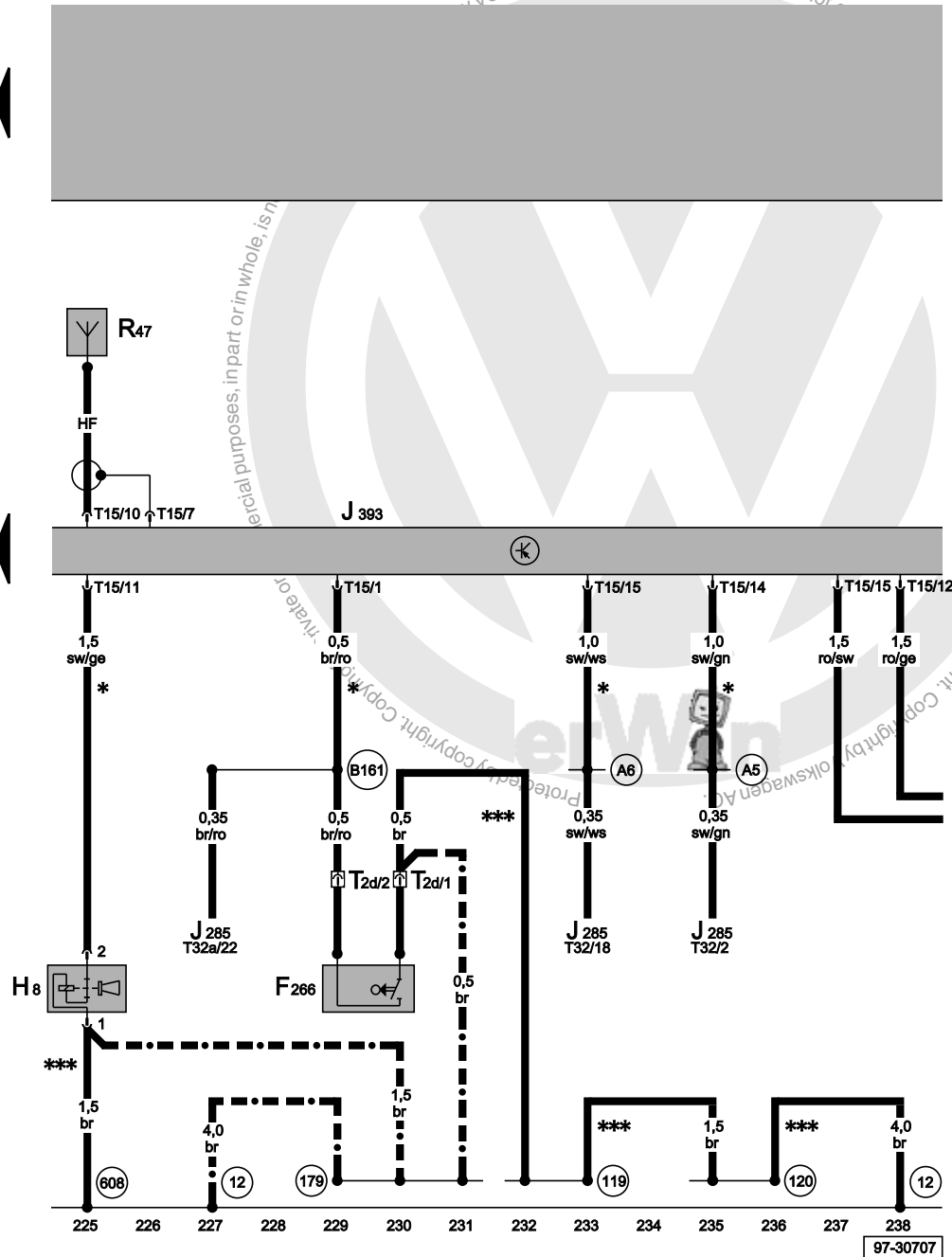


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Convenience system central control unit, anti-theft alarm system horn, central locking and anti-theft alarm system aerial, bonnet contact switch

- F266 Bonnet contact switch
- H8 Anti-theft alarm system horn*
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit
- R47 Central locking and anti-theft alarm system aerial
- T2d 2-pin connector, near right headlight
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- 608 Earth point, in centre of plenum chamber
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B161 Connection (ATA), in interior wiring harness
- * only models with anti-theft alarm
- *** from May 2000
- up to April 2000

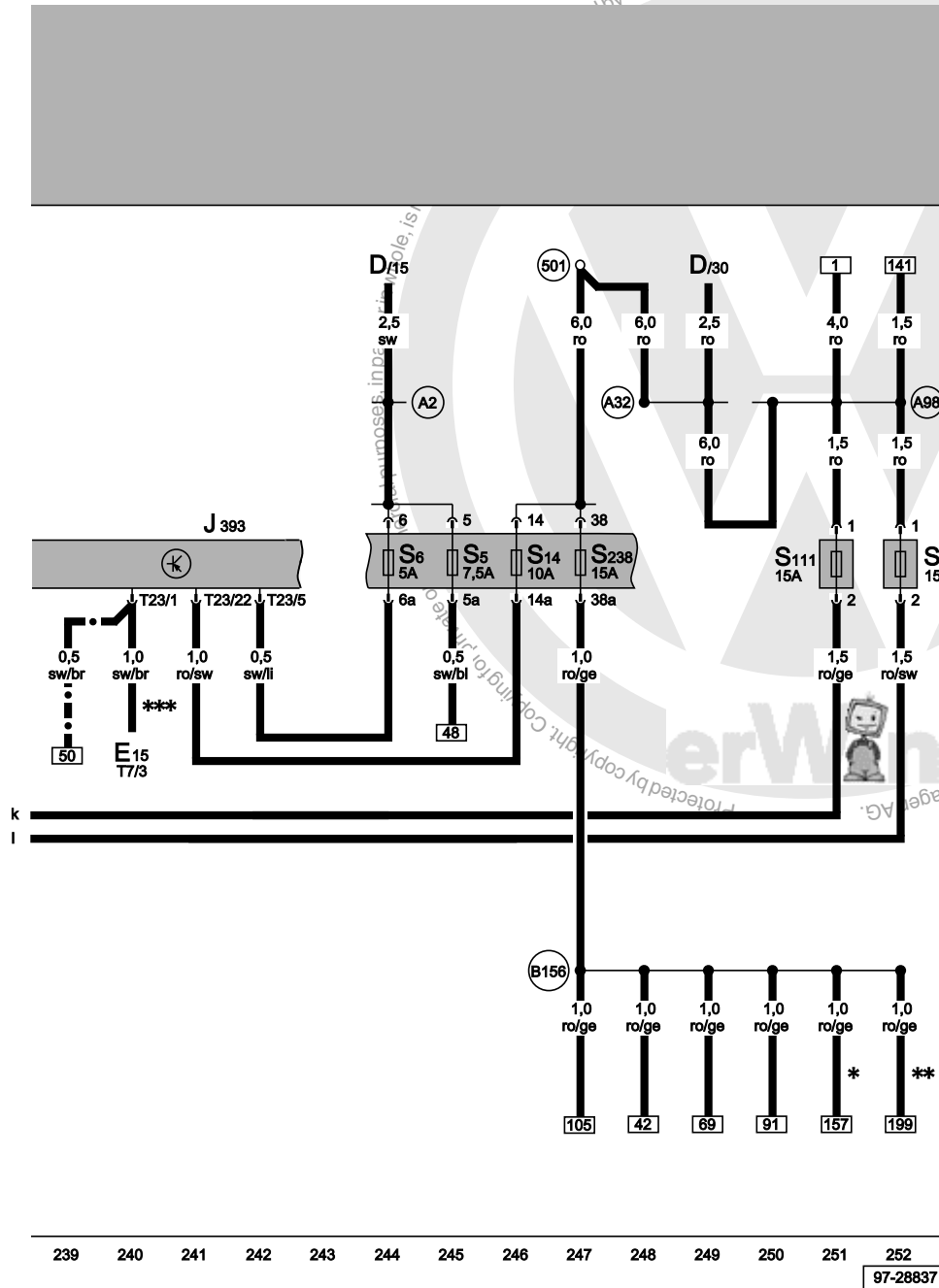


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Convenience system central control unit

- D Ignition/starter switch
- E15 Heated rear window switch
- J393 Convenience system central control unit, behind the dash panel, left
- S5 Fuse 5 in fuse holder
- S6 Fuse 6 in fuse holder
- S14 Fuse 14 in fuse holder
- S111 Anti-theft alarm system fuse
- S144 Anti-theft alarm system central locking fuse
- S238 Fuse 38 in fuse holder
- T7 7-pin connector
- T23 23-pin connector

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B156 Positive connection (30a), in interior wiring harness
- * only Bora
- ** only Golf Variant/ Bora Variant
- *** not in models with separate exterior mirror heater only
- models with separate exterior mirror heater only

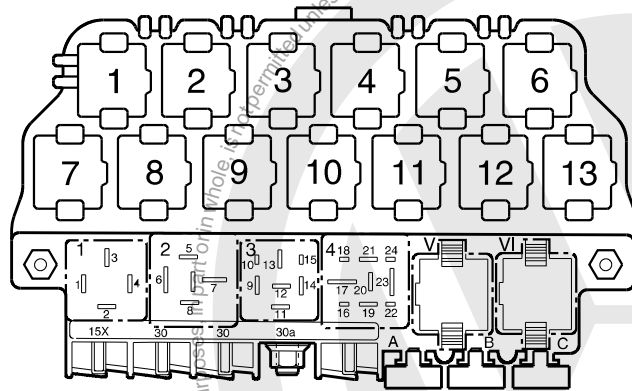


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Interior monitoring (models with central locking)

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

Fuse colours

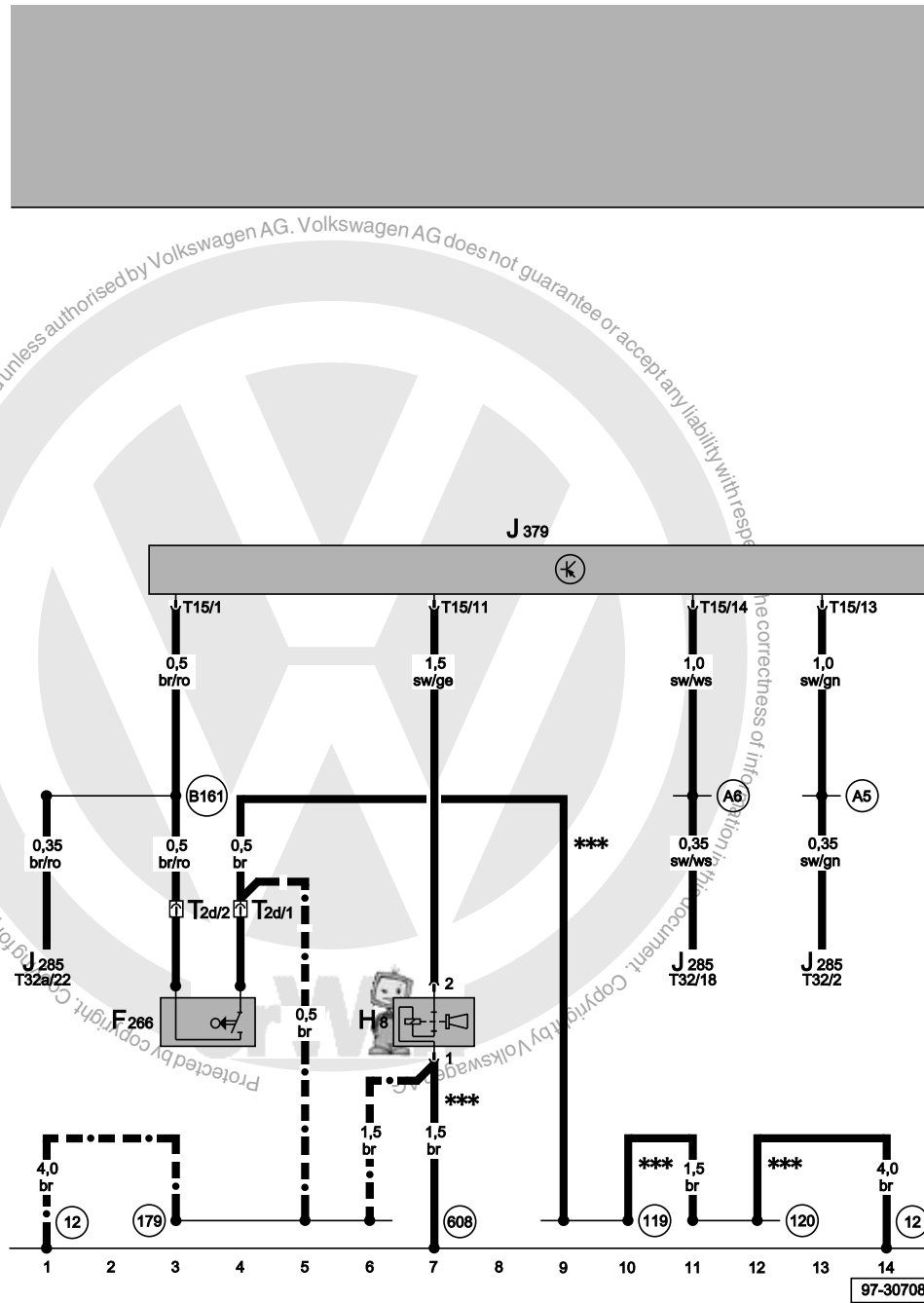
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Central locking and anti-theft alarm system control unit, anti-theft alarm system horn, bonnet contact switch

- F266 Bonnet contact switch, in lock
- H8 Anti-theft alarm system horn
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T2d 2-pin connector, near headlight, right
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- 608 Earth point, in plenum chamber, centre
- A5 Positive (+) connection (right turn signal), in dash panel wiring harness
- A6 Positive (+) connection (left turn signal), in dash panel wiring harness
- B161 Connection (anti-theft alarm), in interior wiring harness
- *** From May 2000
- Up to April 2000

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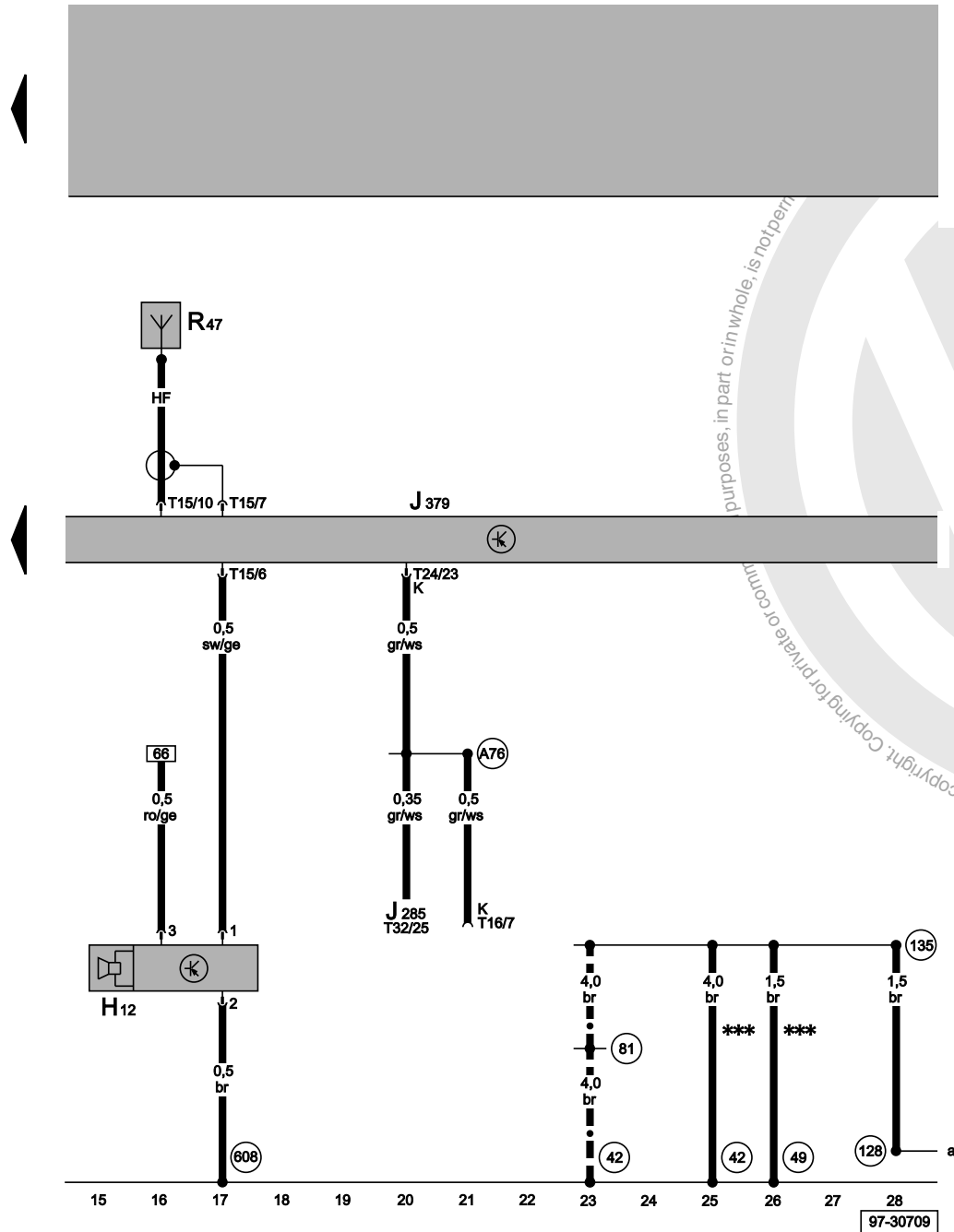
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Central locking control unit and anti-theft alarm system, alarm horn, central locking and anti-theft alarm system aerial

- H12 Alarm horn**
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- R47 Central locking and anti-theft alarm system
- T15 15-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T24 24-pin connector
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 128 Earth connection -1-, in interior light wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 608 Earth point, in plenum chamber, centre
- A76 Connection (diagnosis wire K), in dash panel wiring harness

** For some export countries only
 *** From May 2000
 --- Up to April 2000



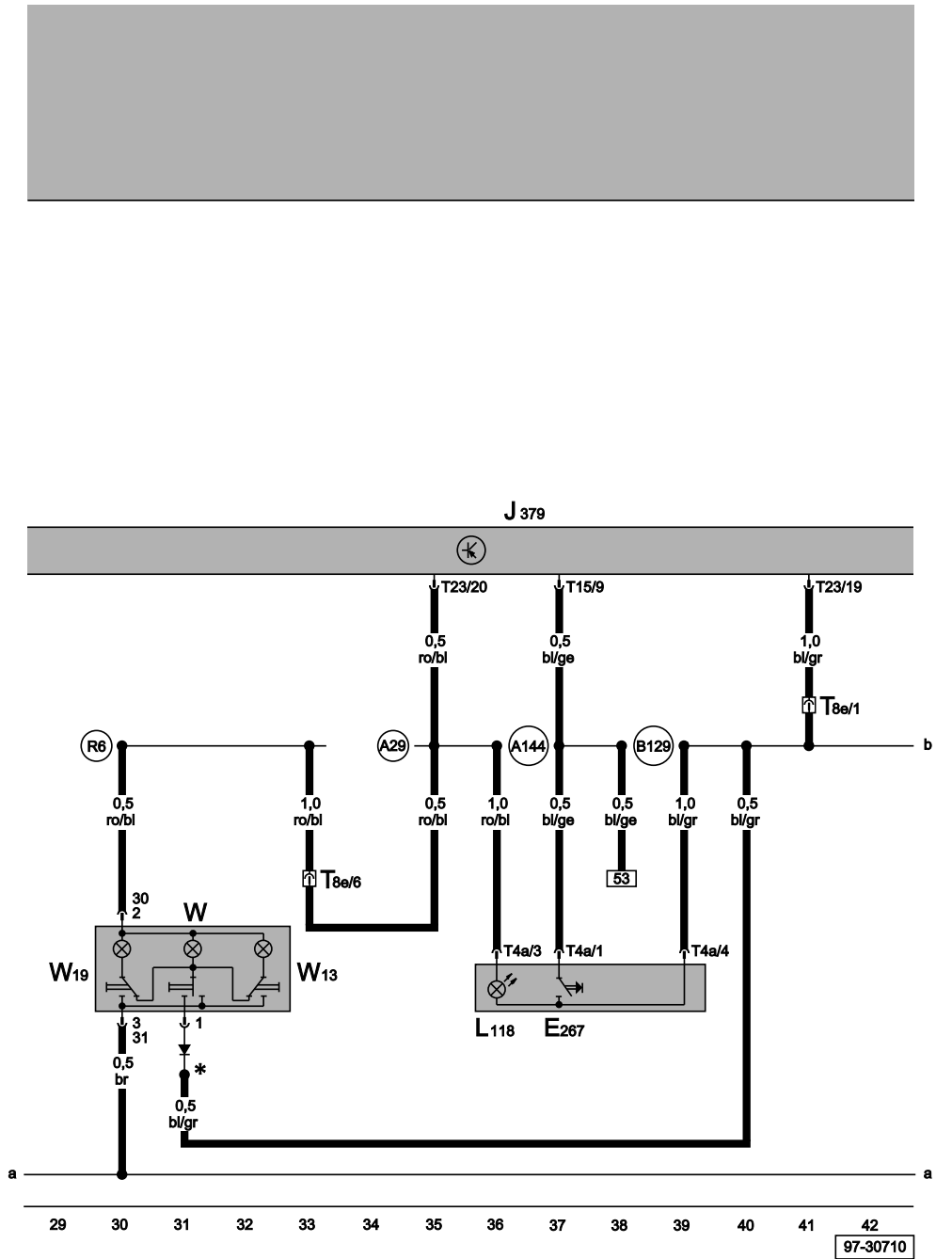
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97-30709

Central locking control unit and anti-theft alarm system, interior monitoring deactivation switch, front interior light, front reading lights

- E267 Interior monitoring deactivation switch
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- L118 Deactivation of interior monitoring system switch illumination
- T4a 4-pin connector
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector
- T23 23-pin connector
- W Interior light, front
- W13 Front passenger reading lamp
- W19 Reading light, driver's side

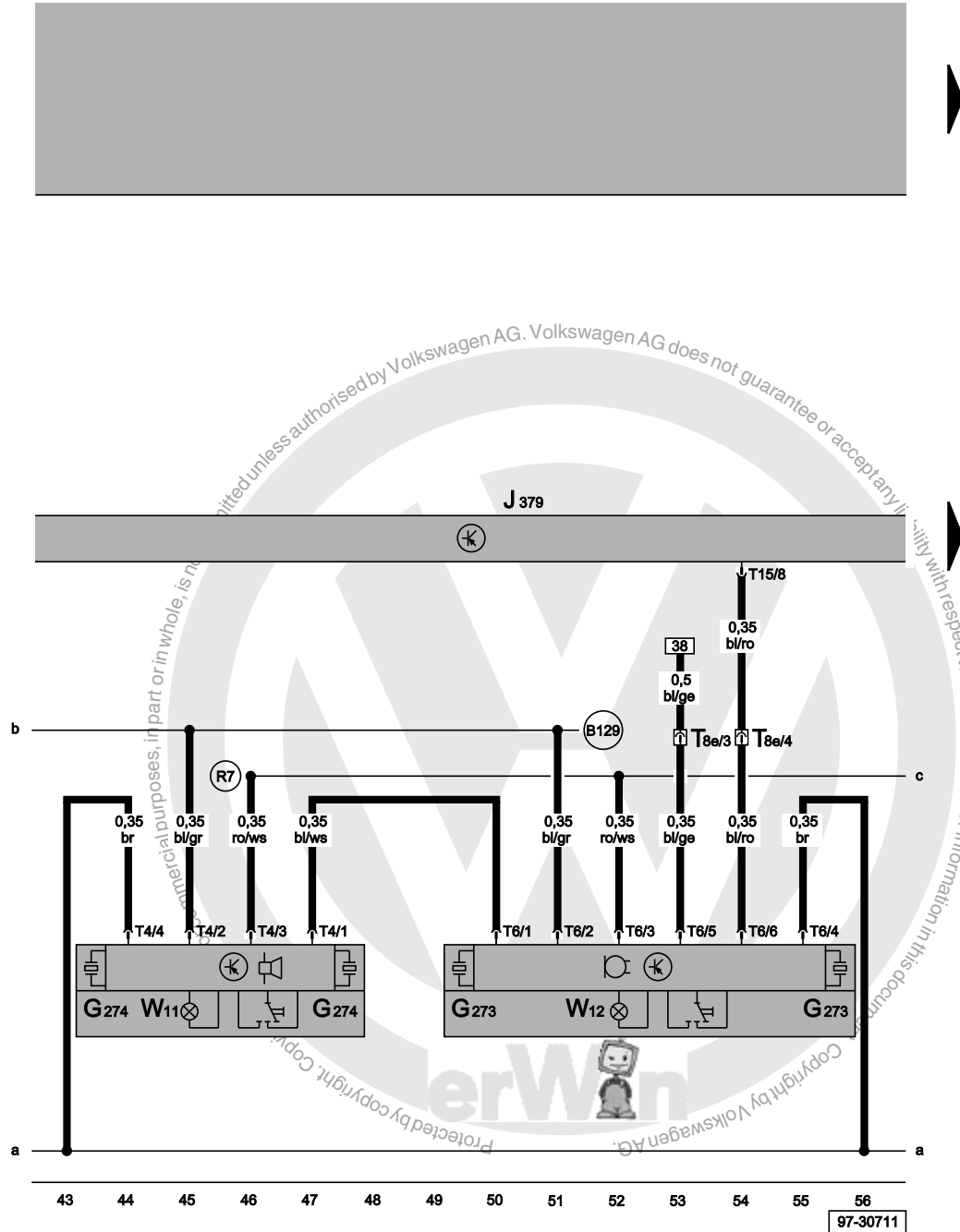
- A29 Connection (interior light), in dash panel wiring harness
- A144 Connection (interior monitoring), in dash panel wiring harness
- B129 Connection (interior light, 31), in interior wiring harness
- R6 Positive (+) connection -1-, in interior light wiring harness
- * Diode in connector housing



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Central locking control unit and anti-theft alarm system, transmitter and sensor for interior monitoring, reading lights rear

- G273 Interior monitoring sensor
- G274 Interior monitoring sender
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T4 4-pin connector
- T6 6-pin connector
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector
- W11 Reading lamp, rear left
- W12 Reading lamp, rear right
- (B129) Connection (interior light, 31), in interior wiring harness
- (R7) Positive (+) connection -2-, in interior light wiring harness

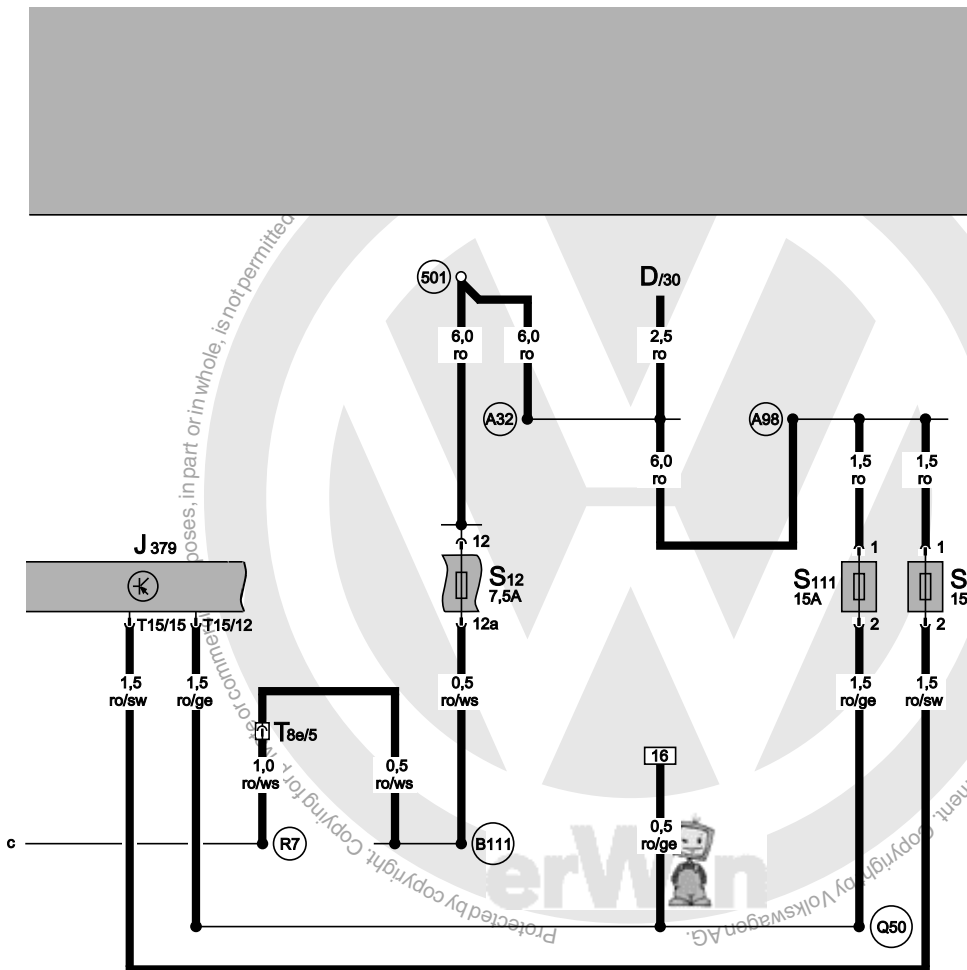


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- or = orange
- rs = pink

Central locking control unit and anti-theft alarm system

- D Ignition/starter switch
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- S12 Fuse in fuse box
- S111 Fuse for anti-theft alarm system
- S144 Anti-theft alarm system/ central locking fuse
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector

- 501 Screw connection -2- (30), on relay plate
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness
- B111 Positive (+) connection -1- (30a), in interior wiring harness
- Q50 Connection (30a), in anti-theft alarm system wiring harness
- R7 Positive (+) connection -2-, in interior light wiring harness

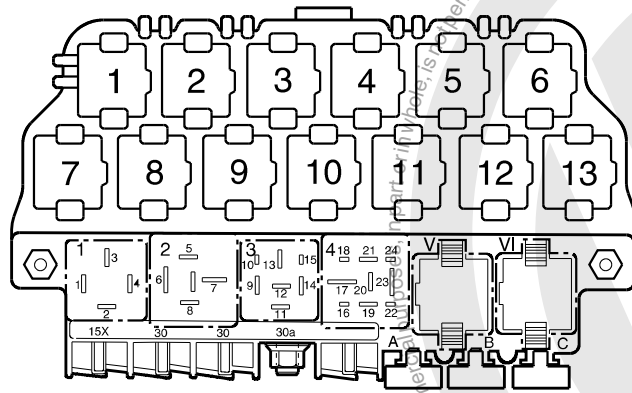


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Interior monitoring (models with convenience system)

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

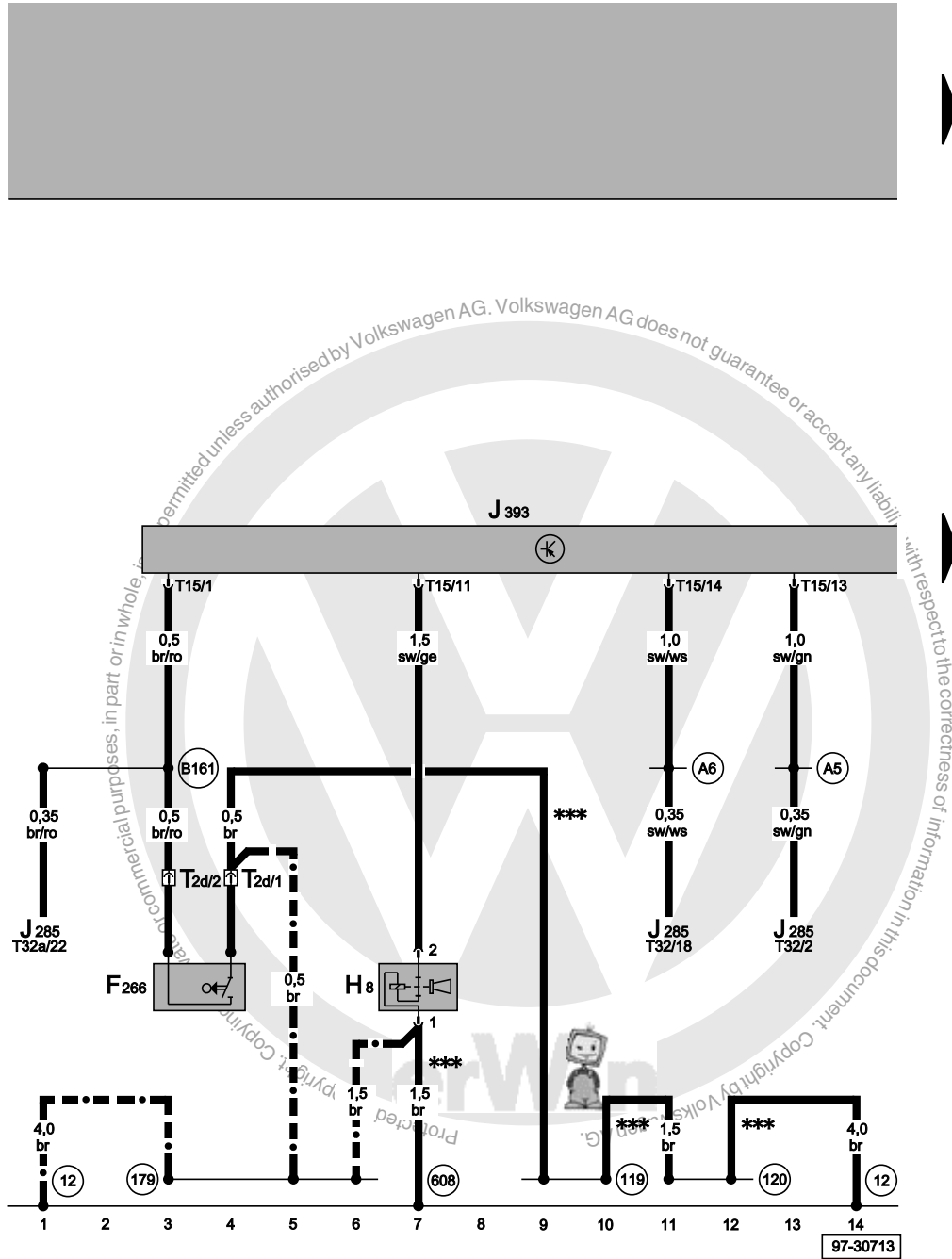
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Convenience system central control unit, anti-theft alarm system horn, bonnet contact switch

- F266 Bonnet contact switch, in lock
- H8 Anti-theft alarm system horn
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind dash panel, left
- T2d 2-pin connector, near headlight, right
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- 608 Earth point, in plenum chamber, centre
- A5 Positive (+) connection (right turn signal), in dash panel wiring harness
- A6 Positive (+) connection (left turn signal), in dash panel wiring harness
- B161 Connection (anti-theft alarm), in interior wiring harness
- *** From May 2000
- Up to April 2000



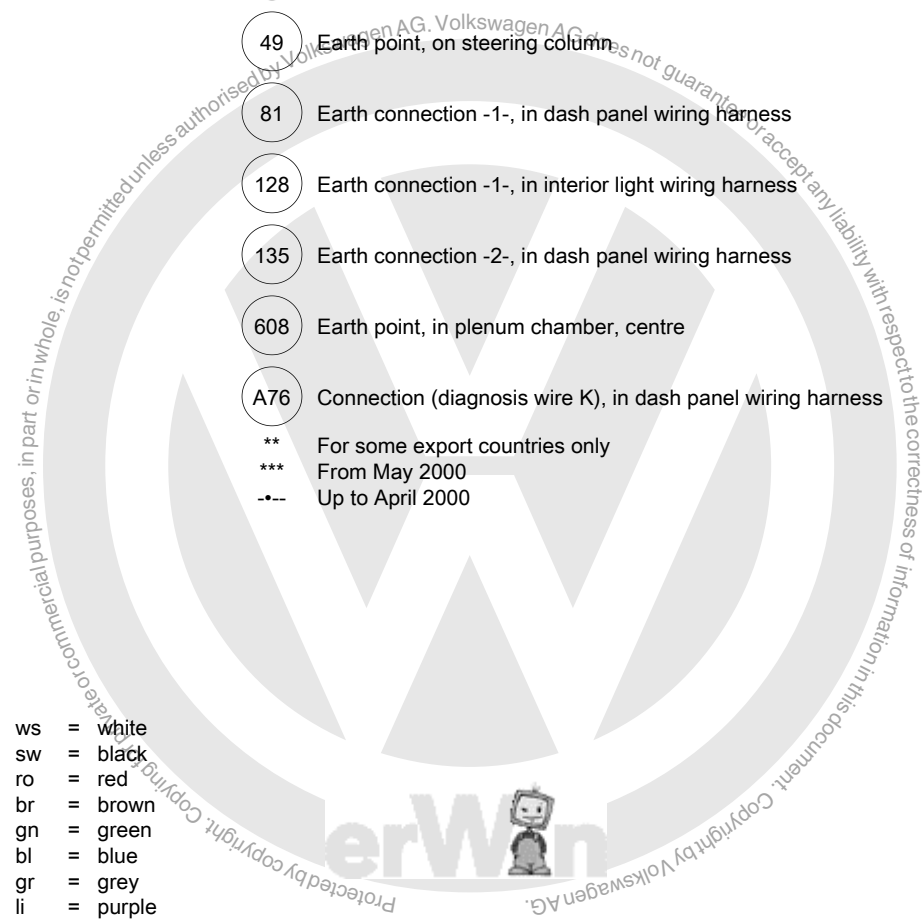
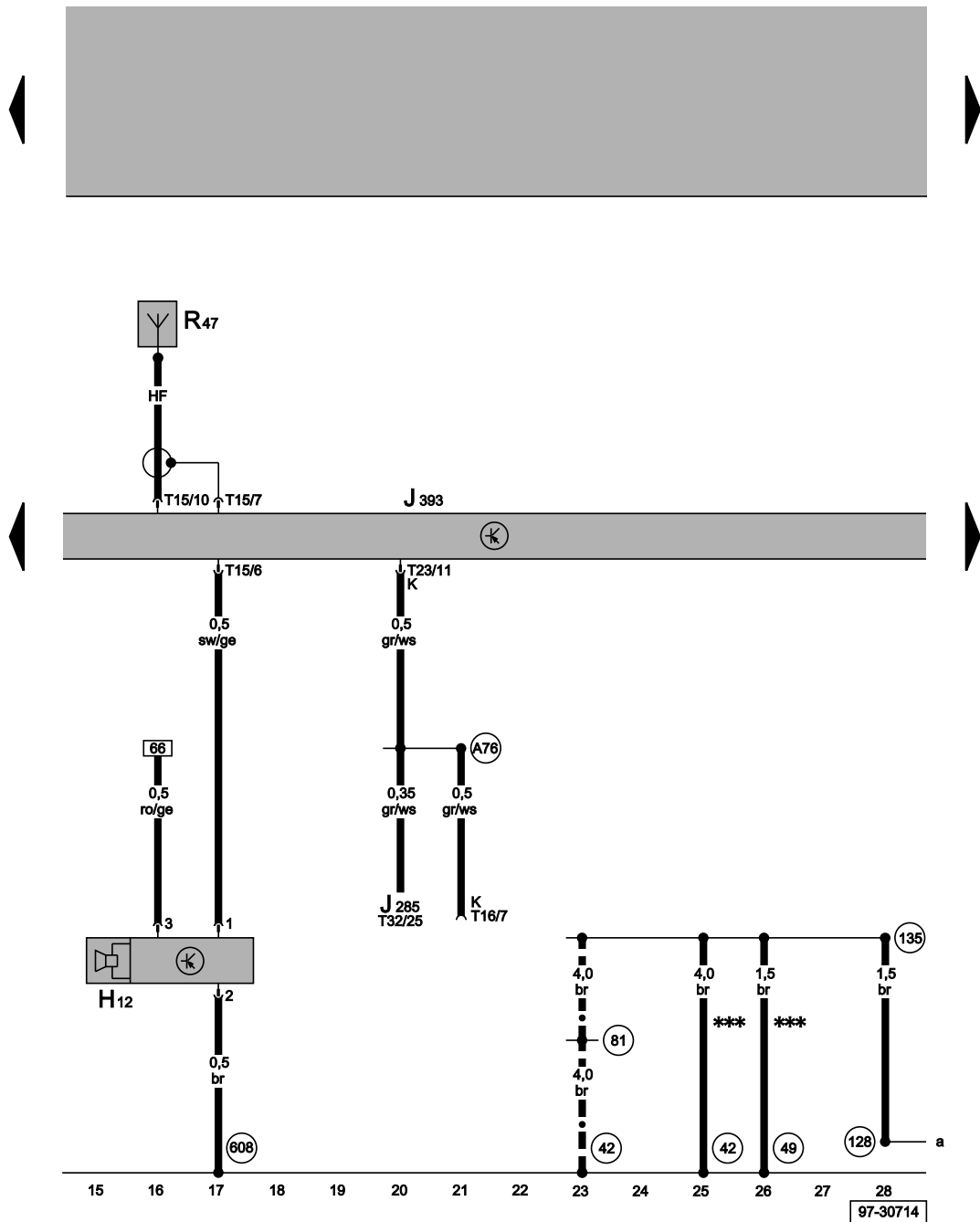
- ws = white
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- or = orange
- rs = pink

97-30713

Convenience system central control unit, alarm horn, central locking and anti-theft alarm system

- H12 Alarm horn**
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind dash panel, left
- R47 Central locking and anti-theft alarm system
- T15 15-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T23 23-pin connector
- T32 32-pin connector, blue

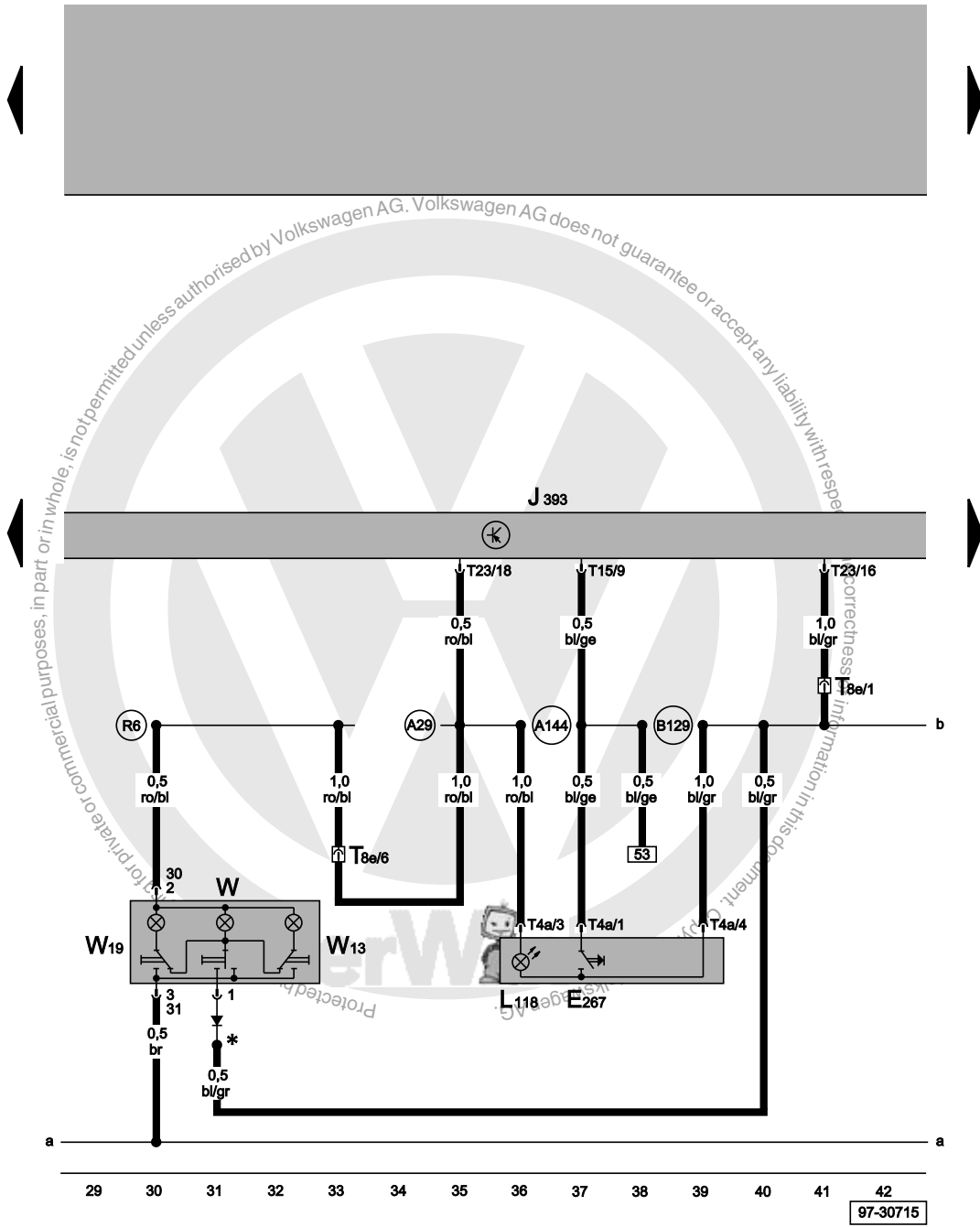
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 128 Earth connection -1-, in interior light wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 608 Earth point, in plenum chamber, centre
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** For some export countries only
- *** From May 2000
- Up to April 2000



Convenience system central control unit, interior monitoring deactivation switch, front interior light, front reading lights

- E267 Interior monitoring deactivation switch
- J393 Convenience system central control unit, behind dash panel, left
- L118 Deactivation of interior monitoring system switch illumination
- T4a 4-pin connector
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector
- T23 23-pin connector
- W Interior light, front
- W13 Reading light, front passenger's side
- W19 Reading light, driver's side

- (A29) Connection (interior light), in dash panel wiring harness
- (A144) Connection (interior monitoring), in dash panel wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R6) Positive (+) connection -1-, in interior light wiring harness
- * Diode in connector housing



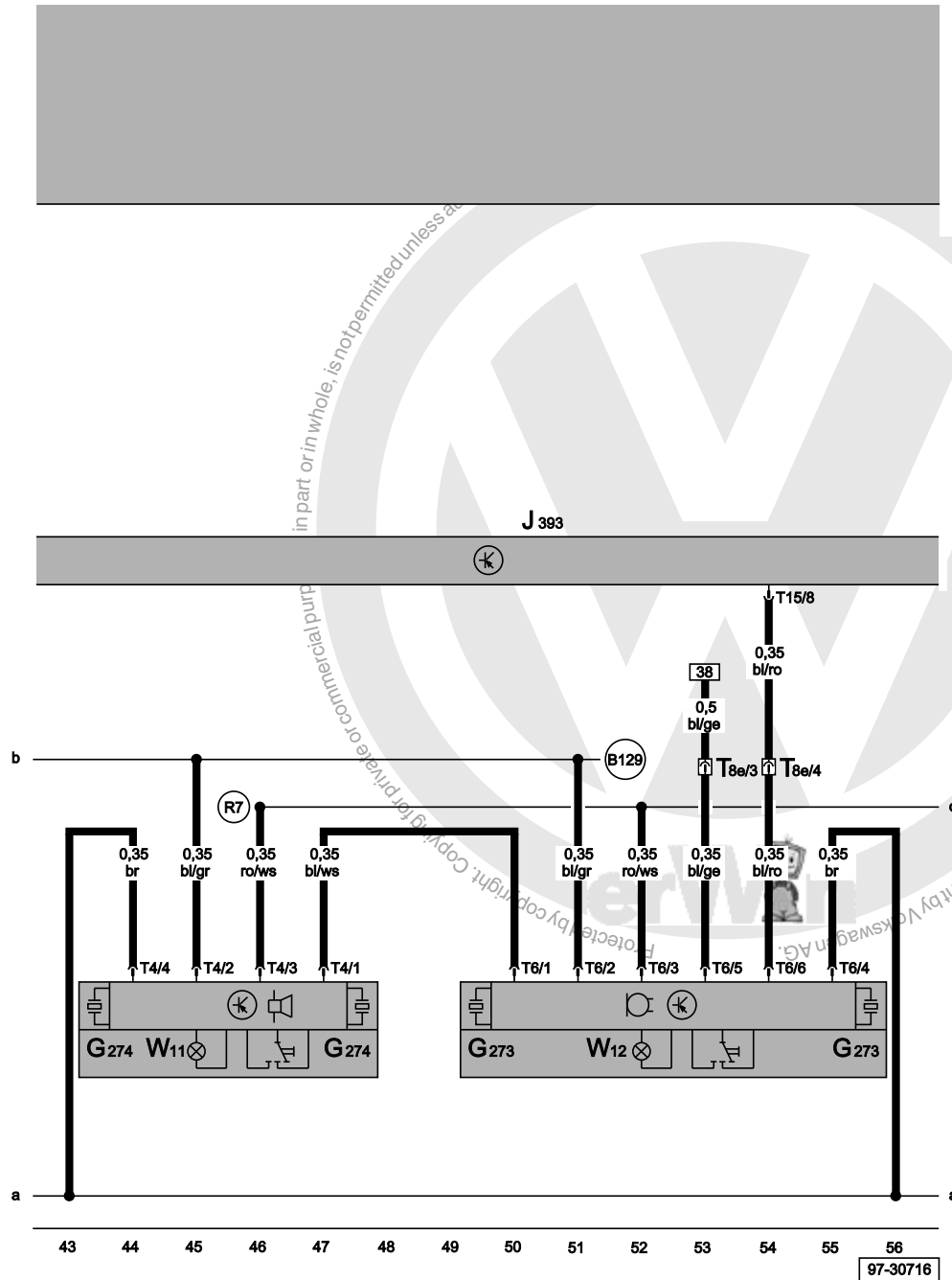
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Convenience system central control unit, sender and sensor for interior monitoring, reading lights rear

- G273 Interior monitoring sensor
- G274 Interior monitoring sender
- J393 Convenience system central control unit, behind dash panel, left
- T4 4-pin connector
- T6 6-pin connector
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector
- W11 Reading lamp, rear left
- W12 Reading lamp, rear right

(B129) Connection (interior light, 31), in interior wiring harness

(R7) Positive (+) connection -2-, in interior light wiring harness

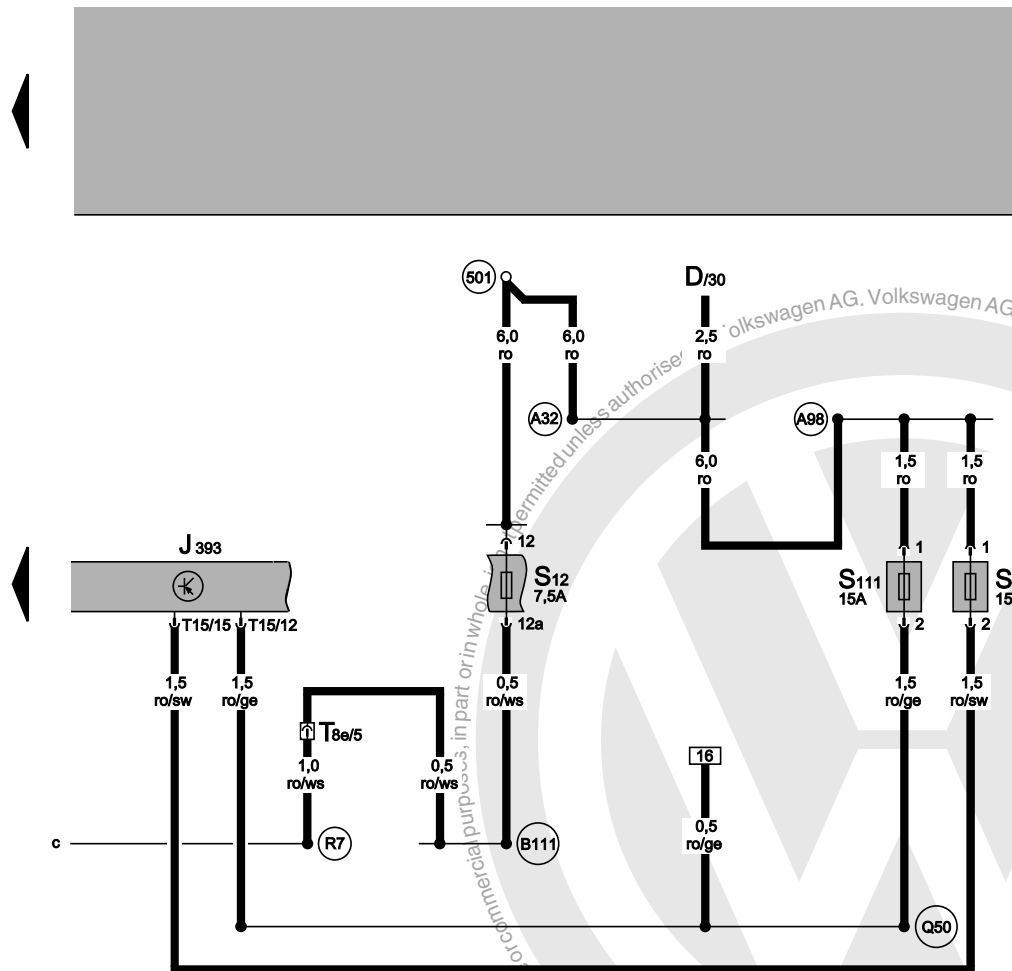


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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Convenience system central control unit

- D Ignition/starter switch
- J393 Convenience system central control unit, behind dash panel, left
- S12 Fuse in fuse box
- S111 Fuse for anti-theft alarm system
- S144 Anti-theft alarm system/ central locking fuse
- T8e 8-pin connector, behind left A-pillar trim
- T15 15-pin connector

- (501) Screw connection -2- (30), on relay plate
- (A32) Positive (+) connection (30), in dash panel wiring harness
- (A98) Positive (+) connection -4- (30), in dash panel wiring harness
- (B111) Positive (+) connection -1- (30a), in interior wiring harness
- (Q50) Connection (30a), in anti-theft alarm system wiring harness
- (R7) Positive (+) connection -2-, in interior light wiring harness

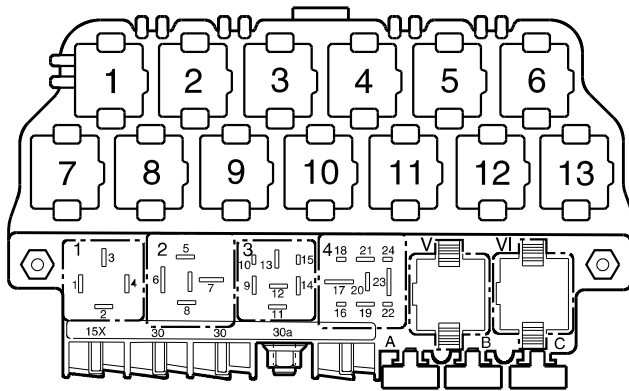


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Sliding / tilting sunroof

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

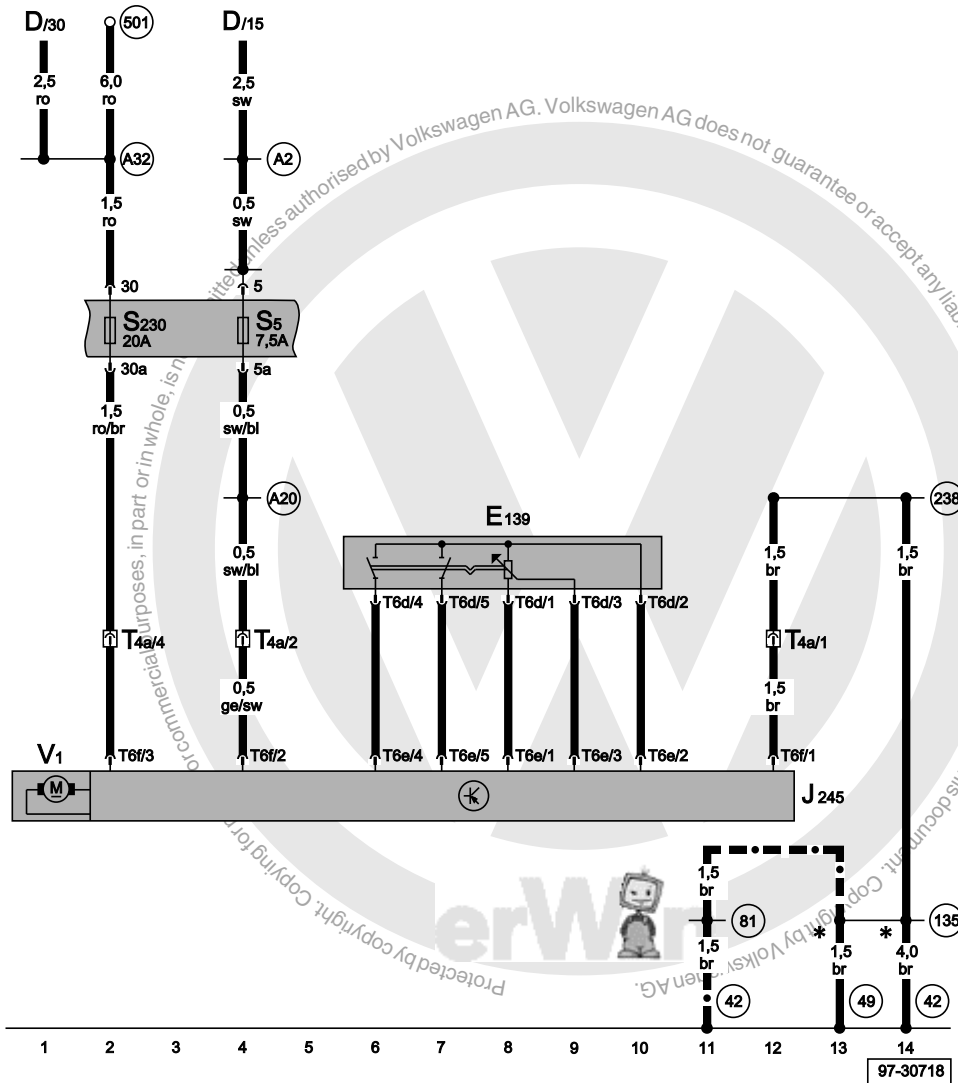
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Sliding sunroof adjustment control unit, sliding sunroof adjustment regulator

- D Ignition/starter switch
- E139 Sliding sunroof adjustment regulator
- J245 Sliding sunroof adjustment control unit, near front interior light
- S5 Fuse in fuse box
- S230 Fuse in fuse box
- T4a 4-pin connector, behind dash panel, left
- T6d 6-pin connector
- T6e 6-pin connector
- T6f 6-pin connector
- V1 Sliding sunroof motor

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 238 Earth connection -1-, in interior wiring harness
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- * From May 2000
- Up to April 2000



Gas discharge headlights with automatic headlight range control

from July 1999

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

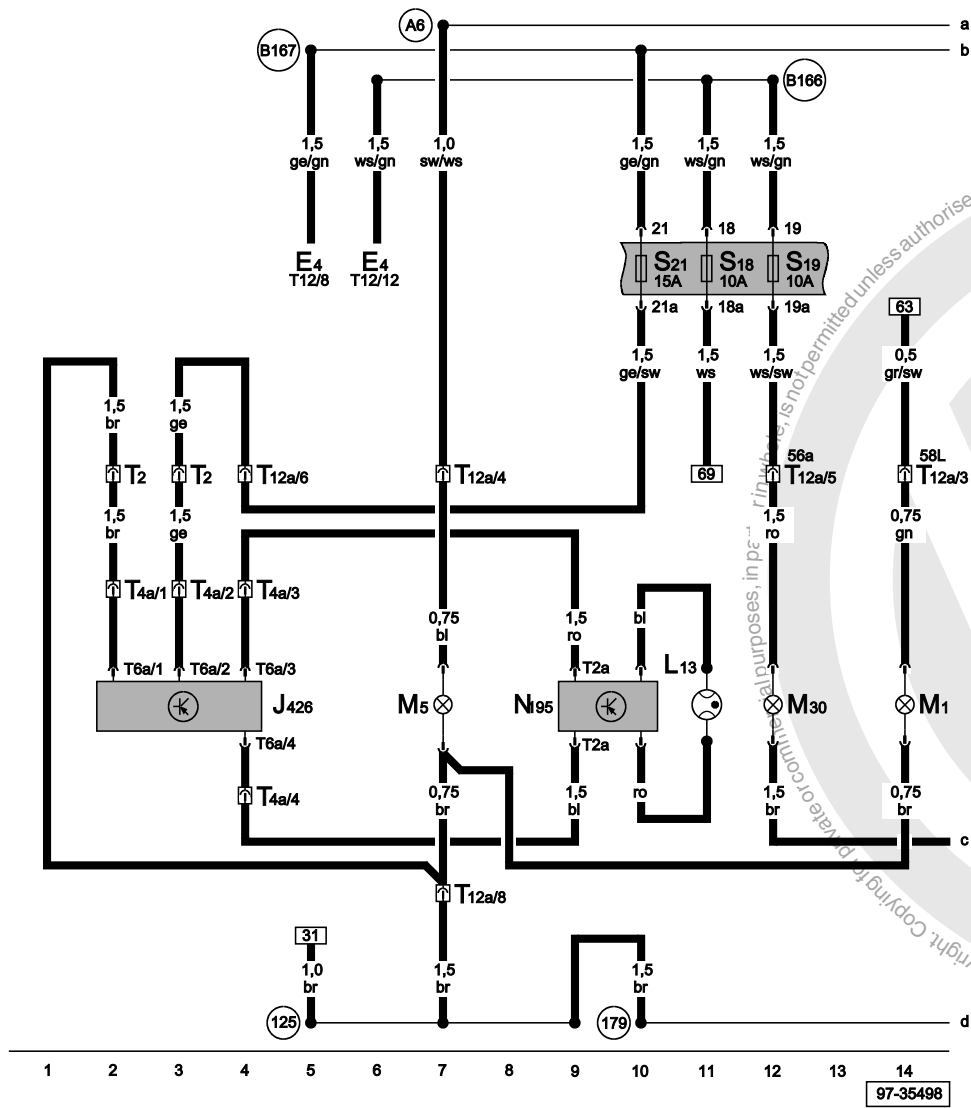
- ⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

- ⇒ guided fault finding

Left gas discharge light control unit, left gas discharge bulb, left main beam bulb, left side light bulb, front left turn signal bulb



- E4 Headlight dipper/flasher switch
- J426 Left headlight starter for gaseous discharge light, behind front left wheel housing
- L13 Left gas discharge (xenon) bulb
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M30 Left main beam bulb
- N195 Gas discharge light starter unit
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T2 2-pin connector
- T2a 2-pin connector
- T4a 4-pin connector, on left headlight
- T6a 6-pin connector
- T12 12-pin connector
- T12a 12-pin connector, on left headlight
- 125 Earth connection 3, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness

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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

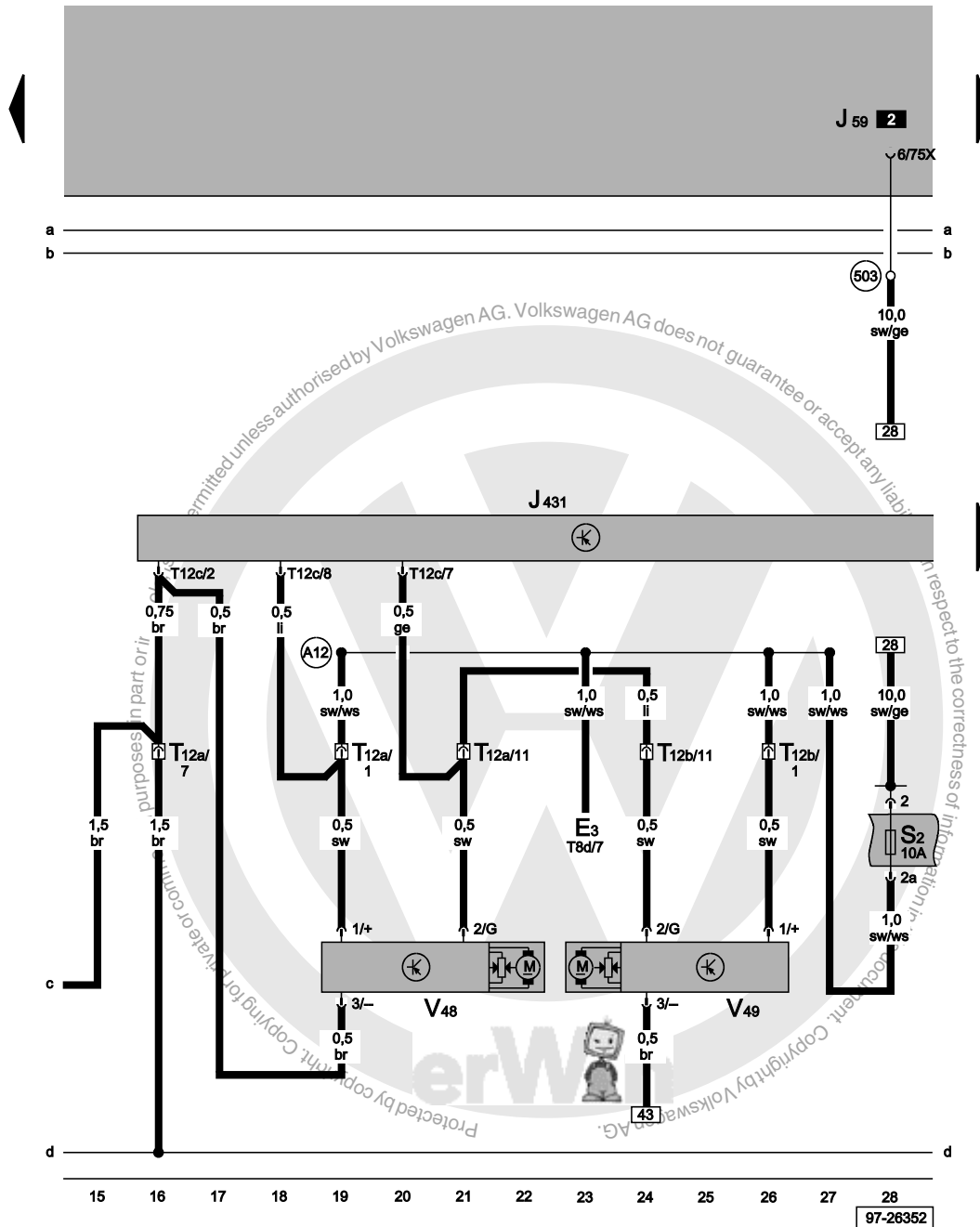
Headlight range control, control unit, headlight range control motor

- E3 Hazard warning light switch
- J59 X-contact relief relay
- J431 Control unit for headlight range control, in left headlight
- S2 Fuse 2 in fuse holder
- T8d 8-pin connector**
- T12c 12-pin connector
- T12a 12-pin connector, on left headlight
- T12b 12-pin connector, on right headlight
- V48 Left headlight range control motor
- V49 Right headlight range control motor

A12 Positive connection (75a), in dash panel wiring harness

503 Screw connection (75x), on relay plate

** Connection numbering of turn signal relay can vary, see fault finding programme!



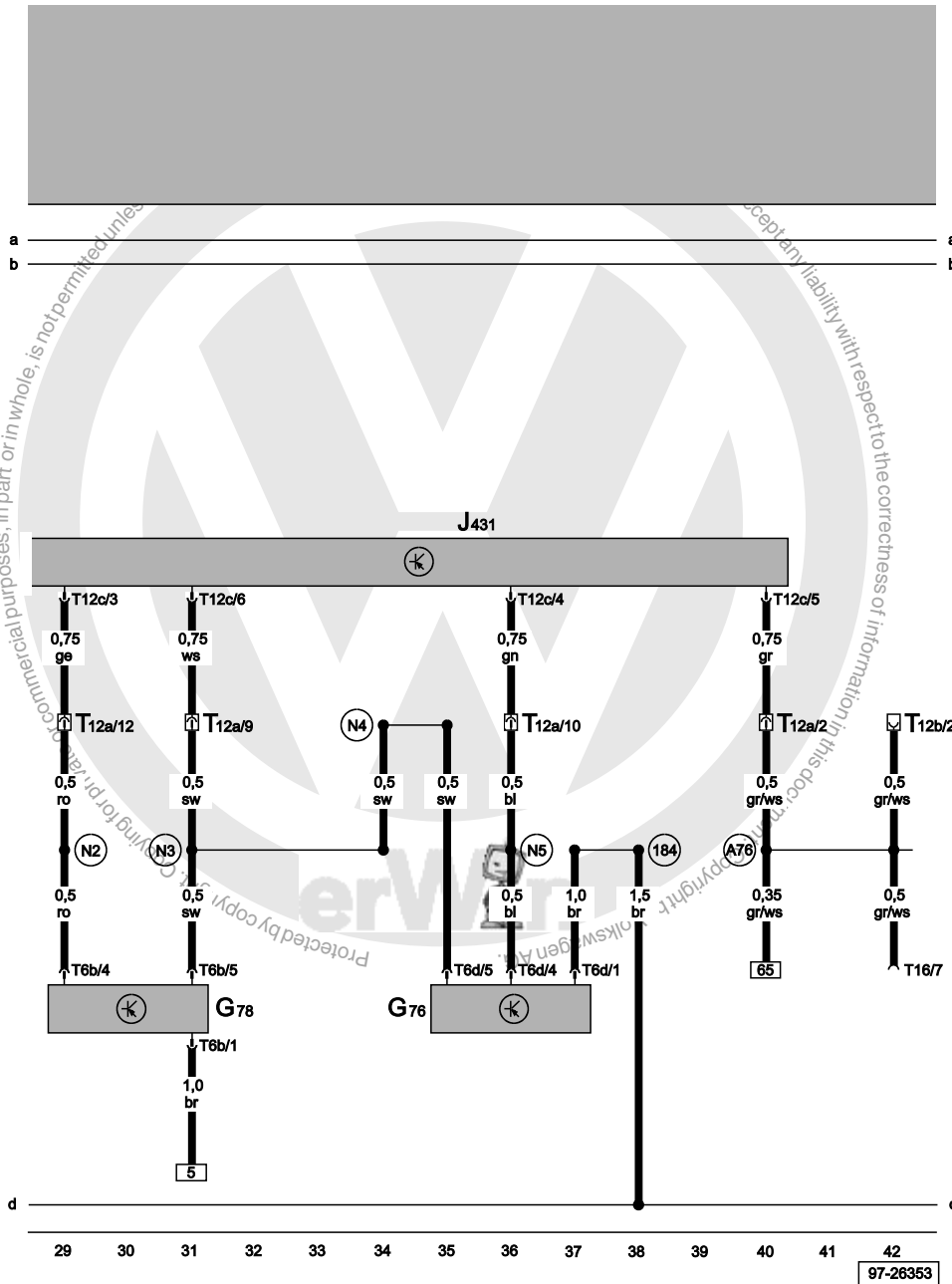
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- rs = pink

Control unit for headlight range control, vehicle inclination sender

- G76 Rear left vehicle level sender
- G78 Front left vehicle level sender
- J431 Control unit for headlight range control, in left headlight
- T6b 6-pin connector
- T6d 6-pin connector
- T12a 12-pin connector, on left headlight
- T12b 12-pin connector, on right headlight
- T12c 12-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection

- (184) Earth connection (headlight range control), in engine compartment wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (N2) Connection 1, in headlight range control wiring harness
- (N3) Connection 2, in headlight range control wiring harness
- (N4) Connection 3, in headlight range control wiring harness
- (N5) Connection 4, in headlight range control wiring harness

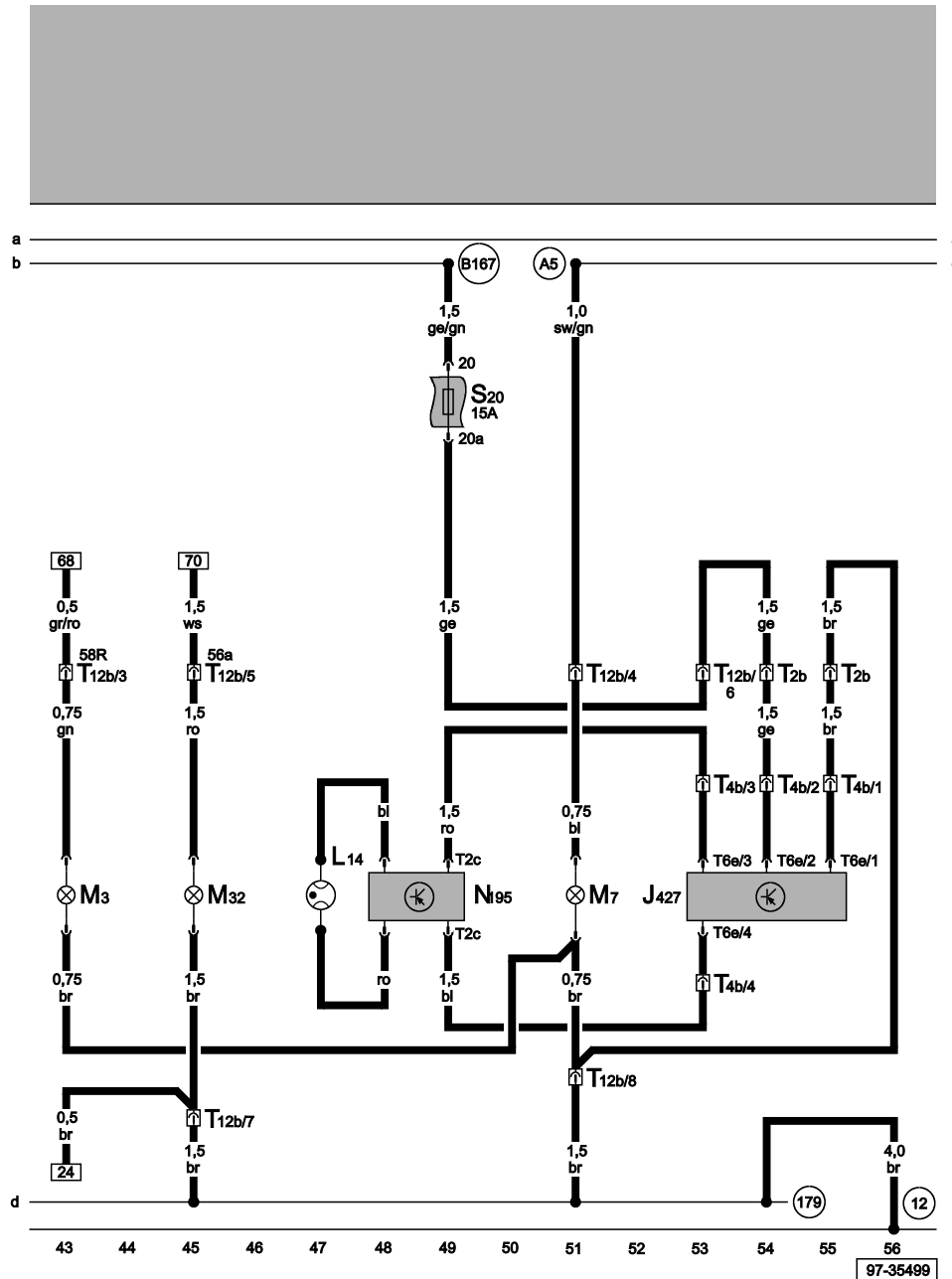
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Right gas discharge light control unit, right gas discharge bulb, right main beam bulb, right side light bulb, front right turn signal bulb

- J427 Right headlight starter for gaseous discharge light, behind front right wheel housing
- L14 Right gas discharge (xenon) bulb
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M32 Right main beam bulb
- N195 Gas discharge light starter unit
- S20 Fuse 20 in fuse holder
- T2b 2-pin connector
- T2c 2-pin connector
- T4b 4-pin connector
- T6e 6-pin connector
- T12b 12-pin connector, on right headlight

- 12 Earth point, on left in engine compartment
- 179 Earth connection, in left headlight wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- B167 Connection (56b), in interior wiring harness

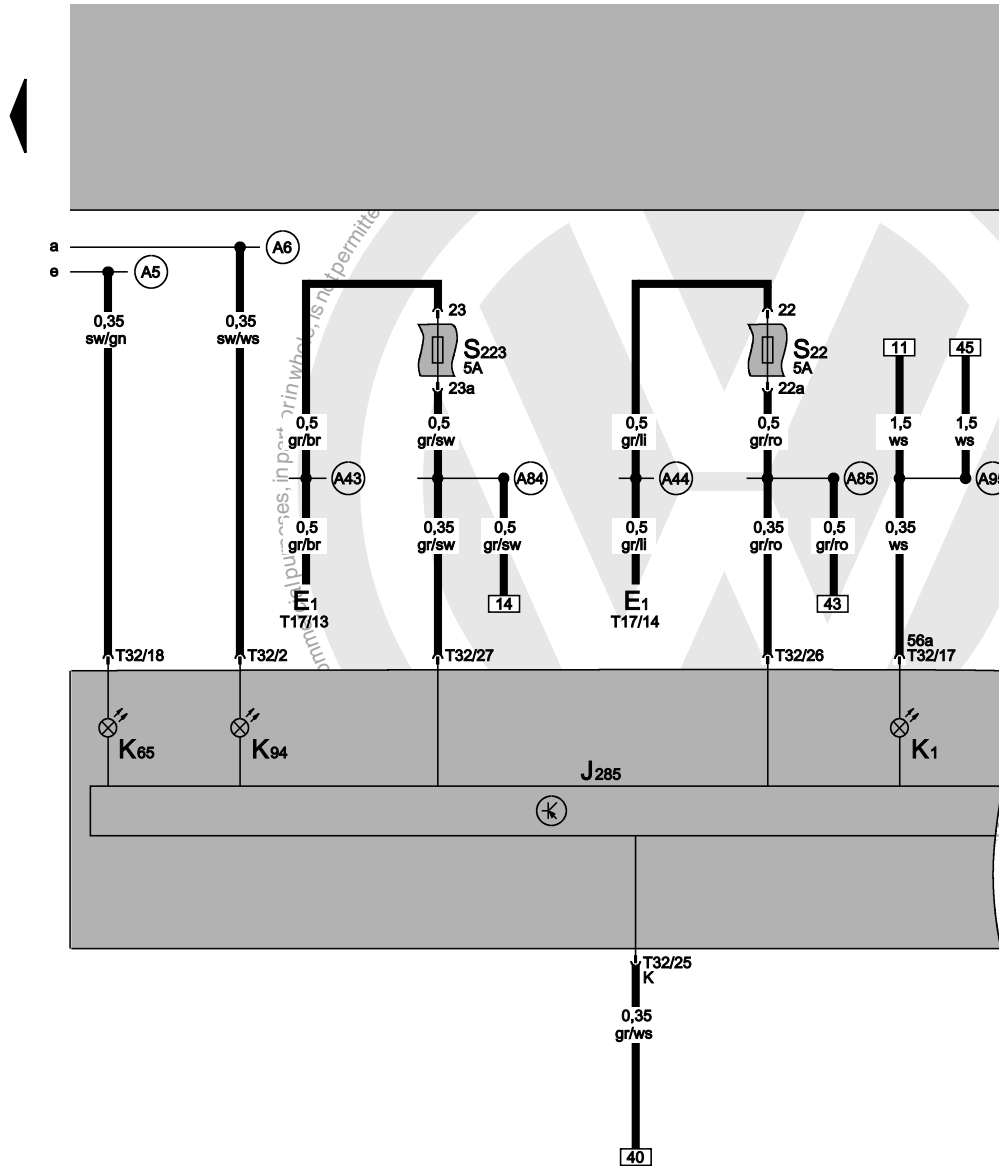


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, turn signal warning lamp, main beam warning lamp

- E1 Light switch
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T17 17-pin connector
- T32 32-pin connector, blue

- (A5) Positive connection (right turn signal), in dash panel wiring harness
- (A6) Positive connection (left turn signal), in dash panel wiring harness
- (A43) Connection (57L), in dash panel wiring harness
- (A44) Connection (57R), in dash panel wiring harness
- (A84) Connection (58L), in dash panel wiring harness
- (A85) Connection (58R), in dash panel wiring harness
- (A95) Connection 1 (56a), in dash panel wiring harness

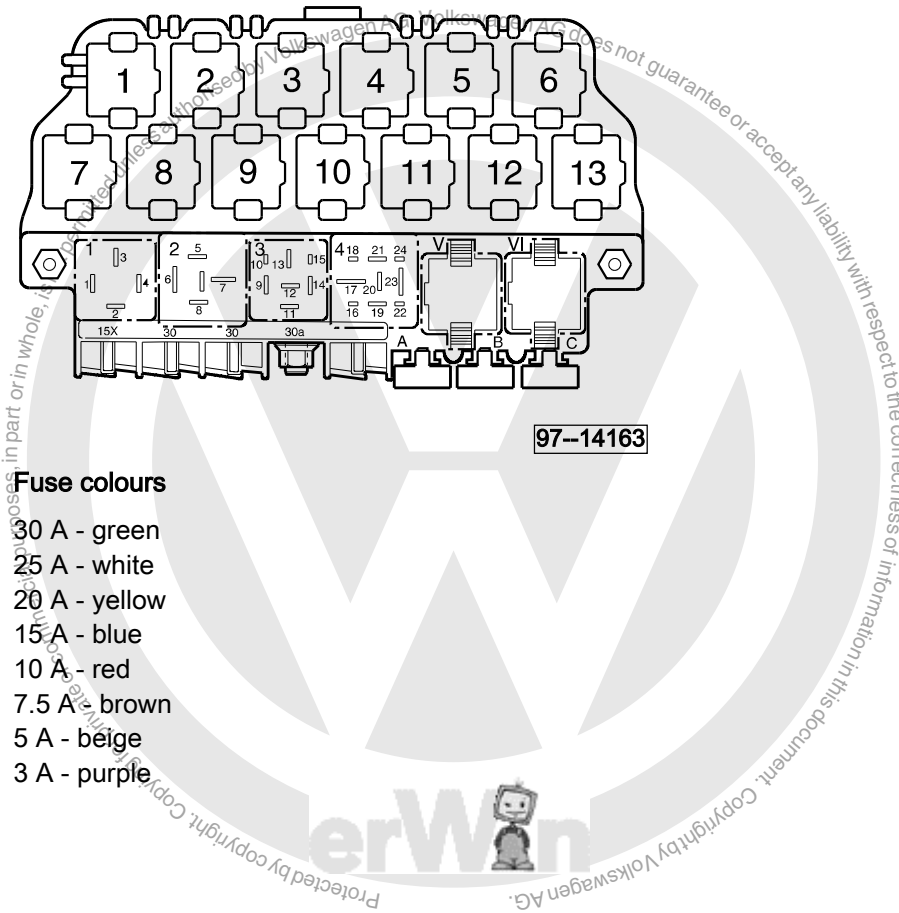


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- gn = green
- bl = blue
- gr = grey
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- ge = yellow
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CAN-bus network, drive train

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring-see "Fitting locations" section.



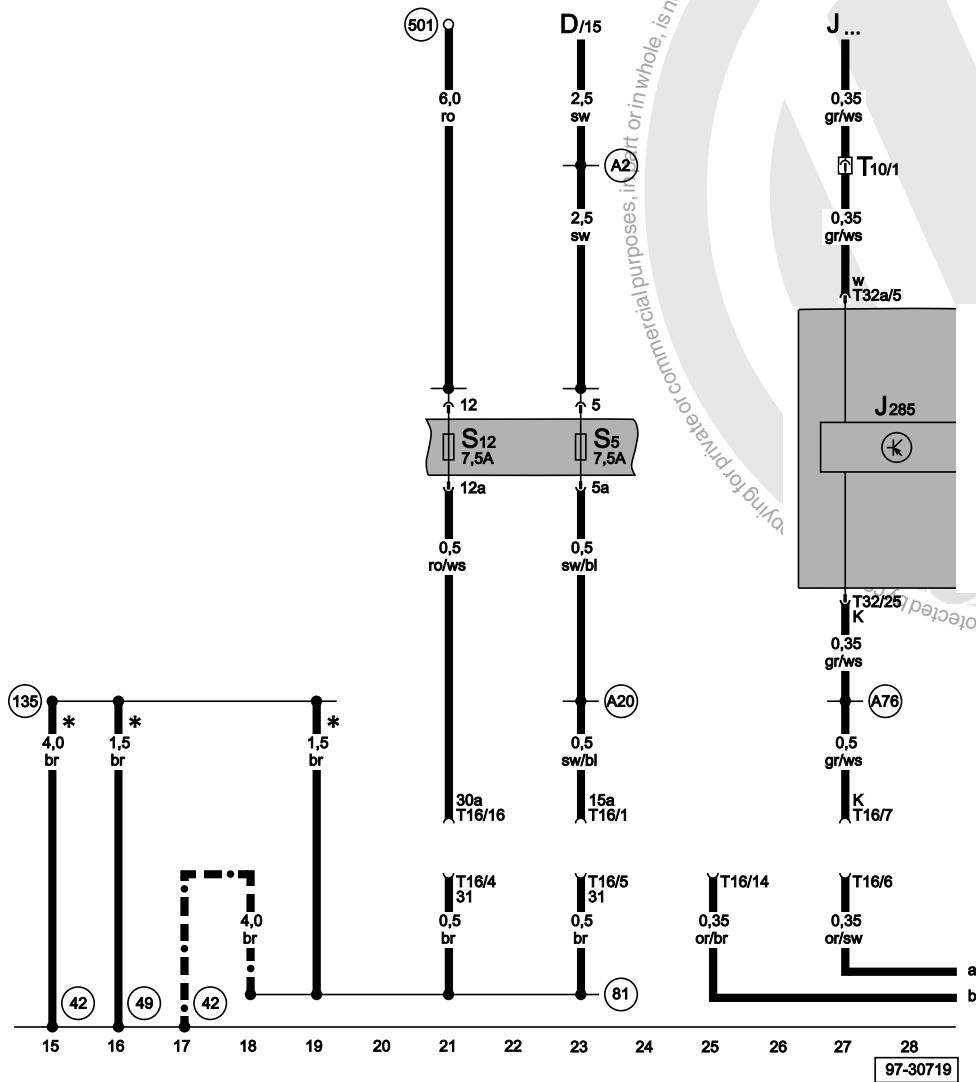
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Dash panel insert, self-diagnosis connection

- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J... Engine control units
- S5 Fuse in fuse box
- S12 Fuse in fuse box
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * From May 2000
- Up to April 2000



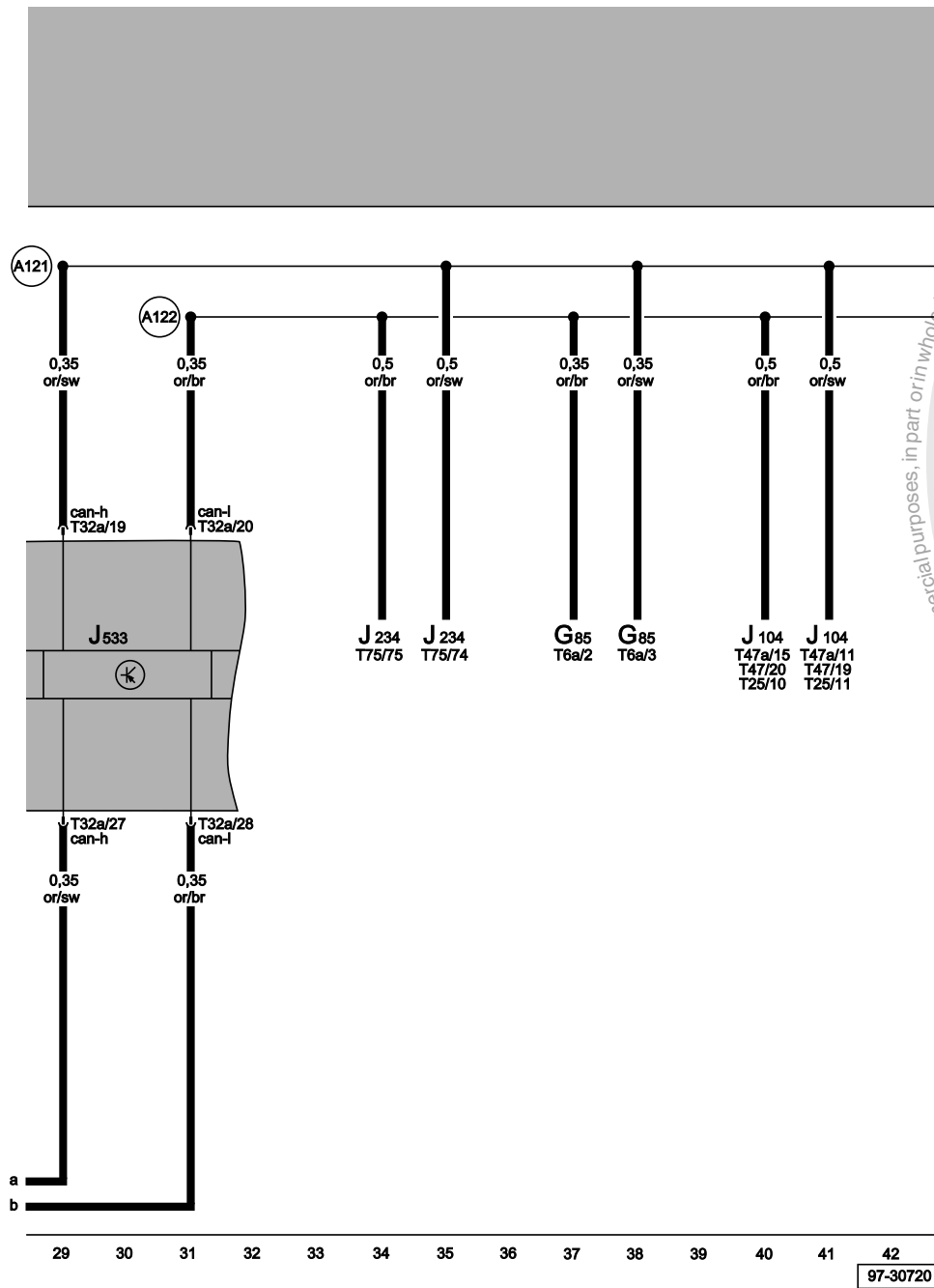
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97-30719

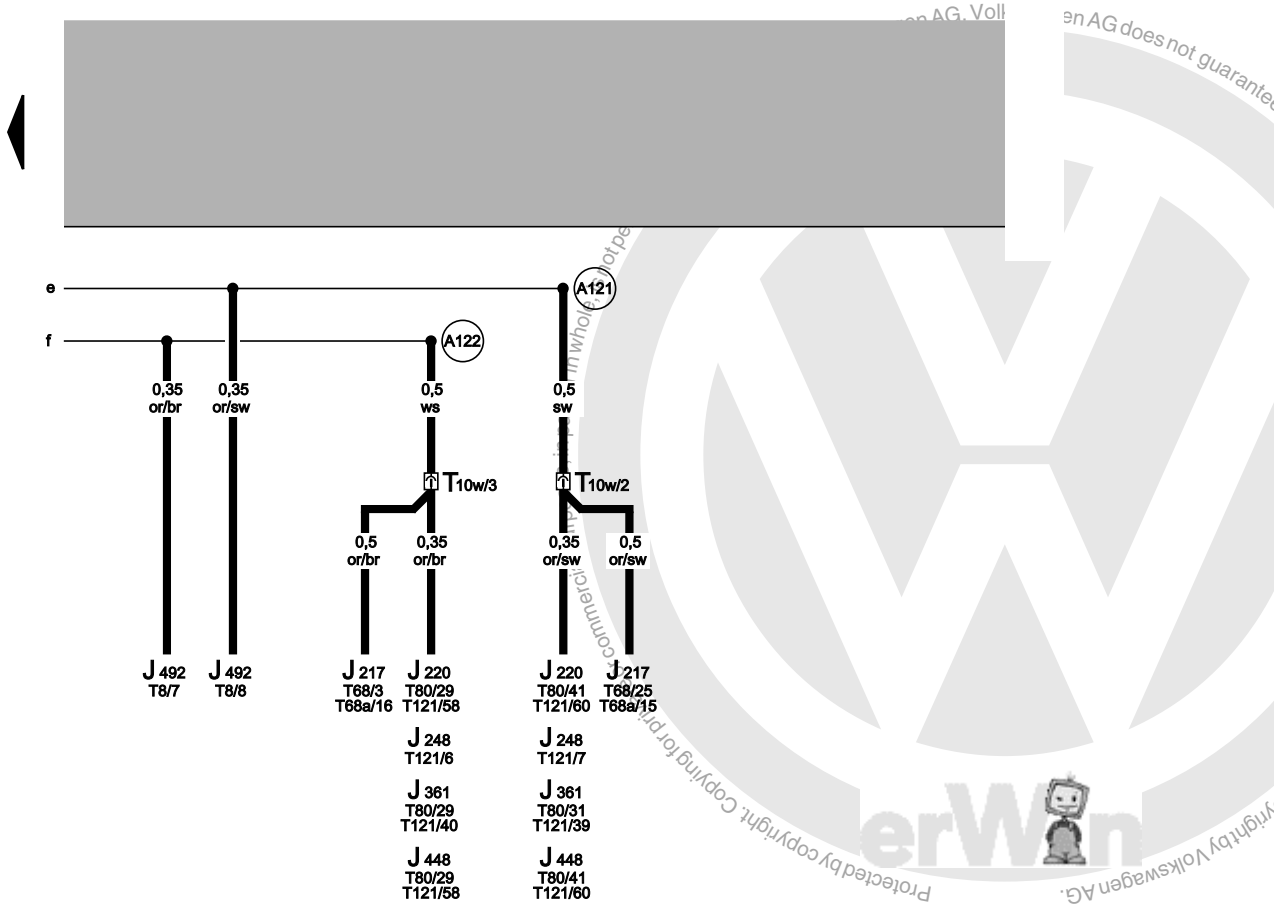
Dash panel insert, data bus diagnostic interface,
connection for: steering angle sender, airbag control unit,
ABS/ABS with EDL control unit

- G85 Steering angle sender, on steering column
- J104 ABS/ABS with EDL control unit
- J234 Airbag control unit
- J533 Data bus diagnostic interface, in dash panel insert
- T6a 6-pin connector, on ABS/ABS with EDL control unit
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T32a 32-pin connector, green
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T75 75-pin connector

- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Connection for: four-wheel drive control unit, automatic gearbox control unit, engine control units

- J217 Automatic gearbox control unit
- J220 Motronic control unit
- J248 Diesel direct injection system control unit
- J361 Simos control unit
- J448 4AV/4LV/4MV control unit (injection system)
- J492 Four-wheel drive control unit, near rear final drive
- T8 8-pin connector
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)
- T80 80-pin connector
- T121 121-pin connector
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness

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1.6 litre/77kW 4LV, engine codes ATN

From November 1999

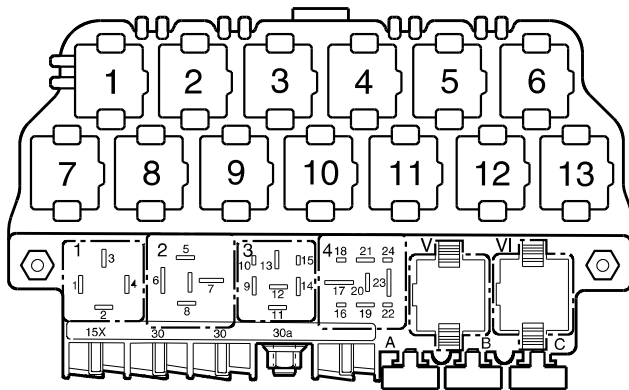
1.6 litre/77kW 4MV, engine codes AUS

From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

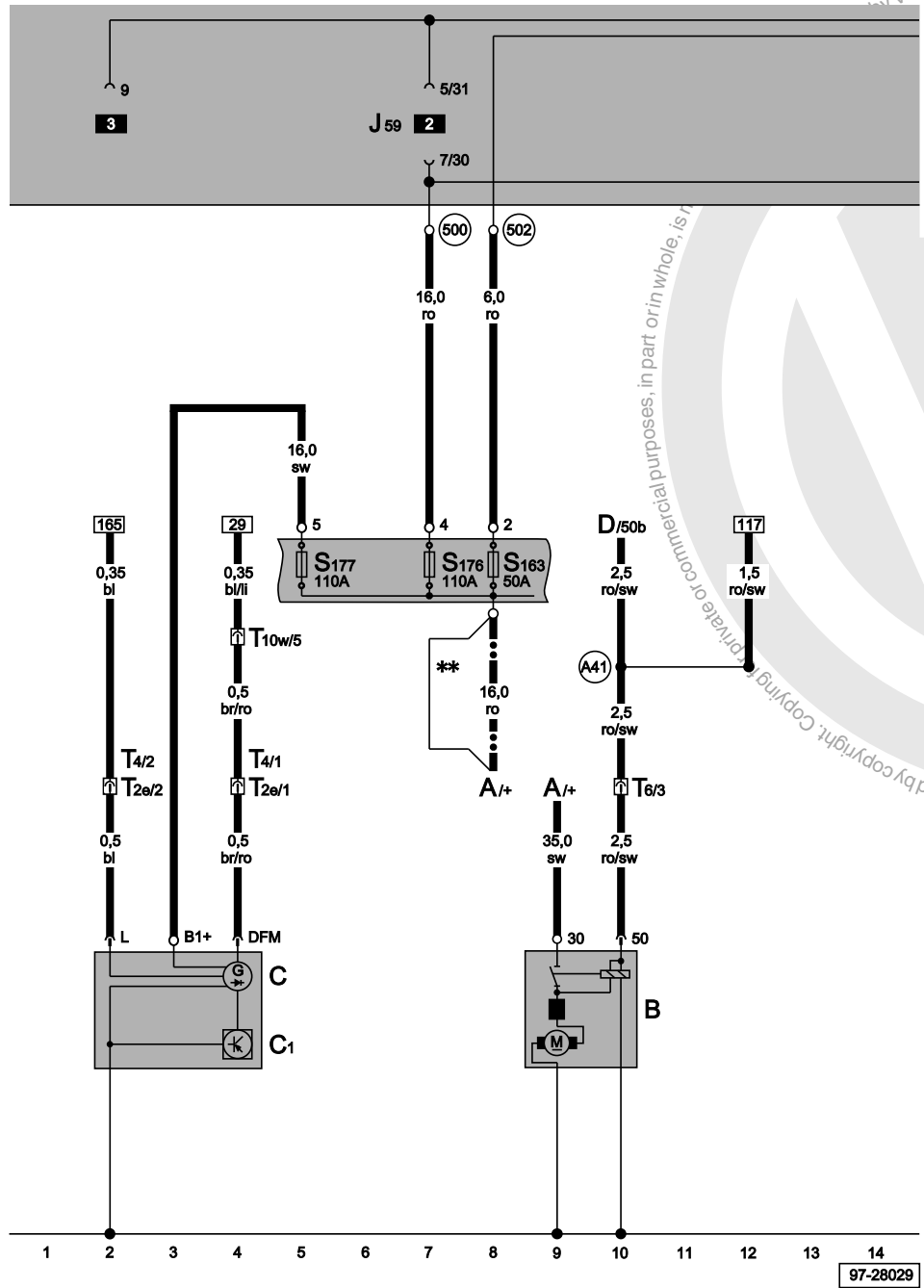
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown



5 A - beige
3 A - lilac





Alternator, starter

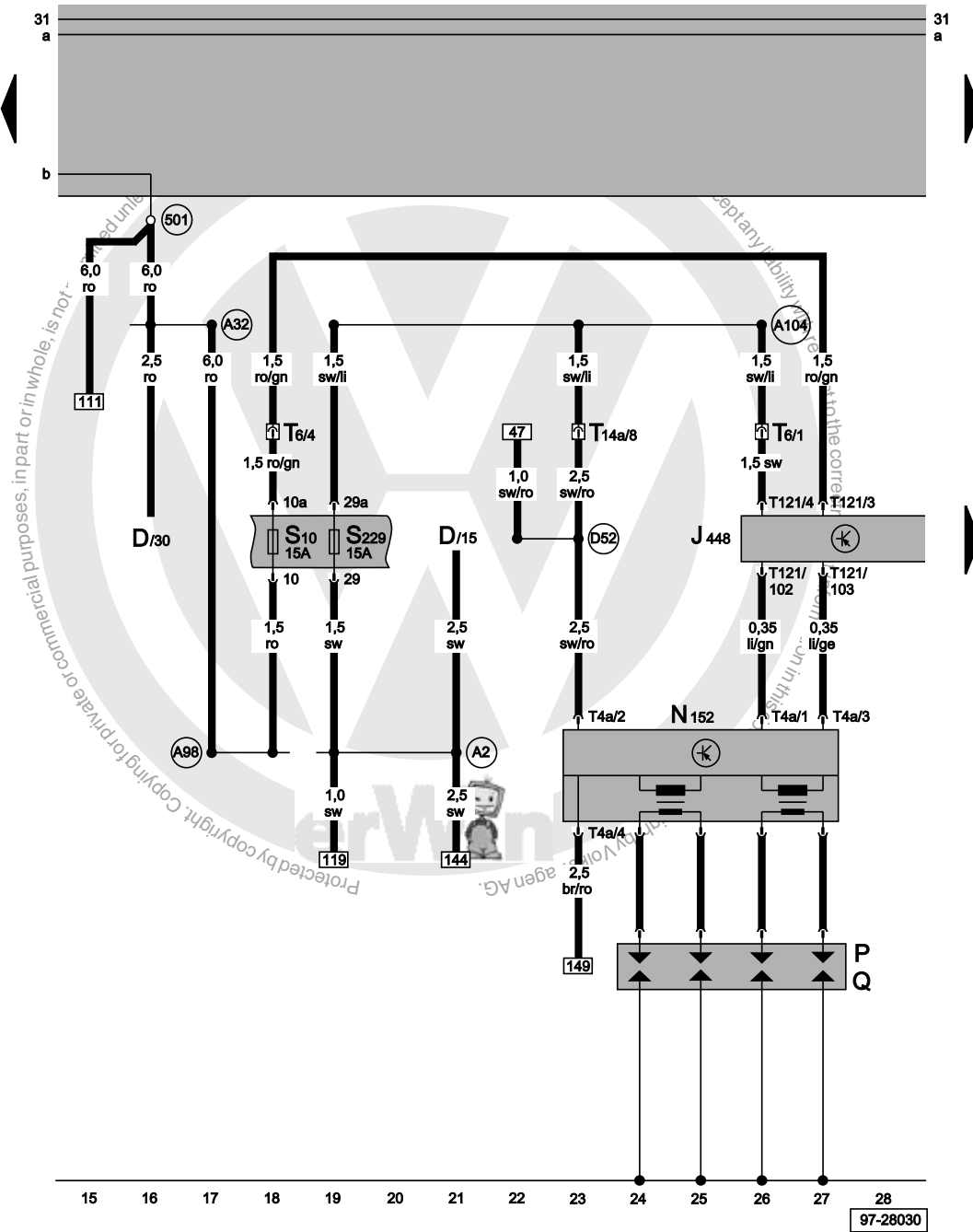
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- A41 Positive (+) connection (50), in dash panel wiring harness
- ** Up to August 2000
- From September 2000

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- bl = blue
- gr = grey
- li = purple
- ge = yellow
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4LV/4MV control unit (injection system), ignition system

- D Ignition/starter switch
- J448 4LV/4MV control unit (injection system), in plenum chamber, centre
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plug
- S10 Fuse in fuse box
- S229 Fuse in fuse box
- T4a 4-pin connector
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

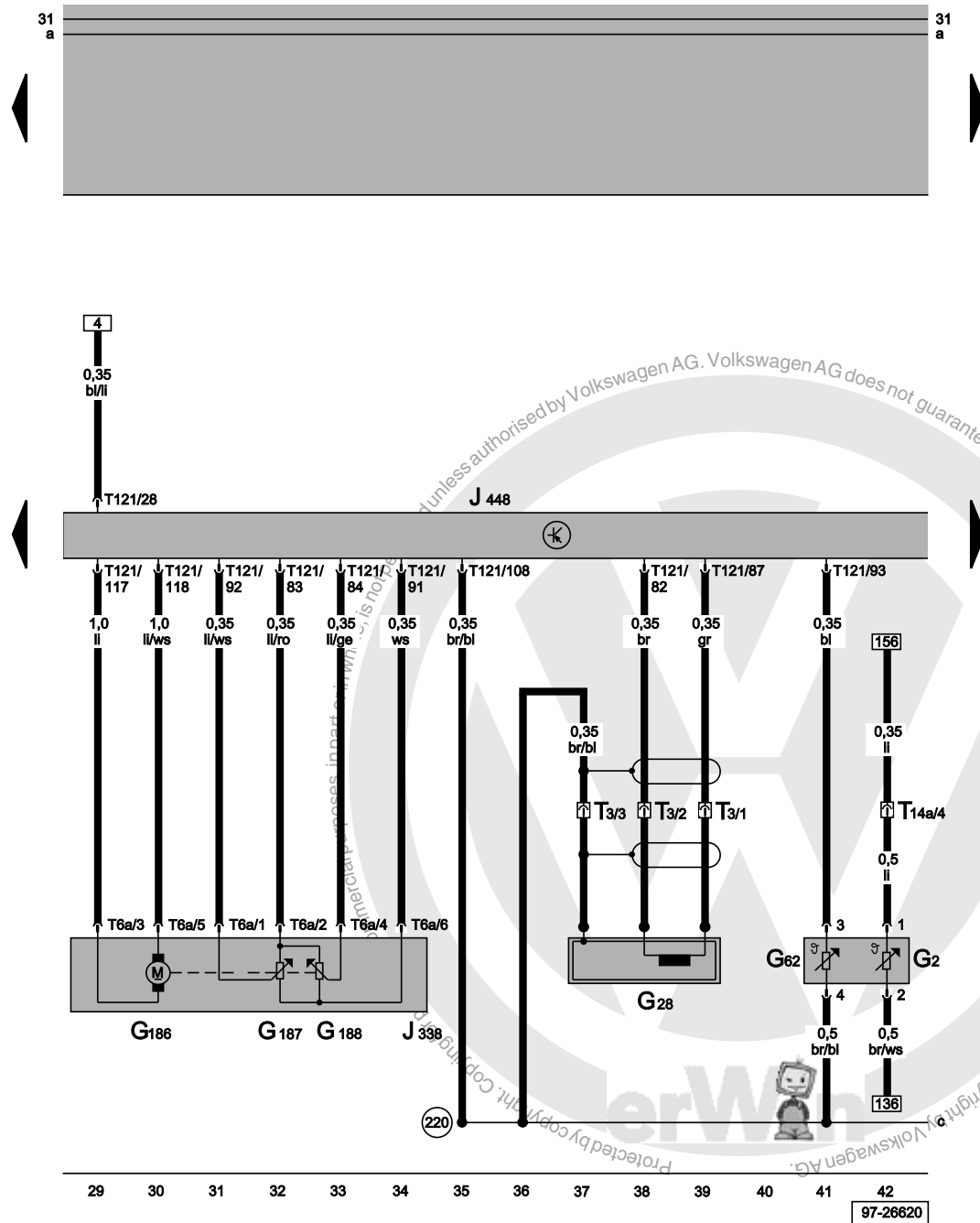
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness
- D52 Positive (+) connection (15a), in engine compartment wiring harness



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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

4LV/4MV control unit (injection system), throttle valve control unit, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric throttle operation)
- G187 Throttle valve drive angle sender -1- (electric throttle operation)
- G188 Throttle valve drive angle sender -2- (electric throttle operation)
- J338 Throttle valve control unit
- J448 4LV/4MV control unit (injection system), in plenum chamber, centre
- T3 3-pin connector, on engine front
- T6a 6-pin connector
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness



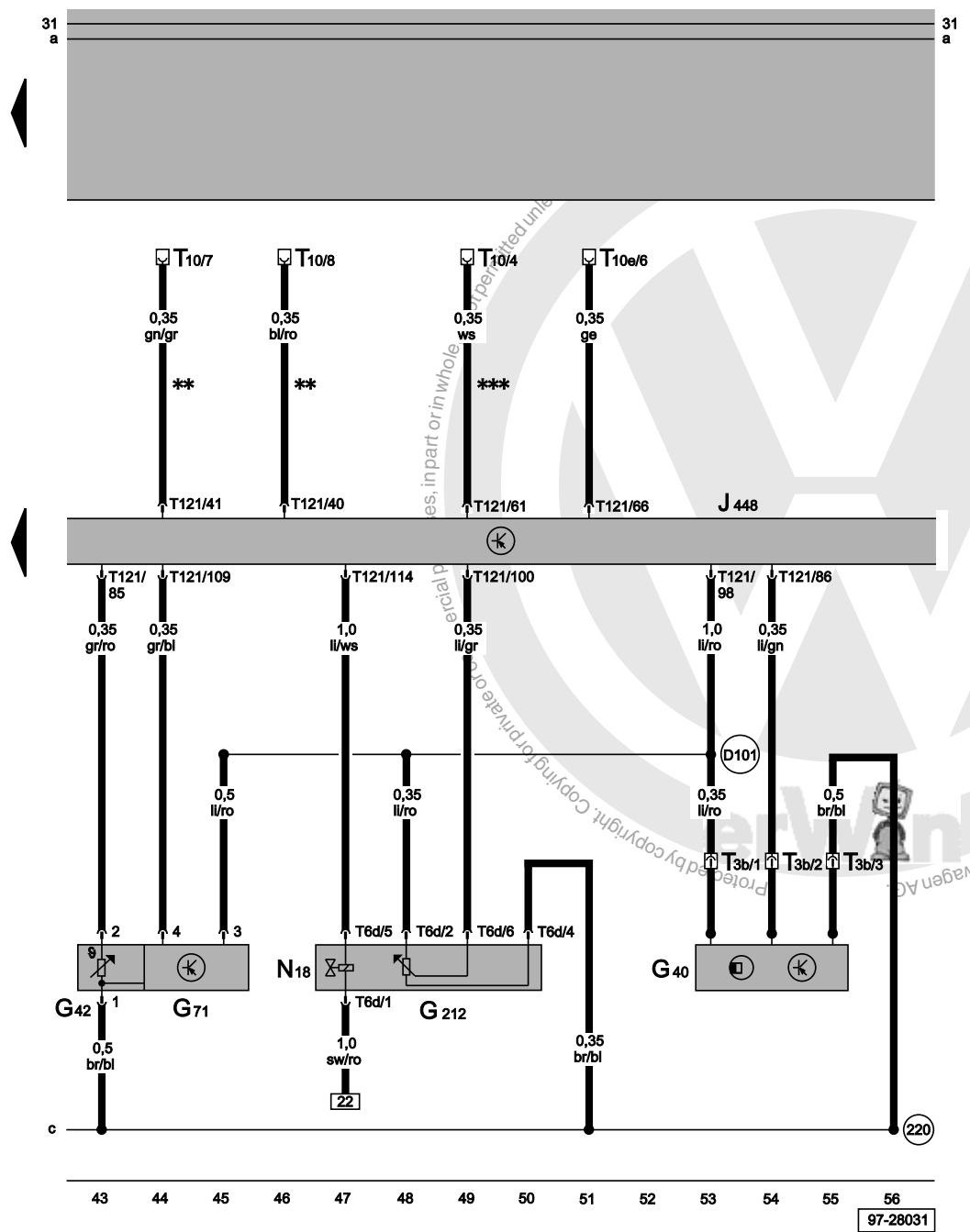
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4LV/4MV control unit (injection system), intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, hall sender

- G40 Hall sender
- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- J448 4LV/4MV control unit (injection system), in plenum chamber, centre
- N18 Exhaust gas recirculation valve
- T3b 3-pin connector, on cylinder head
- T6d 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness

- D101 Connection -1-, in engine compartment wiring harness
- ** Connection for air conditioner
- *** Radiator fan control unit

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- sw = black
- ro = red
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- gn = green
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- gr = grey
- li = purple
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- or = orange
- rs = pink

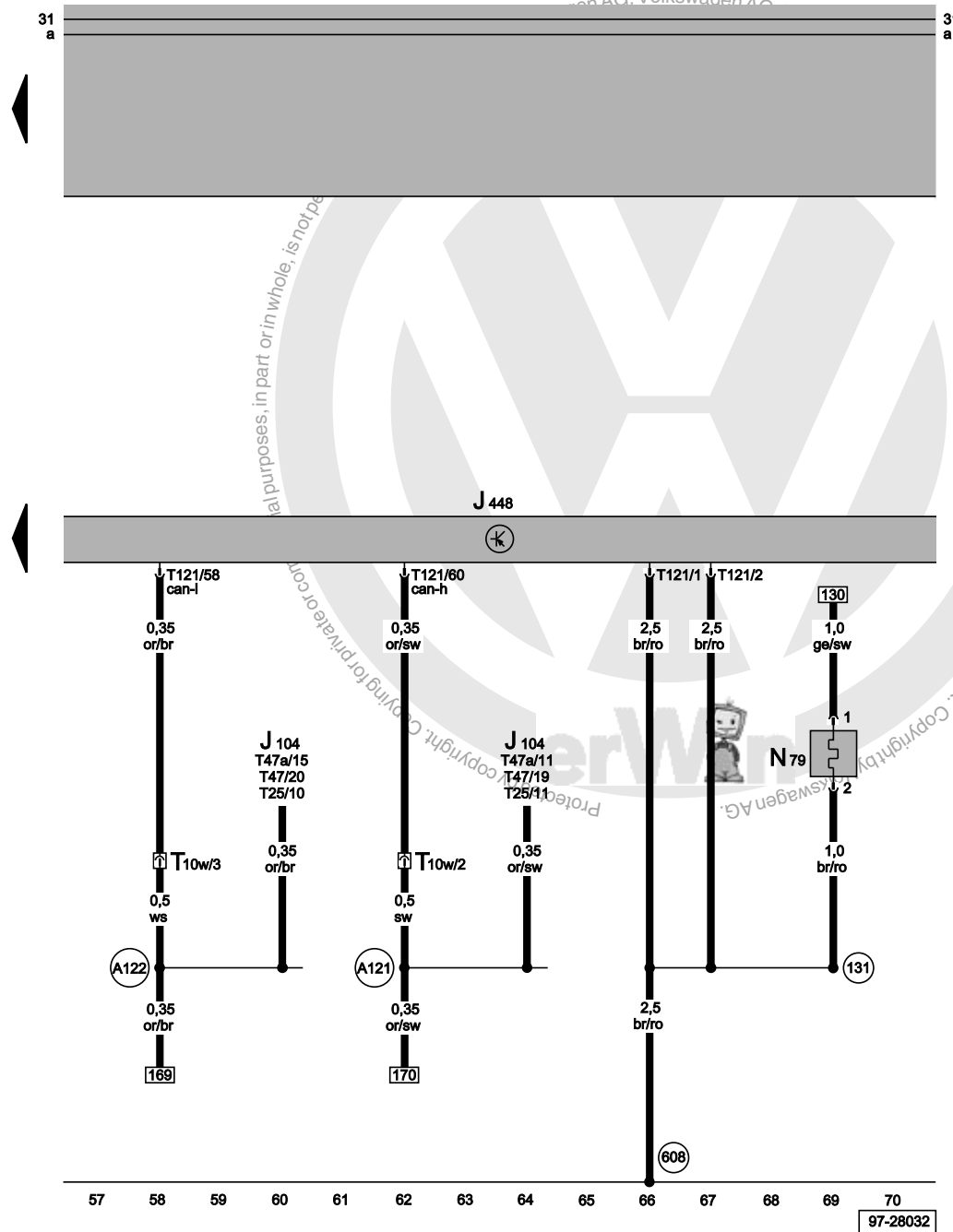


97-28031

4LV/4MV control unit (injection system), heater element (crankcase breather)

- J104 ABS/ABS with EDL control unit
- J448 4LV/4MV control unit (injection system), in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T25 25-pin connector, on ABS/ABS with EDL control unit
- T47 47-pin connector, ABS with EDL/TCS/ESP control unit (up to July 2000)
- T47a 47-pin connector, ABS/ABS with EDL/TCS/ESP control unit (from August 2000)
- T121 121-pin connector

- (131) Earth connection -2-, in engine compartment wiring harness
- (608) Earth point, in plenum chamber, centre
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness

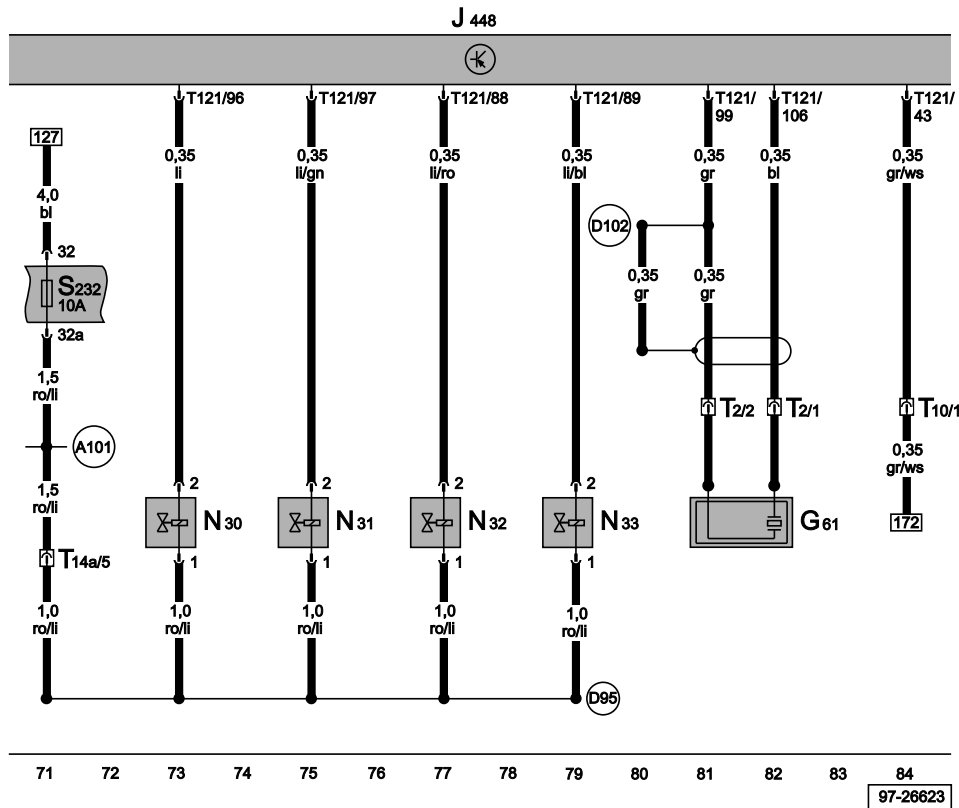
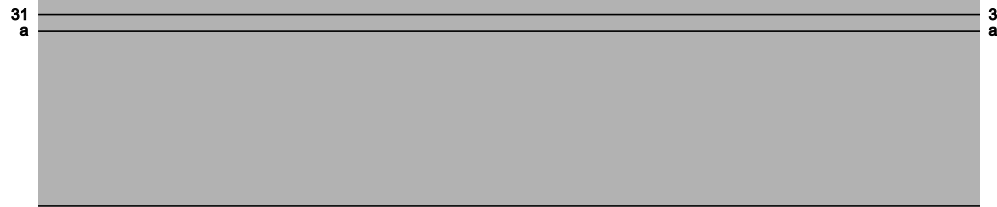


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

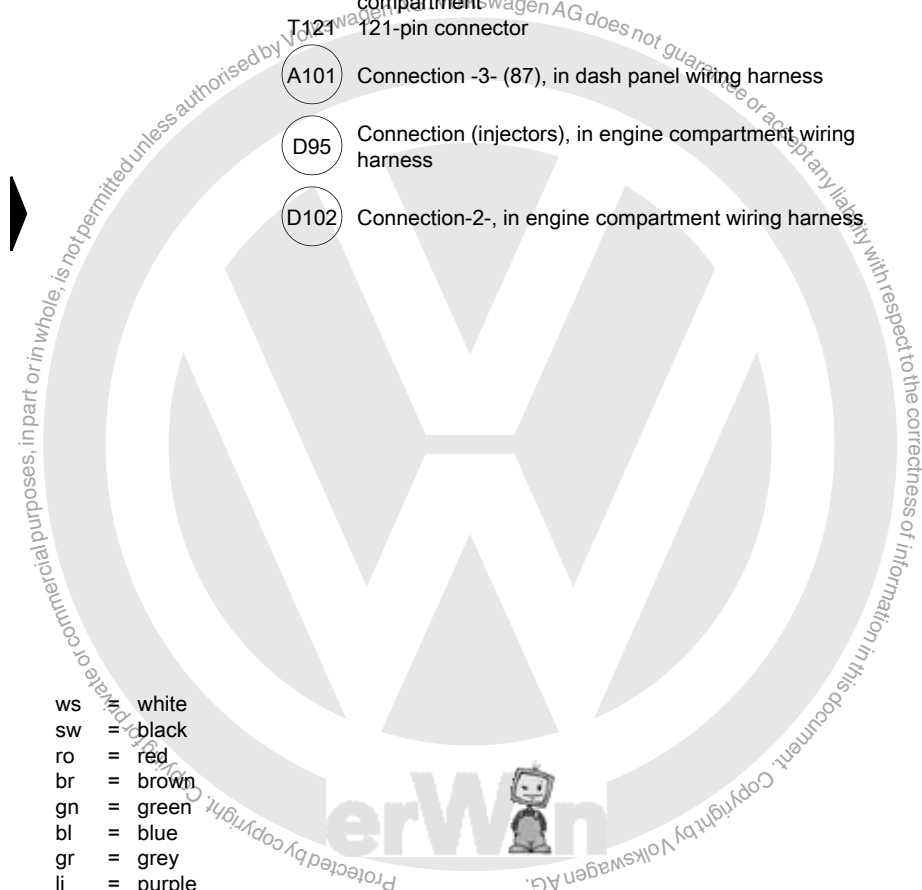
97-28032

4CV control unit (injection system), injectors, knock sensor

- G61 Knock sensor I
- J448 4CV control unit (injection system), centre in plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse holder
- T2 2-pin connector, left on cylinder head
- T10 10-pin connector, orange, in protective housing for connectors, left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector
- A101 Connection -3- (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- D102 Connection-2-, in engine compartment wiring harness

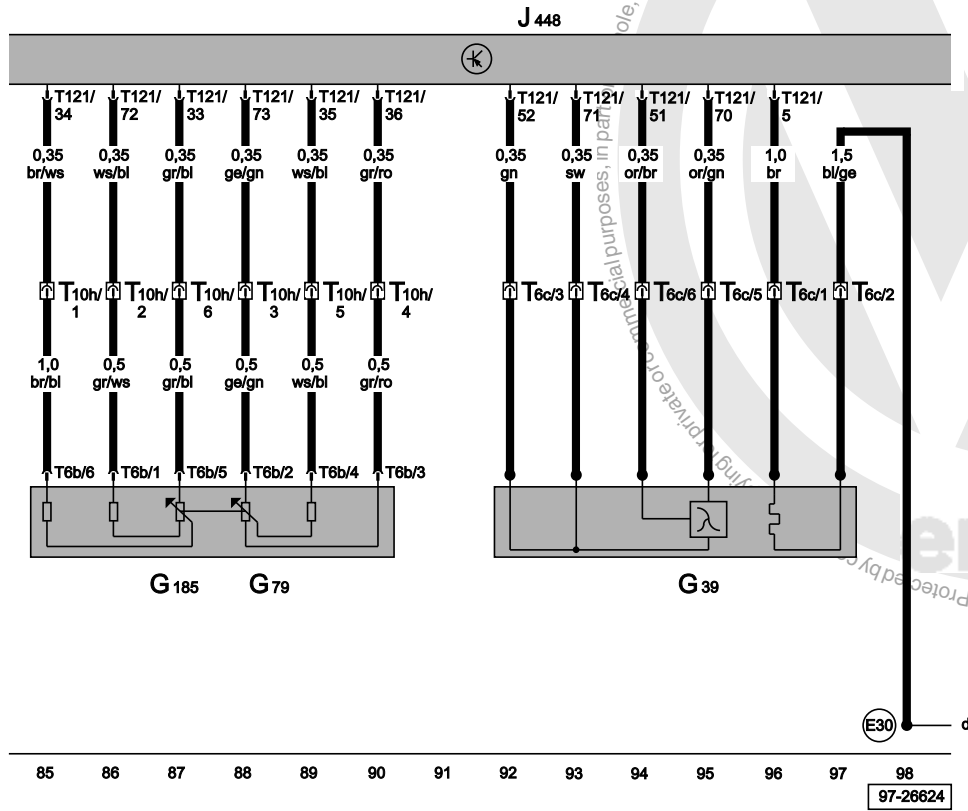
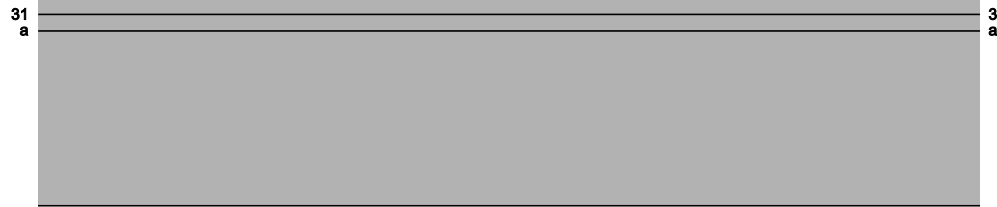


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4CV control unit (injection system), accelerator pedal position sender, Lambda probe (before catalyst)

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator pedal position sender -2-
- J448 4CV control unit (injection system), centre in plenum chamber
- T16b 6-pin connector
- T6c 6-pin connector, near catalyst
- T10h 10-pin connector, blue, in protective housing for connectors, left in plenum chamber
- T121 121-pin connector
- E30 Connection (87a), in engine wiring harness



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

E30
d
98
97-26624

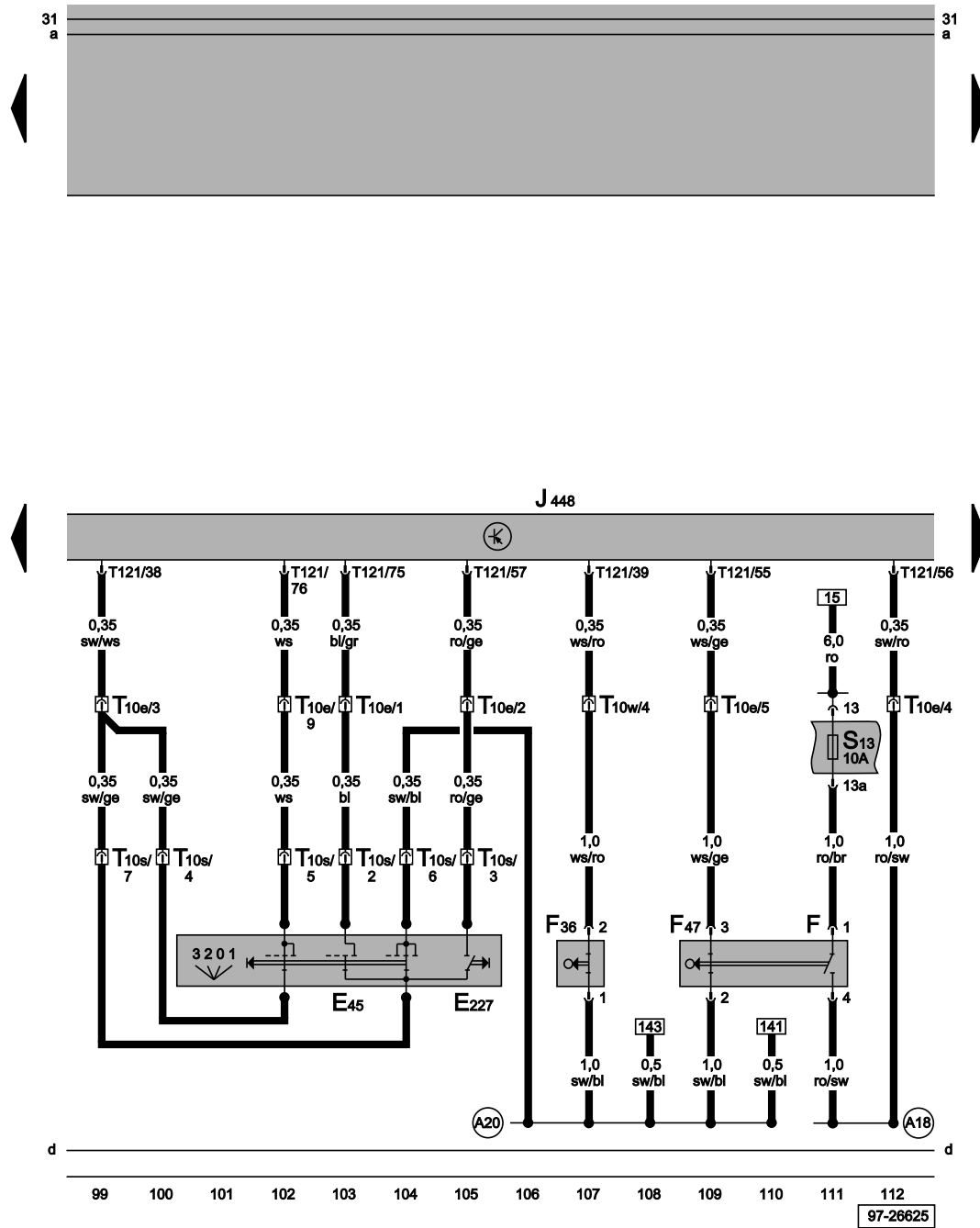
4LV/4MV control unit (injection system), cruise control system switch (CCS), clutch pedal switch, cruise control system brake pedal switch, brake light switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)**
- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J448 4LV/4MV control unit (injection system), in plenum chamber, centre
- S13 Fuse in fuse box
- T10e 10-pin connector, black, in control unit protective housing, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector

A18 Connection (54), in dash panel wiring harness

A20 Connection (15a), in dash panel wiring harness

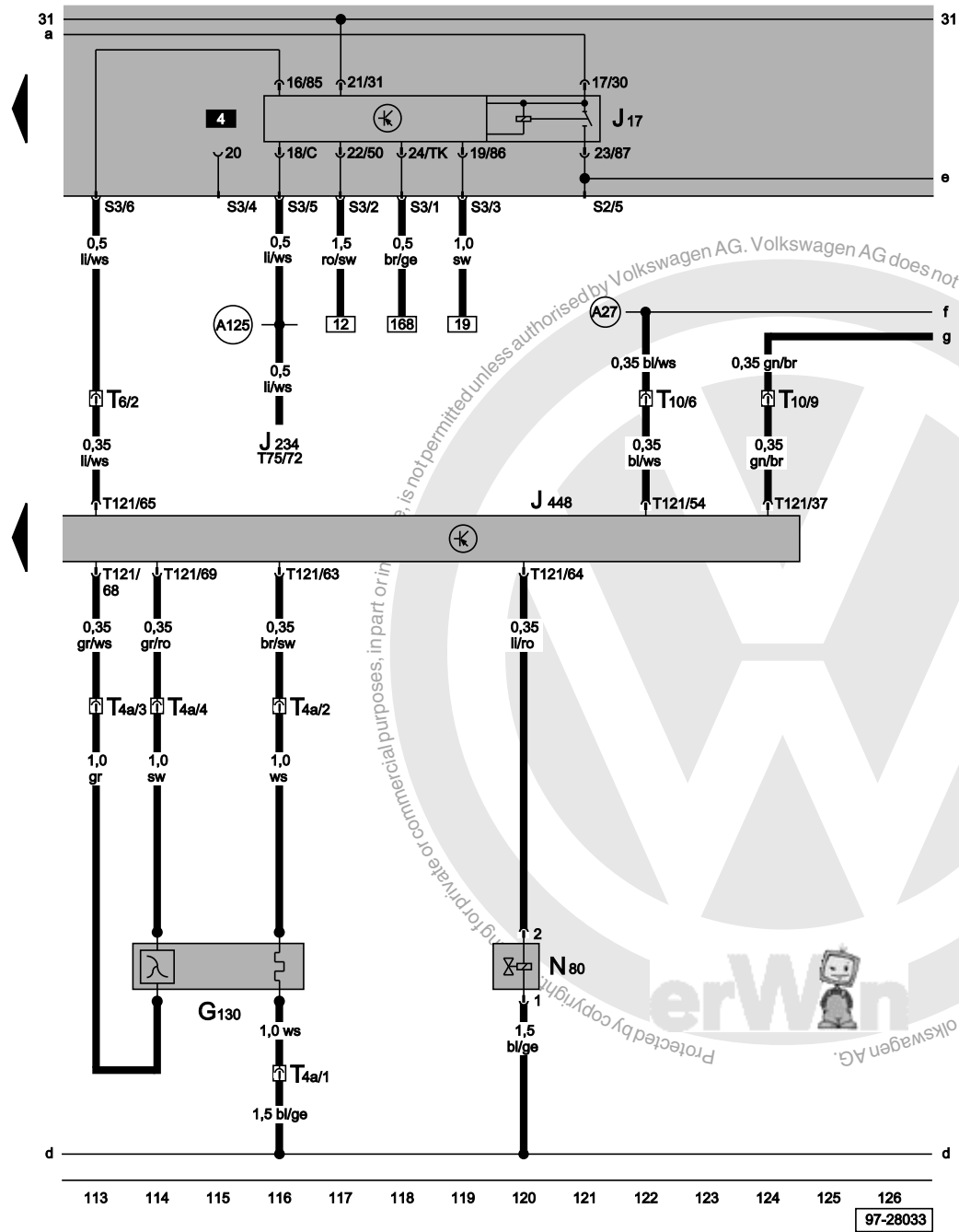
** Only models with CCS



- ws = white
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- li = purple
- ge = yellow
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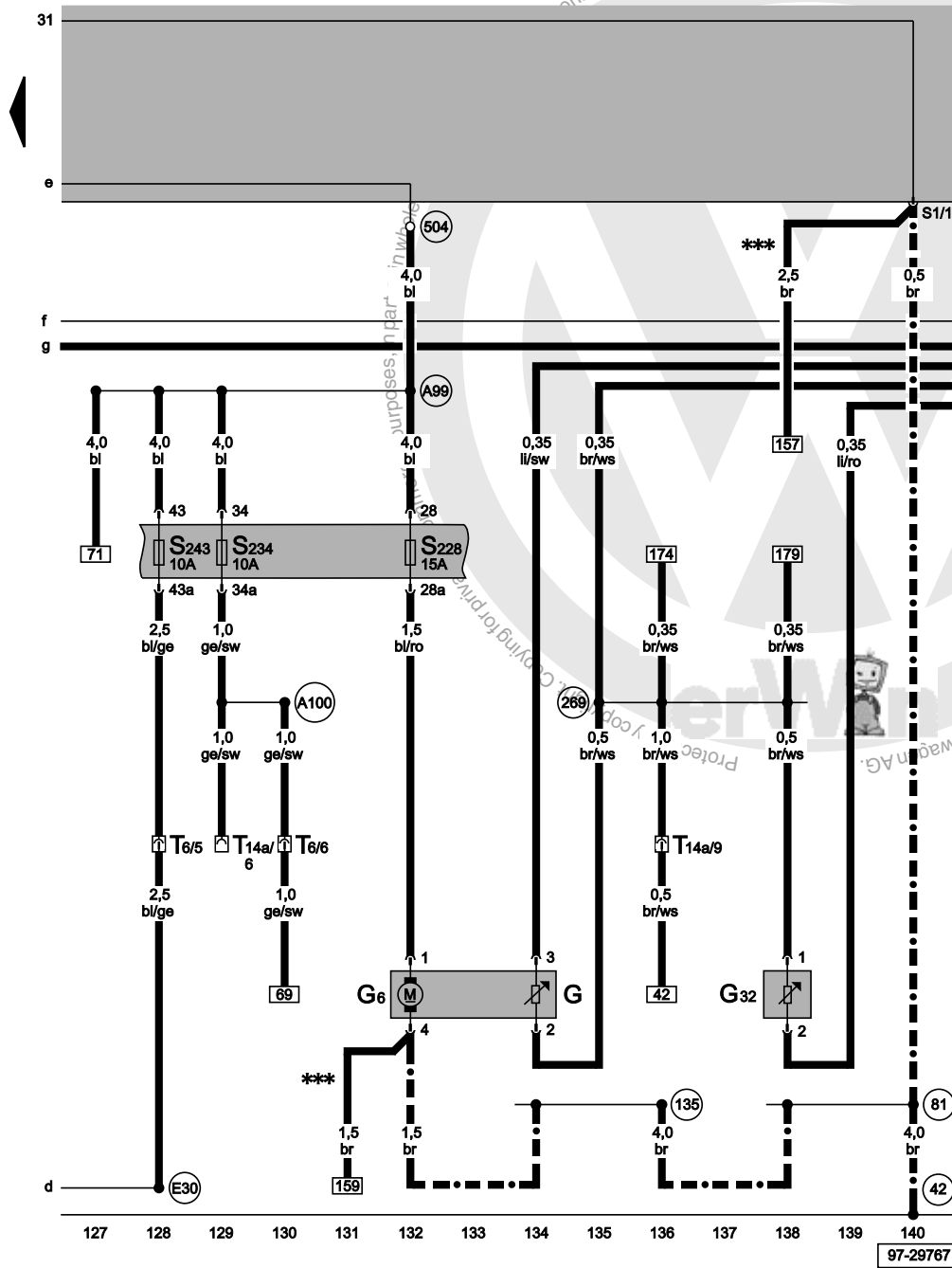
4LV/4MV control unit (injection system), fuel pump relay, lambda probe after catalyst, activated charcoal filter system solenoid valve 1

- G130 Lambda probe after catalyst
- J17 Fuel pump relay
- J234 Airbag control unit
- J448 4MV/4LV control unit (injection system), in plenum chamber, centre
- N80 Activated charcoal filter system solenoid valve I
- T4a 4-pin connector, near catalyst
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness



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Fuel pump, fuel gauge sender, coolant shortage indicator sender



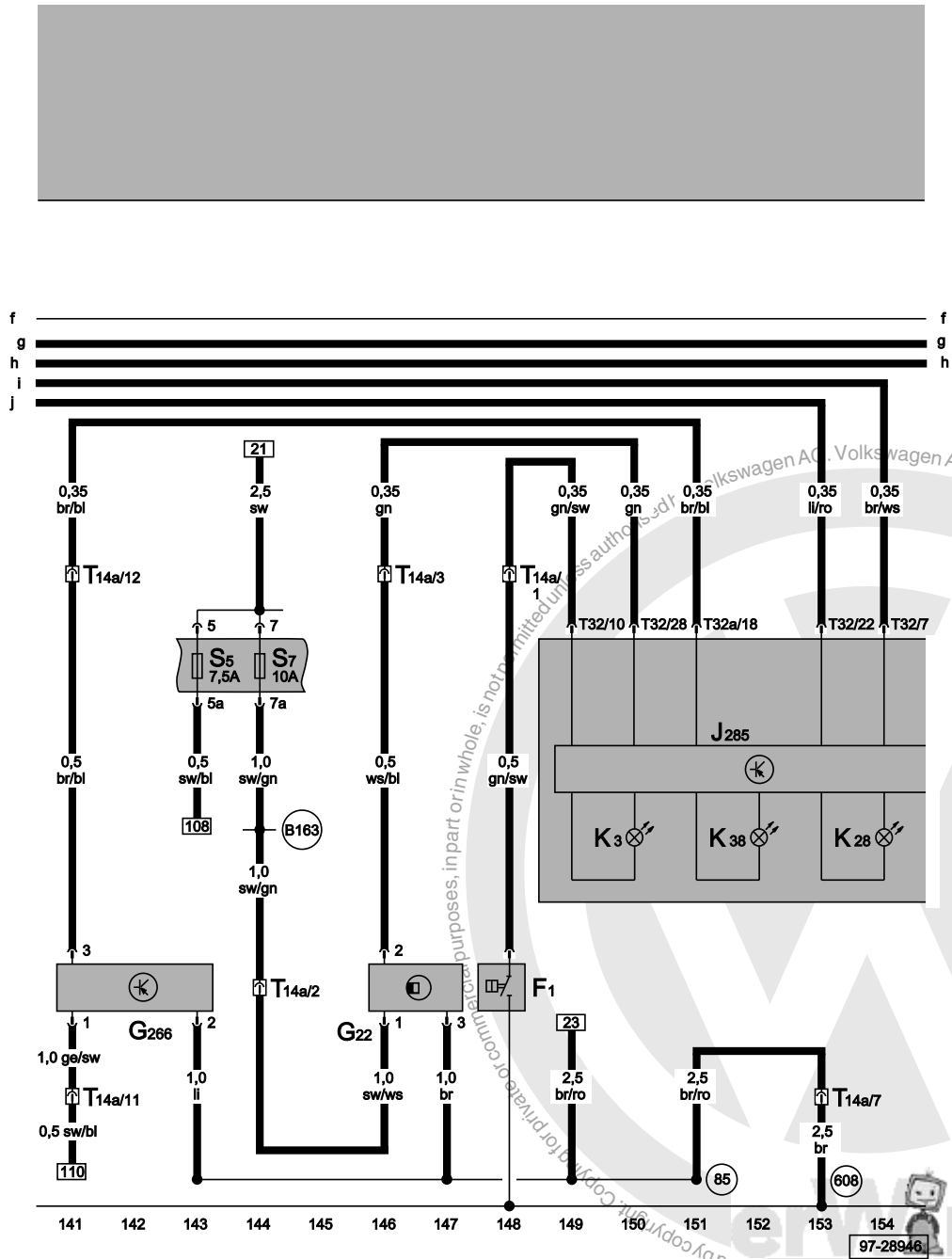
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

- (42) Earth point, next to steering column
- (81) Earth connection -1-, in dash panel wiring harness
- (135) Earth connection -2-, in dash panel wiring harness
- (269) Earth connection (sender earth) -1-, in dash panel wiring harness
- (504) Screw connection -1- (87F), on relay plate
- (A99) Connection -1- (87), in dash panel wiring harness
- (A100) Connection -2- (87), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness
- *** From May 2000
- Up to April 2000

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
 - G22 Speedometer sender (Hall sender, on gearbox)
 - G266 Oil level/oil temperature sender*
 - J285 Control unit with display in dash panel insert
 - K3 Oil pressure warning lamp
 - K28 Coolant temperature/coolant shortage warning lamp
 - K38 Oil level warning lamp*
 - S5 Fuse in fuse box
 - S7 Fuse in fuse box
 - T14a 14-pin connector, in cable channel left in engine compartment
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
 - 608 Earth point, in plenum chamber, centre
 - B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display

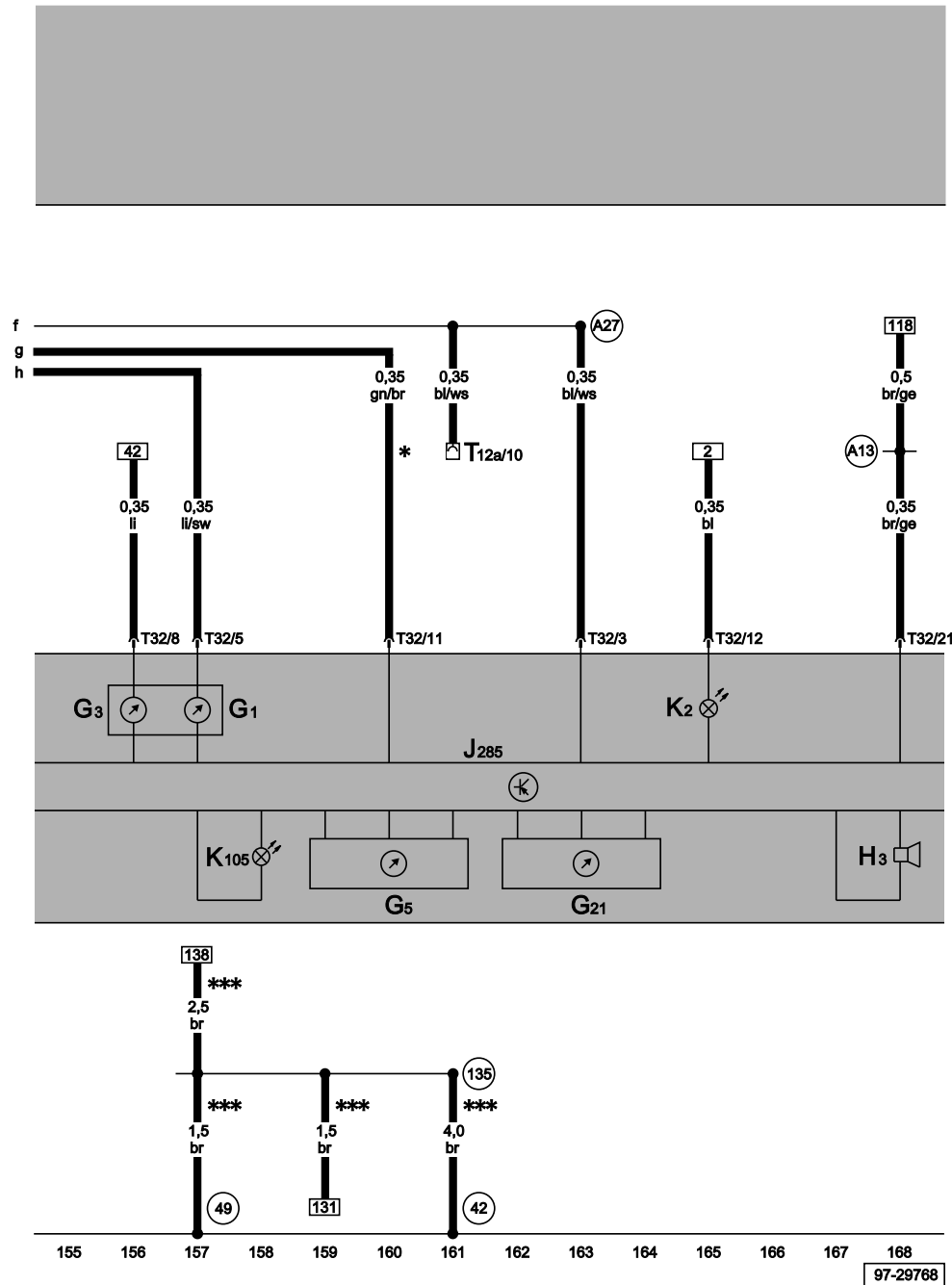


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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue

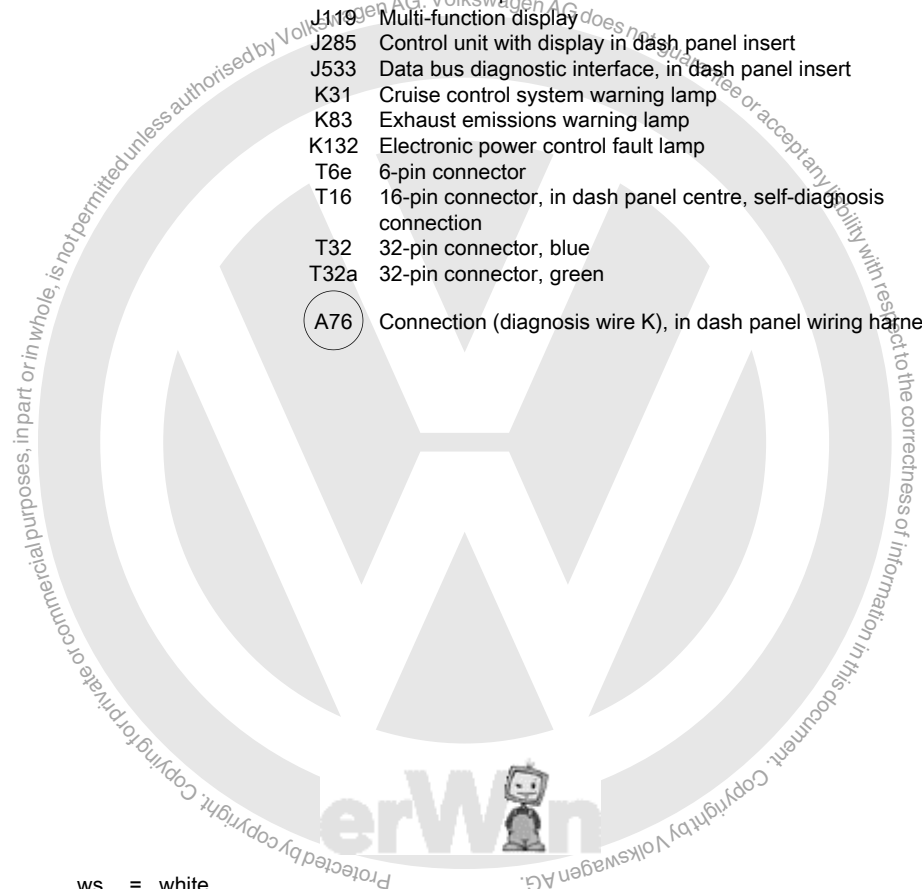
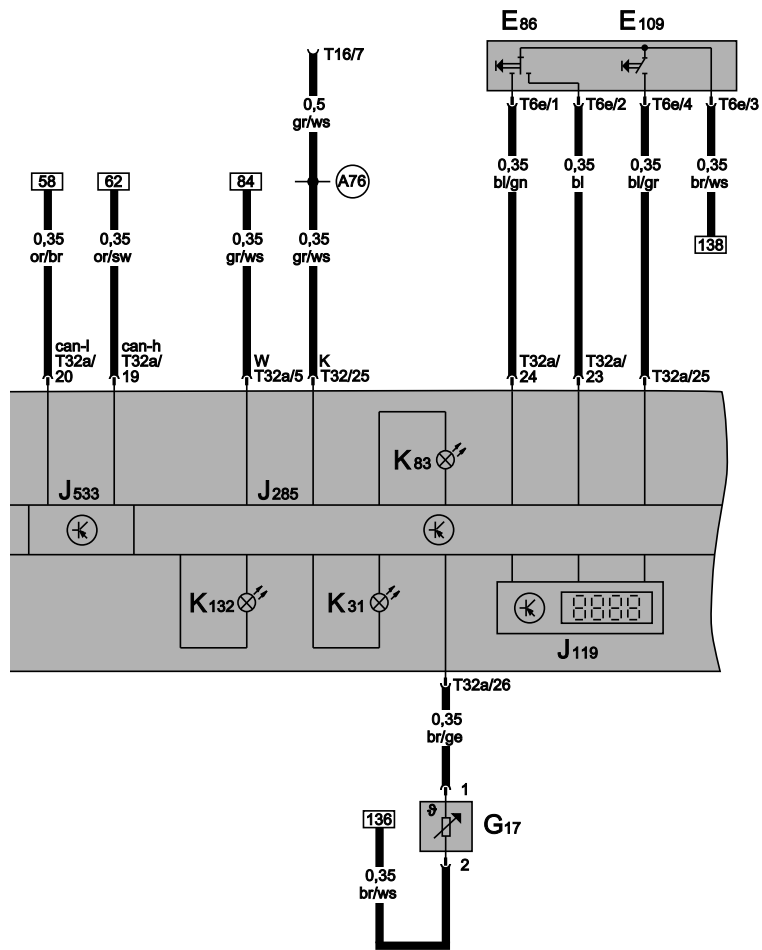
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- *** From May 2000



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multi-function display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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2.0 I/88 kW Motronic, engine code ATF

from January 2000

2.0 I/85 kW Motronic, engine code AZH

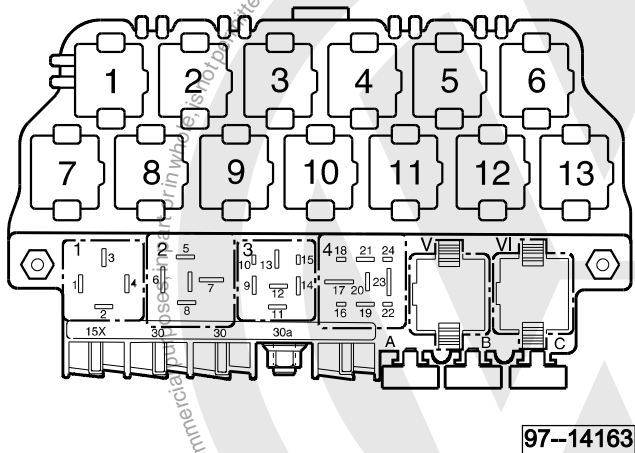
from September 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier

above the relay plate:

Relay locations on relay plate:



2 - X-contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

30 A - green

25 A - white

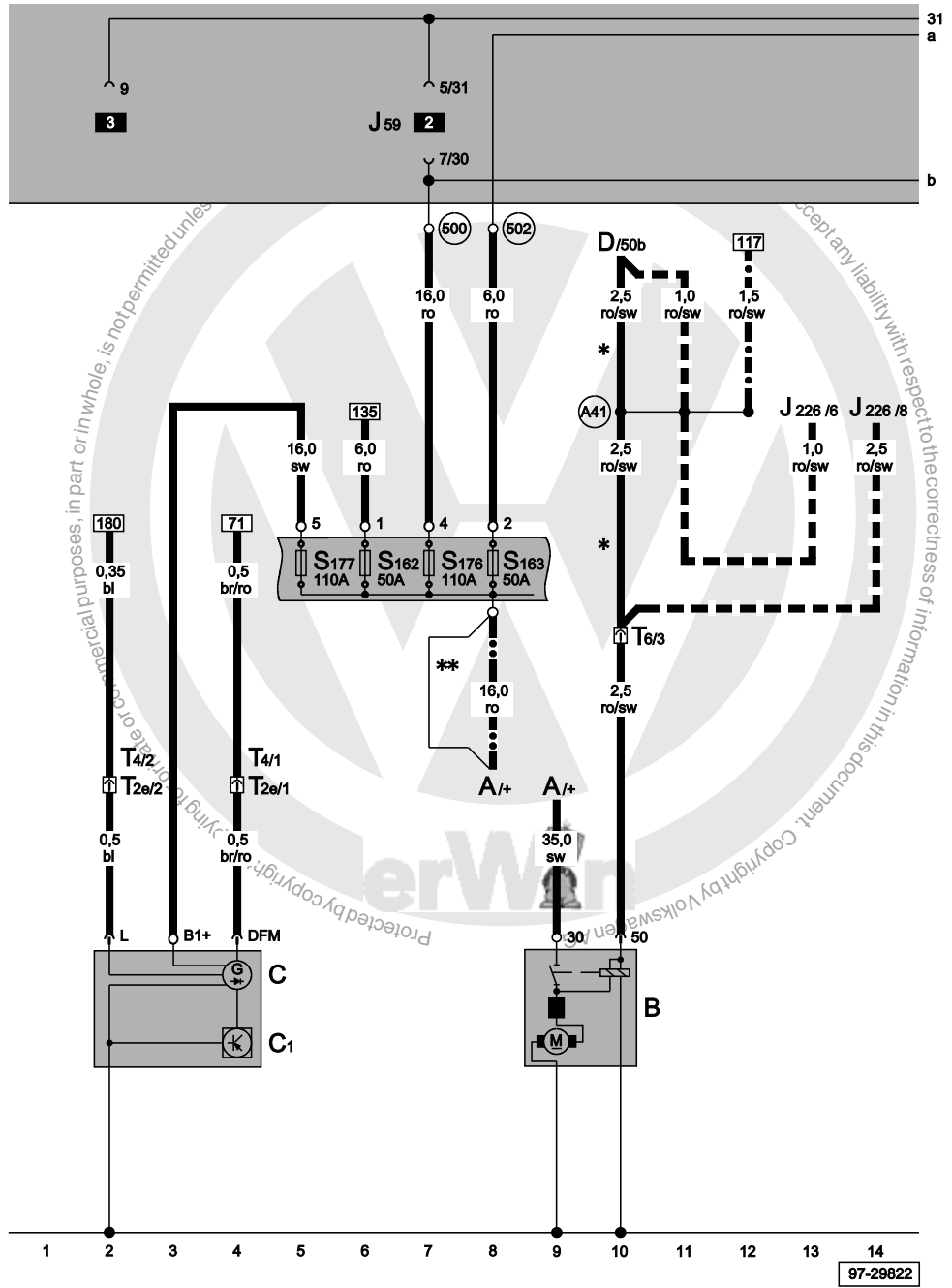
20 A - yellow

15 A - blue

10 A - red

7,5 A - brown
5 A - beige
3 A - purple





Alternator, starter

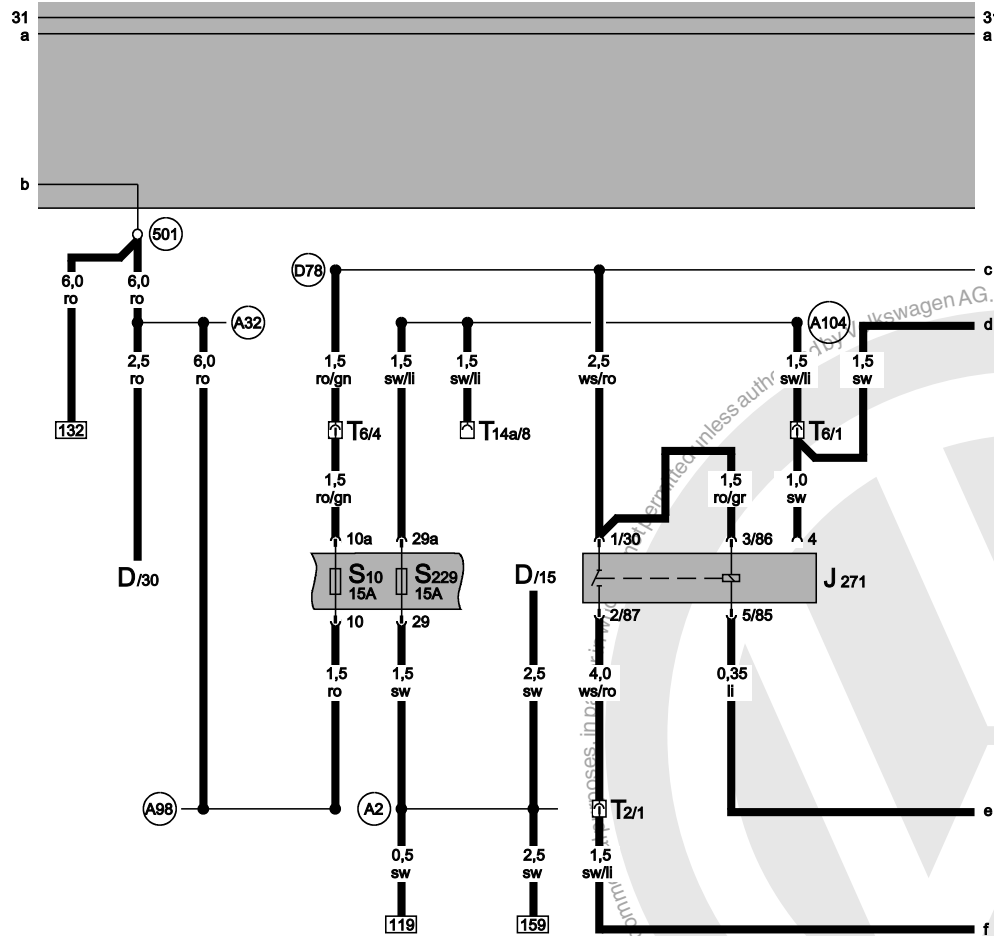
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
- * only models with manual gearbox
- models with automatic gearbox only
- ** up August 2000
- .-.- from September 2000
- up to April 2001

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Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- 501 Screw connection 2 (30), on relay plate

- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness



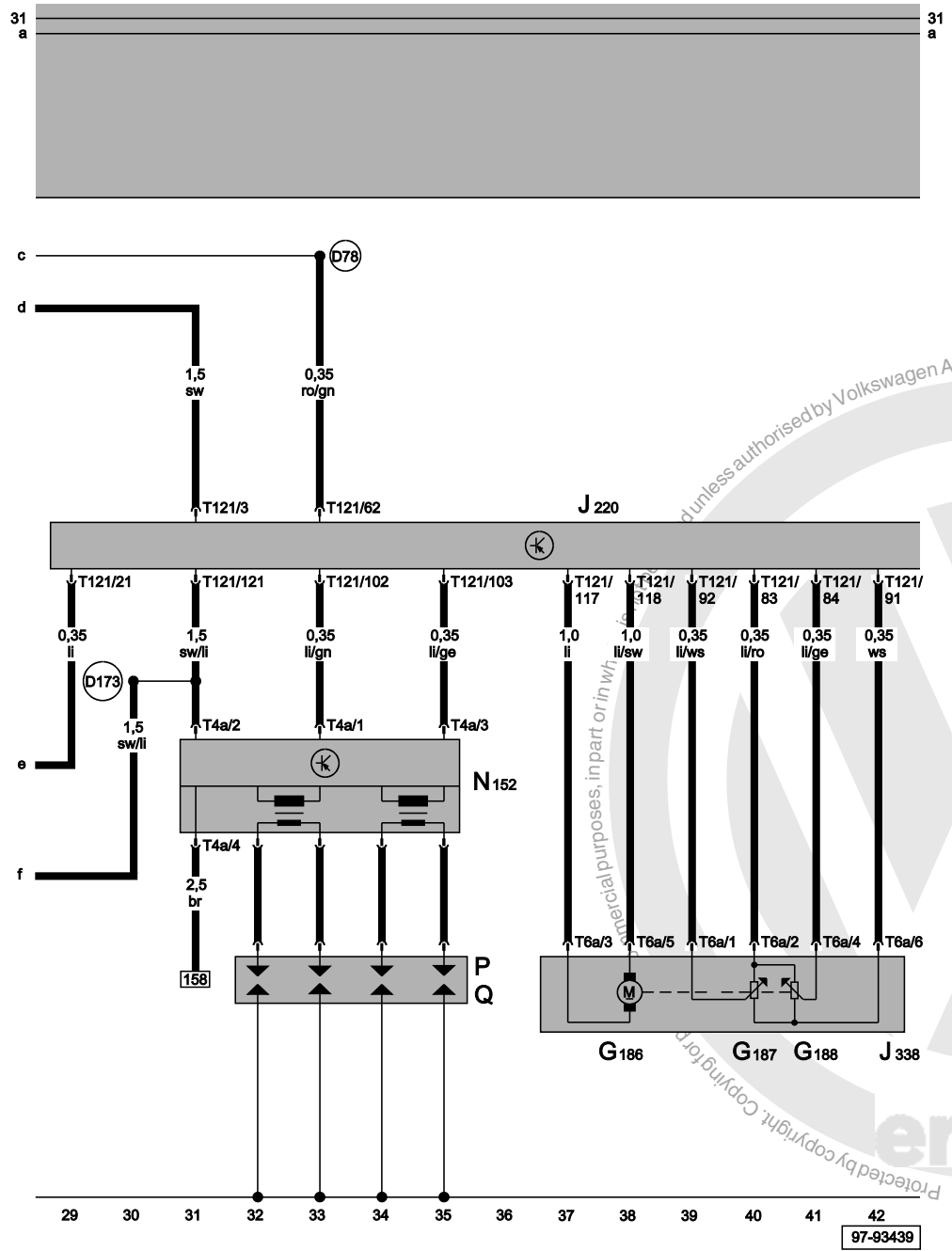
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Motronic control unit, ignition system, throttle valve module, throttle valve drive angle sender for electric throttle

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T6a 6-pin connector
- T121 121-pin connector

D78 Positive connection 1 (30a), in engine compartment wiring harness

D173 Connection (87), in engine wiring harness



97-93439

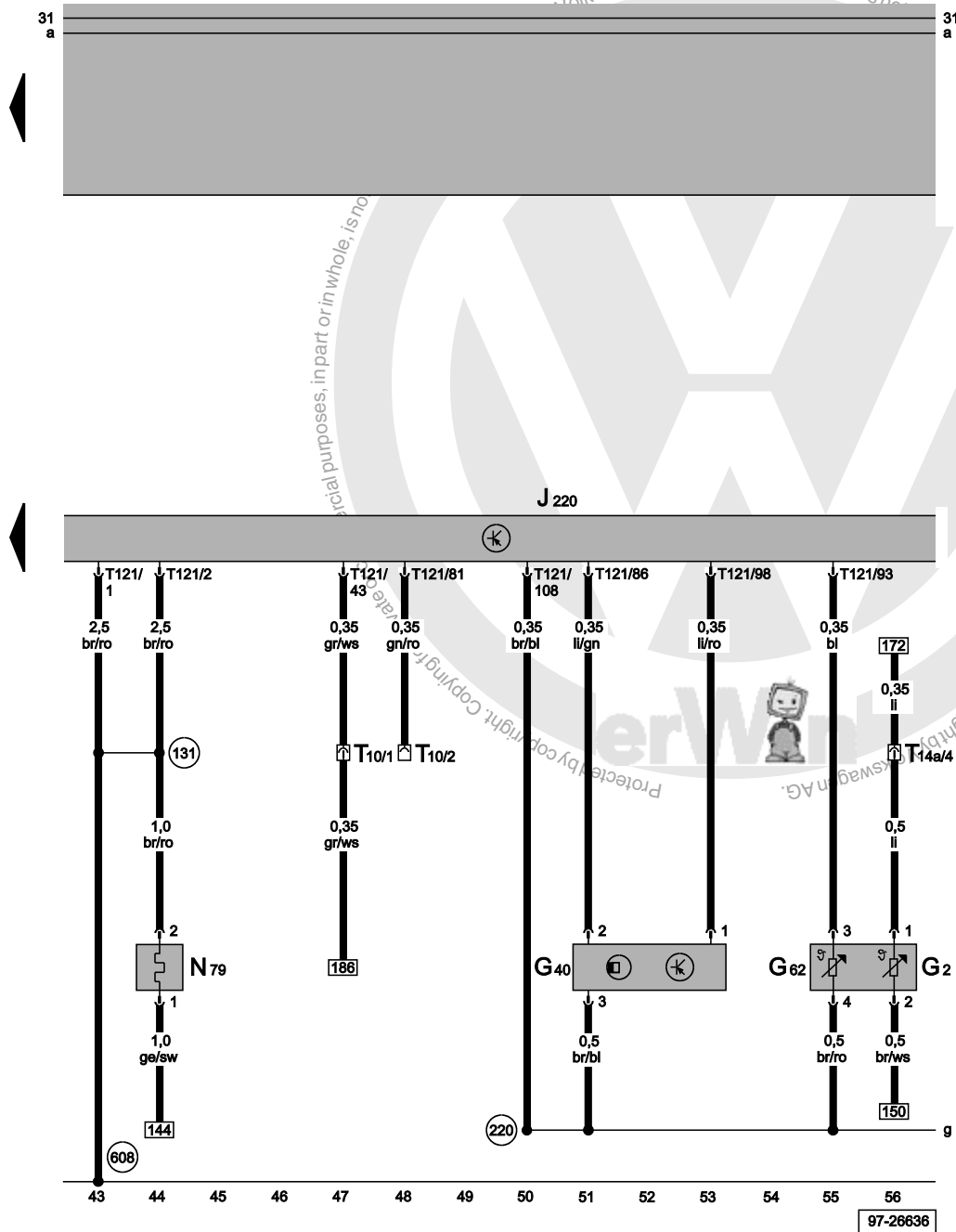
Motronic control unit, coolant temperature display sender, Hall sender, heater element for crankcase breather

- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G40 Hall sender
- J220 Motronic control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

131 Earth connection -2-, in engine compartment wiring harness

220 Earth connection (sender earth), in engine wiring harness

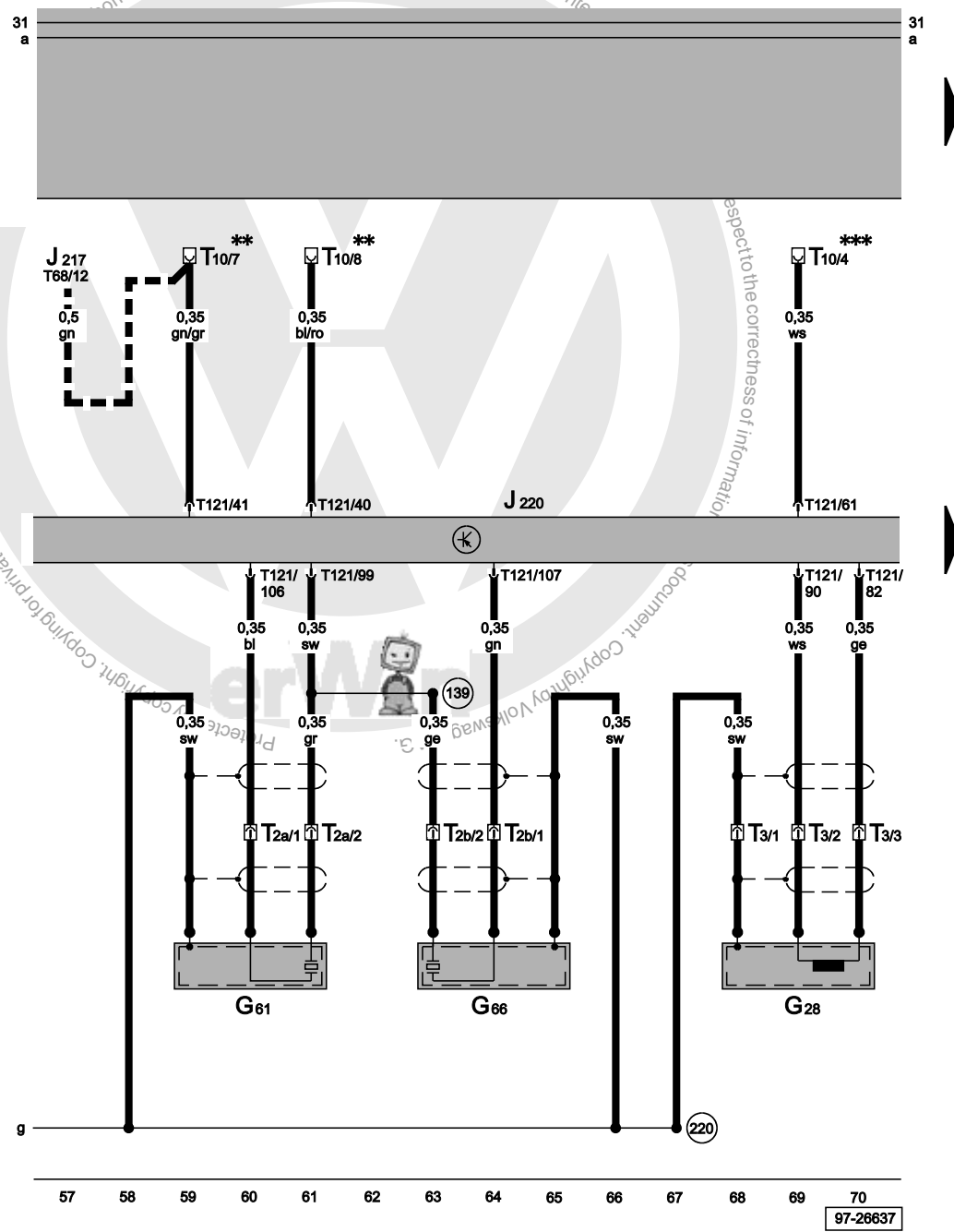
608 Earth point, in centre of plenum chamber



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97-26636

For commercial purposes, in part or in whole...



Motronic control unit, engine speed sender, knock sensor 1, knock sensor 2

- G61 Knock sensor I
- G28 Engine speed sender
- G66 Knock sensor II
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T2a 2-pin connector, in rear engine compartment
- T2b 2-pin connector, in front engine compartment
- T3 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- ** connection air conditioning
- *** radiator fan control unit connection
- models with automatic gearbox only

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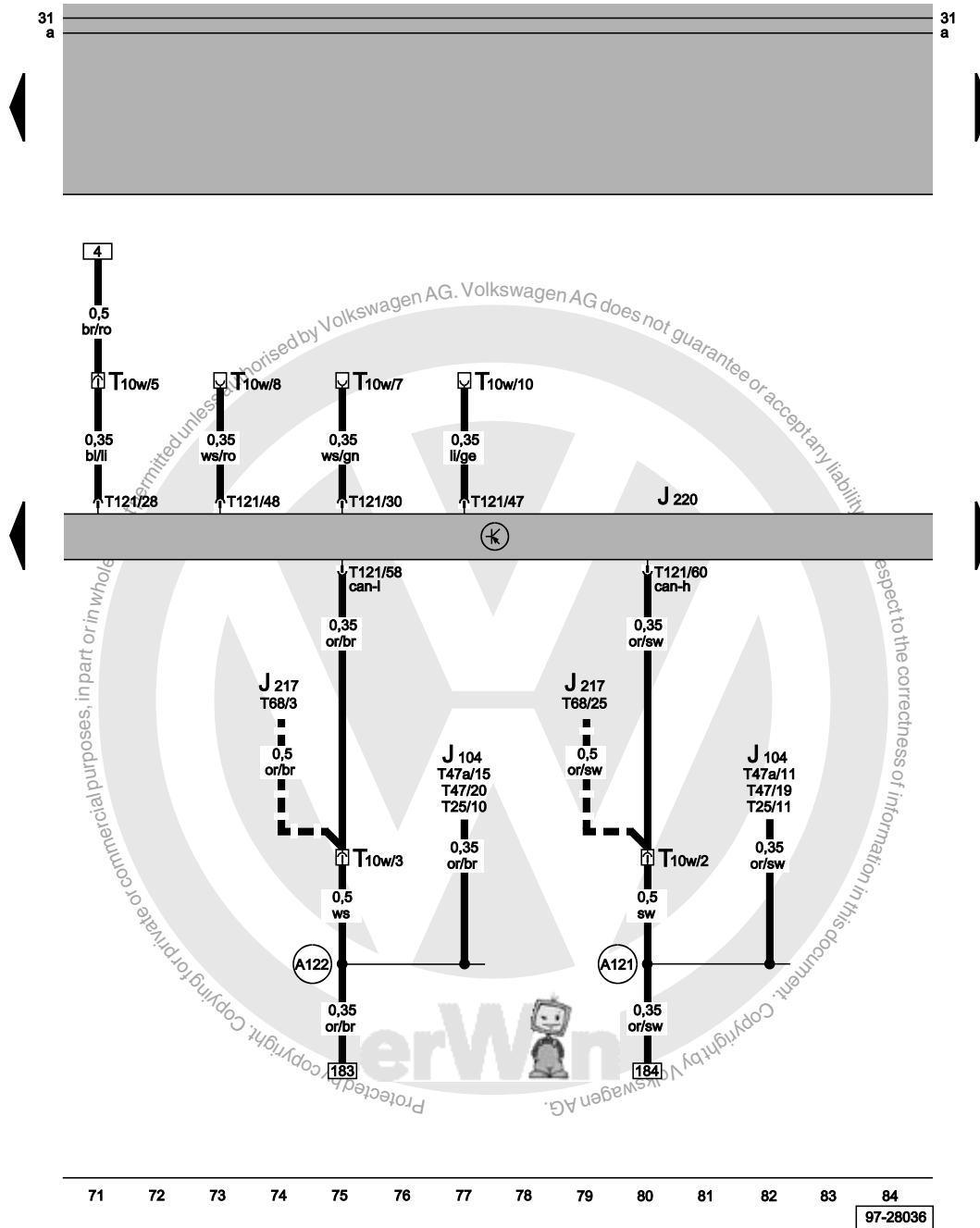
Motronic control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)
- T68 68-pin connector
- T121 121-pin connector

(A121) Connection (high bus), in dash panel wiring harness

(A122) Connection (low bus), in dash panel wiring harness

--- models with automatic gearbox only

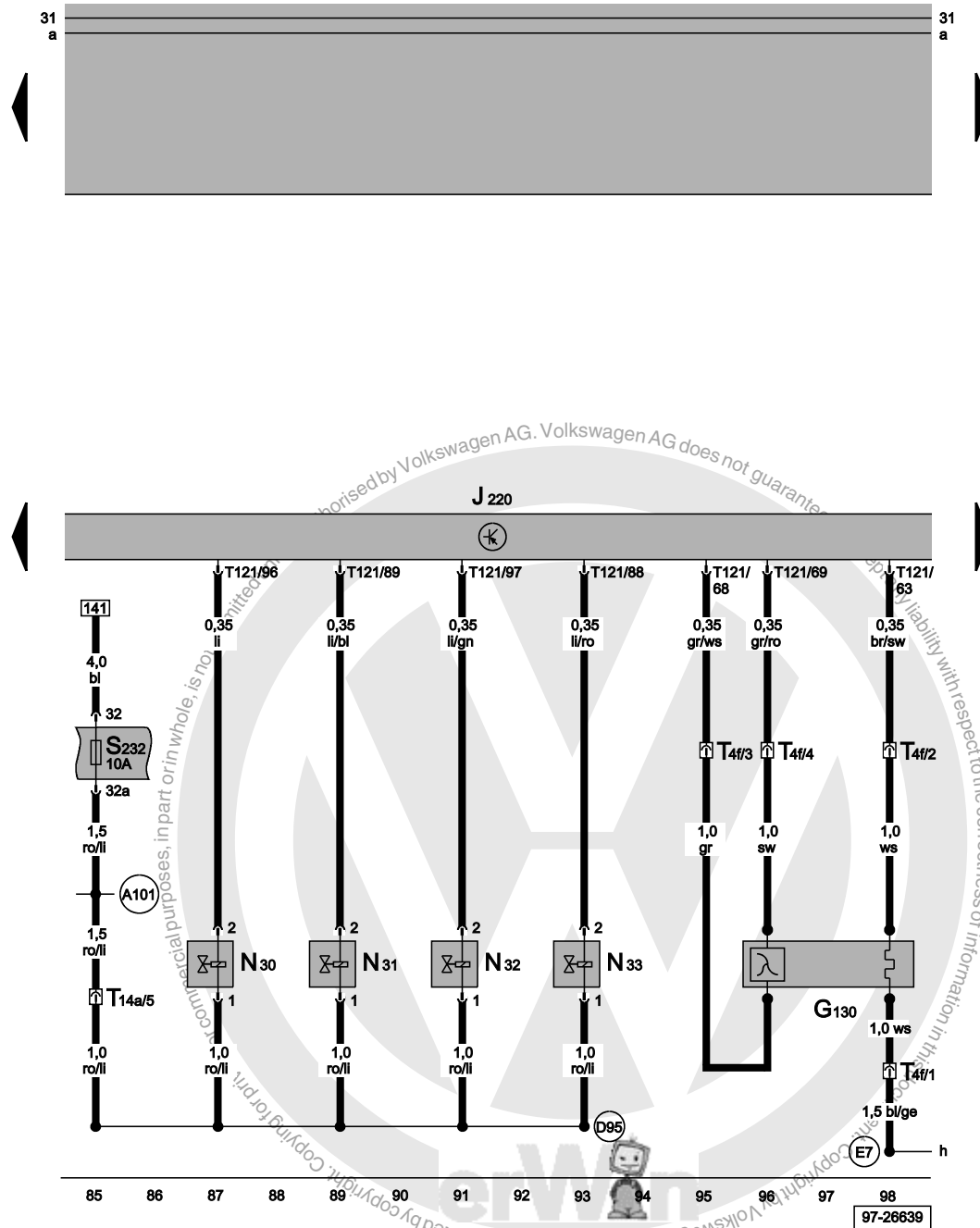


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- li = purple
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Motronic control unit, injectors, lambda probe after catalytic converter

- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4f 4-pin connector, near catalytic converter
- T14a 14-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

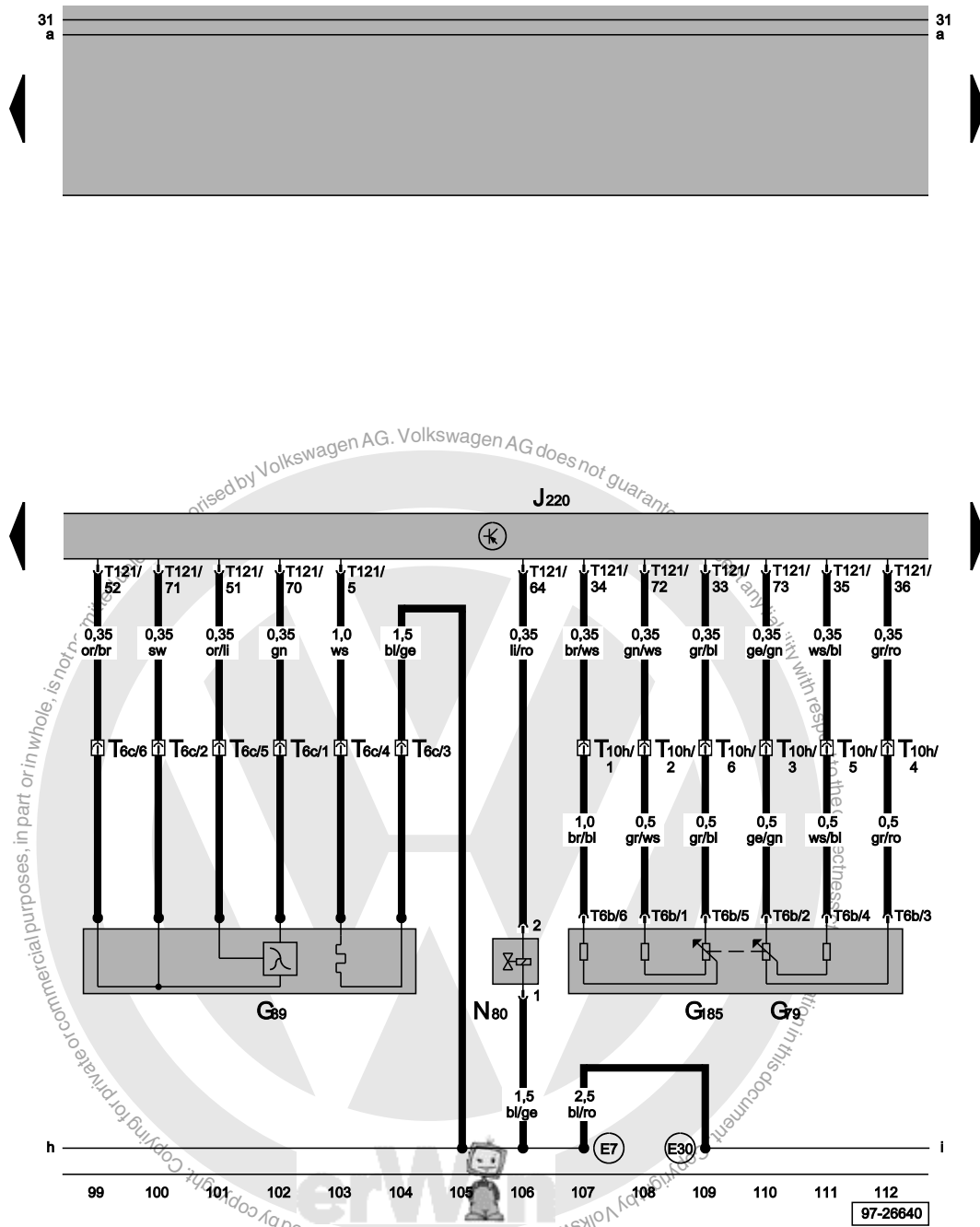
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (E7) Positive connection (87a), in Motronic wiring harness



Motronic control unit, accelerator position sender, lambda probe (upstream of catalytic converter), active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

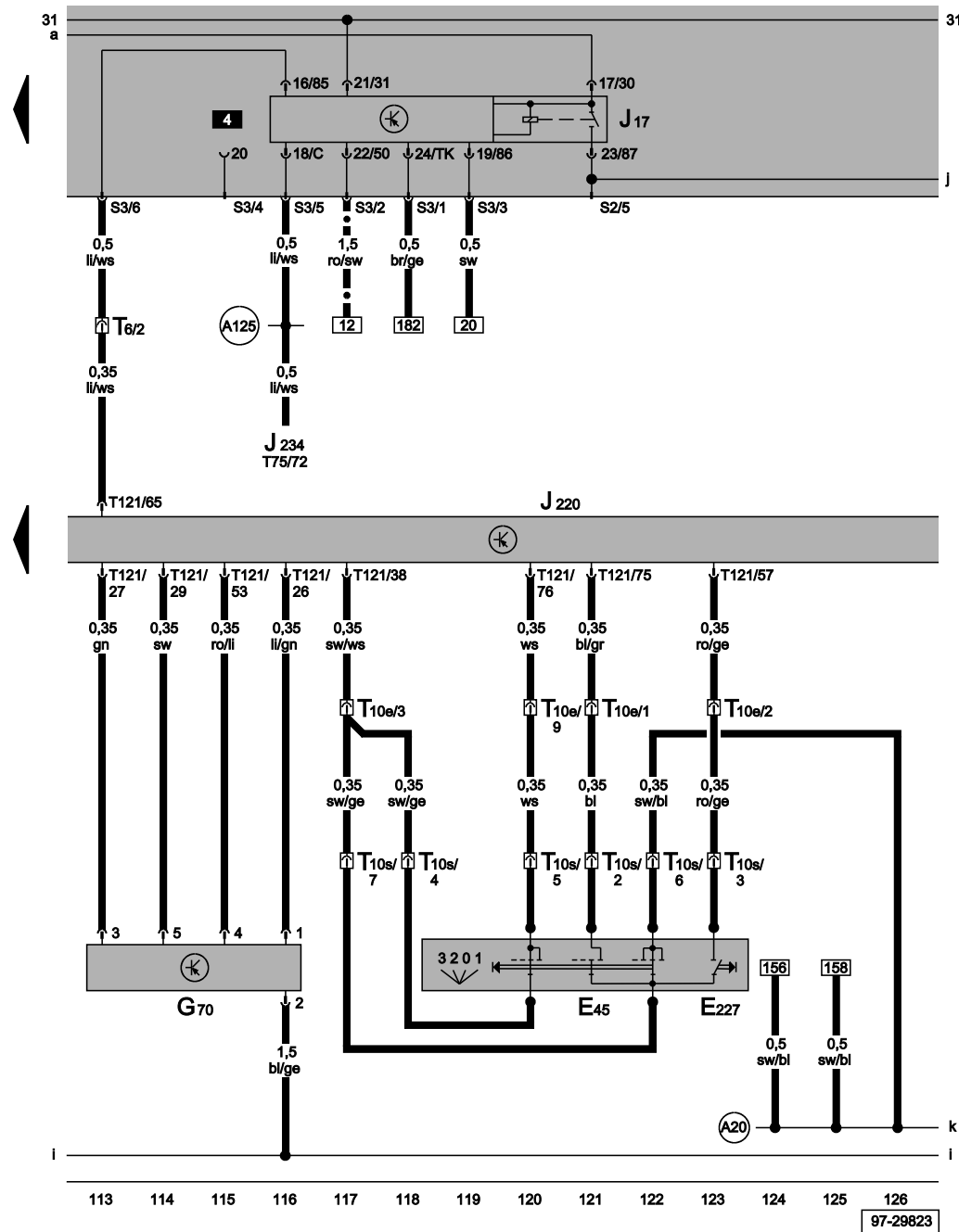
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness



Motronic control unit, fuel pump relay, cruise control system switch (GND), air mass meter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T75 75-pin connector
- T121 121-pin connector

- A20 Connection (15a), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- ** only models with GND
- up to April 2001

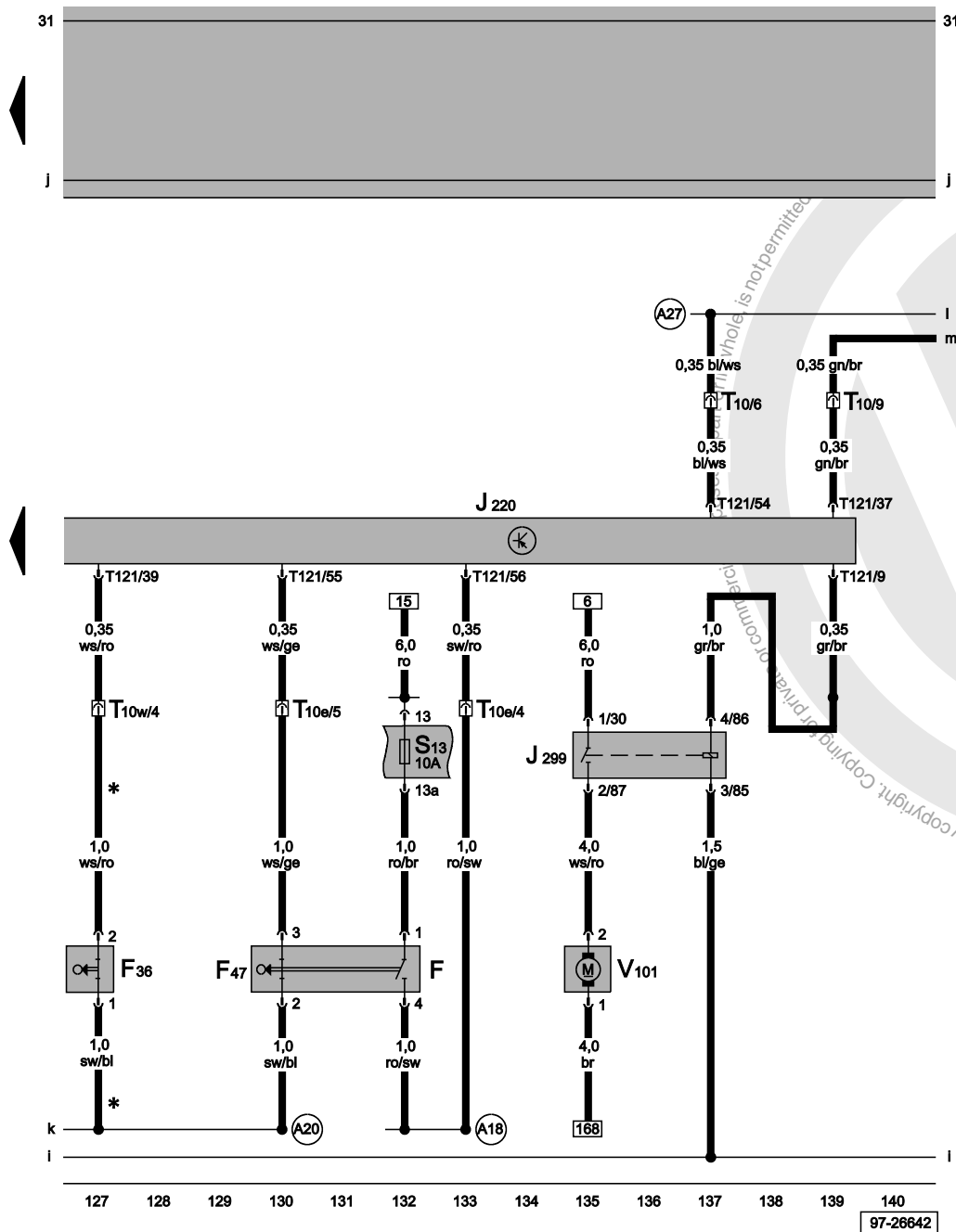


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Motronic control unit, secondary air pump motor, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- S13 Fuse 13 in fuse holder
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * only models with manual gearbox

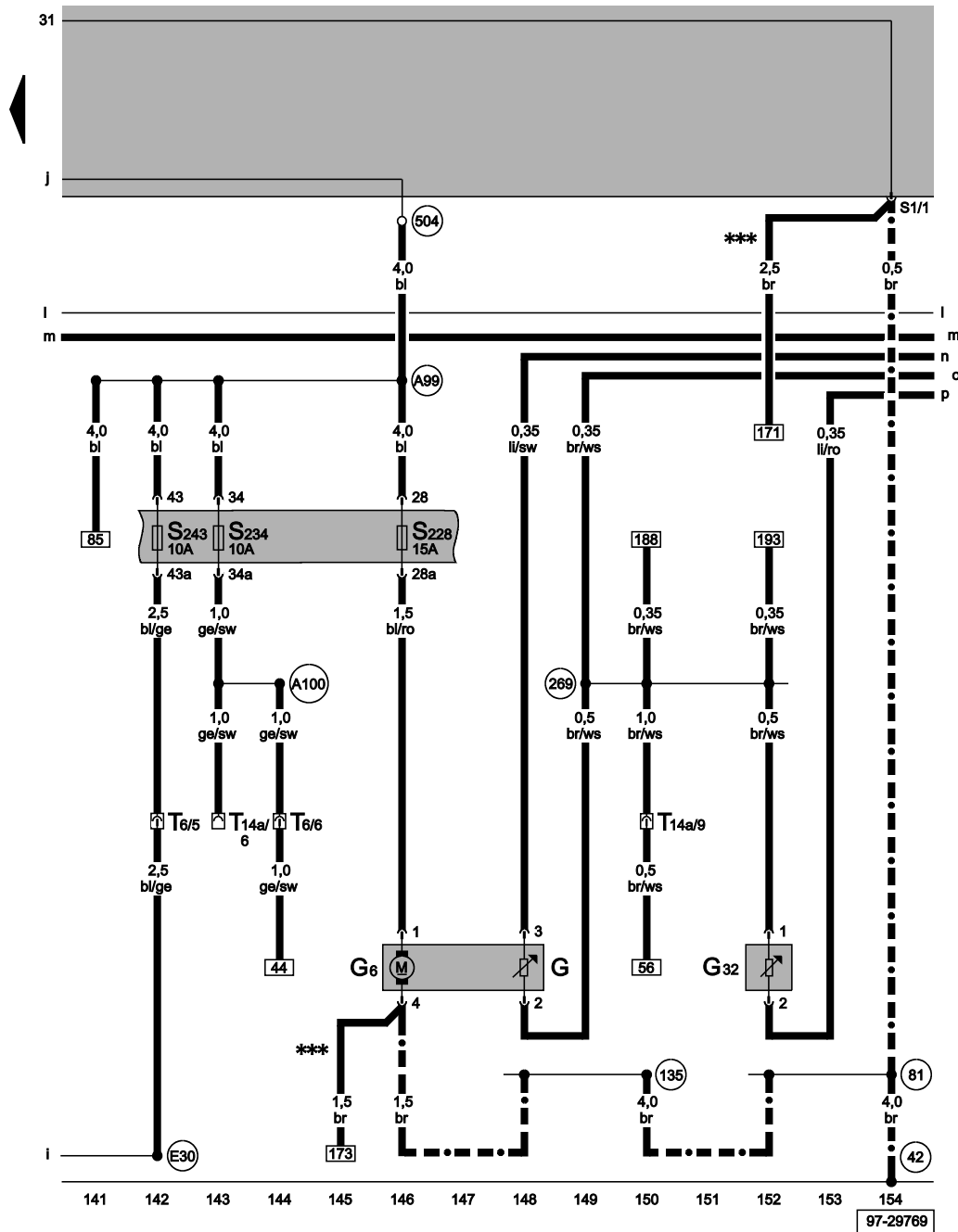


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97-26642

Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, in cable channel left in engine compartment
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** from May 2000
- up to April 2000

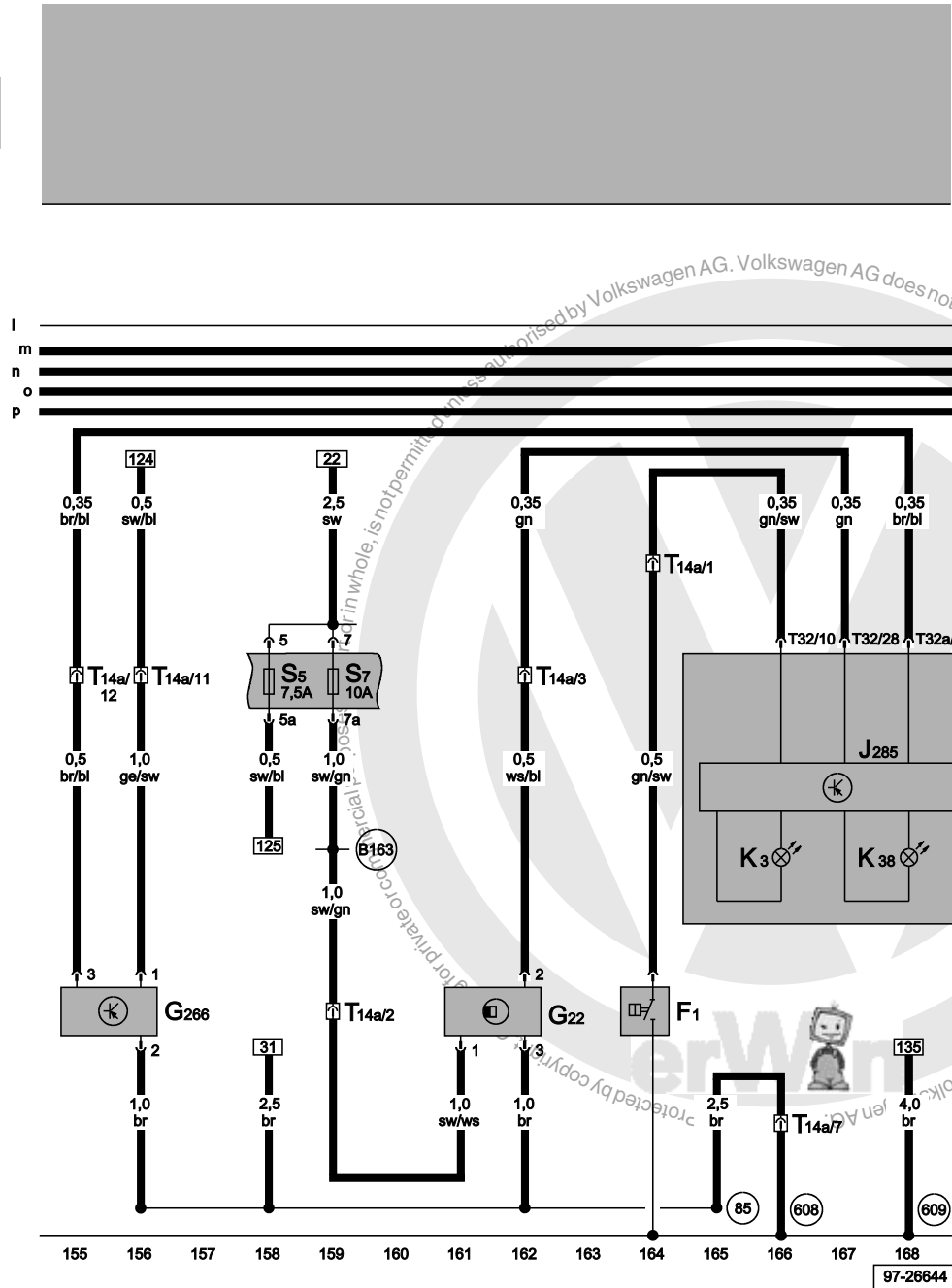


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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display

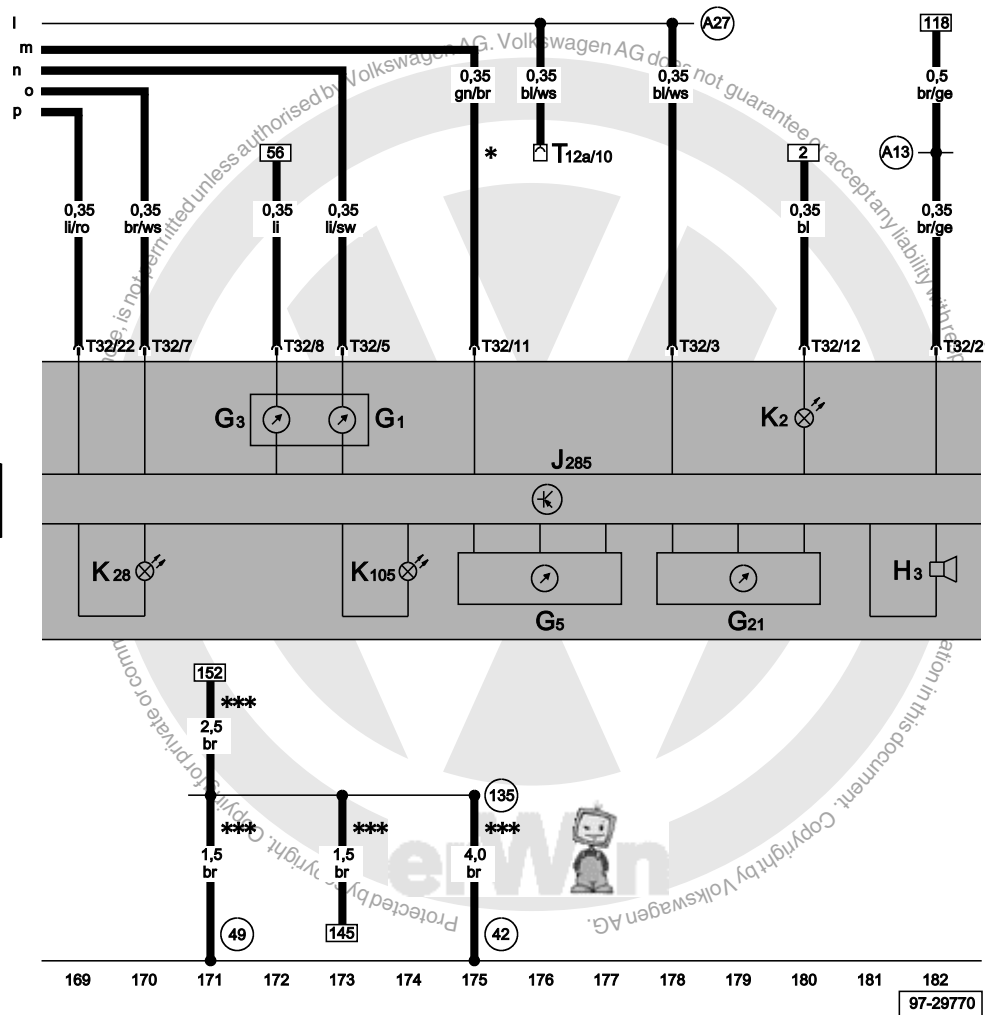


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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit
- *** from May 2000

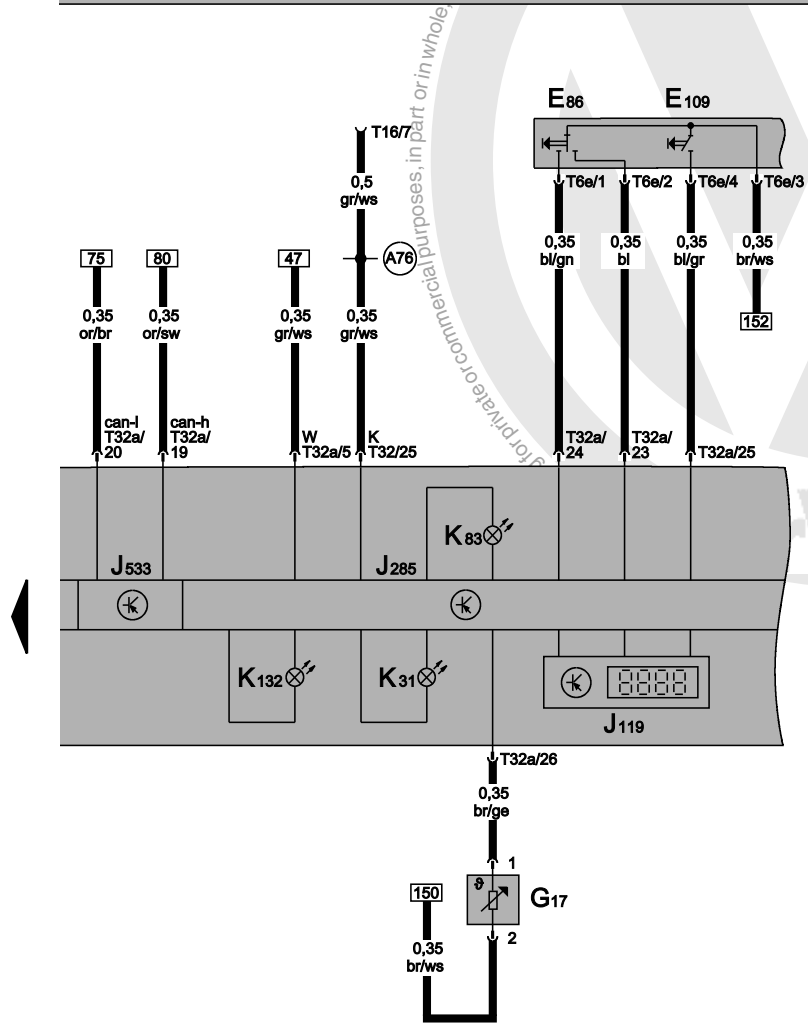


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



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Tailgate/boot lid release

From May 1999

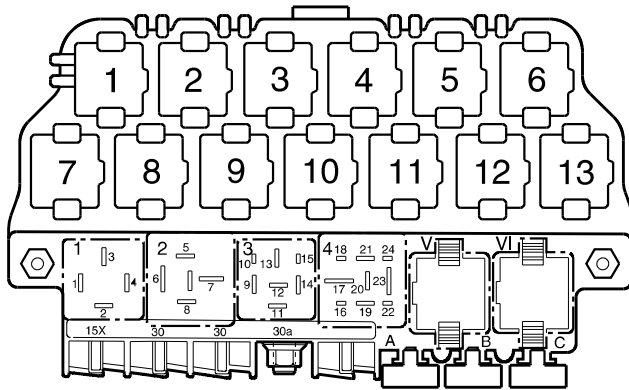
only models without central locking and convenience system

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

2 - Tailgate/boot lid remote release control unit (407)

Relay locations on relay plate:



97-14163



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

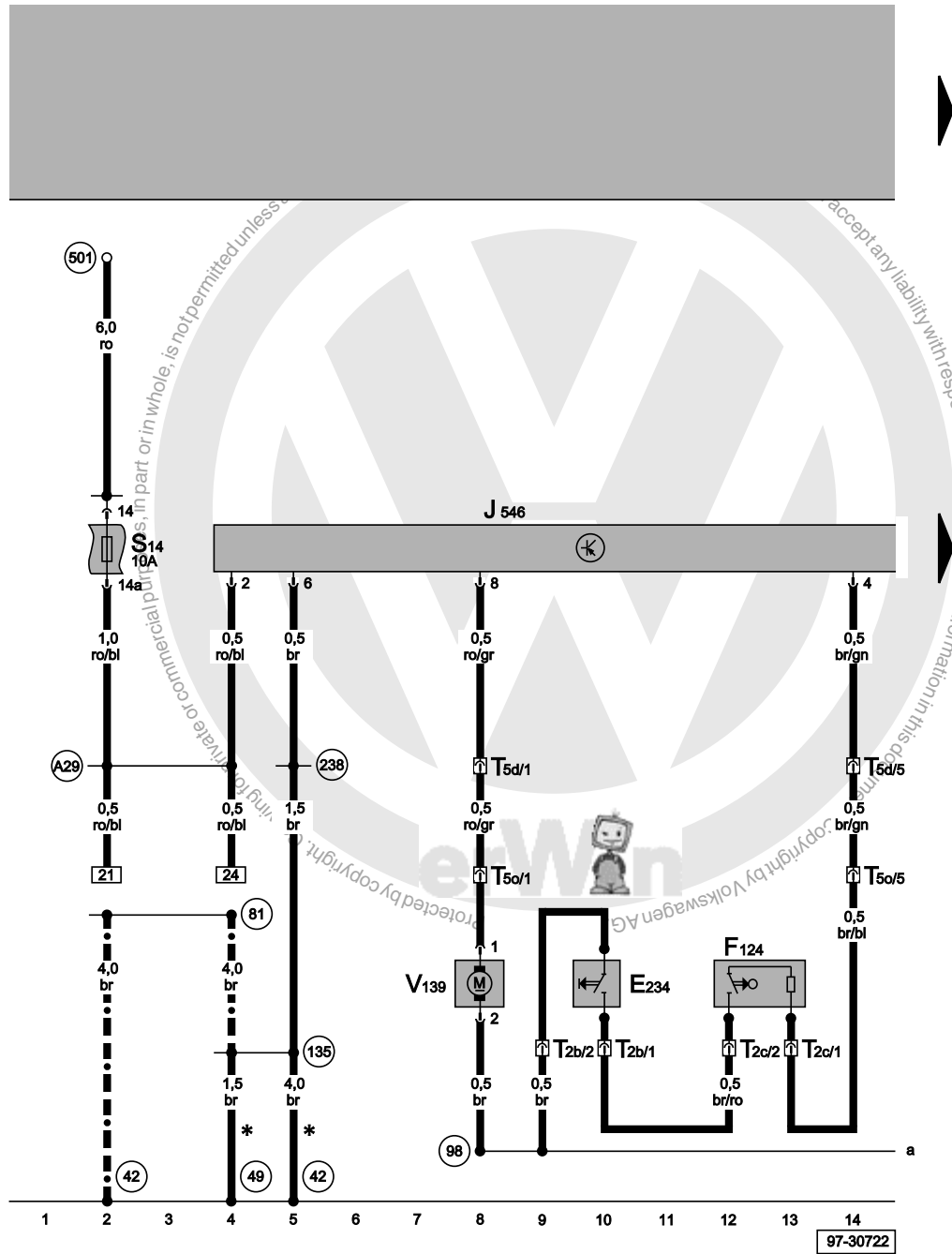
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Tailgate/boot lid remote release control unit, tailgate/boot lid release motor, tailgate/boot lid handle release button, contact switch in lock cylinder for tailgate/boot lid

- E234 Tailgate/boot lid handle release button
- F124 Contact switch in lock cylinder for tailgate/boot lid
- J546 Tailgate/boot lid remote release control unit, on the 13 position additional relay carrier
- S14 Fuse in fuse box
- T2b 2-pin connector, in tailgate/boot lid
- T2c 2-pin connector, in tailgate/boot lid
- T5d 5-pin connector, brown, connector point right D-pillar
- T5o 5-pin connector, brown, in tailgate/boot lid
- V139 Tailgate/boot lid release motor

- 42 Earth point, next to steering column
 - 49 Earth point, on steering column
 - 81 Earth connection -1-, in dash panel wiring harness
 - 98 Earth connection, in tailgate/boot lid wiring harness
 - 135 Earth connection -2-, in dash panel wiring harness
 - 238 Earth connection -1-, in interior wiring harness
 - 501 Screw connection -2- (30), on relay plate
 - A29 Connection (interior light), in dash panel wiring harness
- * From May 2000
 --- Up to April 2000



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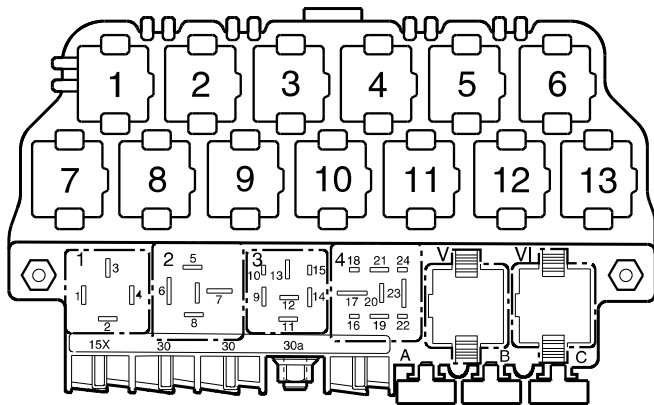
5-speed automatic gearbox (AG5)

- ⇒ 1.8 l/110 kW Motronic, engine code AUM
- ⇒ 1.9 l/74 kW - Turbo diesel engine with unit injectors, engine codes ATD, BEW
- ⇒ 1.9 l/85 kW - Turbo diesel engine with unit injectors, engine codes AJM, AUY
- ⇒ 1.9 l/96 kW - Turbo diesel engine with unit injectors, engine code ASZ
- ⇒ 2.3 l/125 kW Motronic, engine code AQN
- ⇒ 2.8 l/150 kW Motronic, engine code AQP

from February 2003

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

11 - J226 - Starter inhibitor and reversing light relay (175)

Relay locations on relay plate:

4 - J17 - Fuel pump relay (409)



Note:



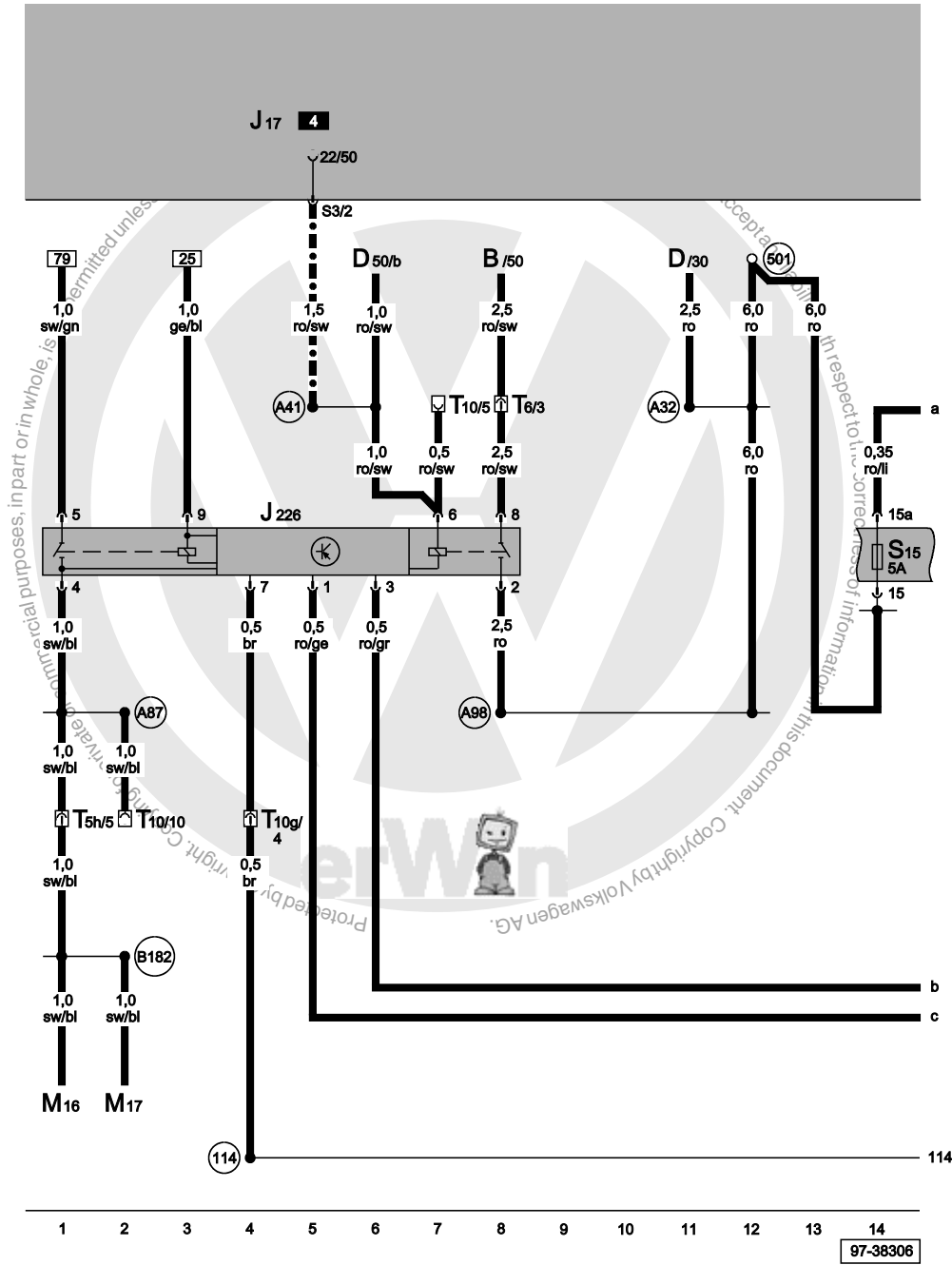
◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Starter inhibitor and reversing light relay



- B Starter
- D Ignition/starter switch
- J17 Fuel pump relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- S15 Fuse 15 in fuse holder
- T5h 5-pin connector, lower left A-pillar, entwined in wiring harness
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- 114 Earth connection, in automatic gearbox wiring harness
- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A41 Positive connection (50), in dash panel wiring harness, (models with petrol engine only)
- A87 Connection (RL), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- .-.- up to April 2001

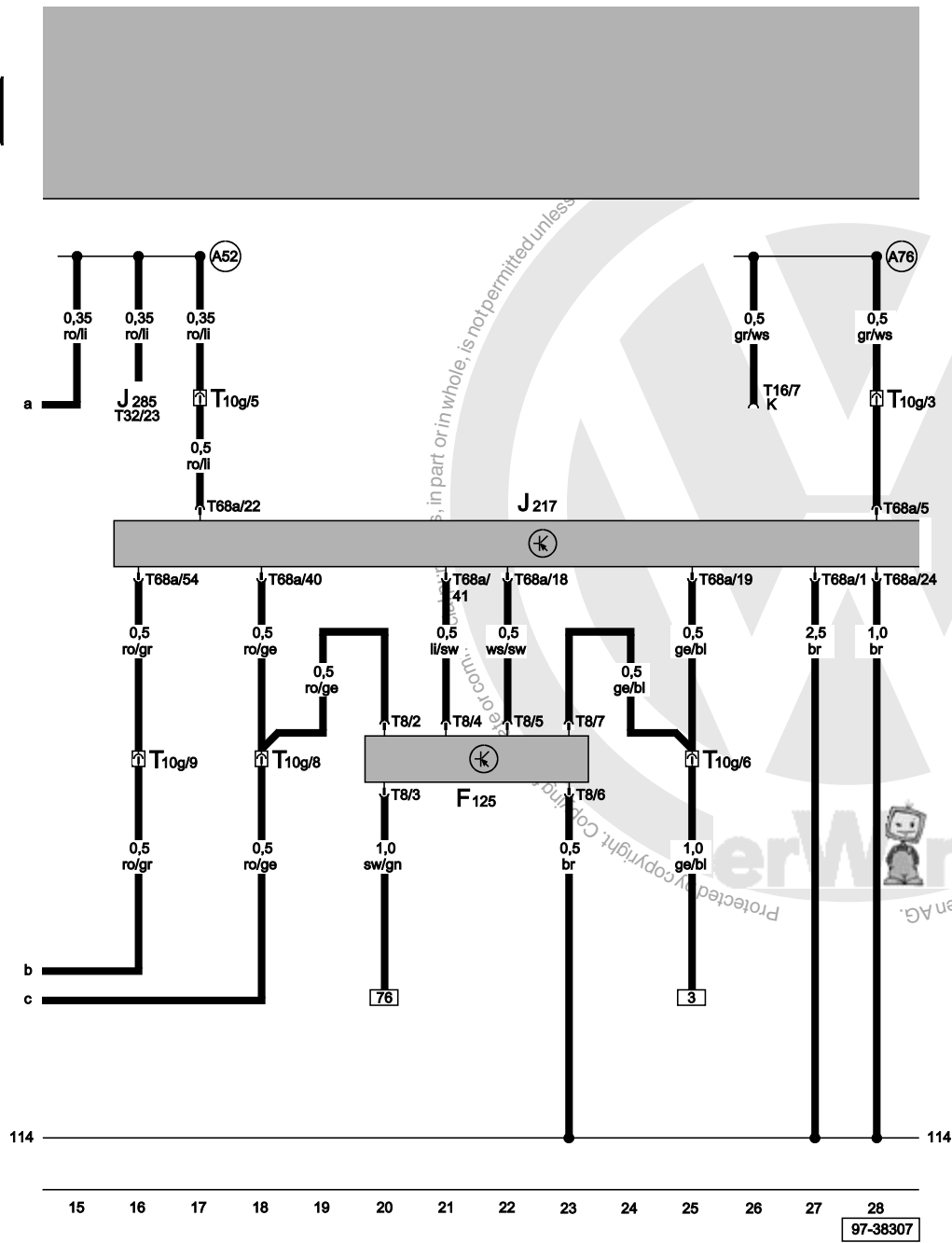
ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

Automatic gearbox control unit, multifunction switch

- F125 Multifunction switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J285 Control unit in dash panel insert
- T8 8-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T68a 68-pin connector

A52 Positive connection (30a), in dash panel wiring harness

A76 Connection (diagnosis wire K), in dash panel wiring harness



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- li = purple
- ge = yellow
- or = orange
- rs = pink

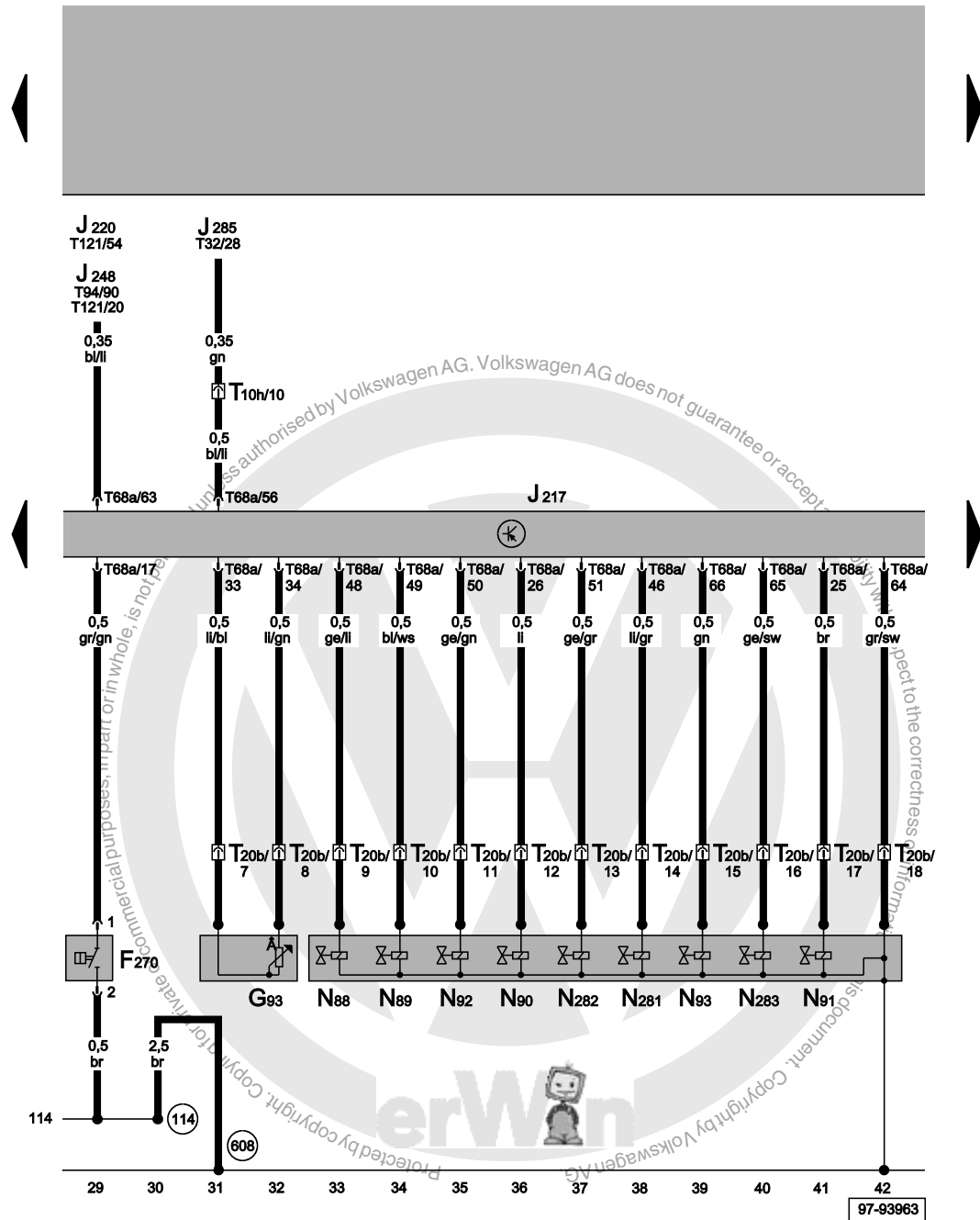
97-38307

Automatic gearbox control unit, solenoid valve, brake pressure switch, gearbox oil temperature sender, gearbox oil temperature sender

- F270 Brake pressure switch
- G93 Gearbox oil temperature sender
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- J248 Diesel direct injection system control unit
- J285 Control unit in dash panel insert
- N88 Solenoid valve 1
- N89 Solenoid valve 2
- N90 Solenoid valve 3
- N91 Solenoid valve 4
- N92 Solenoid valve 5
- N93 Solenoid valve 6
- N281 Solenoid valve 8
- N282 Solenoid valve 9
- N283 Solenoid valve 10
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T20b 20-pin connector, on gearbox
- T32 32-pin connector, blue
- T68a 68-pin connector
- T94 94-pin connector
- T121 121-pin connector

- 114 Earth connection, in automatic gearbox wiring harness
- 608 Earth point, in centre of plenum chamber

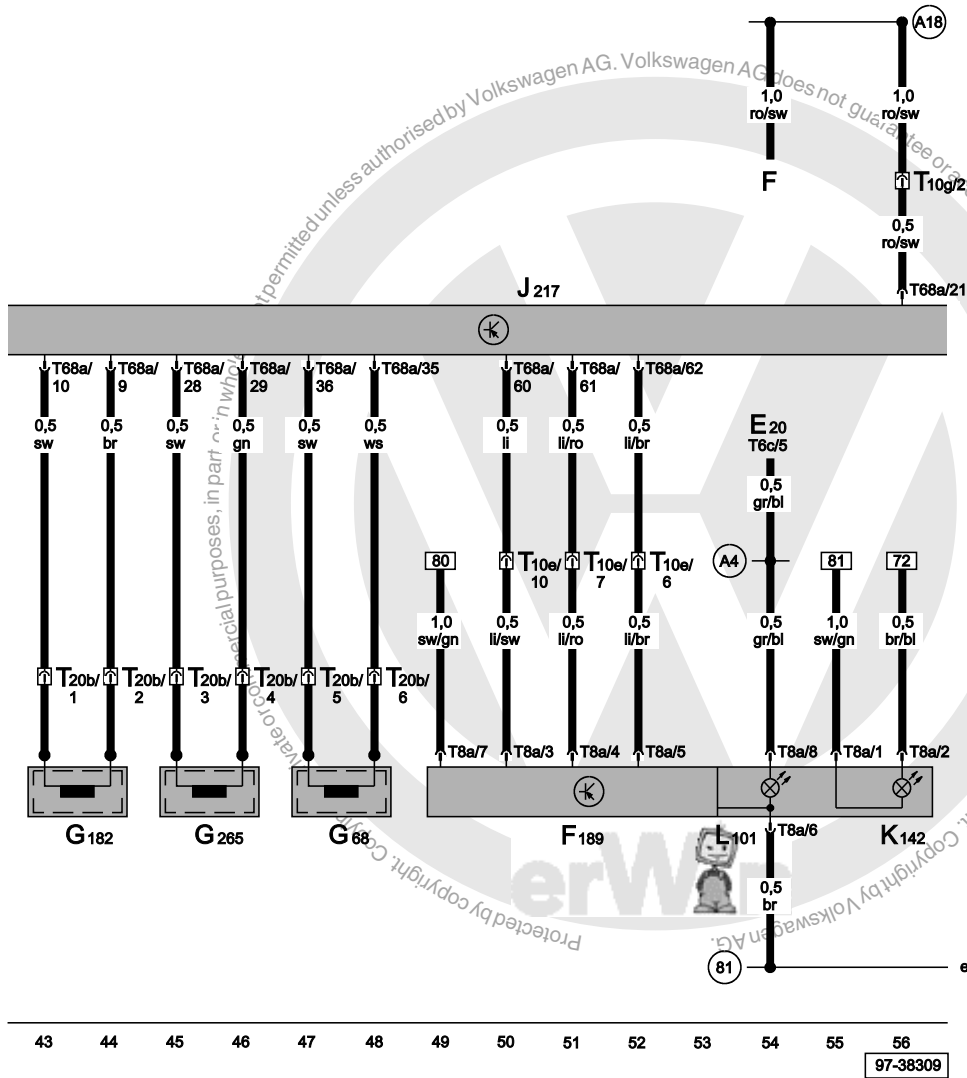
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Automatic gearbox control unit, vehicle speed sender, intermediate shaft speed sender, gearbox input speed sender, Tiptronic switch

- E20 Illumination regulators, switches, instruments
- F Brake light switch
- F189 Tiptronic switch
- G68 Vehicle speed sender
- G182 Gearbox input speed sender
- G265 Intermediate shaft speed sender
- J217 Automatic gearbox control unit, in centre plenum chamber
- K142 Selector lever position P/N warning lamp
- L101 Selector lever display illumination bulb
- T6c 6-pin connector
- T8a 8-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T20b 20-pin connector, on gearbox
- T68a 68-pin connector

- 81 Earth connection 1, in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness

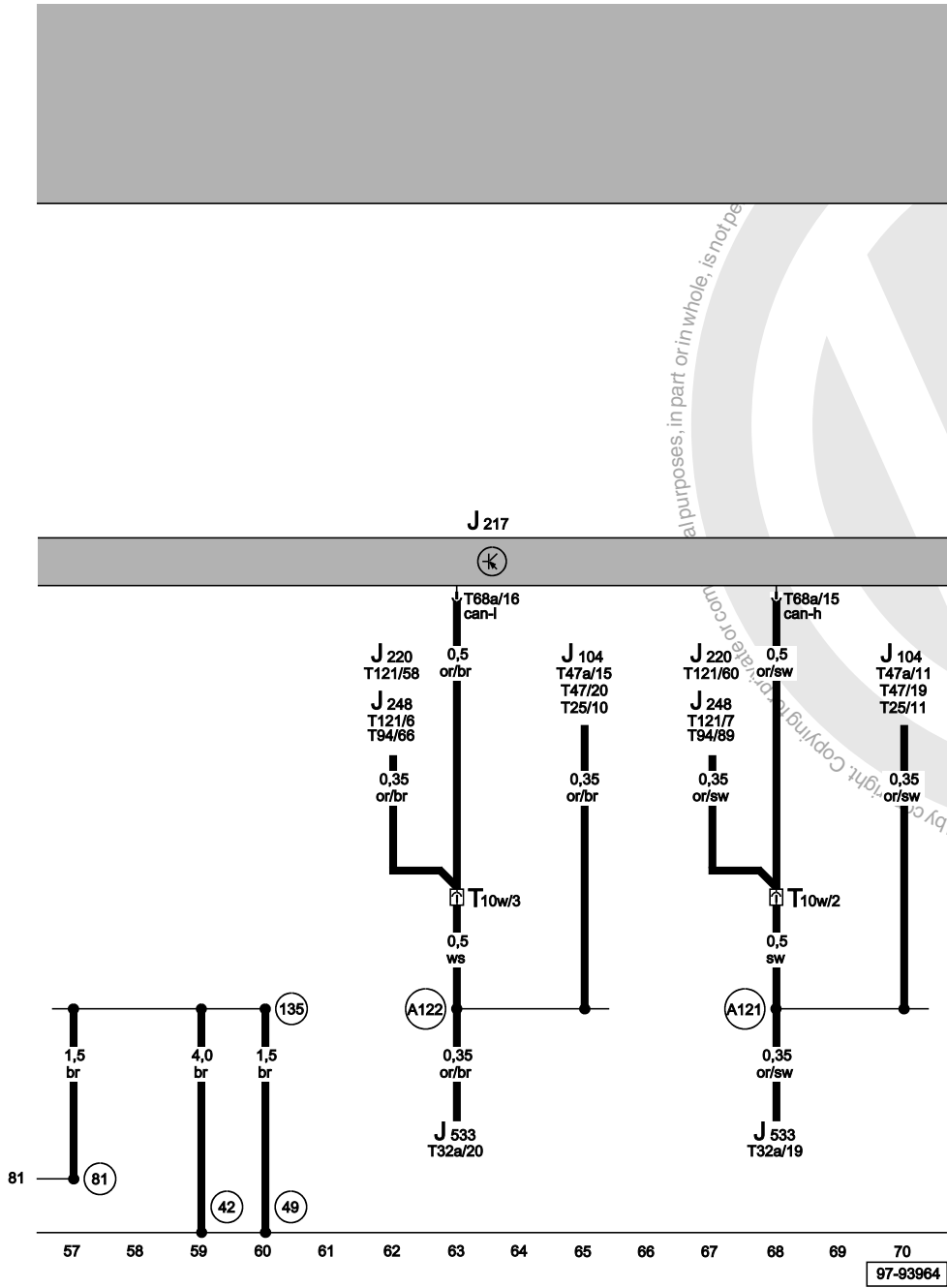


- ws = white
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- ro = red
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- gn = green
- bl = blue
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- ge = yellow
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Automatic gearbox control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- J248 Diesel direct injection system control unit
- J533 Data bus diagnostic interface, in dash panel insert
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T32a 32-pin connector, green, on dash panel insert
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)
- T68a 68-pin connector
- T94 94-pin connector
- T121 121-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



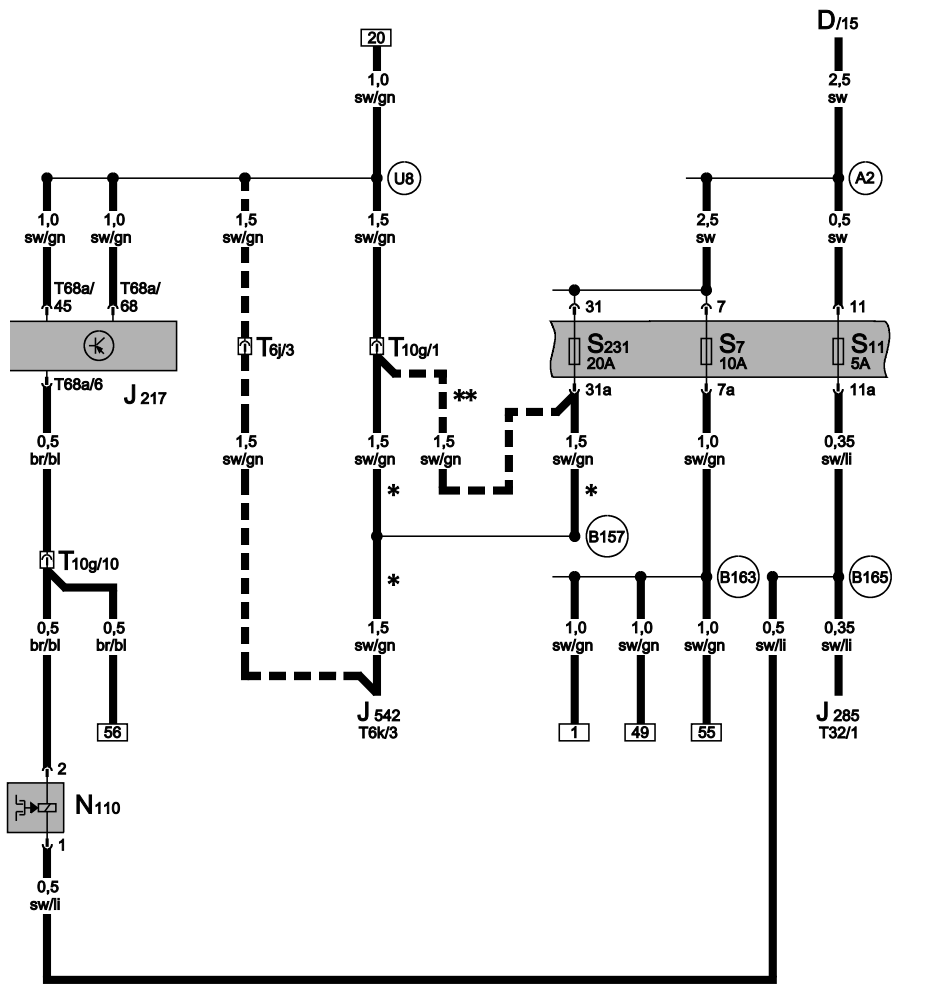
- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-83964

Automatic gearbox control unit, selector lever lock solenoid

- D Ignition/starter switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J285 Control unit in dash panel insert
- J542 Brake servo control unit
- N110 Selector lever lock solenoid
- S7 Fuse 7 in fuse holder
- S11 Fuse 11 in fuse holder
- S231 Fuse 31 in fuse holder
- T6j 6-pin connector, in left engine compartment
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- T68a 68-pin connector

- (A2) Positive connection (15), in dash panel wiring harness
- (B157) Positive connection 3 (15a), in interior wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- (B165) Positive connection 2 (15), in interior wiring harness
- (U8) Connection (15a), in automatic gearbox wiring harness
- * only models with brake servo control unit from May 2002
- ** only models without brake servo control unit
- only models with brake servo control unit up to April 2002



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1.9 I/110 kW - Turbo diesel engine with unit injectors, engine code ARL

from April 2000

1.9 I/96 kW - Turbo diesel engine with unit injectors, engine code ASZ

from October 2000

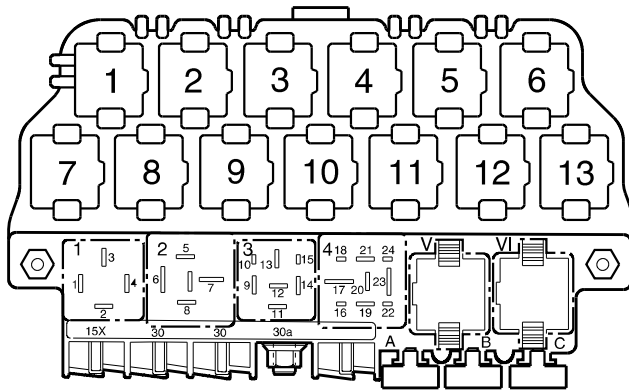
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier

above the relay plate:

- 10 - Fuel pump relay (167)
- 12 - Terminal 30 voltage supply relay (109)

Relay locations on relay plate:



97-14163

- 2 - X-contact relief relay (100)
- 4 - Glow plug relay (103)

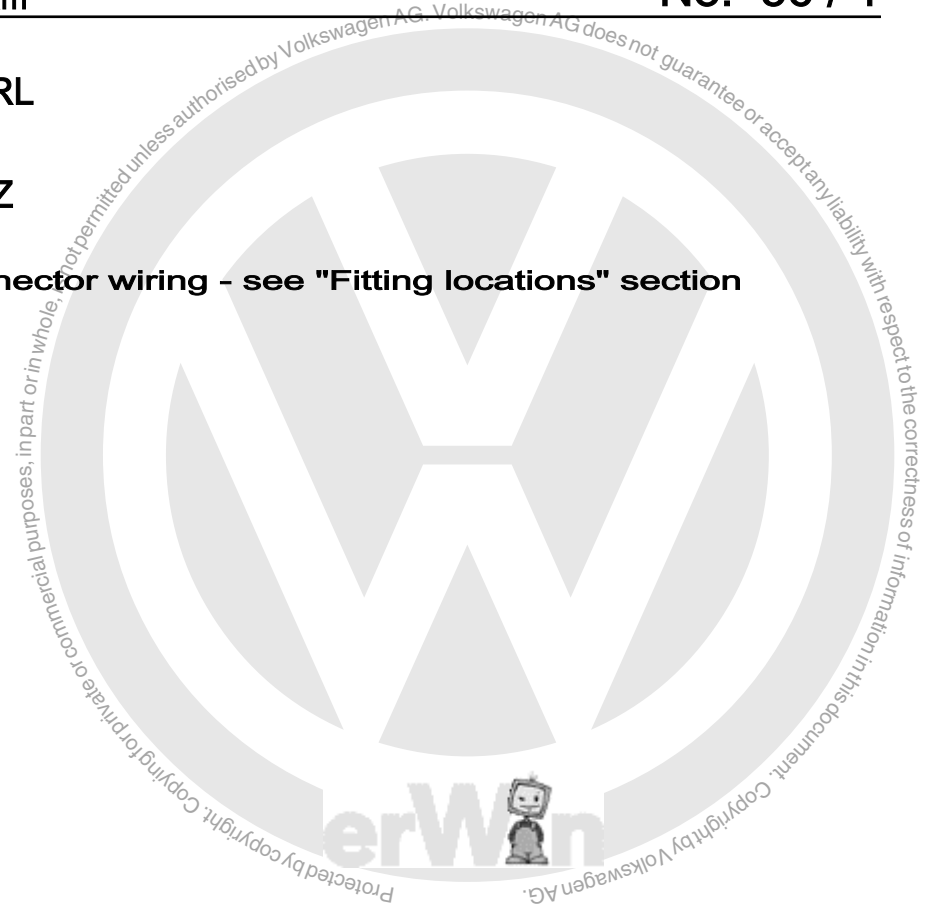


Note:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

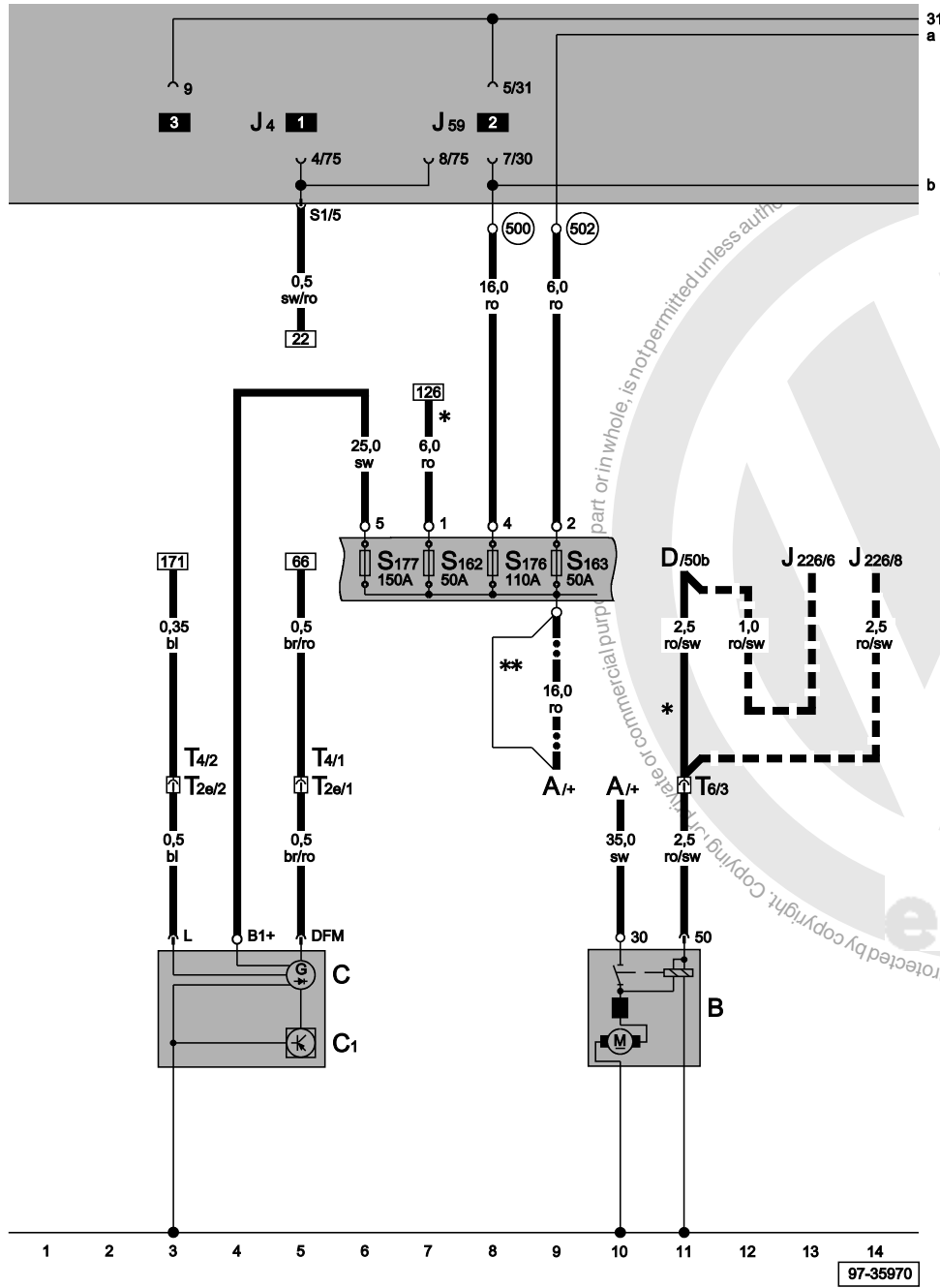
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow



- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





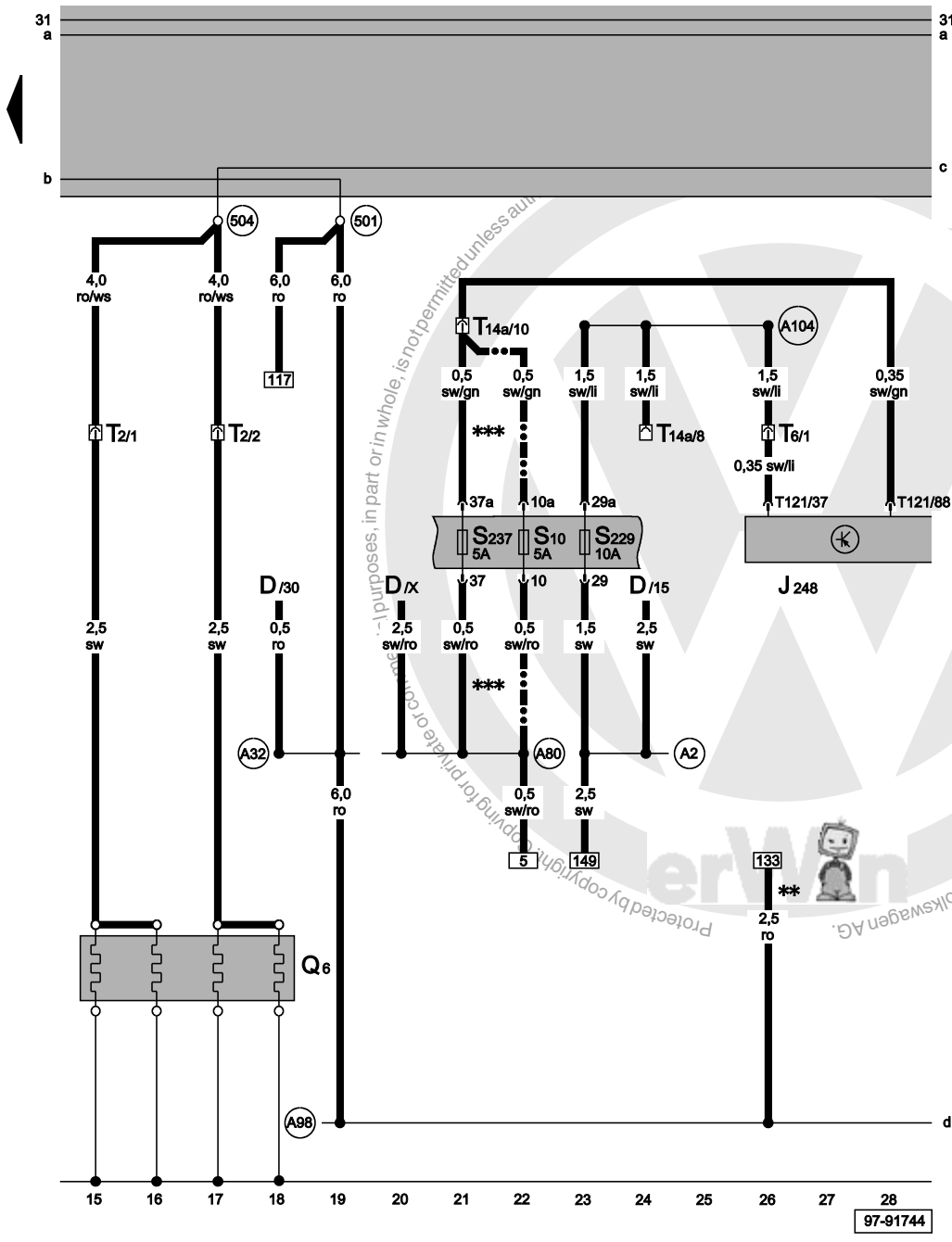
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse -1- (30), in fuse holder on battery
- S163 Fuse -2- (30), in fuse holder on battery
- S176 Fuse -4- (30), in fuse holder on battery
- S177 Fuse -5- (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox from September 2000
- ** up August 2000
- models with automatic gearbox only

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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

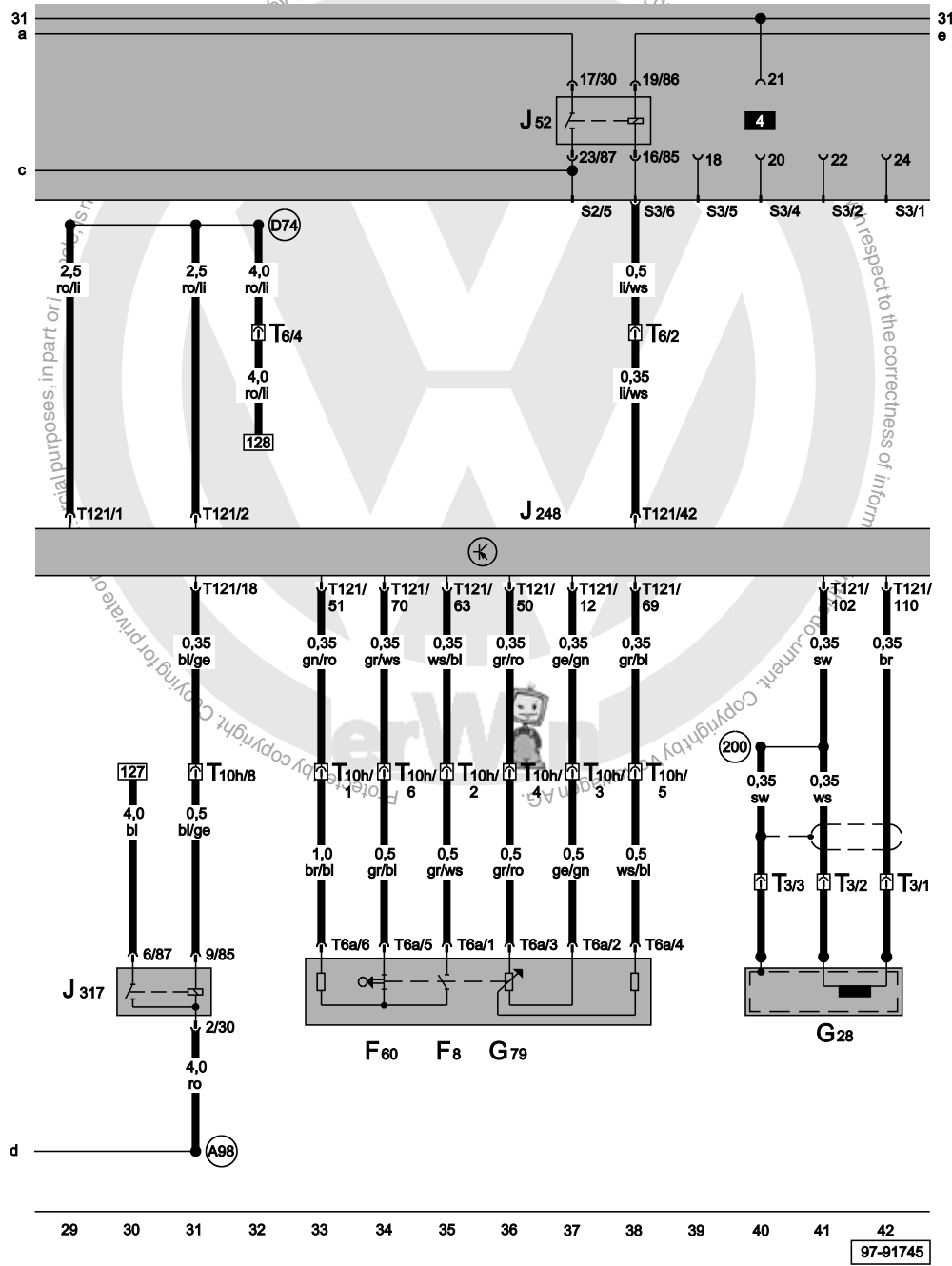
97-35970

Diesel direct injection system control unit, glow plugs - engine



- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- Q6 Glow plugs, engine
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- ** from September 2000
- *** from November 2001
- up to October 2001

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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
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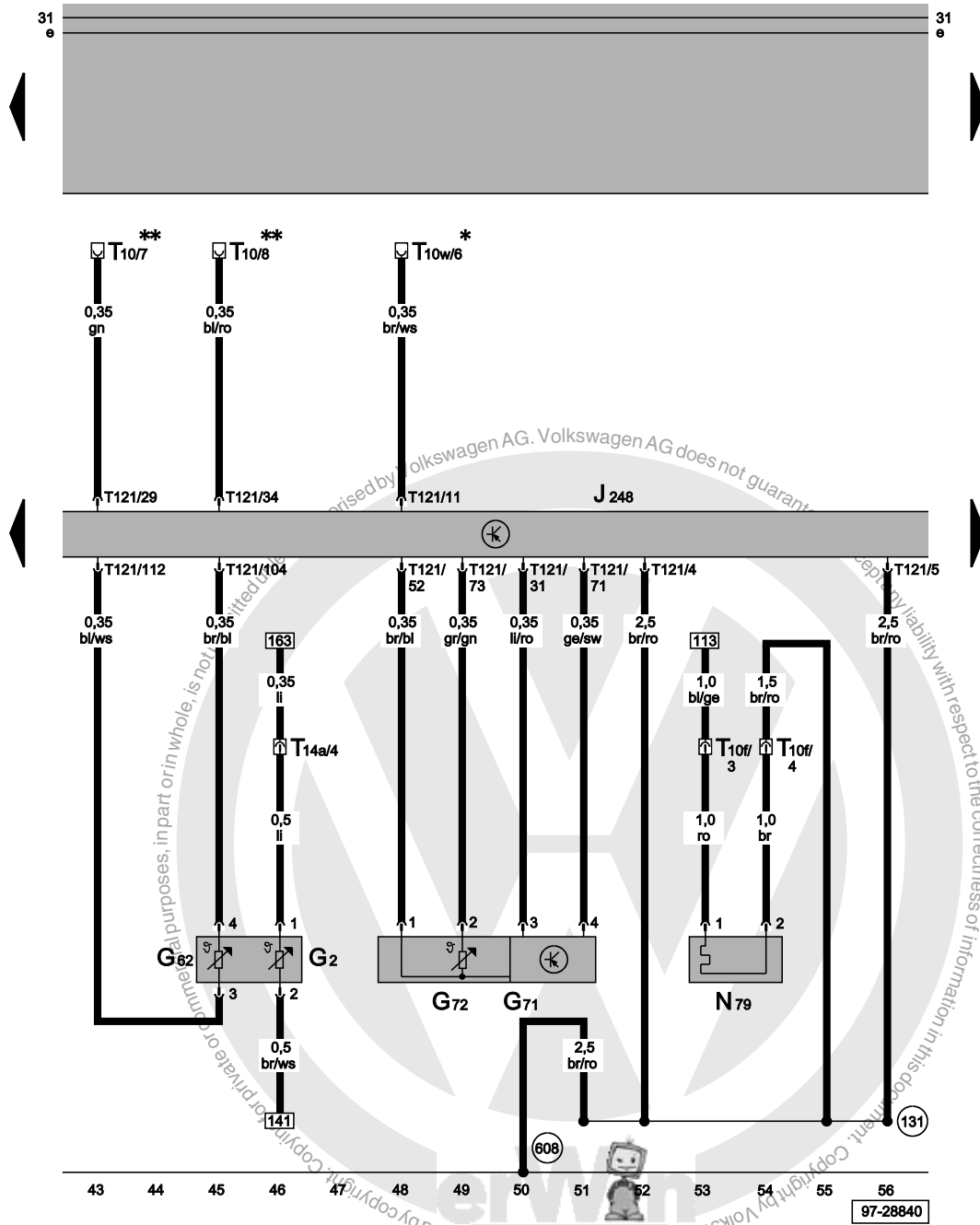
Diesel direct injection system control unit, glow plug relay, kickdown switch, engine speed sender, idling speed switch, accelerator position sender, terminal 30 voltage supply relay

- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- T3 3-pin connector, on front of engine
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 200 Earth connection (screening) in engine compartment wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness

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- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, coolant temperature display sender, intake manifold pressure sender, intake manifold temperature sender, heater element for crankcase breather

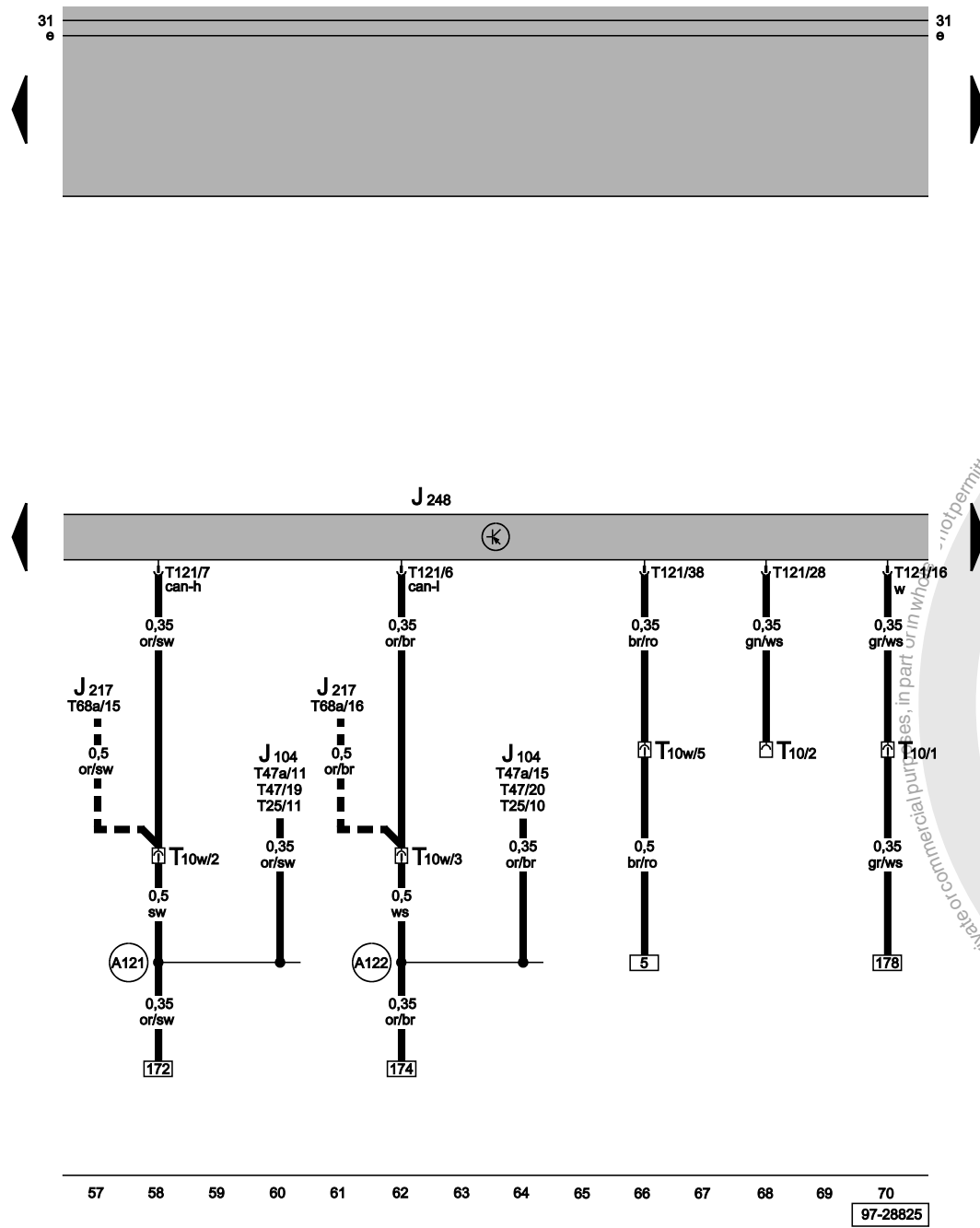
- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, in front engine compartment
- T14a 14-pin connector, near battery
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- * connection for radiator fan control unit/ radiator fan relay
- ** connection air conditioning



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- gn = green
- bl = blue
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- li = purple
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Diesel direct injection system control unit

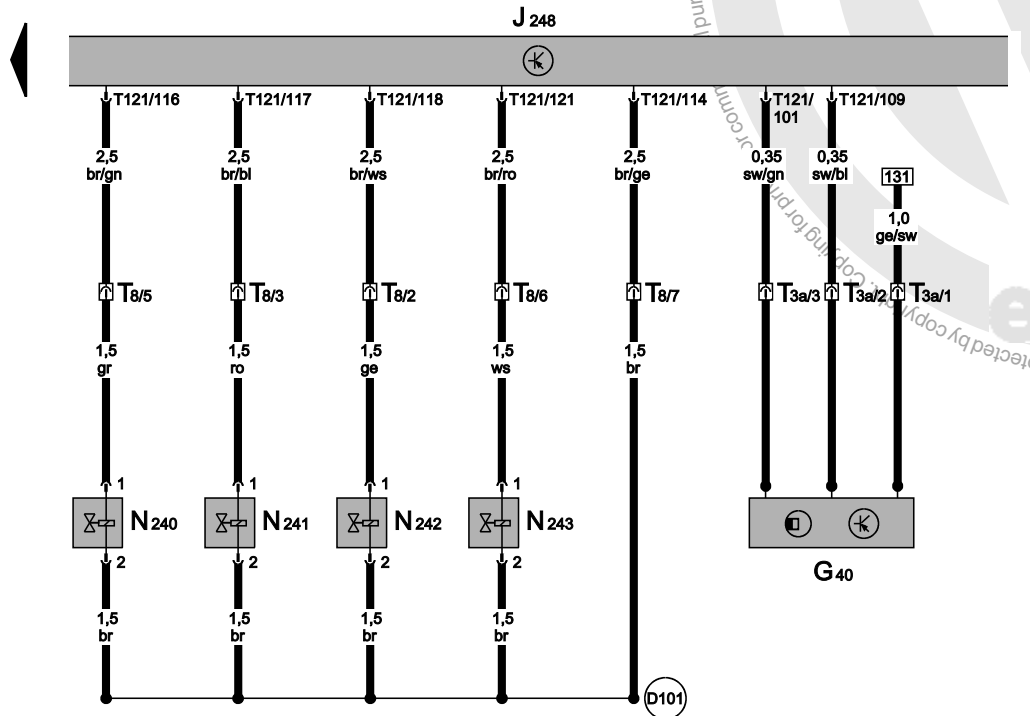
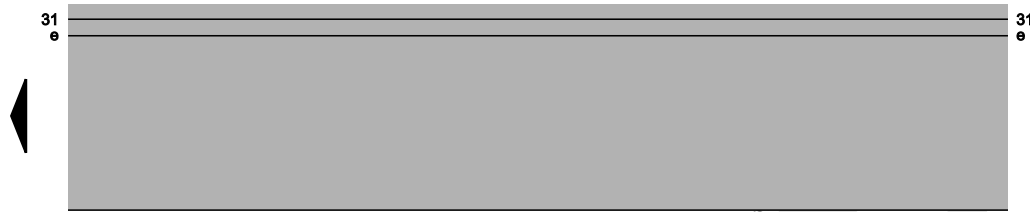
- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only



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Diesel direct injection system control unit, unit injector valves, Hall sender, (for camshaft position)

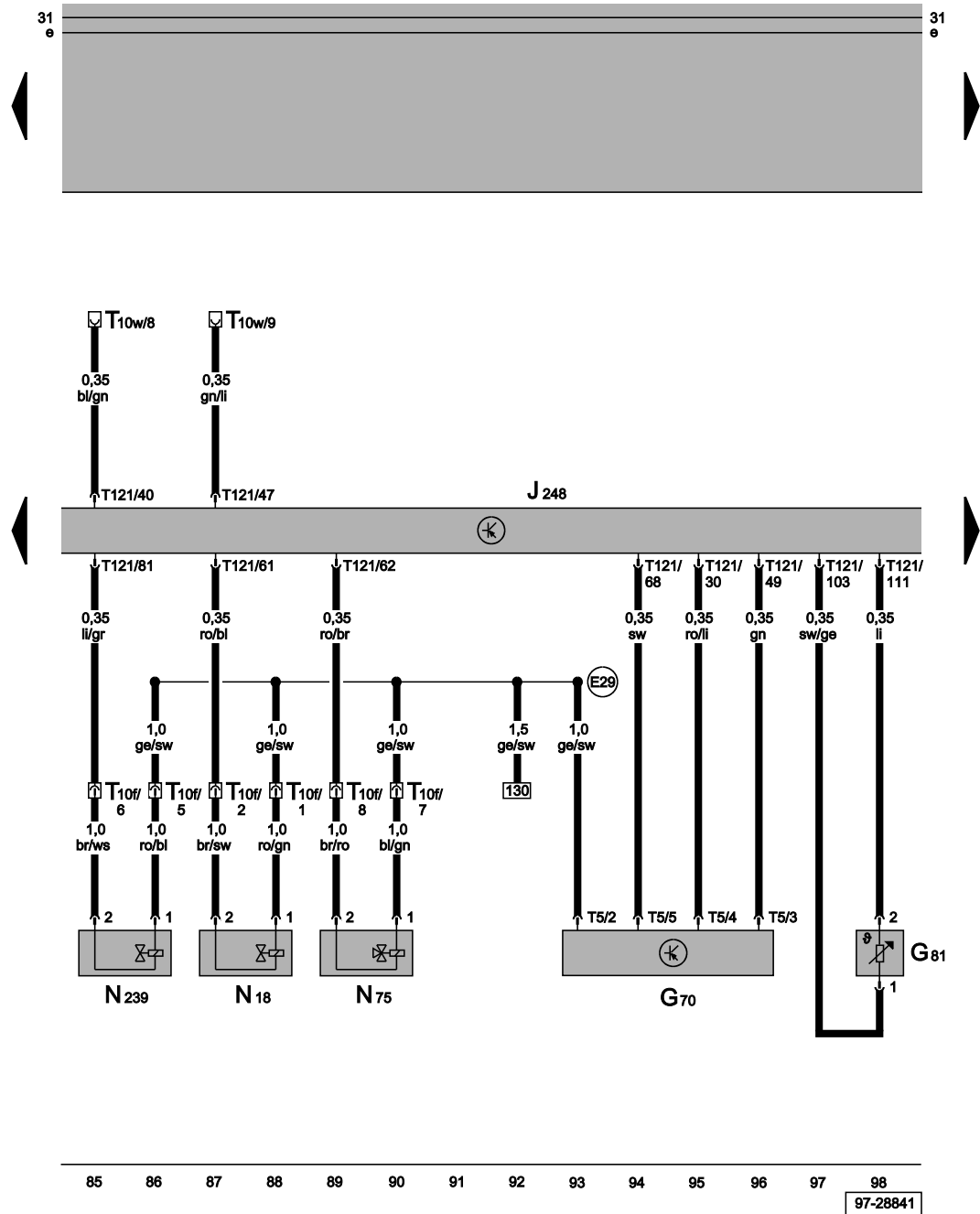
- G40 Hall sender (for camshaft position)
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N240 Unit injector valve, No. 1 cyl.
- N241 Unit injector valve, No. 2 cyl.
- N242 Unit injector valve, No. 3 cyl.
- N243 Unit injector valve, No. 4 cyl.
- T3a 3-pin connector, on front of engine
- T8 8-pin connector, in left engine compartment
- T121 121-pin connector
- D101 Connection -1-, in engine compartment wiring harness



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Diesel direct injection system control unit, air mass meter, variable intake manifold flap change-over valve, fuel temperature sender, exhaust gas recirculation valve, charge pressure control solenoid valve

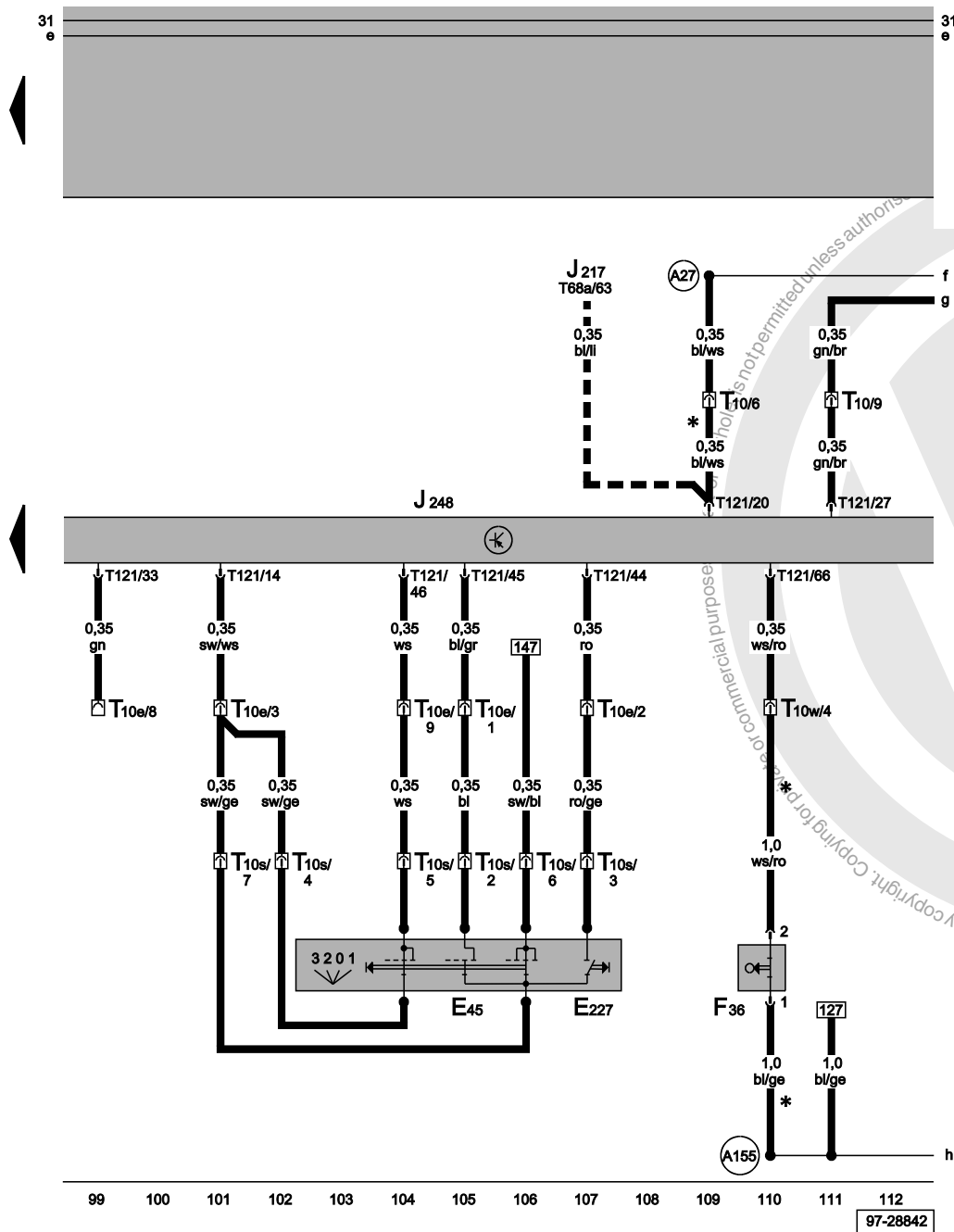
- G70 Air mass meter
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N239 Variable intake manifold flap change-over valve
- T5 5-pin connector
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E29 Connection, in engine compartment wiring harness



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Diesel direct injection system control unit, cruise control system switch, clutch pedal switch

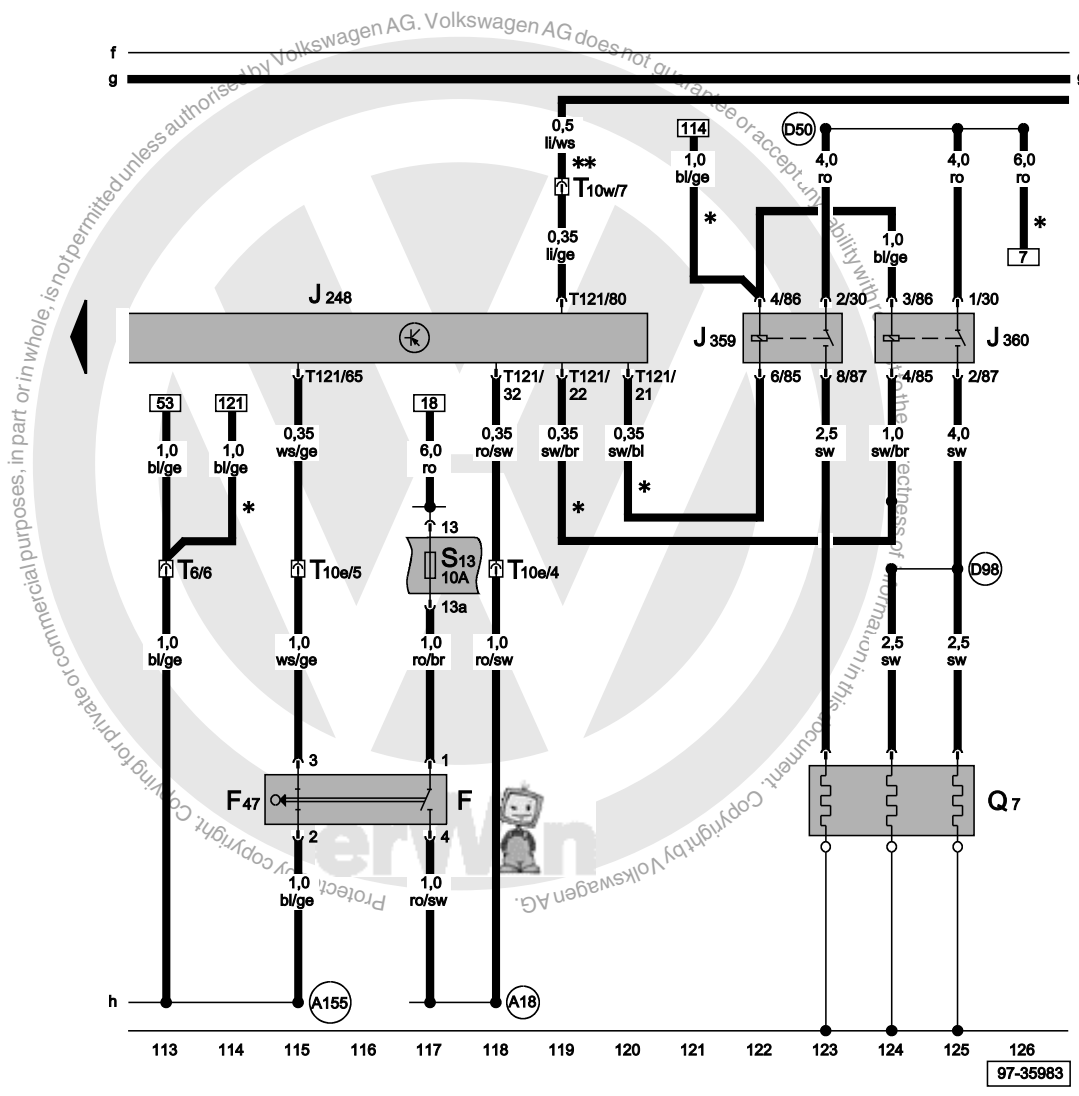
- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- * only models with manual gearbox
- ** only models with GND
- models with automatic gearbox only

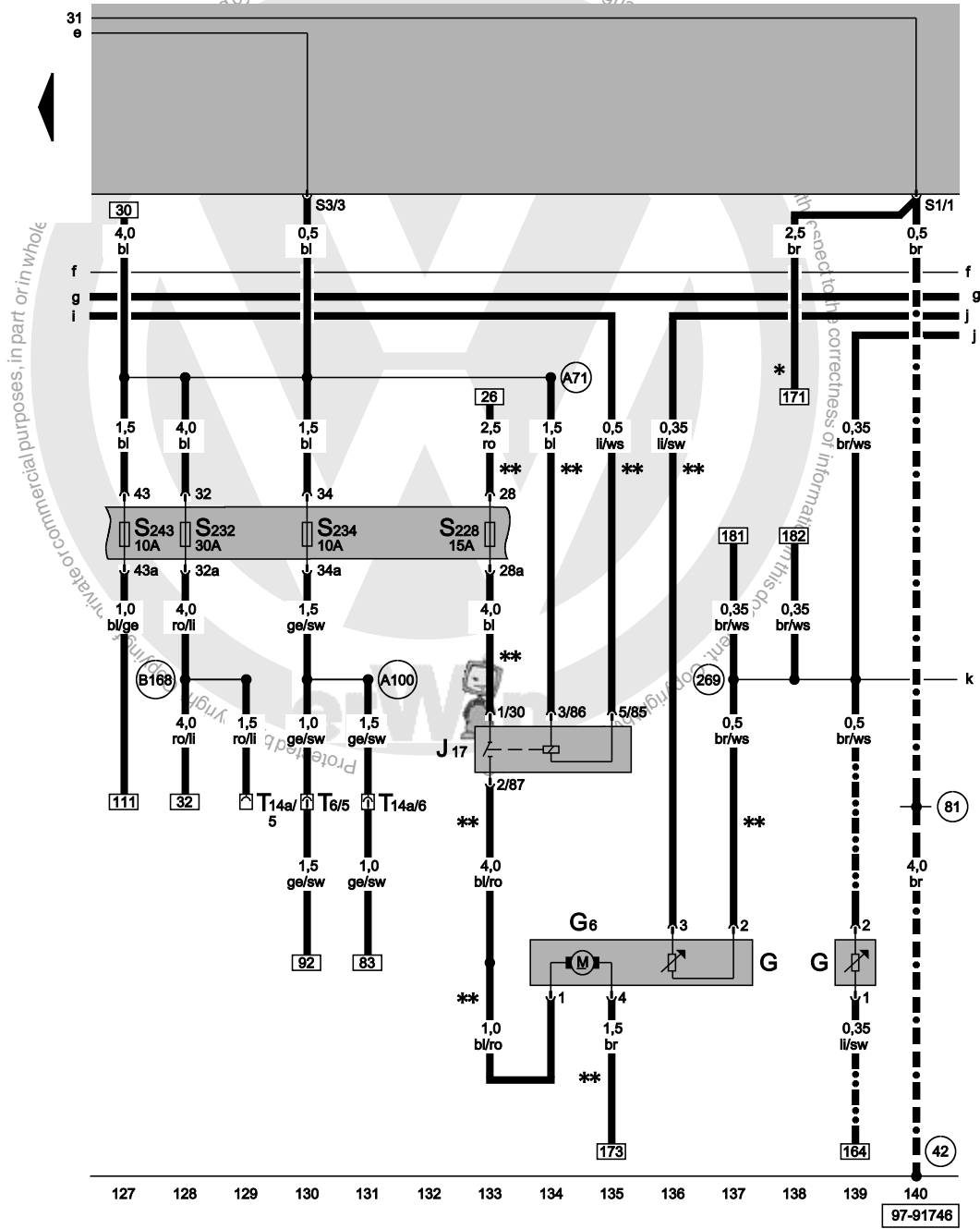


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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, coolant heating element, cruise control system brake pedal switch/diesel direct injection system, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Cruise control system brake pedal switch/diesel direct injection system
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay*, in protective housing on left in engine compartment (53)
- J360 High heat output relay*, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant*
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- * only models with manual gearbox
- ** from September 2000





Fuel pump relay, fuel gauge sender, fuel pump (pre-supply pump)

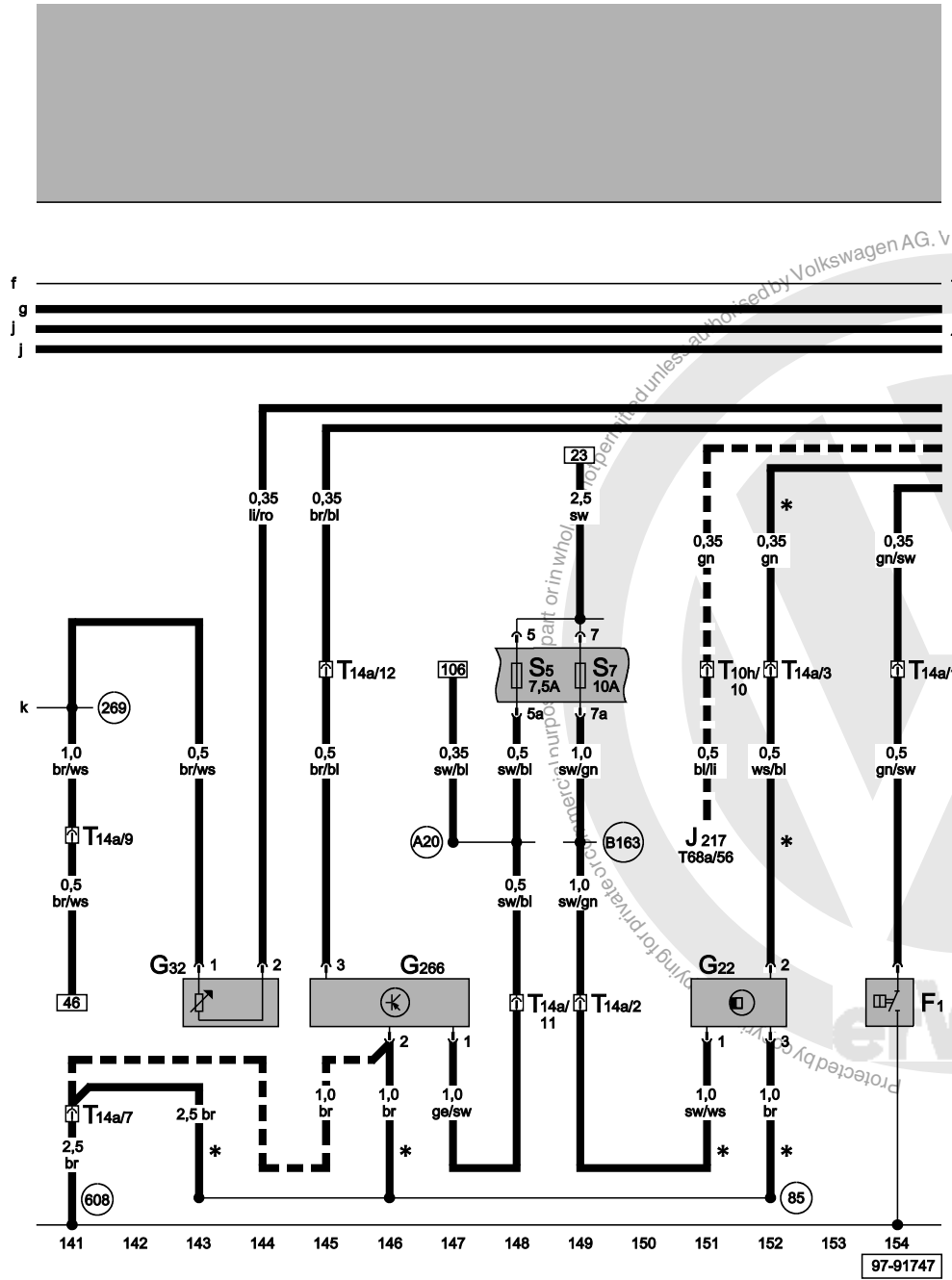
- G Fuel gauge sender***
- G6 Fuel pump (pre-supply pump)
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 81 Earth connection 1, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in engine compartment wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness
- * from May 2000
- ** from September 2000
- up to April 2000
- up August 2000
- *** models with four-wheel drive => four-wheel drive Current Flow Diagram

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Oil level and oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

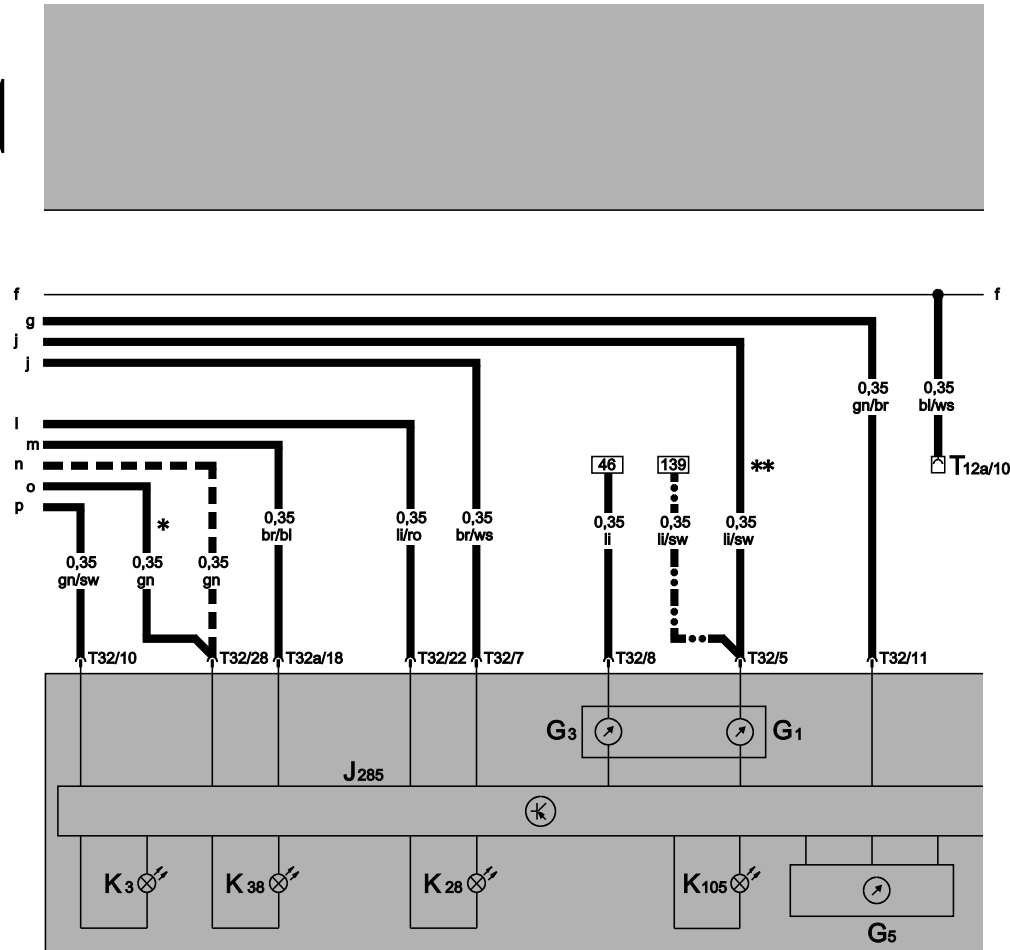
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- J217 Automatic gearbox control unit
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)

- 85 Earth connection 1, in engine compartment wiring harness
- 269 Earth connection (sender earth) 1, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- * only models with manual gearbox
- *** only flexible service interval display
- models with automatic gearbox only



Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, oil pressure warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- * only models with manual gearbox
- ** from September 2000
- up August 2000
- *** only flexible service interval display, models with automatic gearbox only



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- or = orange
- rs = pink

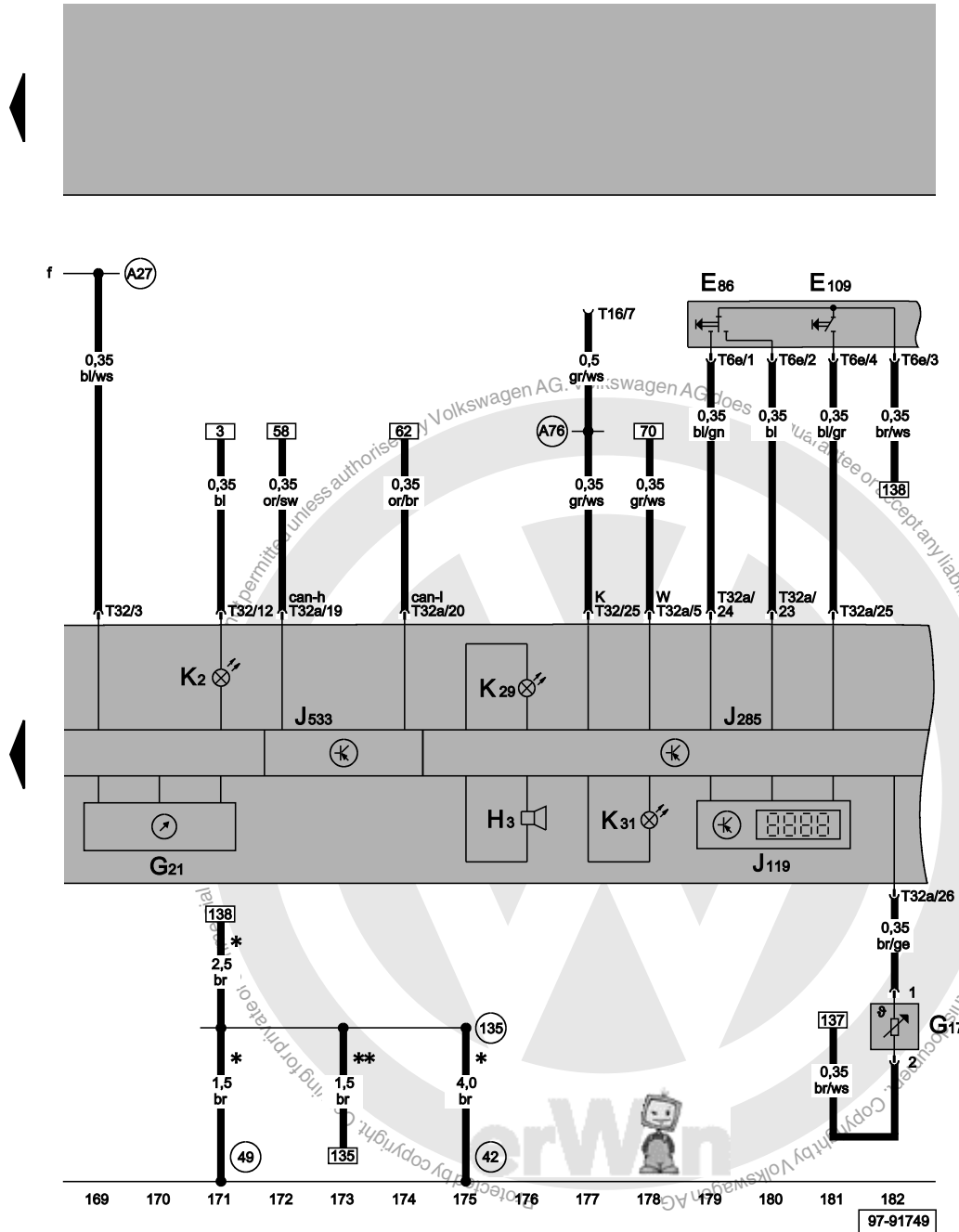
Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, glow period warning lamp, cruise control system warning lamp, speedometer

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- G21 Speedometer
- H3 Warning buzzer
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K2 Alternator warning lamp
- K29 Glow period warning lamp
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness

* from May 2000
 ** from September 2000

- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Radiator fan, 2 speed, for vehicles with four-wheel drive and trailer tow bar (not for models with air conditioner)

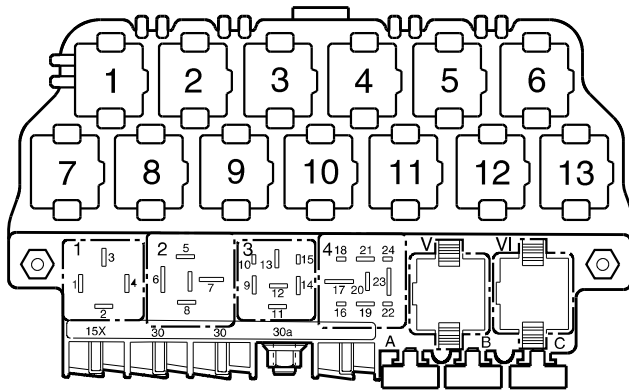
⇒ 1.9 litre/85 kW Turbo diesel engine with unit injectors, engine codes AJM

From November 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)



Note:

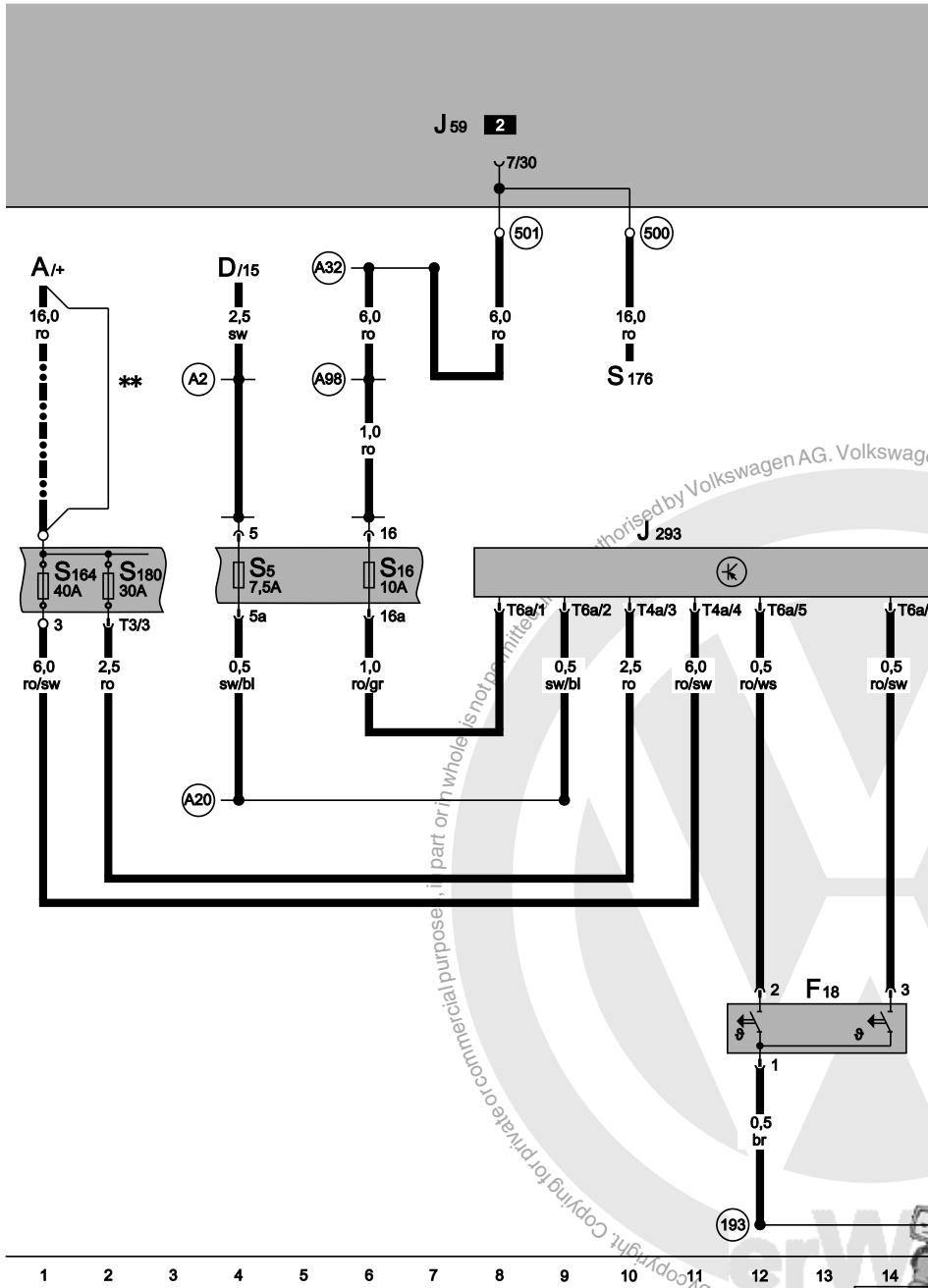
◆ *The number in brackets behind the part designation denotes the control number of the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Radiator fan control unit, radiator fan thermo-switch



- A Battery
- D Ignition/starter switch
- F18 Radiator fan thermo-switch
- J59 X contact relief relay
- J293 Radiator fan control unit, in engine compartment, front left
- S5 Fuse in fuse box
- S16 Fuse in fuse box
- S164 Fuse -3- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S180 Fuse -8- (30), in fuse box/battery
- T3 3-pin connector
- T4a 4-pin connector
- T6a 6-pin connector

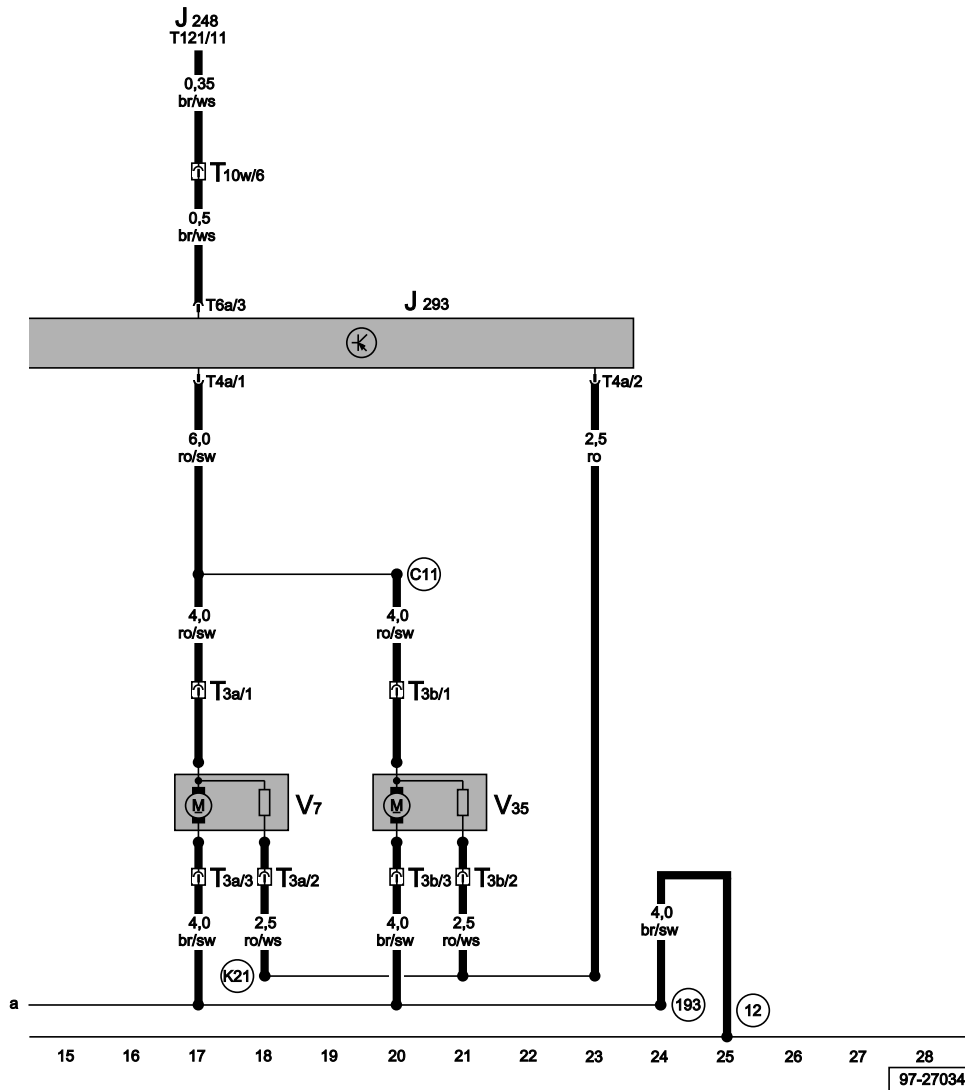
- 193 Earth connection -1-, in radiator fan wiring harness
- 500 Screw connection -1- (30), on relay plate
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- ** Up to August 2000
- ... From September 2000

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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, radiator fan

- J248 Diesel direct injection system control unit
- J293 Radiator fan control unit, in engine compartment, front left
- T3a 3-pin connector, in engine compartment, front left
- T3b 3-pin connector, in engine compartment, front left
- T4a 4-pin connector
- T6a 6-pin connector
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector
- V7 Radiator fan
- V35 Radiator fan, right

- 12 Earth point, in engine compartment, left
- 193 Earth connection -1-, in radiator fan wiring harness
- C11 Connection in radiator fan wiring harness
- K21 Connection -1-, in radiator fan wiring harness



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- gn = green
- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Multi-function steering wheel for CCS and radio

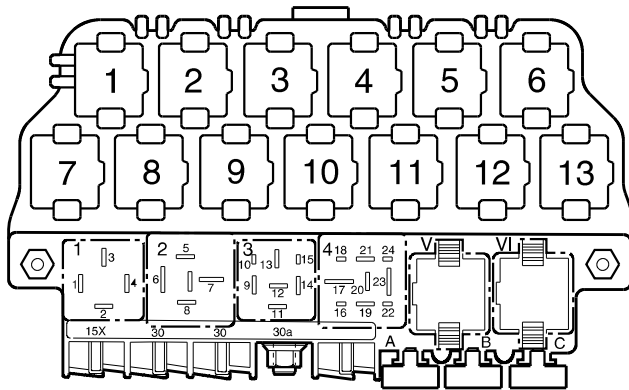
From February 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

5,6 - Multi-function steering wheel control unit (450)

Relay locations on relay plate:



97-14163

1 - Dual tone horn relay (53)

2 - X contact relief relay (100)



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

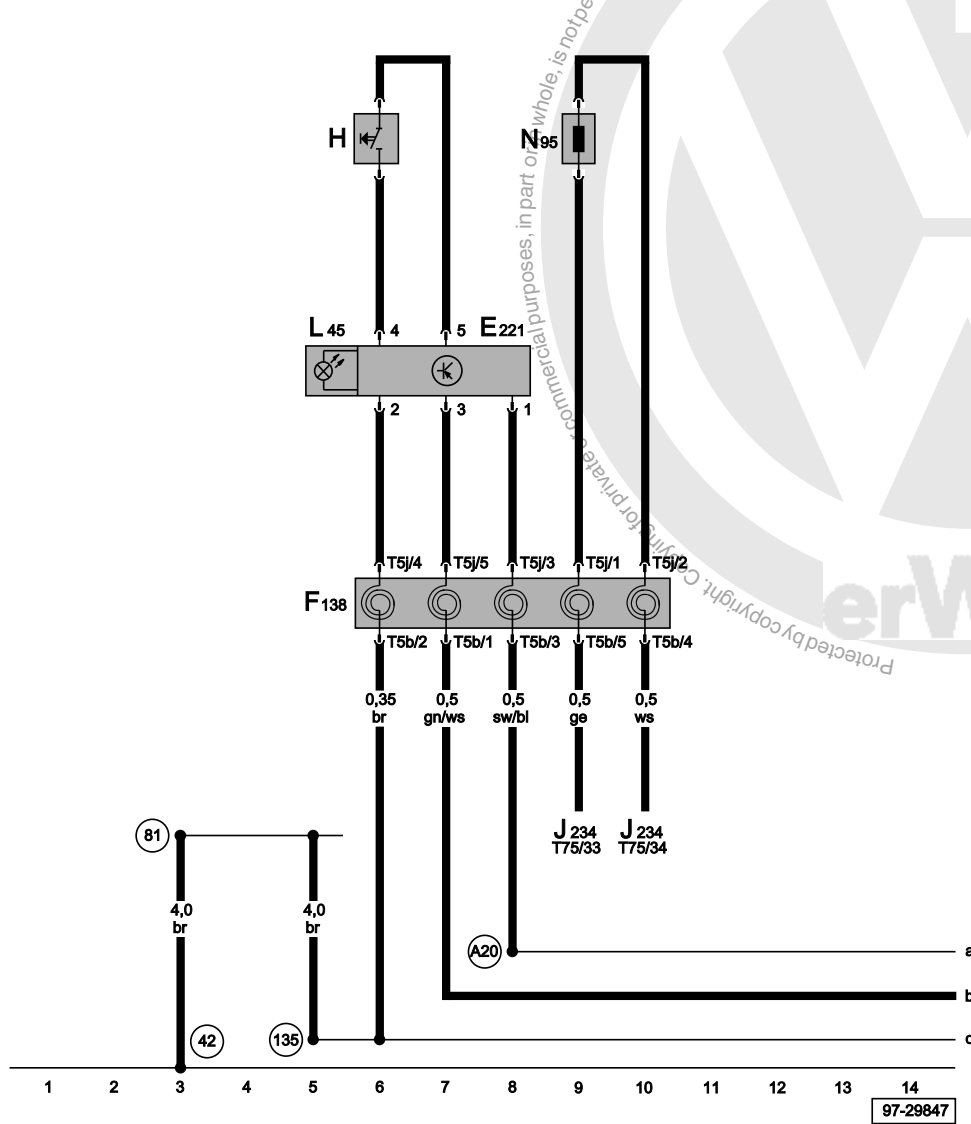
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Operating unit in steering wheel, horn plate, airbag coil connector, airbag igniter, driver's side

- E221 Operating unit in steering wheel
- F138 Airbag coil connector
- H Horn plate
- J234 Airbag control unit
- L45 Light for memory operating unit
- N95 Airbag igniter, driver's side
- T5b 5-pin connector
- T5j 5-pin connector
- T75 75-pin connector

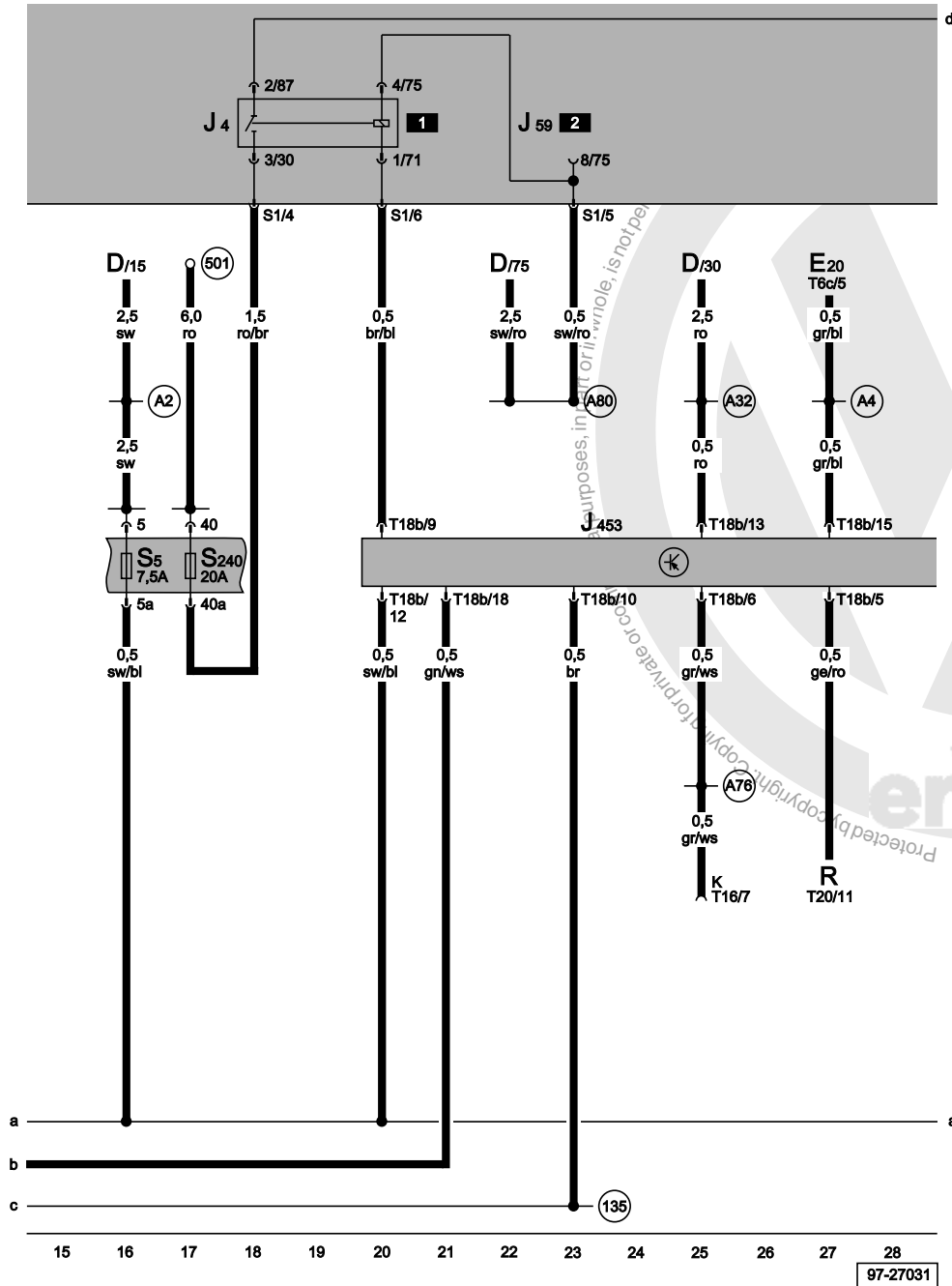
- 42 Earth point, next to steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness



- ws = white
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- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29847

Multi-function steering wheel control unit, dual tone horn relay



- D Ignition/starter switch
- E20 Switches and instruments - lighting control
- J4 Dual tone horn relay
- J59 X contact relief relay
- J453 Multi-function steering wheel control unit, above the central electrics
- R Radio
- S5 Fuse in fuse box
- S240 Fuse in fuse box
- T6c 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T18b 18-pin connector
- T20 20-pin connector, green
- 135 Earth connection -2-, in dash panel wiring harness
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A4 Positive (+) connection (58b), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A80 Connection -1- (X), in dash panel wiring harness

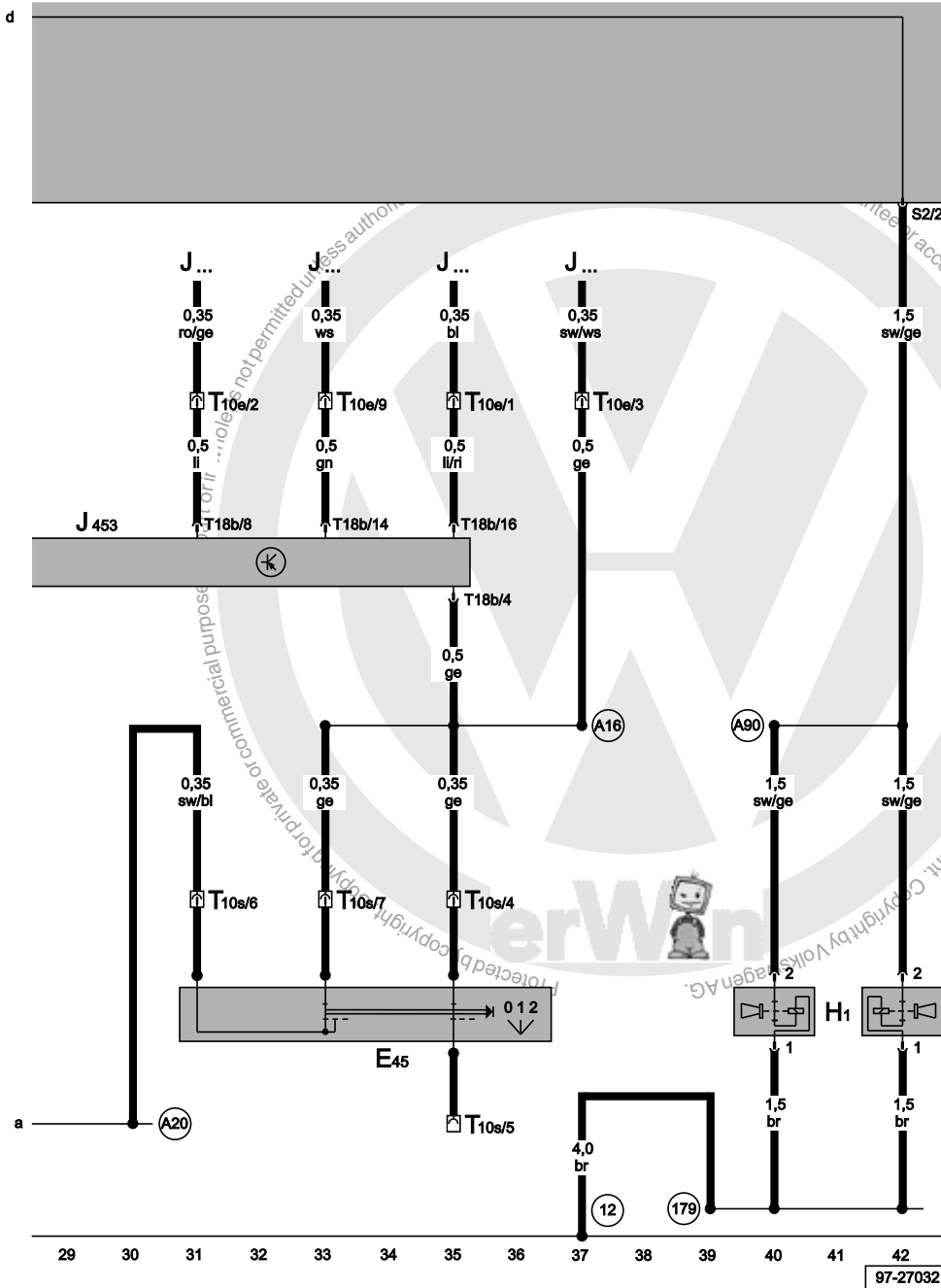
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Multi-function steering wheel control unit, cruise control system switch (CCS), dual tone horn

- E45 Cruise control system switch
- H1 Dual tone horn
- J... Engine control units
- J453 Multi-function steering wheel control unit, above the central electrics
- T10e 10-pin connector, black, in protective housing for connectors, in plenum chamber, left*
- T10s 10-pin connector, next to steering column
- T18b 18-pin connector

- 12 Earth point, in engine compartment, left
- 179 Earth connection, in left headlight wiring harness
- A16 Connection (CCS), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A90 Connection (dual tone horn), in dash panel wiring harness

* ⇒ Current Flow Diagram CCS/ engine



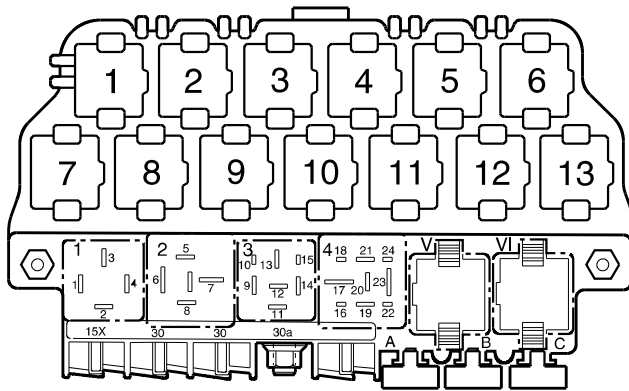
- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-27032

Radio systems

- ⇒ Alpha
 - ⇒ Beta
 - ⇒ Beta with CD changer
 - ⇒ Gamma
 - ⇒ Gamma with CD changer
- from May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



97-14163

Fuse colours

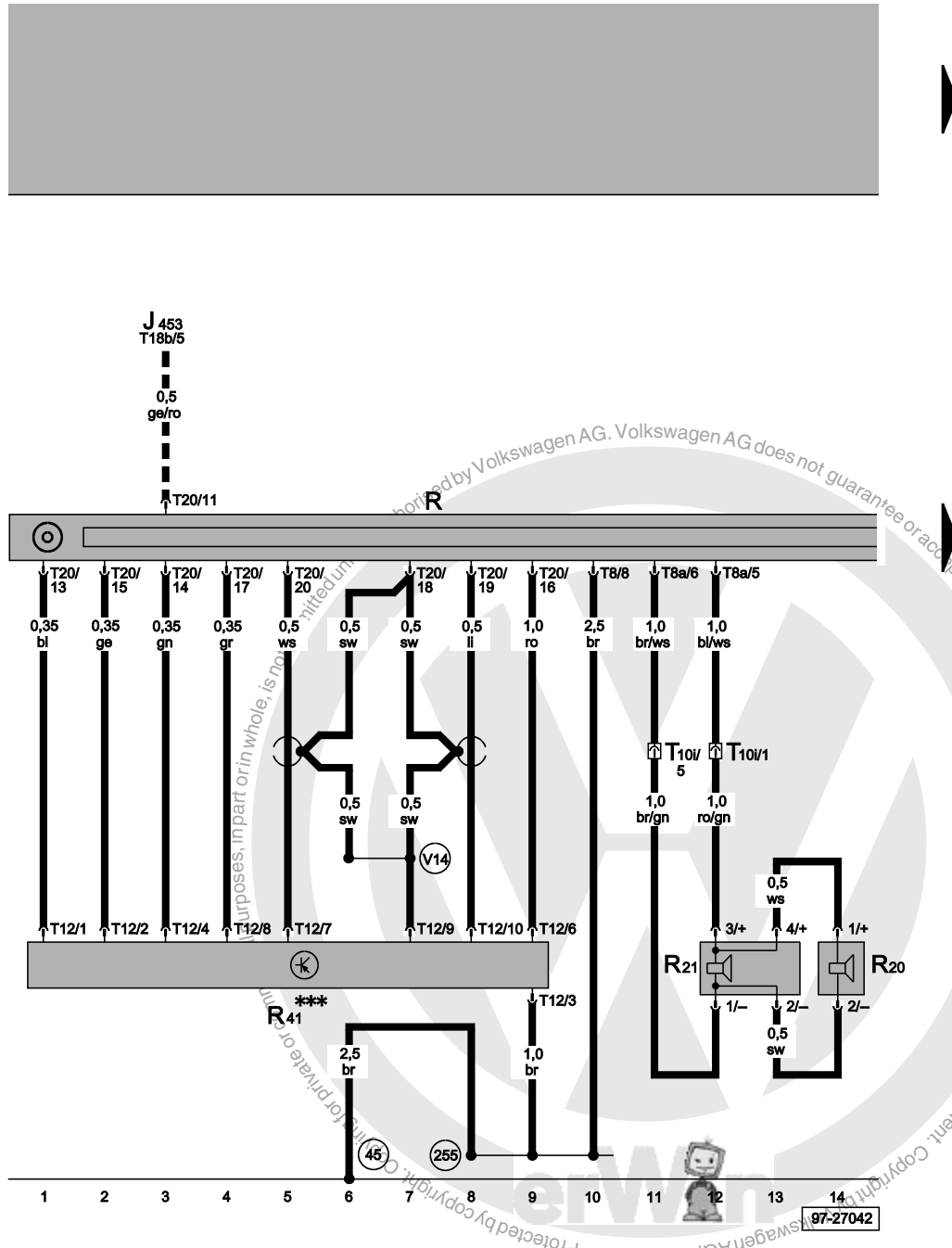
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Radio, CD changer, front left loudspeaker

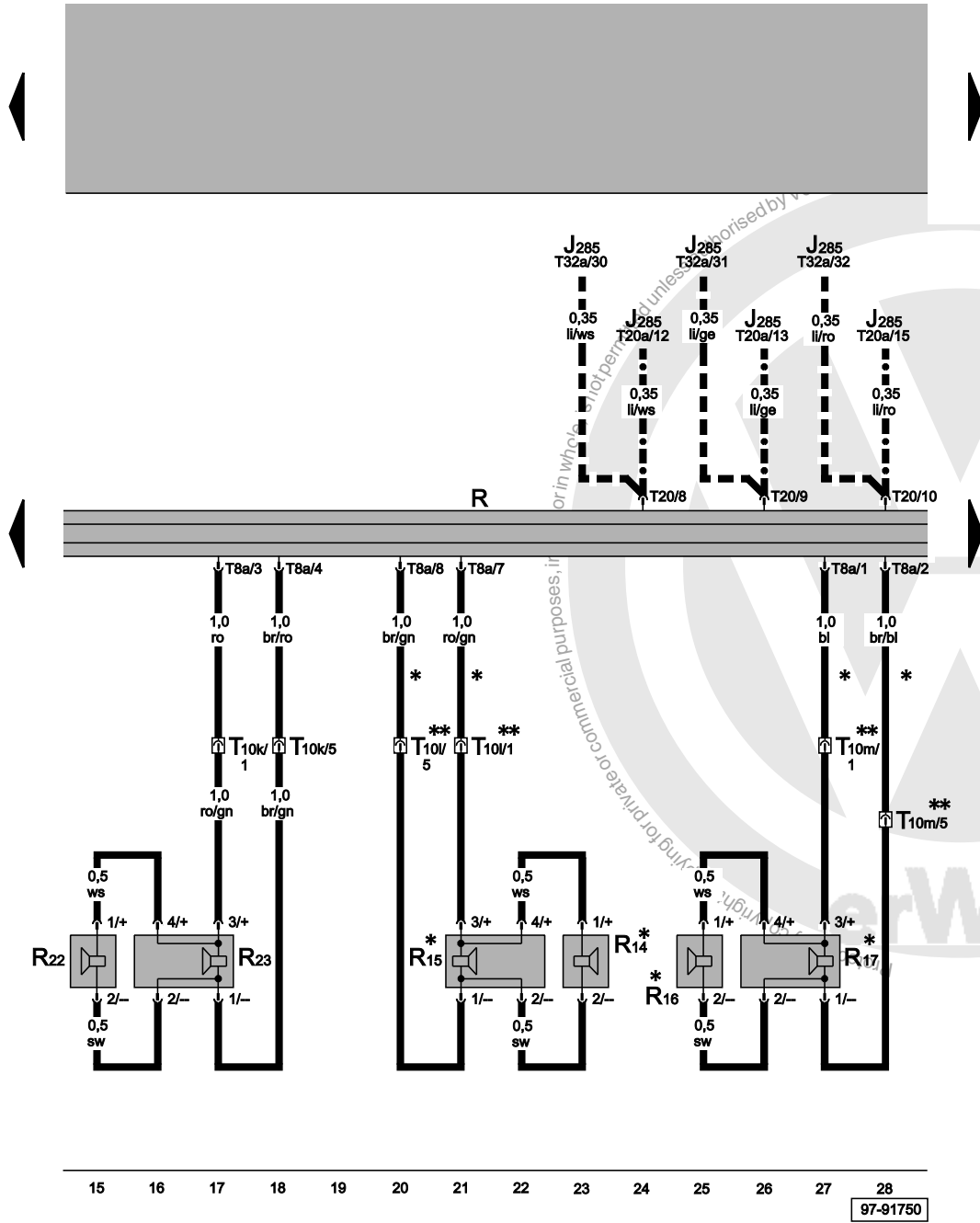
- J453 Multifunction steering wheel control unit
- R Radio
- R20 Front left treble loudspeaker, in the door
- R21 Front left bass loudspeaker, in the door
- R41 CD changer, in luggage compartment, rear left***
- T8 8-pin connector
- T8a 8-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T12 12-pin connector
- T18b 18-pin connector
- T20 20-pin connector, green (DISPLAY)

- 45 Earth point, centre behind dash panel
- 255 Earth connection 1, in radio wiring harness
- V14 Connection (screening), in CD changer wiring harness
- *** not for radio 'Alpha'
- only models with multifunction display



Radio, front right loudspeaker, rear loudspeaker

- J285 Control unit with display in dash panel insert
- R Radio
- R14 Rear left treble loudspeaker
- R15 Rear left bass loudspeaker
- R16 Rear right treble loudspeaker
- R17 Rear right bass loudspeaker
- R22 Front right treble loudspeaker
- R23 Front right bass loudspeaker
- T8a 8-pin connector
- T10k 10-pin connector, black, coupling station right A-pillar
- T10l 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T32a 32-pin connector, green
- * not for radio 'Alpha' and 'Beta'
- ** not for 2-door vehicle
- only radio 'Gamma' with second-display in dash panel insert up to April 2001
- only radio 'Gamma' with second-display in dash panel insert 2001 up to May 2001

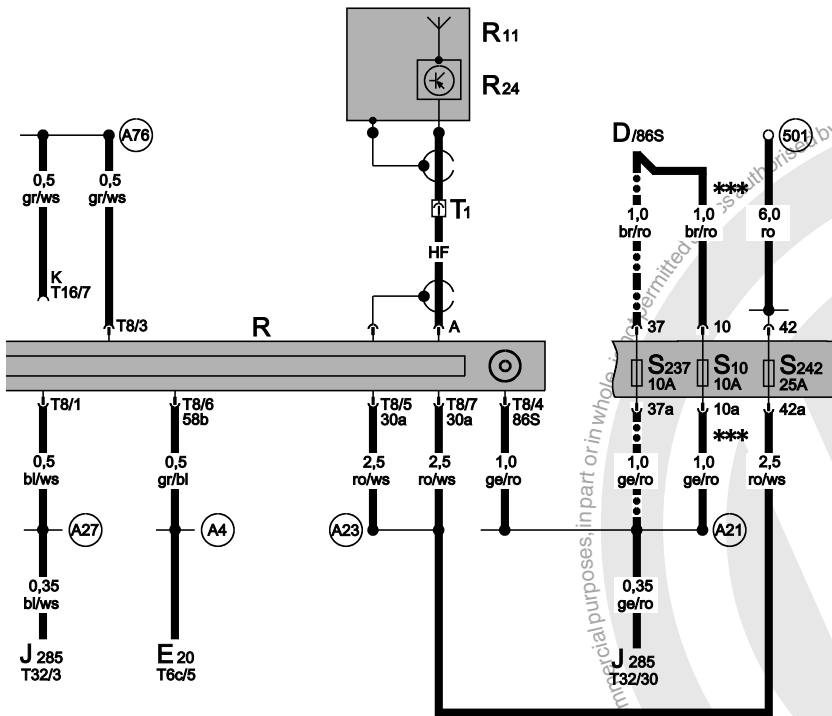


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radio, aerial

- D Ignition/starter switch
- E20 Illumination regulators - switches and instruments
- J285 Control unit with display in dash panel insert
- R Radio
- R11 Aerial
- R24 Aerial amplifier
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T1 Single connector, near roof aerial
- T6c 6-pin connector
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue

- (501) Screw connection 2 (30), on relay plate
- (A4) Positive connection (58b), in dash panel wiring harness
- (A21) Connection (86s), in dash panel wiring harness
- (A23) Connection (30a), in dash panel wiring harness
- (A27) Connection (speed signal), in dash panel wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- *** from November 2001
- up to October 2001

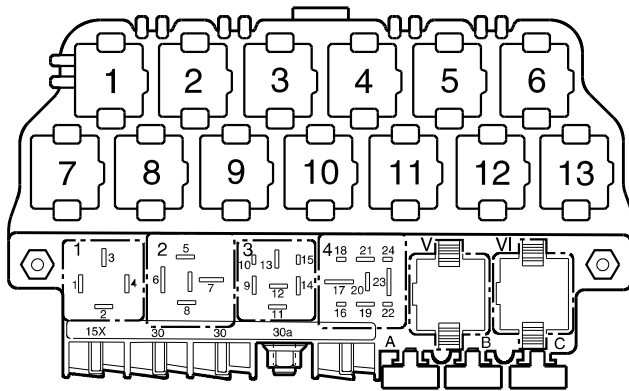


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- rs = pink

Driving school vehicle

From May 1999

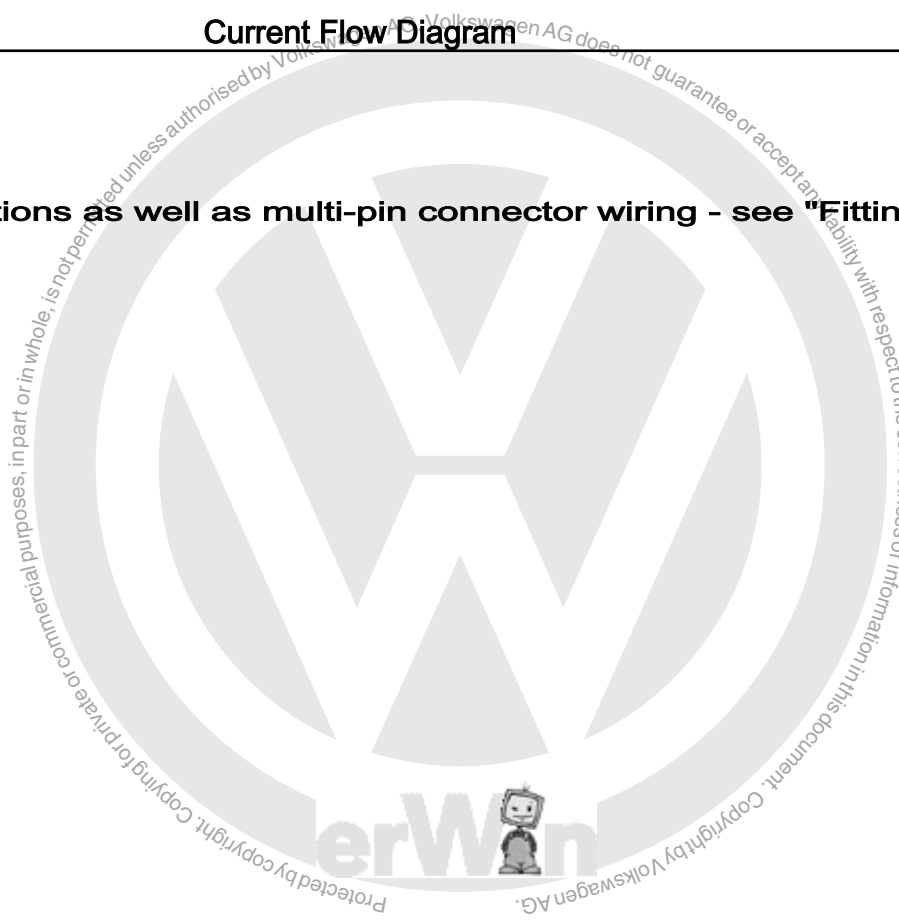
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



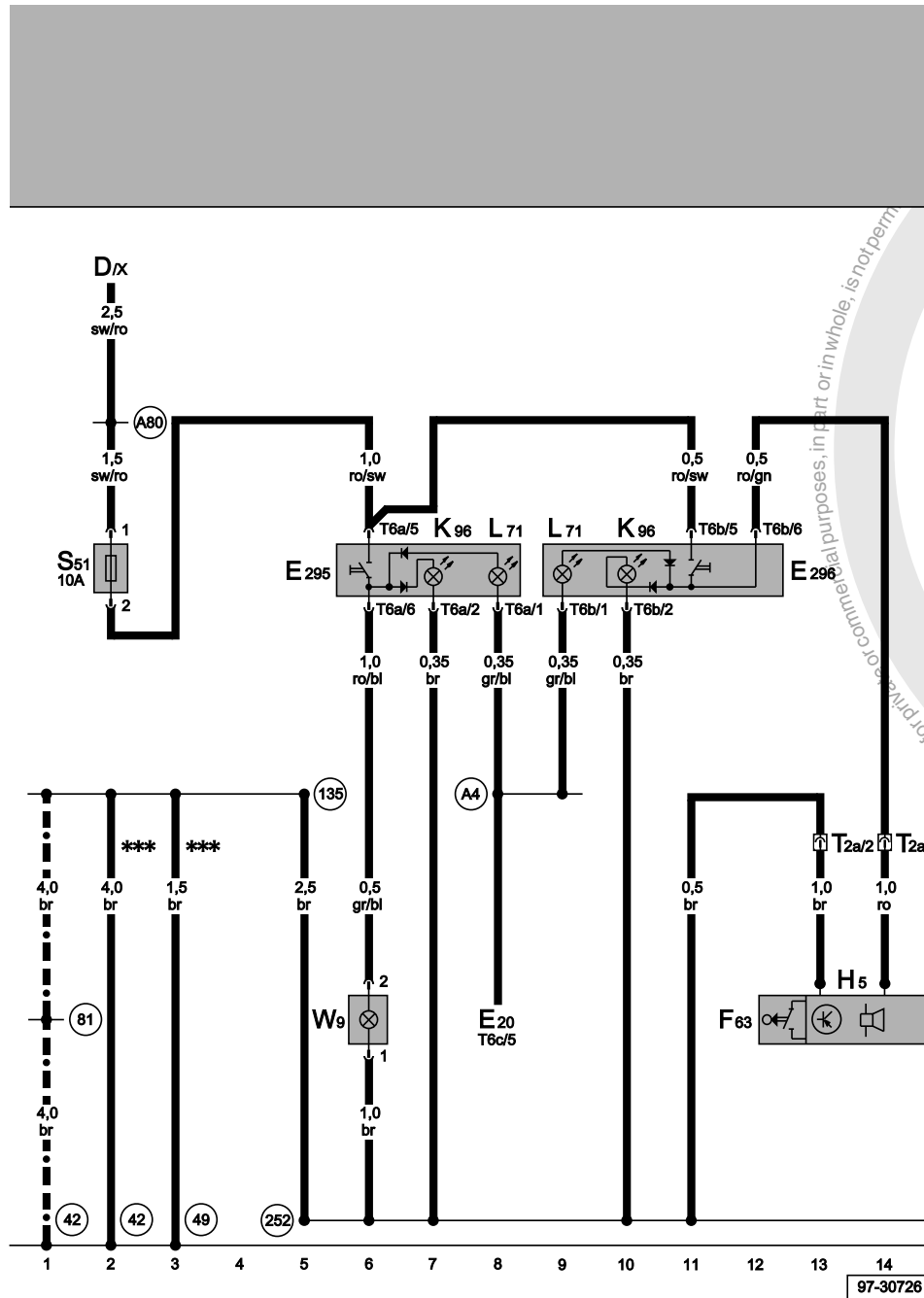
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Footwell lighting switch, left footwell light, warning buzzer switch, brake pedal switch, buzzer



- D Ignition/starter switch
 - E20 Switches and instruments, lighting control
 - E295 Footwell lighting switch
 - E296 Warning buzzer switch
 - F63 Brake pedal switch, front passenger's side
 - H5 Buzzer
 - K96 Warning lamp
 - L71 Button illumination
 - S51 Fuse, on the 13 position additional relay carrier
 - T6a 6-pin connector
 - T6b 6-pin connector
 - T6c 6-pin connector
 - W9 Left footwell light
- 42 Earth point, next to steering column
 - 49 Earth point, on steering column
 - 81 Earth connection -1-, in dash panel wiring harness
 - 135 Earth connection -2-, in dash panel wiring harness
 - 252 Earth connection, in optional equipment wiring harness
 - A4 Positive (+) connection (58b), in dash panel wiring harness
 - A80 Connection -1- (X), in dash panel wiring harness
 - *** From May 2000
 - Up to April 2000

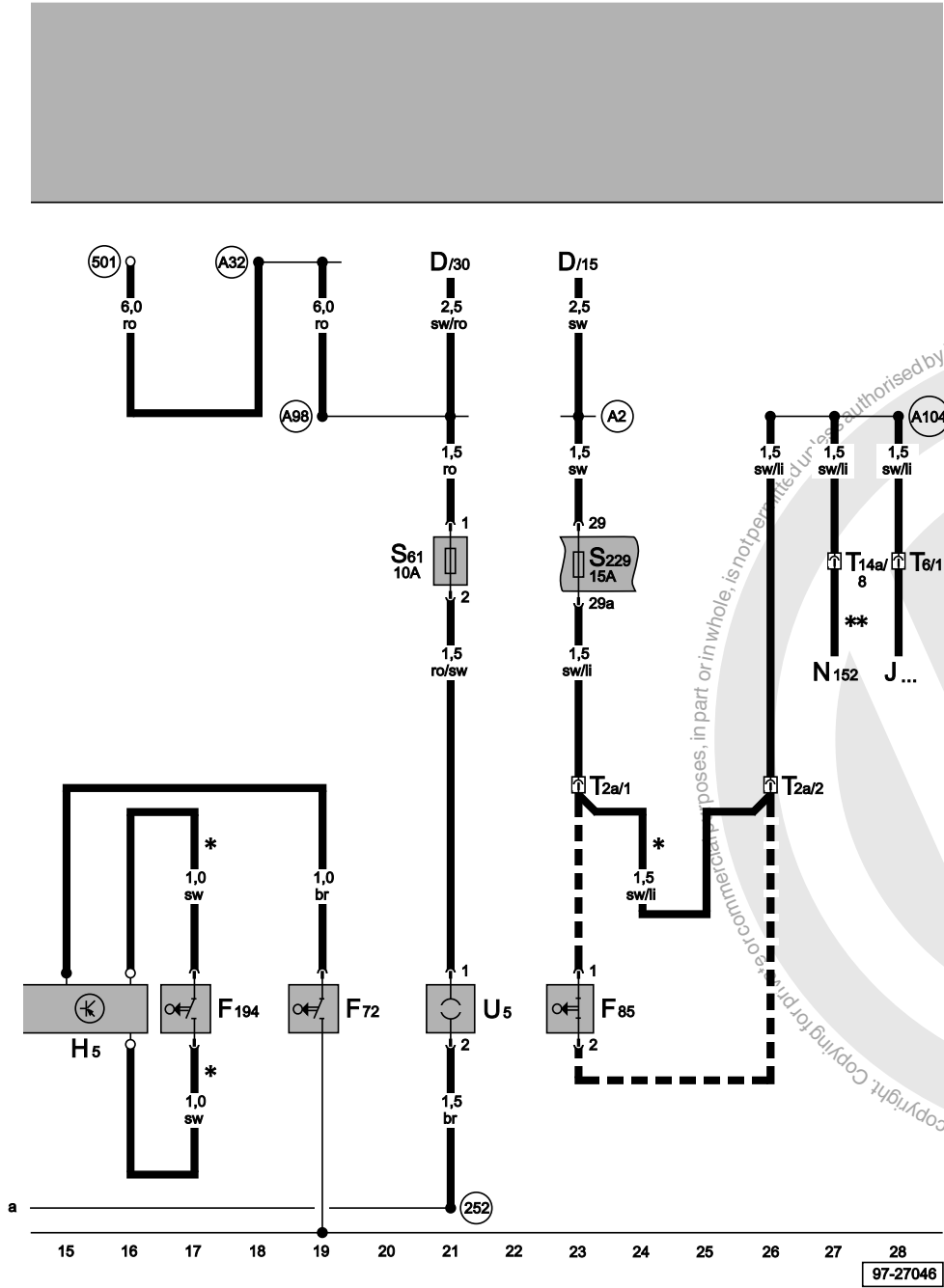
- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Clutch pedal switch for warning buzzer (front passenger's side), brake pedal switch for engine off (front passenger's side), accelerator pedal switch for warning buzzer (front passenger's side), 12 V socket, buzzer

- D Ignition/starter switch
- F194 Clutch pedal switch for warning buzzer
- F72 Accelerator pedal switch for warning buzzer
- F85 Brake pedal switch for engine off
- H5 Buzzer
- J... Engine control units
- N152 Ignition transformer
- S61 Fuse for socket, on the 13 position additional relay carrier
- S229 Fuse in fuse box
- T2a 2-pin connector
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- U5 12 V socket

- (252) Earth connection, in optional equipment wiring harness
- (501) Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness
- * Only models with manual gearbox
- ** Only models with a petrol engine
- Only models with automatic gearbox

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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

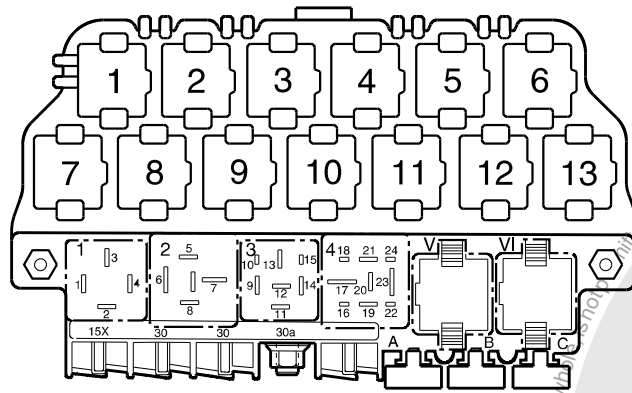


97-27046

Radio and navigation system (MFD) (colour display) with traffic information evaluation

from May 2000

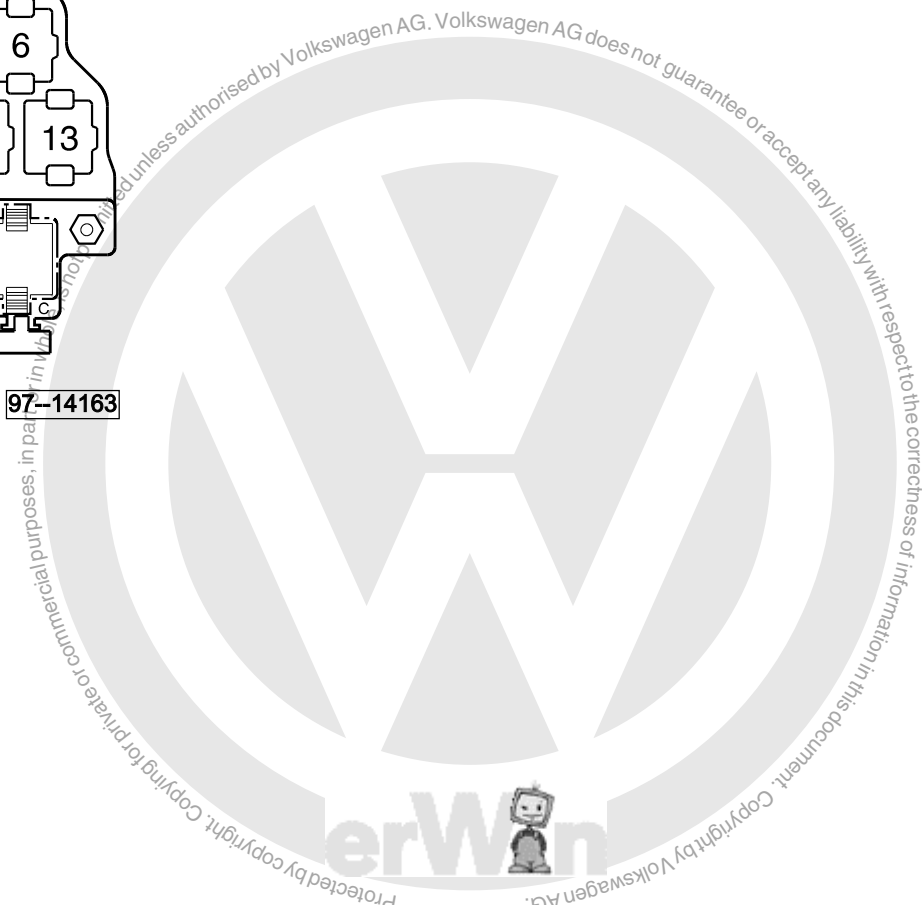
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



97--14163

Fuse colours

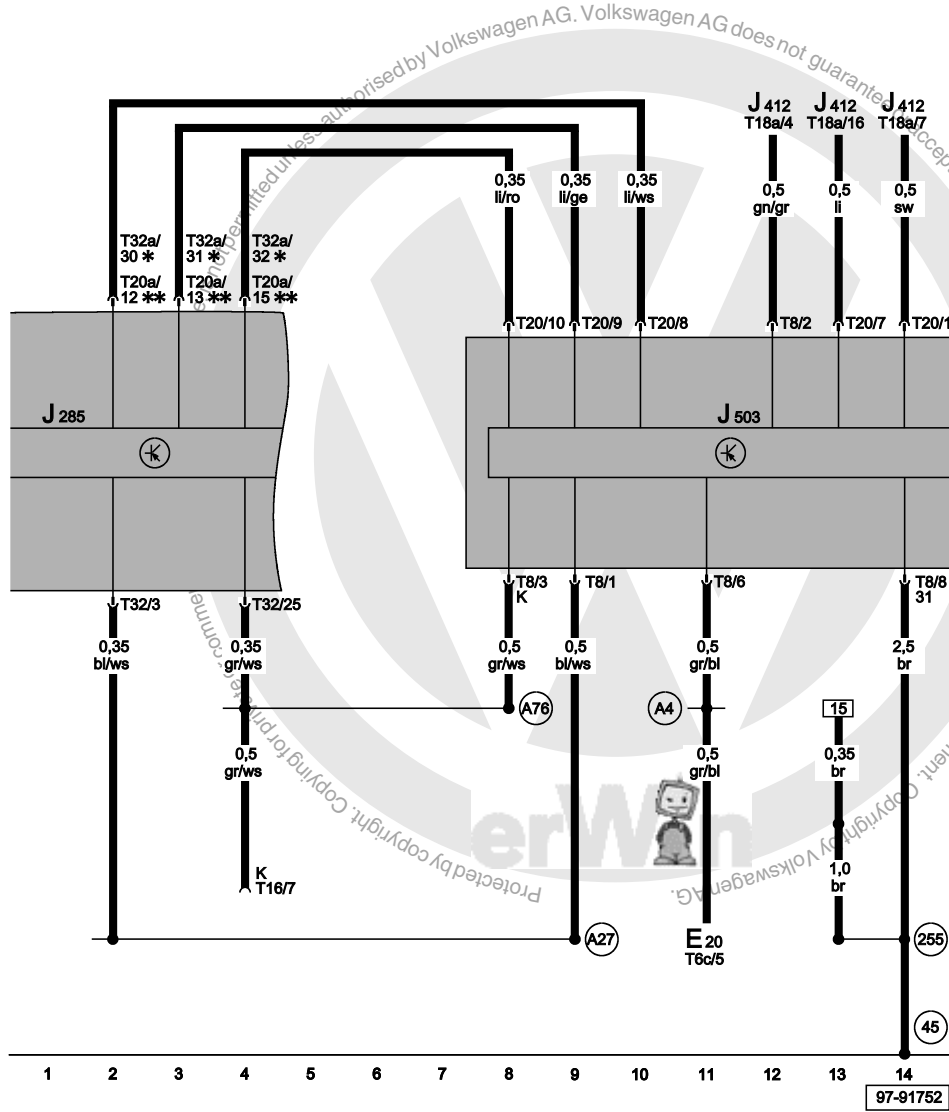
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Control unit with display for radio and navigation system,

- E20 Illumination regulators - switches and instruments
- J285 Control unit with display in dash panel insert
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- T6c 6-pin connector
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T18a 18-pin connector
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T32 32-pin connector, blue
- T32a 32-pin connector, green

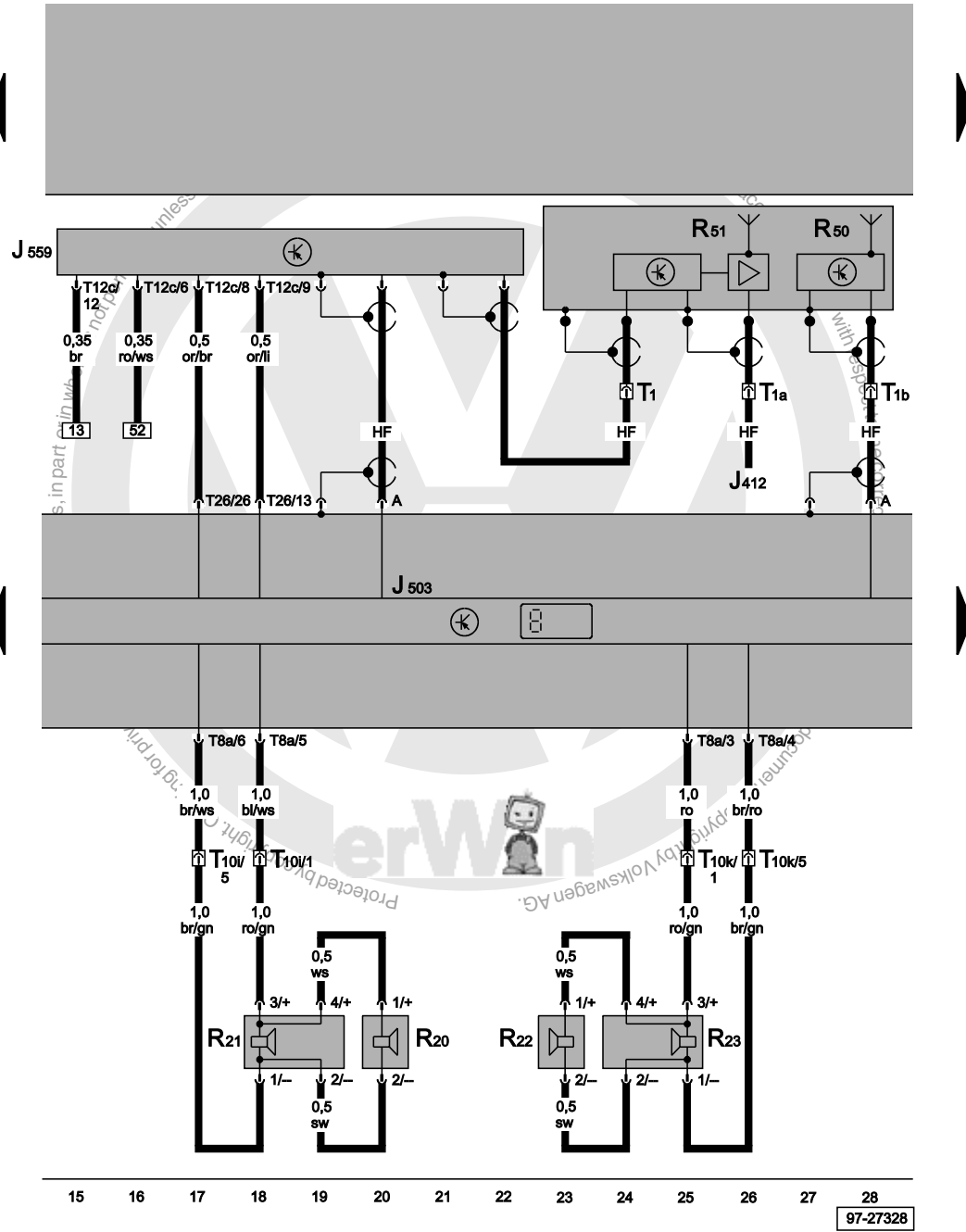
- 45 Earth point, centre behind dash panel
- 255 Earth connection 1, in radio wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2001
- ** up to April 2001



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Control unit with display for radio and navigation, traffic information control unit, front loudspeaker, radio, telephone and auxiliary heater aerial, navigation system aerial (GPS)

- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- J559 Traffic information control unit, behind the dash panel, right
- R20 Front left treble loudspeaker, in the door
- R21 Front left bass loudspeaker, in the door
- R22 Front right treble loudspeaker, in the door
- R23 Front right bass loudspeaker, in the door
- R50 Navigation system aerial (GPS)
- R51 Telephone and auxiliary heater aerial
- T1 Single connector, near roof aerial
- T1a Single connector, near roof aerial
- T1b Single connector, near roof aerial
- T8a 8-pin connector
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10k 10-pin connector, black, coupling station right A-pillar
- T12c 12-pin connector
- T26 26-pin connector

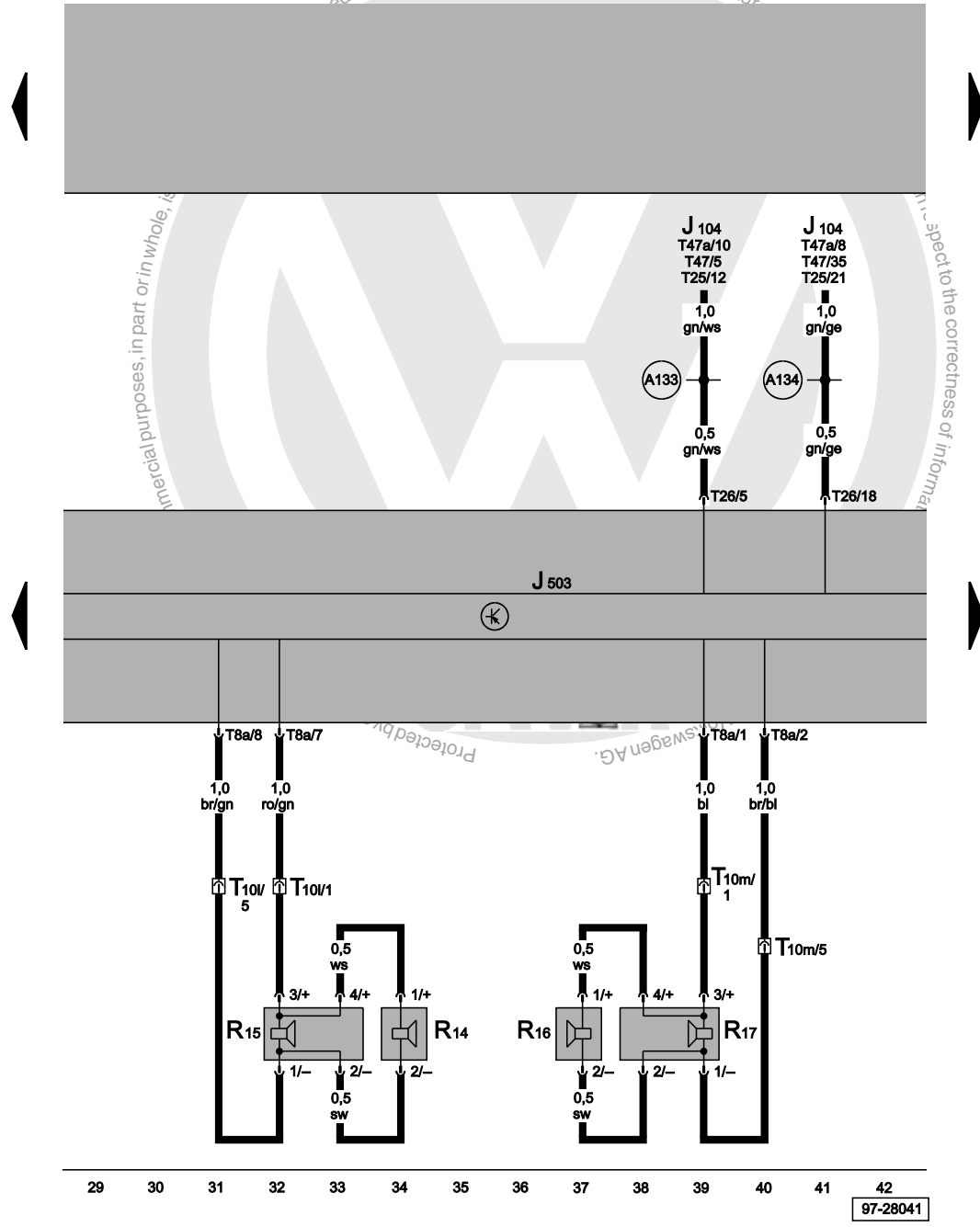


- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Control unit with display for radio and navigation system, rear loudspeaker

- J104 ABS/ABS control unit with EDL
- J503 Control unit with display for radio and navigation system
- R14 Rear left treble loudspeaker, in the door
- R15 Rear left bass loudspeaker, in the door
- R16 Rear right treble loudspeaker, in the door
- R17 Rear right bass loudspeaker, in the door
- T8a 8-pin connector
- T10l 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T26 26-pin connector
- T47 47-pin connector, on ABS with EDL control unit /TCS/ESP (up to July 2000)
- T47a 47-pin connector, on ABS/ ABS with EDL control unit /TCS/ESP (up to August 2000)

- (A133) Connection (left ABS impulse), in dash panel wiring harness
- (A134) Connection (right ABS impulse), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

29 30 31 32 33 34 35 36 37 38 39 40 41 42

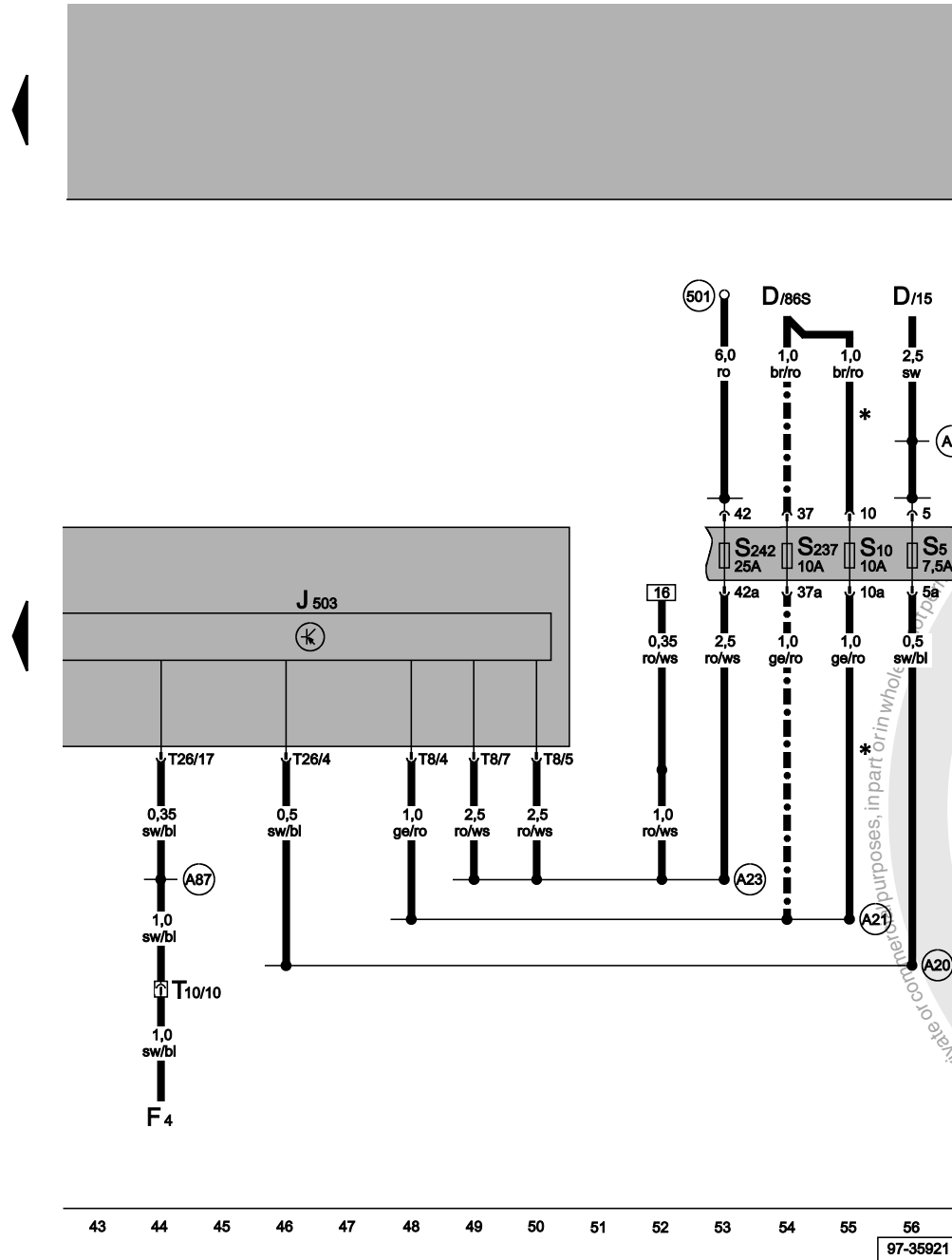
97-28041

Control unit with display for radio and navigation system

- D Ignition/starter switch
- F4 Reversing light switch
- J503 Control unit with display for radio and navigation system
- S5 Fuse 5 in fuse holder
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T26 26-pin connector

- (501) Screw connection 2 (30), on relay plate
- (A2) Positive connection (15), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A21) Connection (86s), in dash panel wiring harness
- (A23) Connection (30a), in dash panel wiring harness
- (A87) Connection (RL), in dash panel wiring harness
- * from November 2001 up to October 2001
- up to October 2001

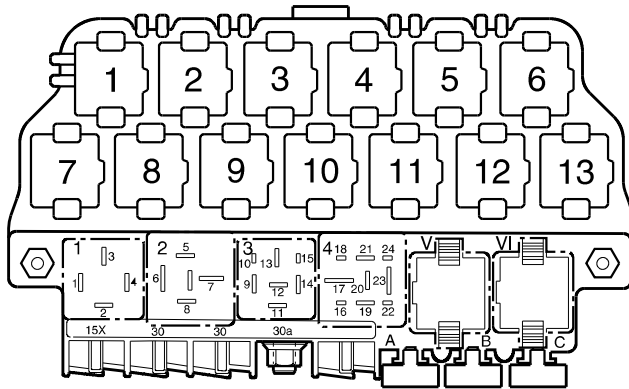
- ws = white
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- gr = grey
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- ge = yellow
- or = orange
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Anti-lock brake system (ABS) with electronic differential lock (EDL) and traction control system (TCS)

From August 2000

For alternatives to relay and fuse locations as well as assignment of multi-pin connector wiring see "Fitting locations" section.



97-14163

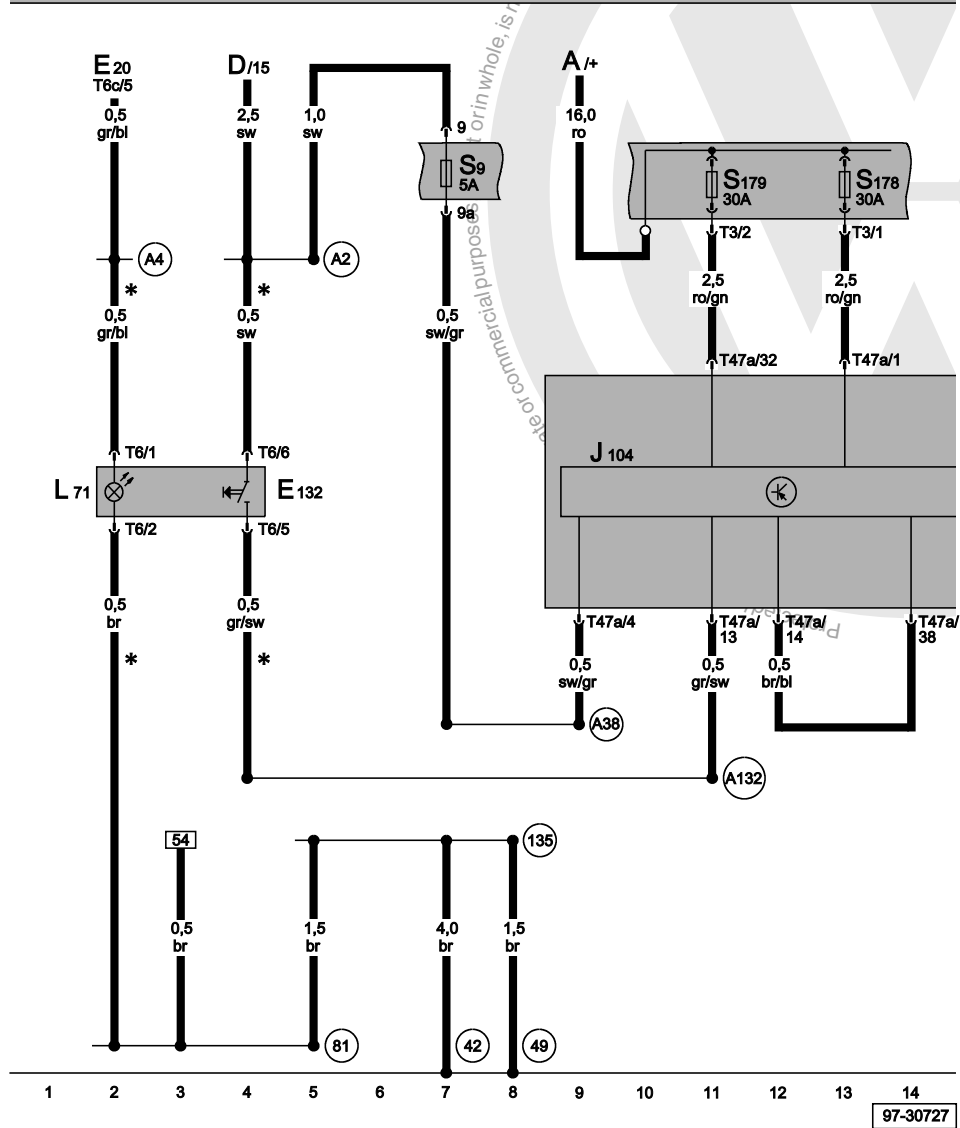
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



ABS/ABS with EDL/TCS control unit, traction control system switch

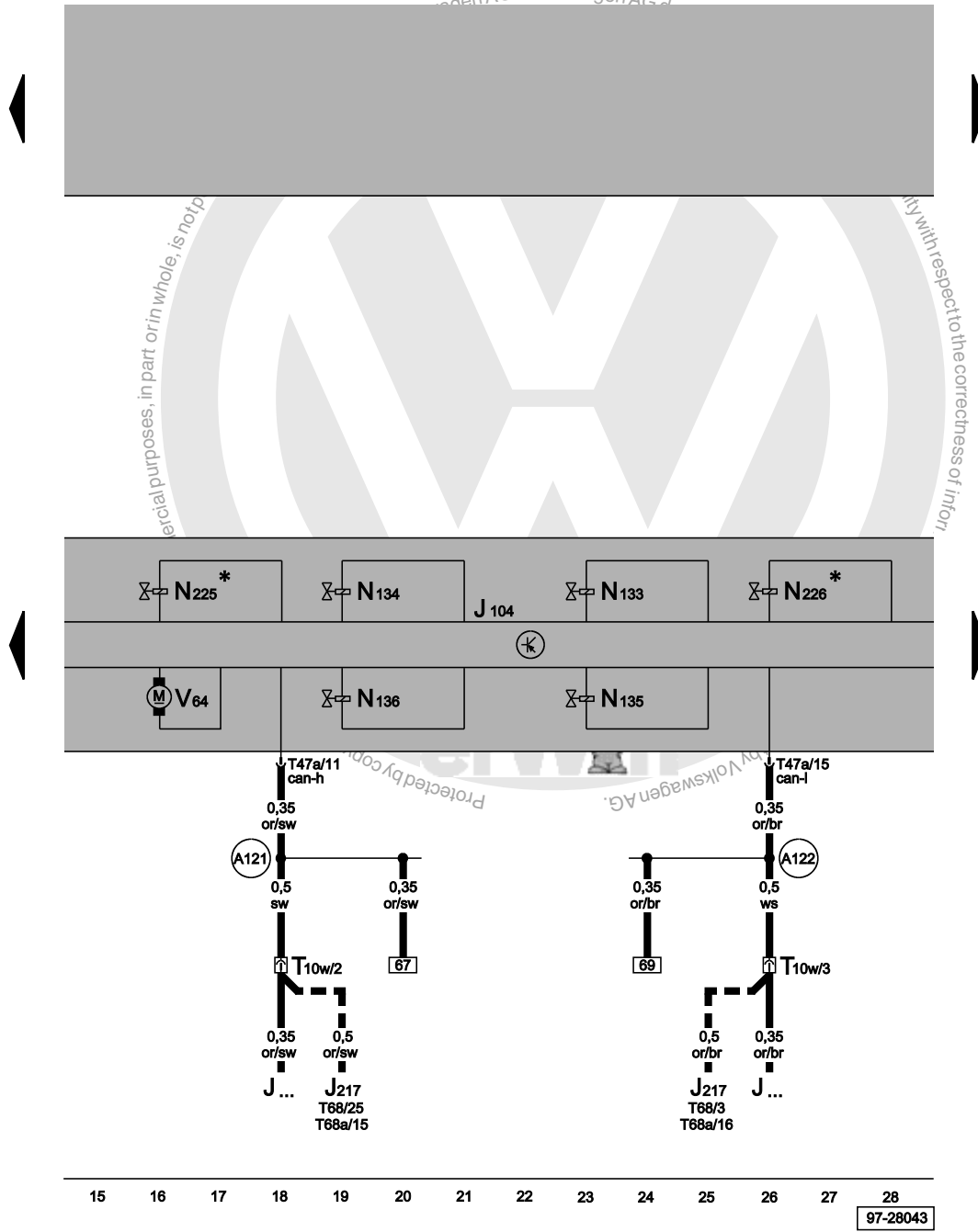
- A Battery
- D Ignition/starter switch
- E20 Switches and instruments illumination regulator
- E132 Traction control system switch
- J104 ABS/ABS with EDL/TCS control unit, left in engine compartment
- L71 Traction control switch illumination
- S9 Fuse 9 in fuse holder
- S178 Fuse -6- (30), in fuse box/battery
- S179 Fuse -7- (30), in fuse box/battery
- T3 3-pin connector
- T6 6-pin connector
- T6c 6-pin connector
- T47a 47-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- A2 Positive connection (15), in dash panel wiring harness
- A4 Positive (+) connection (58b), in dash panel wiring harness
- A38 Positive (+) connection -2- (15a), in dash panel wiring harness
- A132 Connection (TCS/ESP), in dash panel wiring harness
- * Only models with EDL/TCS



- ws = white
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- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS/ABS with EDL/TCS control unit, ABS hydraulic pump

- J104 ABS/ABS with EDL/TCS control unit, in engine compartment, left
- J217 Automatic gearbox control unit
- J... Engine control units
- N133 ABS inlet valve, rear right
- N134 ABS inlet valve, rear left
- N135 ABS outlet valve, rear right
- N136 ABS outlet valve, rear left
- N225 Electronic stability program switch valve -1-*
- N226 Electronic stability program switch valve -2-*
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T47a 47-pin connector
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)
- V64 ABS hydraulic pump
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- * Only models with EDL/TCS
- Only models with automatic gearbox

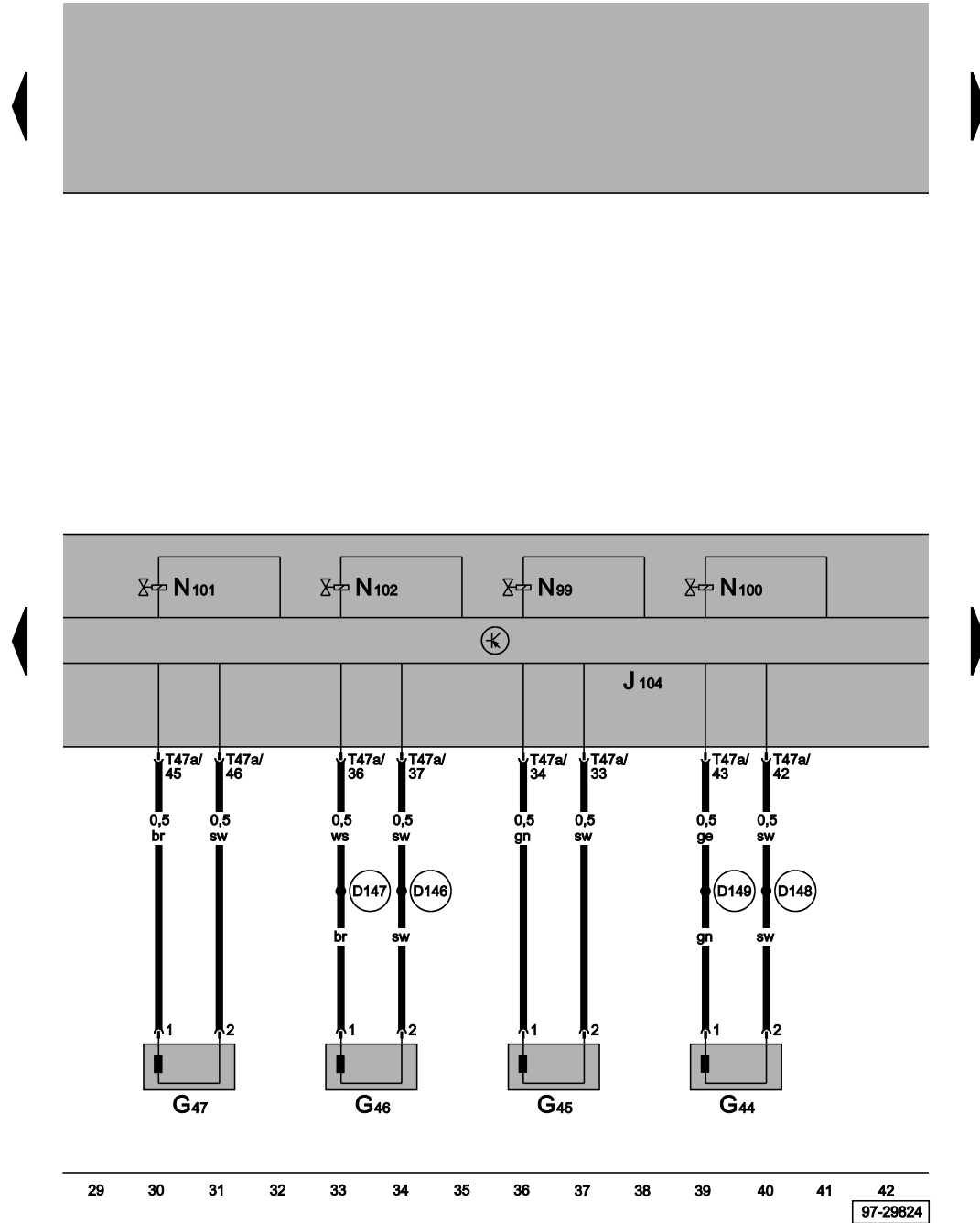


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS/ABS with EDL/TCS control unit, speed sensors

- G44 Rear right speed sensor
- G45 Front right speed sensor
- G46 Rear left speed sensor
- G47 Front left speed sensor
- J104 ABS/ABS with EDL/TCS control unit, in engine compartment, left
- N99 ABS inlet valve, front right
- N100 ABS outlet valve, front right
- N101 ABS inlet valve, front left
- N102 ABS outlet valve, front left
- T47a 47-pin connector

- D146 Connection (rear left speed sensor +), in engine compartment wiring harness
- D147 Connection (rear left speed sensor -), in engine compartment wiring harness
- D148 Connection (rear right speed sensor +), in engine compartment wiring harness
- D149 Connection (rear right speed sensor -), in engine compartment wiring harness

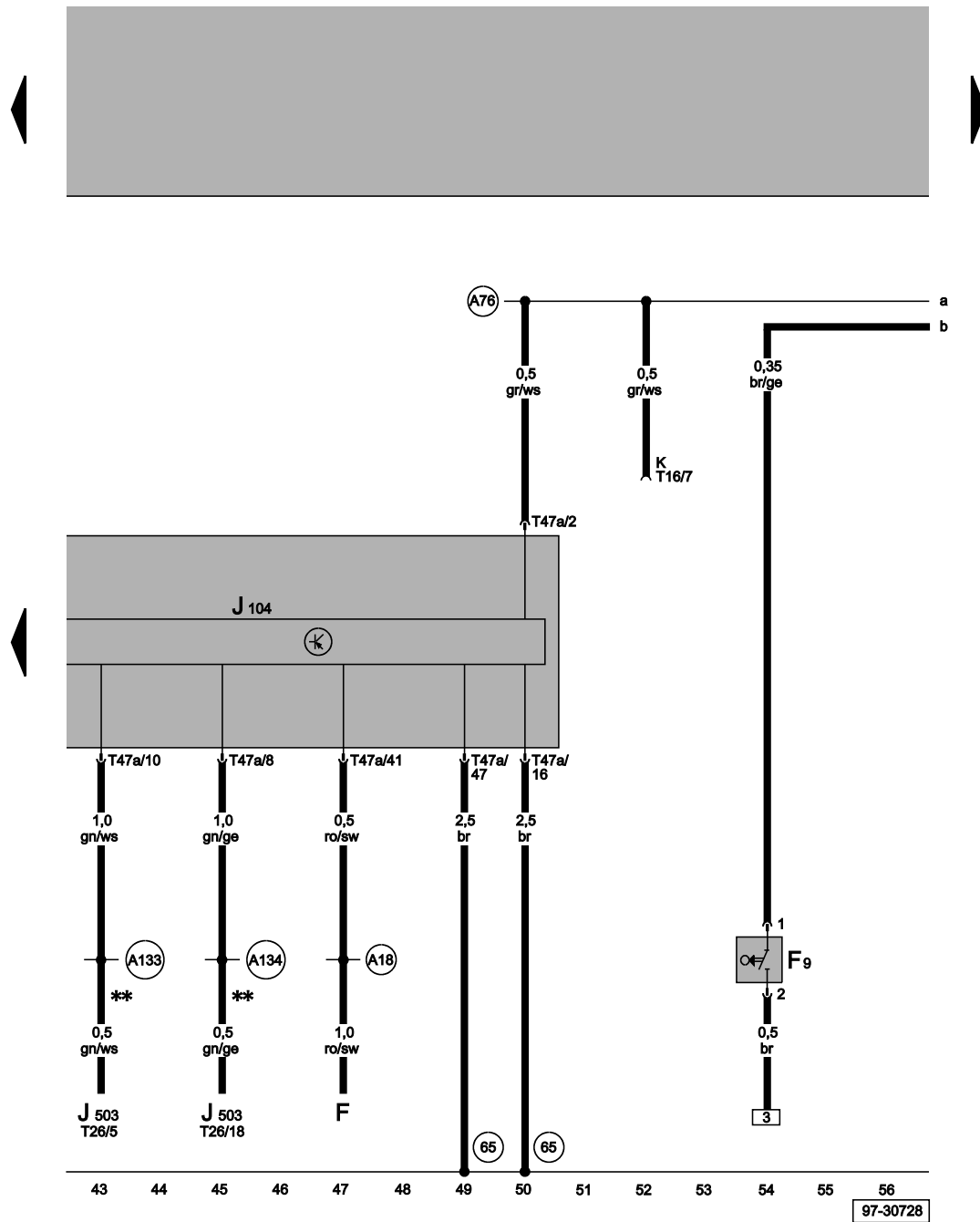


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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS/ABS with EDL/TCS control unit, handbrake warning switch, self-diagnosis connection

- F Brake light switch
- F9 Handbrake warning switch
- J104 ABS/ABS with EDL/TCS control unit, in engine compartment, left
- J503 Control unit with display for radio and navigation**
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T26 26-pin connector**
- T47a 47-pin connector

- 65 Earth point, longitudinal member left, front
- A18 Connection (54), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A133 Connection (ABS impulse left), in dash panel wiring harness
- A134 Connection (ABS impulse right), in dash panel wiring harness
- ** Only models with navigation

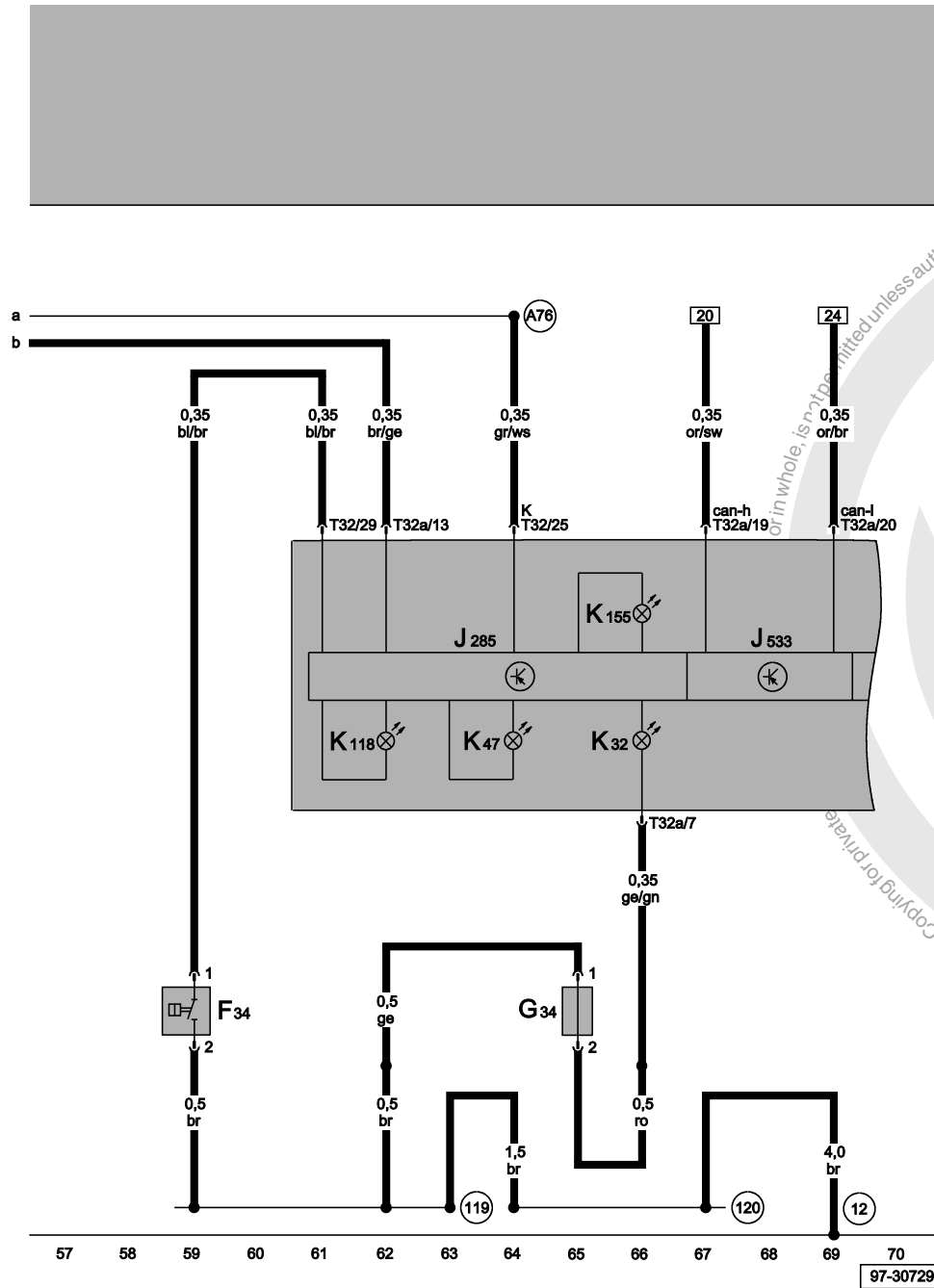


- ws = white
- sw = black
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- bl = blue
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, brake system warning lamp, ABS warning lamp, TCS warning lamp, brake pad/lining warning lamp, brake fluid level warning contact

- F34 Brake fluid level warning contact
- G34 Brake lining/pad wear sender, front left
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K32 Brake pad/lining warning lamp
- K47 ABS warning lamp
- K118 Brake system warning lamp
- K155 TCS warning lamp
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



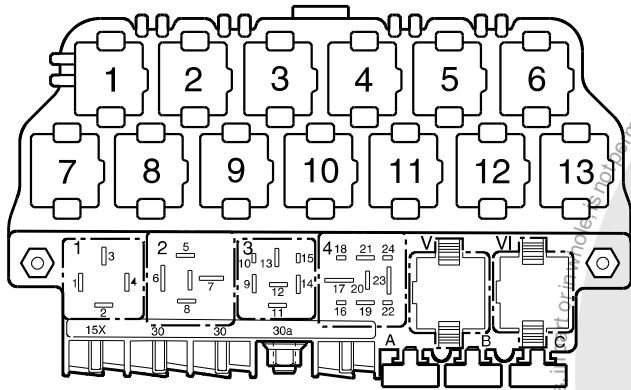
- ws = white
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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30729

Anti-lock brake system (ABS) with electronic differential lock (EDL), traction control system (TCS) and electronic stability programme (ESP)

From August 2000

For alternatives to relay and fuse locations as well as assignment of multi-pin connector wiring see "Fitting locations" section.



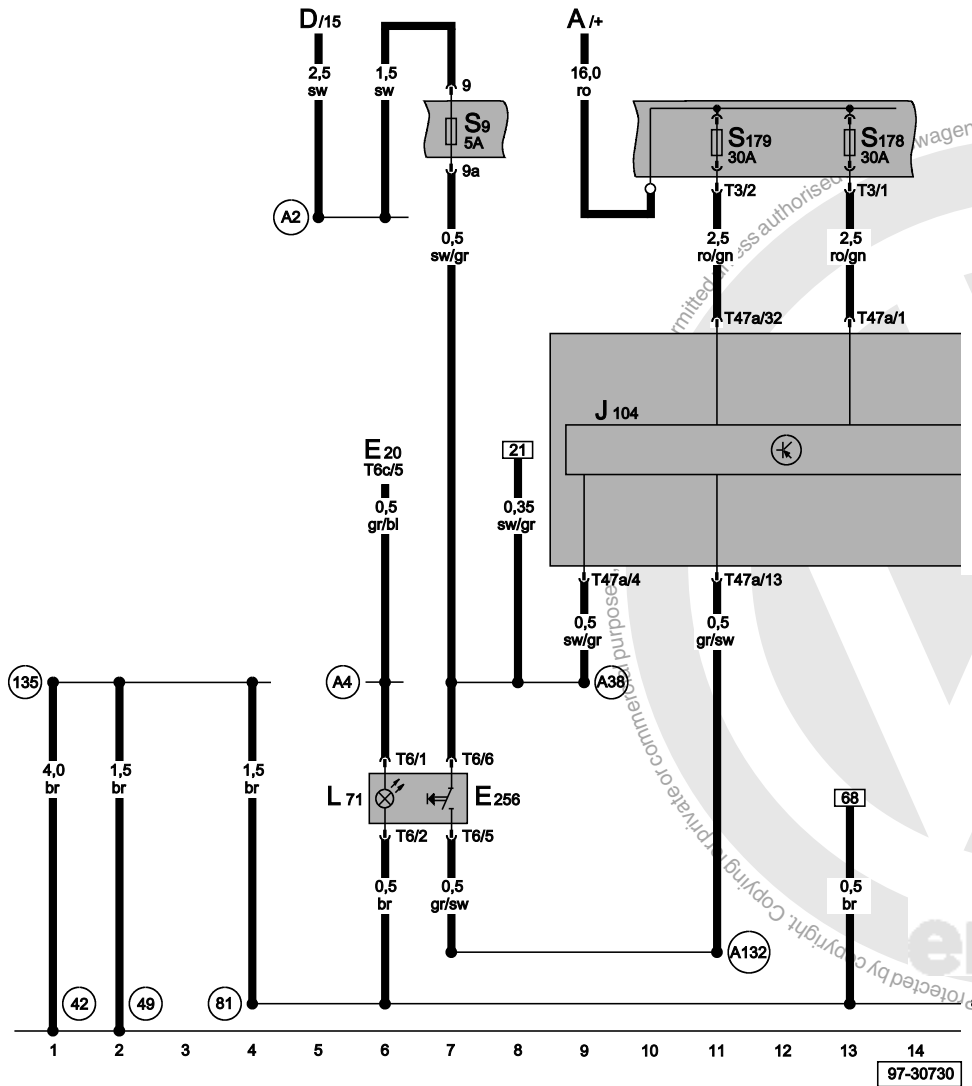
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

ABS with EDL/TCS/ESP control unit, TCS/ESP button

- A Battery
 - D Ignition/starter switch
 - E20 Switches and instruments illumination regulator
 - E256 TCS/ESP button
 - J104 ABS with EDL/TCS/ESP control unit, on left in engine compartment
 - L71 Traction control switch illumination
 - S9 Fuse 9 in fuse holder
 - S178 Fuse -6- (30), in fuse box/battery
 - S179 Fuse -7- (30), in fuse box/battery
 - T3 3-pin connector
 - T6 6-pin connector
 - T6c 6-pin connector
 - T47a 47-pin connector
- 42 Earth point, next to steering column
 - 49 Earth point, on steering column
 - 81 Earth connection -1-, in dash panel wiring harness
 - 135 Earth connection -2-, in dash panel wiring harness
 - A2 Positive connection (15), in dash panel wiring harness
 - A4 Positive (+) connection (58b), in dash panel wiring harness
 - A38 Positive (+) connection -2- (15a), in dash panel wiring harness
 - A132 Connection (TCS/ESP), in dash panel wiring harness



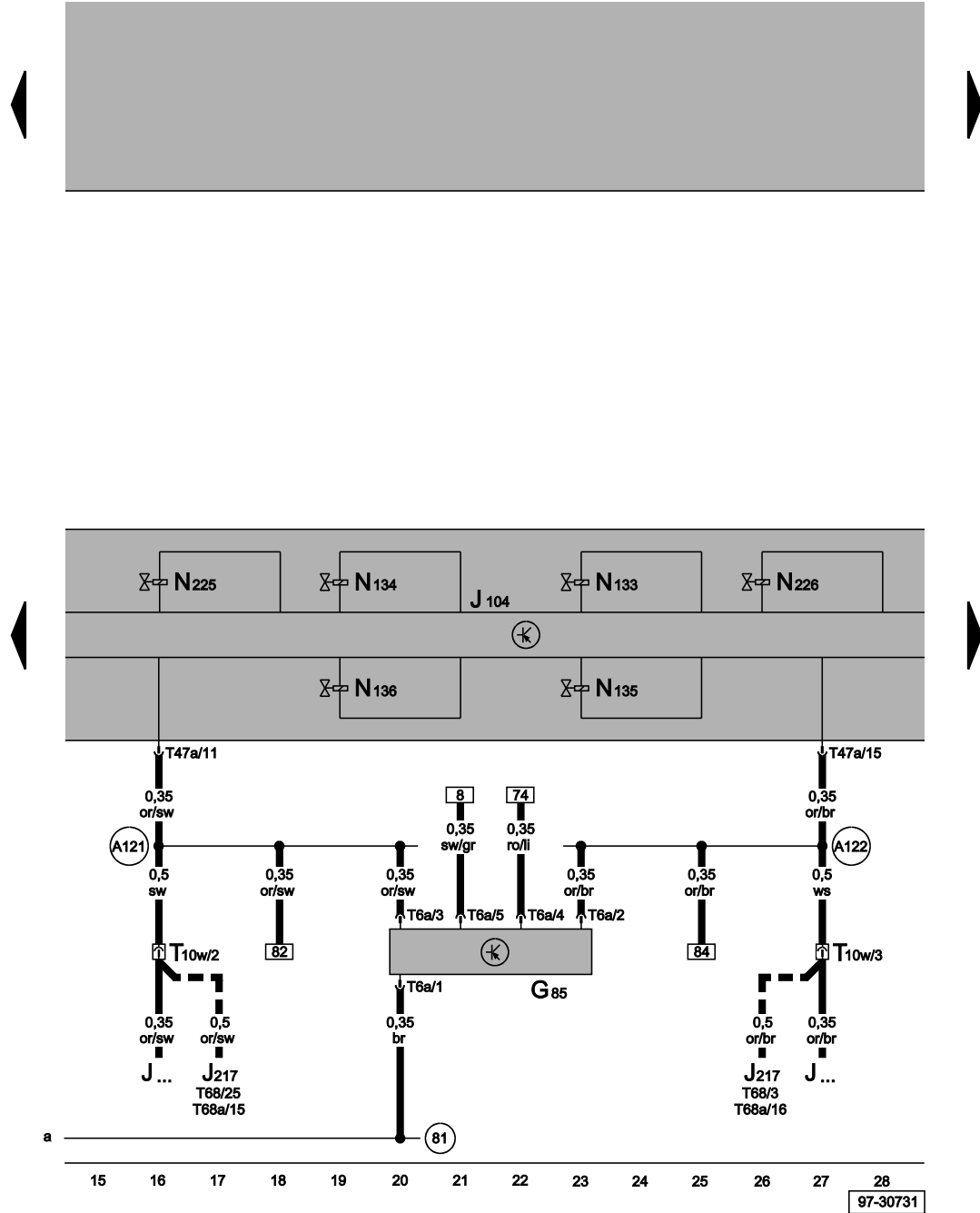
ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

ABS with EDL/TCS/ESP control unit, steering angle sender

- G85 Steering angle sender, on steering column
- J104 ABS with EDL/ TCS/ ESP control unit, in engine compartment, left
- J217 Automatic gearbox control unit
- J... Engine control units
- N133 ABS inlet valve, rear right
- N134 ABS inlet valve, rear left
- N135 ABS outlet valve, rear right
- N136 ABS outlet valve, rear left
- N225 Electronic stability program switch valve -1-
- N226 Electronic stability program switch valve -2-
- T6a 6-pin connector
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T47a 47-pin connector
- T68 68-pin connector, only models with four speed automatic gearbox (AG4)
- T68a 68-pin connector, only models with five speed automatic gearbox (AG5)

- 81 Earth connection -1-, in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- Only models with automatic gearbox control unit

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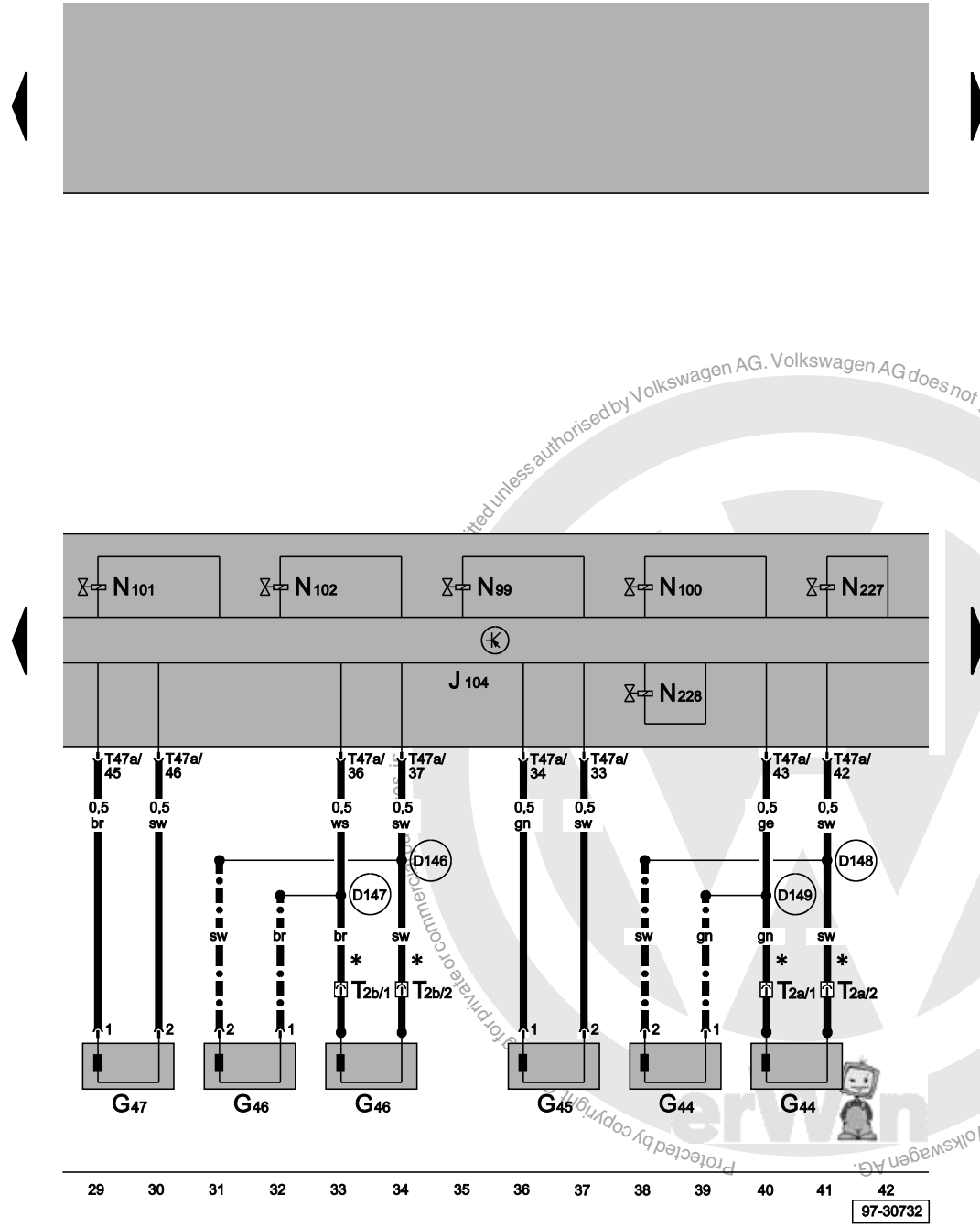


- ws = white
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30731

ABS with EDL/TCS/ESP control unit, speed sensors

- G44 Rear right speed sensor
- G45 Front right speed sensor
- G46 Rear left speed sensor
- G47 Front left speed sensor
- J104 ABS with EDL/ TCS/ ESP control unit, in engine compartment, left
- N99 ABS inlet valve, front right
- N100 ABS outlet valve, front right
- N101 ABS inlet valve, front left
- N102 ABS outlet valve, front left
- N227 Electronic stability program high pressure valve -1-
- N228 Electronic stability program high pressure valve -2-
- T2a 2-pin connector, near rear right speed sensor
- T2b 2-pin connector, near rear left speed sensor
- T47a 47-pin connector
- D146 Connection (rear left speed sensor +), in engine compartment wiring harness
- D147 Connection (rear left speed sensor -), in engine compartment wiring harness
- D148 Connection (rear right speed sensor +), in engine compartment wiring harness
- D149 Connection (rear right speed sensor -), in engine compartment wiring harness
- * Only models with four-wheel drive
- *-- Only models with four-wheel drive



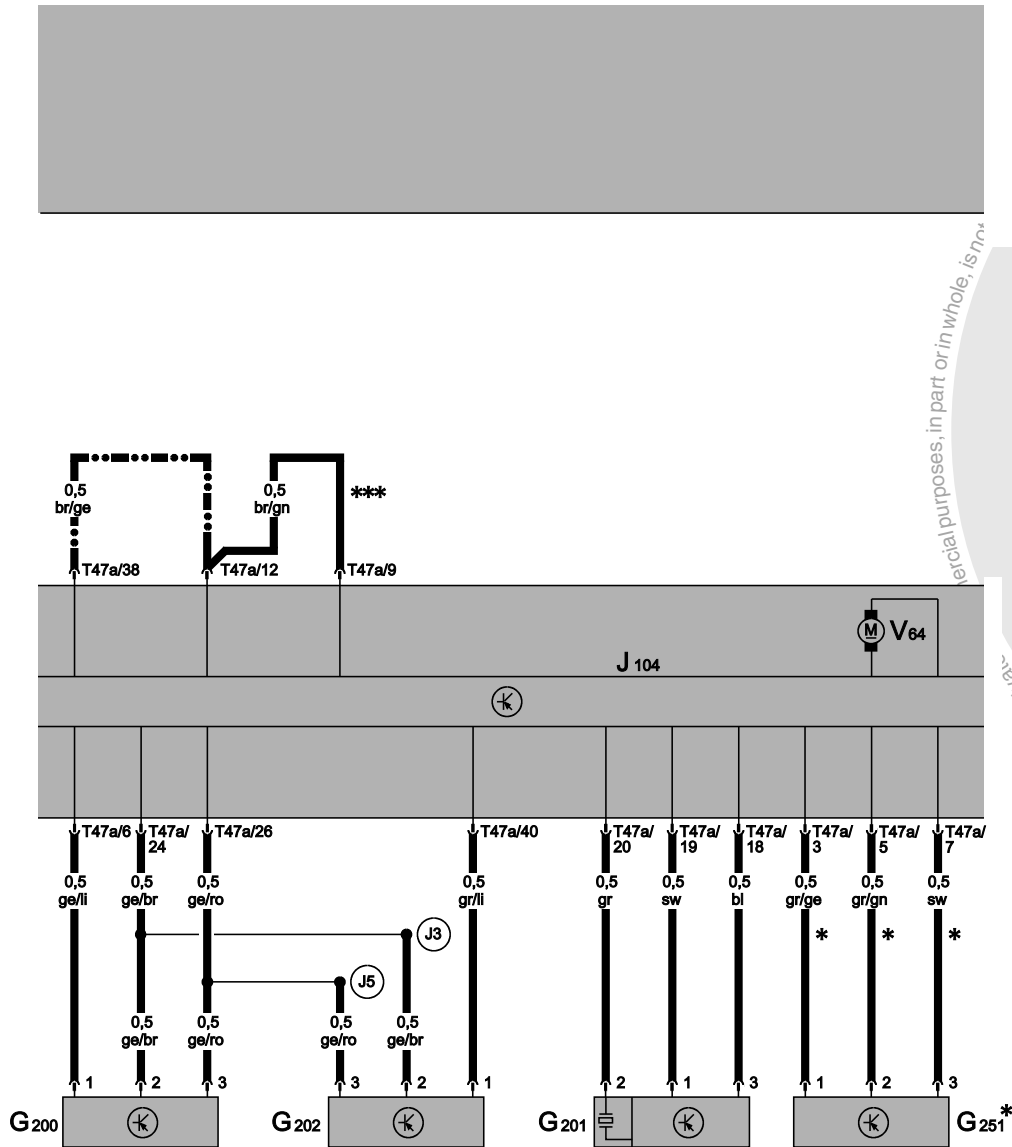
ABS with EDL/ TCS/ ESP control unit, lateral acceleration sender, brake pressure sender, yaw rate sender, ABS hydraulic pump, longitudinal acceleration sender

- G200 Lateral acceleration sender, next to steering column
- G201 Brake pressure sender -1-, on brake master cylinder
- G202 Yaw rate sender, on steering column
- G251 Longitudinal acceleration sender, on right A-pillar*
- J104 ABS with EDL/ TCS/ ESP control unit, in engine compartment, left
- T47a 47-pin connector
- V64 ABS hydraulic pump

J3 Connection -1-, in ABS wiring harness

J5 Connection -2-, in ABS wiring harness

- * Only models with four-wheel drive
- *** Only models with ESP and four-wheel drive
- Only models with ESP and front-wheel drive



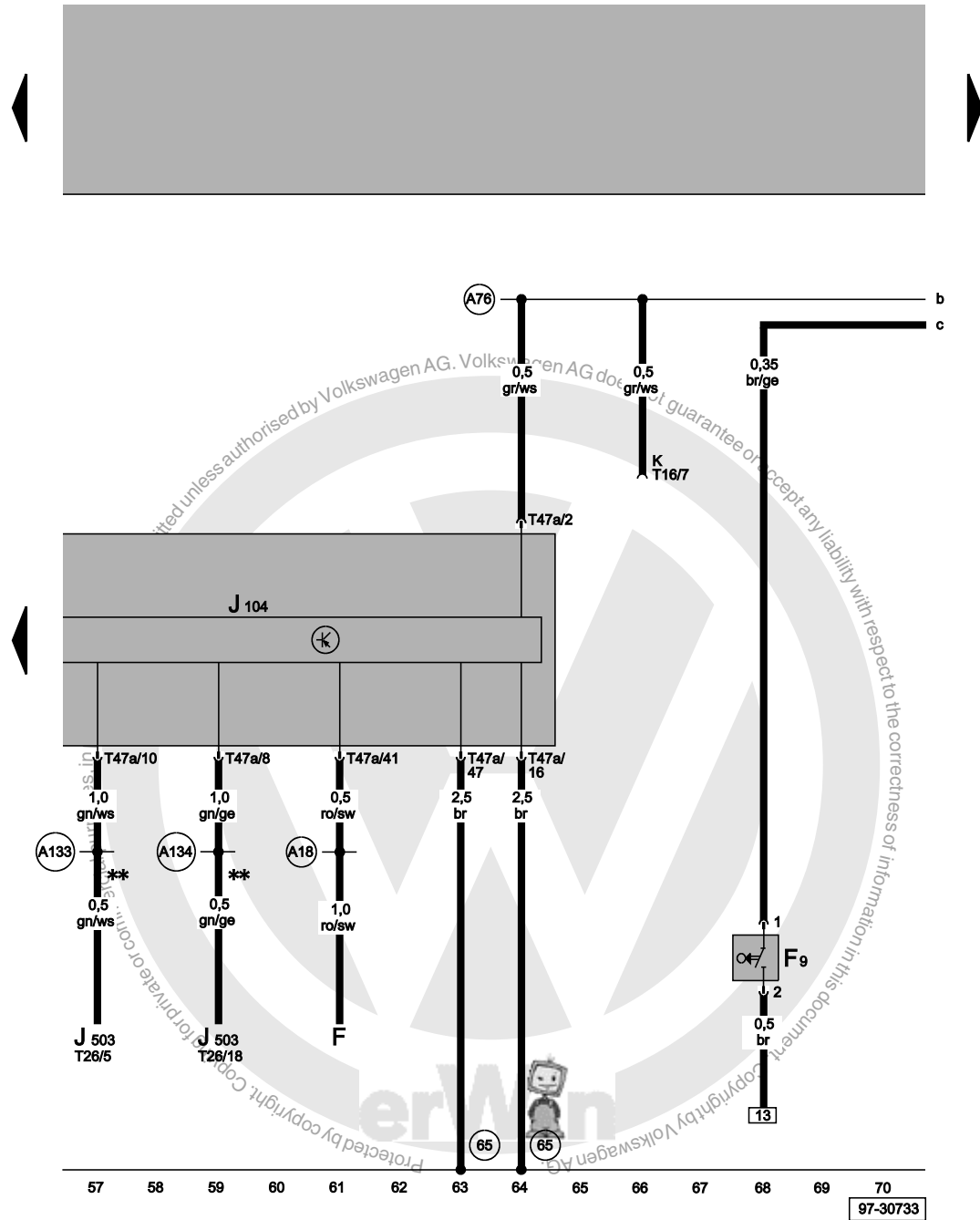
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS with EDL/TCS/ESP control unit, handbrake warning switch, self-diagnosis connection

- F Brake light switch
- F9 Handbrake warning switch
- J104 ABS with EDL/ TCS/ ESP control unit, in engine compartment, left
- J503 Control unit with display for radio and navigation**
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T26 26-pin connector**
- T47a 47-pin connector

- (65) Earth point, longitudinal member left, front
- (A18) Connection (54), in dash panel wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (A133) Connection (ABS impulse left), in dash panel wiring harness
- (A134) Connection (ABS impulse right), in dash panel wiring harness

** Only models with navigation

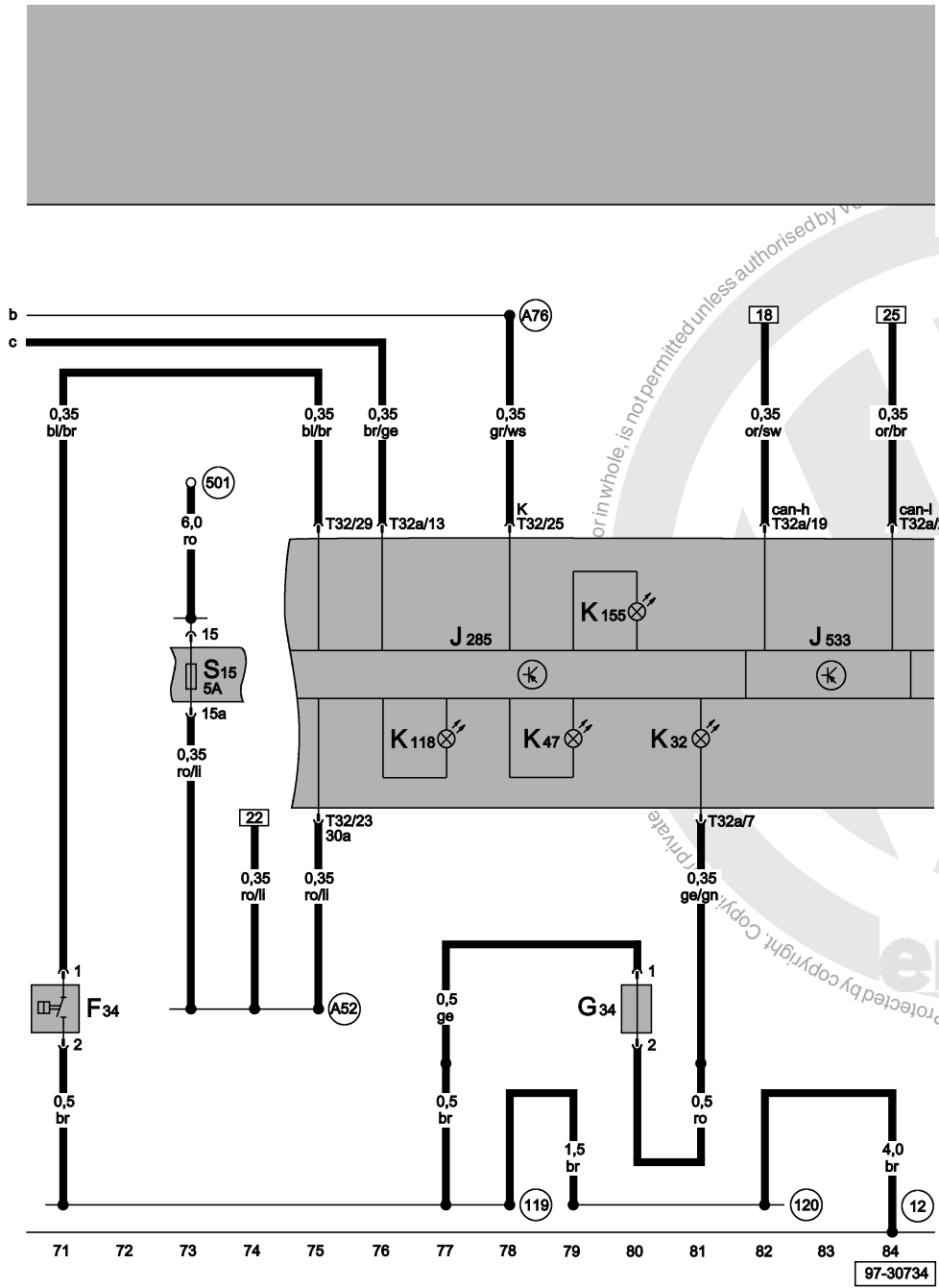


- ws = white
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- ro = red
- br = brown
- gn = green
- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, brake system warning lamp, ABS warning lamp, TCS/ESP warning lamp, brake pad/lining warning lamp, brake fluid level warning contact

- F34 Brake fluid level warning contact
- G34 Brake lining/pad wear sender, front left
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K32 Brake pad/lining warning lamp
- K47 ABS warning lamp
- K118 Brake system warning lamp
- K155 TCS/ESP warning lamp
- S15 Fuse in fuse box
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- 501 Screw connection -2- (30), on relay plate
- A52 Positive (+) connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- gn = green
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- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30734

Parking aid

from September 2000

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding

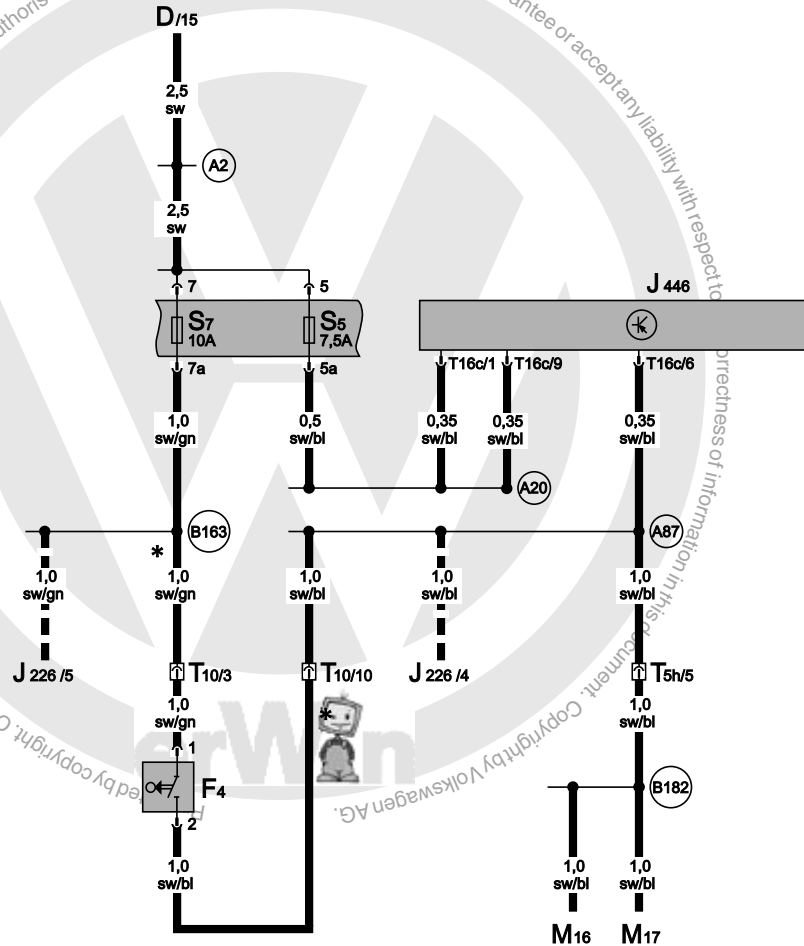


Parking aid control unit, reversing light switch

- D Ignition/starter switch
- F4 Reversing light switch *
- J226 Starter inhibitor and reversing light relay
- J446 Parking aid control unit, on right in luggage compartment
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16c 16-pin connector

- (A2) Positive connection (15), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A87) Connection (RL), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- (B182) Connection (RL), in interior wiring harness
- * only models with manual gearbox
- models with automatic gearbox only

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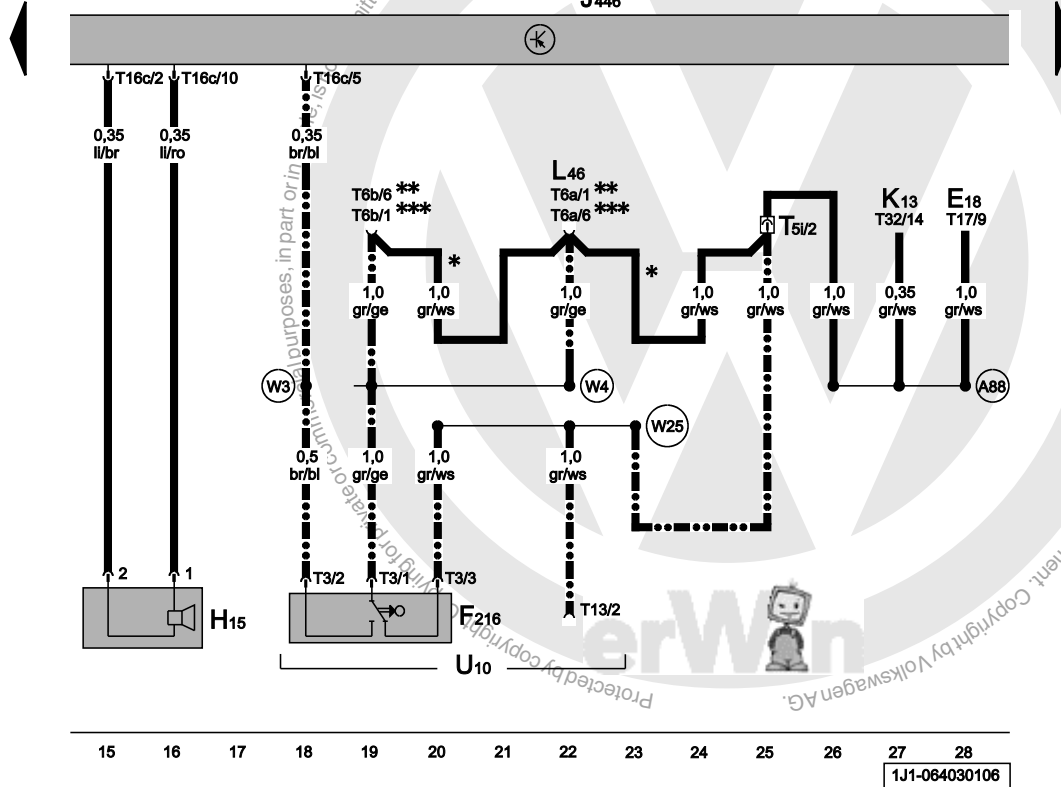
- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Parking aid control unit, parking aid warning buzzer

- E18 Rear fog light switch
- F216 Rear fog light cut-out contact switch, in trailer socket
- H15 Rear parking aid warning buzzer
- J446 Parking aid control unit, on right in luggage compartment
- K13 Rear fog light warning lamp
- L46 Rear left fog light bulb
- T3 3-pin connector
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6a 6-pin connector, on left tail light
- T6b 6-pin connector, on right tail light
- T13 13-pin connector
- T16c 16-pin connector
- T17 17-pin connector, on light switch
- T32 32-pin connector, blue
- U10 Trailer socket

- (A88) Connection (RFL), in dash panel wiring harness
- (W3) Connection, in rear wiring harness
- (W4) Connection 1 (rear fog light), in rear wiring harness
- (W25) Connection 2 (rear fog light), in rear wiring harness

- * only models without trailer operation
- ** only Golf Variant/ Bora Variant
- *** only Golf/ Bora saloon models
- only models with trailer operation

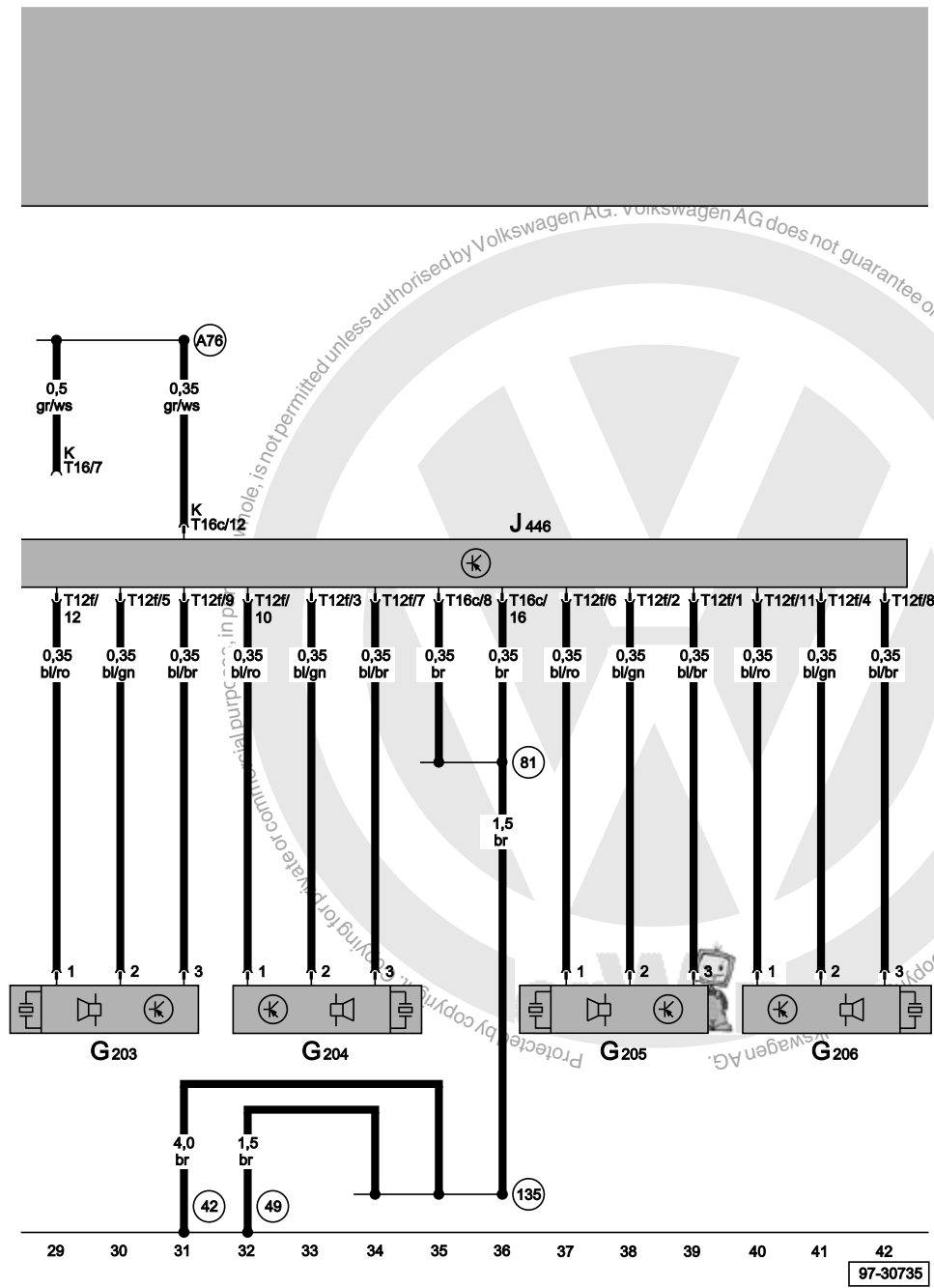


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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Parking aid control unit, rear parking aid sender

- G203 Rear left parking aid sender
- G204 Rear centre left parking aid sender
- G205 Rear centre right parking aid sender
- G206 Rear right parking aid sender
- J446 Parking aid control unit, on right in luggage compartment
- T12f 12-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T16c 16-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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1.6 I/75 kW Simos, engine code AVU

from September 2000

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

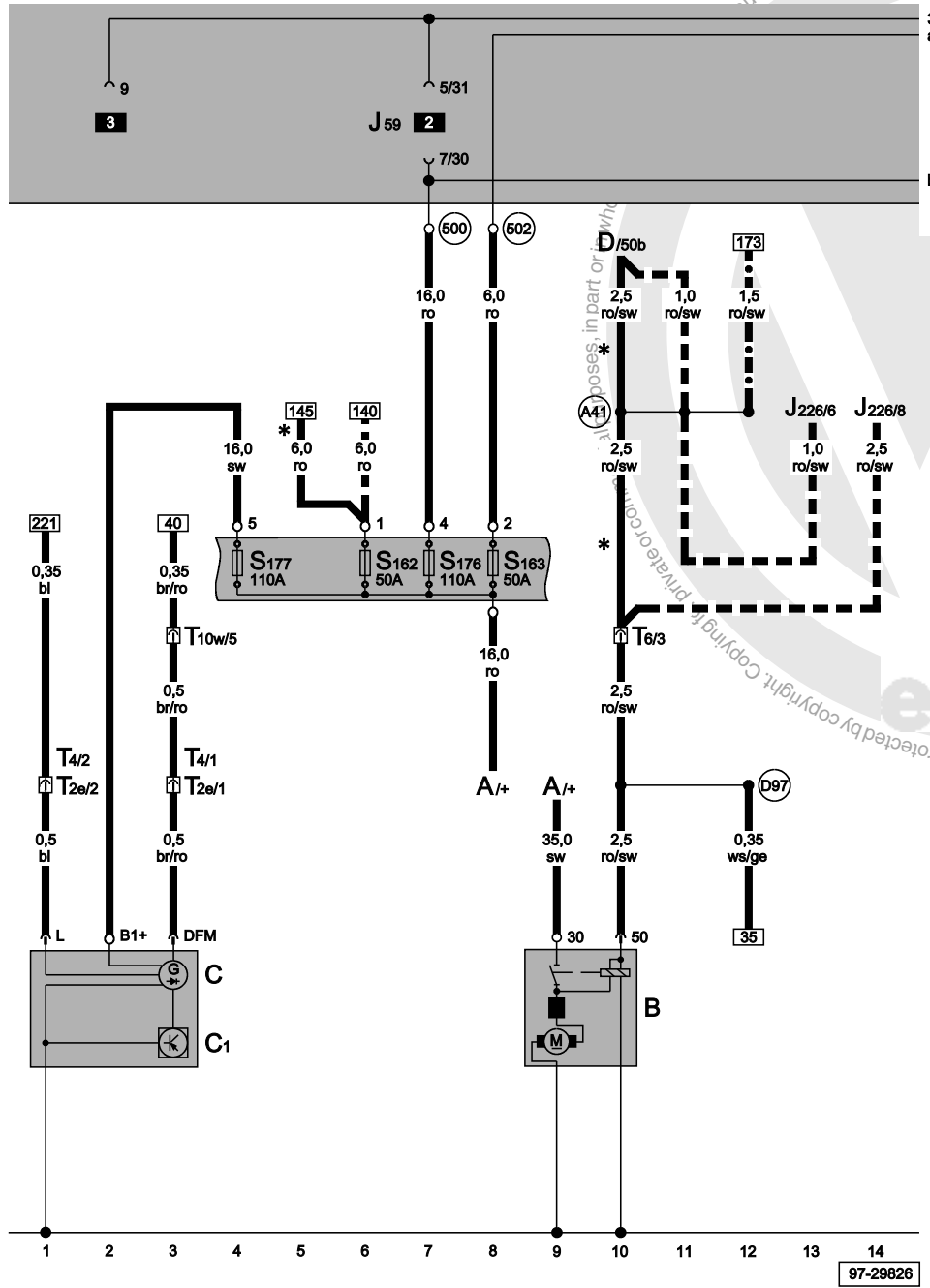
⇒ List of Fitting Locations!

For information concerning

◆ Fault Finding Programs

⇒ guided fault finding





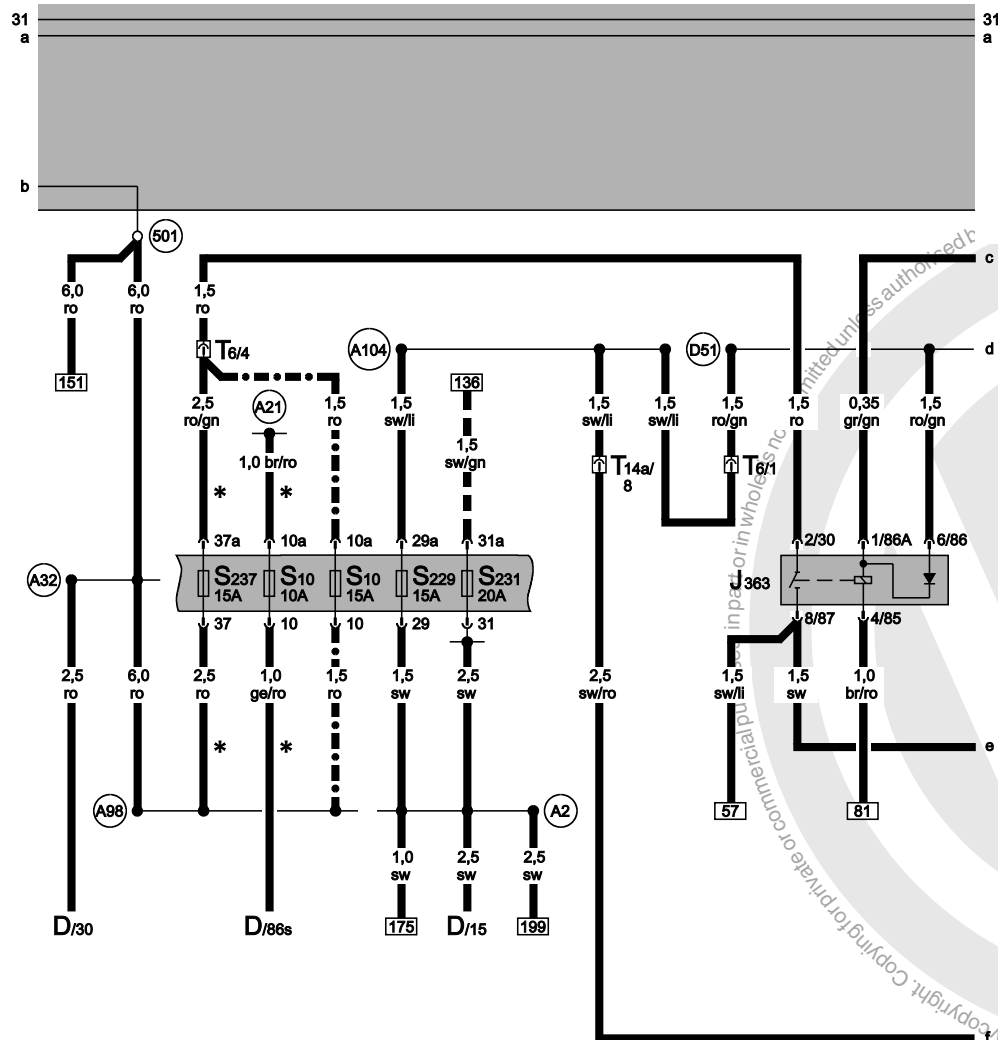
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage Regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
- D97 Connection (50), in engine compartment wiring harness
- * only models with manual gearbox
- models with automatic gearbox only
- up to April 2001

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Current supply relay for Simos control unit

- D Ignition/starter switch
- J363 Current supply relay for Simos control unit, in protective housing on left in engine compartment (control number 429)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S231 Fuse 31 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D51 Positive connection 1 (15), in engine compartment wiring harness
- models with automatic gearbox only
- * from November 2001
- up to October 2001



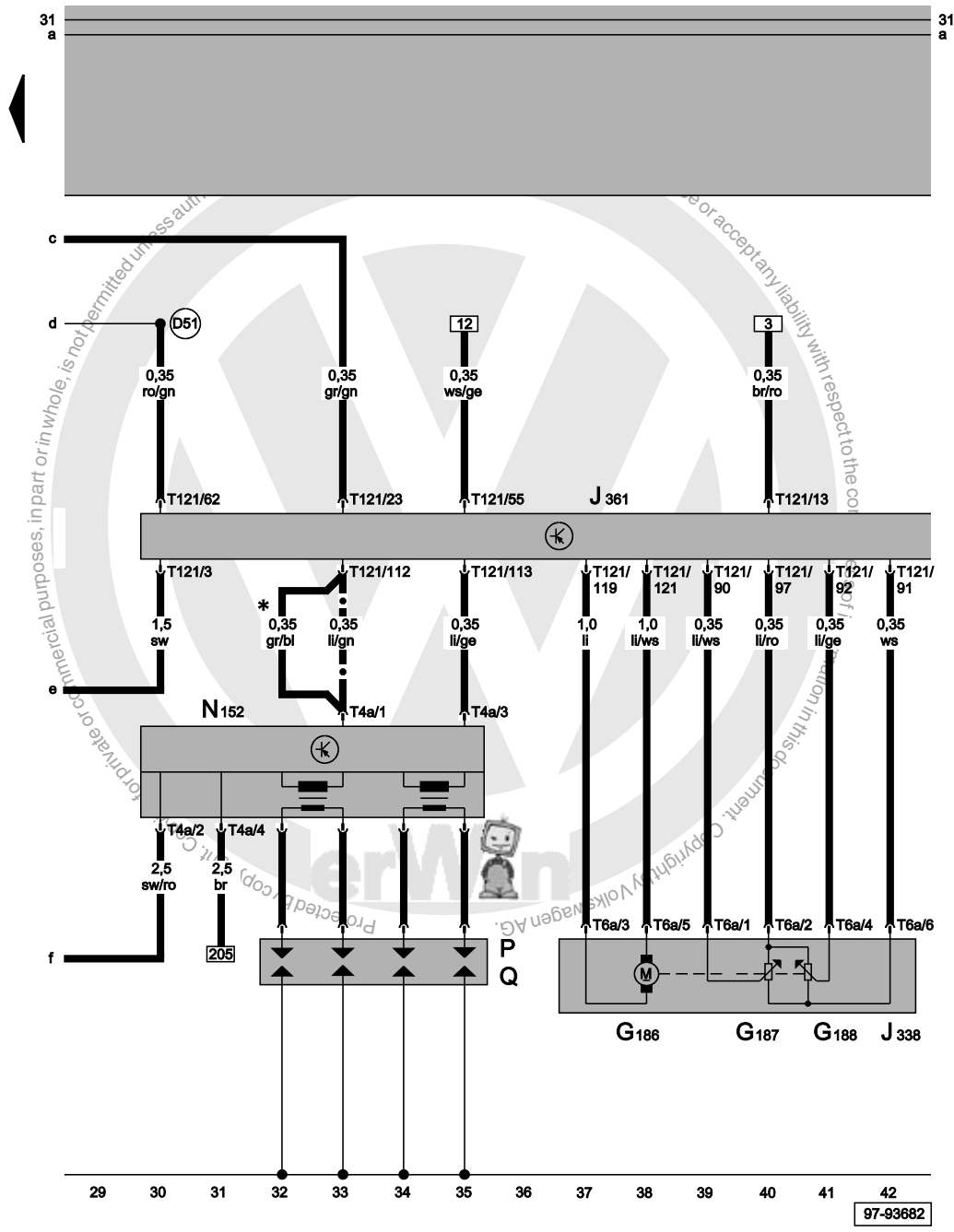
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- ge = yellow
- or = orange
- rs = pink

Simos control unit, ignition system, throttle valve module, throttle valve drive angle sender for electric throttle

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J338 Throttle valve module
- J361 Simos control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T6a 6-pin connector
- T121 121-pin connector

(D51) Positive connection 1 (15), in engine compartment wiring harness

* from November 2000
 -●- up to October 2000

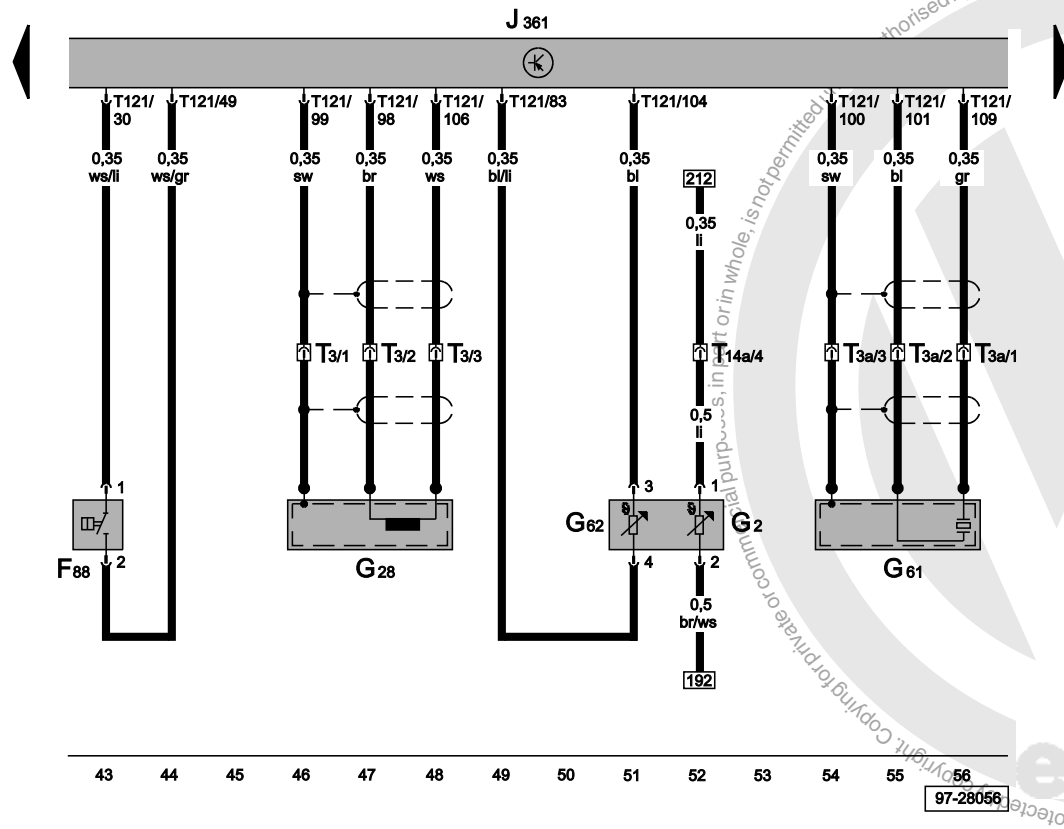


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-93682

Simos control unit, engine speed sender, power assisted steering pressure switch, coolant temperature sender, knock sensor

- F88 Power assisted steering pressure switch
- G2 Coolant temperature sender
- G28 Engine speed sender
- G61 Knock sensor 1
- G62 Coolant temperature sender
- J361 Simos control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T3a 3-pin connector, on front of engine
- T14a 14-pin connector, near battery
- T121 121-pin connector



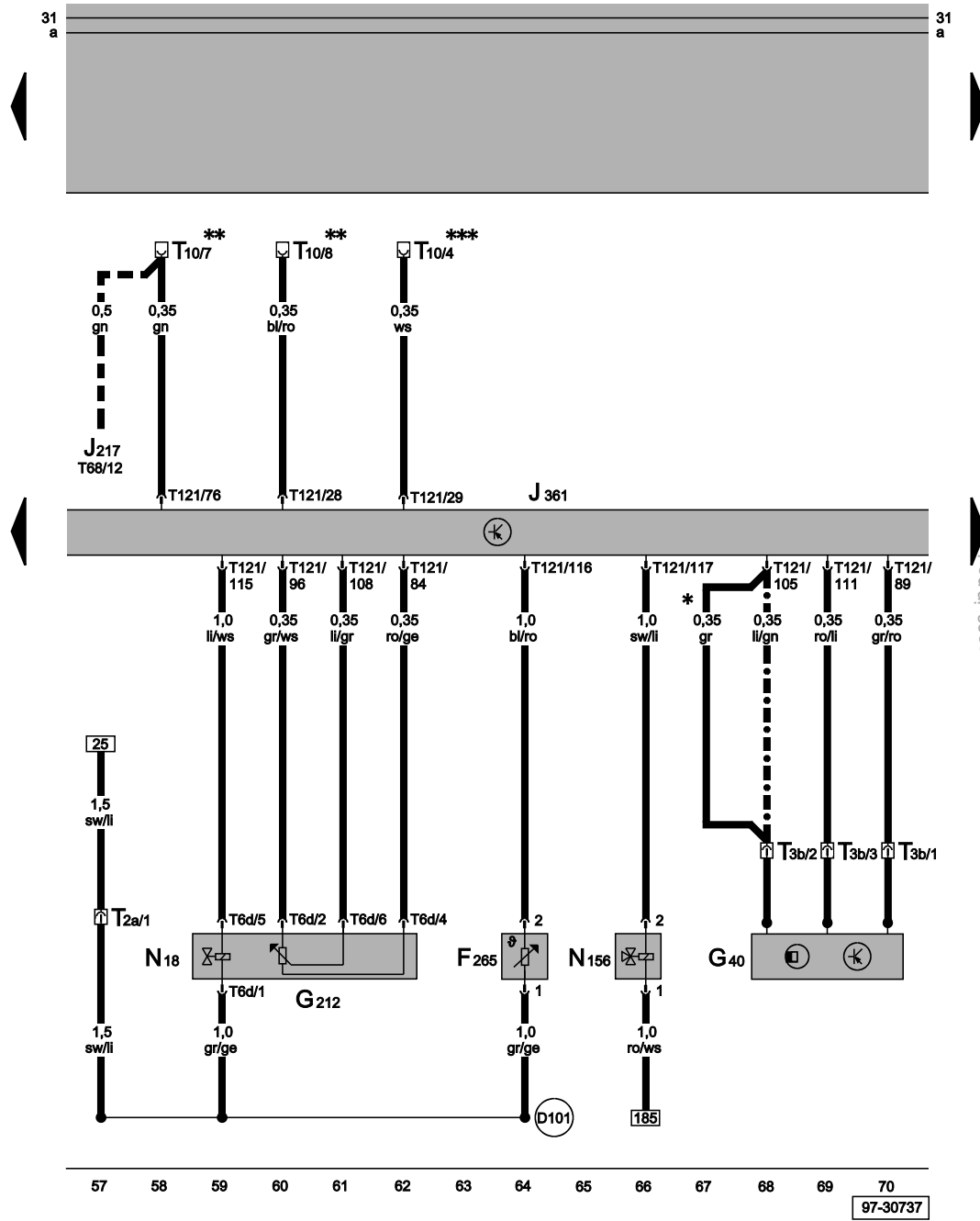
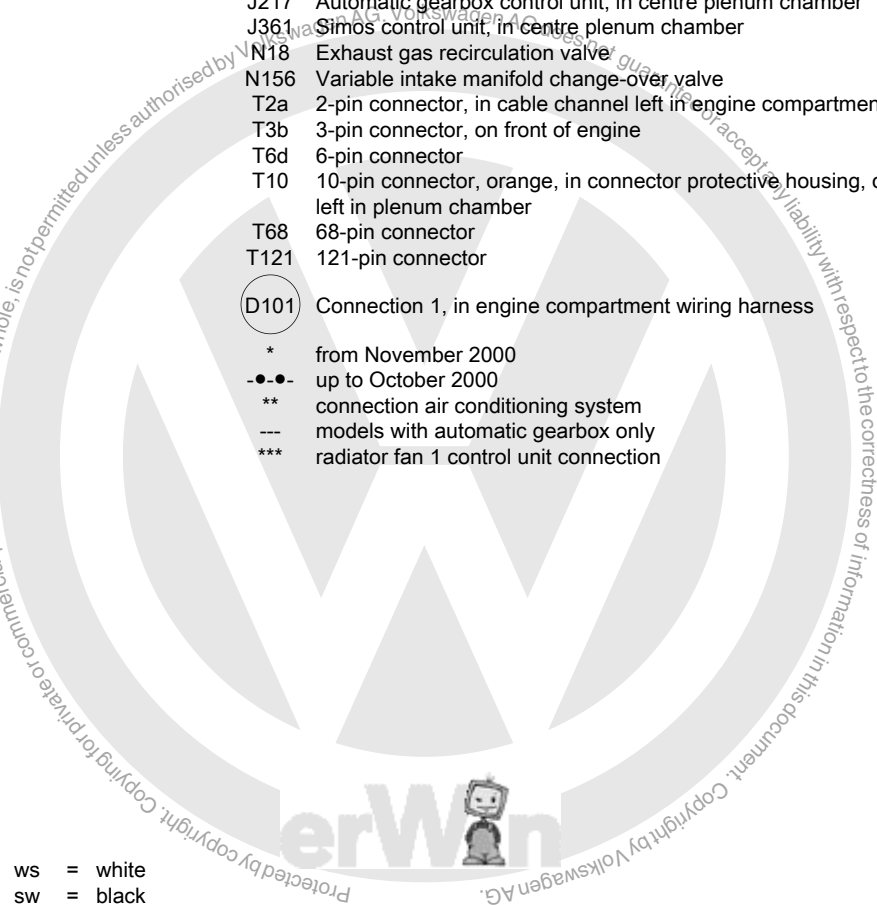
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- ro = red
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97-28056

Simos control unit, Hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, variable intake manifold change-over valve, map-controlled engine cooling system thermostat

- F265 Map-controlled engine cooling system thermostat
- G40 Hall sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit, in centre plenum chamber
- J361 Simos control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N156 Variable intake manifold change-over valve
- T2a 2-pin connector, in cable channel left in engine compartment
- T3b 3-pin connector, on front of engine
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector
- D101 Connection 1, in engine compartment wiring harness

- * from November 2000
- up to October 2000
- ** connection air conditioning system models with automatic gearbox only
- radiator fan 1 control unit connection

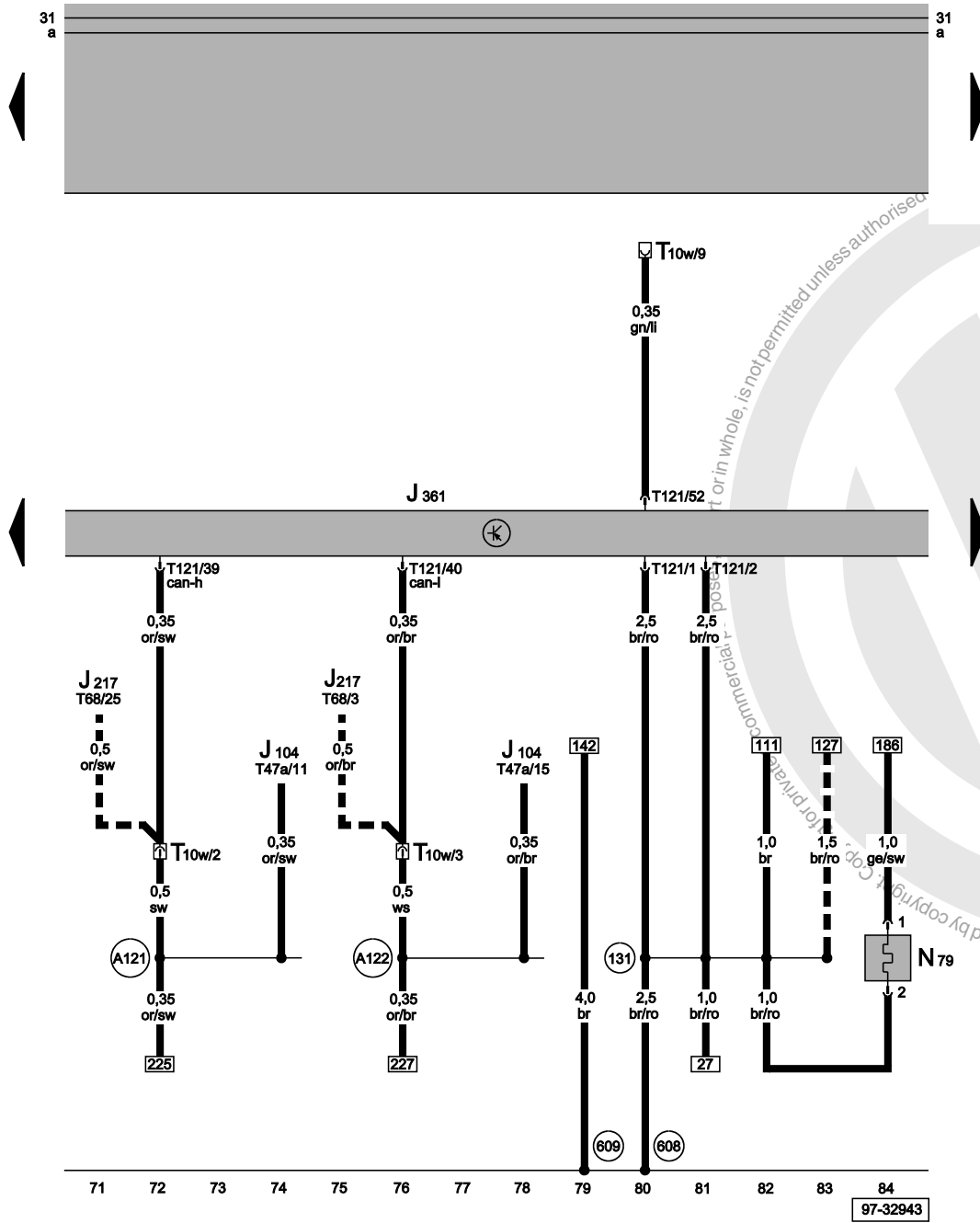


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Simos control unit, heater element for crankcase breather

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J361 Simos control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector
- T121 121-pin connector

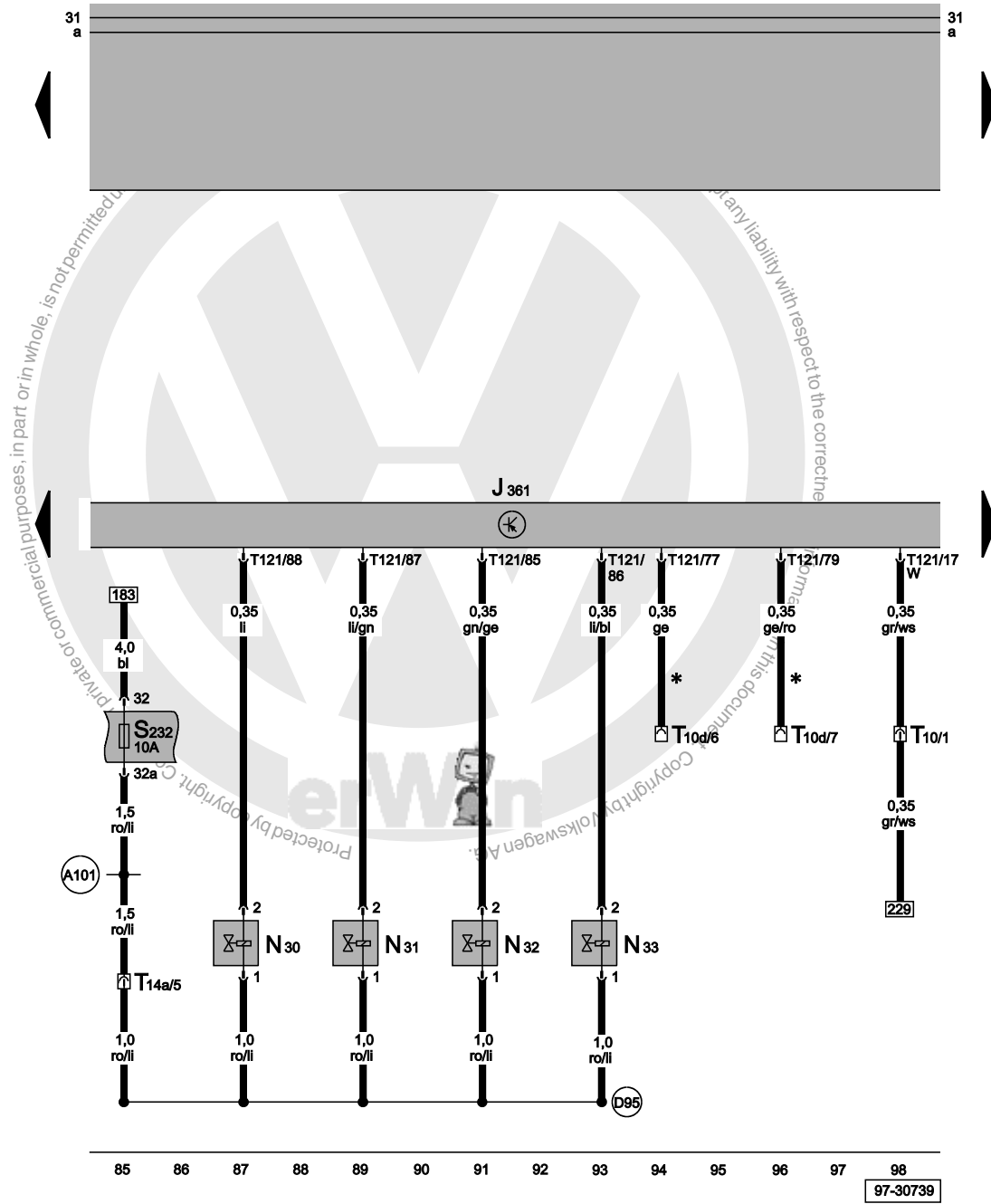
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only



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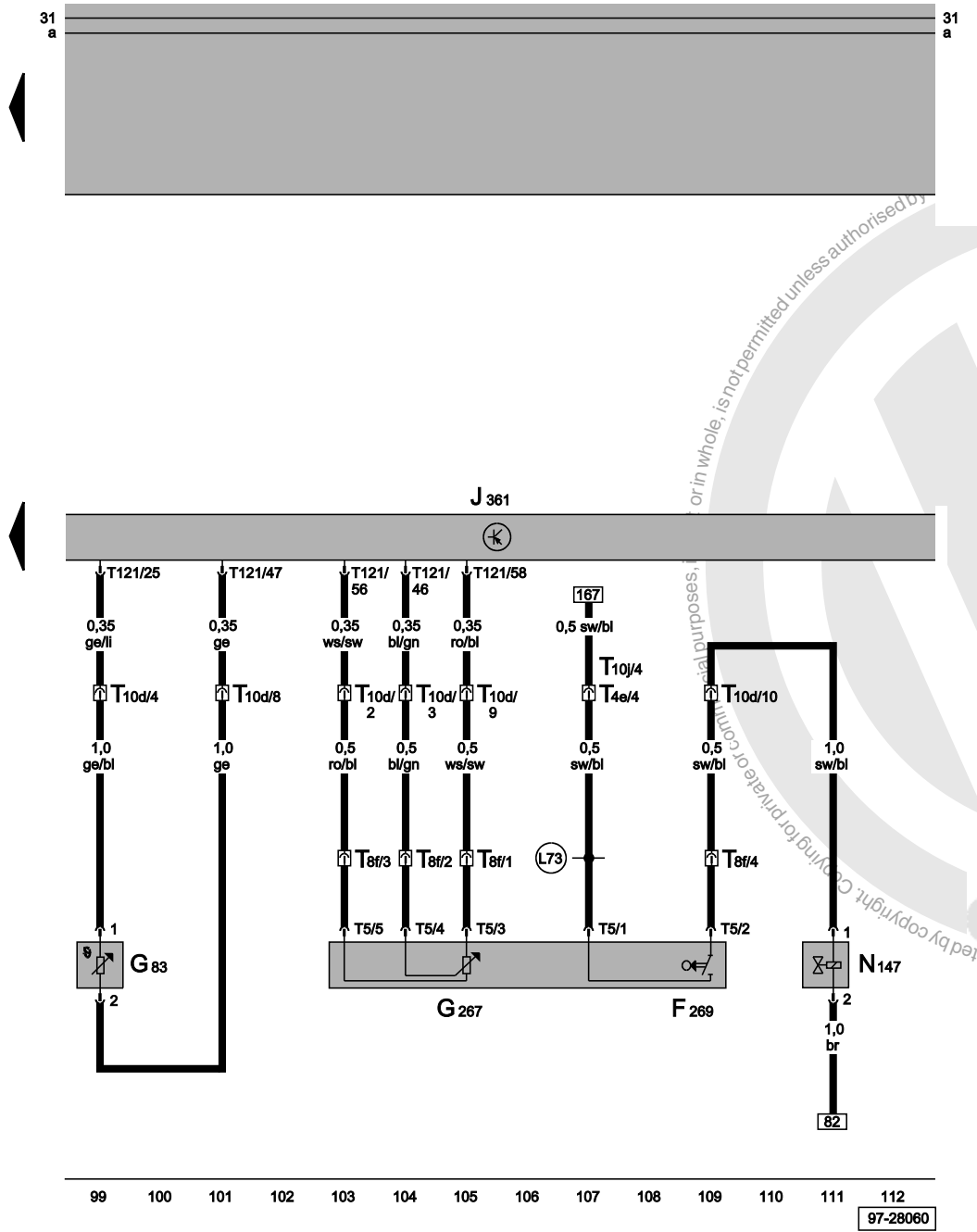
Simos control unit, injectors

- J361 Simos control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- * Radiator fan control unit connection



Simos control unit, radiator outlet coolant temperature sender, potentiometer for temperature selection rotary knob, temperature flap position switch, 2-way valve for coolant shut-off valve

- F269 Temperature flap position switch*
 - G83 Radiator outlet coolant temperature sender
 - G267 Potentiometer, temperature selection rotary knob*
 - J361 Simos control unit, in centre plenum chamber
 - N147 2-way valve for coolant shut-off valve
 - T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
 - T5 5-pin connector
 - T8f 8-pin connector, behind centre dash panel
 - T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
 - T10j 10-pin connector, behind centre dash panel (models with air conditioning system)
 - T121 121-pin connector
 - L73 Connection (15a), in fresh air blower wiring harness
- * F269 is closed when G267 is positioned on left limit stop. component not for Climatronic exist



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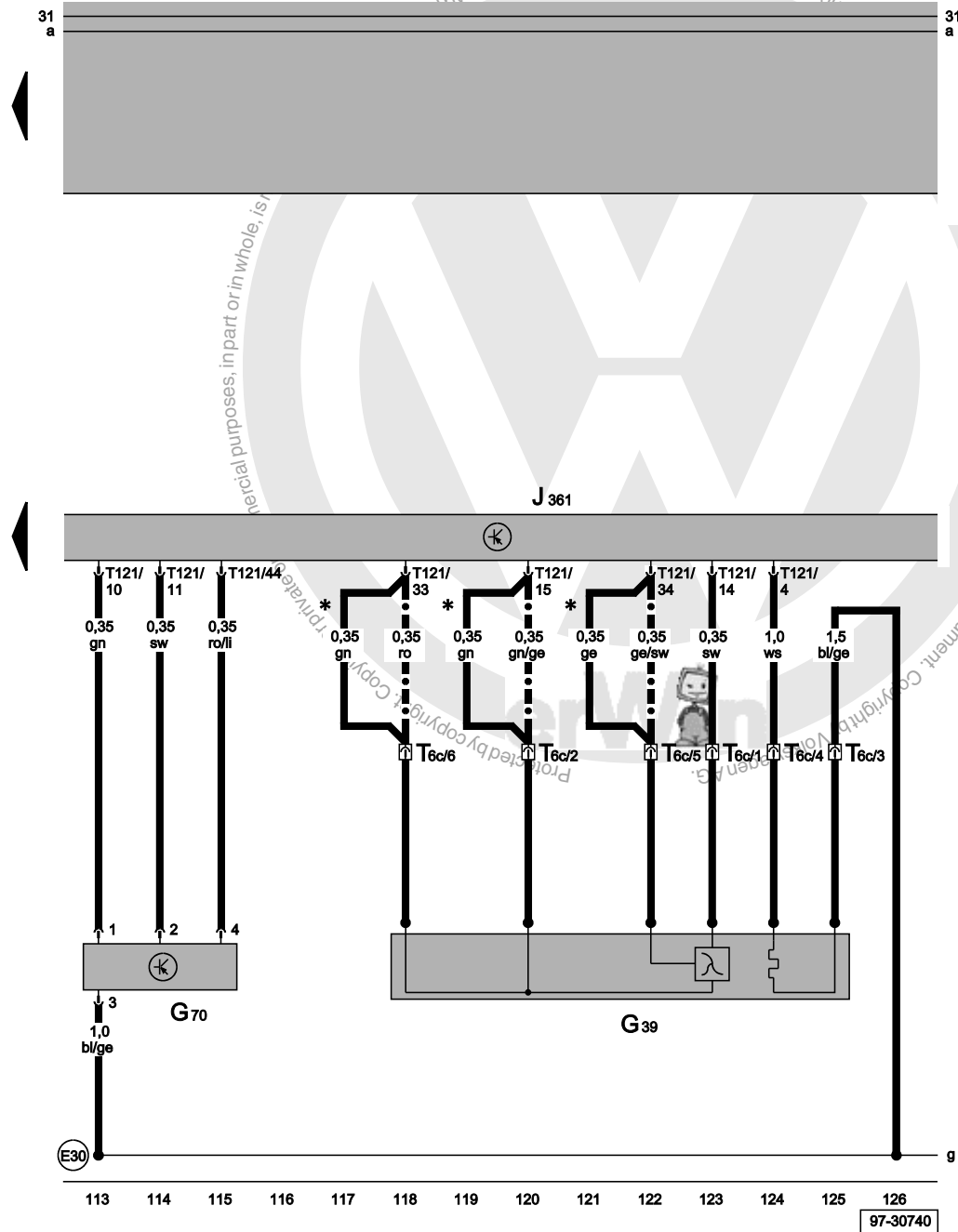
Simos control unit, air mass meter, lambda probe

- G39 Lambda probe
- G70 Air mass meter
- J361 Simos control unit, in centre plenum chamber
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector

E30 Connection (87a), in engine wiring harness

* from November 2000

-••- up to October 2000

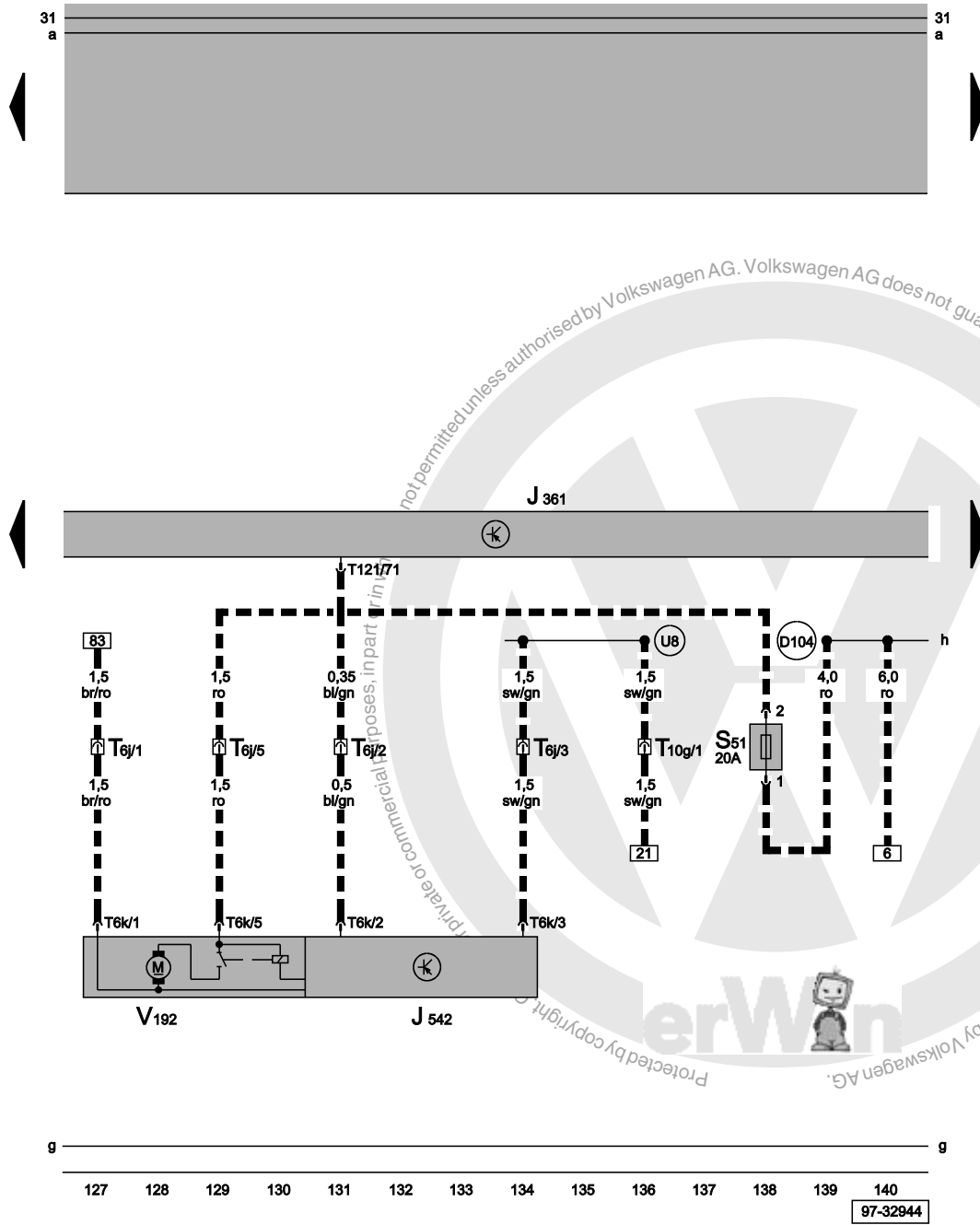


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97-30740

Simos control unit, brake servo control unit, vacuum pump for brakes

- J361 Simos control unit, in centre plenum chamber
- J542 Brake servo control unit
- S51 Fuse, in protective housing on left in engine compartment
- T6j 6-pin connector, in left engine compartment
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes
- D104 Positive connection 2 (30a), in engine compartment wiring harness
- U8 Positive connection (15a), in automatic gearbox wiring harness
- models with automatic gearbox only

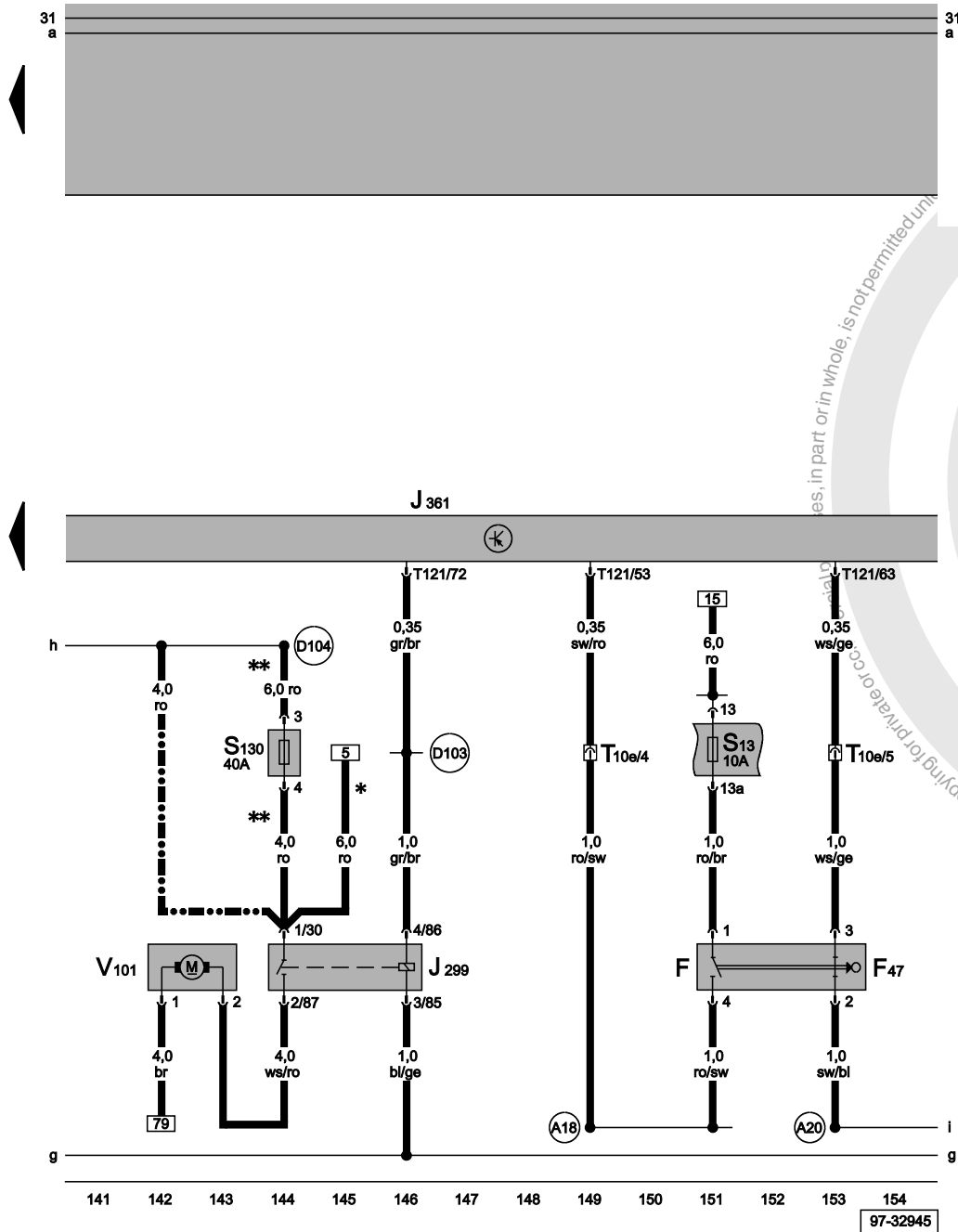


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Simos control unit, secondary air pump motor, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- J361 Simos control unit, in centre plenum chamber
- S13 Fuse 13 in fuse holder
- S130 Secondary air pump fuse, in protective housing on left in engine compartment
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D103) Connection 3, in engine compartment wiring harness
- (D104) Positive connection 2 (30a), in engine compartment wiring harness
- * only models with manual gearbox
- ** models with automatic gearbox only, up to October 2000
- only models with automatic gearbox from November 2000



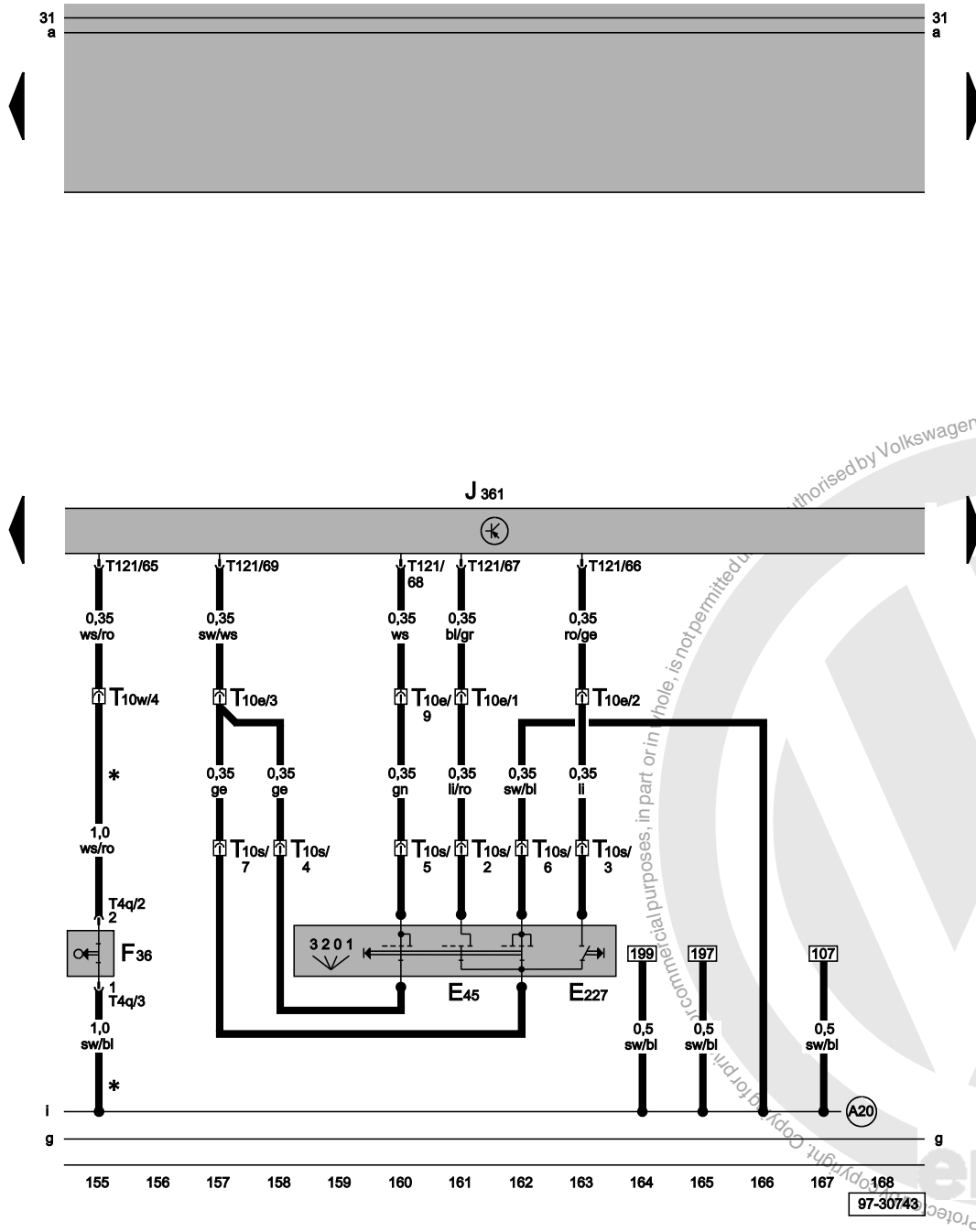
97-32945

Simos control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch*
- J361 Simos control unit, in centre plenum chamber
- T4q 4-pin connector, (from May 2001)
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(A20) Connection (15a), in dash panel wiring harness

- * only models with manual gearbox
- ** only models with GND

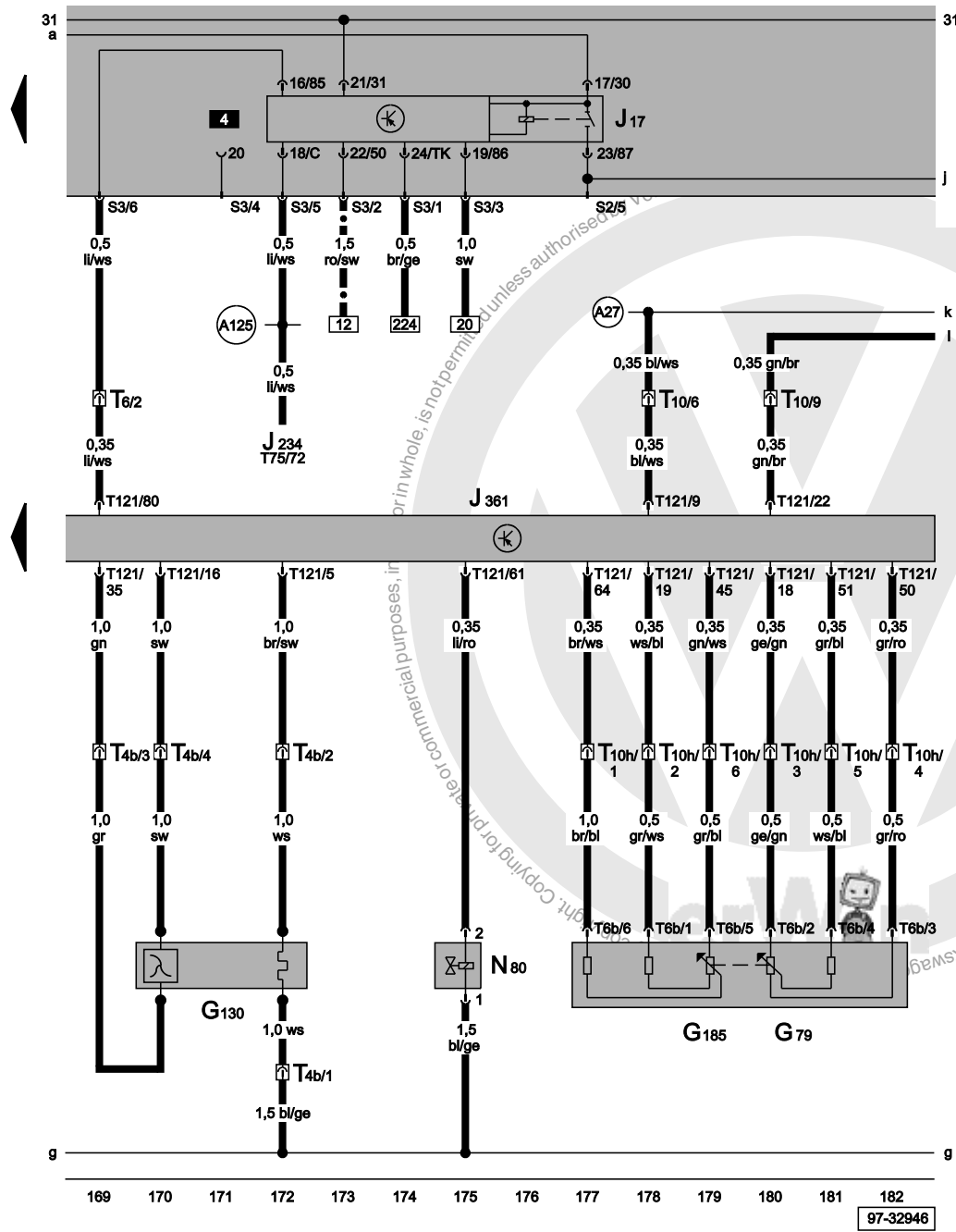


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Simos control unit, lambda probe after catalytic converter, fuel pump relay, active charcoal filter system solenoid valve, accelerator position sender

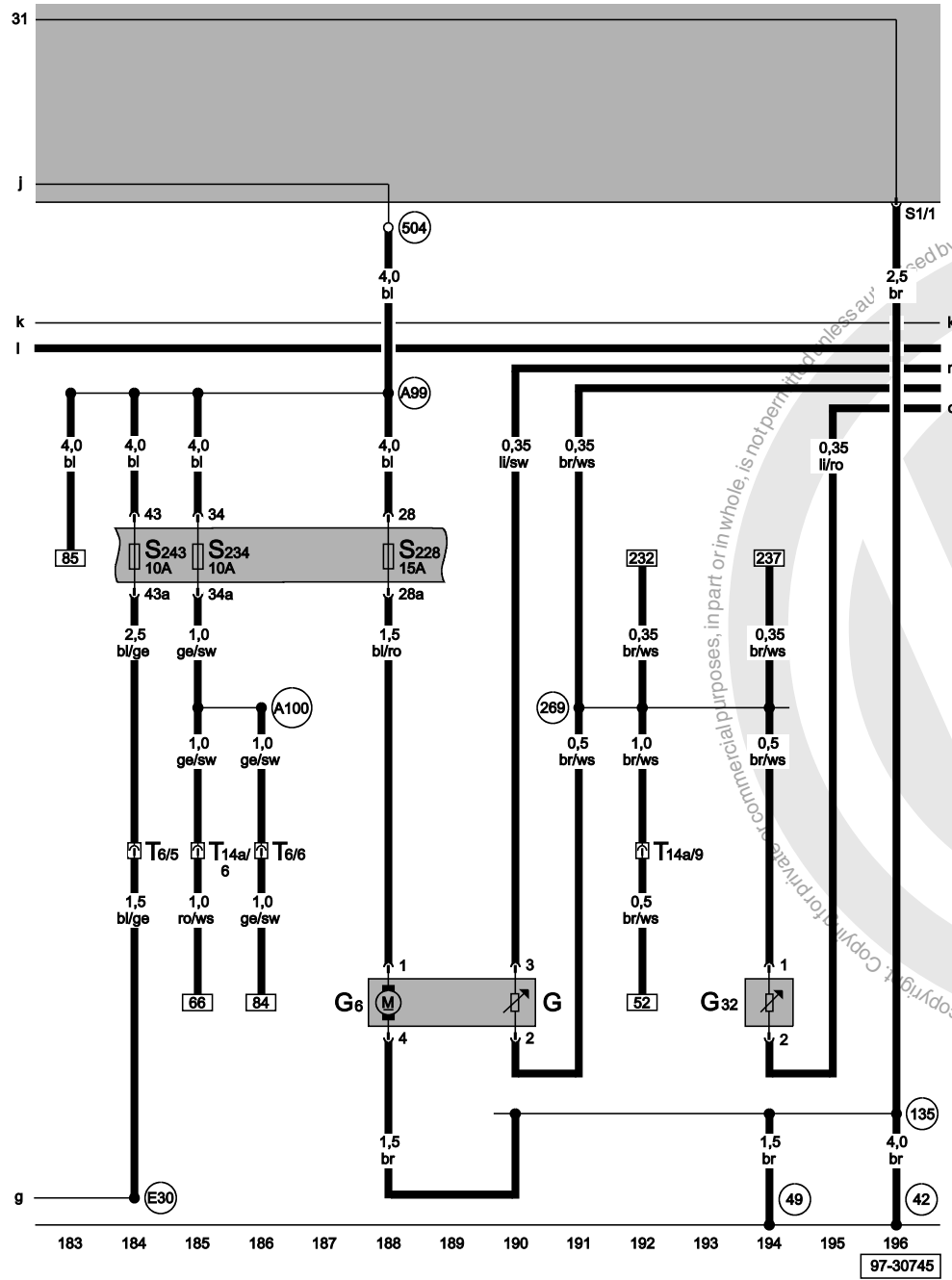
- G79 Accelerator position sender
- G130 Lambda probe after catalytic converter
- G185 Accelerator position sender -2-
- J17 Fuel pump relay
- J234 Airbag control unit
- J361 Simos control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6b 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector

- (A27) Connection (speed signal), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness
- up to April 2001



97-32946

Fuel pump, fuel gauge sender, coolant shortage indicator sender

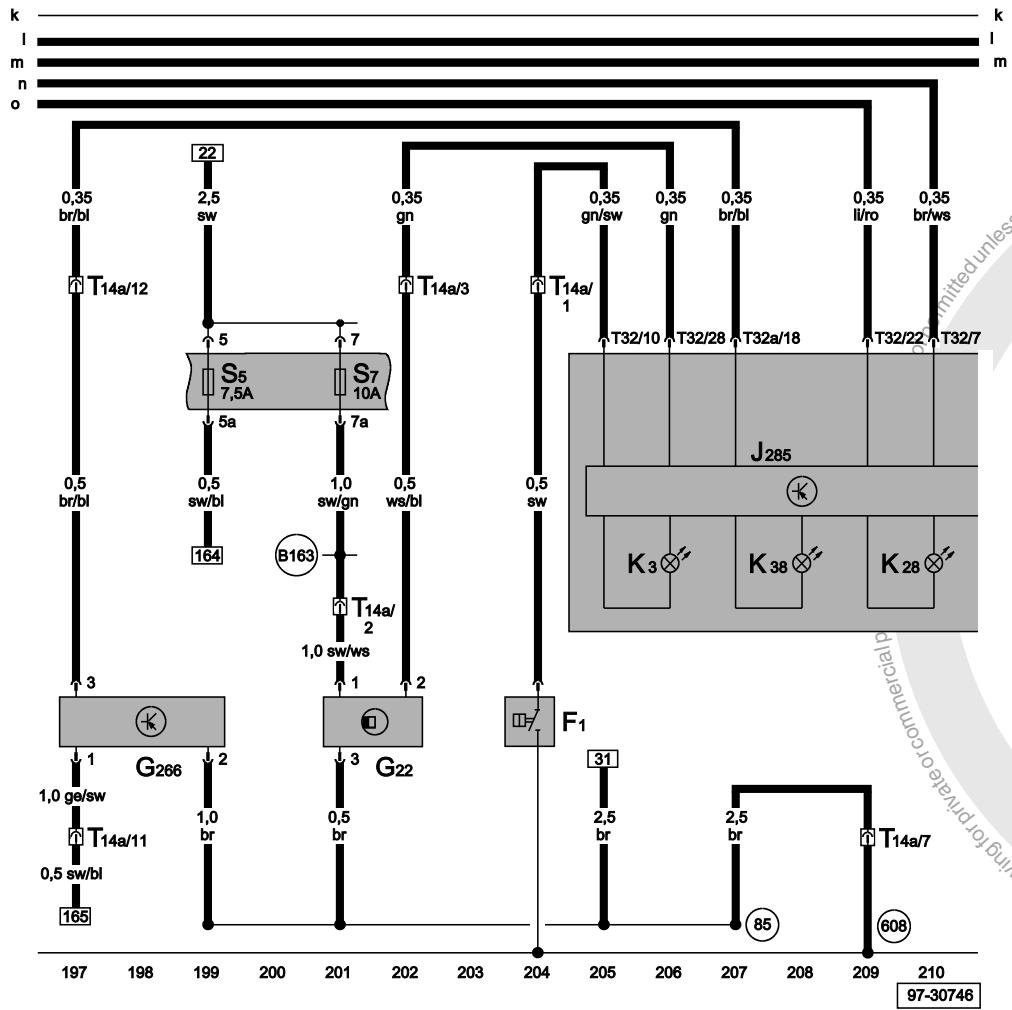


- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

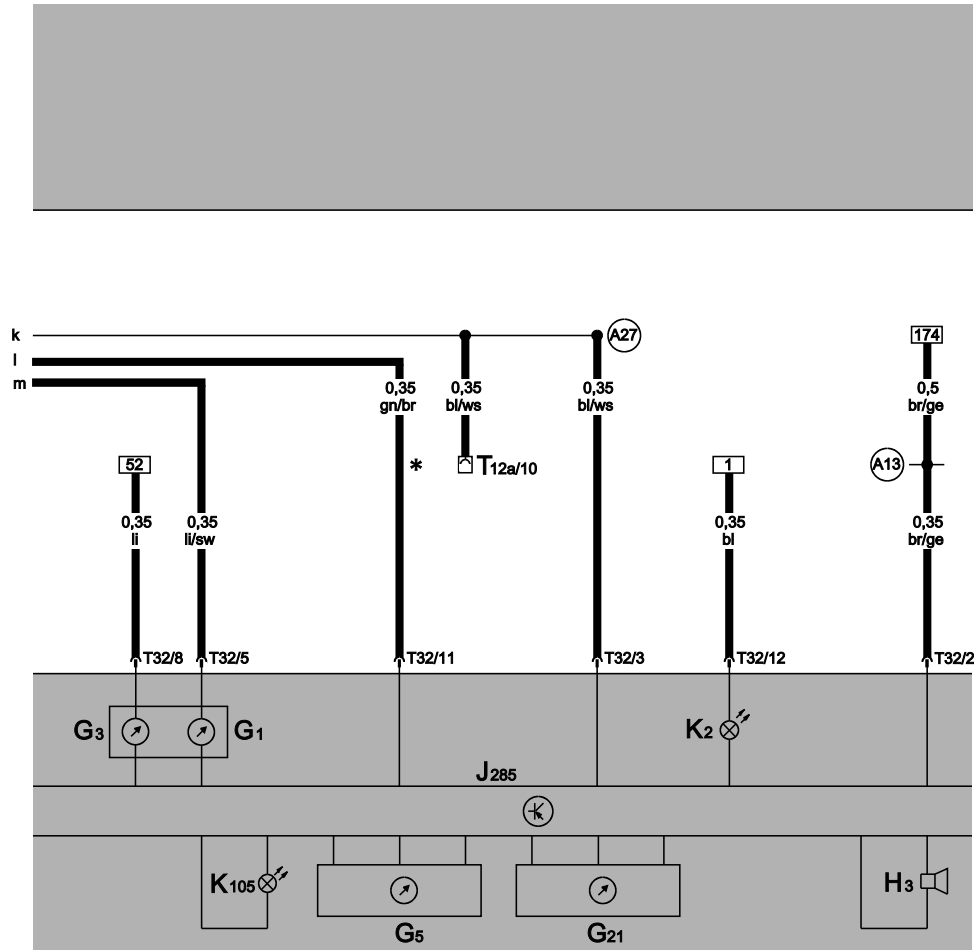
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness
- * only flexible service interval display



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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness

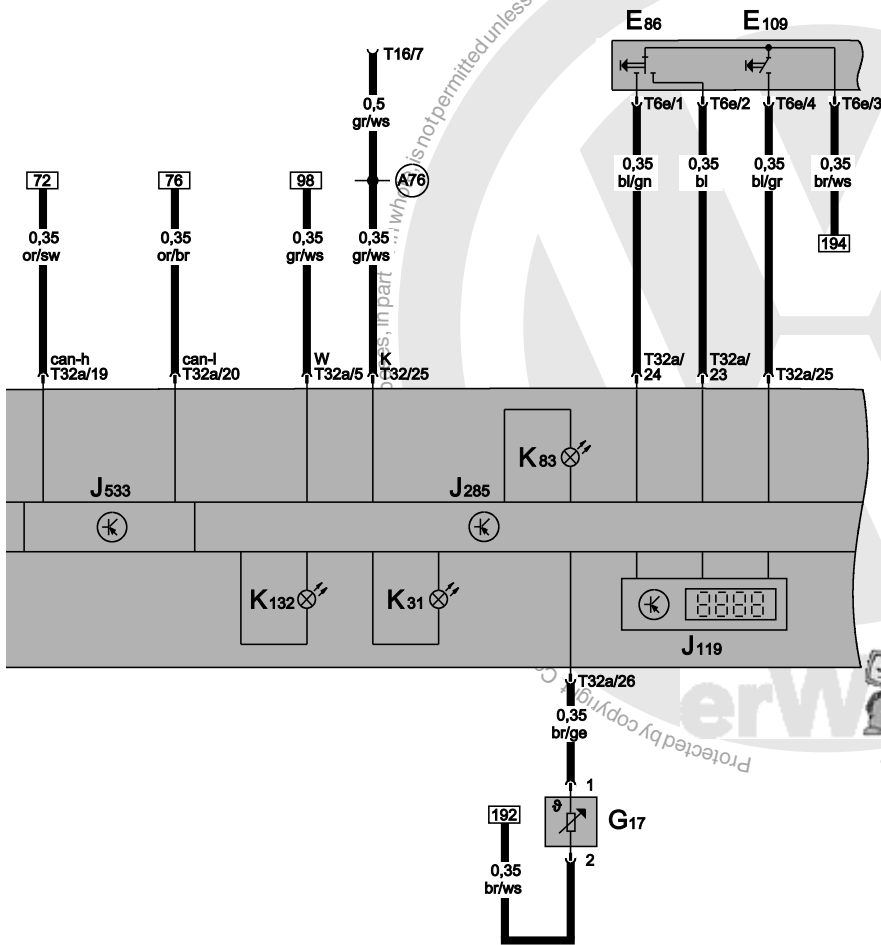


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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



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1.6 I/77 kW, 4MV, engine code AZD

from September 2000

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

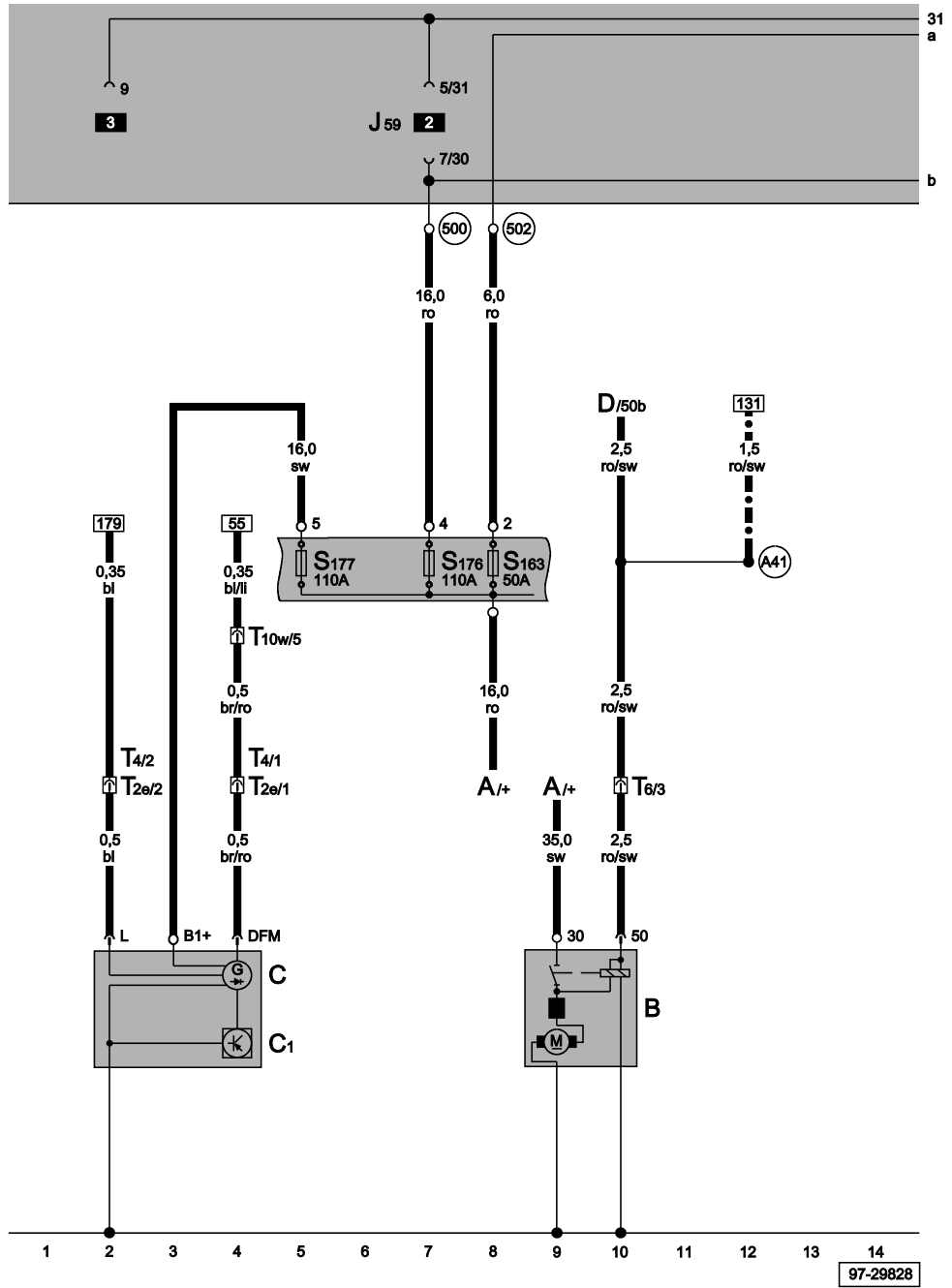
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
- up to April 2001

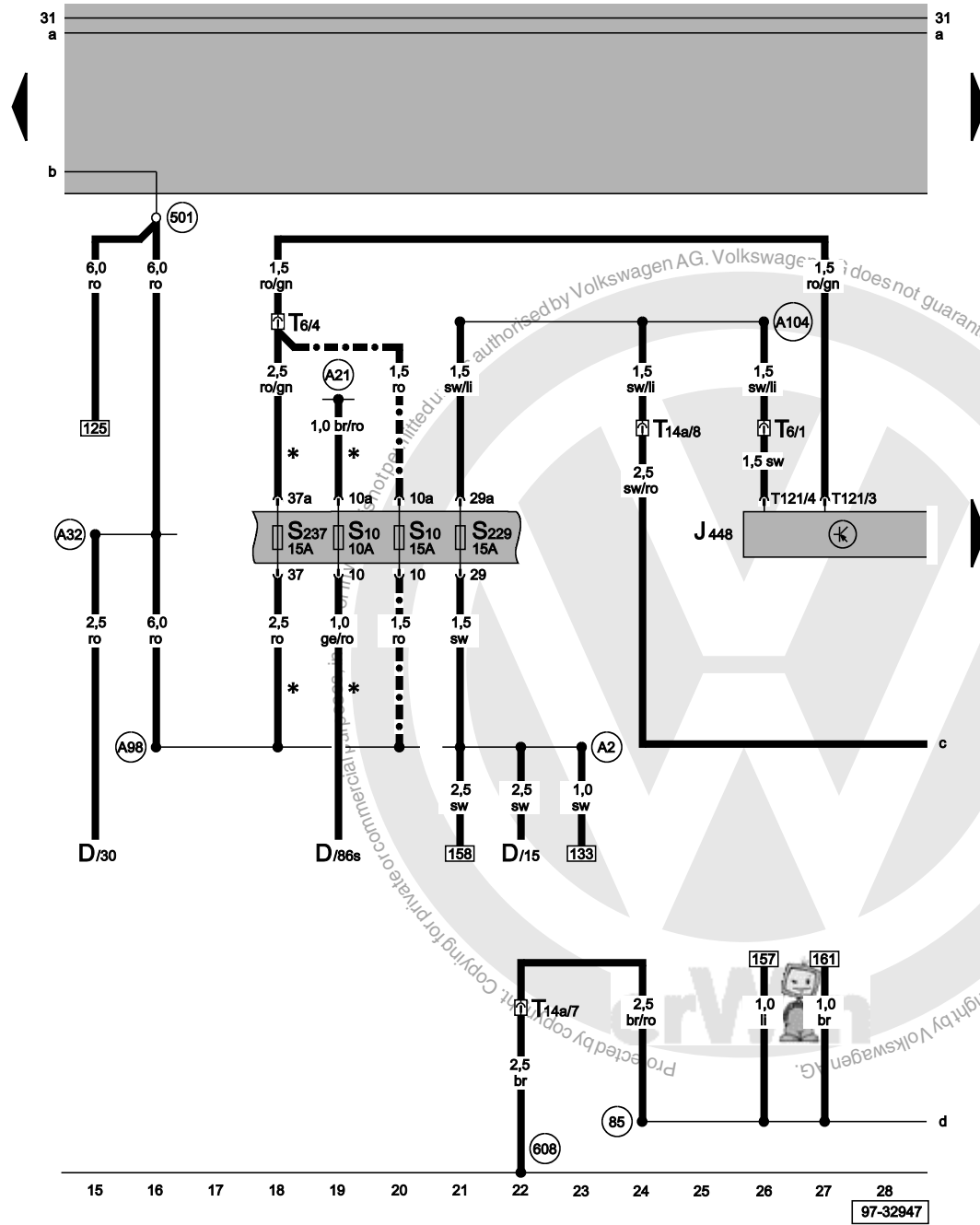
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97-29828

4MV injection system control unit

- D Ignition/starter switch
- J448 4MV injection system control unit, in centre plenum chamber
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 85 Earth connection -1-, in engine compartment wiring harness
- 501 Screw connection 2 (30), on relay plate
- 608 Earth point, in centre of plenum chamber
- A2 Positive connection (15), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- * from November 2001
- up to October 2001

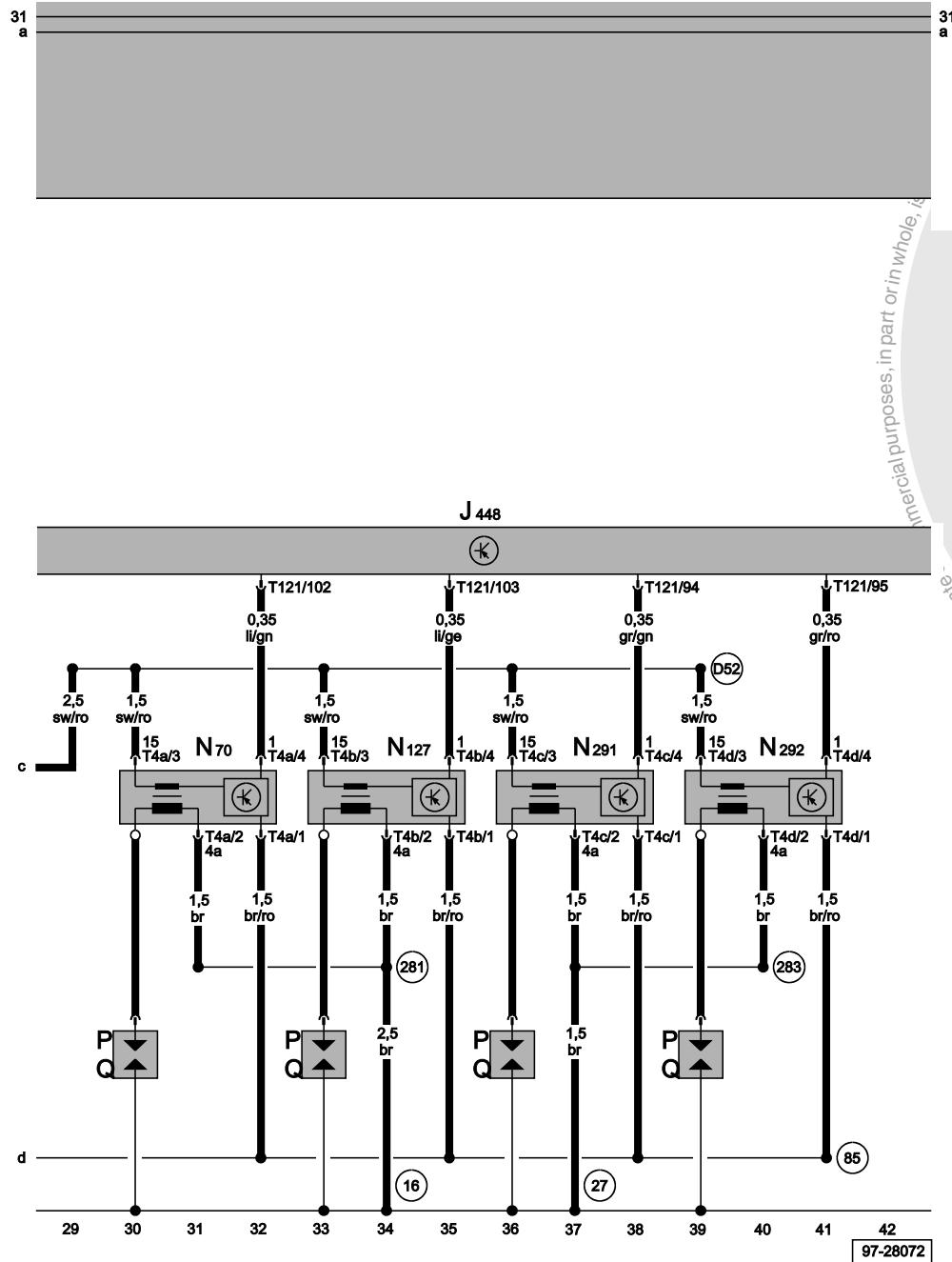


97-32947

4MV injection system control unit, ignition system

- J448 4MV injection system control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 16 Earth point 1, on cylinder head
- 27 Earth point 2, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection 1, in engine wiring harness
- 283 Earth connection 2, in engine wiring harness
- D52 Positive connection (15a), in engine compartment wiring harness



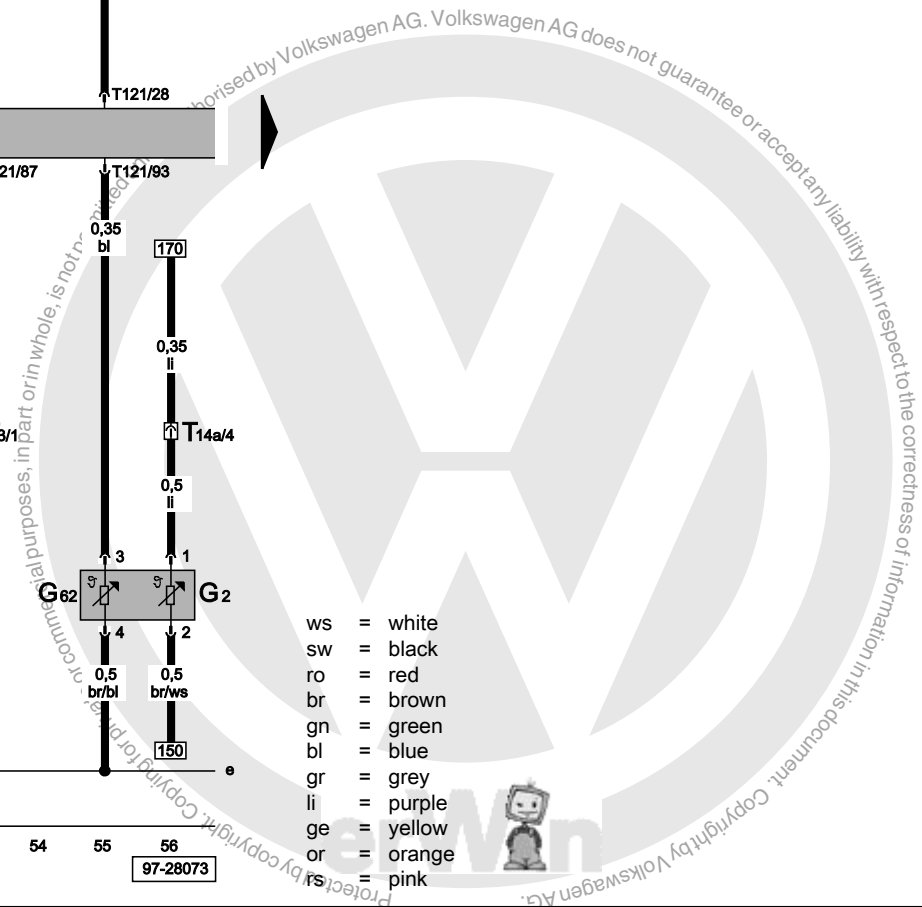
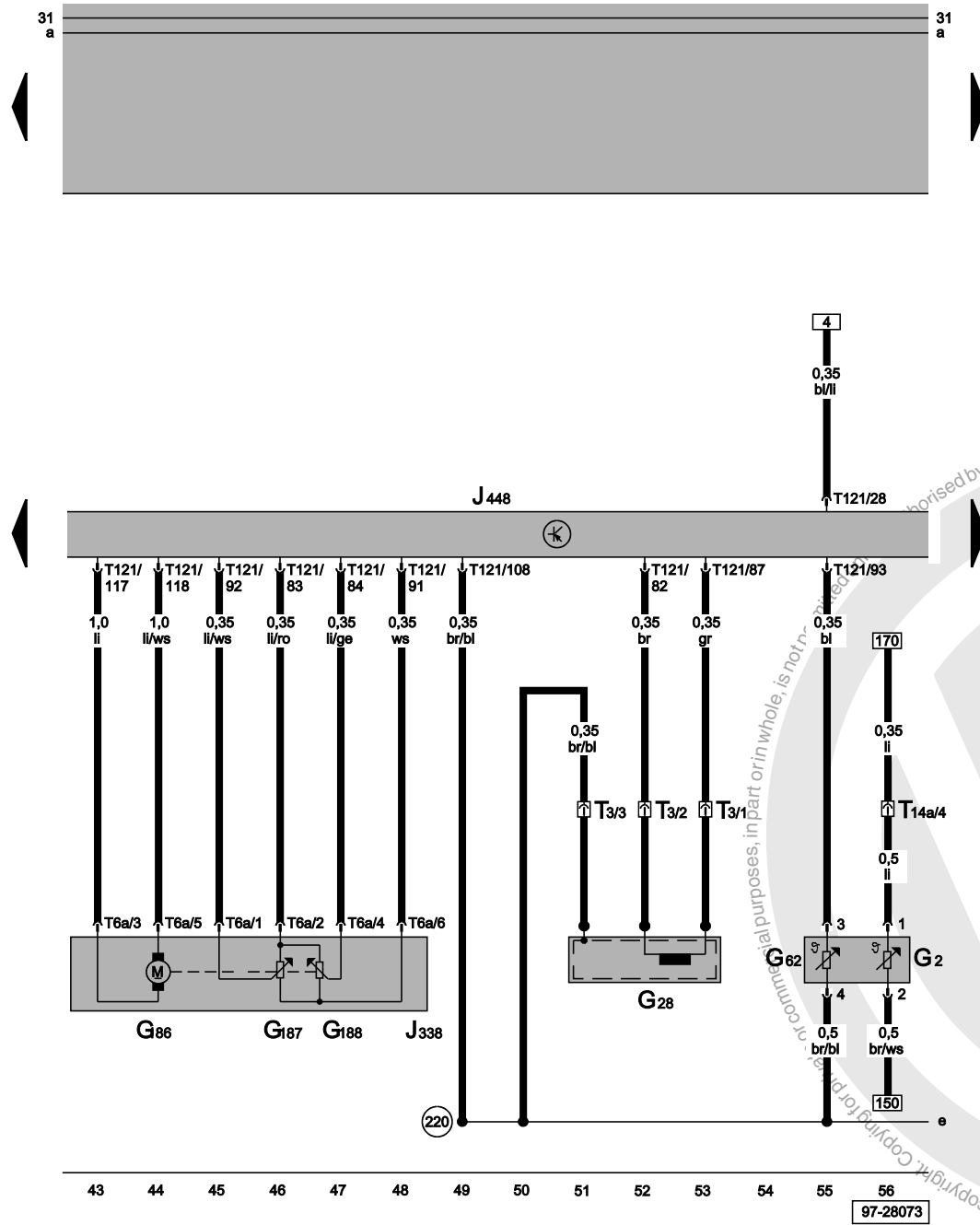
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97-28072

4MV injection system control unit, throttle valve module, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J338 Throttle valve module
- J448 4MV injection system control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector

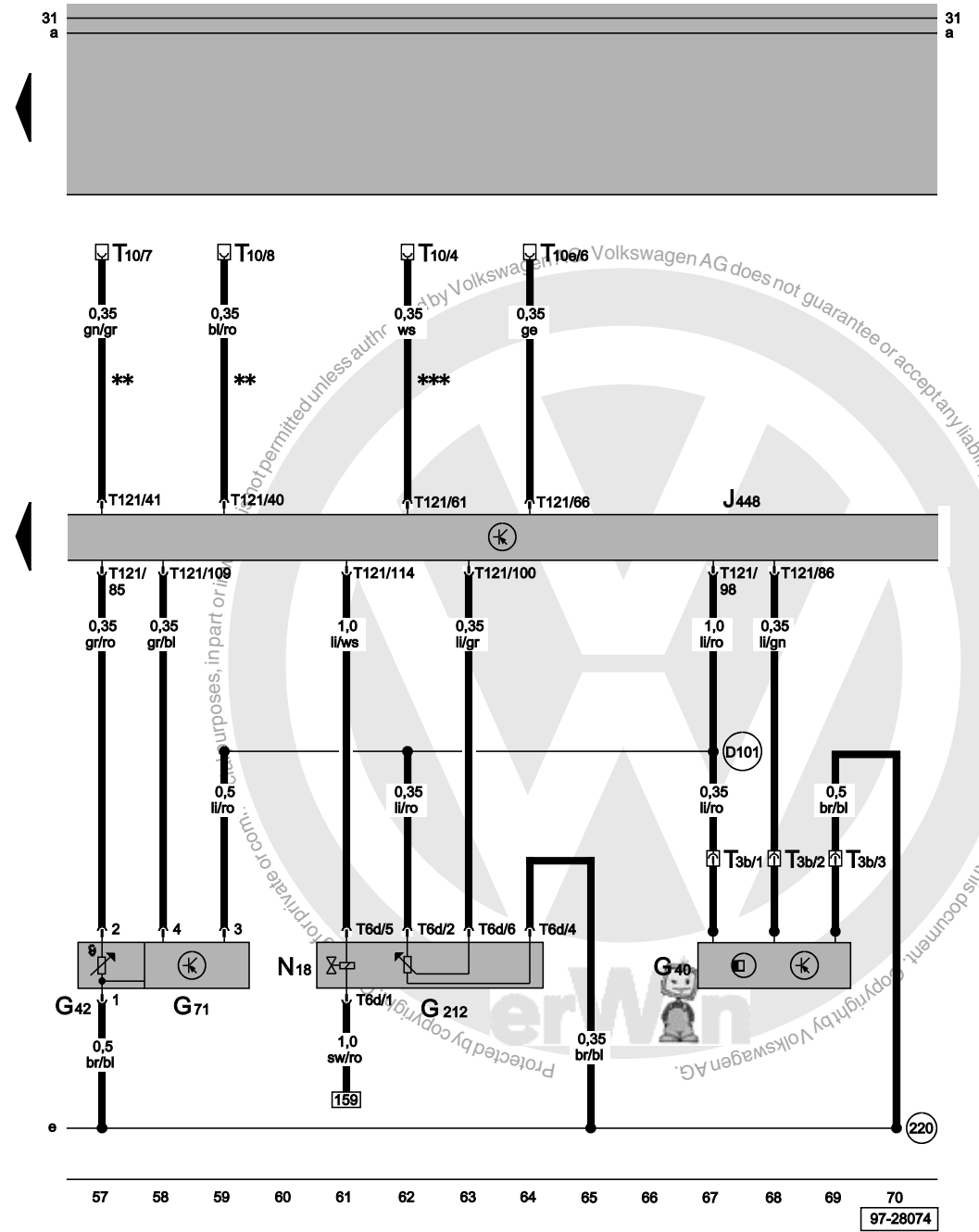
(220) Earth connection (sender earth), in engine wiring harness



4MV injection system control unit, intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, Hall sender

- G40 Hall sender
- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- J448 4MV injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- T3b 3-pin connector, on cylinder head
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (220) Earth connection (sender earth), in engine wiring harness

- (D101) Connection 1, in engine compartment wiring harness
- ** connection air conditioning system
- *** radiator fan control unit connection

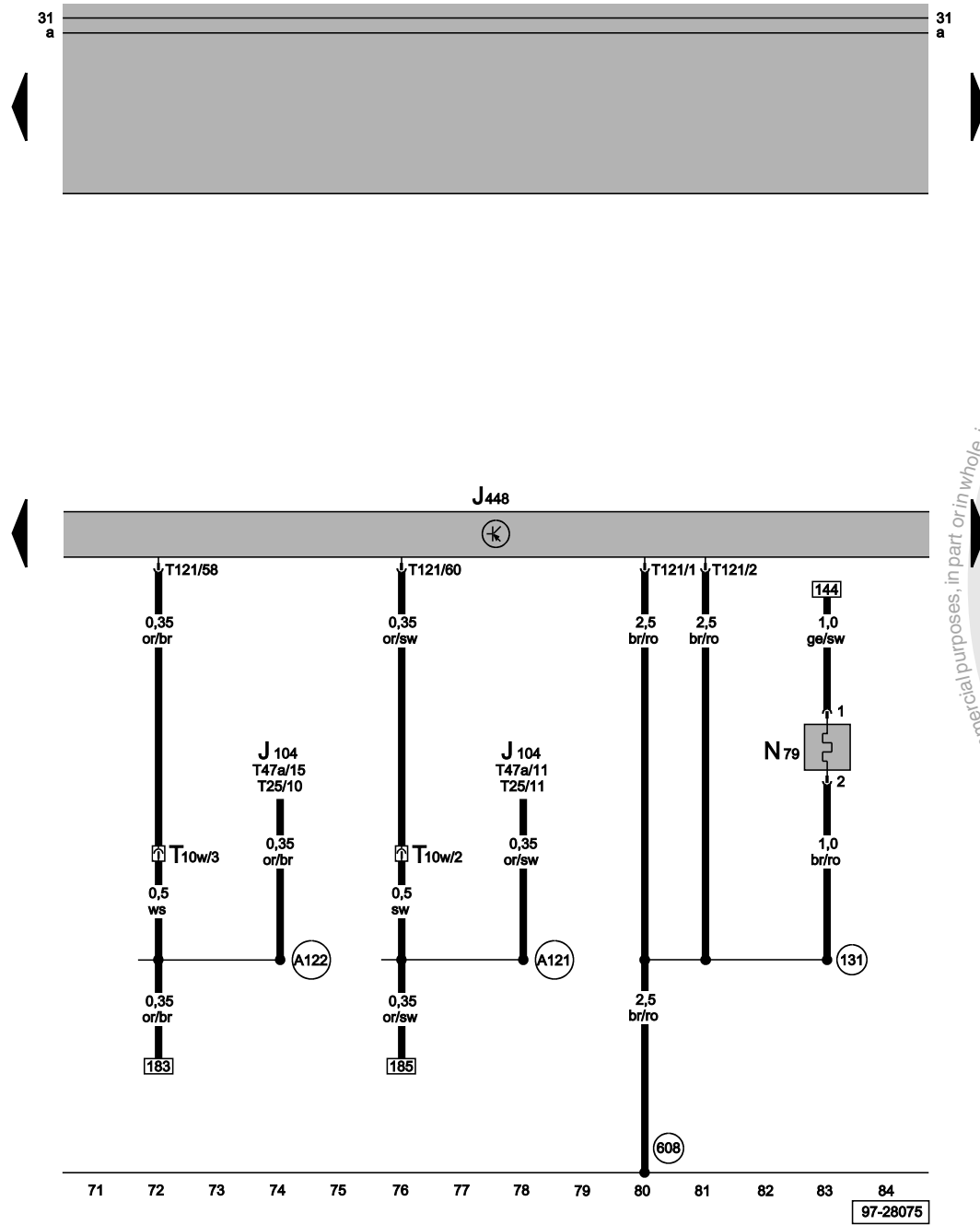


97-28074

4MV injection system control unit, heater element for crankcase breather

- J104 ABS/ABS control unit with EDL
- J448 4MV injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



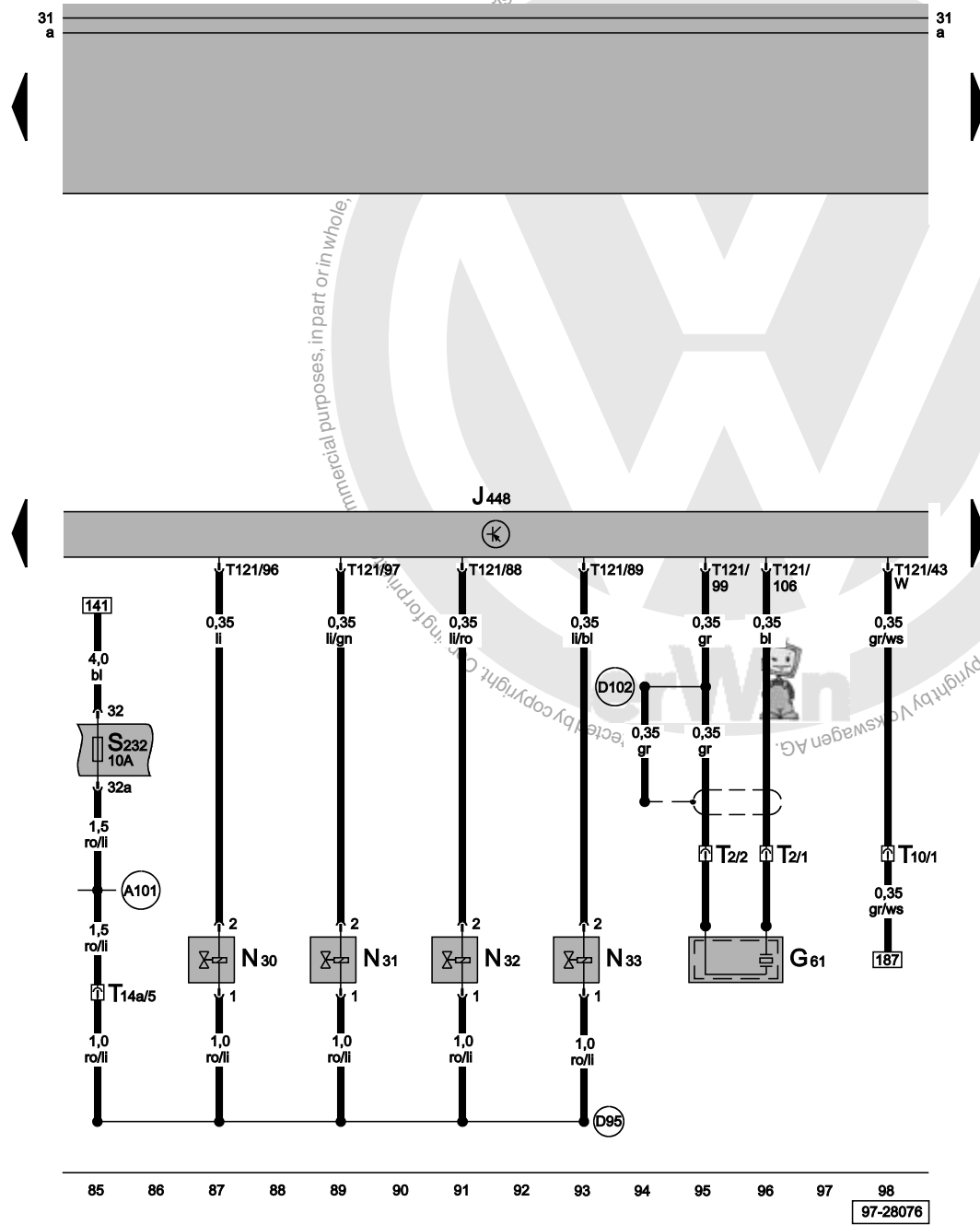
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4MV injection system control unit, injectors, knock sensor

- G61 Knock sensor 1
- J448 4MV injection system control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T2 2-pin connector, on left of cylinder head
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

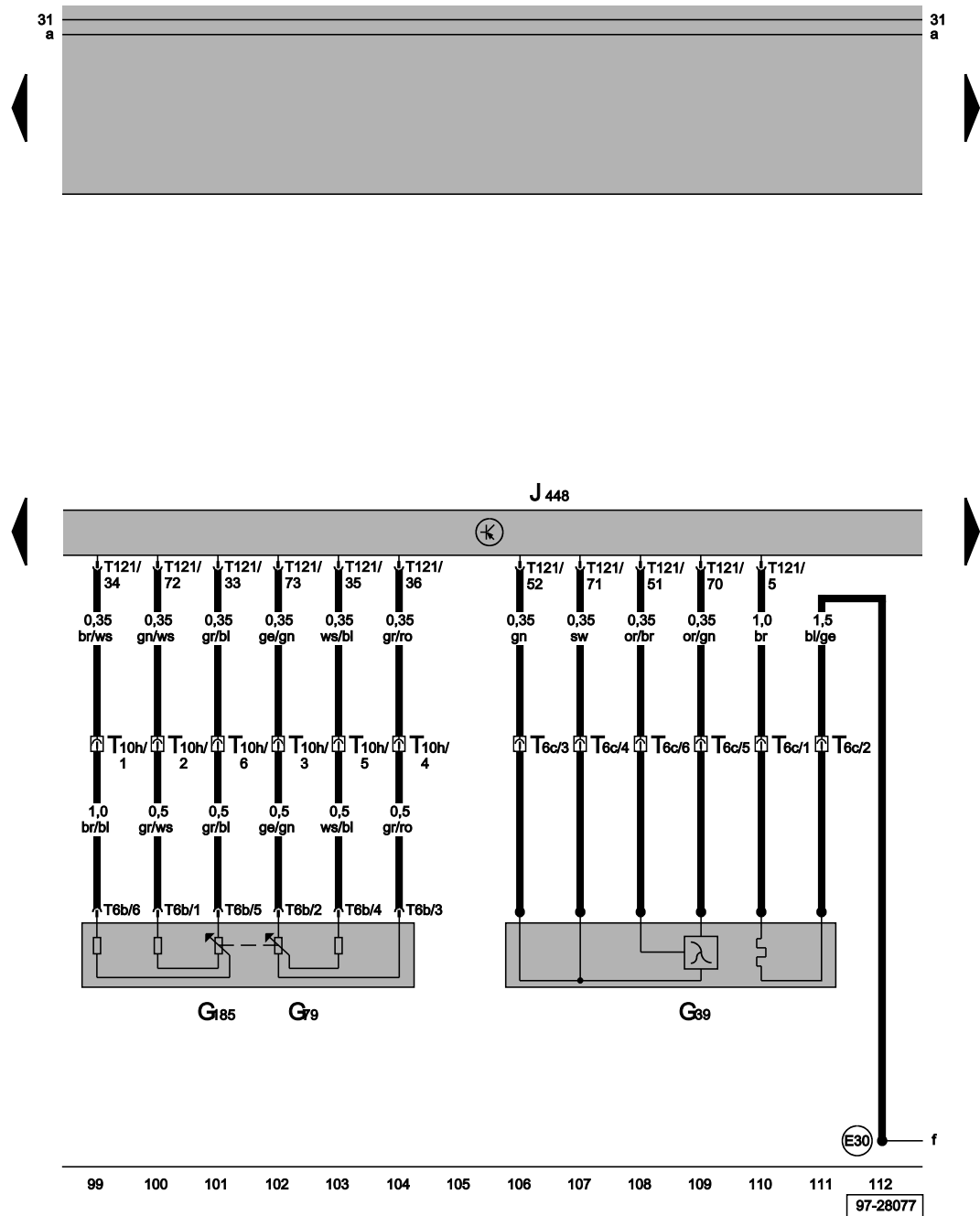
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection 2, in engine compartment wiring harness



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4MV injection system control unit, accelerator position sender, lambda probe upstream of catalytic converter

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J448 4MV injection system control unit, in centre plenum chamber
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (E30) Connection (87a), in engine wiring harness



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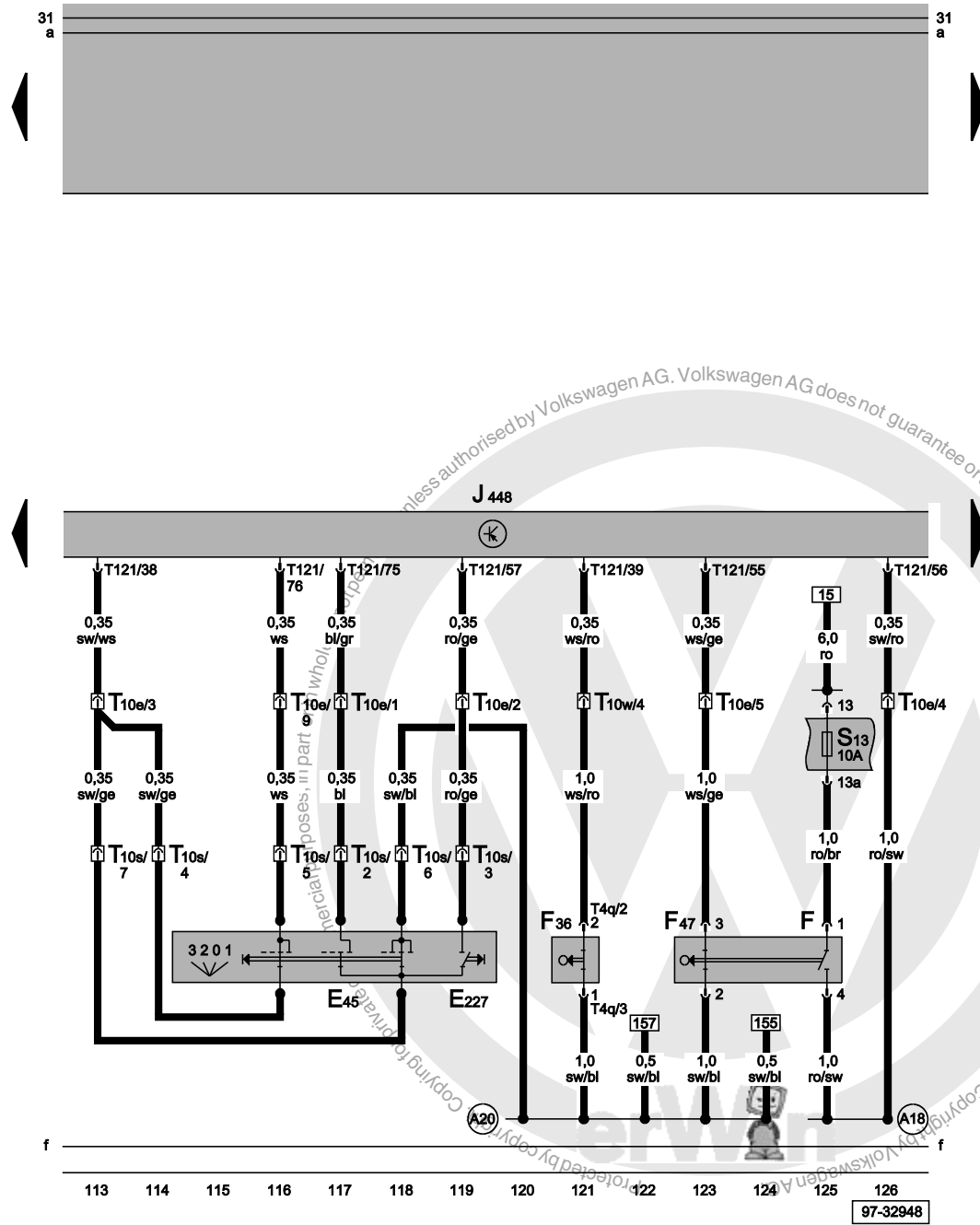
4MV injection system control unit, cruise control system switch, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F Brake light switch
- F36 Clutch pedal switch**
- F47 Cruise control system brake pedal switch
- J448 4MV injection system control unit, in centre plenum chamber
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector, (from May 2001)
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

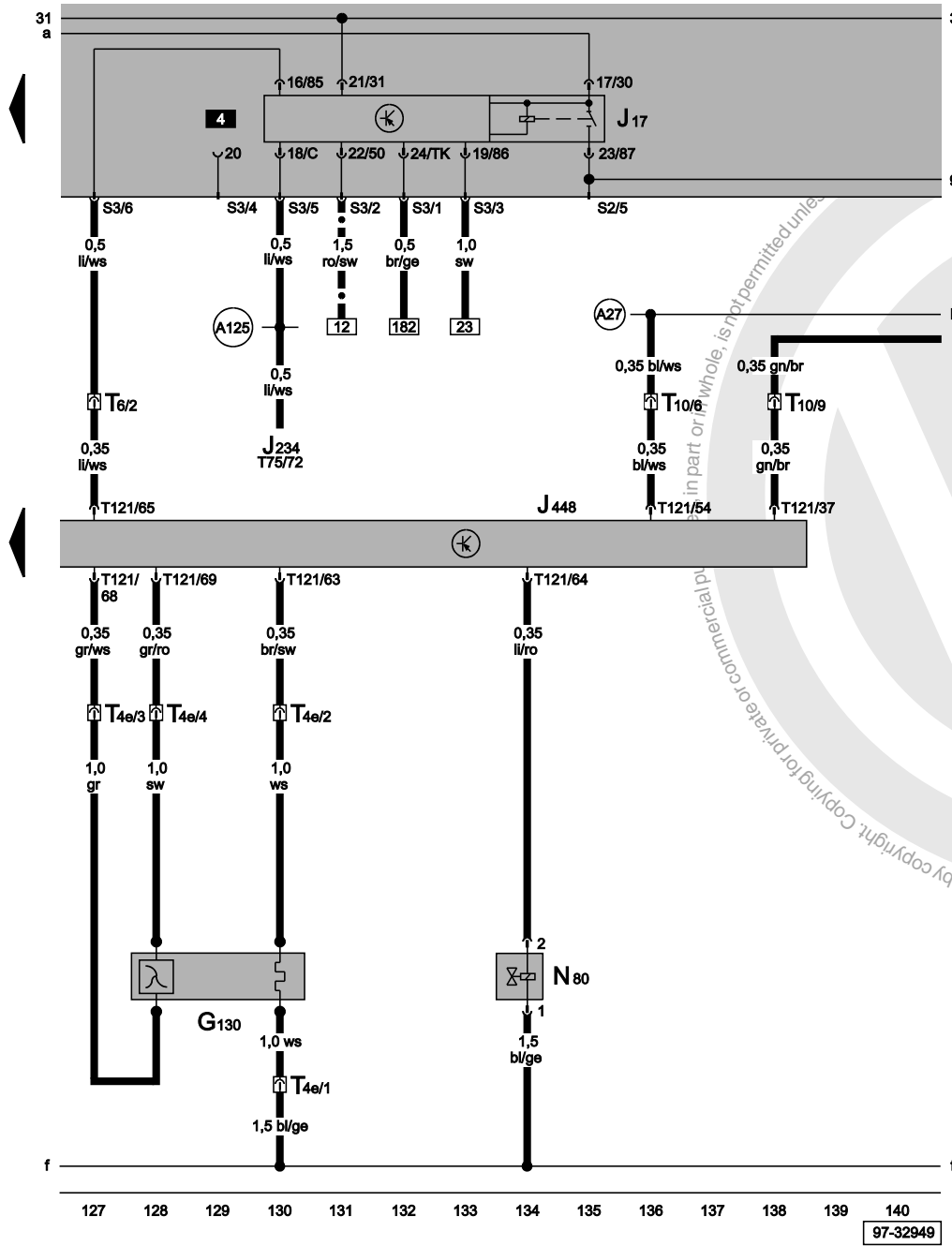
(A18) Connection (54), in dash panel wiring harness

(A20) Connection (15a), in dash panel wiring harness

** only models with GND



4MV injection system control unit, fuel pump relay, lambda probe after catalytic converter, activated charcoal filter system solenoid valve

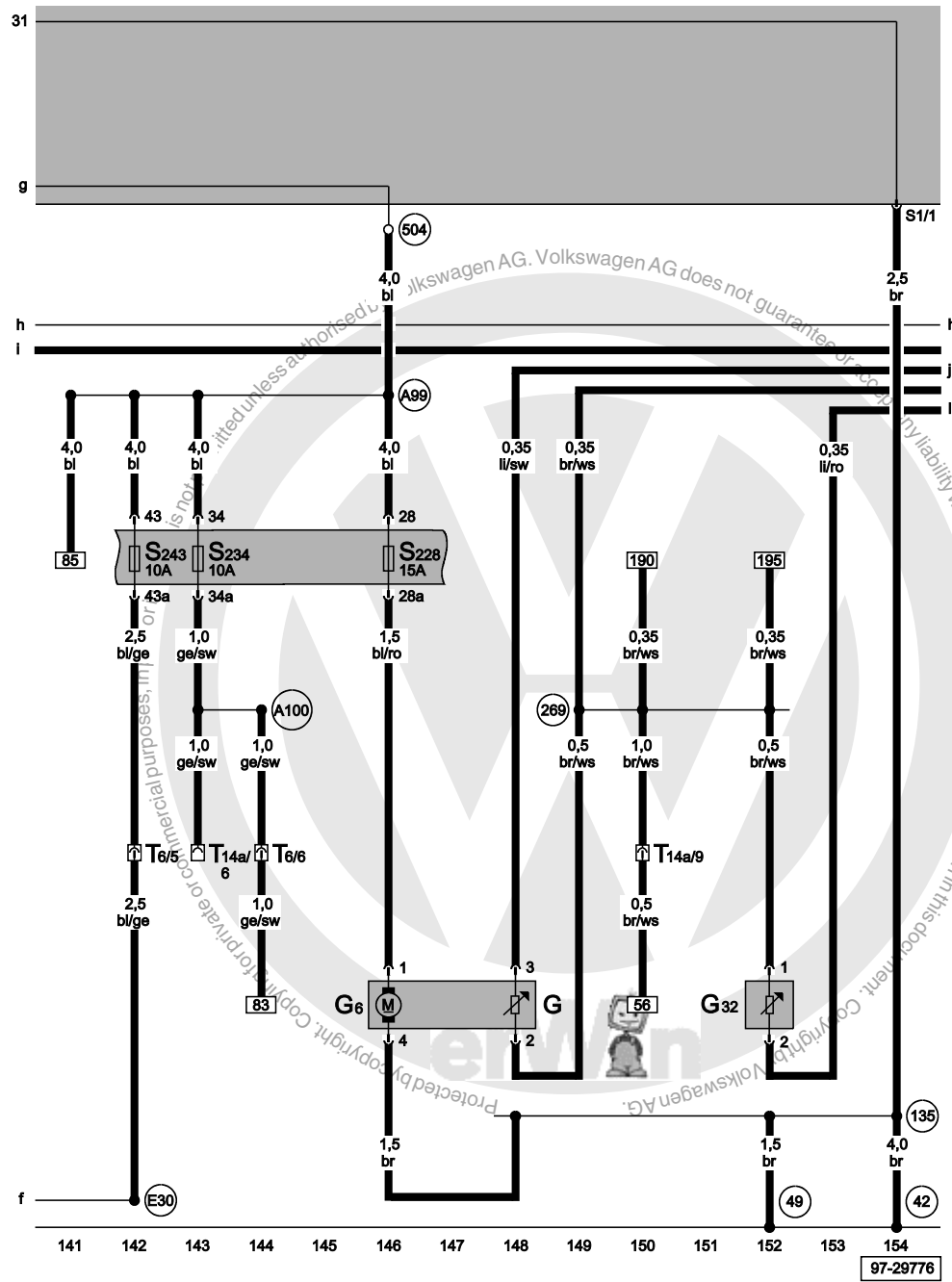


- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit
- J448 4MV injection system control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4e 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- up to April 2001

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Fuel pump, fuel gauge sender, coolant shortage indicator sender

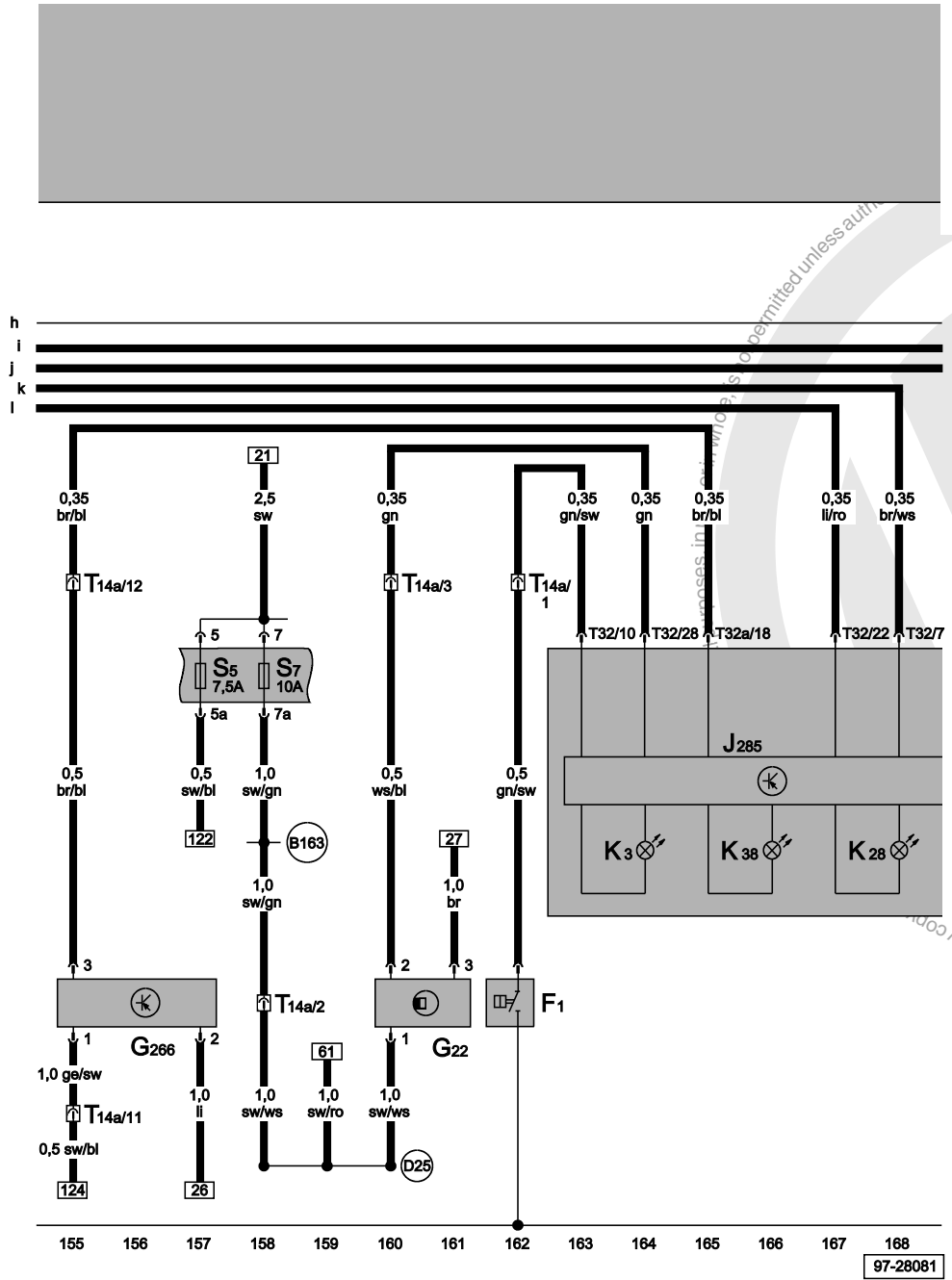
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- (42) Earth point, next to steering column
- (49) Earth point, next to steering column
- (135) Earth connection 2, in dash panel wiring harness
- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (504) Screw connection (87F), on relay plate
- (A99) Connection 1 (87), in dash panel wiring harness
- (A100) Connection 2 (87), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness



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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- B163 Positive connection 1 (15), in interior wiring harness
- D25 Positive connection (15) in engine wiring harness
- * only flexible service interval display

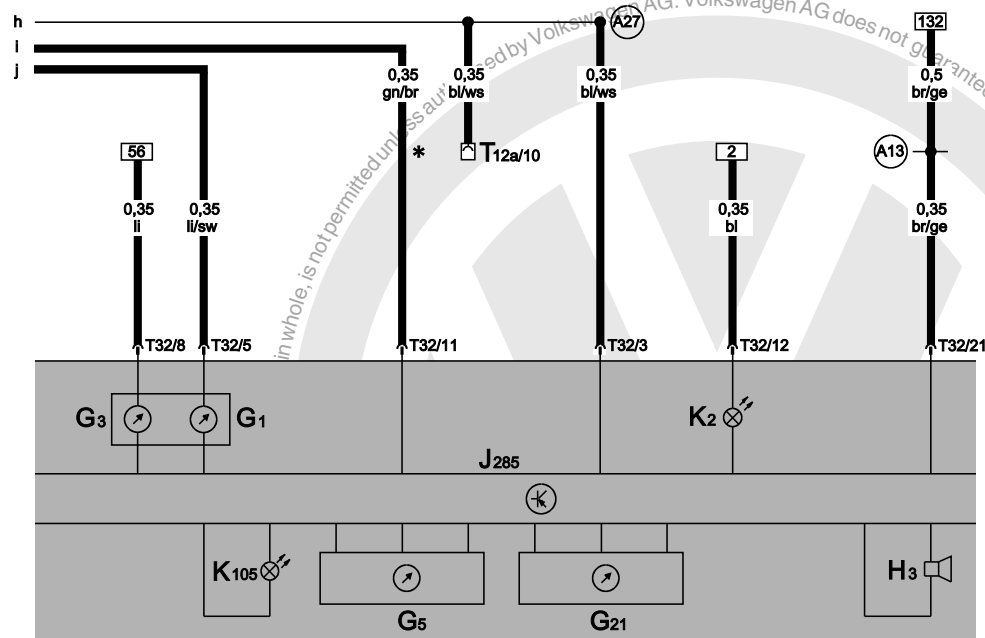


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- rs = pink

97-28081

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit

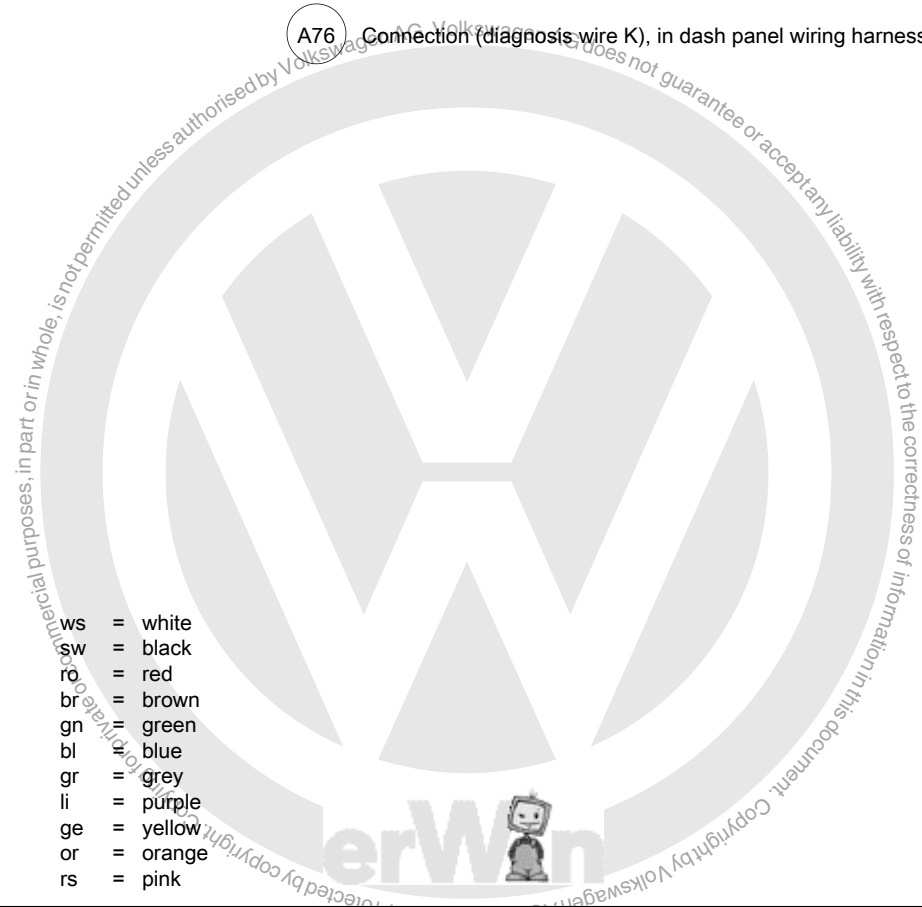
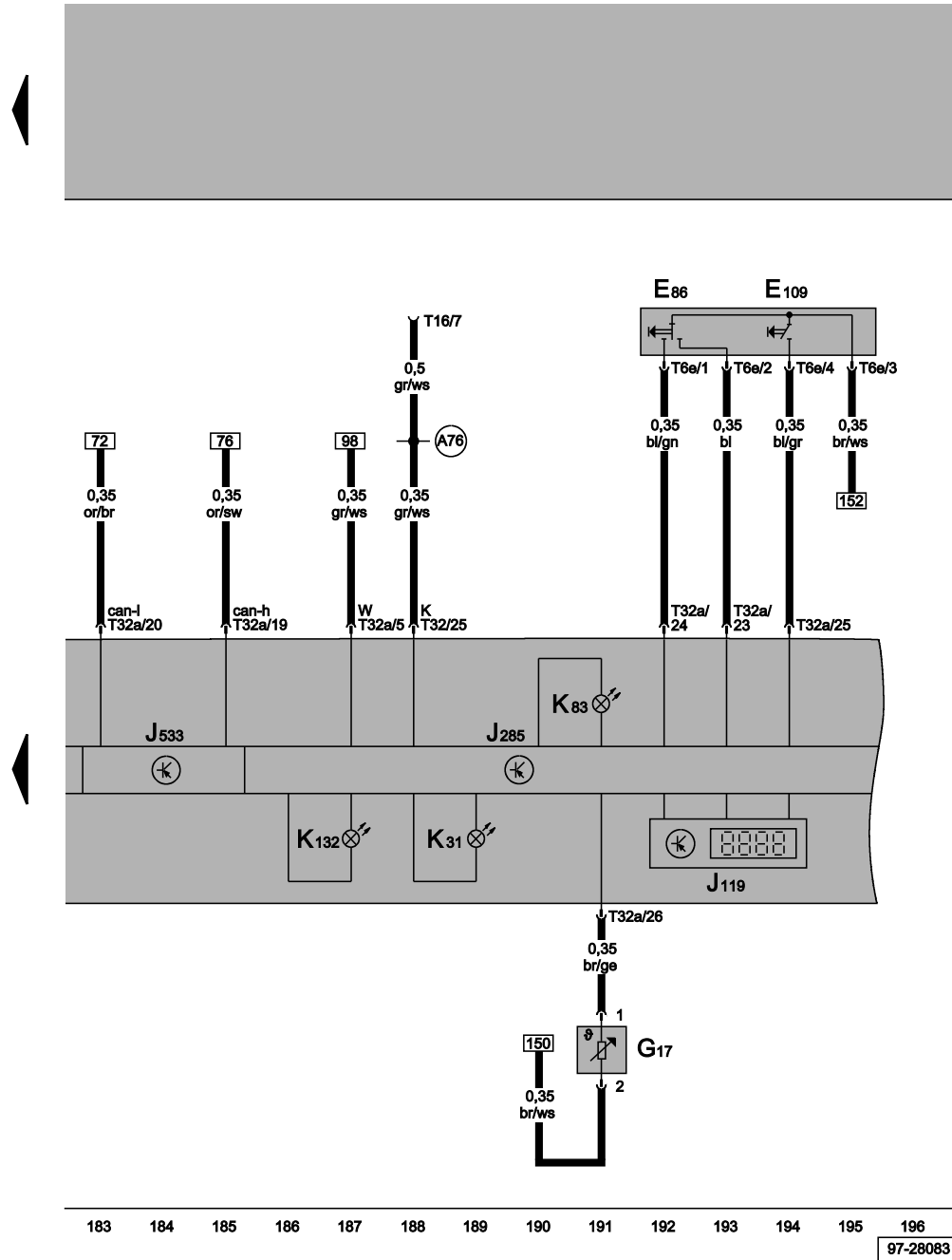


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- rs = pink

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



2.0 litre/85 kW Motronic, engine codes APK

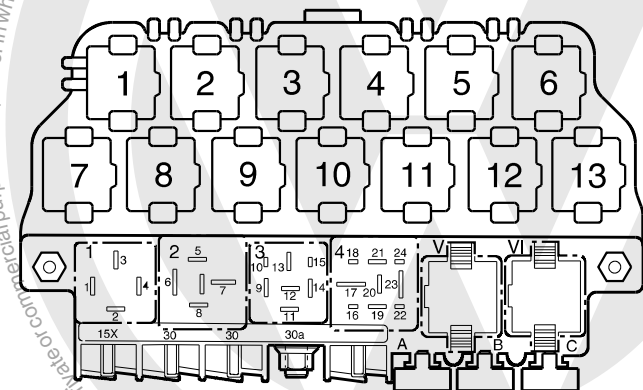
From May 1999

For alternatives to relay and fuse positions, as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:

- 2 - X contact relief relay (18), (up to October 1998)
- X contact relief relay (100), (from November 1999)



4 - Fuel pump relay (409)

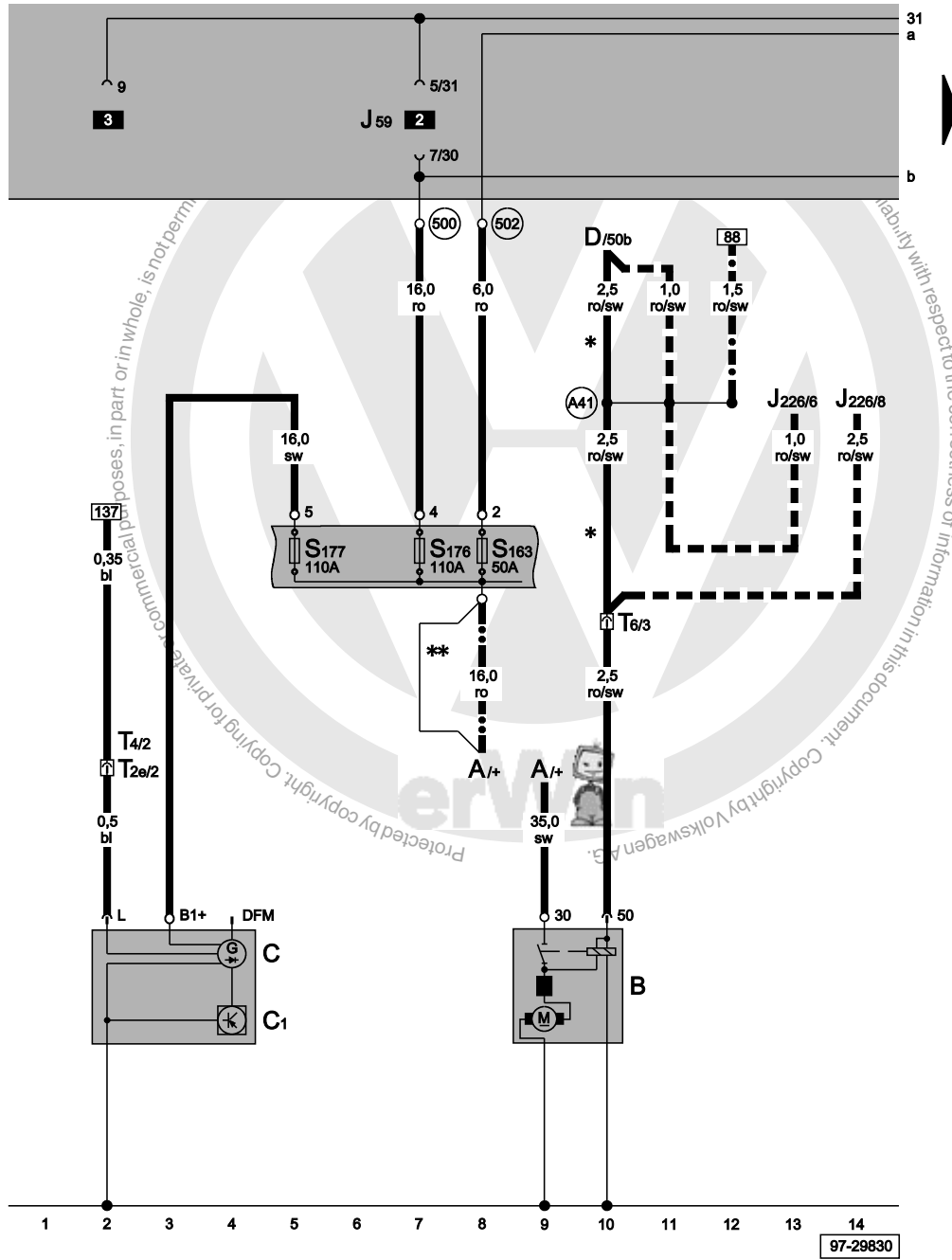


Notes:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

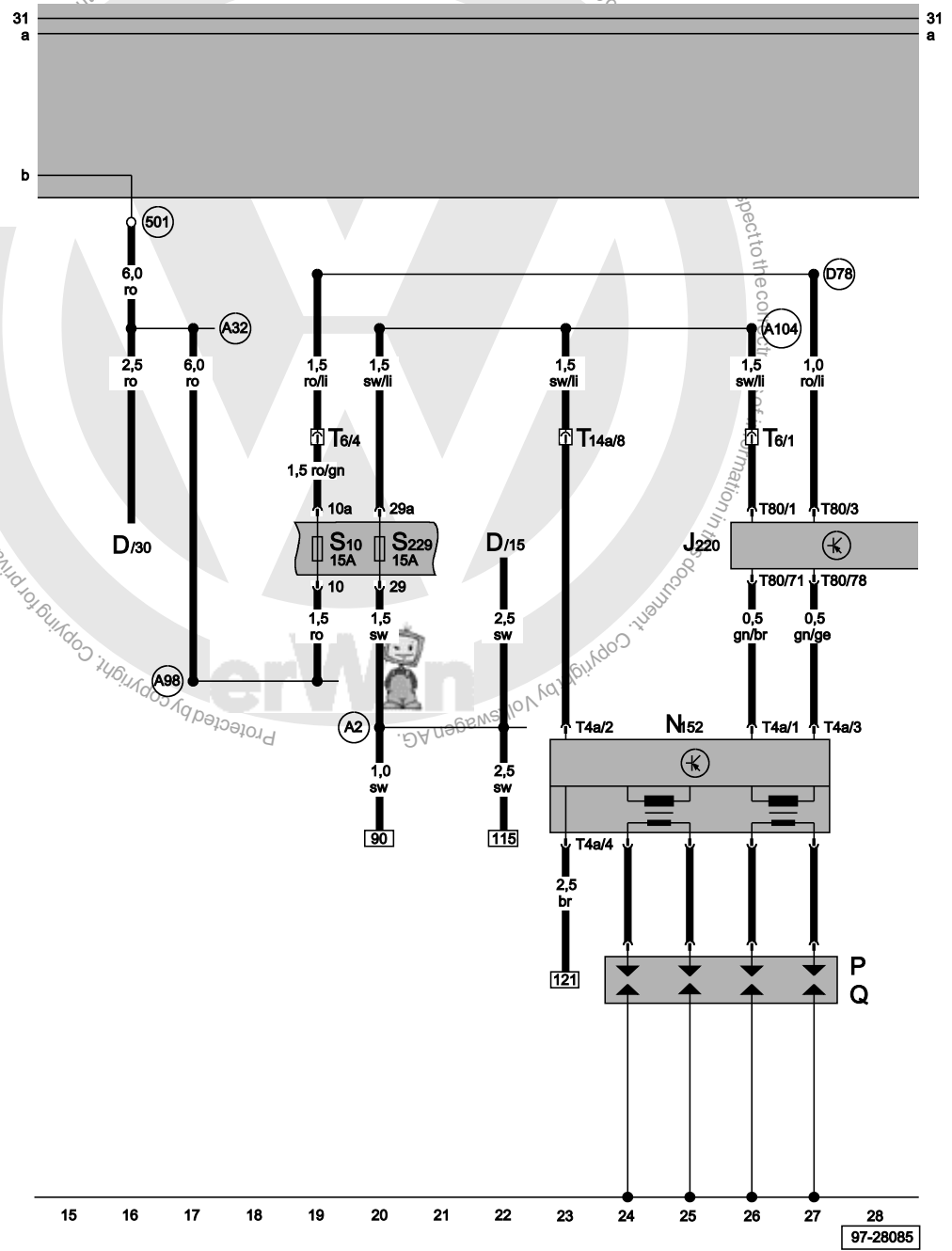


Alternator, starter

- A Battery
 - B Starter
 - C Alternator
 - C1 Voltage regulator
 - D Ignition/starter switch
 - J59 X contact relief relay
 - J226 Starter inhibitor and reversing light relay
 - S163 Fuse -2- (30), in fuse box/battery
 - S176 Fuse -4- (30), in fuse box/battery
 - S177 Fuse -5- (30), in fuse box/battery
 - T2e 2-pin connector, near starter (only models without air conditioner)
 - T4 4-pin connector, near starter (only models with air conditioner)
 - T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
 - 502 Screw connection -1- (30a), on relay plate
 - A41 Positive (+) connection (50), in dash panel wiring harness (up to April 2001)
 - * Only models with manual gearbox
 - From September 2000
 - ** Up to August 2000
 - Only models with automatic gearbox
 - Up to April 2001

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- bl = blue
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- rs = pink

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Motronic control unit, ignition system

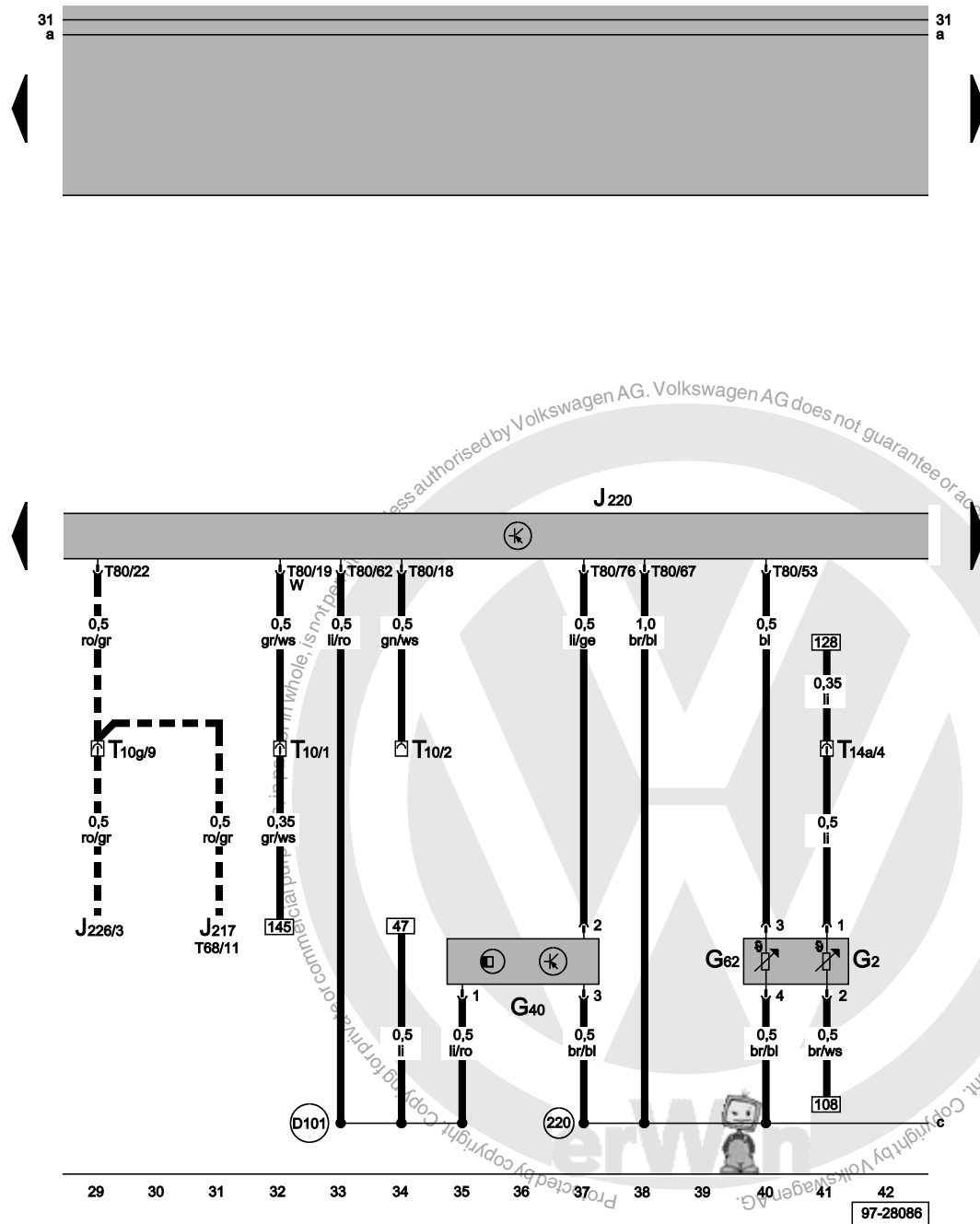
- D Ignition/starter switch
- J220 Motronic control unit, in plenum chamber, centre
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plug
- S10 Fuse in fuse box
- S229 Fuse in fuse box
- T4a 4-pin connector
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- A104 Positive (+) connection -2- (15), in dash panel wiring harness
- D78 Positive (+) connection -1- (30a), in engine compartment wiring harness

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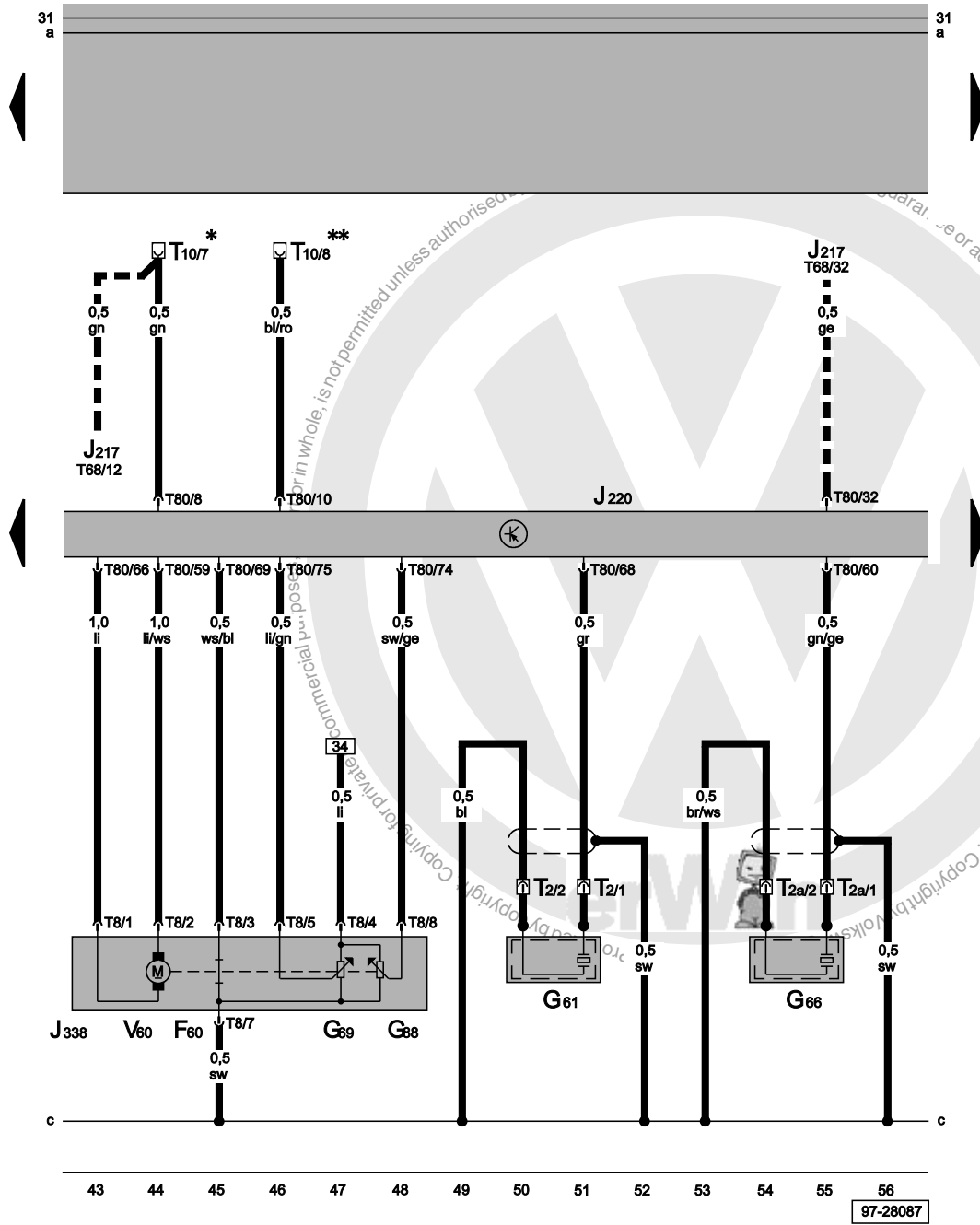
Motronic control unit, coolant temperature sender, hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- J226 Starter inhibitor and reversing light relay
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10g 10-pin connector, grey, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment
- T68 68-pin connector
- T80 80-pin connector
- (220) Earth connection (sender earth), in engine wiring harness
- (D101) Connection -1-, in engine wiring harness
- Only models with automatic gearbox



Motronic control unit, throttle valve control unit, knock sensor I, knock sensor II

- F60 Idling switch
- G61 Knock sensor I
- G66 Knock sensor II
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in plenum chamber, centre
- J338 Throttle valve control unit
- T2 2-pin connector, in engine compartment, rear
- T2a 2-pin connector, in engine compartment, front
- T8 8-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T68 68-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- * Compressor switch-off
- ** Air conditioner 'ready' connection
- Only models with automatic gearbox

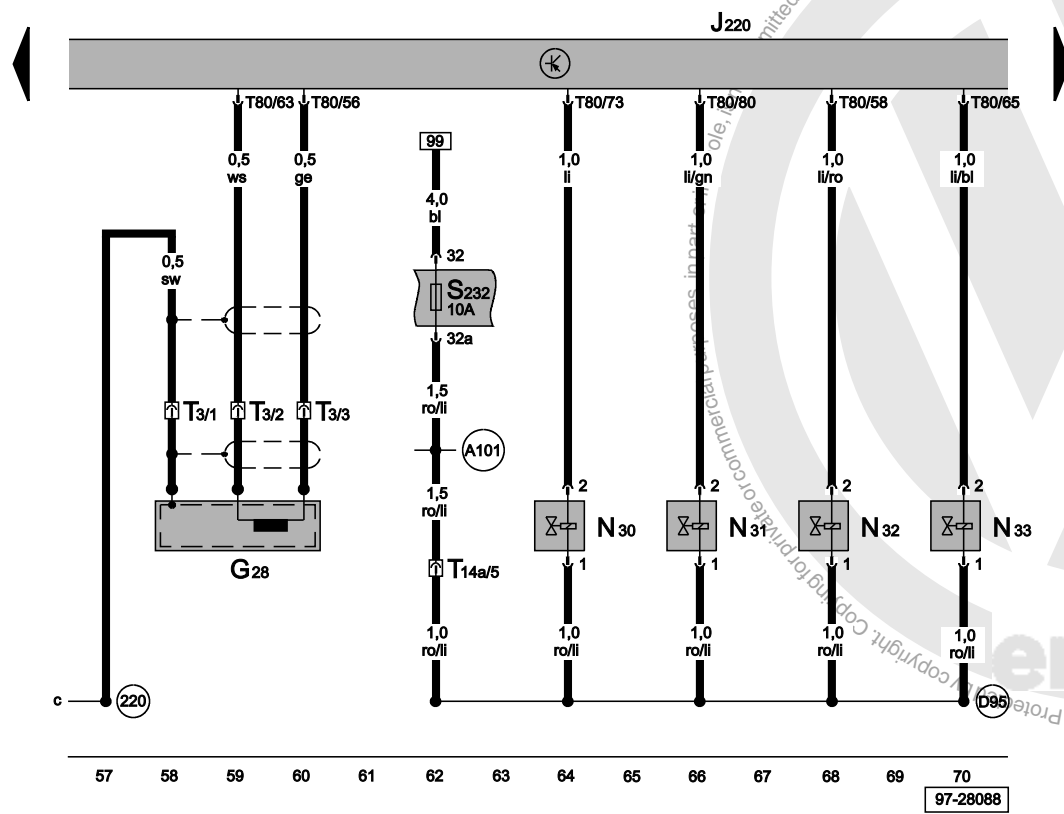
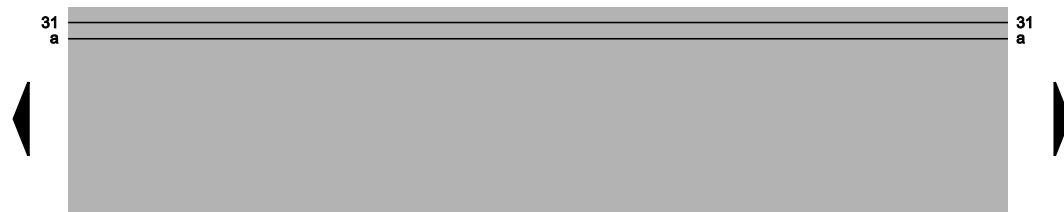


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- rs = pink

Motronic control unit, engine speed sender, injectors

- G28 Engine speed sender
- J220 Motronic control unit, in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse box
- T3 3-pin connector, near intake manifold
- T14a 14-pin connector, in cable channel left in engine compartment
- T80 80-pin connector

- (220) Earth connection (sender earth), in engine wiring harness
- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness

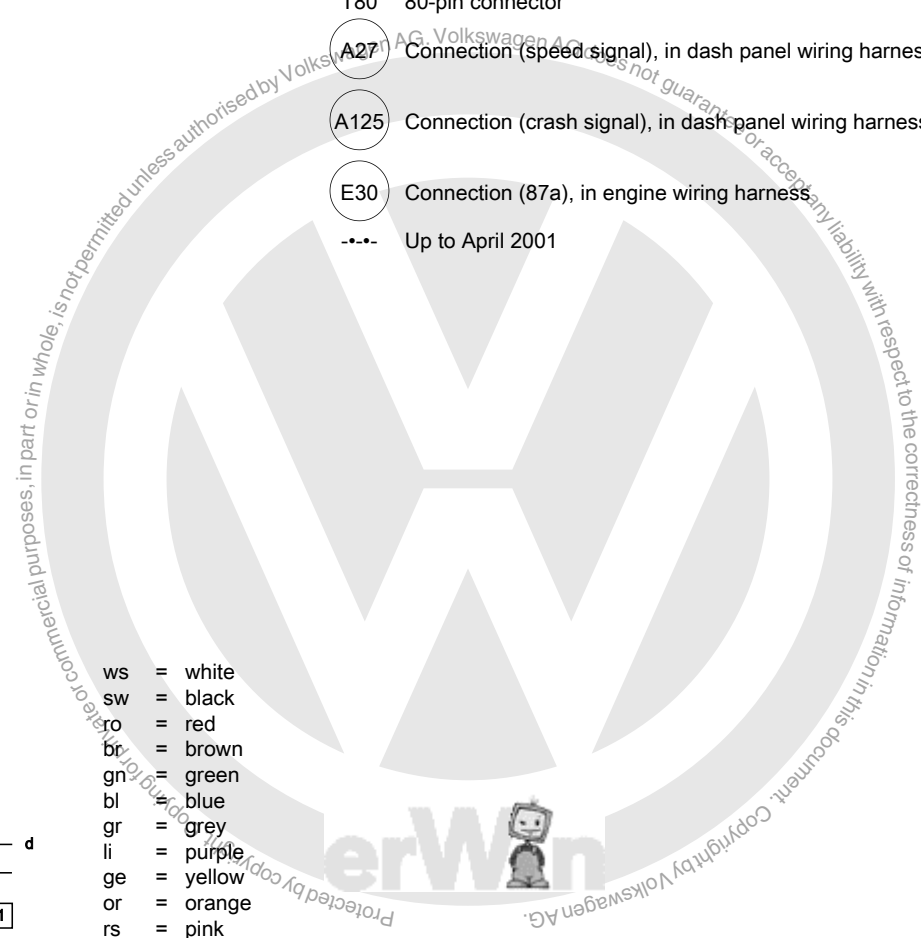
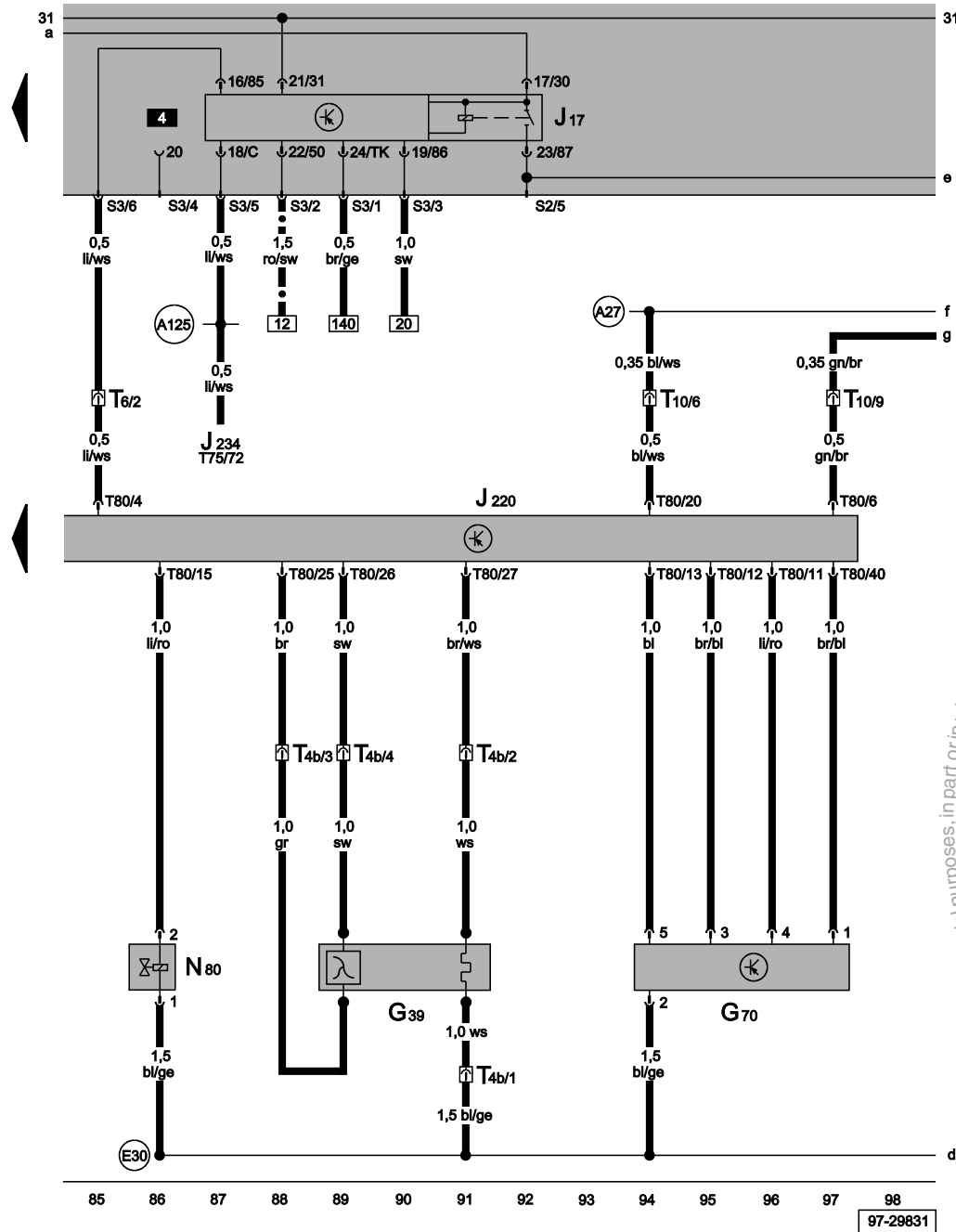


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Motronic control unit, air mass meter, lambda probe, activated charcoal filter system solenoid valve, fuel pump relay

- G39 Lambda probe
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit, behind lower console
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalyst
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T75 75-pin connector
- T80 80-pin connector

- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- Up to April 2001

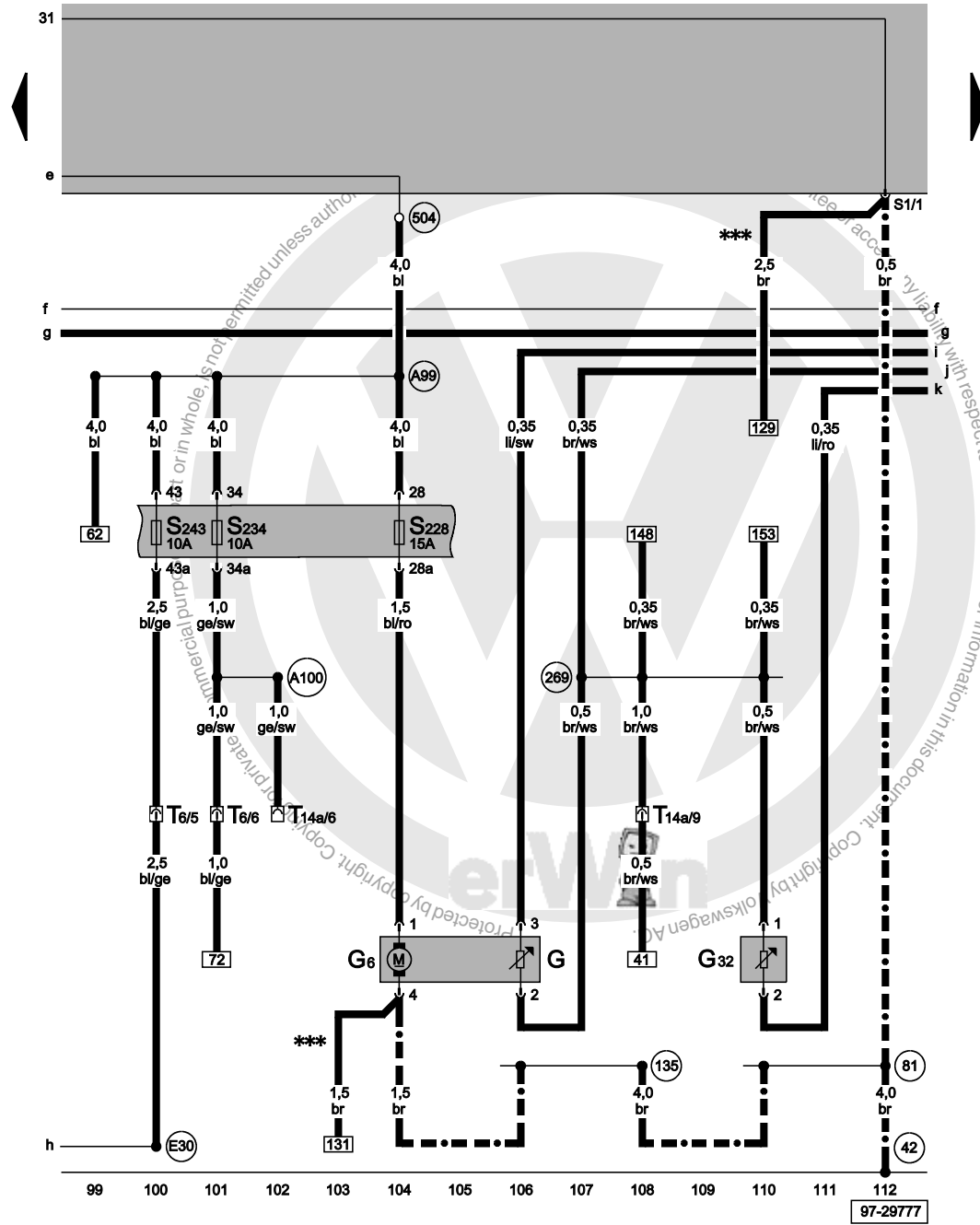


97-29831

Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse 34 in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in control unit protective housing, in plenum chamber, left
- T14a 14-pin connector, in cable channel left in engine compartment

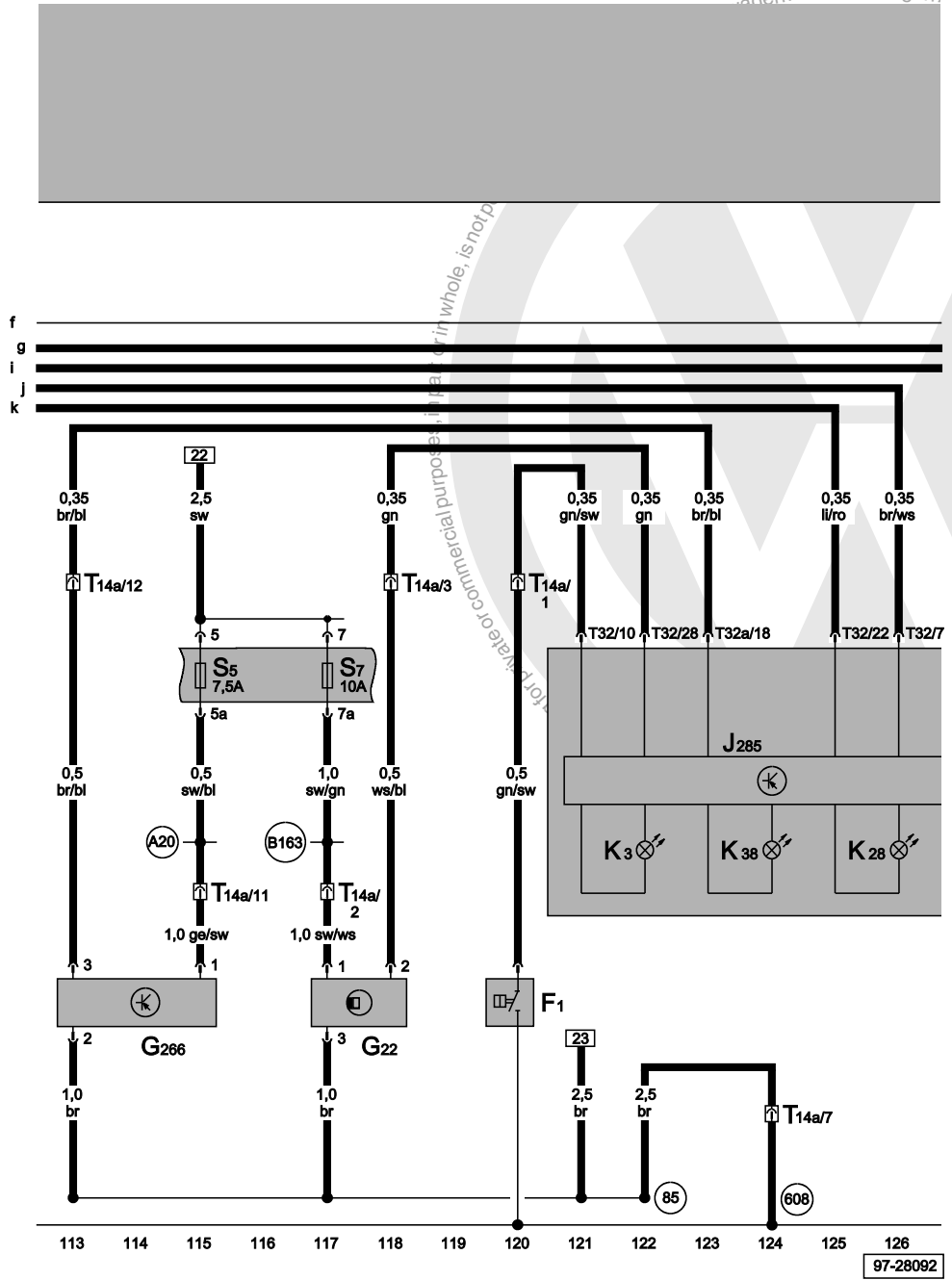
- (42) Earth point, next to steering column
- (81) Earth connection -1-, in dash panel wiring harness
- (135) Earth connection -2-, in dash panel wiring harness
- (269) Earth connection (sender earth) -1-, in dash panel wiring harness
- (504) Screw connection -1- (87F), on relay plate
- (A99) Connection -1- (87), in dash panel wiring harness
- (A100) Connection -2- (87), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness
- *** From May 2000
- Up to April 2000



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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

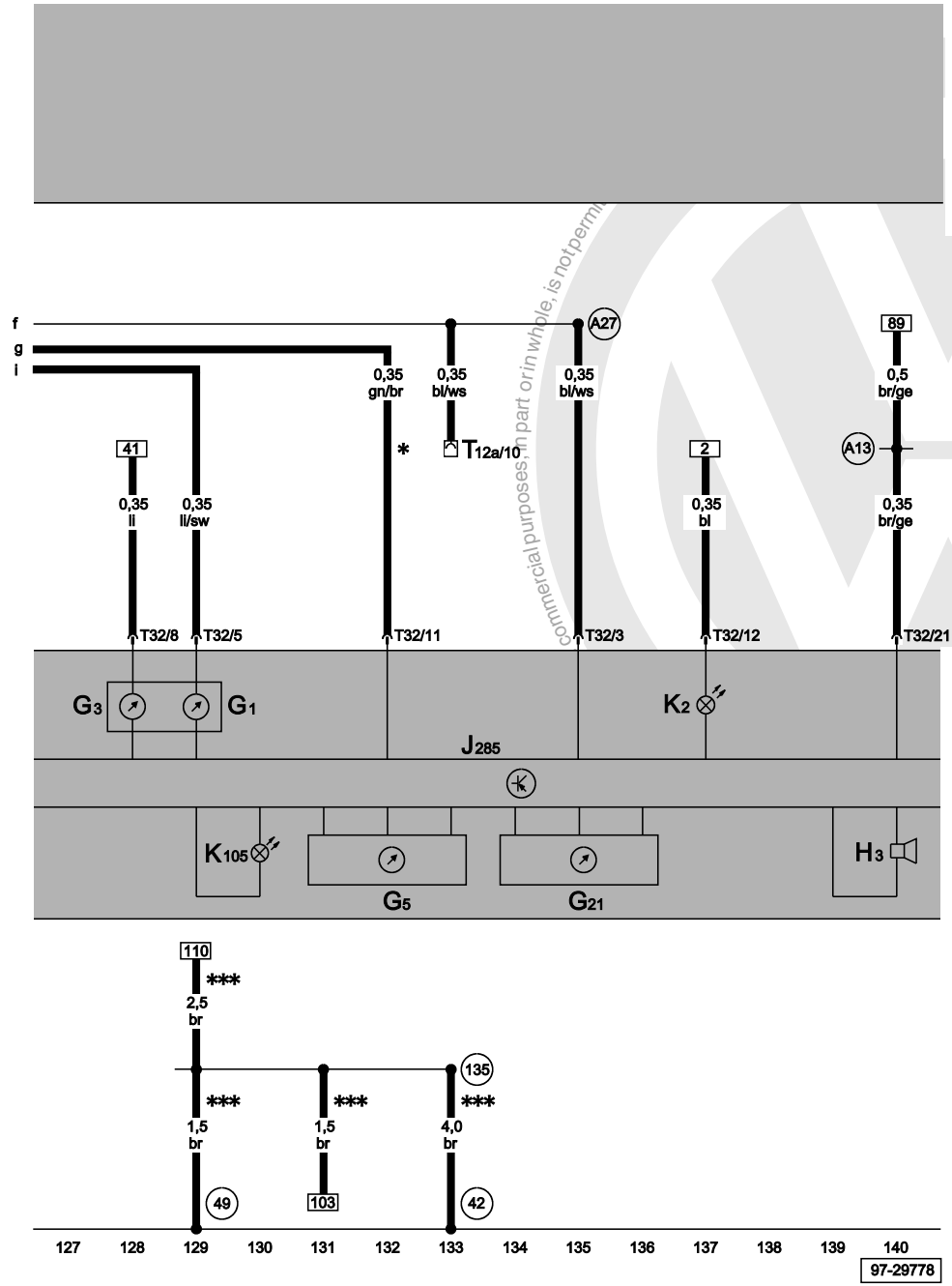
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display



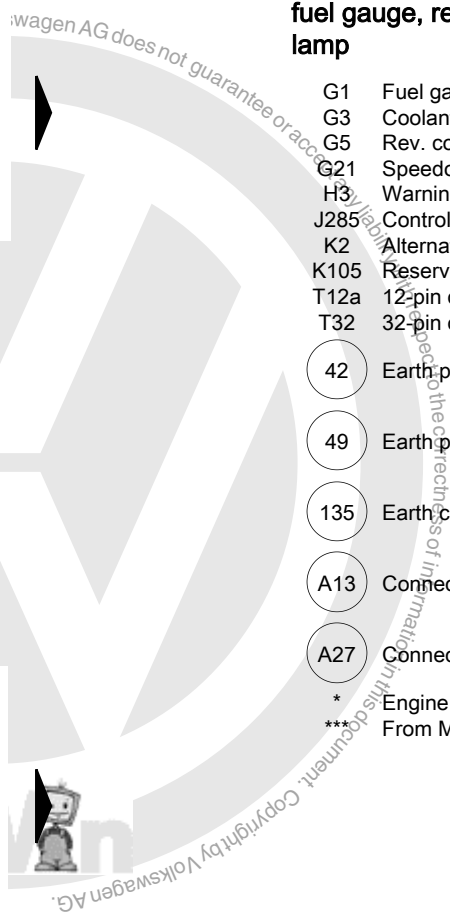
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97-28092

Dash panel insert, coolant temperature gauge and fuel gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp



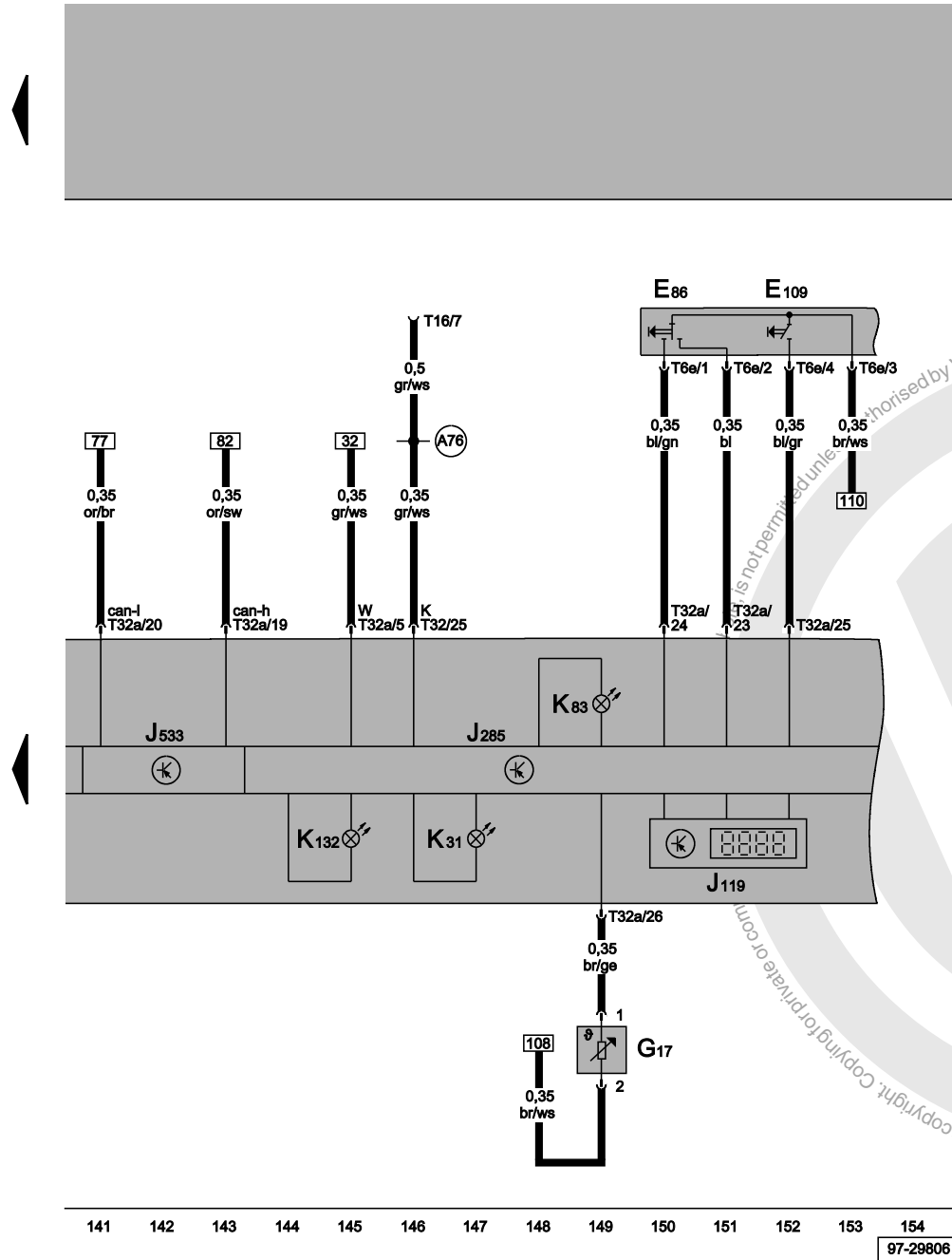
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, connection for Climatronic only
- T32 32-pin connector, blue
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit
- *** From May 2000



97-29778

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multi-function display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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2.3 I/125 kW Motronic, engine code AQN

from September 2000

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

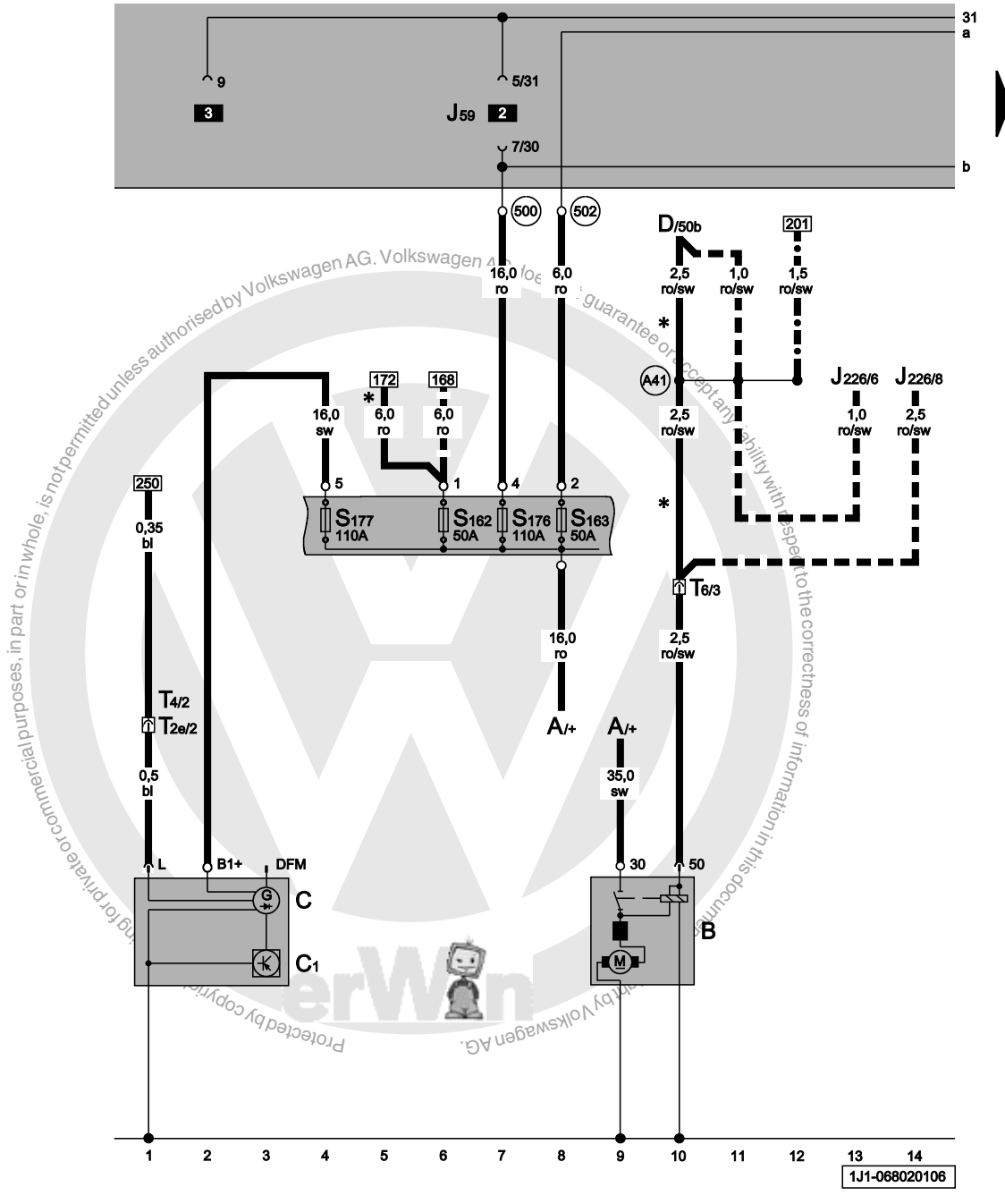
- ◆ Fault Finding Programs

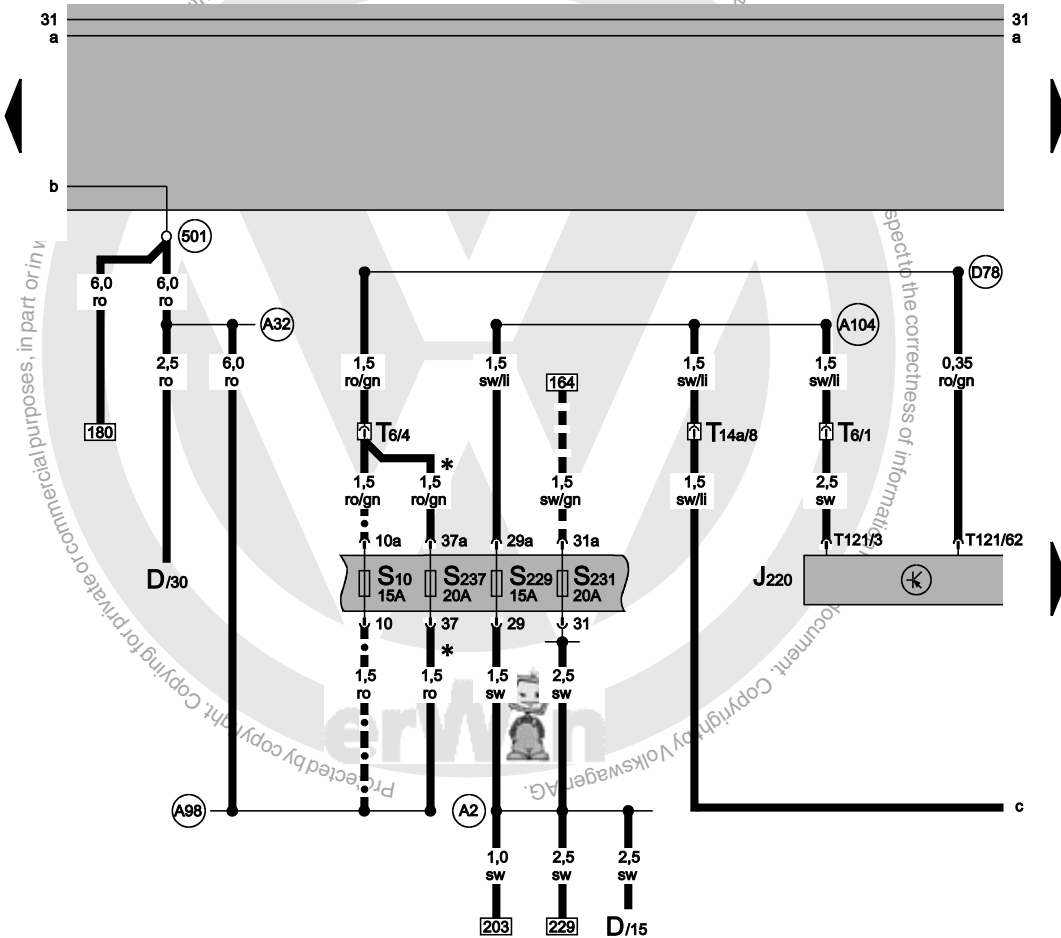
⇒ guided fault finding



Alternator, starter

- A Battery
 - B Starter
 - C Alternator
 - C1 Voltage regulator
 - D Ignition/starter switch
 - J59 X-contact relief relay
 - J226 Starter inhibitor and reversing light relay
 - S162 Fuse 1 (30), in fuse holder on battery
 - S163 Fuse 2 (30), in fuse holder on battery
 - S176 Fuse 4 (30), in fuse holder on battery
 - S177 Fuse 5 (30), in fuse holder on battery
 - T2e 2-pin connector, near starter (in models without air conditioning system)
 - T4 4-pin connector, near starter (in models with air conditioning system)
 - T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
 - 502 Screw connection (30a), on relay plate
 - A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
 - * only models with manual gearbox
 - models with automatic gearbox only
 - up to April 2001





Motronic control unit

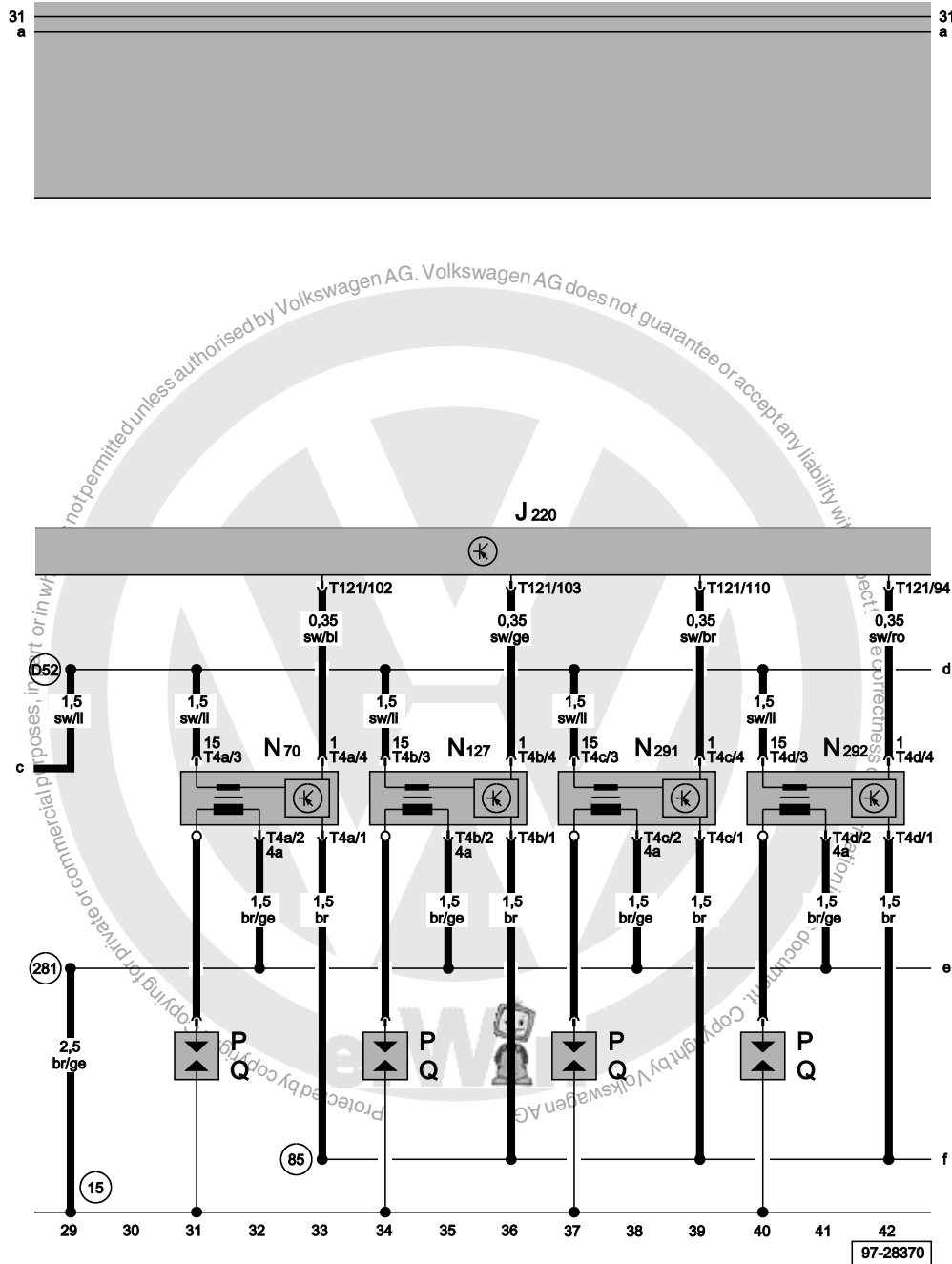
- D Ignition/starter switch
- J220 Motronic control unit, in centre plenum chamber
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S231 Fuse 31 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- models with automatic gearbox only
- * from November 2001
- up to October 2001

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- ge = yellow
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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- (15) Earth point, on cylinder head
- (85) Earth connection -1-, in engine compartment wiring harness
- (281) Earth connection 1, in engine wiring harness
- (D52) Positive connection (15a), in engine compartment wiring harness

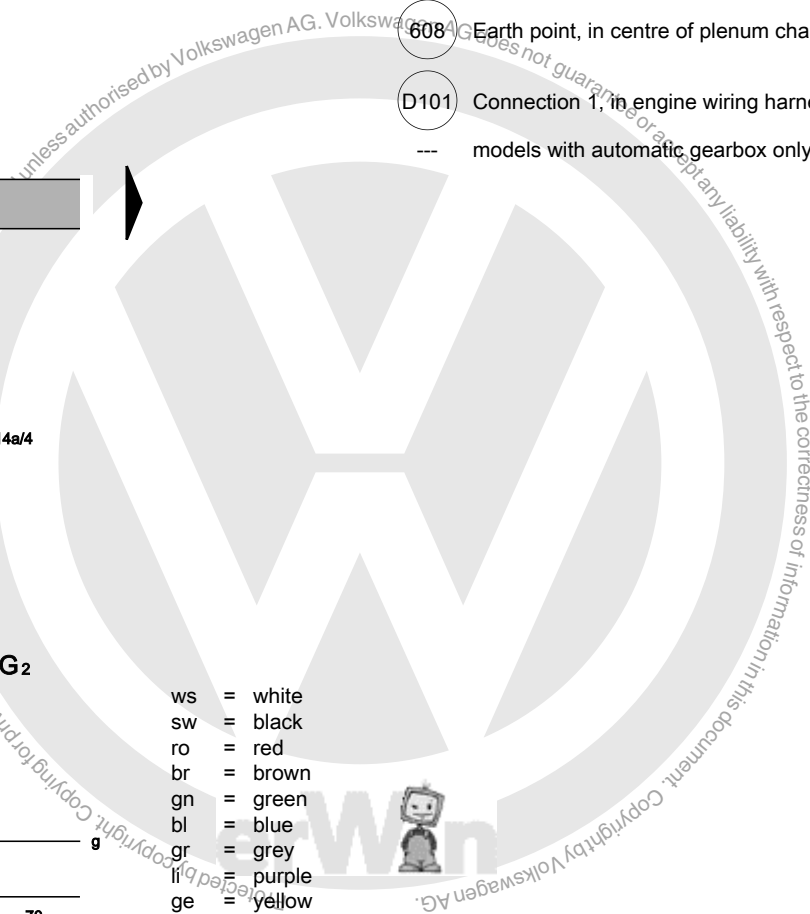
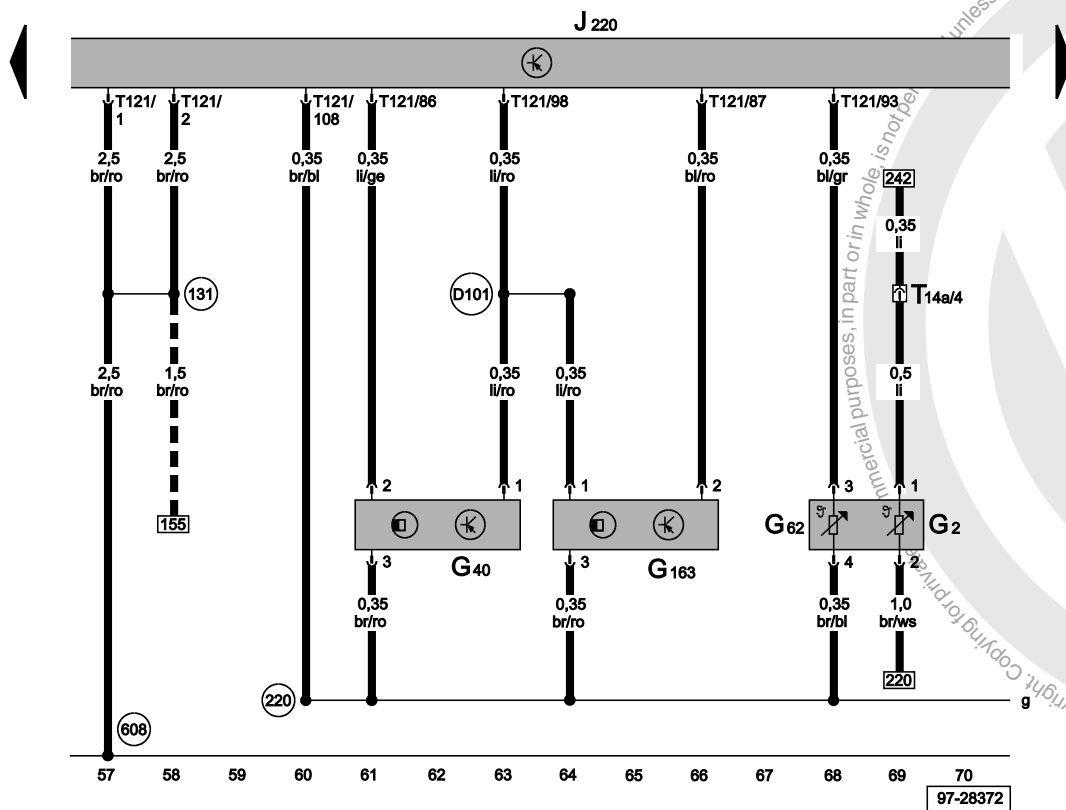
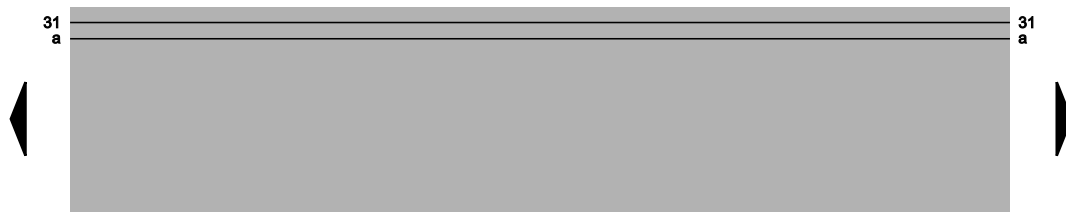


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- li = purple
- ge = yellow
- or = orange
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Motronic control unit, coolant temperature sender, Hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- G163 Hall sender 2
- J220 Motronic control unit, in centre plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber
- D101 Connection 1, in engine wiring harness
- models with automatic gearbox only



97-28372

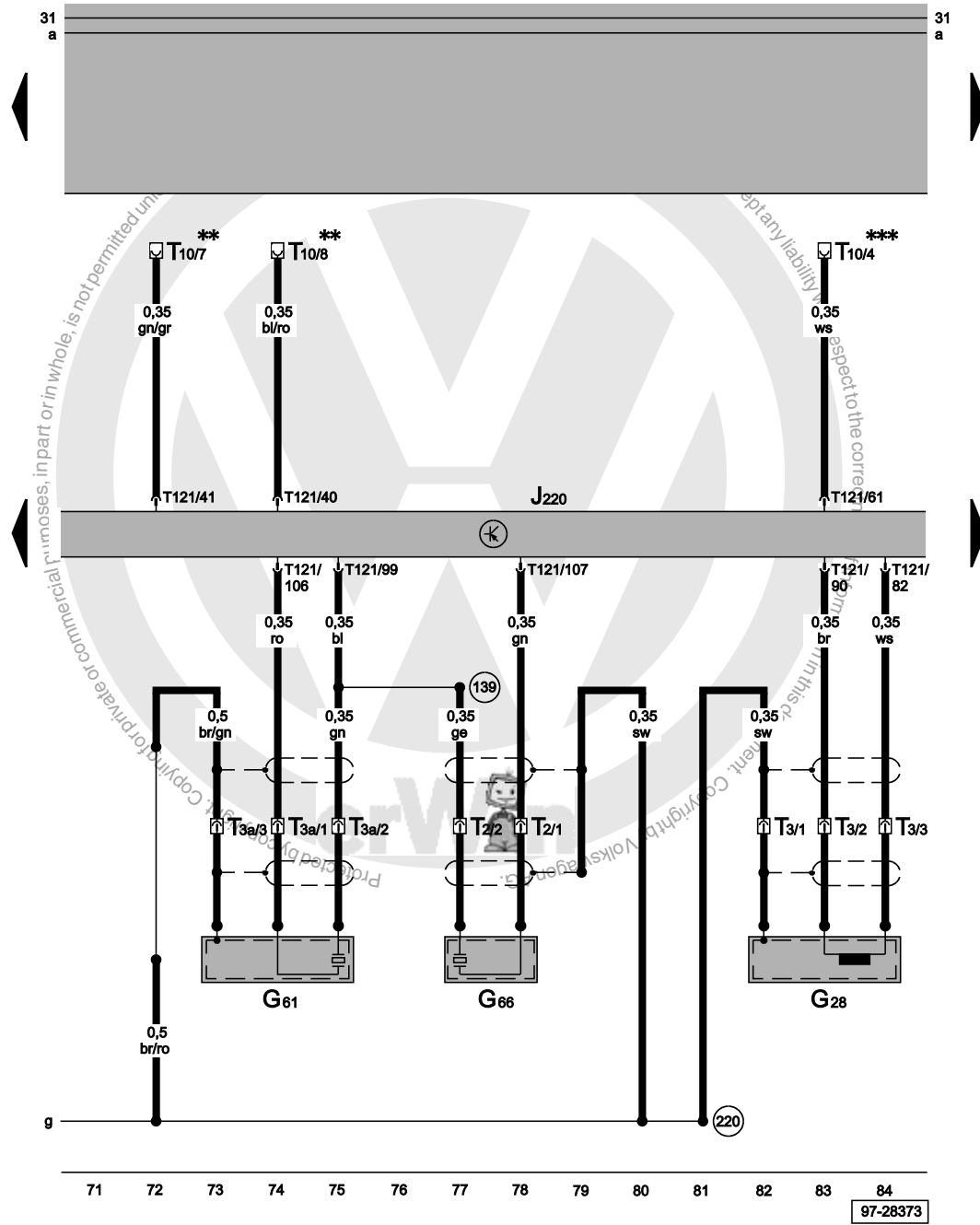
Motronic control unit, engine speed sender, knock sensor 1, knock sensor 2

- G28 Engine speed sender
- G61 Knock sensor 1
- G66 Knock sensor 2
- J220 Motronic control unit, in centre plenum chamber
- T2 2-pin connector, in front engine compartment
- T3 3-pin connector, in front engine compartment
- T3a 3-pin connector, in rear engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

139 Earth connection (sender earth), in Motronic wiring harness

220 Earth connection (sender earth), in engine wiring harness

** connection air conditioning system
 *** radiator fan control unit connection



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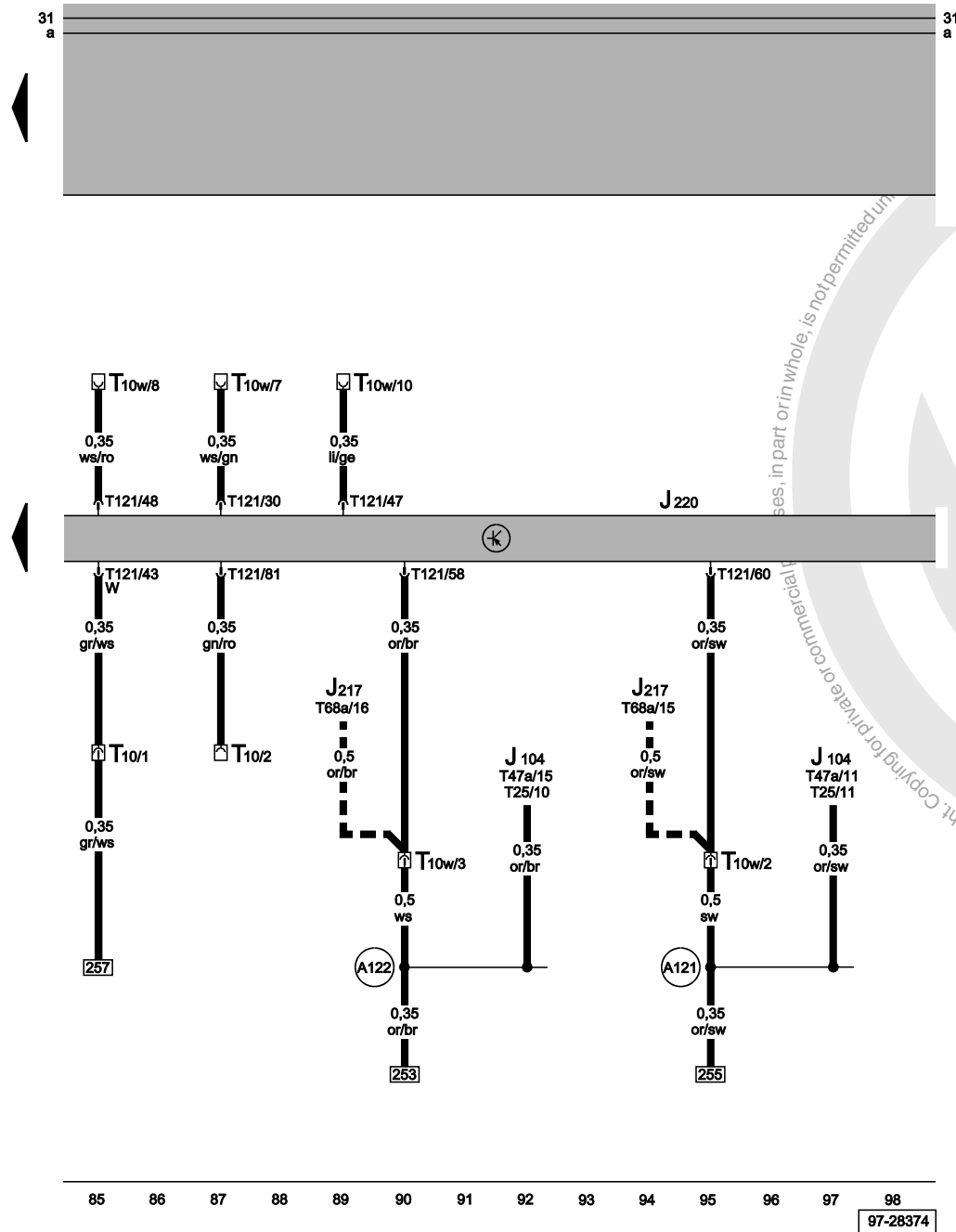
Motronic control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T68a 68-pin connector
- T121 121-pin connector

A121 Connection (high bus), in dash panel wiring harness

A122 Connection (low bus), in dash panel wiring harness

--- models with automatic gearbox only

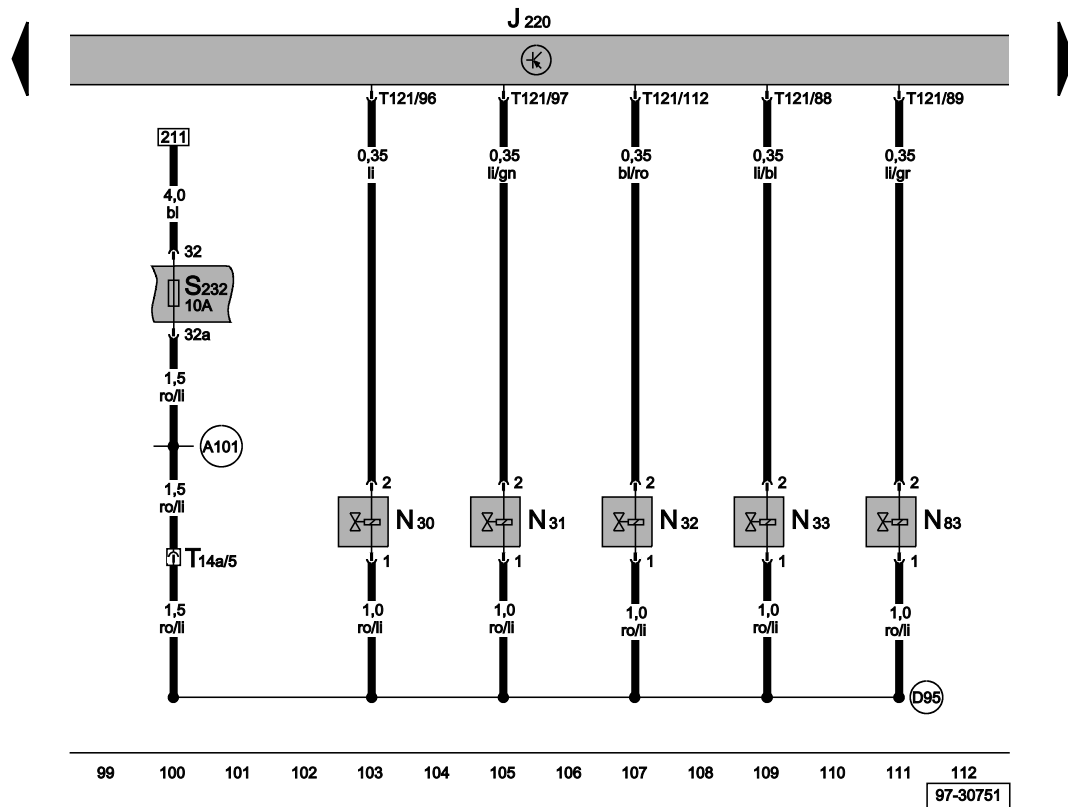


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

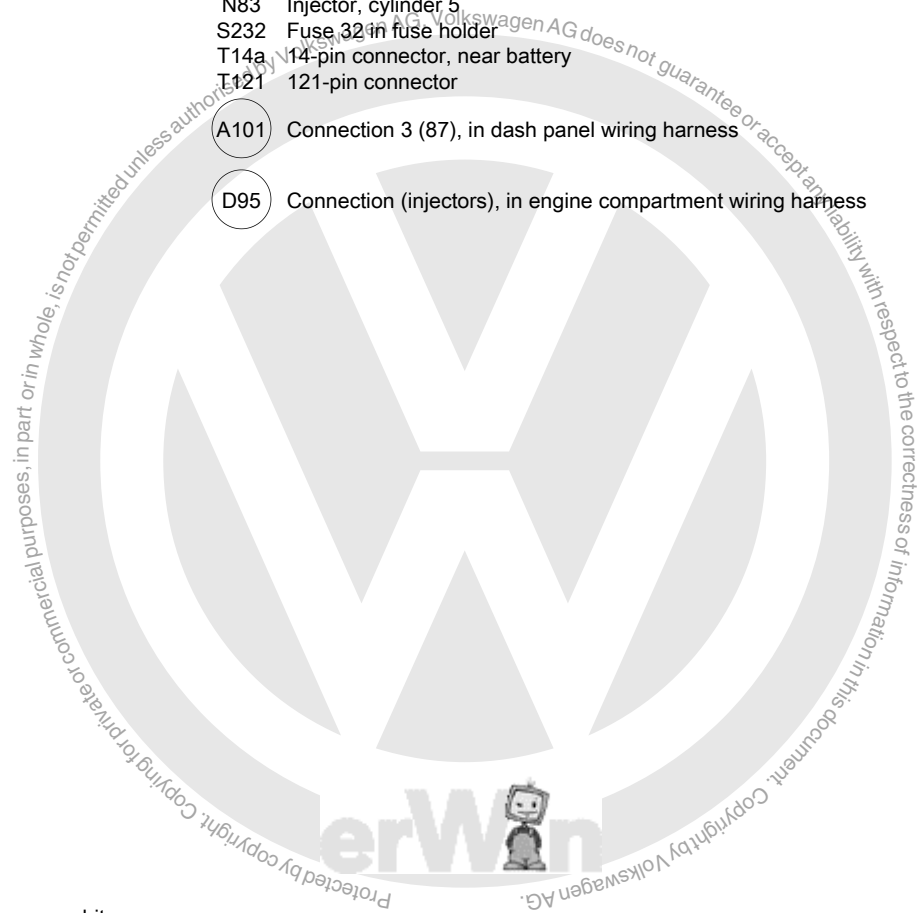
Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- S232 Fuse, 32 in fuse holder
- T14a 14-pin connector, near battery
- T121 121-pin connector

- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness



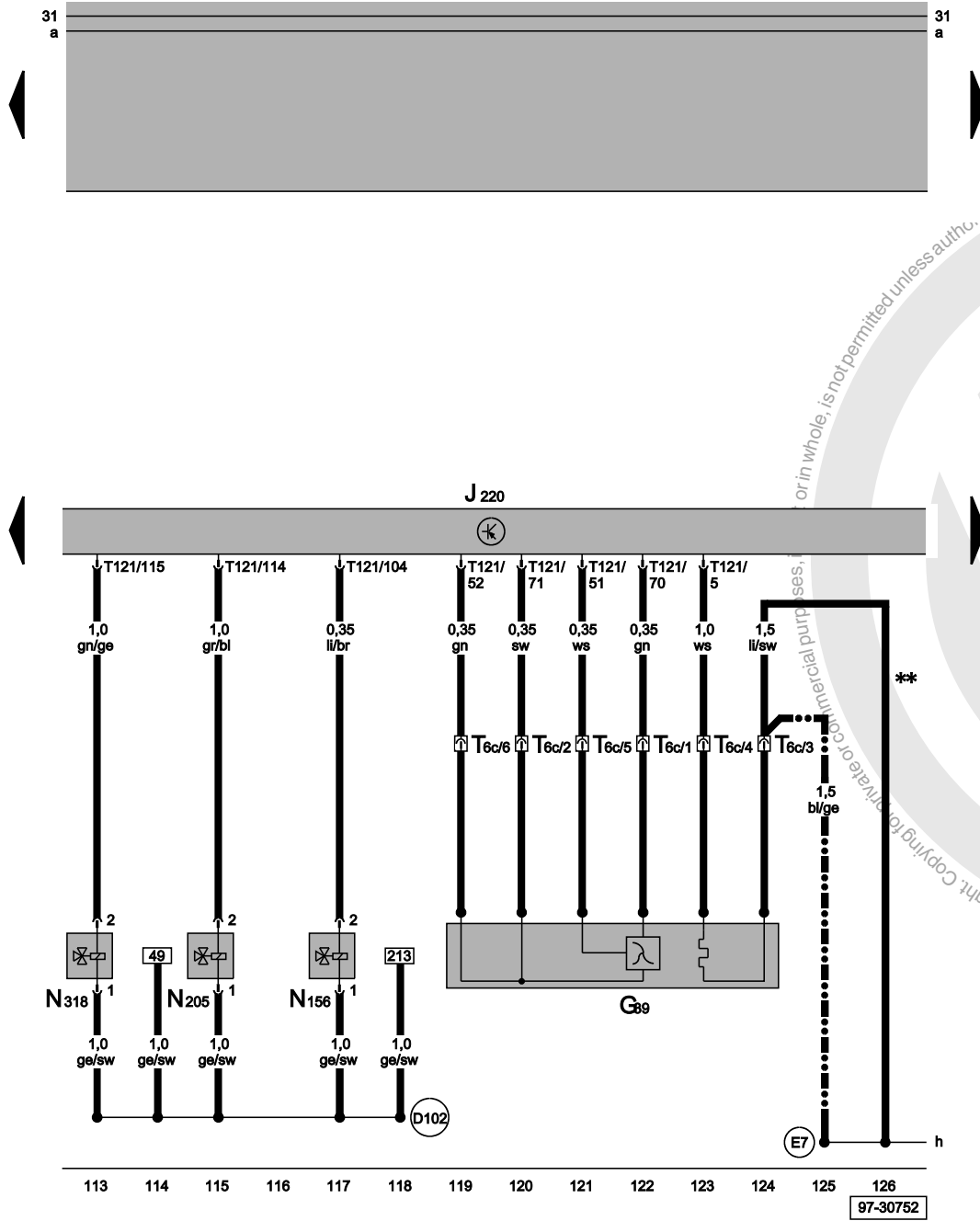
- ws = white
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- gn = green
- bl = blue
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- ge = yellow
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Motronic control unit, lambda probe upstream of catalytic converter, inlet camshaft control, variable intake manifold change-over valve

- G39 Lambda probe
- J220 Motronic control unit, in centre plenum chamber
- N156 Variable intake manifold change-over valve
- N205 Inlet camshaft control valve 1
- N318 Exhaust camshaft control valve 1
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector

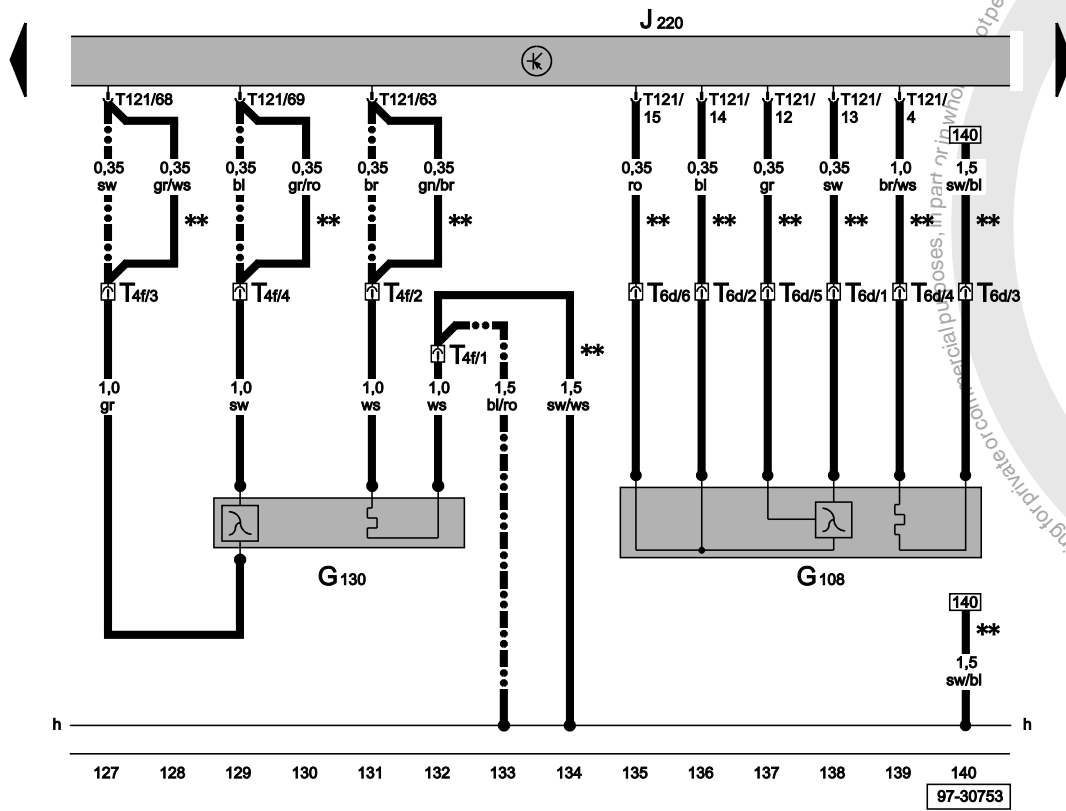
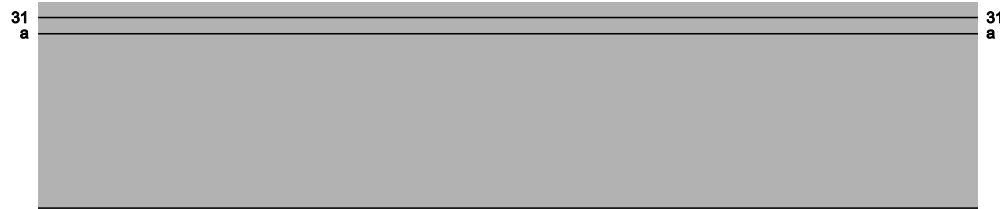
- (D102) Connection 2, in engine compartment wiring harness
- (E7) Positive connection (87a), in Motronic wiring harness
- ** only models with central locking
- only models without central locking



97-30752

Motronic control unit, lambda probe after catalytic converter, lambda probe 2

- G108 Lambda probe 2
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4f 4-pin connector, near catalytic converter
- T6d 6-pin connector, near catalytic converter
- T121 121-pin connector
- ** only models with central locking
- only models without central locking



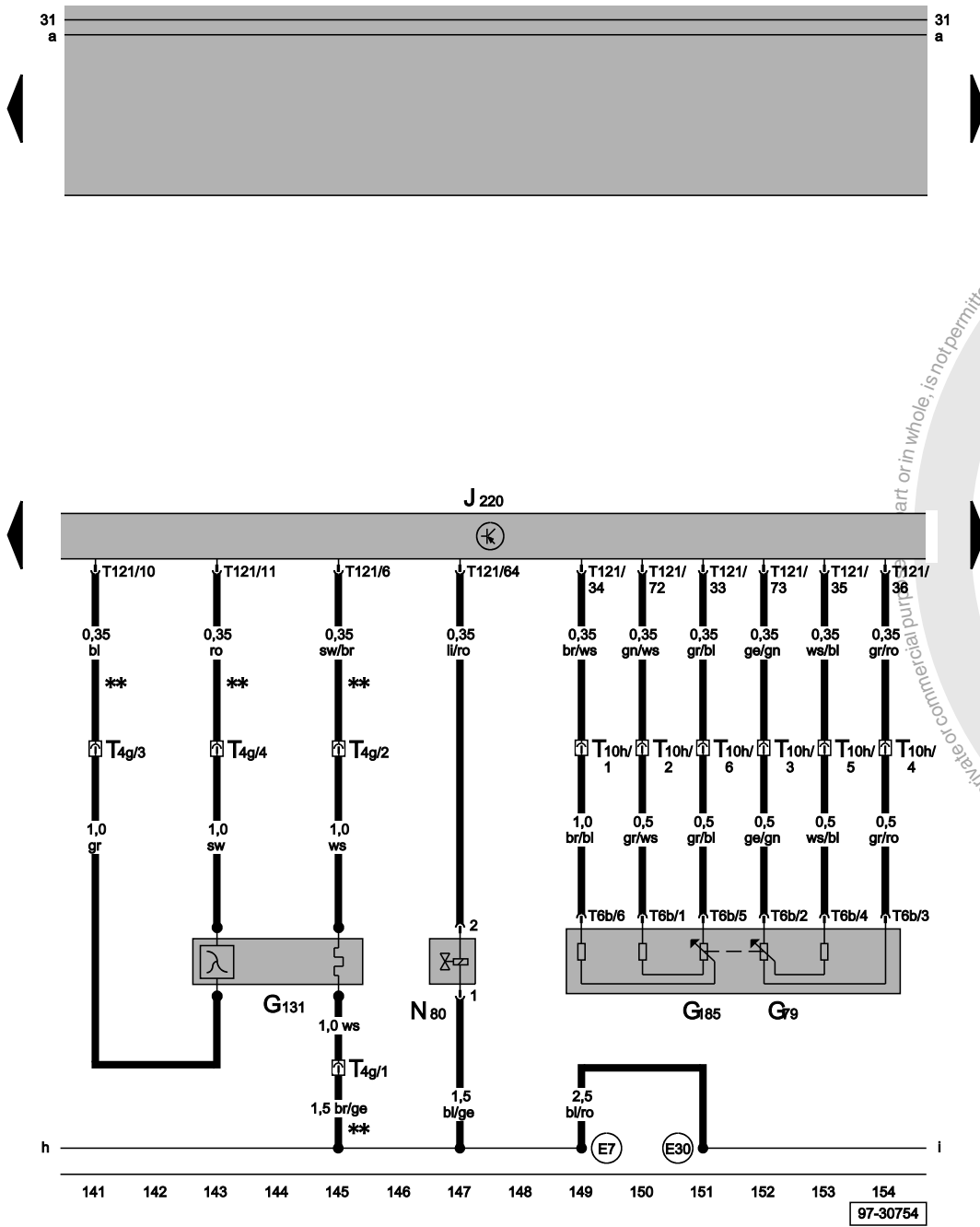
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30753

Motronic control unit, accelerator position sender, lambda probe 2 after catalytic converter, activated charcoal filter system solenoid valve

- G79 Accelerator position sender
- G131 Lambda probe 2 after catalytic converter
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4g 4-pin connector, near catalytic converter
- T6b 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

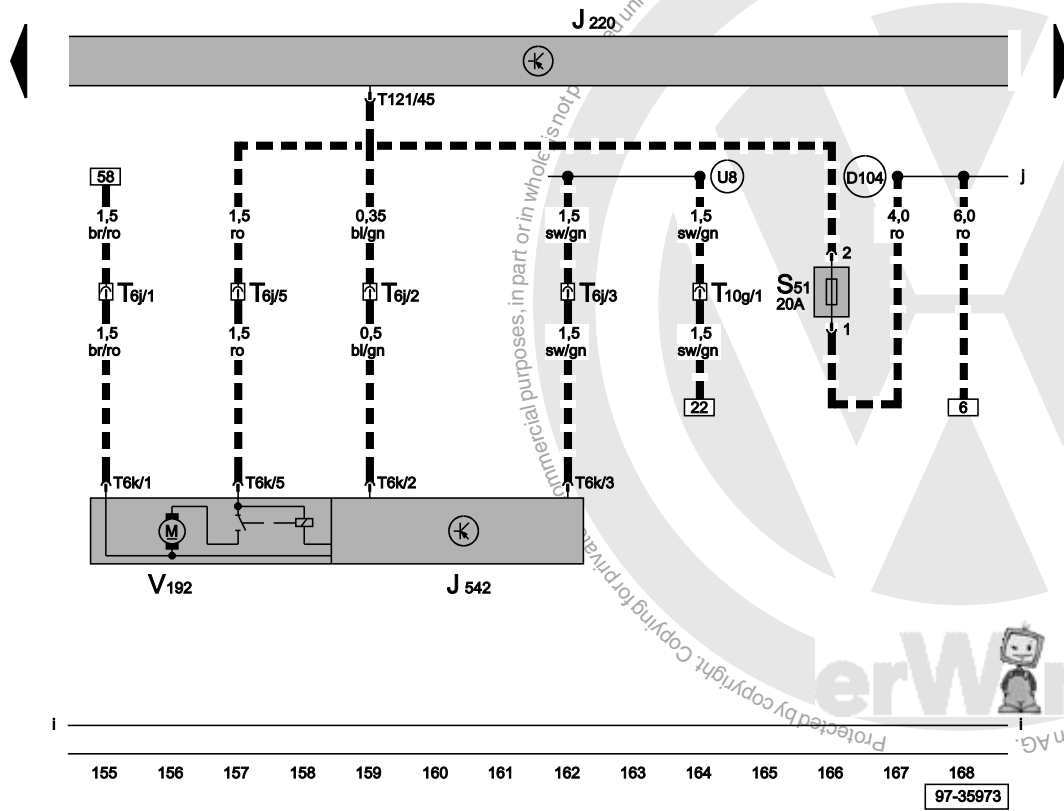
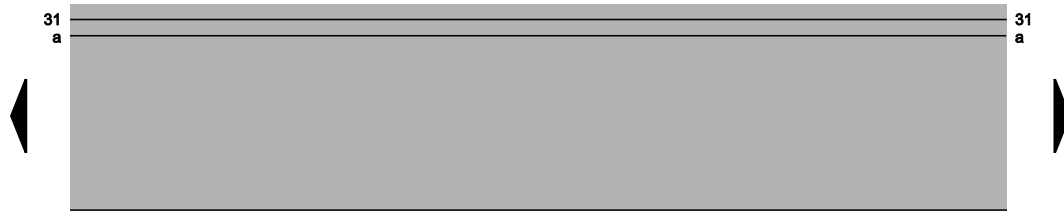
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness
- ** only models with central locking



97-30754

Motronic control unit, brake servo control unit, vacuum pump for brakes

- J220 Motronic control unit, in centre plenum chamber
- J542 Brake servo control unit
- S51 Fuse, in protective housing on left in engine compartment
- T6j 6-pin connector, in left engine compartment
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes
- D104 Positive connection 2 (30a), in engine compartment wiring harness
- U8 Positive connection (15a), in automatic gearbox wiring harness
- models with automatic gearbox only



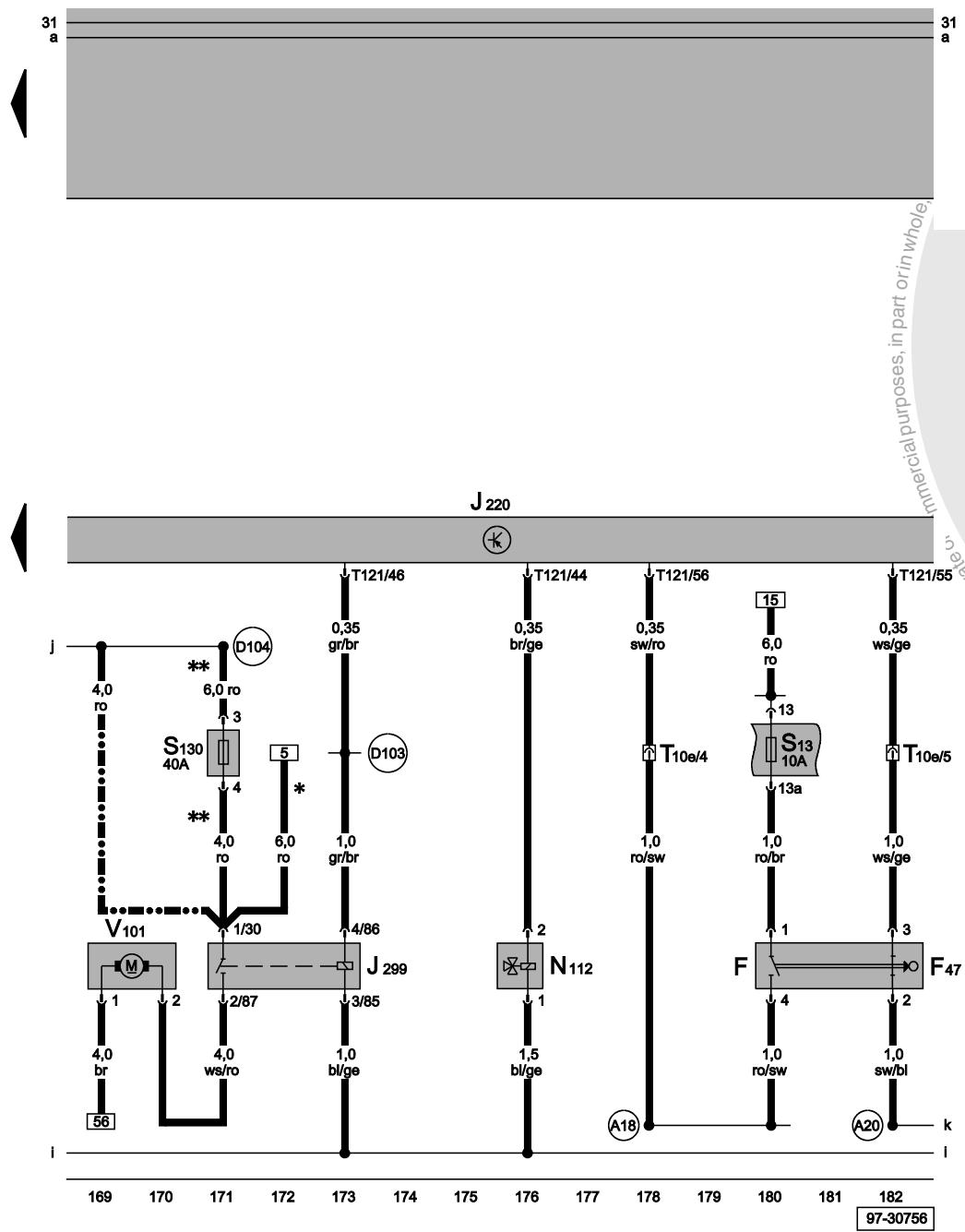
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, secondary air pump motor, secondary air inlet valve, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- S130 Secondary air pump fuse, in protective housing on left in engine compartment
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D103) Connection 3, in engine compartment wiring harness
- (D104) Positive connection 2 (30a), in engine compartment wiring harness

- * only models with manual gearbox
- only models with automatic gearbox from February 2001
- ** models with automatic gearbox only, up to January 2001

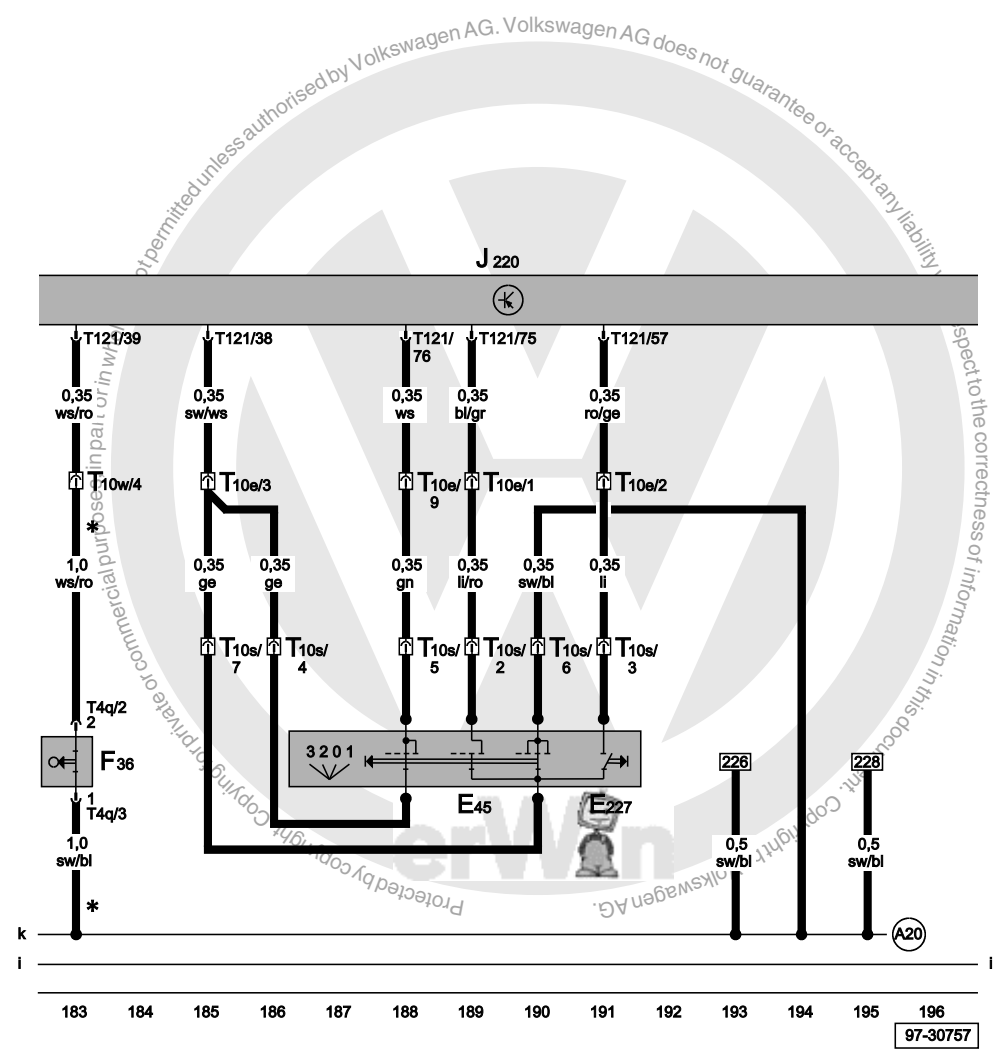
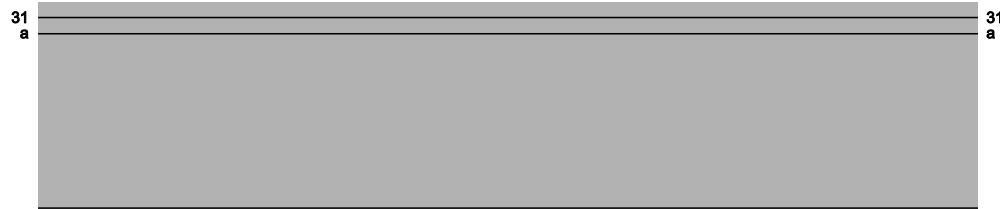


Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch*
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector, (from May 2001)
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(A20) Connection (15a), in dash panel wiring harness

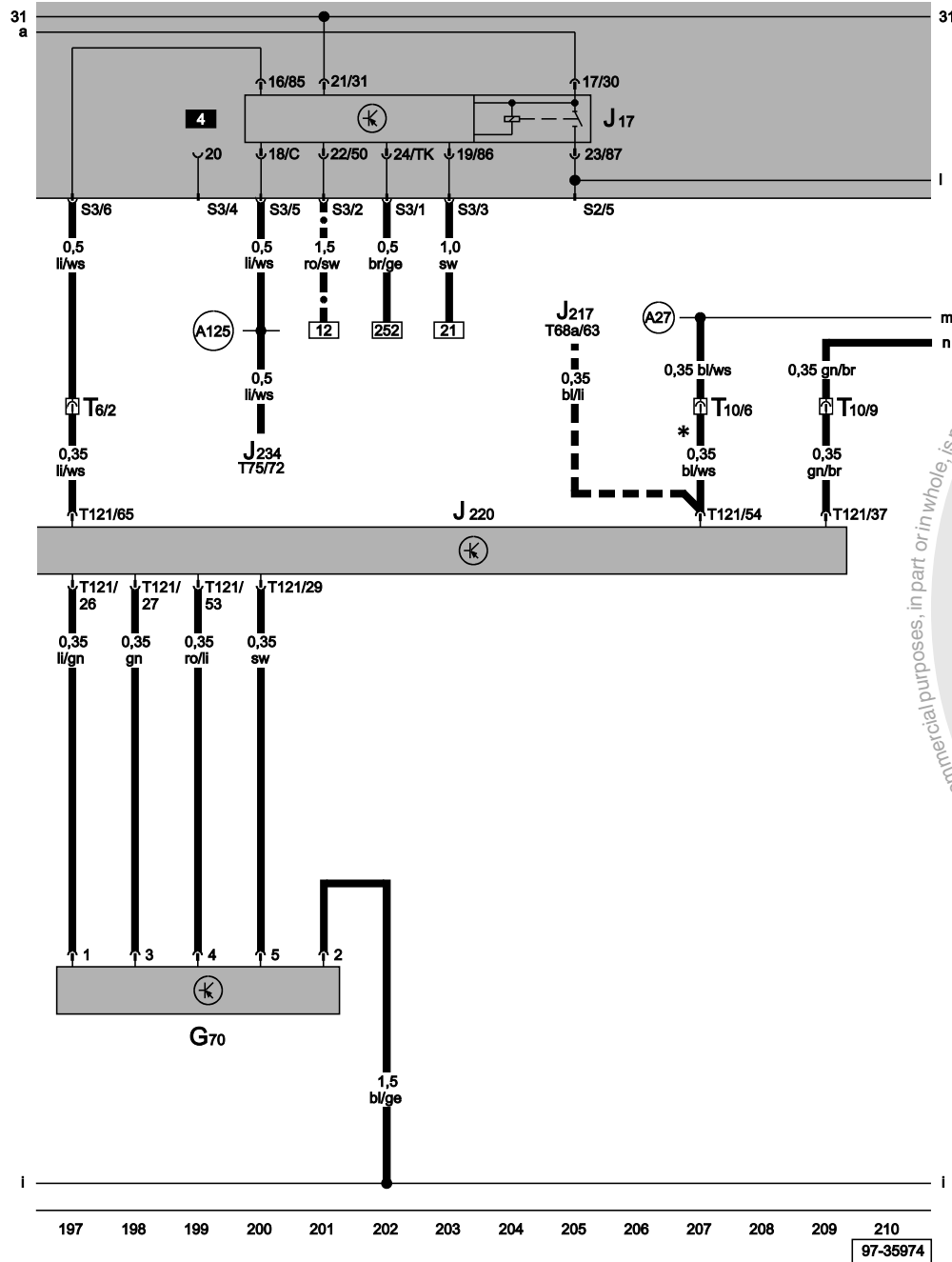
- * only models with manual gearbox
- ** only models with GND



- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, air mass meter, fuel pump relay

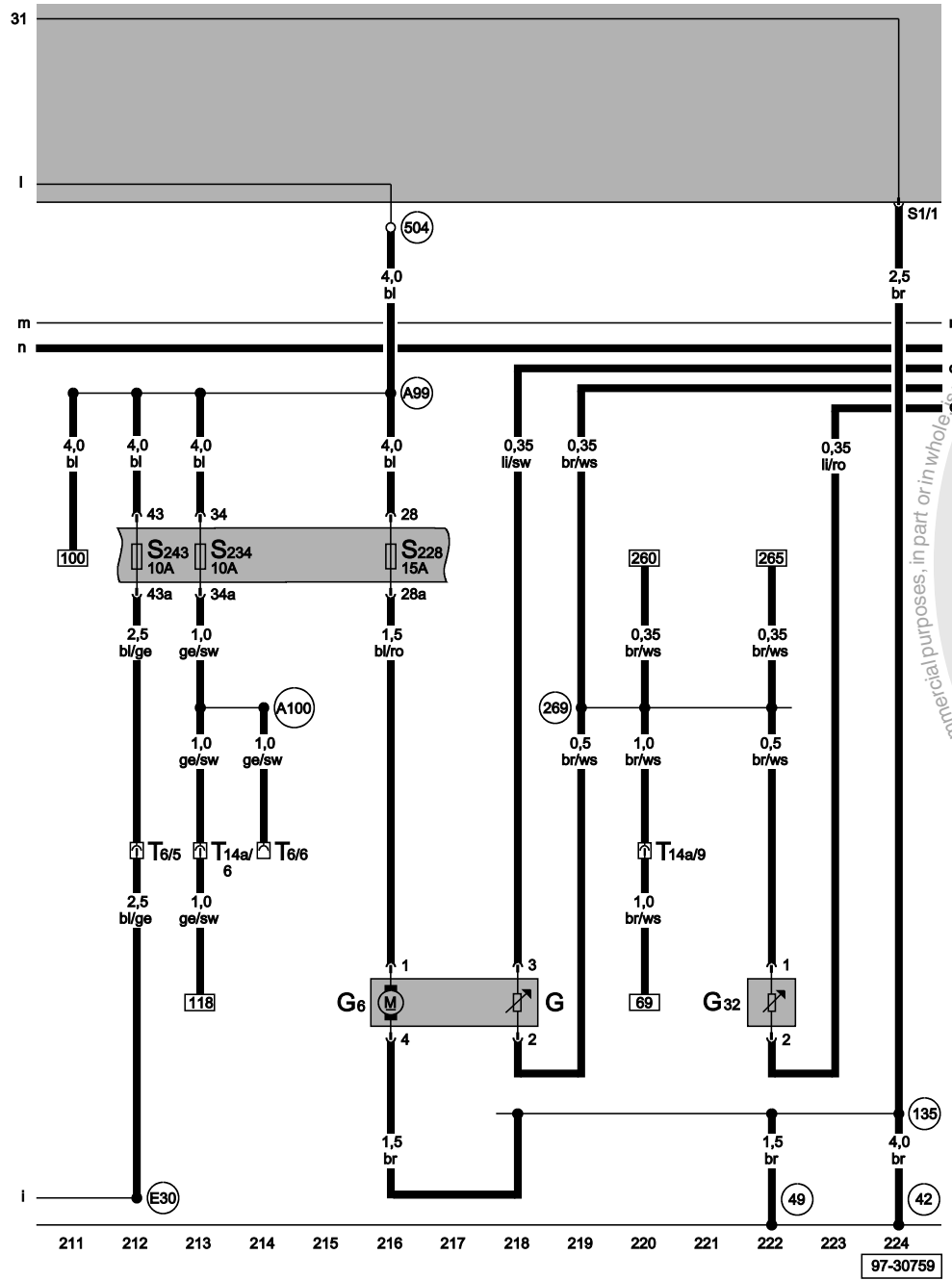
- G70 Air mass meter
- J17 Fuel pump relay
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68a 68-pin connector
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- * only models with manual gearbox
- models with 5-speed automatic gearbox (AG5) only
- up to April 2001



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- gn = green
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- li = purple
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- or = orange
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Fuel pump, fuel gauge sender, coolant shortage indicator sender

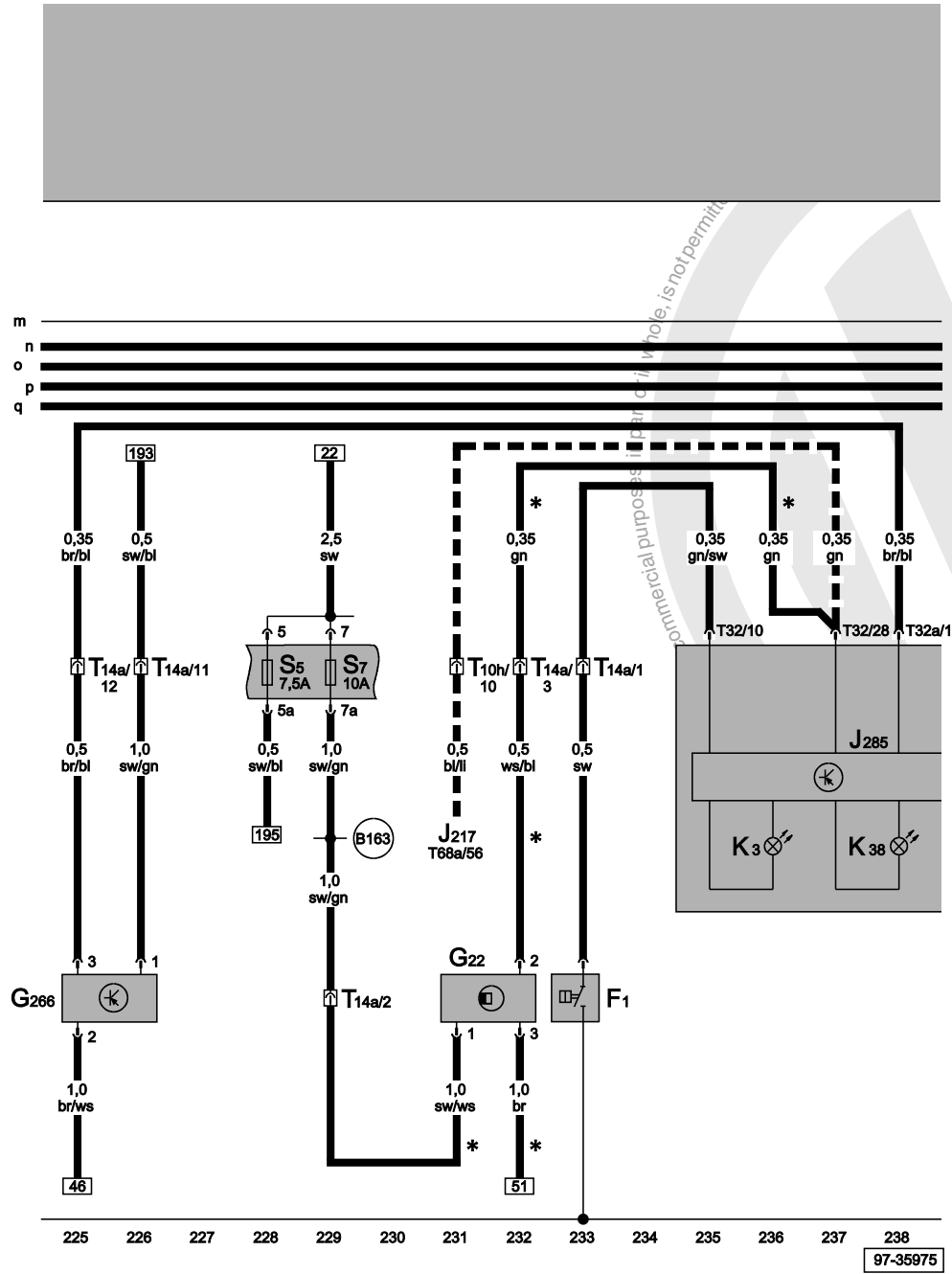
- G Fuel gauge sender***
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** models with four-wheel drive => four-wheel drive Current Flow Diagram



- ws = white
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- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J217 Automatic gearbox control unit
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T68a 68-pin connector
- B163 Positive connection 1 (15), in interior wiring harness
- * only models with manual gearbox
- ** only flexible service interval display
- models with 5-speed automatic gearbox (AG5) only

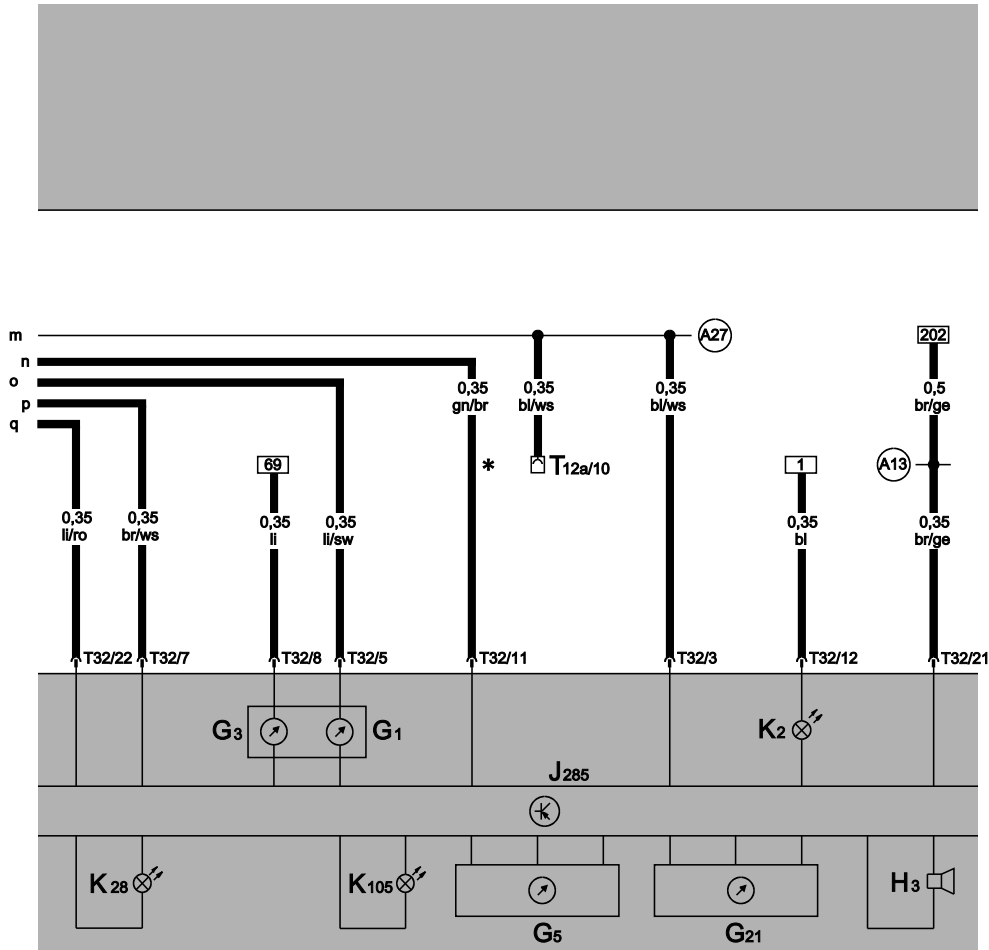


- ws = white
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- ro = red
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- bl = blue
- gr = grey
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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue

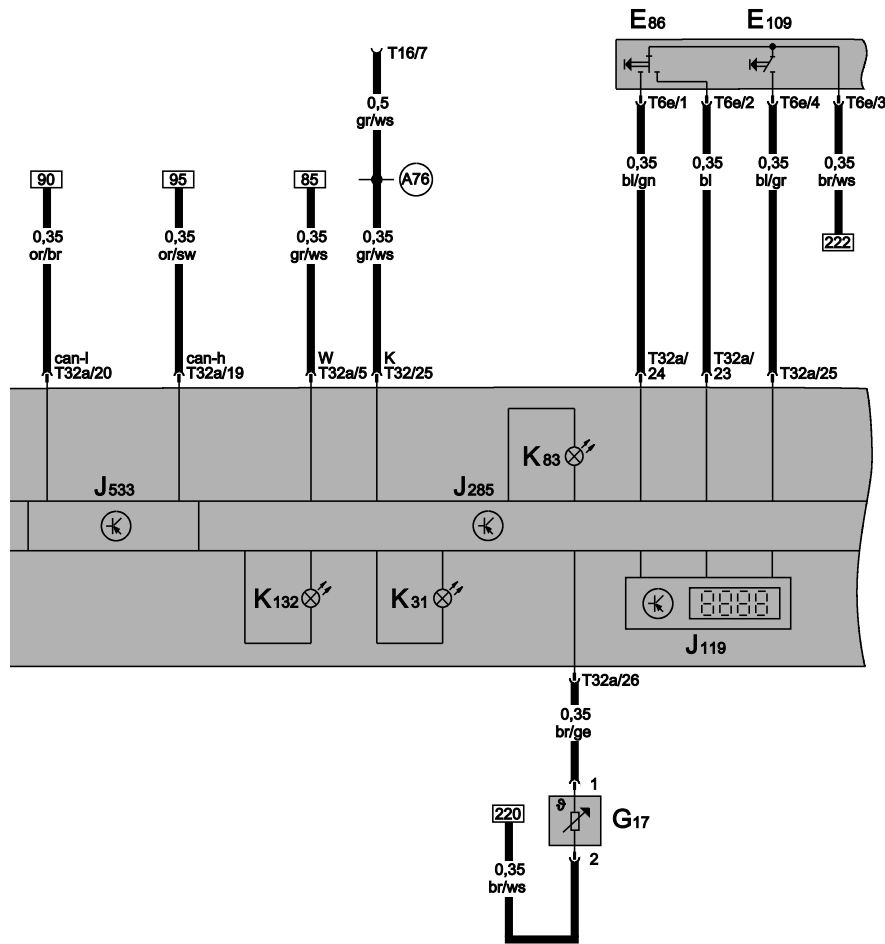
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit



- ws = white
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- ro = red
- br = brown
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- li = purple
- ge = yellow
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- rs = pink

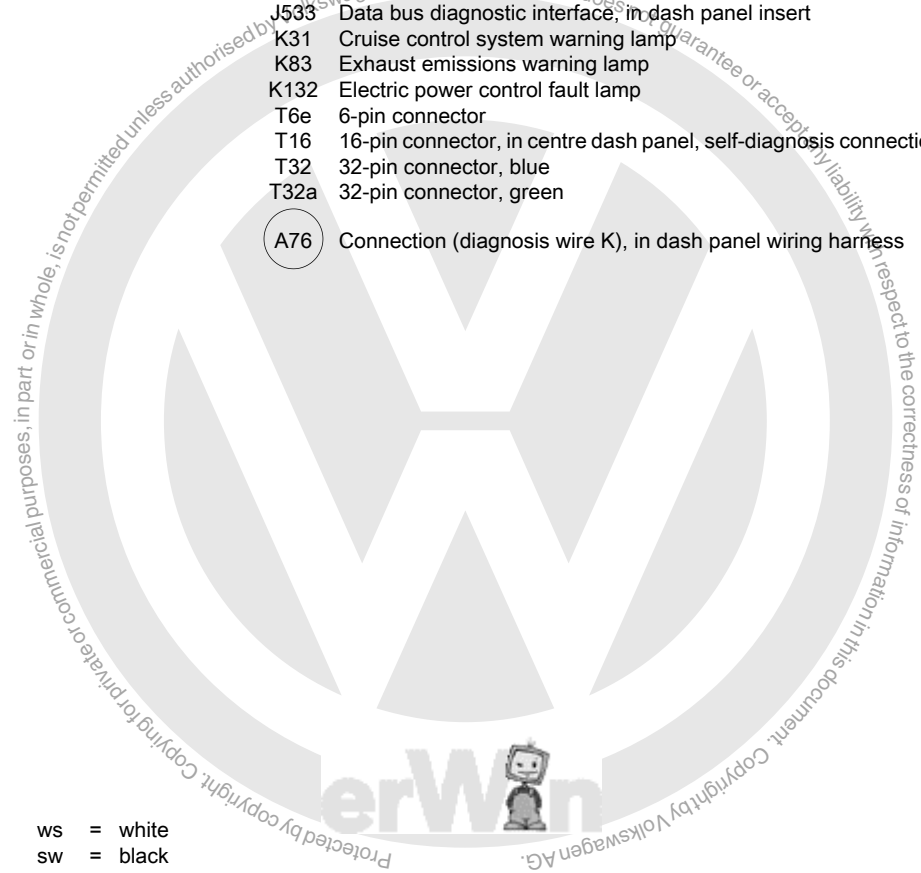
Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



253 254 255 256 257 258 259 260 261 262 263 264 265 266
97-93640

- ws = white
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- li = purple
- ge = yellow
- or = orange
- rs = pink



Radio and navigation system (MFD) (colour display) with "digital sound package" and TV tuner

from September 2000

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

⇒ List of Fitting Locations!

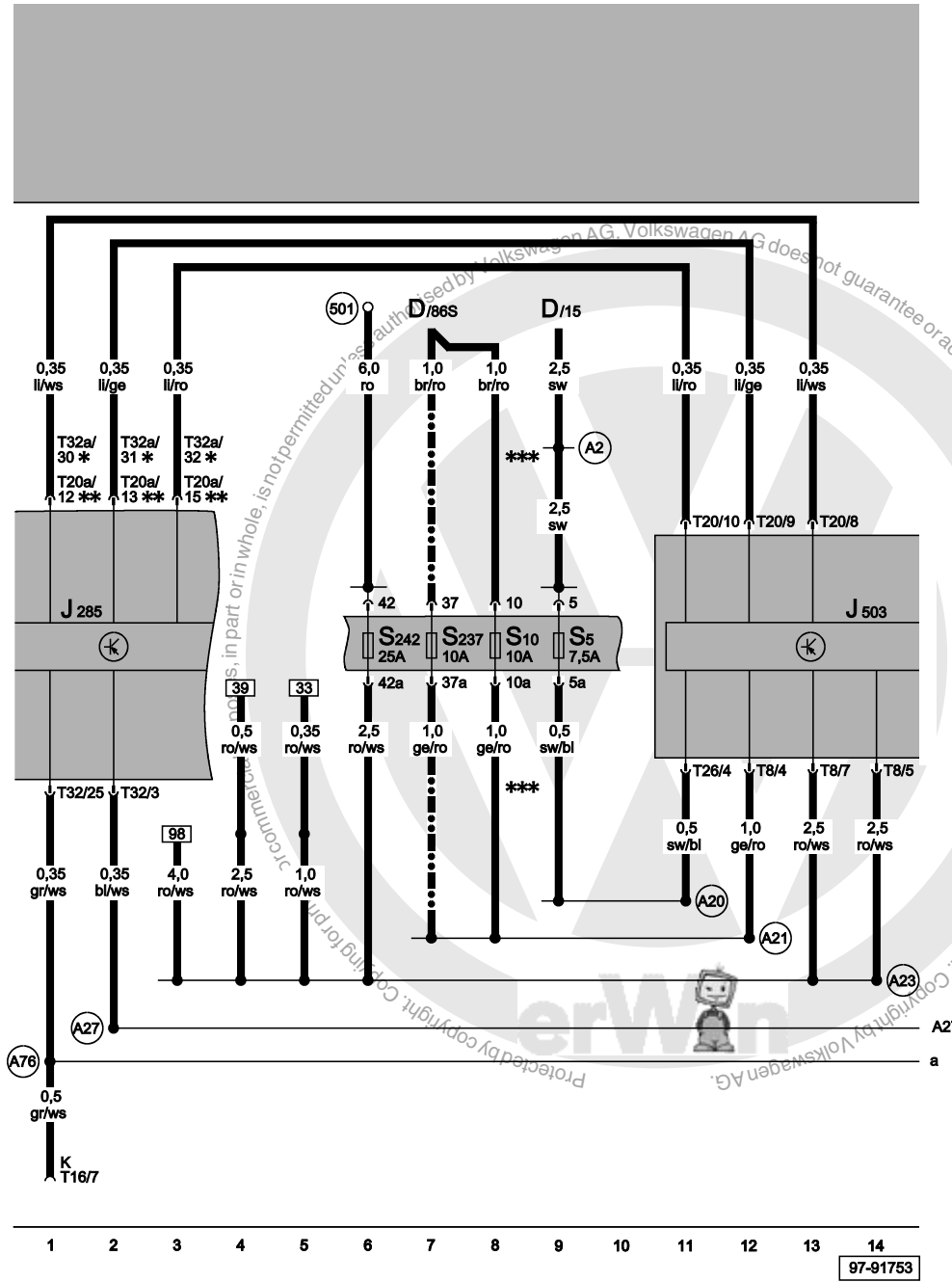
For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding



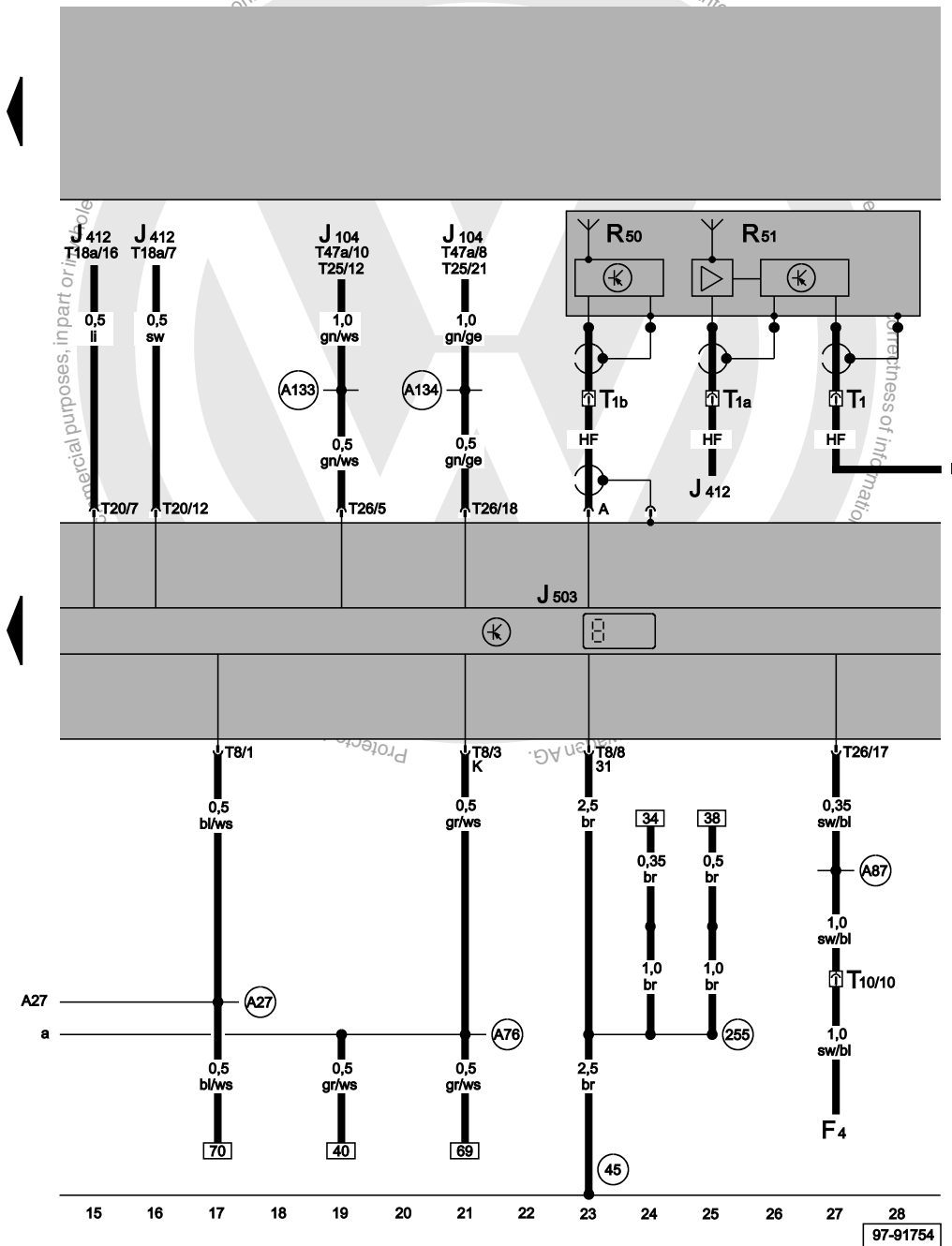
Control unit with display for radio and navigation system, dash panel insert



- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J503 Control unit with display for radio and navigation system
- S5 Fuse 5 in fuse holder
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T26 26-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A23 Connection (30a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2001
- ** up to April 2001
- *** from November 2001
- up to October 2001

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Control unit with display for radio and navigation, radio and telephone aerial, navigation system aerial (GPS)



- F4 Reversing light switch
- J104 ABS/ABS control unit with EDL
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- R50 Navigation system aerial (GPS)
- R51 Radio and telephone aerial
- T1 Single connector, near roof aerial
- T1a Single connector, near roof aerial
- T1b Single connector, near roof aerial
- T8 8-pin connector
- T10 10-pin connector
- T18a 18-pin connector
- T20 20-pin connector, green (DISPLAY)
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T26 26-pin connector
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP

- (45) Earth point, centre behind dash panel
- (255) Earth connection 1, in radio wiring harness
- (A27) Connection (speed signal), in dash panel wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (A87) Connection (RL), in dash panel wiring harness
- (A133) Connection (left ABS impulse), in dash panel wiring harness
- (A134) Connection (right ABS impulse), in dash panel wiring harness

ws = white
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 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange
 rs = pink

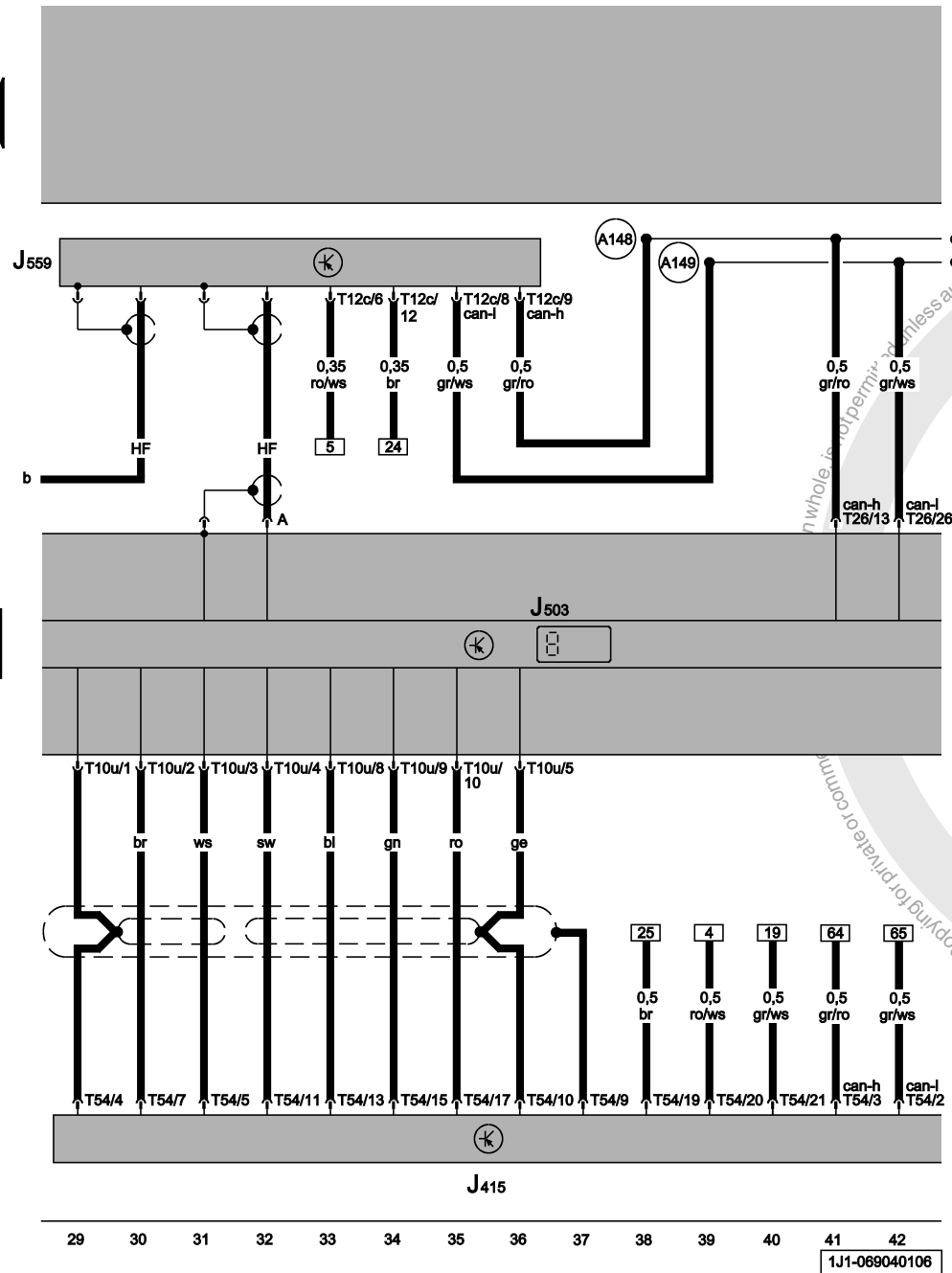
97-91754

Control unit with display for radio and navigation system, traffic information control unit, TV tuner

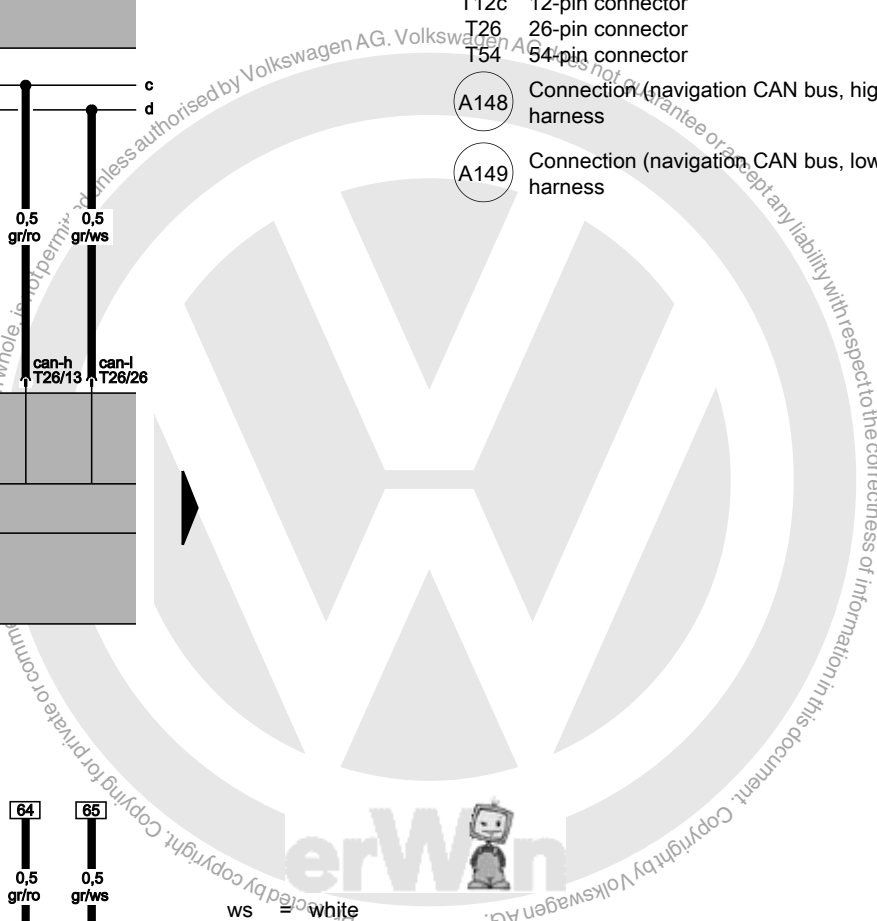
- J415 TV tuner, on left in luggage compartment
- J503 Control unit with display for radio and navigation system
- J559 Traffic information control unit, behind the dash panel, right
- T10u 10-pin connector
- T12c 12-pin connector
- T26 26-pin connector
- T54 54-pin connector

A148 Connection (navigation CAN bus, high), in dash panel wiring harness

A149 Connection (navigation CAN bus, low), in dash panel wiring harness

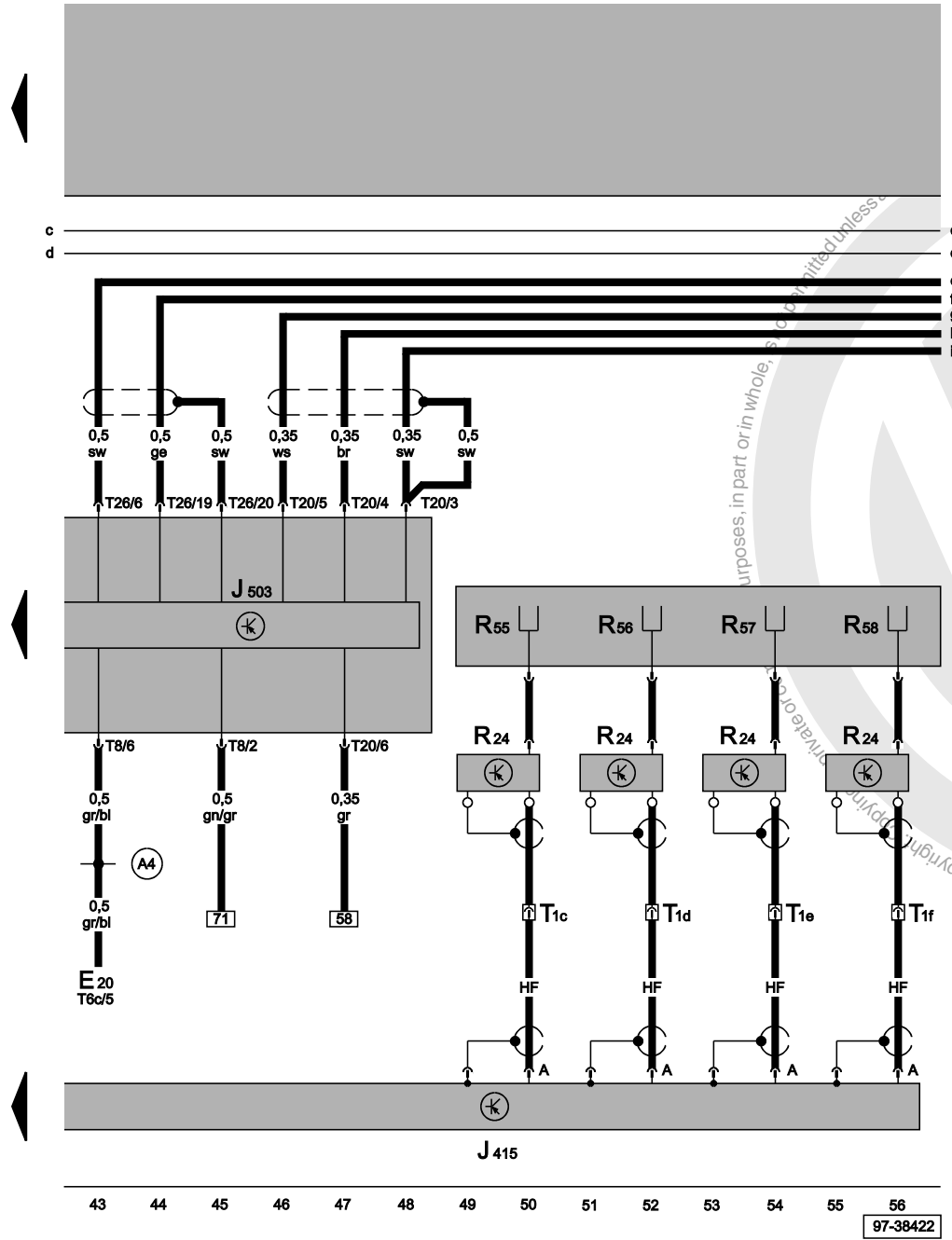


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Control unit with display for radio and navigation system, rear window aerial, navigation system tuner for TV

- E20 Illumination regulators, switches, instruments
- J415 TV tuner, on left in luggage compartment
- J503 Control unit with display for radio and navigation system
- R24 Aerial amplifier
- R55 TV aerial 1
- R56 TV aerial 2
- R57 TV aerial 3
- R58 TV aerial 4
- T1c Single connector, on left in luggage compartment
- T1d Single connector, on left in luggage compartment
- T1e Single connector, on left in luggage compartment
- T1f Single connector, on left in luggage compartment
- T6c 6-pin connector
- T8 8-pin connector
- T20 20-pin connector, blue (LINE)
- T26 26-pin connector
- A4 Positive connection (58b), in dash panel wiring harness

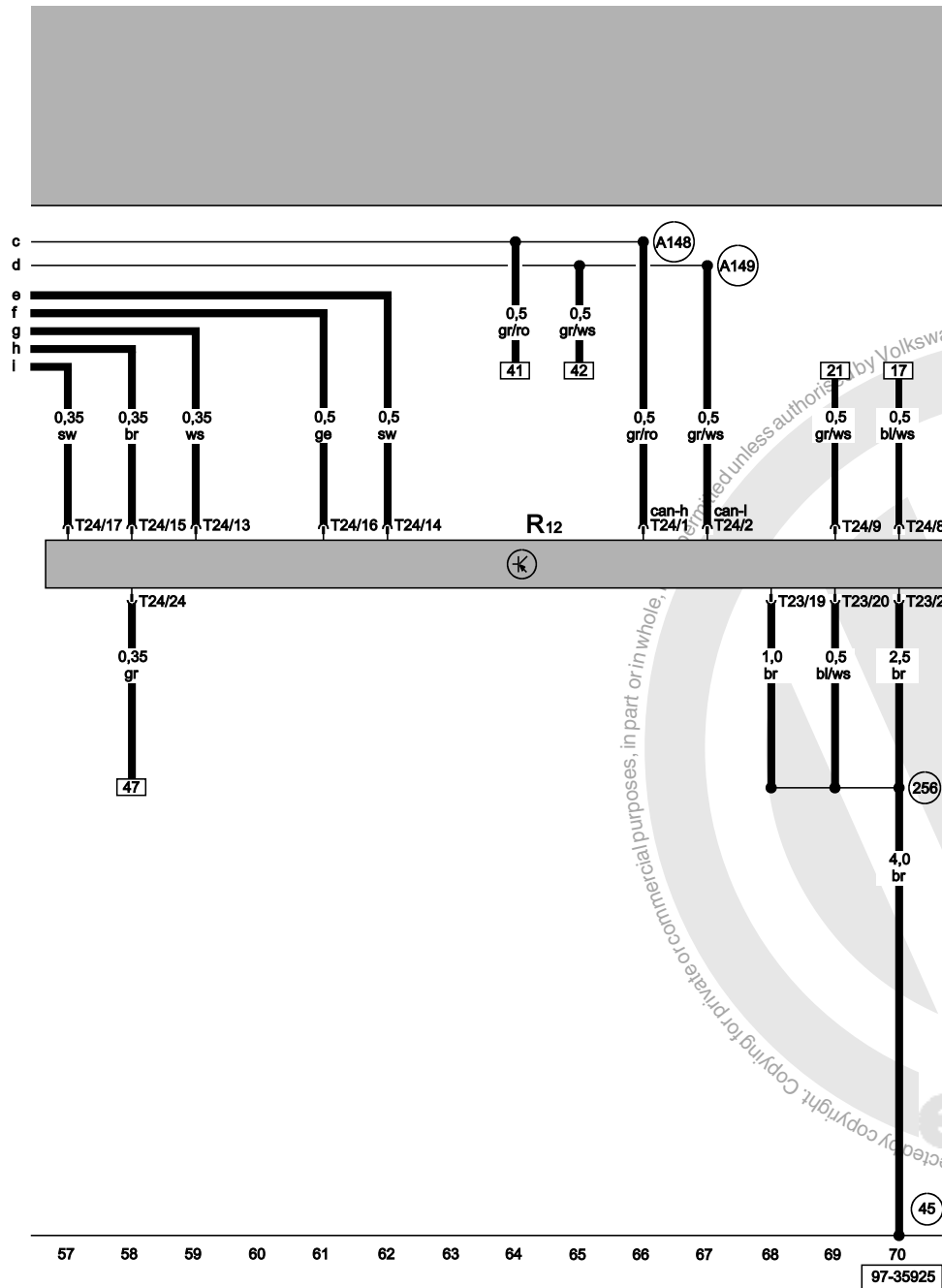


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- li = purple
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- rs = pink

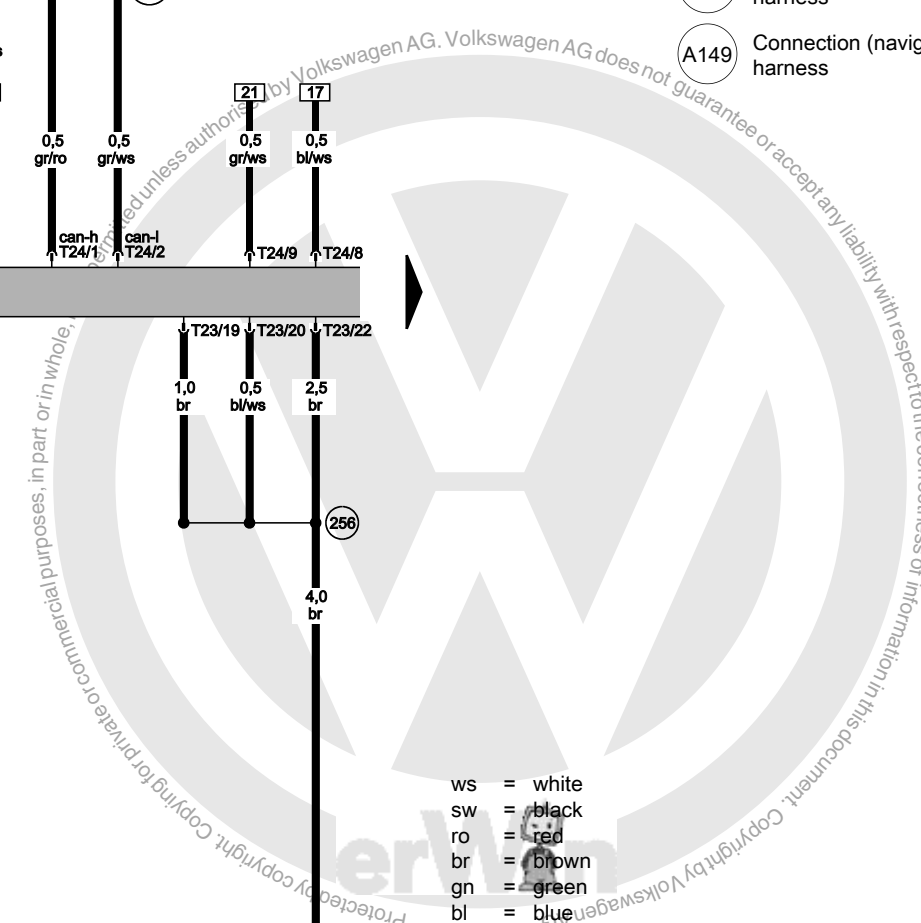
Amplifier 'digital sound package'

- R12 Amplifier, on left in luggage compartment
- T23 23-pin connector
- T24 24-pin connector

- 45 Earth point, centre behind dash panel
- 256 Earth connection 2, in radio wiring harness
- A148 Connection (navigation CAN bus, high), in dash panel wiring harness
- A149 Connection (navigation CAN bus, low), in dash panel wiring harness



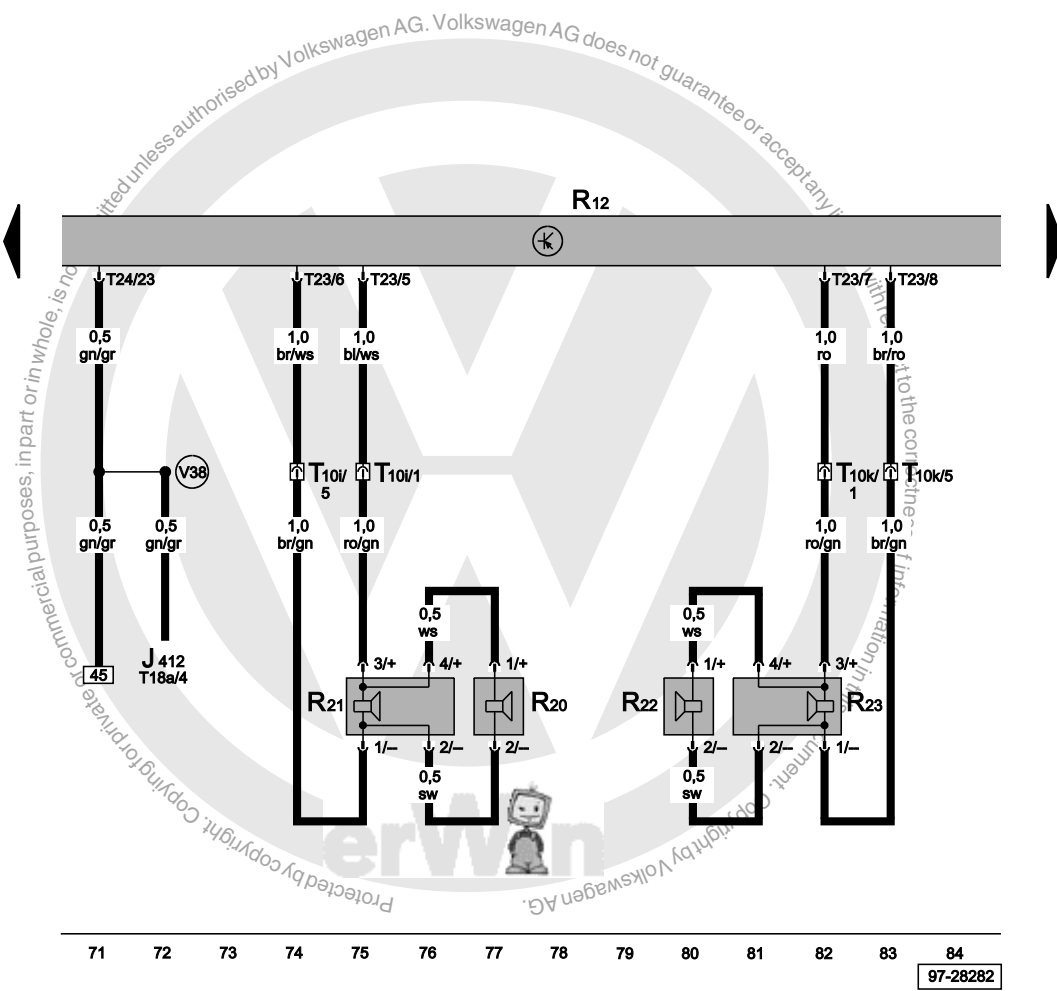
- ws = white
- sw = black
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- bl = blue
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Amplifier 'digital sound package', front loudspeaker

- J412 Mobile telephone operating electronics control unit, next handbrake lever
- R12 Amplifier, on left in luggage compartment
- R20 Front left treble loudspeaker, in the door
- R21 Front left bass loudspeaker, in the door
- R22 Front right treble loudspeaker, in the door
- R23 Front right bass loudspeaker, in the door
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10k 10-pin connector, black, coupling station right A-pillar
- T18a 18-pin connector
- T23 23-pin connector
- T24 24-pin connector

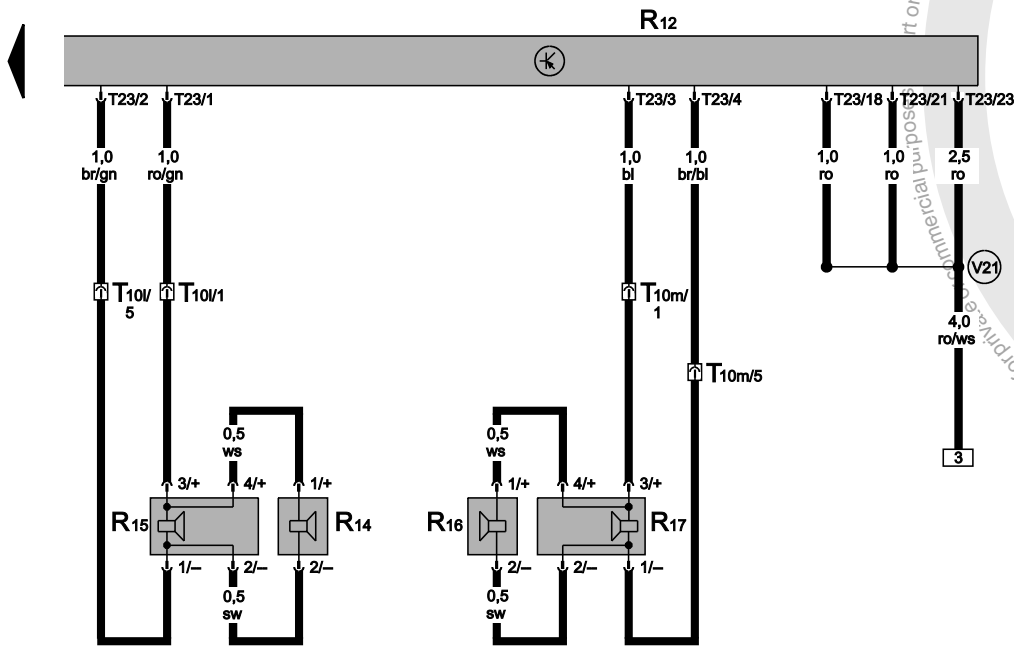
V38 Connection (mute circuit), in DSP/telephone wiring harness



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- gr = grey
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Amplifier 'digital sound package', rear loudspeaker

- R12 Amplifier, on left in luggage compartment
- R14 Rear left treble loudspeaker, in the door
- R15 Rear left bass loudspeaker, in the door
- R16 Rear right treble loudspeaker, in the door
- R17 Rear right bass loudspeaker, in the door
- T10f 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T23 23-pin connector
- V21 Positive connection (30), in radio - amplifier wiring harness



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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

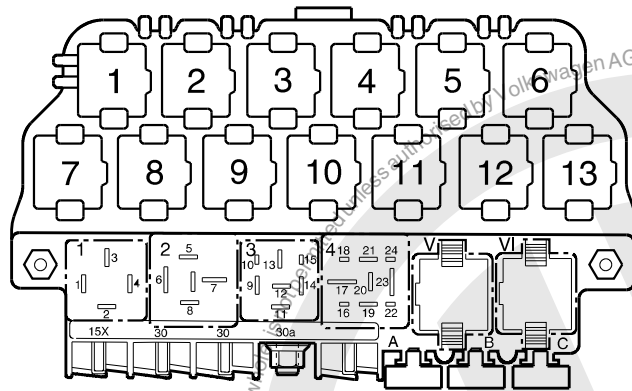
85 86 87 88 89 90 91 92 93 94 95 96 97 98

97-28283

Radio and navigation system (MFD) (colour display) with CD changer and TV tuner

from September 2000

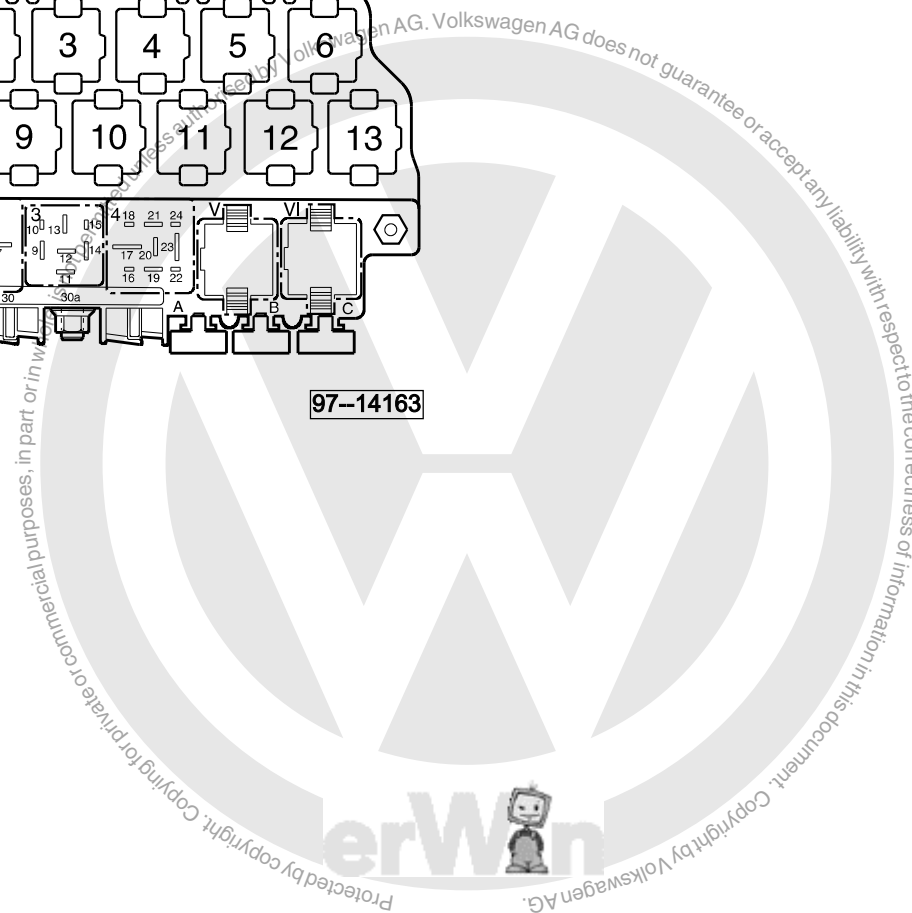
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



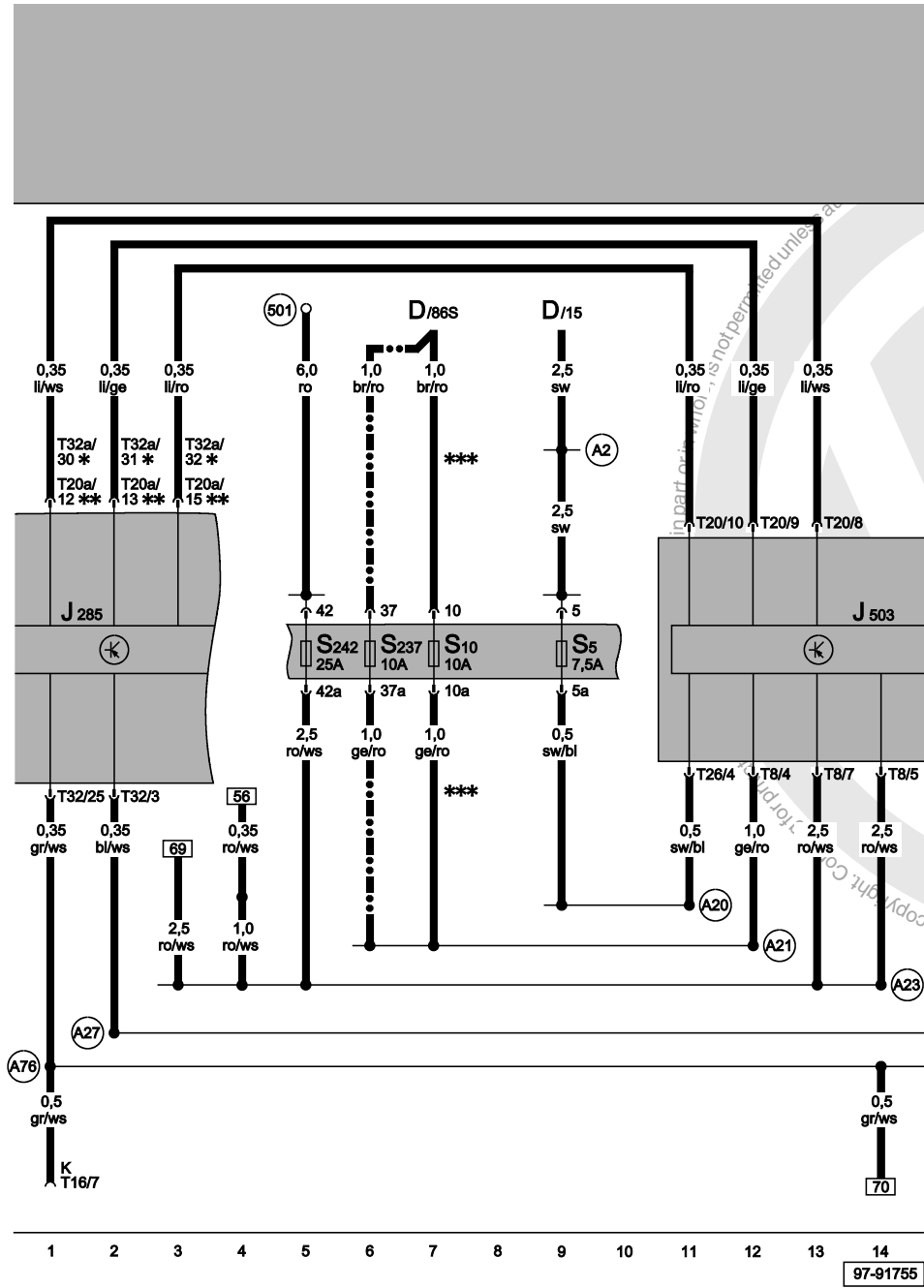
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Control unit with display for radio and navigation system,



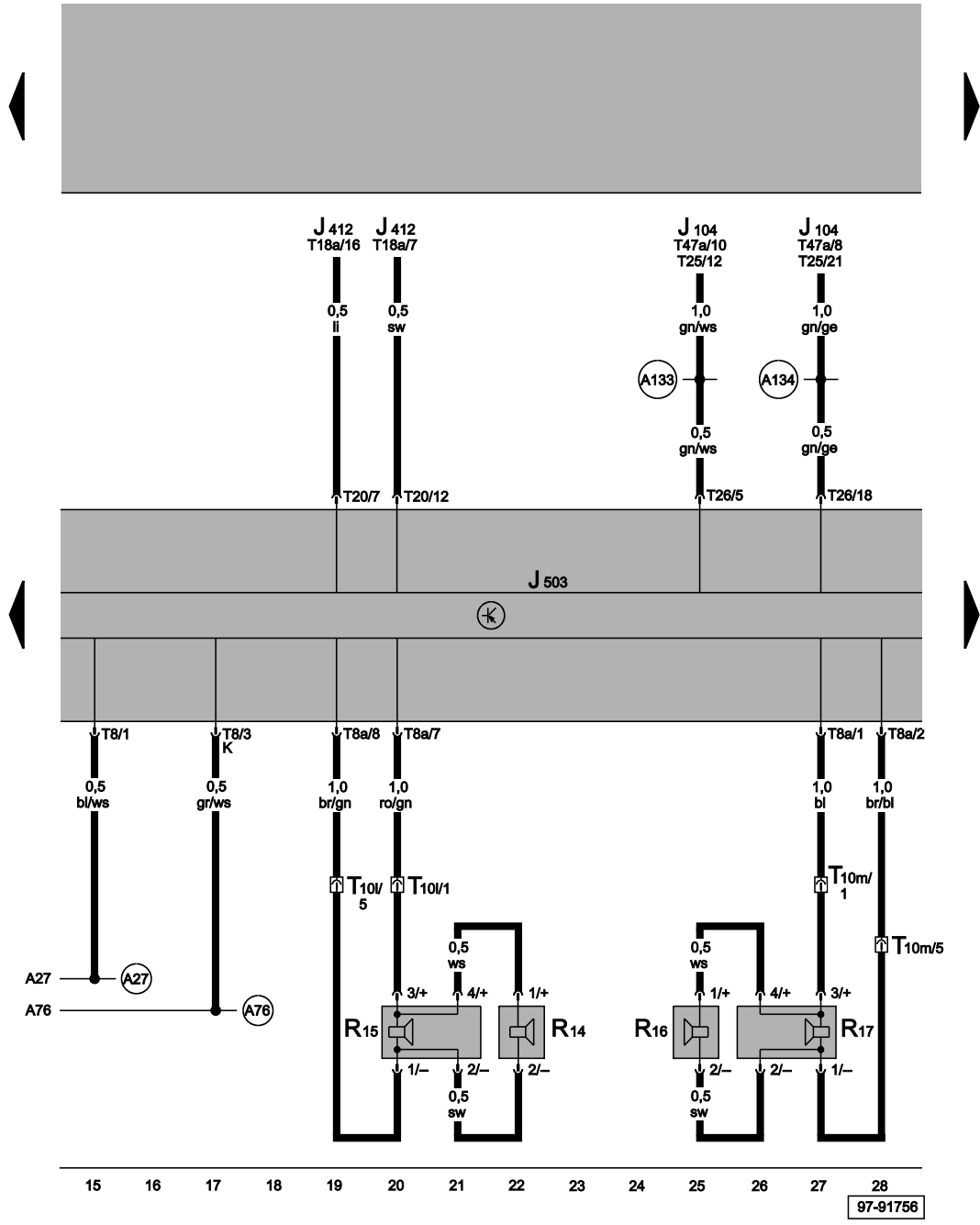
- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- J503 Control unit with display for radio and navigation system
- S5 Fuse 5 in fuse holder
- S10 Fuse 10 in fuse holder
- S237 Fuse 37 in fuse holder
- S242 Fuse 42 in fuse holder
- T8 8-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector, green (DISPLAY)
- T20a 20-pin connector, red
- T26 26-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A23 Connection (30a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * from May 2001
- ** up to April 2001
- *** from November 2001
- ... up to October 2001, see engine Current Flow Diagram

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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Control unit with display for radio and navigation system, rear loudspeaker

- J104 ABS/ABS control unit with EDL
- J412 Mobile telephone operating electronics control unit
- J503 Control unit with display for radio and navigation system
- R14 Rear left treble loudspeaker, in the door
- R15 Rear left bass loudspeaker, in the door
- R16 Rear right treble loudspeaker, in the door
- R17 Rear right bass loudspeaker, in the door
- T8 8-pin connector
- T8a 8-pin connector
- T10l 10-pin connector, black, coupling station on left B-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- T18a 18-pin connector
- T20 20-pin connector, green (DISPLAY)
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T26 26-pin connector
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP

- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A133 Connection (left ABS impulse), in dash panel wiring harness
- A134 Connection (right ABS impulse), in dash panel wiring harness



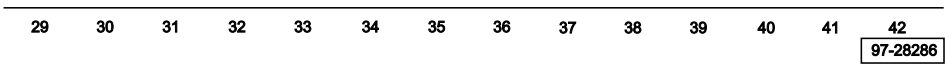
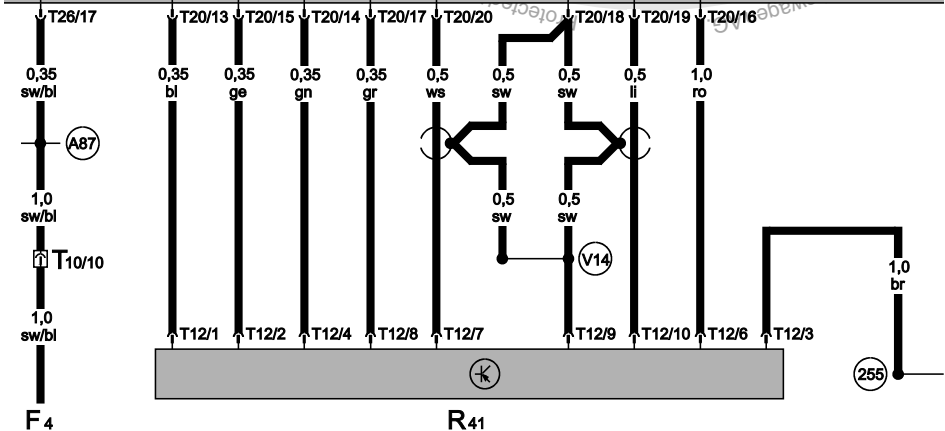
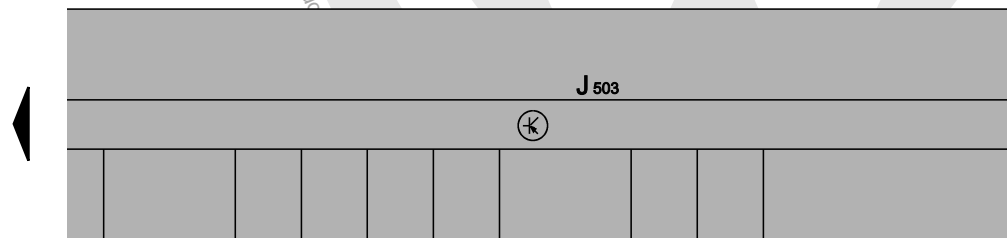
- ws = white
- sw = black
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97-91756

Control unit with display for radio and navigation system, CD changer

- F4 Reversing light switch
- J503 Control unit with display for radio and navigation system
- R41 CD changer
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T12 12-pin connector
- T20 20-pin connector, blue (LINE)
- T26 26-pin connector

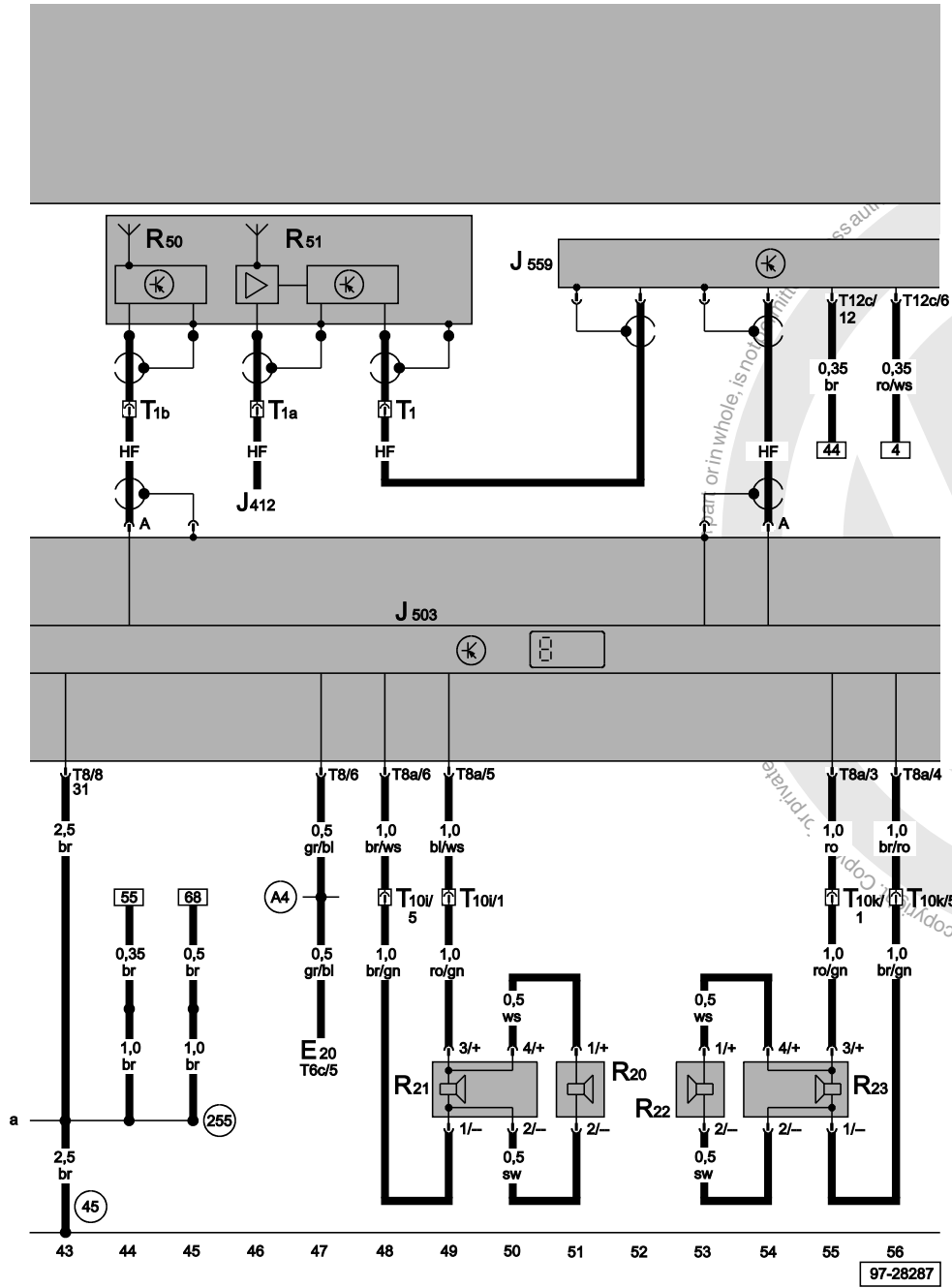
- (255) Earth connection 1, in radio wiring harness
- (A87) Connection (RL), in dash panel wiring harness
- (V14) Connection (screening), in CD changer wiring harness



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Control unit with display for radio and navigation, traffic information control unit, front loudspeaker, radio, telephone and auxiliary heater aerial, navigation system aerial (GPS)

- E20 Illumination regulators - switches and instruments
 - J412 Mobile telephone operating electronics control unit
 - J503 Control unit with display for radio and navigation system
 - J559 Traffic information control unit, behind the dash panel, right
 - R20 Front left treble loudspeaker, in the door
 - R21 Front left bass loudspeaker, in the door
 - R22 Front right treble loudspeaker, in the door
 - R23 Front right bass loudspeaker, in the door
 - R50 Navigation system aerial (GPS)
 - R51 Telephone and auxiliary heater aerial
 - T1 Single connector, near roof aerial
 - T1a Single connector, near roof aerial
 - T1b Single connector, near roof aerial
 - T6c 6-pin connector
 - T8 8-pin connector
 - T8a 8-pin connector
 - T10i 10-pin connector, black, coupling station on left A-pillar
 - T10k 10-pin connector, black, coupling station right A-pillar
 - T12c 12-pin connector
- 45 Earth point, centre behind dash panel
 - 255 Earth connection 1, in radio wiring harness
 - A4 Positive connection (58b), in dash panel wiring harness

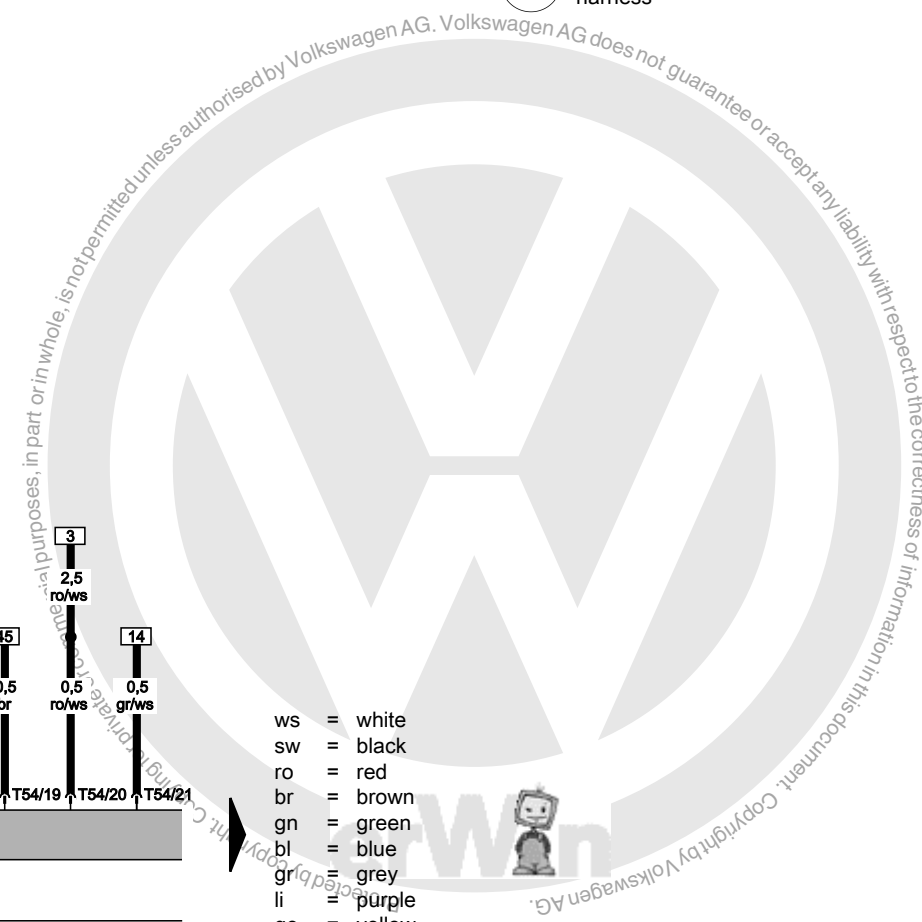
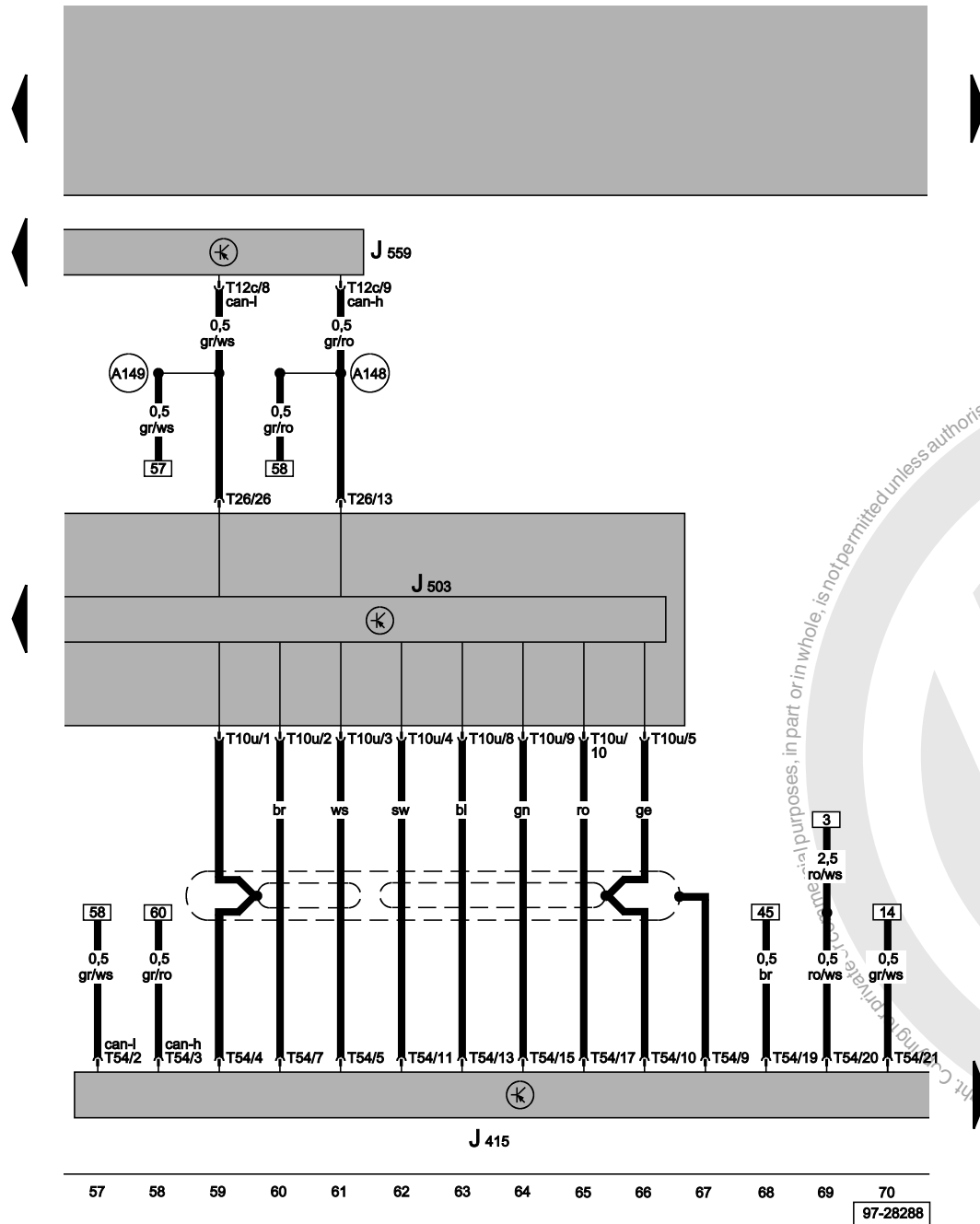


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Control unit with display for radio and navigation system, traffic information control unit, TV tuner

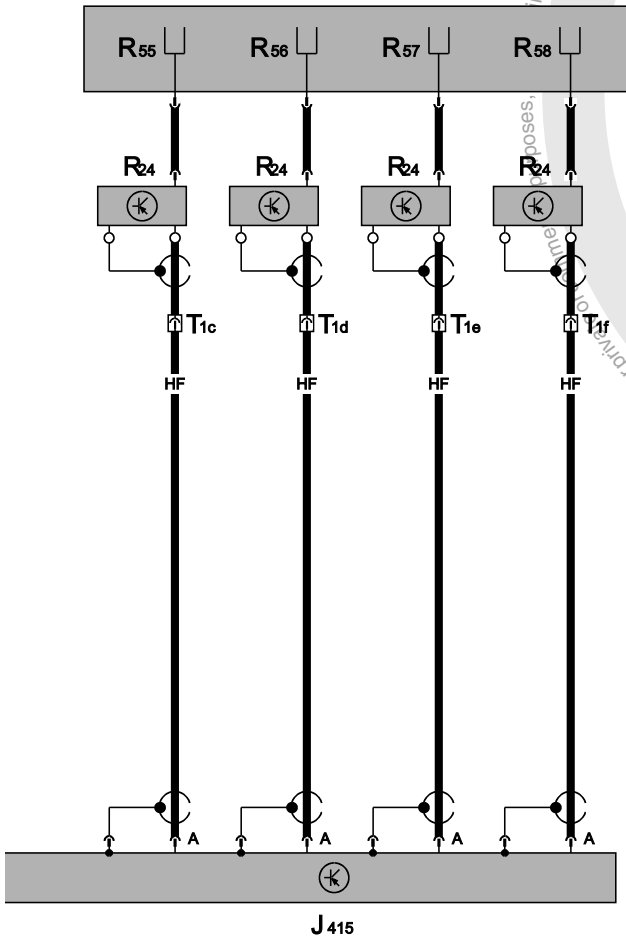
- J415 TV tuner, on left in luggage compartment
- J503 Control unit with display for radio and navigation system
- J559 Traffic information control unit, behind the dash panel, right
- T10u 10-pin connector
- T12c 12-pin connector
- T26 26-pin connector
- T54 54-pin connector

- (A148) Connection (navigation CAN bus, high), in dash panel wiring harness
- (A149) Connection (navigation CAN bus, low), in dash panel wiring harness



Control unit with display for radio and navigation system, rear window aerial, navigation system tuner for TV

- J415 TV tuner, on left in luggage compartment
- R24 Aerial amplifier
- R55 TV aerial 1
- R56 TV aerial 2
- R57 TV aerial 3
- R58 TV aerial 4
- T1c 1-pin connector, on left in luggage compartment
- T1d 1-pin connector, on left in luggage compartment
- T1e 1-pin connector, on left in luggage compartment
- T1f 1-pin connector, on left in luggage compartment



71 72 73 74 75 76 77 78 79 80 81 82 83 84
 97-28289

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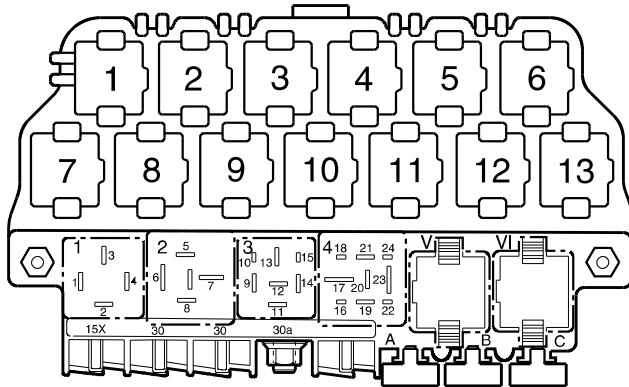
Electric seat adjustment front, memory for driver's seat and exterior mirror

From May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see **"Fitting locations"** section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

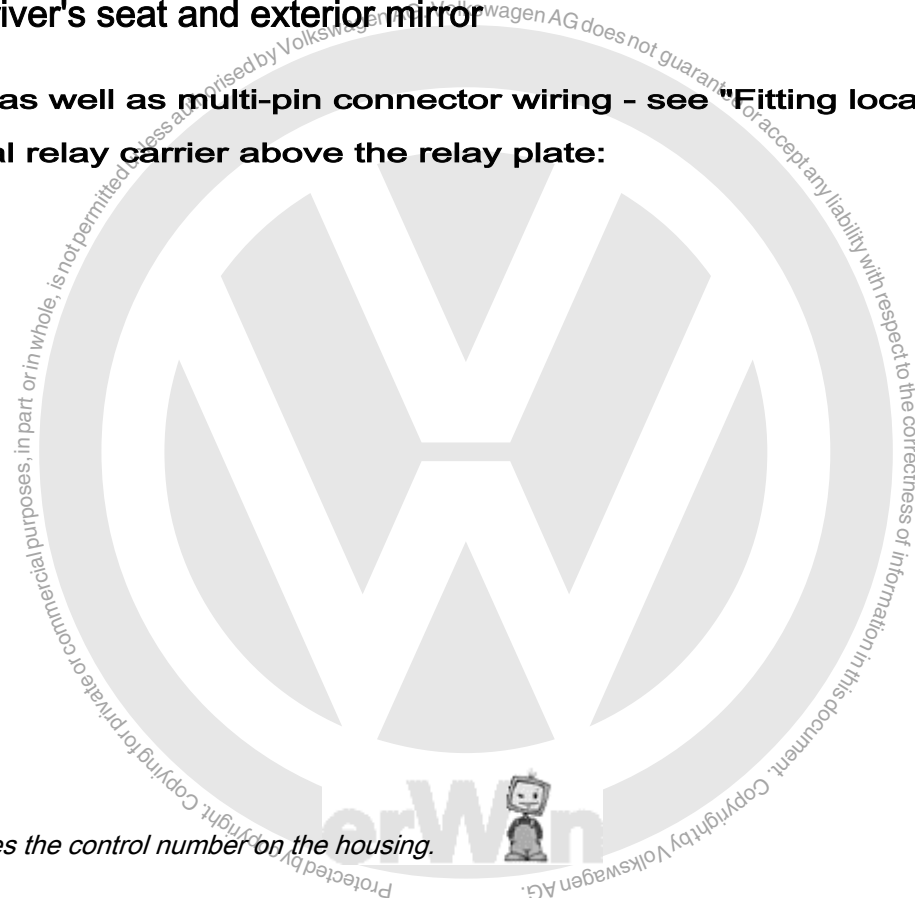


Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

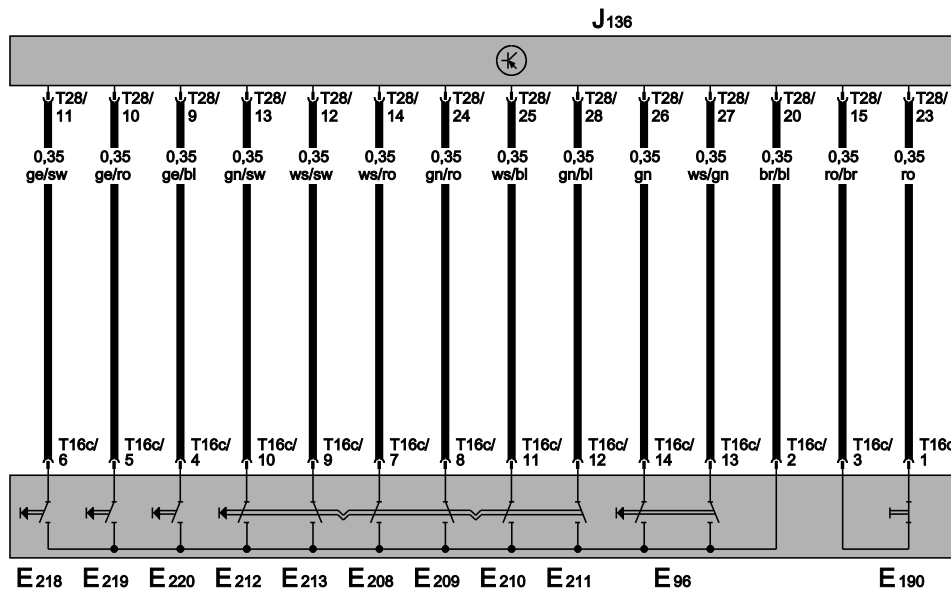
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac





Seat adjustment (with memory) control unit, height adjustment button, longitudinal adjustment button, backrest adjustment switch driver's seat, 'Emergency "OFF" switch' for memory funktion

- E96 Backrest adjustment switch, driver's seat
- E190 'Emergency "OFF" switch' for memory funktion
- E208 Front height adjustment button, upwards, driver's seat
- E209 Front height adjustment button, downwards, driver's seat
- E210 Rear height adjustment button, upwards, driver's seat
- E211 Rear height adjustment button, downwards, driver's seat
- E212 Longitudinal adjustment button, forwards, driver's seat
- E213 Longitudinal adjustment button, backwards, driver's set
- E218 Memory seat driver's 1 button
- E219 Memory seat driver's 2 button
- E220 Memory seat driver's 3 button
- J136 Seat adjustment with memory control unit, under driver's seat
- T16c 16-pin connector
- T28 28-pin connector

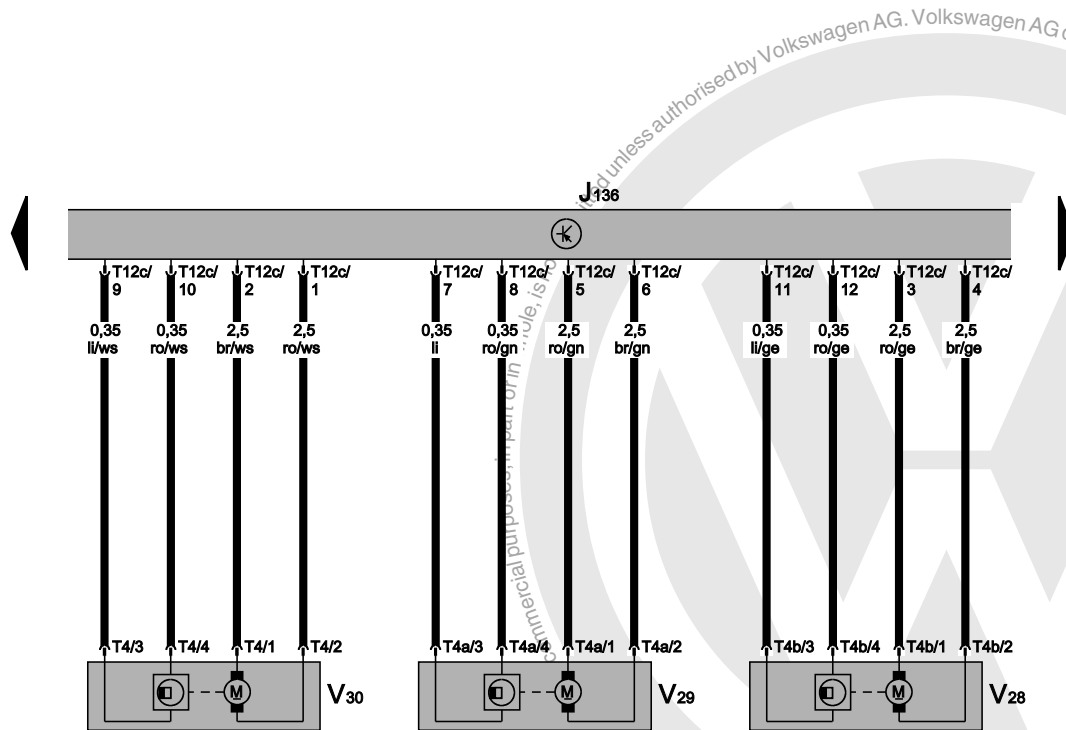


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1 2 3 4 5 6 7 8 9 10 11 12 13 14
97-23210

Seat adjustment (with memory) control unit, seat longitudinal adjustment motor, seat front height adjustment motor, seat rear height adjustment motor

- J136 Seat adjustment with memory control unit, under driver's seat
- T4 4-pin connector
- T4a 4-pin connector
- T4b 4-pin connector
- T12c 12-pin connector
- V28 Seat longitudinal adjustment motor, driver's
- V29 Seat front height adjustment motor, driver's
- V30 Seat rear height adjustment motor, driver's



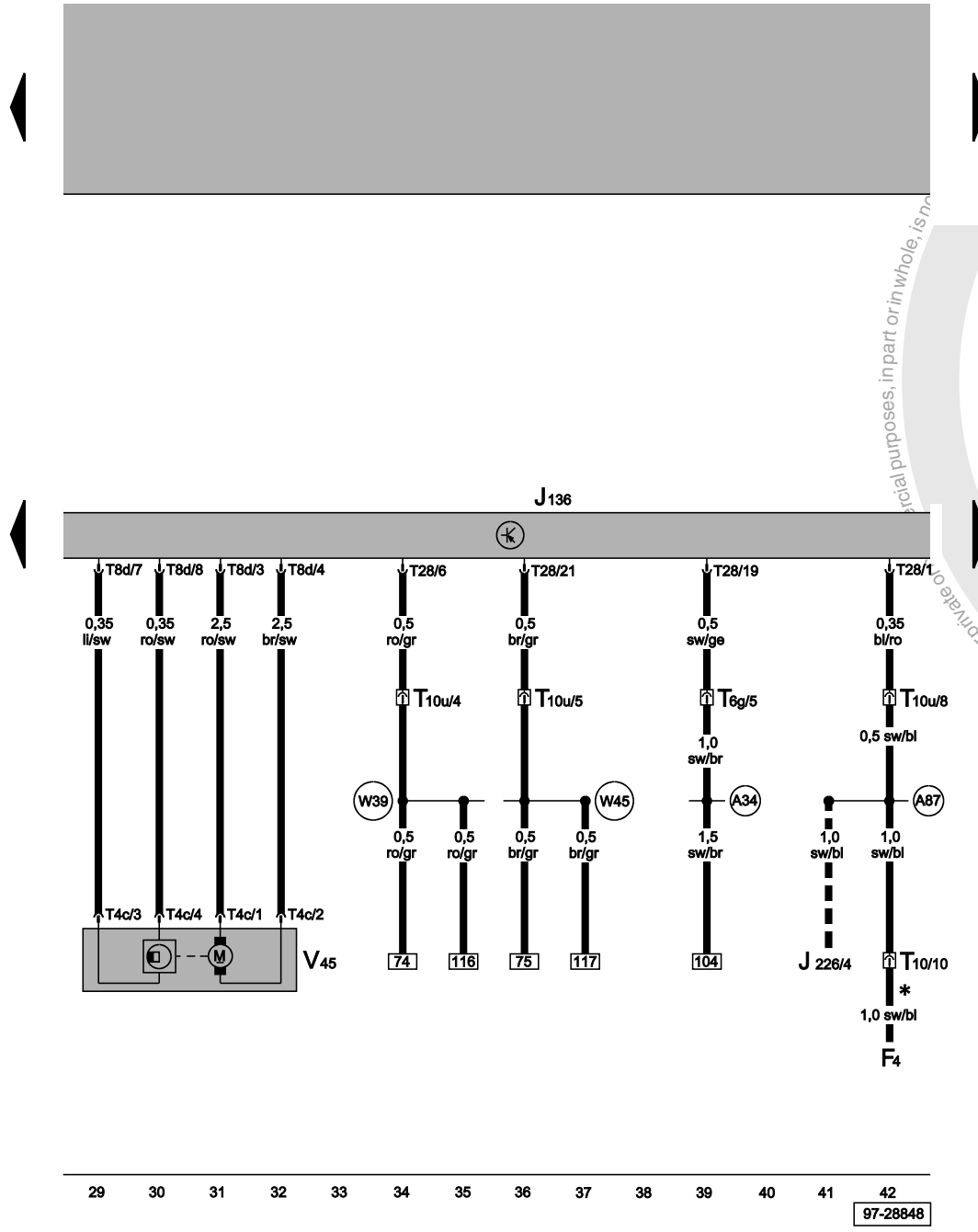
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Seat adjustment (with memory) control unit, backrest (top) adjustment motor

- F4 Reversing light switch
- J136 Seat adjustment with memory control unit, under driver's seat
- J226 Starter inhibitor and reversing light relay
- T4c 4-pin connector
- T6g 6-pin connector, red, under driver's seat
- T8d 8-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T10u 10-pin connector, brown, connector point left A-pillar
- T28 28-pin connector
- V45 Backrest adjustment motor, driver's seat

- A34 Connection (75x), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness
- W39 Connection -1- (mirror memory), in floor wiring harness
- W45 Connection -2- (mirror memory), in floor wiring harness

- * Only models with manual gearbox
- Only models with automatic gearbox

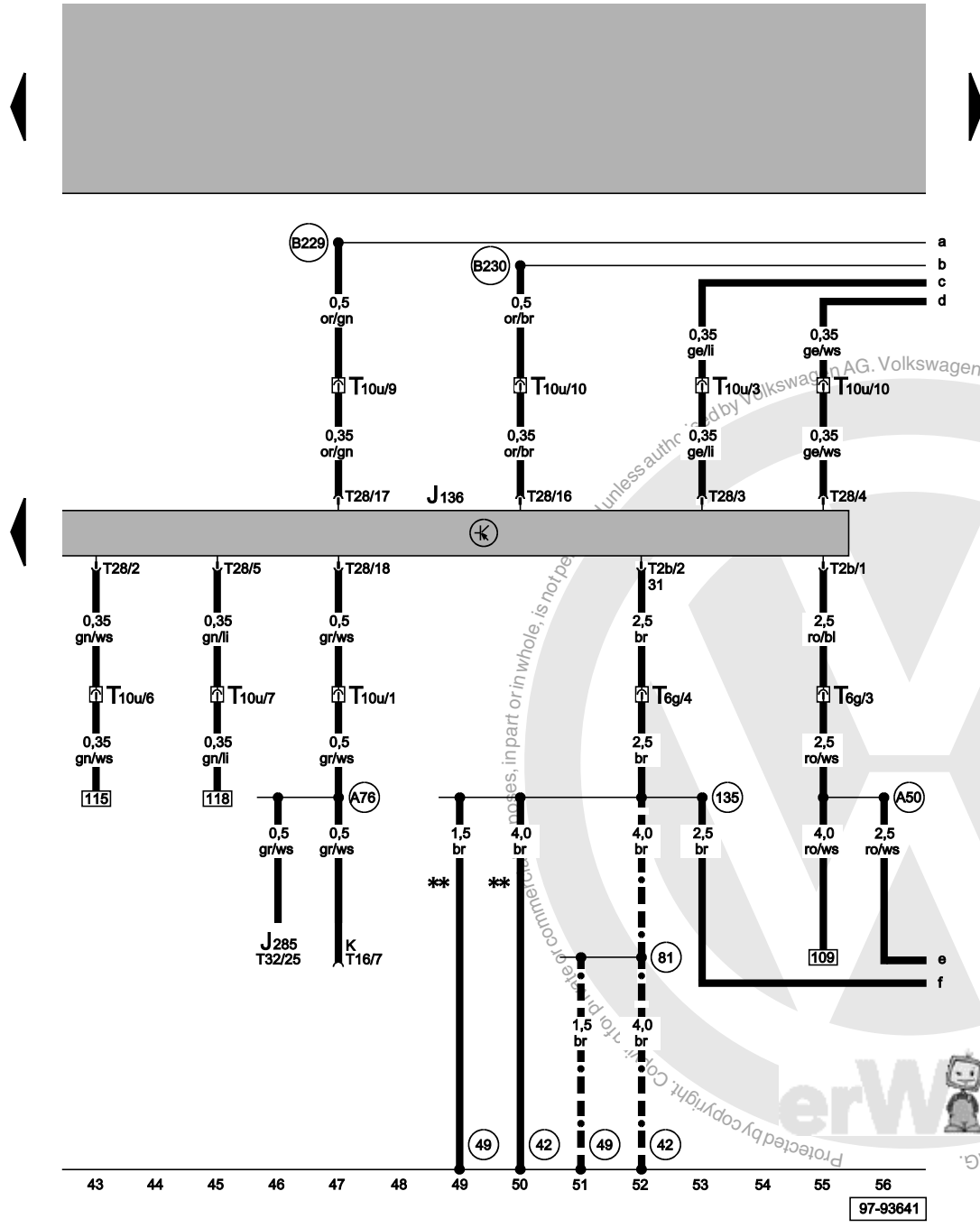


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Seat adjustment (with memory) control unit, self-diagnosis connection

- J136 Seat adjustment with memory control unit, under driver's seat
- J285 Control unit with display in dash panel insert
- T2b 2-pin connector
- T6g 6-pin connector, red, under driver's seat
- T10u 10-pin connector, brown, connector point left A-pillar
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T28 28-pin connector
- T32 32-pin connector, blue

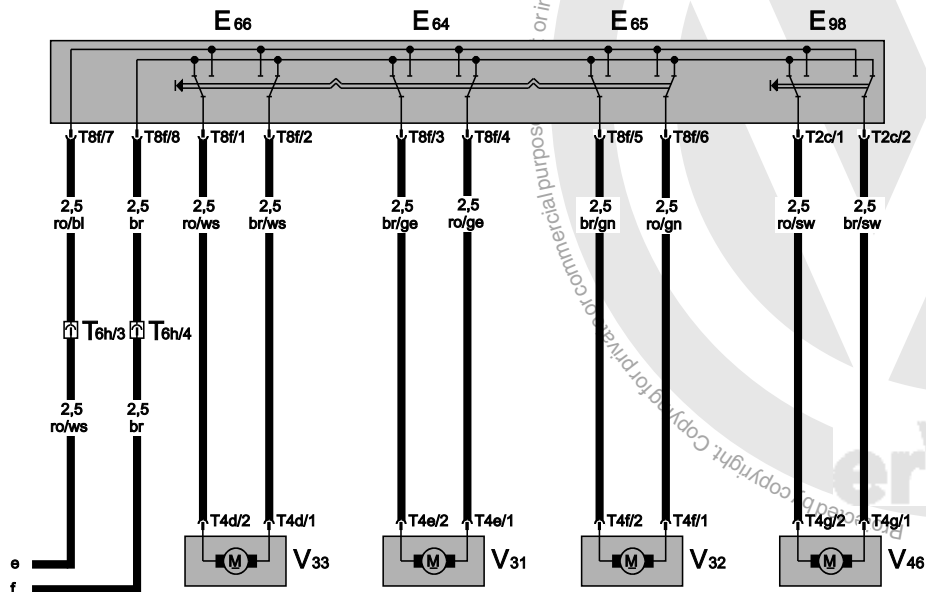
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- A50 Positive (+) connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness
- ** From May 2000
- Up to April 2000



97-93641

Seat adjustment front passenger's seat

- E64 Longitudinal adjustment switch, front passenger's seat
- E65 Front height adjustment switch, front passenger's seat
- E66 Rear height adjustment adjustment switch, front passenger's seat
- E98 Backrest adjustment switch, front passenger's seat
- T2c 2-pin connector, black
- T4d 2-pin connector, black, under front passenger's seat
- T4e 2-pin connector, black, under front passenger's seat
- T4f 2-pin connector, black, under front passenger's seat
- T4g 2-pin connector, black, under front passenger's seat
- T6h 6-pin connector, red, under front passenger's seat
- T8f 8-pin connector
- V31 Longitudinal adjustment motor, front passenger's seat
- V32 Front height adjustment motor, front passenger's seat
- V33 Rear height adjustment motor, front passenger's seat
- V46 Backrest adjustment motor, front passenger's seat

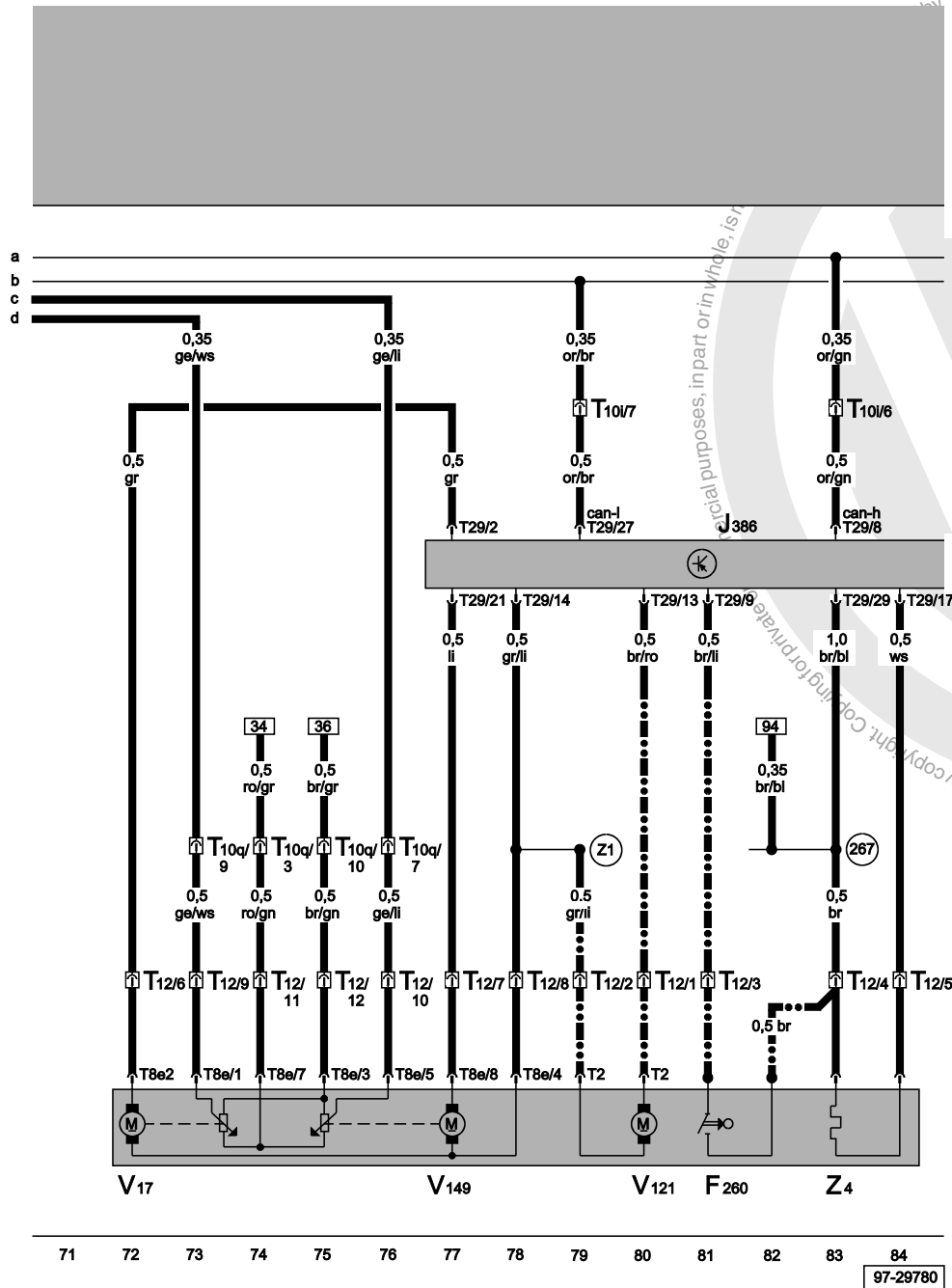


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Door control unit (driver's side), electrically adjustable exterior mirrors for driver's door

- F260 Mirror folding system contact switch, driver's side
- J386 Door control unit, driver's side
- T2 2-pin connector
- T8e 8-pin connector
- T10i 10-pin connector, black, connector point left A-pillar
- T10q 10-pin connector, blue, connector point left A-pillar
- T12 12-pin connector, in driver's door
- T29 29-pin connector
- V17 Mirror adjustment motor, driver' side
- V121 Folding mirror motor, driver's side
- V149 Mirror adjustment motor, driver's side
- Z4 Heated exterior mirror, driver's side

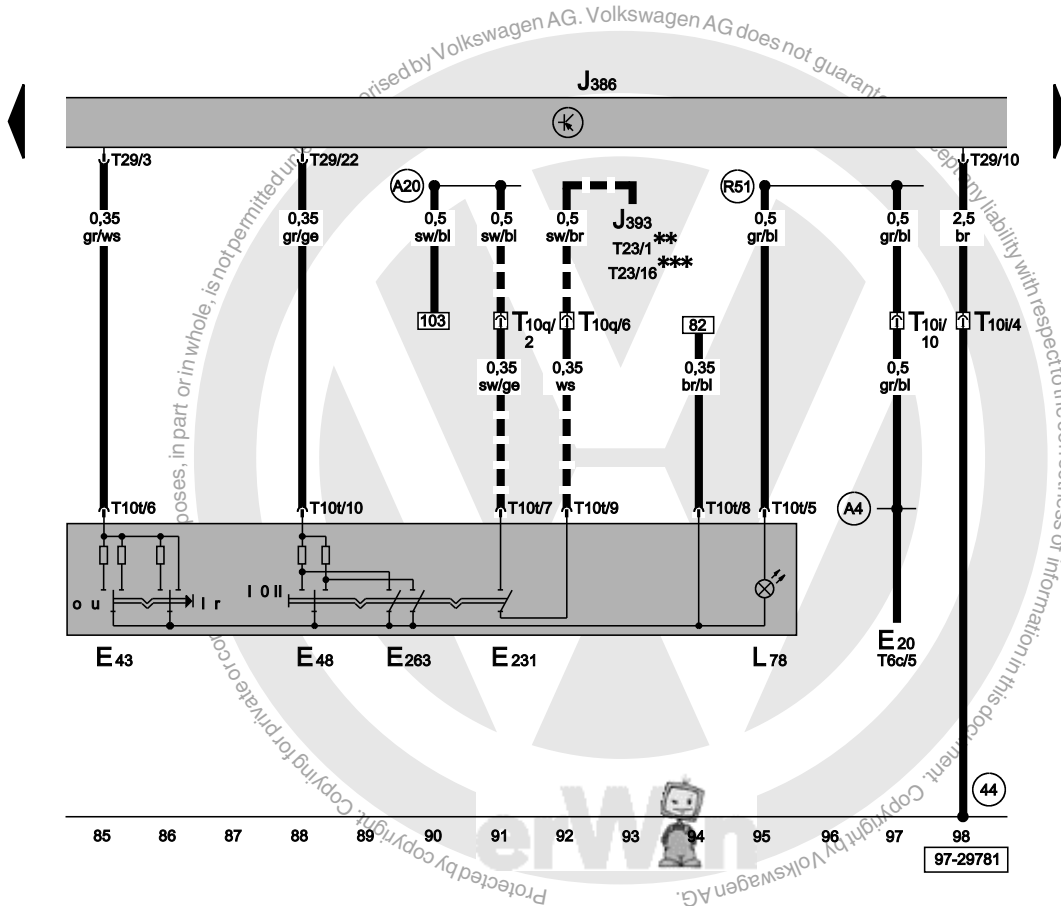
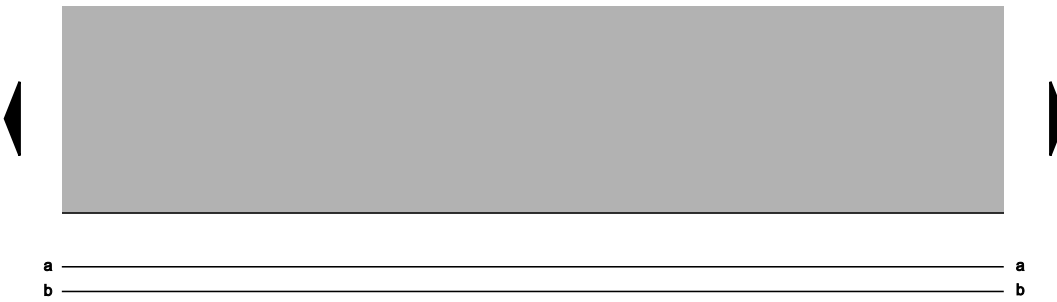
- 267 Earth connection -2-, in door wiring harness - driver's side
- Z1 Connection -2-, in mirror adjustment/heating wiring harness
- Fold in (retraction) function for some export countries only



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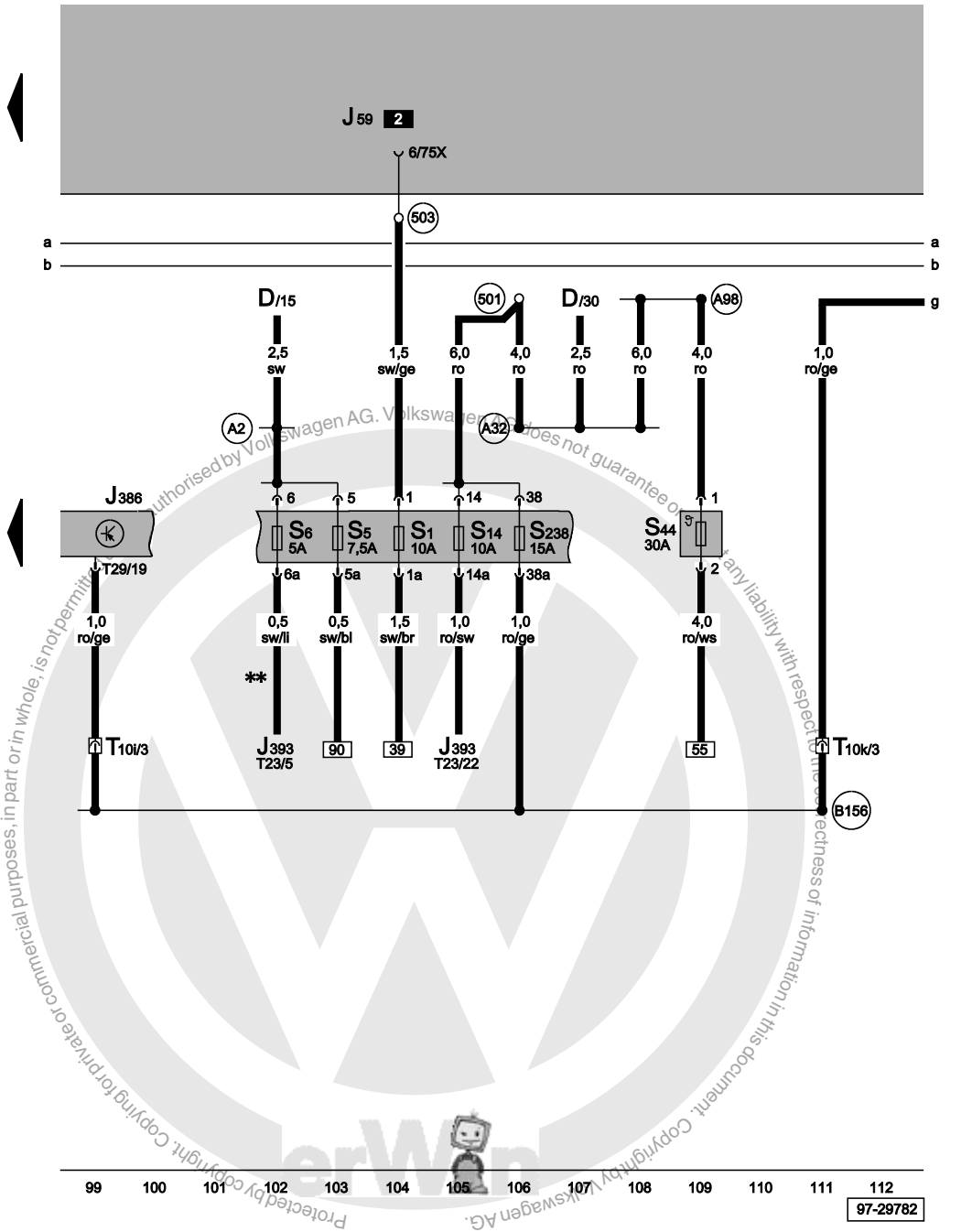
Door control unit (driver's side), mirror adjustment switch, mirror fold system switch

- E20 Switches and instruments, lighting control
- E43 Mirror adjustment switch
- E48 Mirror adjustment change-over switch
- E231 Exterior mirror heating button
- E263 Mirror fold system switch
- J386 Door control unit, driver's side
- J393 Convenience system central control unit
- L78 Mirror adjustment switch illumination
- T6c 6-pin connector
- T10i 10-pin connector, black, connector point left A-pillar
- T10q 10-pin connector, blue, connector point left A-pillar
- T10t 10-pin connector
- T23 23-pin connector
- T29 29-pin connector



- (44) Earth point, lower part of left A-pillar
- (A4) Positive (+) connection (58b), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (R51) Connection (58b), in door wiring harness - driver's side
- ** Up to April 2001
- *** From May 2001
- Only models with separated mirror heating

Door control unit (driver's side), door control unit (front passenger's side)



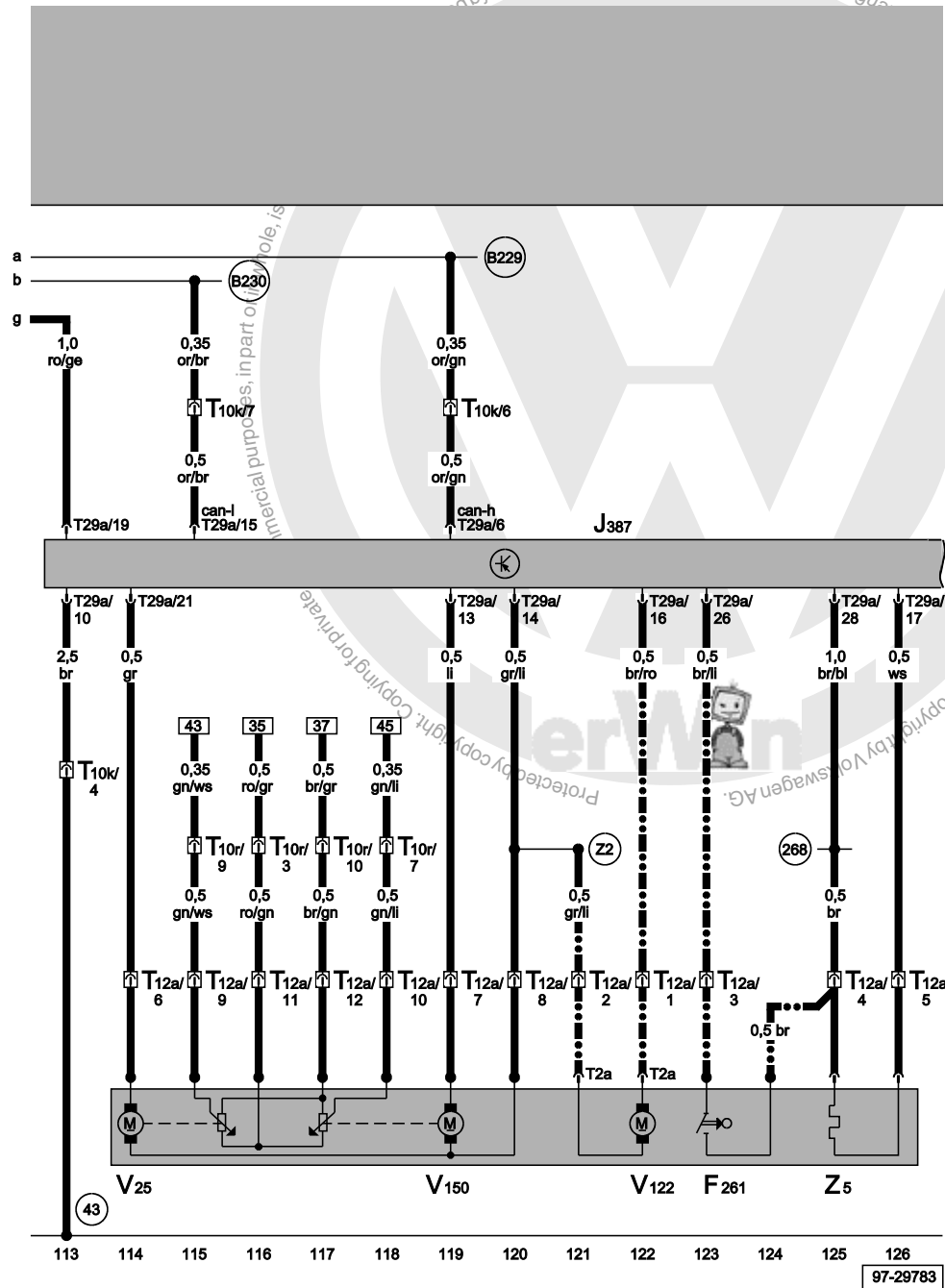
- D Ignition/starter switch
- J59 X contact relief relay
- J386 Door control unit, driver's side
- J393 Convenience system central control unit, behind dash panel, left
- S1 Fuse in fuse box
- S5 Fuse in fuse box
- S6 Fuse in fuse box
- S14 Fuse in fuse box
- S44 Seat adjustment thermo-fuse 1, on position relay carrier above relay plate
- S238 Fuse 38 in fuse box
- T10i 10-pin connector, black, connector point left A-pillar
- T10k 10-pin connector, black, connector point right A-pillar
- T23 23-pin connector
- T29 29-pin connector
- 501 Screw connection -2- (30), on relay plate
- 503 Screw connection (75X), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection-4-(30), in dash panel wiring harness
- B156 Positive (+) connection (30a), in interior wiring harness
- ** Up to April 2001

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Door control unit (front passenger's side), electrically adjustable exterior mirrors for front passenger's door

- F261 Mirror folding system contact switch, front passenger's side
- J387 Door control unit, front passenger's side
- T2a 2-pin connector
- T10k 10-pin connector, black, connector point right A-pillar
- T10r 10-pin connector, blue, connector point right A-pillar
- T12a 12-pin connector, in front passenger's door
- T29a 29-pin connector
- V25 Mirror adjustment motor, front passenger's side
- V122 Folding mirror motor, front passenger's side
- V150 Mirror adjustment motor, front passenger's side
- Z5 Heated exterior mirror, front passenger's side

- 43 Earth point, lower part of right A pillar
- 268 Earth connection -2-, in door wiring harness - front passenger's side
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness
- Z2 Connection -2-, in mirror adjustment wiring harness
- Fold in (retraction) function for some export countries only



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Basic equipment, Golf and Bora

from May 2000

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

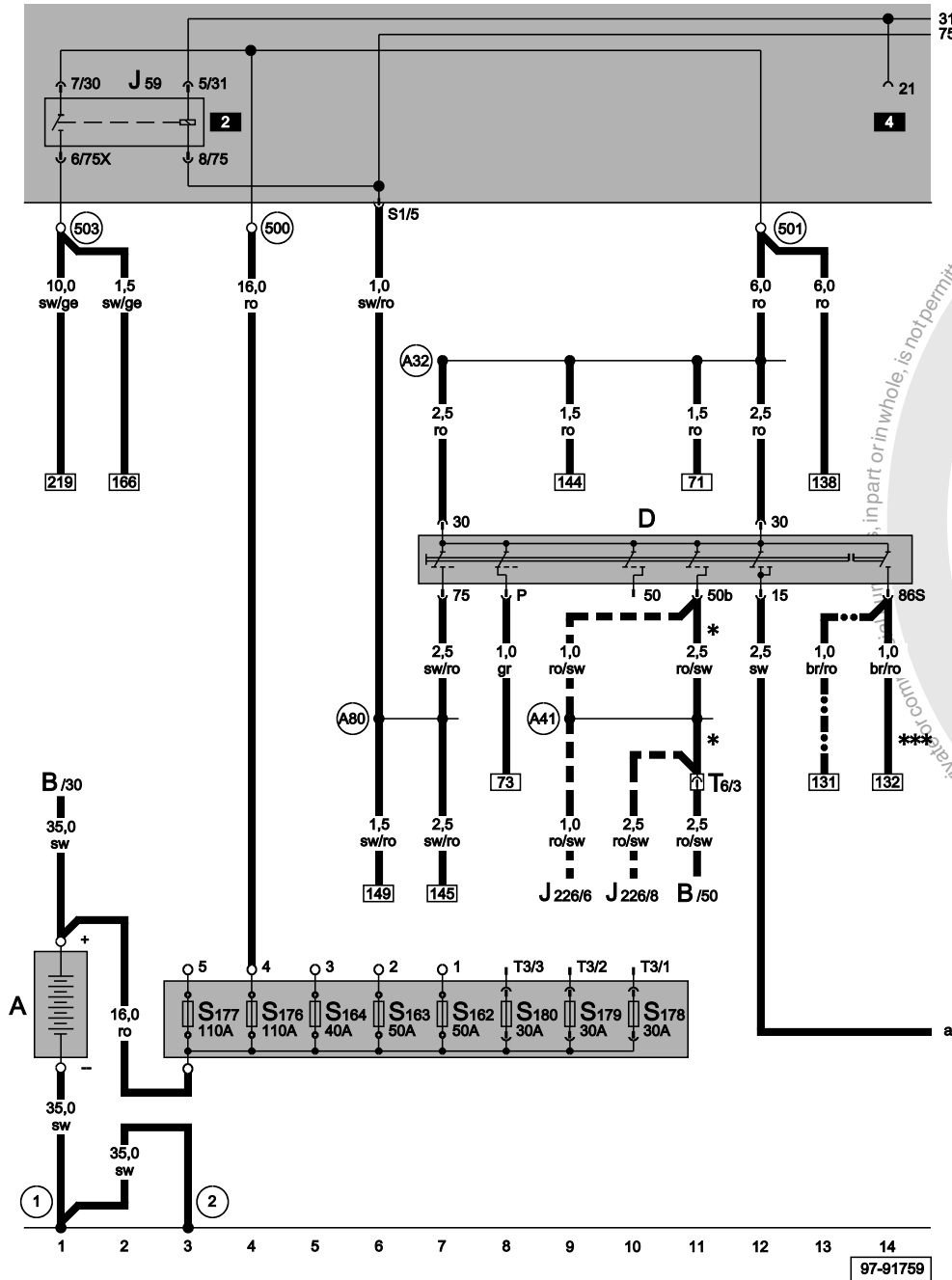
For information concerning

◆ Fault Finding Programs

⇒ guided fault finding



Battery, ignition/starter switch, X-contact relief relay



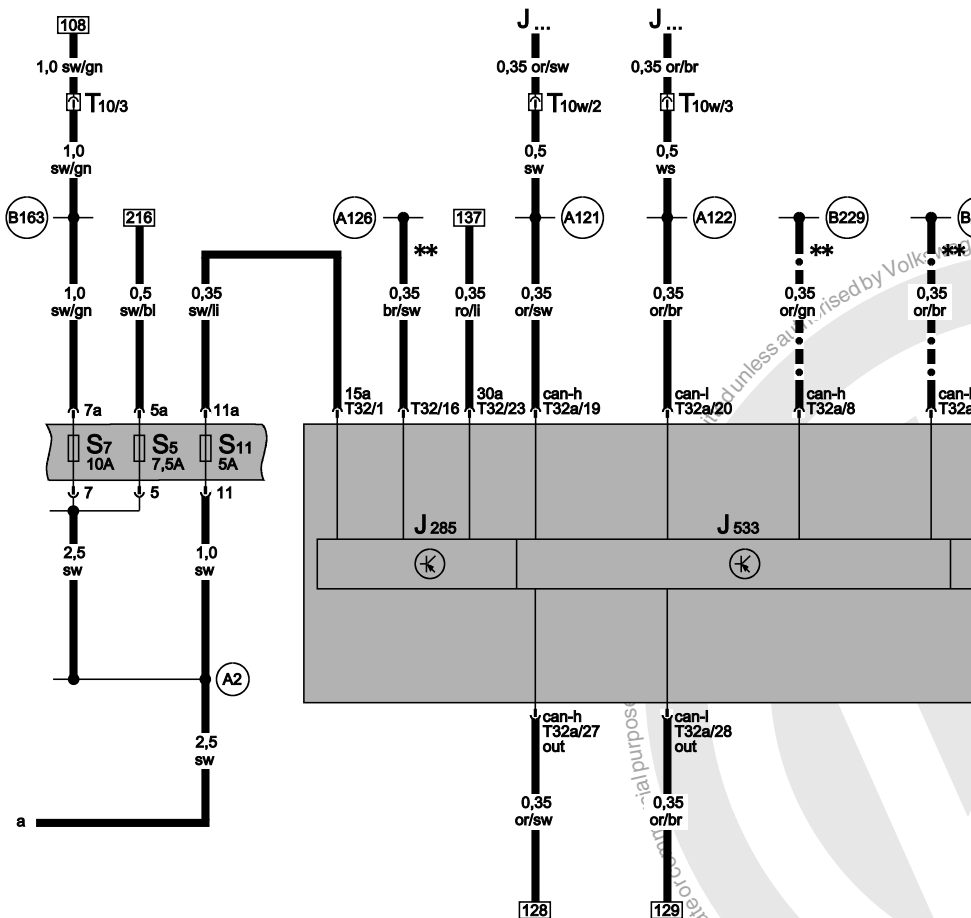
- A Battery
 - B Starter
 - D Ignition/starter switch
 - J59 X-contact relief relay
 - J226 Starter inhibitor and reversing light relay
 - S162 Fuse 1 (30) in fuse holder on battery
 - S163 Fuse 2 (30) in fuse holder on battery
 - S164 Fuse 3 (30) in fuse holder on battery
 - S176 Fuse 4 (30) in fuse holder on battery
 - S177 Fuse 5 (30) in fuse holder on battery
 - S178 Fuse 6 (30) in fuse holder on battery
 - S179 Fuse 7 (30) in fuse holder on battery
 - S180 Fuse 8 (30) in fuse holder on battery
 - T3 3-pin connector
 - T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 1 Earth strap, battery - body
 - 2 Earth strap, gearbox - body
 - 500 Screw connection 1 (30), on relay plate
 - 501 Screw connection 2 (30), on relay plate
 - 503 Screw connection (75x), on relay plate
 - A32 Positive connection (30), in dash panel wiring harness
 - A41 Positive connection (50), in dash panel wiring harness, (models with petrol engine only, up to April 2001)
 - A80 Connection 1 (X), in dash panel wiring harness
 - * only models with manual gearbox
 - models with automatic gearbox only
 - *** from November 2001
 - up to October 2001

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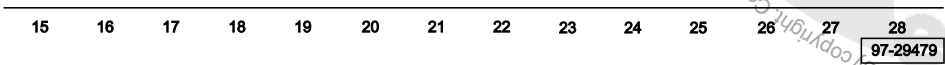
Dash panel insert

- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- J... Engine control units
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- S11 Fuse 11 in fuse holder
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- (A2) Positive connection (15), in dash panel wiring harness
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- (A126) Connection (rear lid contact switch), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- (B229) Connection (high bus), in interior wiring harness
- (B230) Connection (low bus), in interior wiring harness
- ** ⇒ Current Flow Diagram convenience system/central locking from May 2001
- .-.-

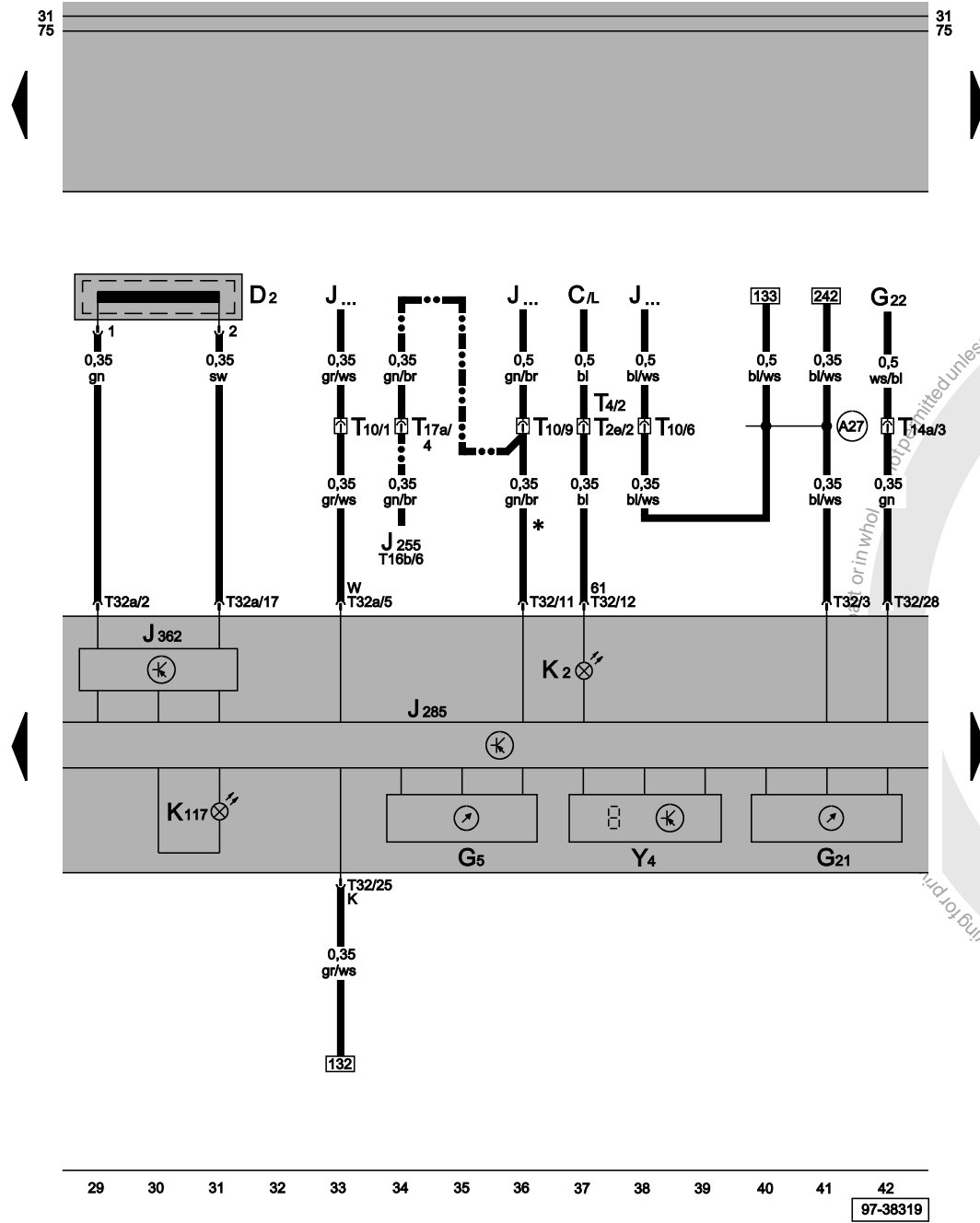


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Dash panel insert, immobilizer, rev. counter, odometer display, speedometer, alternator warning lamp

- C Alternator
- D2 Immobilizer reader coil
- G5 Rev. counter
- G21 Speedometer
- G22 Speedometer sender, on gearbox
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J362 Immobilizer control unit
- J... Engine control units
- K2 Alternator warning lamp
- K117 Immobilizer warning lamp
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- Y4 Odometer display
- A27 Connection (speed signal), in dash panel wiring harness
- * Revolution signal engine control unit up to April 2002 only models with Climatronic



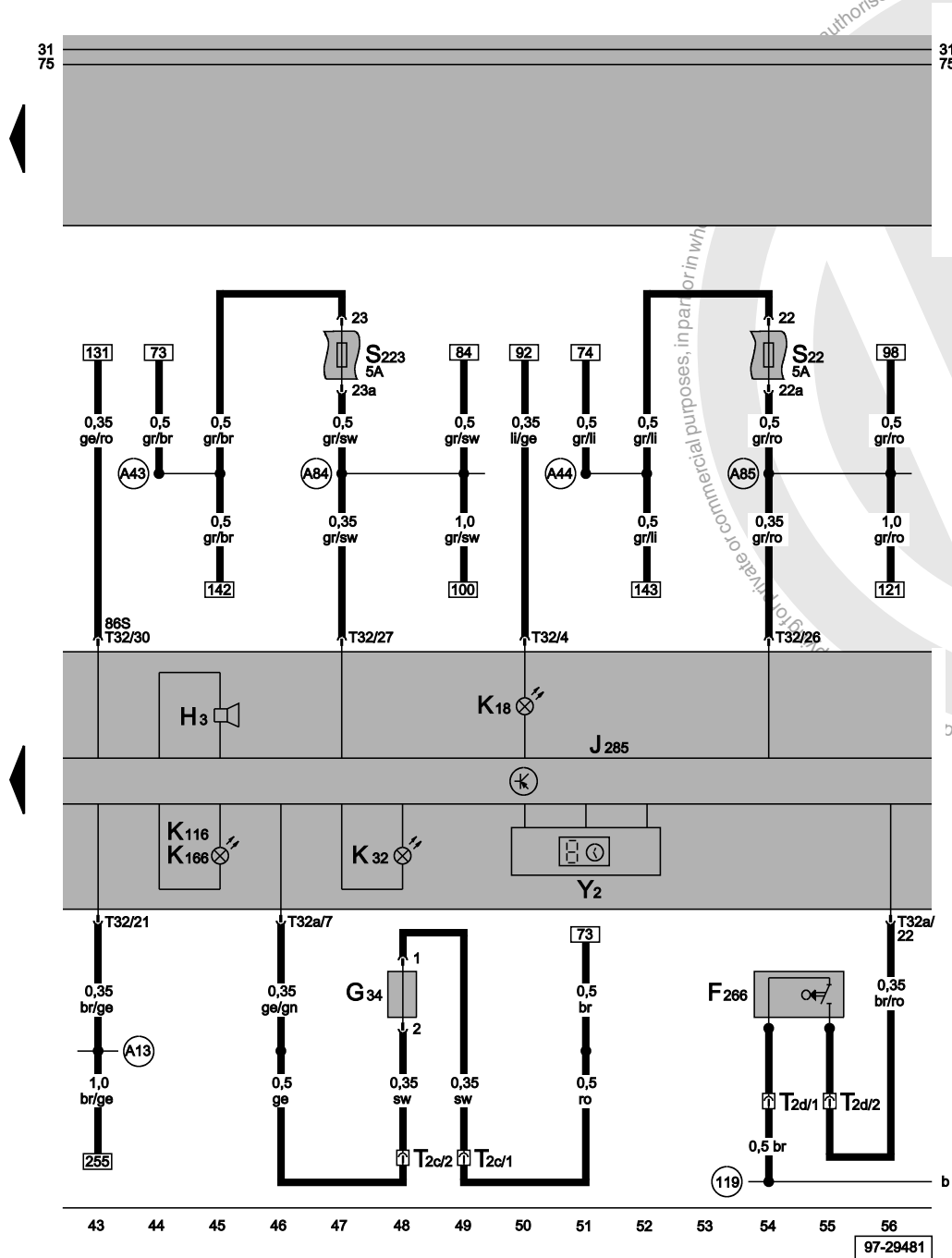
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Dash panel insert, trailer operation warning lamp, digital clock, bonnet contact switch, front left brake pad wear sender, brake pad warning lamp

- F266 Bonnet contact switch, in lock part
- G34 Front left brake pad wear sender
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K18 Trailer operation warning lamp
- K32 Brake pad warning lamp
- K116 Rear lid open warning lamp (up to April 2001)
- K166 Door open warning lamp (from May 2001)
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T2c 2-pin connector, near front left brake pad wear sender
- T2d 2-pin connector, near right headlight
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- Y2 Digital clock

- 119 Earth connection 1, in headlight wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness

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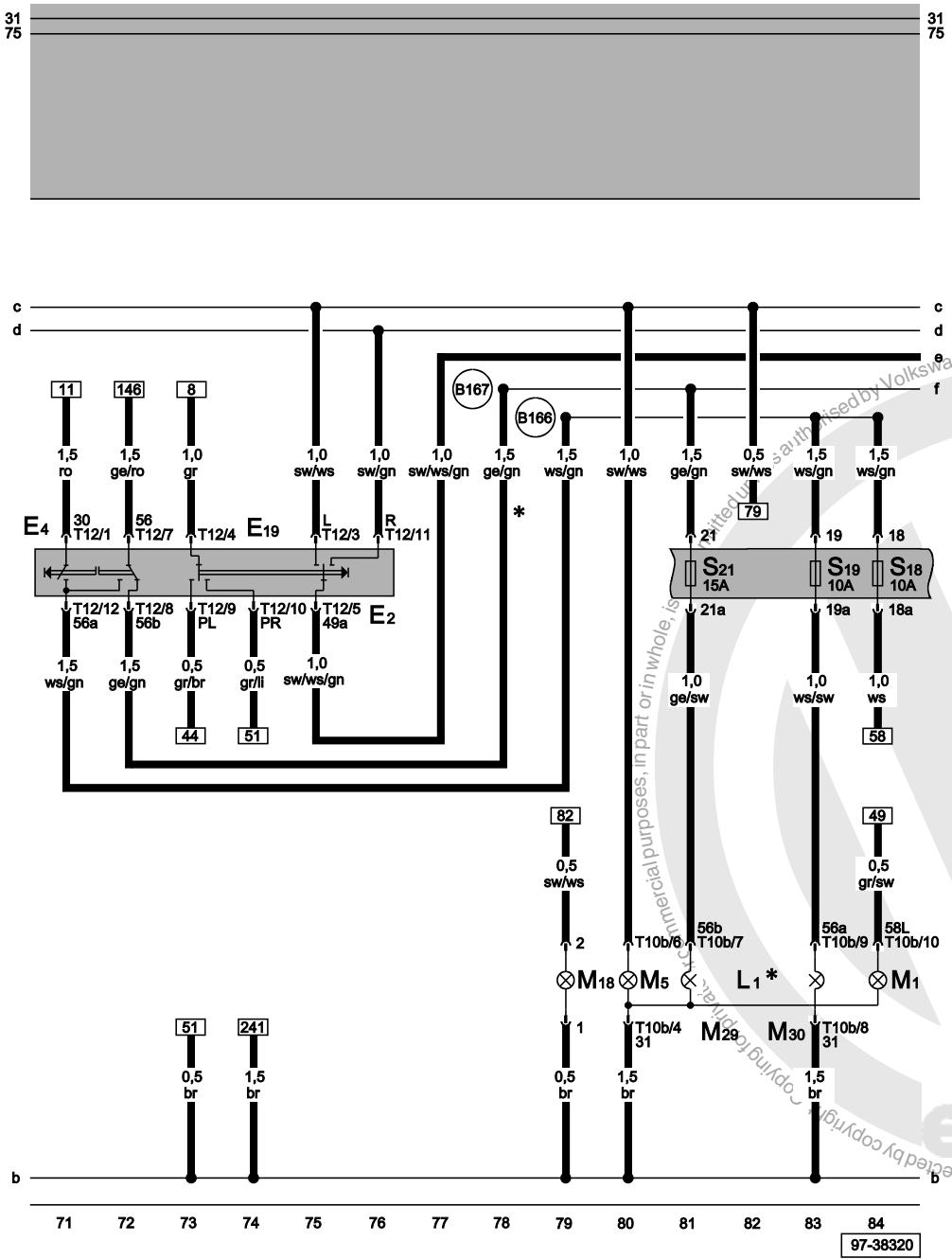


97-29481

Turn signal switch, headlight dipper/flasher switch, parking light switch, front left headlight, front left turn signal

- E2 Turn signal switch
- E4 Headlight dipper/flasher switch
- E19 Parking light switch
- L1 Left twin filament bulb*
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left headlight dipped beam bulb (only Golf)
- M30 Left headlight main beam bulb (only Golf)
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness
- * only Bora



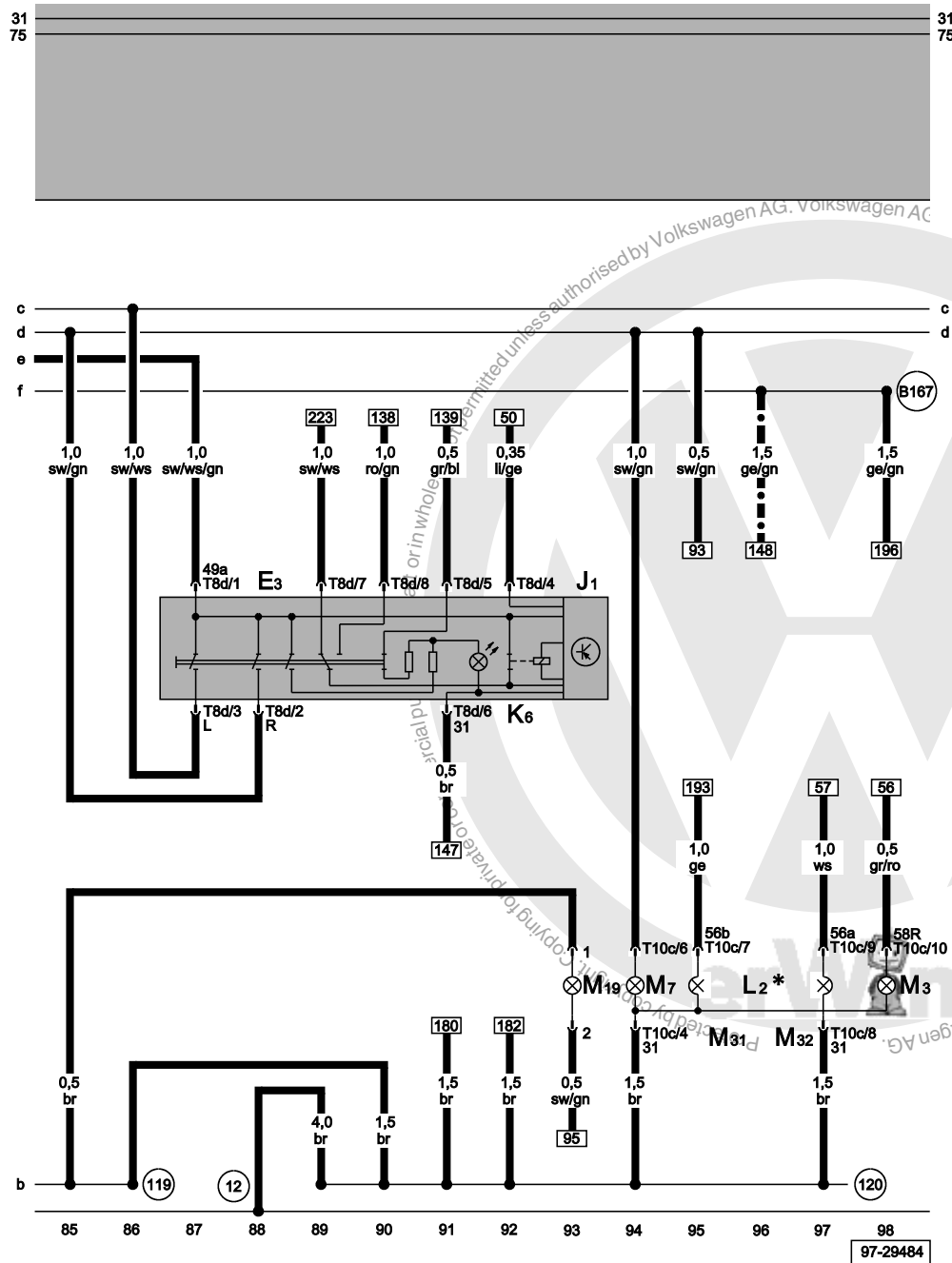
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Hazard warning light switch, turn signal relay, front right headlight, front right turn signal

- E3 Hazard warning light switch
- J1 Turn signal relay
- K6 Hazard warning light system warning lamp
- L2 Right twin filament bulb*
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right headlight dipped beam bulb (only Golf)
- M32 Right headlight main beam bulb (only Golf)
- T8d 8-pin connector**
- T10c 10-pin connector, on right headlight

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- B167 Connection (56b), in interior wiring harness

* only Bora
 ** Connection numbering of turn signal relay can vary, see fault finding programme!
 ● only Golf



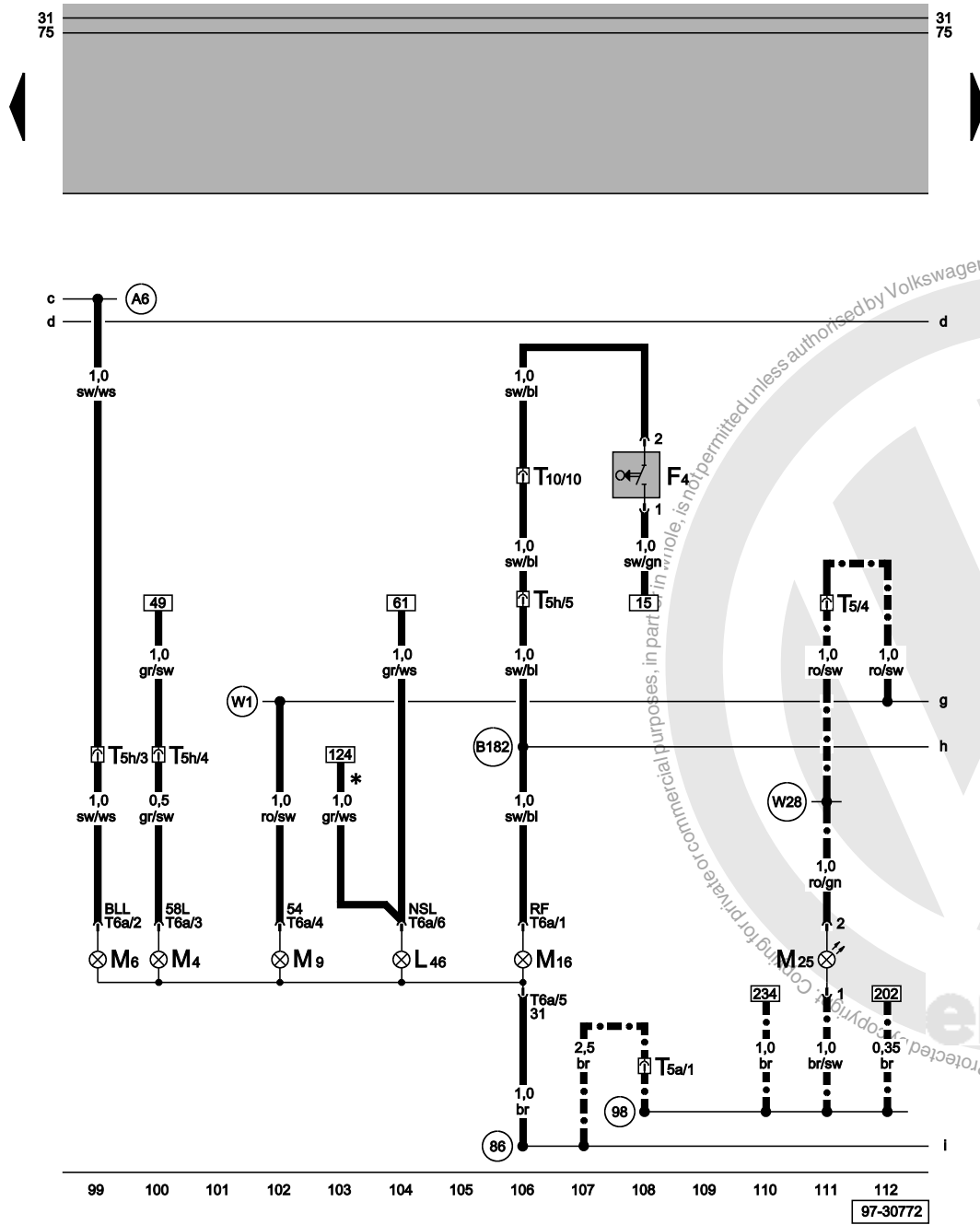
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Left tail light, left brake light, rear left turn signal, reversing lights switch, left reversing light, rear fog light, high level brake light bulb (Golf)

- F4 Reversing light switch
- L46 Rear left fog light bulb
- M4 Left tail light bulb
- M6 Rear left turn signal bulb
- M9 Left brake light bulb
- M16 Left reversing light bulb
- M25 High level brake light bulb (32 LED's)
- T5 5-pin connector, black, coupling station on left C-pillar
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

- 86 Earth connection 1, in rear wiring harness
- 98 Earth connection, in rear lid wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- W28 Positive connection 2 (54), in rear wiring harness
- * only Bora
- .-.- only Golf

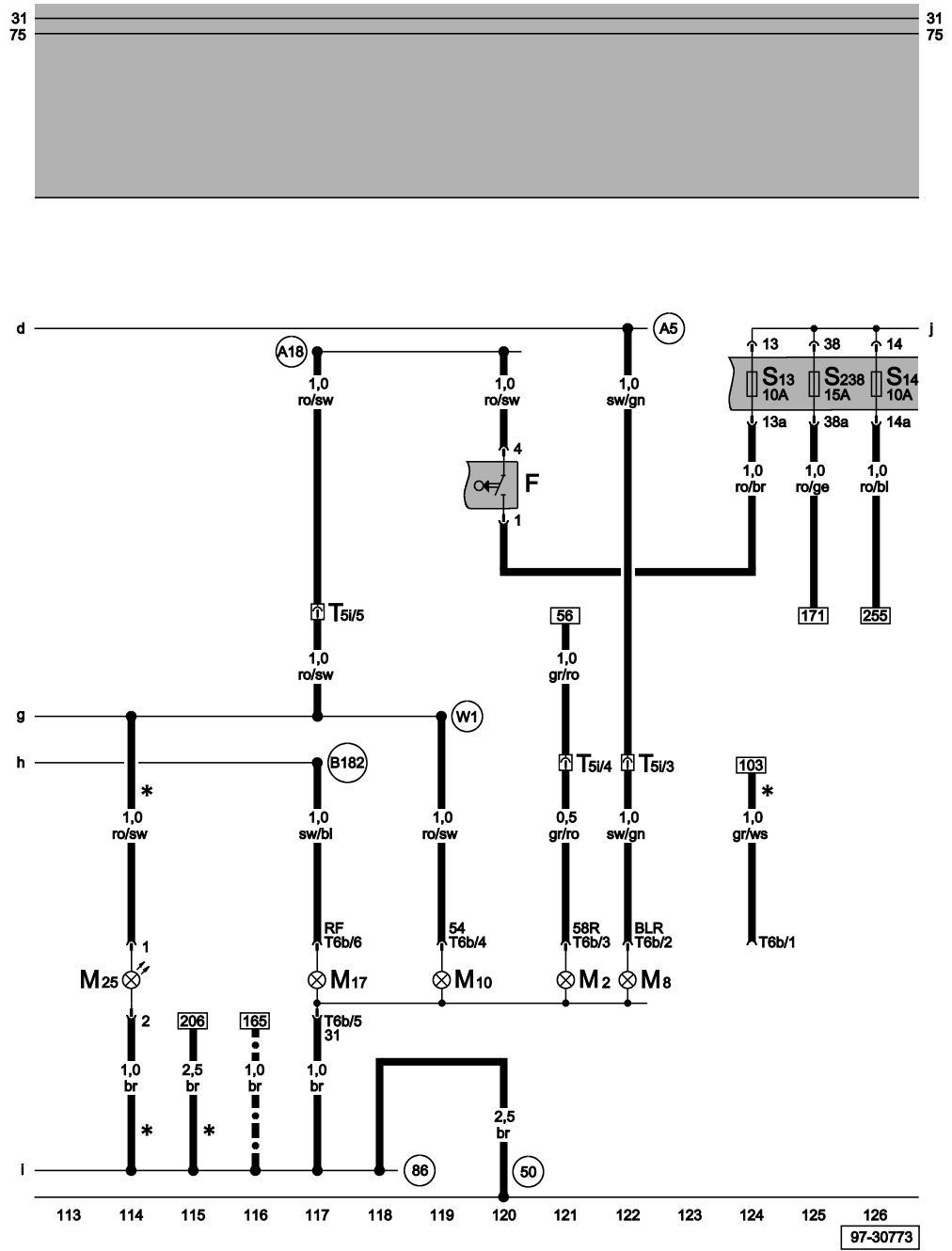
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97-30772

Right tail light, right brake light, rear right turn signal, right reversing light, brake light switch, high level brake light (Bora)

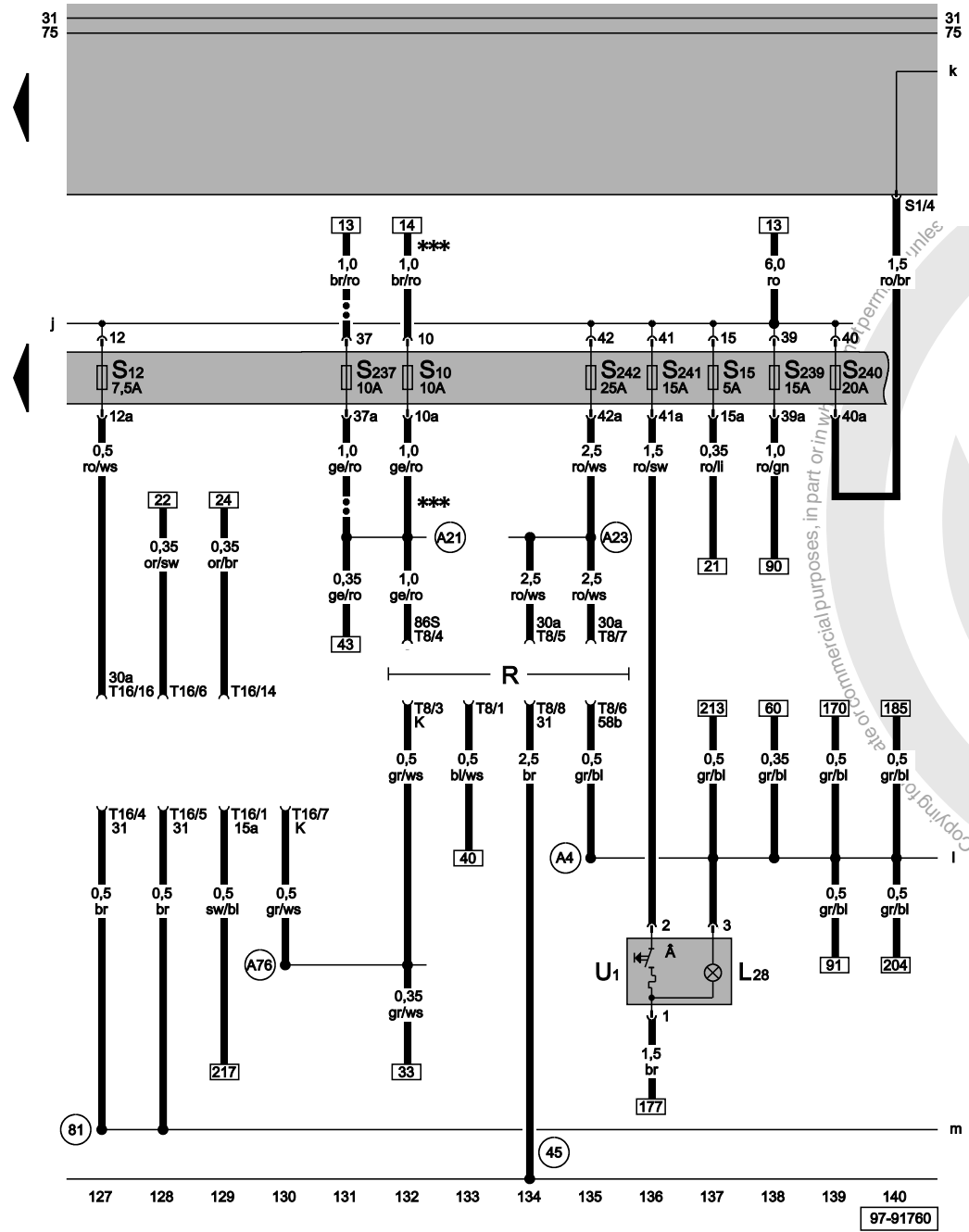
- F Brake light switch
- M2 Right tail light bulb
- M8 Rear right turn signal bulb
- M10 Right brake light bulb
- M17 Right reversing light bulb
- M25 High level brake light bulb (18 LED's)
- S13 Fuse 13 in fuse holder
- S14 Fuse 14 in fuse holder
- S238 Fuse 38 in fuse holder
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6b 6-pin connector
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- * only Bora
- .-.- only Golf



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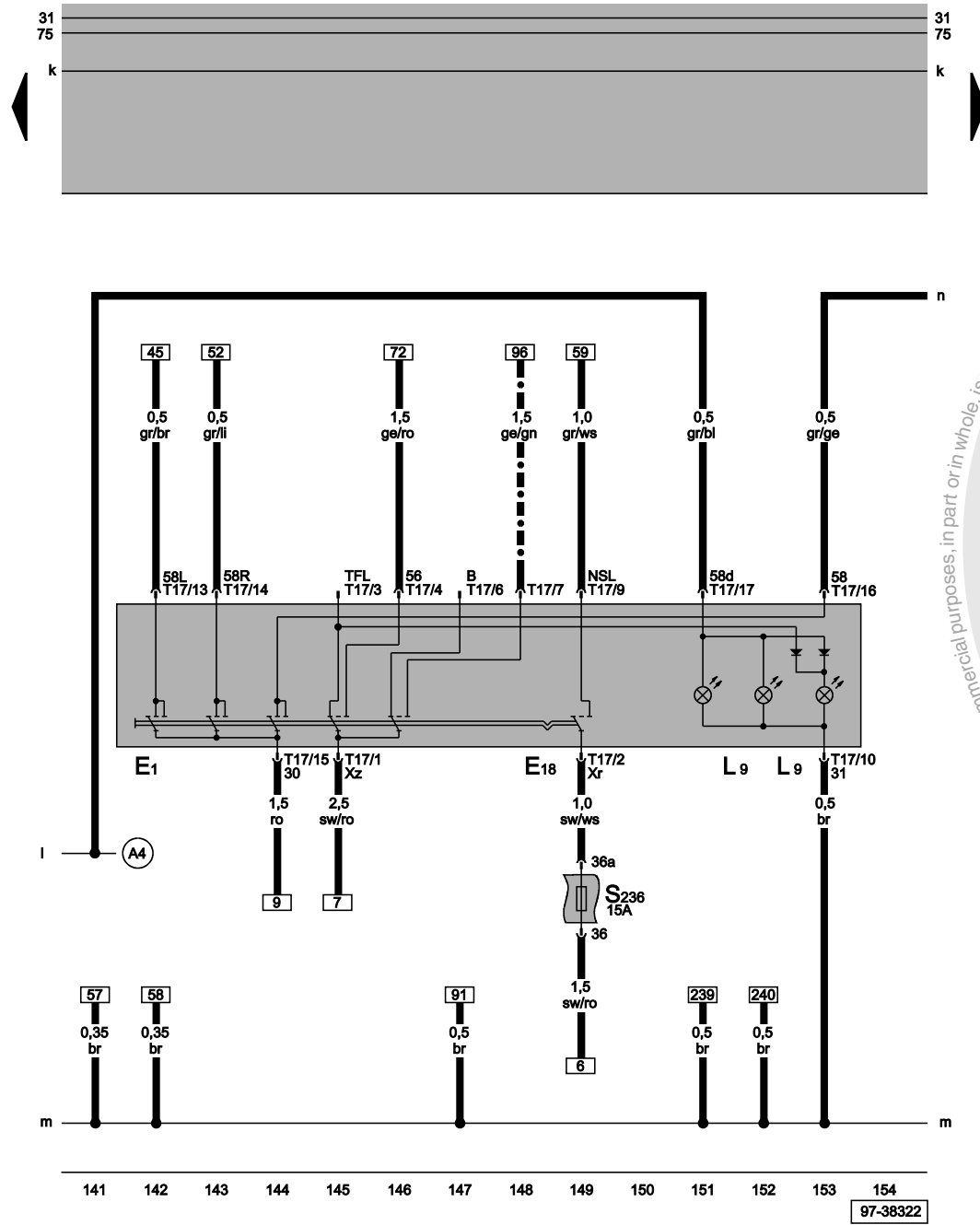
Self-diagnosis connection, connection for radio, cigarette lighter

- L28 Cigarette lighter illumination bulb
 - R Radio**
 - S10 Fuse 10 in fuse holder
 - S12 Fuse 12 in fuse holder
 - S15 Fuse 15 in fuse holder
 - S237 Fuse 37 in fuse holder
 - S239 Fuse 39 in fuse holder
 - S240 Fuse 40 in fuse holder
 - S241 Fuse 41 in fuse holder
 - S242 Fuse 42 in fuse holder
 - T8 8-pin connector, on radio (not for radio system 'Delta')
 - T16 16-pin connector, in centre dash panel, self-diagnosis connection
 - U1 Cigarette lighter
- 45 Earth point, centre behind dash panel
 - 81 Earth connection 1, in dash panel wiring harness
 - A4 Positive connection (58b), in dash panel wiring harness
 - A21 Connection (86s), in dash panel wiring harness
 - A23 Connection (30a), in dash panel wiring harness
 - A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** models with radio 'Delta', Current Flow Diagram radio system 'Delta'
 *** from November 2001 up to October 2001



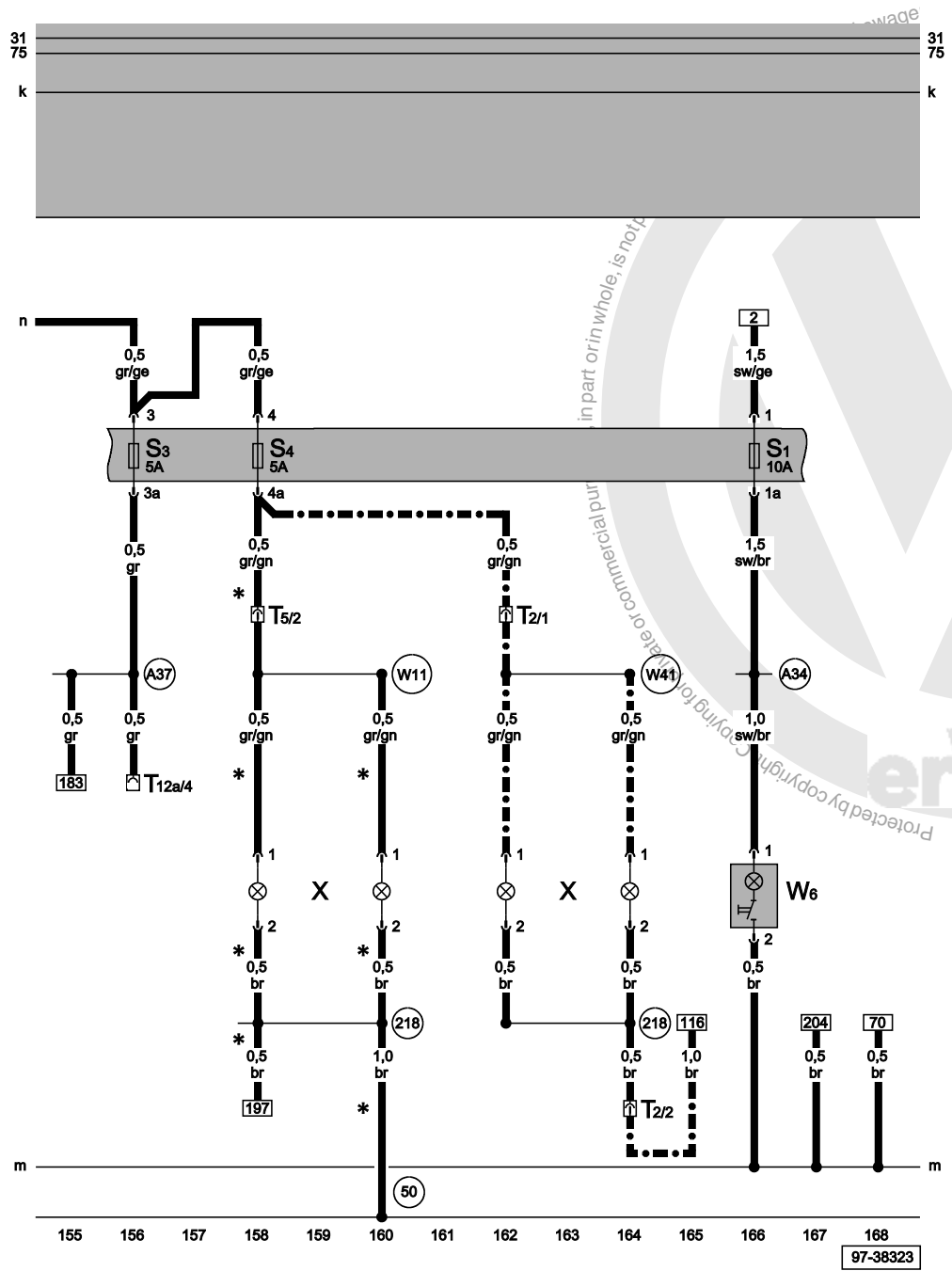
Light switch, rear fog light switch

- E1 Light switch
- E18 Rear fog light switch
- L9 Light switch illumination bulb
- S236 Fuse 36 in fuse holder
- T17 17-pin connector
- A4 Positive connection (58b) in dash panel wiring harness
- only Golf



Glove compartment light, number plate lights

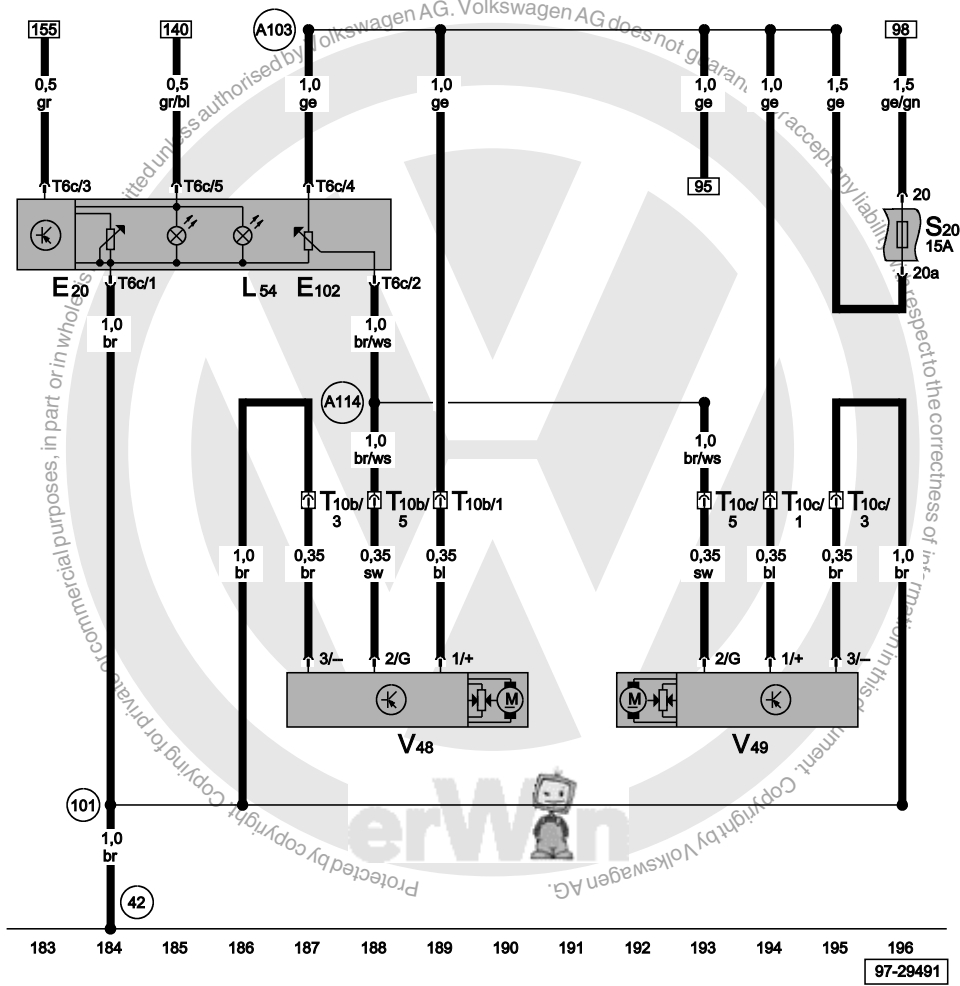
- S1 Fuse 1 in fuse holder
 - S3 Fuse 3 in fuse holder
 - S4 Fuse 4 in fuse holder
 - T2 2-pin connector, on left in luggage compartment
 - T5 5-pin connector, black, coupling station on left C-pillar
 - T12a 12-pin connector, Climatronic connection only
 - W6 Glove compartment light
 - X Number plate lights
-
- 50 Earth point, on left in luggage compartment
 - 218 Earth connection 1, in rear lid wiring harness
 - A34 Connection (75x), in dash panel wiring harness
 - A37 Connection (58a), in dash panel wiring harness
 - W11 Connection (58), in rear lid wiring harness
 - W41 Positive connection (58), in licence plate lights wiring harness
- * only Bora
 -.-.- only Golf



Headlight range control regulator, headlight range control motor, illumination regulators - switches and instruments

- E20 Illumination regulators - switches and instruments
- E102 Headlight range control regulator
- L54 Headlight range control regulator illumination bulb
- S20 Fuse 20 in fuse holder
- T6c 6-pin connector
- T10b 10-pin connector, on left headlight
- T10c 10-pin connector, on right headlight
- V48 Left headlight range control motor
- V49 Right headlight range control motor

- (42) Earth point, next to steering column
- (101) Earth connection, in headlight range adjustment wiring harness
- (A103) Connection 2 (56), in dash panel wiring harness
- (A114) Connection (headlight range control), in dash panel wiring harness

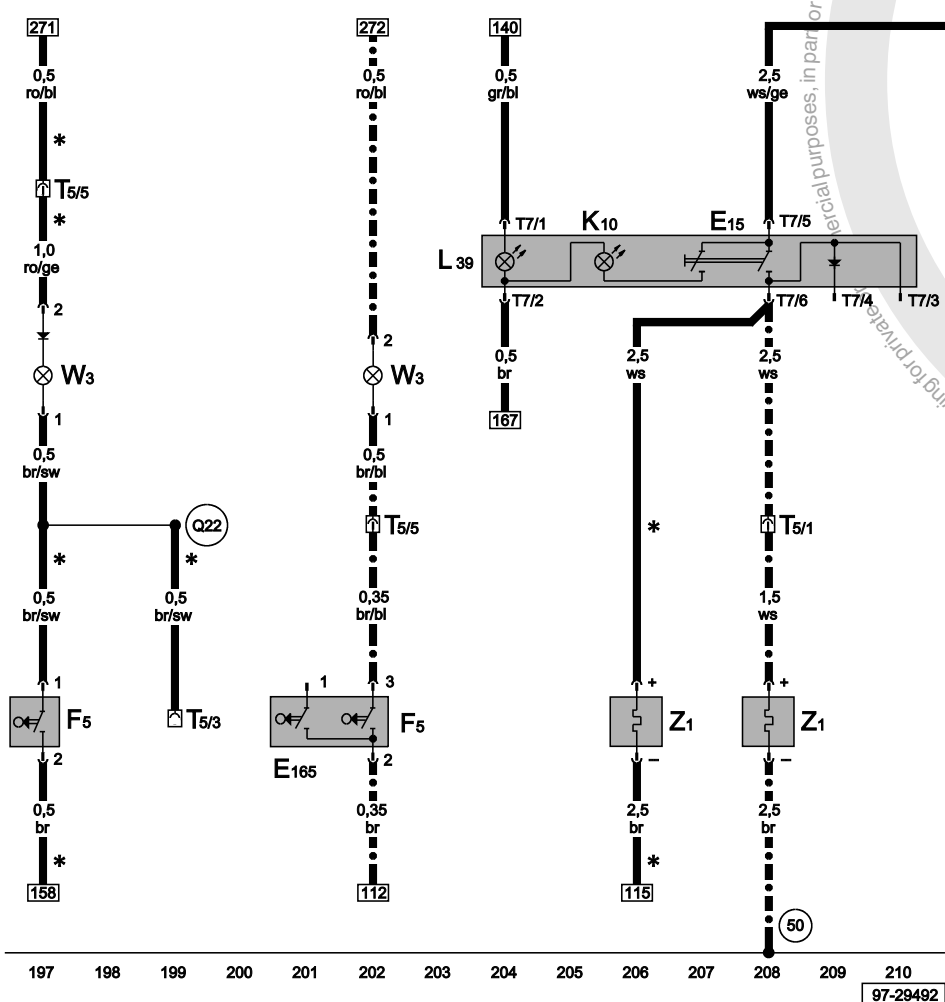


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Heated rear window switch, heated rear window, luggage compartment light

- E15 Heated rear window switch
- E165 Rear lid release switch
- F5 Luggage compartment light switch
- K10 Heated rear window warning lamp
- L39 Heated rear window switch illumination bulb
- T5 5-pin connector, black, coupling station on left C-pillar
- T7 7-pin connector
- W3 Luggage compartment light**
- Z1 Heated rear window

- 50 Earth point, on left in luggage compartment
- Q22 Connection 1, in rear lid wiring harness
- * only Bora
- only Golf
- ** see also convenience electrics/ central locking



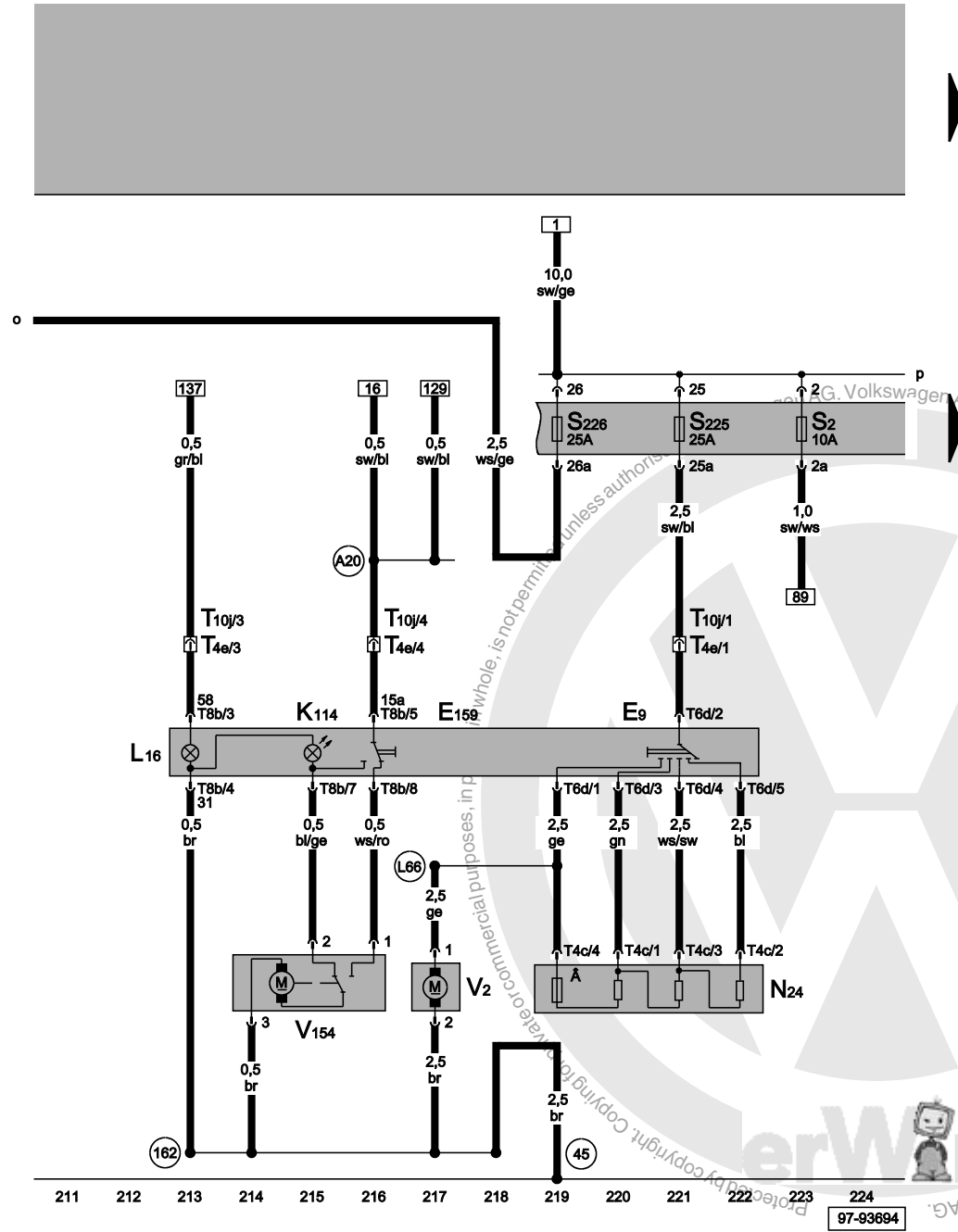
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Fresh air blower switch, fresh air/air recirculation flap switch, fresh air blower, fresh air/recirculated air flap control motor

- E9 Fresh air blower switch
- E159 Fresh air/air recirculation flap switch
- K114 Fresh air and air recirculation warning lamp
- L16 Fresh air regulator illumination bulb
- N24 Fresh air blower series resistor with overheating fuse
- S2 Fuse 2 in fuse holder
- S225 Fuse 25 in fuse holder
- S226 Fuse 26 in fuse holder
- T4c 4-pin connector
- T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
- T6d 6-pin connector
- T8b 8-pin connector
- T10j 10-pin connector, behind centre dash panel (models with air conditioning system)
- V2 Fresh air blower
- V154 Fresh air/recirculated air flap control motor

- 45 Earth point, centre behind dash panel
- 162 Earth connection, in blower motor wiring harness
- A20 Connection (15a), in dash panel wiring harness
- L66 Connection, in heater blower wiring harness

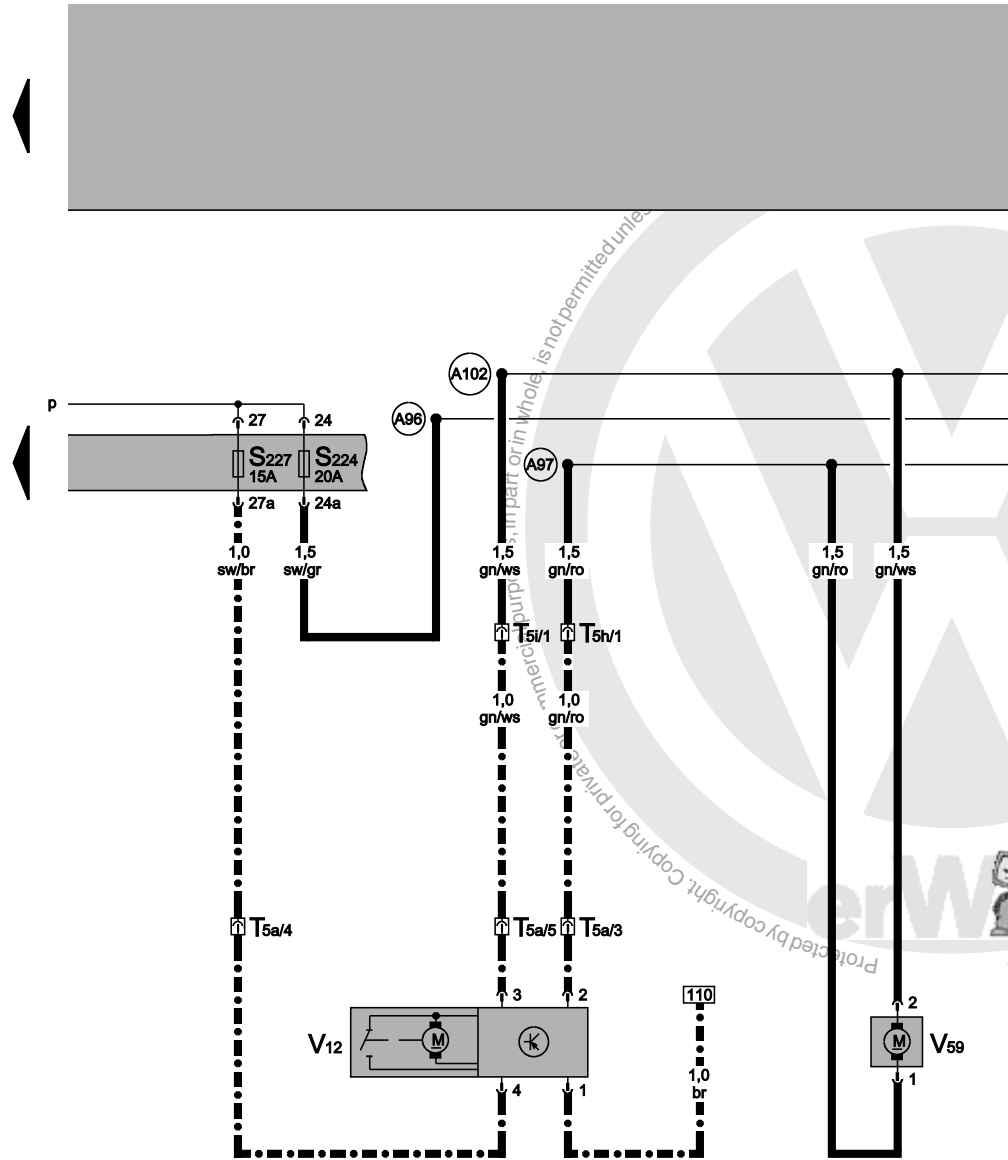
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211 212 213 214 215 216 217 218 219 220 221 222 223 224
97-93694

Rear window wiper motor, windscreen and rear window washer pump

- S224 Fuse 24 in fuse holder
- S227 Fuse 27 in fuse holder
- T5a 5-pin connector, pink, coupling station on left C-pillar
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- V12 Rear window wiper motor
- V59 Windscreen and rear window washer pump
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness
- .-.- only Golf



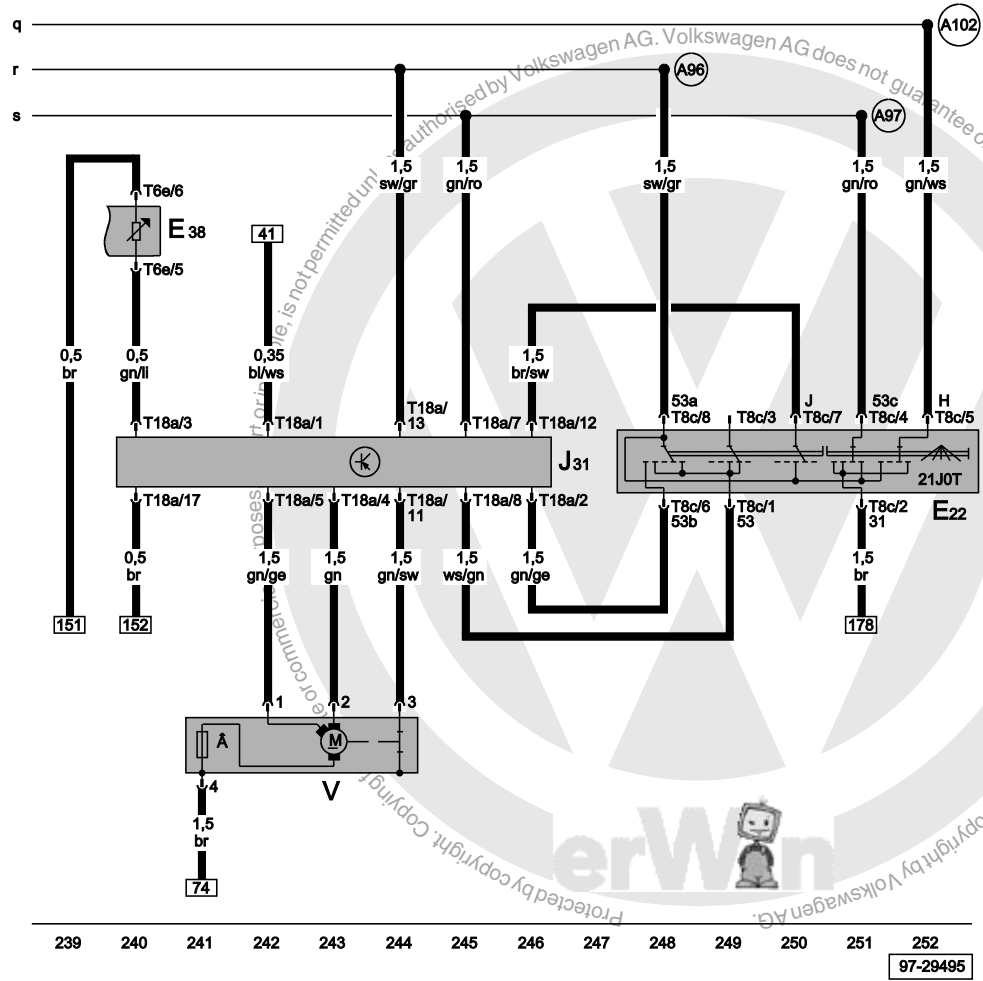
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225 226 227 228 229 230 231 232 233 234 235 236 237 238

97-29494

Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash and wipe relay

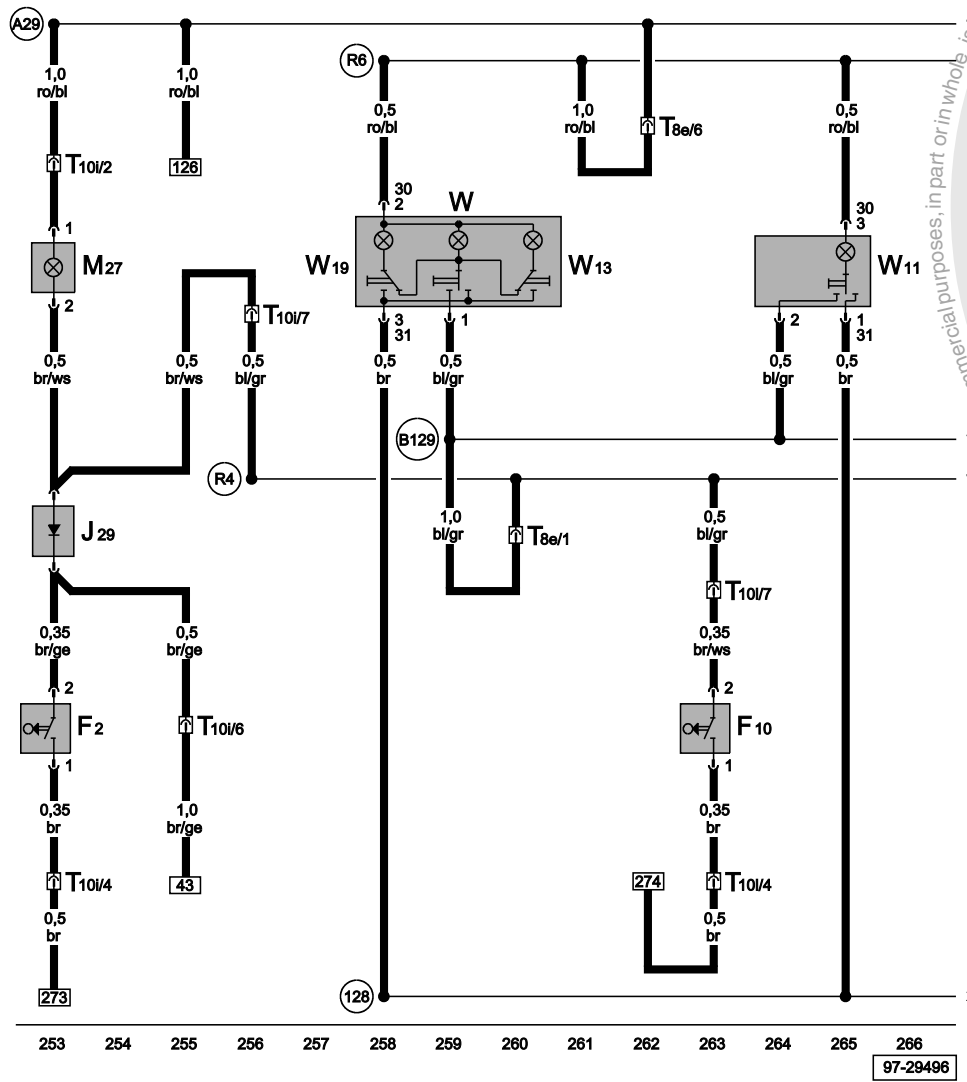
- E22 Intermittent wiper switch
- E38 Intermittent wiper regulator
- J31 Automatic intermittent wash and wipe relay, on relay plate
- T6e 6-pin connector
- T8c 8-pin connector
- T18a 18-pin connector
- V Windscreen wiper motor
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness



Front interior light, rear left reading light, left door warning lamp

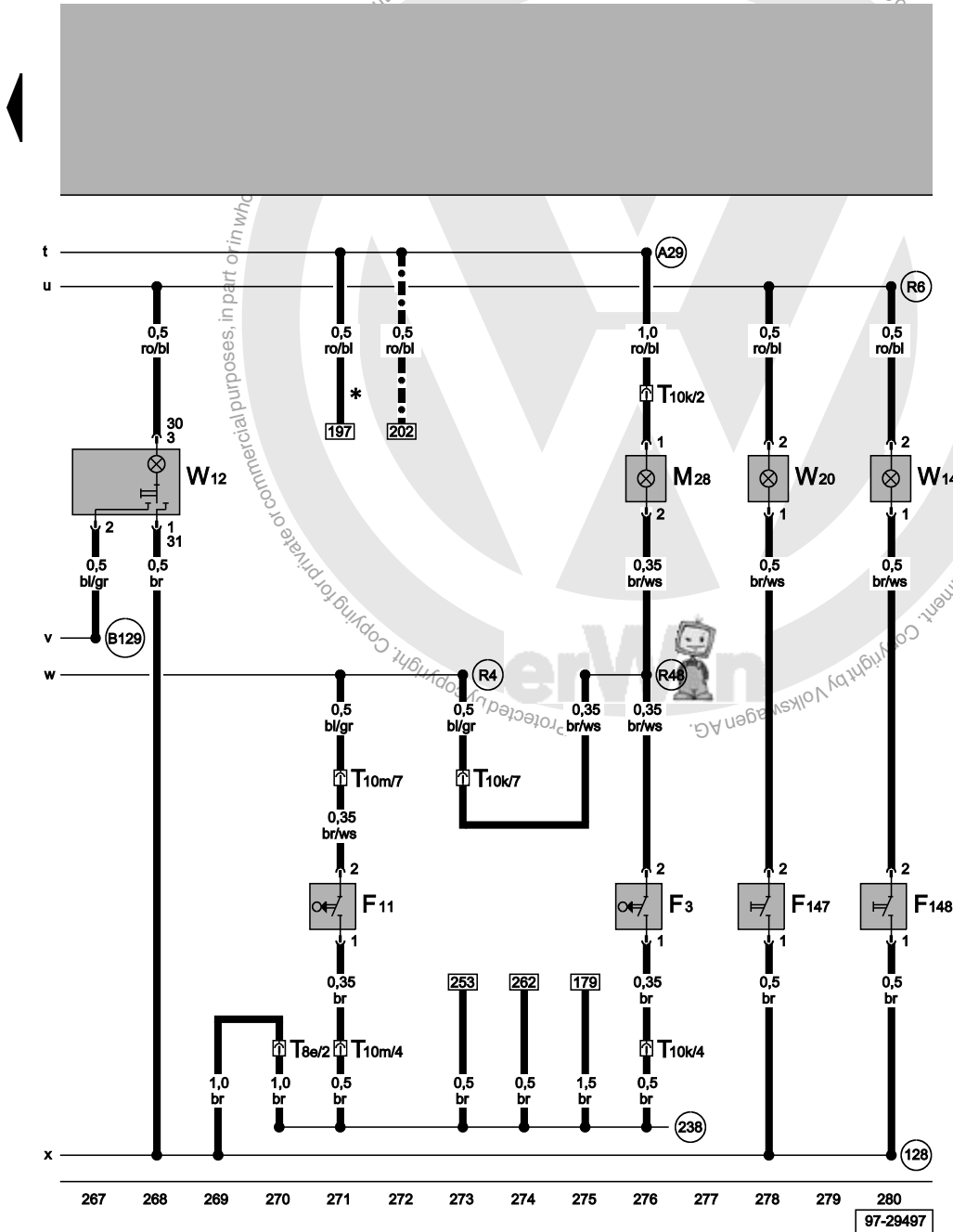
- F2 Driver door contact switch
- F10 Rear left door contact switch
- J29 Blocking diode
- M27 Left door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10i 10-pin connector, black, coupling station on left A-pillar
- T10l 10-pin connector, black, coupling station on left B-pillar
- W Front interior light
- W11 Rear left reading light
- W13 Front passenger side reading light
- W19 Driver side reading light

- 128 Earth connection 1, in interior light wiring harness
- A29 Connection (interior light), in dash panel wiring harness
- B129 Connection (interior light, 31), in interior wiring harness
- R4 Connection 1, in interior light/door contact switch wiring harness
- R6 Positive connection 1, in interior light wiring harness



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97-29496



Rear right reading light, right door warning lamp, illuminated vanity mirror

- F3 Front passenger door contact switch
- F11 Rear right door contact switch
- F147 Driver vanity mirror contact switch
- F148 Front passenger vanity mirror contact switch
- M28 Right door warning lamp
- T8e 8-pin connector, behind left dash panel
- T10k 10-pin connector, black, coupling station right A-pillar
- T10m 10-pin connector, black, coupling station right B-pillar
- W12 Rear right reading light
- W14 Illuminated vanity mirror (front passenger side)
- W20 Illuminated vanity mirror (driver side)

- (128) Earth connection 1, in interior light wiring harness
- (238) Earth connection 1, in interior wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R4) Connection 1, in interior light/door contact switch wiring harness
- (R6) Positive connection 1, in interior light wiring harness
- (R48) Connection, in front passenger side door wiring harness
- * only Bora
- only Golf

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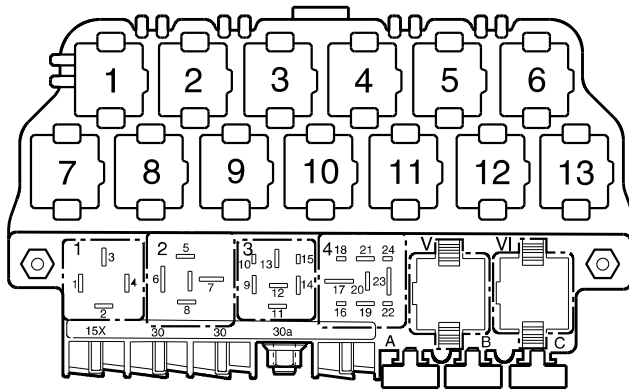
Central locking (with remote control)

- ⇒ Anti-theft alarm system
- ⇒ Tailgate / boot lid release
- ⇒ Interior lights
- ⇒ Luggage compartment lights
- ⇒ Sliding / tilting sunroof

From May 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Fuse colours

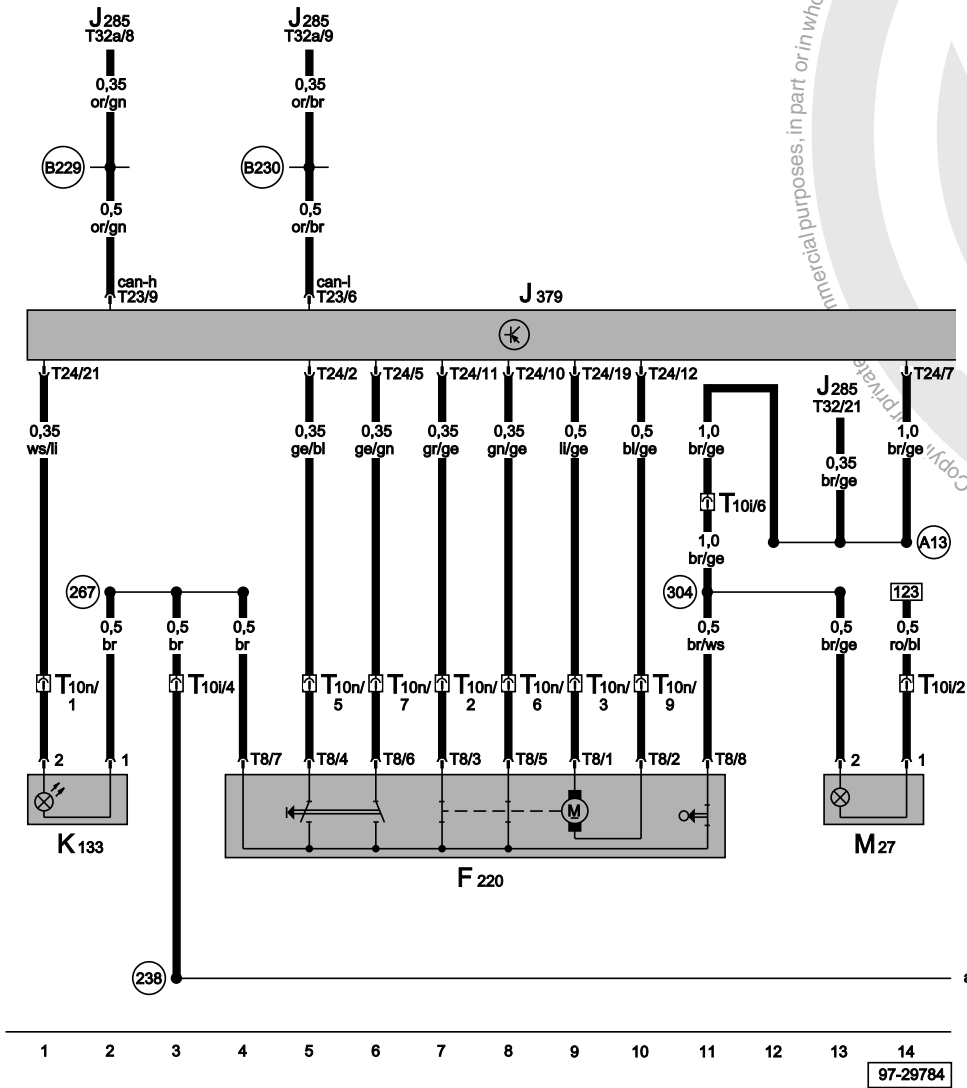
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac



Central locking and anti-theft alarm system control unit, central locking lock unit (driver's side), Door warning lamp, left, central locking warning lamp -SAFE-

- F220 Central locking lock unit, driver's side
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- K133 Central locking warning lamp -SAFE-
- M27 Door warning lamp, left
- T8 8-pin connector
- T10i 10-pin connector, black, connector point left A-pillar
- T10n 10-pin connector, brown, connector point left A-pillar
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 238 Earth connection -1-, in interior wiring harness
- 267 Earth connection -2-, in door wiring harness - driver's side
- 304 Earth connection -3-, in door wiring harness - driver's side
- A13 Connection (door contact switch), in dash panel wiring harness
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness

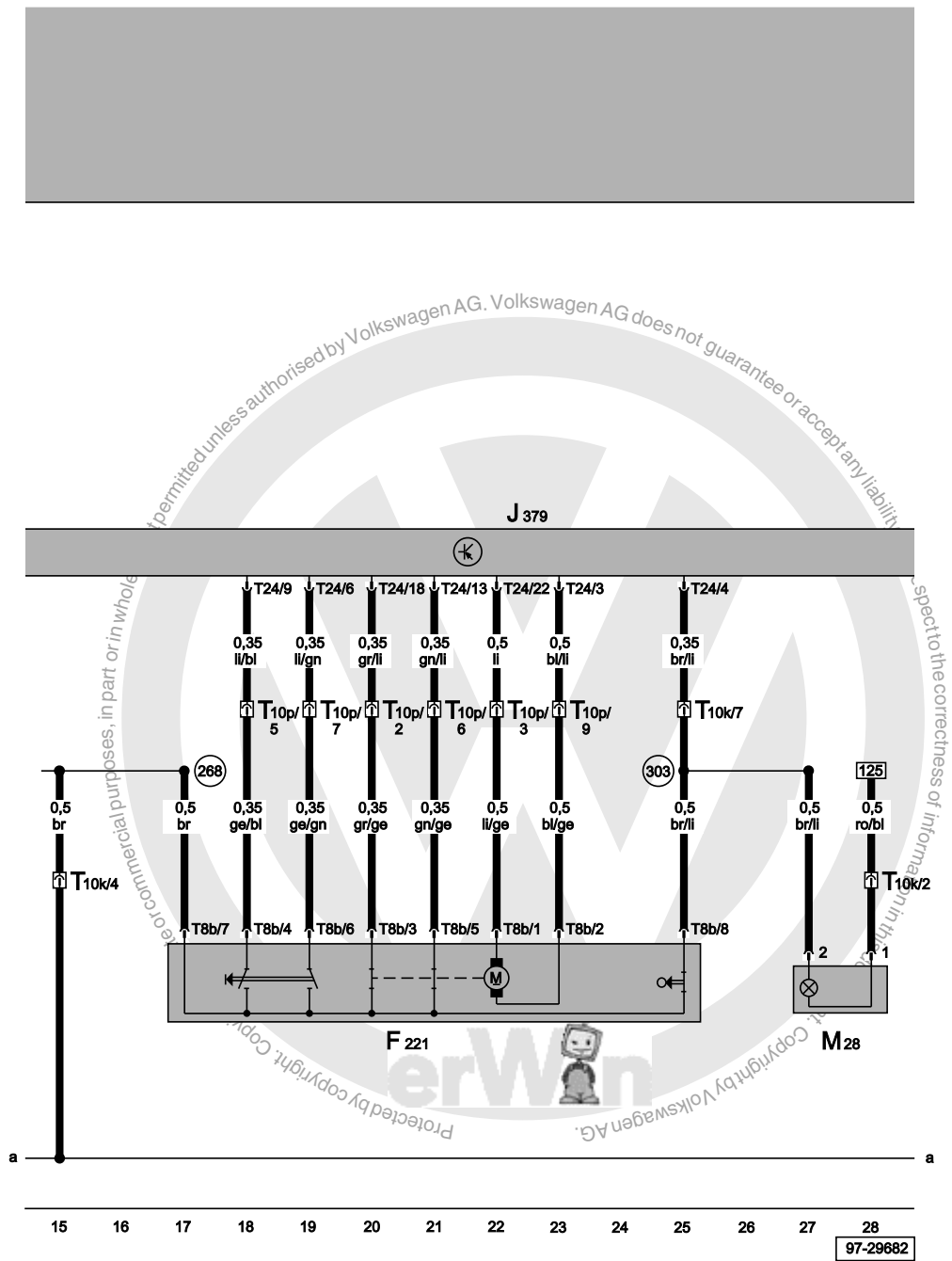


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- rs = pink

Central locking control unit and anti-theft alarm system, central locking lock unit (front passenger's side), door warning lamp, right

- F221 Central locking lock unit, front passenger's side
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- M28 Door warning lamp, right
- T8b 8-pin connector
- T10k 10-pin connector, black, connector point right A-pillar
- T10p 10-pin connector, brown, connector point right A-pillar
- T24 24-pin connector

- 268 Earth connection -2-, in door wiring harness - front passenger's side
- 303 Earth connection -3-, in door wiring harness - front passenger's side

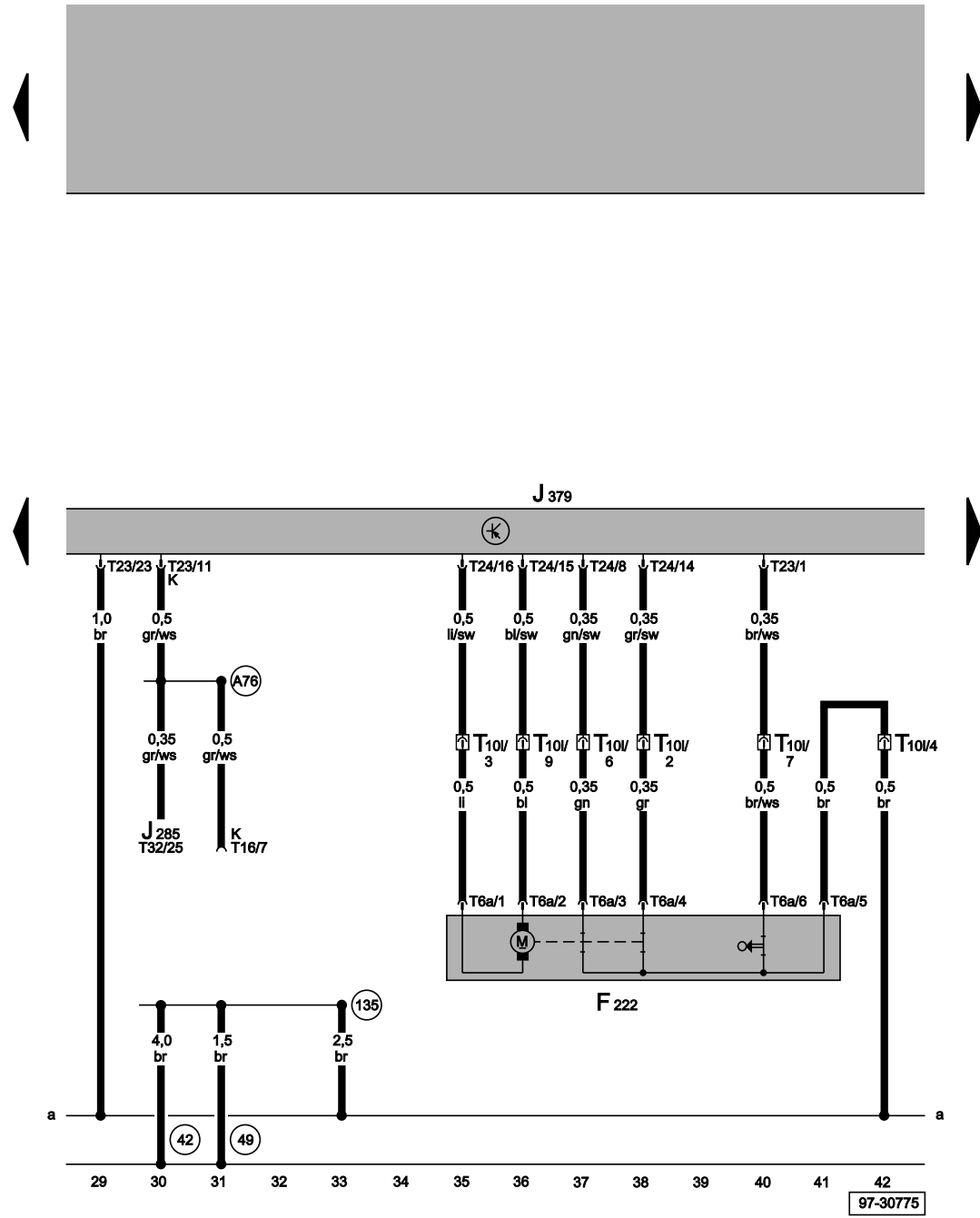


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- rs = pink

Central locking control unit and anti-theft alarm system, central locking lock unit (rear left)

- F222 Central locking lock unit, rear left
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T6a 6-pin connector
- T101 10-pin connector, black, connector point left B-pillar
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



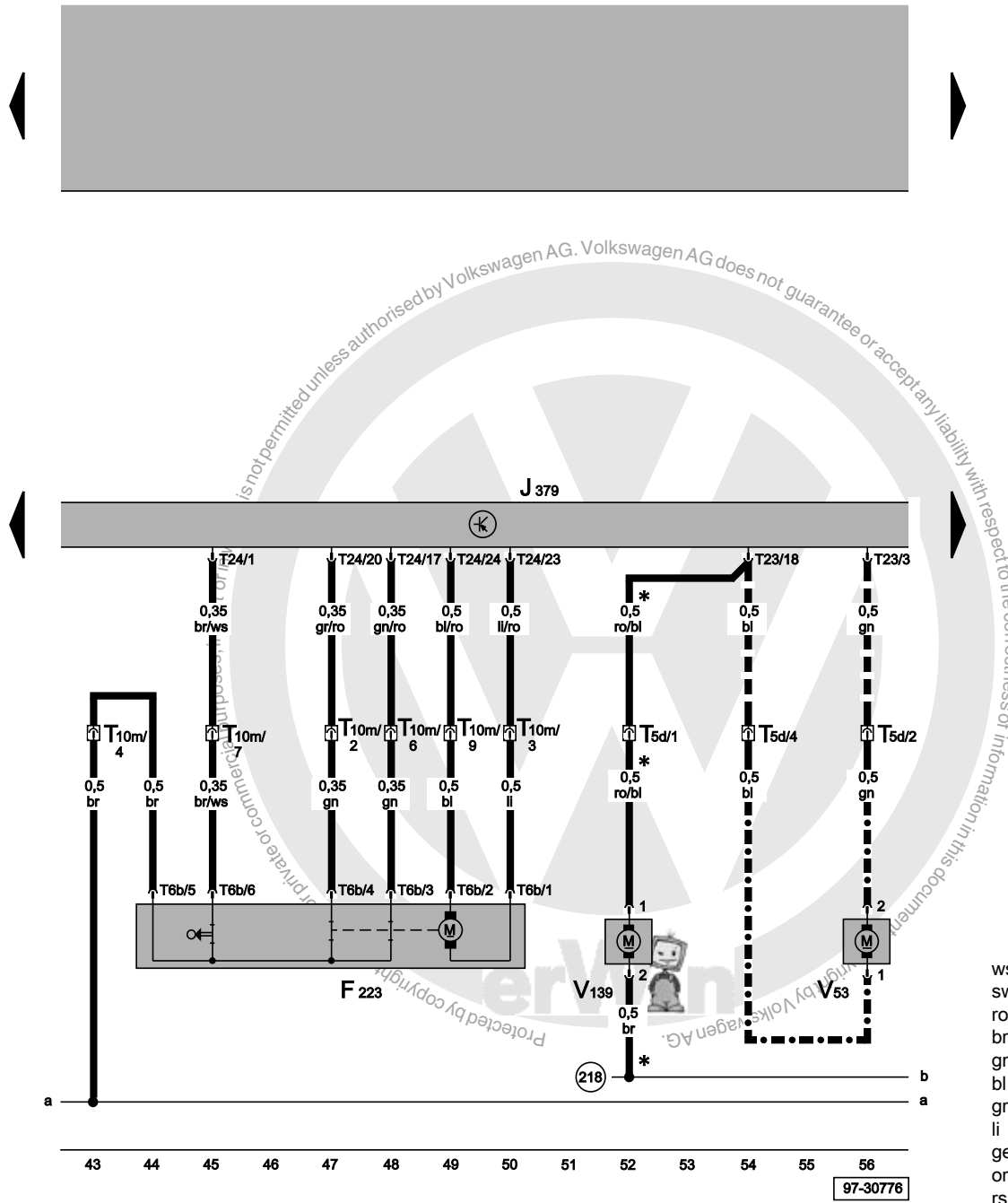
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Central locking control unit and anti-theft alarm system, central locking lock unit (rear right), tailgate/boot lid release motor

- F223 Central locking lock unit, rear right
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T5d 5-pin connector, brown, connector point left C-pillar
- T6b 6-pin connector
- T10m 10-pin connector, black, connector point right B-pillar
- T23 23-pin connector
- T24 24-pin connector
- V53 Central locking motor, tailgate/boot lid
- V139 Tailgate/boot lid release motor*

218 Earth connection -1-, in tailgate/bootlid wiring harness

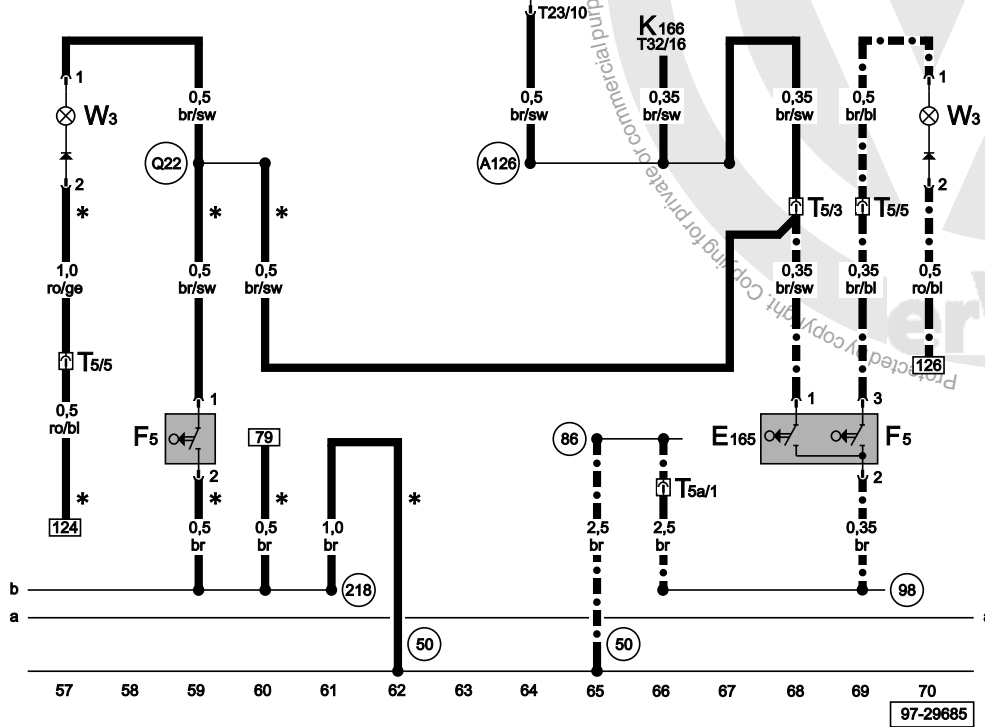
- * Only Bora
- .-.- Only Golf
- Only Golf/ Bora
- Tailgate/boot lid release Variant-mode'sl, ⇒ Current Flow Diagram No. 74/8



Central locking control unit and anti-theft alarm, luggage compartment light (only Golf/ Bora)

- E165 Tailgate/bootlid release switch
- F5 Luggage compartment light switch
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- K166 Tailgate/bootlid released warning lamp
- T5 5-pin connector, black, connector point left C-pillar
- T5a 5-pin connector, pink, connector point left C-pillar
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light

- 50 Earth point, on left luggage compartment
- 86 Earth connection -1-, in rear wiring harness
- 98 Earth connection, in tailgate/bootlid wiring harness
- 218 Earth connection -1-, in tailgate/bootlid wiring harness
- A126 Connection (tailgate/bootlid contact switch), in dash panel wiring harness
- Q22 Connection -1-, in tailgate/bootlid wiring harness
- * Only Bora
- Only Golf
- Luggage compartment light Variant-model, ⇒ Current Flow Diagram No. 74/9



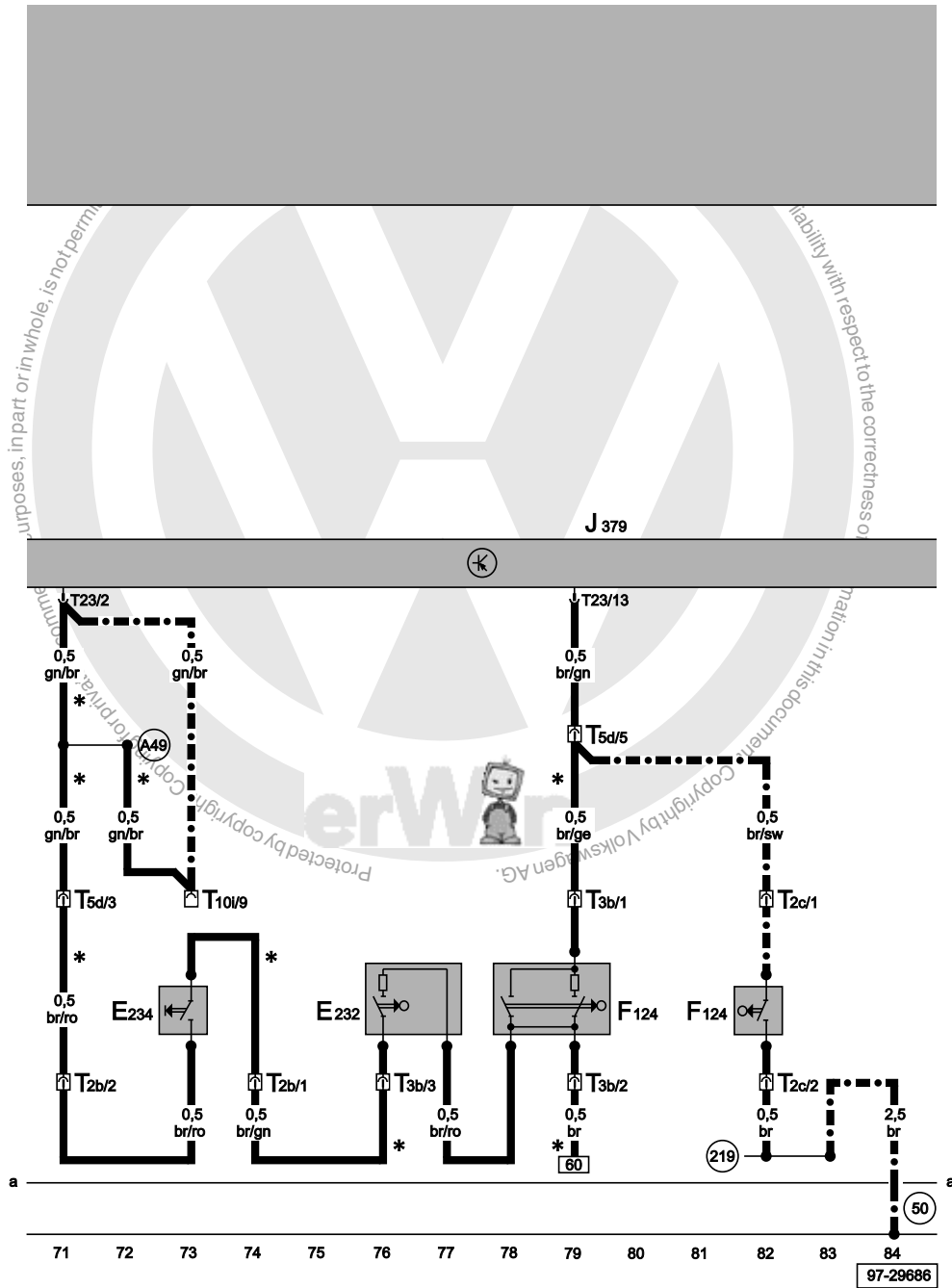
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- rs = pink

Central locking control unit and anti-theft alarm system, release button (tailgate/boot lid handle), tailgate/bootlid remote release key switch

- E232 Tailgate/bootlid remote release key switch*
- E234 Tailgate/bootlid handle release button*
- F124 Contact switch in lock cylinder for tailgate/boot lid anti-theft alarm system/central locking system
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T2b 2-pin connector, in tailgate/bootlid
- T2c 2-pin connector, in tailgate/bootlid
- T3b 3-pin connector, in tailgate/bootlid
- T5d 5-pin connector, brown, connector point left C-pillar
- T10i 10-pin connector, black, connector point left A-pillar
- T23 23-pin connector

- 50 Earth point, on left luggage compartment
- 219 Earth connection -2-, in tailgate/bootlid wiring harness
- A49 Connection -1-, in dash panel wiring harness

- * Only Bora
- Only Golf
- Tailgate/boot lid release Variant-model's, => Current Flow Diagram No. 74/8



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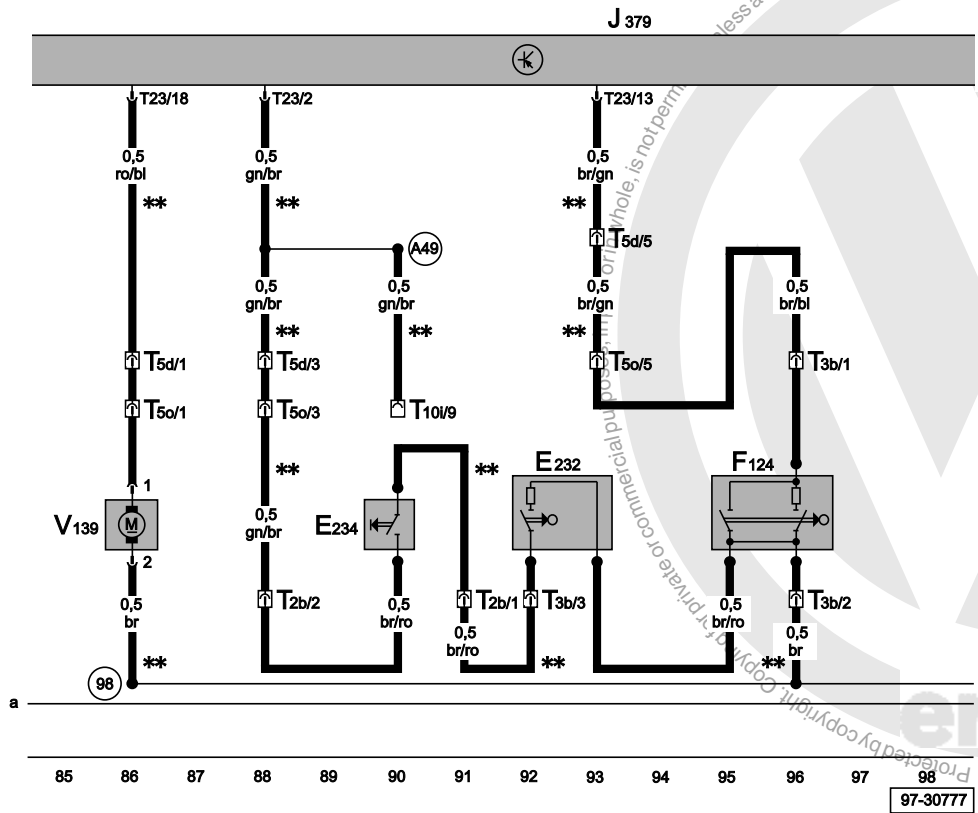
Central locking control unit and anti-theft alarm, tailgate/ bootlid release motor, release button (tailgate/boot lid handle)

- E232 Tailgate/boot lid remote release key switch**
- E234 Tailgate/boot lid handle release button**
- F124 Contact switch in lock cylinder for tailgate/boot lid anti-theft alarm system/central locking system
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T2b 2-pin connector, in tailgate/boot lid
- T3b 3-pin connector, in tailgate/boot lid
- T5d 5-pin connector, brown, connector point right D-pillar
- T5o 5-pin connector, brown, in tailgate/bootlid
- T10i 10-pin connector, black, connector point left A-pillar
- T23 23-pin connector
- V139 Tailgate/boot lid release motor

98 Earth connection, in tailgate/boot lid wiring harness

A49 Connection -1-, in dash panel wiring harness

** Only Golf Variant/ Bora Variant
Tailgate/boot lid release limousinen model's, ⇒ Current Flow Diagram No. 74/5 and No. 74/7



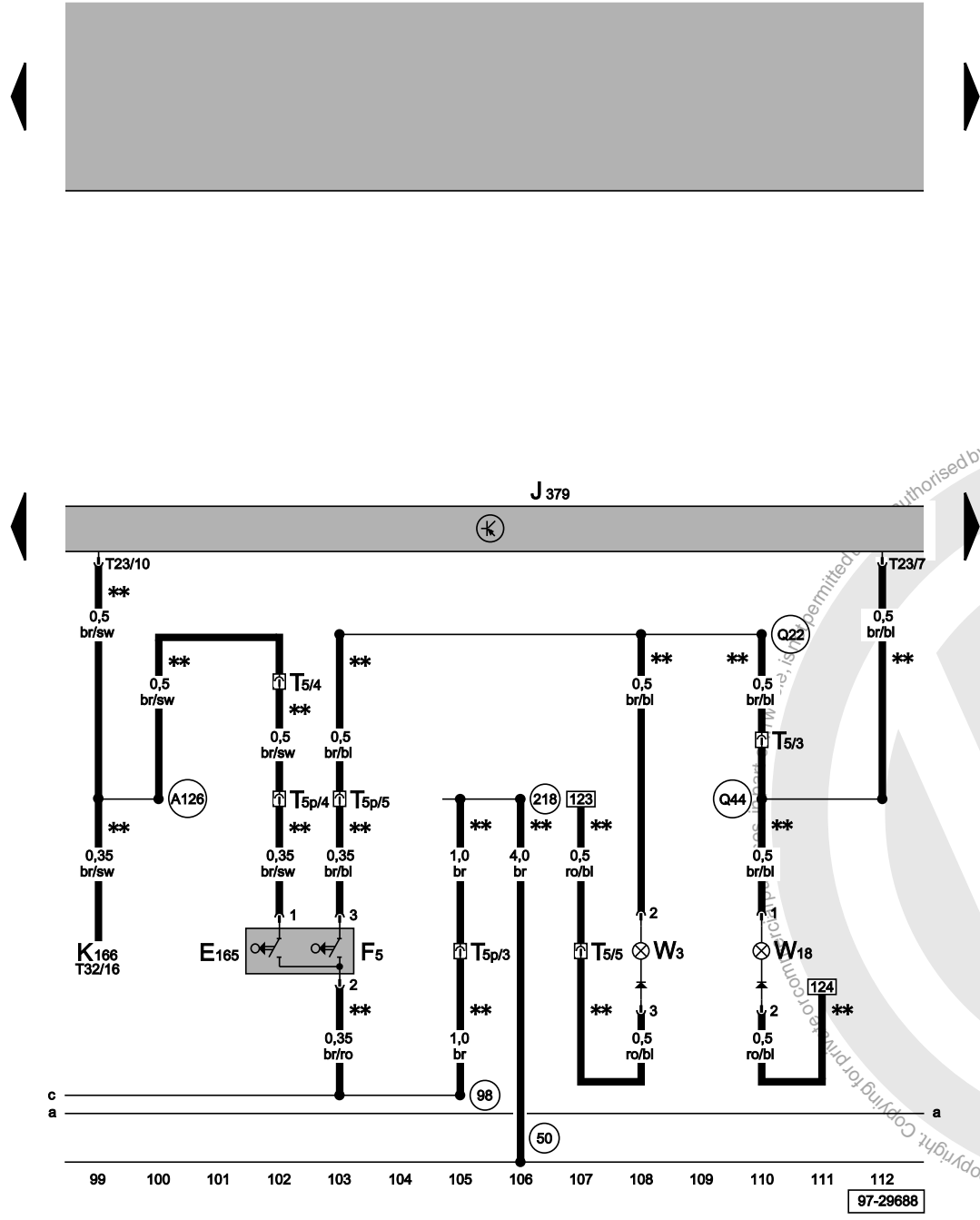
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- rs = pink

97-30777

Central locking and anti-theft alarm system control unit, luggage compartment light (only Golf estate/Bora estate)

- E165 Tailgate/bootlid release switch
- F5 Luggage compartment light switch
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- K166 Door open warning lamp
- T5 5-pin connector, black, connector point left D-pillar
- T5p 5-pin connector, black, in tailgate/boot lid
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light
- W18 Luggage compartment light, left

- 50 Earth point, on left luggage compartment
- 98 Earth connection, in tailgate/boot lid wiring harness
- 218 Earth connection -1-, in tailgate/boot lid wiring harness
- A126 Connection (tailgate/boot lid contact switch), in dash panel wiring harness
- Q22 Connection -1-, in tailgate/boot lid wiring harness
- Q44 Connection -2-, in tailgate/boot lid wiring harness
- ** Only Golf Variant/ Bora Variant Luggage compartment lights hatchback models, => Current Flow Diagram No. 74/6

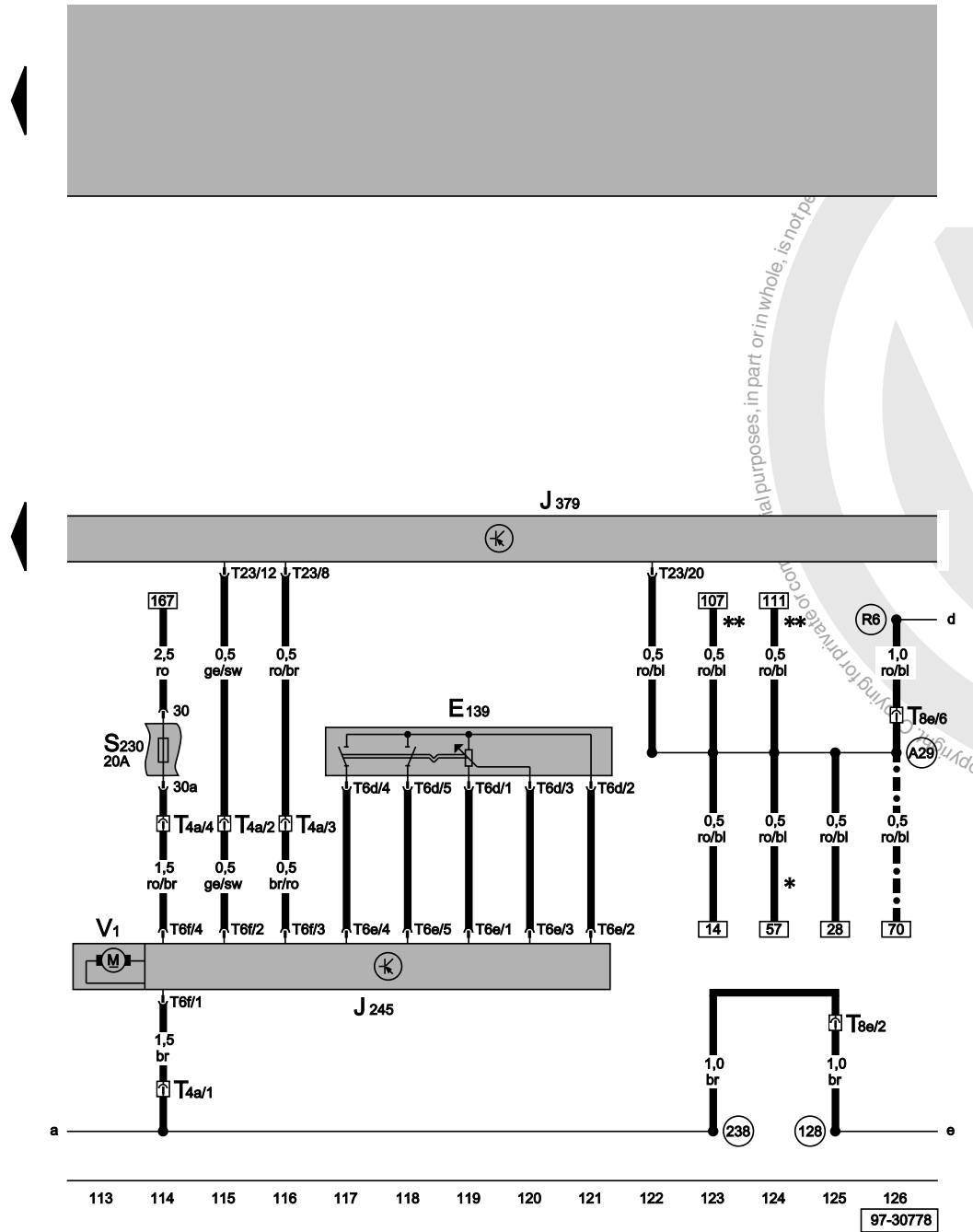


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Central locking control unit and anti-theft alarm system, sliding sunroof adjustment control unit, sliding sunroof adjustment regulator

- E139 Sliding sunroof adjustment regulator
- J245 Sliding sunroof adjustment control unit
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- S230 Fuse in fuse box
- T4a 4-pin connector, behind left A-pillar trim
- T6d 6-pin connector
- T6e 6-pin connector
- T6f 6-pin connector
- T8e 8-pin connector, behind left A-pillar trim
- T23 23-pin connector
- V1 Sliding sunroof motor

- (128) Earth connection -1-, in interior light wiring harness
- (238) Earth connection -1-, in interior wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (R6) Positive (+) connection-1-, in interior light wiring harness
- * Only Bora
- ** Only Golf Variant/ Bora Variant
- Only Golf

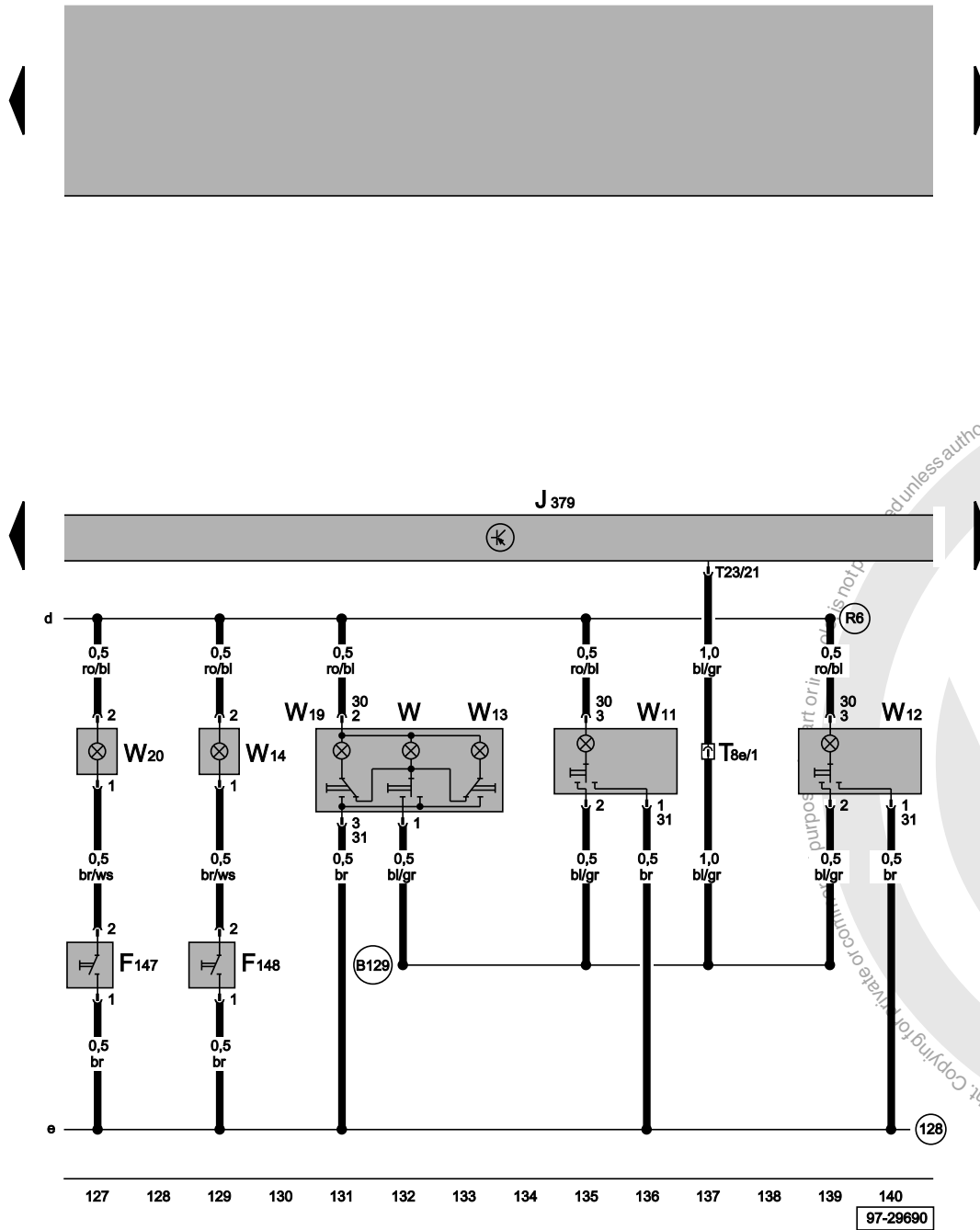


- ws = white
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- rs = pink

Central locking control unit and anti-theft alarm, interior light front, reading lights front and rear, illuminated vanity mirror (driver's and front passenger's side)

- F147 Vanity mirror contact switch, driver's side
- F148 Vanity mirror contact switch, front passenger's side
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- T8e 8-pin connector, behind left A-pillar trim
- T23 23-pin connector
- W Interior light, front
- W11 Reading lamp, rear left
- W12 Reading lamp, rear right
- W13 Front passenger reading lamp
- W14 Illuminated vanity mirror, front passenger's side
- W19 Reading light, driver's side
- W20 Illuminated vanity mirror, driver's side

- (128) Earth connection -1-, in interior light wiring harness
- (B129) Connection (interior light 31), in interior wiring harness
- (R6) Positive (+) connection -1-, in interior light wiring harness



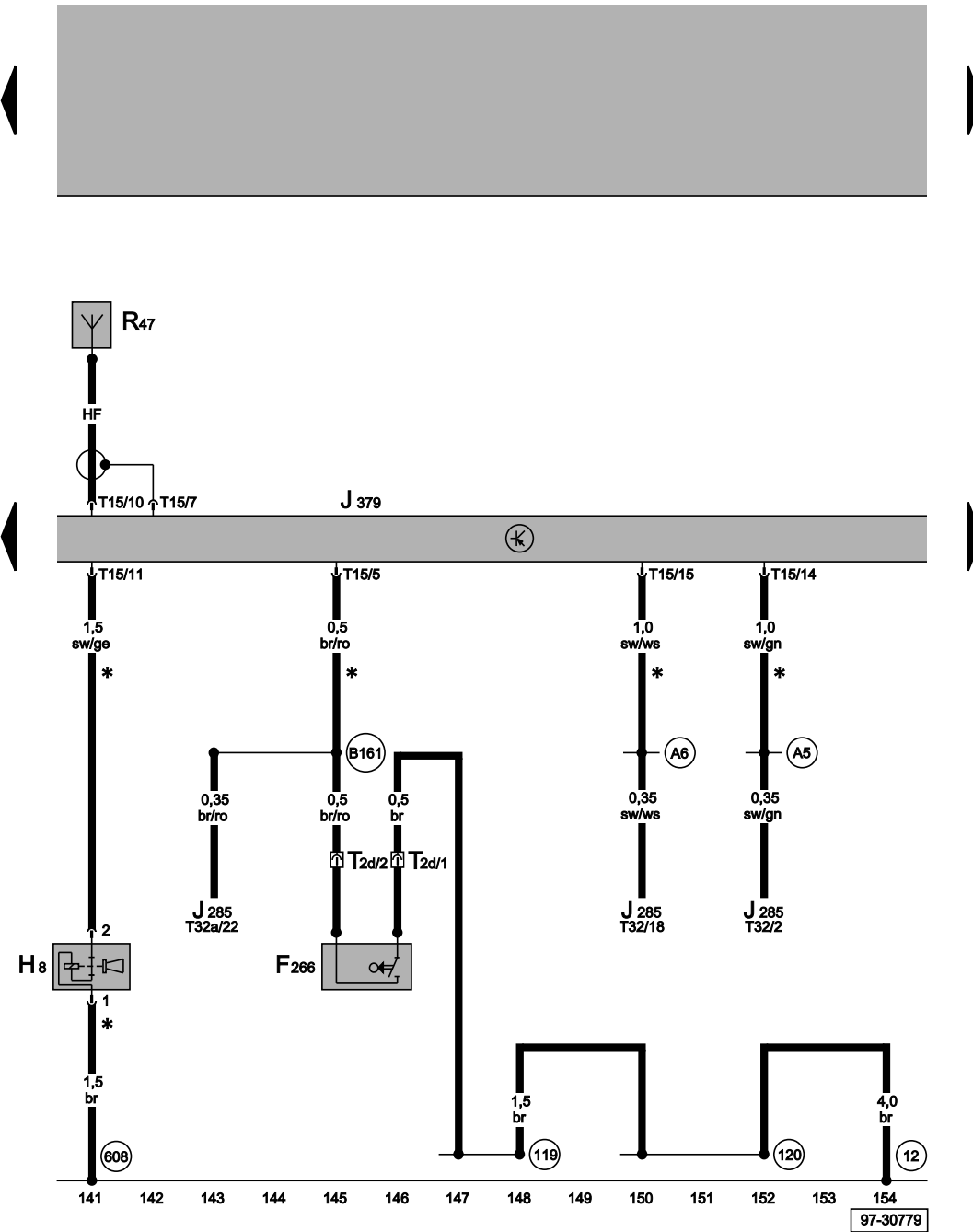
- ws = white
- sw = black
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Central locking control unit and anti-theft alarm system, anti-theft alarm system horn, central locking and anti-theft alarm system aerial, bonnet contact switch

- F266 Bonnet contact switch
- H8 Anti-theft alarm system horn*
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind dash panel, left
- R47 Central locking and anti-theft alarm system
- T2d 2-pin connector, near headlight, right
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- 608 Earth point, in plenum chamber, centre
- A5 Positive (+) connection (right turn signal), in dash panel wiring harness
- A6 Positive (+) connection (left turn signal), in dash panel wiring harness
- B161 Connection (anti-theft alarm system), in interior wiring harness

* Only in models with anti-theft alarm system



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- rs = pink

97-30779

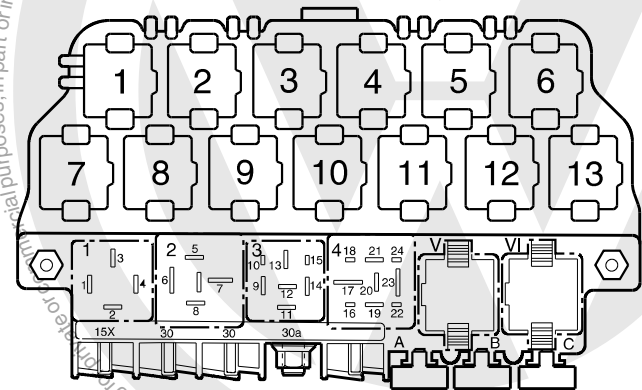
Convenience system

- ⇒ Exterior mirror, heated and adjustable
- ⇒ Anti-theft alarm system
- ⇒ Window lifter switch, front and rear
- ⇒ Tailgate/boot lid release
- ⇒ Interior lights
- ⇒ Luggage compartment lights
- ⇒ Sliding-/tilting sunroof
- ⇒ Central locking with radio-operated remote control

From May 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

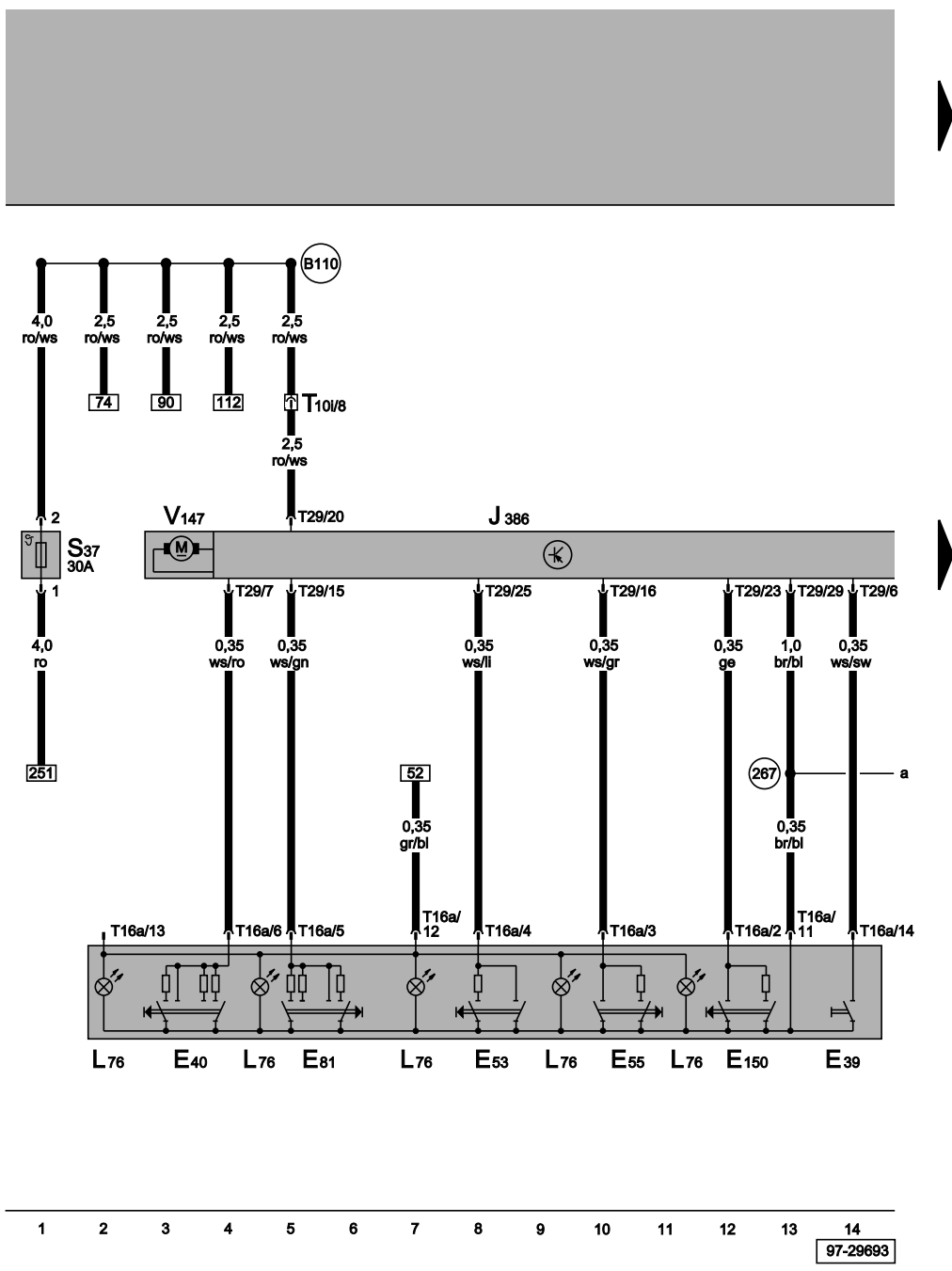


Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

Door control unit (driver's side), window lifters for driver's side, interior locking switch, window lifter switch, rear window lifter isolation switch

- E39 Rear window lifter isolation switch
- E40 Window lifter switch, front left
- E53 Window lifter switch, rear left, driver
- E55 Window lifter switch, rear right, driver
- E81 Window lifter switch, front right, driver
- E150 Interior locking switch, driver's side
- J386 Door control unit, driver's side
- L76 Button illumination
- S37 Window lifter single fuse, on additional relay carrier above the relay plate
- T10i 10-pin connector, black, connector point left A-pillar
- T16a 16-pin connector
- T29 29-pin connector
- V147 Window lifter motor, driver's side
- 267 Earth connection -2-, in door wiring harness -driver's side
- B110 Connection (30, window lifters), in interior wiring harness

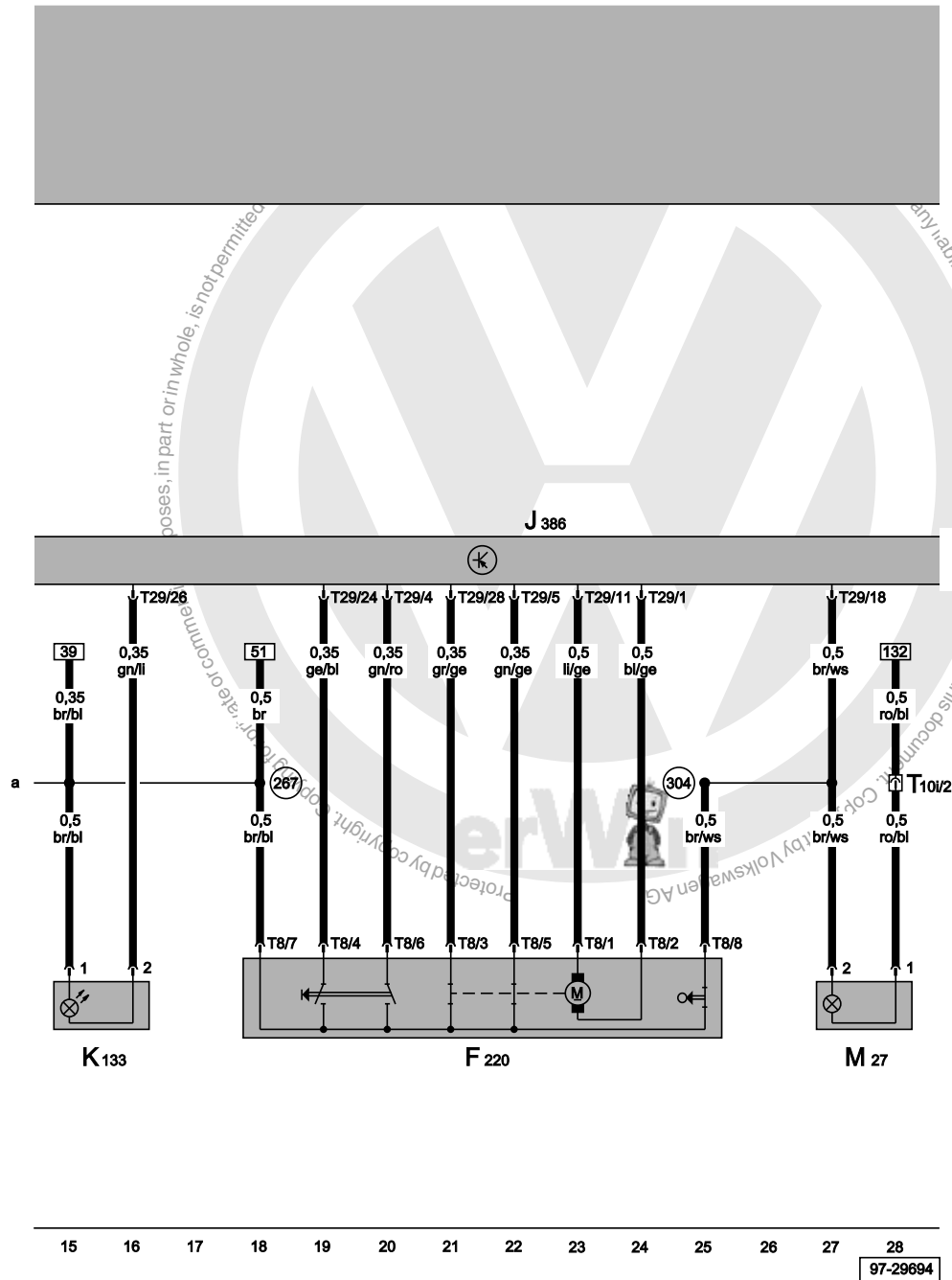


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Door control unit (driver side), central locking lock unit (driver side), central locking warning lamp, door warning lamp left

- F220 Central locking lock unit, driver's side
- J386 Door control unit, driver's side
- K133 Central locking warning lamp -SAFE-
- M27 Door warning lamp, left
- T8 8-pin connector
- T10i 10-pin connector, black, connector point left A-pillar
- T29 29-pin connector

- 267 Earth connection -2-, in door wiring harness - driver's side
- 304 Earth connection -3-, in door wiring harness - driver's side



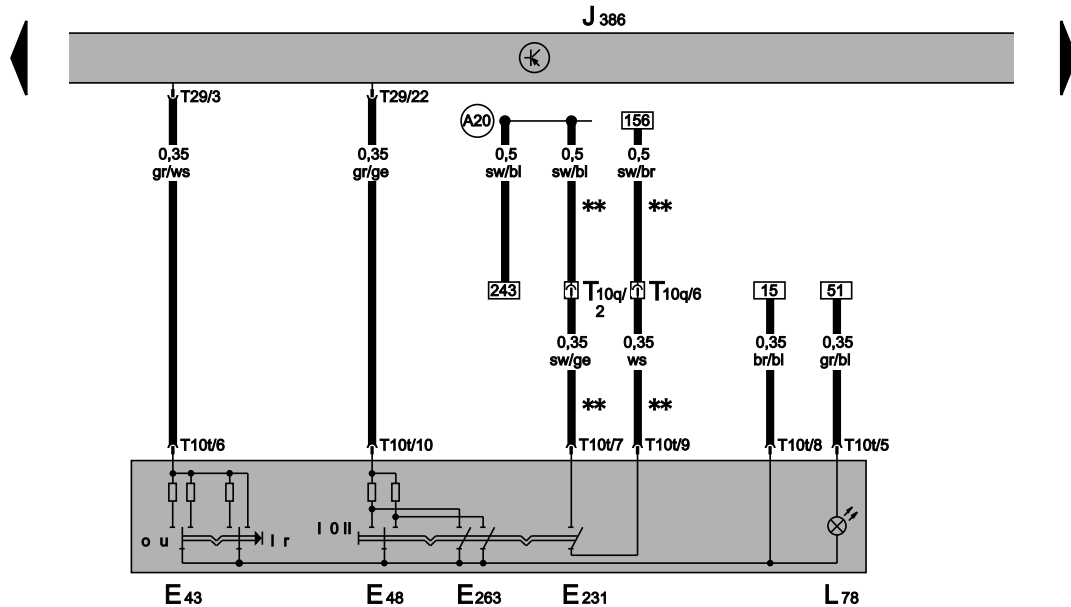
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- sw = black
- ro = red
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- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Door control unit (driver side), mirror adjustment switch, exterior mirror heating button, mirror fold system switch

- E43 Mirror adjustment switch
- E48 Mirror adjustment change-over switch
- E231 Exterior mirror heating button
- E263 Mirror fold system switch
- J386 Door control unit, driver's side
- L78 Mirror adjustment switch illumination
- T10q 10-pin connector, blue, connector point left A-pillar
- T10t 10-pin connector
- T29 29-pin connector

A20 Connection (15a), in dash panel wiring harness

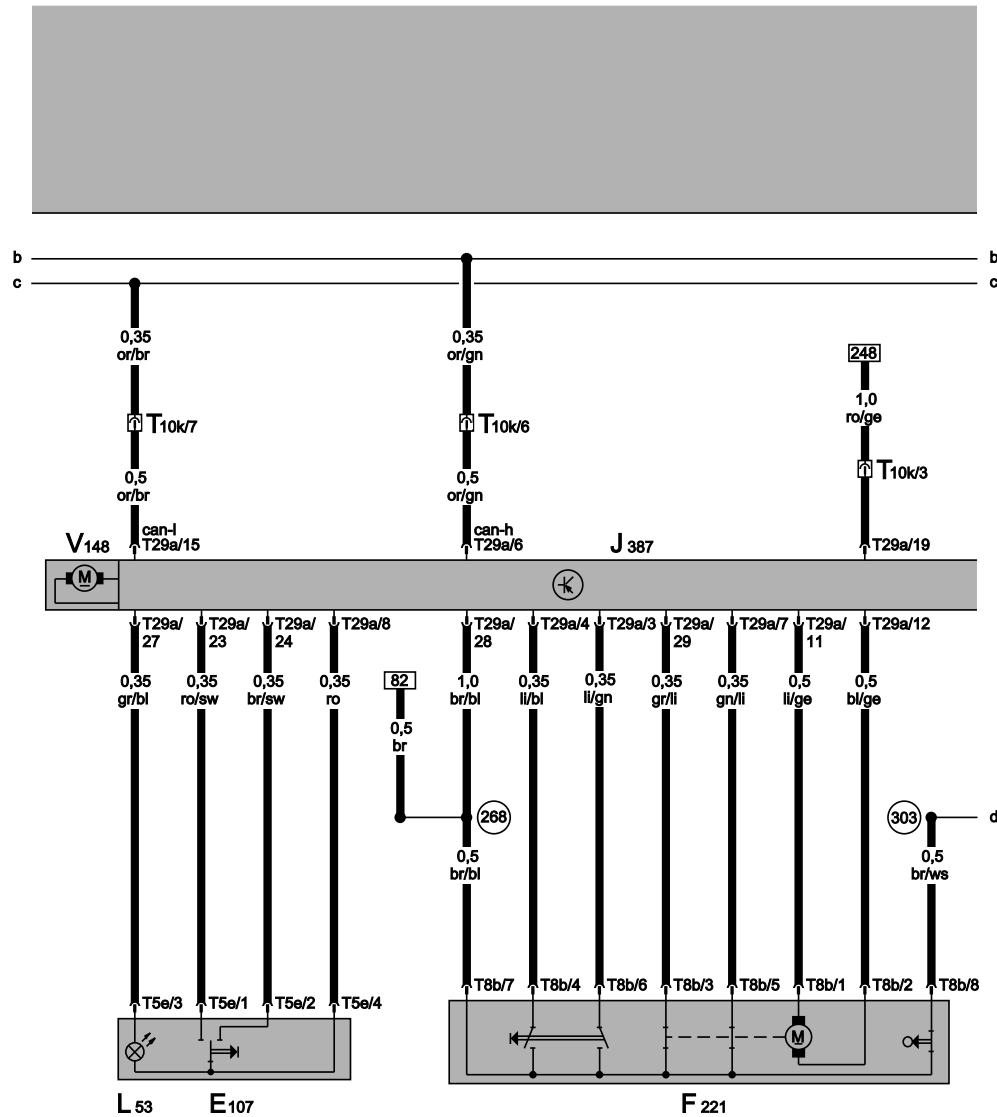
** Only vehicles with separate exterior mirror heater



- ws = white
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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Door control unit (front passenger's side), window lifter for front passenger's door, central locking lock unit (front passenger's side)

- E107 Window lifter switch, in front passenger's door
- F221 Central locking lock unit, front passenger's side
- J387 Door control unit, front passenger's side
- L53 Electric window switch light bulb
- T5e 5-pin connector
- T8b 8-pin connector
- T10k 10-pin connector, black, connector point right A-pillar
- T29a 29-pin connector
- V148 Window lifter motor, front passenger's side
- 268 Earth connection -2-, in door wiring harness -front passenger's side
- 303 Earth connection -3-, in door wiring harness -front passenger's side



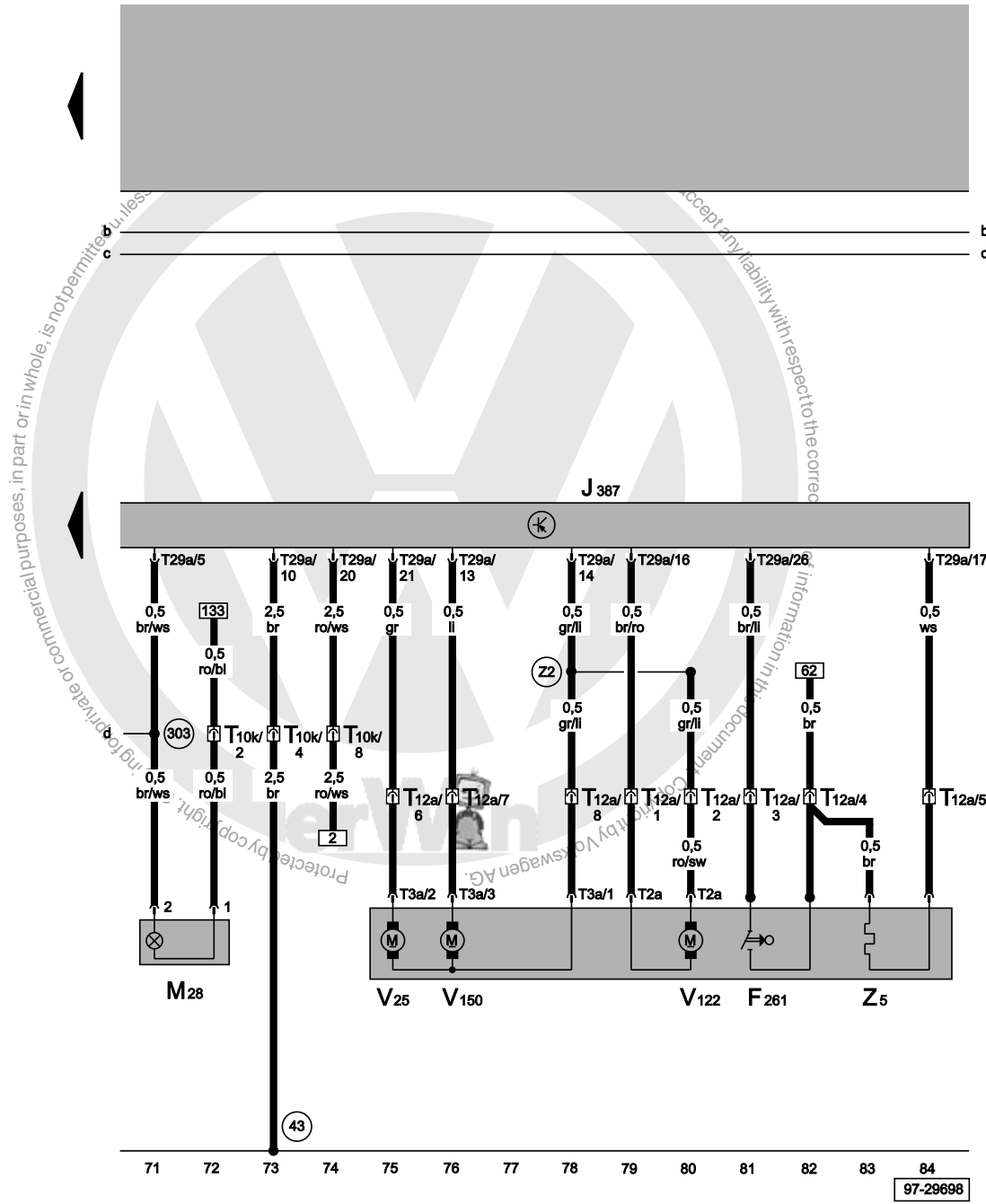
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Door control unit (front passenger's side), electrically adjustable exterior mirrors for front passenger's door, door warning lamp, right

- F261 Mirror folding system contact switch, front passenger's side**
- J387 Door control unit, front passenger's side
- M28 Door warning lamp, right
- T2a 2-pin connector
- T3a 3-pin connector
- T10k 10-pin connector, black, connector point right A-pillar
- T12a 12-pin connector, in front passenger's door
- T29a 29-pin connector
- V25 Mirror adjustment motor (front passenger's side)
- V122 Folding mirror motor, front passenger's side**
- V150 Mirror adjustment motor, front passenger's side
- Z5 Heated exterior mirror, front passenger's side

- (43) Earth point, lower part of right A-pillar
- (303) Earth connection -3-, in door wiring harness -front passenger's side
- (Z2) Connection -2-, in mirror adjustment wiring harness

** Fold in (retraction) function for some export countries only

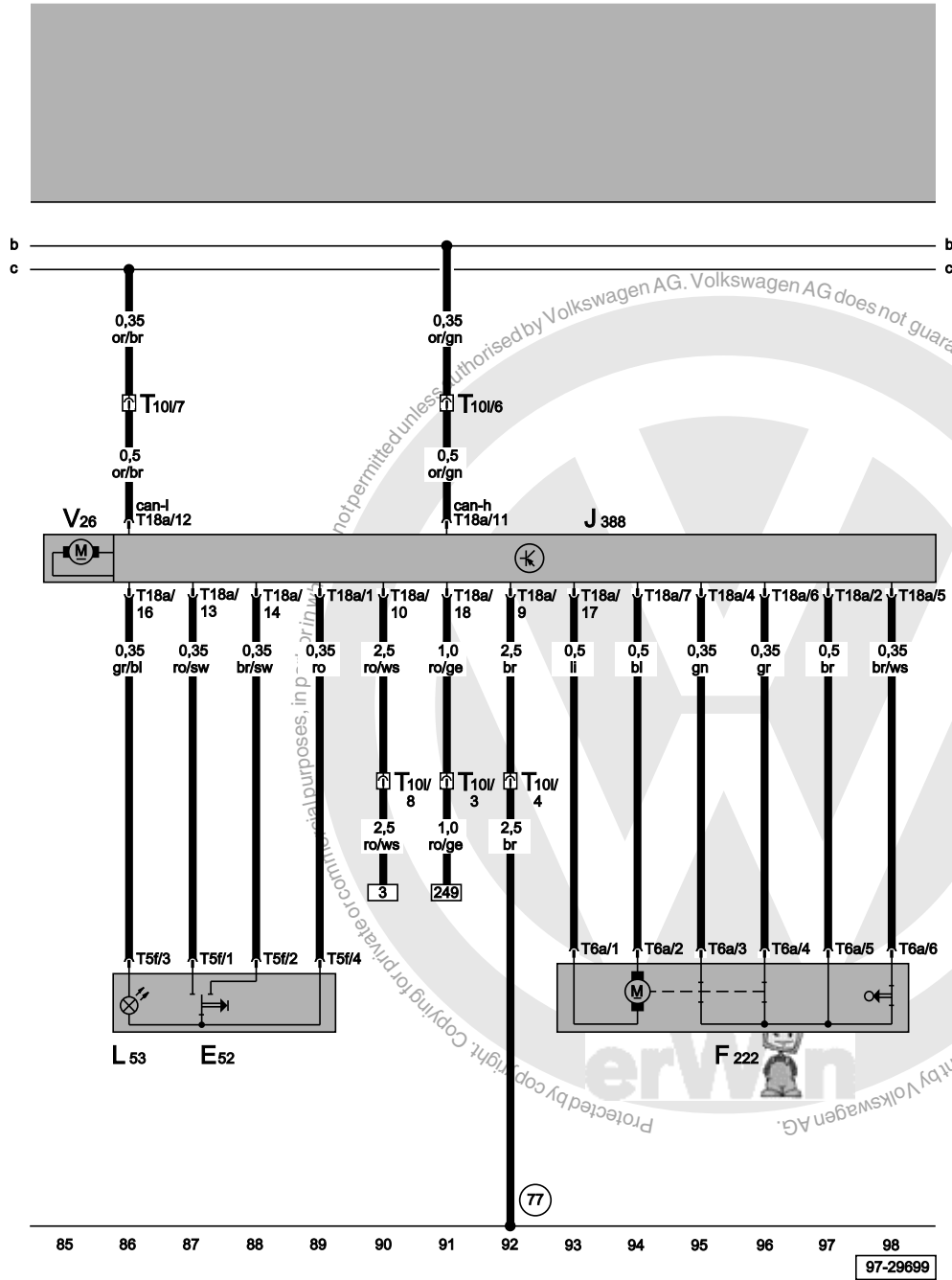


- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Door control unit (rear left), rear left window lifter for door, central locking lock unit (rear left)

- E52 Window lifter switch, rear left (in door)
- F222 Central locking lock unit, rear left
- J388 Door control unit, rear left
- L53 Electric window switch light bulb
- T5f 5-pin connector
- T6a 6-pin connector
- T10l 10-pin connector, black, connector point left B-pillar
- T18a 18-pin connector
- V26 Window lifter motor, rear left

77 Earth point, lower part of left B-pillar



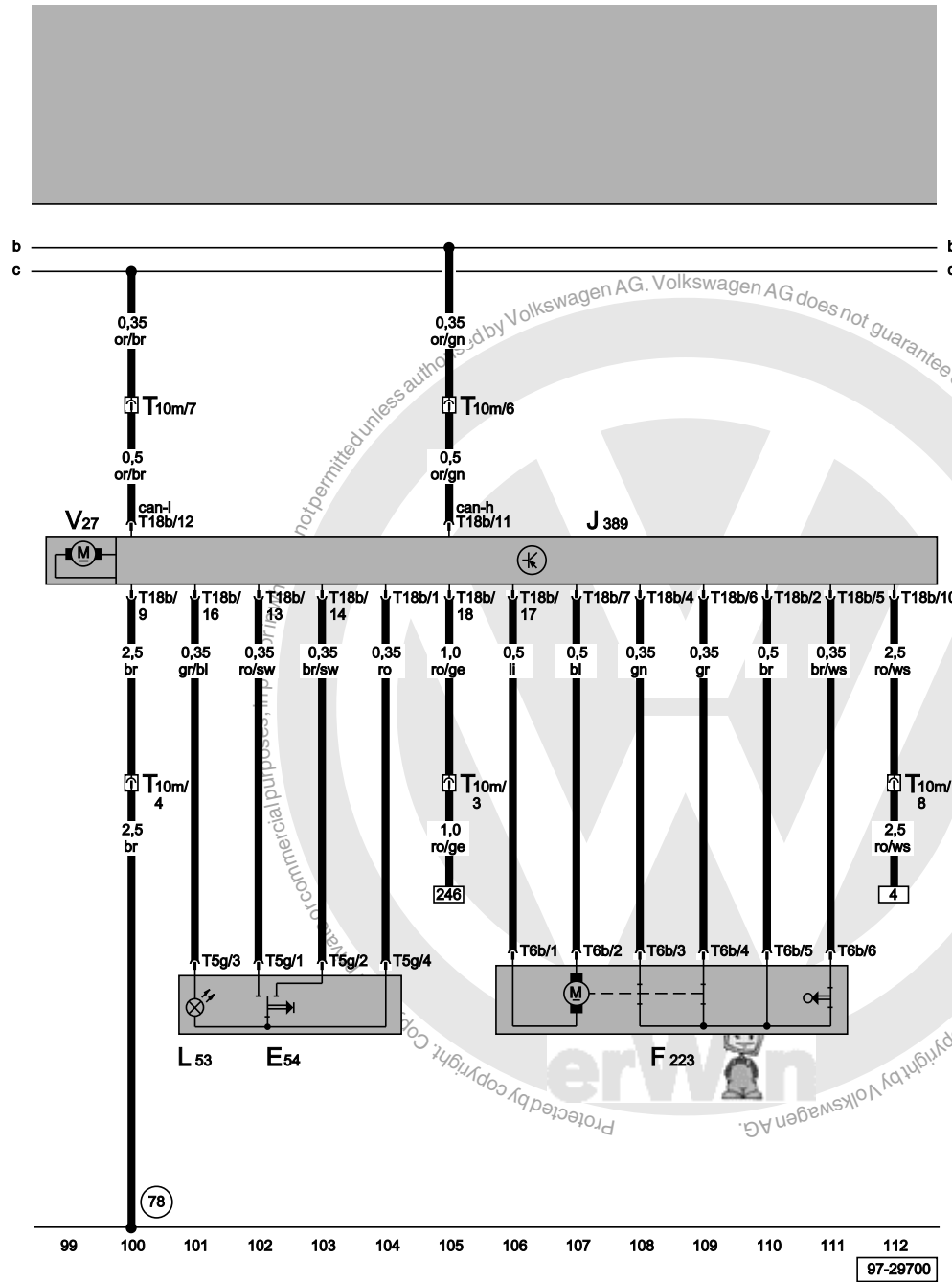
- ws = white
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- bl = blue
- gr = grey
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- rs = pink

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Door control unit (rear right), rear right window lifter for door, central locking lock unit (rear right)

- E54 Window lifter switch, rear right (in door)
- F223 Central locking lock unit, rear right
- J389 Door control unit, rear right
- L53 Electric window switch light bulb
- T5g 5-pin connector
- T6b 6-pin connector
- T10 10-pin connector, black, connector point right B-pillar
- T18b 18-pin connector
- V27 Electric window motor, rear right

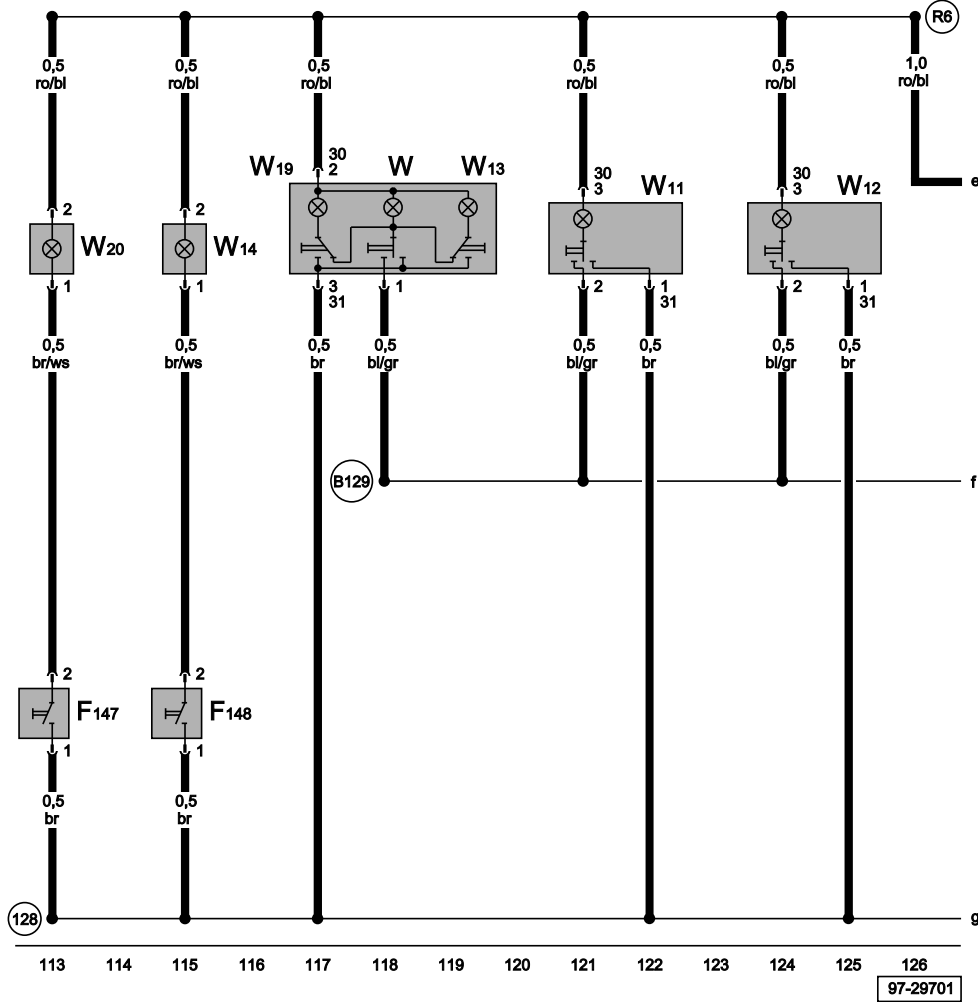
78 Earth point, lower part of right B-pillar



Interior light front, reading lights front and rear, illuminated make-up mirror (driver and front passenger's side)

- F147 Make-up mirror contact switch, driver's side
- F148 Make-up mirror contact switch, front passenger's side
- W Interior light, front
- W11 Reading lamp, rear left
- W12 Reading lamp, rear right
- W13 Front passenger's side reading lamp
- W14 Illuminated make-up mirror, front passenger's side
- W19 Reading lamp driver's side
- W20 Illuminated make-up mirror, driver's side

- (128) Earth connection -1-, in interior light wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R6) Positive (+) connection -1-, in interior light wiring harness



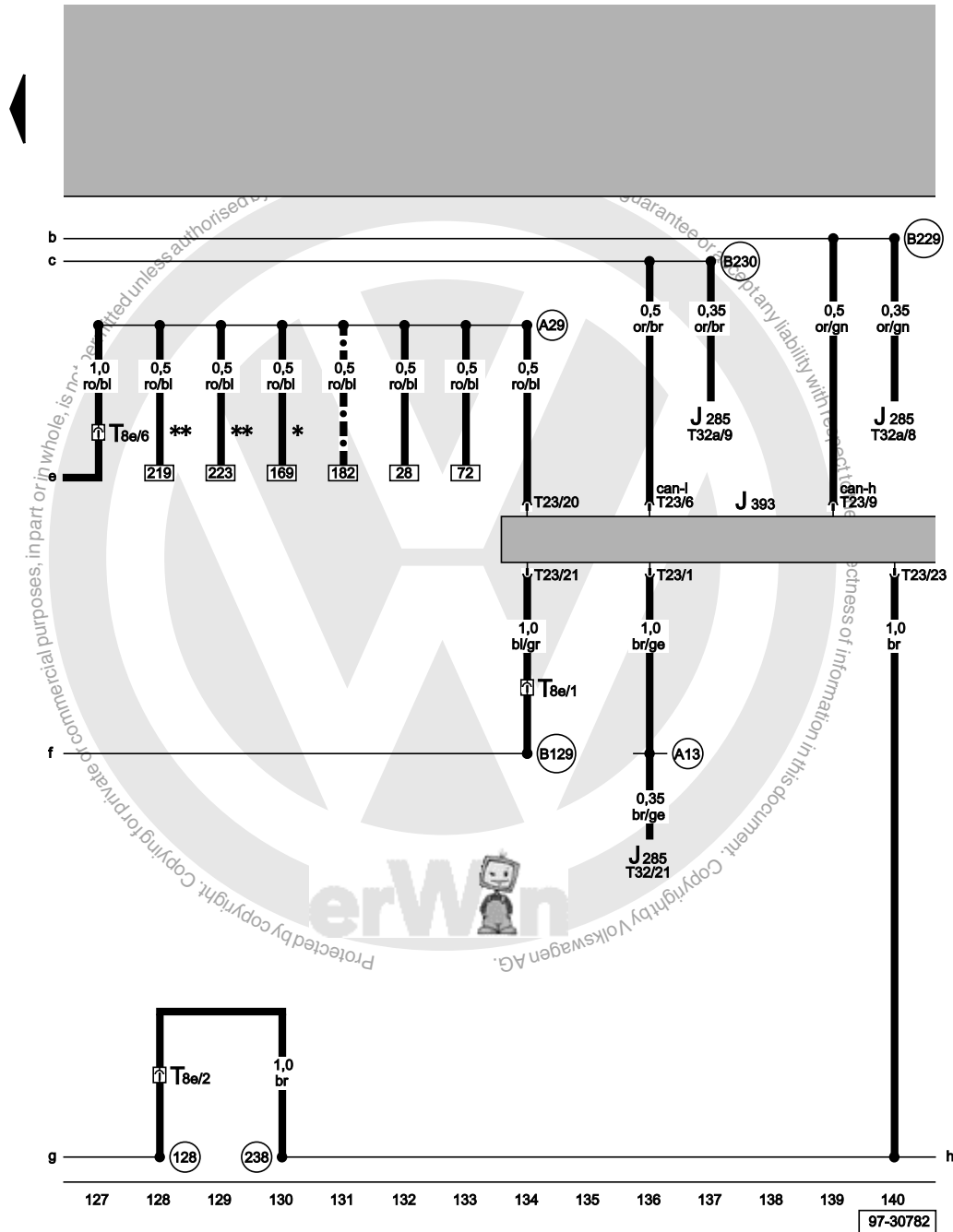
- ws = white
- sw = black
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29701

Convenience system central control unit

- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind dash panel, left
- T8e 8-pin connector, behind left A-pillar trim
- T23 23-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 128 Earth connection -1-, in interior light wiring harness
- 238 Earth connection -1-, in interior wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A29 Connection (interior light), in dash panel wiring harness
- B129 Connection (interior light, 31l), in interior wiring harness
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness
- * Only Bora
- ** Only Golf Variant/ Bora Variant
- .-.- Only Golf

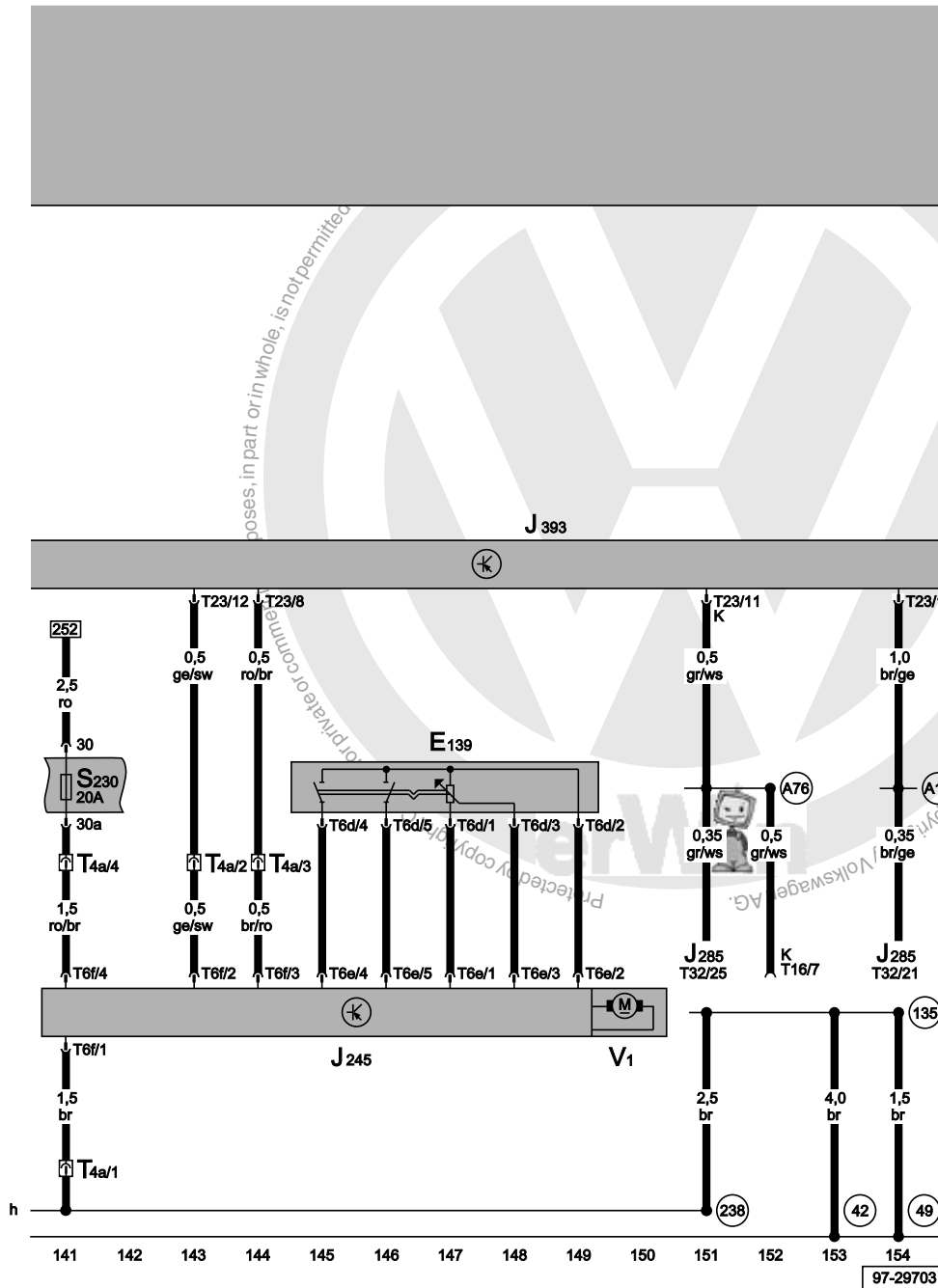


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Convenience system central control unit, sliding sunroof adjustment control unit, sliding sunroof adjustment regulator

- E139 Sliding sunroof adjustment regulator
- J245 Sliding sunroof adjustment control unit
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind dash panel, left
- S230 Fuse in fuse box
- T4a 4-pin connector, behind left A-pillar trim
- T6d 6-pin connector
- T6e 6-pin connector
- T6f 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T23 23-pin connector
- T32 32-pin connector, blue
- V1 Sliding sunroof motor

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- 238 Earth connection -1-, in interior wiring harness
- A13 Connection (door contact switch), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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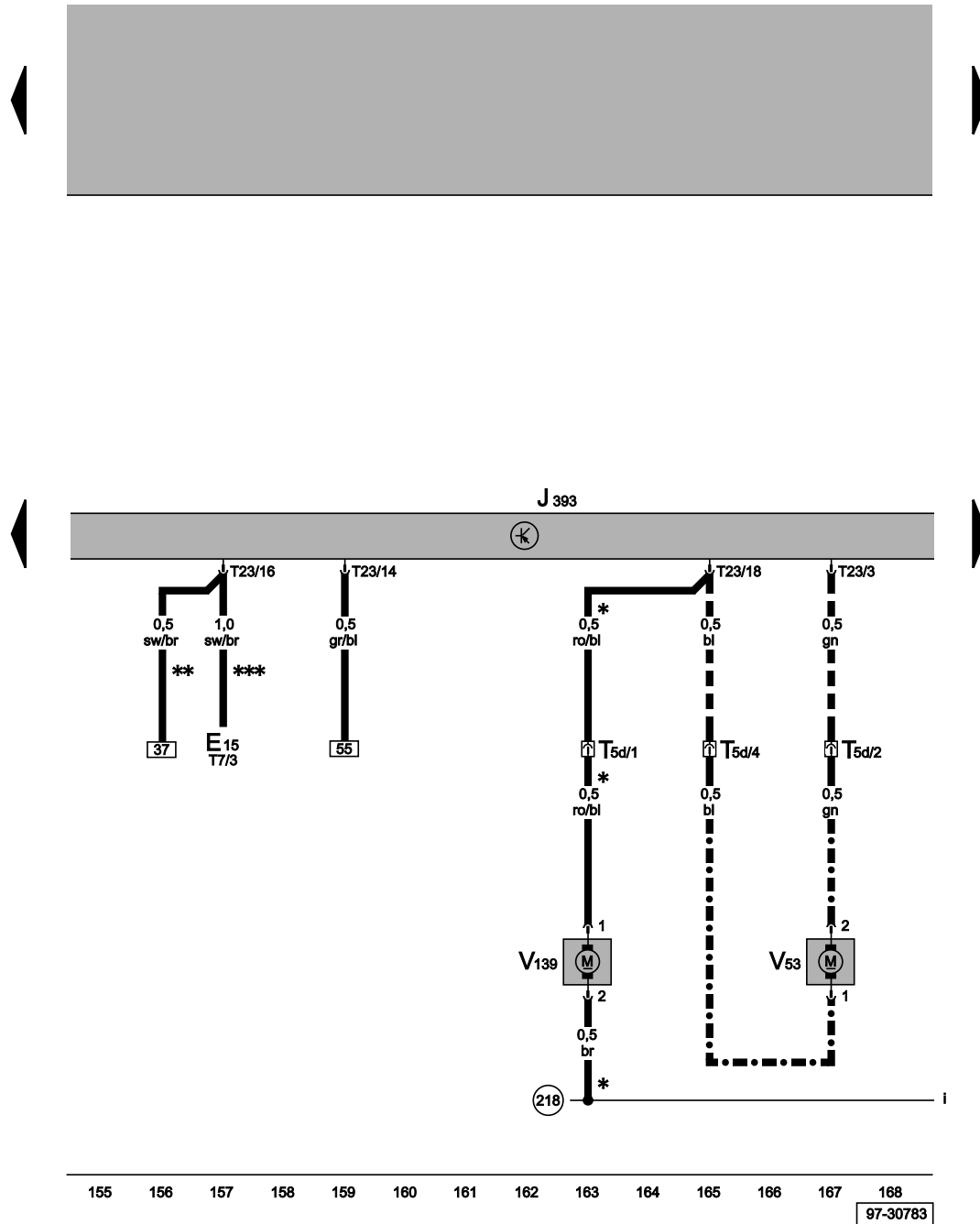
97-29703

Convenience system central control unit, central locking motor, tailgate/boot lid, tailgate/bootlid release motor

- E15 Heated rear window switch
- J393 Convenience system central control unit, behind dash panel, left
- T5d 5-pin connector, brown, connector point left C-pillar
- T7 7-pin connector
- T23 23-pin connector
- V53 Central locking motor, tailgate/boot lid
- V139 Tailgate/bootlid release motor*

218 Earth connection -1- , in tailgate/boot lid wiring harness

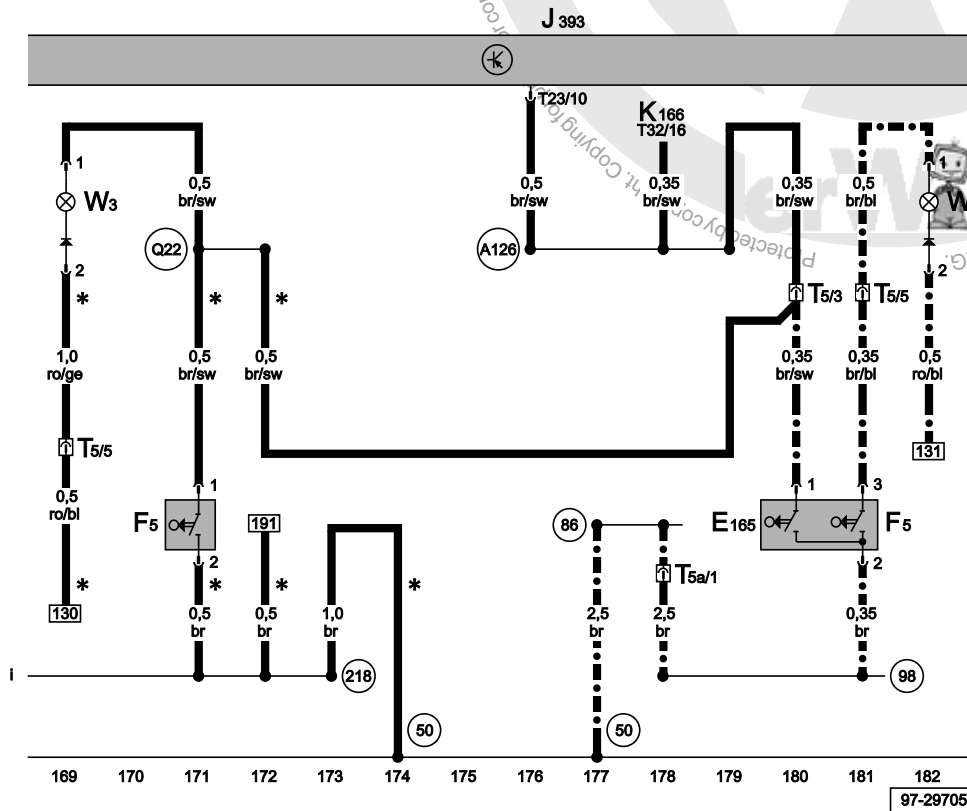
- * Only Bora
- .-.- Only Golf
- ** For vehicles with separate exterior mirror heater only
- Only Golf/ Bora
- *** Models without separate exterior mirror heating
Tailgate/boot lid release Variant-model's, => Current Flow Diagram No. 75/16



Convenience system central control unit, luggage compartment light (only Golf/ Bora)

- E165 Tailgate/boot lid release switch
- F5 Luggage compartment light switch
- J393 Convenience system central control unit, behind dash panel, left
- K166 Tailgate/boot lid released warning lamp
- T5 5-pin connector, black, connector point left C-pillar
- T5a 5-pin connector, pink, connector point left C-pillar
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light

- 50 Earth point, on left luggage compartment
- 86 Earth connection -1-, in rear wiring harness
- 98 Earth connection, in tailgate/boot lid wiring harness
- 218 Earth connection -1-, in tailgate/boot lid wiring harness
- A126 Connection (tailgate/bootlid contact switch), in dash panel wiring harness
- Q22 Connection -1-, in tailgate/bootlid wiring harness
- * Only Bora
- Only Golf
- Luggage compartment light Variant-mode'sl, ⇒ Current Flow Diagram No. 75/17



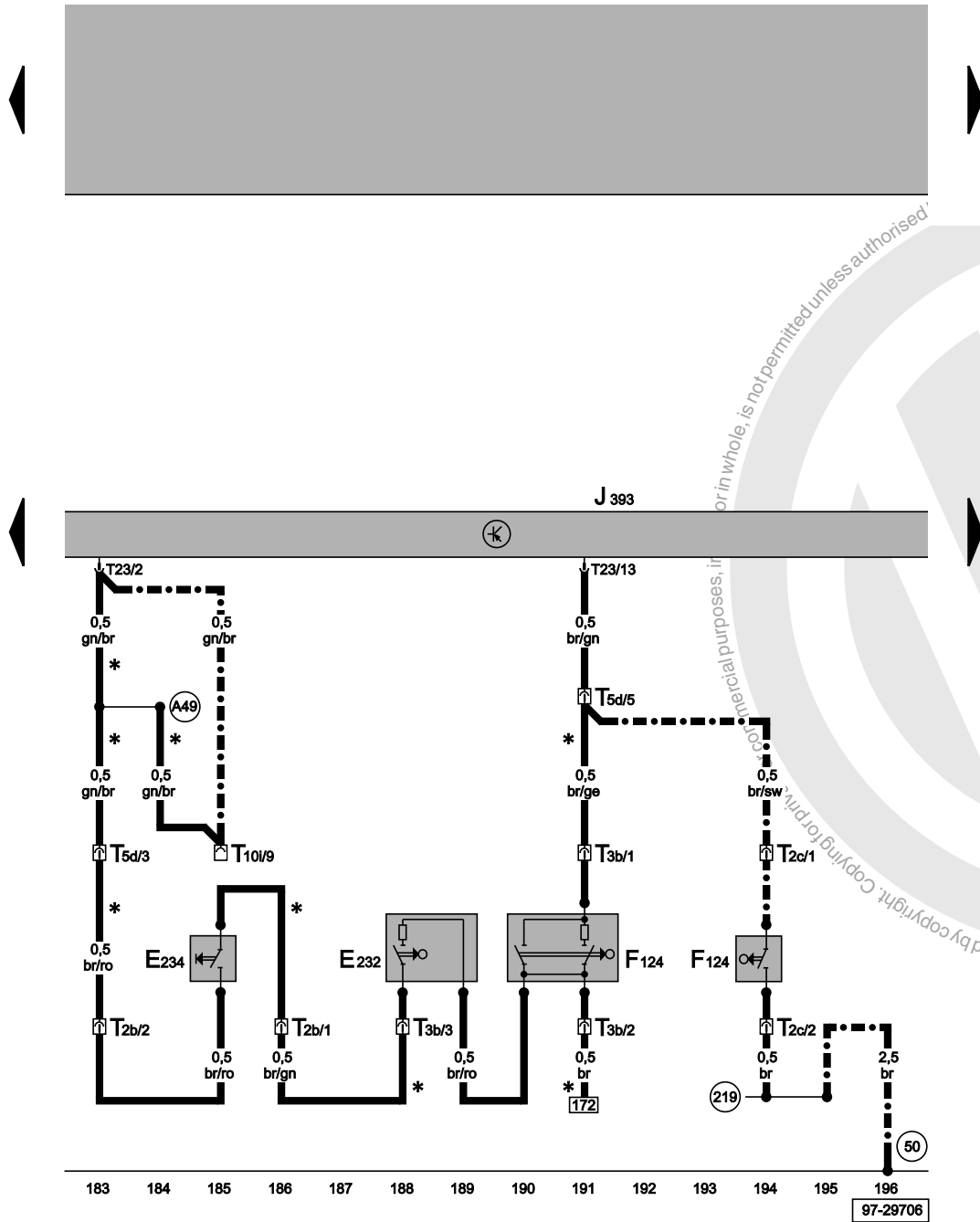
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- rs = pink

Convenience system central control unit, release button (tailgate/bootlid handle), tailgate/boot lid remote release key switch

- E232 Tailgate/bootlid remote release key switch*
- E234 Tailgate/bootlid handle release button*
- F124 Contact switch in lock cylinder for tailgate/boot lid anti-theft alarm system/central locking system
- J393 Convenience system central control unit, behind dash panel, left
- T2b 2-pin connector, in tailgate/bootlid
- T2c 2-pin connector, in tailgate/bootlid
- T3b 3-pin connector, in tailgate/bootlid
- T5d 5-pin connector, brown, connector point left C-pillar
- T10i 10-pin connector, black, connector point left A-pillar
- T23 23-pin connector

- 50 Earth point, on left luggage compartment
- 219 Earth connection -2-, in tailgate/bootlid wiring harness
- A49 Connection -1-, in dash panel wiring harness

- * Only Bora
- Only Golf
- Tailgate/bootlid release Variant-mode/sl, ⇒ Current Flow Diagram No. 75/16



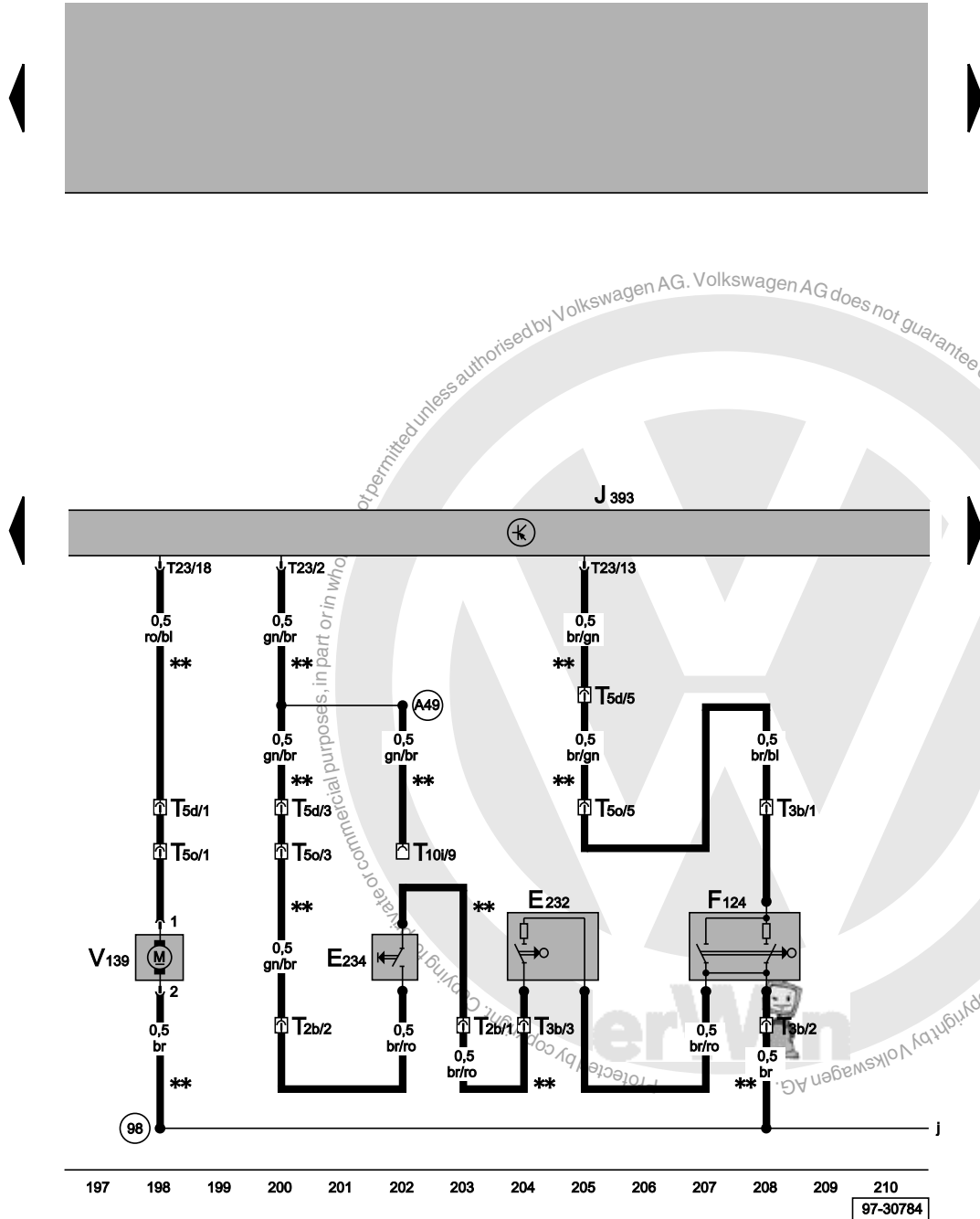
Convenience system central control unit, tailgate/bootlid release motor, release button (tailgate/bootlid handle)

- E232 Tailgate/bootlid remote release key switch**
- E234 Tailgate/bootlid handle release button**
- F124 Contact switch in lock cylinder for tailgate/boot lid anti-theft alarm system/central locking system
- J393 Convenience system central control unit, behind dash panel, left
- T2b 2-pin connector, in tailgate/bootlid
- T3b 3-pin connector, in tailgate/bootlid
- T5d 5-pin connector, brown, connector point right D-pillar
- T5o 5-pin connector, brown, in tailgate/bootlid
- T10i 10-pin connector, black, connector point left A-pillar
- T23 23-pin connector
- V139 Tailgate/boot lid release motor

98 Earth connection, in tailgate/bootlid wiring harness

A49 Connection -1-, in dash panel wiring harness

** Only Golf Variant/ Bora Variant
Tailgate/bootlid release limousinen model, => Current Flow Diagram No. 75/14 and No. 75/15



- ws = white
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- or = orange
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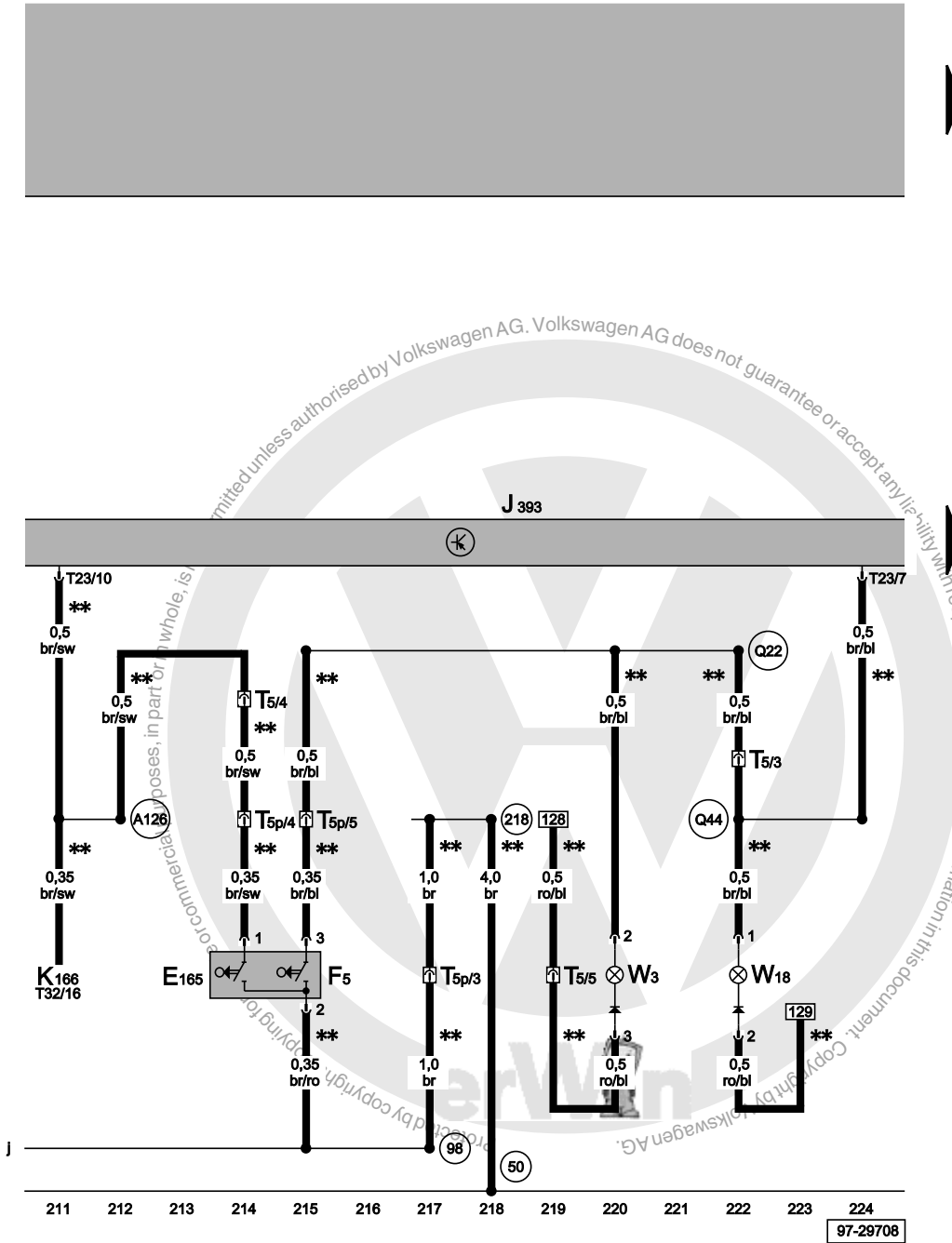
197	198	199	200	201	202	203	204	205	206	207	208	209	210
	98										98		97-30784

Convenience system central control unit, luggage compartment light (only Golf Variant/ Bora Variant)

- E165 Tailgate/bootlid release switch
- F5 Luggage compartment light switch
- J393 Convenience system central control unit, behind dash panel, left
- K166 Door open warning lamp
- T5 5-pin connector, black, connector point left D-pillar
- T5p 5-pin connector, black, in tailgate/bootlid
- T23 23-pin connector
- T32 32-pin connector, blue
- W3 Luggage compartment light
- W18 Luggage compartment light, left

- 50 Earth point, on left luggage compartment
- 98 Earth connection, in tailgate/bootlid wiring harness
- 218 Earth connection -1-, in tailgate/bootlid wiring harness
- A126 Connection (tailgate/bootlid contact switch), in dash panel wiring harness
- Q22 Connection -1-, in tailgate/bootlid wiring harness
- Q44 Connection -2-, in tailgate/bootlid wiring harness

** Only Golf Variant/ Bora Variant
Luggage compartment lights hatchback models, ⇒ Current Flow Diagram No. 75/14

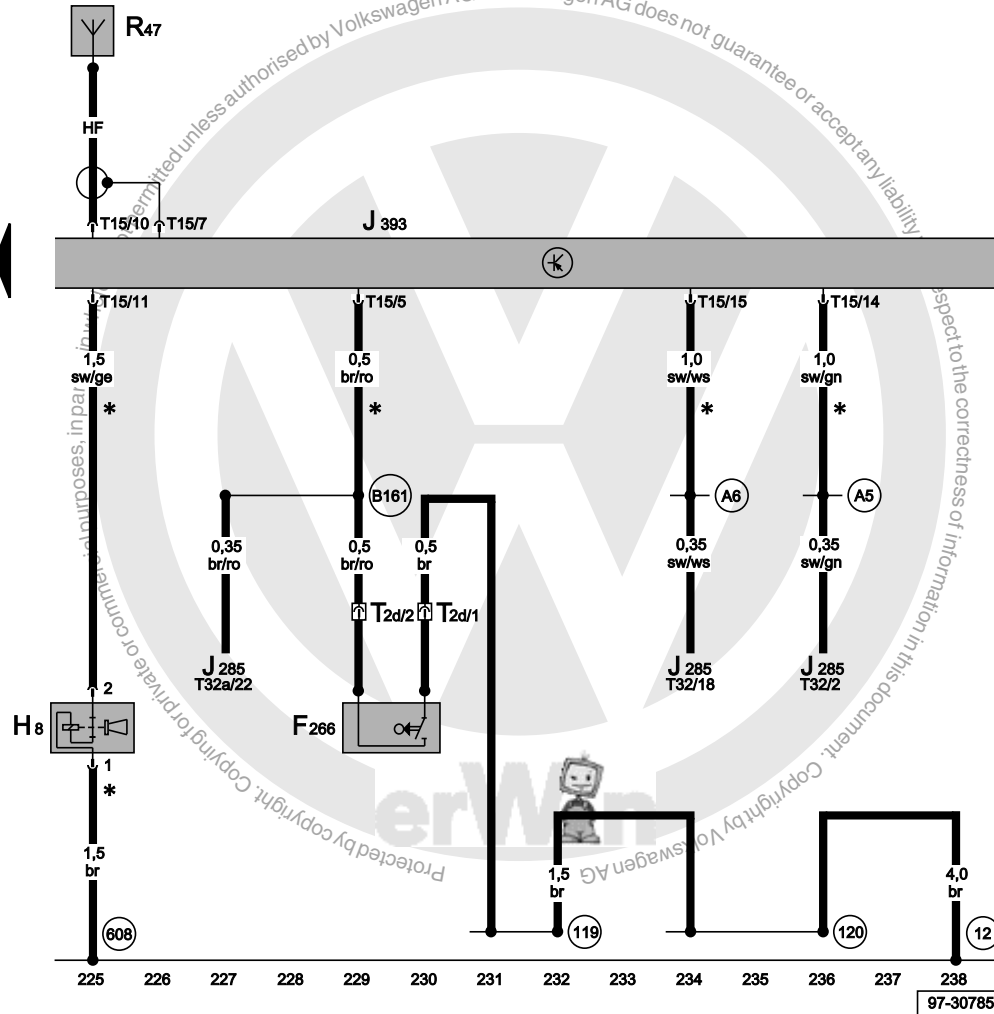


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- rs = pink

Convenience system central control unit, anti-theft alarm system horn, central locking and anti-theft alarm system aerial, bonnet contact switch

- F266 Bonnet contact switch
- H8 Anti-theft alarm system horn*
- J285 Control unit with display in dash panel insert
- J393 Convenience system central control unit, behind dash panel, left
- R47 Central locking and anti-theft alarm system
- T2d 2-pin connector, near headlight, right
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, in engine compartment, left
 - 119 Earth connection -1-, in headlight wiring harness
 - 120 Earth connection -2-, in headlight wiring harness
 - 608 Earth point, in plenum chamber, centre
 - A5 Positive (+) connection (right turn signal), in dash panel wiring harness
 - A6 Positive (+) connection (left turn signal), in dash panel wiring harness
 - B161 Connection (anti-theft alarm), in interior wiring harness
- * Only in models with anti-theft alarm system

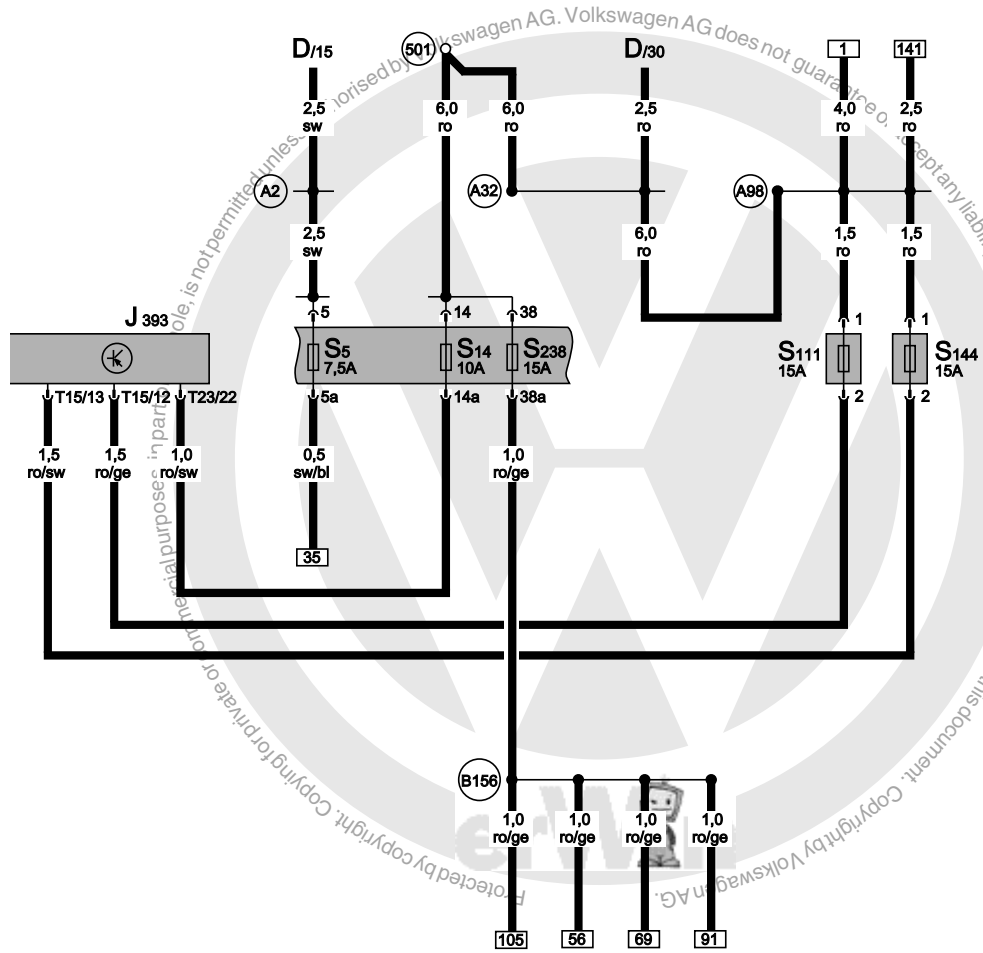


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- li = purple
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- rs = pink

Convenience system central control unit

- D Ignition/starter switch
- J393 Convenience system central control unit, behind dash panel, left
- S5 Fuse in fuse box
- S14 Fuse in fuse box
- S111 Fuse for anti-theft alarm system
- S144 Anti-theft alarm system/ central locking fuse
- S238 Fuse in fuse box
- T15 15-pin connector
- T23 23-pin connector

- (501) Screw connection -2- (30), on relay plate
- (A2) Positive (+) connection (15), in dash panel wiring harness
- (A32) Positive (+) connection (30), in dash panel wiring harness
- (A98) Positive (+) connection -4- (30), in dash panel wiring harness
- (B156) Positive (+) connection (30a), in interior wiring harness

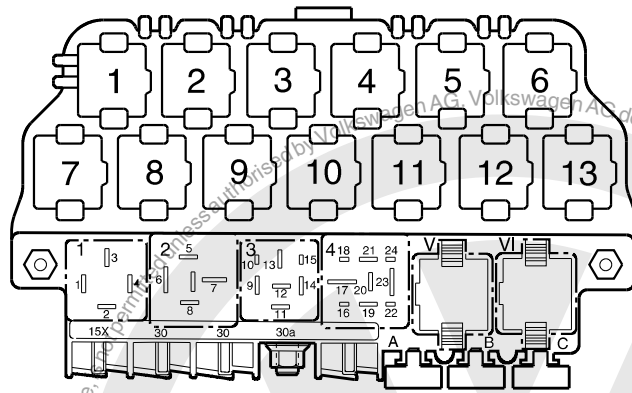


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Interior monitor

from May 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section



97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple

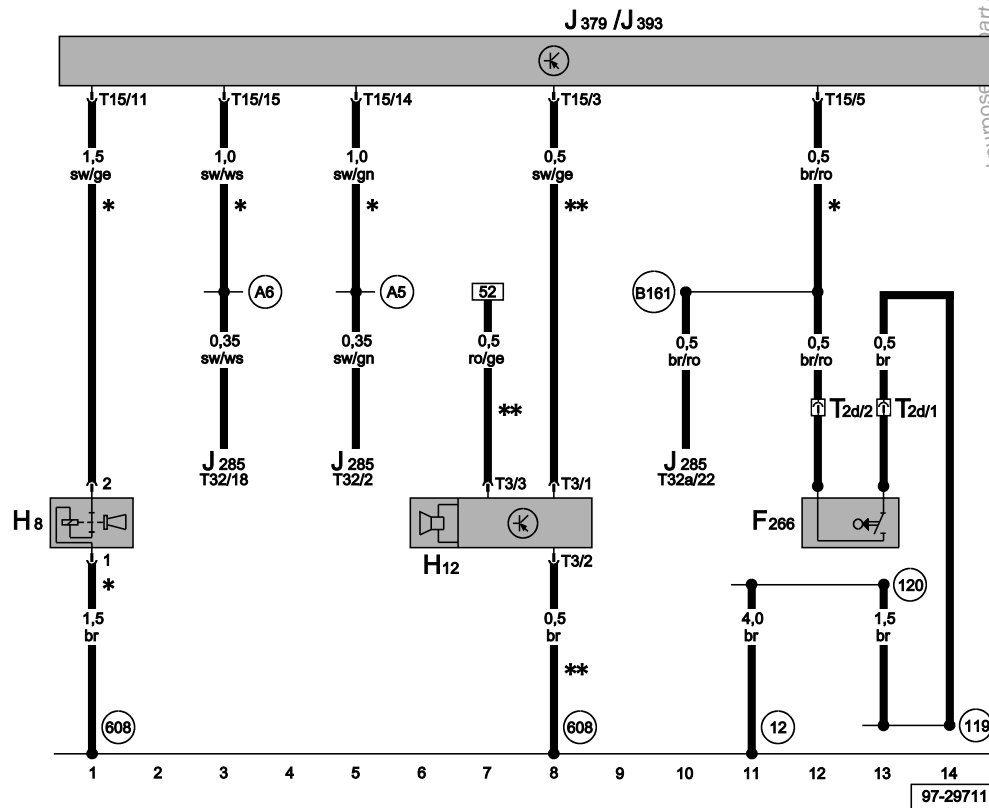
Central locking and anti-theft alarm system control unit, convenience system central control unit, anti-theft alarm system horn, bonnet contact switch

- F266 Bonnet contact switch, in lock part
- H8 Anti-theft alarm system horn
- H12 Alarm horn**
- J285 Control unit with display in dash panel insert
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J393 Convenience system central control unit, behind the dash panel, left
- T2d 2-pin connector, near right headlight
- T3 3-pin connector
- T15 15-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- (12) Earth point, on left in engine compartment
- (119) Earth connection 1, in headlight wiring harness
- (120) Earth connection 2, in headlight wiring harness
- (608) Earth point, in centre of plenum chamber
- (A5) Positive connection (right turn signal), in dash panel wiring harness
- (A6) Positive connection (left turn signal), in dash panel wiring harness
- (B161) Connection (ATA), in interior wiring harness

* only models with anti-theft alarm
 ** only for some export countries

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
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- gr = grey
- li = purple
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- or = orange
- rs = pink

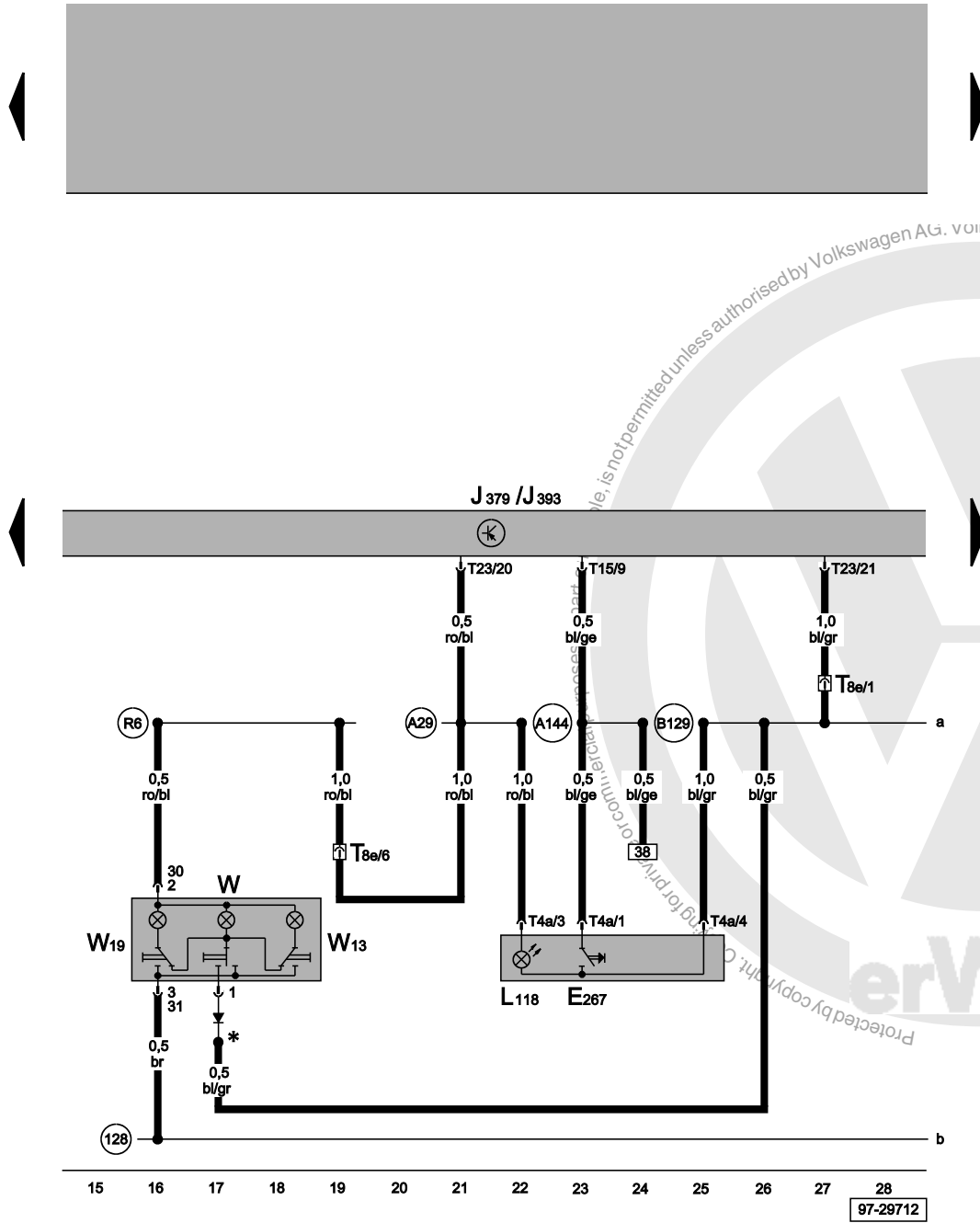


97-29711

Central locking and anti-theft alarm system control unit, convenience system central control unit, interior monitoring deactivation switch, front interior light, front reading lights

- E267 Interior monitoring deactivation switch
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J393 Convenience system central control unit, behind the dash panel, left
- L118 Deactivation of interior monitoring system switch illumination bulb
- T4a 4-pin connector
- T8e 8-pin connector, on left A-pillar
- T15 15-pin connector
- T23 23-pin connector
- W Front interior light
- W13 Front passenger side reading light
- W19 Driver side reading light

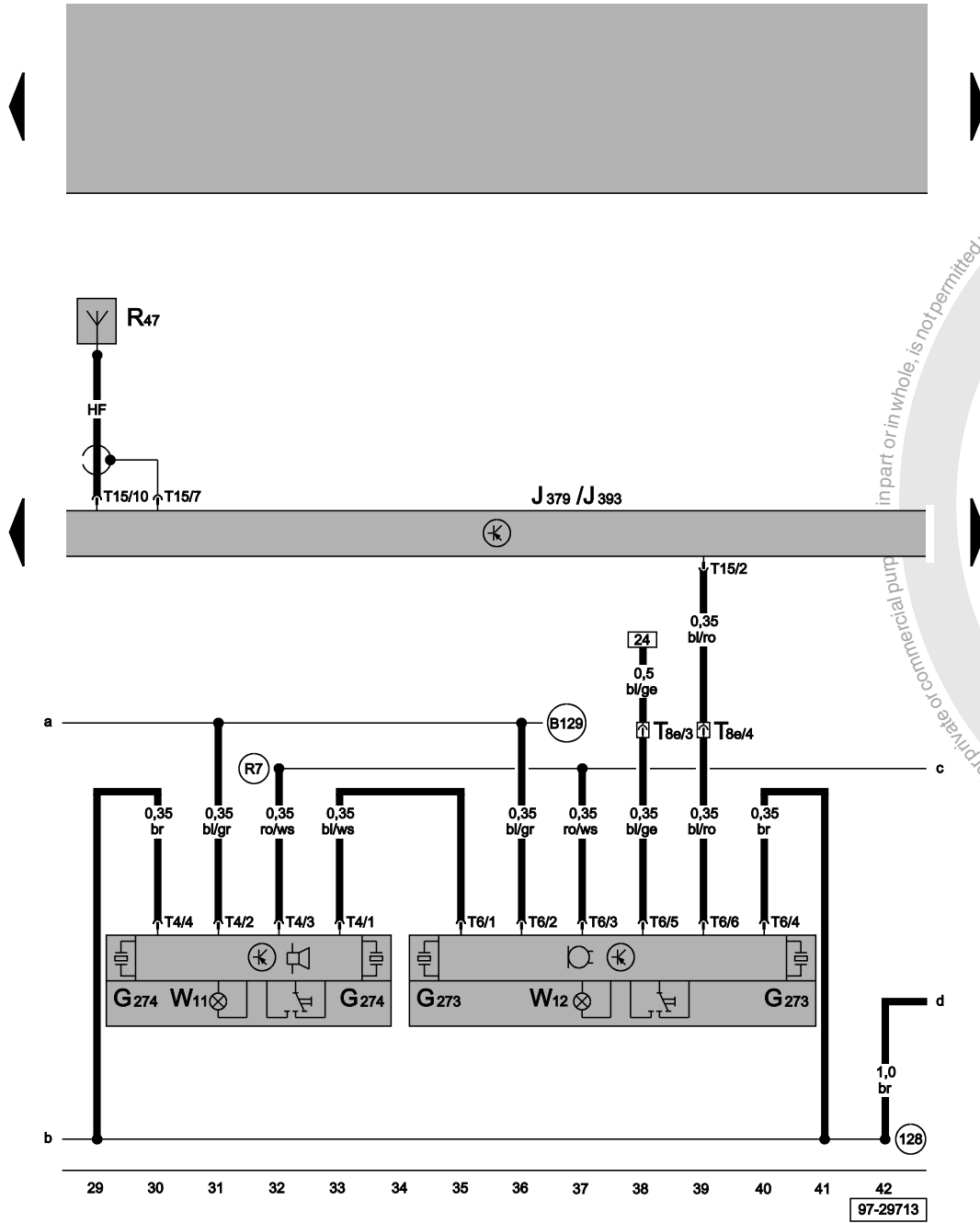
- (128) Earth connection 1, in interior light wiring harness
- (A29) Connection (interior light), in dash panel wiring harness
- (A144) Connection (interior monitoring) in dash panel wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R6) Positive connection 1, in interior light wiring harness
- * diode in connector housing



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Central locking and anti-theft alarm system control unit, convenience system central control unit, interior monitoring sensor and sender, rear reading lights

- G273 Interior monitoring sensor
- G274 Interior monitoring sender
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J393 Convenience system central control unit, behind the dash panel, left
- R47 Central locking and anti-theft alarm system aerial
- T4 4-pin connector
- T6 6-pin connector
- T8e 8-pin connector, on left A-pillar
- T15 15-pin connector
- W11 Rear left reading light
- W12 Rear right reading light
- (128) Earth connection 1, in interior light wiring harness
- (B129) Connection (interior light, 31), in interior wiring harness
- (R7) Positive connection 2, in interior light wiring harness

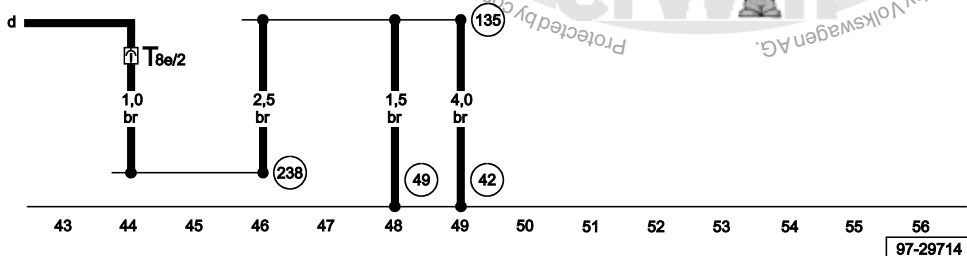
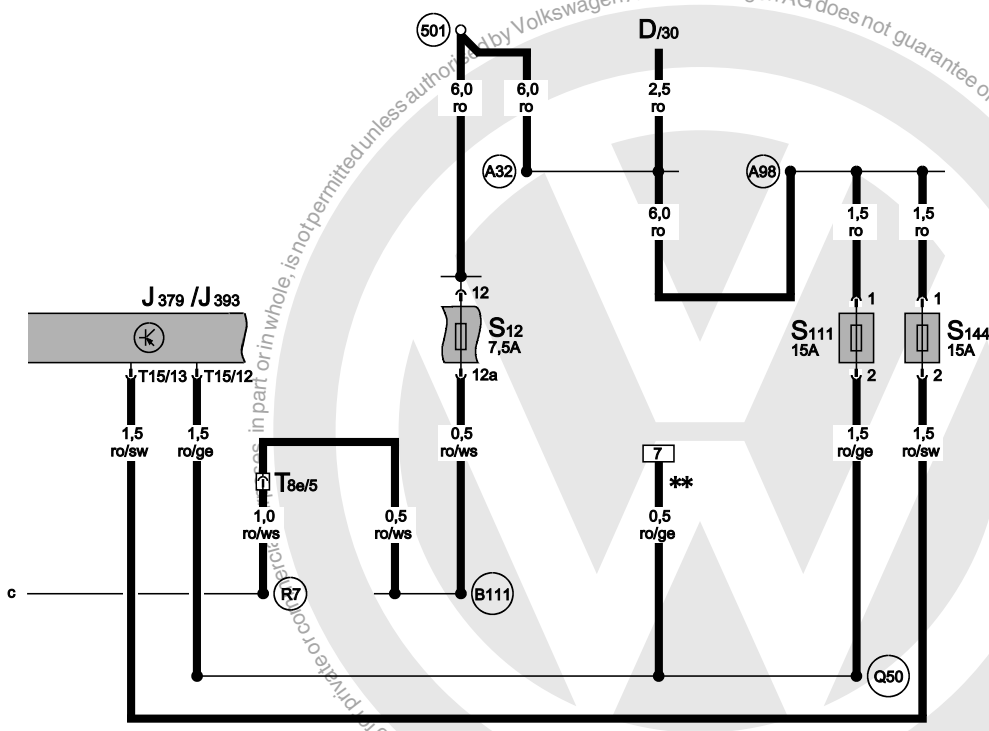


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Central locking and anti-theft alarm system control unit, convenience system central control unit

- D Ignition/starter switch
- J379 Central locking and anti-theft alarm system control unit, behind the dash panel, left
- J393 Convenience system central control unit, behind the dash panel, left
- S12 Fuse 12 in fuse holder
- S111 Anti-theft alarm system fuse
- S144 Anti-theft alarm system central locking fuse
- T8e 8-pin connector, on left A-pillar
- T15 15-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- 238 Earth connection 1, in interior wiring harness
- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B111 Positive connection -1- (30a), in interior wiring harness
- Q50 Connection (30 a), in anti-theft alarm system wiring harness
- R7 Positive connection 2, in interior light wiring harness
- ** only for some export countries



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2.0 l/85 kW Motronic, engine code AZJ

from May 2001

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

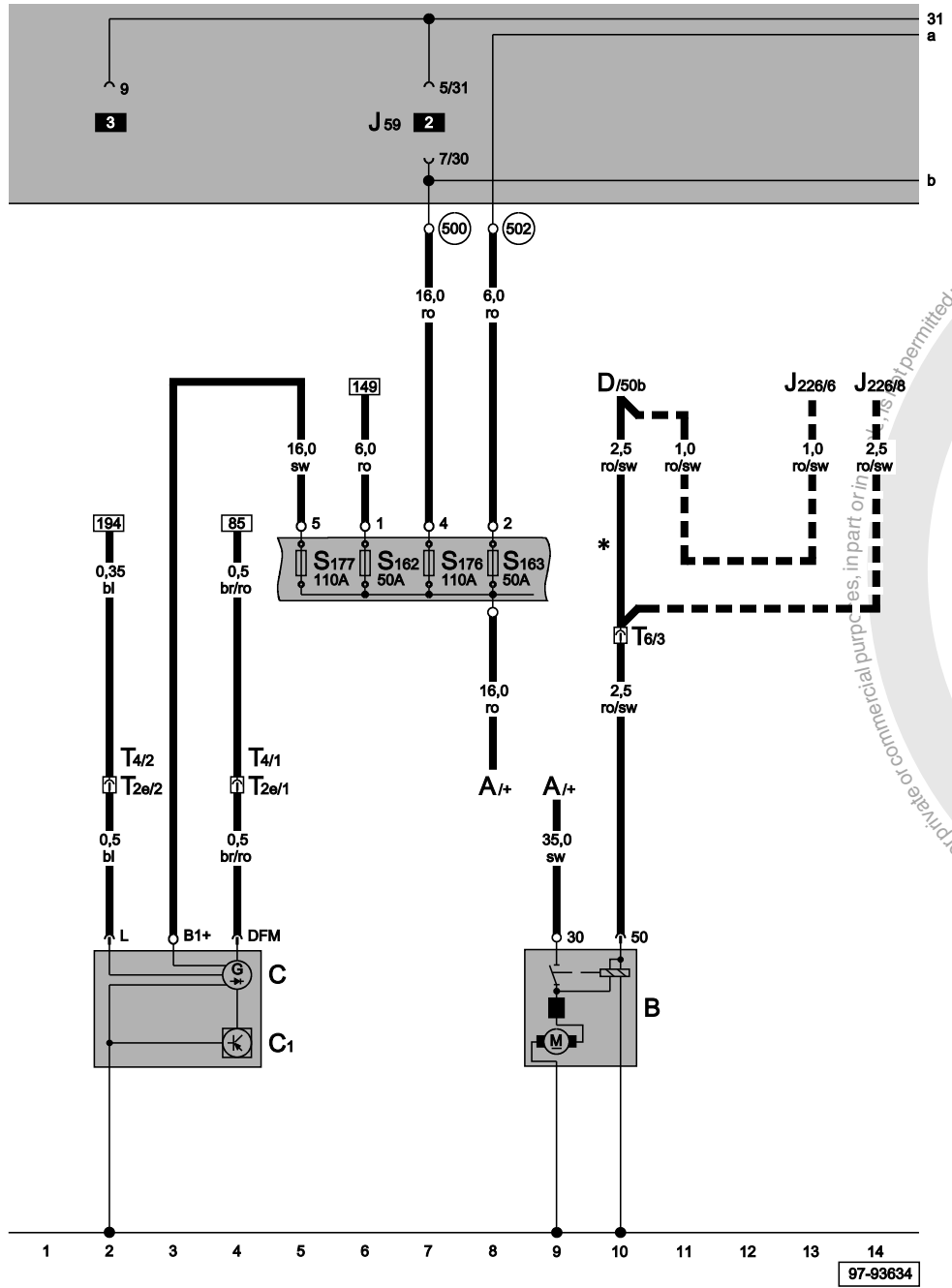
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- models with automatic gearbox only

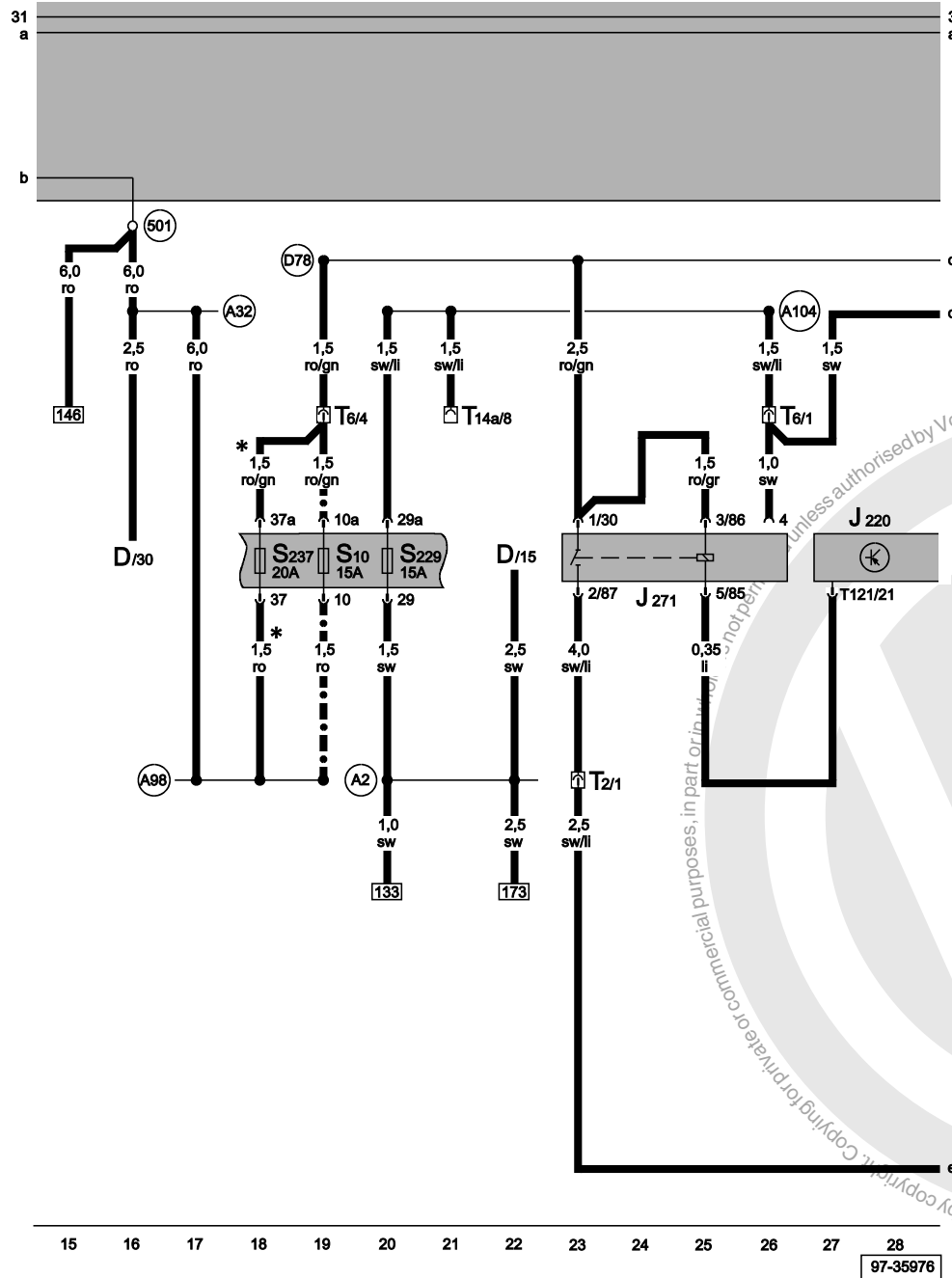
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97-93634

Motronic current supply relay, Motronic control unit

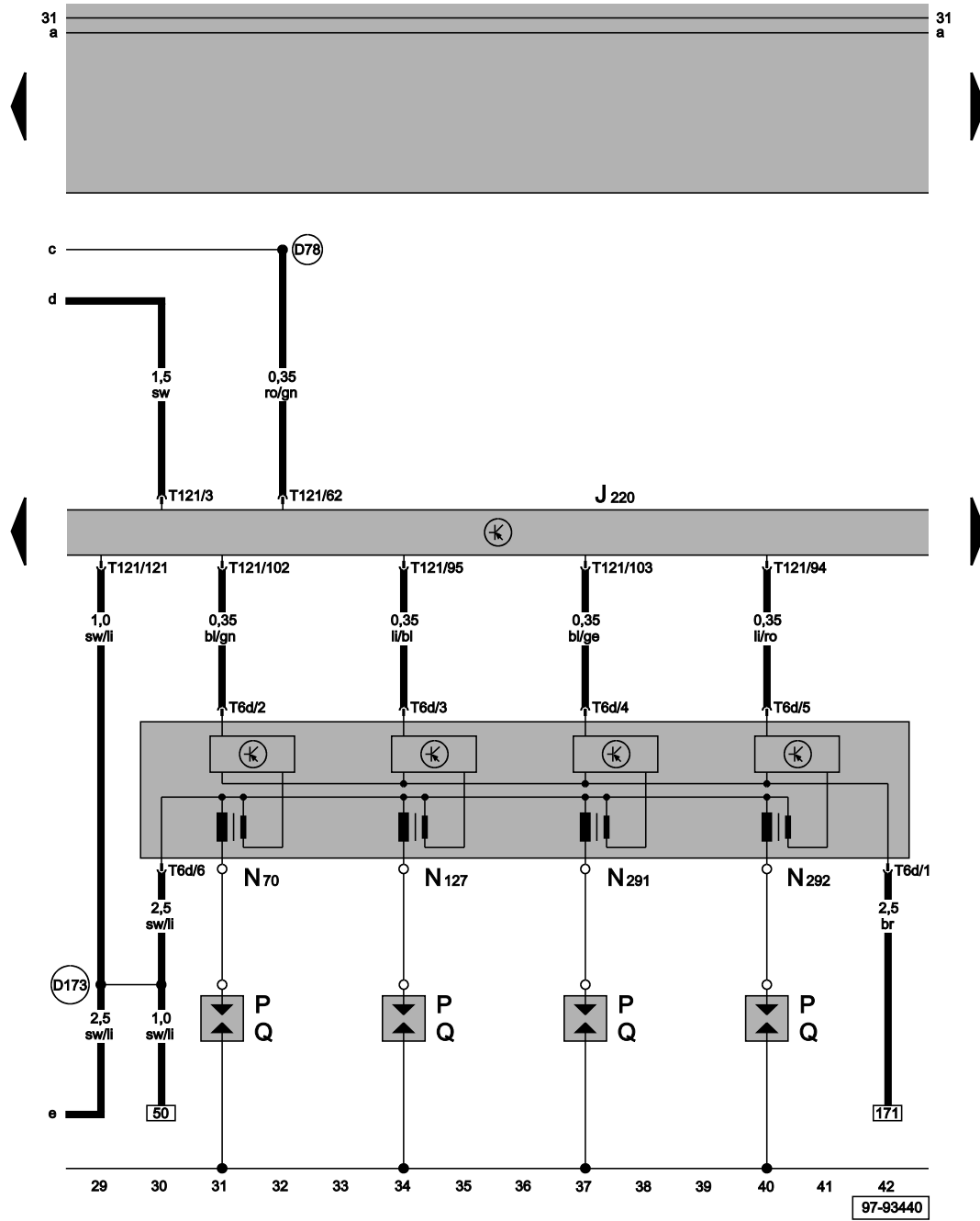
- D Ignition/starter switch
- J220 Motronic control unit, in centre plenum chamber
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- * from November 2001
- up to October 2001

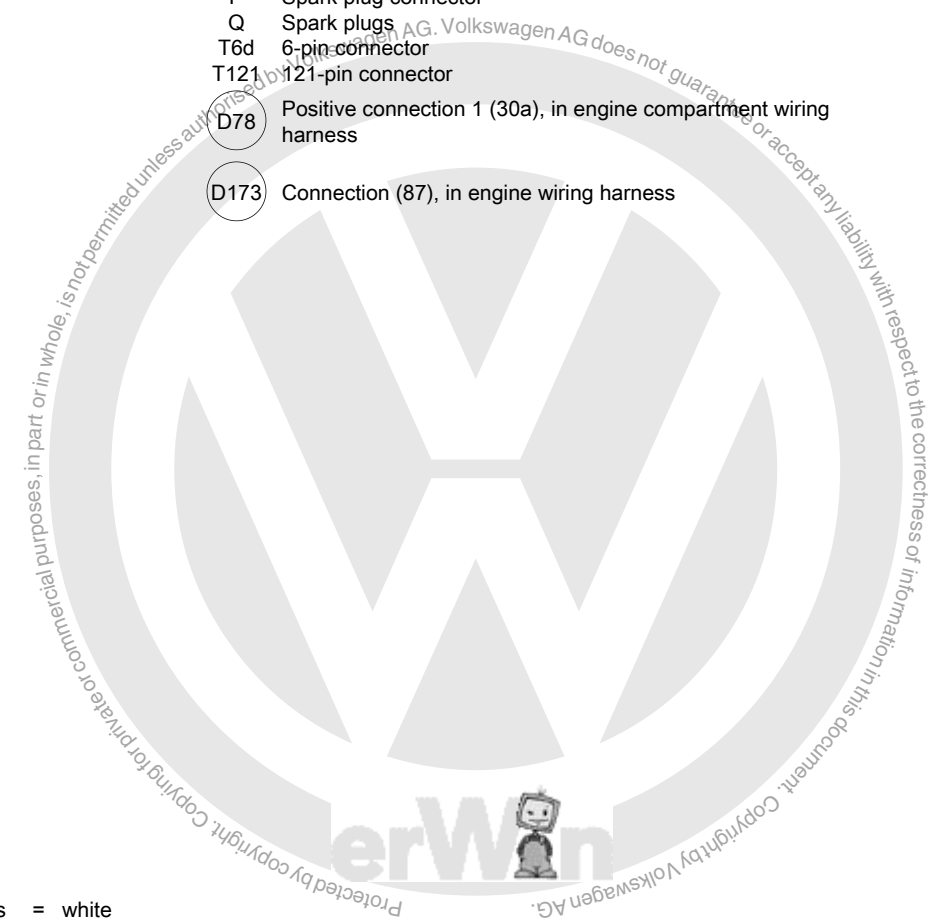


Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T6d 6-pin connector
- T121 121-pin connector
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness



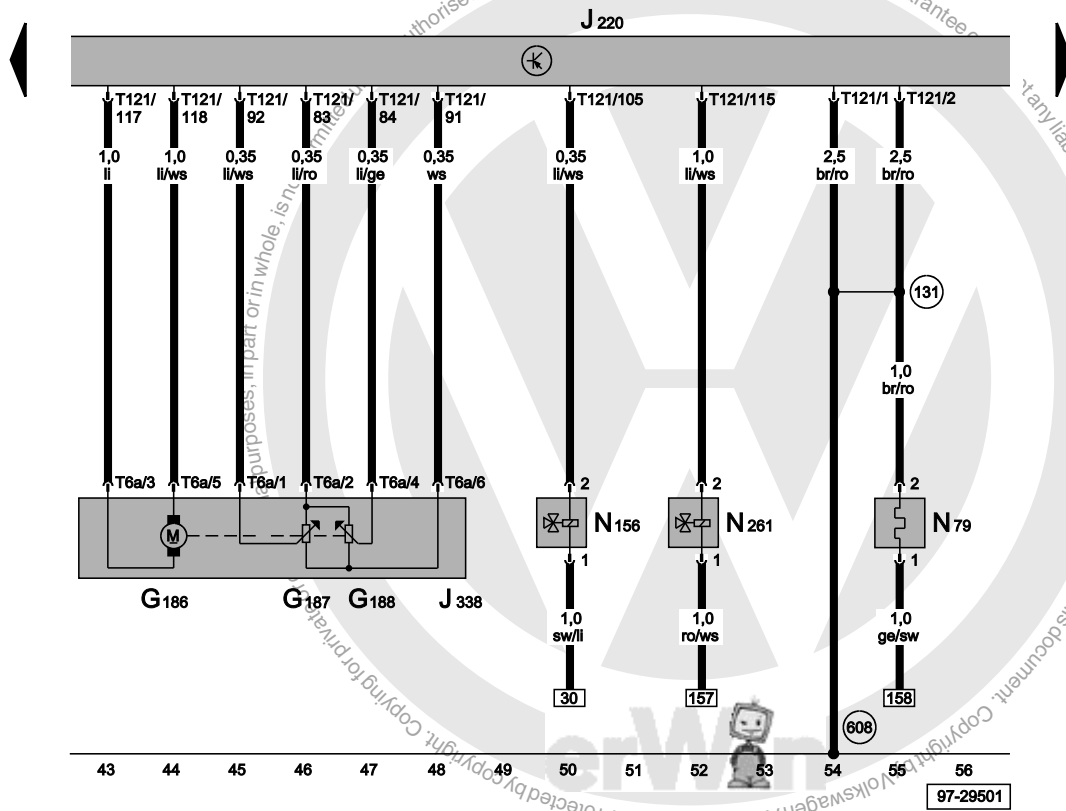
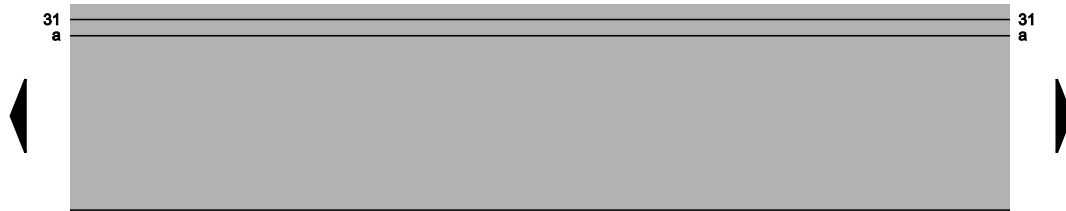
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Motronic control unit, throttle valve module, variable intake manifold change-over valve, heater element for crankcase breather

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- N79 Heater element for crankcase breather
- N156 Variable intake manifold change-over valve
- N261 Variable intake manifold change-over valve 2
- T6a 6-pin connector
- T121 121-pin connector

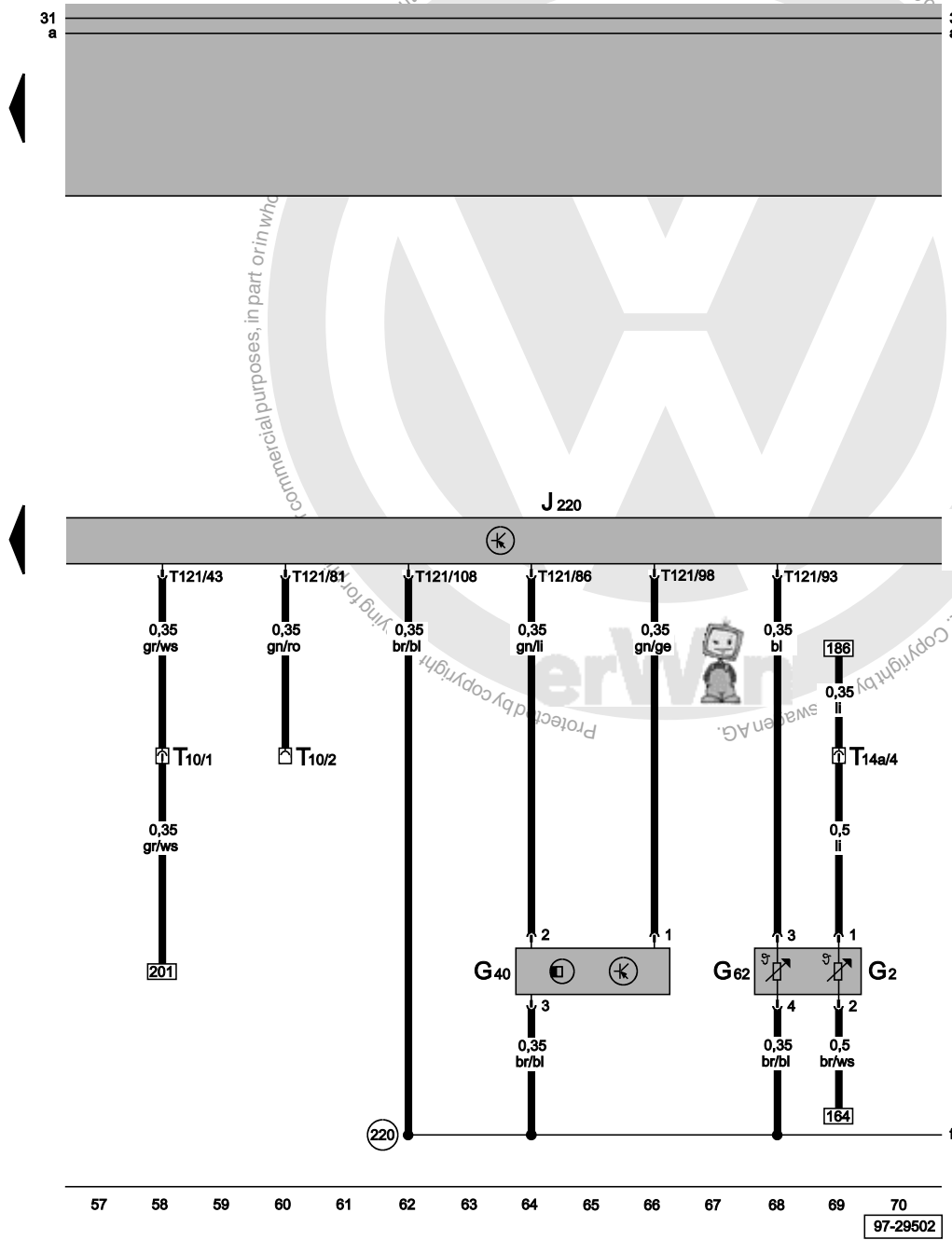
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber



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Motronic control unit, coolant temperature sender, Hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (220) Earth connection (sender earth), in engine wiring harness



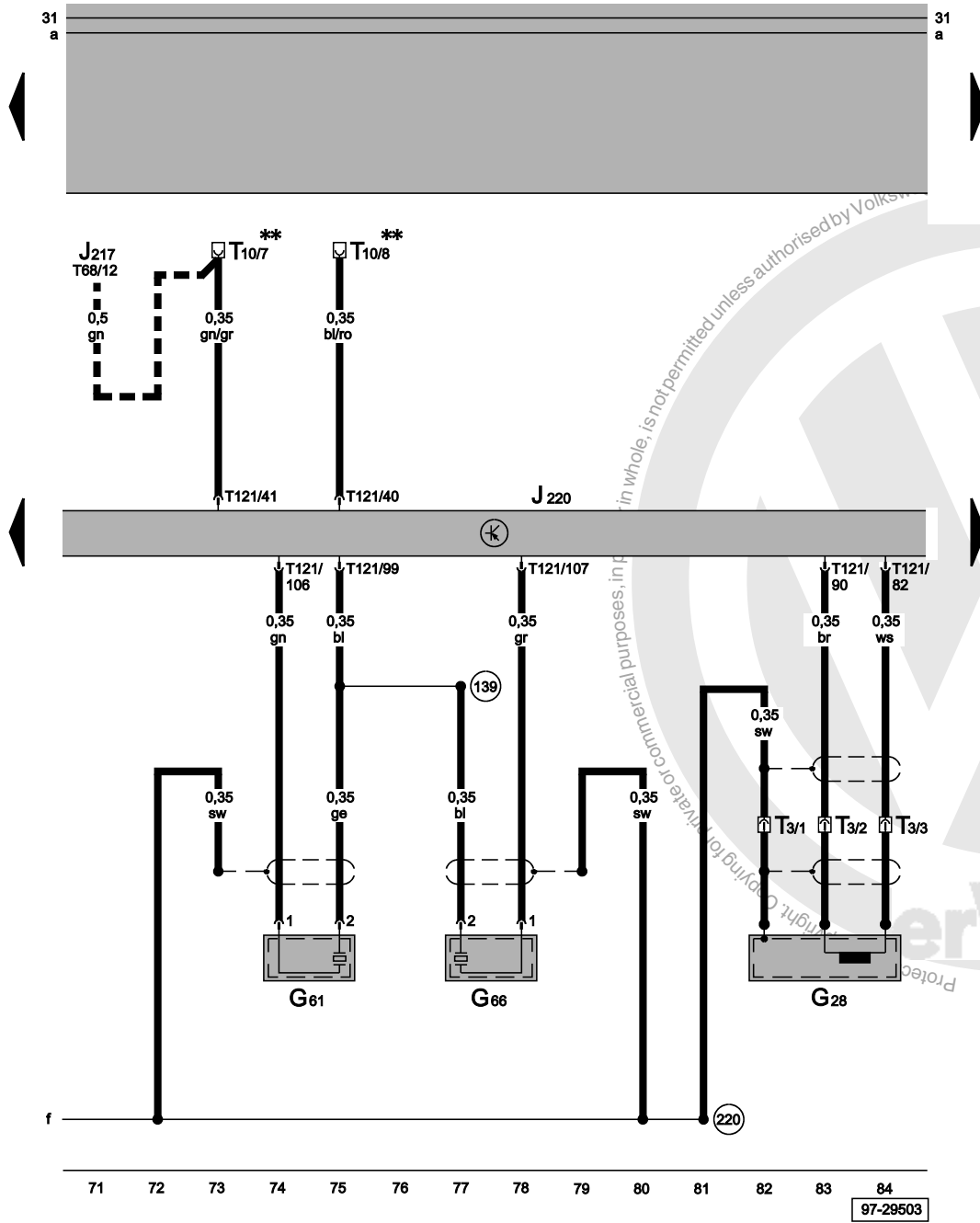
Motronic control unit, engine speed sender, knock sensors

- G28 Engine speed sender
- G61 Knock sensor 1
- G66 Knock sensor 2
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T3 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

139 Earth connection (sender earth), in Motronic wiring harness

220 Earth connection (sender earth), in engine wiring harness

** connection air conditioning system
 --- models with automatic gearbox only



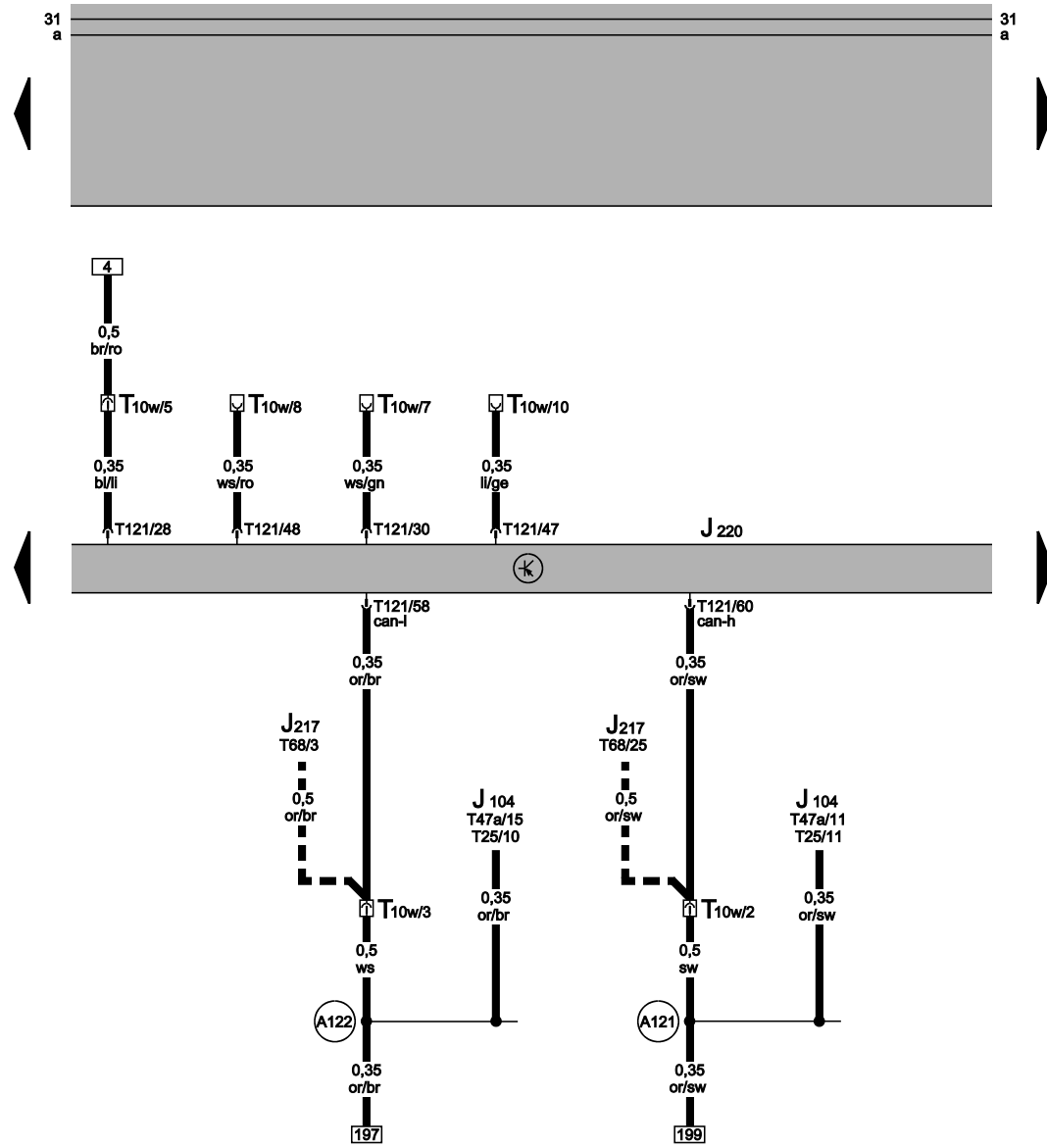
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Motronic control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector
- T121 121-pin connector

A121 Connection (high bus), in dash panel wiring harness

A122 Connection (low bus), in dash panel wiring harness
 models with automatic gearbox only

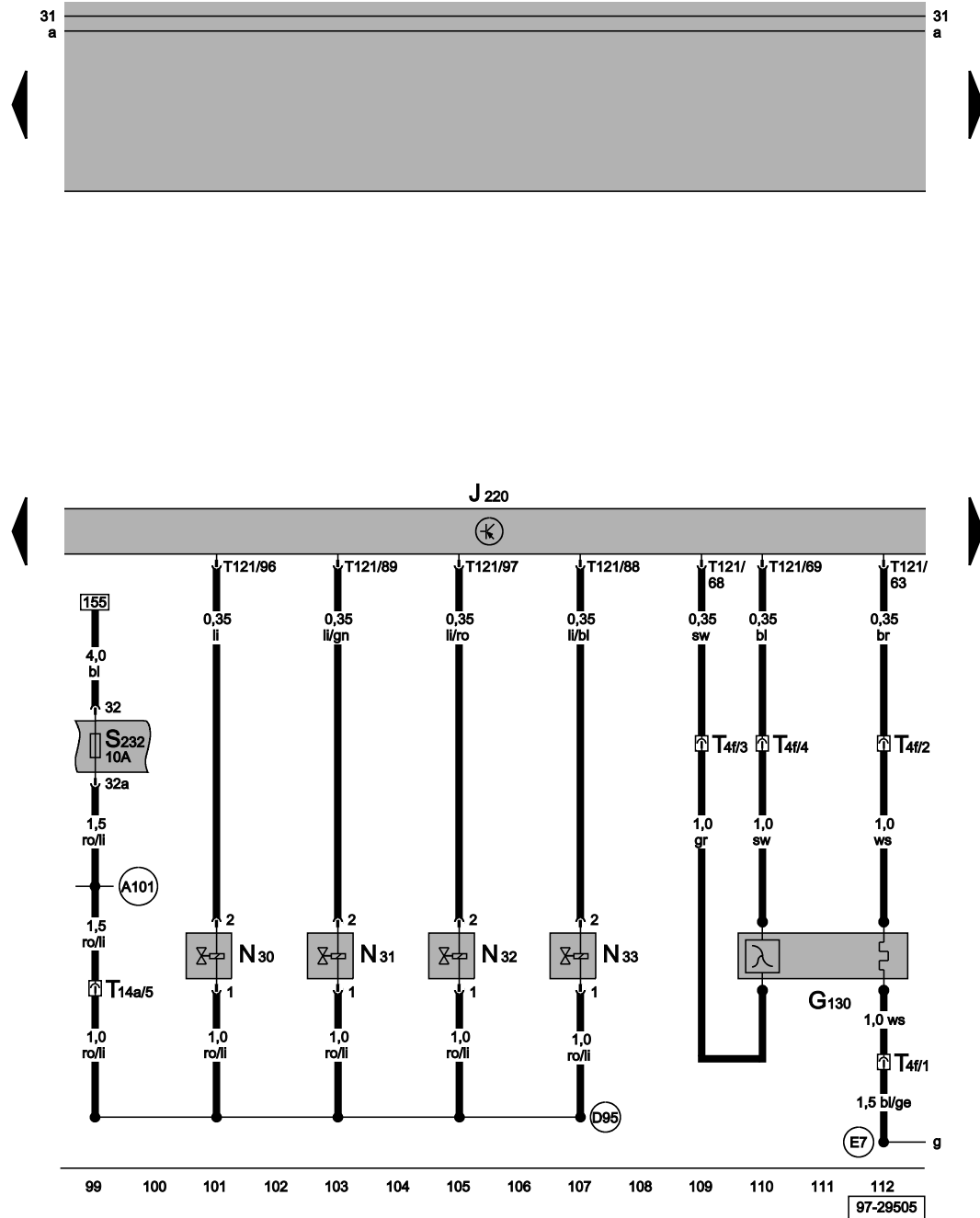


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Motronic control unit, injectors, lambda probe after catalytic converter

- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4f 4-pin connector, near catalytic converter
- T14a 14-pin connector, near battery
- T121 121-pin connector

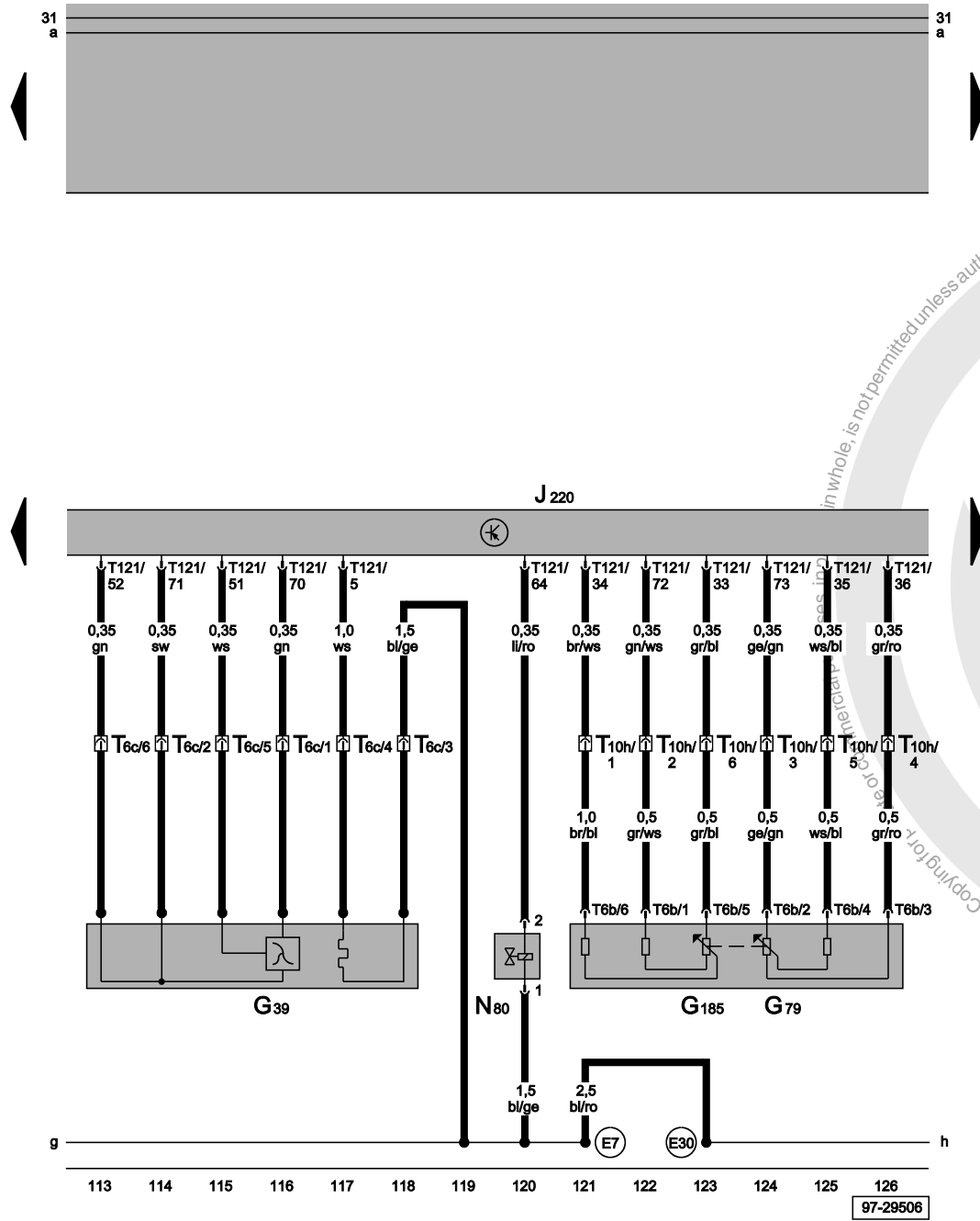
- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- E7 Positive connection (87a), in Motronic wiring harness



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Motronic control unit, accelerator position sender, lambda probe (upstream of catalytic converter), active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness

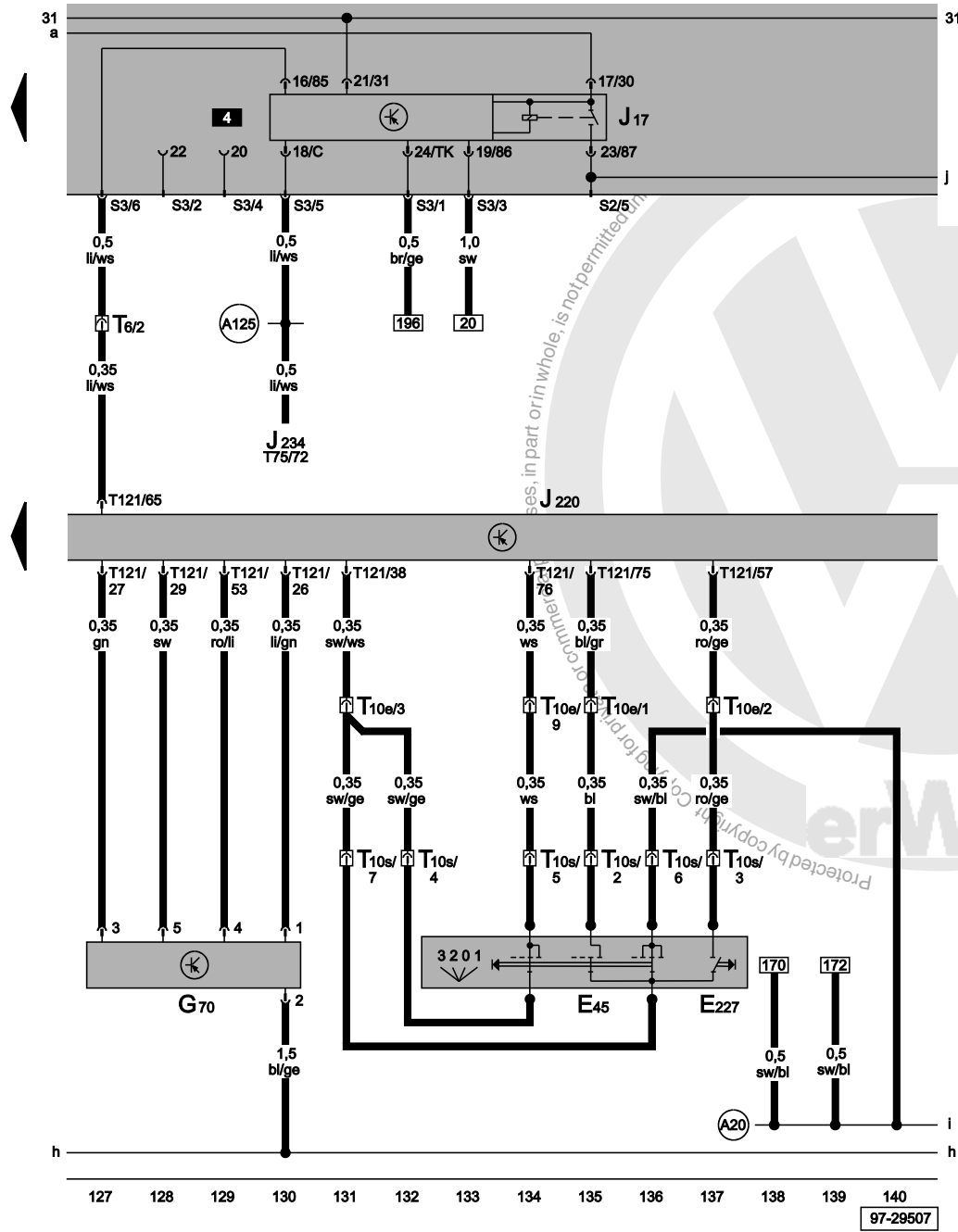


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97-29506

Motronic control unit, fuel pump relay, cruise control system switch (GND), air mass meter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T75 75-pin connector
- T121 121-pin connector
- A20 Connection (15a), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- ** only models with GND



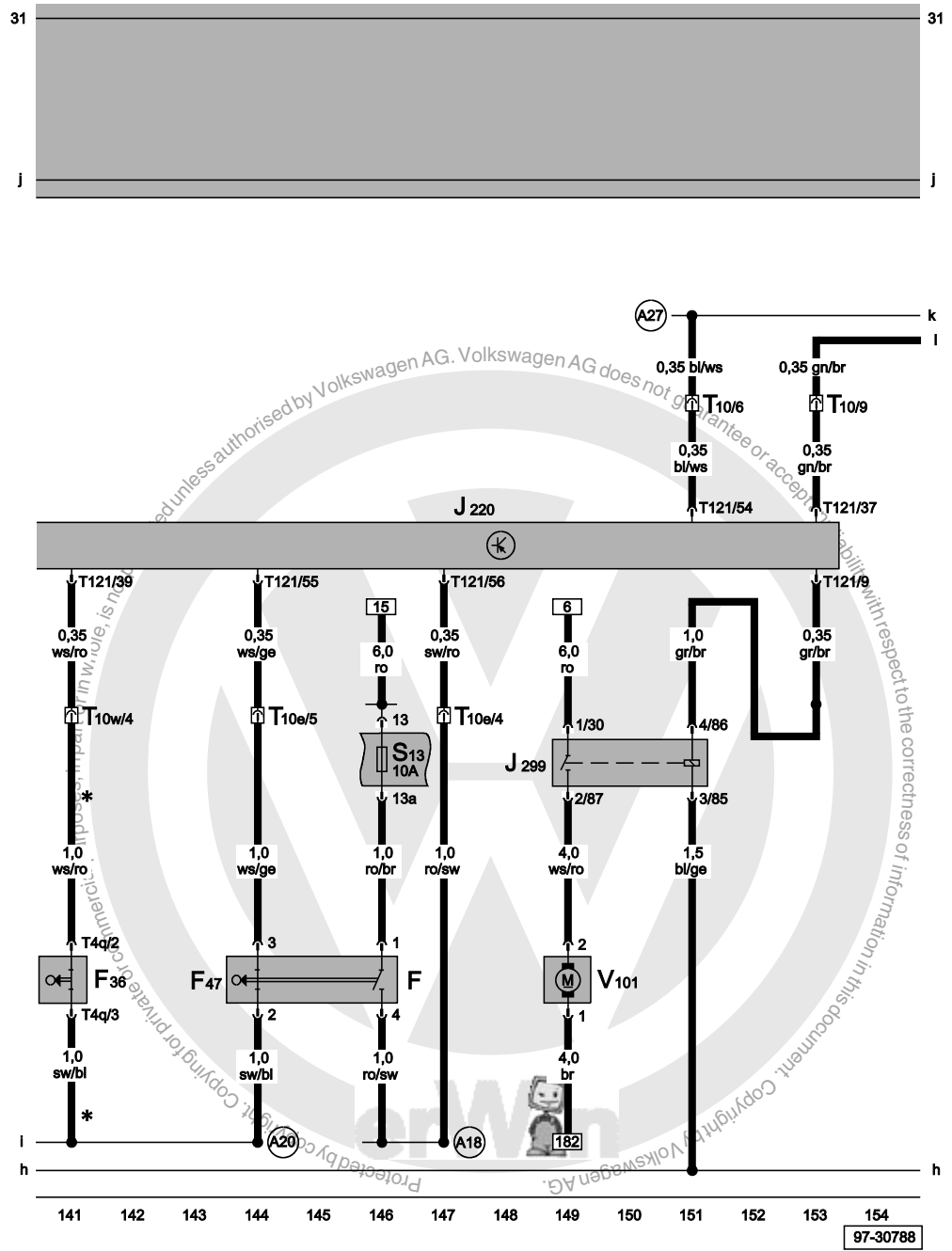
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97-29507

Motronic control unit, secondary air pump motor, clutch pedal switch, cruise control system brake pedal switch, brake light switch

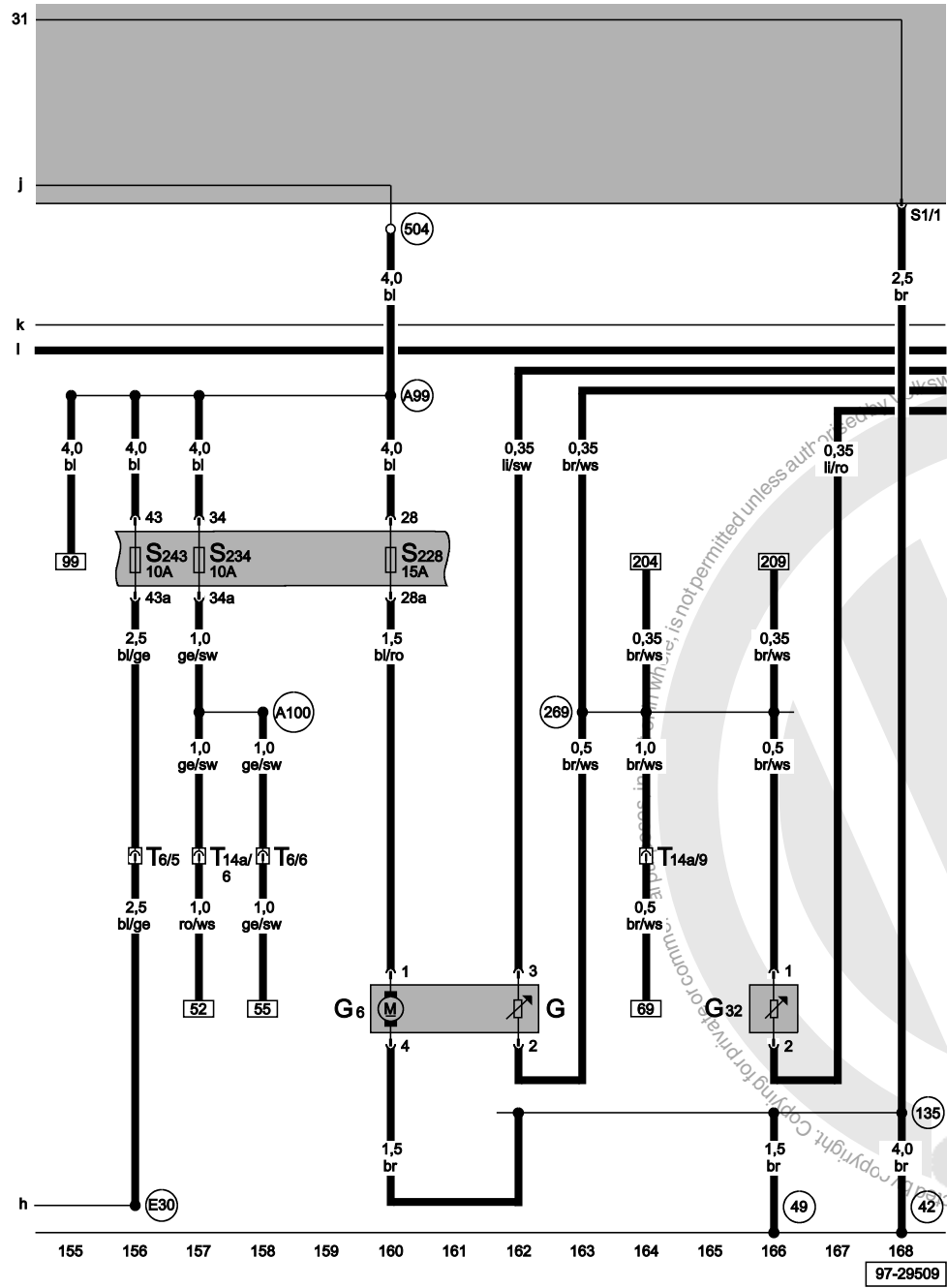
- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * only models with manual gearbox



Fuel pump, fuel gauge sender, coolant shortage indicator sender

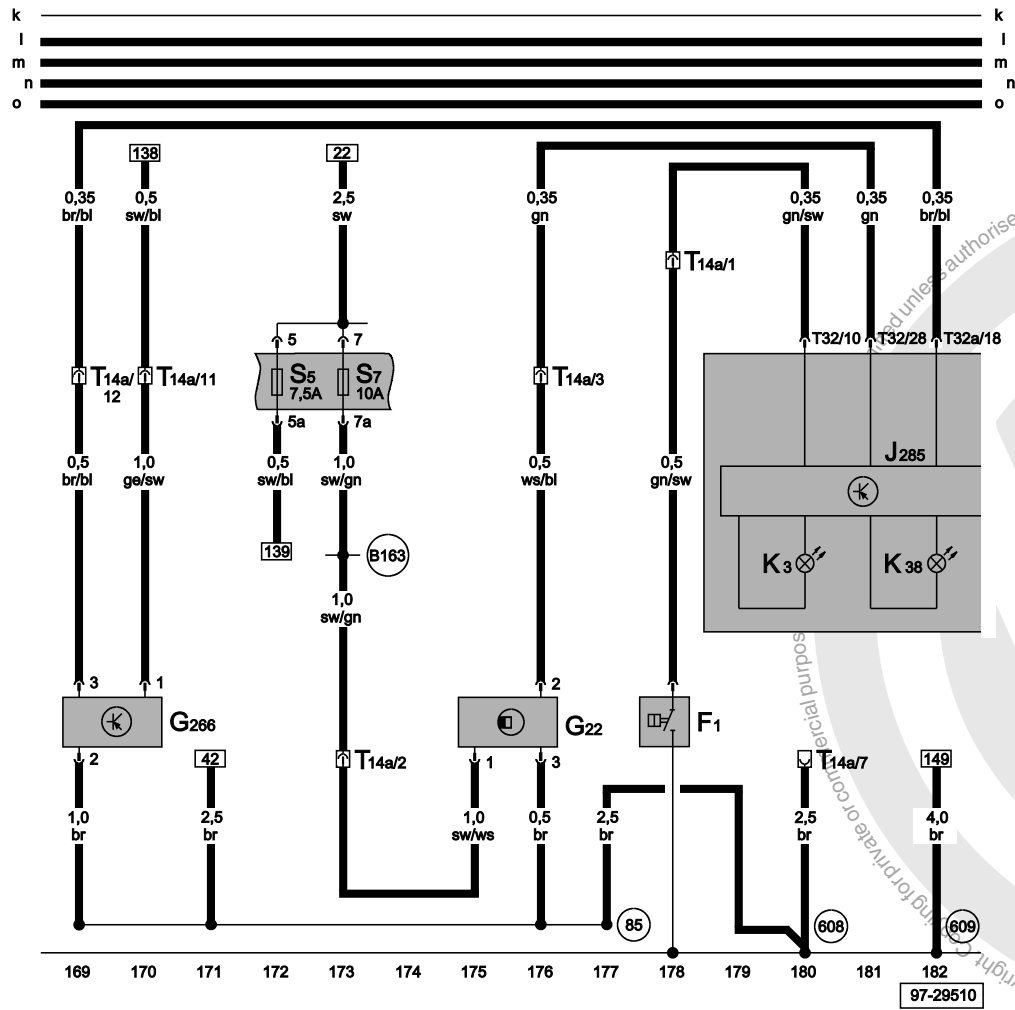
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness



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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

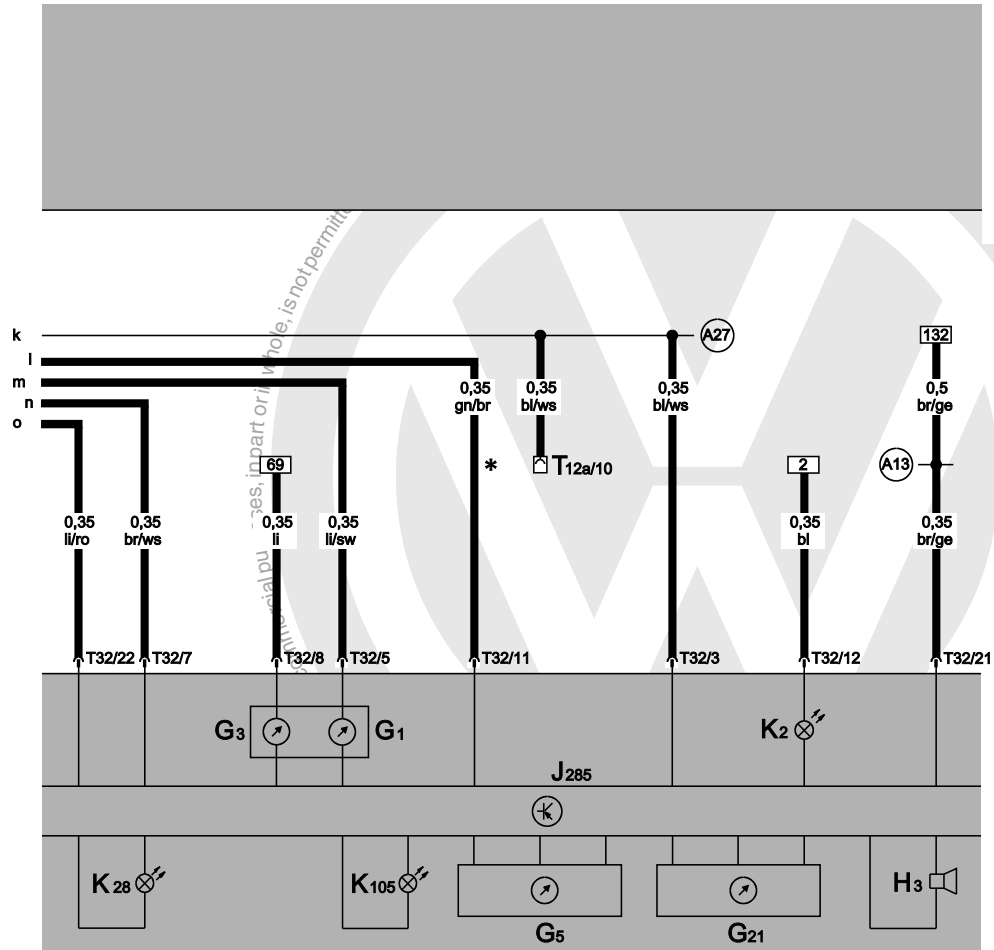
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display



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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit

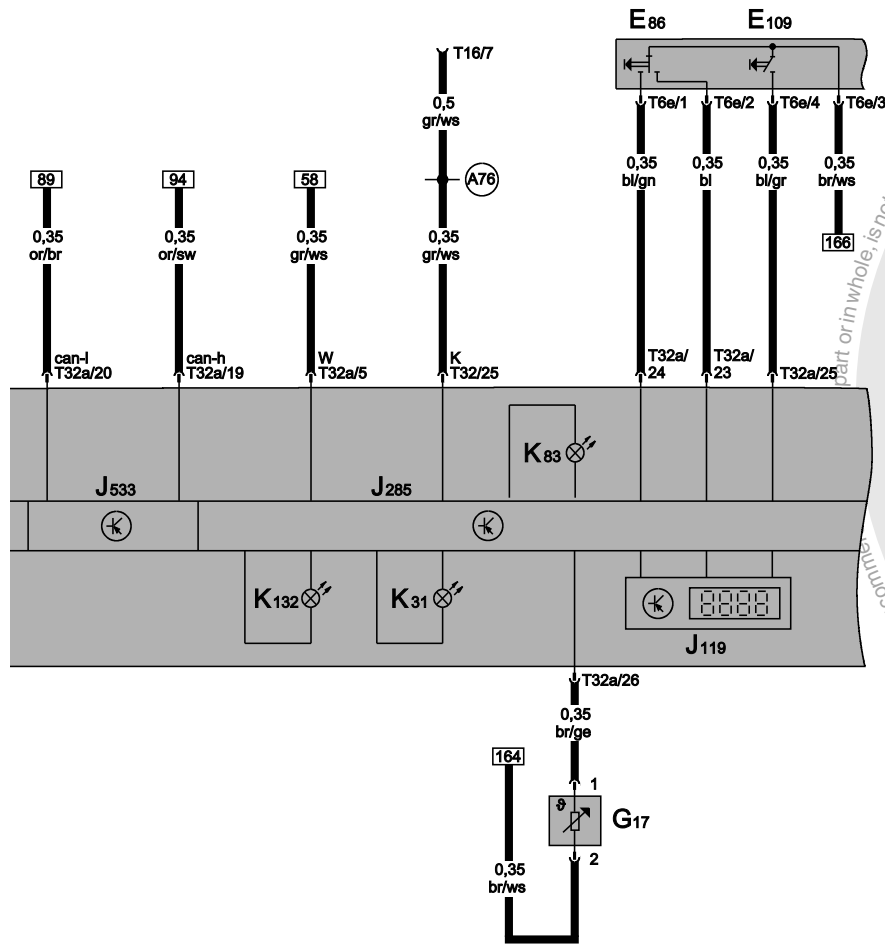


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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



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2.8 I/150 kW Motronic, engine code BDE

from May 2001

Notes:

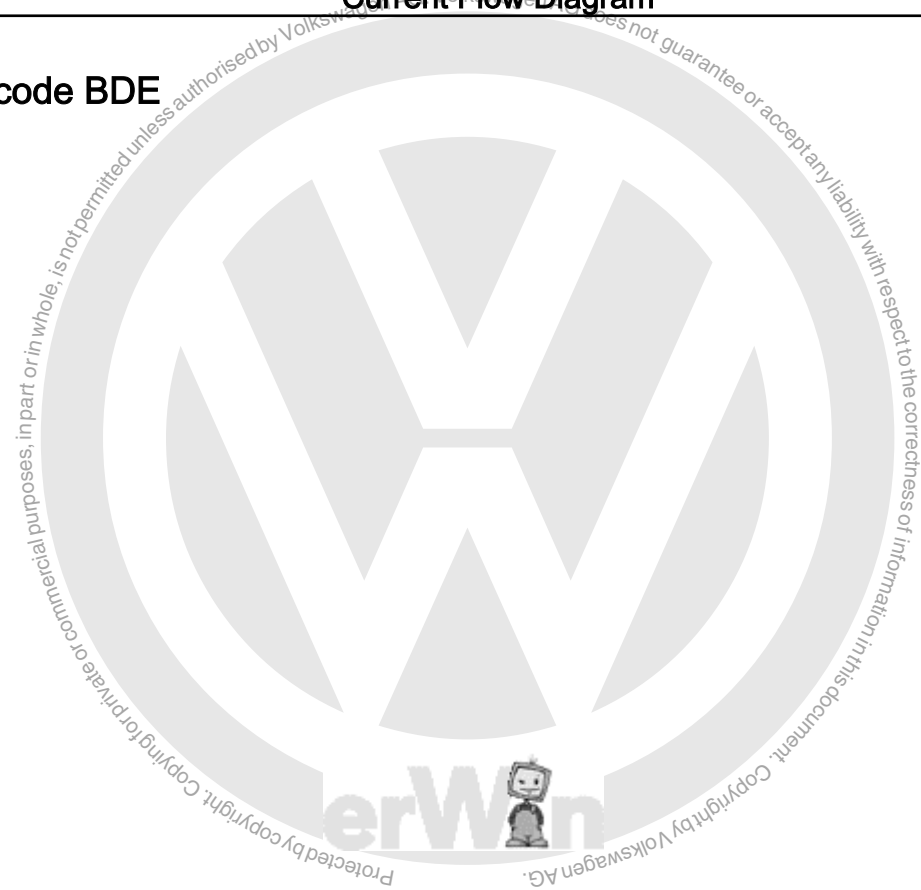
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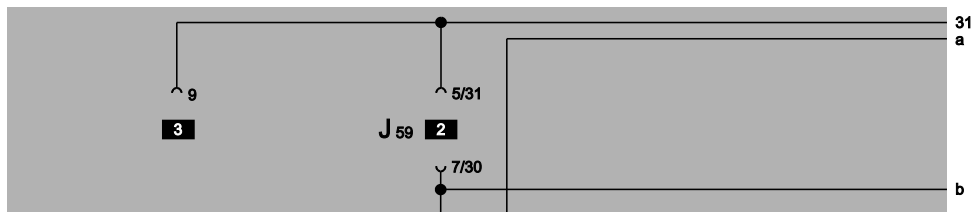
- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

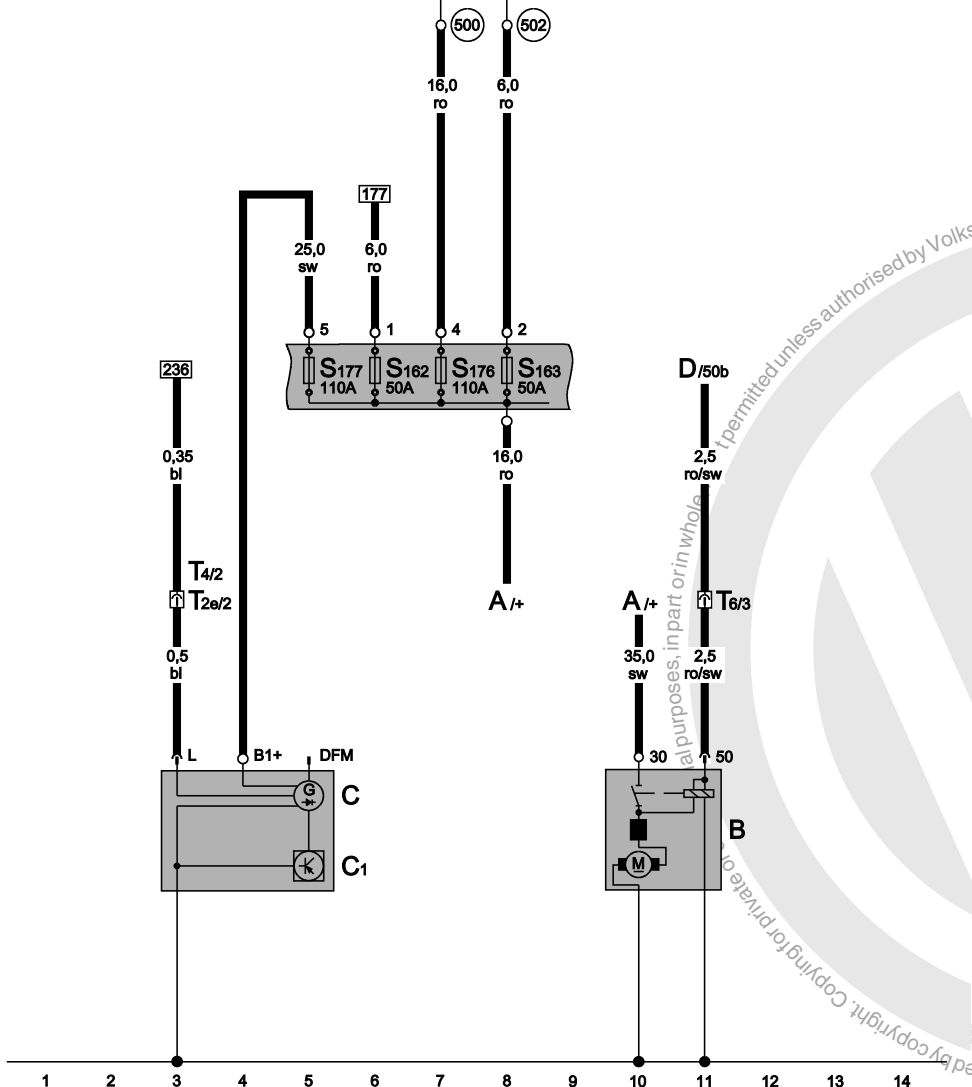
- ◆ Fault Finding Programs
- ⇒ guided fault finding





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber



- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

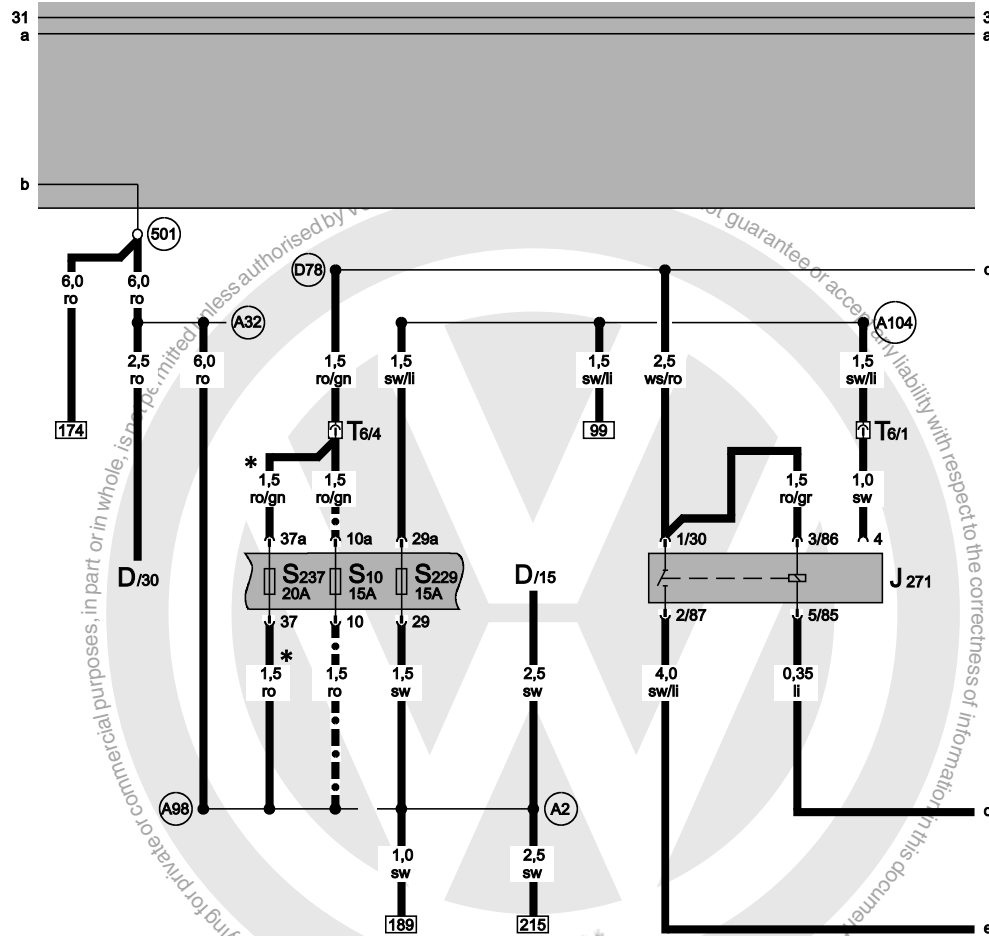
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97-29513

Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- * from November 2001
- up to October 2001

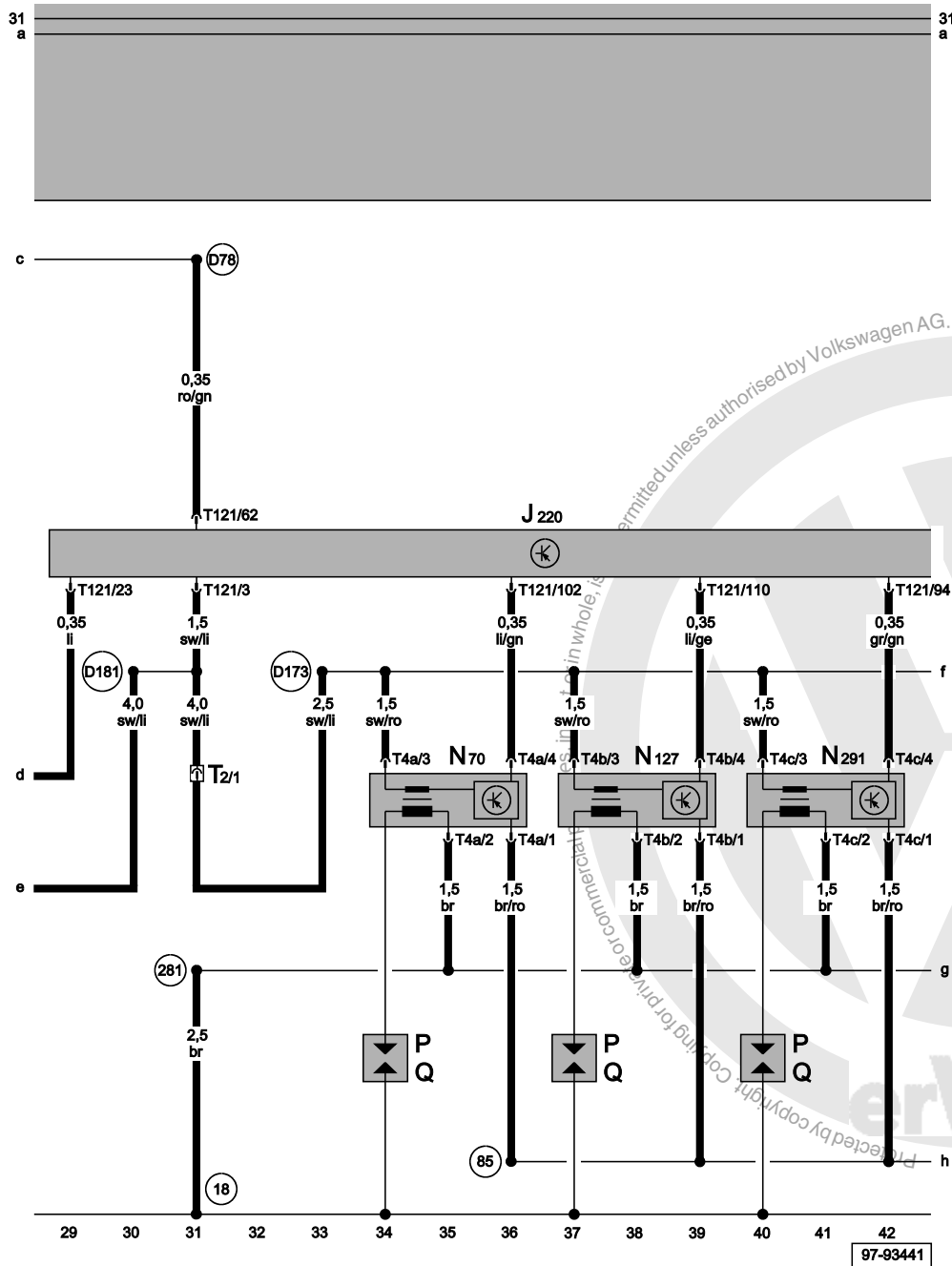


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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- P Spark plug connector
- Q Spark plugs
- T2 2-pin connector, in left engine compartment
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T121 121-pin connector

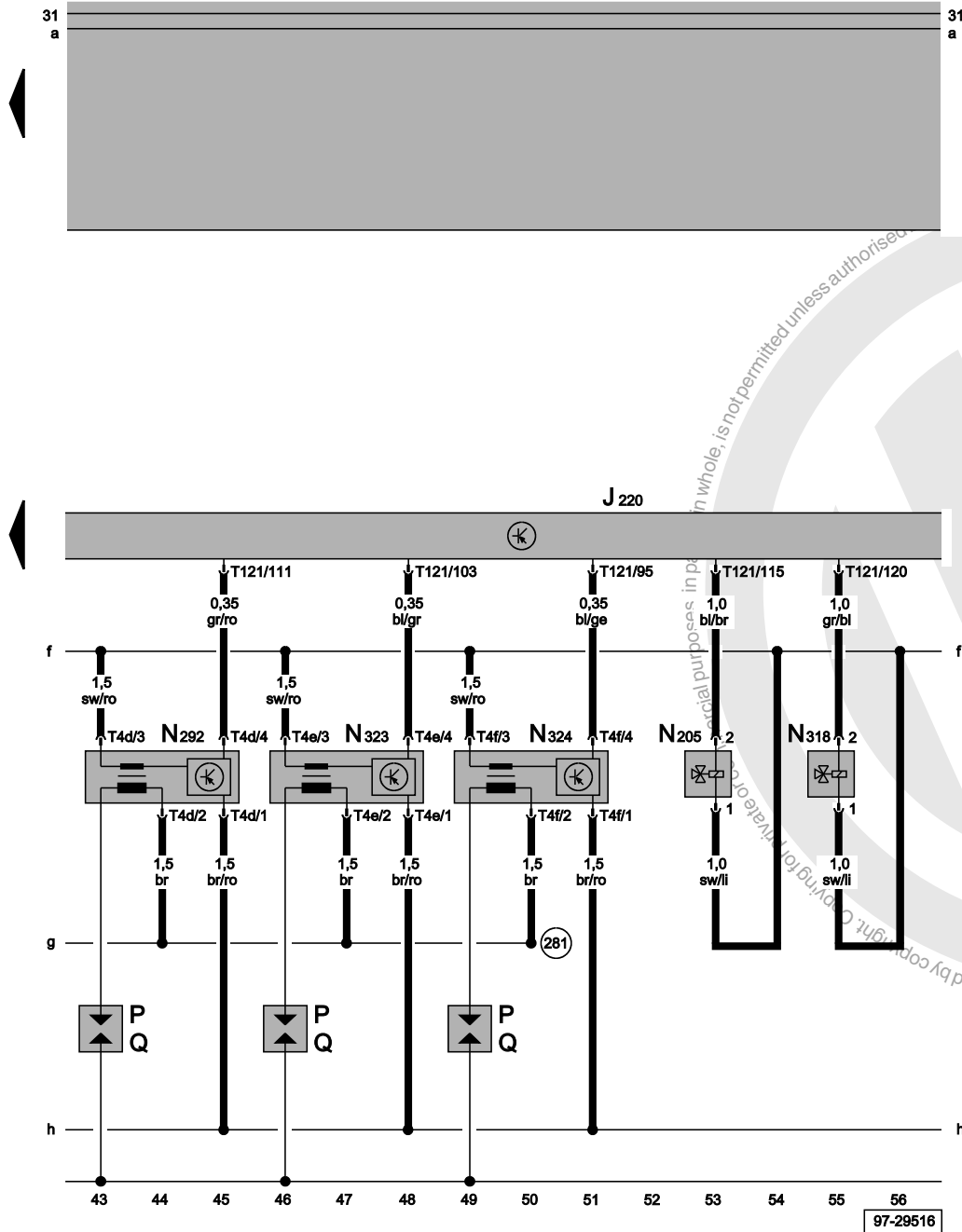
- (18) Earth point, on engine block
- (85) Earth connection -1-, in engine compartment wiring harness
- (281) Earth connection 1, in engine wiring harness
- (D78) Positive connection 1 (30a), in engine compartment wiring harness
- (D173) Connection (87), in engine wiring harness
- (D181) Connection 2 (87a), in engine compartment wiring harness



- ws = white
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- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, ignition system, inlet camshaft control valve

- J220 Motronic control unit, in centre plenum chamber
- N205 Inlet camshaft control valve 1
- N292 Ignition coil 4 with output stage
- N318 Exhaust camshaft control valve 1
- N323 Ignition coil 5 with output stage
- N324 Ignition coil 6 with output stage
- P Spark plug connector
- Q Spark plugs
- T4d 4-pin connector
- T4e 4-pin connector
- T4f 4-pin connector
- T121 121-pin connector
- 281 Earth connection 1, in engine wiring harness



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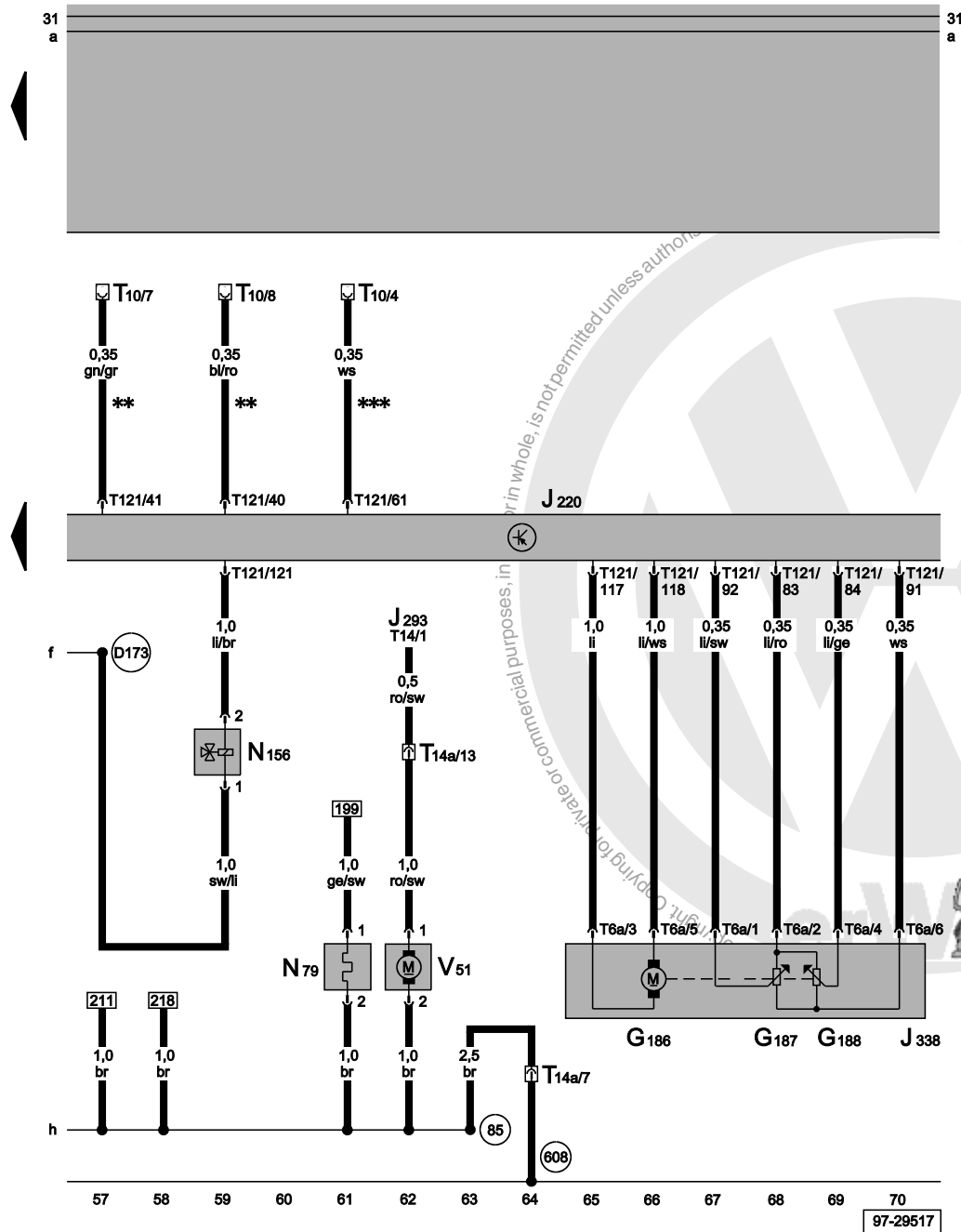
97-29516

Motronic control unit, throttle valve module, variable intake manifold change-over valve, continued coolant circulation pump, heater element for crankcase breather

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J293 Radiator fan control unit
- J338 Throttle valve module
- N79 Heater element for crankcase breather
- N156 Variable intake manifold change-over valve
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector
- V51 Continued coolant circulation pump

- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- D173 Connection (87), in engine wiring harness
- ** connection air conditioning system
- *** Radiator fan control unit connection

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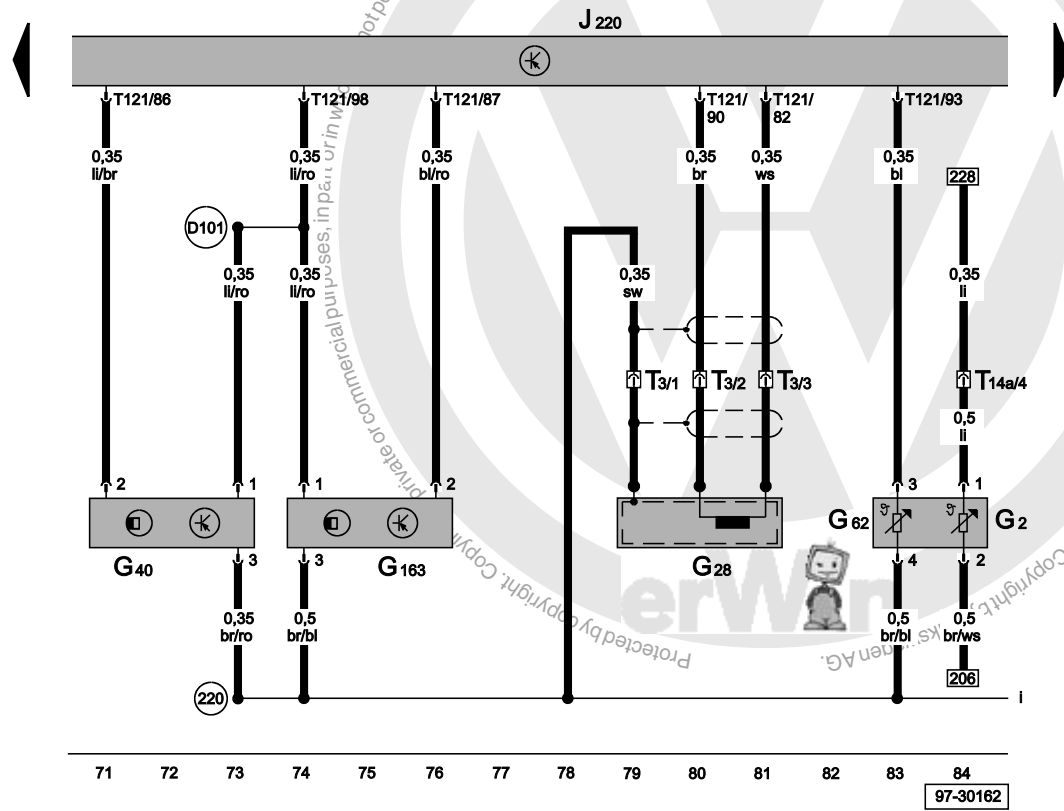
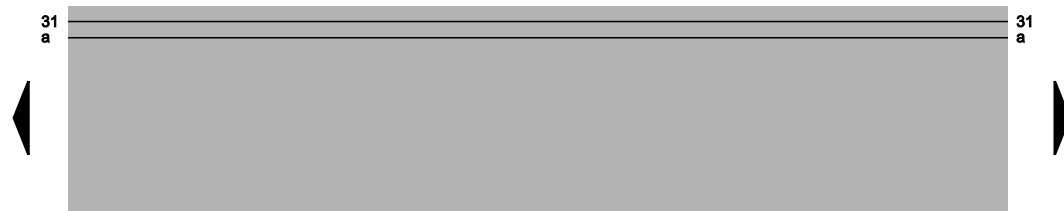


Motronic control unit, engine speed sender, Hall sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G40 Hall sender
- G62 Coolant temperature sender
- G163 Hall sender 2
- J220 Motronic control unit, in centre plenum chamber
- T3 3-pin connector, near intake manifold
- T14a 14-pin connector, near battery
- T121 121-pin connector

220 Earth connection (sender earth), in engine wiring harness

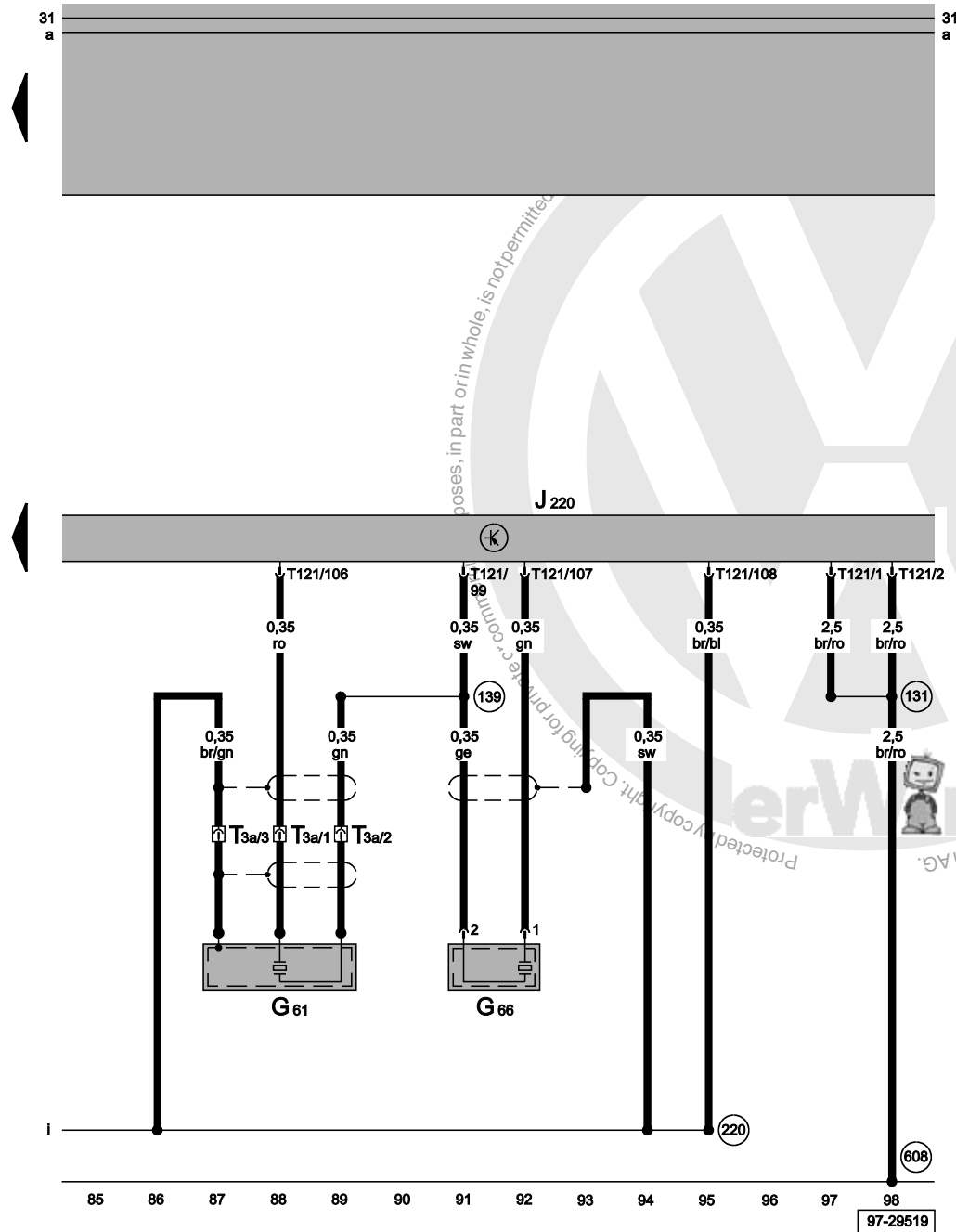
D101 Connection 1, in engine compartment wiring harness



Motronic control unit, knock sensors

- G61 Knock sensor 1
- G66 Knock sensor 2
- J220 Motronic control unit, in centre plenum chamber
- T3a 3-pin connector, in rear engine compartment
- T121 121-pin connector

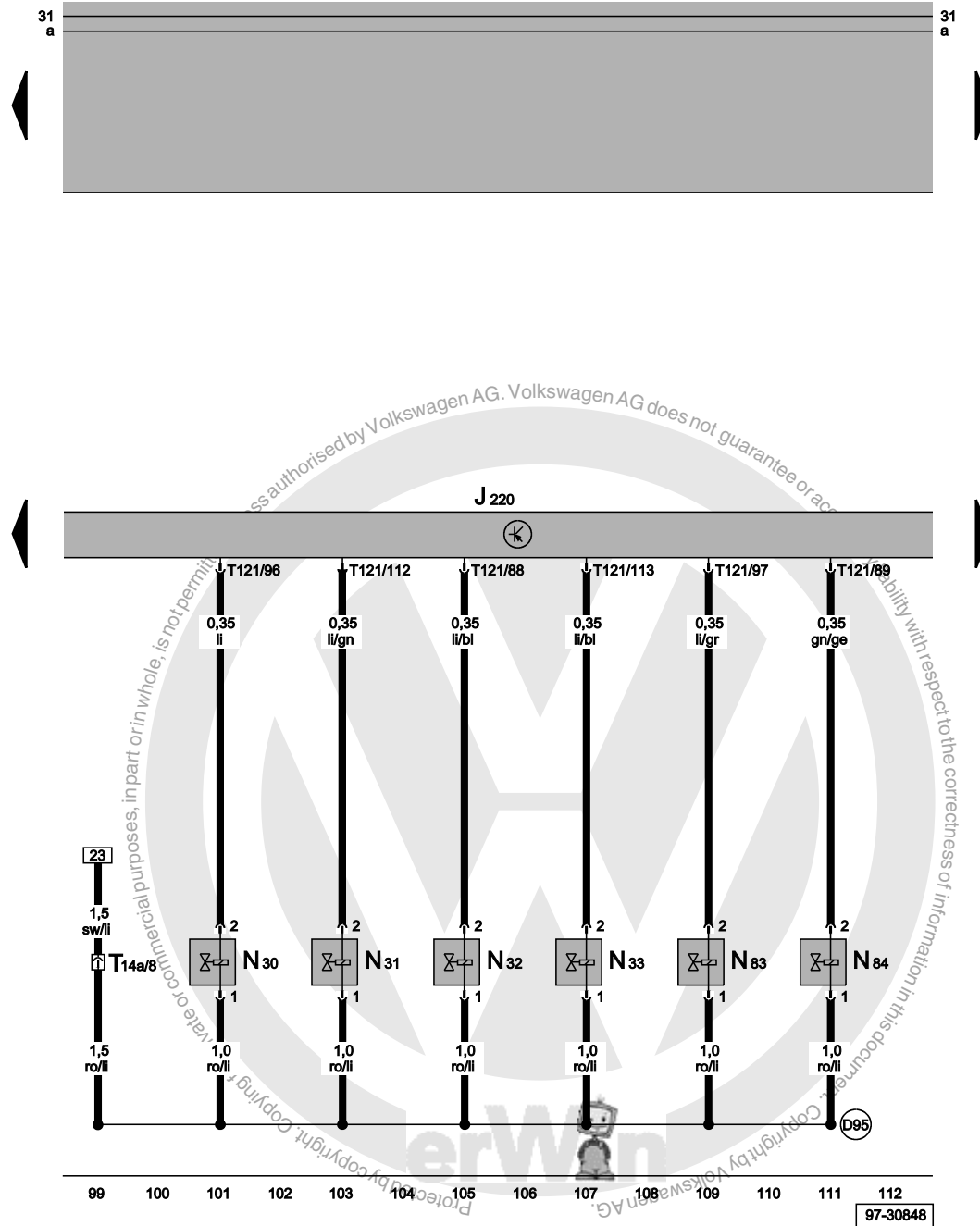
- 131 Earth connection -2-, in engine compartment wiring harness
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber



Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- N84 Injector, cylinder 6
- T14a 14-pin connector, near battery
- T121 121-pin connector

(D95) Connection (injectors), in engine compartment wiring harness

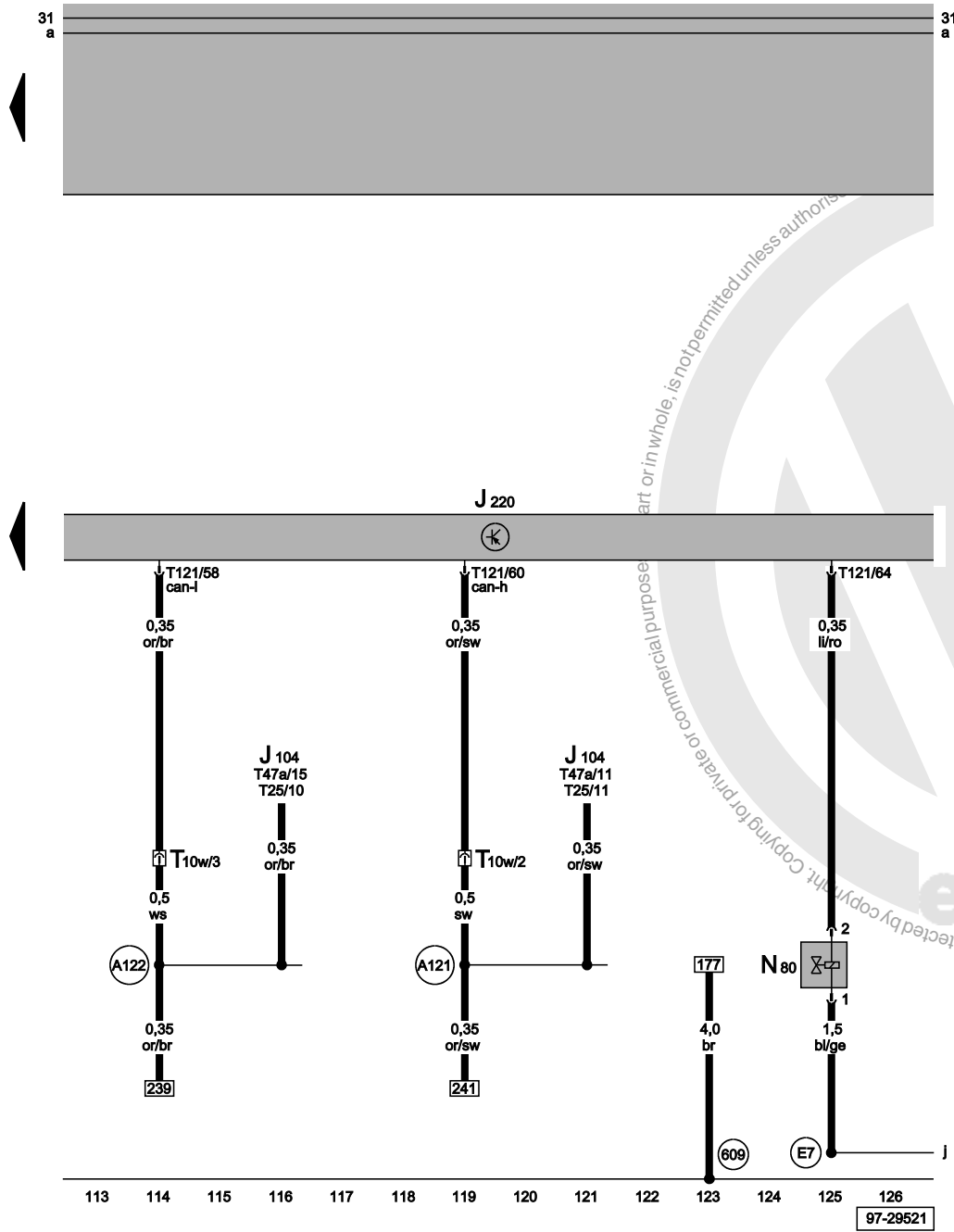


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Motronic control unit, active charcoal filter system solenoid valve

- J104 ABS/ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

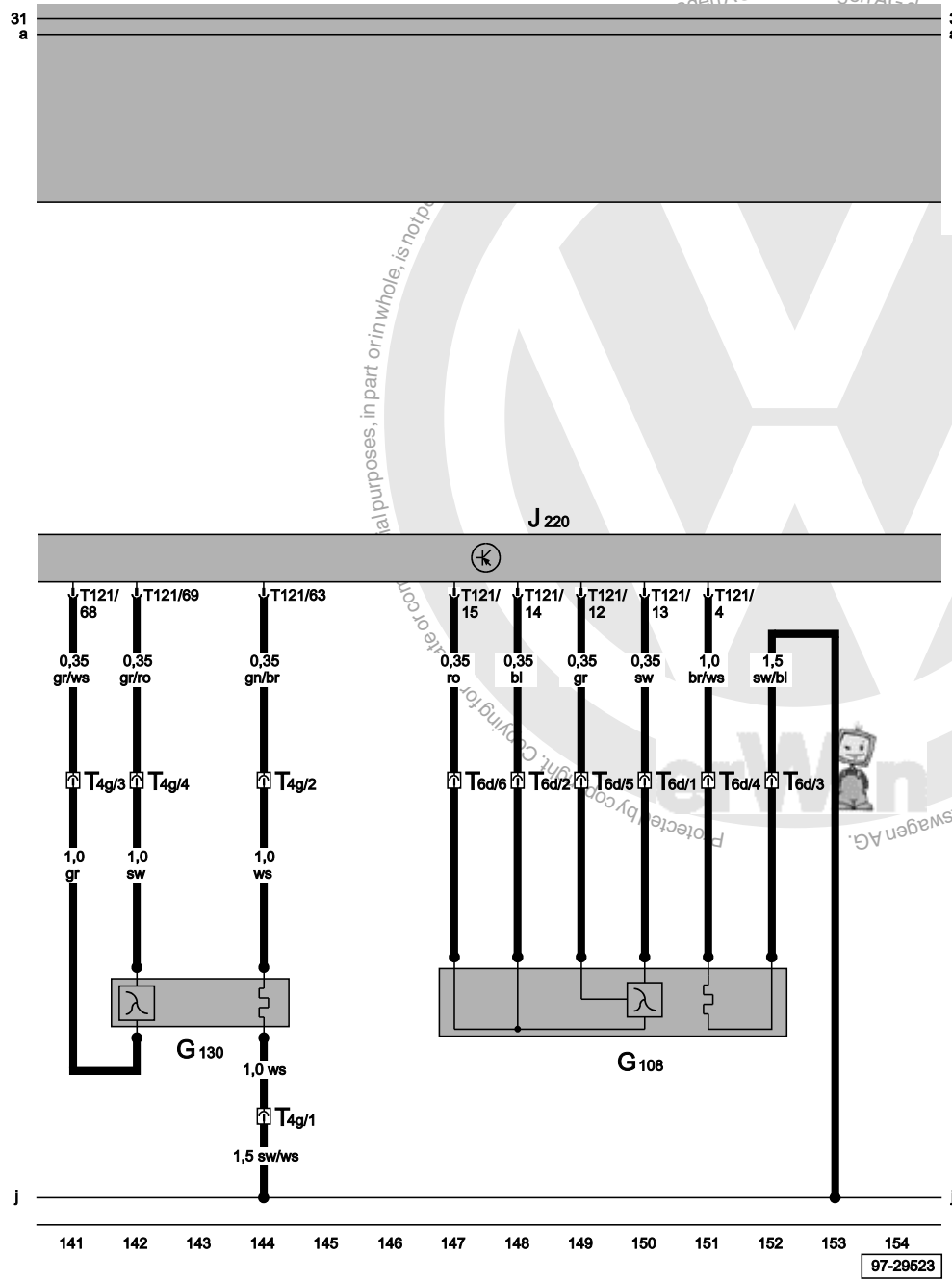
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- E7 Positive connection (87a), in Motronic wiring harness



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Motronic control unit, lambda probe after catalytic converter, lambda probe 2

- G108 Lambda probe 2
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4g 4-pin connector, near catalytic converter
- T6d 6-pin connector, near catalytic converter
- T121 121-pin connector



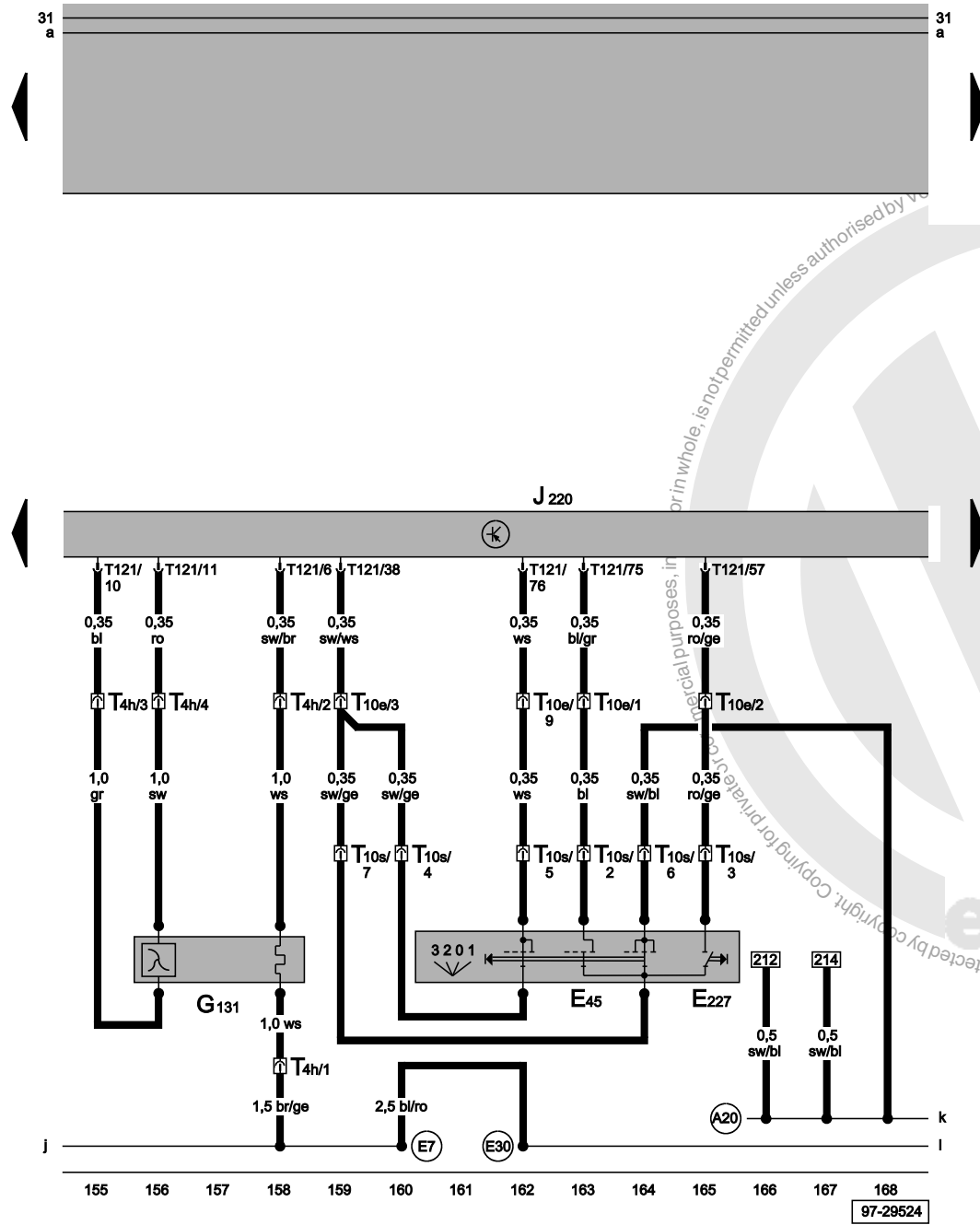
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97-29523

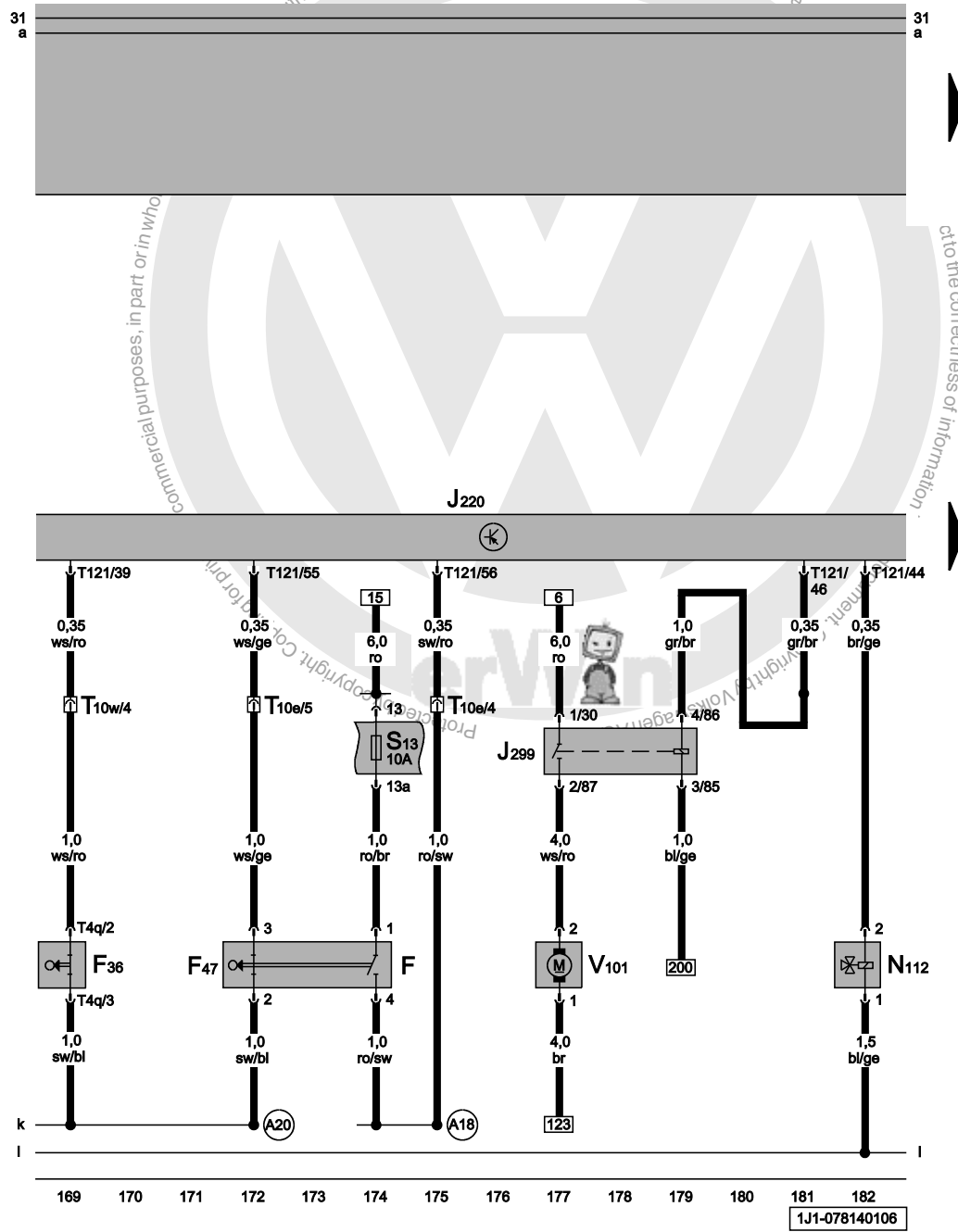
Motronic control unit, cruise control system switch, lambda probe 2 after catalytic converter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G131 Lambda probe 2 after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4h 4-pin connector, near catalytic converter
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector

- (A20) Connection (15a), in dash panel wiring harness
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness
- ** only models with GND



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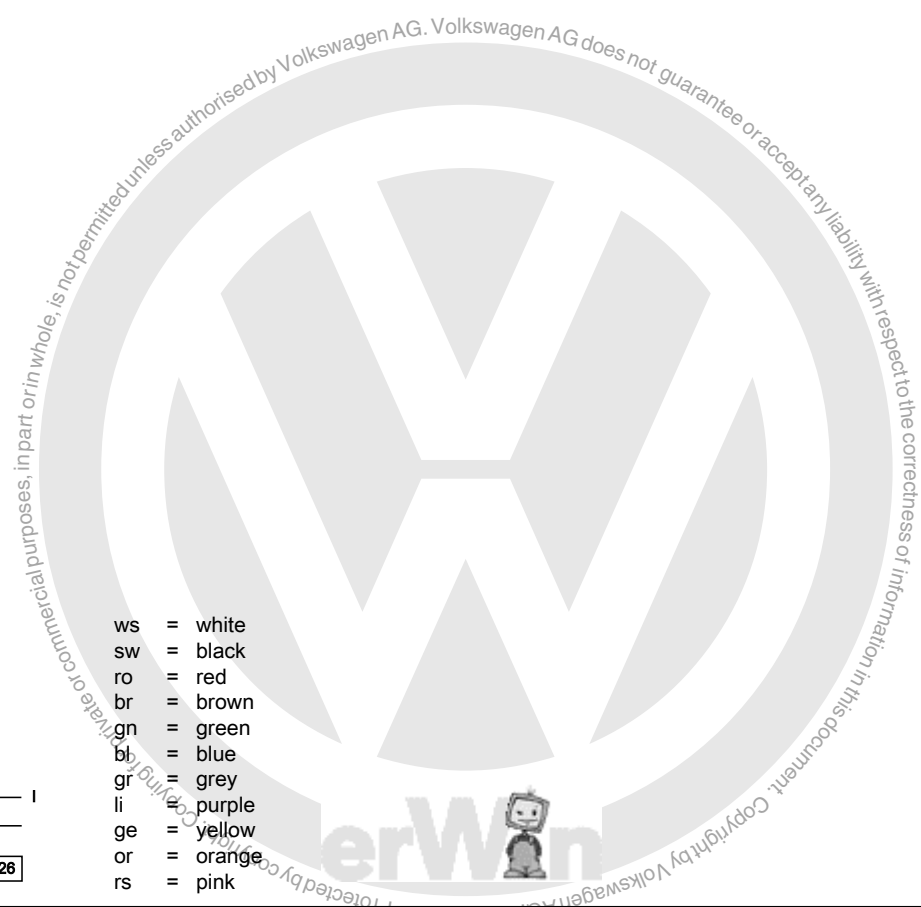
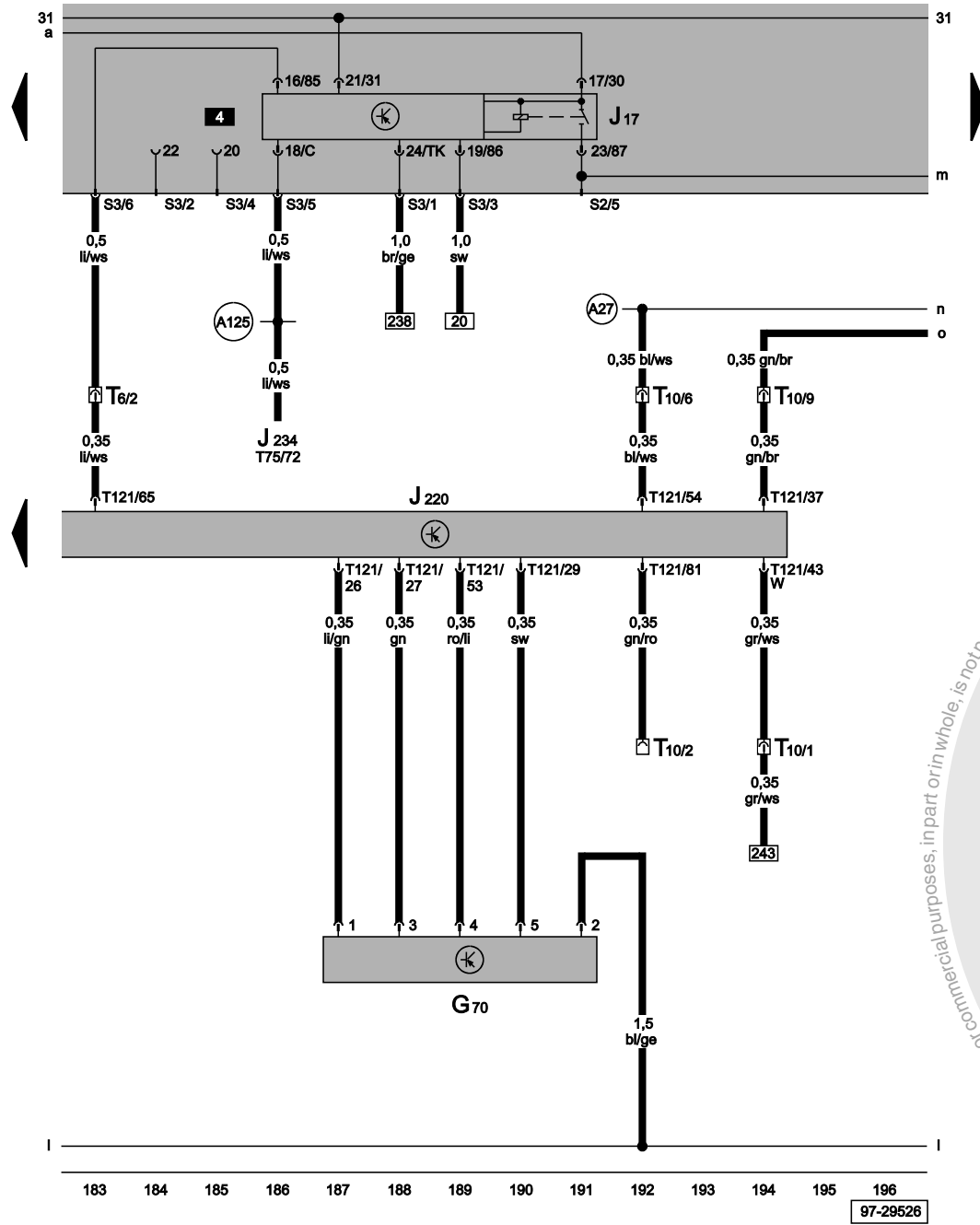
Motronic control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness

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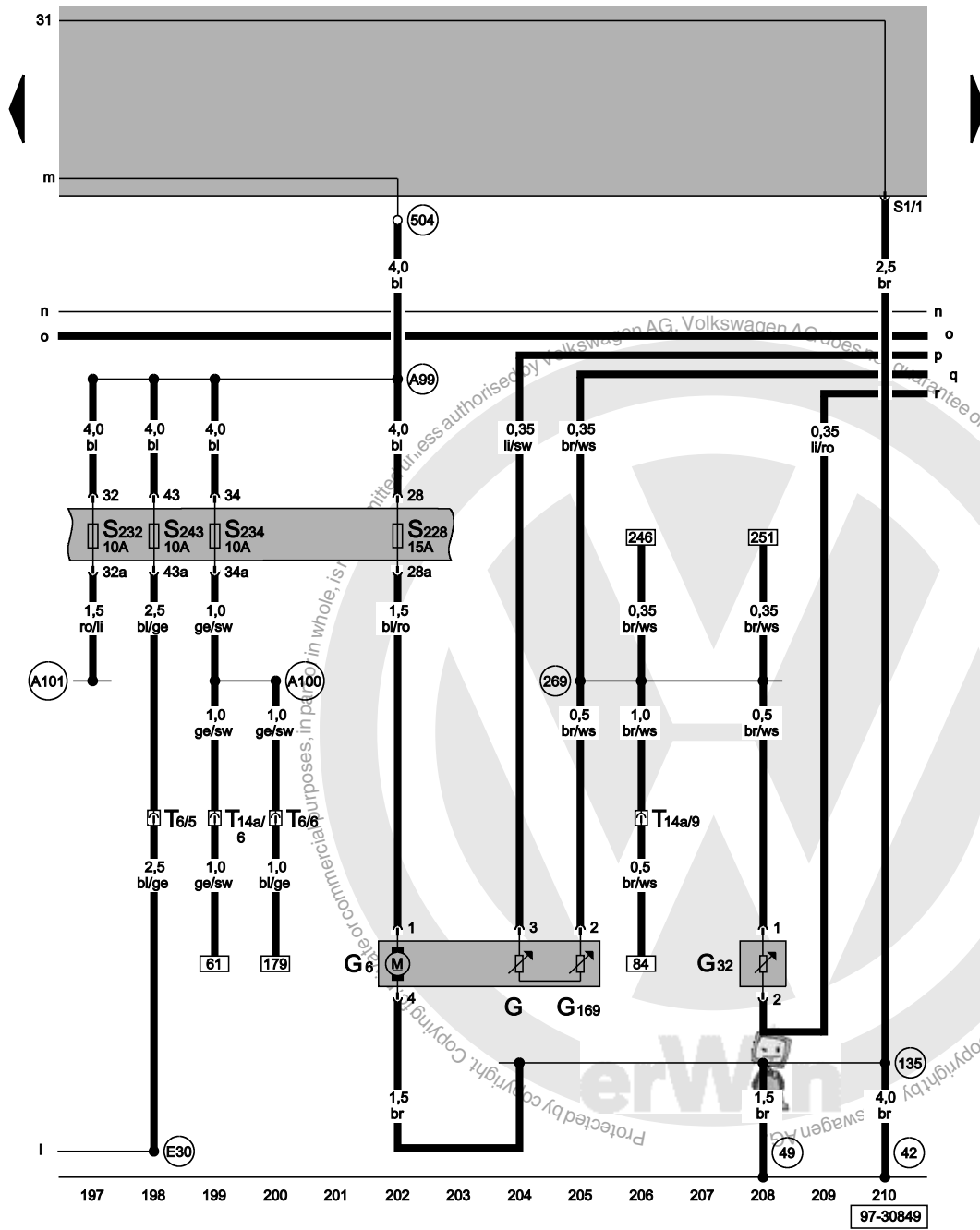
Motronic control unit, air mass meter, fuel pump relay

- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector
- (A27) Connection (speed signal), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness



Fuel pump, fuel gauge sender, coolant shortage indicator sender

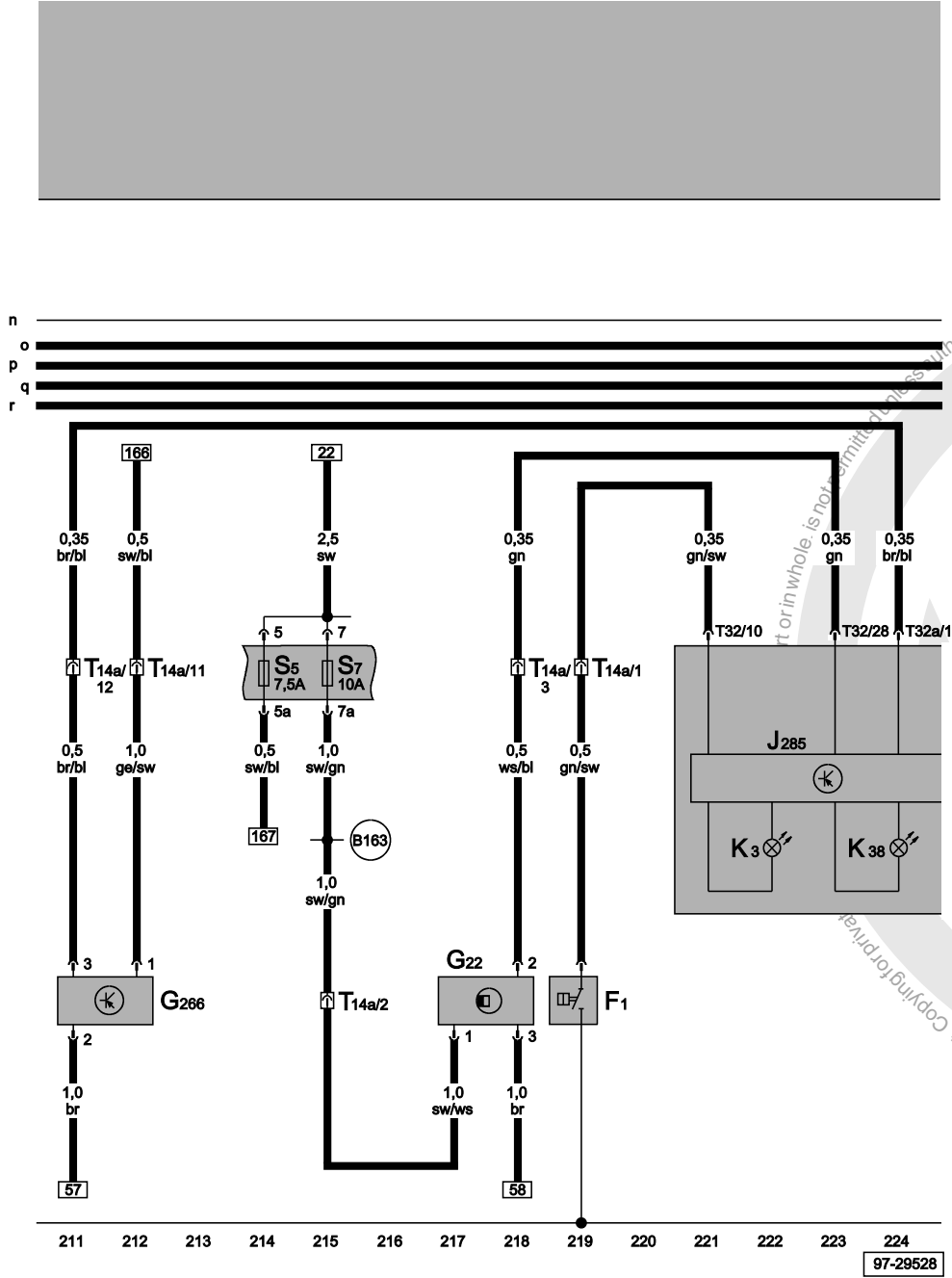
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- G169 Fuel gauge sender 2
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A101 Connection 3 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness



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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

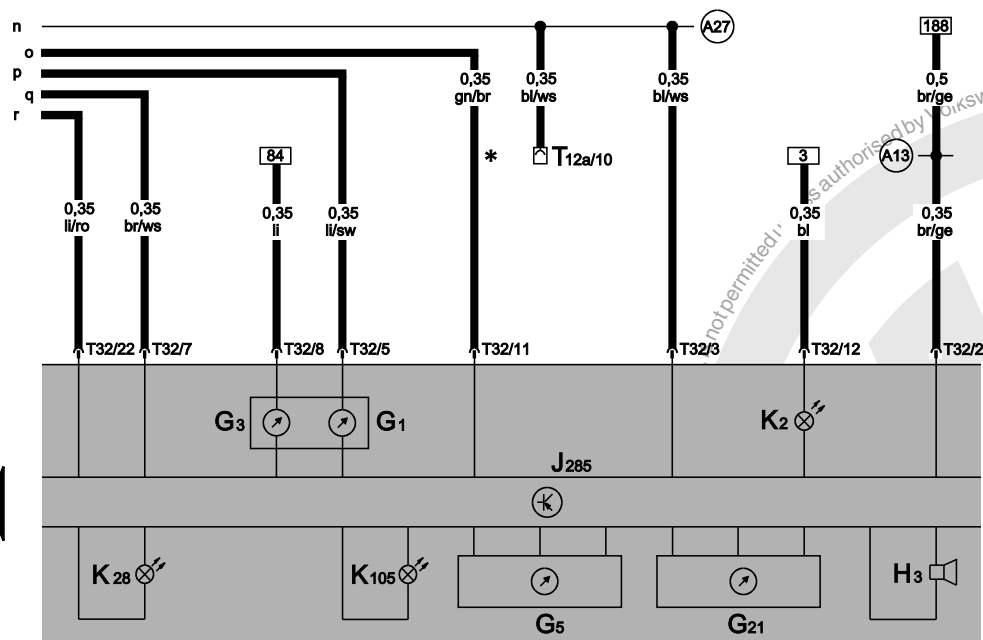
- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- B163 Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display



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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit

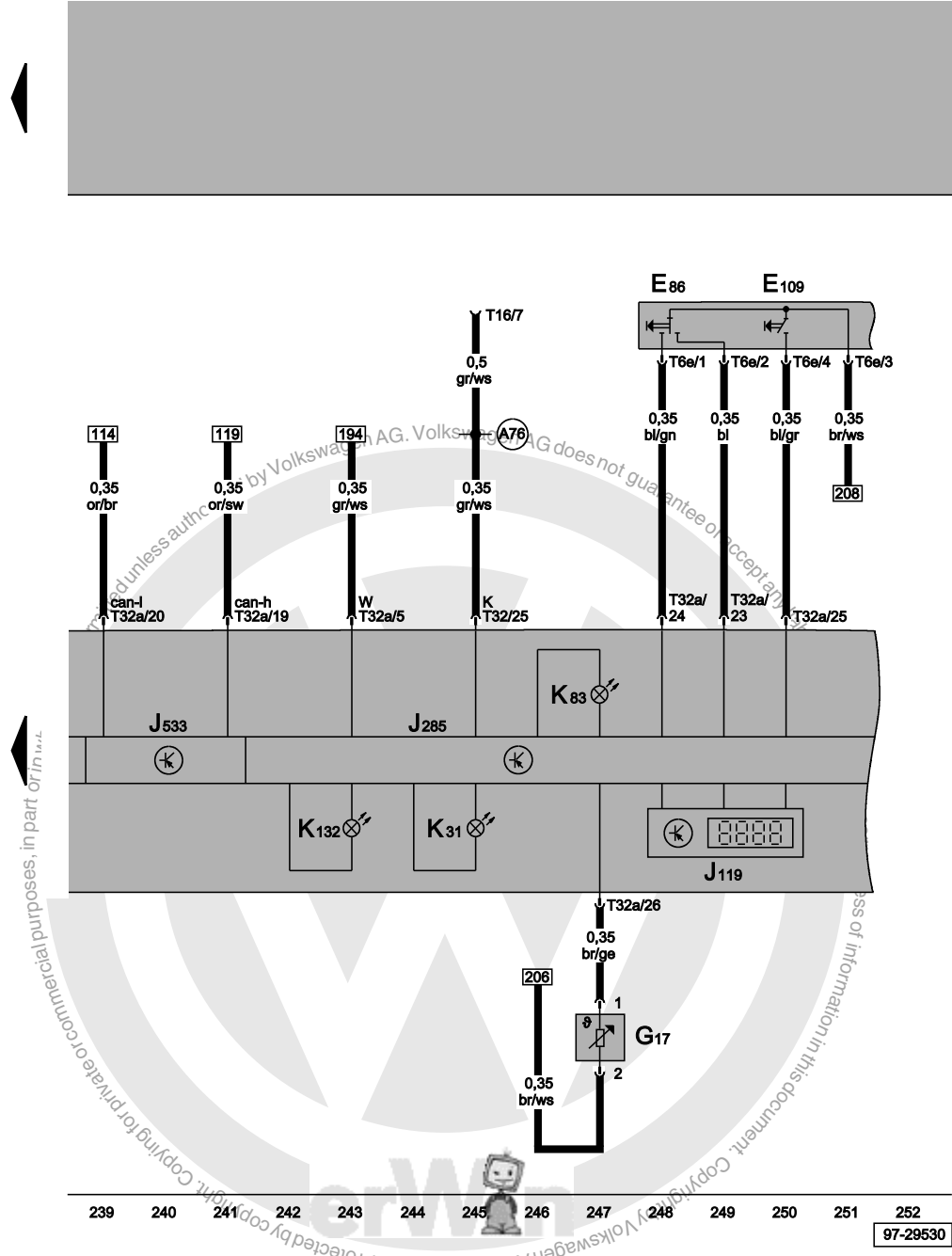


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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



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1.9 l/74 kW - Turbo diesel engine with unit injectors, engine code AXR

from May 2001

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

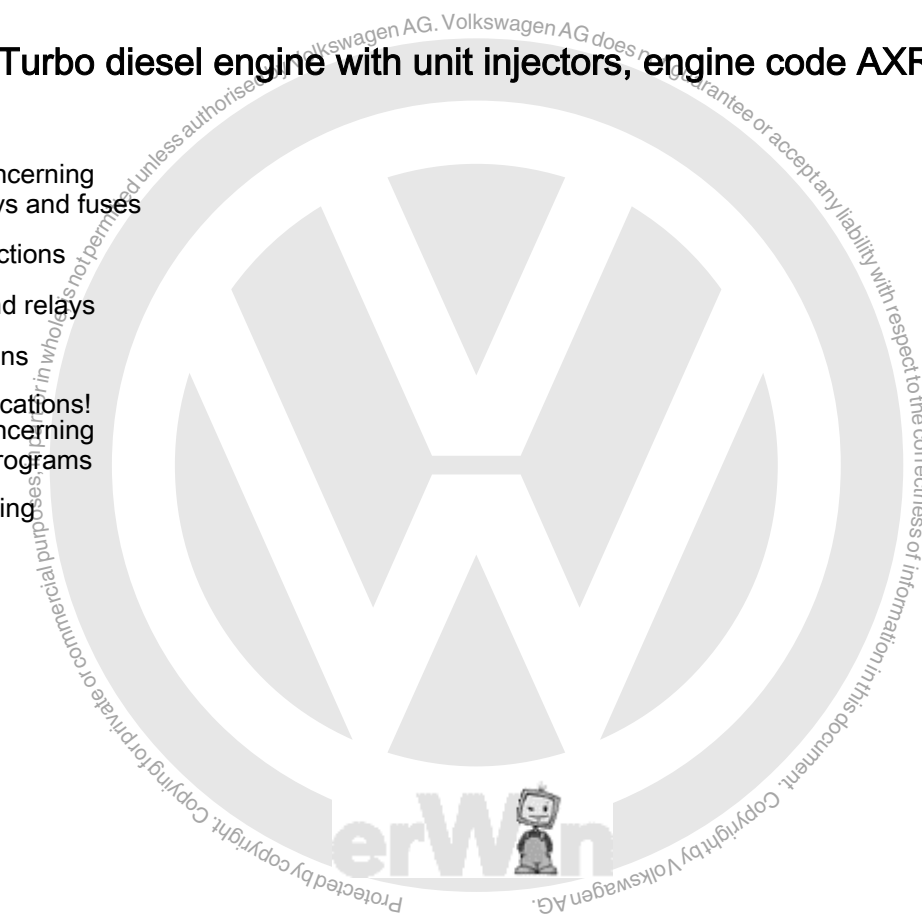
- ◆ Earth connections

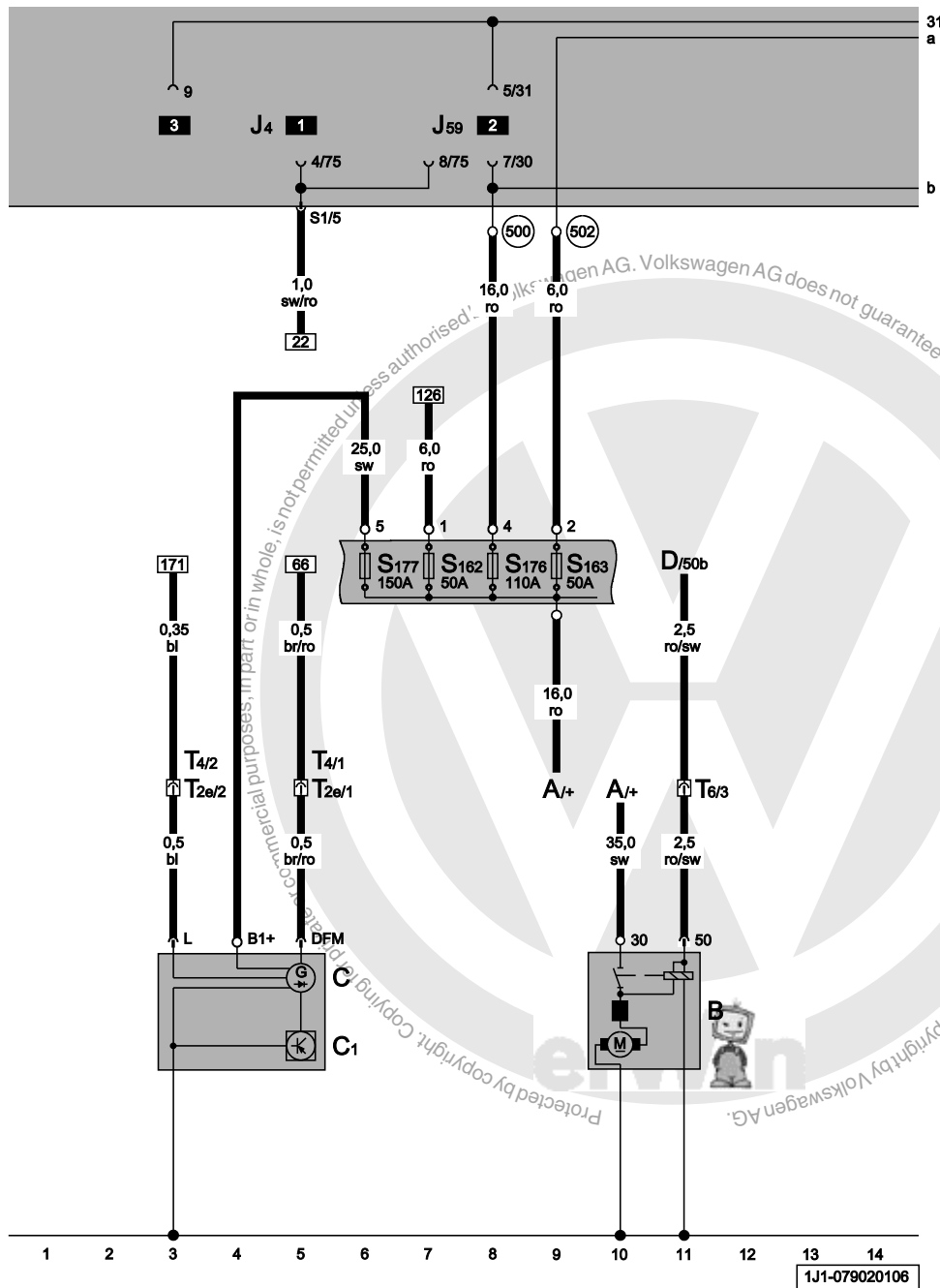
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





Alternator, starter

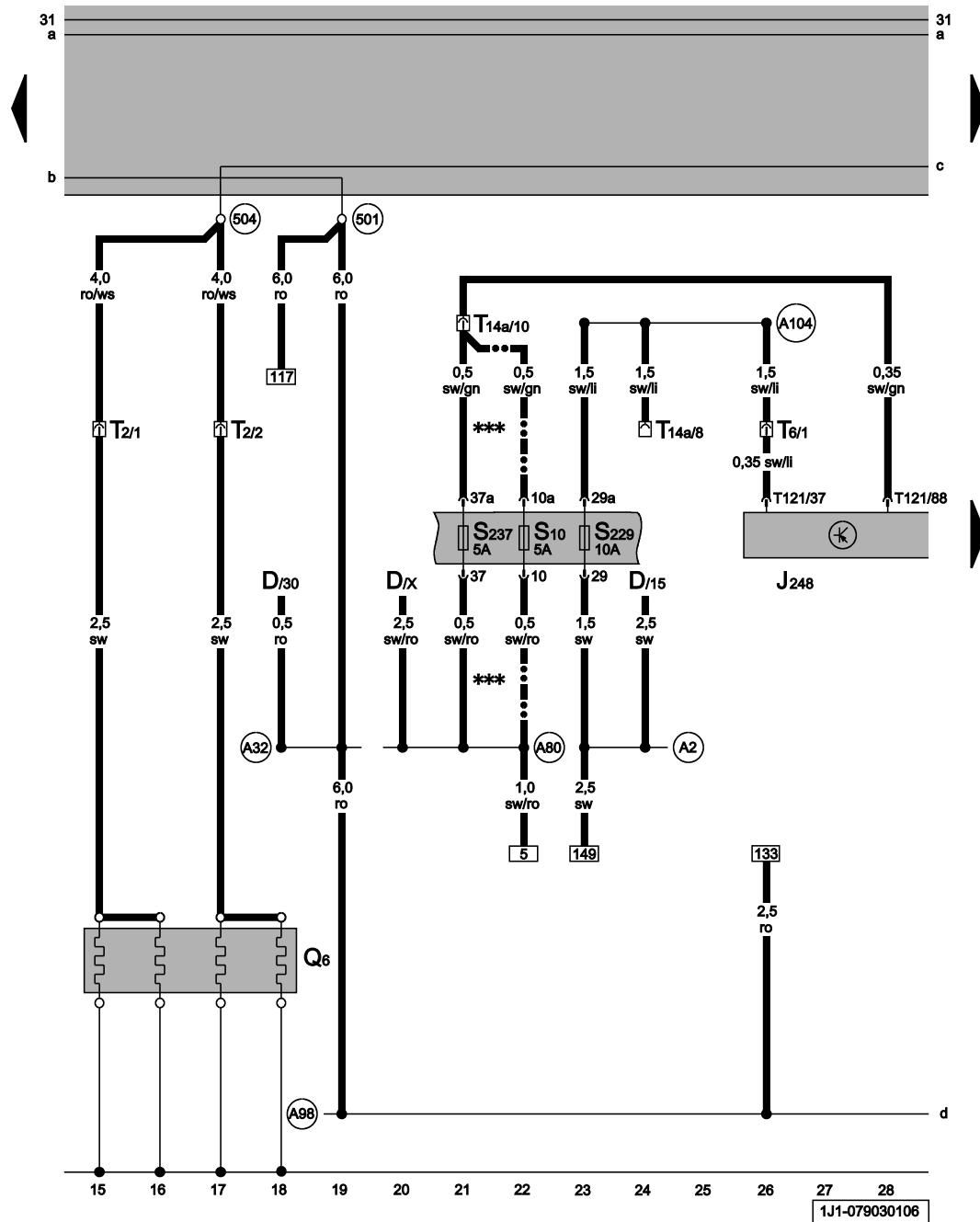
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

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Diesel direct injection system control unit, glow plugs - engine

- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- Q6 Glow plugs, engine
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

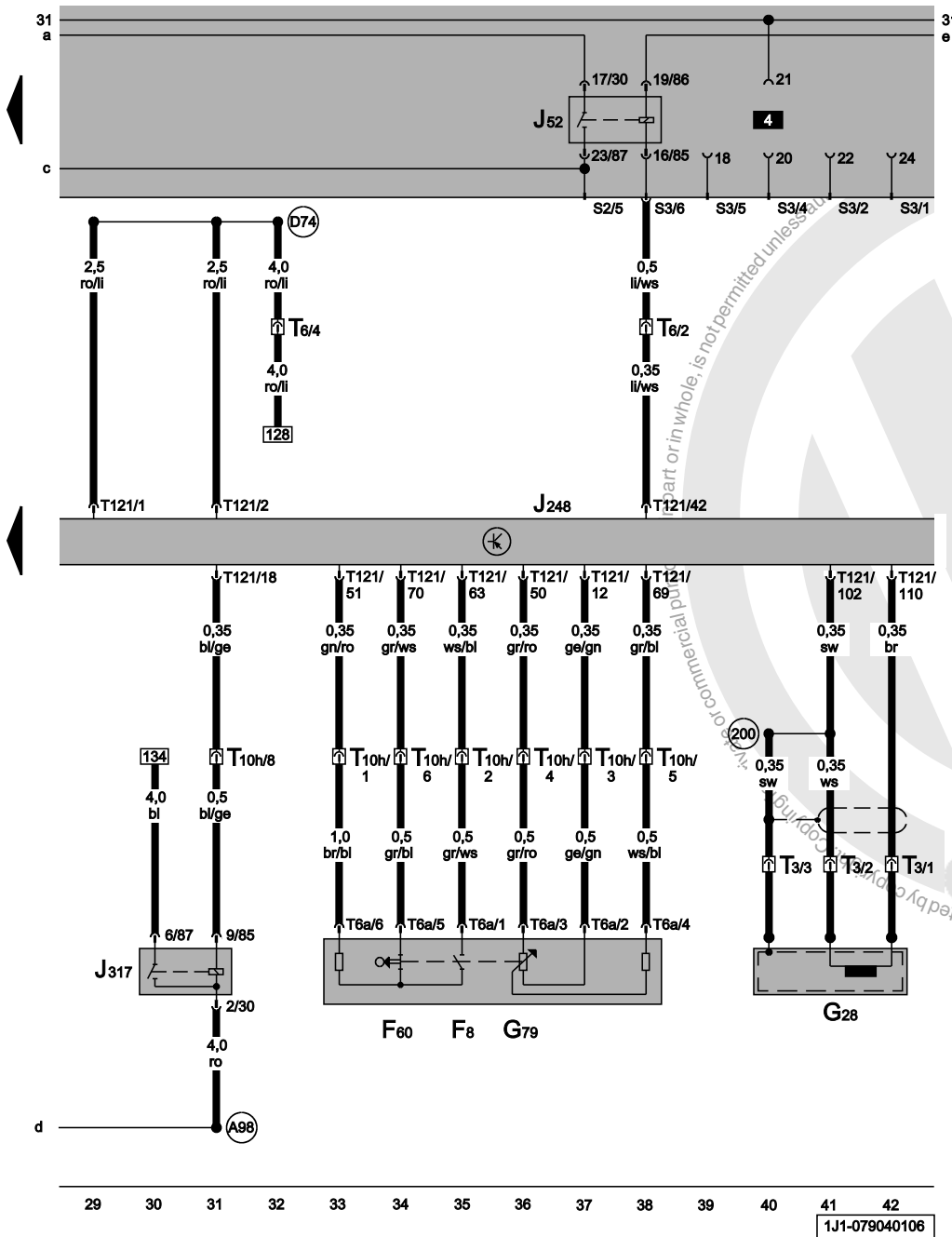
- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- *** from November 2001
- up to October 2001



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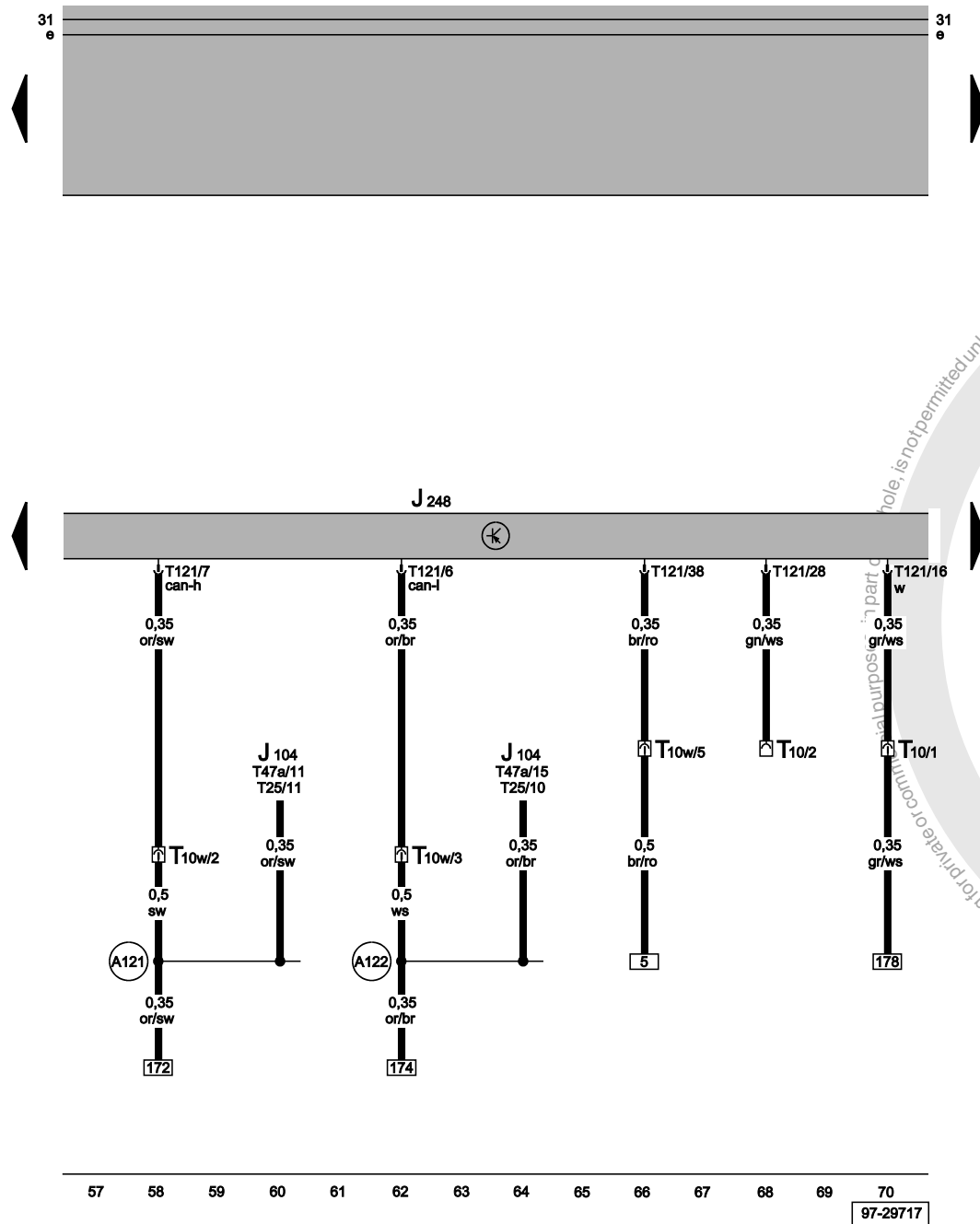
Diesel direct injection system control unit, glow plug relay, kickdown switch, engine speed sender, idling speed switch, accelerator position sender, terminal 30 voltage supply relay



- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- T3 3-pin connector, on front of engine
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 200 Earth connection (screening), in engine compartment wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness

Diesel direct injection system control unit

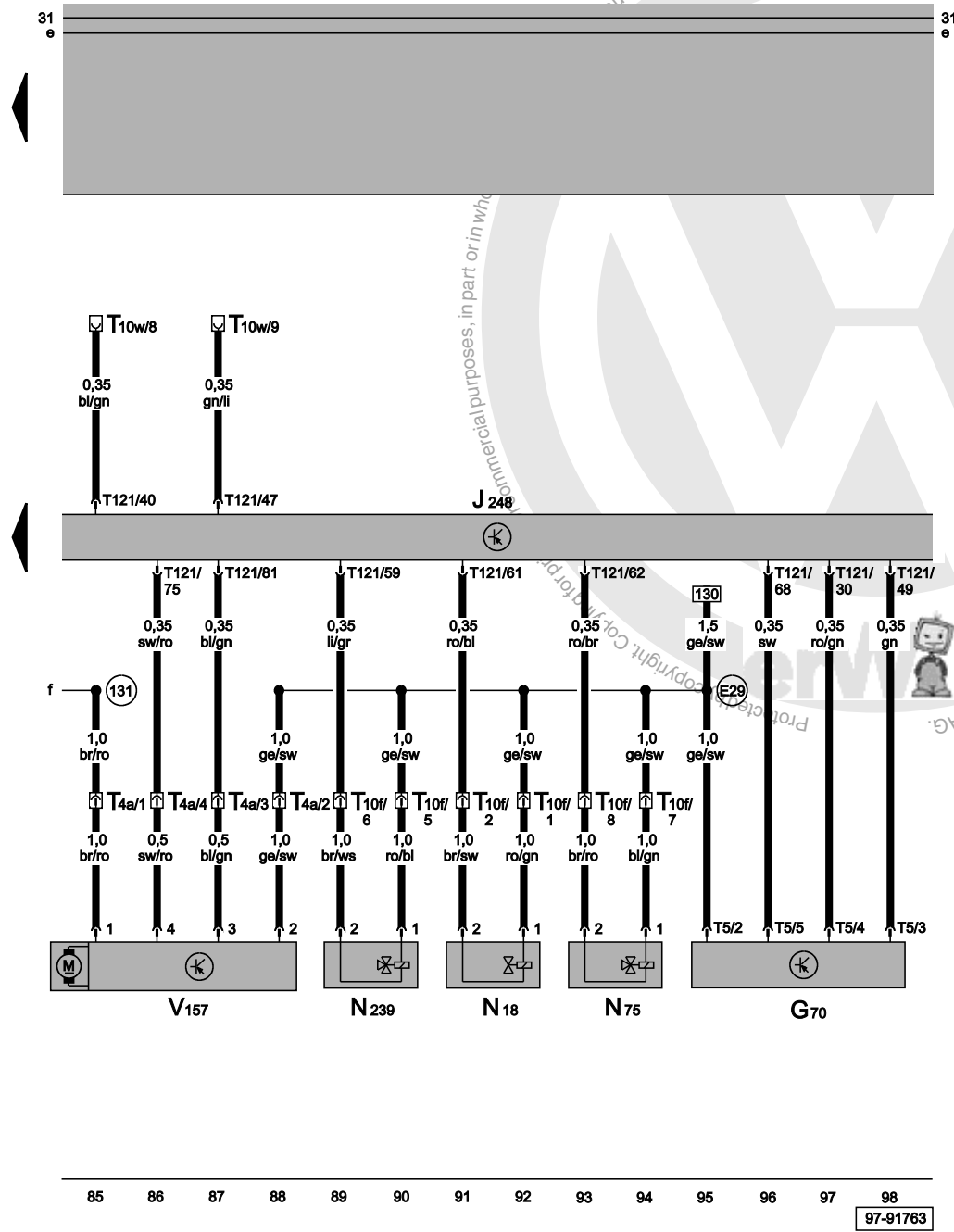
- J104 ABS/ABS control unit with EDL
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



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Diesel direct injection system control unit, air mass meter, variable intake manifold flap change-over valve, exhaust gas recirculation valve, charge pressure control solenoid valve, intake manifold flap motor

- G70 Air mass meter
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N239 Variable intake manifold flap change-over valve
- T4a 4-pin connector, on right in bulkhead
- T5 5-pin connector
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V157 Intake manifold flap motor
- 131 Earth connection -2-, in engine compartment wiring harness
- E29 Connection, in engine wiring harness



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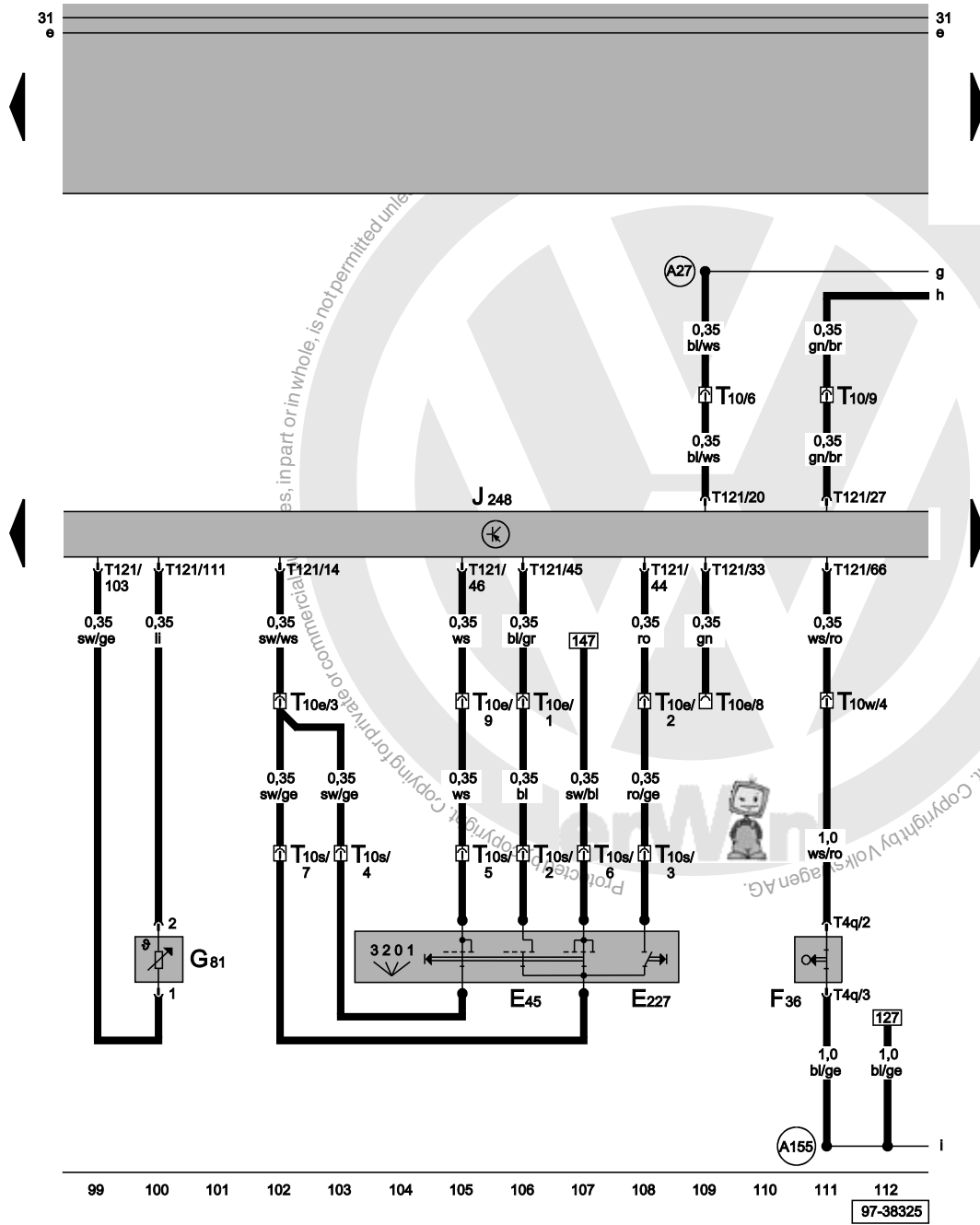
Diesel direct injection system control unit, cruise control system switch (GND), clutch pedal switch, fuel temperature sender

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T4q 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

A27 Connection (speed signal), in dash panel wiring harness

A155 Connection 2 (86), in dash panel wiring harness

** only models with GND

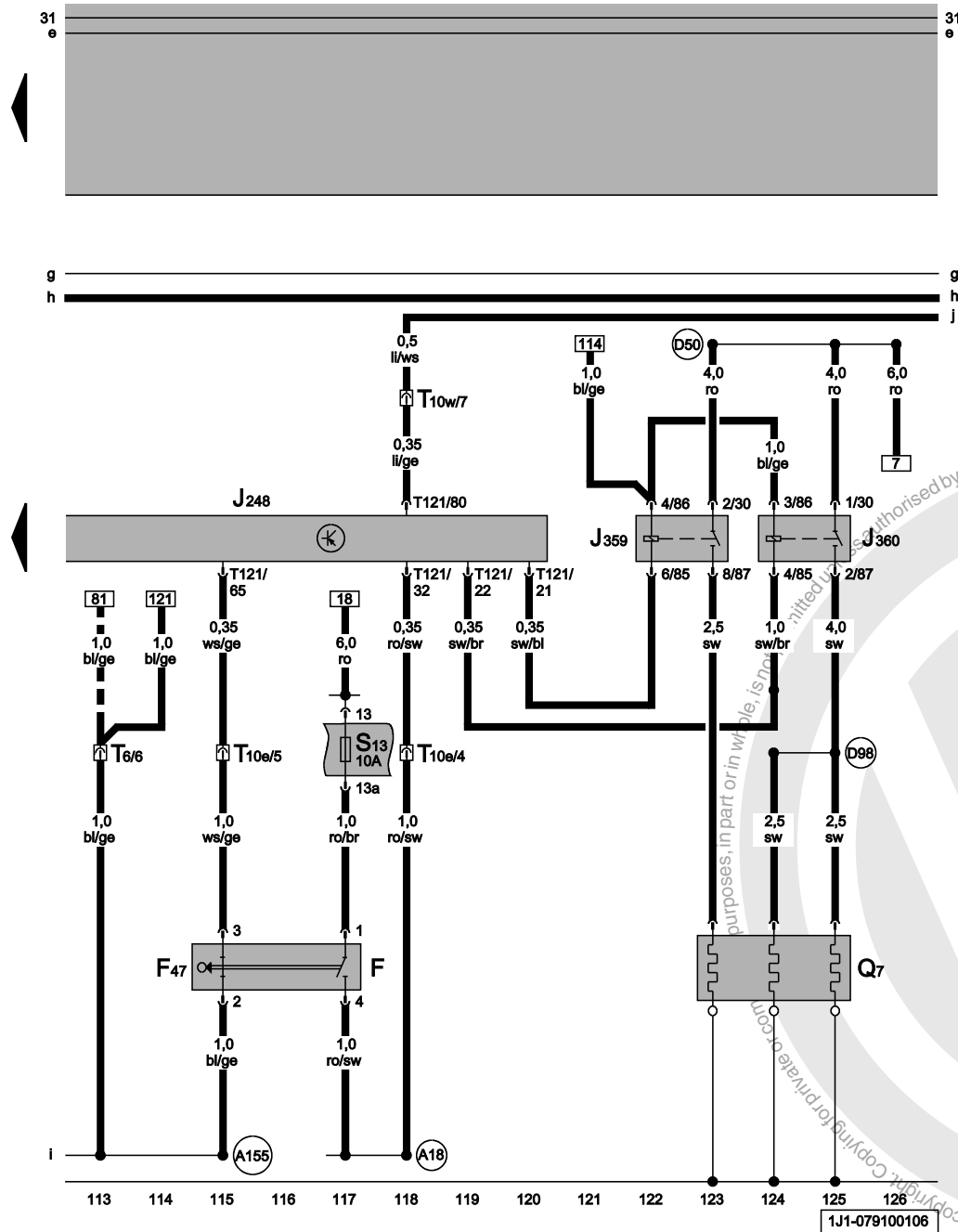


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Diesel direct injection system control unit, coolant heating element, brake pedal switch, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Brake pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay, in protective housing on left in engine compartment (53)
- J360 High heat output relay, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- A18 Connection (54), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- for models with heater element for crankcase breather only

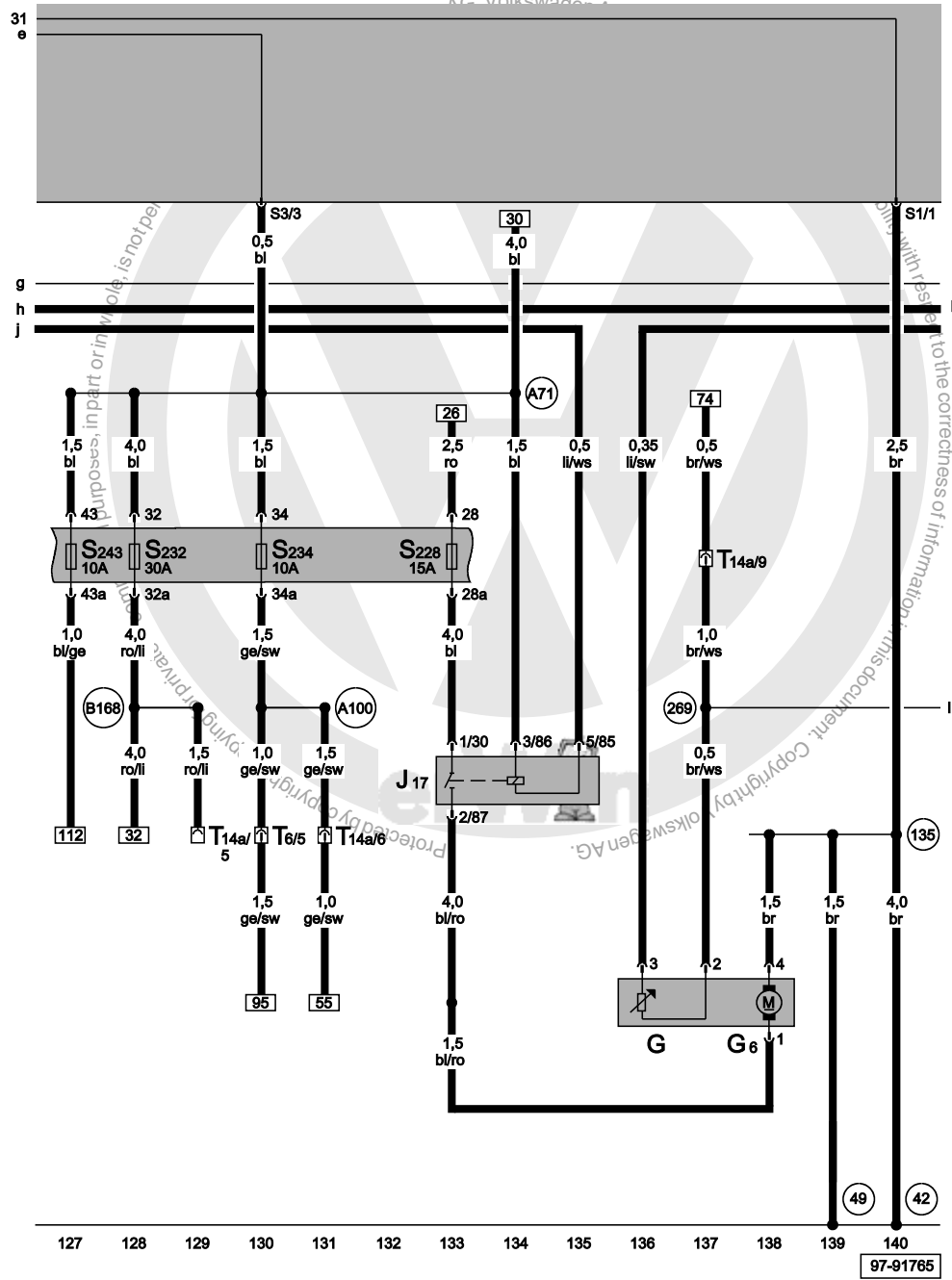


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Fuel pump relay, fuel gauge sender, fuel pump (pre-supply pump)

- G Fuel gauge sender
- G6 Fuel pump (pre-supply pump)
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in engine compartment wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness

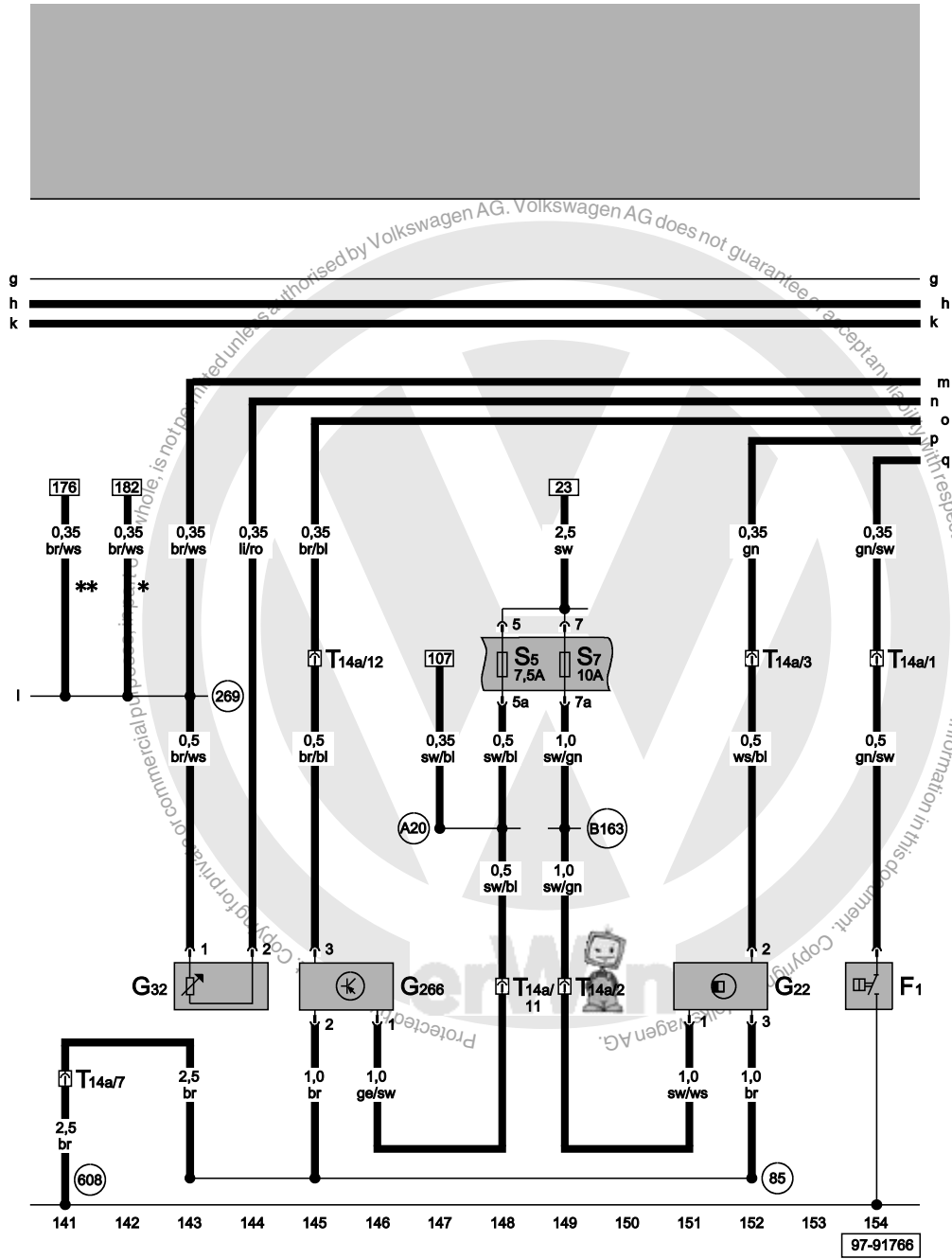


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Oil level and oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery

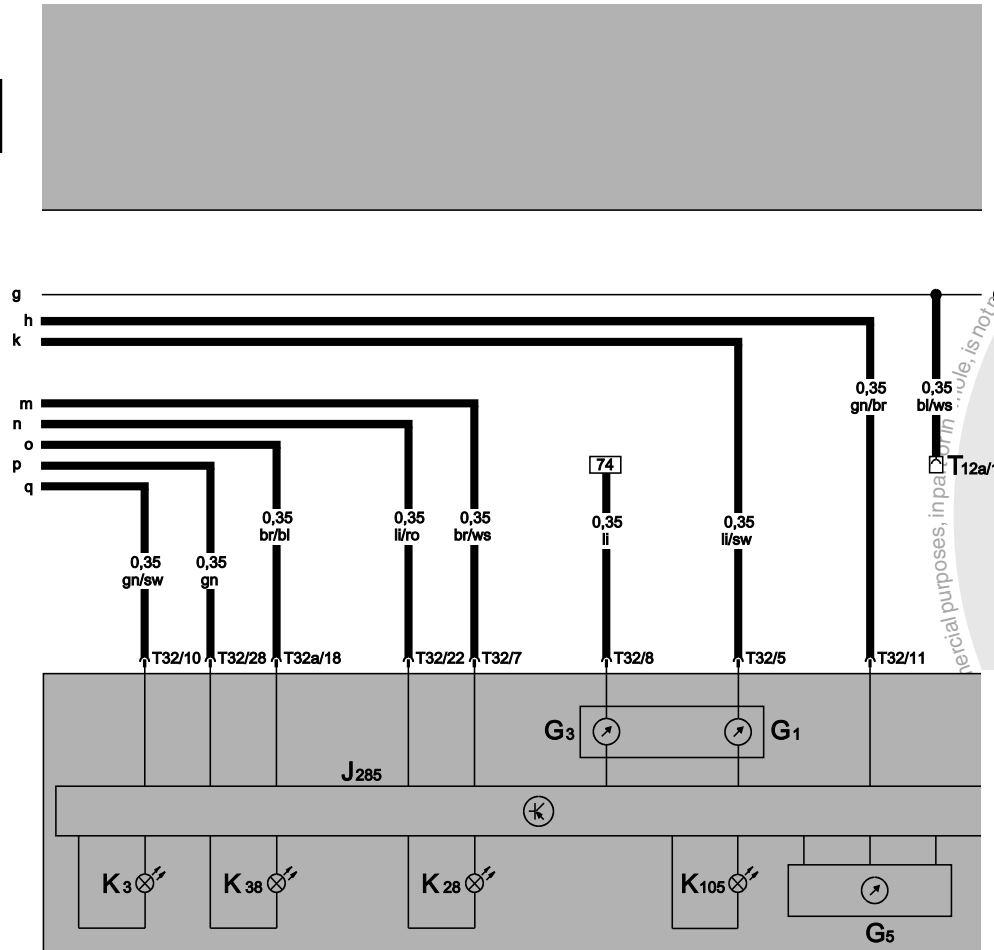
- 85 Earth connection -1-, in engine compartment wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 608 Earth point, in centre of plenum chamber
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- * only models with multifunction display
- ** models with multifunction display and without Climatronic only
- *** only flexible service interval display



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, coolant temperature/coolant shortage, fuel gauge, rev. counter

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- *** only flexible service interval display



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Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, glow period warning lamp, cruise control system warning lamp, speedometer

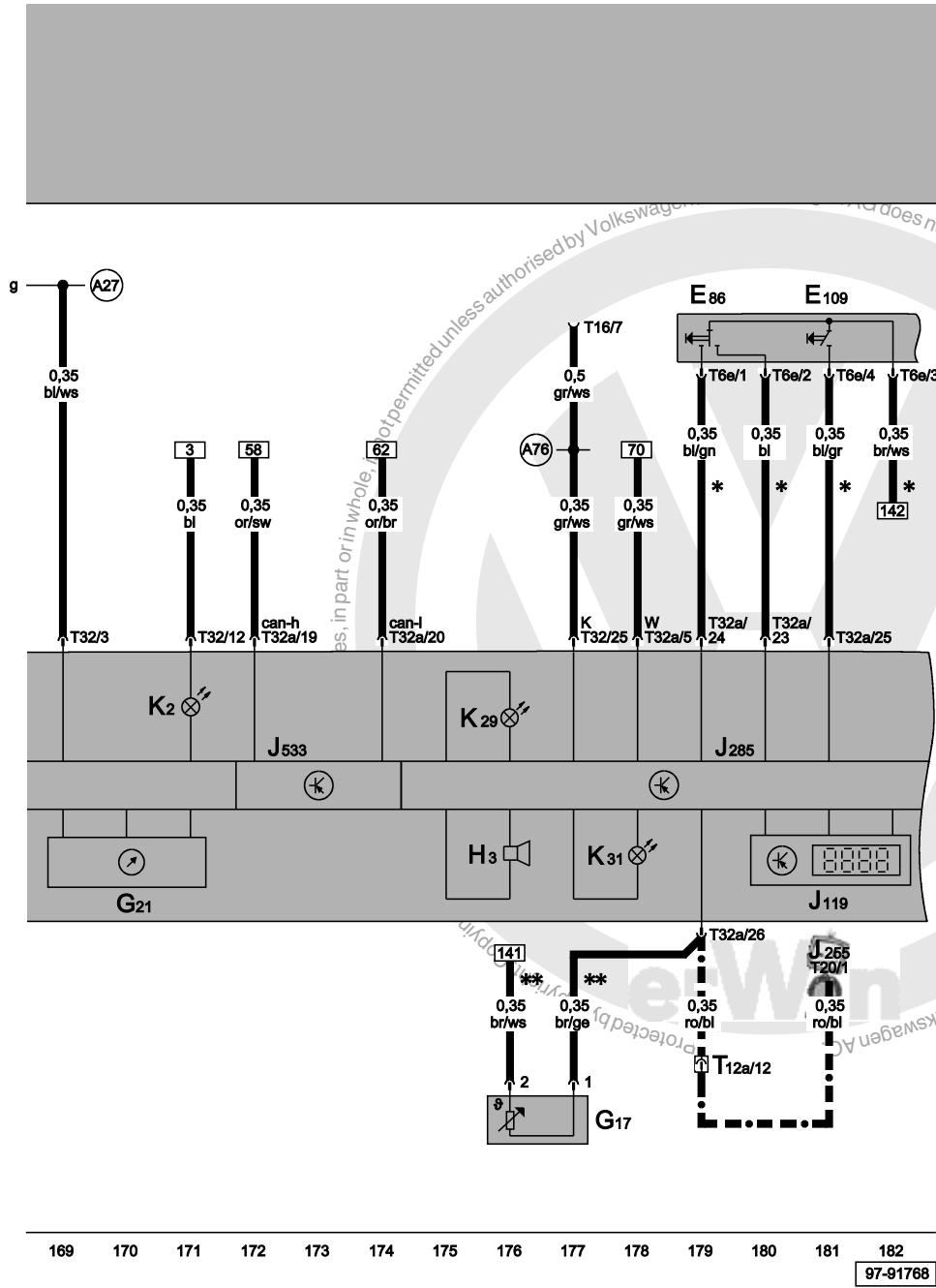
- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- G21 Speedometer
- H3 Warning buzzer
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K2 Alternator warning lamp
- K29 Glow period warning lamp
- K31 Cruise control system warning lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

(A27) Connection (speed signal), in dash panel wiring harness

(A76) Connection (diagnosis wire K), in dash panel wiring harness

- * only models with multifunction display
- ** models with multifunction display and without Climatronic only
- only models with Climatronic

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Fog light and rear fog light

from May 2000

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

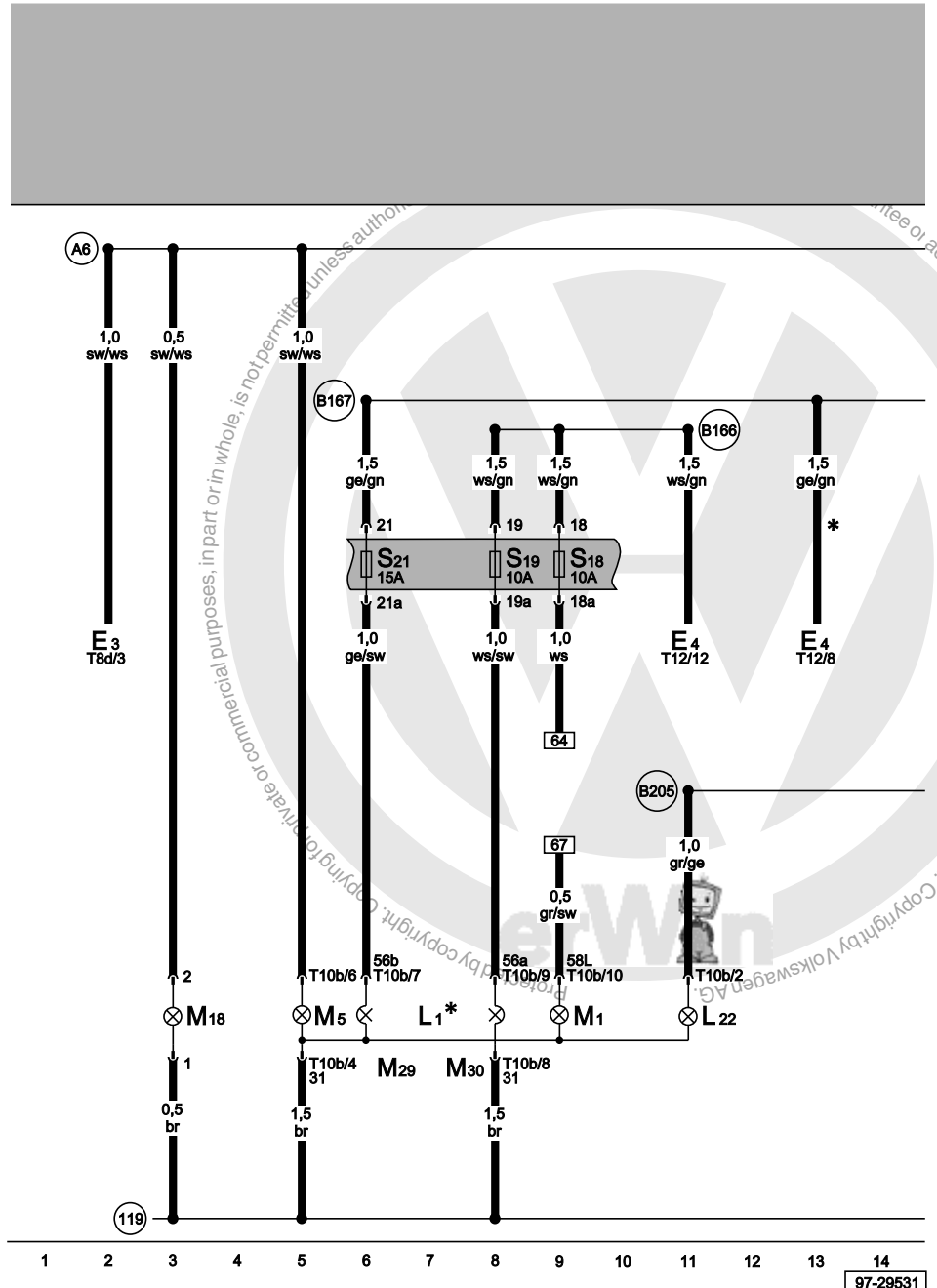
For information concerning

◆ Fault Finding Programs

⇒ guided fault finding



Left fog light, left headlight, left side light, front left turn signal



- E3 Hazard warning light switch
- E4 Headlight dipper/flasher switch
- L1 Left twin filament bulb*
- L22 Left fog light bulb
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left headlight dipped beam bulb (only Golf/ Golf Variant)
- M30 Left headlight main beam bulb (only Golf/ Golf Variant)
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T8d 8-pin connector
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

- 119 Earth connection 1, in headlight wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness
- B205 Connection (FL), in interior wiring harness
- * only Bora/ Bora Variant

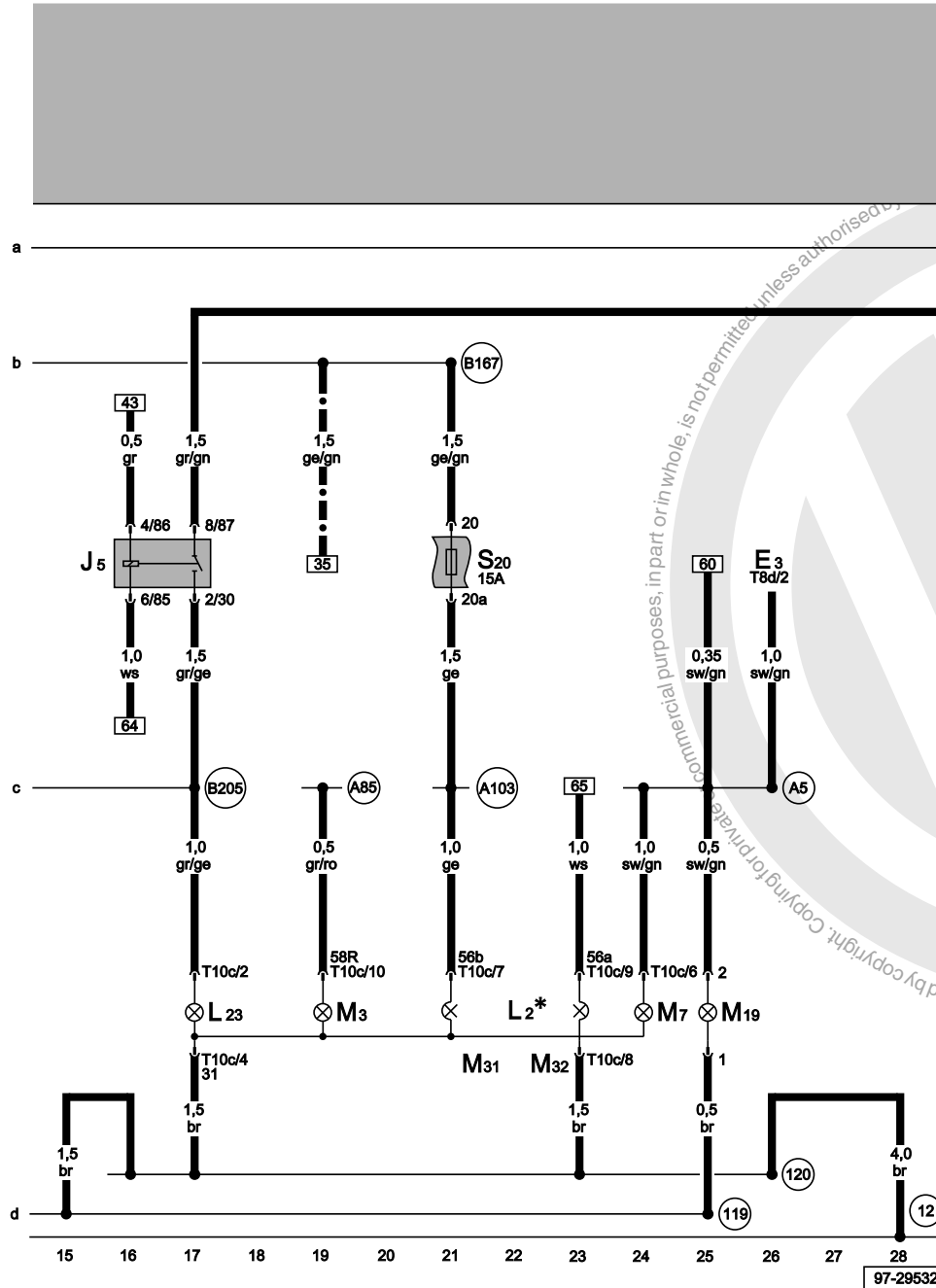
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- ge = yellow
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- rs = pink

97-29531

Right fog light, fog light relay, right headlight, right side light, front right turn signal

- E3 Hazard warning light switch
- J5 Fog light relay, on additional relay carrier above the relay plate
- L2 Right twin filament bulb*
- L23 Right fog light bulb
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right headlight dipped beam bulb (only Golf/ Golf Variant)
- M32 Right headlight main beam bulb (only Golf/ Golf Variant)
- S20 Fuse 20 in fuse holder
- T8d 8-pin connector
- T10c 10-pin connector

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness
- A103 Connection 2 (56), in dash panel wiring harness
- B167 Connection (56b), in interior wiring harness
- B205 Connection (FL), in interior wiring harness
- * only Bora/ Bora Variant
- only Golf/ Golf Variant

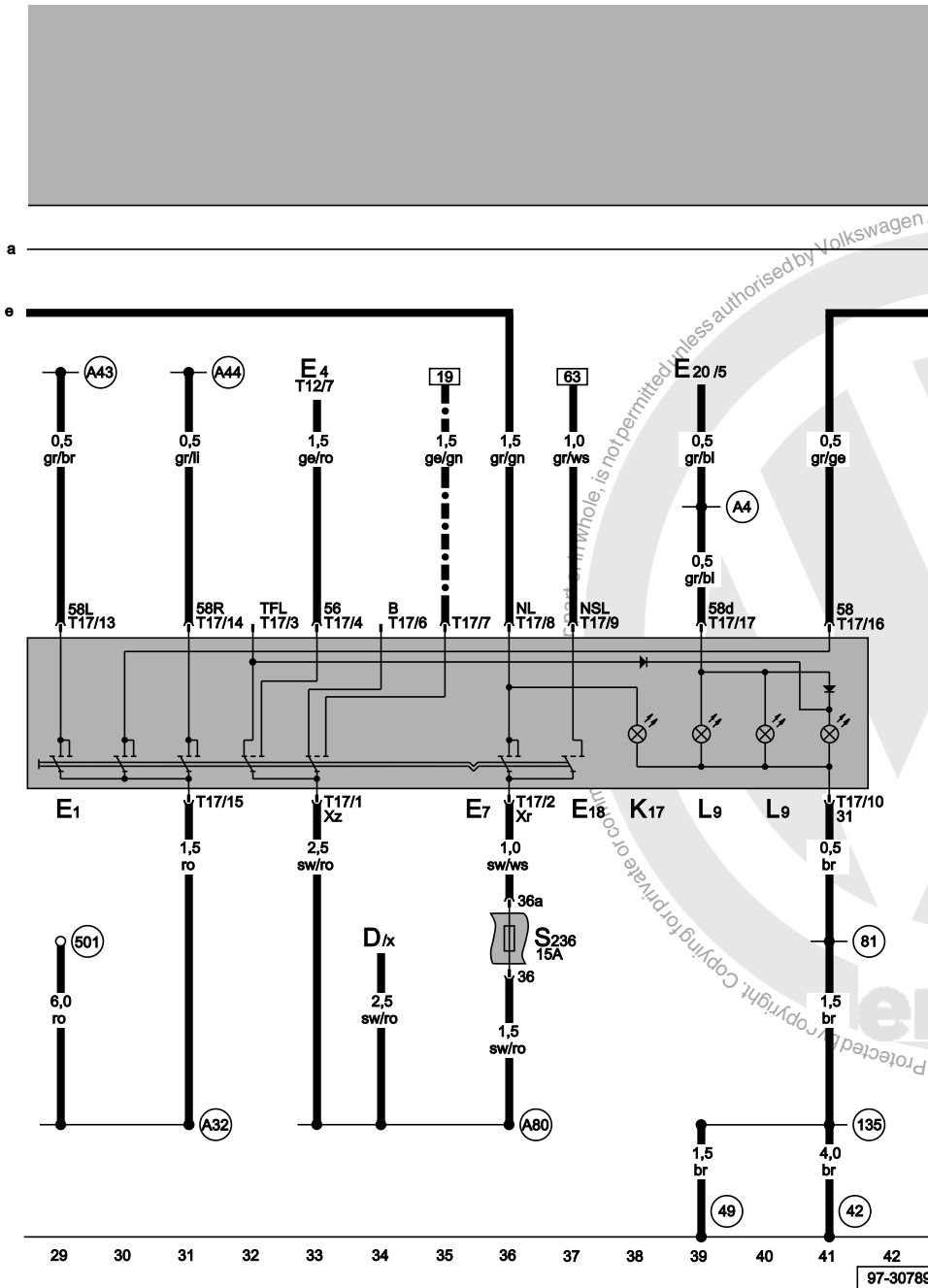


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- bl = blue
- gr = grey
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- rs = pink

Light switch, fog light switch, rear fog light switch

- D Ignition/starter switch
- E1 Light switch
- E4 Headlight dipper/flasher switch
- E7 Fog light switch
- E18 Rear fog light switch
- E20 Illumination regulators - switches and instruments
- K17 Fog light warning lamp
- L9 Light switch illumination bulb
- S236 Fuse 36 in fuse holder
- T12 12-pin connector
- T17 17-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 501 Screw connection 2 (30), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- .-.- only Golf/ Golf Variant



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- li = purple
- ge = yellow
- or = orange
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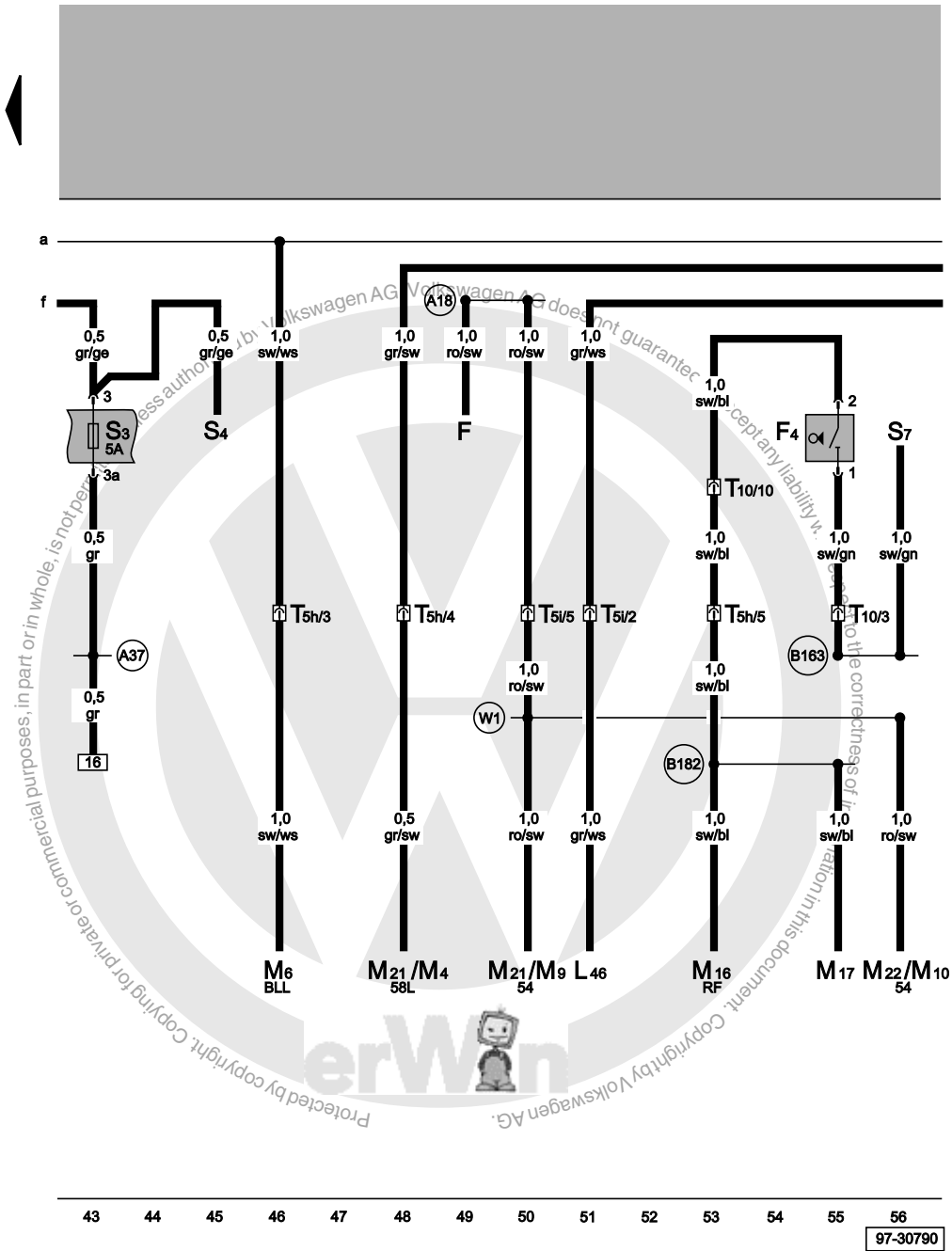
97-30789

Rear fog light, left tail light, brake light, reversing light

- F Brake light switch
- F4 Reversing light switch
- L46 Rear left fog light bulb
- M4 Left tail light bulb (Golf/ Bora)
- M6 Rear left turn signal bulb
- M9 Left brake light bulb (Golf/ Bora)
- M10 Right brake light bulb (Golf/ Bora)
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- M21 Left brake and tail light bulb (Golf Variant/ Bora Variant)
- M22 Right brake and tail light bulb (Golf Variant/ Bora Variant)
- S3 Fuse 3 in fuse holder
- S4 Fuse 4 in fuse holder
- S7 Fuse 7 in fuse holder
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

- A18 Connection (54), in dash panel wiring harness
- A37 Connection (58a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness

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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

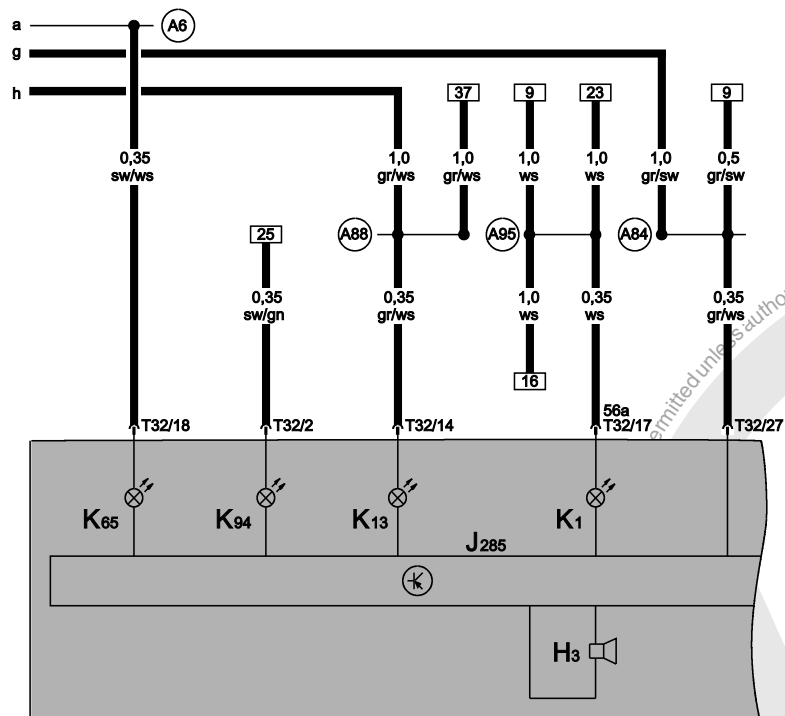




Dash panel insert, turn signal warning lamps, main beam warning lamp, rear fog light warning lamp

- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K13 Rear fog light warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- T32 32-pin connector, blue

- (A6) Positive connection (left turn signal), in dash panel wiring harness
- (A84) Connection (58L), in dash panel wiring harness
- (A88) Connection (RFL), in dash panel wiring harness
- (A95) Connection 1 (56a), in dash panel wiring harness



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Day driving light

from May 2000

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

◆ Fault Finding Programs

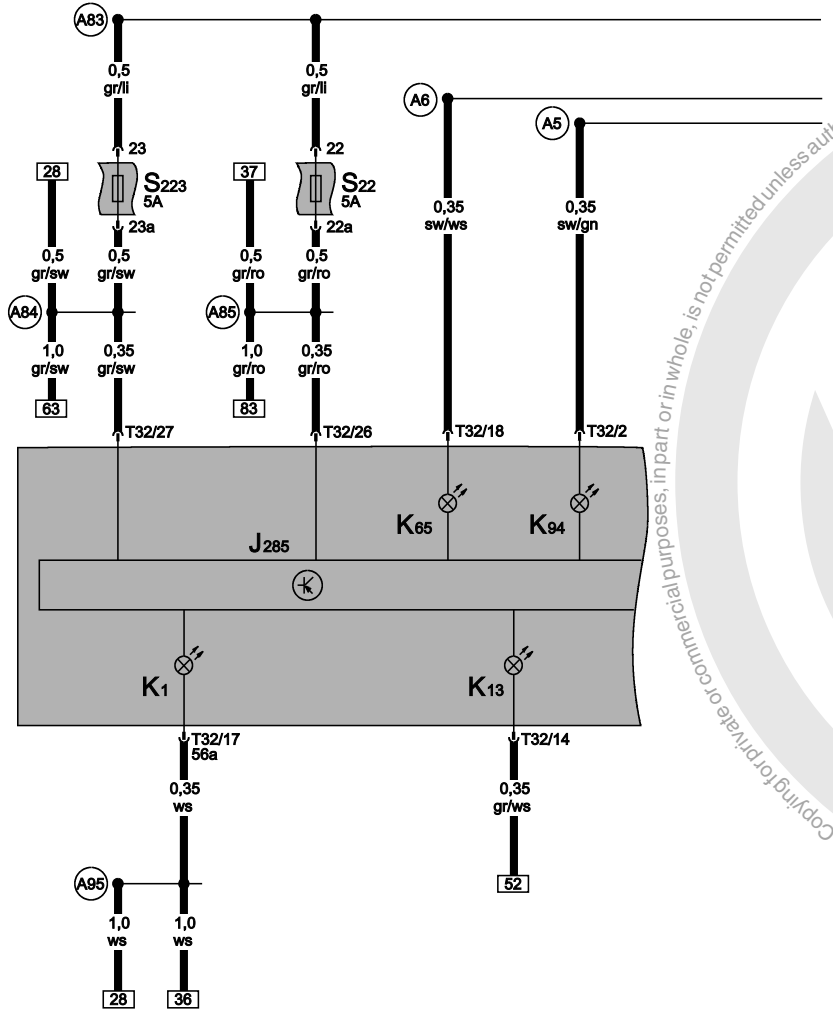
⇒ guided fault finding



Dash panel insert

- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K13 Rear fog light warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T32 32-pin connector, blue

- A5 Positive connection (right turn signal), in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- A83 Connection (day driving light), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness
- A95 Connection 1 (56a), in dash panel wiring harness



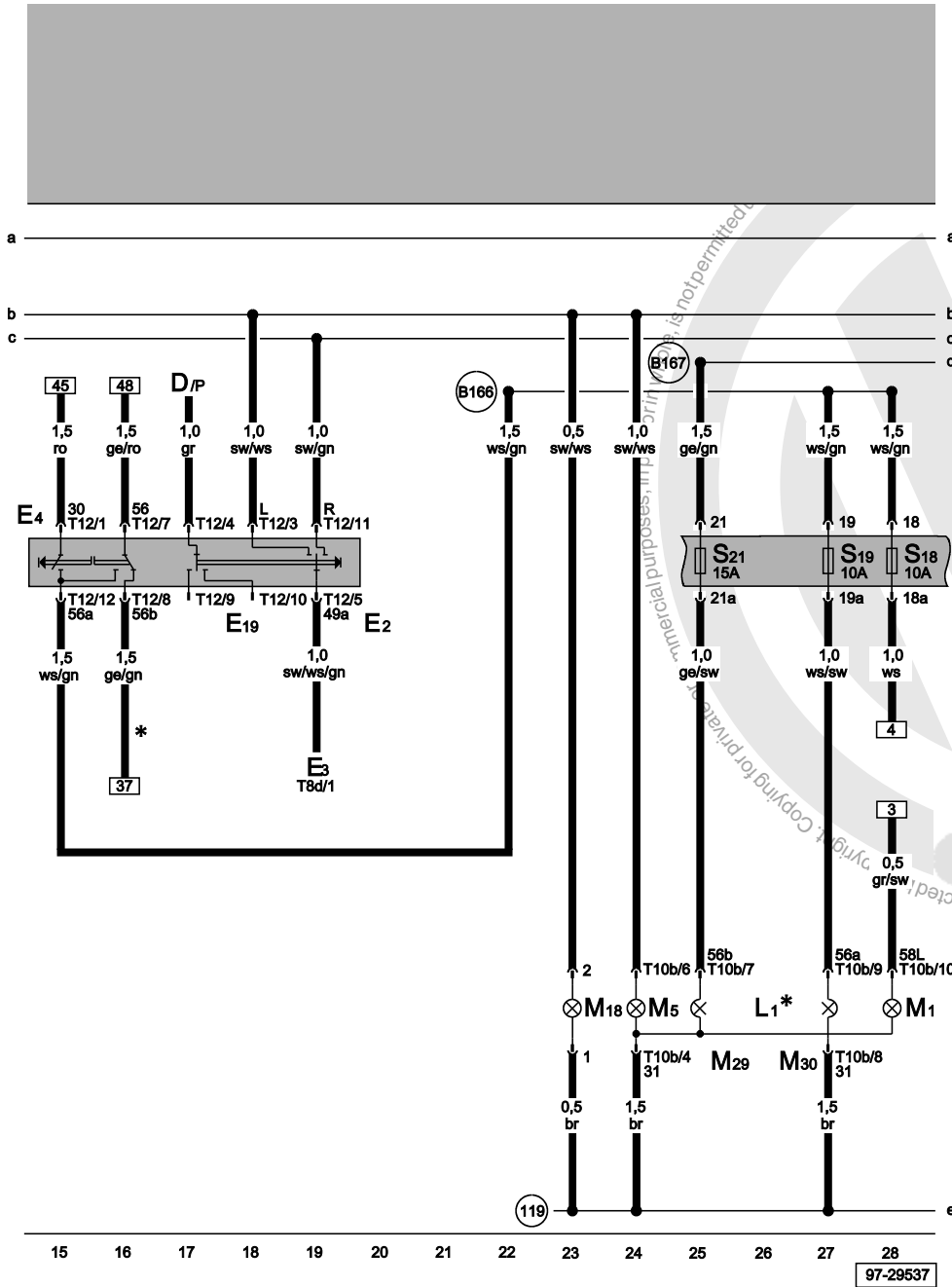
- ws = white
- sw = black
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Left headlight, left side light, front left turn signal, turn signal switch, headlight dipper/flasher switch

- D Ignition/starter switch
- E2 Turn signal switch
- E3 Hazard warning light switch
- E4 Headlight dipper/flasher switch
- E19 Parking light switch
- L1 Left twin filament bulb*
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M18 Left side mounted turn signal bulb
- M29 Left dipped beam bulb**
- M30 Left main beam bulb**
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T8d 8-pin connector
- T10b 10-pin connector, on left headlight
- T12 12-pin connector

- 119 Earth connection 1 in headlight wiring harness
- B166 Connection (56a) in interior wiring harness
- B167 Connection (56b) in interior wiring harness
- * only Bora/ Bora Variant
- ** only Golf/ Golf Variant

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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



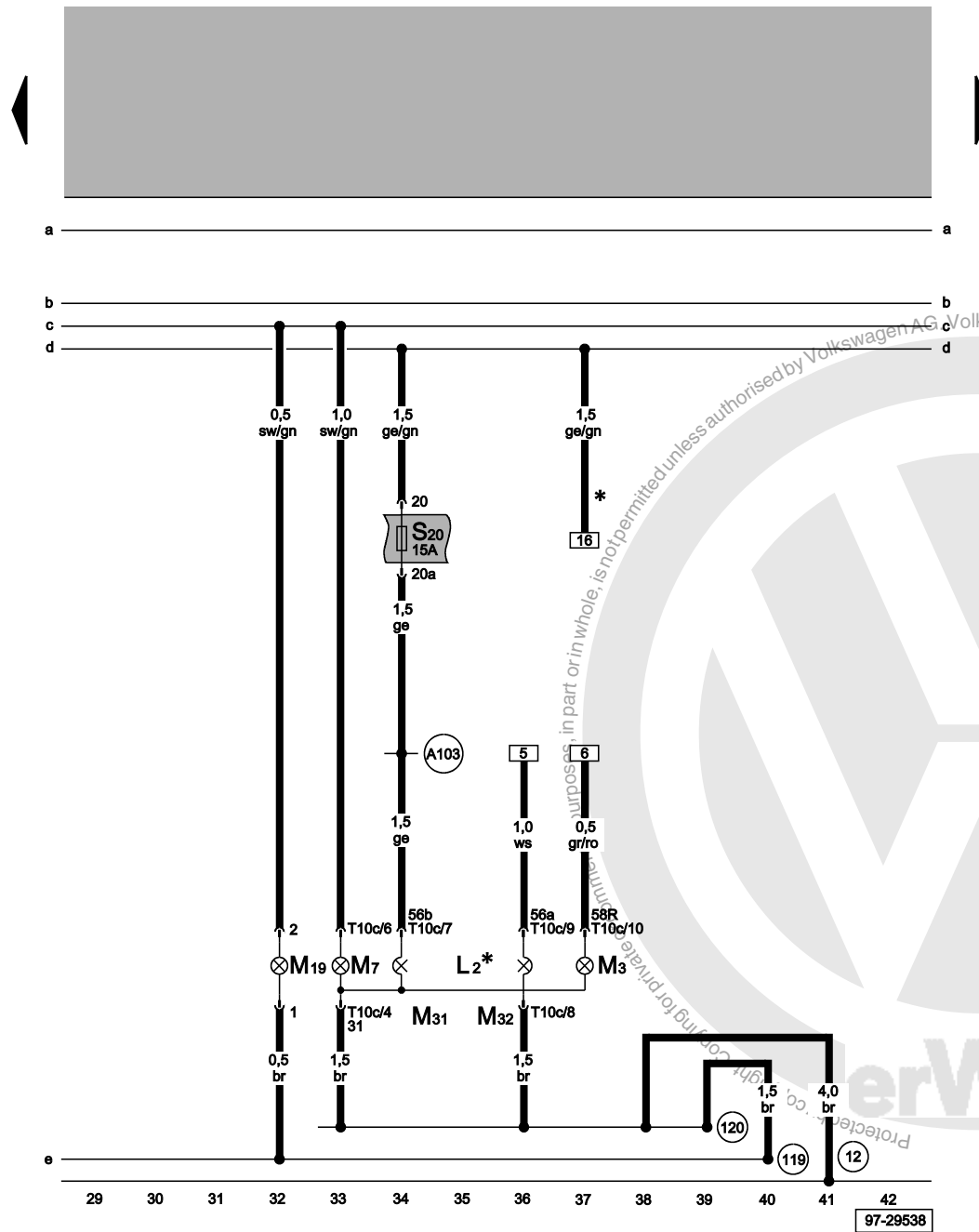
97-29537

Right headlight, right side light, front right turn signal

- L2 Right twin filament bulb*
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M19 Right side mounted turn signal bulb
- M31 Right dipped beam bulb**
- M32 Right main beam bulb**
- S20 Fuse 20 in fuse holder
- T10c 10-pin connector, on right headlight

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- A103 Connection 2 (56), in dash panel wiring harness

* only Bora/ Bora Variant
 ** only Golf/ Golf Variant



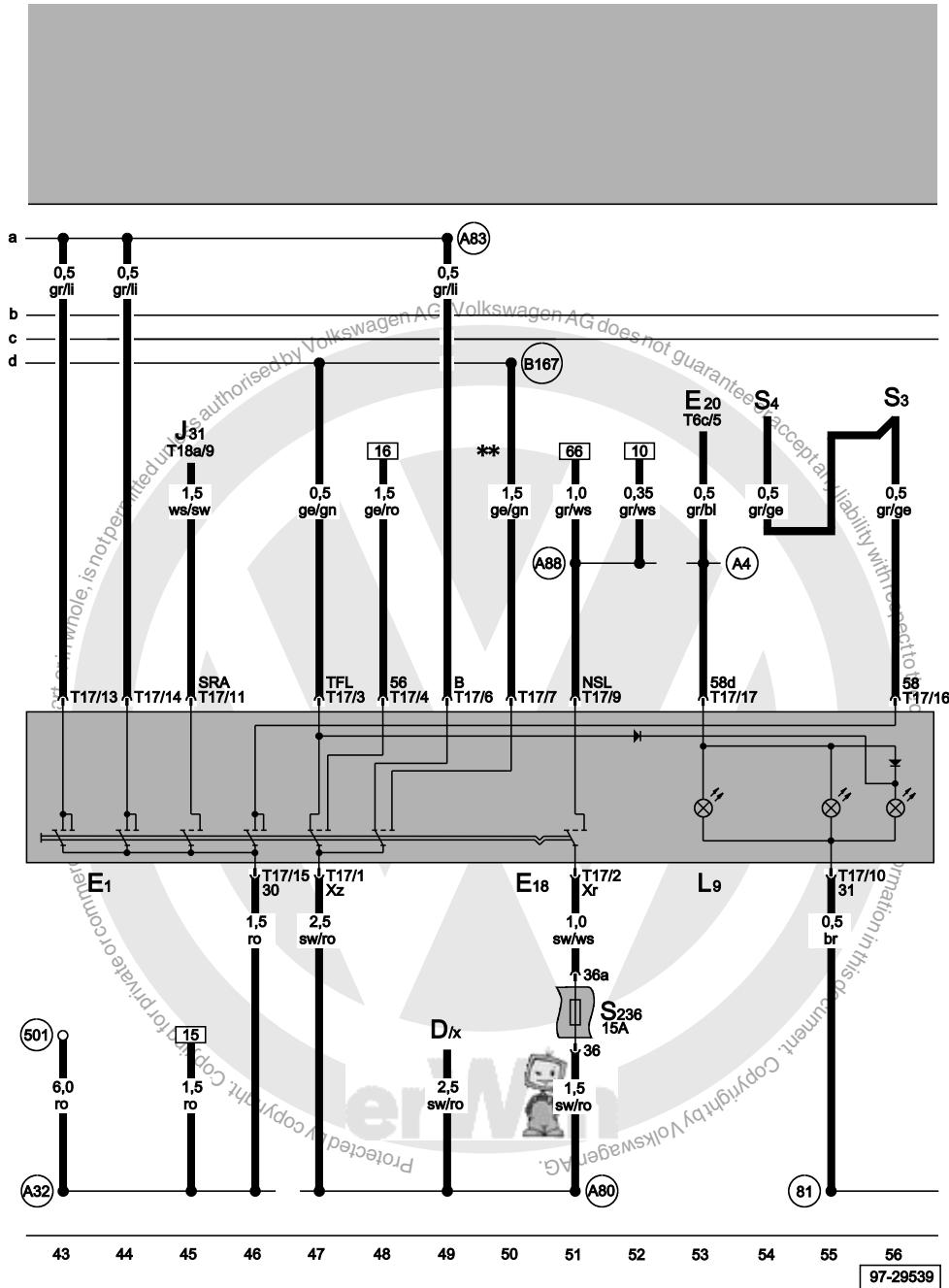
- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29538

Light switch, rear fog light switch

- D Ignition/starter switch
- E1 Light switch
- E18 Rear fog light switch
- E20 Illumination regulators - switches and instruments
- J31 Automatic intermittent wash and wipe relay
- L9 Light switch illumination bulb
- S3 Fuse 3 in fuse holder
- S4 Fuse 4 in fuse holder
- S236 Fuse 36 in fuse holder
- T6c 6-pin connector
- T17 17-pin connector
- T18a 18-pin connector

- 81 Earth connection 1, in dash panel wiring harness
- 501 Screw connection 2 (30), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A83 Connection (day driving light), in dash panel wiring harness
- A88 Connection (RFL), in dash panel wiring harness
- B167 Connection (56b), in interior wiring harness
- ** only Golf/ Golf Variant



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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-29539

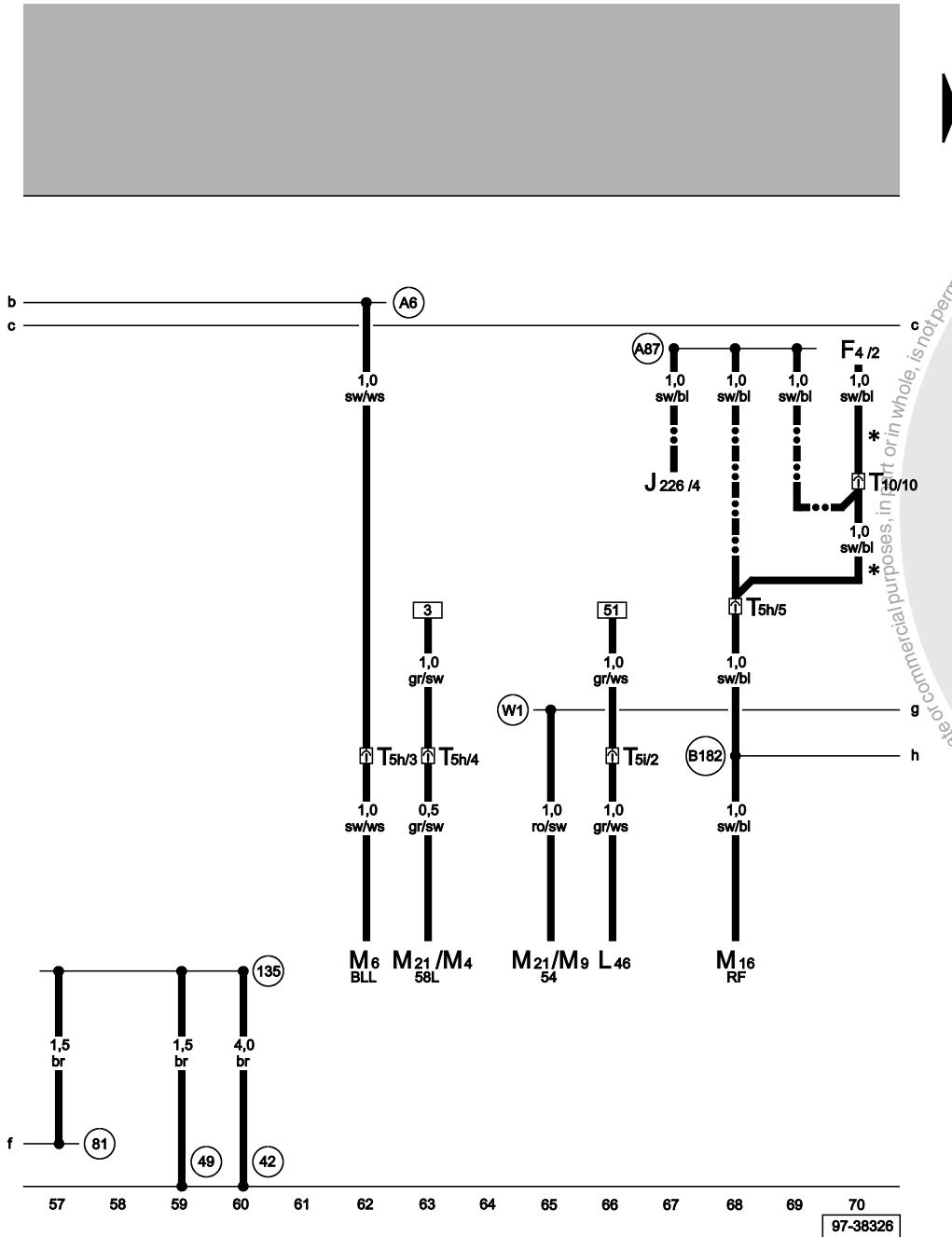
Left brake light, rear fog light, left reversing light, left tail light, rear left turn signal

- F4 Reversing light switch
- J226 Starter inhibitor and reversing light relay
- L46 Rear left fog light bulb
- M4 Left tail light bulb (Golf/ Bora)
- M6 Rear left turn signal bulb
- M9 Left brake light bulb (Golf/ Bora)
- M16 Left reversing light bulb
- M21 Left brake and tail light bulb (Golf Variant/ Bora Variant)
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection 1 (54), in rear wiring harness

* only models with manual gearbox
 -●- models with automatic gearbox only

- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

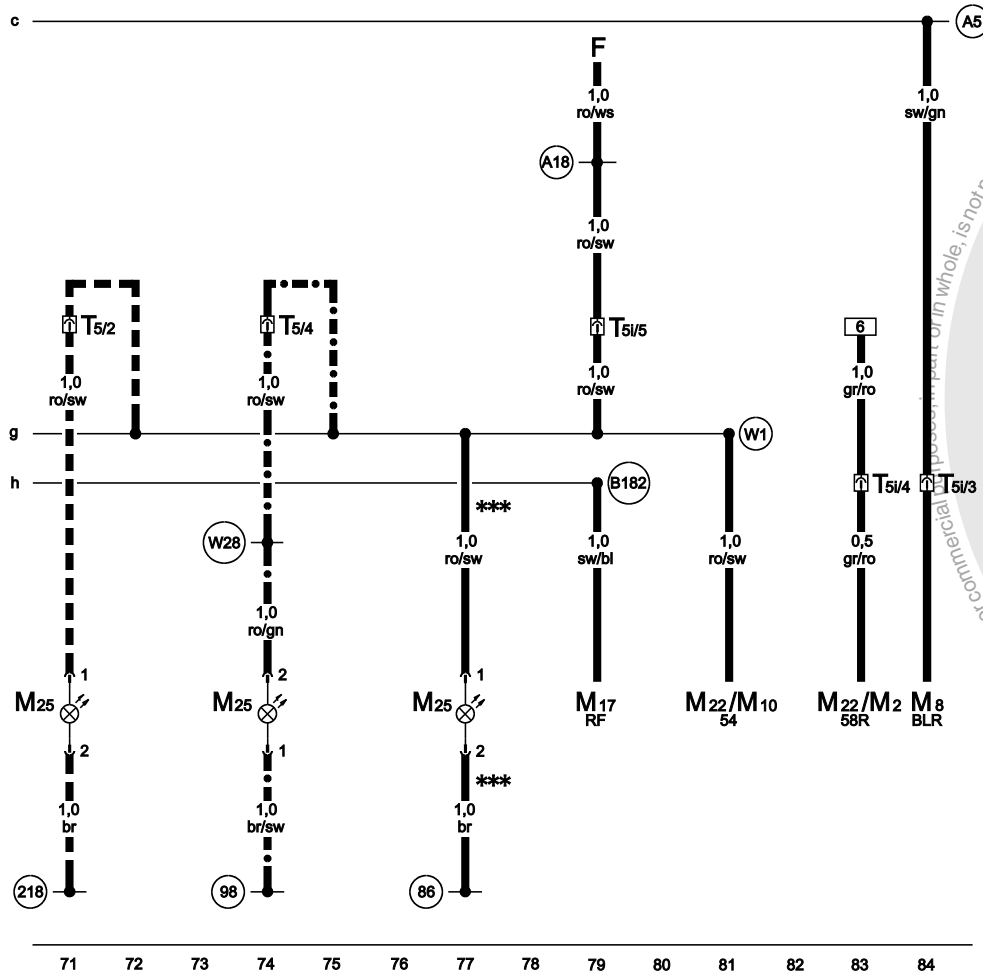


97-38326



Right tail light, right brake light, rear right turn signal, right reversing light, high level brake light

- F Brake light switch
- M2 Right tail light bulb (Golf/ Bora)
- M8 Rear right turn signal bulb
- M10 Right brake light bulb (Golf/ Bora)
- M17 Right reversing light bulb
- M22 Right brake and tail light bulb (Golf Variant/ Bora Variant)
- M25 High level brake light bulb
- T5 5-pin connector, black, coupling station on left C-pillar
- T5i 5-pin connector, near lower left A-pillar, entwined in wiring harness



- 86 Earth connection 1, in rear wiring harness
- 98 Earth connection, in rear lid wiring harness
- 218 Earth connection -1-, in rear lid wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- A18 Connection (54), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- W1 Positive connection (54), in rear wiring harness
- W28 Positive connection (54), in tail lights wiring harness
- *** only Bora
- only Golf Variant/ Bora Variant
- only Golf

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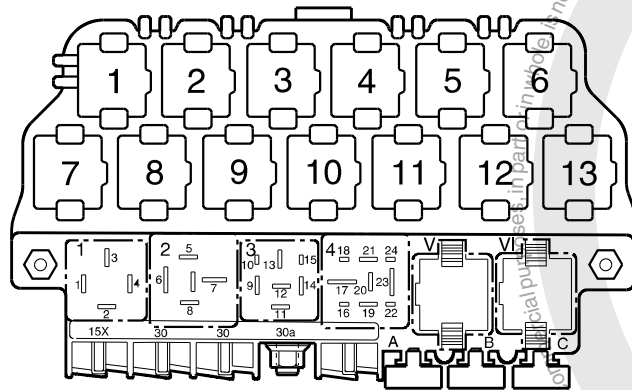
97-30792

Airbags system

- ⇒ Driver's and front passenger's airbags
- ⇒ Belt tensioners
- ⇒ Curtain airbag
- ⇒ Side airbag

From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

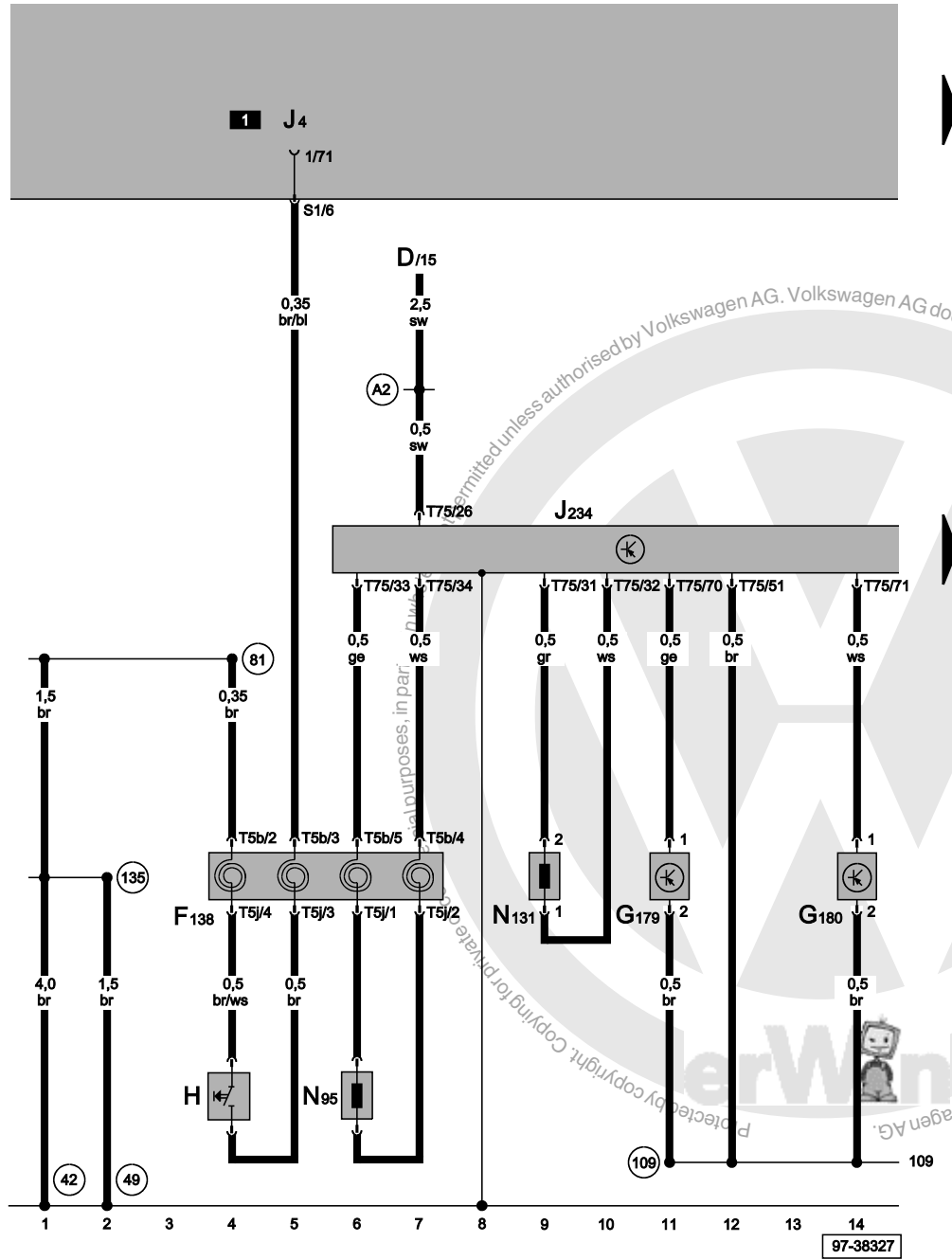


97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

Airbag control unit, airbag coil connector, front airbag igniter, side airbag crash sensors



- D Ignition and starter switch
- F138 Airbag coil connector and return ring with slip ring
- G179 Driver crash sensor for side airbag
- G180 Front passenger crash sensor for side airbag
- H Horn plate
- J4 Dual tone horn relay
- J234 Airbag control unit, behind lower console
- N95 Driver airbag igniter
- N131 Front passenger airbag igniter 1
- T5b 5-pin connector
- T5j 5-pin connector
- T75 75-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 109 Earth connection, in airbag wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A2 Positive connection (15), in dash panel wiring harness

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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

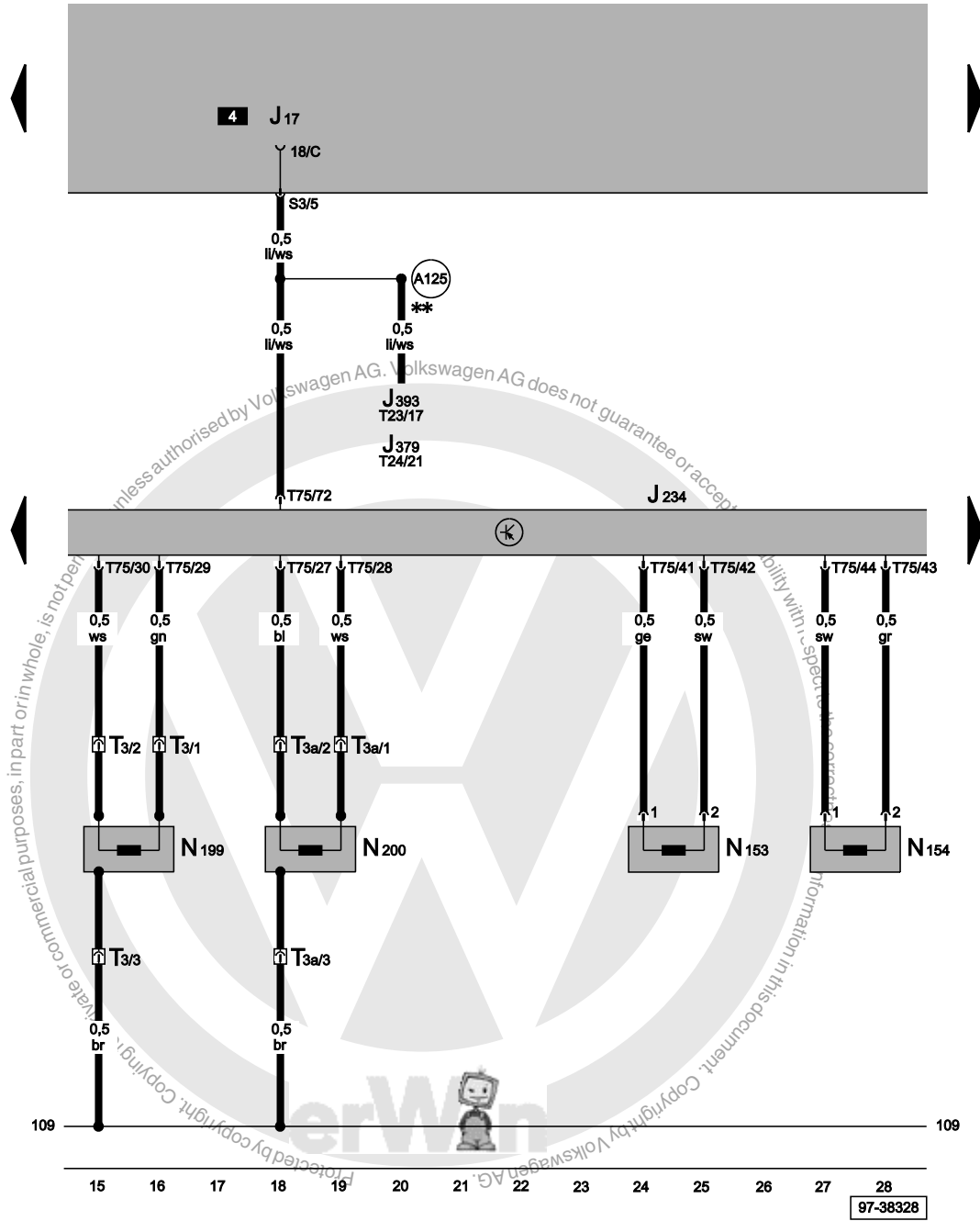
97-38327

Airbag control unit, side airbag igniter, belt tensioner igniter

- J17 Fuel pump relay
- J234 Airbag control unit, behind lower console
- J379 Central locking and anti-theft alarm system control unit
- J393 Convenience system central control unit
- N153 Driver seat belt tensioner igniter 1
- N154 Front passenger seat belt tensioner igniter 1
- N199 Side airbag igniter, driver side
- N200 Side airbag igniter, front passenger side
- T3 3-pin connector, under driver seat
- T3a 3-pin connector, under front passenger seat
- T23 23-pin connector
- T24 24-pin connector
- T75 75-pin connector

A125 Connection (crash signal), in dash panel wiring harness

** Up to April 2001



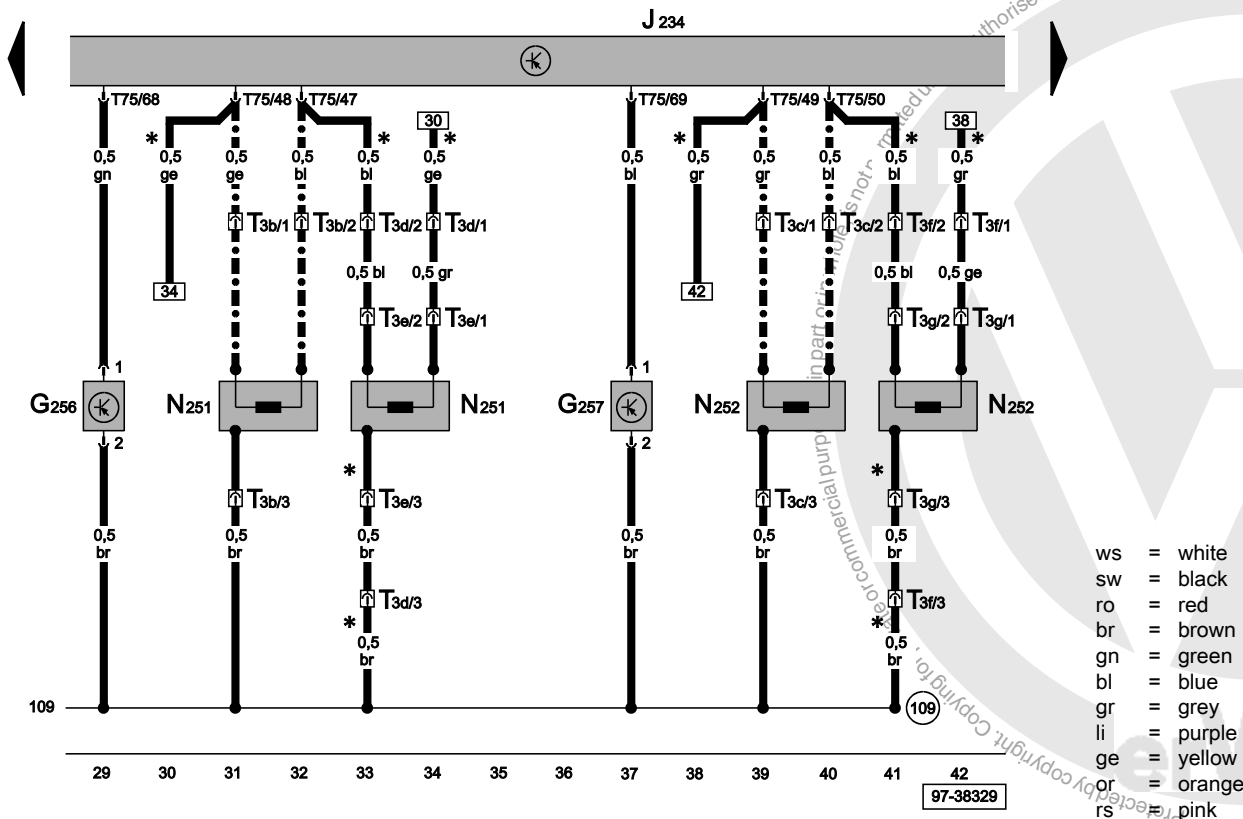
- ws = white
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Airbag control unit, rear side airbag crash sensor, curtain airbag igniter

- G256 Rear side airbag crash sensor, driver side
- G257 Rear side airbag crash sensor, front passenger side
- J234 Airbag control unit, behind lower console
- N251 Curtain airbag igniter, driver side
- N252 Curtain airbag igniter, front passenger side
- T3b 3-pin connector, behind left C-pillar trim
- T3c 3-pin connector, behind right C-pillar trim
- T3d 3-pin connector, near left D-pillar coupling station
- T3e 3-pin connector, behind left D-pillar trim
- T3f 3-pin connector, near right D-pillar coupling station
- T3g 3-pin connector, behind right D-pillar trim
- T75 75-pin connector

109 Earth connection, in airbag wiring harness

* Only Golf estate/Bora estate
 * Only Golf saloon/Bora saloon



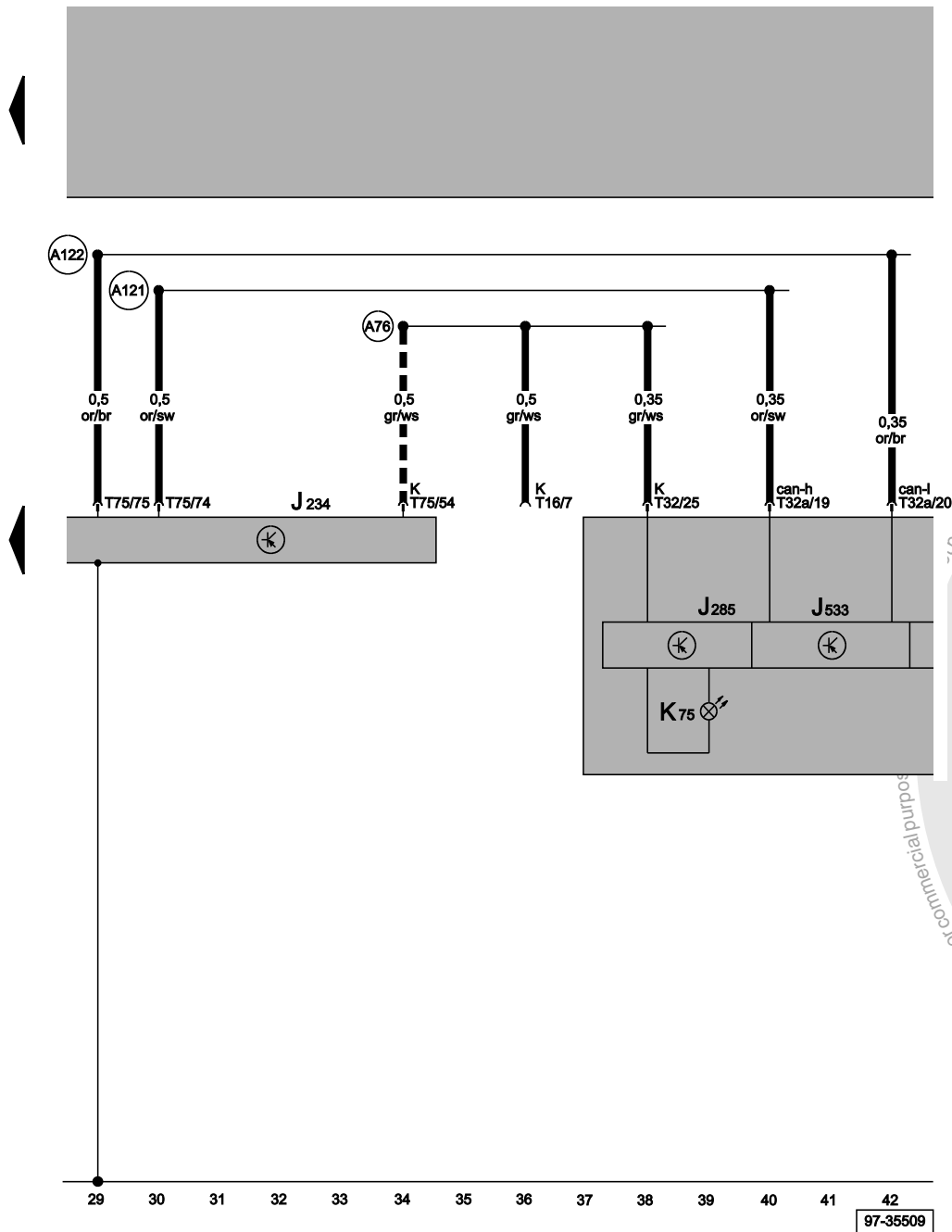
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- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

Airbag control unit, airbag warning lamp, diagnostic socket

- J234 Airbag control unit, down behind console
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K75 Airbag warning lamp, in dash panel insert
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T75 75-pin connector

- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness

--- Up to June 2001



97-35509

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1.8 I/110 kW Motronic, engine code AUM

from September 2000

1.8 I/132 kW Motronic, engine code AUQ

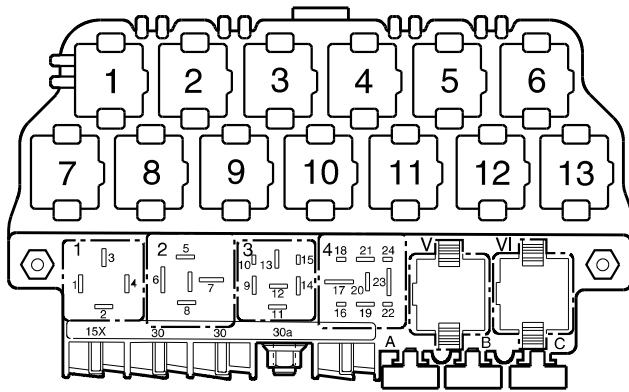
from June 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier

above the relay plate:

Relay locations on relay plate:



97-14163

2 - X-contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

30 A - green

25 A - white

20 A - yellow

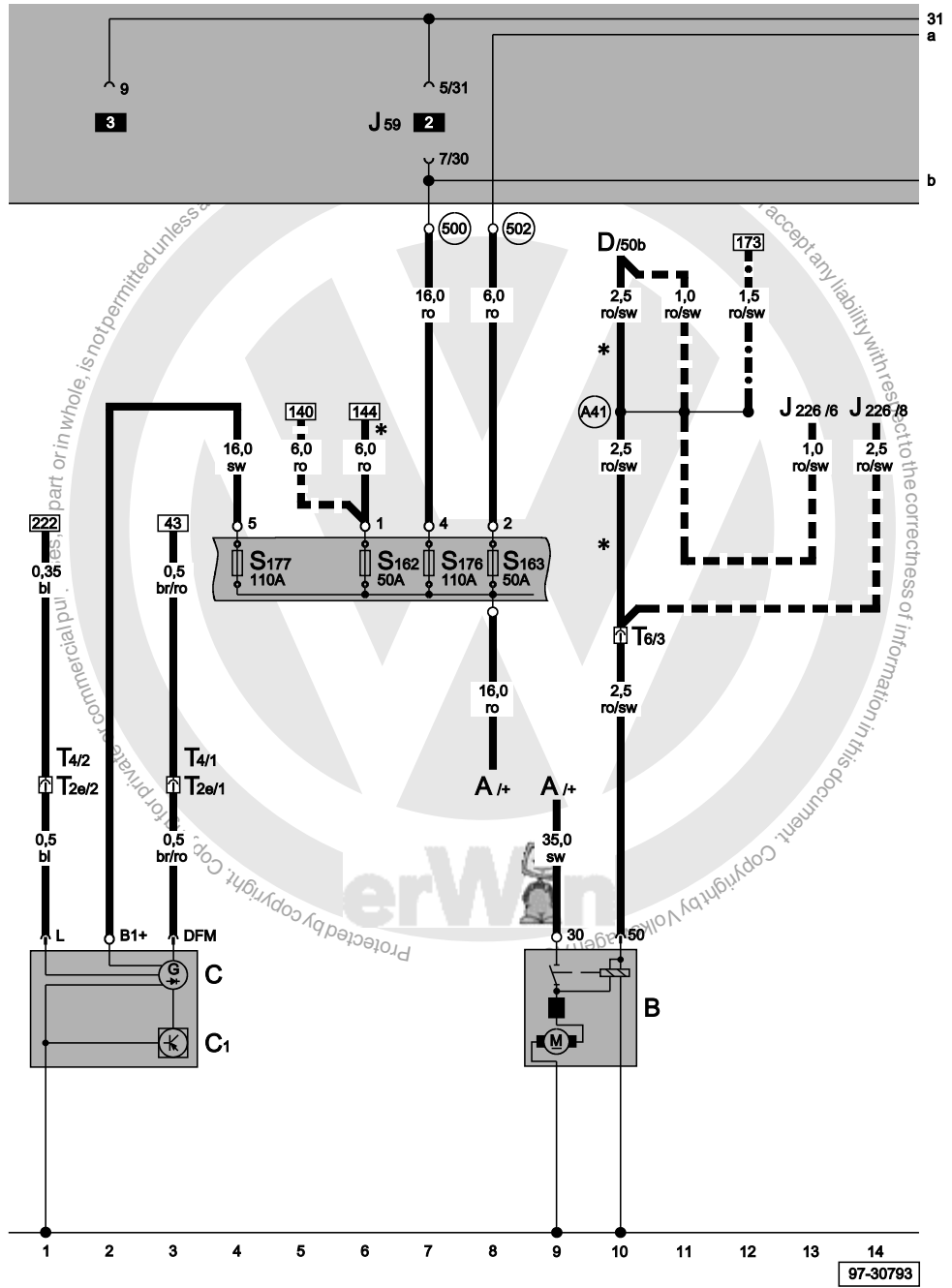
15 A - blue

10 A - red



7,5 A - brown
5 A - beige
3 A - purple





Alternator, starter

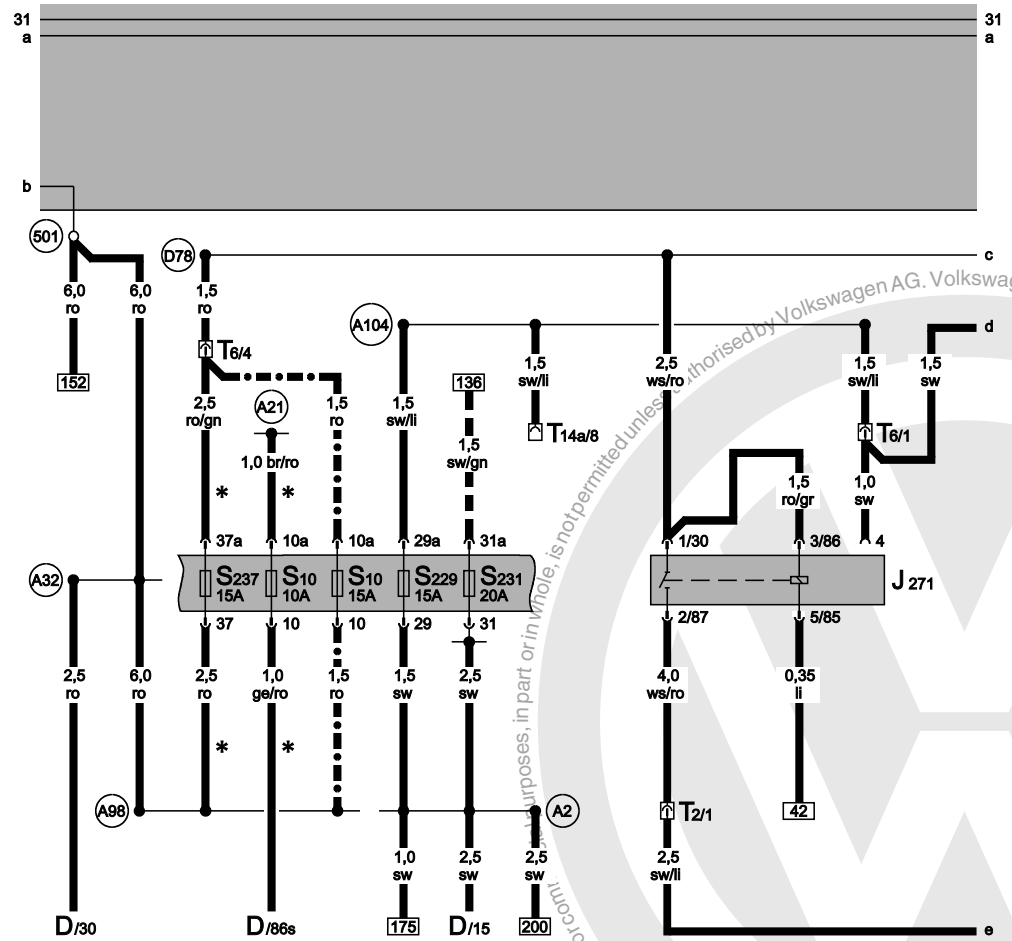
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- A41 Positive connection (50), in dash panel wiring harness (up to April 2001)
- * only models with manual gearbox
- models with automatic gearbox only
- .-.- up to April 2001

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- or = orange
- rs = pink

Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S231 Fuse 31 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A21 Connection (86s), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- models with automatic gearbox only
- * from November 2001
- ... up to October 2001



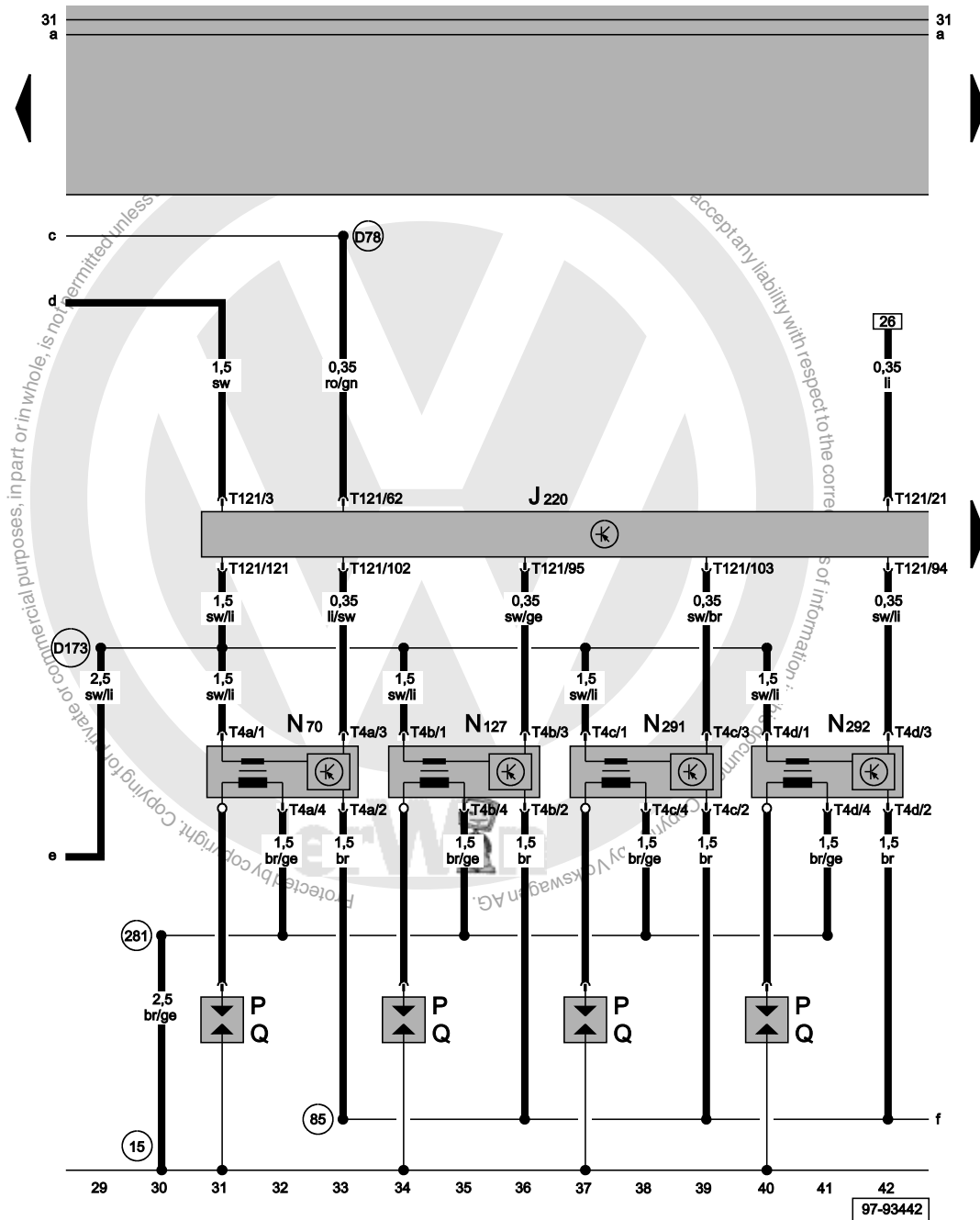
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection 1, in engine wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness

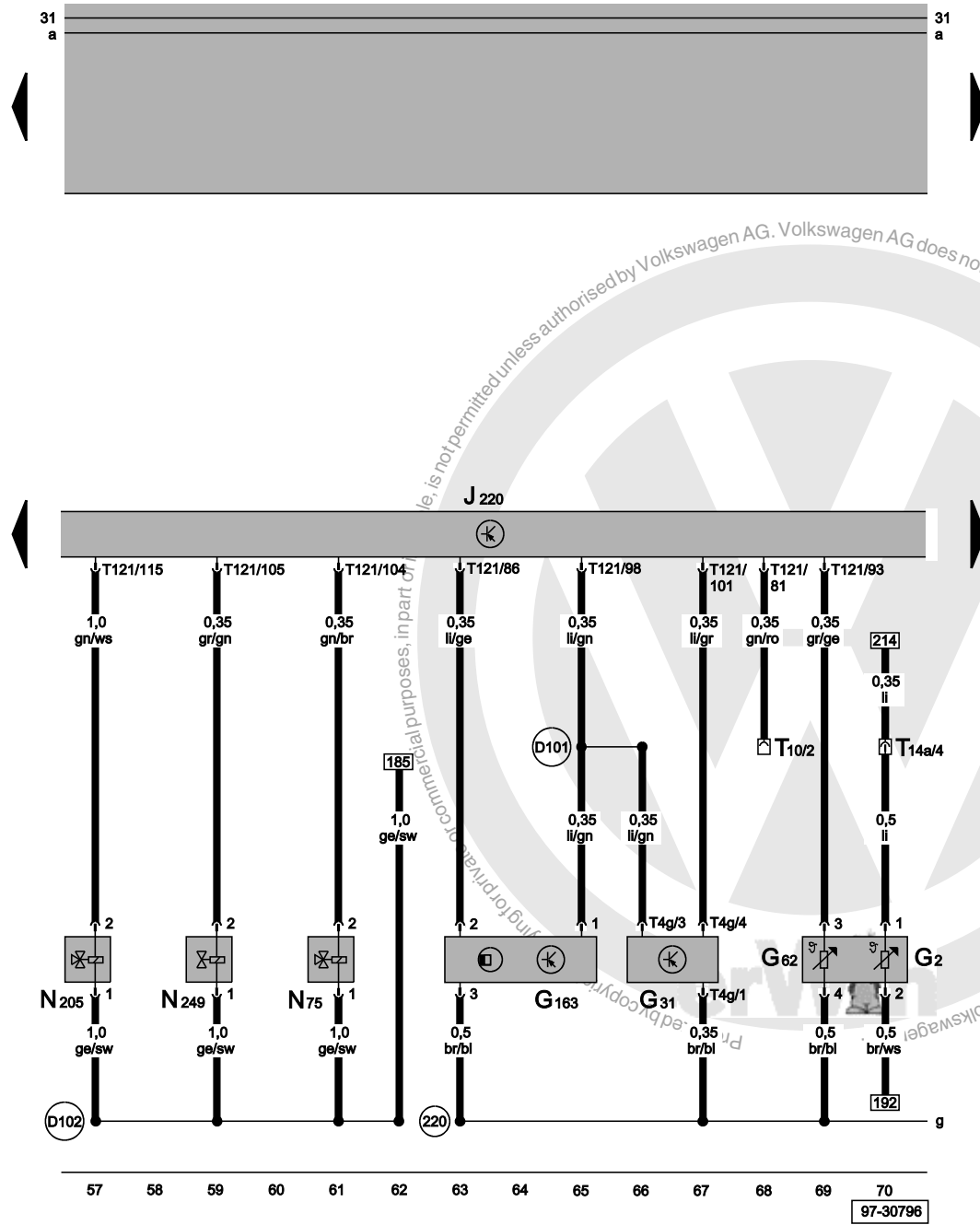
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97-83442

Motronic control unit, coolant temperature sender, Hall sender, charge air pressure sender, charge pressure control solenoid valve, turbocharger air recirculation valve, inlet camshaft control valve 1

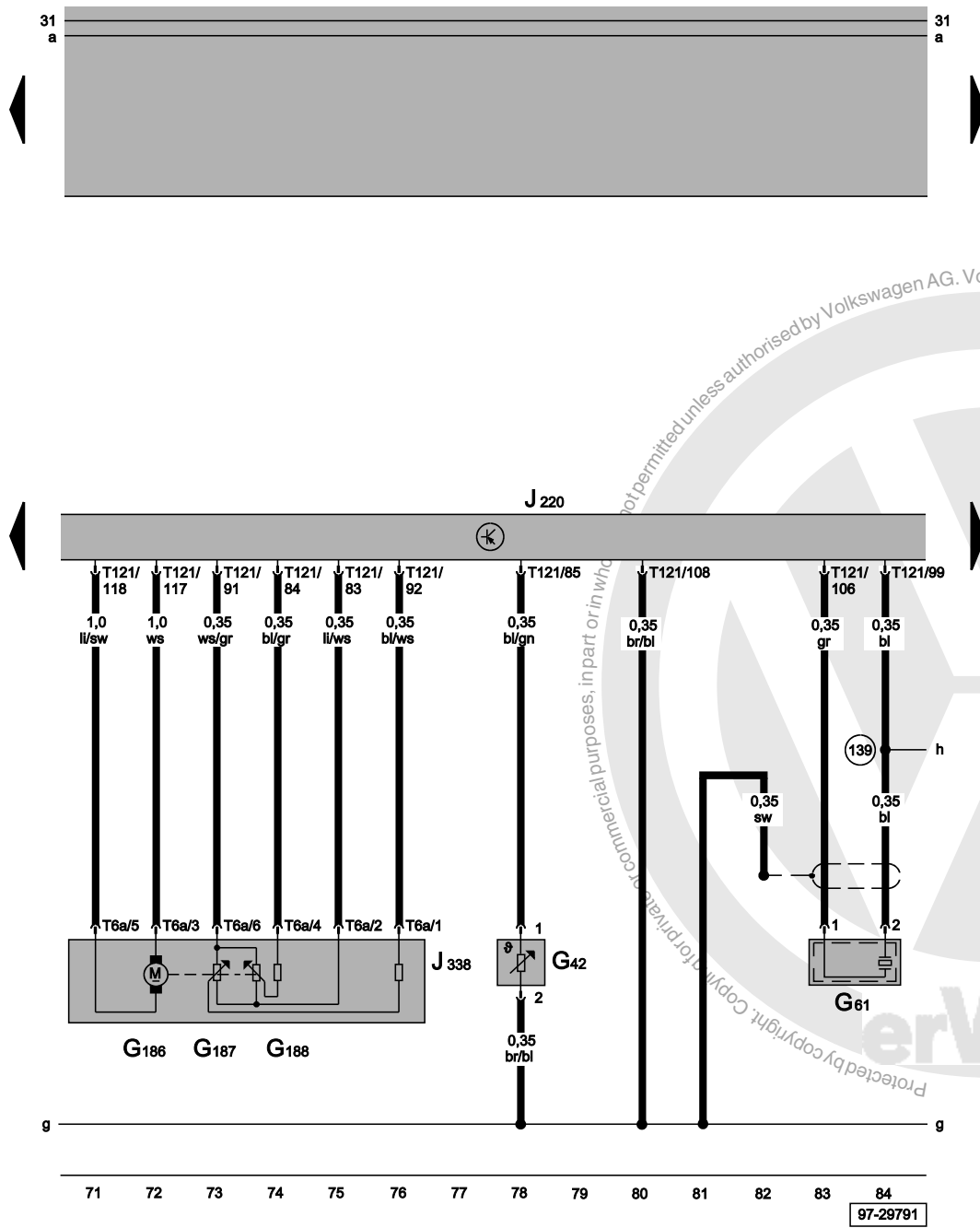
- G2 Coolant temperature sender
- G31 Charge air pressure sender
- G62 Coolant temperature sender
- G163 Hall sender
- J220 Motronic control unit, in centre plenum chamber
- N75 Charge pressure control solenoid valve
- N205 Inlet camshaft control valve 1
- N249 Turbocharger air recirculation valve
- T4g 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- D101 Connection 1, in engine compartment wiring harness
- D102 Connection 2, in engine compartment wiring harness



Motronic control unit, throttle valve module, throttle valve drives angle sender (electric throttle), knock sensor 1, intake air temperature sender

- G42 Intake air temperature sender
- G61 Knock sensor 1
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T6a 6-pin connector
- T121 121-pin connector

139 Earth connection (sender earth), in Motronic wiring harness



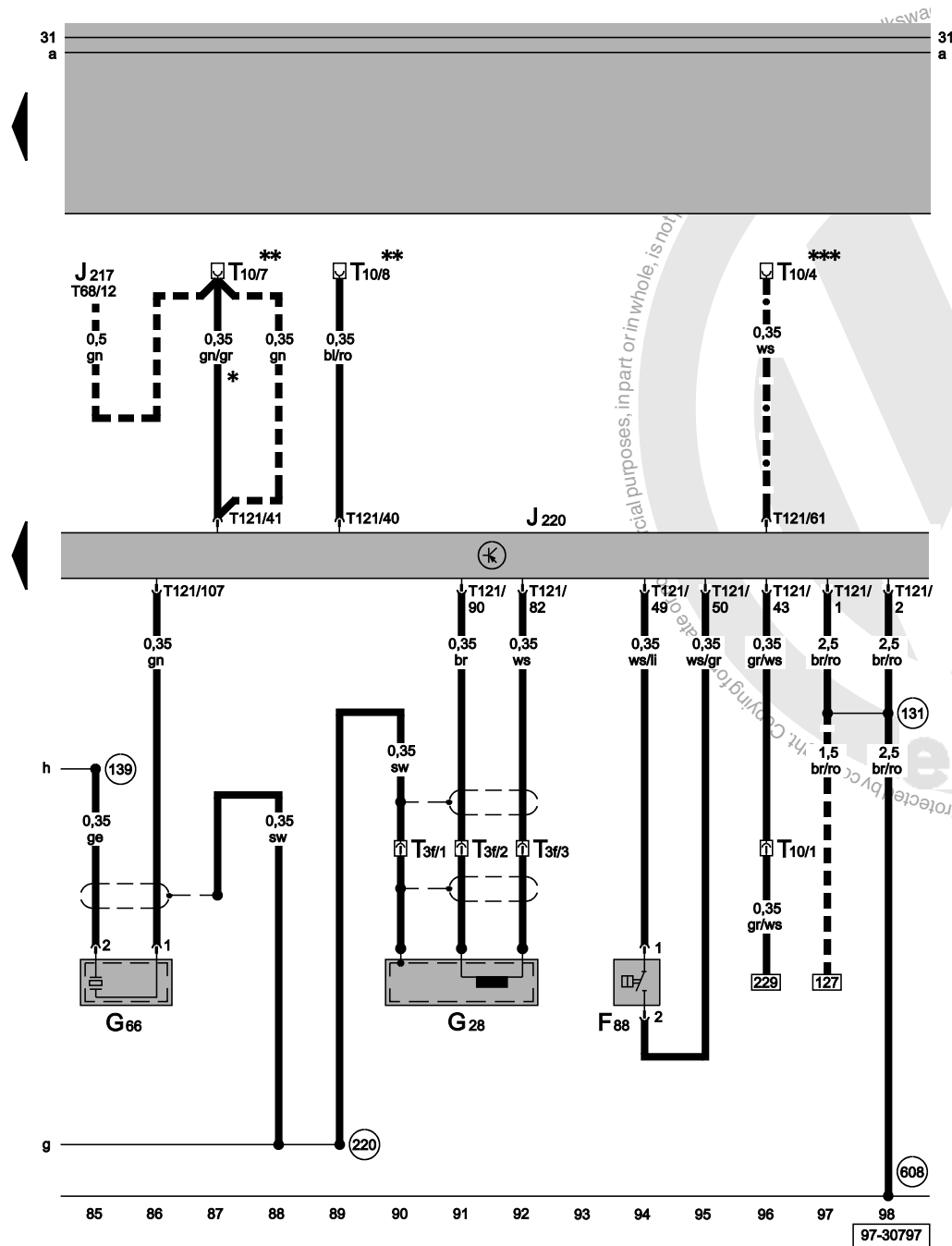
Motronic control unit, engine speed sender, knock sensor
 2, power assisted steering pressure switch

- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G66 Knock sensor II
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T3f 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

- * only models with manual gearbox
- ** connection air conditioning
- *** radiator fan control unit connection
- models with automatic gearbox only
- - - up to January 2001

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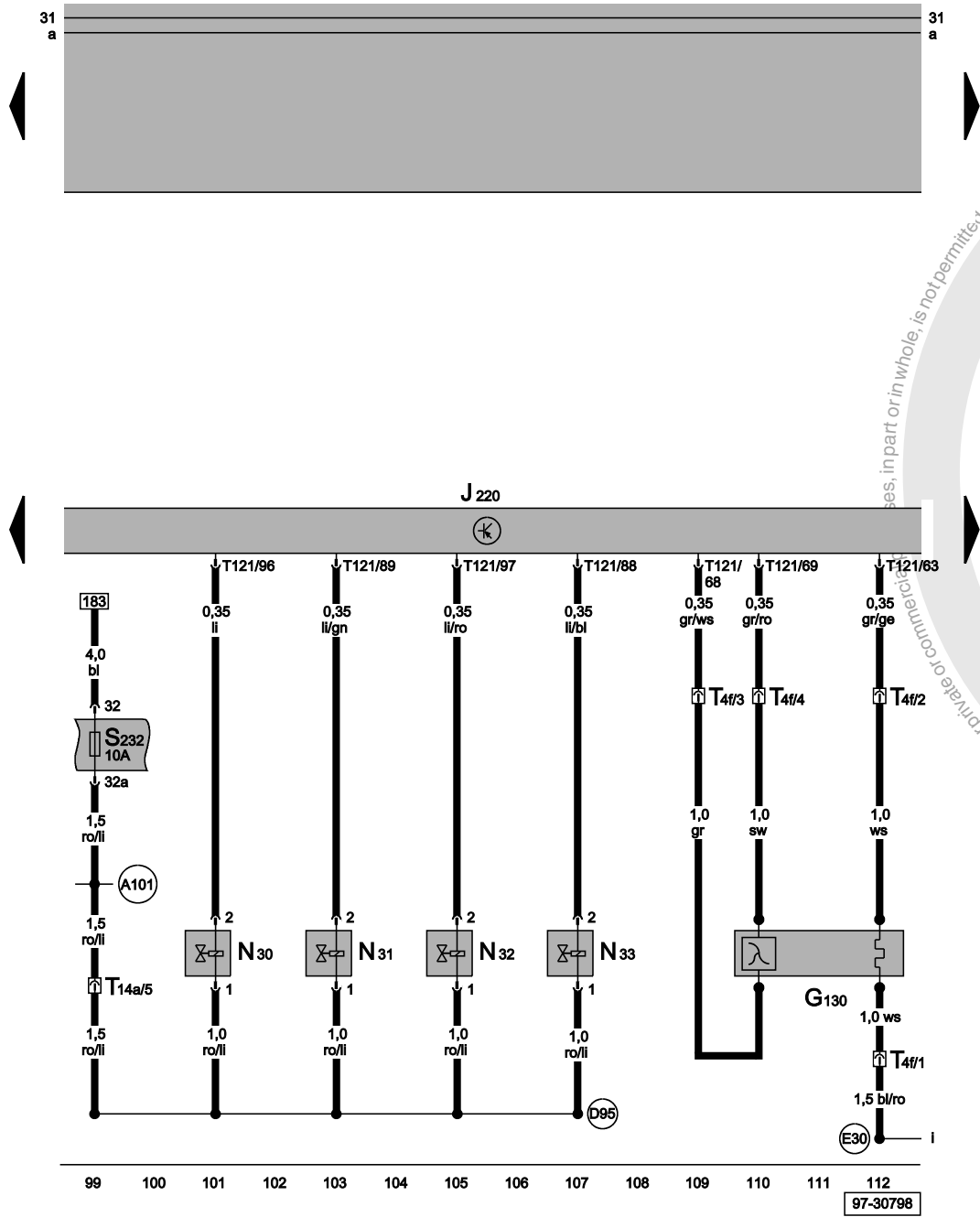


97-30797

Motronic control unit, injectors, lambda probe after catalytic converter

- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4f 4-pin connector, near catalytic converter
- T14a 14-pin connector, near battery
- T121 121-pin connector

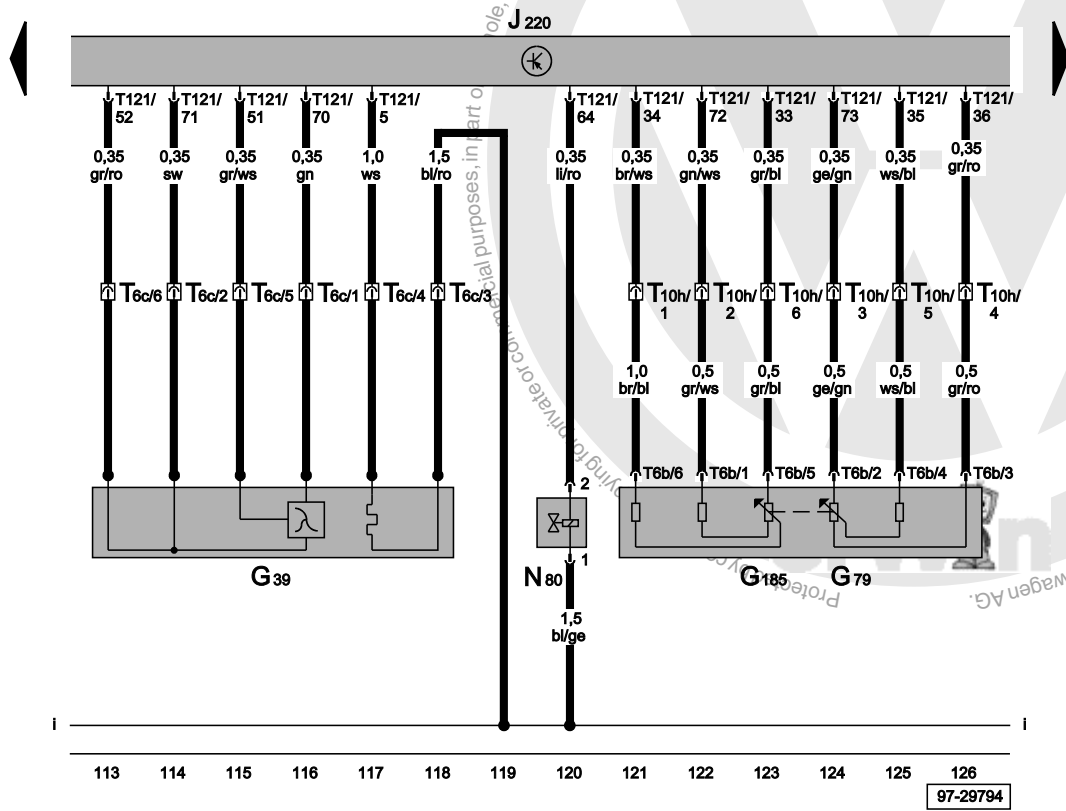
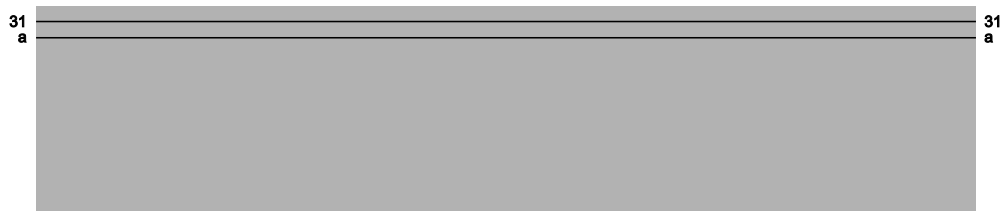
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness



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Motronic control unit, accelerator position sender, lambda probe, active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector



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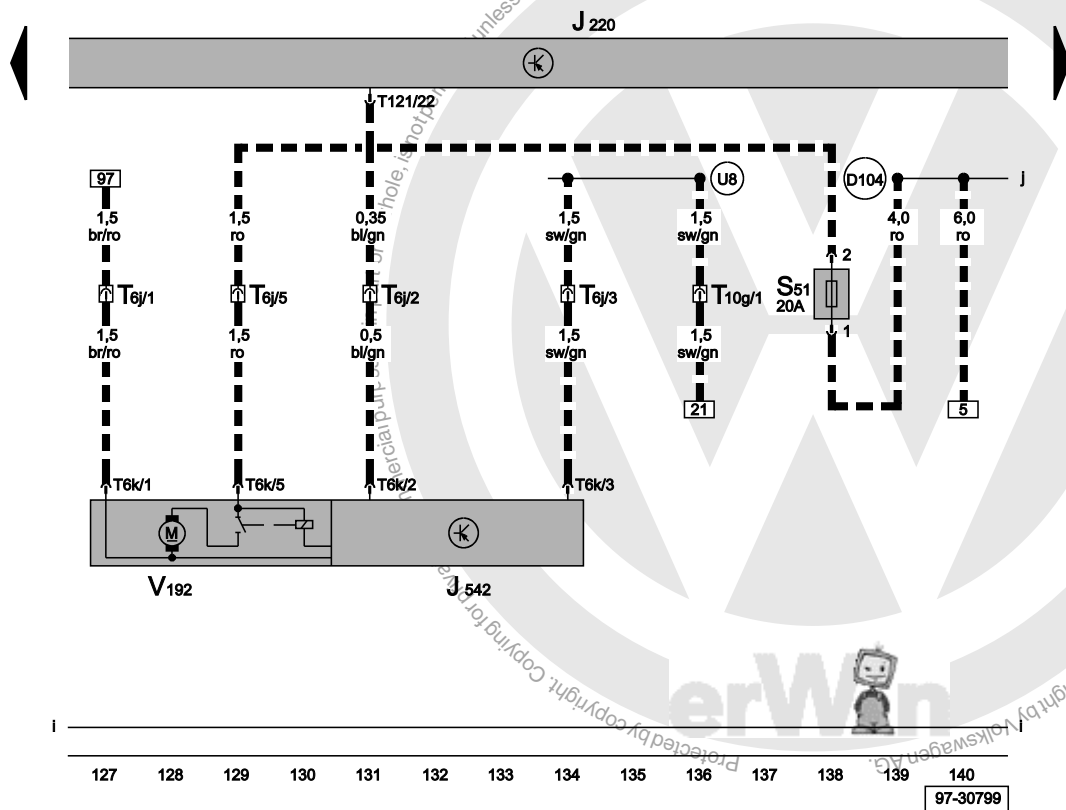
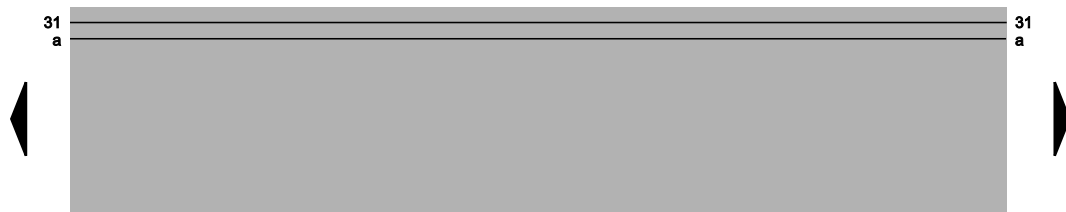
Motronic control unit, brake servo control unit, vacuum pump for brakes

- J220 Motronic control unit, in centre plenum chamber
- J542 Brake servo control unit
- S51 Fuse, in protective housing on left in engine compartment
- T6j 6-pin connector, in left engine compartment
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes

(D104) Positive connection 2 (30a), in engine compartment wiring harness

(U8) Positive connection (15a), in automatic gearbox wiring harness

--- models with automatic gearbox only

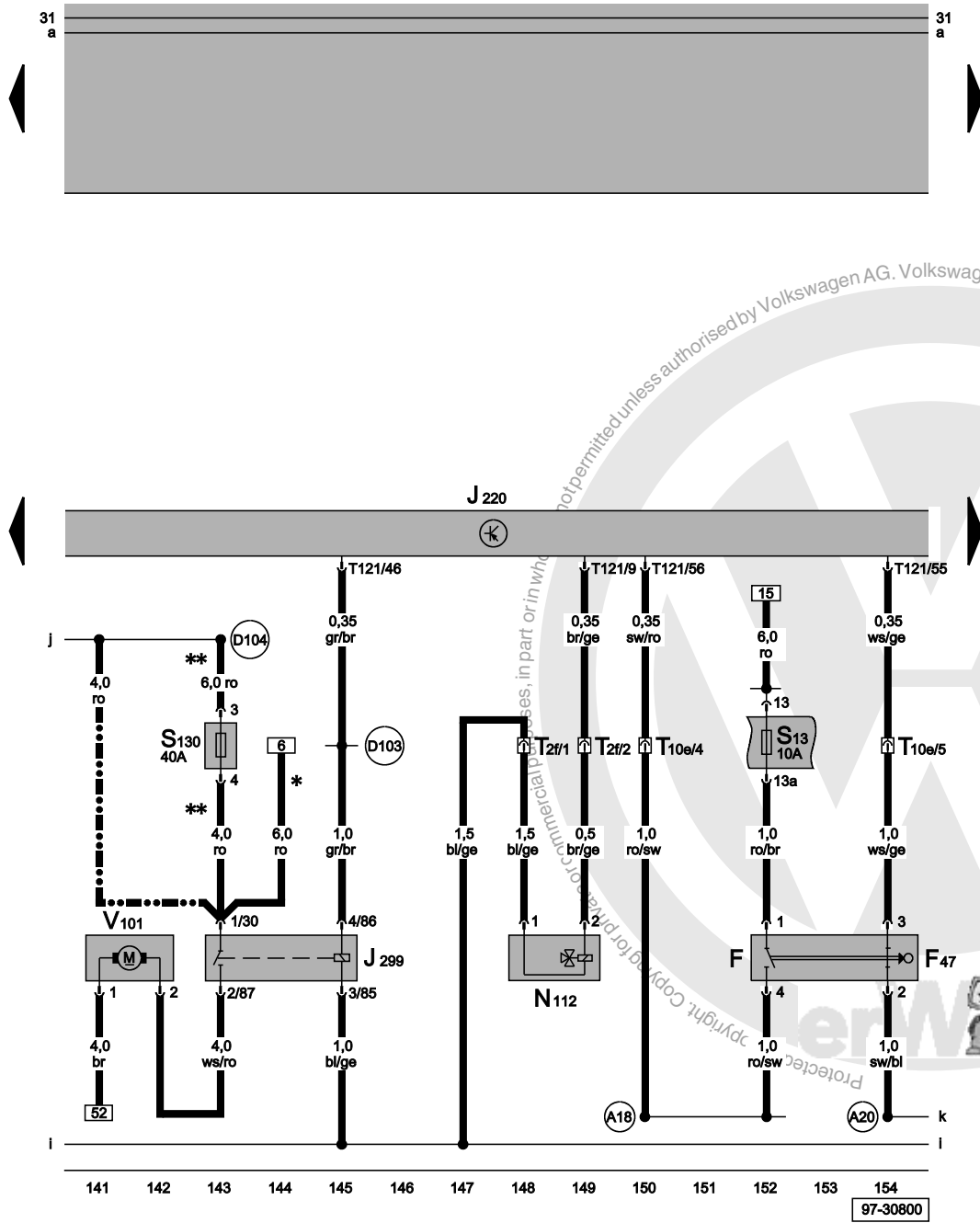


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Motronic control unit, secondary air pump relay, secondary air pump motor, secondary air inlet valve, brake light switch, cruise control system brake pedal switch

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- S130 Secondary air pump fuse, in protective housing on left in engine compartment
- T2f 2-pin connector, in left engine compartment
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D103) Connection 3, in engine compartment wiring harness
- (D104) Positive connection 2 (30a), in engine compartment wiring harness
- * only models with manual gearbox
- .-.- only models with automatic gearbox from February 2001
- ** models with automatic gearbox only, up to January 2001

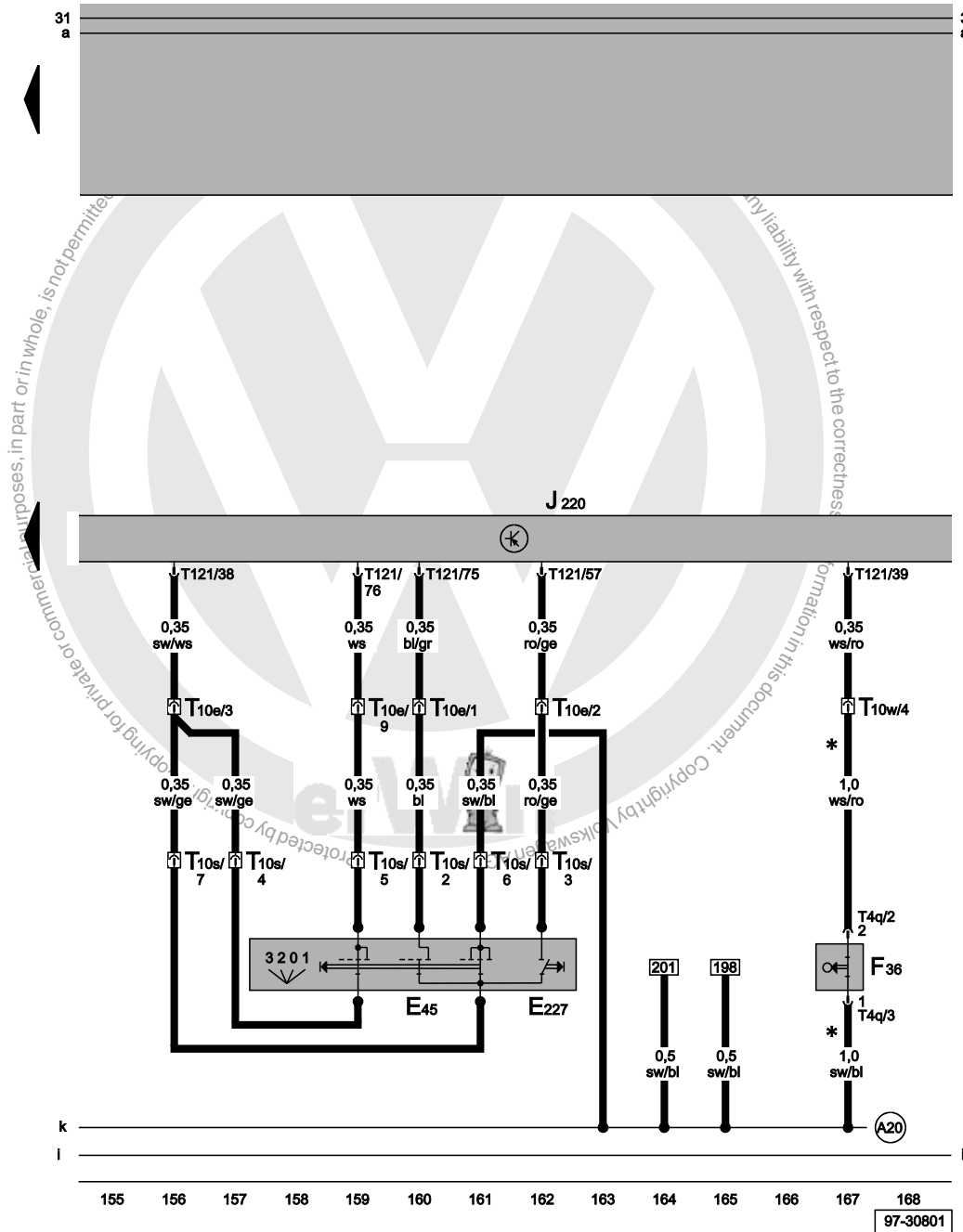


Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector, (from May 2001)
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

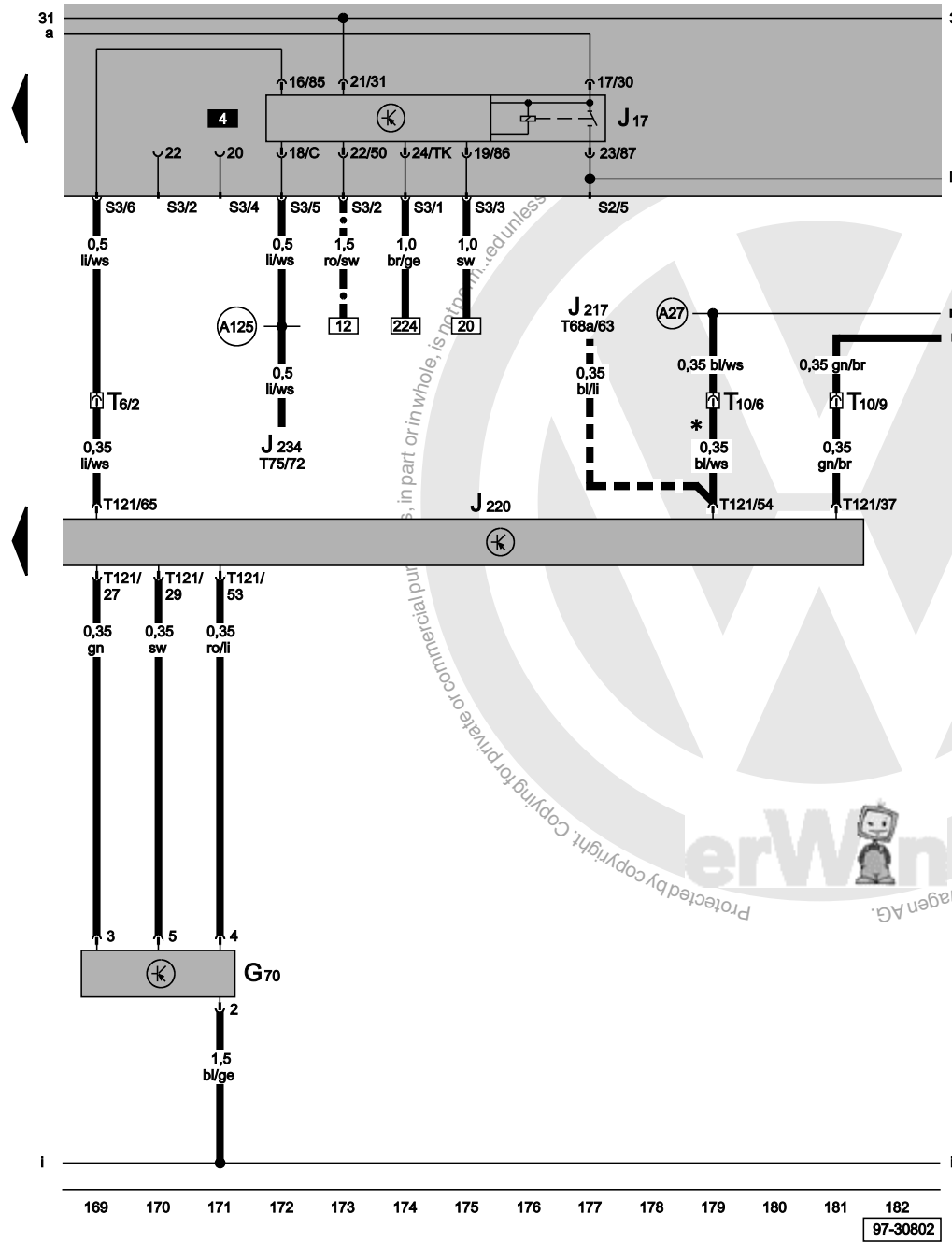
(A20) Connection (15a), in dash panel wiring harness

- * only models with manual gearbox
- ** only models with GND



Motronic control unit, fuel pump relay, air mass meter

- G70 Air mass meter
- J17 Fuel pump relay
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- * only models with manual gearbox
- models with automatic gearbox only
- up to April 2001

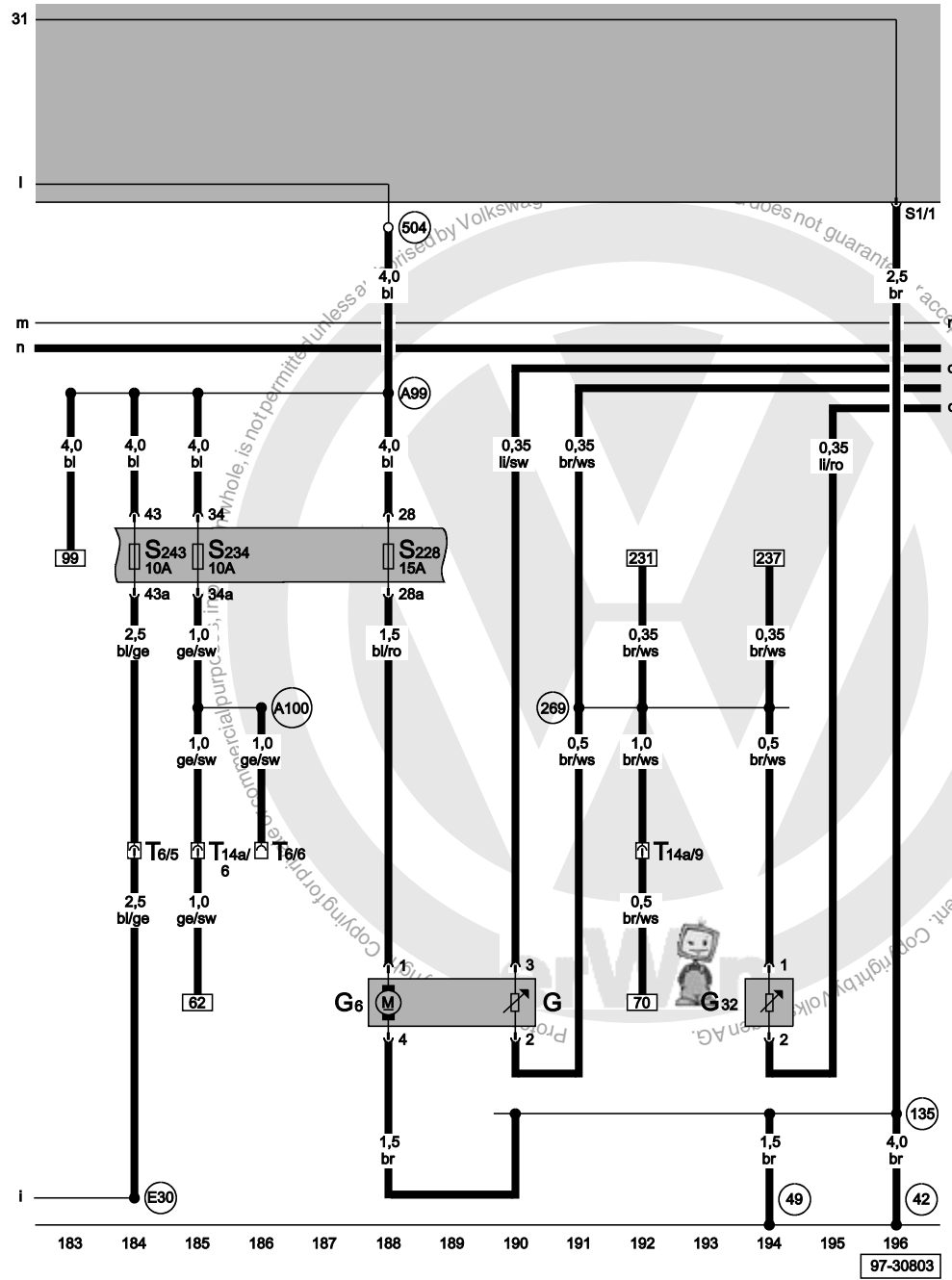


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97-30802

Fuel pump, fuel gauge sender, coolant shortage indicator sender

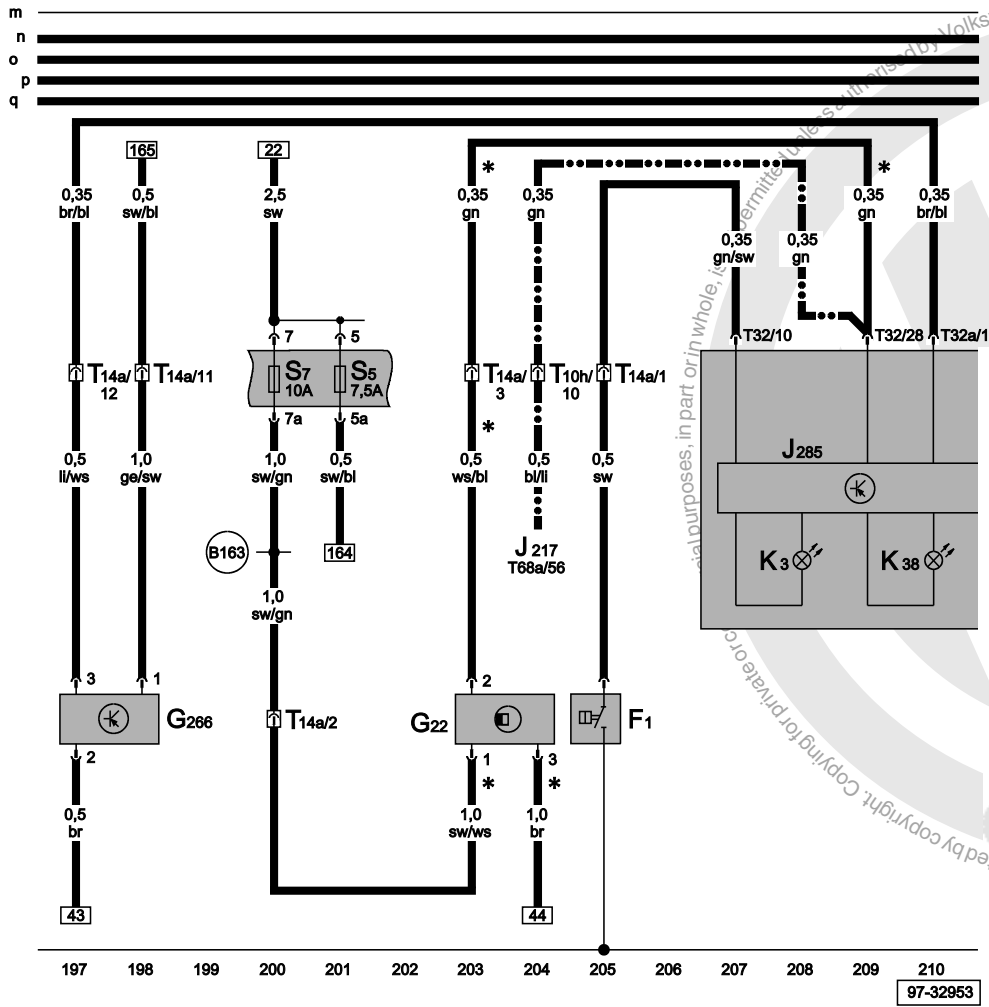
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness



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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender**
- J217 Automatic gearbox control unit
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)



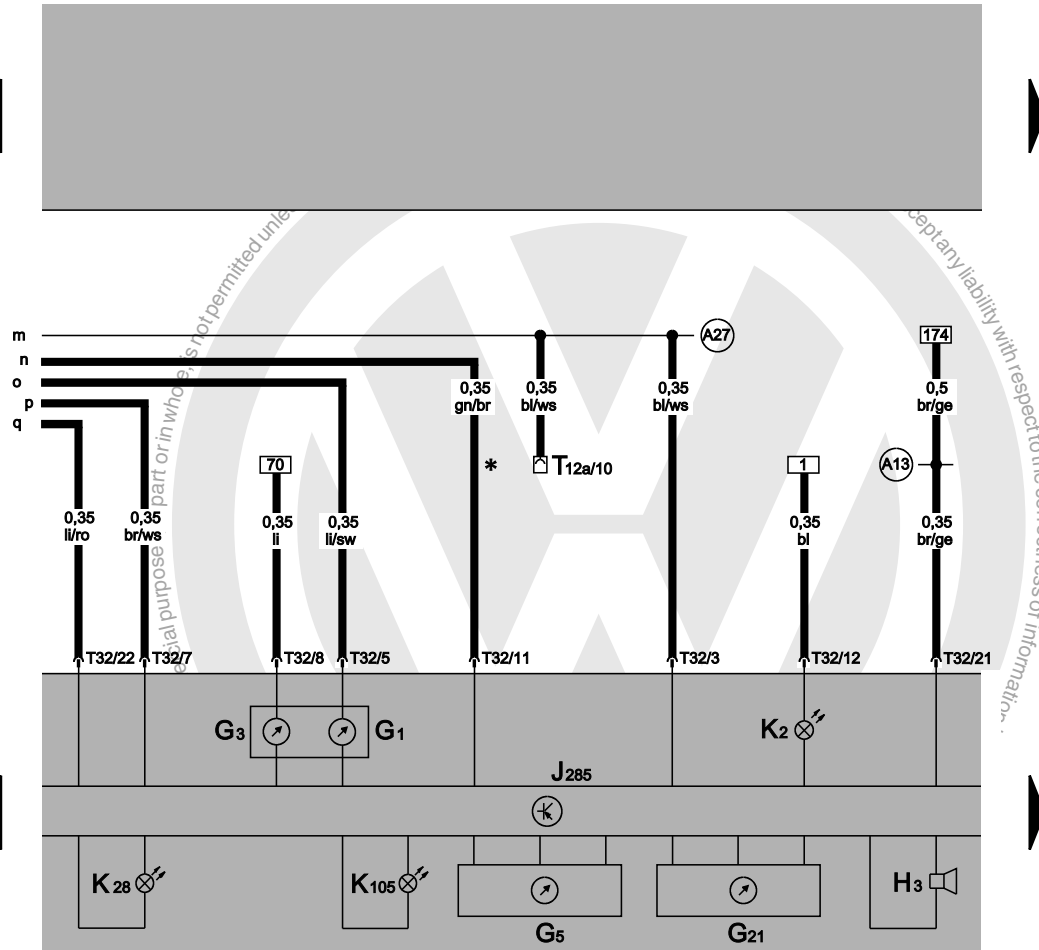
- B163 Positive connection 1 (15), in interior wiring harness
- * models with manual gearbox/automatic gearbox (AG4) only
- ** only flexible service interval display
- .-.- models with 5-speed automatic gearbox (AG5) only

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- rs = pink

97-32953

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

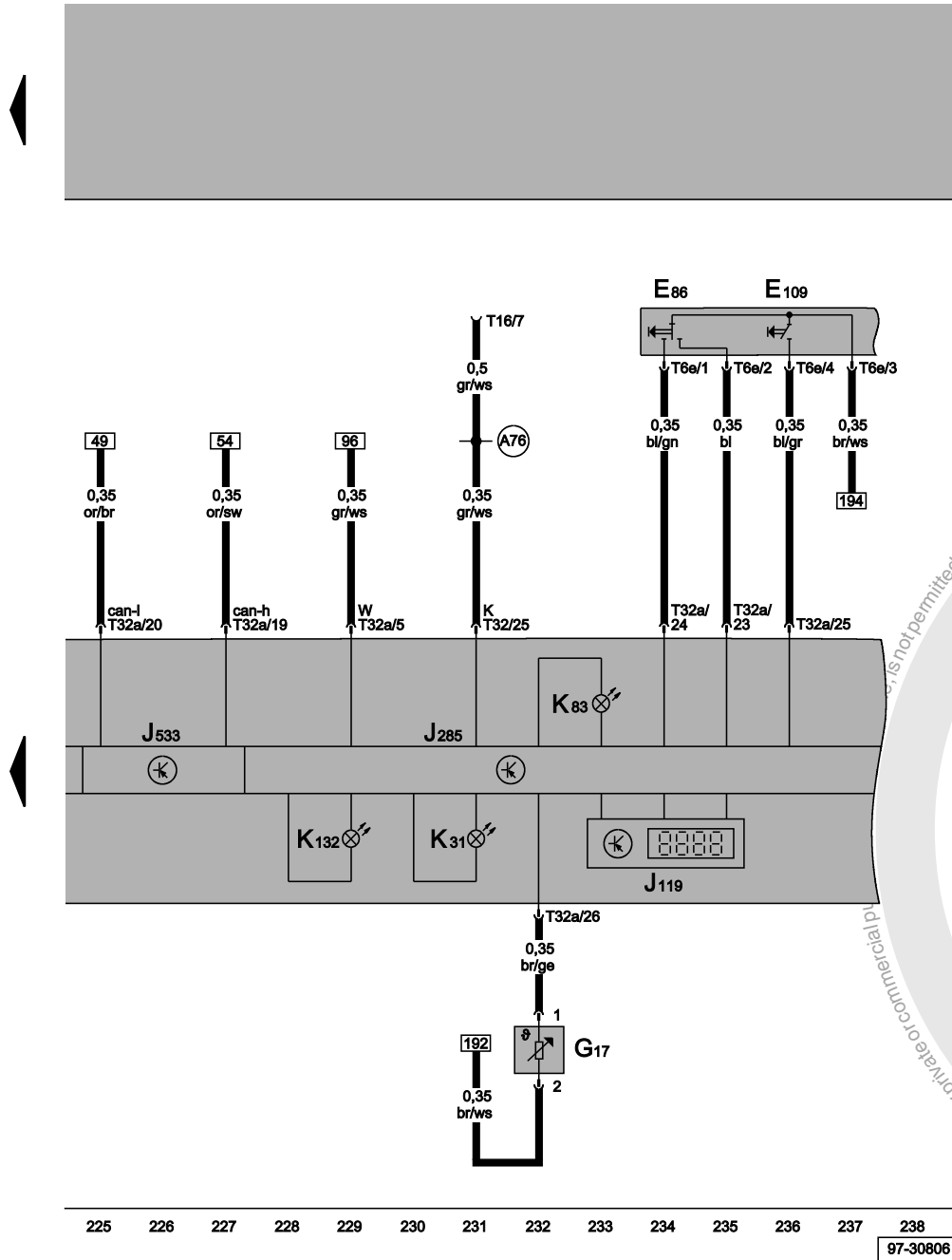
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit



Dash panel insert, cruise control system warning lamp, multifunction display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp***
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness
 *** engine code AUM only

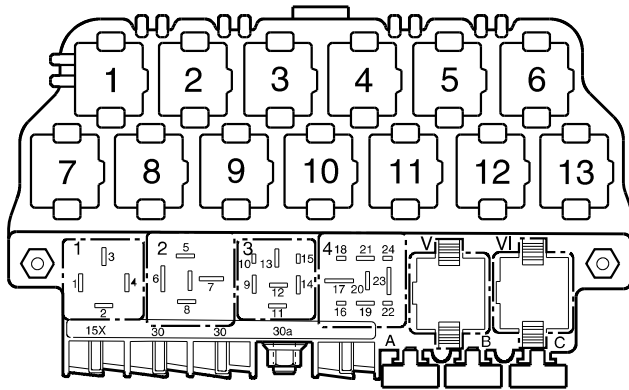


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e-generation with PDA (personal data assistant)

From June 2001

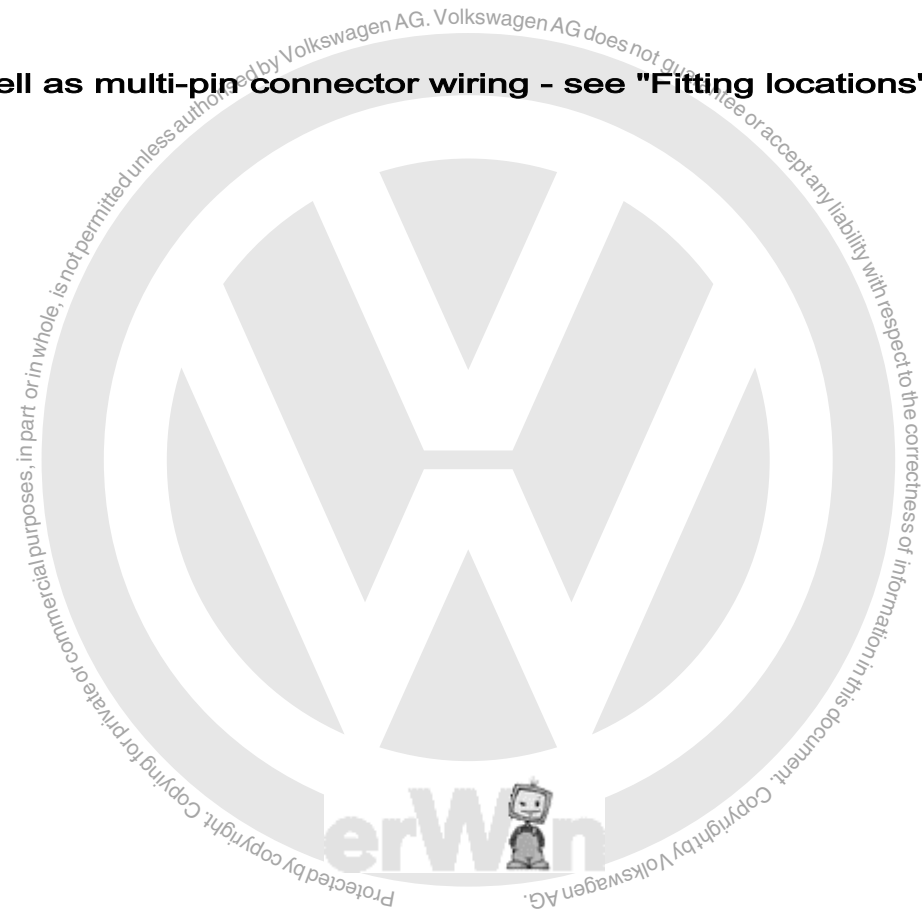
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



97-14163

Fuse colours

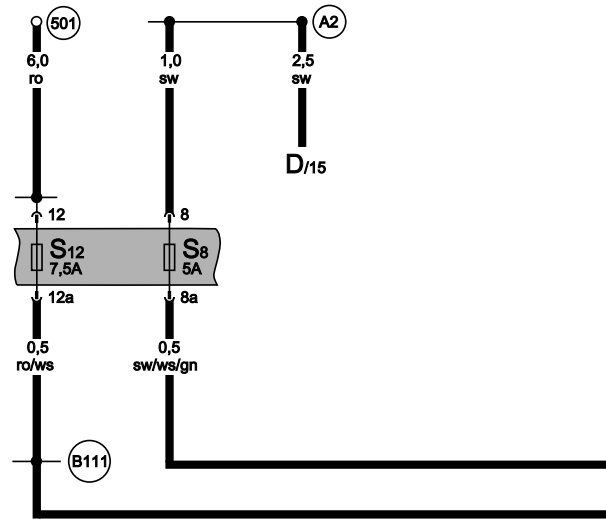
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple





Position of fuses

- D Ignition/starter switch
- S8 Fuse in fuse box
- S12 Fuse in fuse box
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- B111 Positive (+) connection -1- (30a), in interior wiring harness

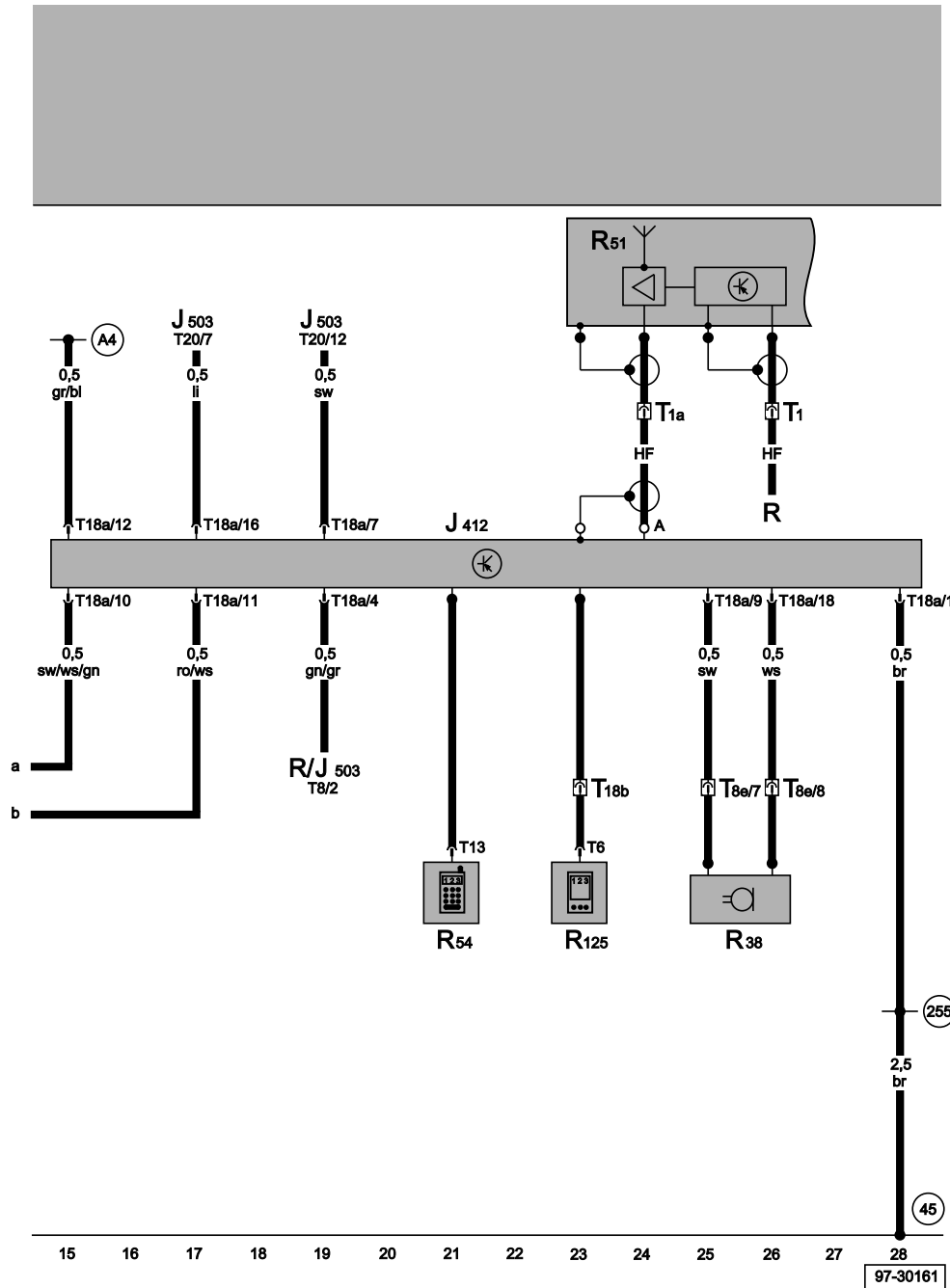


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Mobile phone operating electronics control unit, aerial, microphone, pocket PC (PDA)

- J412 Mobile phone operating electronics control unit, next to handbrake lever
- J503 Control unit with display for radio and navigation*
- R Radio
- R38 Telephone microphone
- R51 Radio/telephone aerial
- R54 Mobile telephone
- R125 Pocket PC (PDA)
- T1 Single connector, near sunroof aerial
- T1a Single connector, near sunroof aerial
- T8 8-pin connector
- T8e 8-pin connector, behind front left A-pillar trim
- T13 13-pin connector
- T6 6-pin connector
- T18a 18-pin connector
- T18b 18-pin connector, in front right footwell, near centre console
- T20 20-pin connector, green

- (45) Earth point, behind dash panel - centre
- (255) Earth connection -1-, in radio wiring harness
- (A4) Positive (+) connection (58b), in dash panel wiring harness
- * Only models with radio navigation system



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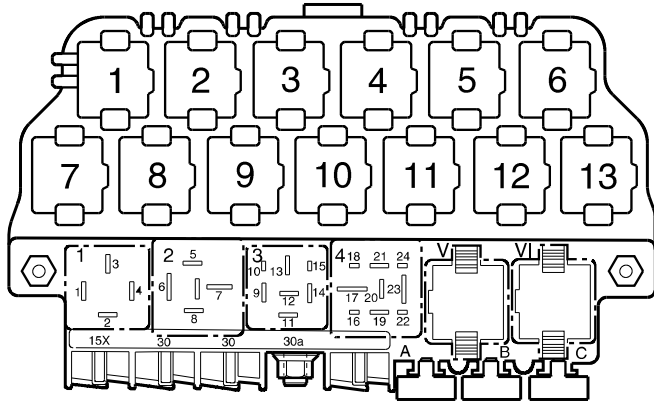
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Front seat heating

from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

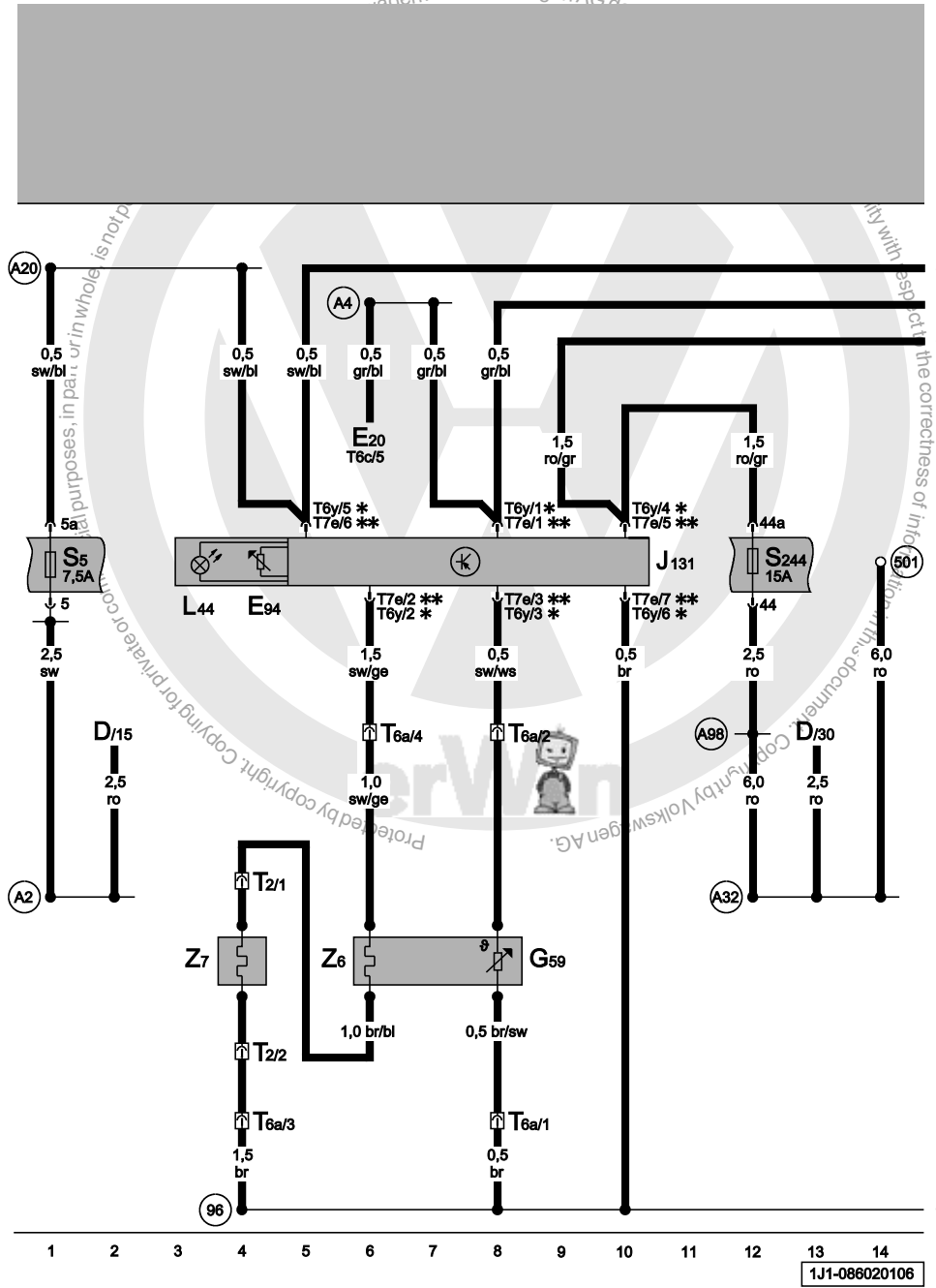
Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:





Heated driver seat control unit, temperature sensor, heated driver seat, driver seat cushion lateral support heater

- D Ignition/starter switch
- E20 Illumination regulators - switches and instruments
- E94 Heated driver seat regulator
- G59 Driver seat temperature sensor
- J131 Heated driver seat control unit
- L44 Seat heating switch illumination bulb
- S5 Fuse 5 in fuse holder
- S244 Fuse 44 in fuse holder
- T2 2-pin connector, under driver seat
- T6a 6-pin connector, green, under driver seat
- T6c 6-pin connector
- T6y 6-pin connector
- T7e 7-pin connector
- Z6 Heated driver seat cushion
- Z7 Heated driver seat backrest
- 96 Earth connection 1, in seat heating wiring harness
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- * on wiring harness
- ** on heated driver seat control unit

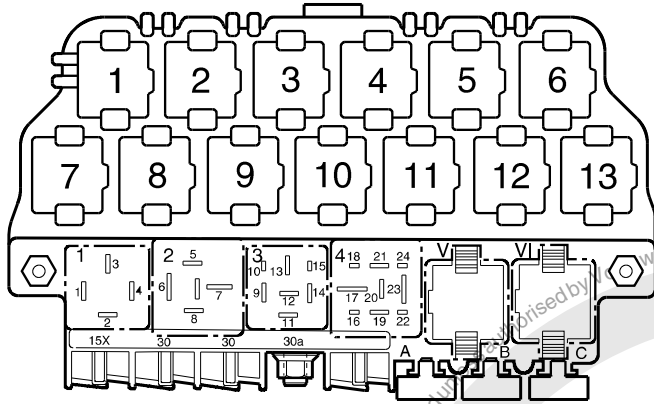
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Front seat heating, leather seat

from May 1999

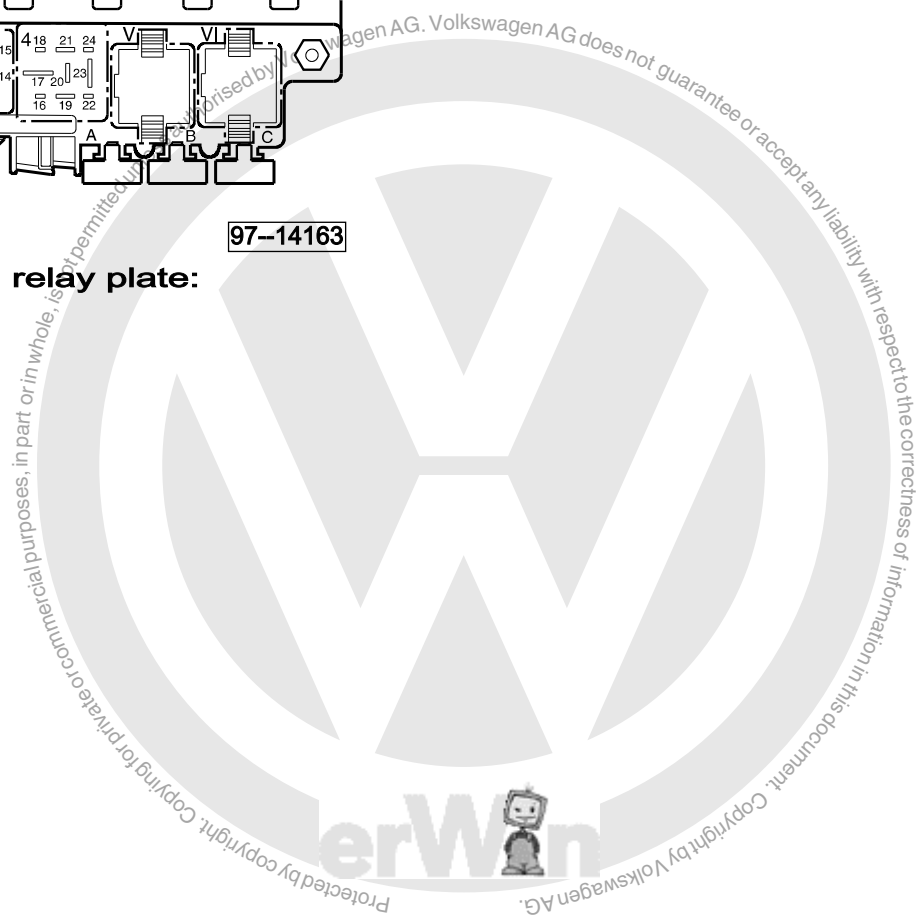
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

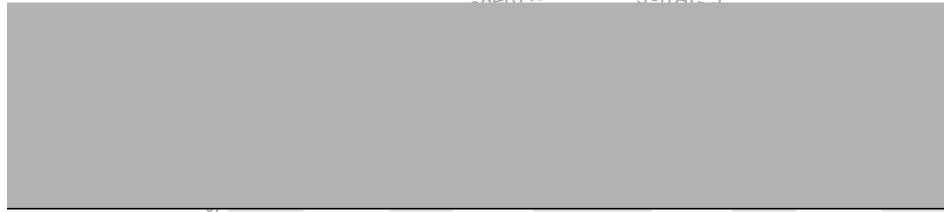
Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:



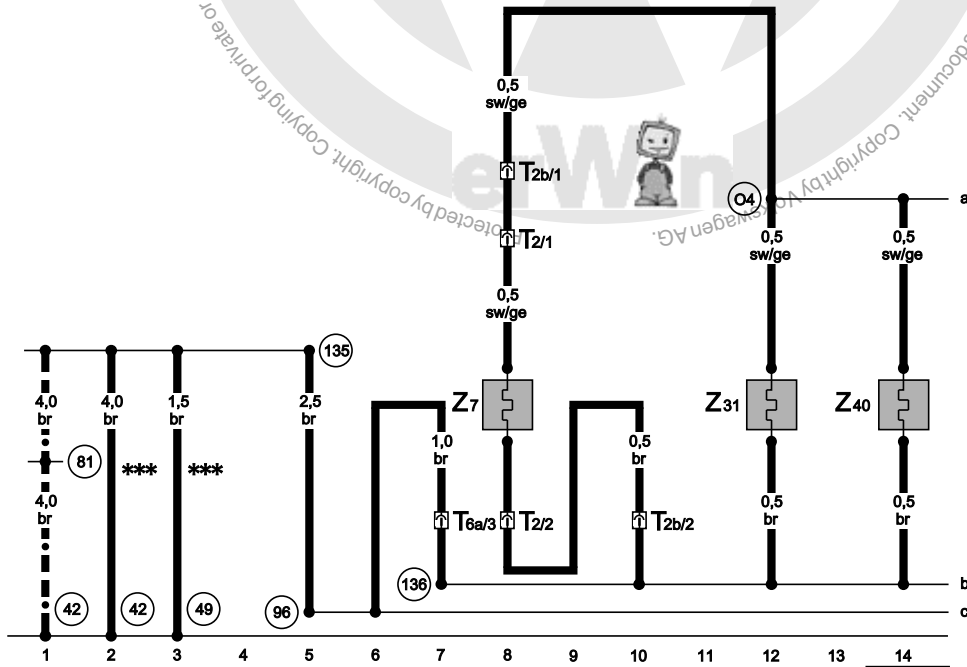


Driver seat cushion lateral support heater, heated driver seat backrest

- T2 2-pin connector, under driver seat
- T2b 2-pin connector, under driver seat
- T6a 6-pin connector, green, under driver seat
- Z7 Heated driver seat backrest
- Z31 Driver seat cushion lateral support heater
- Z40 Driver seat lateral support heater 2

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 96 Earth connection 1, in seat heating wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 136 Earth connection 2, in seat heating wiring harness
- O4 Positive connection (30a), in seat heating wiring harness

*** from May 2000
 -●- up to April 2000



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97-30414

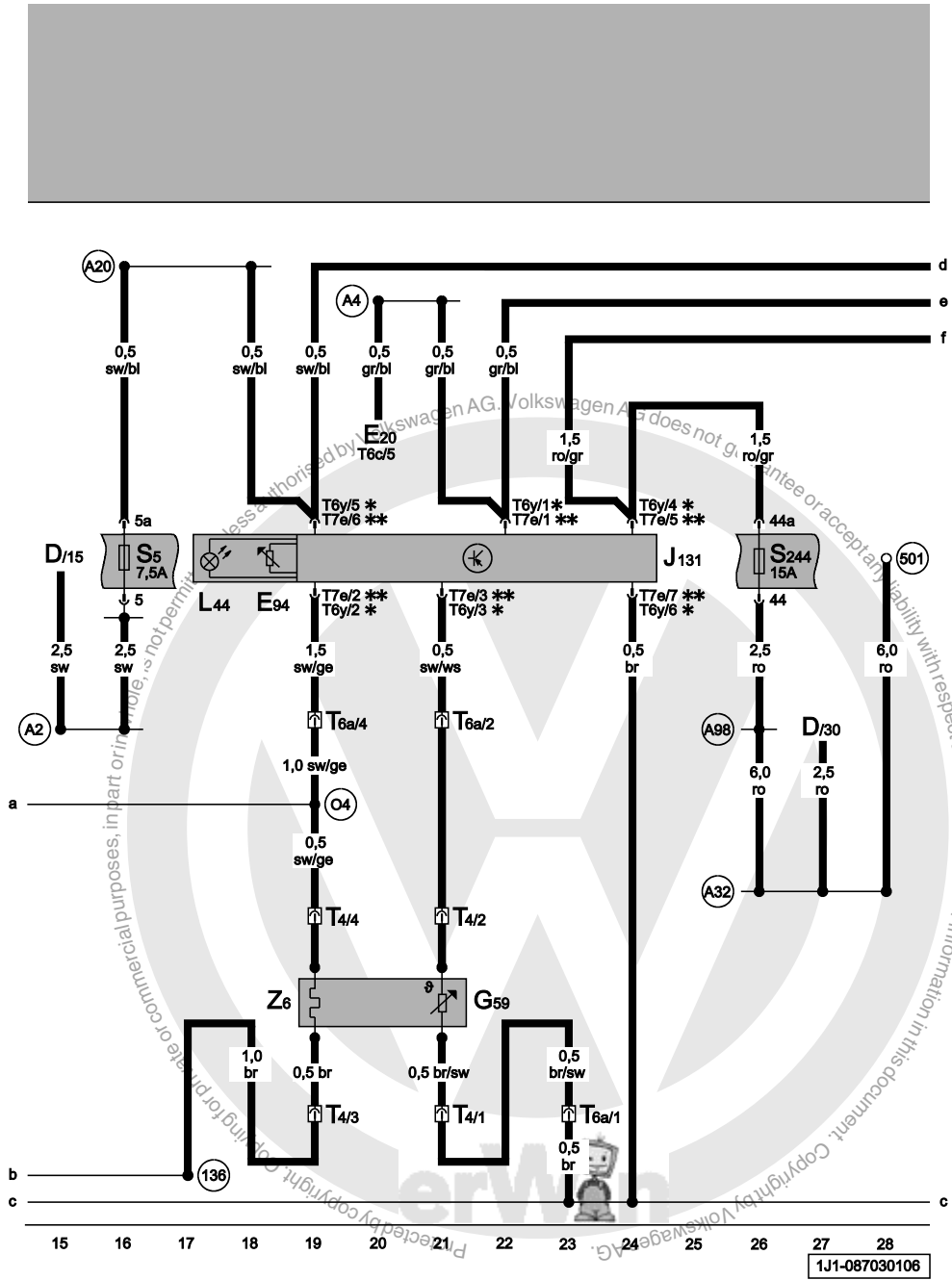
Heated driver seat control unit, temperature sensor, heated driver seat

- D Ignition/starter switch
- E20 Illumination regulators - switches and instruments
- E94 Heated driver seat regulator
- G59 Driver seat temperature sensor
- J131 Heated driver seat control unit
- L44 Seat heating switch illumination bulb
- S5 Fuse 5 in fuse holder
- S244 Fuse 44 in fuse holder
- T4 4-pin connector, under driver seat
- T6a 6-pin connector, green, under driver seat
- T6c 6-pin connector
- T6y 6-pin connector
- T7e 7-pin connector
- Z6 Heated driver seat cushion

- (136) Earth connection 2, in seat heating wiring harness
- (501) Screw connection 2 (30), on relay plate
- (A2) Positive connection (15), in dash panel wiring harness
- (A4) Positive connection (58b), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A32) Positive connection (30), in dash panel wiring harness
- (A98) Positive connection 4 (30), in dash panel wiring harness
- (O4) Positive connection (30a), in seat heating wiring harness

* on wiring harness
 ** on heated driver seat control unit

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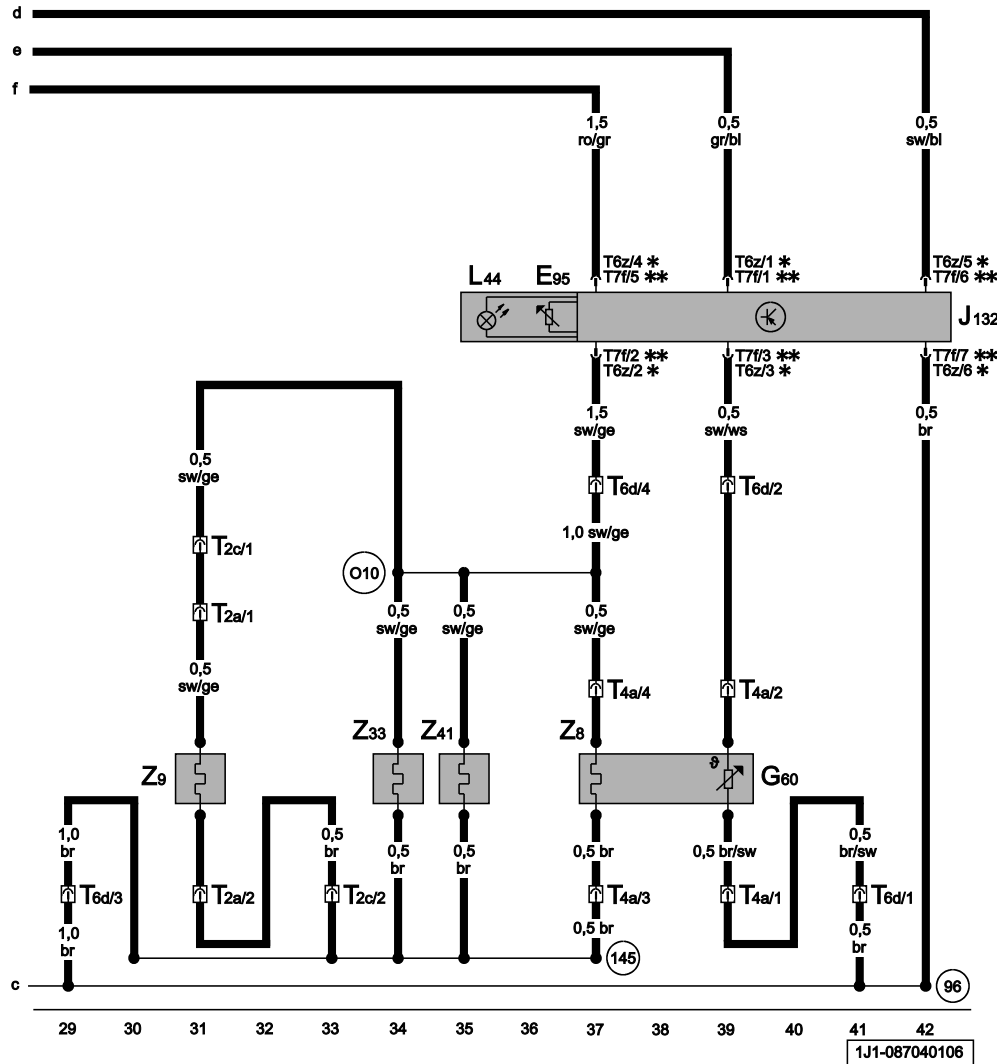
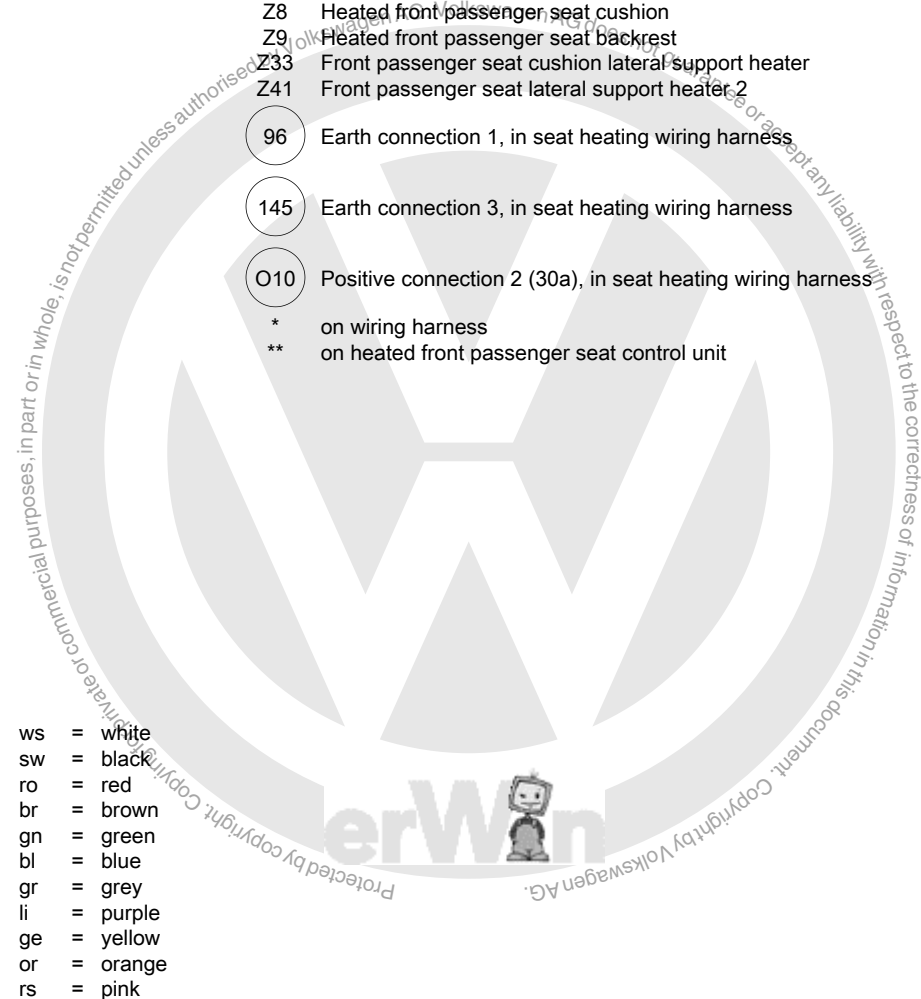


1J1-087030106

Heated front passenger seat control unit, temperature sensor, heated front passenger seat cushion, front passenger seat cushion lateral support heater

- E95 Heated front passenger seat regulator
- G60 Front passenger seat temperature sensor
- J132 Heated front passenger seat control unit
- L44 Seat heating switch illumination bulb
- T2a 2-pin connector, under front passenger seat
- T2c 2-pin connector, under front passenger seat
- T4a 4-pin connector, under front passenger seat
- T6d 6-pin connector, green, under front passenger seat
- T6z 6-pin connector
- T7f 7-pin connector
- Z8 Heated front passenger seat cushion
- Z9 Heated front passenger seat backrest
- Z33 Front passenger seat cushion lateral support heater
- Z41 Front passenger seat lateral support heater 2

- 96 Earth connection 1, in seat heating wiring harness
- 145 Earth connection 3, in seat heating wiring harness
- O10 Positive connection 2 (30a), in seat heating wiring harness
- * on wiring harness
- ** on heated front passenger seat control unit



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1.6 I/81 kW Motronic, engine code BAD

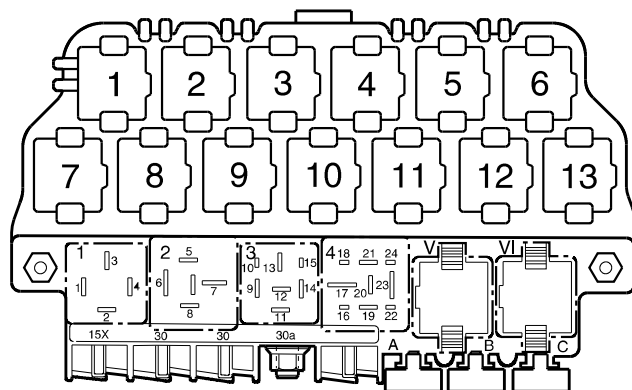
from October 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier

above the relay plate:

Relay locations on relay plate:



97-14163

2 - X-contact relief relay (100)

4 - Fuel pump relay (409)



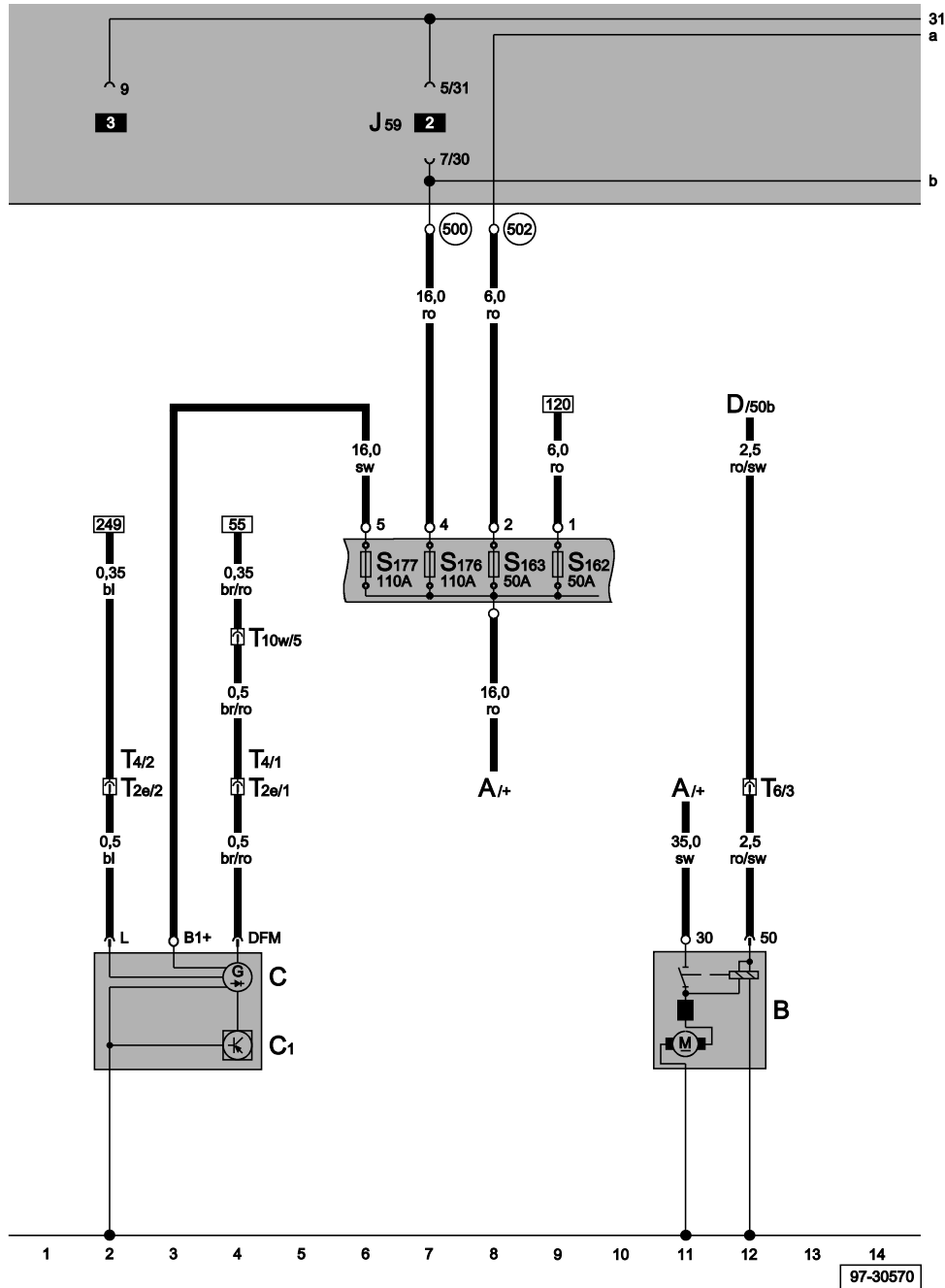
Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





Alternator, starter

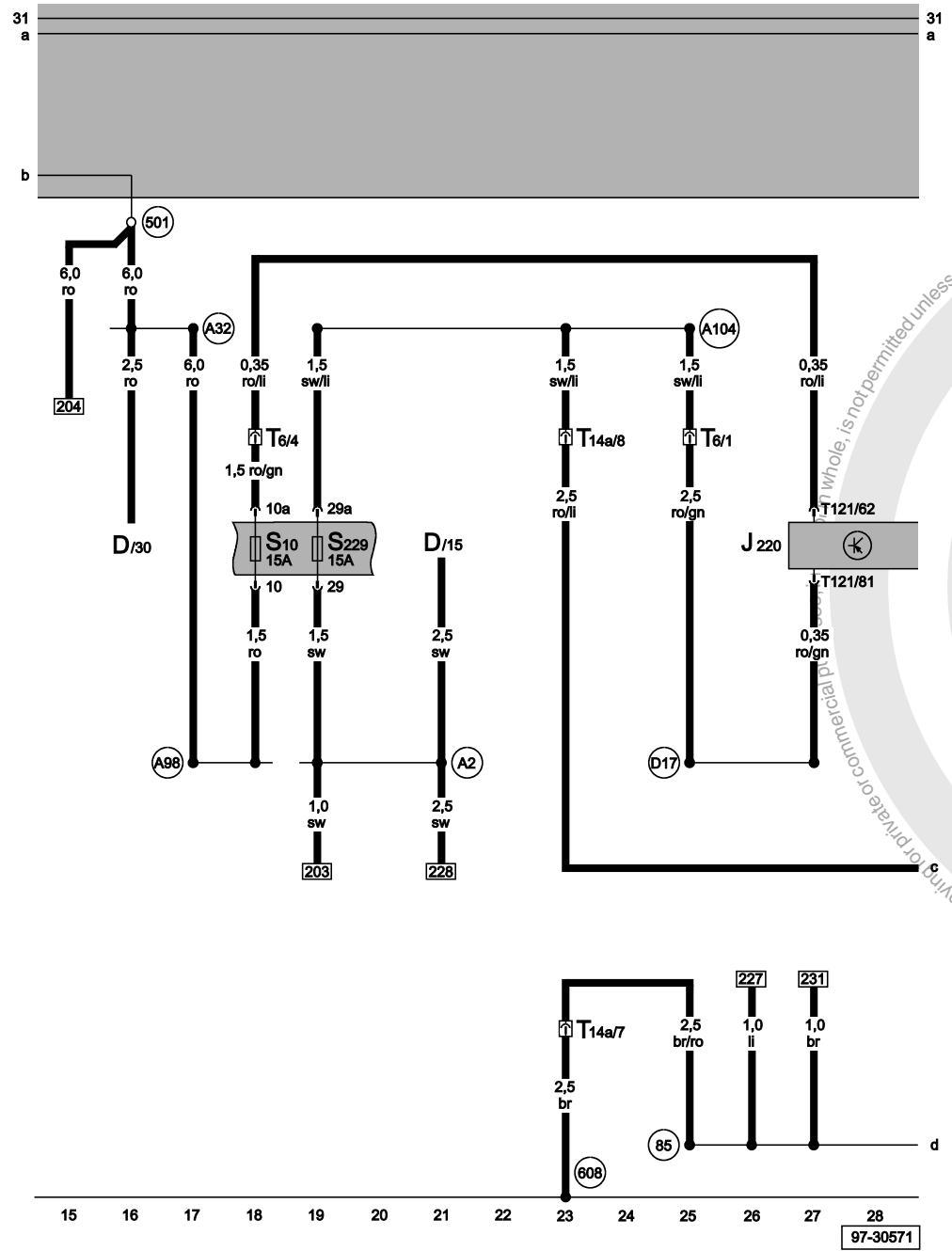
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse -1- (30), in fuse holder on battery
- S163 Fuse -2- (30), in fuse holder on battery
- S176 Fuse -4- (30), in fuse holder on battery
- S177 Fuse -5- (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit

- D Ignition/starter switch
- J220 Motronic control unit, in centre plenum chamber
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 85 Earth connection -1- in engine compartment wiring harness
- 501 Screw connection 2 (30), on relay plate
- 608 Earth point, in centre of plenum chamber
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D17 Positive connection -1- (15), in engine harness



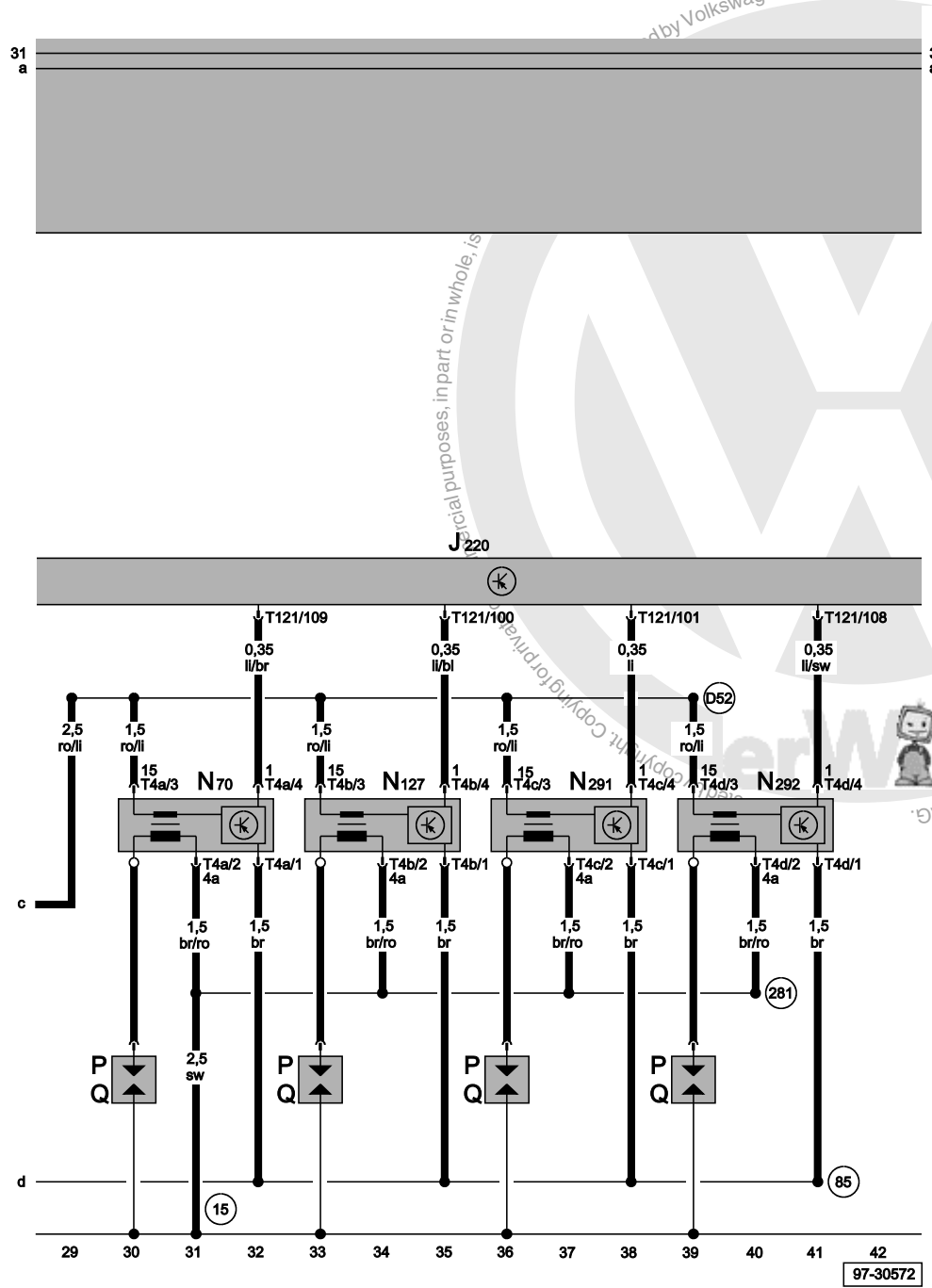
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30571

Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection -1-, in engine wiring harness
- D52 Positive connection (15a), in engine compartment wiring harness



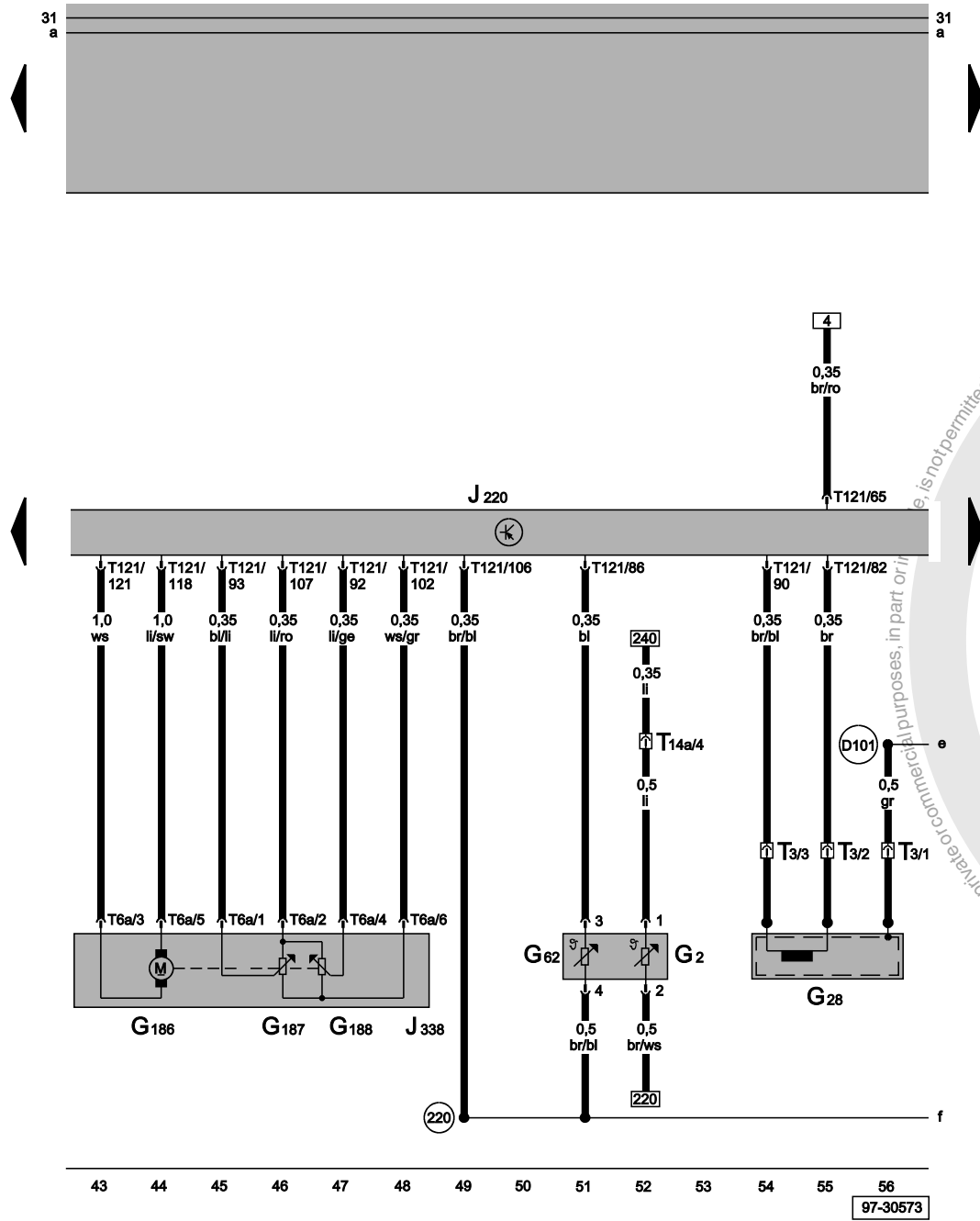
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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30572

Motronic control unit, throttle valve module, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender -1- (electric power control)
- G188 Throttle valve drive angle sender -2- (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector

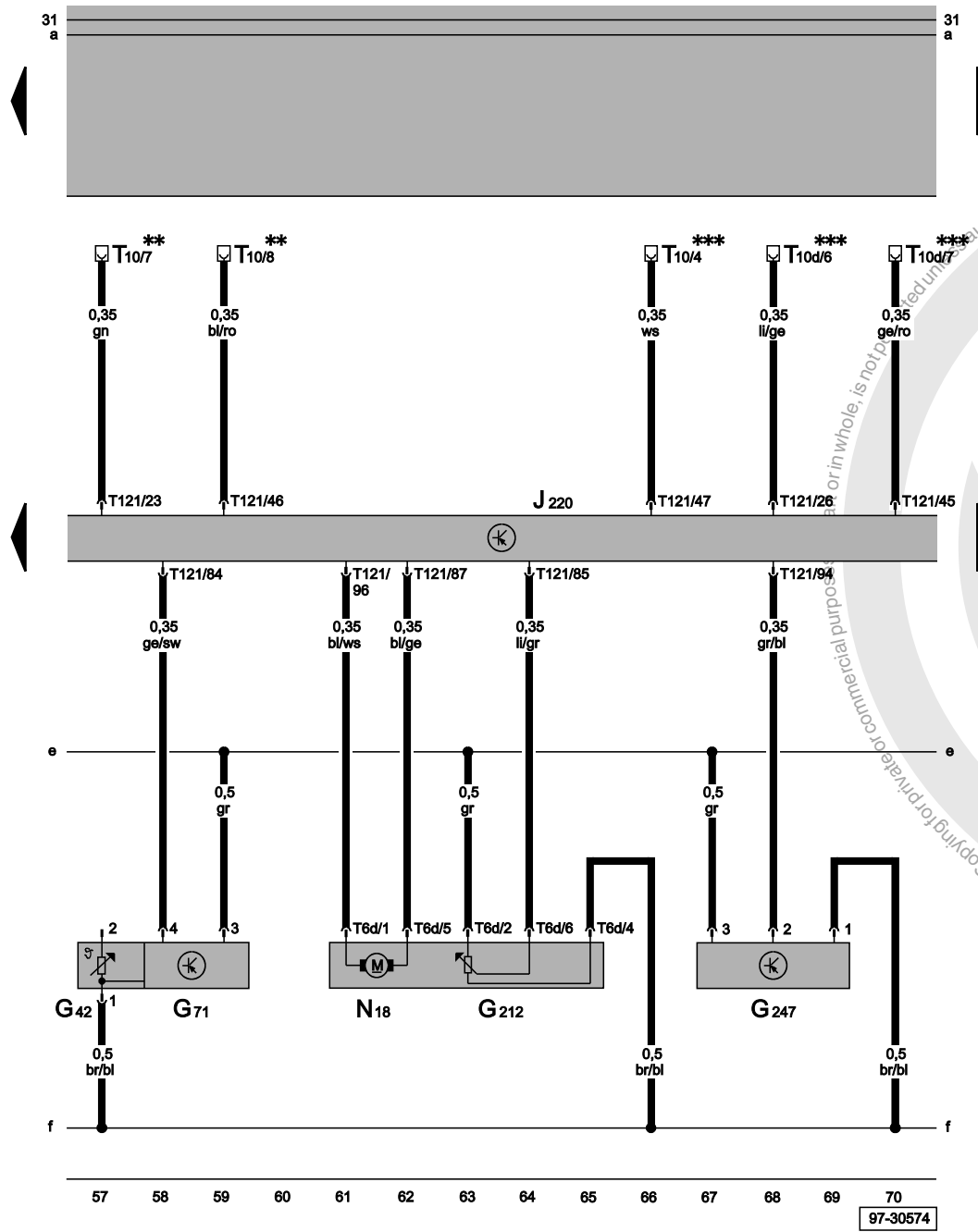
- (220) Earth connection (sender earth), in engine wiring harness
- (D101) Connection -1-, in engine compartment wiring harness



97-30573

Motronic control unit, intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, fuel pressure sender

- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- G247 Fuel pressure sender
- J220 Motronic control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- ** connection air conditioning
- *** radiator fan control unit connection



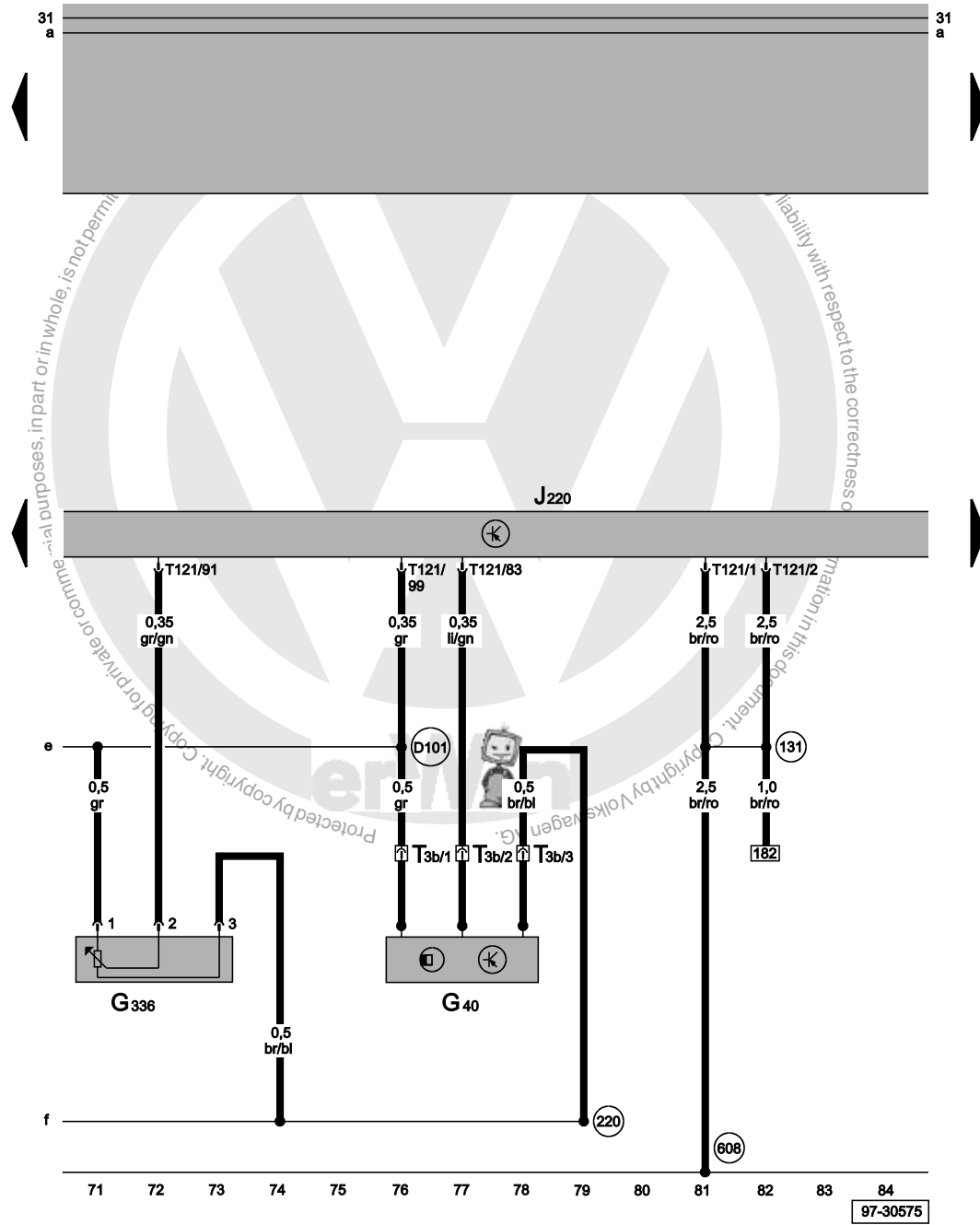
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30574

Motronic control unit, intake manifold flap potentiometer, Hall sender

- G40 Hall sender
- G336 Intake manifold flap sender
- J220 Motronic control unit, in centre plenum chamber
- T3b 3-pin connector, on cylinder head
- T121 121-pin connector

- (131) Earth connection -2-, in engine compartment wiring harness
- (220) Earth connection (sender earth), in engine wiring harness
- (608) Earth point, in centre of plenum chamber
- (D101) Connection -1-, in engine compartment wiring harness

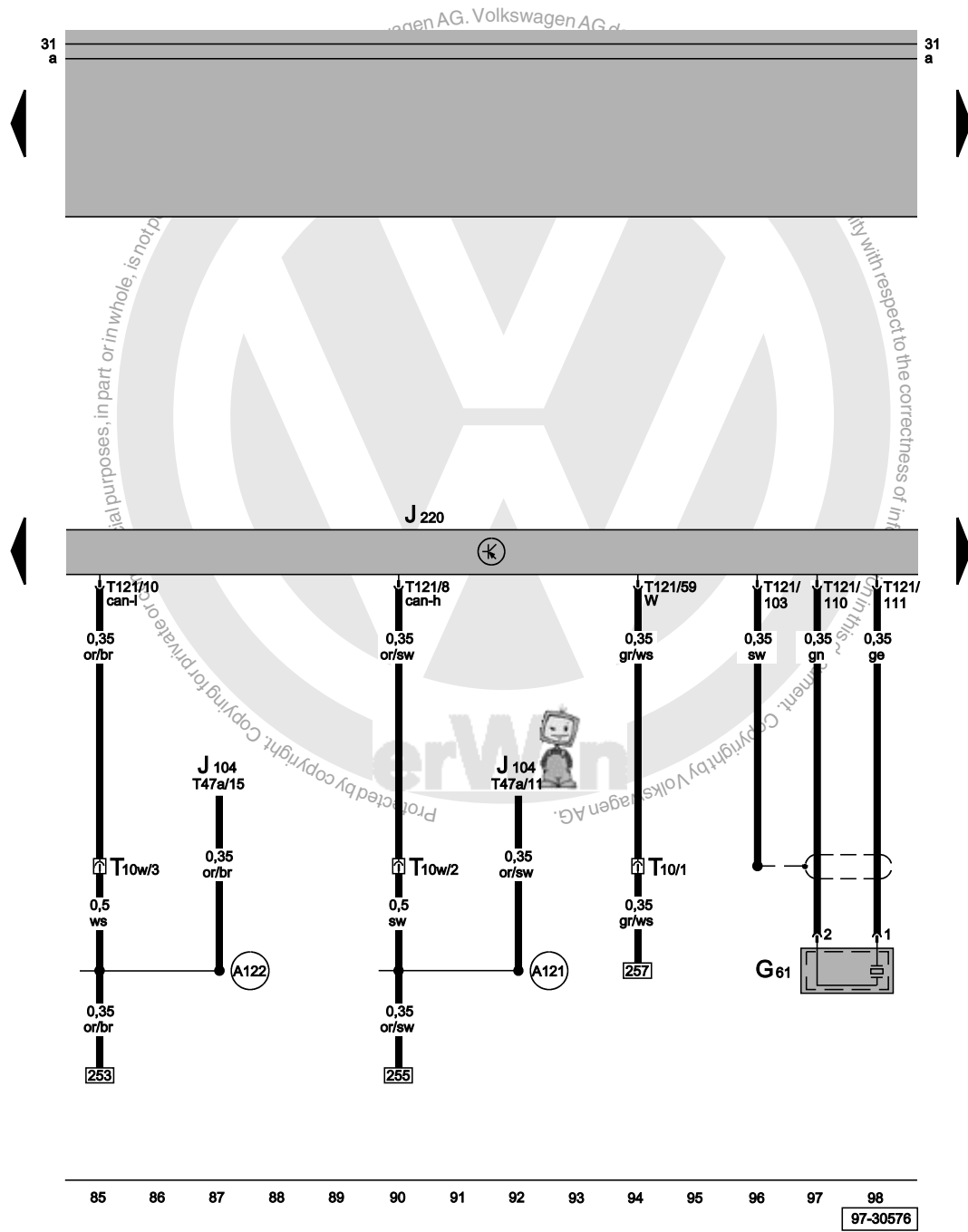


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, knock sensor

- G61 Knock sensor I
- J104 ABS/ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness



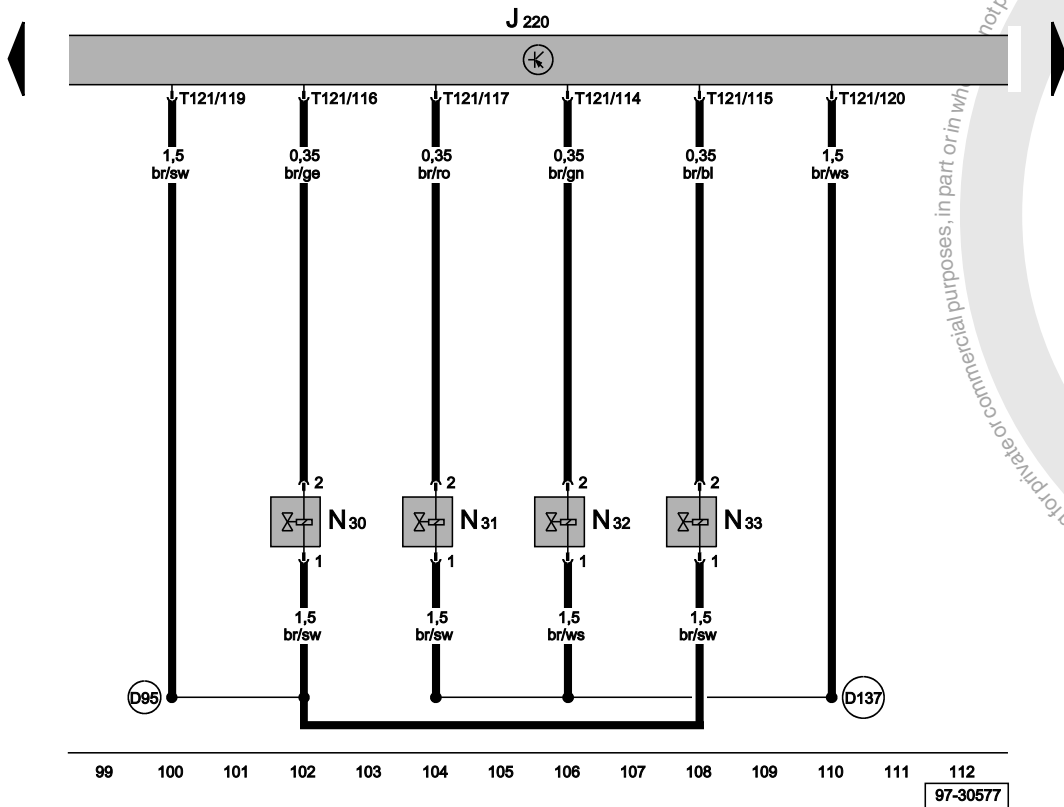
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- T121 121-pin connector

D95 Connection (injectors), in engine compartment wiring harness

D137 Connection -2- (injectors), in engine compartment wiring harness



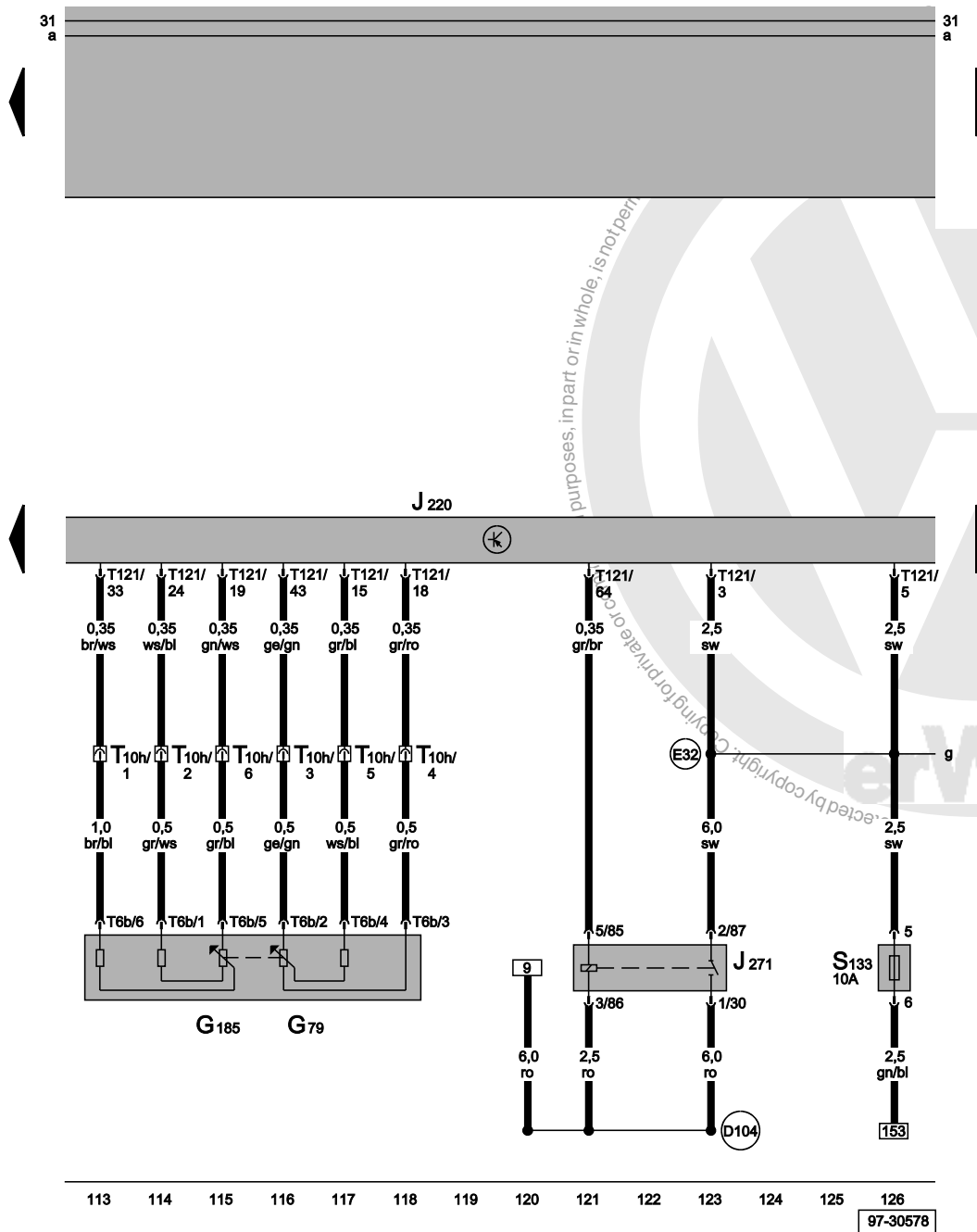
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-30577

Motronic control unit, accelerator position sender, Motronic current supply relay

- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S133 Fuse 3, in protective housing on left in engine compartment
- T6b 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E32 Connection (87), in Motronic wiring harness
- D104 Positive connection 2 (30a), in engine compartment wiring harness



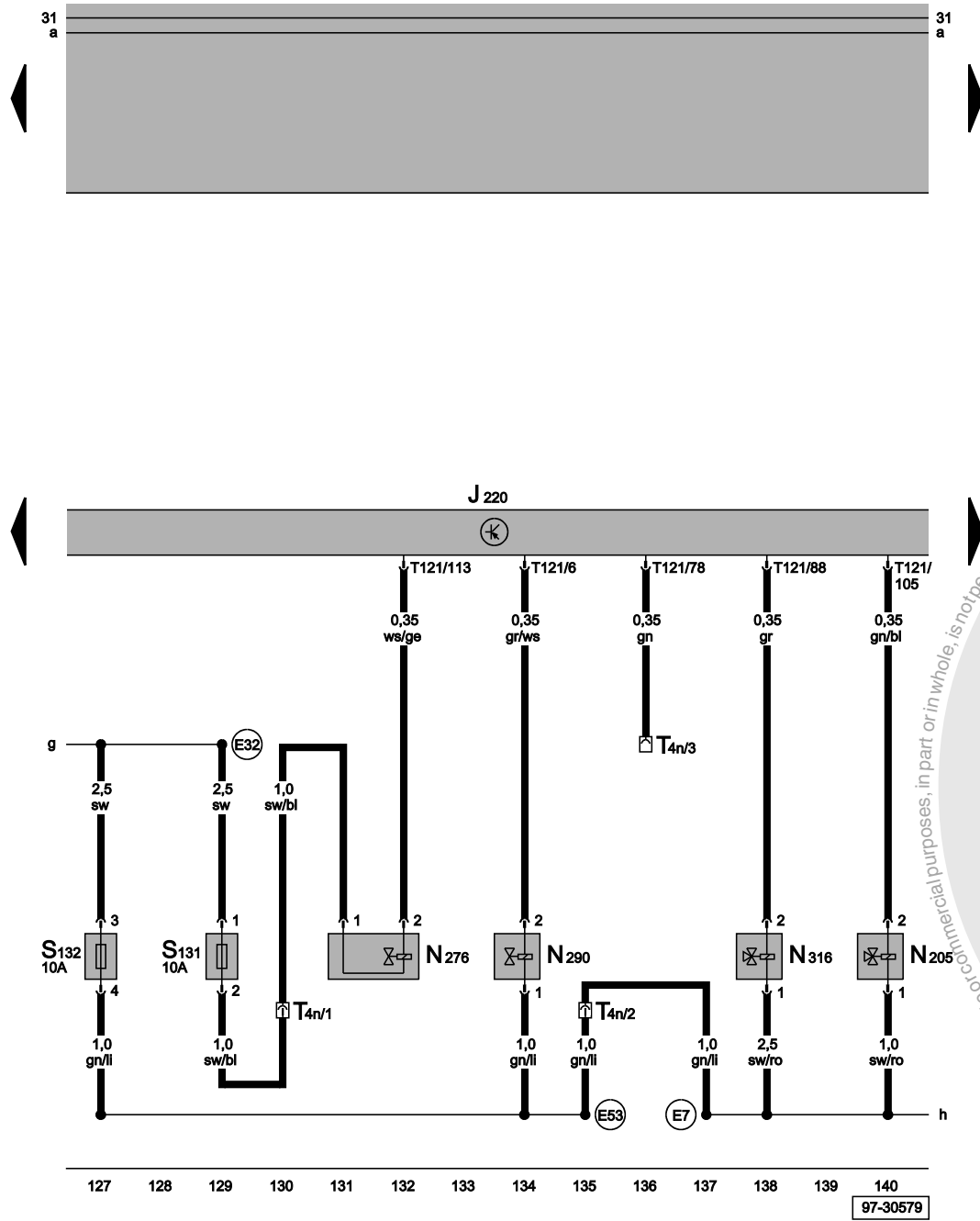
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30578

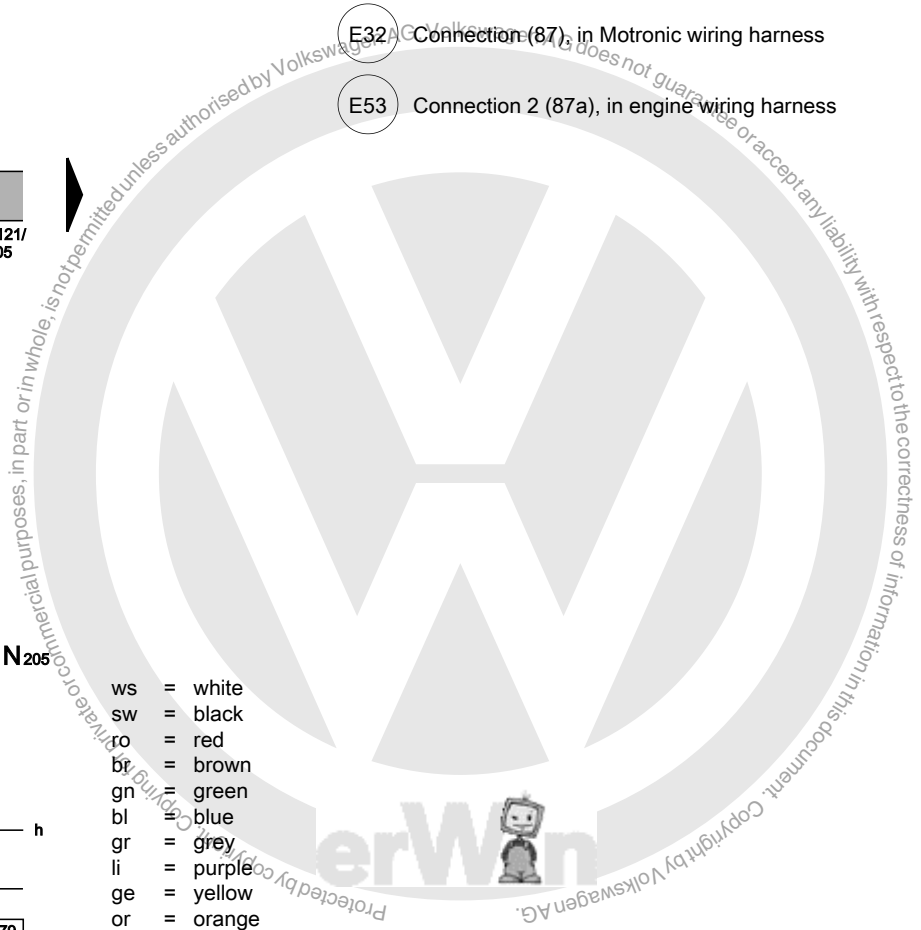
Motronic control unit, inlet camshaft control valve, fuel pressure regulating valve, fuel metering valve, intake manifold flap air flow control valve

- J220 Motronic control unit, in centre plenum chamber
- N205 Inlet camshaft control valve -1-
- N276 Fuel pressure regulating valve
- N290 Fuel metering valve
- N316 Intake manifold flap air flow control valve
- S131 Fuse 1, in protective housing on left in engine compartment
- S132 Fuse 2, in protective housing on left in engine compartment
- T4n 4-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

- (E7) Positive connection (87a), in Motronic wiring harness
- (E32) Connection (87) in Motronic wiring harness
- (E53) Connection 2 (87a), in engine wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

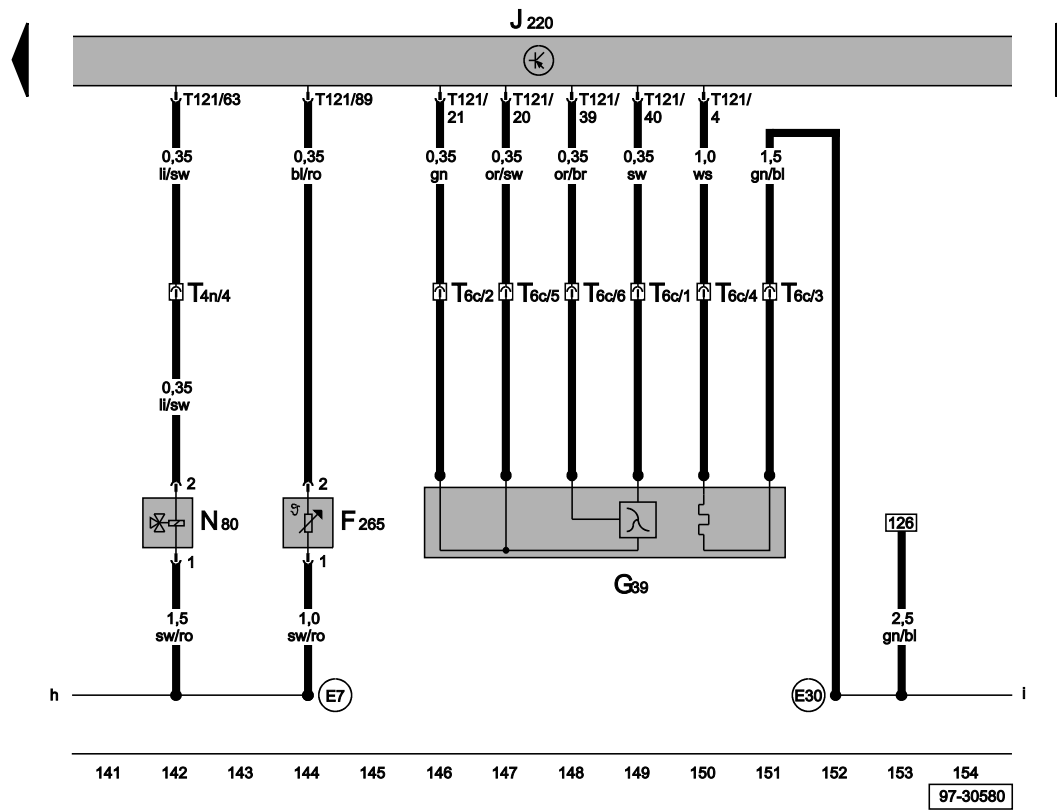
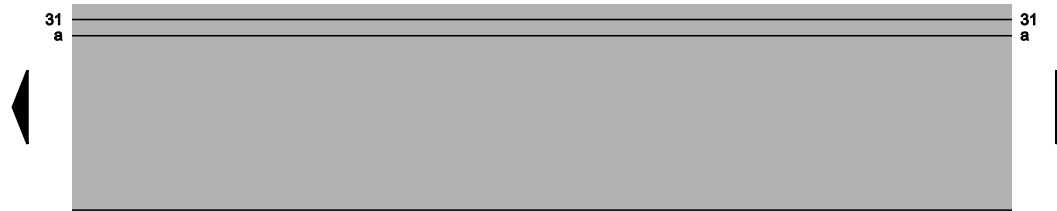


97-30579

Motronic control unit, lambda probe, map-controlled engine cooling system thermostat, active charcoal filter system solenoid valve

- F265 Map-controlled engine cooling system thermostat
- G39 Lambda probe
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4n 4-pin connector, in cable channel left in engine compartment
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector

- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness



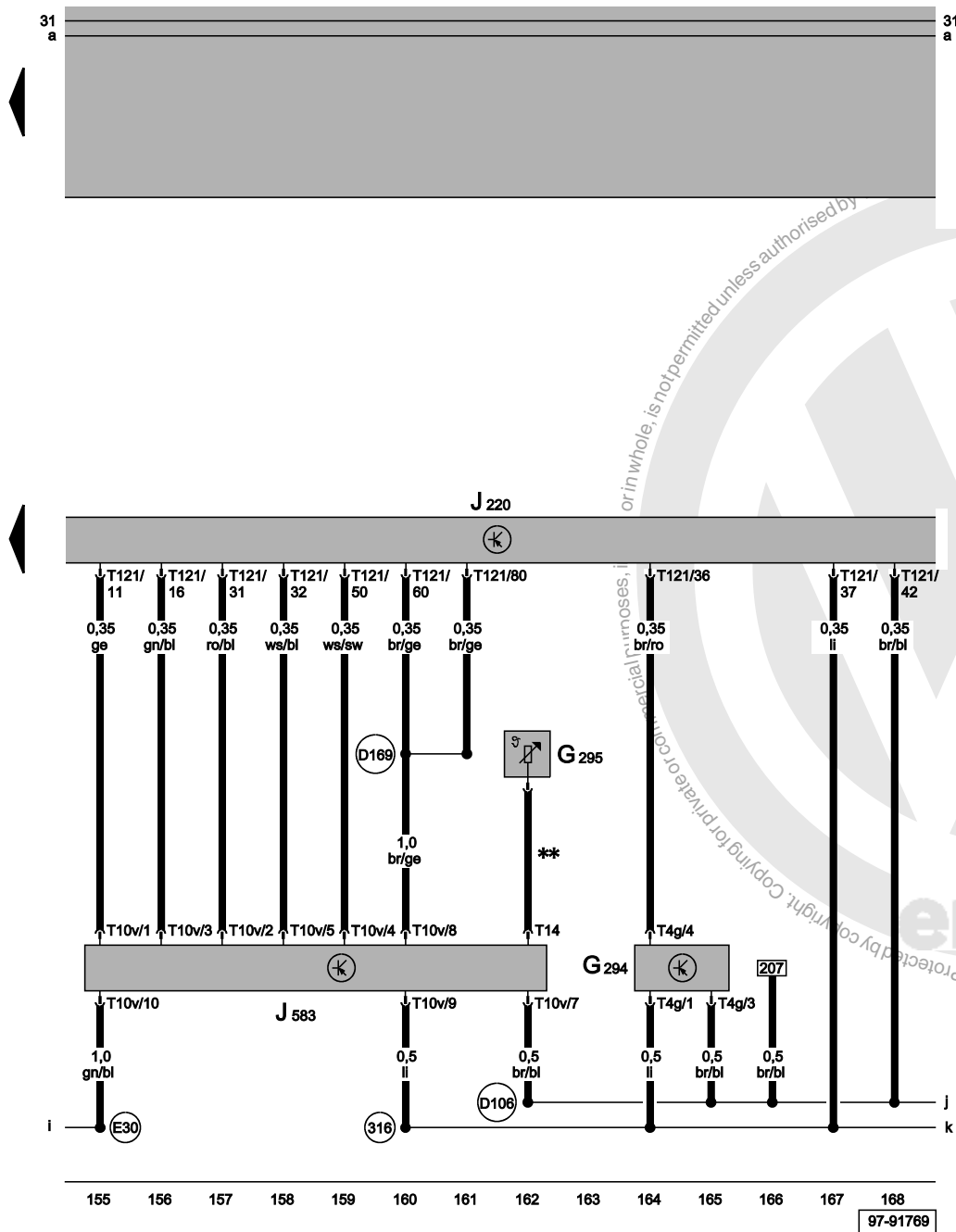
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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Motronic control unit, NOx sensor control unit, NOx sender, brake servo pressure sensor

- G294 Brake servo pressure sensor
- G295 NOx sender
- J220 Motronic control unit, in centre plenum chamber
- J583 NOx sensor control unit, in connector protective housing, near catalytic converter
- T4g 4-pin connector
- T10v 10-pin connector
- T14 14-pin connector
- T121 121-pin connector

- (316) Earth connection (sender earth 2), in engine wiring harness
- (D106) Connection -4-, in engine compartment wiring harness
- (D169) Connection (NOx), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness
- ** Connection is composed of several single wires



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

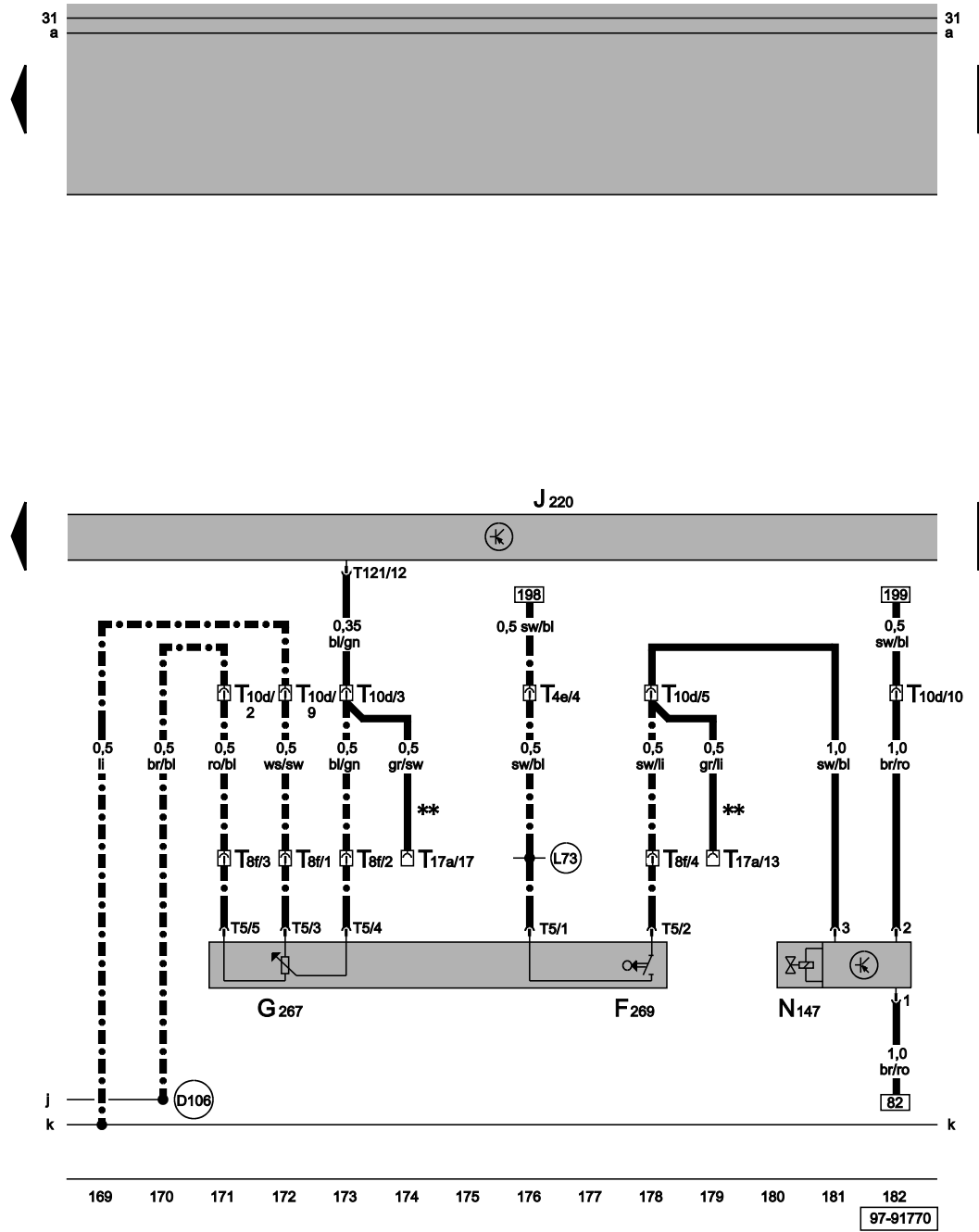
97-91769

Motronic control unit, potentiometer for temperature selection rotary knob, temperature flap position switch, 2-way valve for coolant shut-off valve

- F269 Temperature flap position switch
- G267 Potentiometer, temperature selection rotary knob*
- J220 Motronic control unit, in centre plenum chamber
- N147 2-way valve for coolant shut-off valve
- T4e 4-pin connector, behind centre dash panel (models without air conditioning system)
- T5 5-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T17a 17-pin connector, behind centre dash panel
- T121 121-pin connector

- (D106) Connection -4-, in engine compartment wiring harness
- (L73) Connection (15a), in fresh air blower wiring harness

- * F269 is closed when G267 is positioned on left limit stop. component not for Climatronic exist
- ** only models with Climatronic
- .-.- only models without air conditioning system/Climatronic



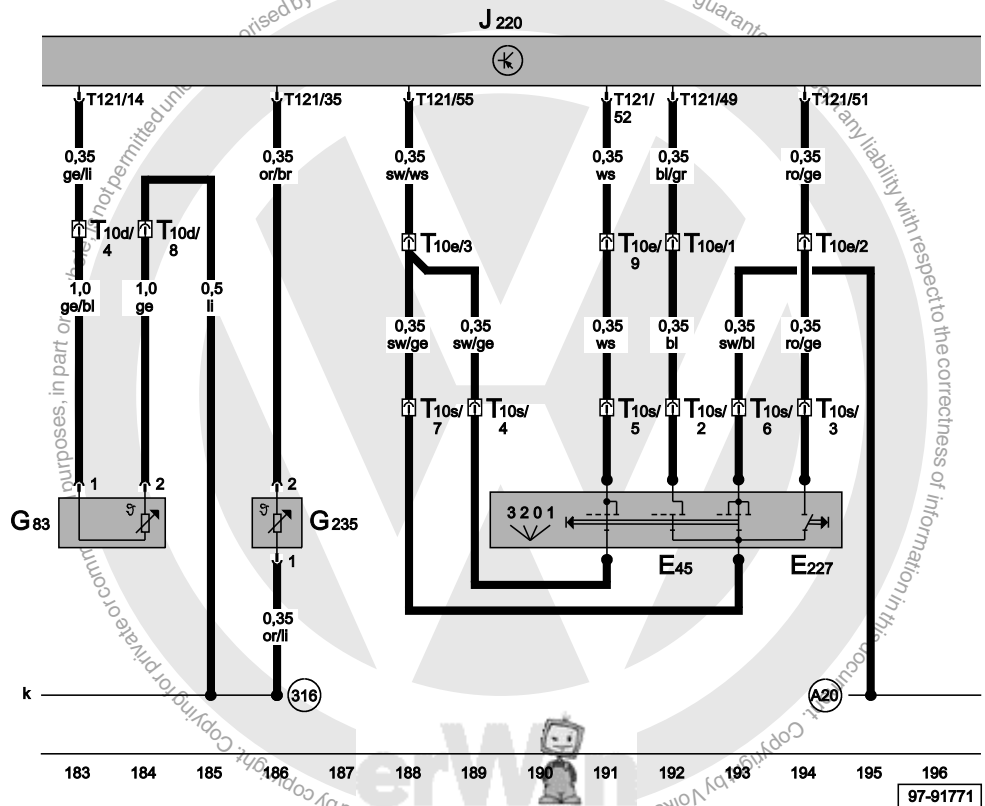
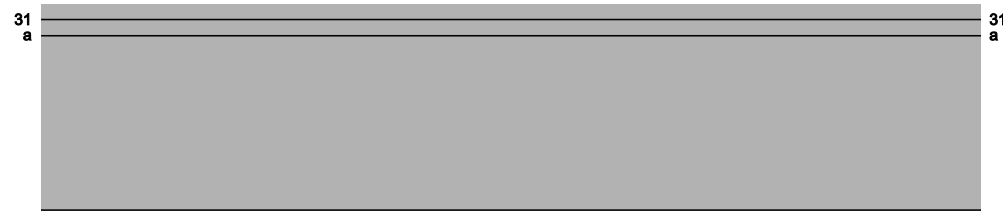
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, cruise control system switch, exhaust gas temperature sender, radiator outlet coolant temperature sender

- E45 Cruise control system switch
- E227 Cruise control system (CCS) SET button
- G83 Radiator outlet coolant temperature sender
- G235 Exhaust gas temperature sender 1
- J220 Motronic control unit, in centre plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector

316 Earth connection (sender earth 2), in engine wiring harness

A20 Connection (15a), in dash panel wiring harness



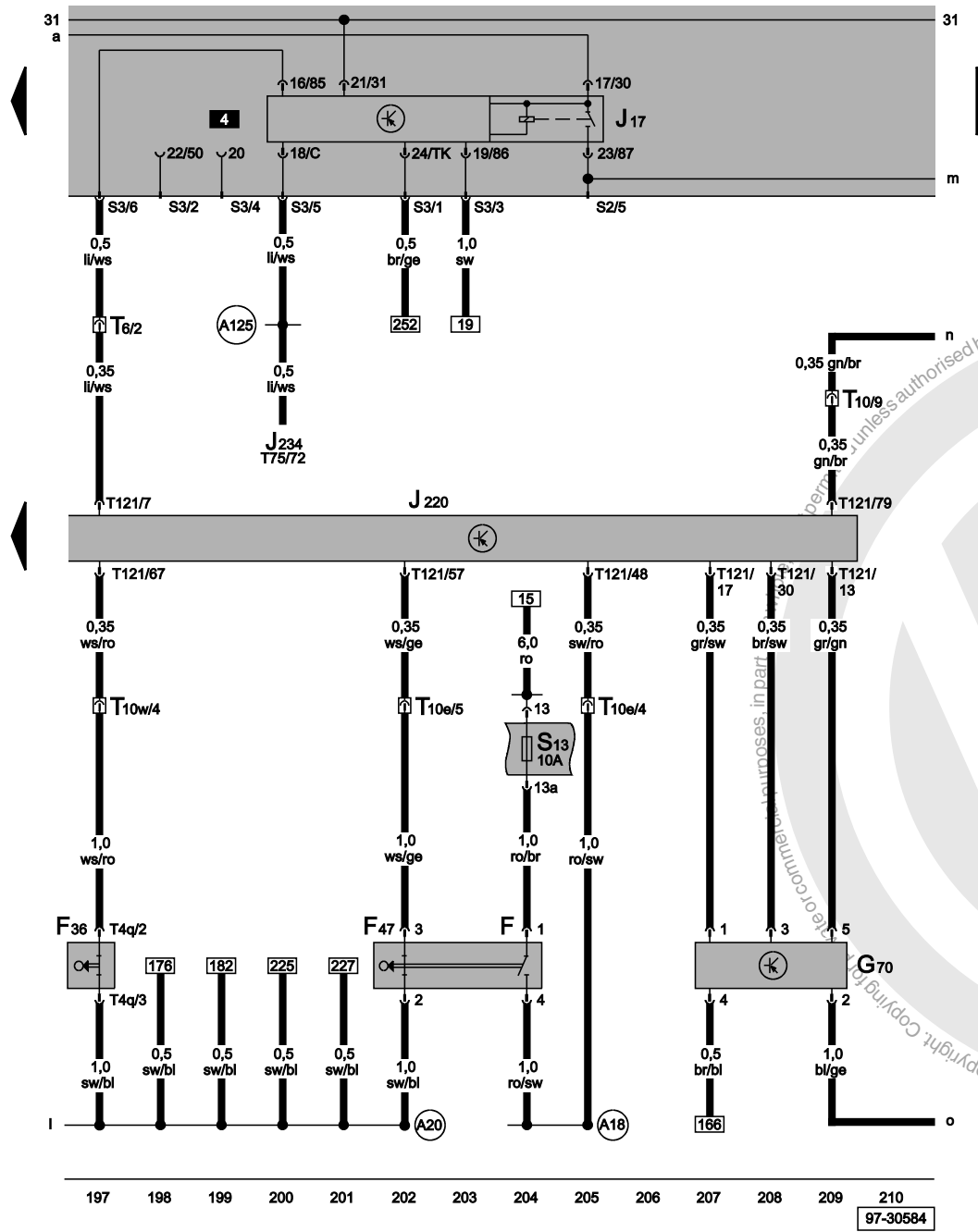
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, fuel pump relay, air mass meter, brake pedal switch, cruise control system brake pedal switch, brake light switch, clutch pedal switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector

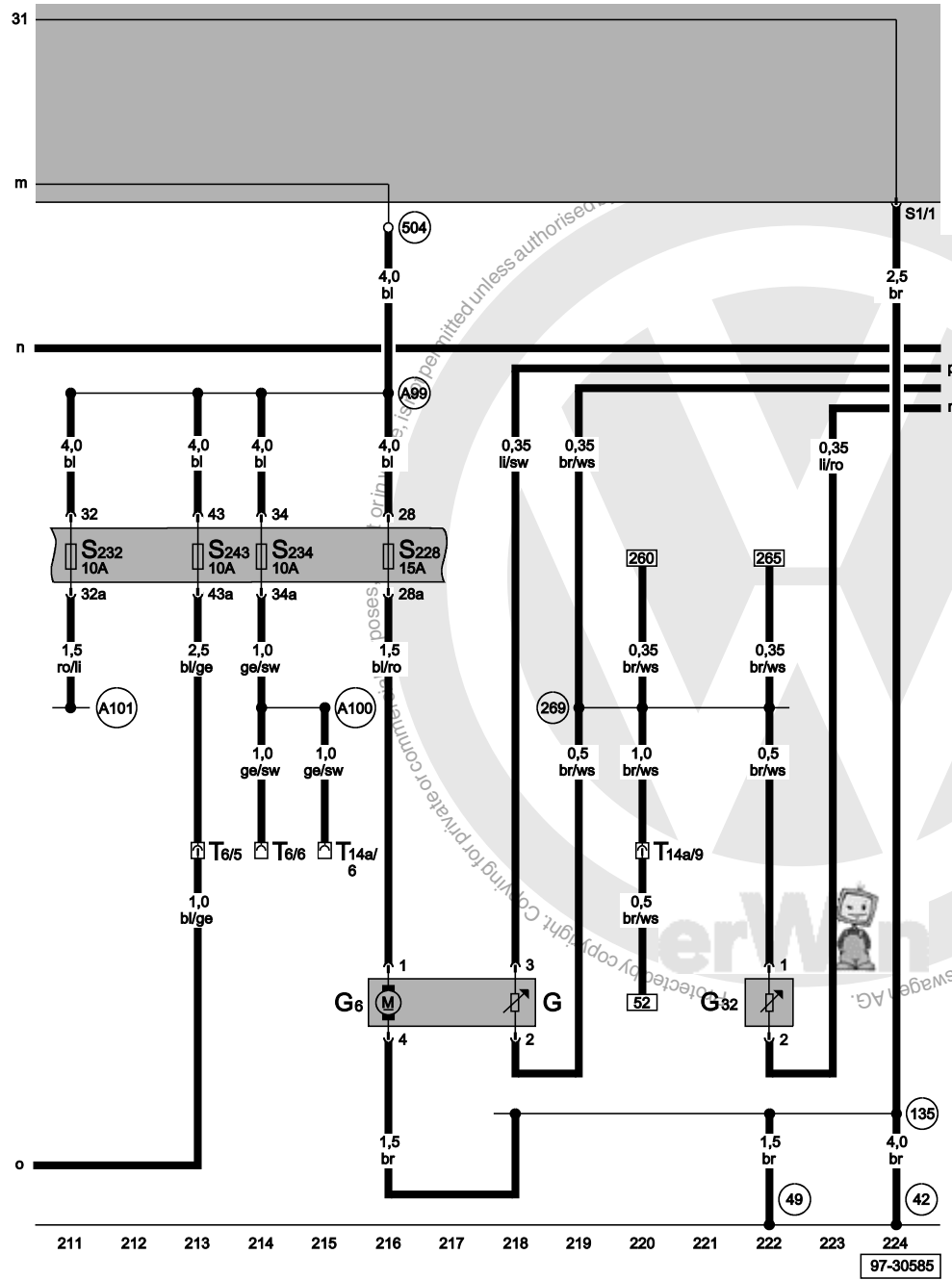
- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in engine compartment wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A101 Connection 3 (87), in dash panel wiring harness



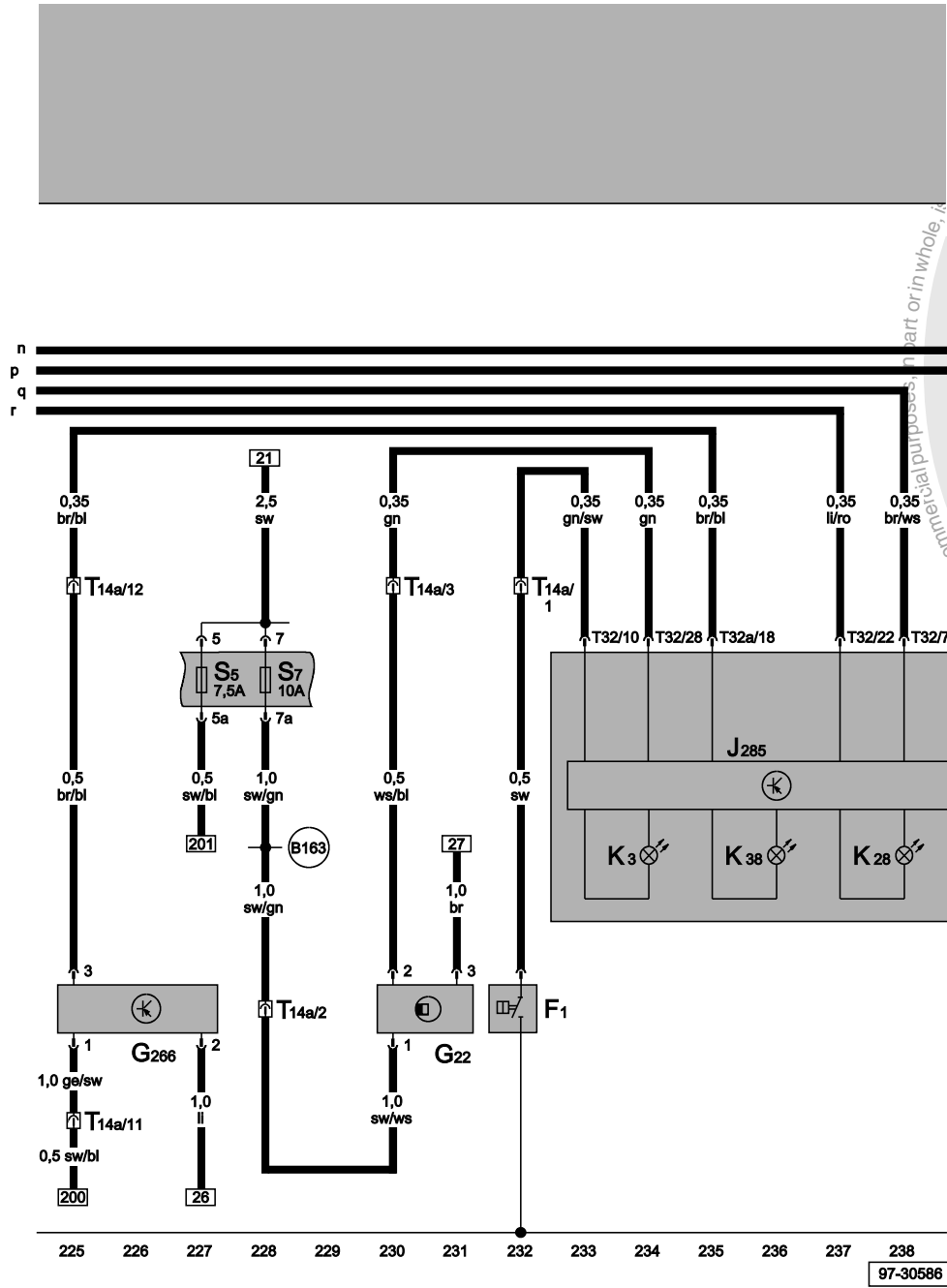
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

B163 Positive connection -1- (15), in interior wiring harness

* only flexible service interval display

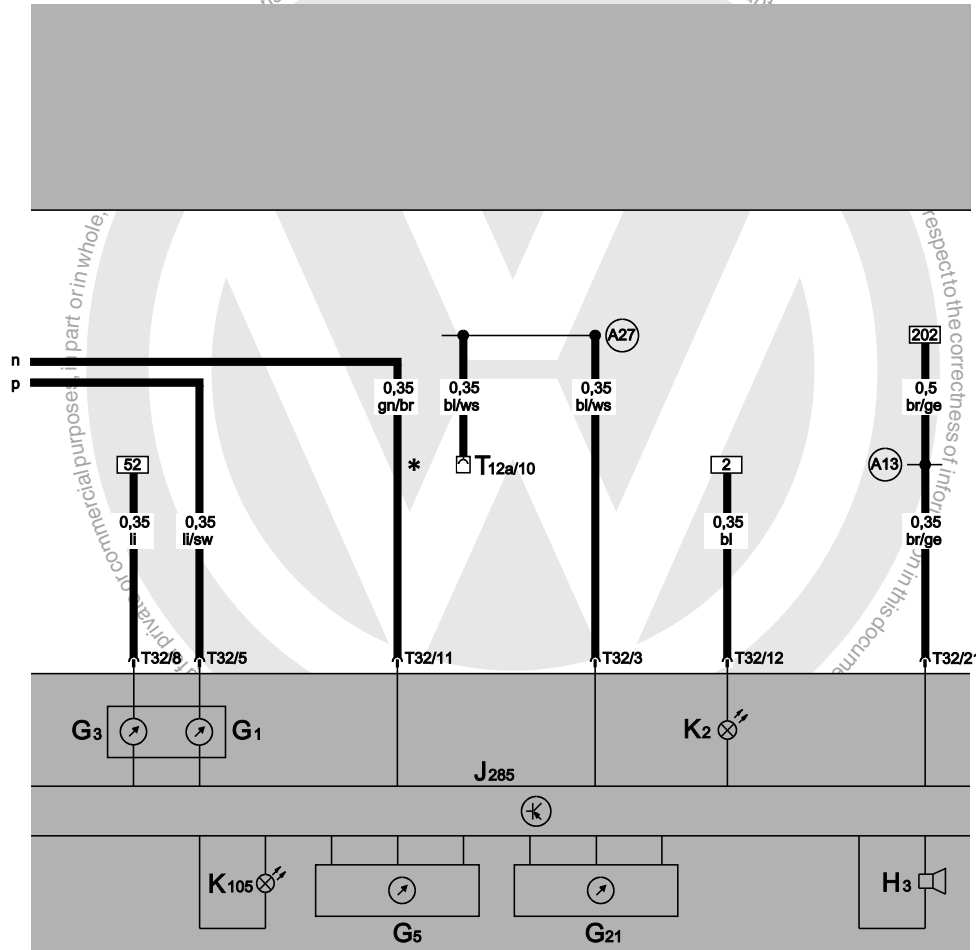


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30586

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

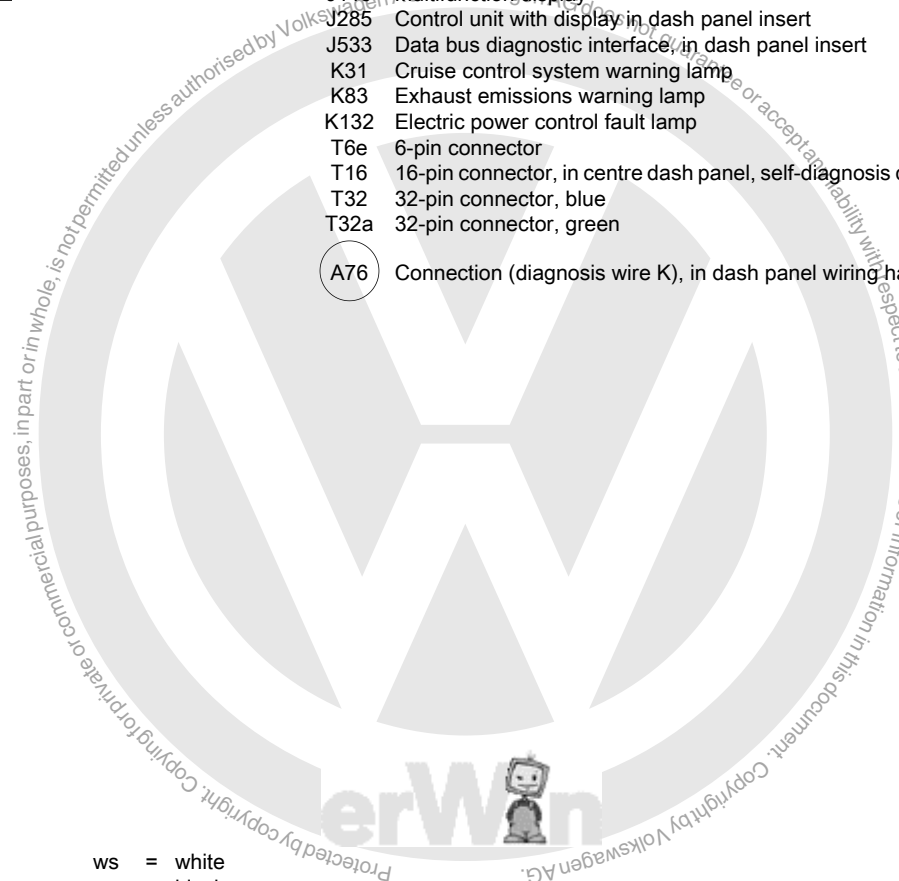
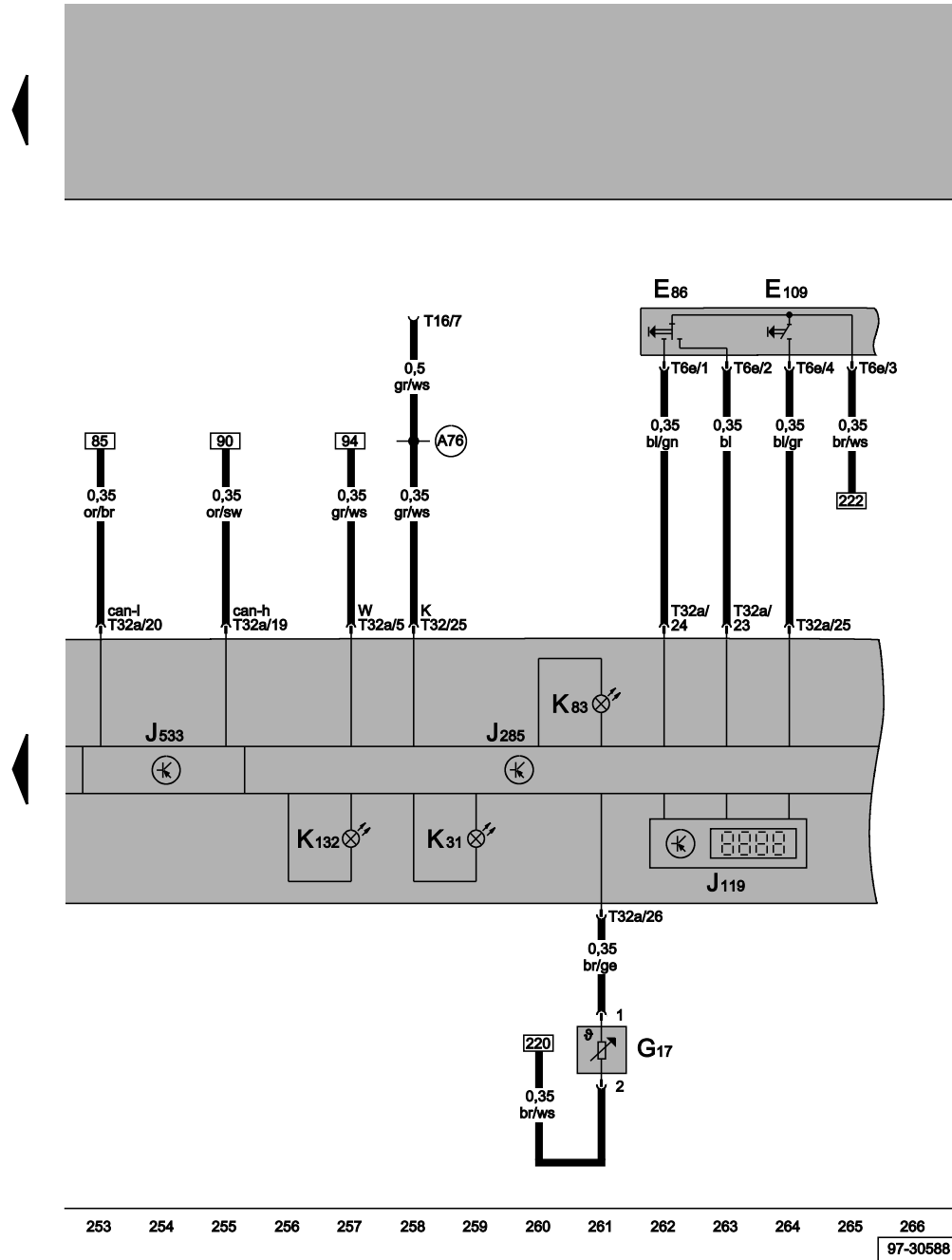
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

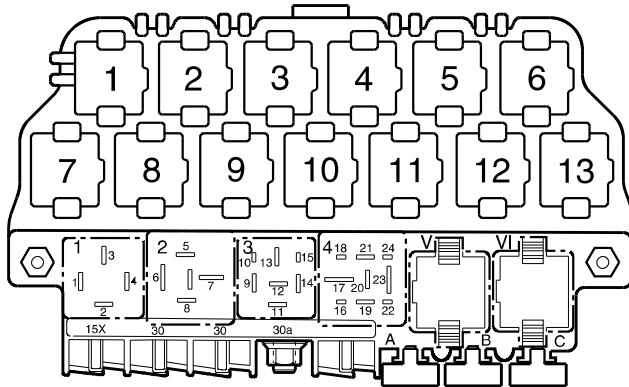
1.6 I/77 kW 4LV, engine code BCB

From November 2001

For alternatives to relay and fuse locations as well as multi-pin connector assignment see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)



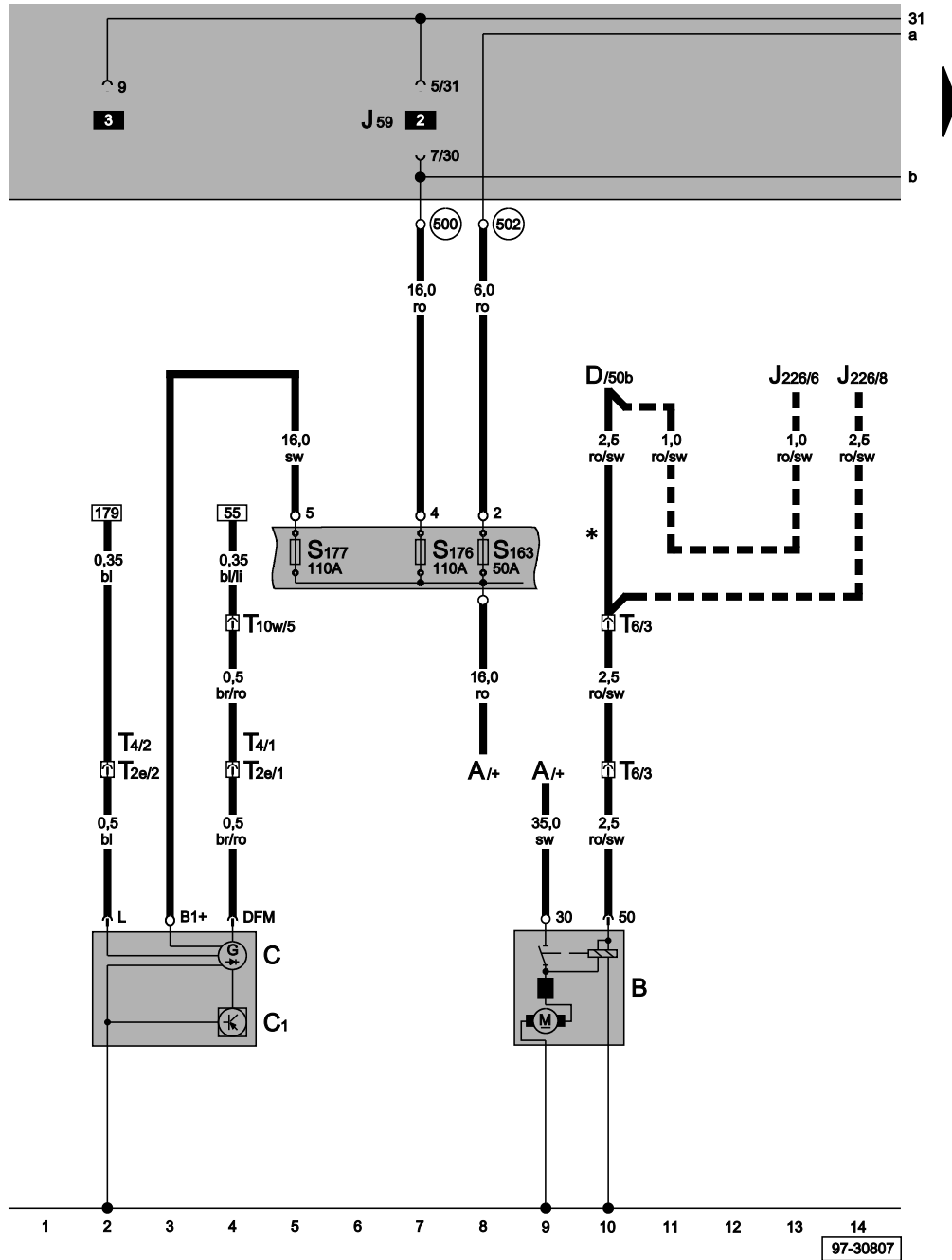
Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac





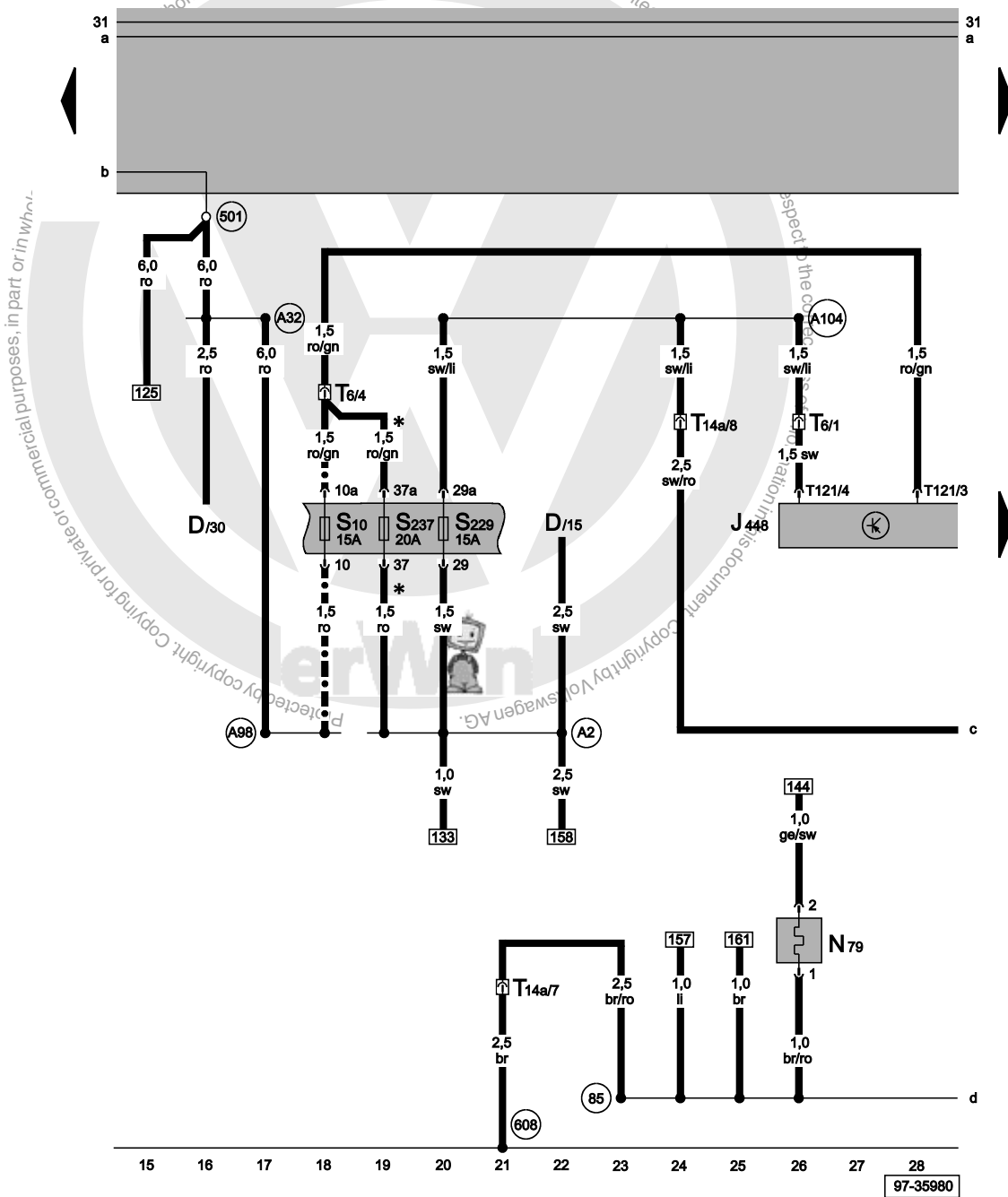
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S163 Fuse -2- (30), in battery fuse holder
- S176 Fuse -4- (30), in battery fuse holder
- S177 Fuse -5- (30), in battery fuse holder
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber

- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * Applies only to models with a manual gearbox
- Applies only to models with an automatic gearbox

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30807



4LV control unit (injection system), heater element (crankcase breather)

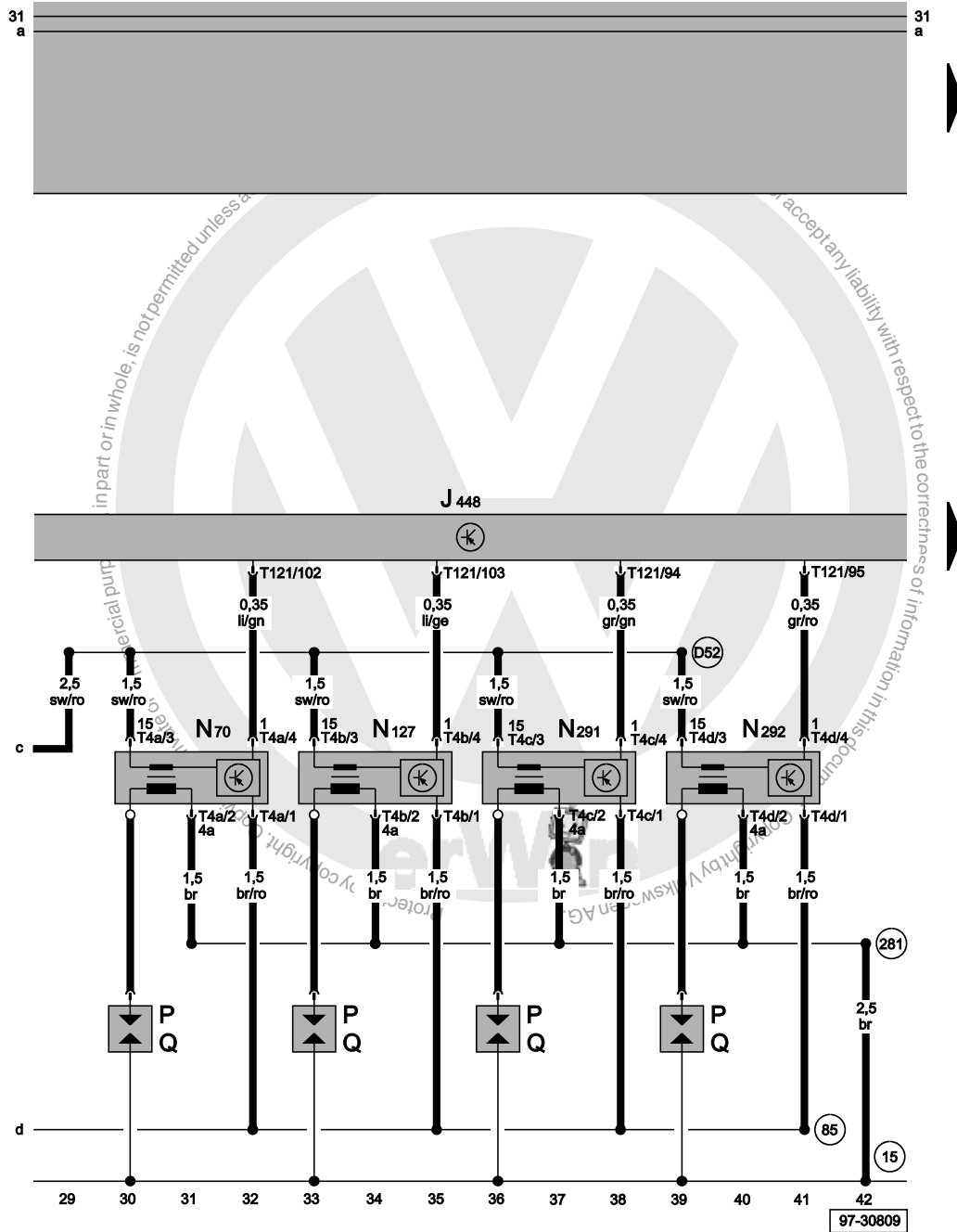
- D Ignition/starter switch
- J448 4LV control unit (injection system), in centre of plenum chamber
- N79 Heater element (crankcase breather)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 85 Earth connection -1-, in engine compartment wiring harness
- 501 Screw connection -2- (30), on relay plate
- 608 Earth point, in centre of plenum chamber
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection -4- (30), in dash panel wiring harness
- A104 Positive connection -2- (15), in dash panel wiring harness
- * From November 2001
- .-.- Up to October 2001

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4LV control unit (injection system), ignition system

- J448 4LV control unit (injection system), in centre of plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connectors
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- (15) Earth point, on cylinder head
- (85) Earth connection -1-, in engine compartment wiring harness
- (281) Earth connection -1-, in engine pre-wiring wiring harness
- (D52) Positive connection (15a), in engine compartment wiring harness

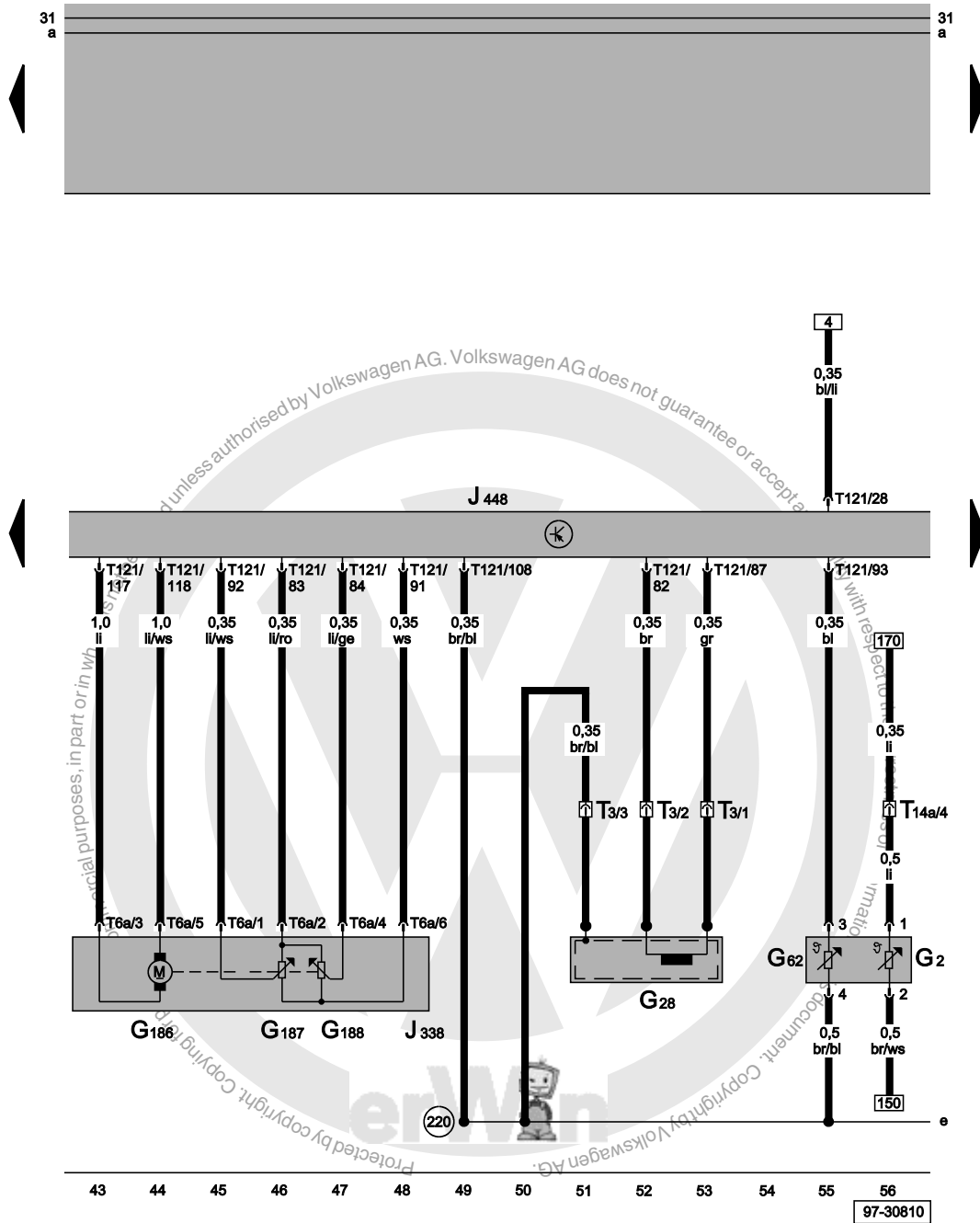


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97-30809

4LV control unit (injection system), throttle valve control module, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electrically operated throttle)
- G187 Throttle valve drive angle sender -1- (electrically operated throttle)
- G188 Throttle valve drive angle sender -2- (electrically operated throttle)
- J338 Throttle valve control module
- J448 4LV control unit (injection system), in centre of plenum chamber
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (220) Earth connection (sender earth), in engine wiring harness



4LV control unit (injection system), intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, Hall sender

- G40 Hall sender
- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit
- J448 4LV control unit (injection system), in centre of plenum chamber
- N18 Exhaust gas recirculation valve
- T3b 3-pin connector, on cylinder head
- T6d 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

(220) Earth connection (sender earth), in engine wiring harness

(D101) Connection N-, in engine compartment wiring harness

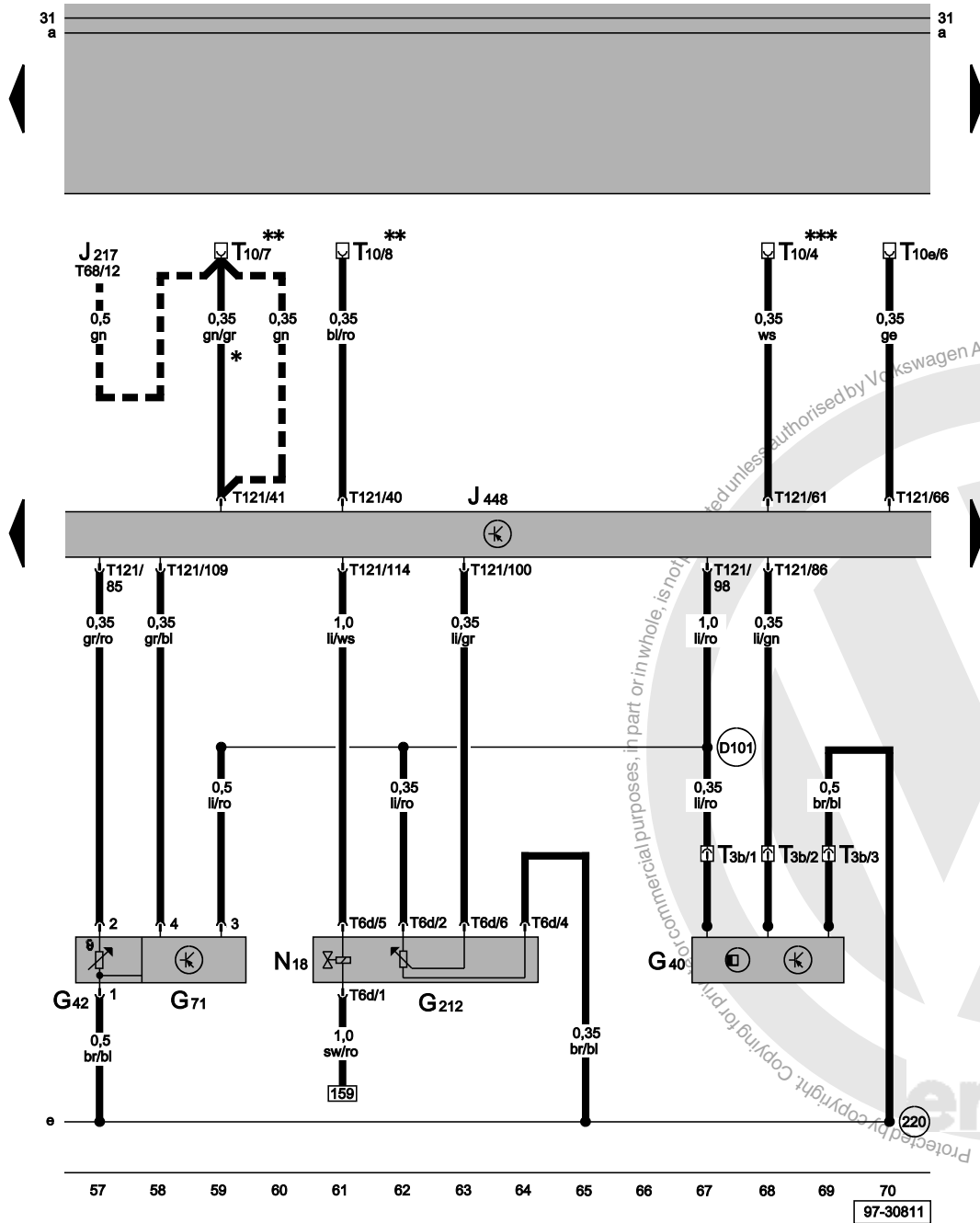
* Applies only to models with a manual gearbox

** Connection for air conditioner

*** Connection for radiator fan control unit

--- Applies only to models with an automatic gearbox

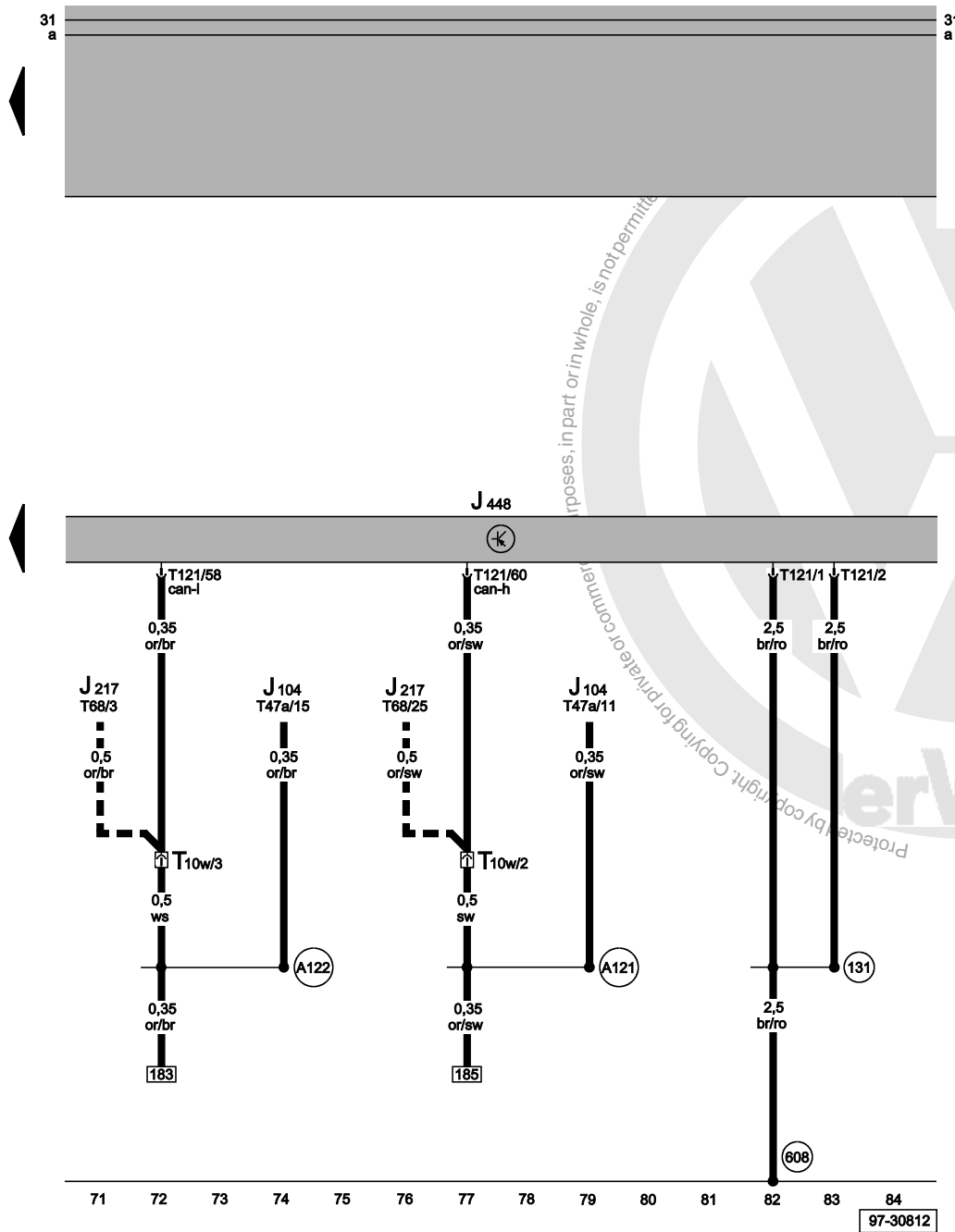
- ws = white
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4LV control unit (injection system)

- J104 ABS/ABS and EDL control unit
- J217 Automatic gearbox control unit
- J448 4LV control unit (injection system), in centre of plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T47a 47-pin connector, on ABS and EDL/TCS/ESP control unit
- T68 68-pin connector
- T121 121-pin connector

- (131) Earth connection -2-, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (A121) Connection (high-bus), in dash panel wiring harness
- (A122) Connection (low-bus), in dash panel wiring harness
- Applies only to models with an automatic gearbox



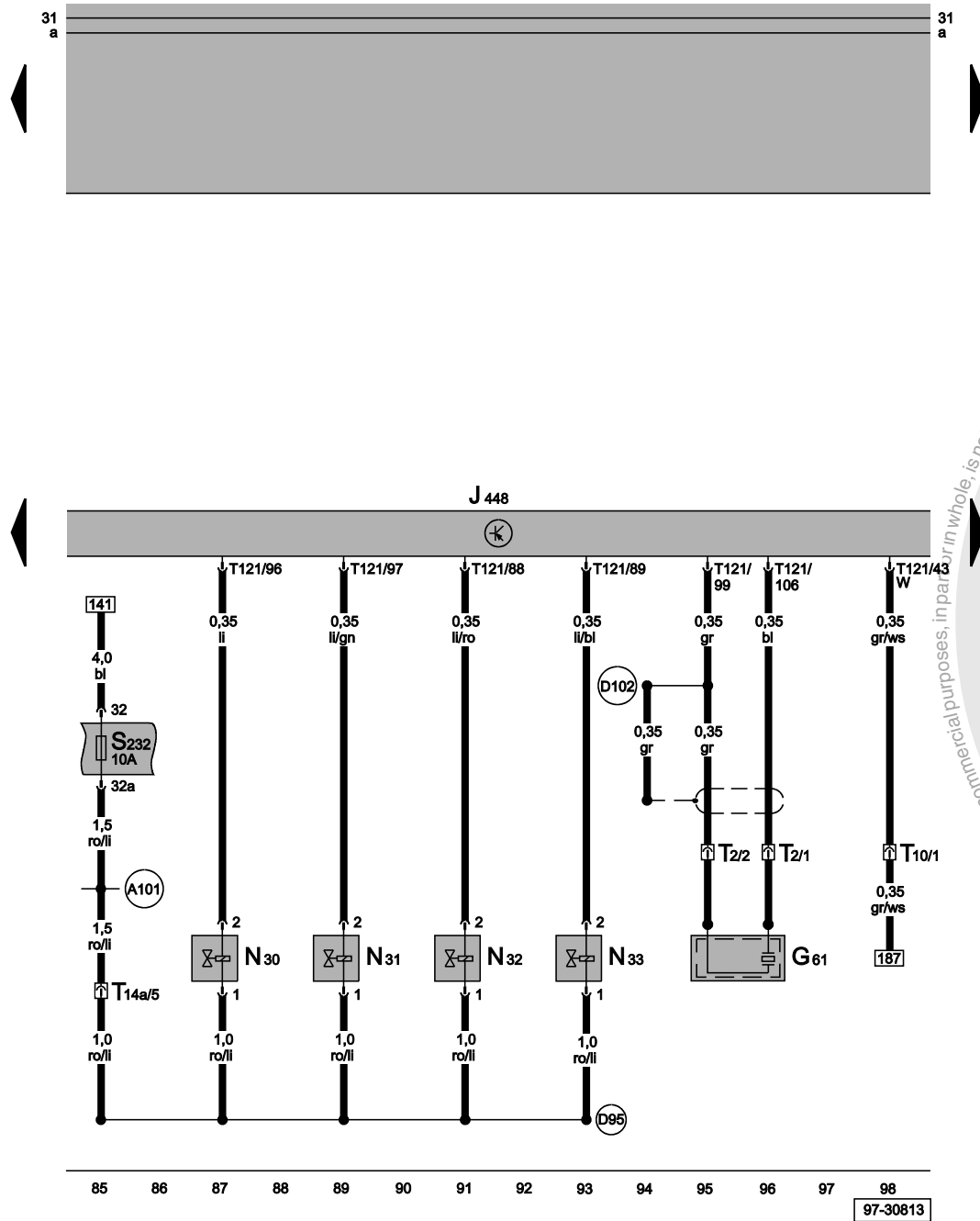
- ws = white
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97-30812

4LV control unit (injection system), injectors, knock sensor

- G61 Knock sensor I
- J448 4LV control unit (injection system), in centre of plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T2 2-pin connector, on left of cylinder head
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

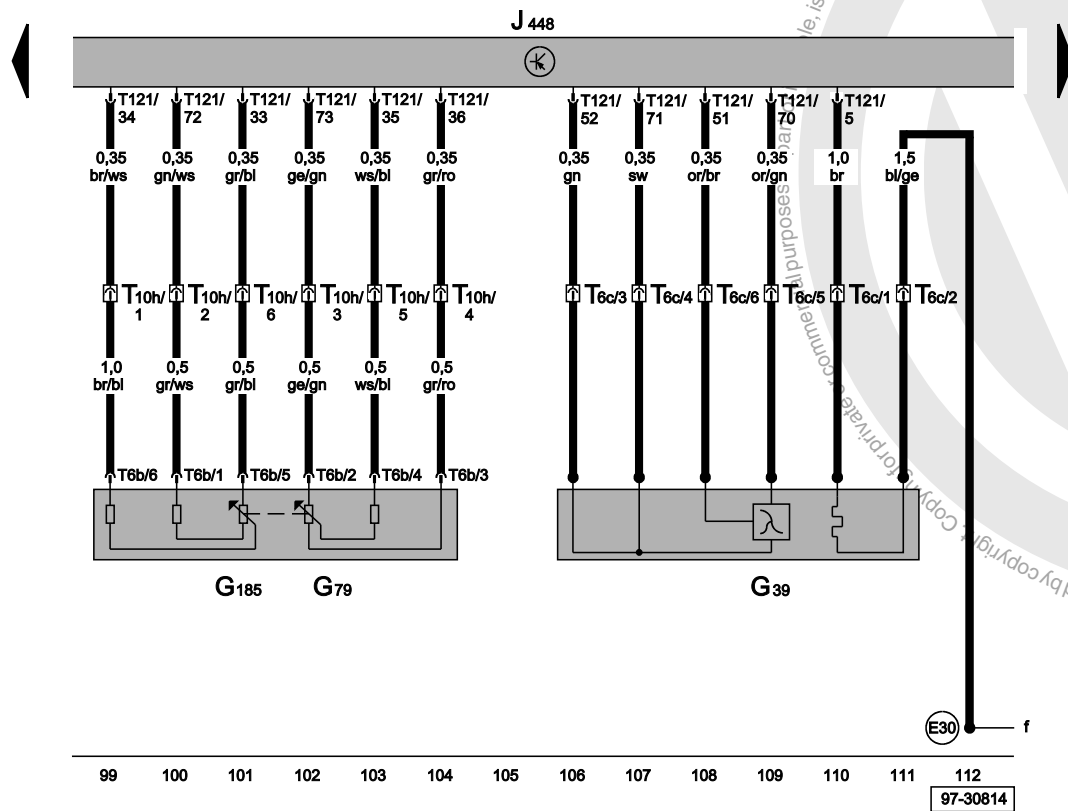
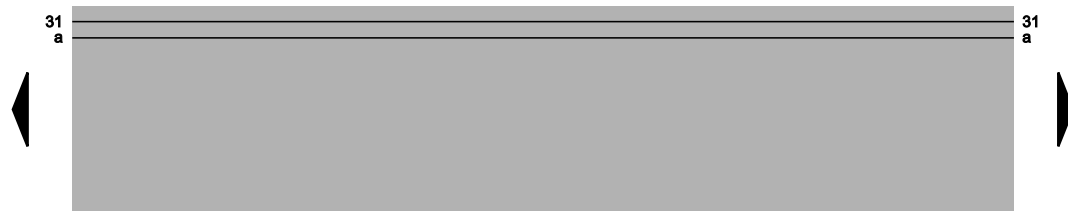
- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection -2-, in engine compartment wiring harness



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4LV control unit (injection system), accelerator pedal position sender, lambda probe (before catalyst)

- G39 Lambda probe
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender -2-
- J448 4LV control unit (injection system), in plenum chamber, centre
- T6b 6-pin connector
- T6c 6-pin connector, near catalyst
- T10h 10-pin connector, blue, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector
- E30 Connection (87a), in engine wiring harness



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4LV control unit (injection system), cruise control system switch (CCS), clutch pedal switch, cruise control system brake pedal switch, brake light switch

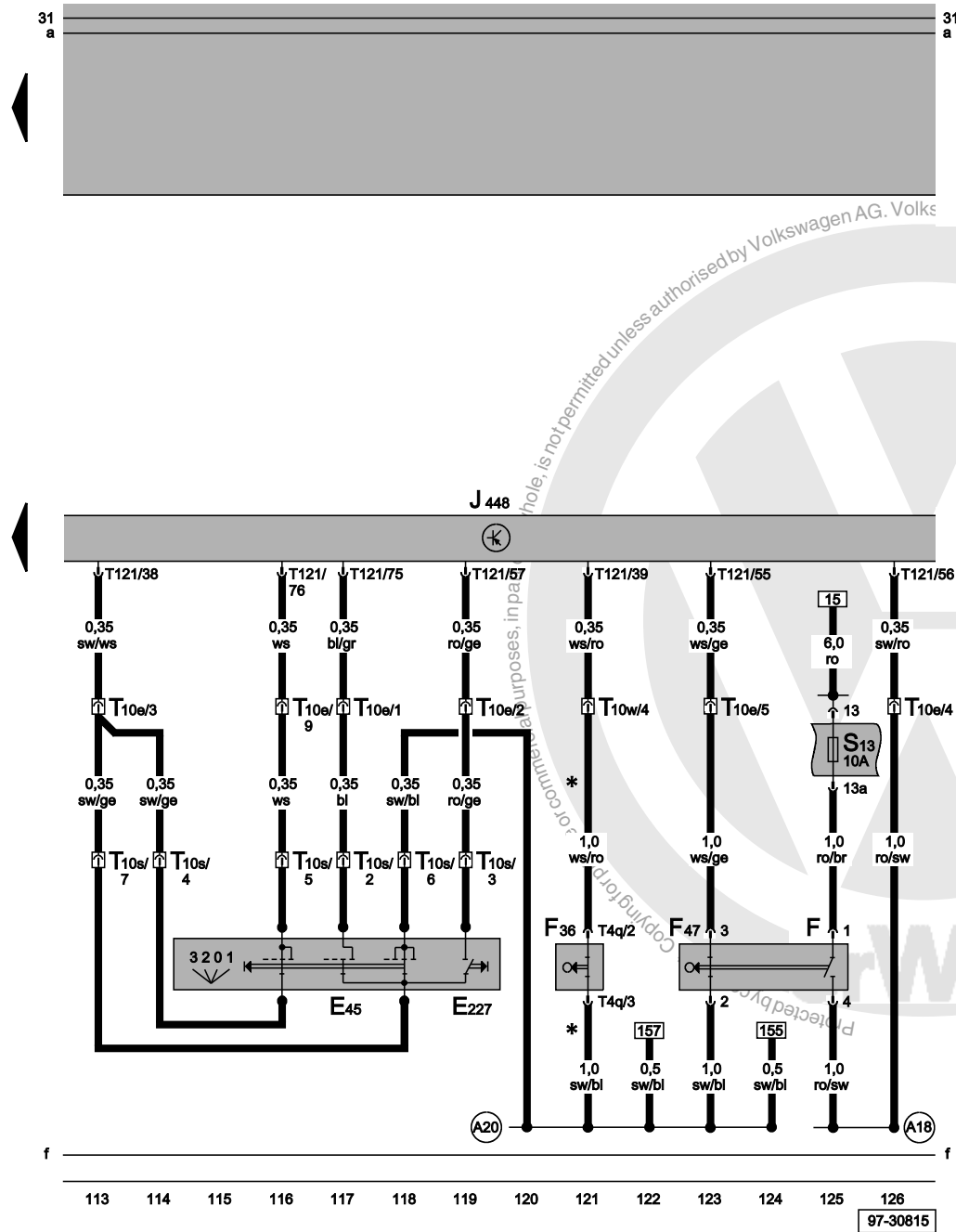
- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)**
- F Brake light switch
- F36 Clutch pedal switch**
- F47 Cruise control system brake pedal switch
- J448 4LV control unit (injection system), in plenum chamber, centre
- S13 Fuse in fuse box
- T4q 4-pin connector
- T10e 10-pin connector, black, in protective housing for connectors, in plenum chamber, left
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T121 121-pin connector

A18 Connection (54), in dash panel wiring harness

A20 Connection (15a), in dash panel wiring harness

* Only models with manual gearbox

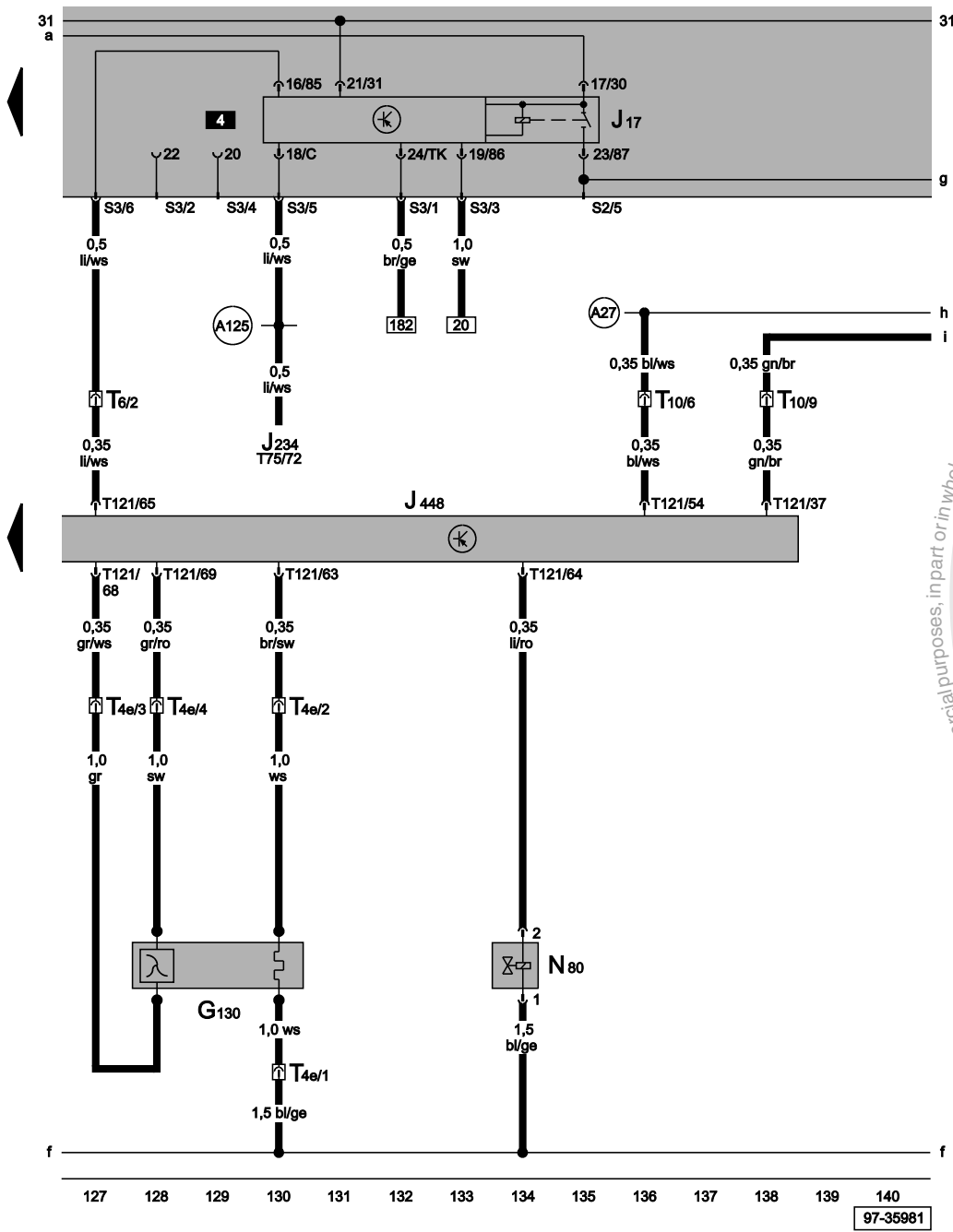
** Only models with CCS



4LV control unit (injection system), fuel pump relay, lambda probe after catalyst, active charcoal filter system solenoid valve 1

- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit
- J448 4LV control unit (injection system), in centre of plenum chamber
- N80 Active charcoal filter system solenoid valve 1
- T4e 4-pin connector, near catalyst
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T75 75-pin connector
- T121 121-pin connector

- (A27) Connection (speed signal), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness

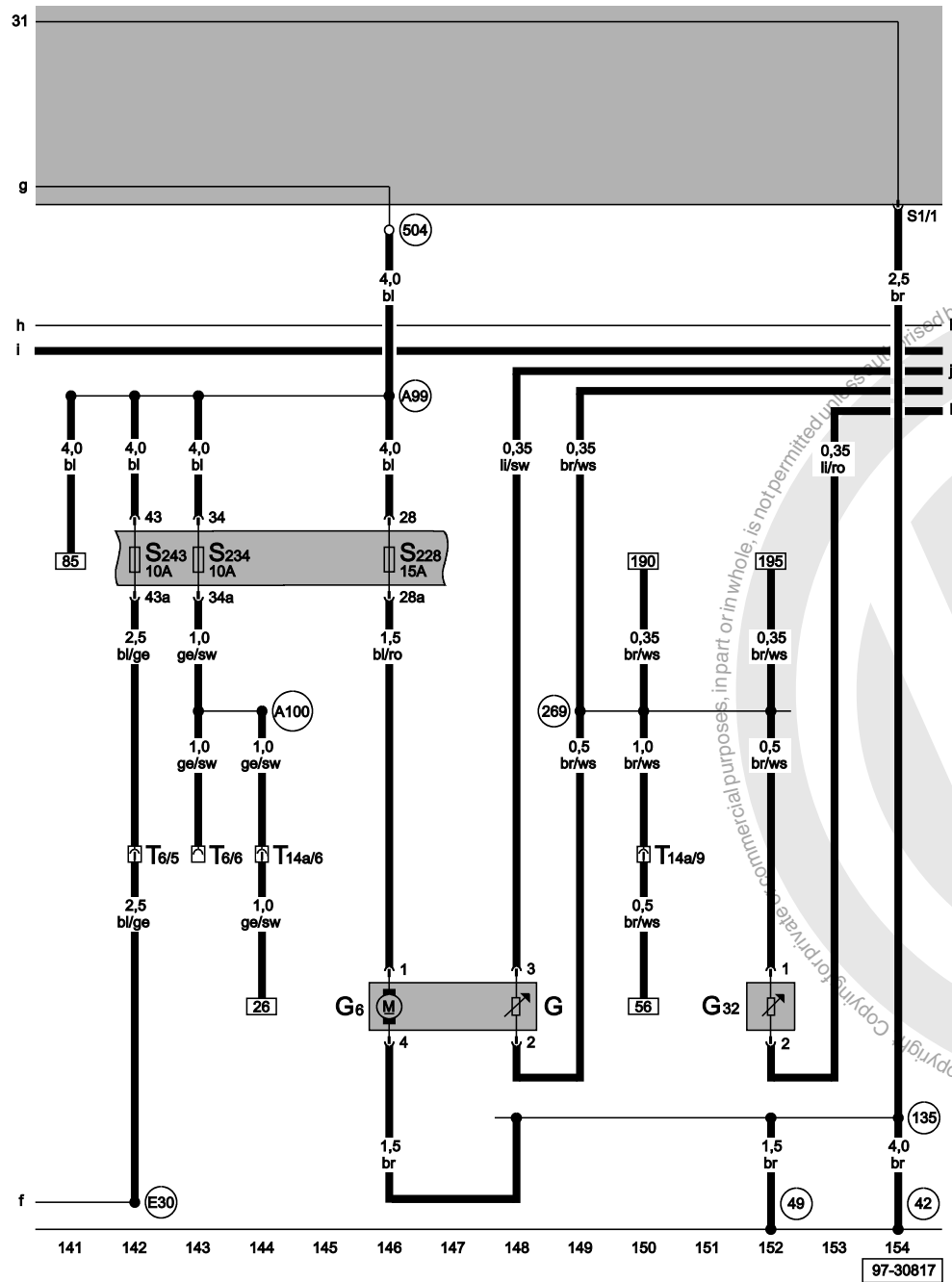


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Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery

- 42 Earth point, next to steering column
- 49 Earth point, next to steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness



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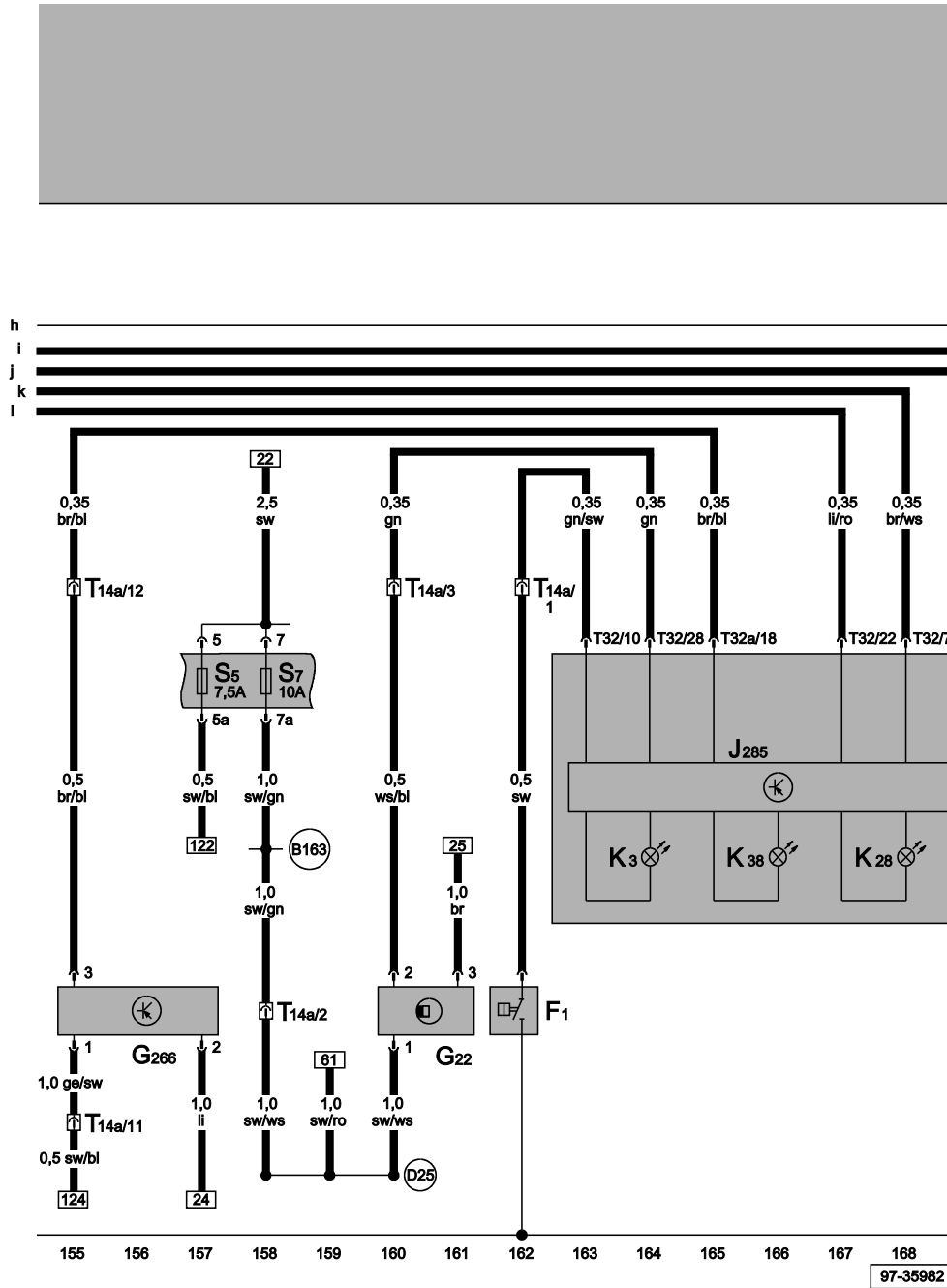
Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

B163 Positive connection -1- (15), in interior wiring harness

D25 Positive connection (15), in engine pre-wiring wiring harness

* Only with flexible service interval display



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97-35982

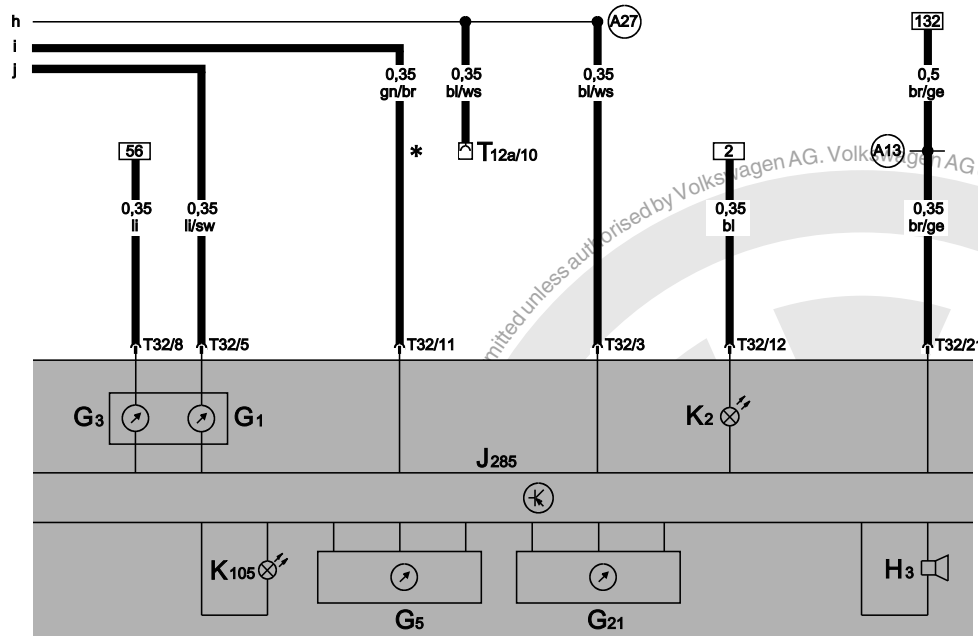
Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, only if fitted with Climatronic
- T32 32-pin connector, blue

A13 Connection (door contact switch), in dash panel wiring harness

A27 Connection (speed signal), in dash panel wiring harness

* Engine speed signal from engine control unit

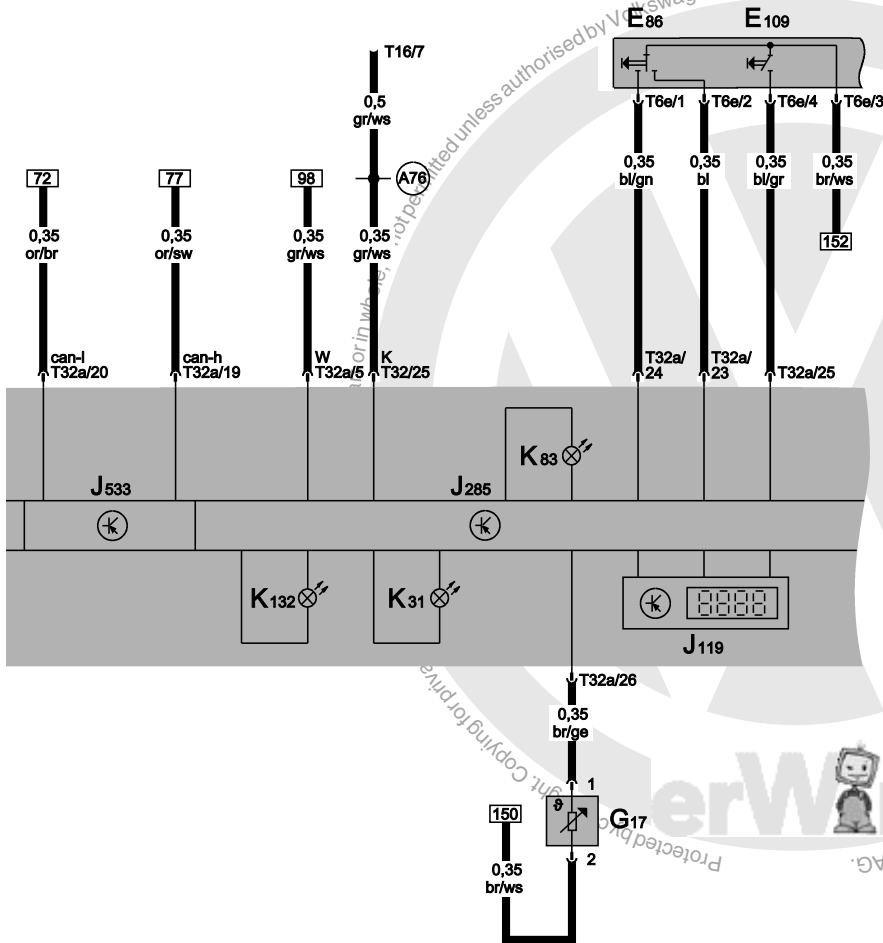


- ws = white
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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multi-function display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A76 Connection (diagnosis wire K), in dash panel wiring harness



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Tailgate/boot lid release

From May 2001

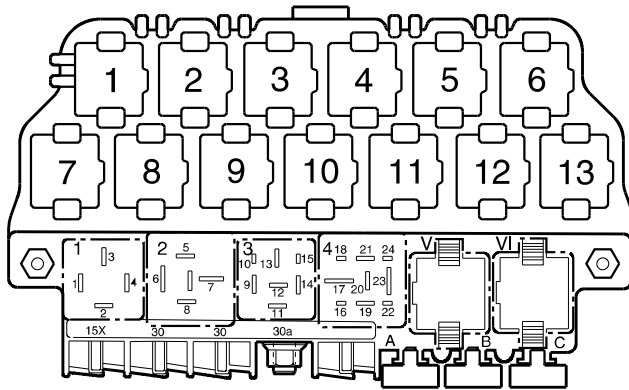
only models without central locking and convenience system

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

2 - Tailgate/boot lid remote release control unit (407)

Relay locations on relay plate:



97-14163



Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

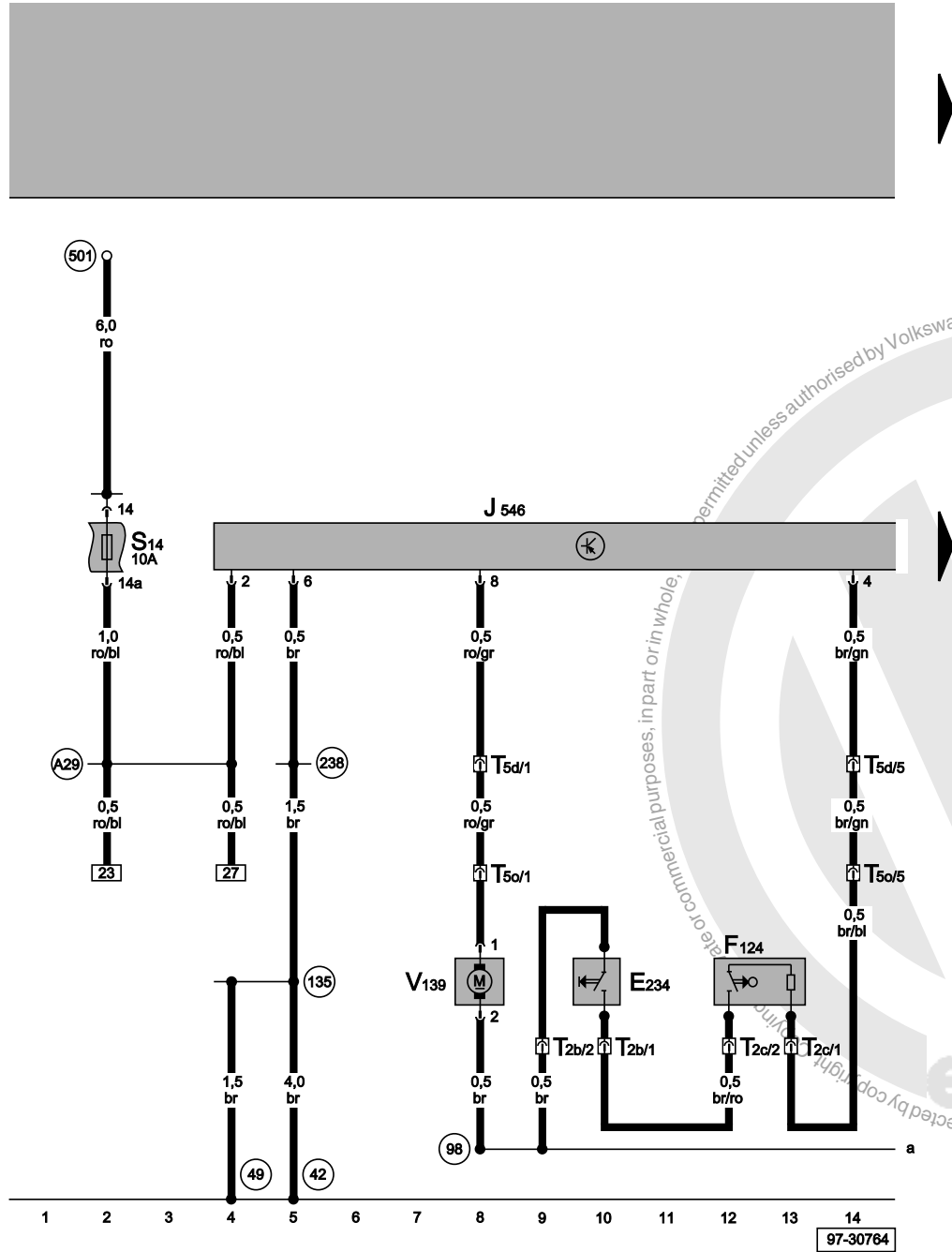
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Tailgate/bootlid remote release control unit, tailgate/bootlid release motor, tailgate/bootlid handle release button, contact switch in lock cylinder for tailgate/bootlid

- E234 Tailgate/bootlid handle release button
- F124 Contact switch in lock cylinder for tailgate/boot lid
- J546 Tailgate/bootlid remote release control unit, on the 13 position additional relay carrier
- S14 Fuse in fuse box
- T2b 2-pin connector, in tailgate/bootlid
- T2c 2-pin connector, in tailgate/bootlid
- T5d 5-pin connector, brown, connector point right D-pillar
- T5o 5-pin connector, brown, in tailgate/bootlid
- V139 Tailgate/bootlid release motor

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 98 Earth connection, in tailgate/bootlid wiring harness
- 135 Earth connection -2- in dash panel wiring harness
- 238 Earth connection -1-, in interior wiring harness
- 501 Screw connection -2- (30), on relay plate
- A29 Connection (interior light), in dash panel wiring harness



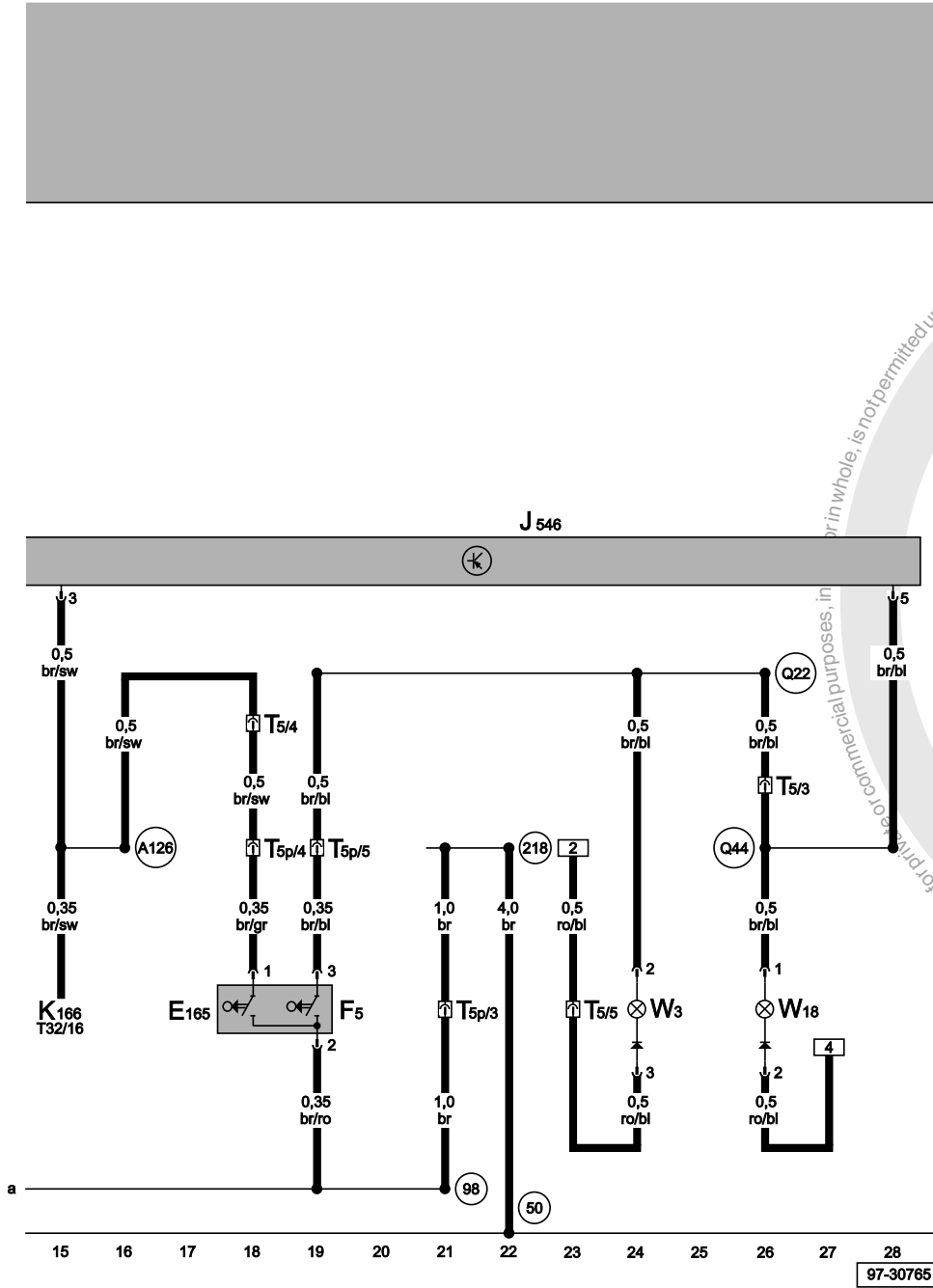
- ws = white
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97-30764

Tailgate/boot lid remote release control unit, luggage compartment light

- E165 Tailgate/bootlid release switch
- F5 Luggage compartment light switch
- J546 Tailgate/boot lid remote release control unit, on the 13 position additional relay carrier
- K166 Door open warning lamp
- T5 5-pin connector, black, connector point left D-pillar
- T5p 5-pin connector, black, in tailgate/bootlid
- T32 32-pin connector, blue
- W3 Luggage compartment light
- W18 Luggage compartment light, left

- 50 Earth point, on left luggage compartment
- 98 Earth connection, in tailgate/bootlid wiring harness
- 218 Earth connection -1-, in tailgate/bootlid wiring harness
- A126 Connection (tailgate/bootlid contact switch), in dash panel wiring harness
- Q22 Connection -1-, in tailgate/bootlid wiring harness
- Q44 Connection -2-, in tailgate/bootlid wiring harness



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Gas discharge headlights with automatic headlight range control

from May 2000

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding

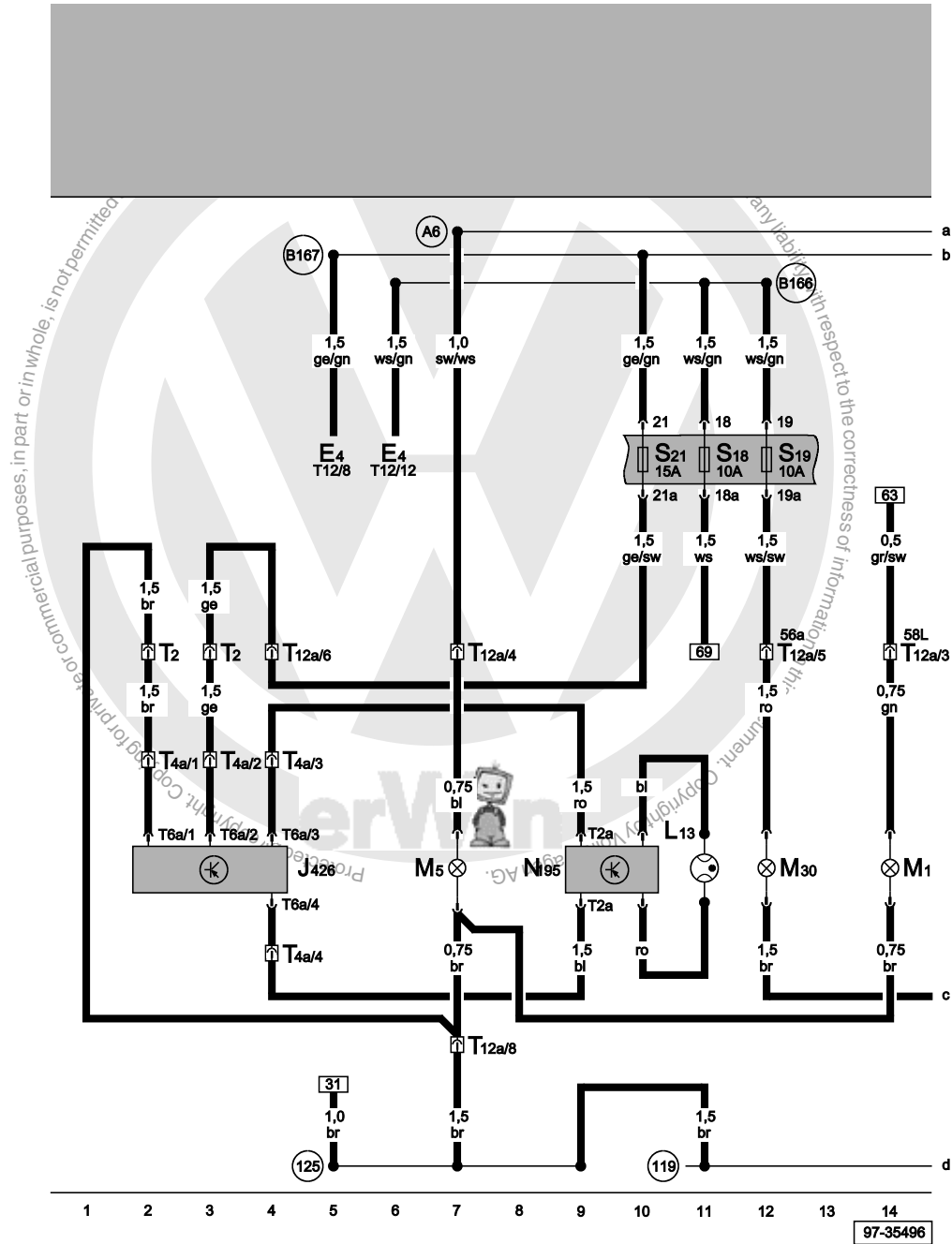


Left gas discharge light control unit, left gas discharge bulb, left main beam bulb, left side light bulb, front left turn signal bulb

- E4 Headlight dipper/flasher switch
- J426 Left headlight starter for gaseous discharge light, behind front left wheel housing
- L13 Left gas discharge (xenon) bulb
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M30 Left main beam bulb
- N195 Gas discharge light starter unit
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T2 2-pin connector, in left headlight
- T2a 2-pin connector
- T4a 4-pin connector, on left headlight
- T6a 6-pin connector
- T12 12-pin connector
- T12a 12-pin connector, on left headlight

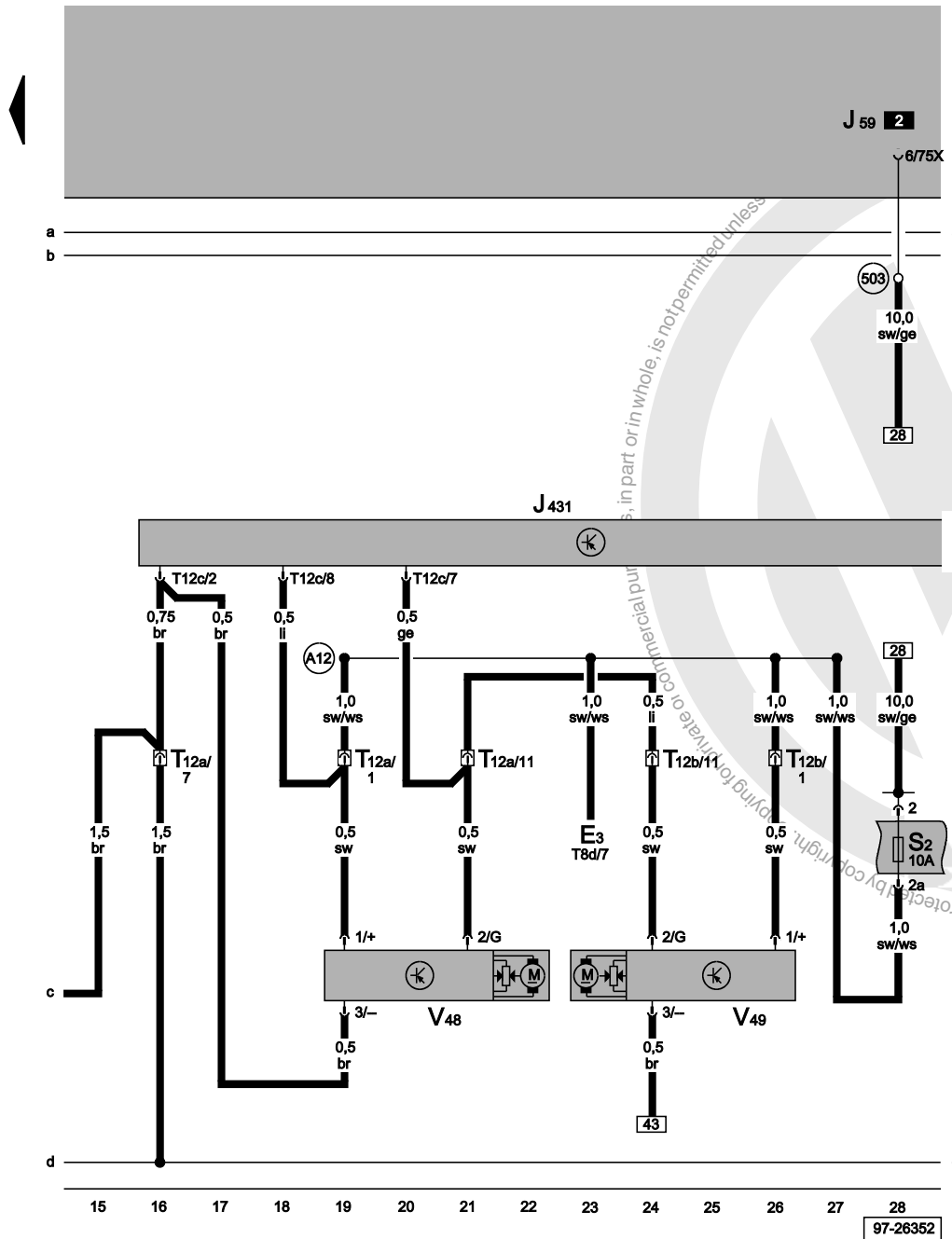
- 119 Earth connection 1, in headlight wiring harness
- 125 Earth connection 3, in headlight wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness

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Headlight range control, control unit, headlight range control motor

- E3 Hazard warning light switch
- J59 X-contact relief relay
- J431 Control unit for headlight range control, in left headlight
- S2 Fuse 2 in fuse holder
- T8d 8-pin connector**
- T12a 12-pin connector, on left headlight
- T12c 12-pin connector
- T12b 12-pin connector, on right headlight
- V48 Left headlight range control motor
- V49 Right headlight range control motor
- 503 Screw connection (75x), on relay plate
- A12 Positive connection (75a), in dash panel wiring harness
- ** Connection numbering of turn signal relay can vary, see fault finding programme!

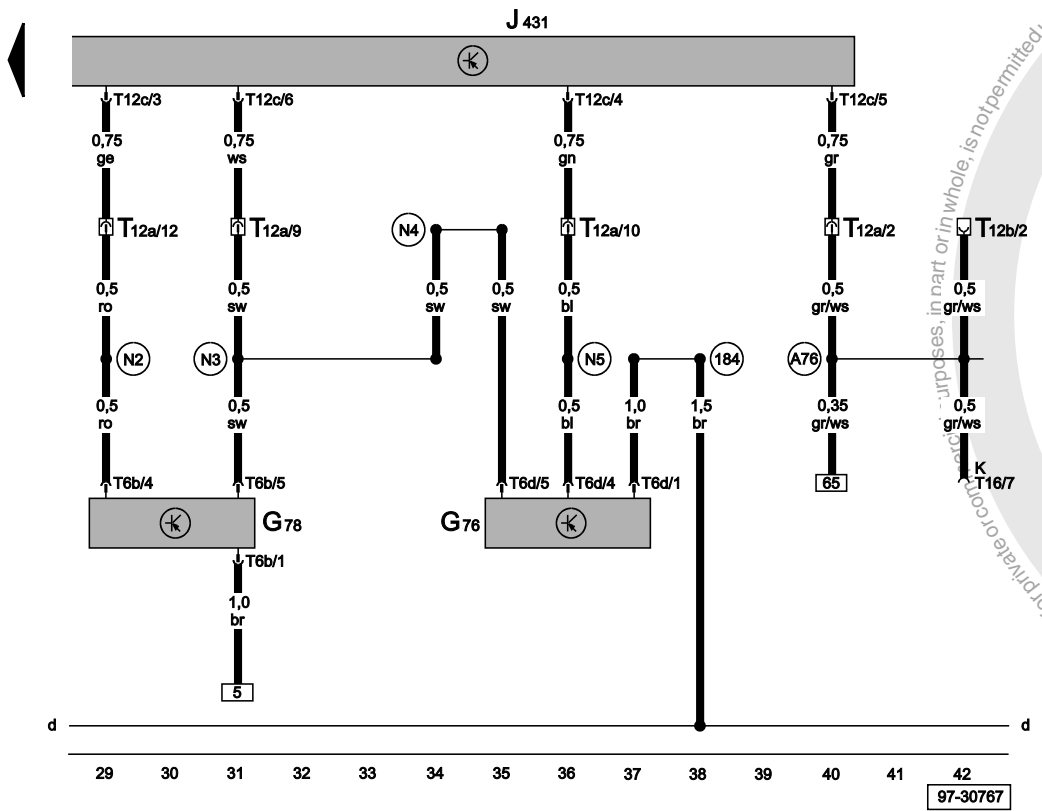
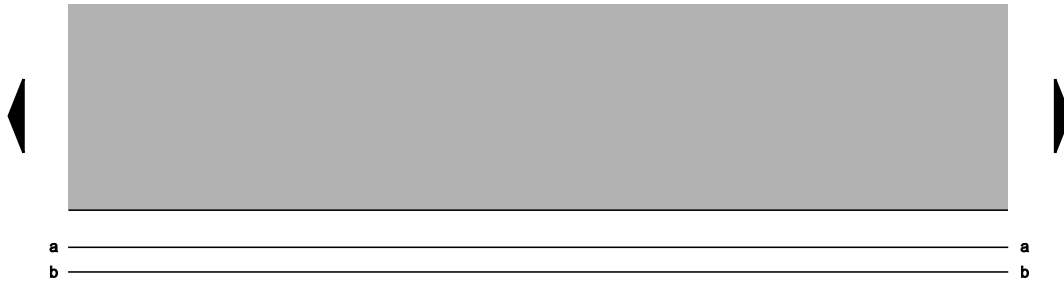


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Control unit for headlight range control, vehicle inclination sender

- G76 Rear left vehicle level sender
- G78 Front left vehicle level sender
- J431 Control unit for headlight range control, in left headlight
- T6b 6-pin connector
- T6d 6-pin connector
- T12a 12-pin connector, on left headlight
- T12b 12-pin connector, on right headlight
- T12c 12-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection

- 184 Earth connection (headlight range control), in engine compartment wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- N2 Connection 1, in headlight range control wiring harness
- N3 Connection 2, in headlight range control wiring harness
- N4 Connection 3, in headlight range control wiring harness
- N5 Connection 4, in headlight range control wiring harness

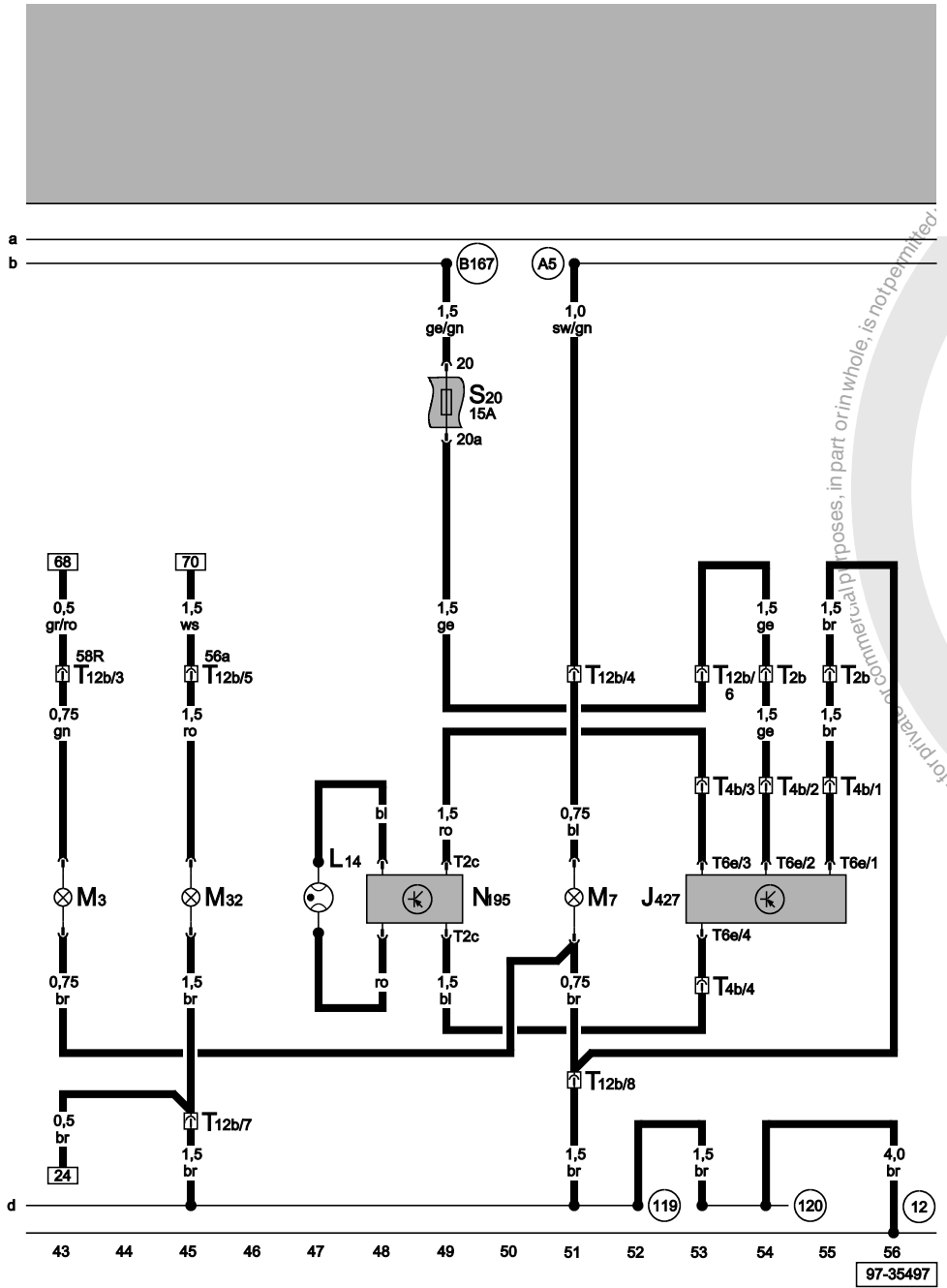


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Right gas discharge light control unit, right gas discharge bulb, right main beam bulb, right side light bulb, front right turn signal bulb

- J427 Right headlight starter for gaseous discharge light, behind front right wheel housing
- L14 Right gas discharge (xenon) bulb
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M32 Right main beam bulb
- N195 Gas discharge light starter unit
- S20 Fuse 20 in fuse holder
- T2b 2-pin connector, in right headlight
- T2c 2-pin connector
- T4b 4-pin connector, on right headlight
- T6e 6-pin connector
- T12b 12-pin connector, on right headlight

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- A5 Positive connection (right turn signal), in dash panel wiring harness
- B167 Connection (56b), in interior wiring harness

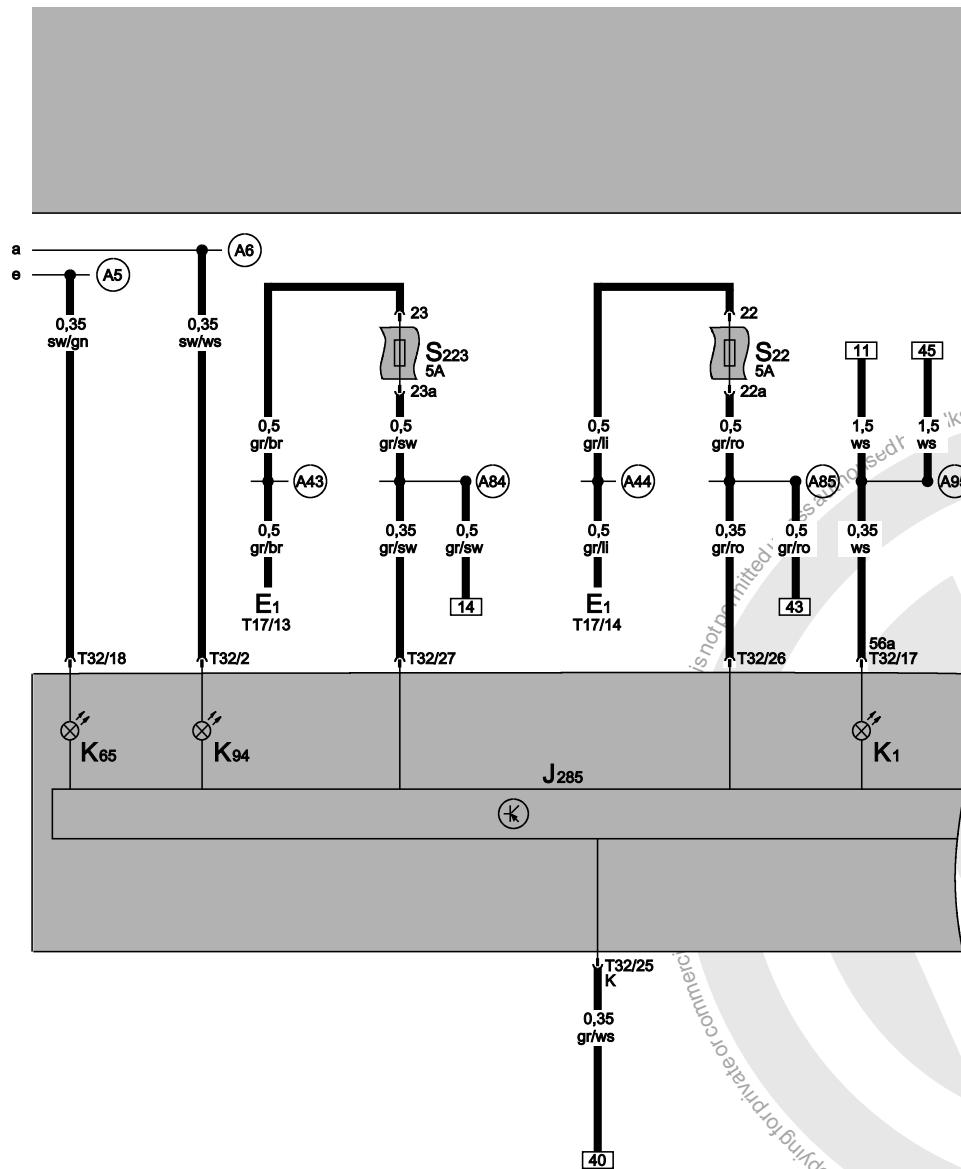


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- li = purple
- ge = yellow
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Dash panel insert, turn signal warning lamp, main beam warning lamp

- E1 Light switch
- J285 Control unit with display in dash panel insert
- K1 Main beam warning lamp
- K65 Left turn signal warning lamp
- K94 Right turn signal warning lamp
- S22 Fuse 22 in fuse holder
- S223 Fuse 23 in fuse holder
- T17 17-pin connector
- T32 32-pin connector, blue

- A5 Positive connection (right turn signal), in dash panel wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- A43 Connection (57L), in dash panel wiring harness
- A44 Connection (57R), in dash panel wiring harness
- A84 Connection (58L), in dash panel wiring harness
- A85 Connection (58R), in dash panel wiring harness
- A95 Connection 1 (56a), in dash panel wiring harness



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57 58 59 60 61 62 63 64 65 66 67 68 69 70

1J1-091060106

Multi-function steering wheel for CCS and radio

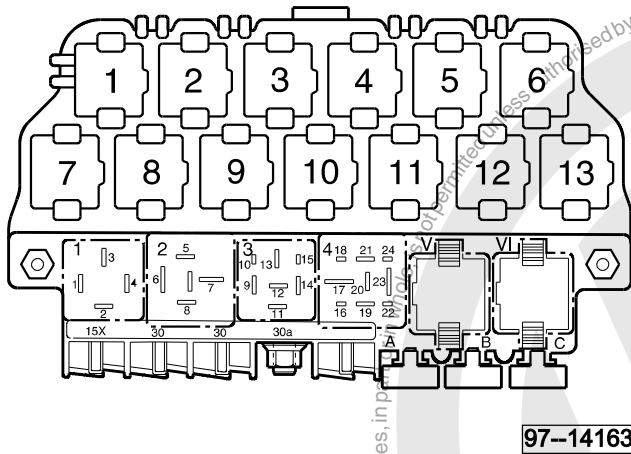
From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

5,6 - Multi-function steering wheel control unit (450)

Relay locations on relay plate:



- 1 - Dual tone horn relay (53)
- 2 - X contact relief relay (100)



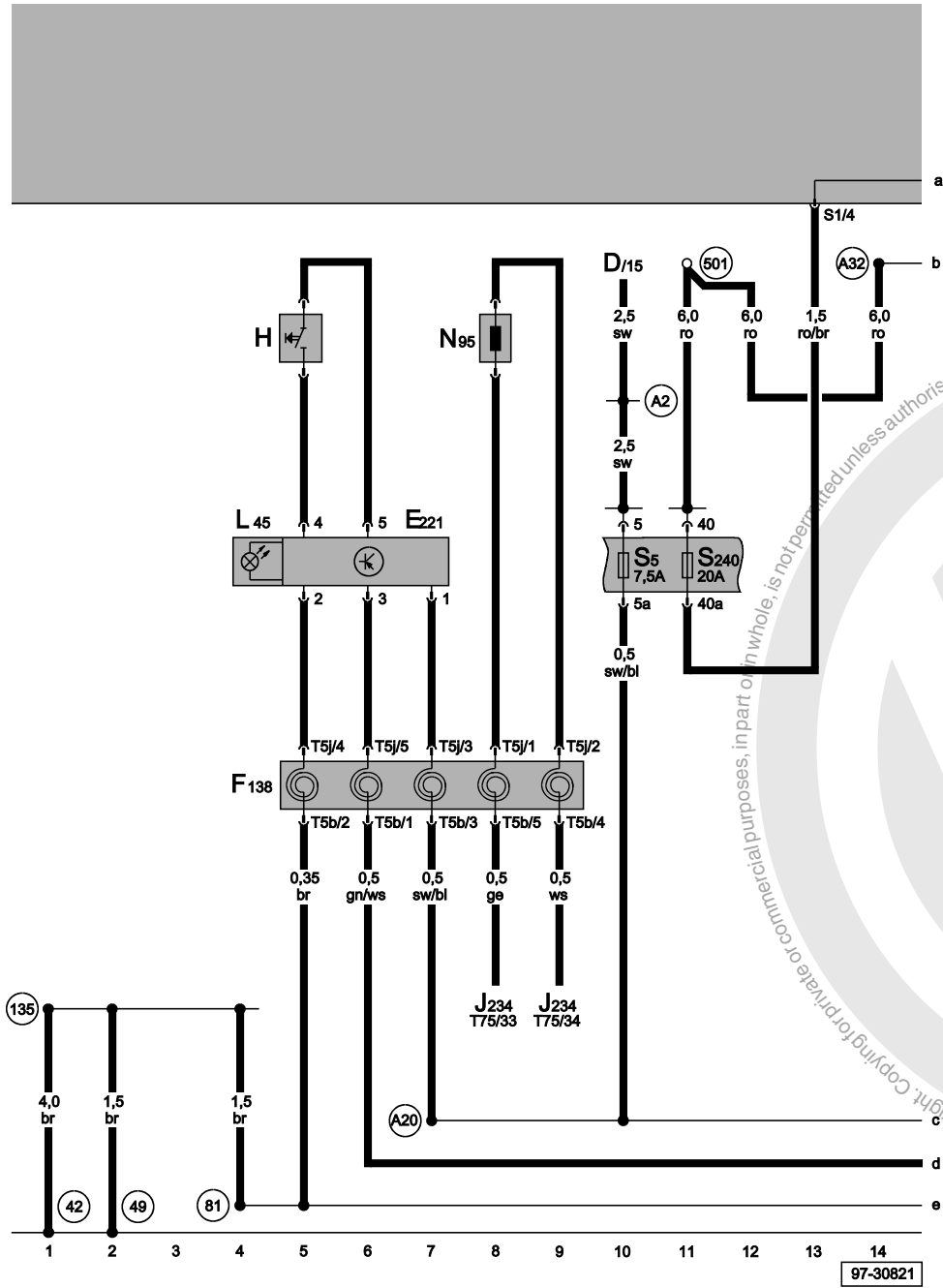
Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Operating unit in steering wheel, horn plate, airbag coil connector, driver airbag igniter

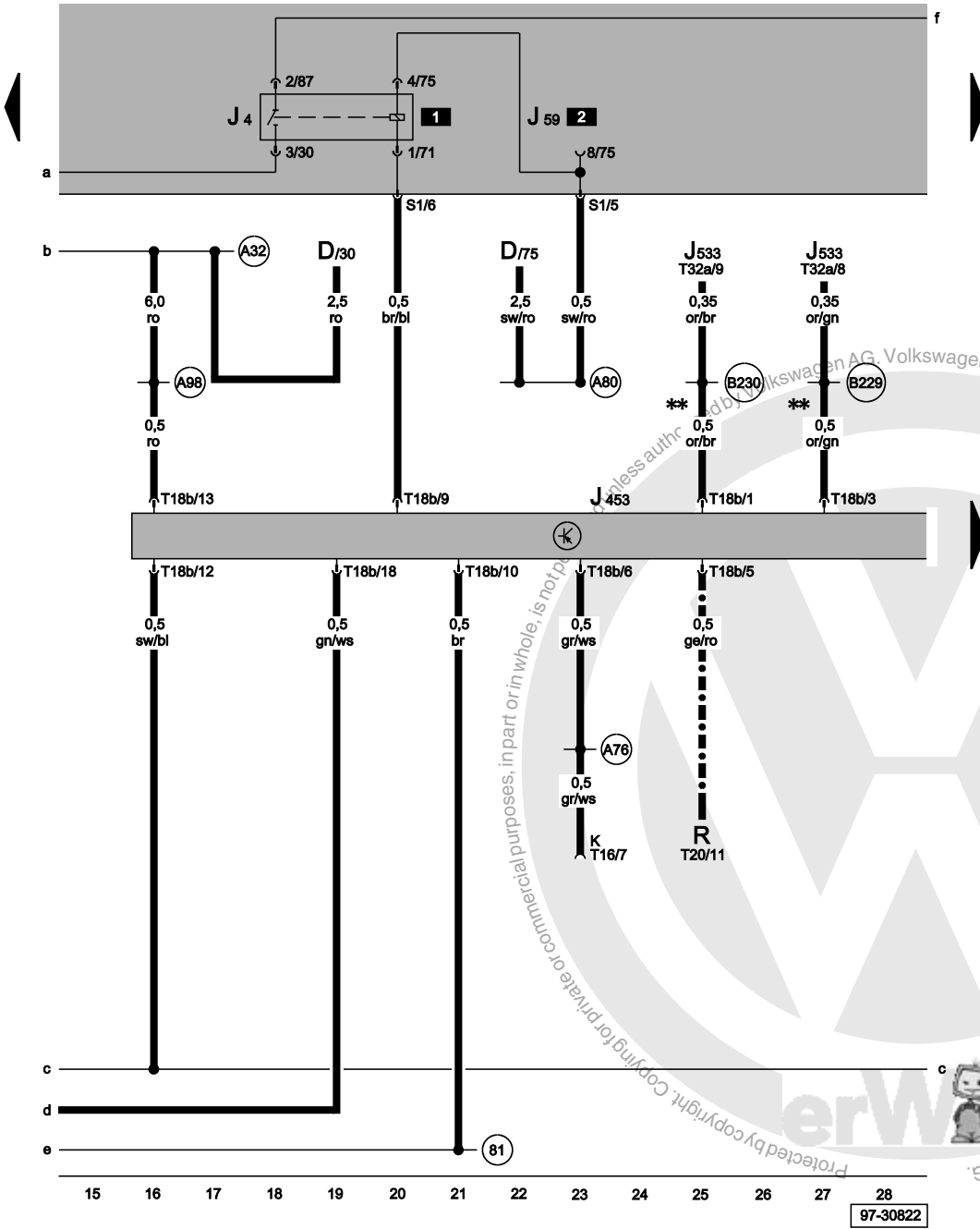


- E221 Operating unit in steering wheel
- F138 Airbag coil connector
- H Horn plate
- J234 Airbag control unit
- L45 Light for memory operating unit
- N95 Airbag igniter, driver's side
- S5 Fuse in fuse box
- S240 Fuse in fuse box
- T5b 5-pin connector
- T5j 5-pin connector
- T75 75-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 501 Screw connection -2- (30), on relay plate
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness

- ws = white
- sw = black
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30821

Multi-function steering wheel control unit, dual tone horn relay



- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X contact relief relay
- J285 Control unit with display in dash panel insert
- J453 Multi-function steering wheel control unit, above the central electrics
- J533 Data bus diagnostic interface
- R Radio
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T18b 18-pin connector
- T20 20-pin connector, green
- T32a 32-pin connector, green
- 81 Earth connection -1-, in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A80 Connection -1- (X), in dash panel wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness
- B229 Connection (high bus), in interior wiring harness
- B230 Connection (low bus), in interior wiring harness
- ** Only models with 'Delta' radio
- .-.- Applies only to models with no 'Delta' radio

97-30822

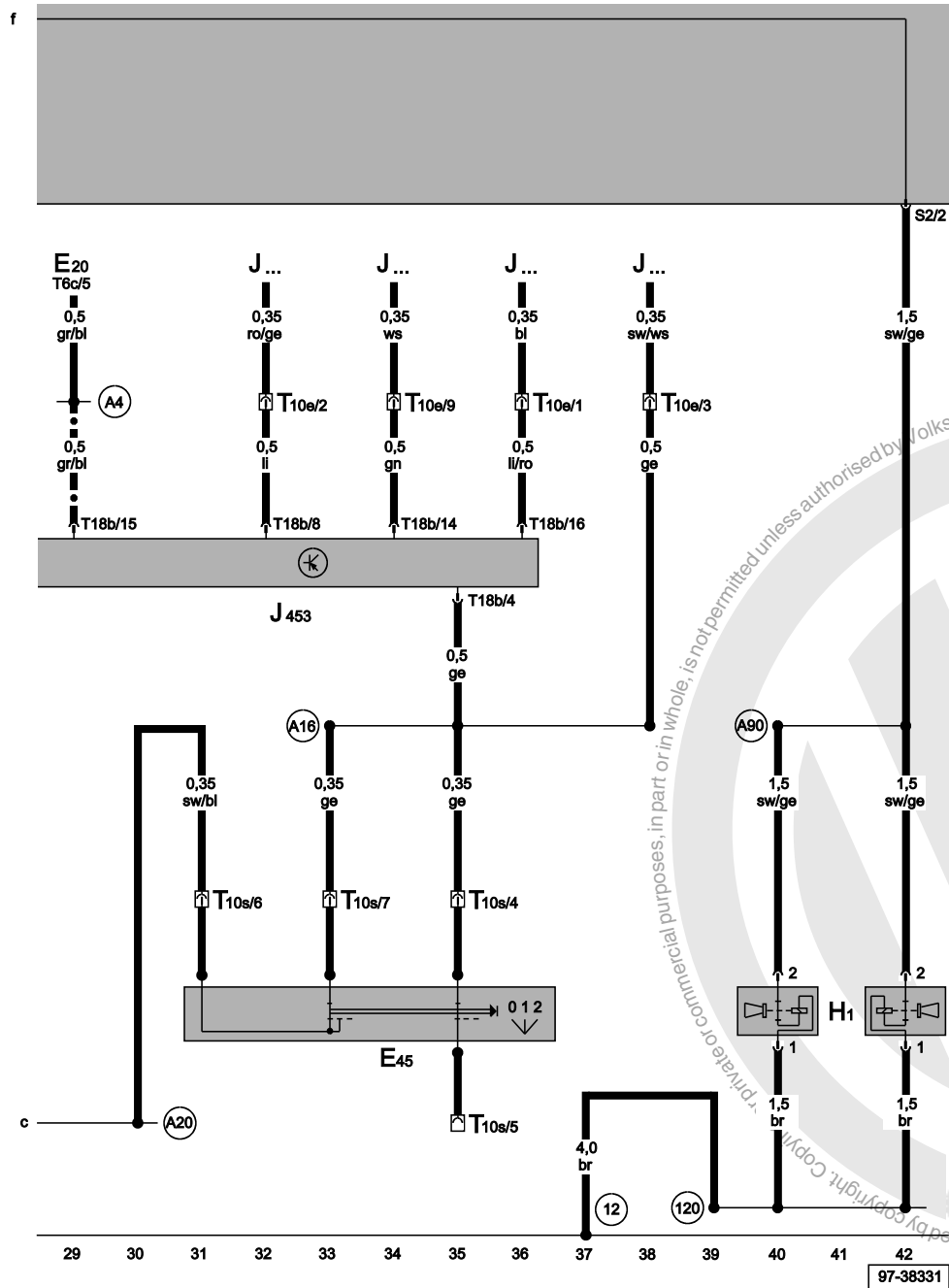
Multi-function steering wheel control unit, cruise control system switch (CCS), dual tone horn

- E45 Cruise control system (CCS) switch
- E20 Switches and instruments illumination regulator
- H1 Dual tone horn
- J... Engine control unit
- J453 Multi-function steering wheel control unit, above the central electrics
- T6c 6-pin connector
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber*
- T10s 10-pin connector, next to steering column
- T18b 18-pin connector

- 12 Earth point, on left in engine compartment
- 120 Earth connection 2, in headlight wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A16 Connection (CCS), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A90 Connection (dual tone horn), in dash panel wiring harness

* ⇒ Current Flow Diagram CCS/engine
 - - - Not with 'Delta' radio

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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-38331

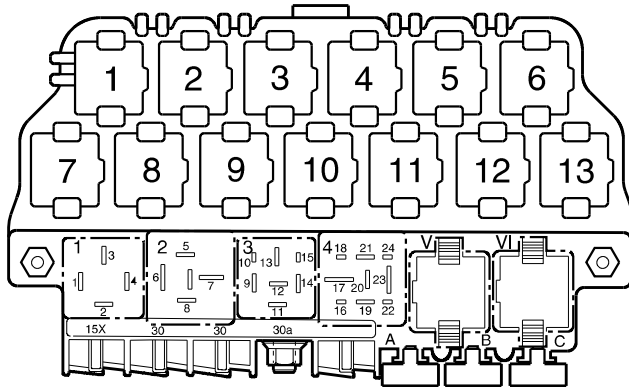
Automatic anti-dazzle interior mirror, rain sensor

From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

V, VI - Automatic intermittent wash/wipe relay (192)

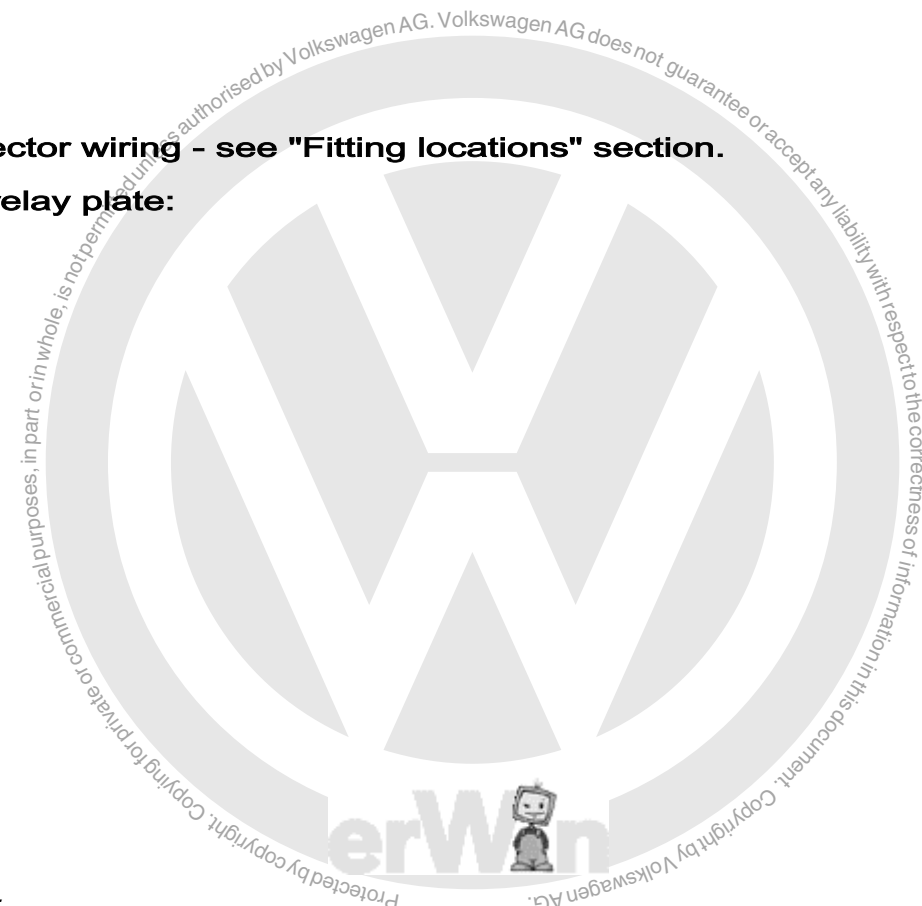


Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

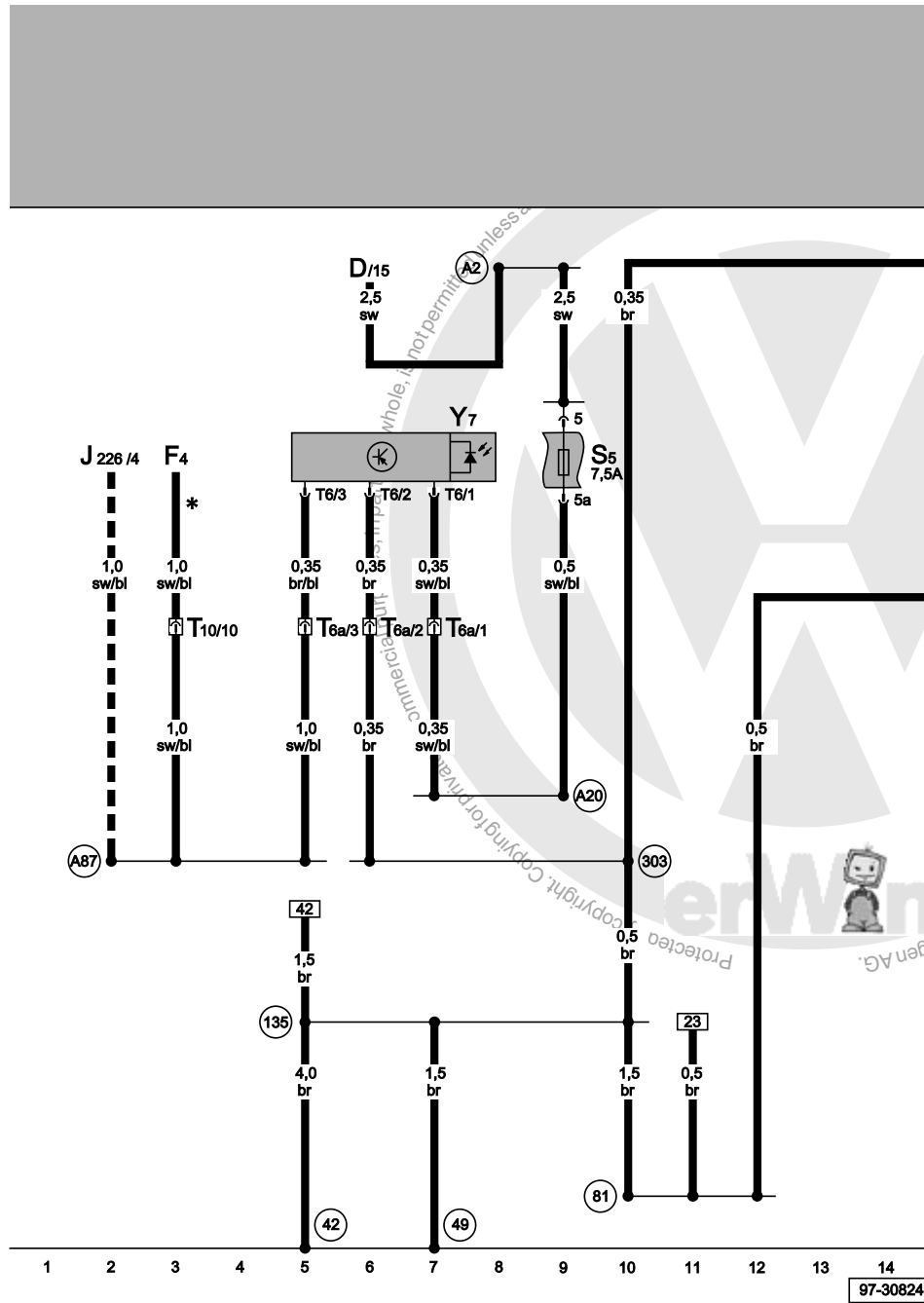
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Automatic anti-dazzle interior mirror

- D Ignition/starter switch
- F4 Reversing light switch
- J226 Starter inhibitor and reversing light relay
- S5 Fuse in fuse box
- T6 6-pin connector
- T6a 6-pin connector, near interior light, front
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- Y7 Automatic anti-dazzle interior mirror

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 303 Earth connection -rain sensor/mirror-, in interior wiring harness
- A2 Positive (+) connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A87 Connection (RF (reversing light)), in dash panel wiring harness
- * Only models with manual gearbox
- Only models with automatic gearbox

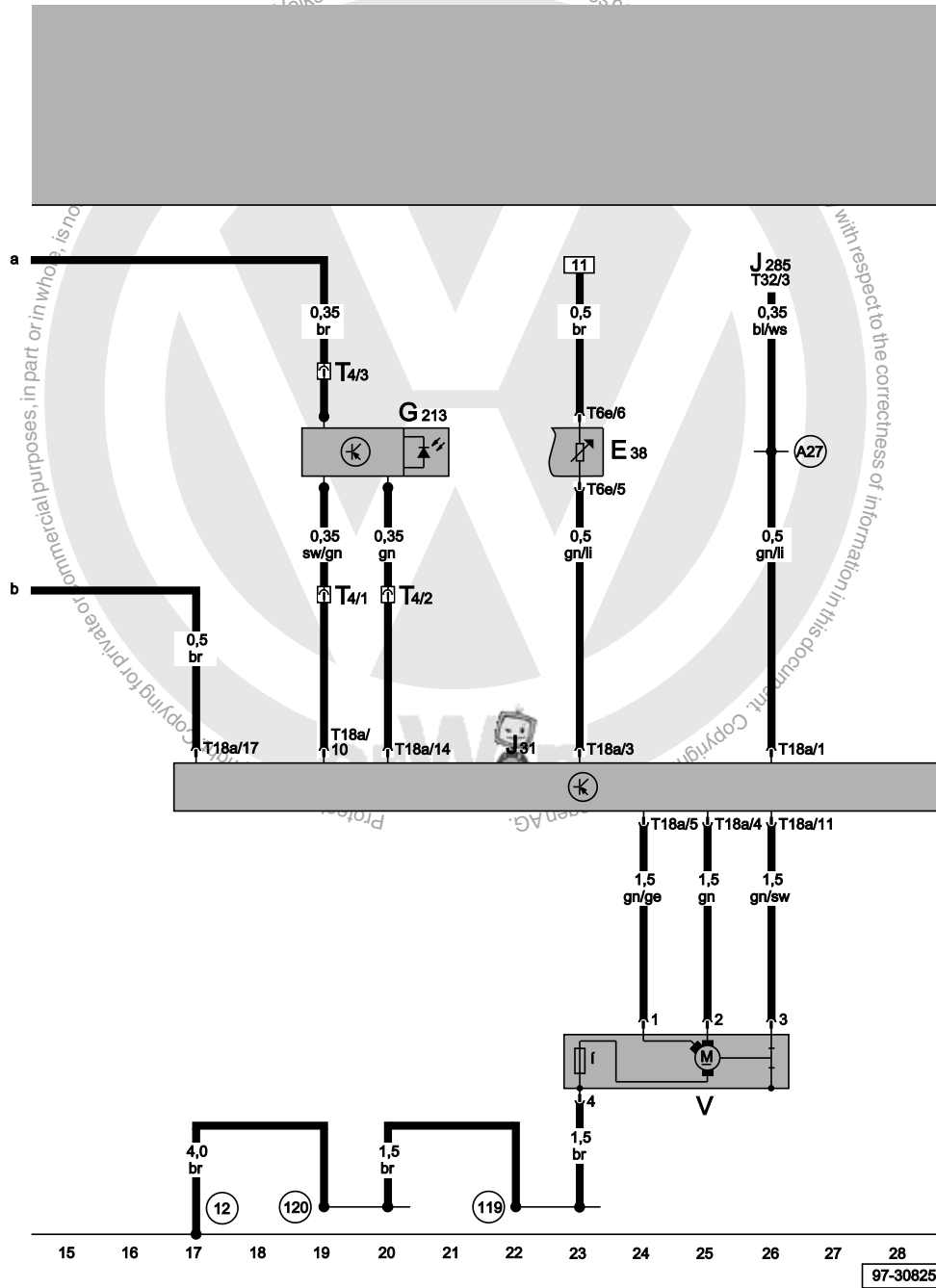


97-30824

Windscreen wiper motor, automatic intermittent wash/wipe relay, rain sensor

- E38 Intermittent wiper control
- G213 Rain sensor
- J31 Automatic intermittent wash/wipe relay, on relay plate
- J285 Control unit with display in dash panel insert
- T4 4-pin connector, near front interior light
- T6e 6-pin connector
- T18a 18-pin connector
- T32 32-pin connector, blue
- V Windscreen wiper motor

- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- A27 Connection (speed signal), in dash panel wiring harness

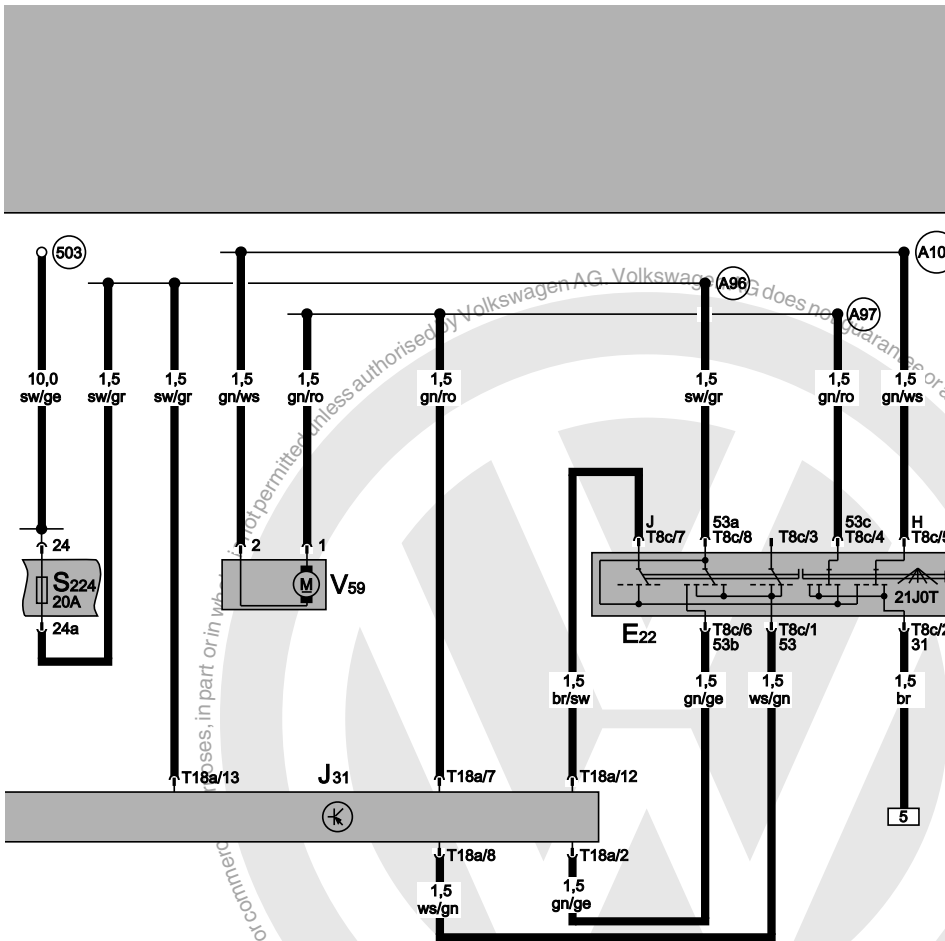


- ws = white
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- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Intermittent wiper switch, automatic intermittent wash/wipe relay, windscreen and rear window washer pump

- E22 Intermittent wiper switch
- J31 Automatic intermittent wash/wipe relay, on relay plate
- S224 Fuse in fuse box
- T8c 8-pin connector
- T18a 18-pin connector
- V59 Windscreen and rear window washer pump

- 503 Screw connection (75x), on relay plate
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness



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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

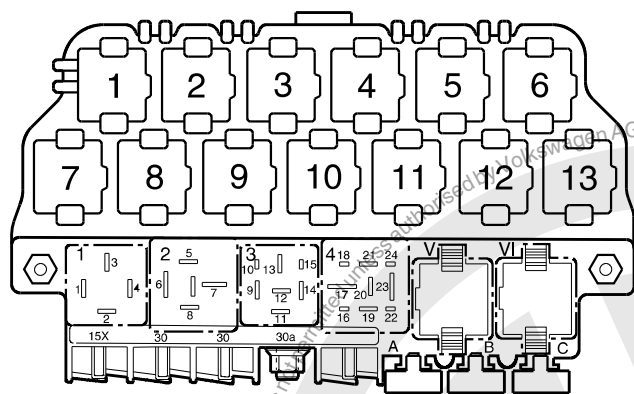
Headlight washer system

From May 2000

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

V, VI - Automatic intermittent wash/wipe relay (389)



Note:

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

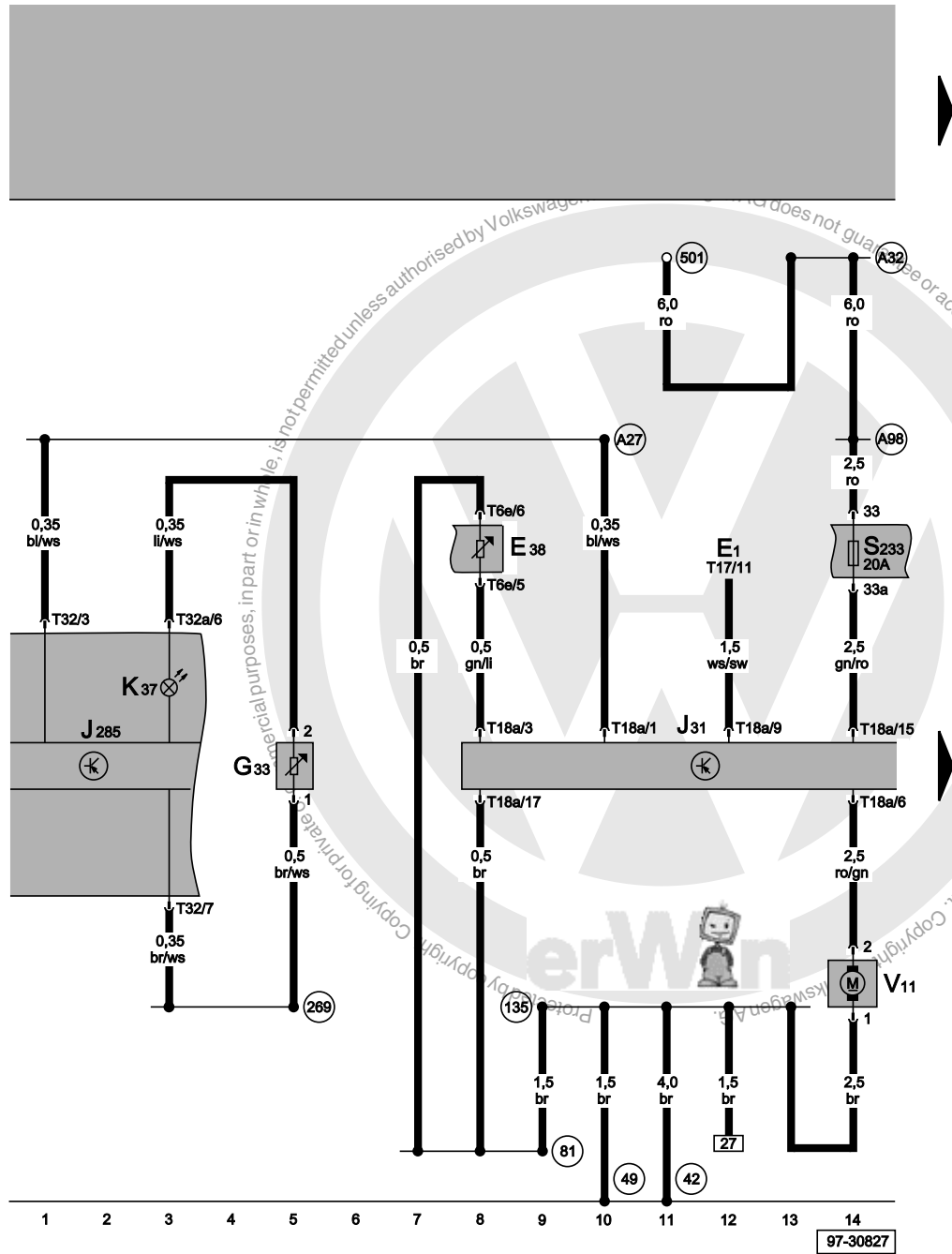
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple

Automatic intermittent wash/wipe relay, intermittent wiper control, headlight washer system pump, windscreen washer fluid level sender

- E1 Lighting switch
- E38 Intermittent wiper control
- G33 Windscreen washer fluid level sender
- J31 Automatic intermittent wash/wipe relay, on relay plate
- J285 Control unit with display in dash panel insert
- K37 Windscreen washer fluid level warning lamp
- S233 Fuse in fuse box
- T6e 6-pin connector
- T17 17-pin connector, on lighting switch
- T18a 18-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- V11 Headlight washer system pump

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection -1-, in dash panel wiring harness
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 501 Screw connection -2- (30), on relay plate
- A27 Connection (speed signal), in dash panel wiring harness
- A32 Positive (+) connection (30), in dash panel wiring harness
- A98 Positive (+) connection -4- (30), in dash panel wiring harness

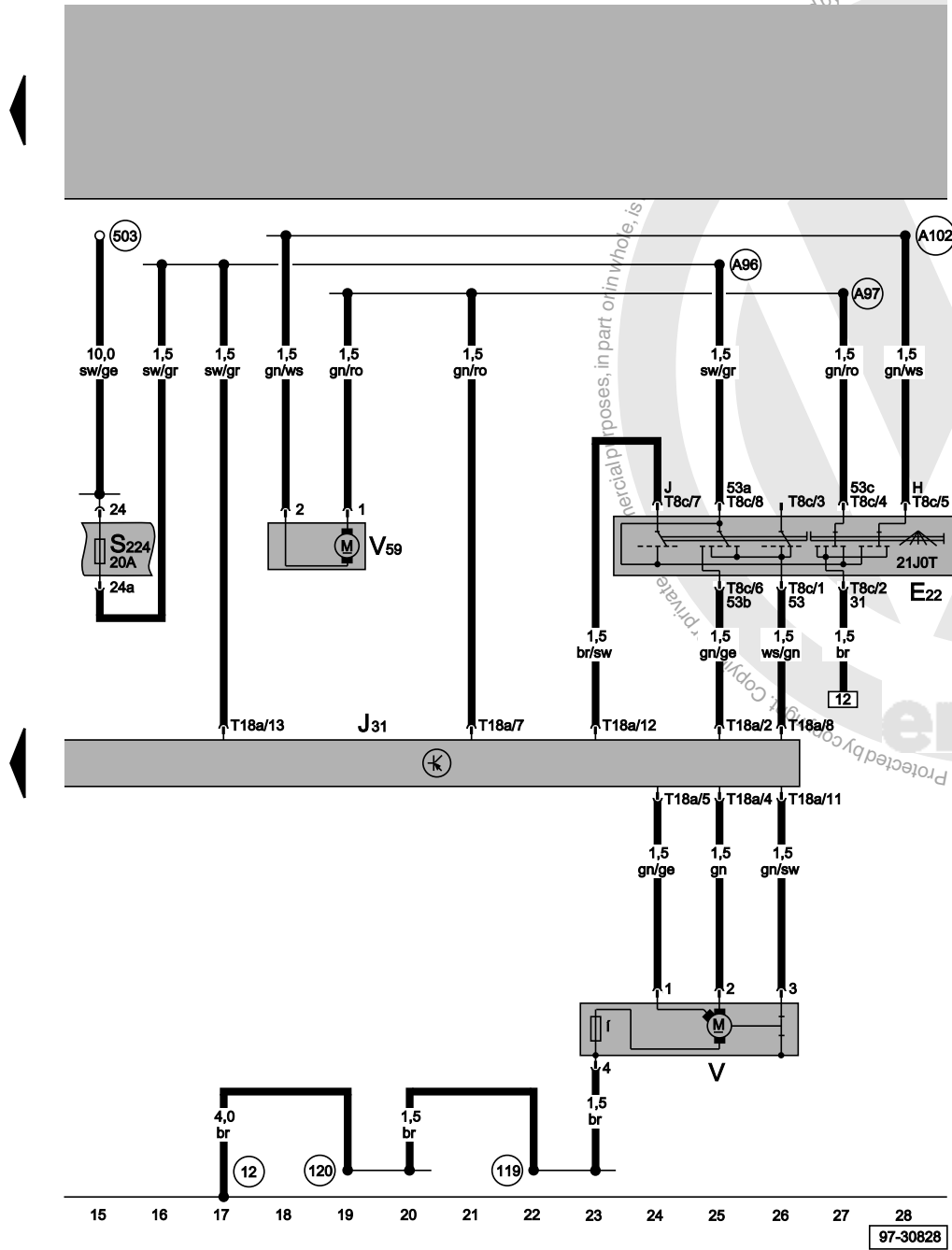


- ws = white
- sw = black
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30827

Intermittent wiper switch, windscreen wiper motor, automatic intermittent wash/wipe relay, windscreen and rear window washer pump

- E22 Intermittent wiper switch
- J31 Automatic intermittent wash/wipe relay, on relay plate
- S224 Fuse in fuse box
- T8c 8-pin connector
- T18a 18-pin connector
- V Windscreen wiper motor
- V59 Windscreen and rear window washer pump
- 12 Earth point, in engine compartment, left
- 119 Earth connection -1-, in headlight wiring harness
- 120 Earth connection -2-, in headlight wiring harness
- 503 Screw connection (75x), on relay plate
- A96 Connection (53a), in dash panel wiring harness
- A97 Connection (53), in dash panel wiring harness
- A102 Connection (windscreen wiper), in dash panel wiring harness



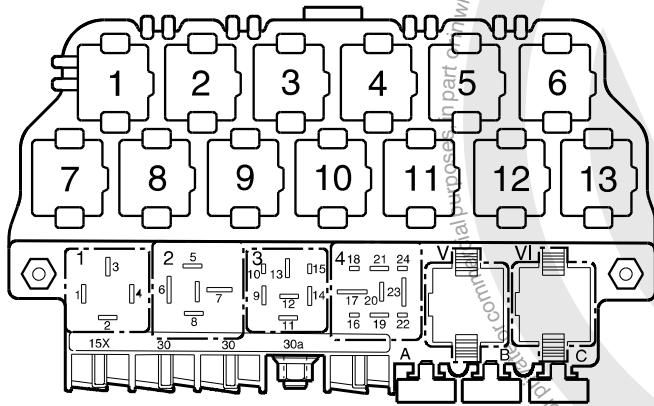
- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Anti-locking brake system (ABS) with electronic differential lock (EDL), traction control system (TCS) and electronic stability program (ESP)

from November 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:



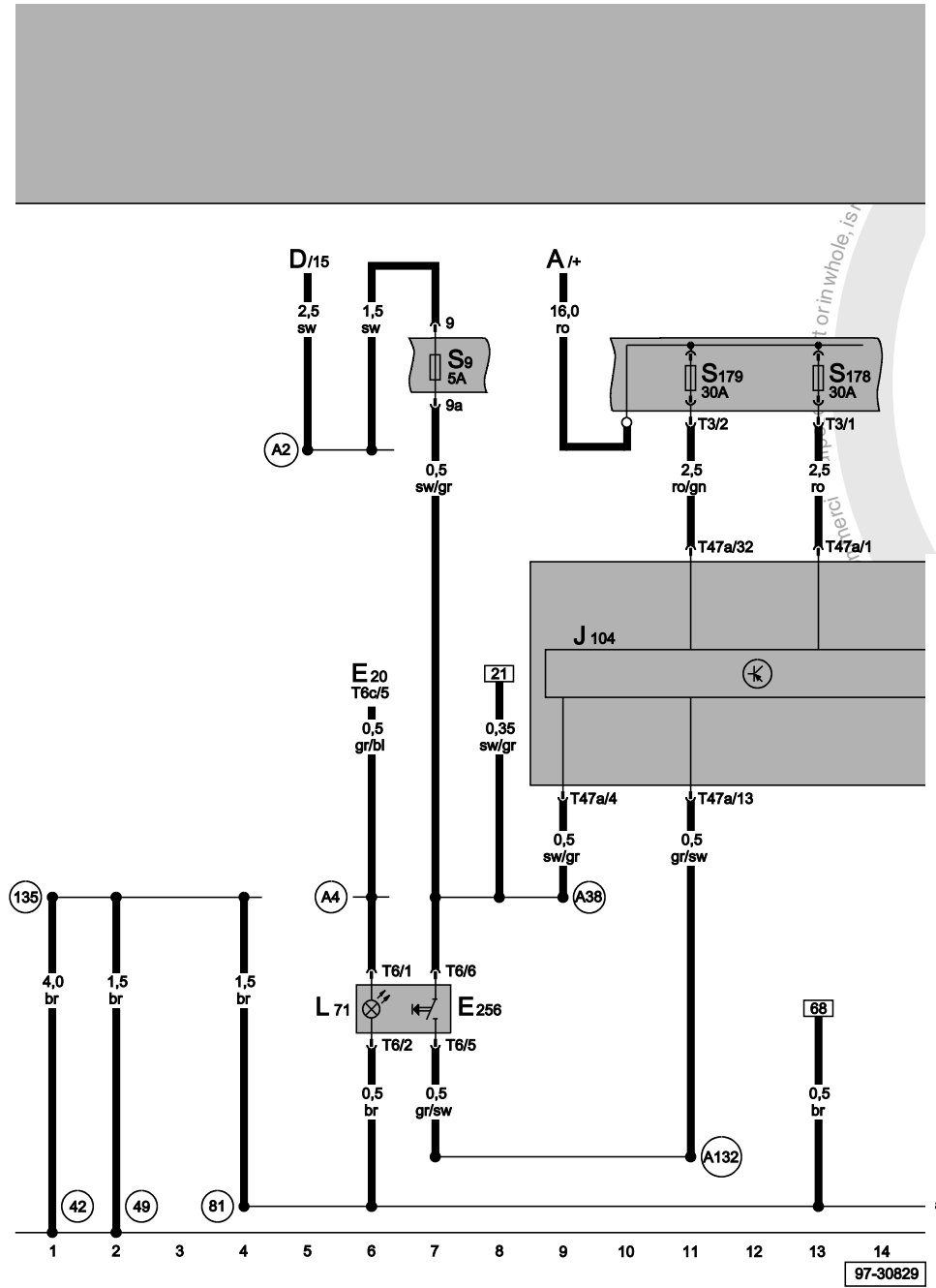
Note:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple

ABS/ABS control unit with EDL/ ASR/ ESP, TCS and ESP button



- A Battery
- D Ignition/starter switch
- E20 Illumination regulators - switches and instruments
- E256 TCS and ESP button
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- L71 Traction control switch illumination
- S9 Fuse 9 in fuse holder
- S178 Fuse -6- (30), in fuse holder on battery
- S179 Fuse -7- (30), in fuse holder on battery
- T3 3-pin connector
- T6 6-pin connector
- T6c 6-pin connector
- T47a 47-pin connector
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A2 Positive connection (15), in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A38 Positive connection -2- (15a), in dash panel wiring harness
- A132 Connection (TCS/ESP), in dash panel wiring harness

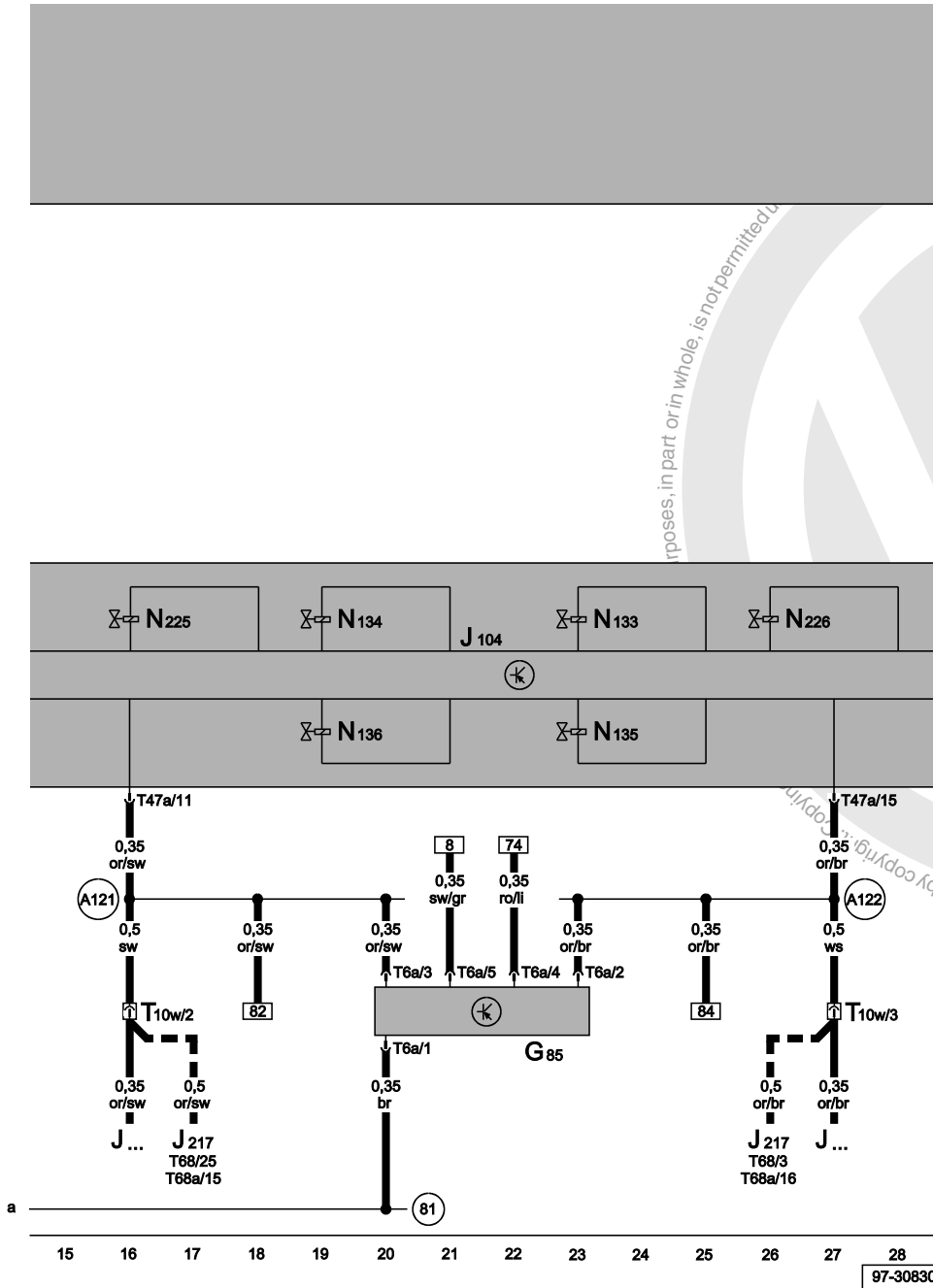
ws = white
 sw = black
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 bl = blue
 gr = grey
 li = purple
 ge = yellow
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 rs = pink

97-30829

ABS/ABS control unit with EDL/ ASR/ ESP, steering angle sender

- G85 Steering angle sender, on steering column
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- J217 Automatic gearbox control unit
- J... Engine control units
- N133 Rear right ABS inlet valve
- N134 Rear left ABS inlet valve
- N135 Rear right ABS outlet valve
- N136 Rear left ABS outlet valve
- N225 Vehicle stabilization program switch valve 1
- N226 Vehicle stabilization program switch valve 2
- T6a 6-pin connector
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector
- T68 68-pin connector, models with 4-speed automatic gearbox (AG4)
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)

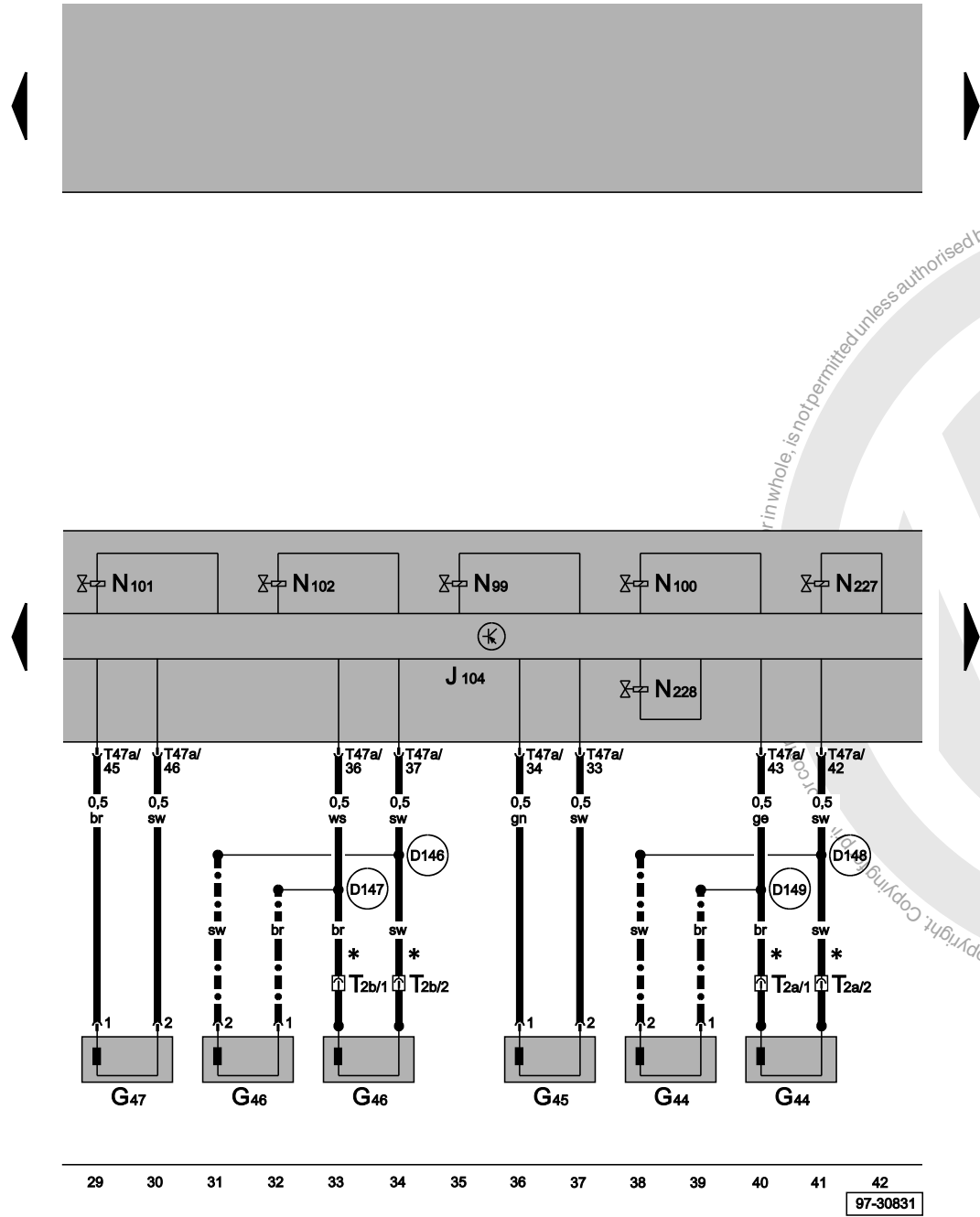
- 81 Earth connection 1, in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only



97-30830

ABS/ABS control unit with EDL/ ASR/ ESP, speed sensor

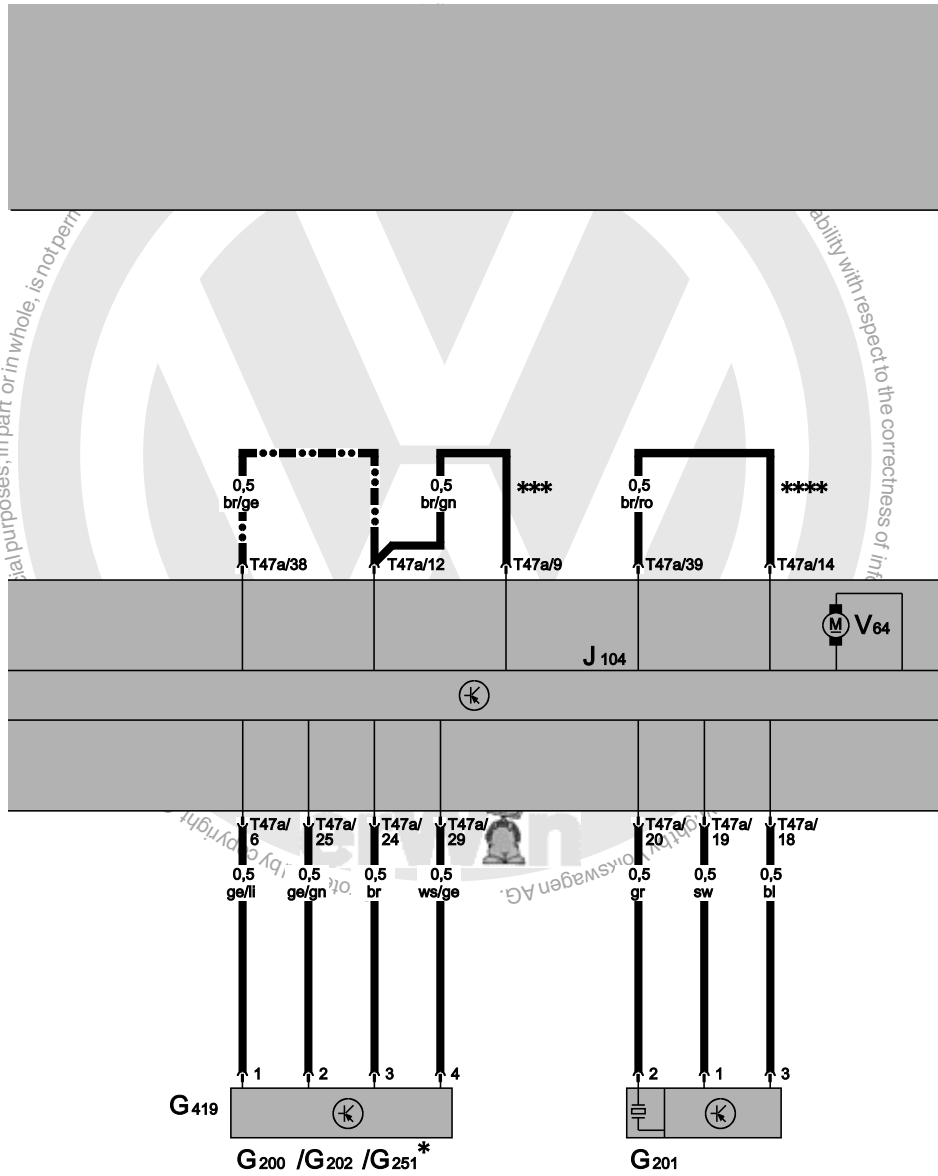
- G44 Rear right speed sensor
- G45 Front right speed sensor
- G46 Rear left speed sensor
- G47 Front left speed sensor
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- N99 Front right ABS inlet valve
- N100 Front right ABS outlet valve
- N101 Front left ABS inlet valve
- N102 Front left ABS outlet valve
- N227 Vehicle stabilization program high pressure valve 1
- N228 Vehicle stabilization program high pressure valve 2
- T2a 2-pin connector, near rear right speed sensor
- T2b 2-pin connector, near rear left speed sensor
- T47a 47-pin connector
- D146 Connection (rear left speed sensor +), in engine compartment wiring harness
- D147 Connection (rear left speed sensor -), in engine compartment wiring harness
- D148 Connection (rear right speed sensor +), in engine compartment wiring harness
- D149 Connection (rear right speed sensor -), in engine compartment wiring harness
- * only models with central locking
- ...- only models without parking aid



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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS/ABS control unit with EDL/ ASR/ ESP, lateral acceleration sender, brake pressure sender, yaw rate sender, ABS hydraulic pump, longitudinal acceleration sender, ESP sensor unit

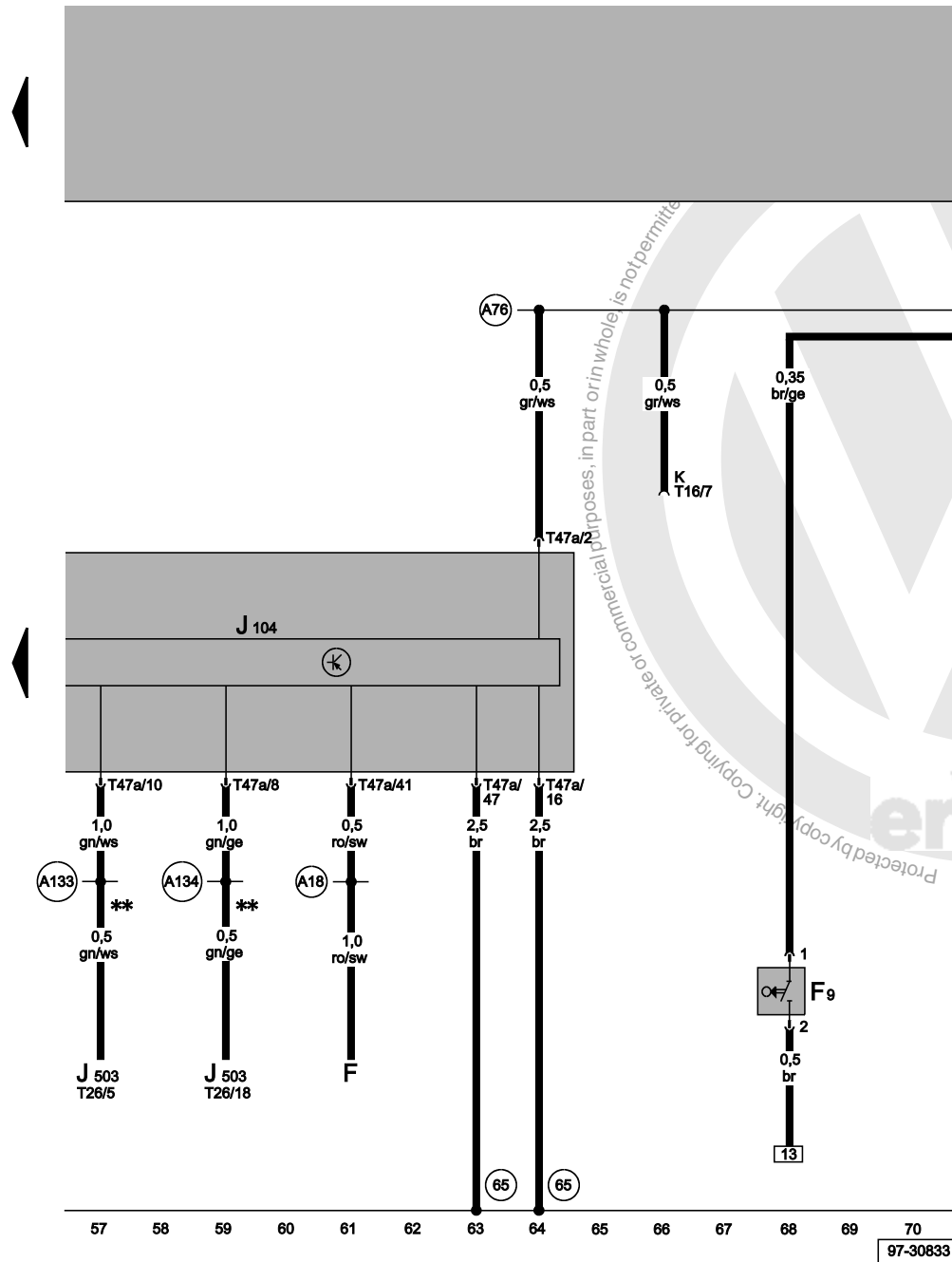
- G200 Lateral acceleration sender, on steering column
- G201 Brake pressure sender 1, on brake master cylinder
- G202 Yaw rate sender, on steering column
- G251 Longitudinal acceleration sender, on steering column*
- G419 ESP sensor unit
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- T47a 47-pin connector
- V64 ABS hydraulic pump
- * only models with central locking
- *** models with four-wheel drive only (not for engine codes BFH)
- only models with front-wheel drive
- **** models with four-wheel drive only (only engine codes BFH)



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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

ABS/ABS control unit with EDL/ ASR/ ESP, handbrake warning switch, self-diagnosis connection

- F Brake light switch
- F9 Handbrake warning switch
- J104 ABS control unit with EDL/ ASR/ ESP, in left engine compartment
- J503 Control unit with display for radio and navigation system**
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T26 26-pin connector**
- T47a 47-pin connector
- 65 Earth point, on front of left longitudinal member
- A18 Connection (54), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- A133 Connection (left ABS impulse), in dash panel wiring harness
- A134 Connection (right ABS impulse), in dash panel wiring harness
- ** only models with navigation

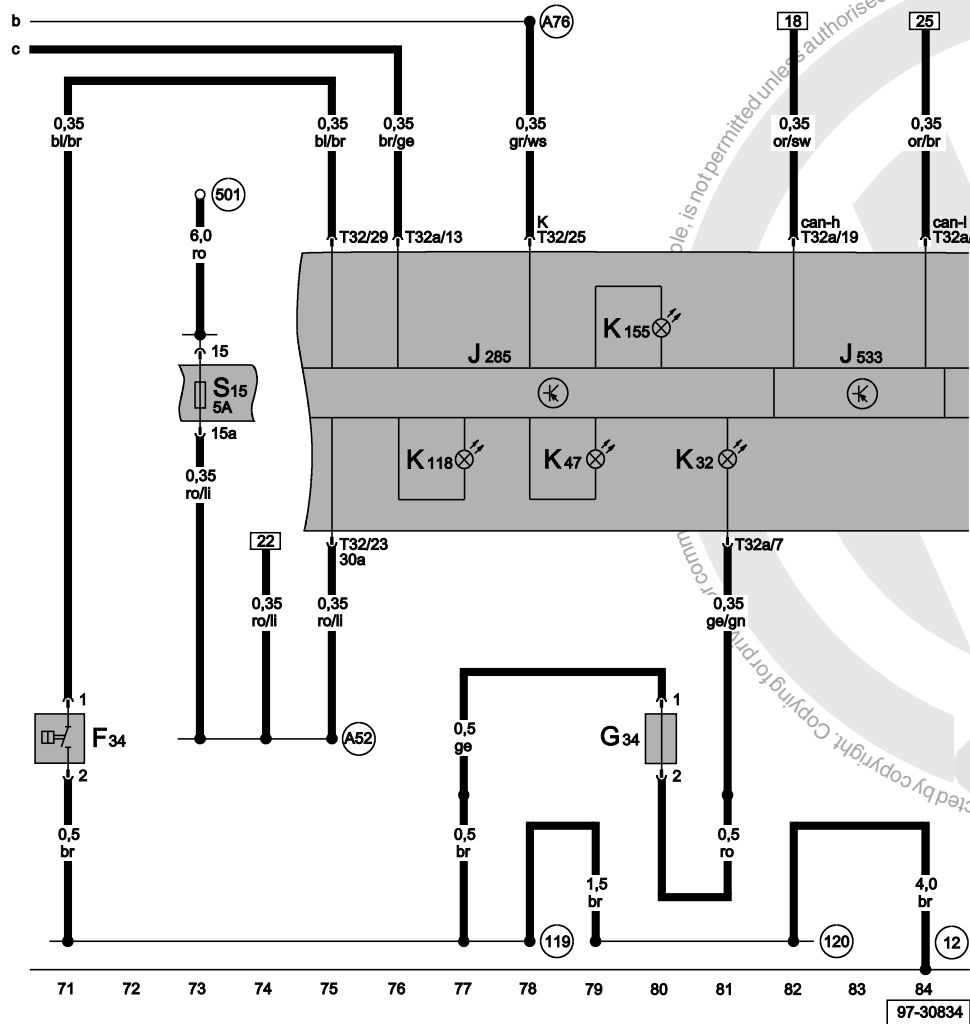


97-30833

Dash panel insert, brake system warning lamp, ABS warning lamp, ESP and TCS warning lamp, brake pad wear control, brake fluid level warning contact

- F34 Brake fluid level warning contact
- G34 Front left brake pad wear sender
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K32 Brake pad warning lamp
- K47 ABS warning lamp
- K118 Brake system warning lamp
- K155 TCS and ESP warning lamp
- S15 Fuse 15 in fuse holder
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- 12 Earth point, on left in engine compartment
- 119 Earth connection 1, in headlight wiring harness
- 120 Earth connection 2, in headlight wiring harness
- 501 Screw connection 2 (30), on relay plate
- A52 Positive connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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- li = purple
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- or = orange
- rs = pink

97-30834

Climatronic

⇒ 1.6 l/81 kW Motronic, engine code BAD
from October 2001

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

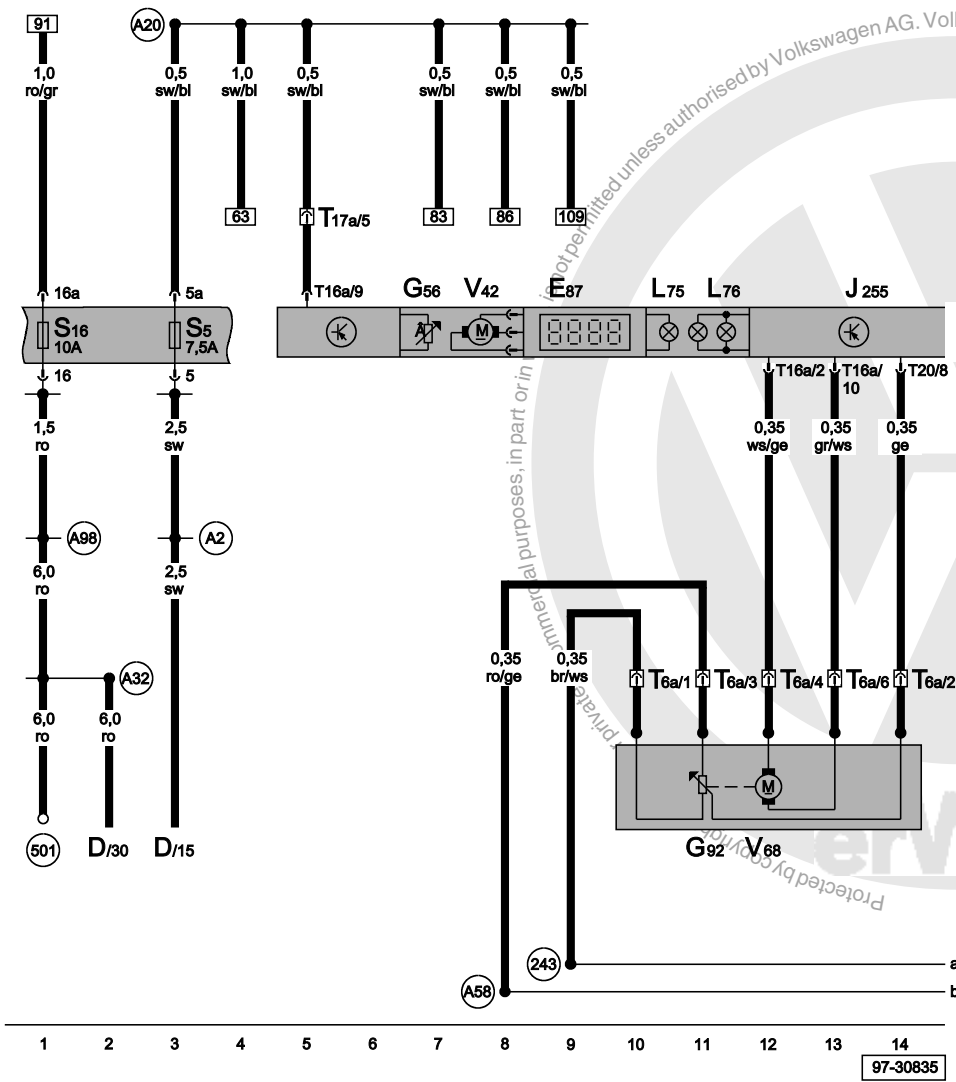
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs
- ⇒ guided fault finding



Climatronic control unit, temperature flap control motor



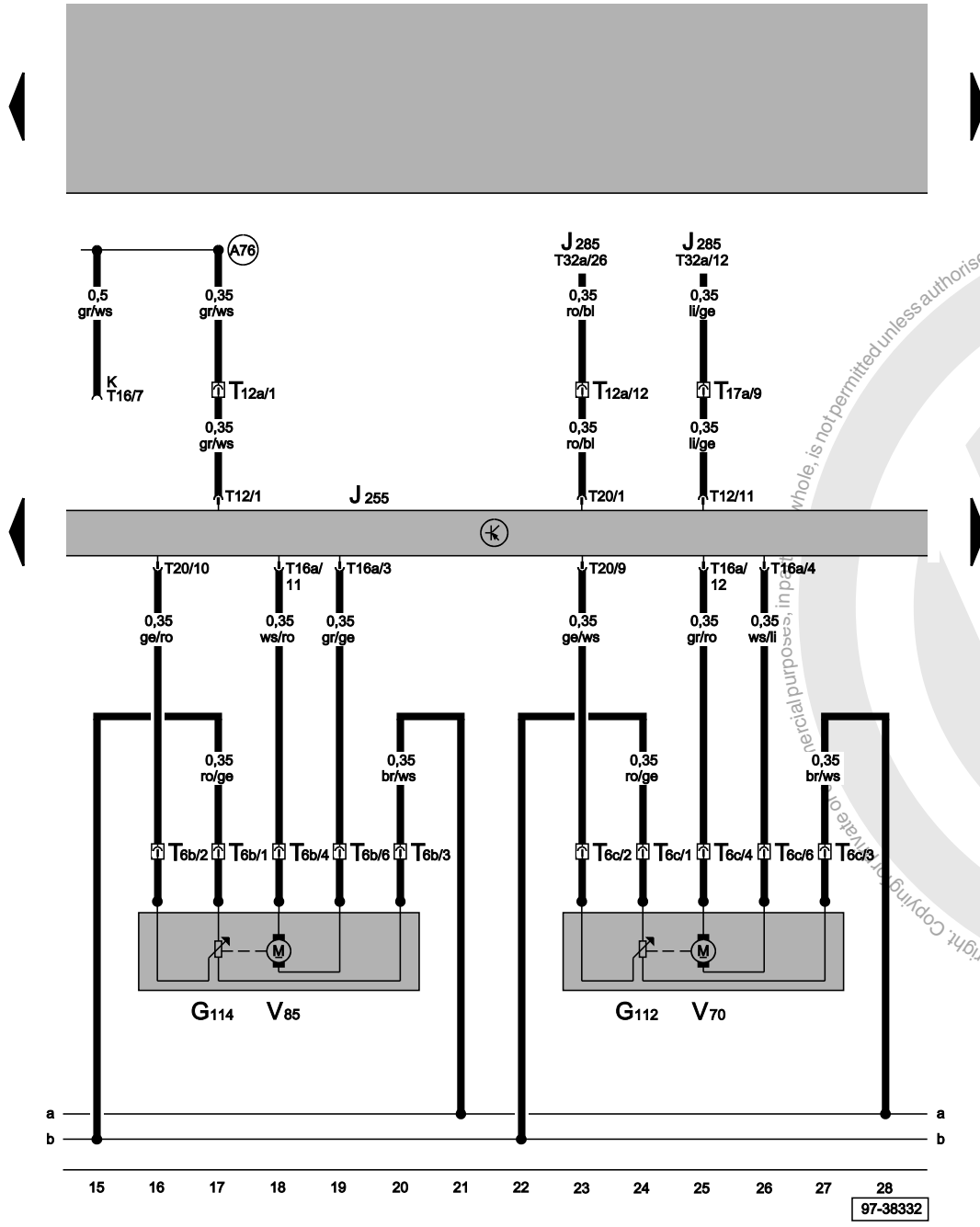
- D Ignition/starter switch
- E87 Rear Climatronic operating and display unit
- G56 Dash panel temperature sensor
- G92 Potentiometer for temperature flap control motor
- J255 Climatronic control unit
- L75 Digital display illumination bulb
- L76 Button illumination bulb
- S5 Fuse 5 in fuse holder
- S16 Fuse 16 in fuse holder
- T6a 6-pin connector, behind centre dash panel
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V42 Temperature sensor blower
- V68 Temperature flap control motor
- 243 Earth connection 1, in Climatronic wiring harness
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A58 Connection (5 volt), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness

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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30835

Climatronic control unit, central flap control motor, footwell and defroster flap control motor

- G112 Central flap control motor potentiometer
- G114 Footwell/defroster flap control motor potentiometer
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- T6b 6-pin connector, behind centre dash panel
- T6c 6-pin connector, behind centre dash panel
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32a 32-pin connector, green, on dash panel insert
- V70 Central flap control motor
- V85 Footwell and defroster flap control motor
- A76 Connection (diagnosis wire K), in dash panel wiring harness

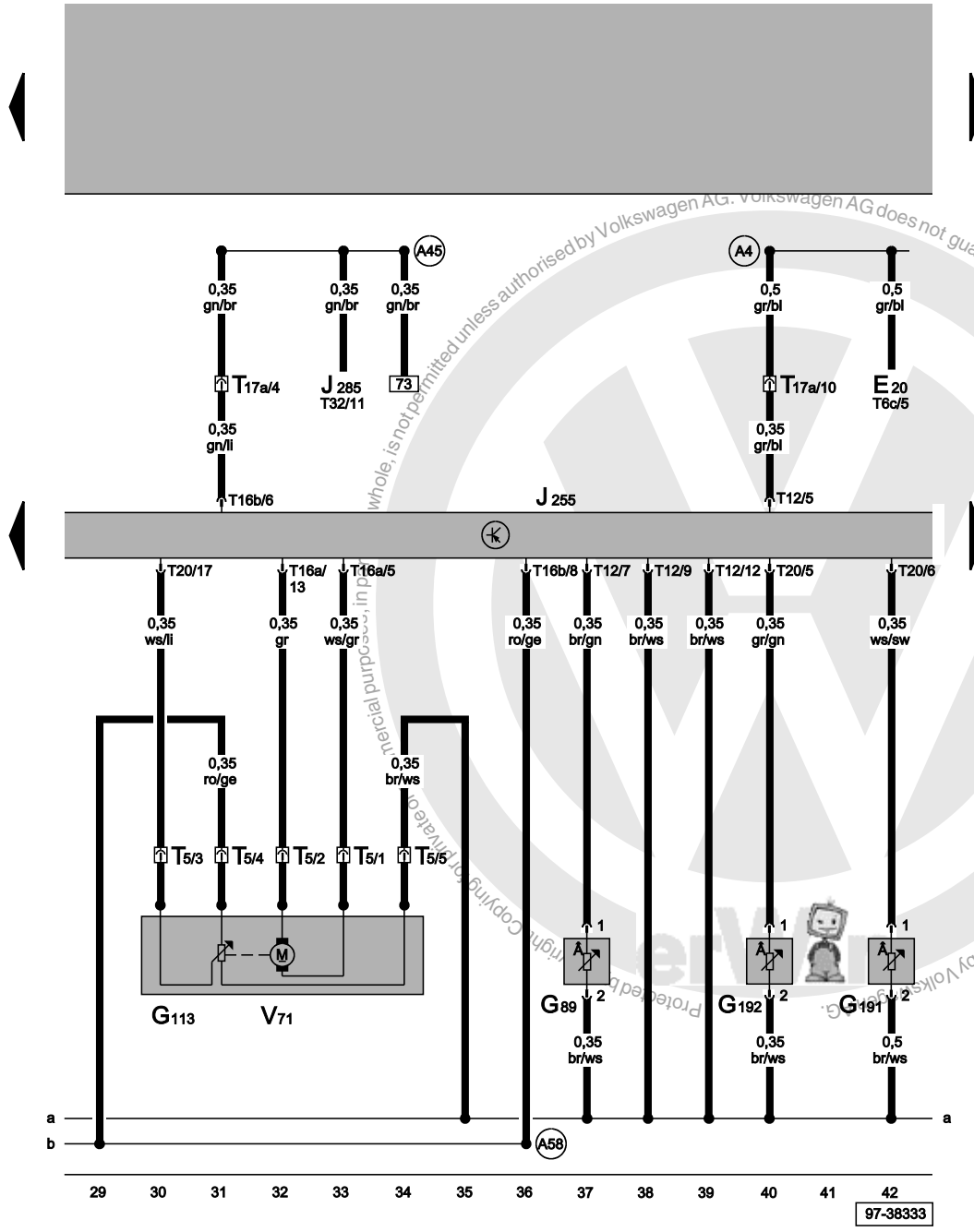


97-38332

Climatronic control unit, air flow flap control motor, vent temperature sender, fresh air intake duct temperature sensor

- E20 Illumination regulators, switches, instruments
- G89 Fresh air intake duct temperature sensor, below the dash panel on right
- G113 Air flow flap control motor potentiometer
- G191 Centre vent temperature sender
- G192 Footwell vent temperature sender
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- T5 5-pin connector, behind centre dash panel
- T6c 6-pin connector
- T12 12-pin connector
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert
- V71 Air flow flap control motor

- (A4) Positive connection (58b), in dash panel wiring harness
- (A45) Connection (RPM signal), in dash panel wiring harness
- (A58) Connection (5 volt), in dash panel wiring harness

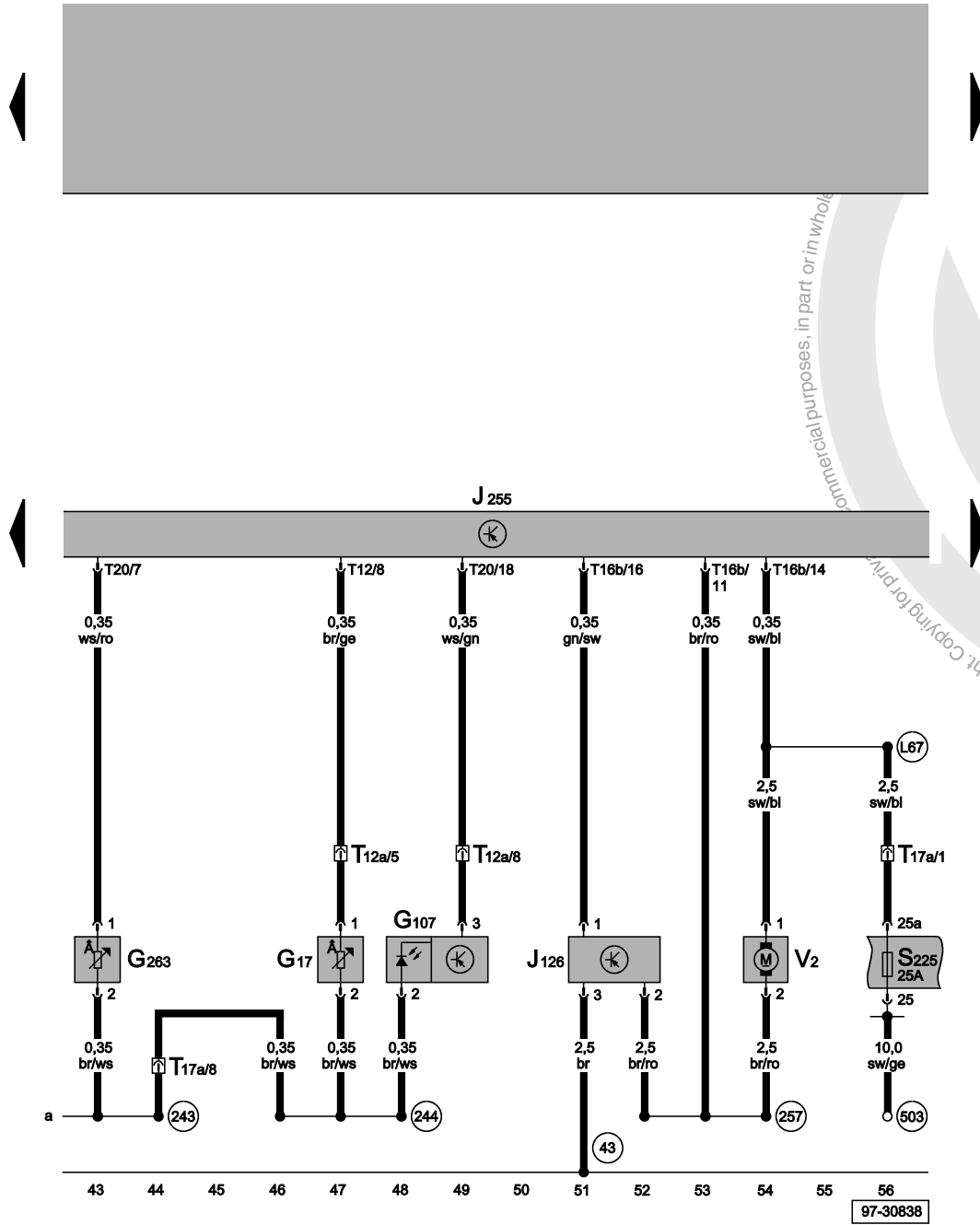


- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, evaporator output temperature sender, sunlight penetration photosensor

- G17 Ambient temperature sensor, on bumper front left
- G107 Sunlight penetration photosensor, on centre dash panel
- G263 Evaporator output temperature sender
- J126 Fresh air blower control unit, below the dash panel on right
- J255 Climatronic control unit
- S225 Fuse 25 in fuse holder
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V2 Fresh air blower

- 43 Earth point, lower part of right A-pillar
- 243 Earth connection 1, in Climatronic wiring harness
- 244 Earth connection (sender earth), in Climatronic wiring harness
- 257 Earth connection 2, in Climatronic wiring harness
- 503 Screw connection (75x), on relay plate
- L67 Positive connection (75x), in engine wiring harness



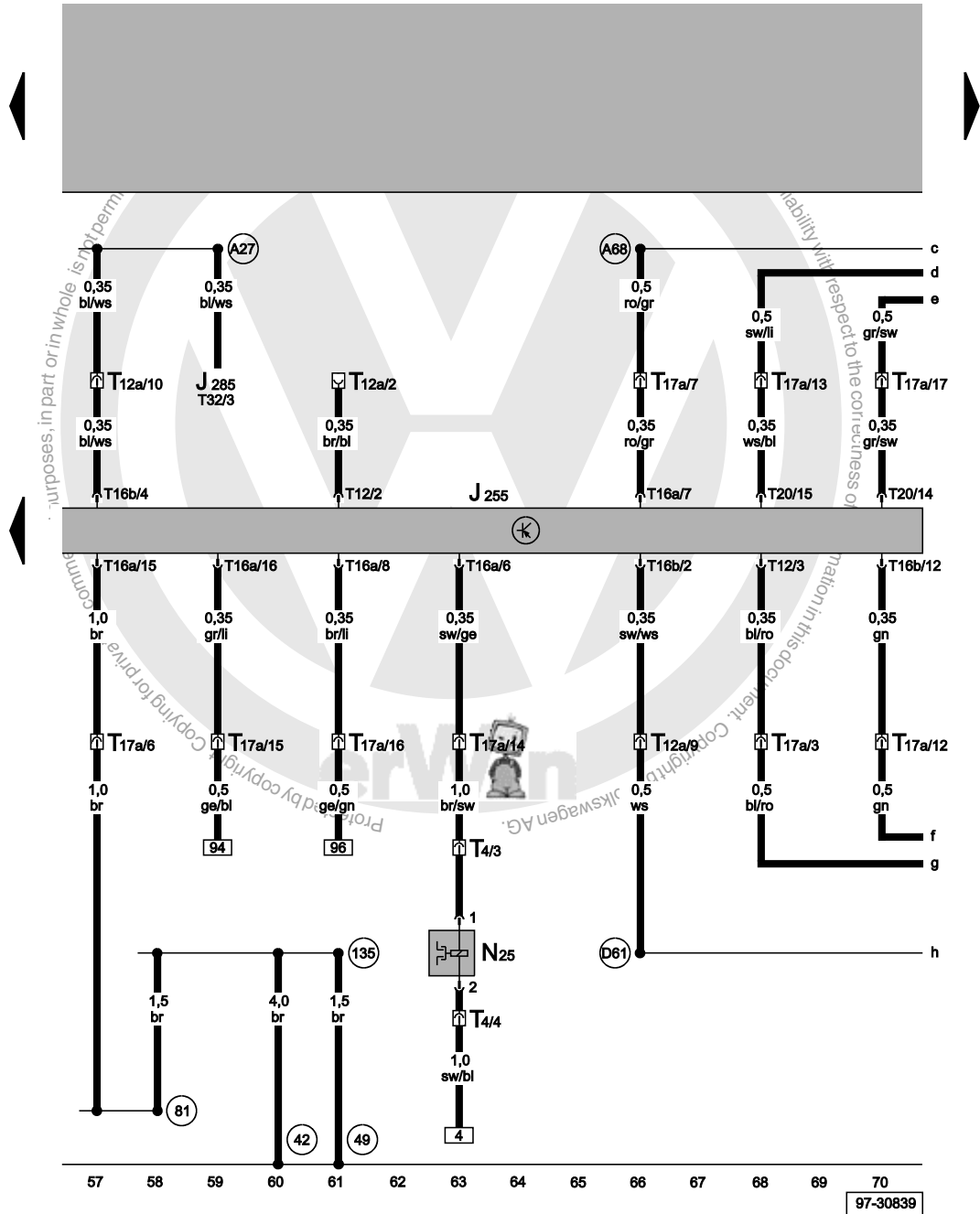
97-30838

Climatronic control unit, air conditioning system magnetic coupling

- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- N25 Air conditioning system magnetic coupling
- T4 4-pin connector, near starter
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- D61 Connection (air conditioning system), in engine compartment wiring harness

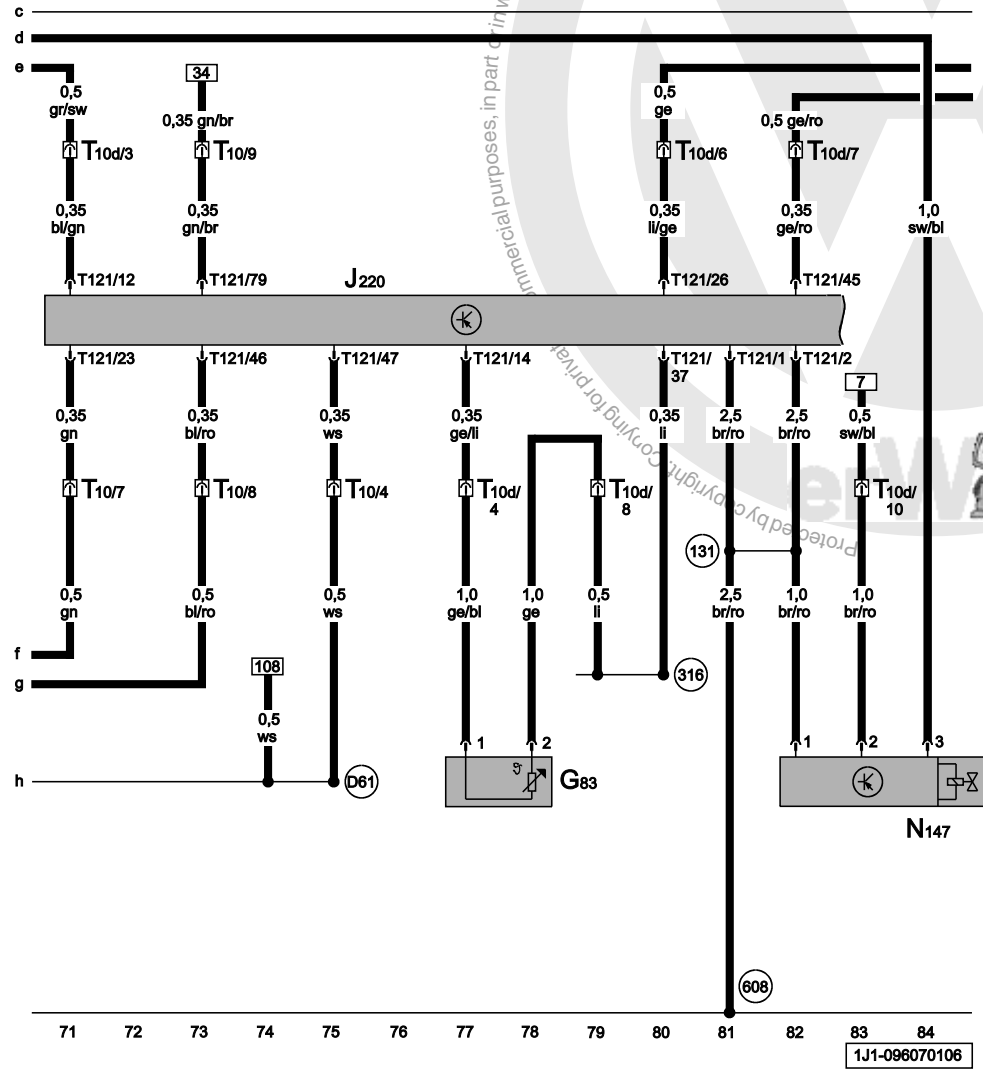
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



Motronic control unit, radiator outlet coolant temperature sender, 2-way valve for coolant shut-off valve

- G83 Radiator outlet coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- N147 2-way valve for coolant shut-off valve
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

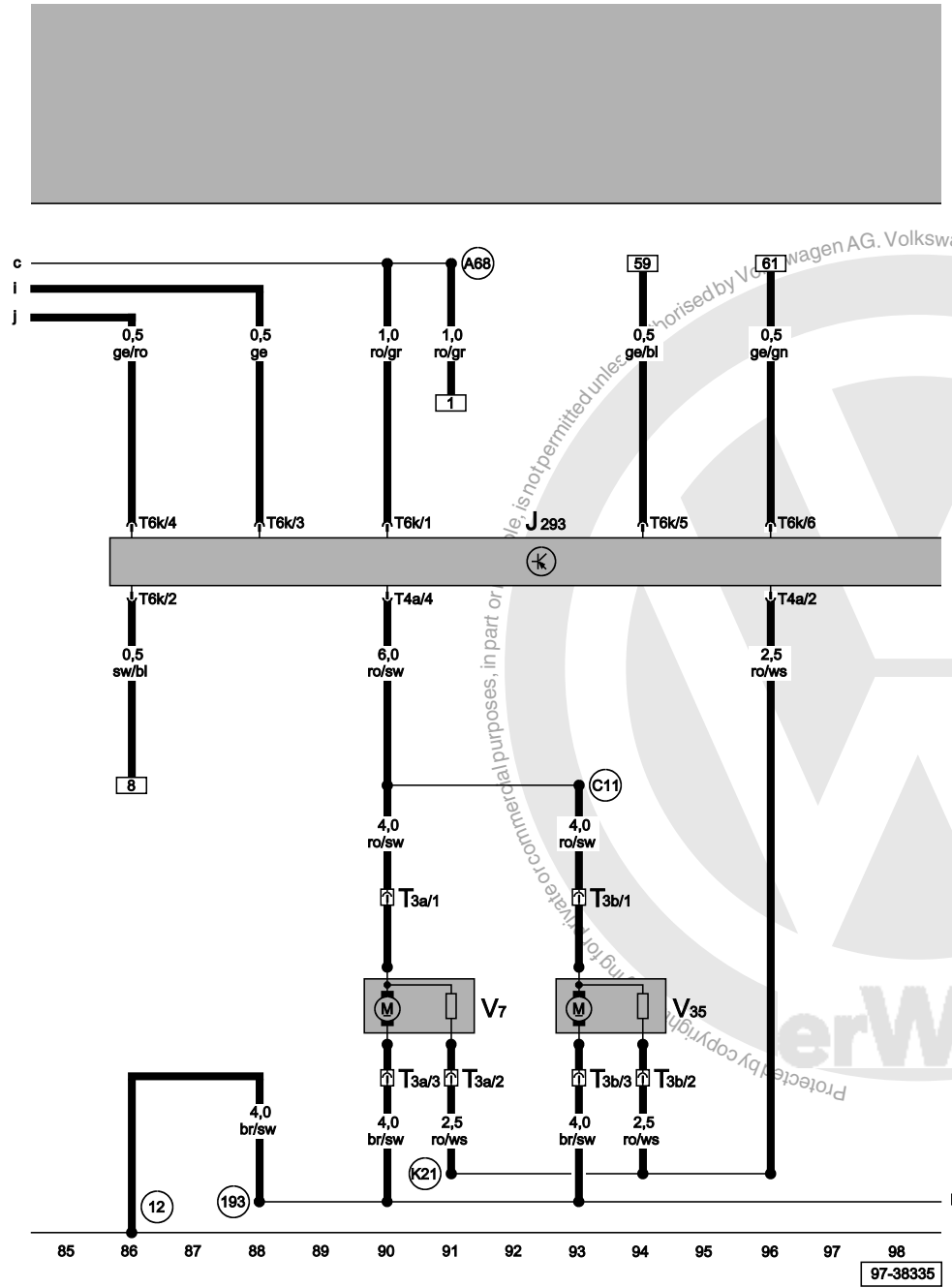
- 131 Earth connection 2, in engine compartment wiring harness
- 316 Earth connection (sender earth 2), in engine wiring harness
- 608 Earth point, in centre of plenum chamber
- D61 Connection (air conditioning system), in engine compartment wiring harness



Radiator fan control unit, radiator fan

- J293 Radiator fan control unit, in engine compartment, front left
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4a 4-pin connector
- T6k 6-pin connector
- V7 Radiator fan
- V35 Right fan for radiator

- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in coolant fan wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- C11 Connection in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness



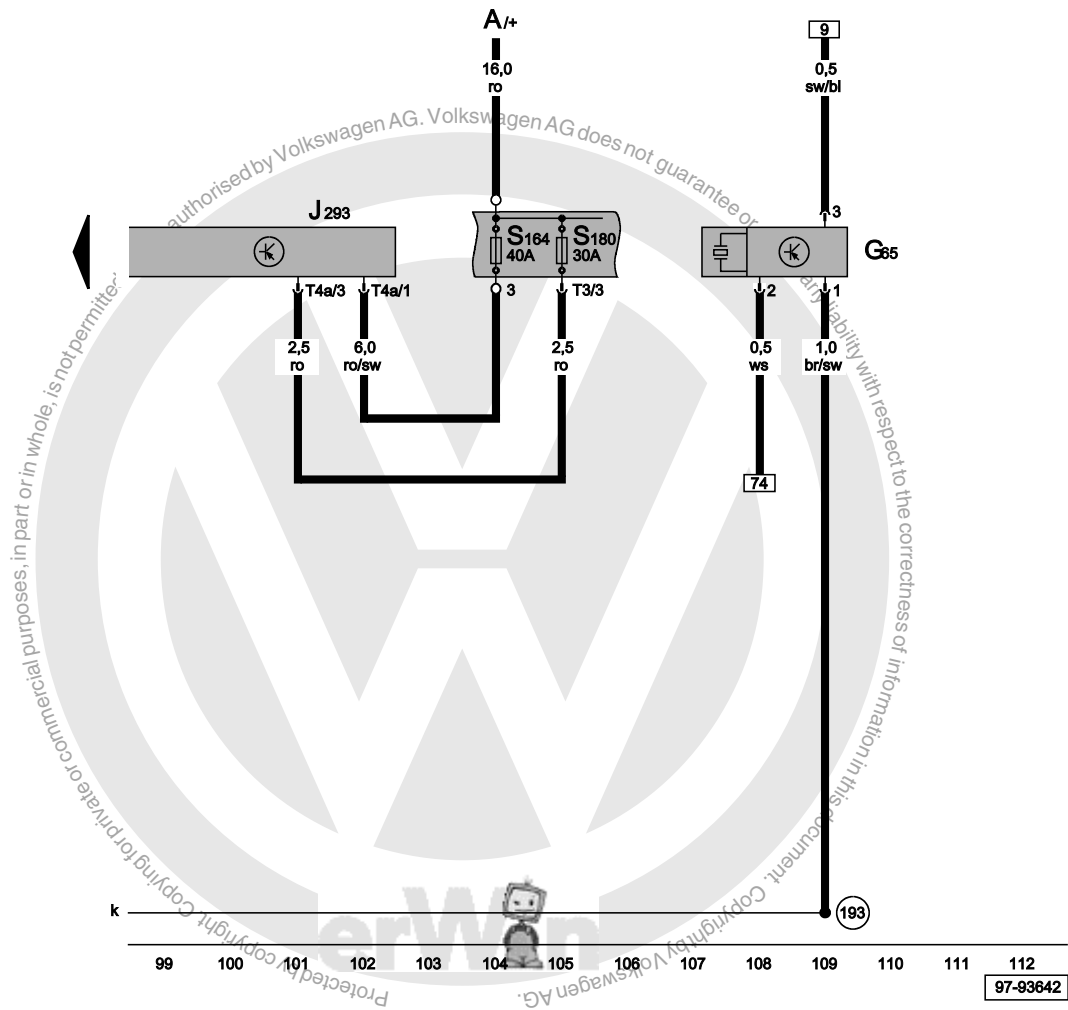
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-38335

Radiator fan control unit, high pressure sender

- A Battery
- G65 High pressure sender
- J293 Radiator fan control unit, in engine compartment, front left
- S164 Fuse 3 (30), in fuse holder on battery
- S180 Fuse 8 (30), in fuse holder on battery
- T3 3-pin connector
- T4a 4-pin connector

193 Earth connection 1, in coolant fan wiring harness



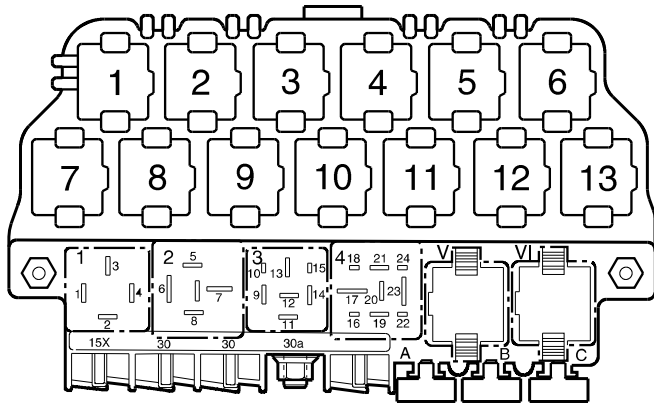
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- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan (not for models with air conditioning system)

⇒ 1.6 I/81 kW Motronic, engine code BAD
from October 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

2 - J59 - X-contact relief relay (100)

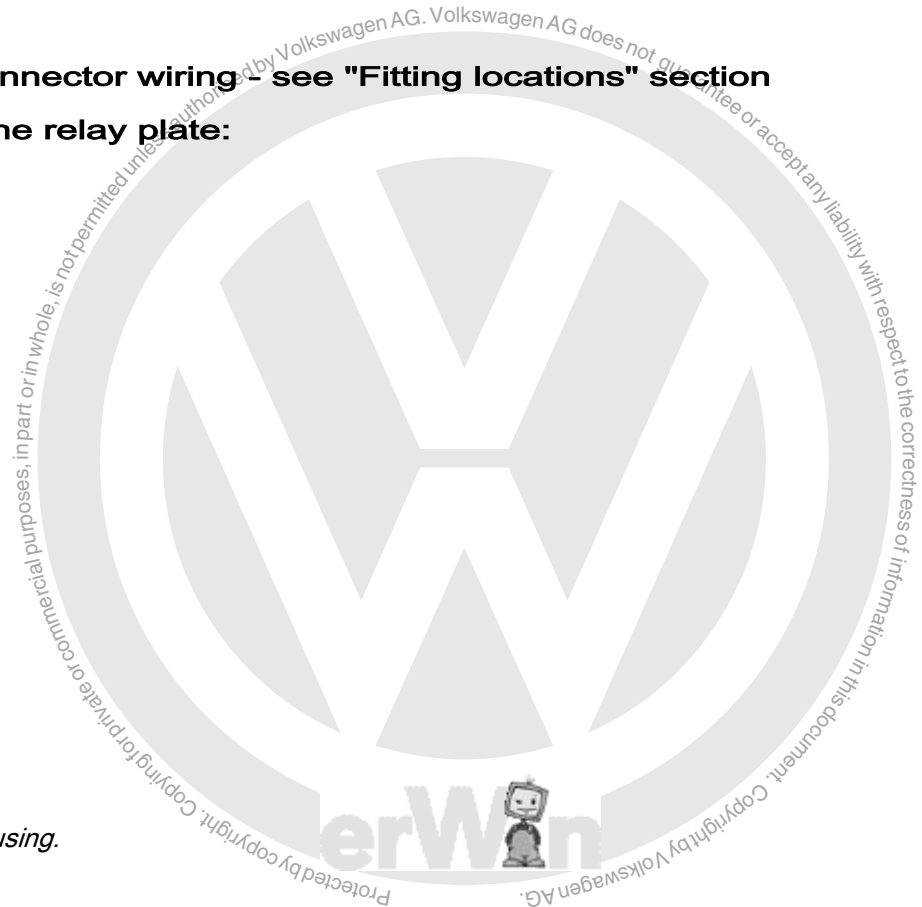


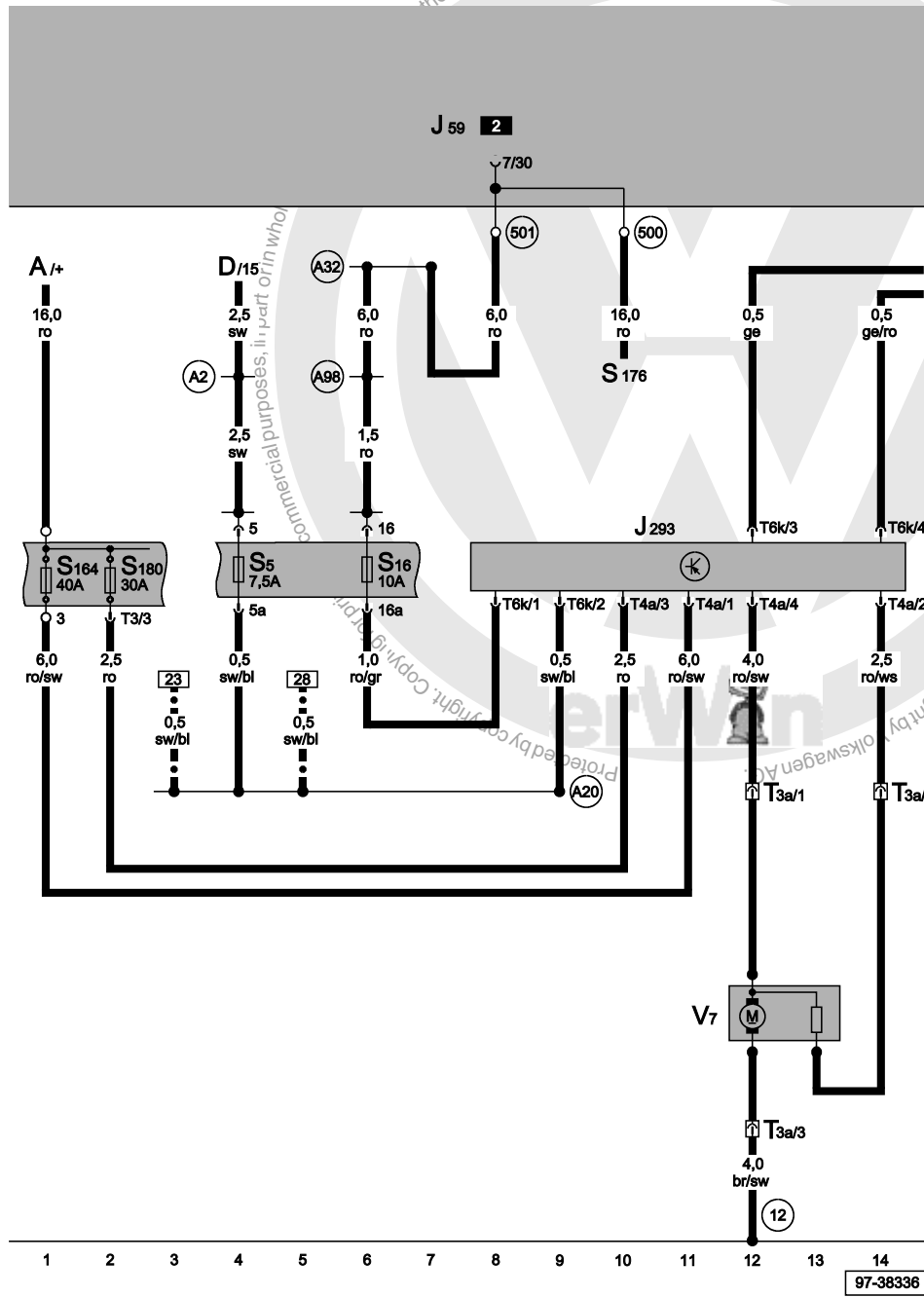
Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





Radiator fan control unit, radiator fan

- A Battery
 - D Ignition/starter switch
 - J59 X-contact relief relay
 - J293 Radiator fan control unit, in engine compartment, front left
 - S5 Fuse 5 in fuse holder
 - S16 Fuse 16 in fuse holder
 - S164 Fuse 3 (30) in fuse holder on battery
 - S176 Fuse 4 (30) in fuse holder on battery
 - S180 Fuse 8 (30) in fuse holder on battery
 - T3 3-pin connector
 - T3a 3-pin connector, in front left engine compartment
 - T4a 4-pin connector
 - T6k 6-pin connector
 - V7 Radiator fan
- 12 Earth point, on left in engine compartment
 - 500 Screw connection 1 (30), on relay plate
 - 501 Screw connection 2 (30), on relay plate
 - A2 Positive connection (15), in dash panel wiring harness
 - A20 Connection (15a), in dash panel wiring harness
 - A32 Positive connection (30), in dash panel wiring harness
 - A98 Positive connection 4 (30), in dash panel wiring harness
 - up to April 2002

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Motronic control unit, potentiometer for temperature selection rotary knob, temperature flap position switch, 2-way valve for coolant shut-off valve

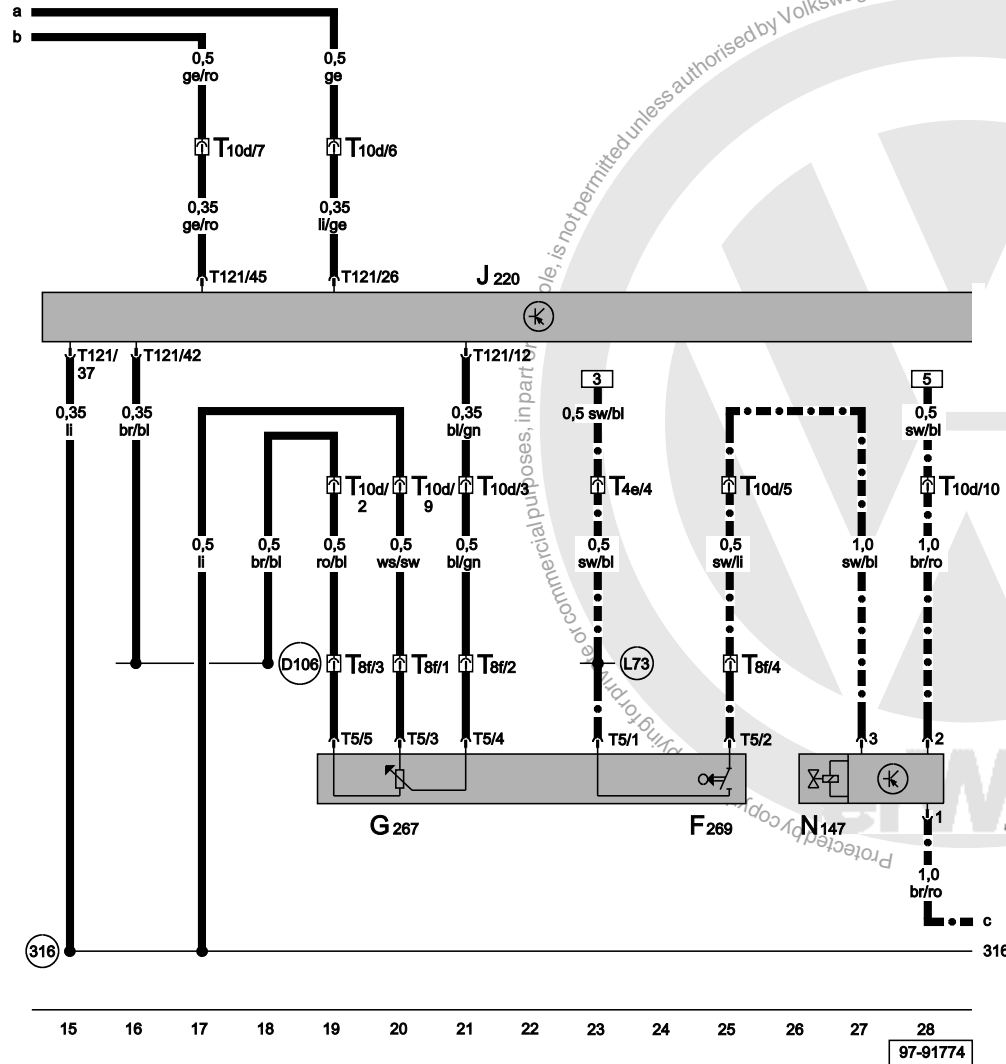
- F269 Temperature flap position switch
- G267 Potentiometer, temperature selection rotary knob*
- J220 Motronic control unit, in centre plenum chamber
- N147 2-way valve for coolant shut-off valve (up to April 2002)
- T4e 4-pin connector, behind centre dash panel
- T5 5-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

316 Earth connection (sender earth 2), in engine wiring harness

D106 Connection 4, in engine compartment wiring harness

L73 Connection (15a), in fresh air blower wiring harness

* F269 is closed when G267 is positioned on left limit stop.
 up to April 2002



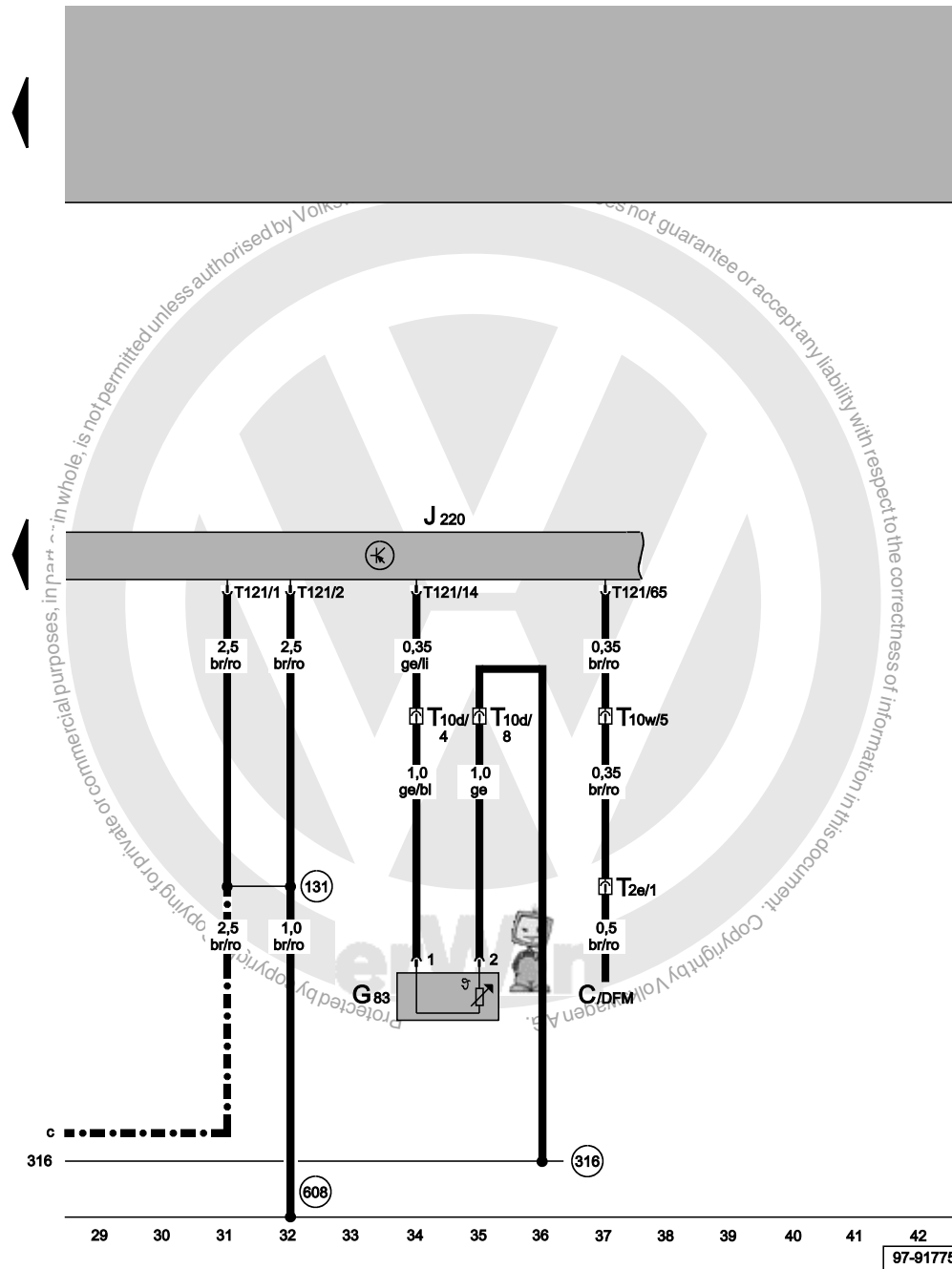
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, radiator outlet coolant temperature sender

- C Alternator
- G83 Radiator outlet coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 316 Earth connection (sender earth 2), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

--- up to April 2002



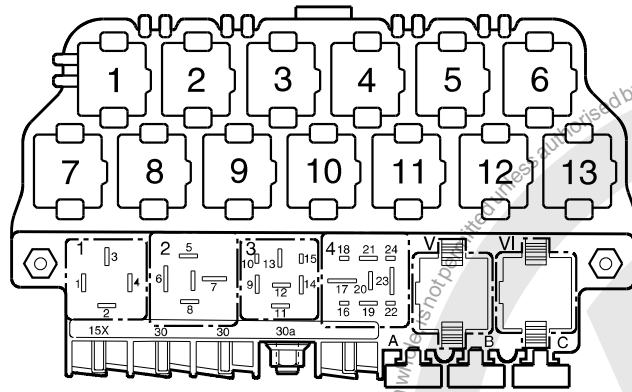
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- or = orange
- rs = pink

Climatronic

⇒ Not for engine codes AVU, BAD

From May 2001

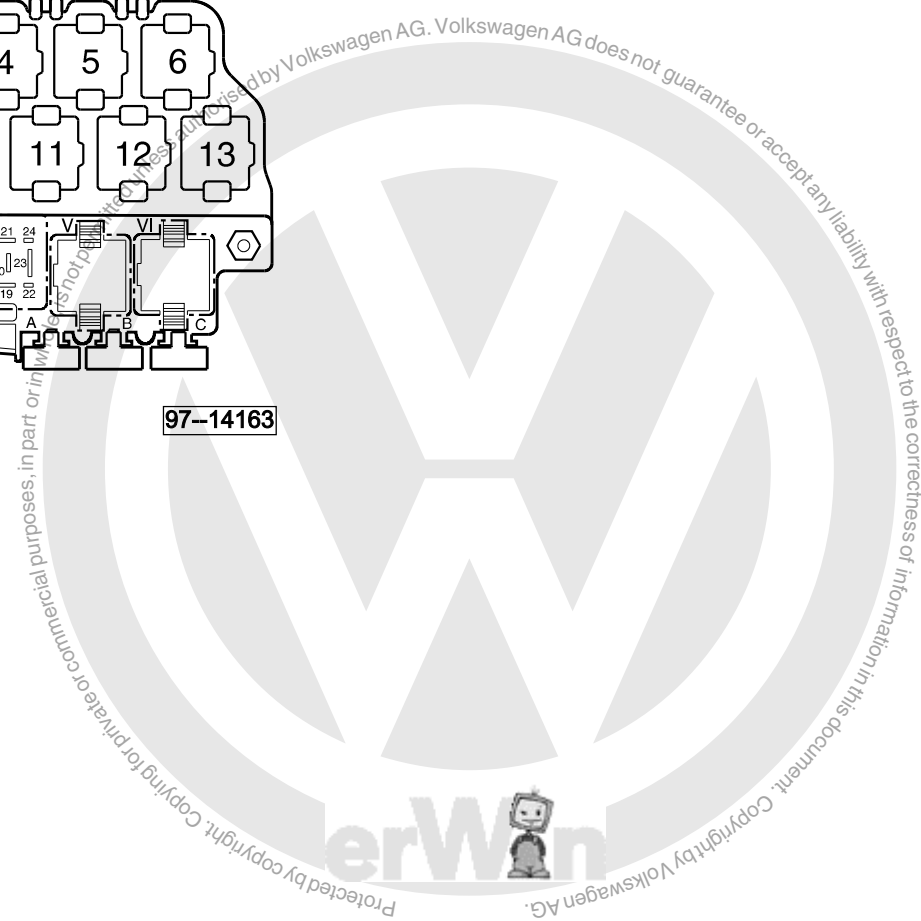
For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.



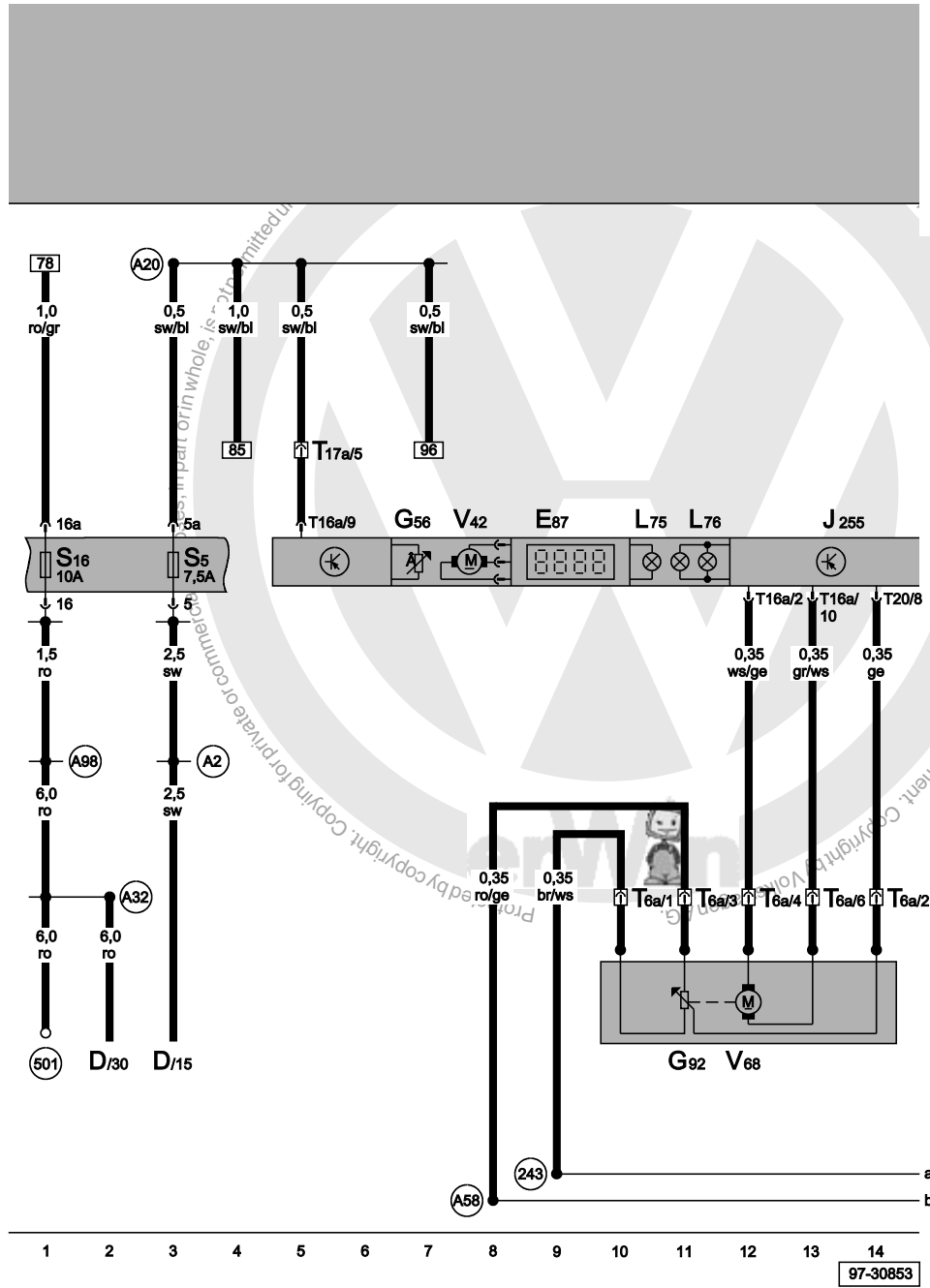
97-14163

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Climatronic control unit, temperature flap control motor



- D Ignition/starter switch
- E87 Control and display unit for Climatronic
- G56 Dash panel temperature sensor
- G92 Control motor potentiometer for temperature flap
- J255 Climatronic control unit
- L75 Digital display illumination
- L76 Button illumination
- S5 Fuse in fuse box
- S16 Fuse in fuse box
- T6a 6-pin connector, behind dash panel, centre
- T16a 16-pin connector
- T17a 17-pin connector, behind dash panel, centre
- T20 20-pin connector
- V42 Temperature sensor blower
- V68 Temperature flap control motor

- (243) Earth connection -1-, in Climatronic wiring harness
- (501) Screw connection -2- (30), on relay plate
- (A2) Positive (+) connection (15), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A32) Positive (+) connection (30), in dash panel wiring harness
- (A58) Connection (5 volt), in instruments wiring harness
- (A98) Positive (+) connection -4- (30), in dash panel wiring harness

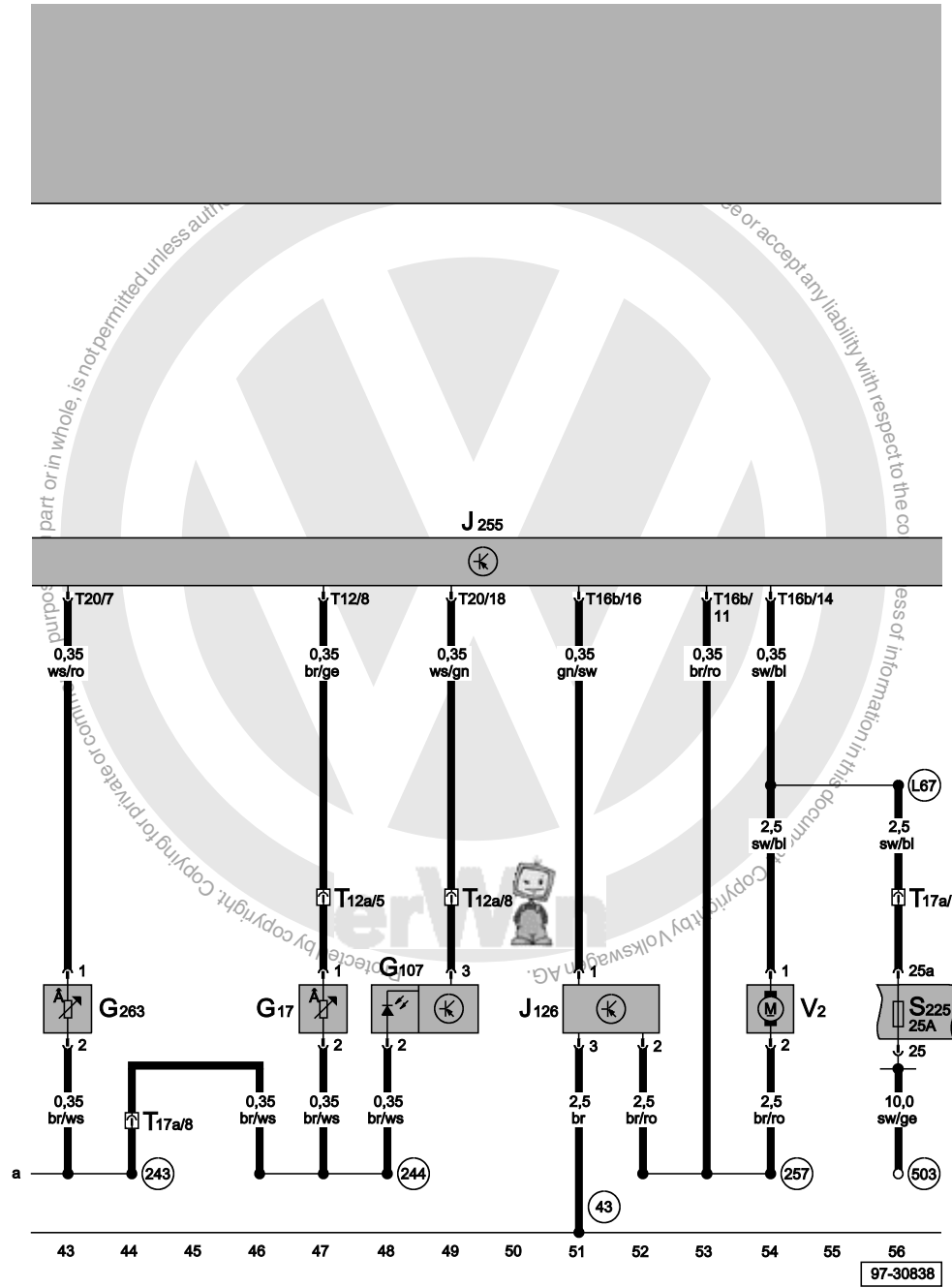
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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-30853

Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, evaporator out-flow temperature sender, sunlight penetration photo-sensor

- G17 Ambient temperature sensor, in front left bumper
- G107 Sunlight penetration photosensor, on dash panel centre
- G263 Evaporator outflow temperature sender
- J126 Fresh air blower control unit, on right under dash panel
- J255 Climatronic control unit
- S225 Fuse 25 in fuse box
- T12 12-pin connector
- T12a 12-pin connector, behind dash panel, centre
- T16b 16-pin connector
- T17a 17-pin connector, behind dash panel, centre
- T20 20-pin connector
- V2 Fresh air blower

- (43) Earth point, lower part of right A-pillar
- (243) Earth connection -1-, in Climatronic wiring harness
- (244) Earth connection (sender earth), in Climatronic wiring harness
- (257) Earth connection -2-, in Climatronic wiring harness
- (503) Screw connection (75X), on relay plate
- (L67) Positive (+) connection (75X), in Climatronic wiring harness

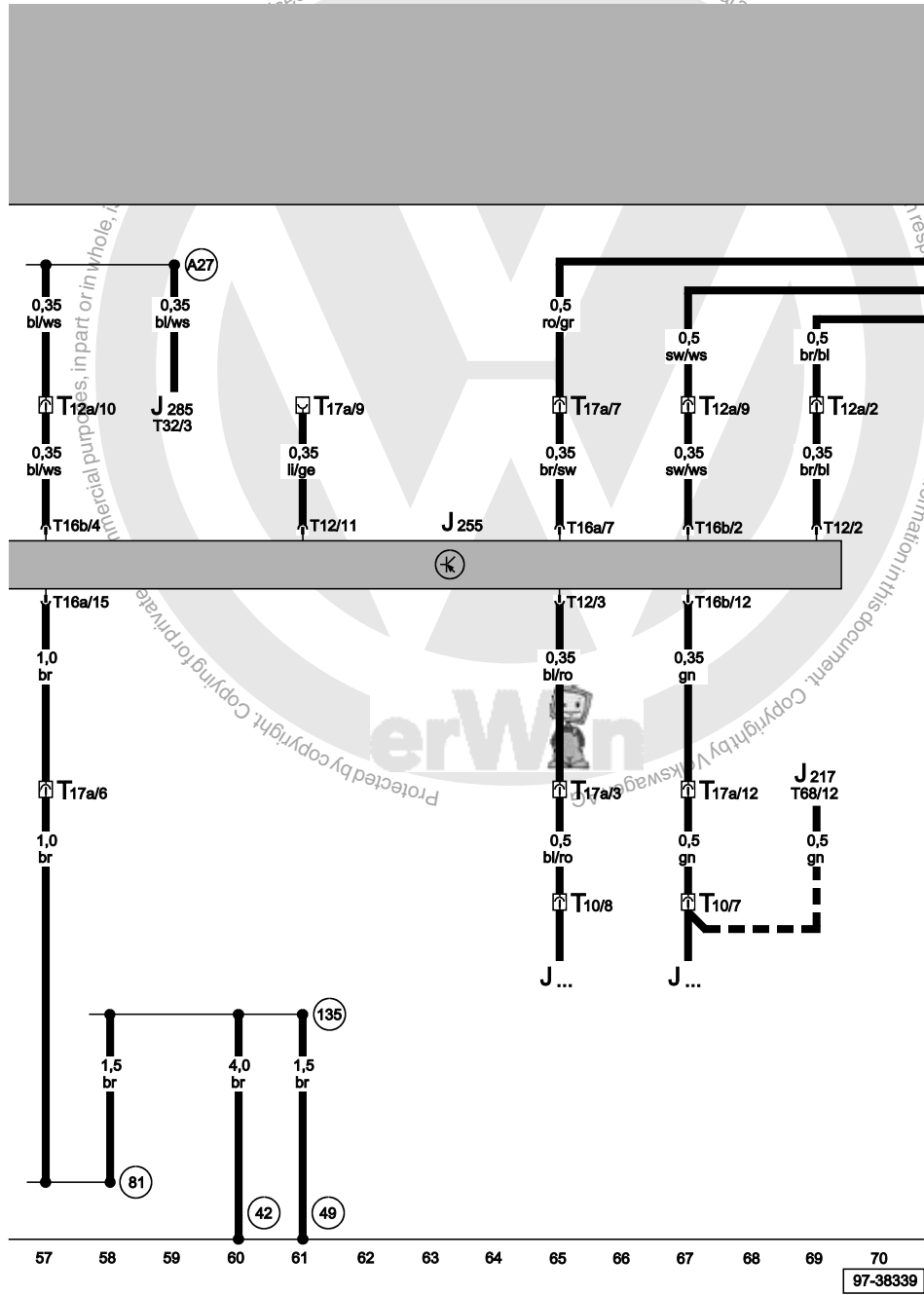


- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Climatronic control unit

- J217 Automatic gearbox control unit
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- T12 12-pin connector
- T12a 12-pin connector, in centre behind dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, in centre behind dash panel
- T32 32-pin connector, blue, on dash panel insert
- T68 68-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- Only models with automatic gearbox (AG4)



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- gr = grey
- li = purple
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- or = orange
- rs = pink

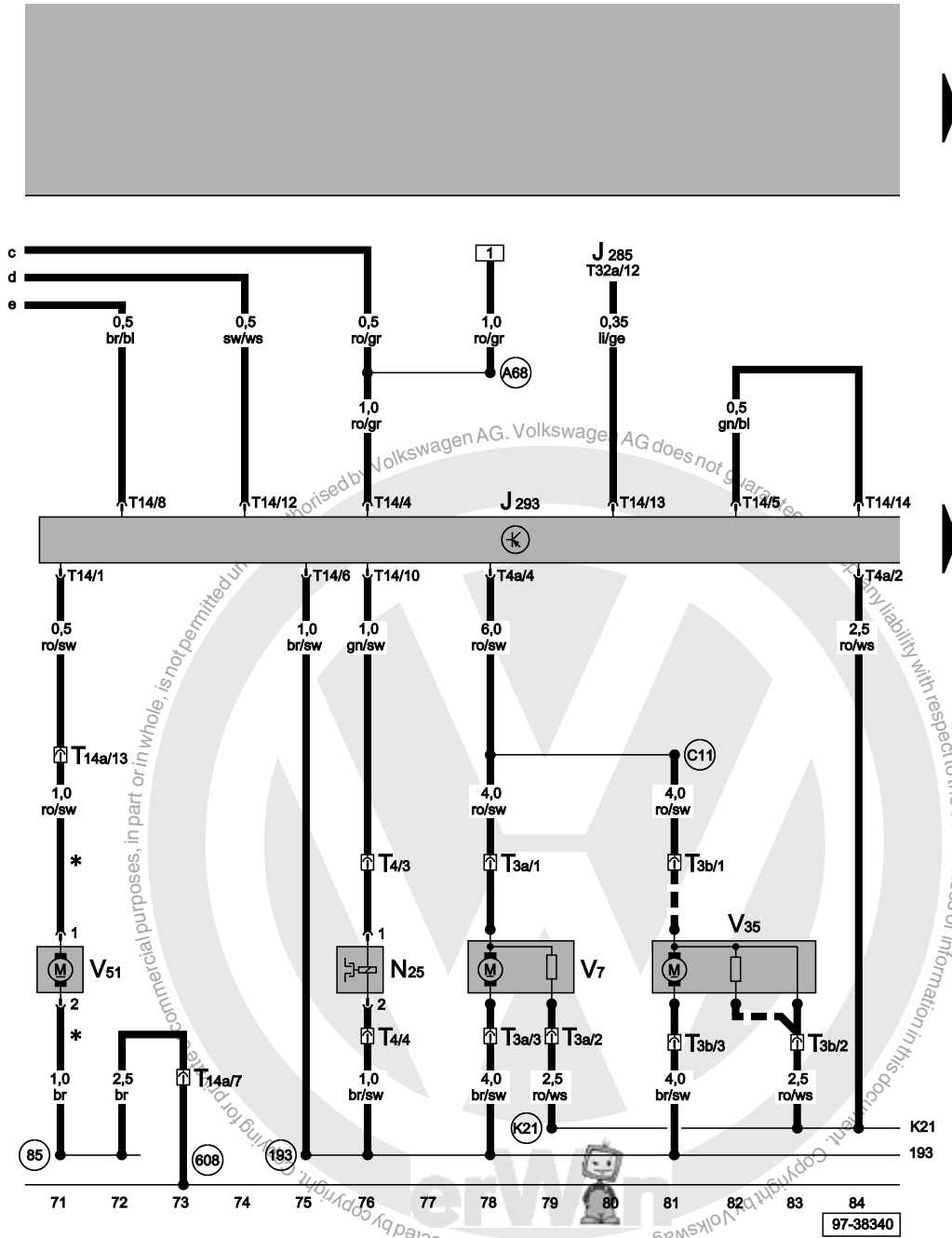
97-38339

Radiator fan control unit, radiator fan, air conditioner magnetic coupling, continued coolant circulation pump

- J285 Control unit in dash panel insert
- J293 Radiator fan control unit, on left in front of engine compartment
- N25 Air conditioner magnetic coupling
- T3a 3-pin connector, on left in front of engine compartment
- T3b 3-pin connector, on left in front of engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, near battery
- T32a 32-pin connector, green, on dash panel insert
- V7 Radiator fan
- V35 Right radiator fan**
- V51 Continued coolant circulation pump

- 85 Earth connection 1, in engine compartment wiring harness
- 193 Earth connection 1, in radiator fan wiring harness
- 608 Earth point, in centre of plenum chamber
- A68 Connection (30, air conditioner), in dash panel wiring harness
- C11 Connection, in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- * Only models with 5 and 6-cylinder engines
- ** With/without series resistor depends on engine fitted
- Not fitted with all engines

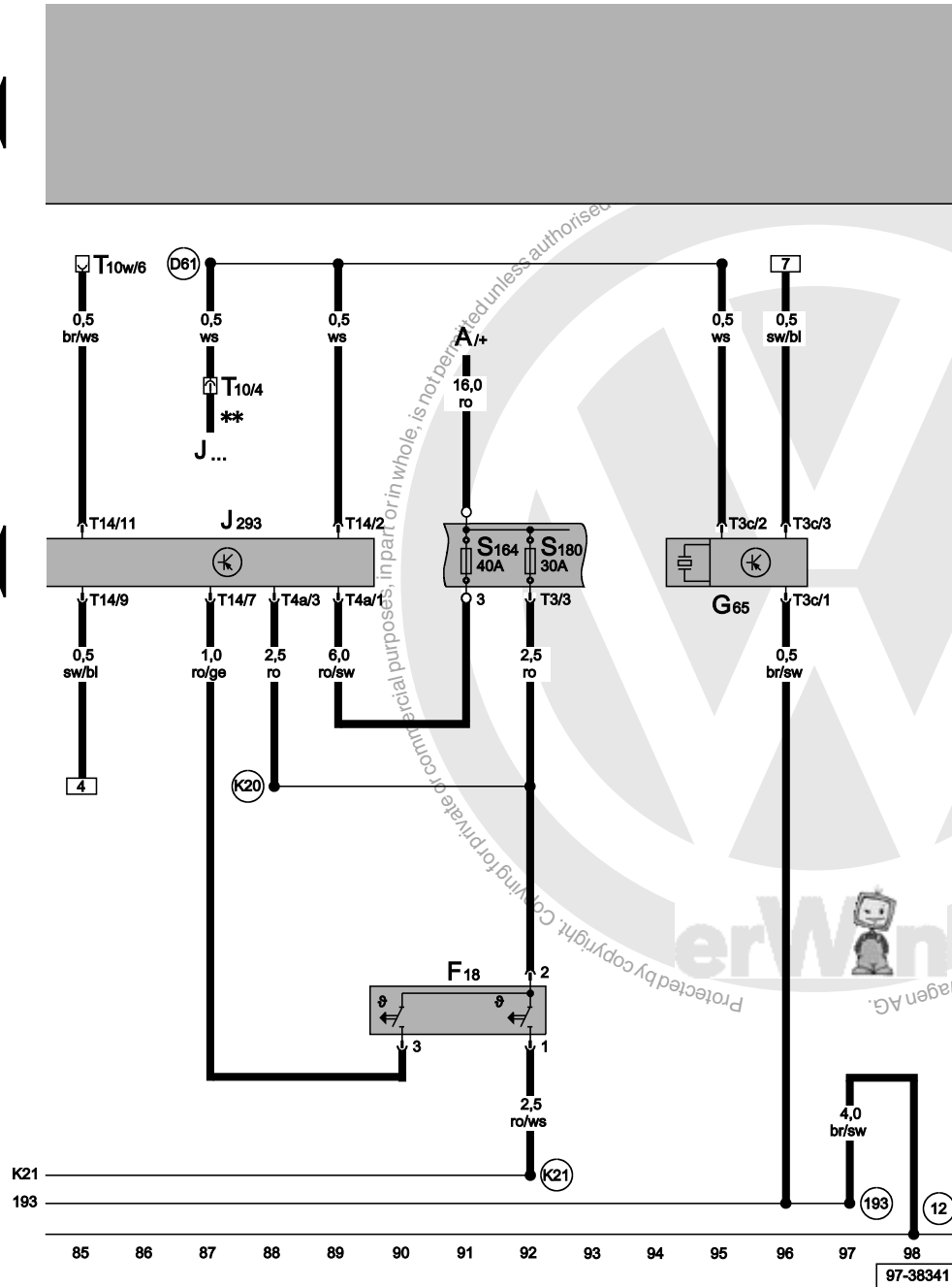
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- sw = black
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink



97-38340

Radiator fan control unit, radiator fan thermal switch, high pressure sender

- A Battery
- F18 Radiator fan thermal switch
- G65 High pressure sender
- J293 Radiator fan control unit, on left in front of engine compartment
- J... Engine control unit
- S164 Fuse 3 (30), in battery fuse holder
- S180 Fuse 8 (30), in battery fuse holder
- T3 3-pin connector
- T3c 3-pin connector
- T4a 4-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T14 14-pin connector
- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in radiator fan wiring harness
- D61 Connection (air conditioner), in engine compartment wiring harness
- K20 Positive connection 1 (30), in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- ** Not fitted with all engines



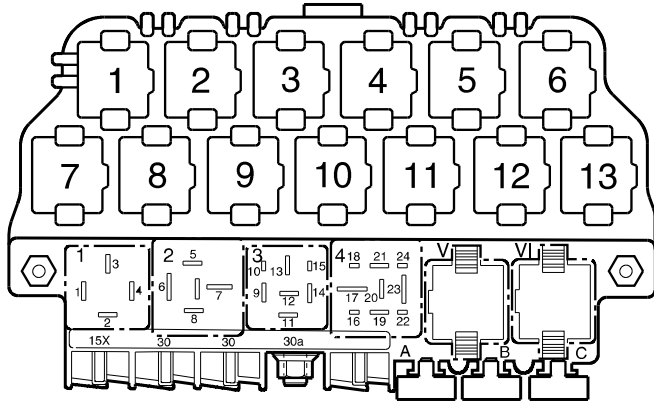
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
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- rs = pink

2.0 l/85 kW Motronic, engine code BEH, bivalent (natural gas/petrol)

from September 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:

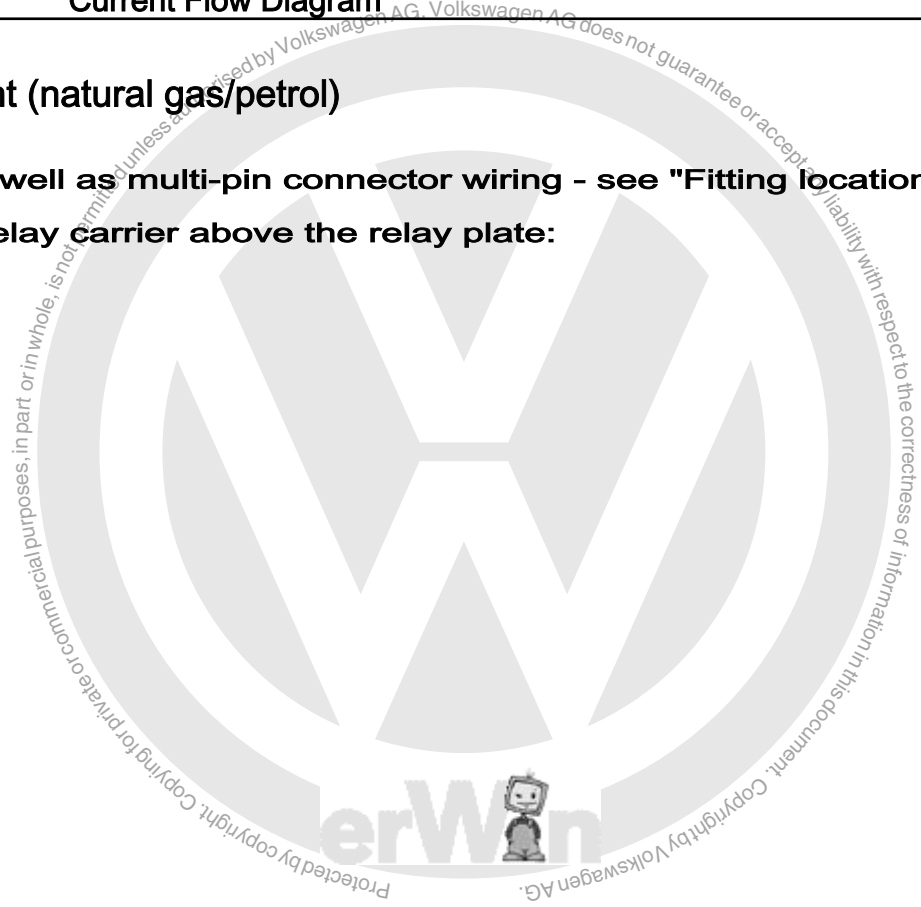


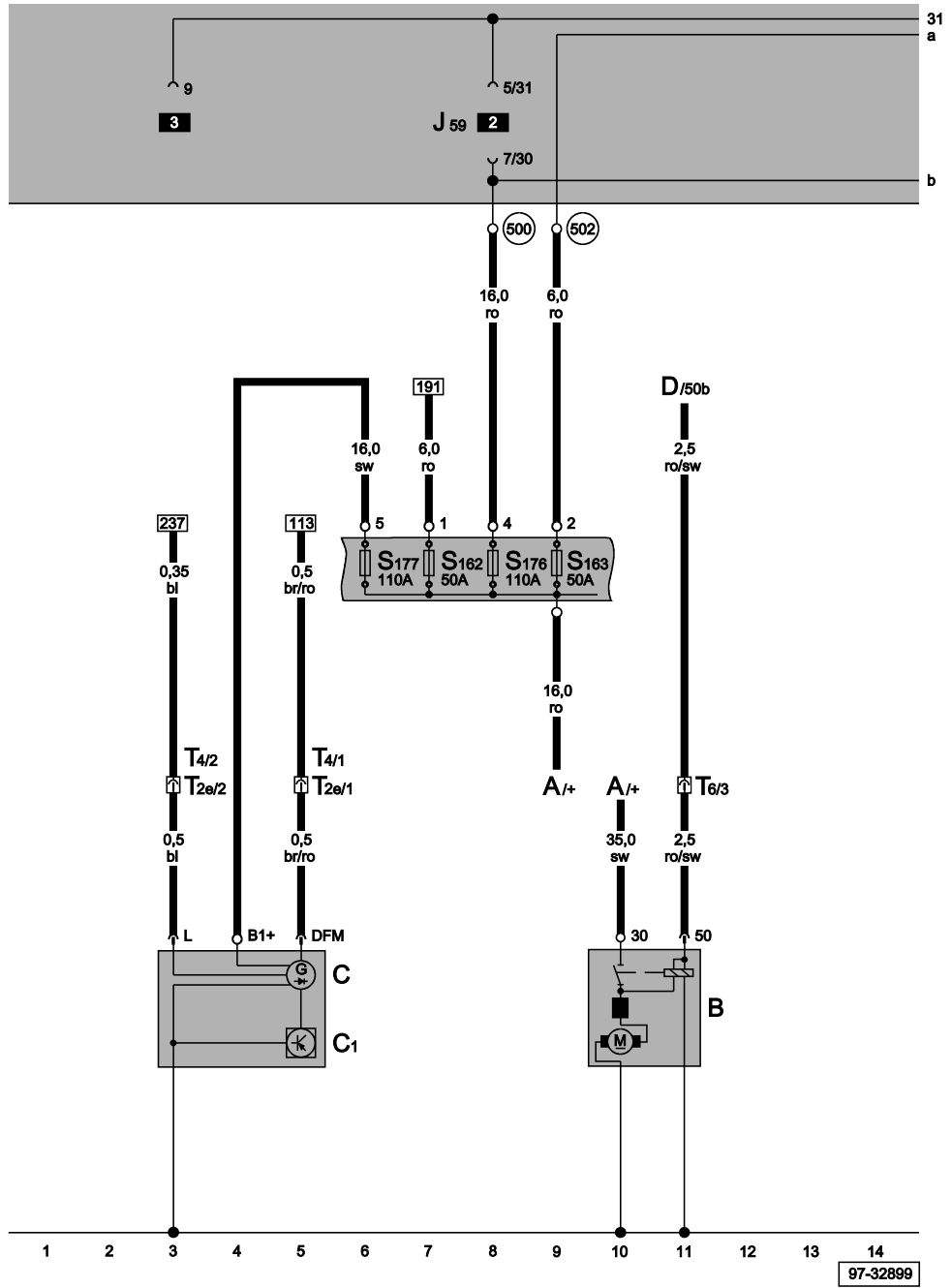
97-14163

- 1 - J651 - Shut-off valve relay 1 (404)
- 1 - J333 - Fuel pump switch-off relay (404)

Relay locations on relay plate:

- 2 - J59 - X-contact relief relay (100)
- 4 - J17 - Fuel pump relay (409)





Alternator, starter

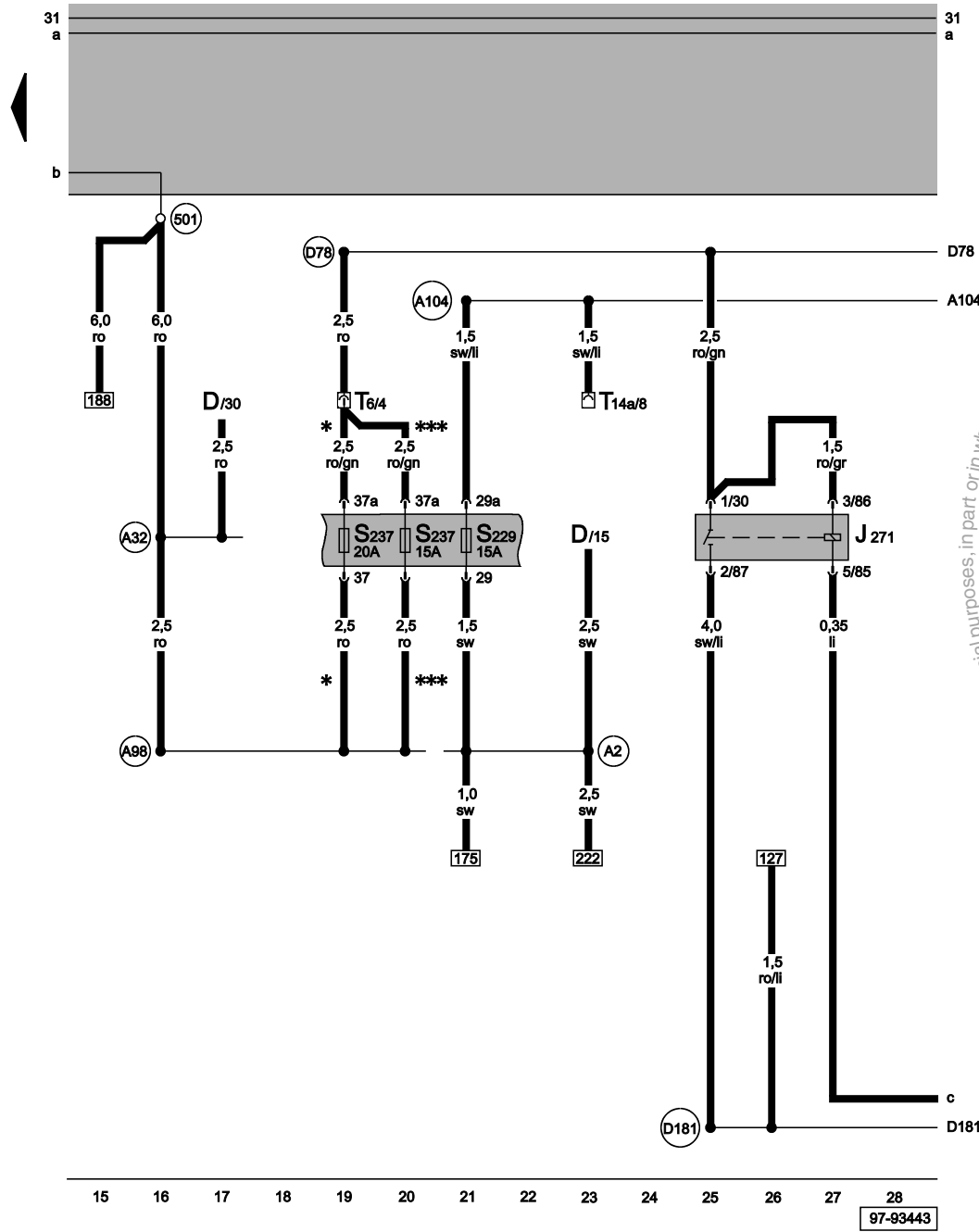
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

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Motronic current supply relay

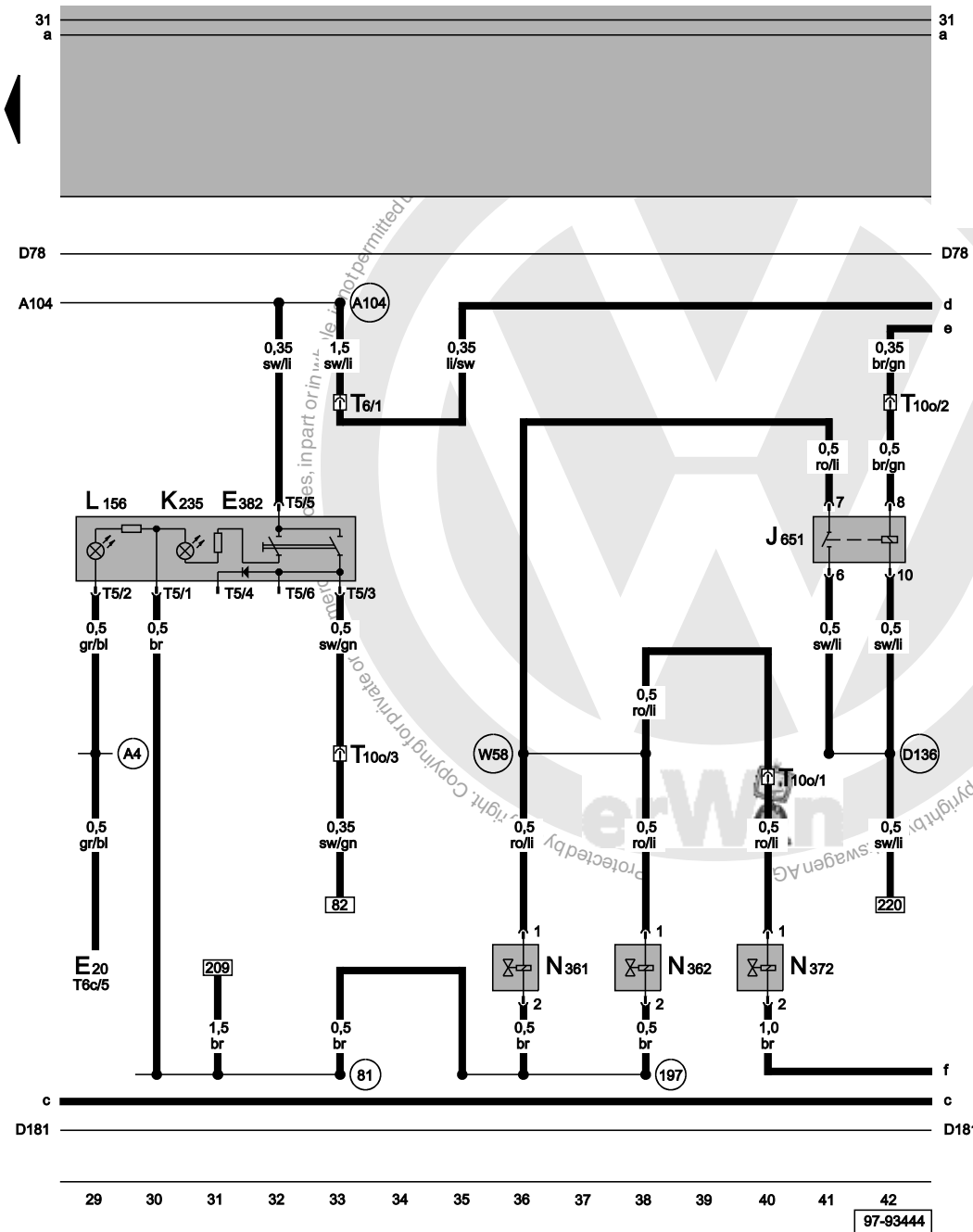
- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- (501) Screw connection 2 (30), on relay plate
- (A2) Positive connection (15), in dash panel wiring harness
- (A32) Positive connection (30), in dash panel wiring harness
- (A98) Positive connection 4 (30), in dash panel wiring harness
- (A104) Positive connection 2 (15), in dash panel wiring harness
- (D78) Positive connection 1 (30a), in engine compartment wiring harness
- (D181) Connection 2 (87a), in engine compartment wiring harness
- * from May 2003
- *** up to April 2003



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Gas or petrol operating mode change-over switch, high pressure valve for gas mode, fuel tank shut-off valves, shut-off valve relay 1

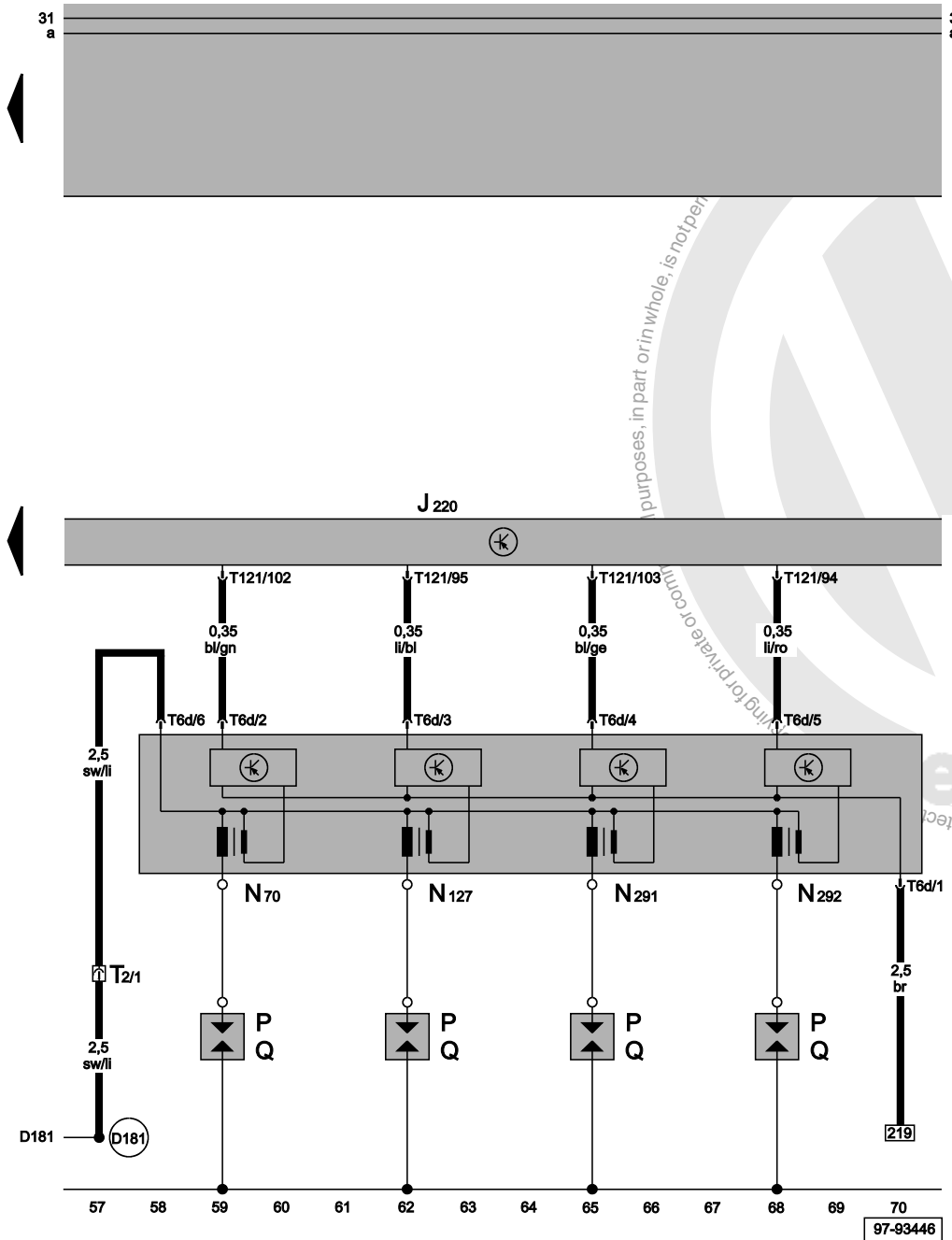


- E20 Illumination regulators, switches, instruments
- E382 Gas or petrol operating mode change-over switch
- J651 Shut-off valve relay 1, on the 13 position additional relay carrier
- K235 Natural gas operation warning lamp 2,
- L156 Switch illumination bulb
- N361 Fuel tank shut-off valve 1
- N362 Fuel tank shut-off valve 2
- N372 High pressure valve for gas mode
- T5 5-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6c 6-pin connector
- T10o 10-pin connector, yellow, in connector protective housing, on left in plenum chamber
- 81 Earth connection 1, in dash panel wiring harness
- 197 Earth connection 4, in rear wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D136 Positive connection 2 (15a), in engine compartment wiring harness
- W58 Connection (87), in rear wiring harness

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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T2 2-pin connector, in left engine compartment
- T6d 6-pin connector
- T121 121-pin connector
- D181 Connection 2 (87a), in engine compartment wiring harness

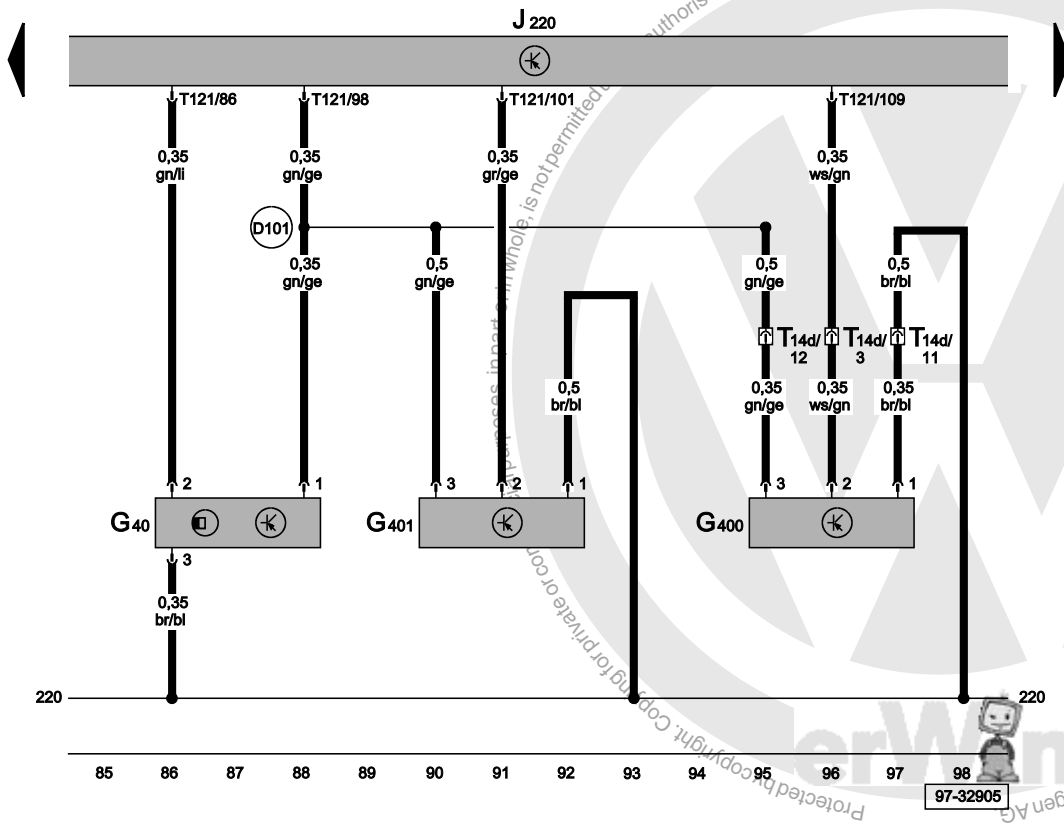
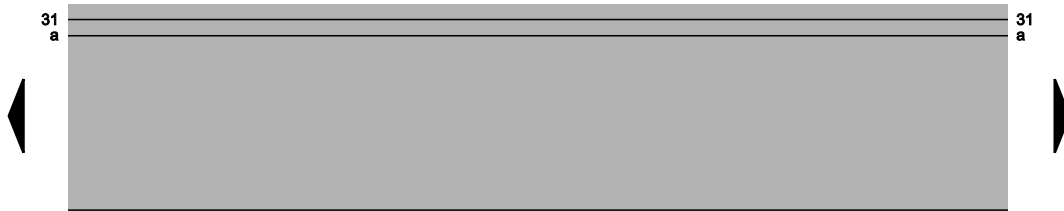


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Motronic control unit, Hall sender, fuel tank pressure sensor, gas fuel rail sensor

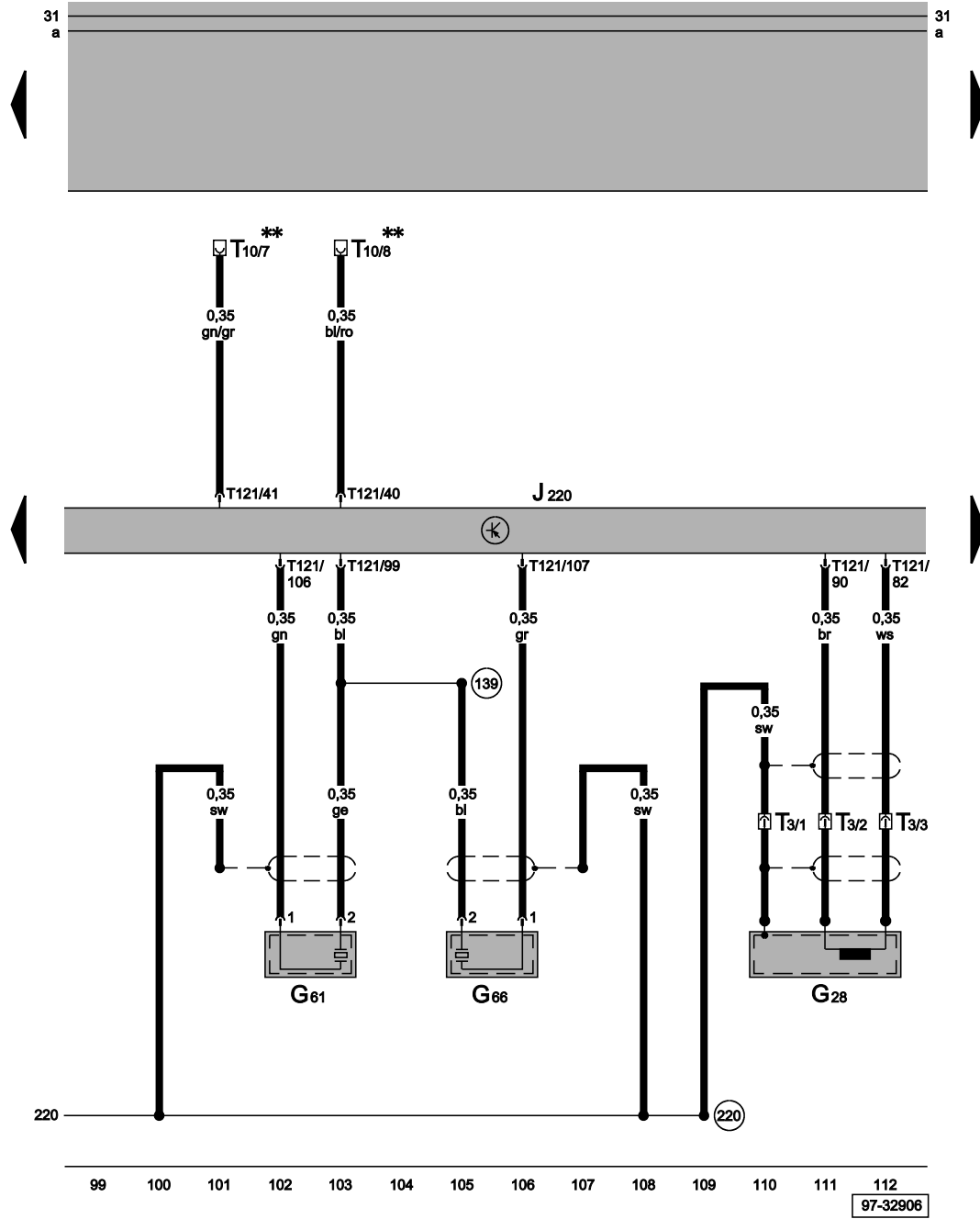
- G40 Hall sender
- G400 Fuel tank pressure sensor
- G401 Gas fuel rail sensor
- J220 Motronic control unit, in centre plenum chamber
- T14d 14-pin connector, on left in plenum chamber
- T121 121-pin connector

(D101) Connection 1, in engine compartment wiring harness



Motronic control unit, engine speed sender, knock sensors

- G28 Engine speed sender
- G61 Knock sensor I
- G66 Knock sensor II
- J220 Motronic control unit, in centre plenum chamber
- T3 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- ** connection air conditioning



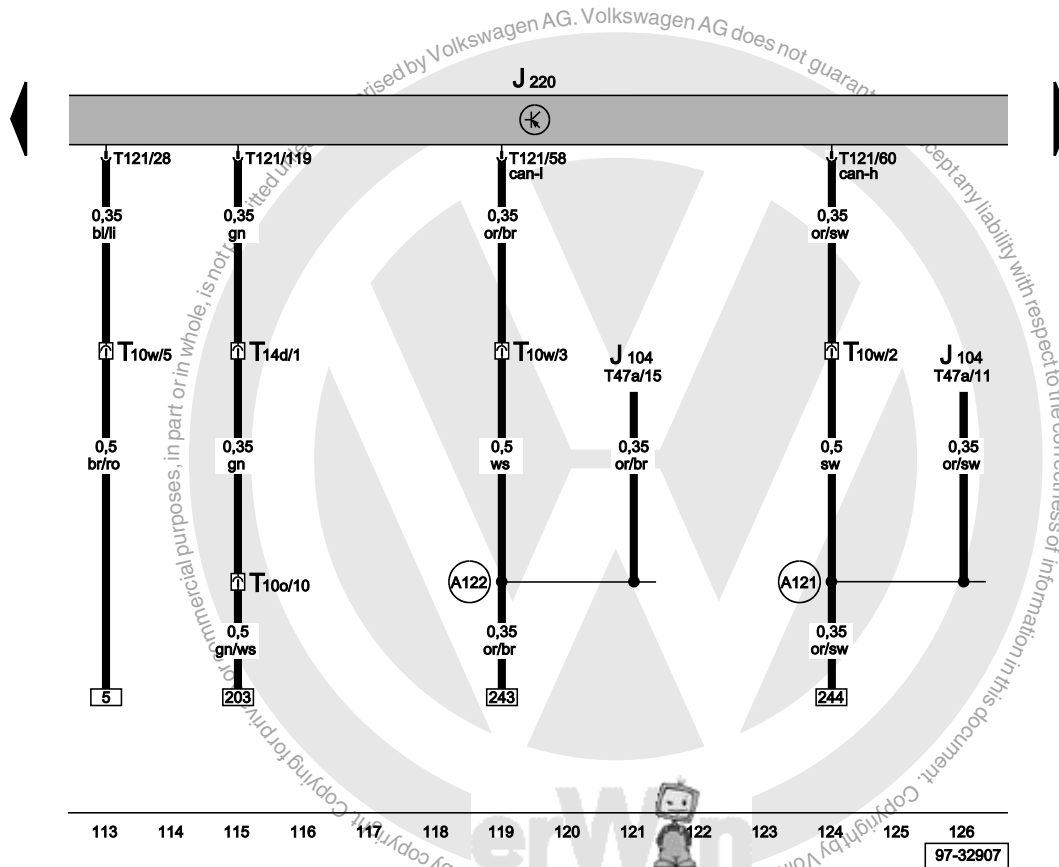
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- or = orange
- rs = pink

Motronic control unit

- J104 ABS/ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- T10o 10-pin connector, yellow, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14d 14-pin connector, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

(A121) Connection (high bus), in dash panel wiring harness

(A122) Connection (low bus), in dash panel wiring harness

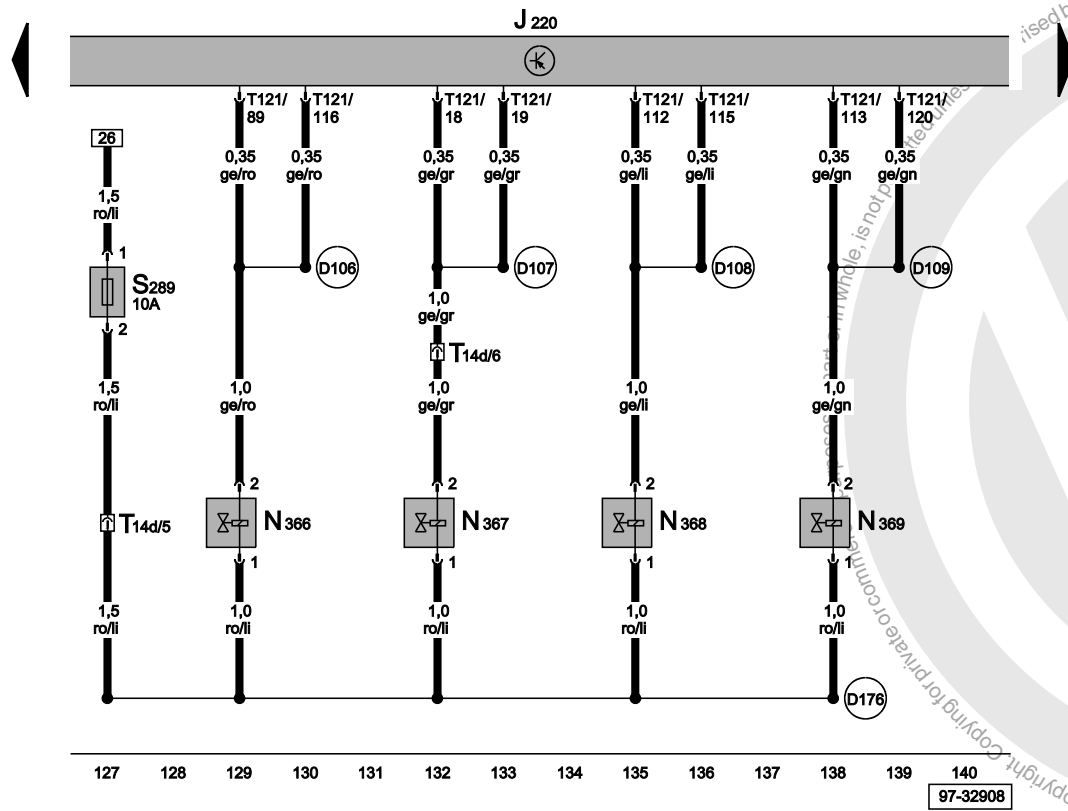
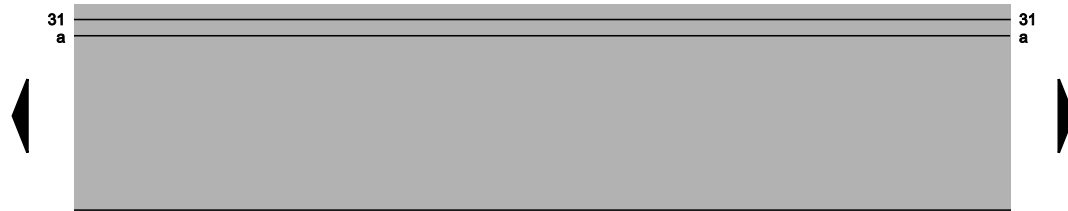


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Motronic control unit, gas injection valves

- J220 Motronic control unit, in centre plenum chamber
- N366 Gas injection valve 1
- N367 Gas injection valve 2
- N368 Gas injection valve 3
- N369 Gas injection valve 4
- S289 Gas injector fuse, in protective housing on left in engine compartment
- T14d 14-pin connector, on left in plenum chamber
- T121 121-pin connector

- D106 Connection 4, in engine compartment wiring harness
- D107 Connection 5, in engine compartment wiring harness
- D108 Connection 6, in engine compartment wiring harness
- D109 Connection 7, in engine compartment wiring harness
- D176 Connection (gas injector), in engine compartment wiring harness



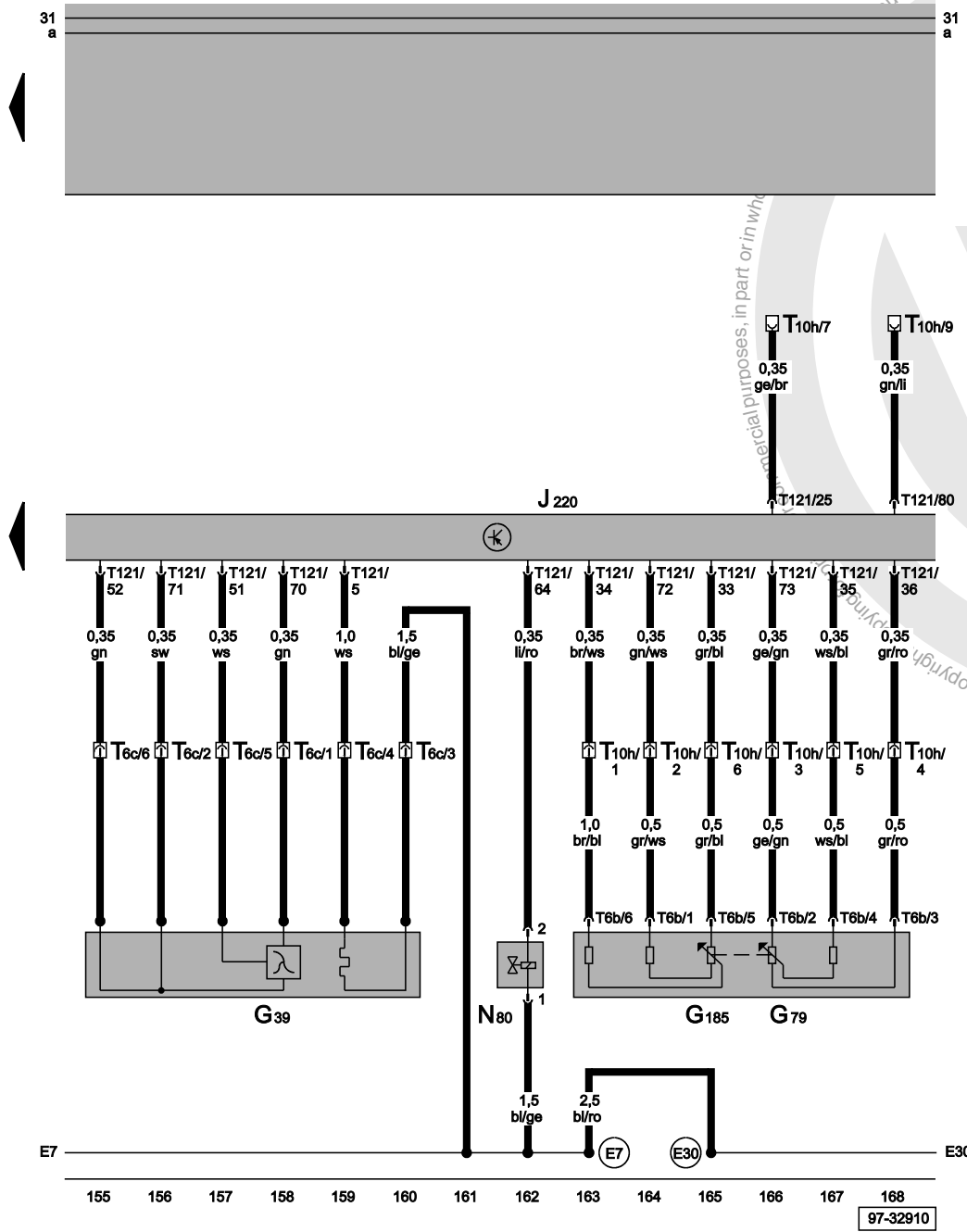
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- or = orange
- fs = pink

Motronic control unit, accelerator position sender, lambda probe (upstream of catalytic converter), active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(E7) Positive connection (87a), in Motronic wiring harness

(E30) Connection (87a), in engine wiring harness



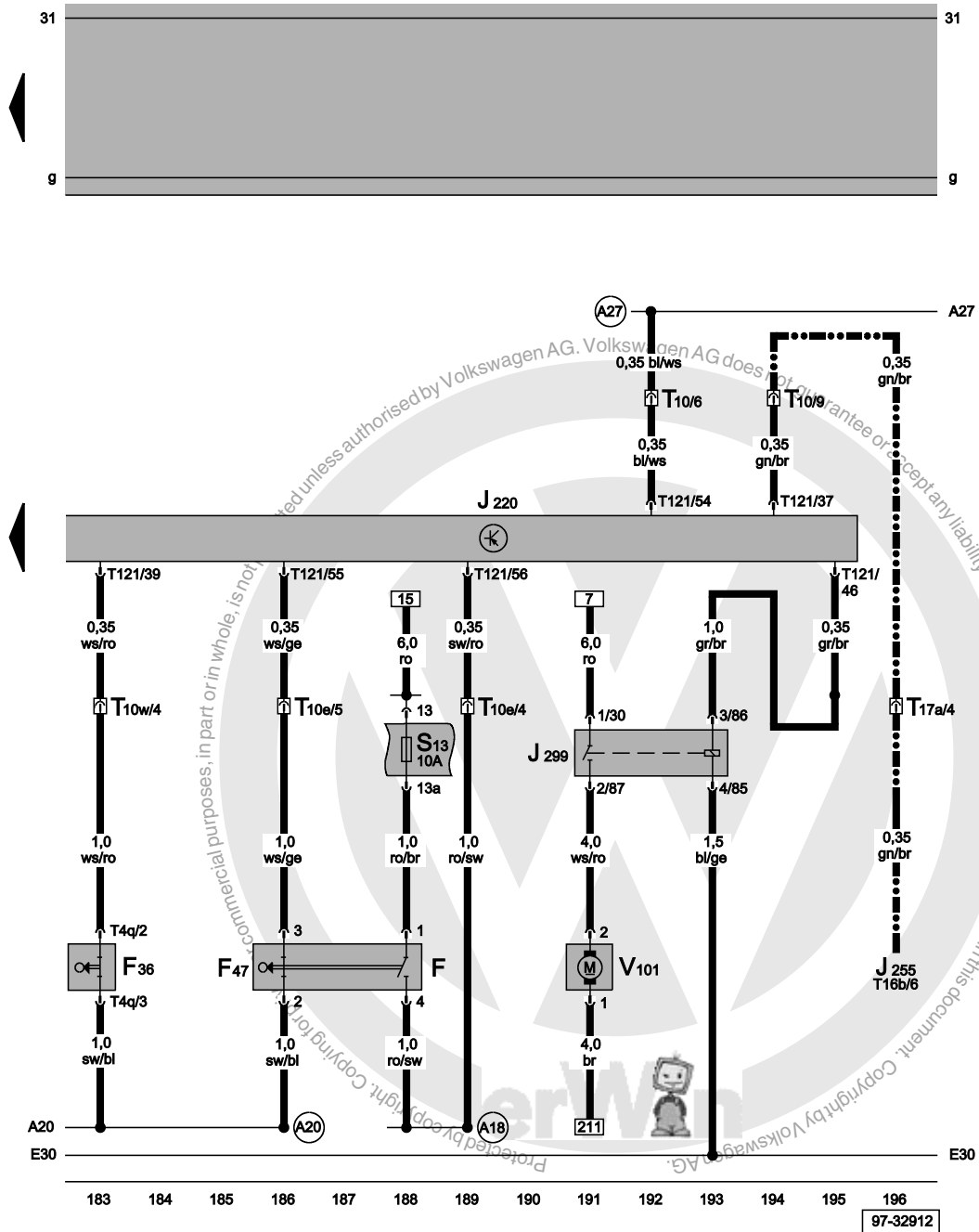
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Motronic control unit, secondary air pump motor, clutch pedal switch, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J255 Climatronic control unit
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T121 121-pin connector
- V101 Secondary air pump motor

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A27) Connection (speed signal), in dash panel wiring harness
- only models with Climatronic

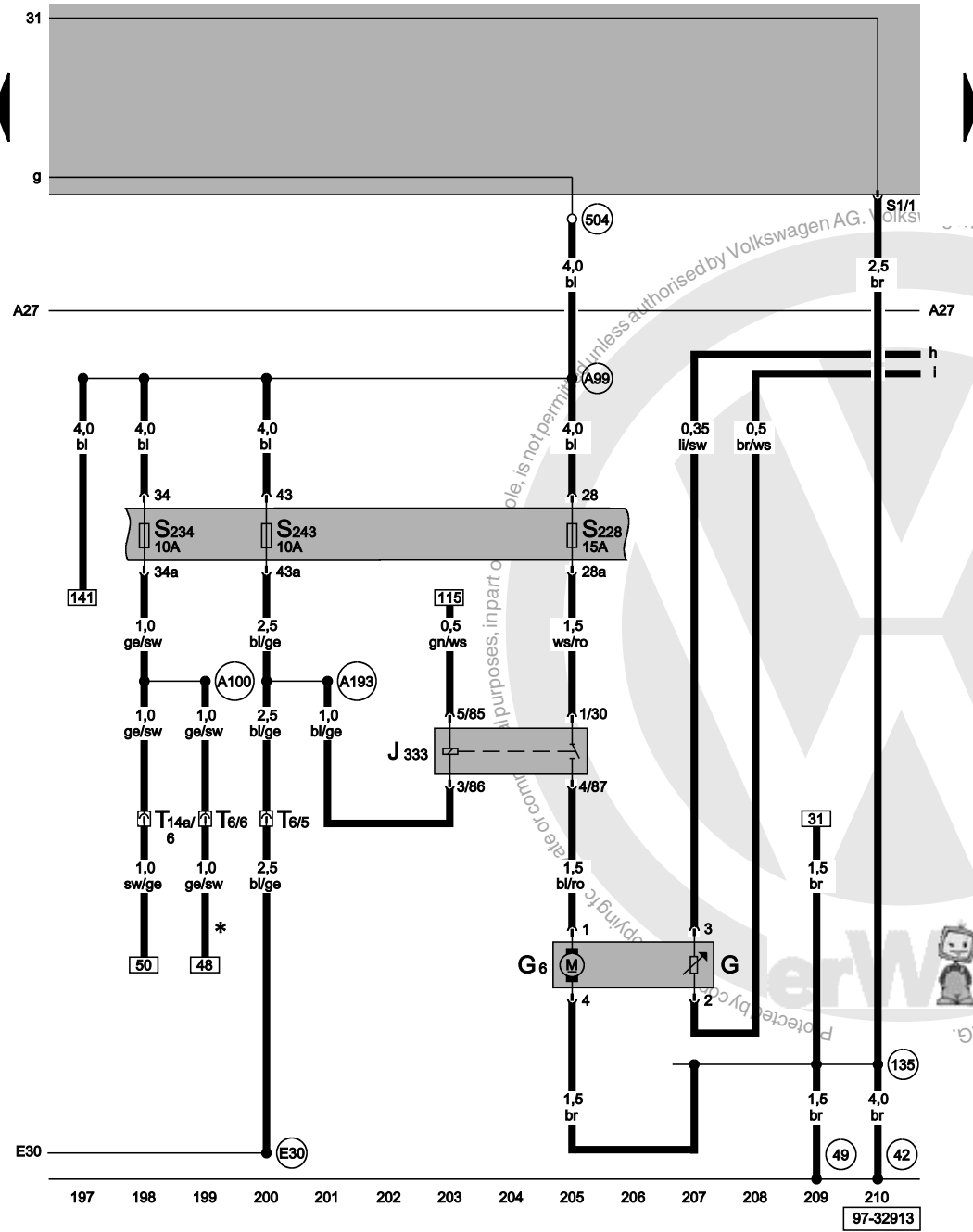
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97-32912

Fuel pump, fuel gauge sender, fuel pump switch-off relay

- G Fuel gauge sender
- G6 Fuel pump
- J333 Fuel pump switch-off relay, on the 13 position additional relay carrier
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A193 Connection (87a), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * models with heater element for crankcase breather only

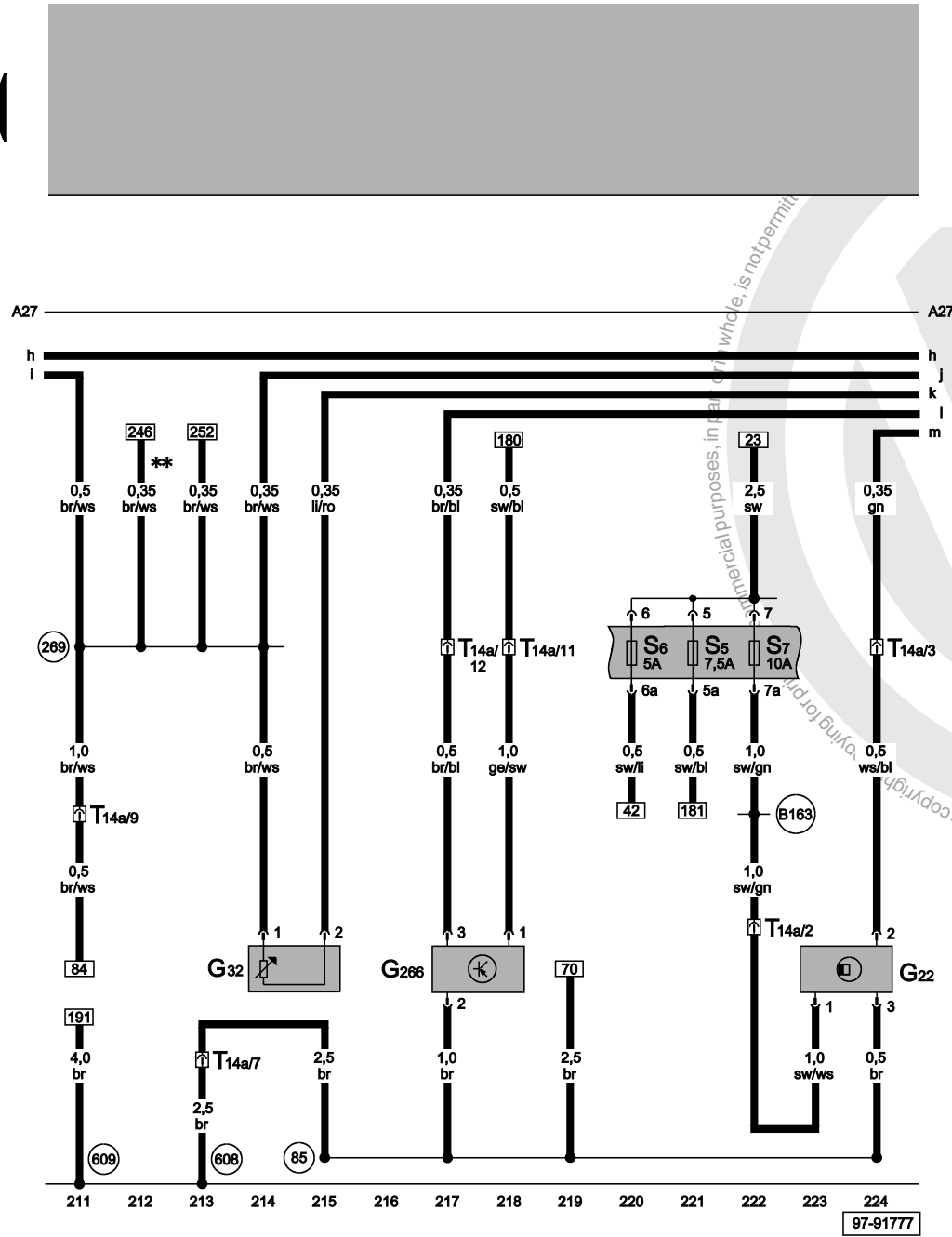


ws = white
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Coolant shortage indicator sender, oil level and oil temperature sender, speedometer sender

- G22 Speedometer sender (Hall sender, on gearbox)
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- S5 Fuse 5 in fuse holder
- S6 Fuse 6 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery

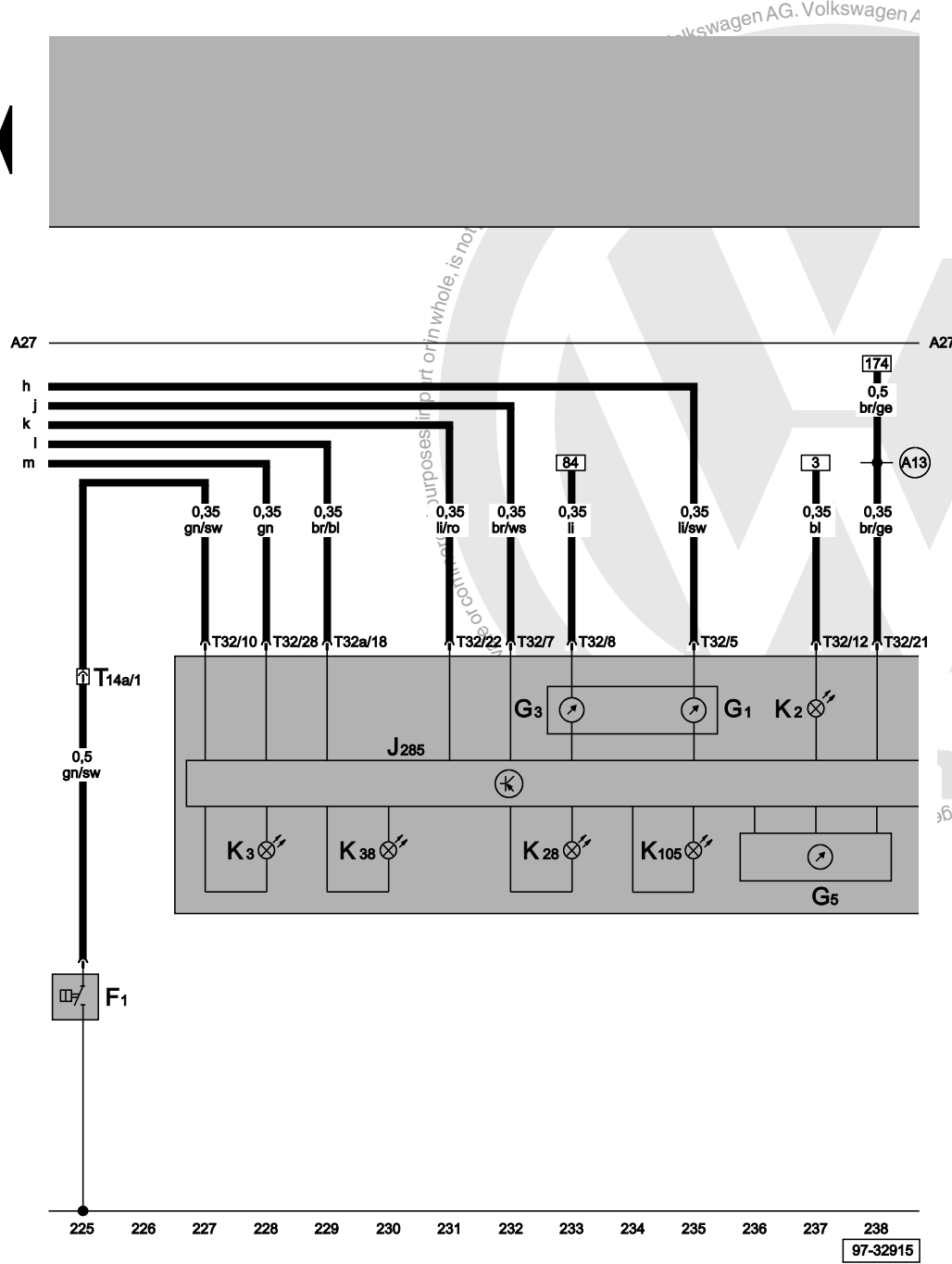
- (85) Earth connection -1-, in engine compartment wiring harness
- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (608) Earth point, in centre of plenum chamber
- (609) Earth point, on right in plenum chamber
- (B163) Positive connection 1 (15), in interior wiring harness
- ** only models without Climatronic
- *** only flexible service interval display



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Dash panel insert, coolant temperature/coolant shortage indicator, alternator warning lamp, fuel gauge, oil pressure warning, rev. counter

- F1 Oil pressure switch
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A13 Connection (door contact switch), in dash panel wiring harness
- *** only flexible service interval display



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97-32915

Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, exhaust emissions warning lamp, cruise control system warning lamp, natural gas mode warning lamp, speedometer

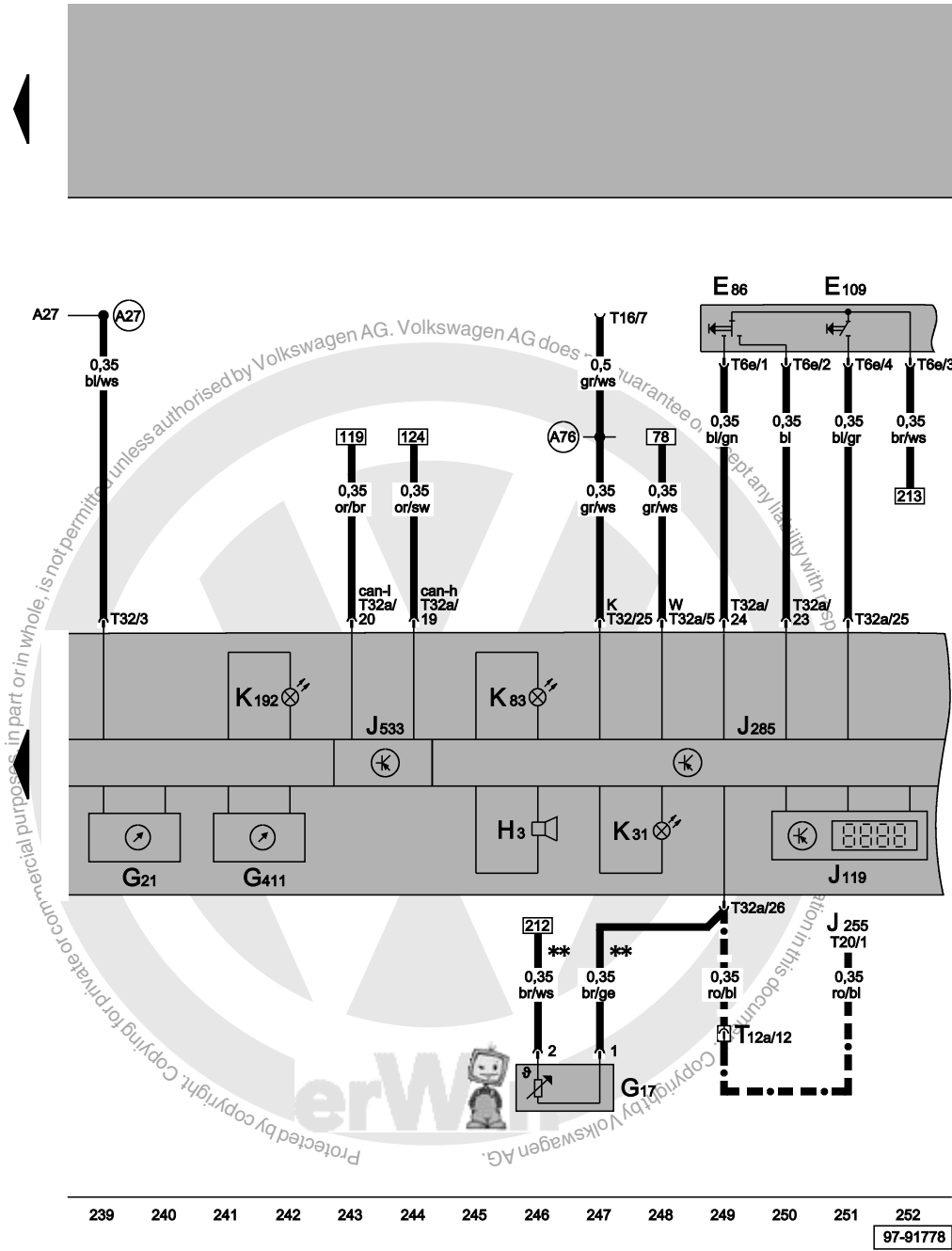
- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- G21 Speedometer
- G411 Natural gas gauge
- H3 Warning buzzer
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K83 Exhaust emissions warning lamp
- K31 Cruise control system warning lamp
- K192 Natural gas mode warning lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A27 Connection (speed signal), in dash panel wiring harness

A76 Connection (diagnosis wire K), in dash panel wiring harness

** only models without Climatronic
 -- only models with Climatronic

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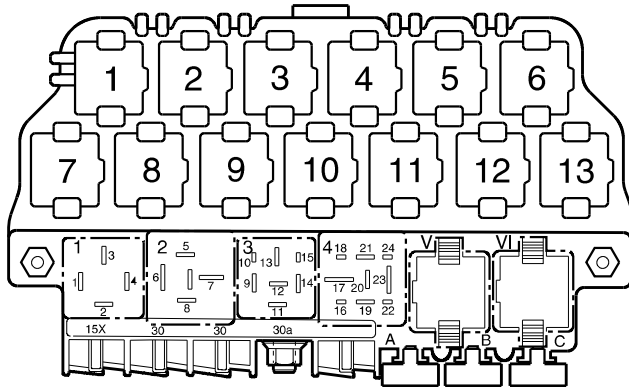
1.4 I /55 kW Motronic, engine codes BCA

From January 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:

Relay locations on relay plate:



97-14163

2 - X contact relief relay (100)

4 - Fuel pump relay (409)



Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

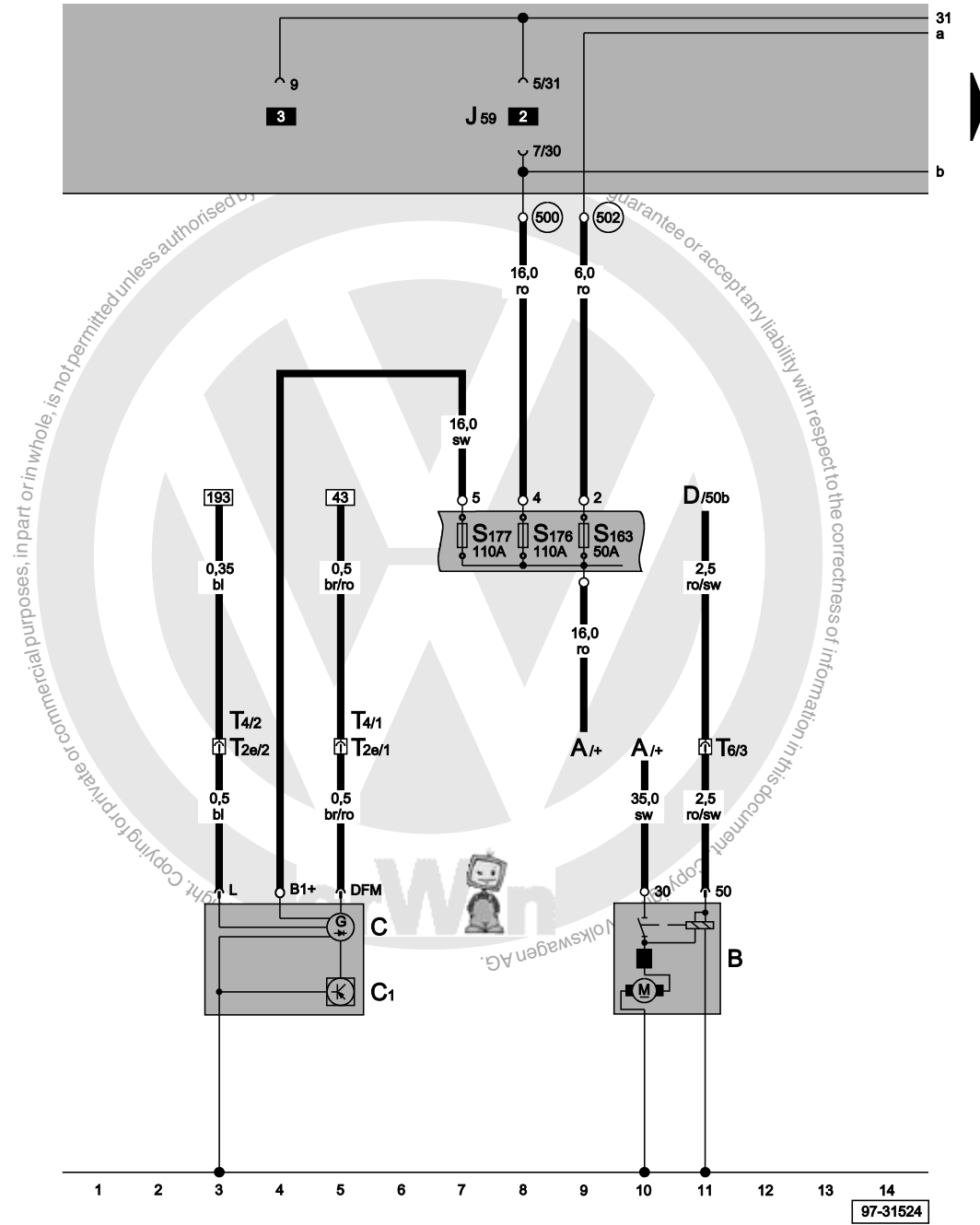
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Alternator, starter

- A Battery
 - B Starter
 - C Alternator
 - C1 Voltage regulator
 - D Ignition/starter switch
 - J59 X contact relief relay
 - S163 Fuse -2- (30), in fuse box/battery
 - S176 Fuse -4- (30), in fuse box/battery
 - S177 Fuse -5- (30), in fuse box/battery
 - T2e 2-pin connector, near starter (only models without air conditioner)
 - T4 4-pin connector, near starter (only models with air conditioner)
 - T6 6-pin connector, brown, in protective housing for connectors, in plenum chamber, left
- 500 Screw connection -1- (30), on relay plate
 - 502 Screw connection -1- (30a), on relay plate

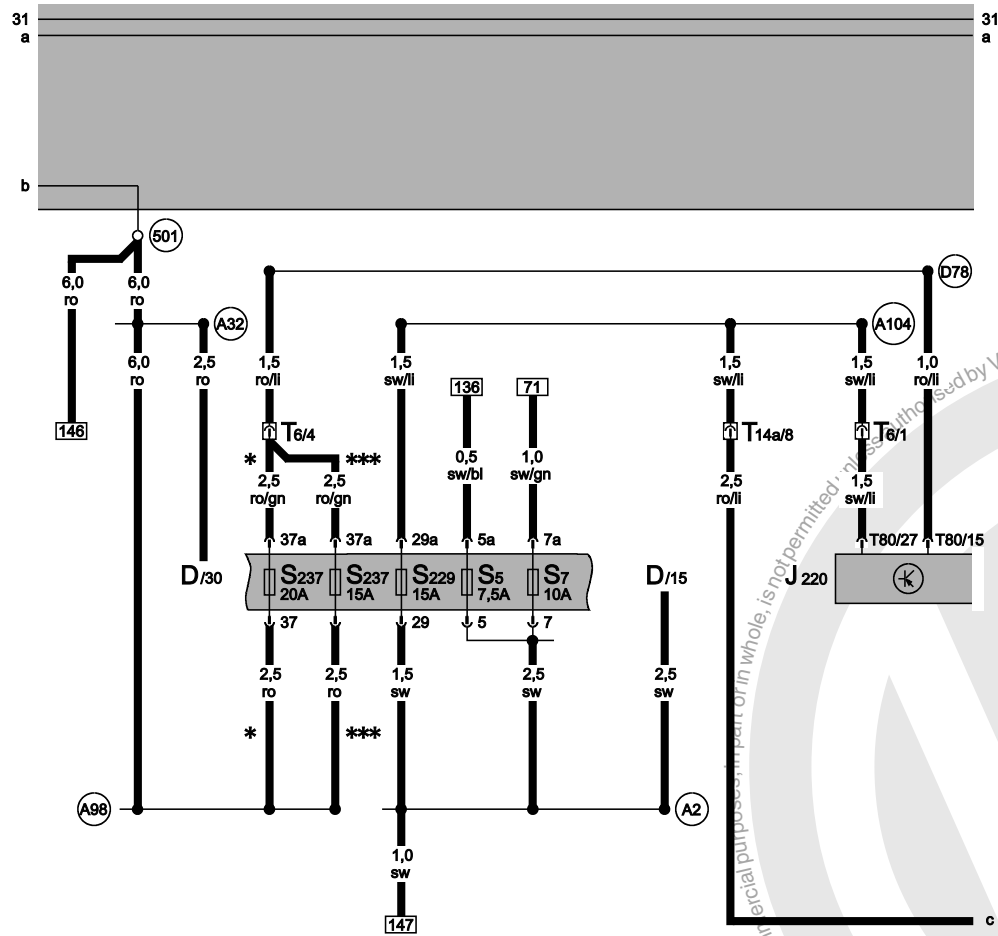


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Motronic control unit

- D Ignition and starter switch
- J220 Motronic control unit, in centre of plenum chamber
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector

- (85) Earth connection 1, in engine compartment wiring harness
- (501) Screw connection 2 (30), on relay plate
- (608) Earth point, in centre of plenum chamber
- (A2) Positive connection (15), in dash panel wiring harness
- (A32) Positive connection (30), in dash panel wiring harness
- (A98) Positive connection 4 (30), in dash panel wiring harness
- (A104) Positive connection 2 (15), in dash panel wiring harness
- (D17) Positive connection 1 (15), in engine wiring harness
- * From May 2003
- *** Up to April 2003

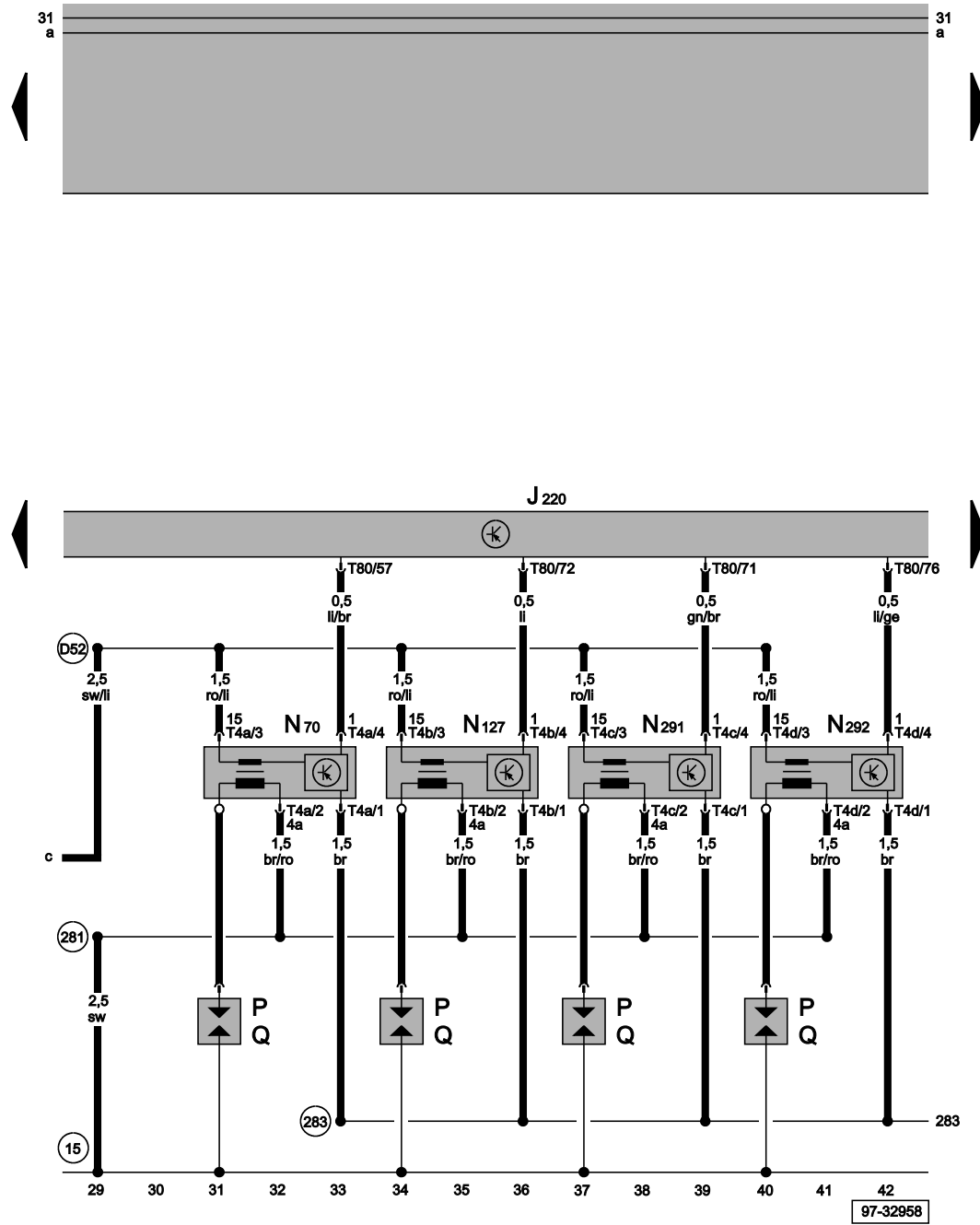


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Motronic control unit, ignition system

- J220 Motronic control unit, in plenum chamber, centre
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T80 80-pin connector

- 15 Earth point, on cylinder head
- 281 Earth connection -1-, in engine prewiring wiring harness
- 283 Earth connection -2-, in engine prewiring wiring harness
- D52 Positive (+) connection (15a), in engine compartment wiring harness

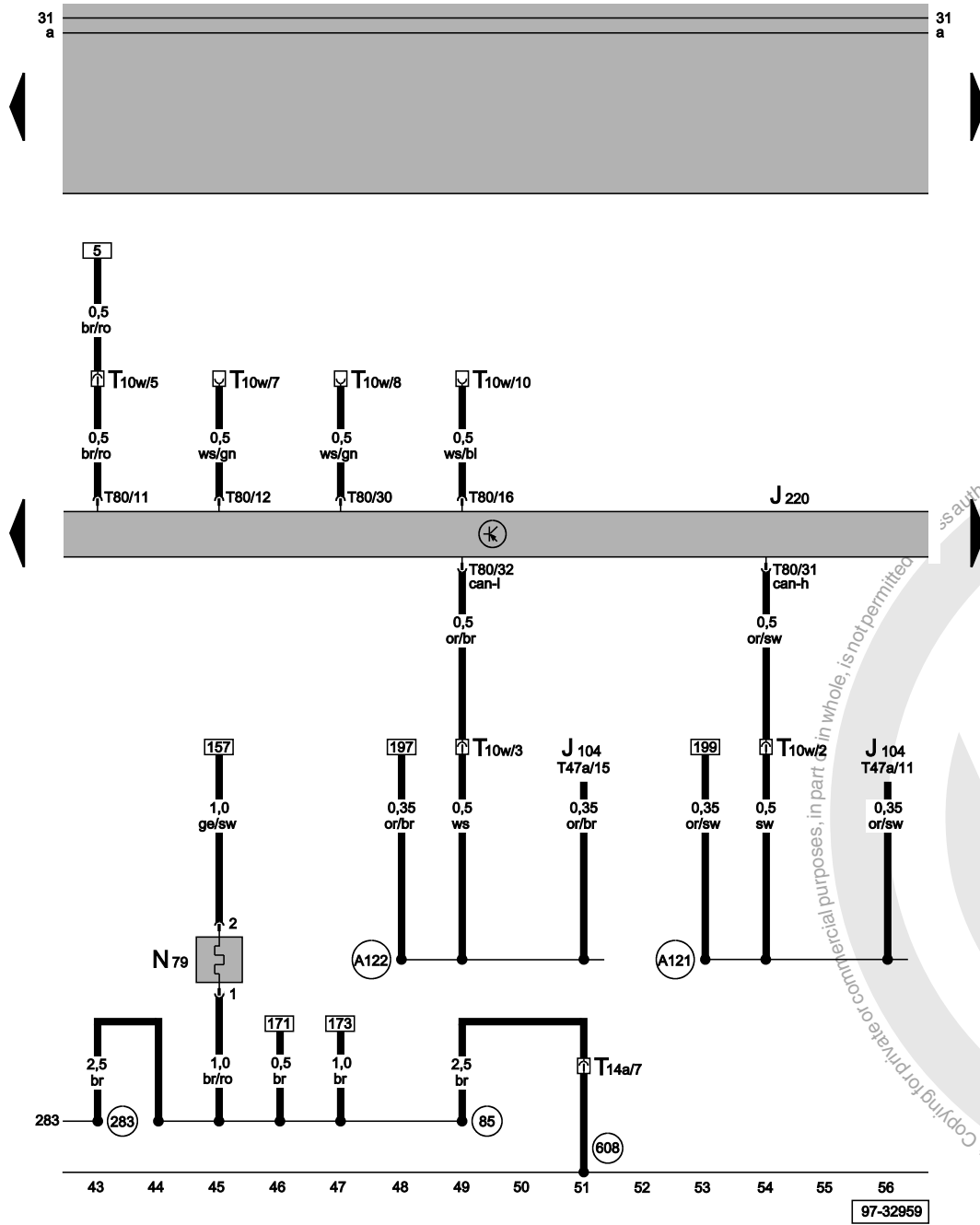


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Motronic control unit, heater element (crankcase breather)

- J104 ABS/ABS with EDL control unit
- J220 Motronic control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T47a 47-pin connector, on ABS/ABS with EDL/TCS/ESP control unit
- T80 80-pin connector

- 85 Earth connection -1-, in engine compartment wiring harness
- 283 Earth connection -2-, in engine prewiring wiring harness
- 608 Earth point, in plenum chamber, centre
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



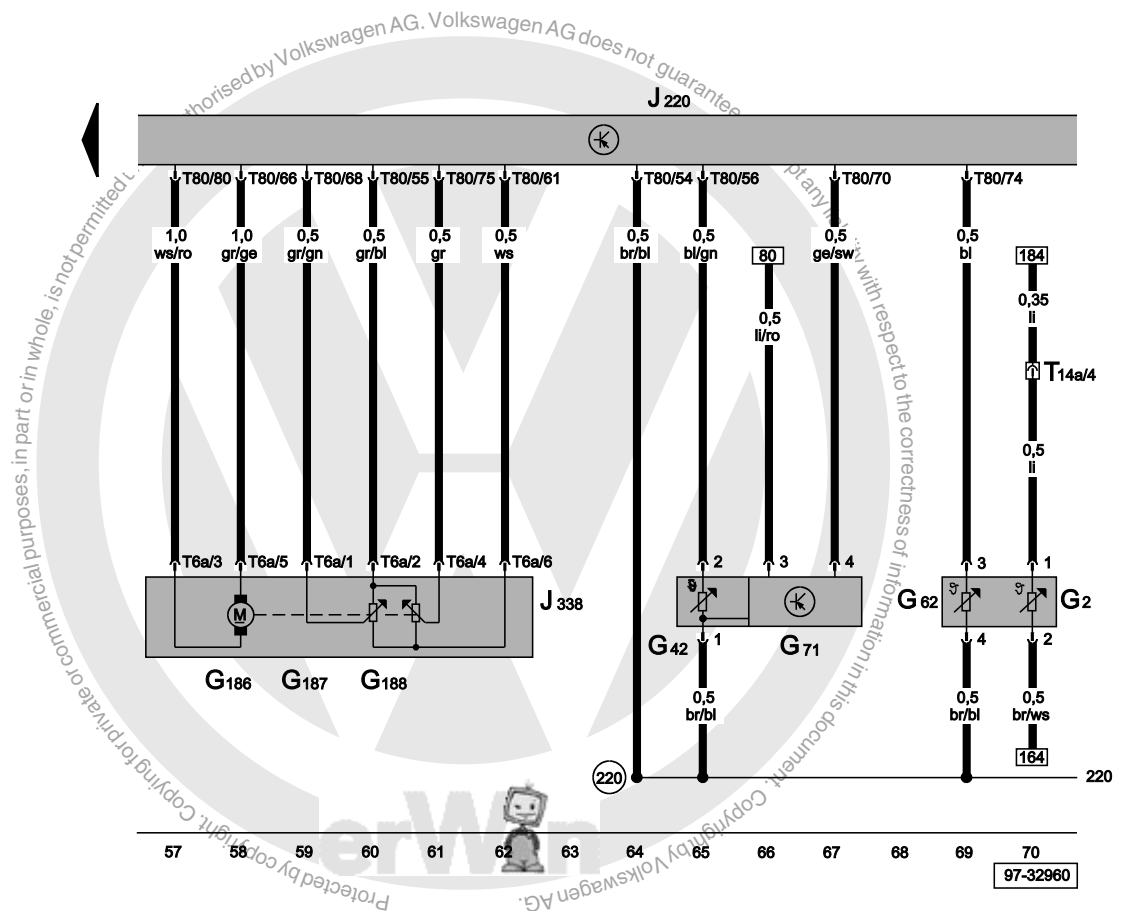
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97-32959

Motronic control unit, throttle valve control module, coolant temperature sender, intake air temperature sender, intake manifold pressure sender

- G2 Coolant temperature sender
- G42 Intake air temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G186 Throttle valve drive (electric throttle operation)
- G187 Throttle valve drive angle sender -1- (electric throttle operation)
- G188 Throttle valve drive angle sender -2- (electric throttle operation)
- J220 Motronic control unit, in plenum chamber, centre
- J338 Throttle valve control unit
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T80 80-pin connector

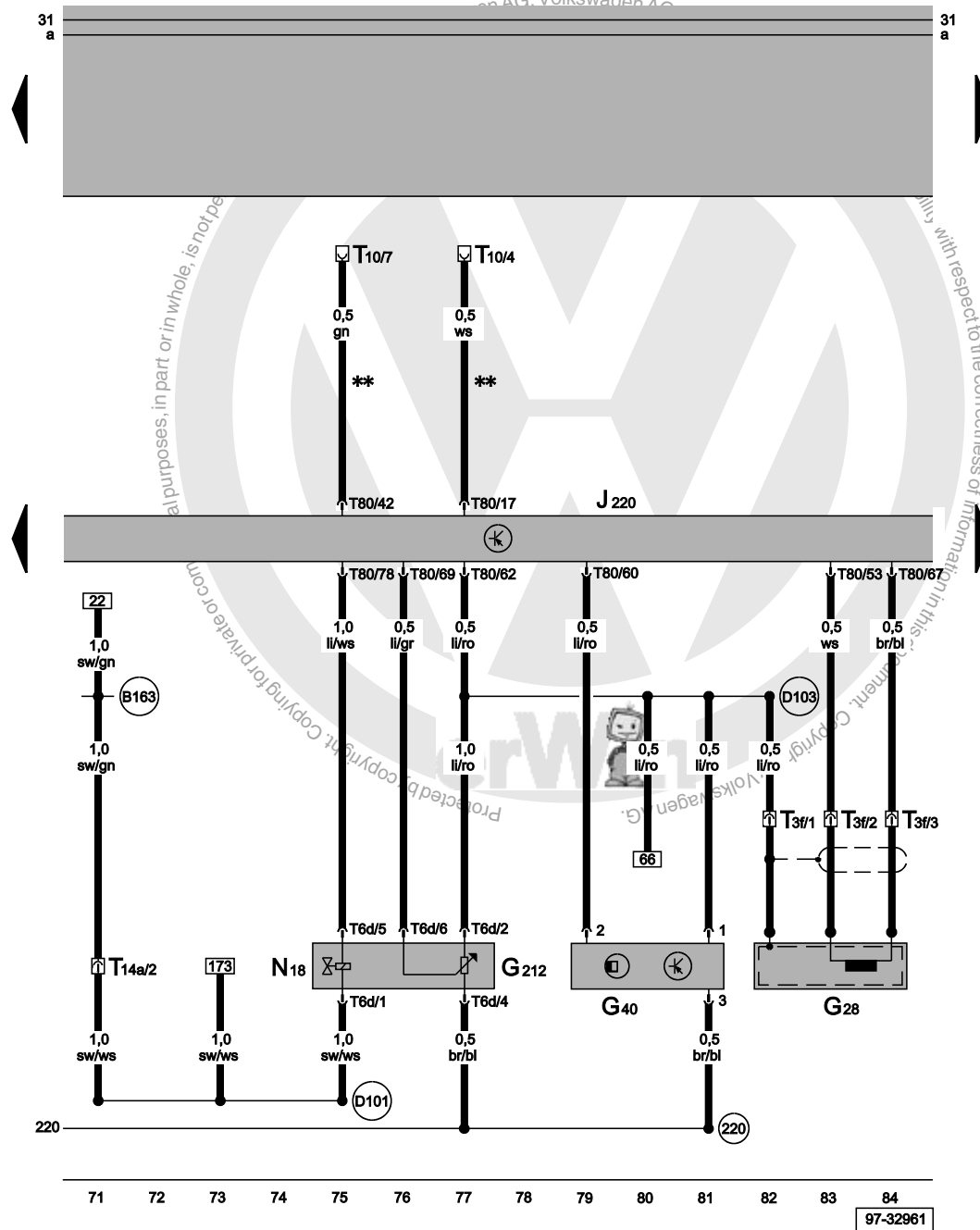
(220) Earth connection (sender earth), in engine wiring harness



Motronic control unit, hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, engine speed sender

- G28 Engine speed sender
- G40 Hall sender
- G212 Exhaust gas recirculation potentiometer
- J220 Motronic control unit, in plenum chamber, centre
- N18 Exhaust gas recirculation valve
- T3f 3-pin connector, in engine compartment front
- T6d 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, near battery
- T80 80-pin connector

- 220 Earth connection (sender earth), in engine wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- D101 Connection -1-, in engine compartment wiring harness
- D103 Connection -3-, in engine compartment wiring harness
- ** Connection for air conditioner

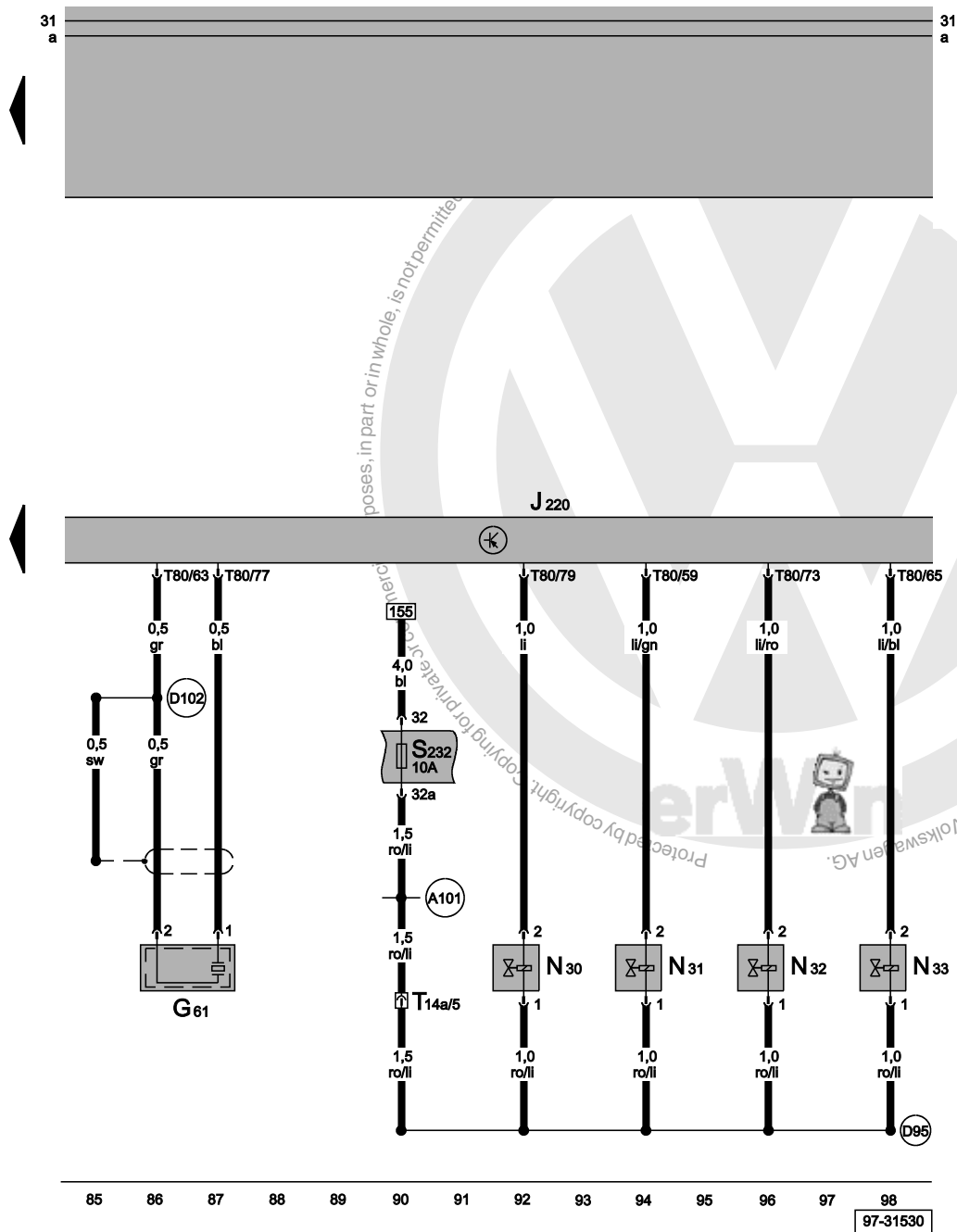


- ws = white
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Motronic control unit, injectors, knock sensor

- G61 Knock sensor I
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse box
- T14a 14-pin connector, near battery
- J220 Motronic control unit, in plenum chamber, centre
- T80 80-pin connector

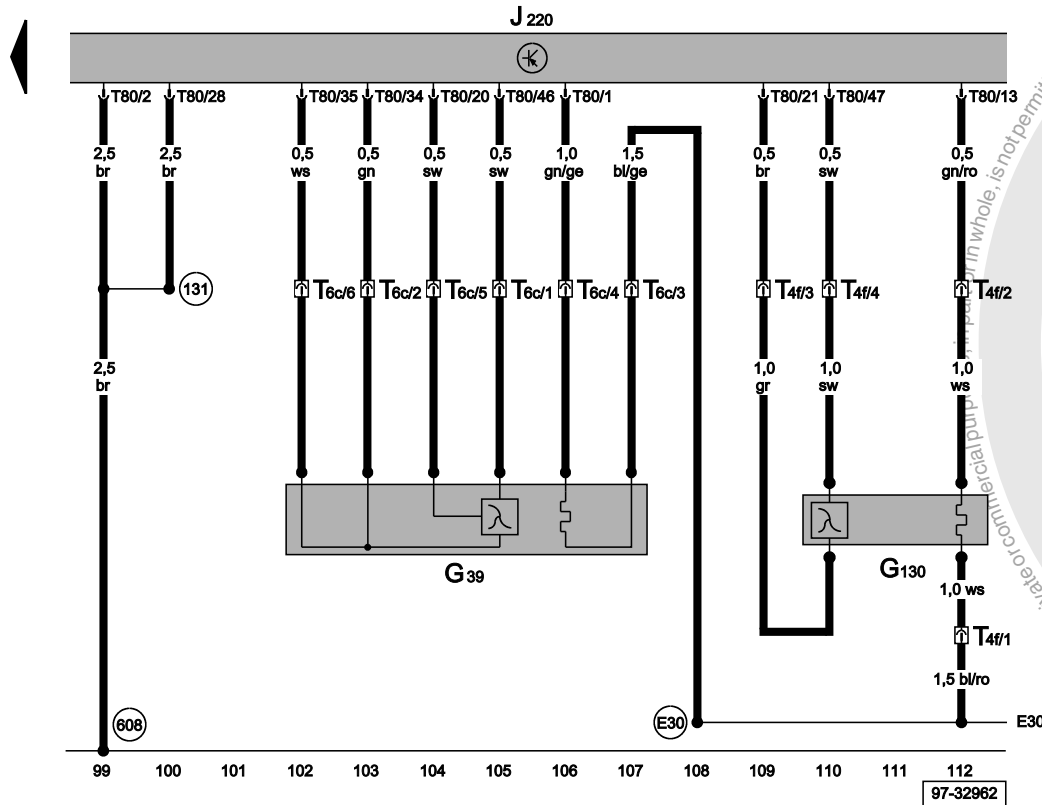
- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection -2-, in engine compartment wiring harness



- ws = white
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Motronic control unit, lambda probe before catalytic converter, lambda probe after catalytic converter

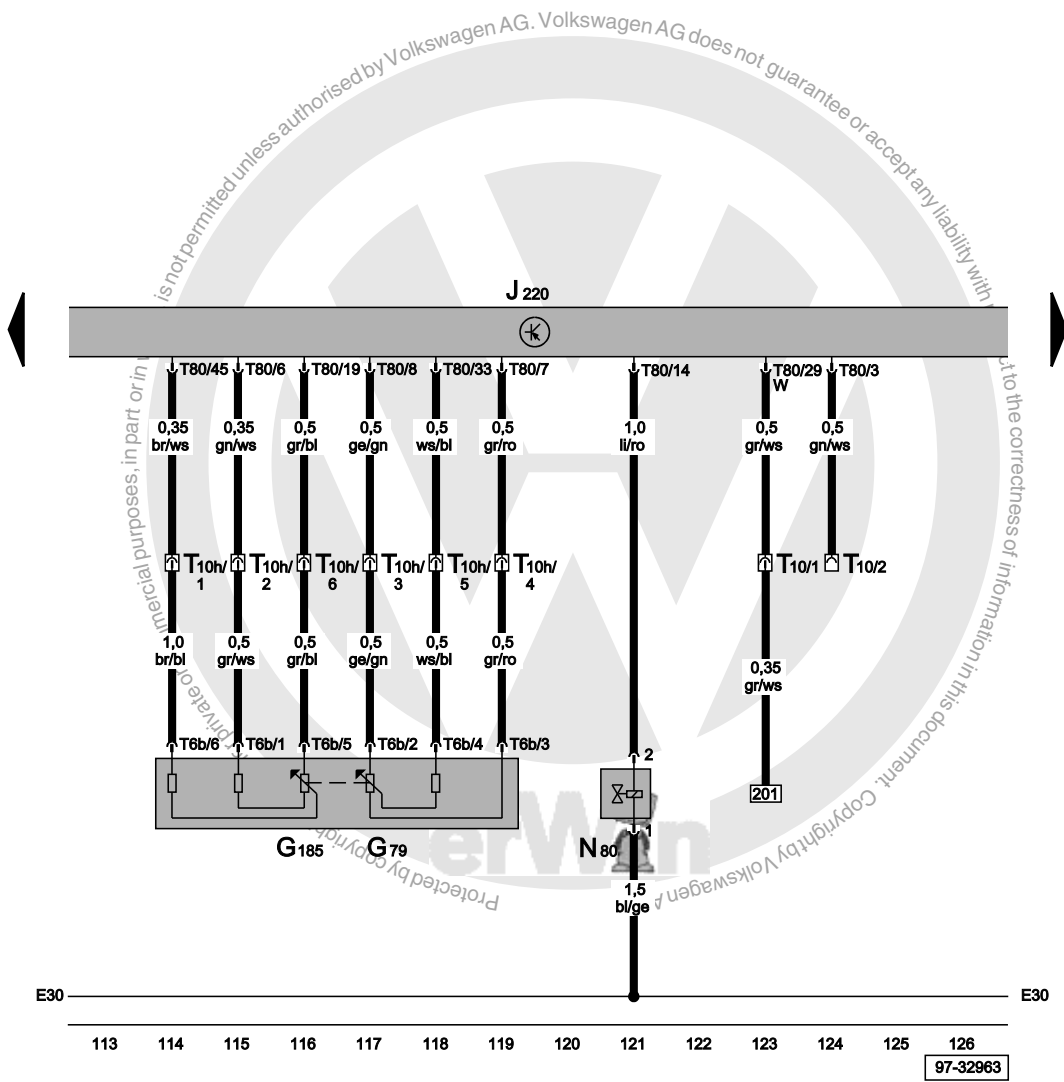
- G39 Lambda probe
- G130 Lambda probe after catalyst
- J220 Motronic control unit, in plenum chamber, centre
- T4f 4-pin connector, near catalyst
- T6c 6-pin connector, near catalyst
- T80 80-pin connector
- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- E30 Connection (87a), in engine wiring harness



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Motronic control unit, accelerator pedal position sender, active charcoal filter system solenoid valve

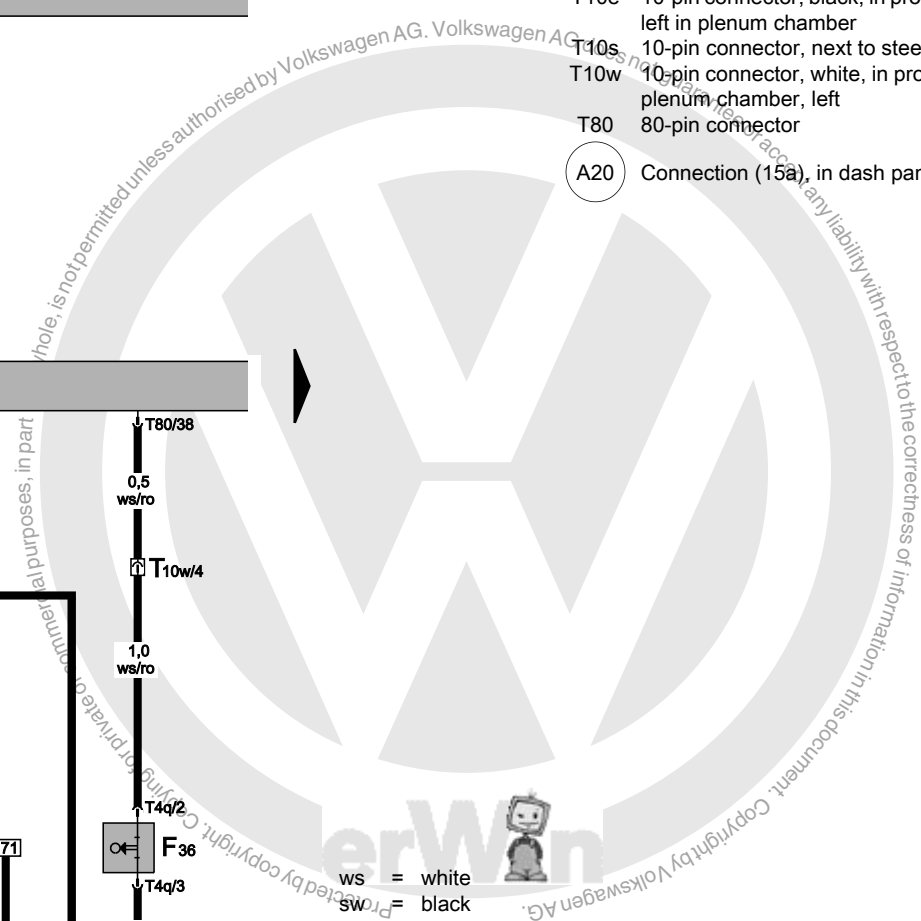
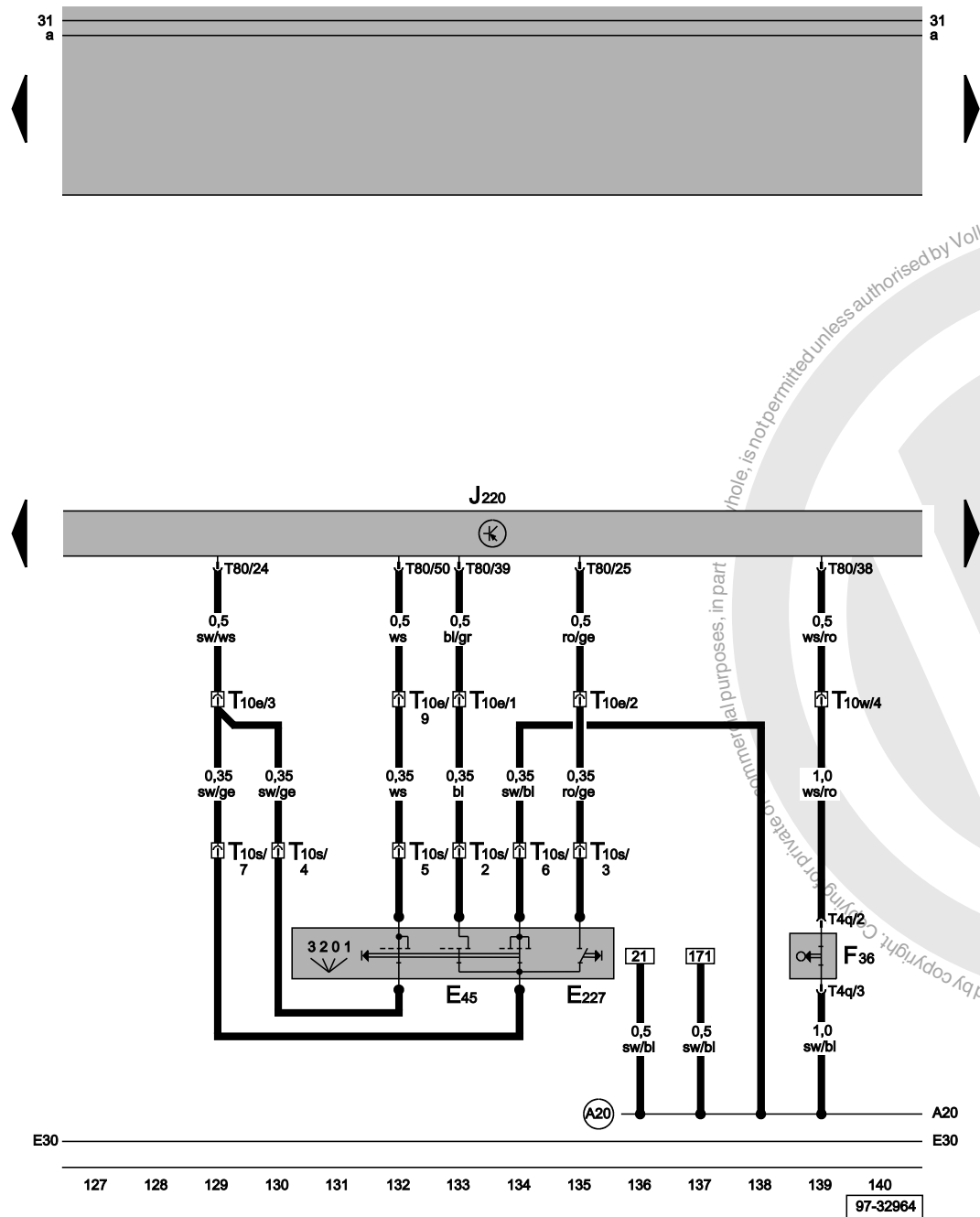
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender -2-
- J220 Motronic control unit, in plenum chamber, centre
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10h 10-pin connector, blue, in protective housing for connectors, on left in plenum chamber
- T80 121-pin connector



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Motronic control unit, cruise control system switch (CCS), clutch pedal switch

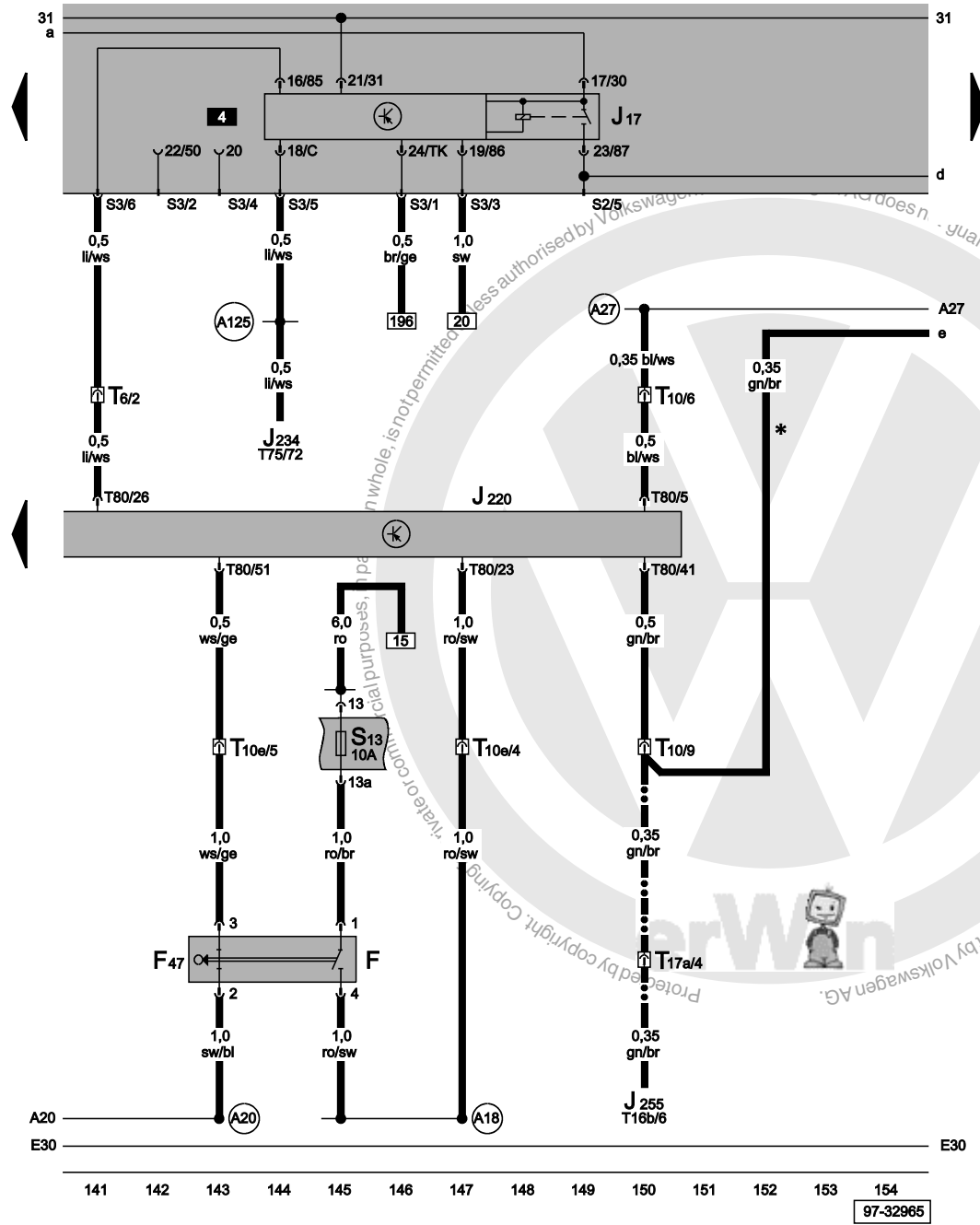
- E45 Cruise control system switch
- E227 Cruise control system (CCS) button (Set)
- F36 Clutch pedal switch
- J220 Motronic control unit, in plenum chamber, centre
- T4q 4-pin connector
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, in plenum chamber, left
- T80 80-pin connector
- A20 Connection (15a), in dash panel wiring harness



Motronic control unit, fuel pump relay, CCS brake pedal switch, brake light switch

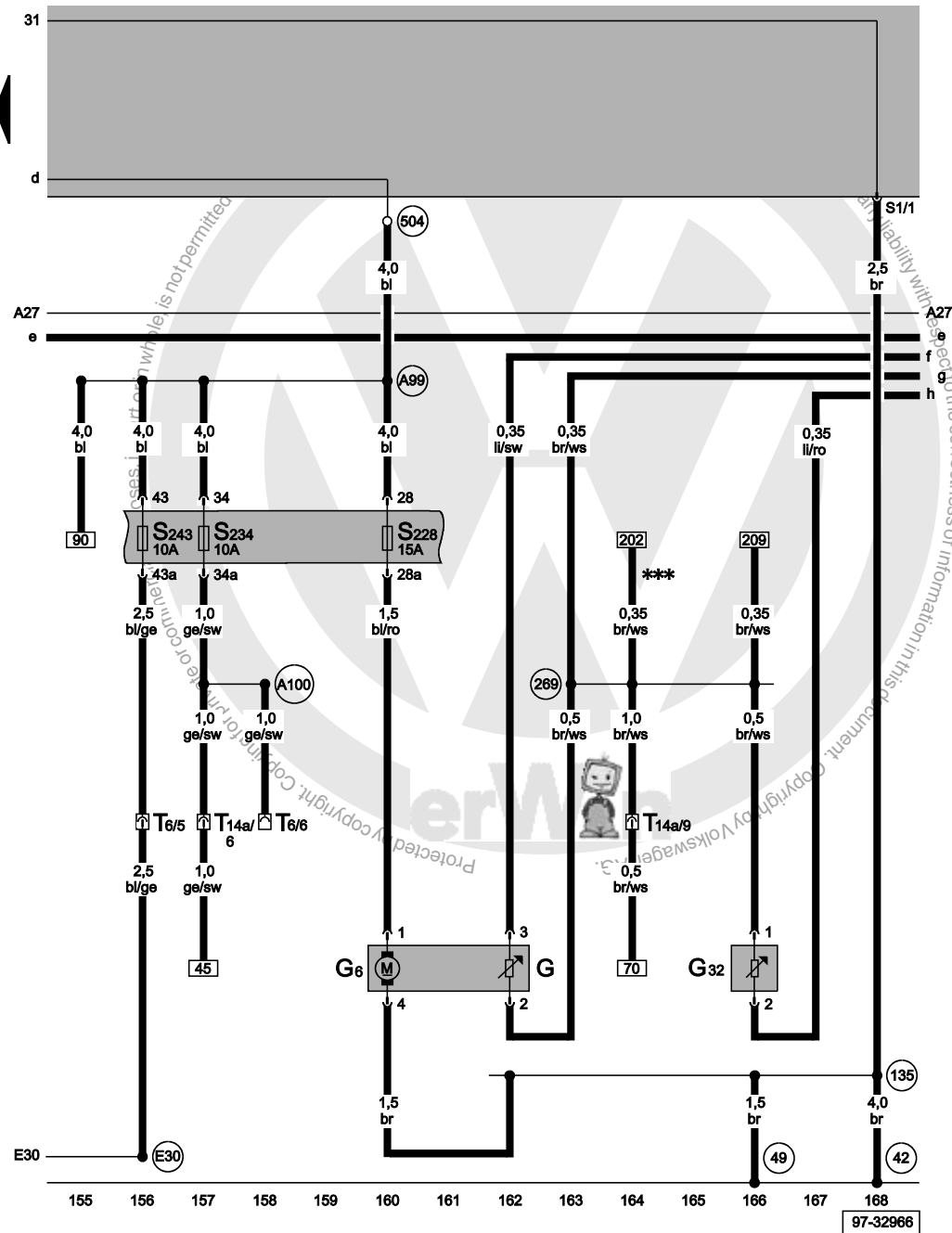
- F Brake light switch
- F47 Cruise control system brake pedal switch
- J17 Fuel pump relay
- J220 Motronic control unit, in plenum chamber, centre
- J234 Airbag control unit
- J255 Climatronic control unit
- S13 Fuse in fuse box
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind dash panel, centre
- T75 75-pin connector
- T80 80-pin connector

- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- * Engine speed signal from engine control unit up to April 2002
- Only models with Climatronic



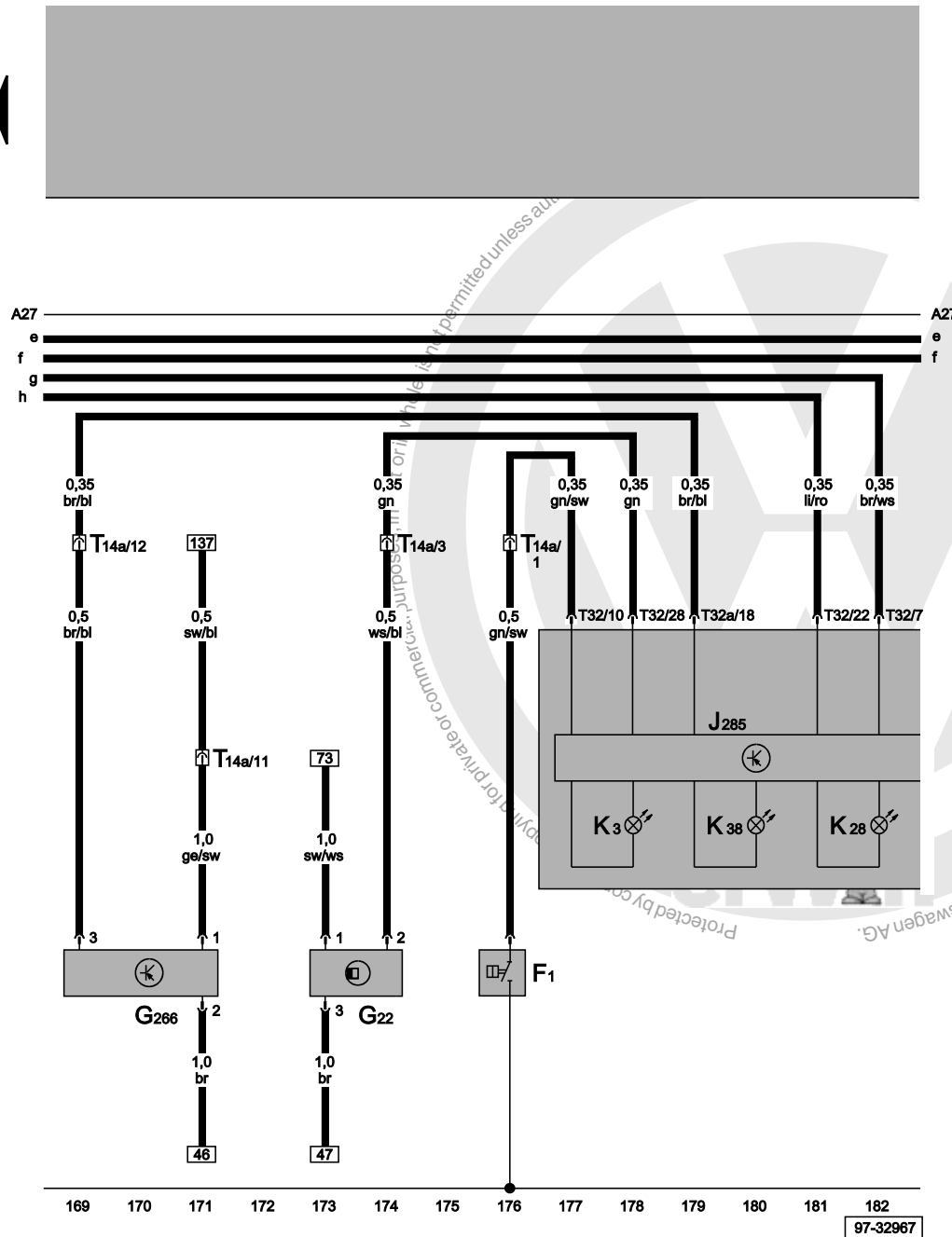
Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- (42) Earth point, next to steering column
- (49) Earth point, on steering column
- (135) Earth connection -2-, in dash panel wiring harness
- (269) Earth connection (sender earth) -1-, in dash panel wiring harness
- (504) Screw connection -1- (87F), on relay plate
- (A99) Connection -1- (87), in dash panel wiring harness
- (A100) Connection -2- (87), in dash panel wiring harness
- (E30) Connection (87a), in engine wiring harness
- *** Only models without Climatronic



Dash panel insert, oil pressure warning, oil level and oil temperature warning, speedometer sender, coolant temperature and coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- * Only with flexible service interval display

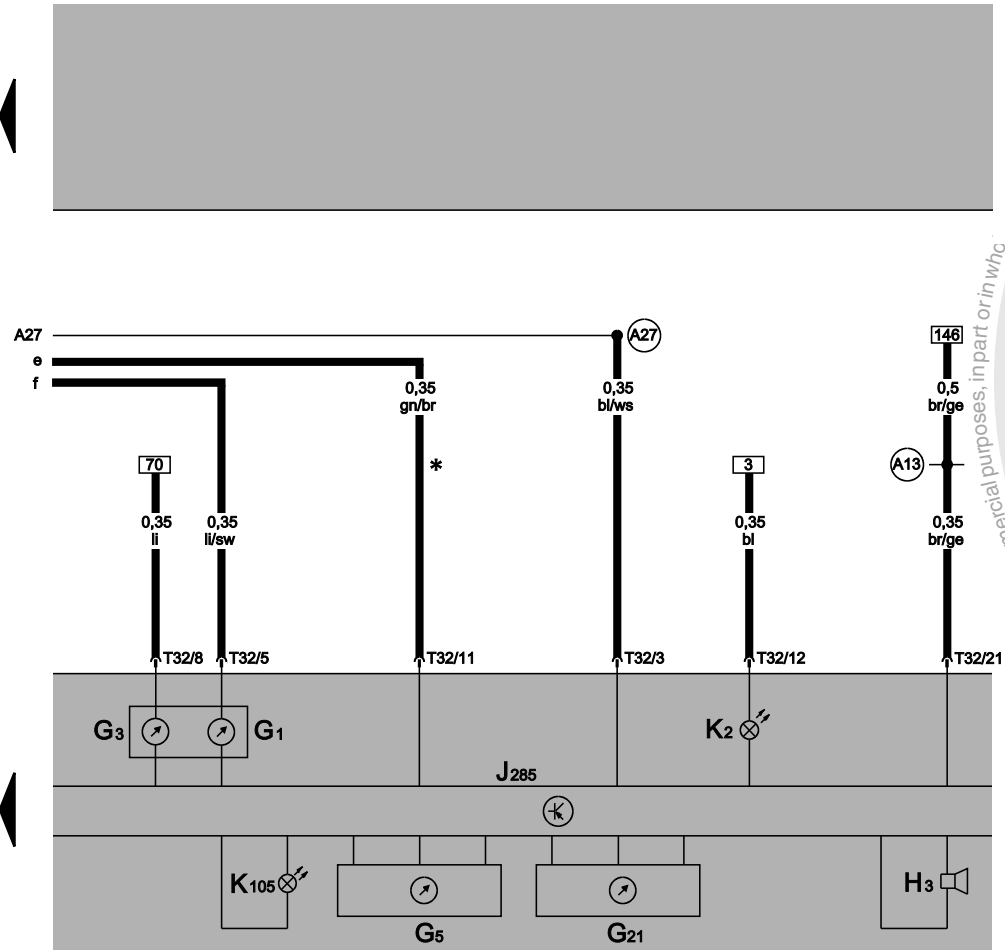


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97-32967

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

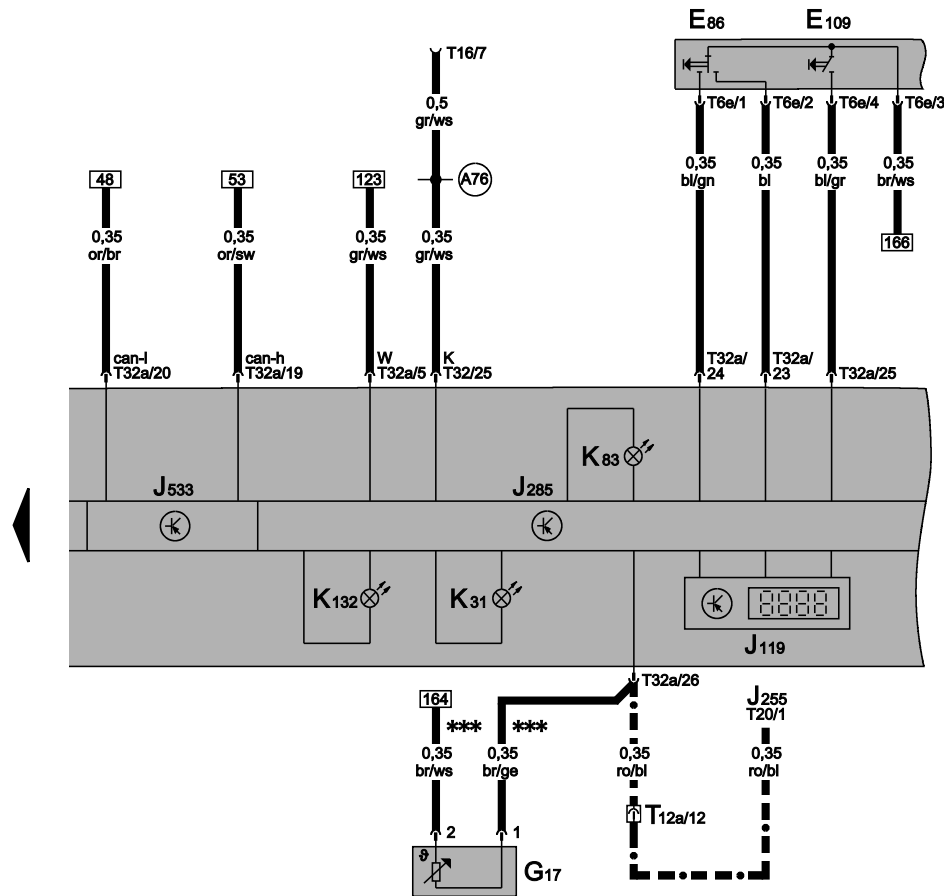
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit up to April 2002



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Dash panel insert, electrically operated throttle fault lamp, CCS warning lamp, multi-function display, ambient temperature display, exhaust emissions warning lamp, diagnostic socket

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T12a 12-pin connector, behind dash panel, centre
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** Only models without Climatronic
- .- Only models with Climatronic



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3.2 I/177 kW Motronic, engine code BFH

from July 2002

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

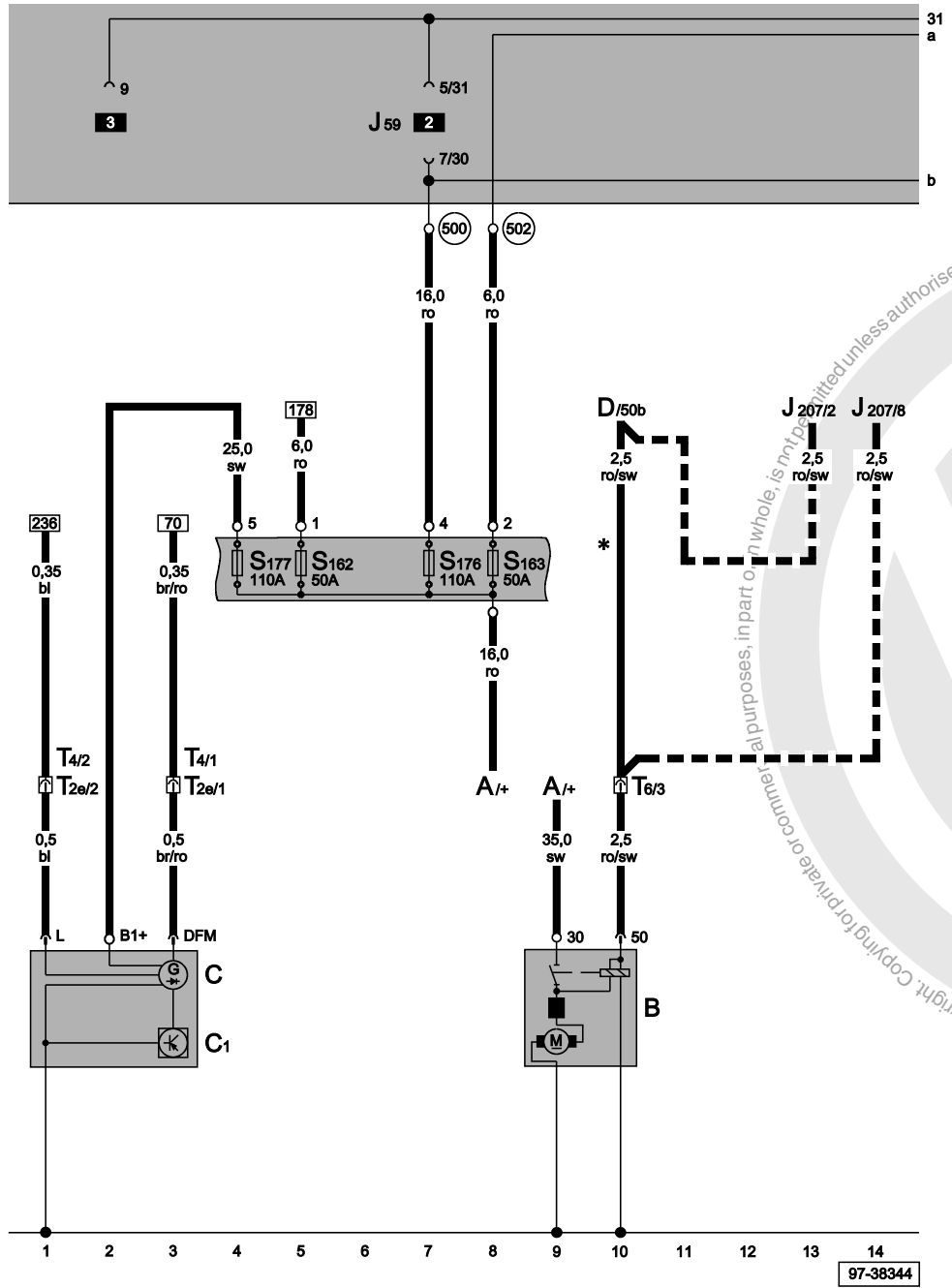
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs
- ⇒ guided fault finding



Alternator, starter



- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J207 Starter inhibitor relay, on the 13 position additional relay carrier
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- only models with 02E double clutch gearbox 02E (DSG)

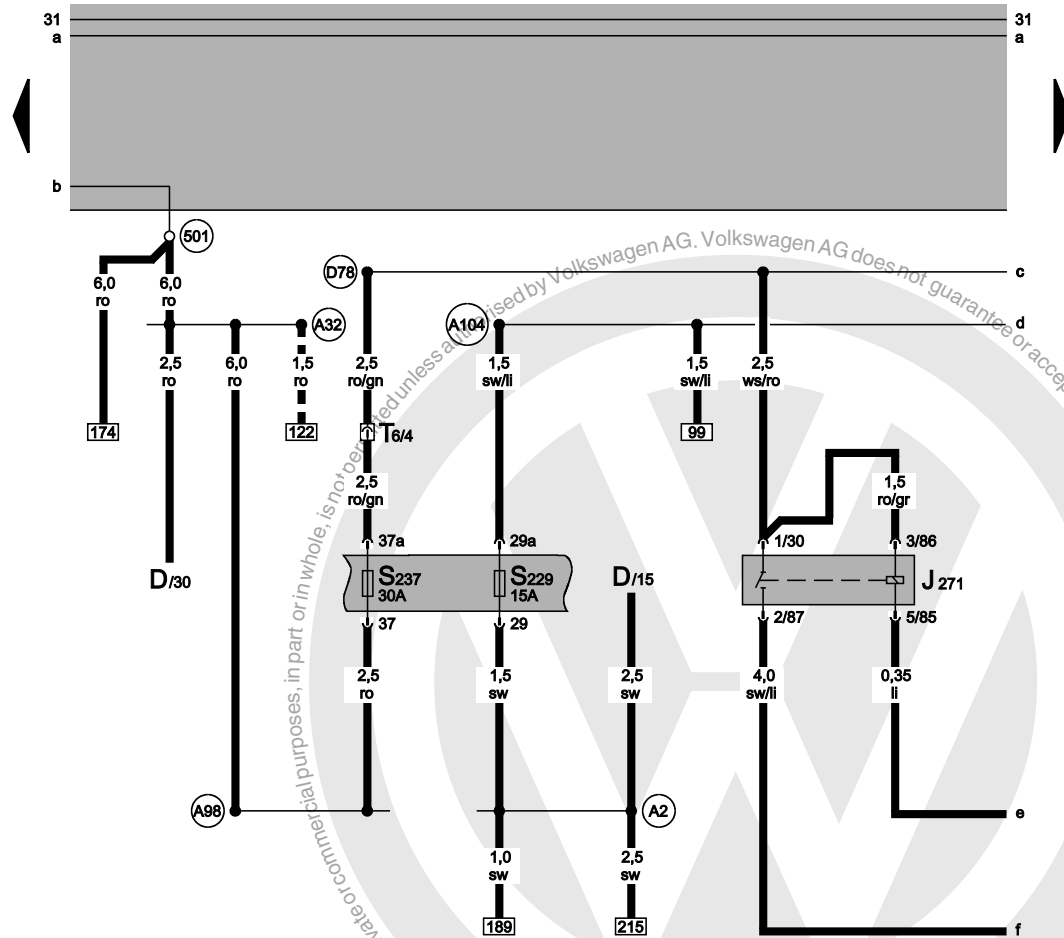
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97-38344

Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- only models with 02E double clutch gearbox 02E (DSG)

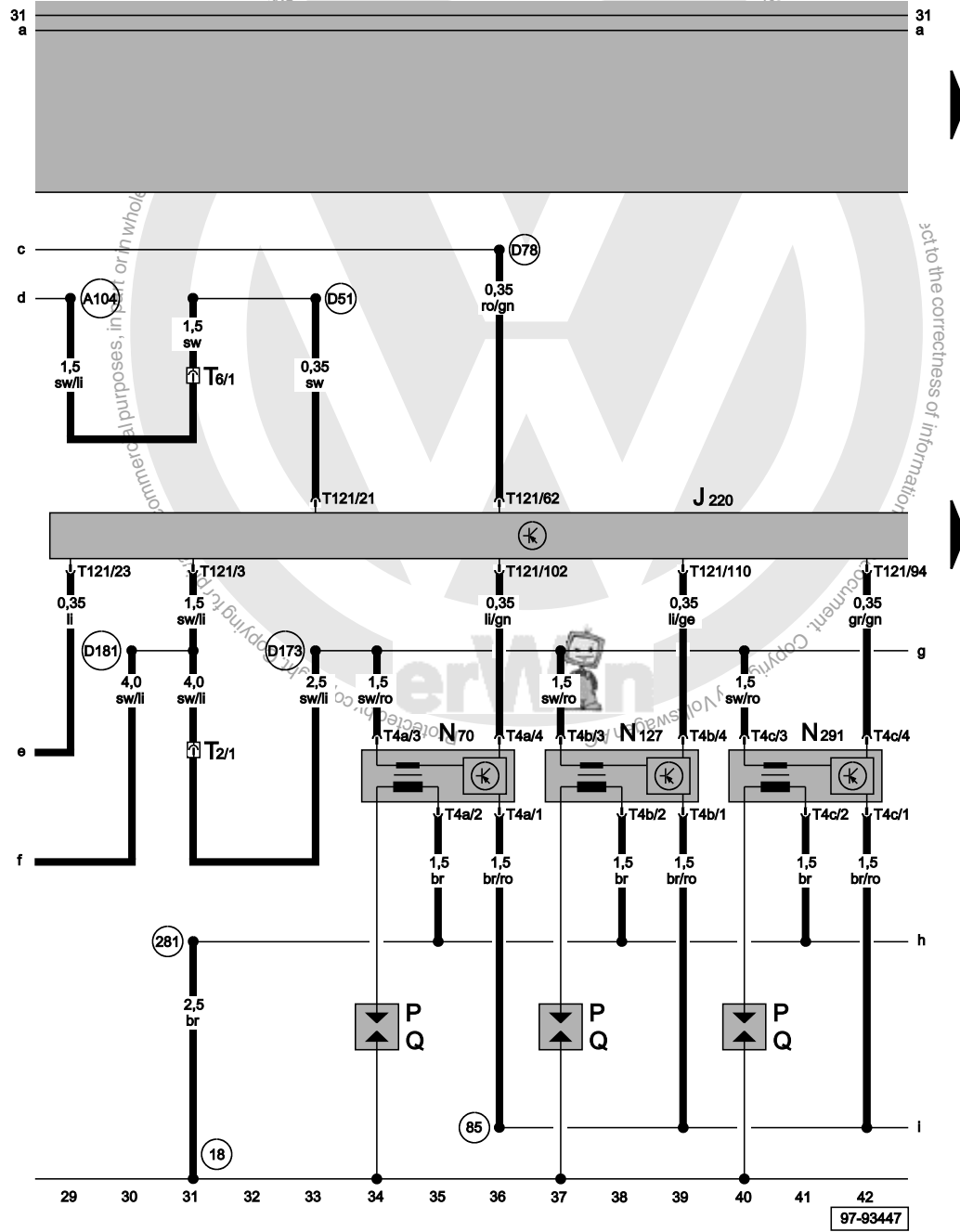


- ws = white
- sw = black
- ro = red
- br = brown
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- or = orange
- rs = pink

Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- P Spark plug connector
- Q Spark plugs
- T2 2-pin connector, in left engine compartment
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 18 Earth point, on engine block
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection 1, in engine wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D51 Positive connection 1 (15), in engine compartment wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness
- D181 Connection 2 (87a), in engine compartment wiring harness



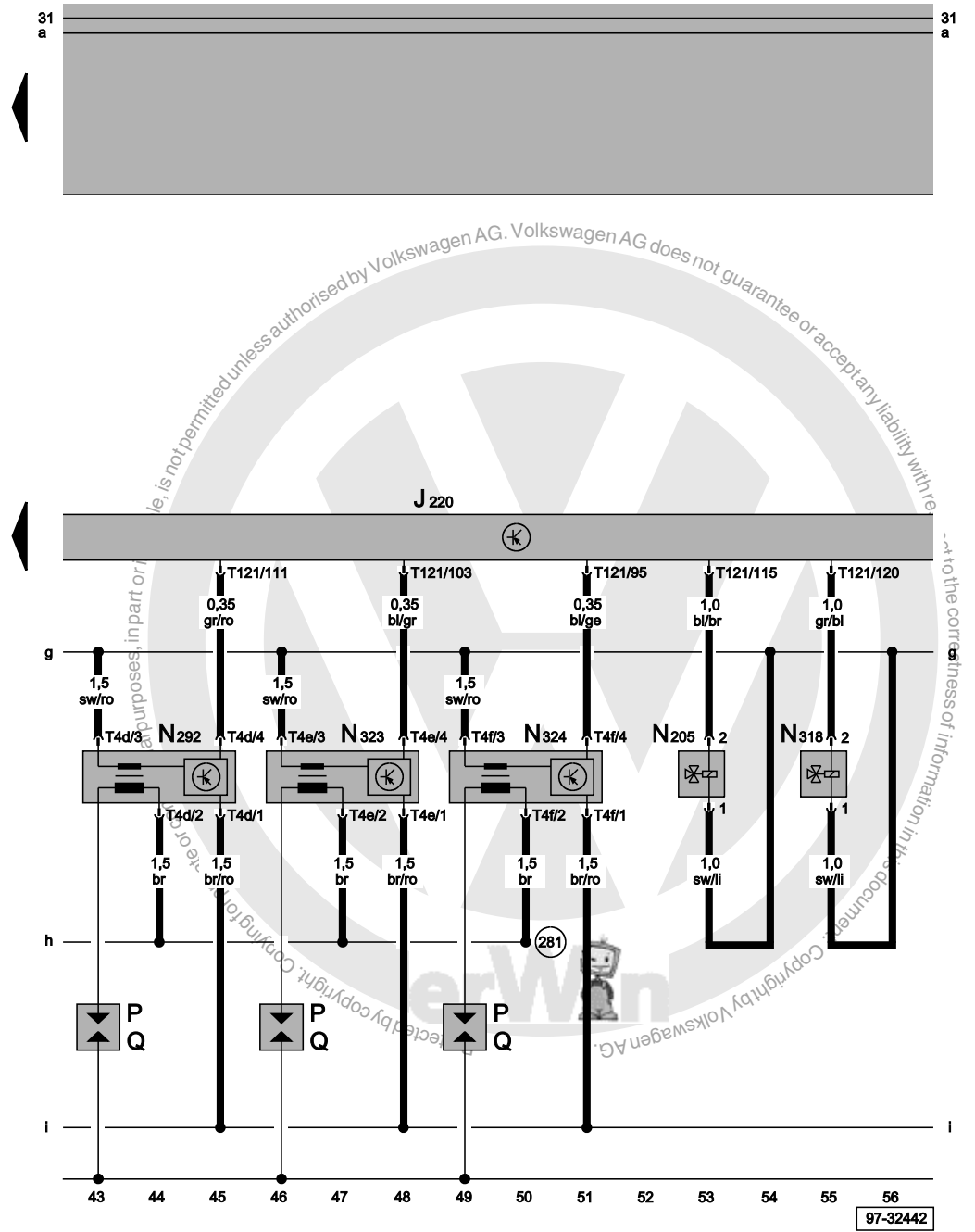
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97-93447

Motronic control unit, ignition system, inlet camshaft control valve

- J220 Motronic control unit, in centre plenum chamber
- N205 Inlet camshaft control valve 1
- N292 Ignition coil 4 with output stage
- N318 Exhaust camshaft control valve 1
- N323 Ignition coil 5 with output stage
- N324 Ignition coil 6 with output stage
- P Spark plug connector
- Q Spark plugs
- T4d 4-pin connector
- T4e 4-pin connector
- T4f 4-pin connector
- T121 121-pin connector

281 Earth connection 1, in engine wiring harness



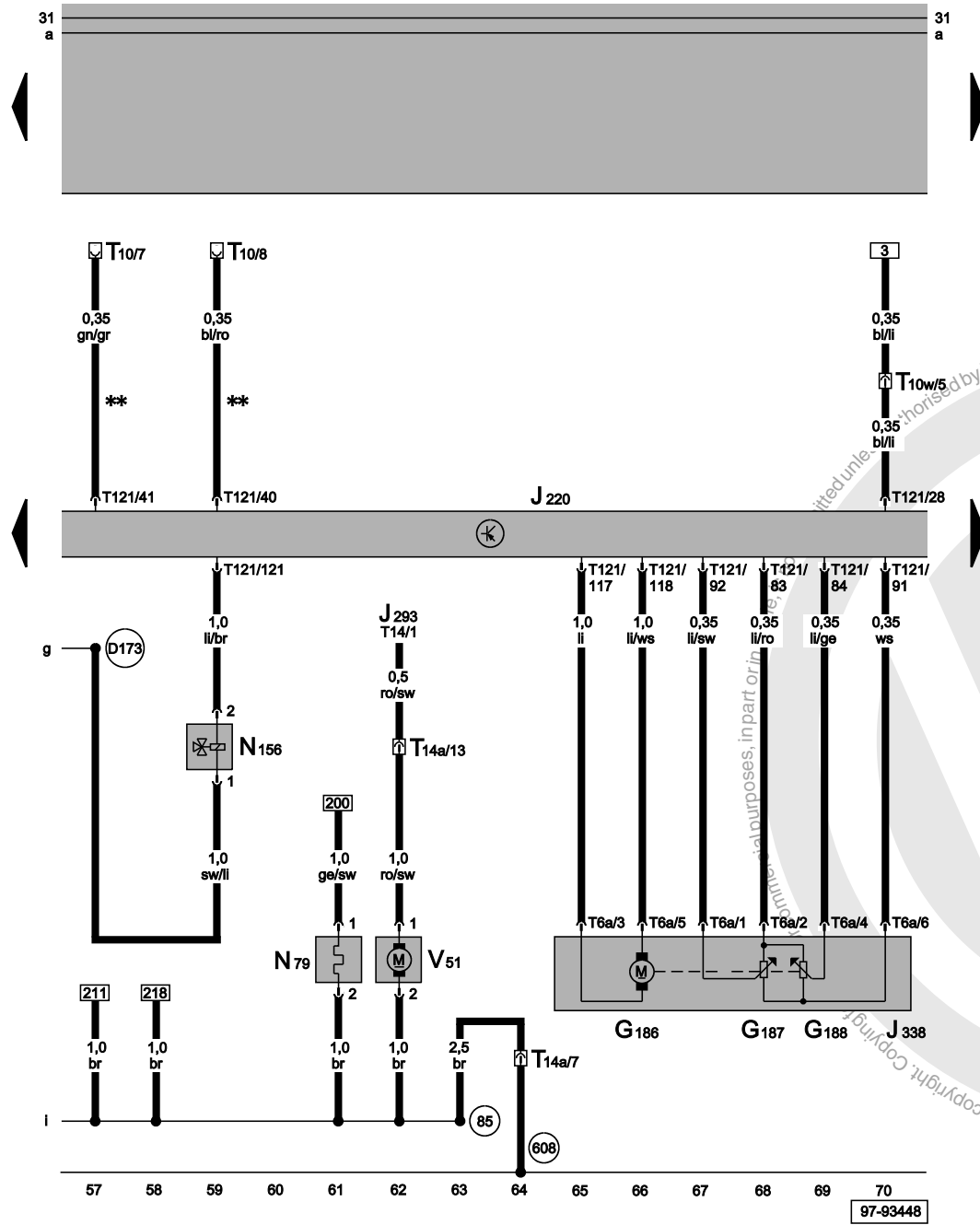
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97-32442

Motronic control unit, throttle valve module, variable intake manifold change-over valve, continued coolant circulation pump, heater element for crankcase breather

- G186 Throttle valve drive, electric throttle
- G187 Throttle valve drives angle sender 1, electric throttle
- G188 Throttle valve drives angle sender 2, electric throttle
- J220 Motronic control unit, in centre plenum chamber
- J293 Radiator fan control unit
- J338 Throttle valve module
- N79 Heater element for crankcase breather
- N156 Variable intake manifold change-over valve
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector
- V51 Continued coolant circulation pump

- 85 Earth connection 1, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- D173 Connection (87), in engine wiring harness
- ** connection air conditioning system

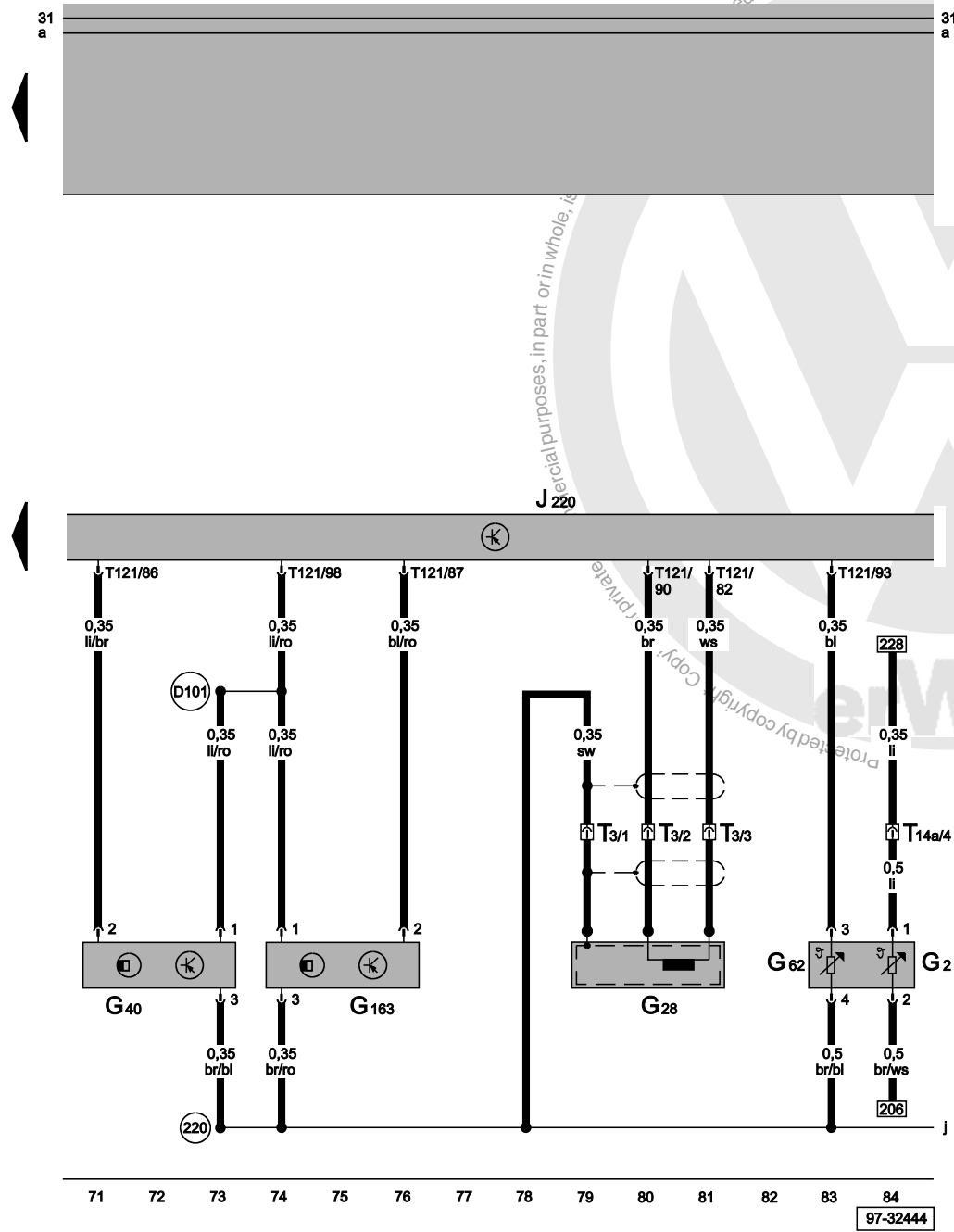


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97-93448

Motronic control unit, engine speed sender, Hall sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G40 Hall sender
- G62 Coolant temperature sender
- G163 Hall sender 2
- J220 Motronic control unit, in centre plenum chamber
- T3 3-pin connector, near intake manifold
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- D101 Connection 1, in engine compartment wiring harness

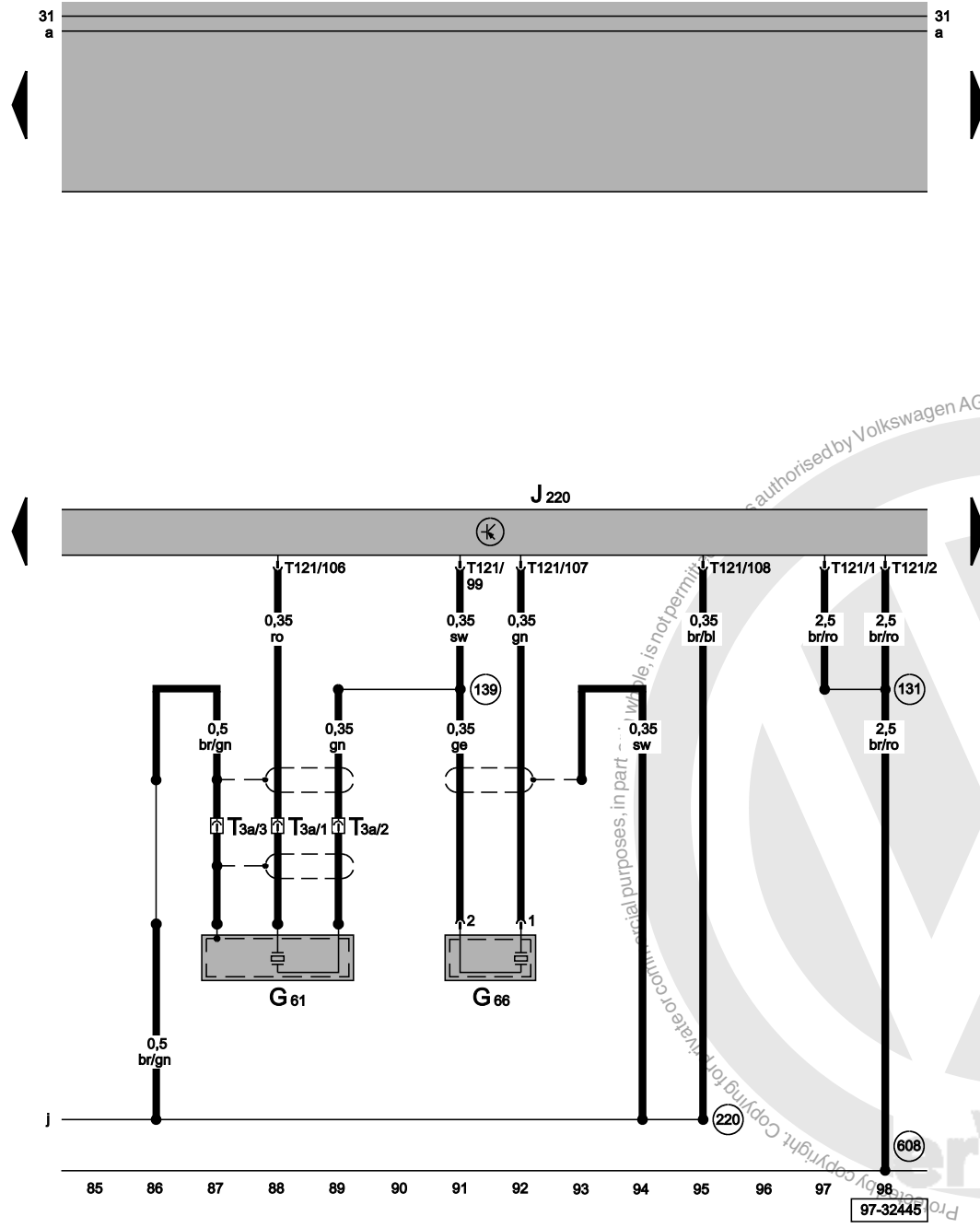


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Motronic control unit, knock sensors

- G61 Knock sensor 1
- G66 Knock sensor 2
- J220 Motronic control unit, in centre plenum chamber
- T3a 3-pin connector, in rear engine compartment
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

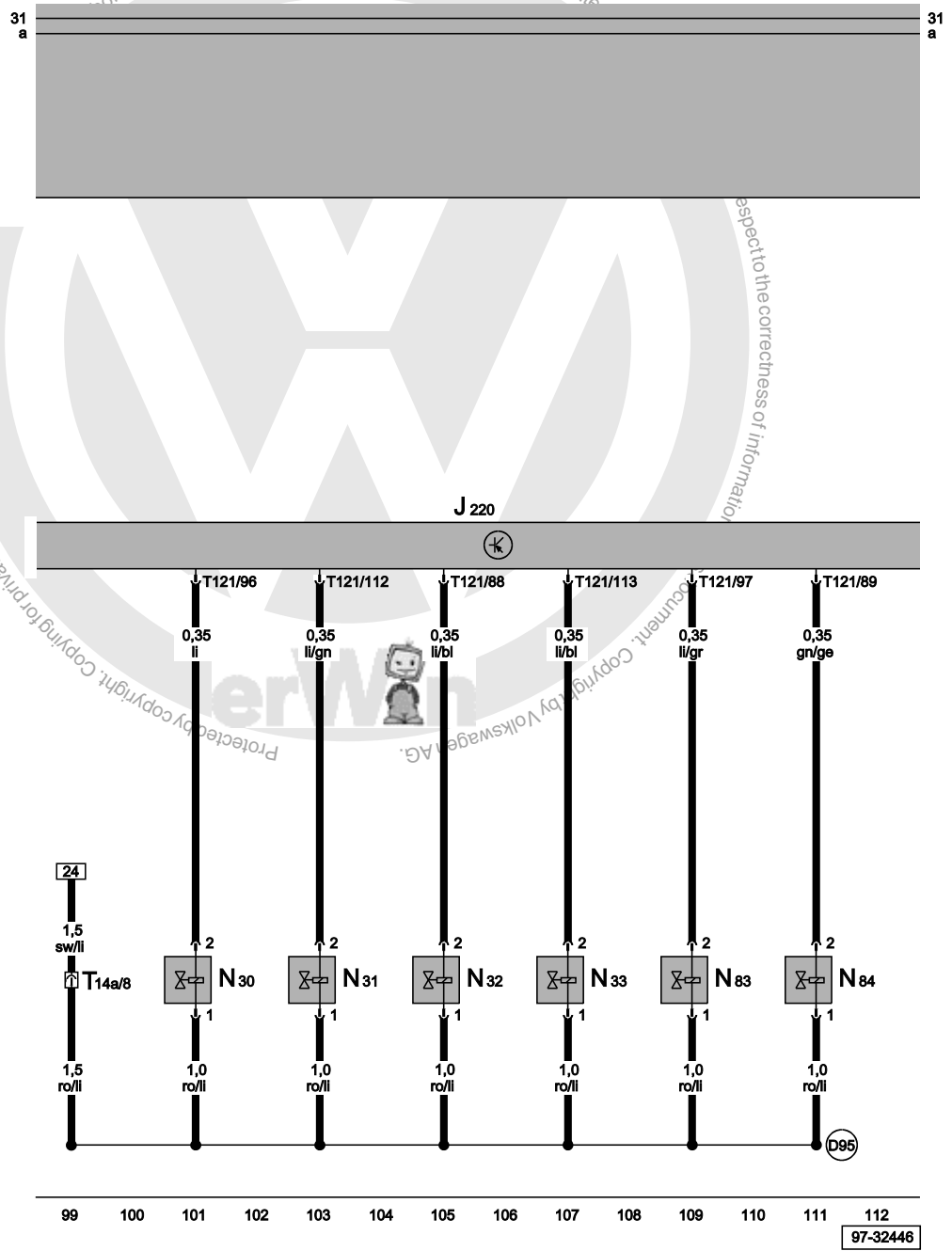


Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- N84 Injector, cylinder 6
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (D95) Connection (injectors), in engine compartment wiring harness

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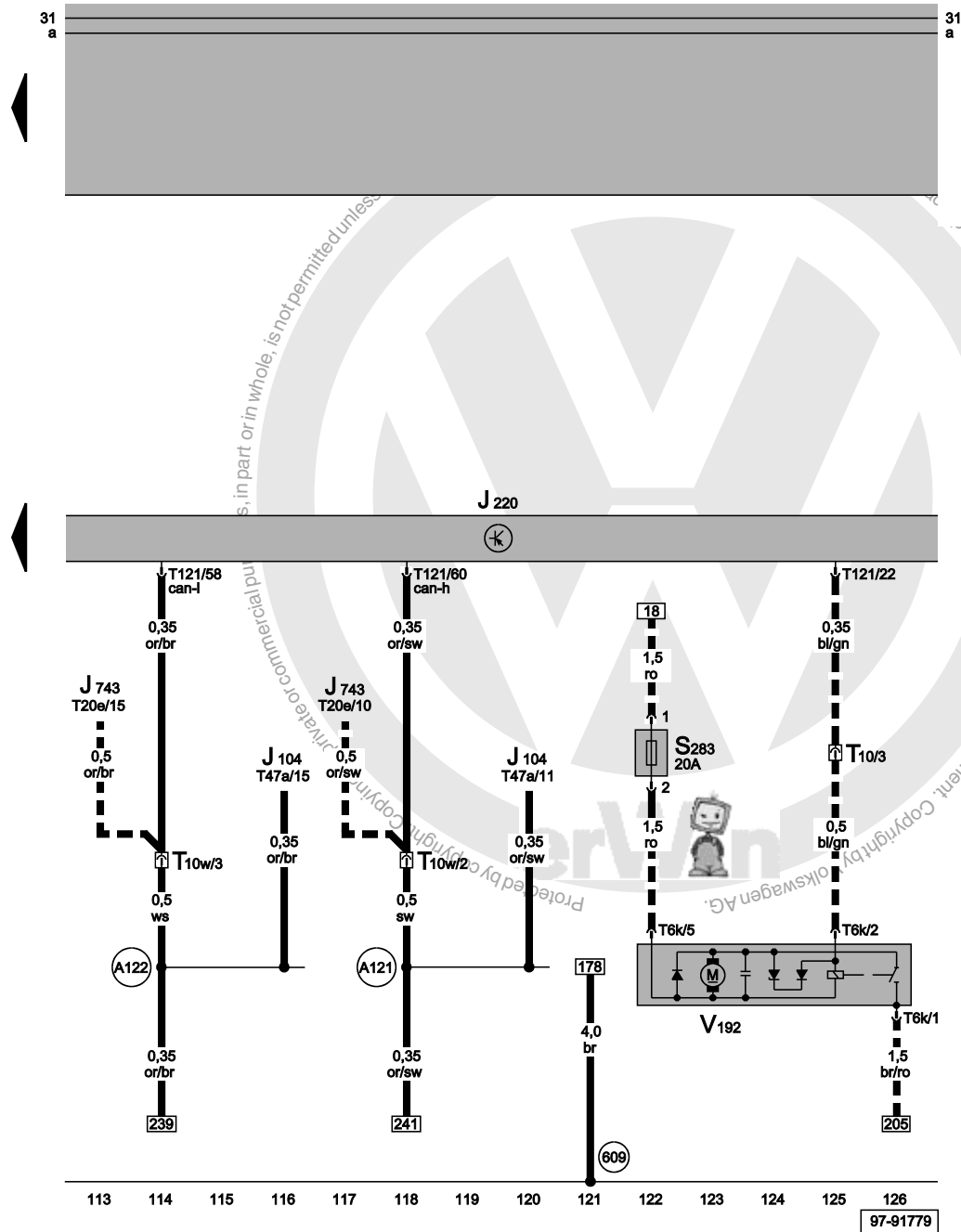
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Motronic control unit

- J104 ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- J743 Mechatronic unit for double clutch gearbox, in gearbox
- S283 Brake vacuum pump fuse (on relay plate)
- T6k 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T20e 20-pin connector
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector
- V192 Vacuum pump for brakes

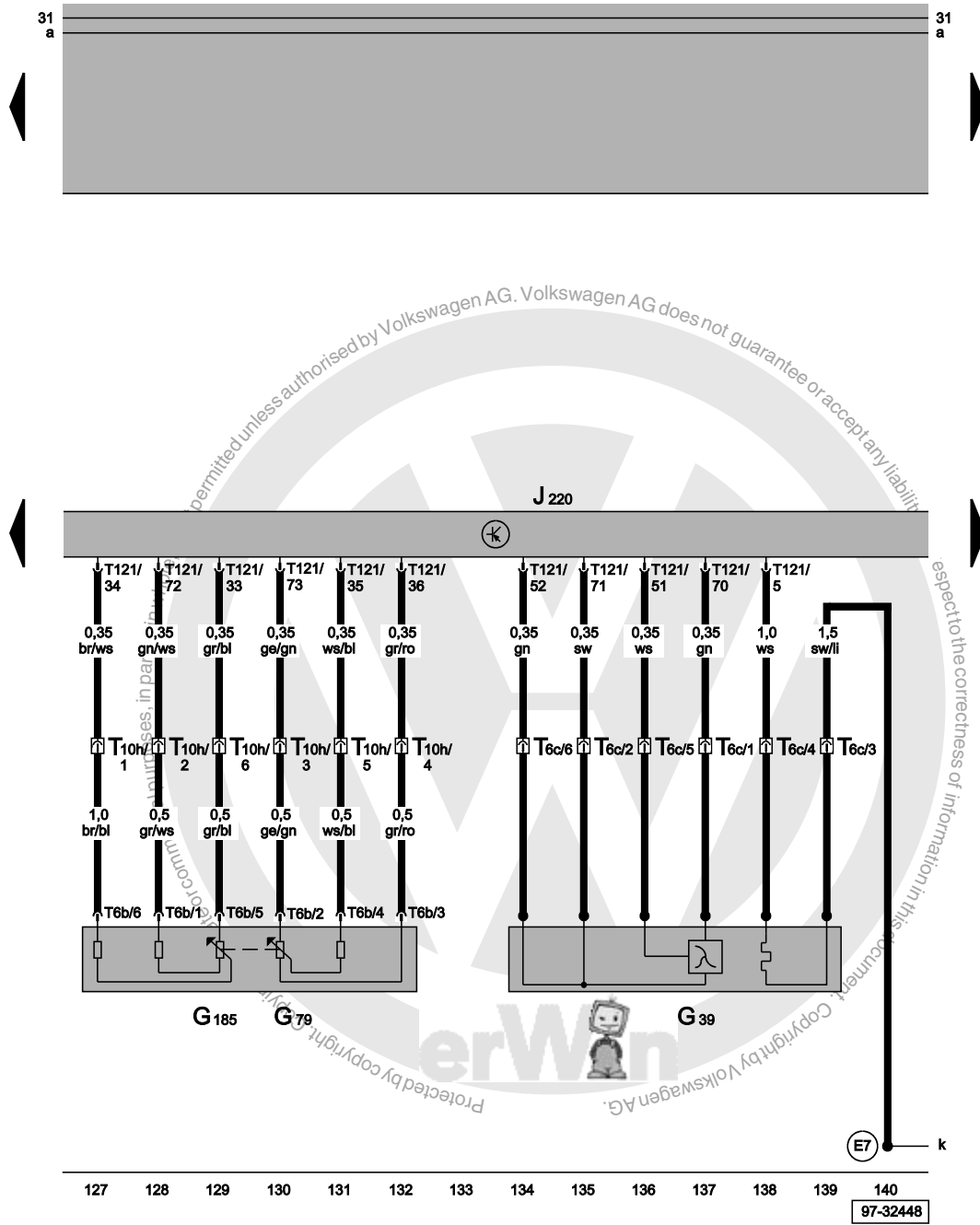
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- only models with 02E double clutch gearbox 02E (DSG)



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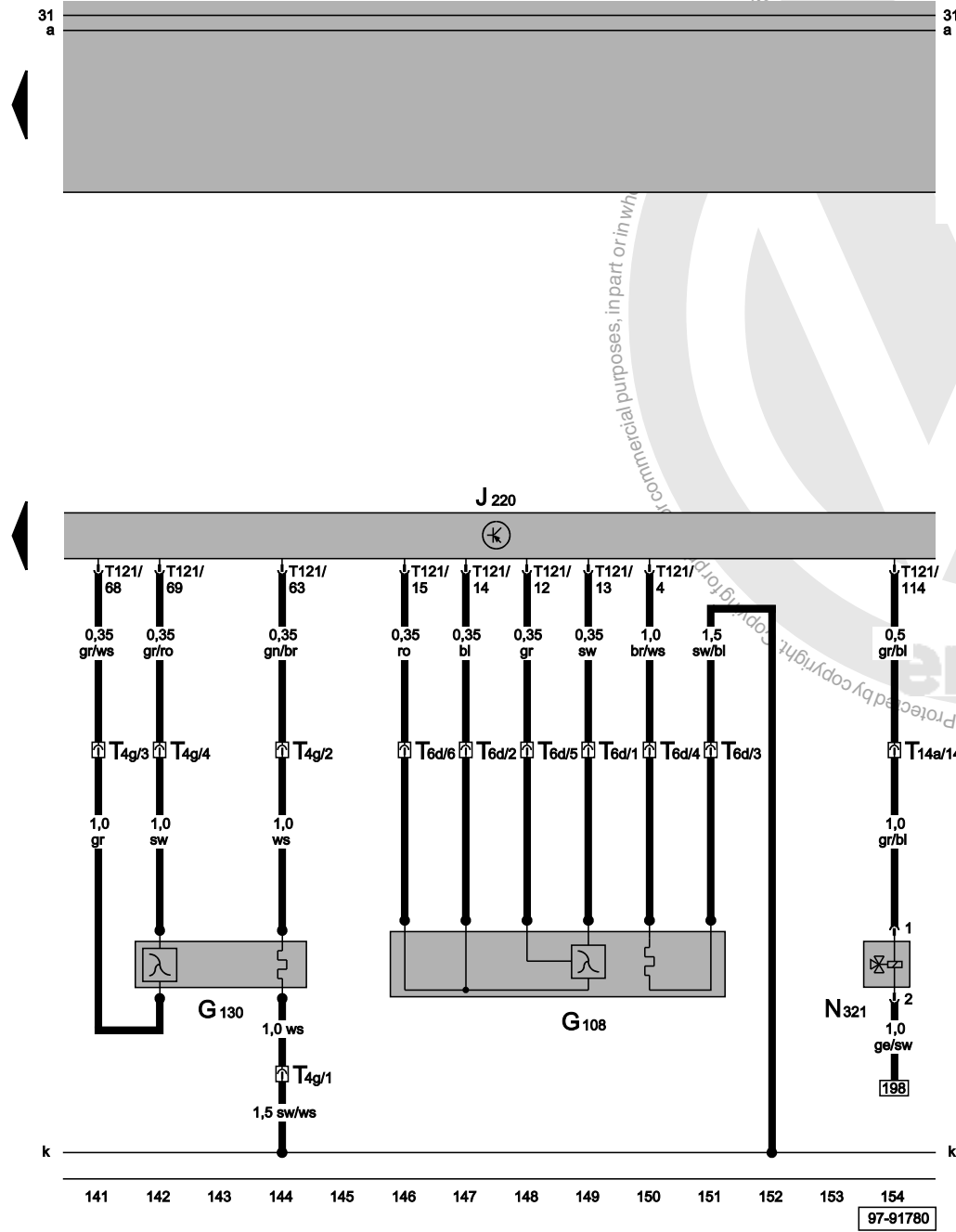
Motronic control unit, accelerator position sender, lambda probe

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (E7) Positive connection (87a), in Motronic wiring harness



Motronic control unit, lambda probe after catalytic converter, lambda probe 2, exhaust flap valve

- G108 Lambda probe 2
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N321 Exhaust flap 1 valve
- T4g 4-pin connector, near catalytic converter
- T6d 6-pin connector, near catalytic converter
- T14a 14-pin connector, near battery
- T121 121-pin connector



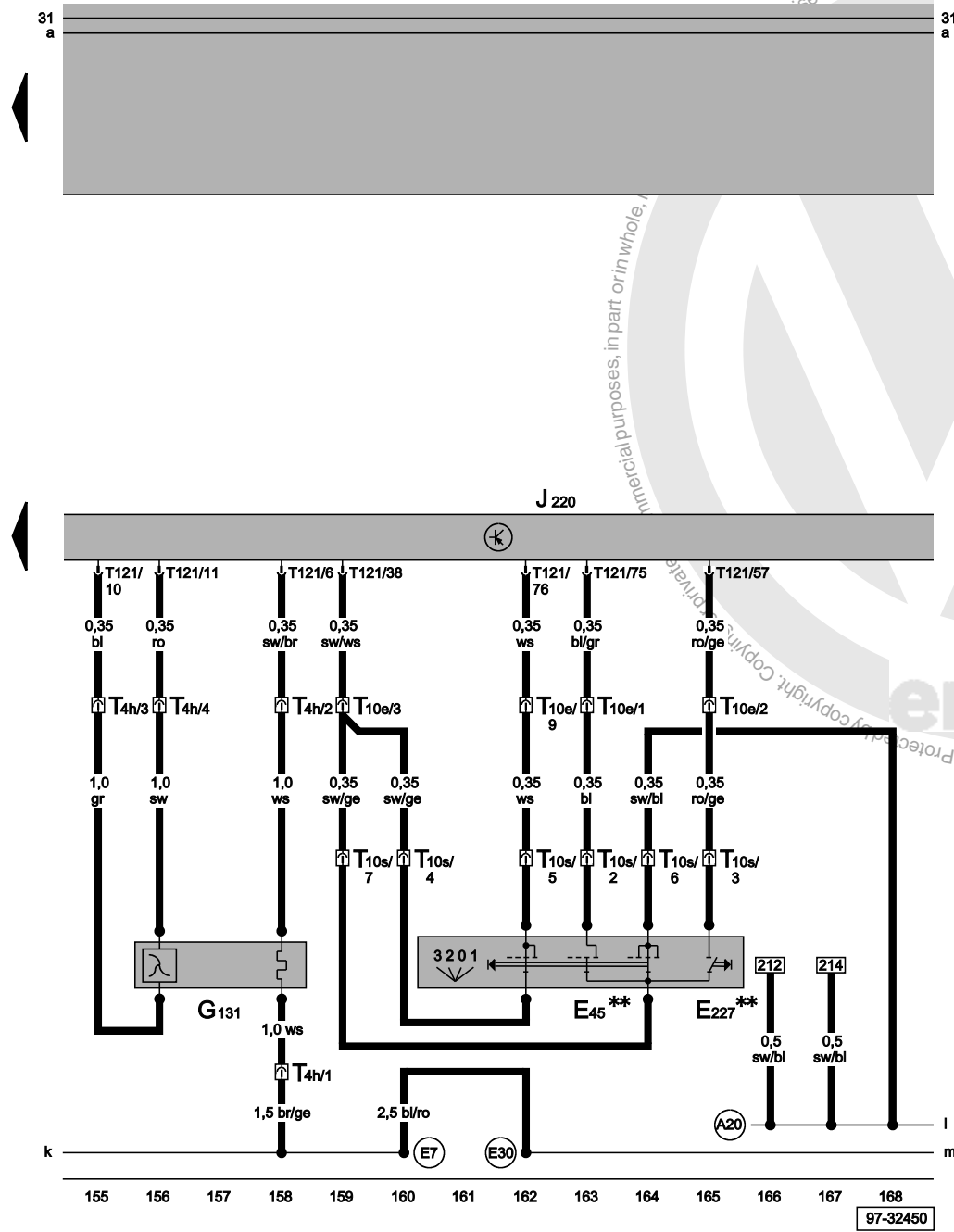
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Motronic control unit, cruise control system switch, lambda probe 2 after catalytic converter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G131 Lambda probe 2 after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4h 4-pin connector, near catalytic converter
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector

- (A20) Connection (15a), in dash panel wiring harness
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness

** only models with GND, models with multifunction display => Current Flow Diagram multifunction steering wheel for cruise control system and radio



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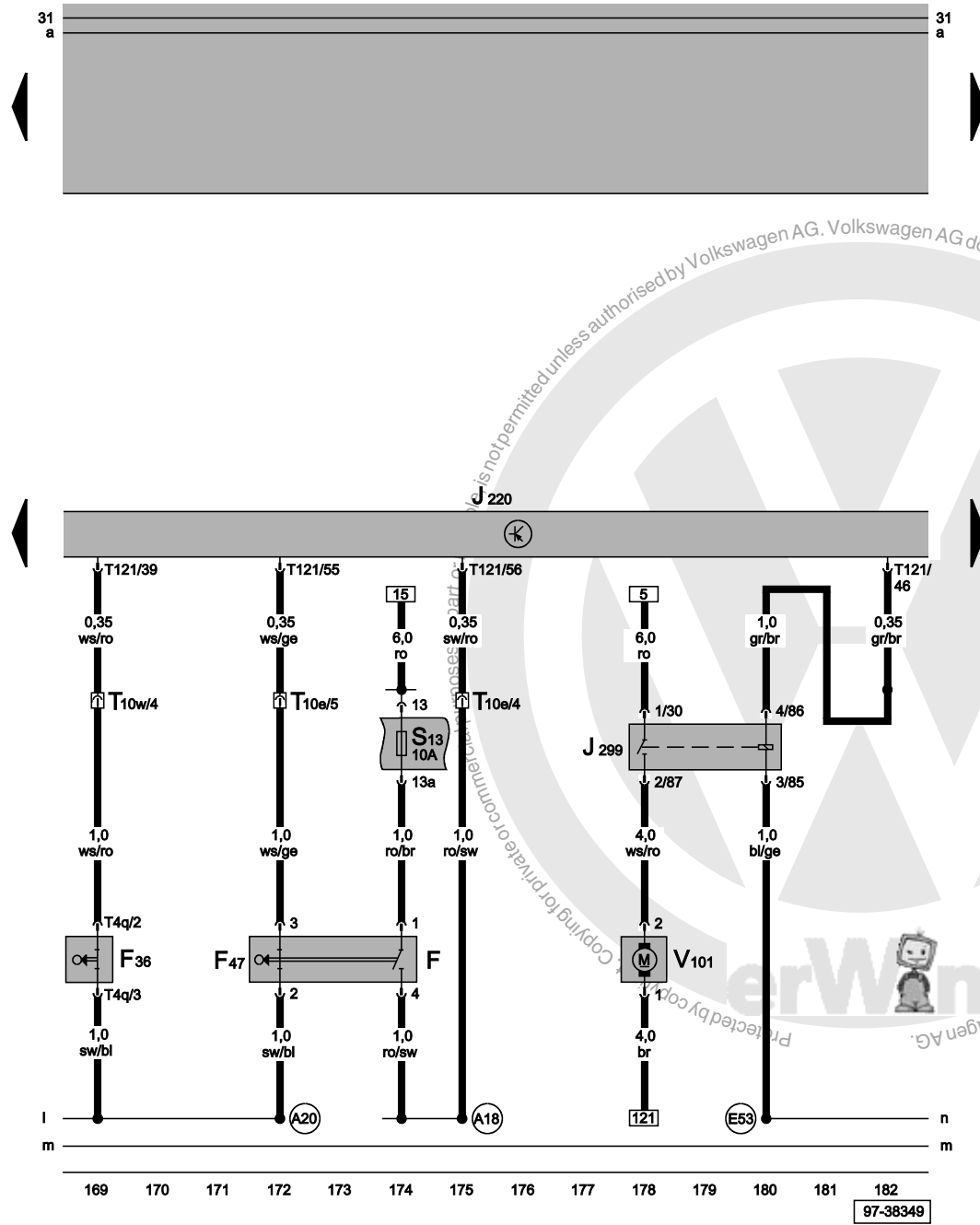
Motronic control unit, secondary air pump relay, secondary air pump motor, clutch pedal switch, brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

A18 Connection (54), in dash panel wiring harness

A20 Connection (15a), in dash panel wiring harness

E53 Connection 2 (87a), in Motronic wiring harness



97-38349

Motronic control unit, air mass meter, fuel pump relay, secondary air inlet valve, active charcoal filter system solenoid valve 1

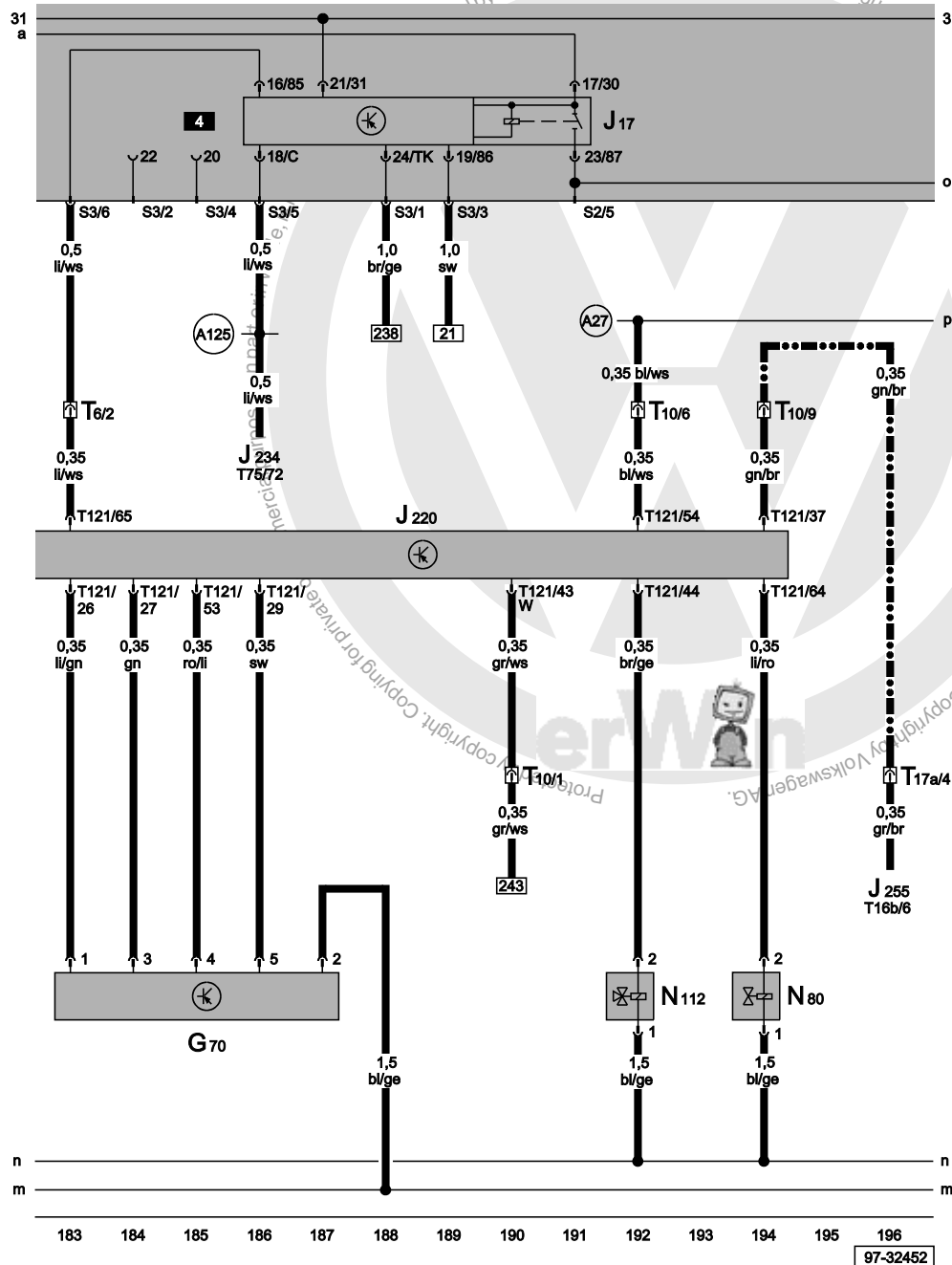
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- J255 Climatronic control unit
- N80 Activated charcoal filter system solenoid valve 1
- N112 Secondary air inlet valve
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector

(A27) Connection (speed signal), in dash panel wiring harness

(A125) Connection (crash signal), in dash panel wiring harness

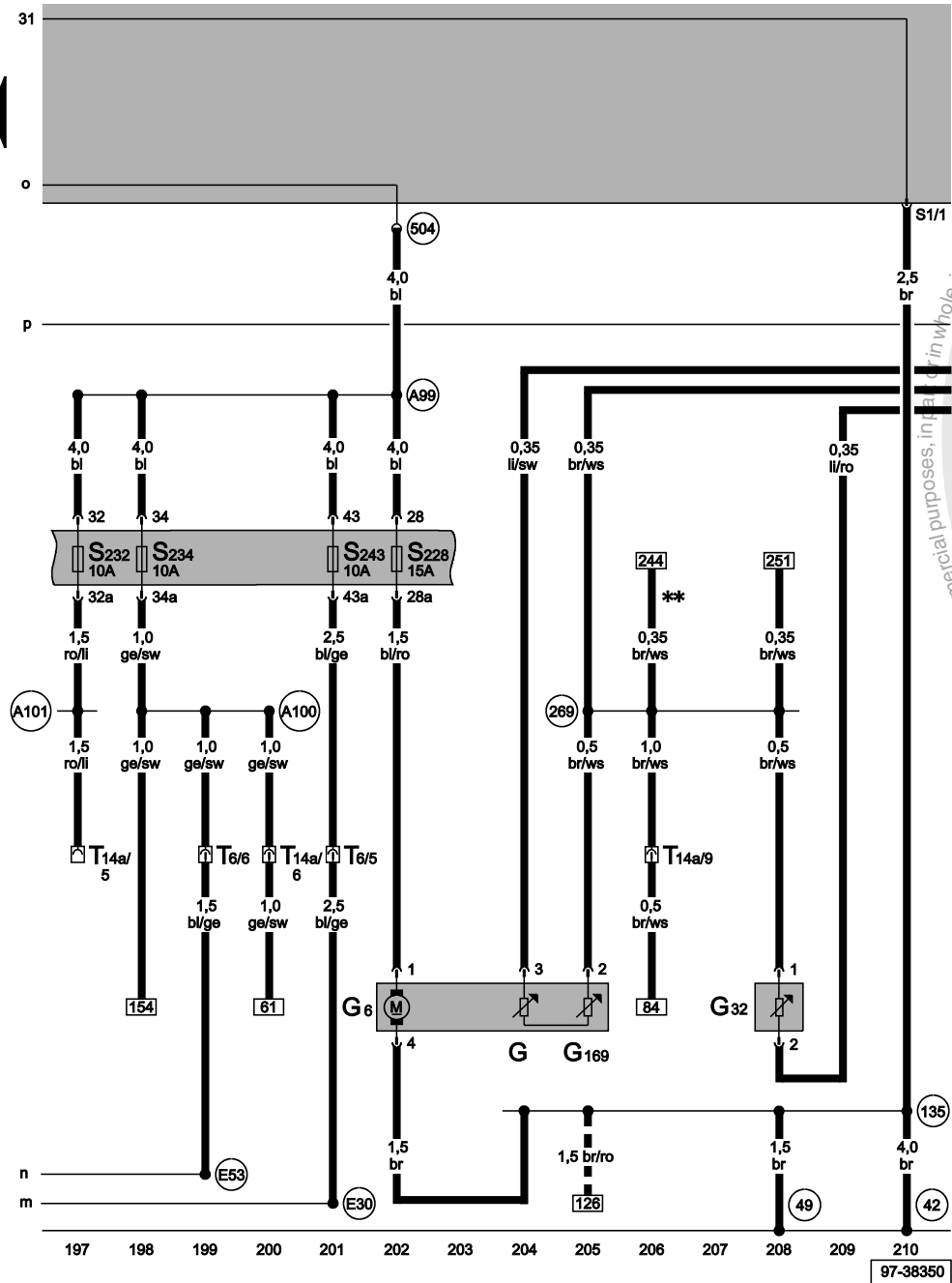
-••- only models with Climatronic

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97-32452

Fuel pump, fuel gauge sender, coolant shortage indicator sender

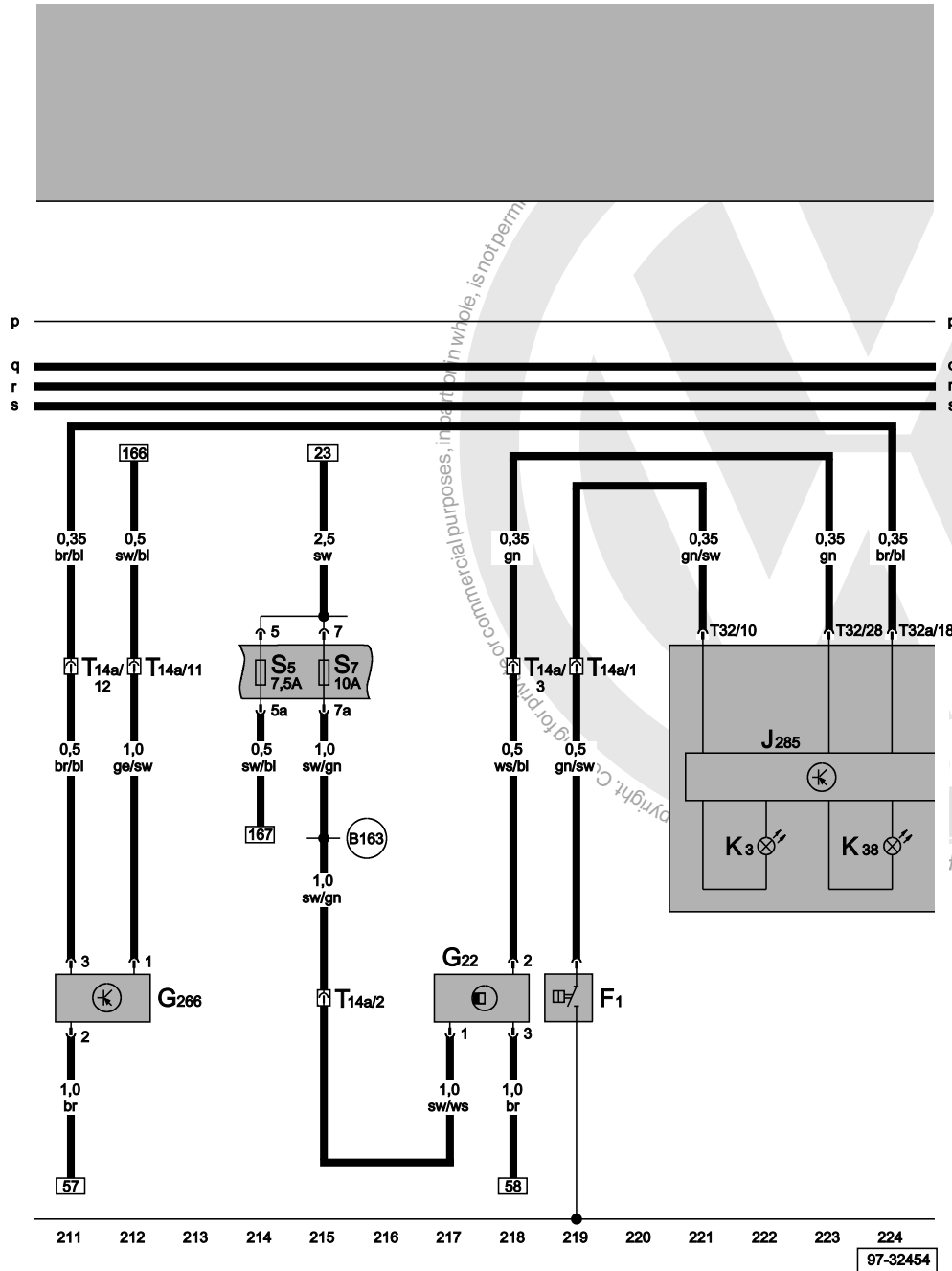


- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- G169 Fuel gauge sender 2
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A101 Connection 3 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- E53 Connection 2 (87a), in Motronic wiring harness
- only models with 02E double clutch gearbox 02E (DSG)
- ** only models without Climatronic

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

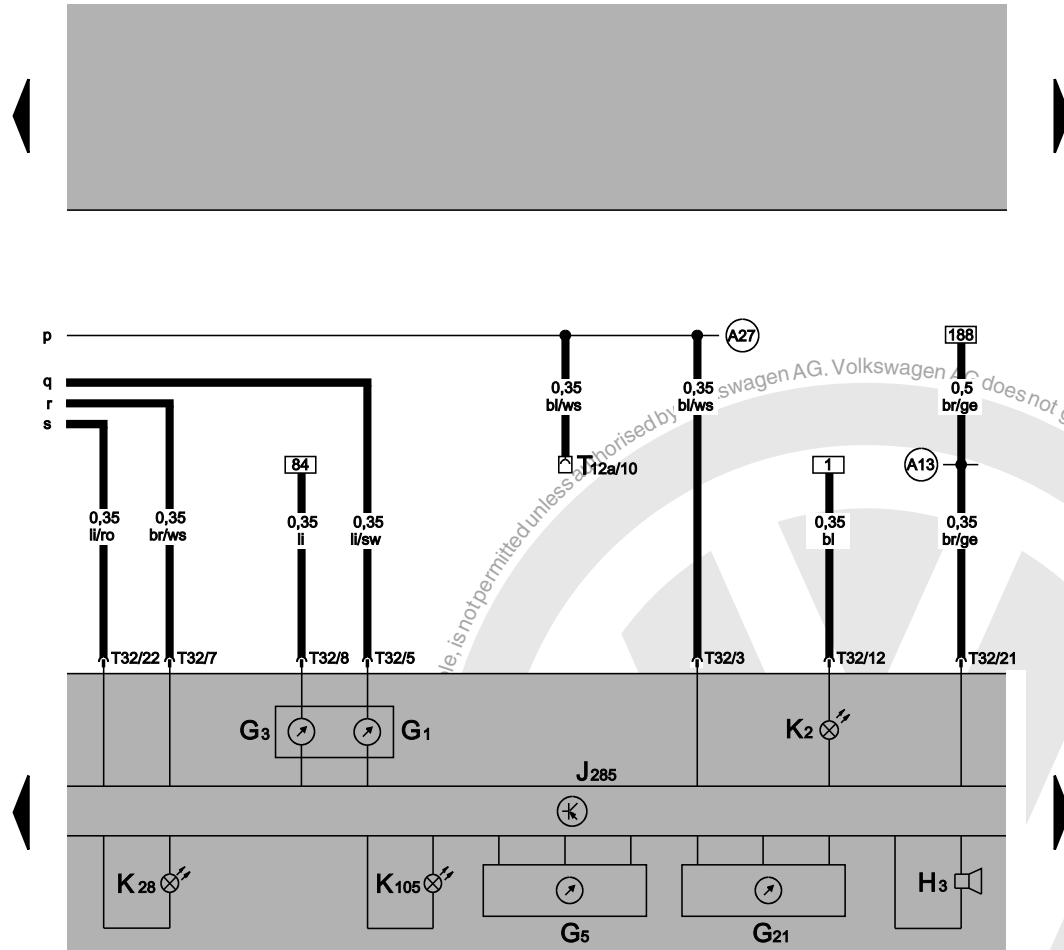
- F1 Oil pressure switch
 - G22 Speedometer sender (Hall sender, on gearbox)
 - G266 Oil level and oil temperature sender**
 - J285 Control unit with display in dash panel insert
 - K3 Oil pressure warning lamp
 - K38 Oil level warning lamp**
 - S5 Fuse 5 in fuse holder
 - S7 Fuse 7 in fuse holder
 - T14a 14-pin connector, near battery
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
 - B163 Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display



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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

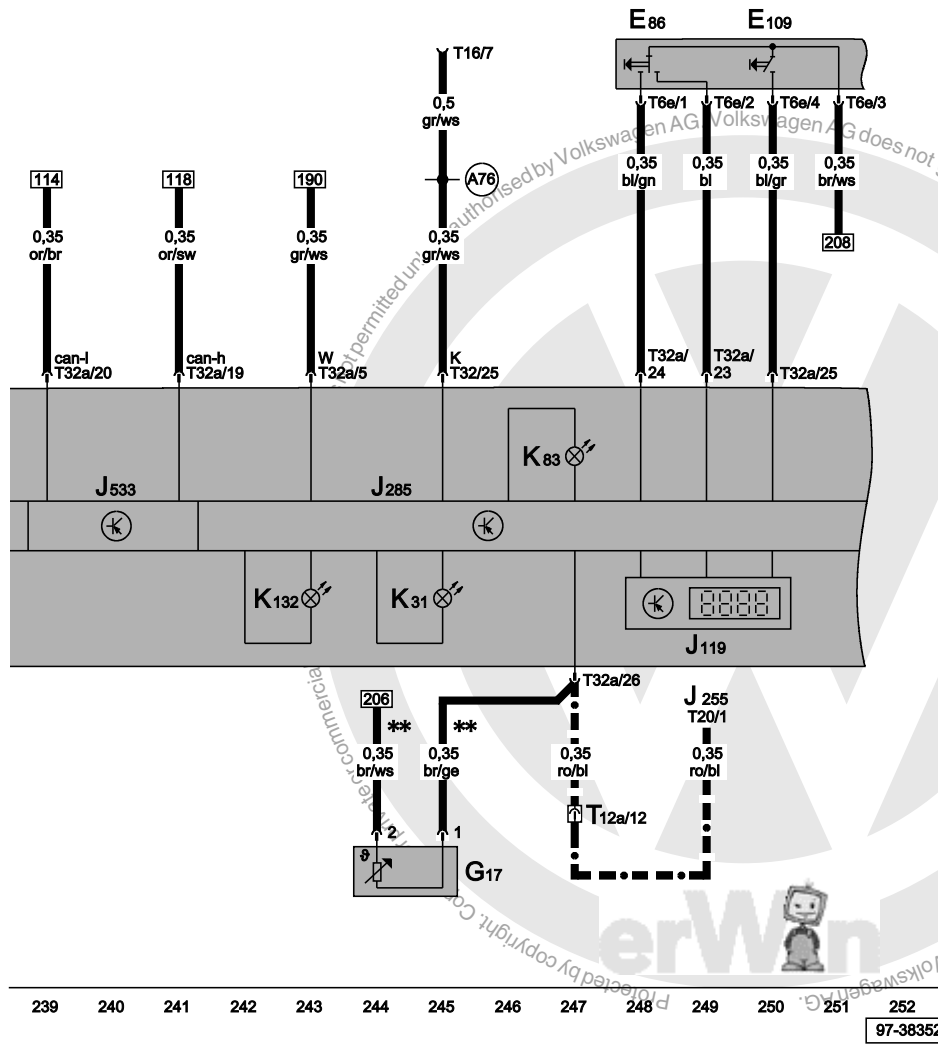
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** only models without Climatronic
- only models with Climatronic



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1.6 I/75 kW Simos, engine code BFQ

from May 2002

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

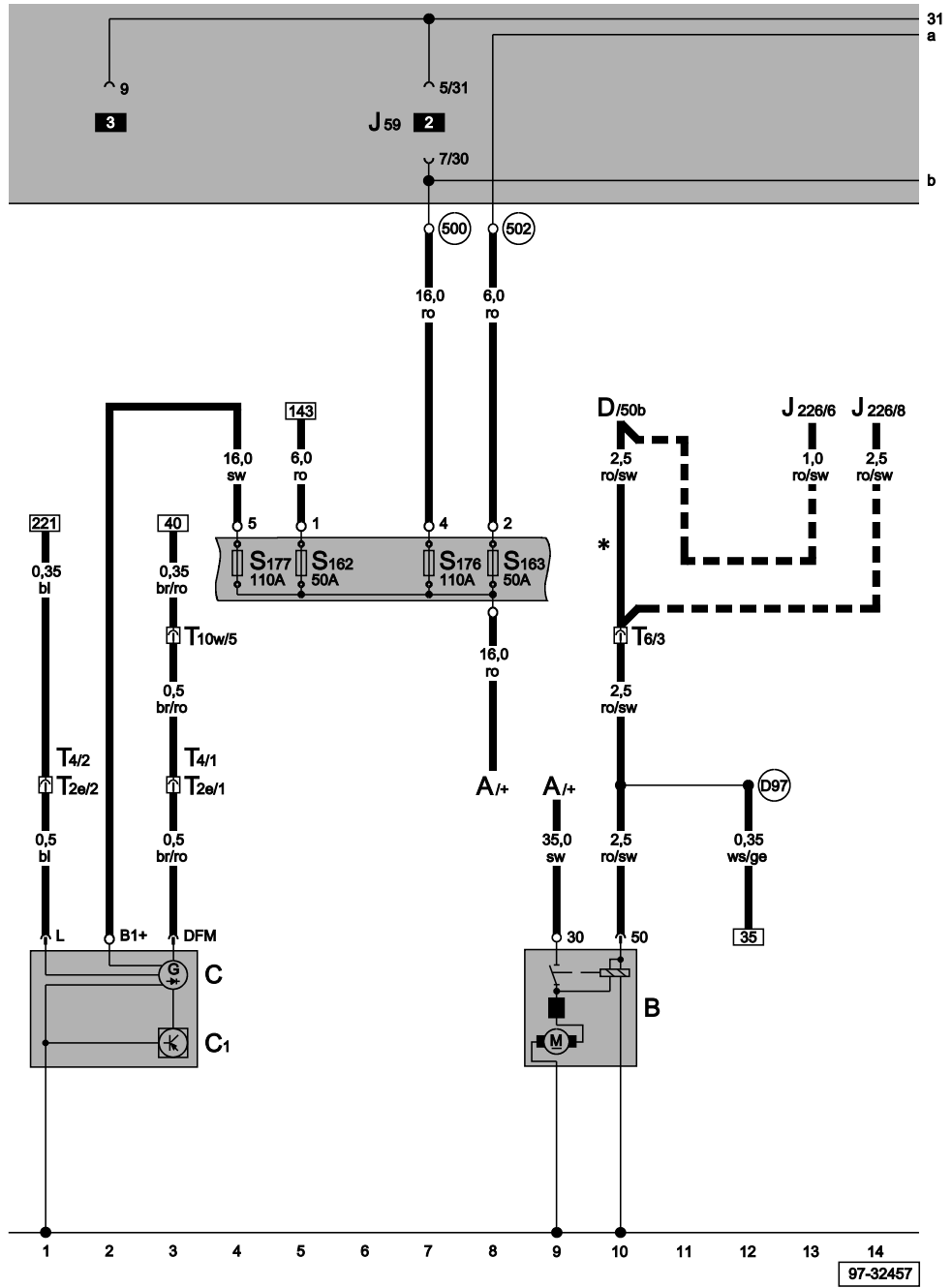
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





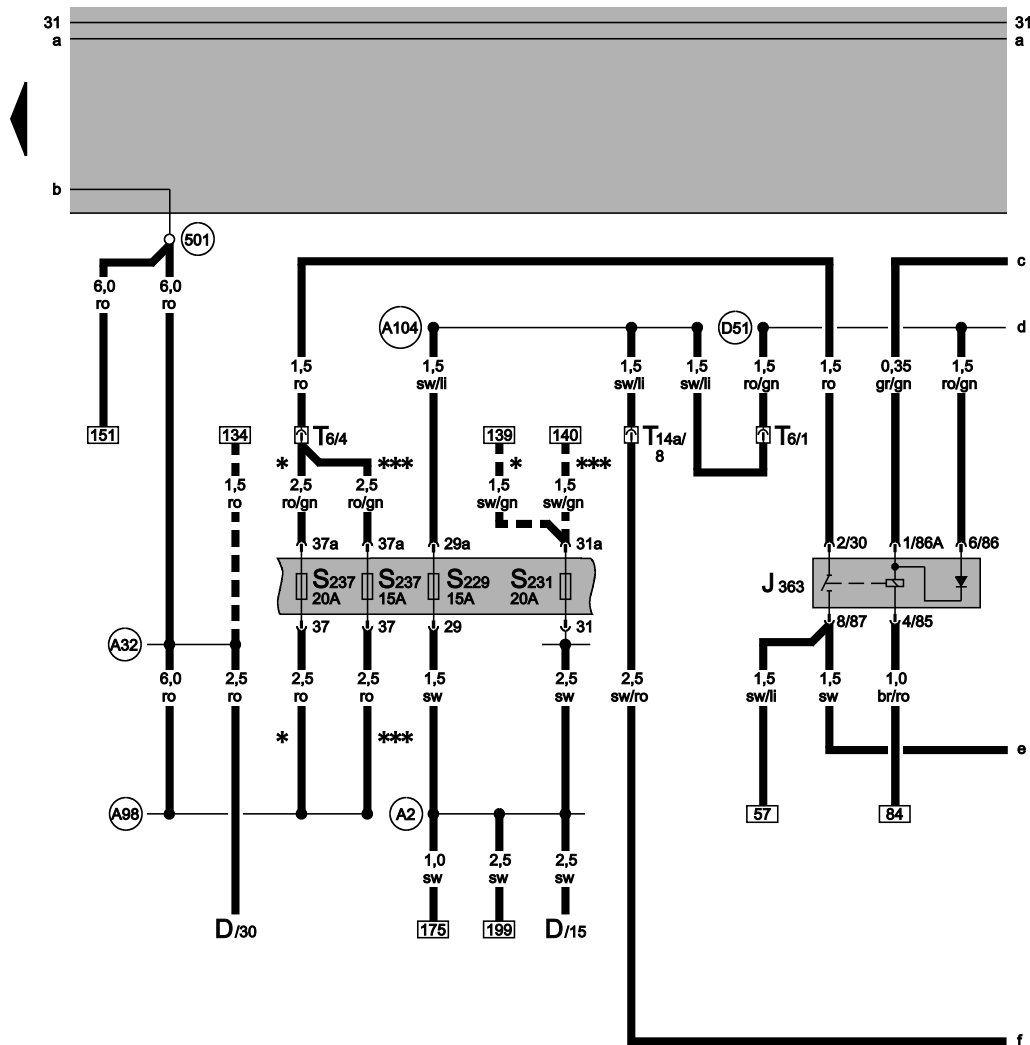
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- D97 Connection (50), in engine compartment wiring harness
- * only models with manual gearbox
- models with automatic gearbox only

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Current supply relay for Simos control unit

- D Ignition/starter switch
- J363 Current supply relay for Simos control unit, in protective housing on left in engine compartment (control number 429)
- S229 Fuse 29 in fuse holder
- S231 Fuse 31 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D51 Positive connection 1 (15), in engine compartment wiring harness
- * from May 2003
- *** up to April 2003
- models with automatic gearbox only

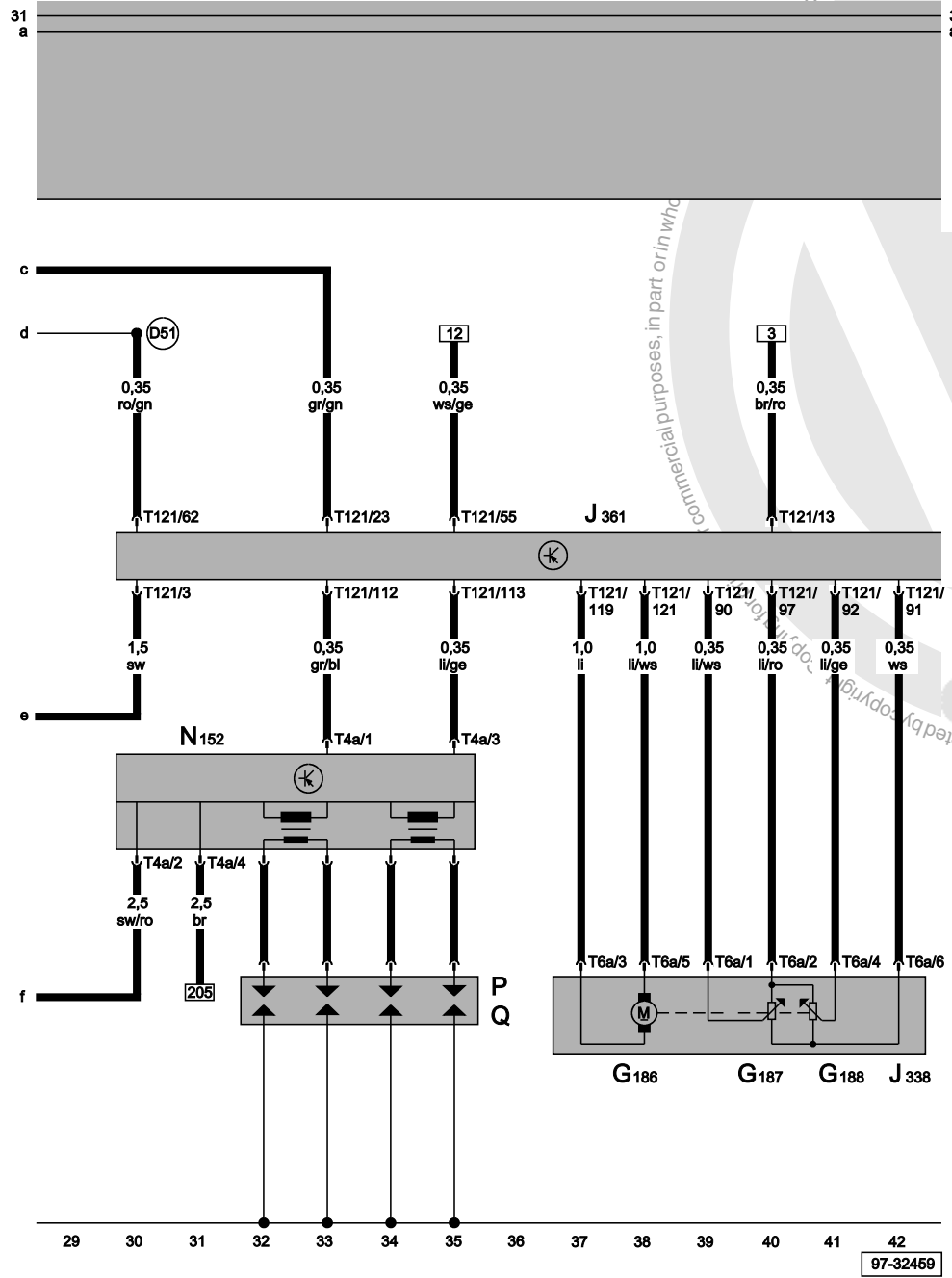


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Simos control unit, ignition system, throttle valve module, throttle valve drive angle sender for electric throttle

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J338 Throttle valve module
- J361 Simos control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T6a 6-pin connector
- T121 121-pin connector

(D51) Positive connection (15), in engine compartment wiring harness

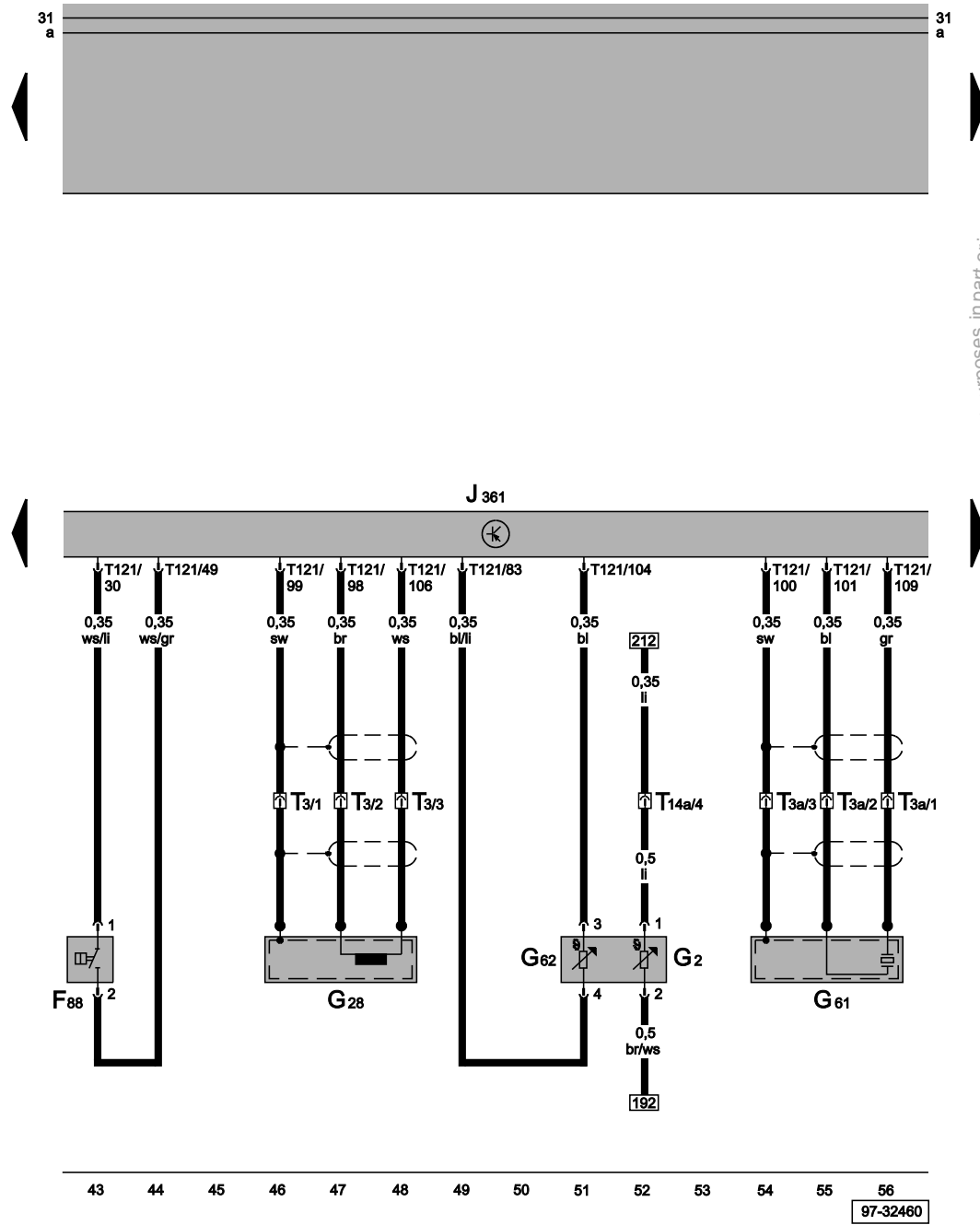


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97-32459

Simos control unit, engine speed sender, power assisted steering pressure switch, coolant temperature sender, knock sensor

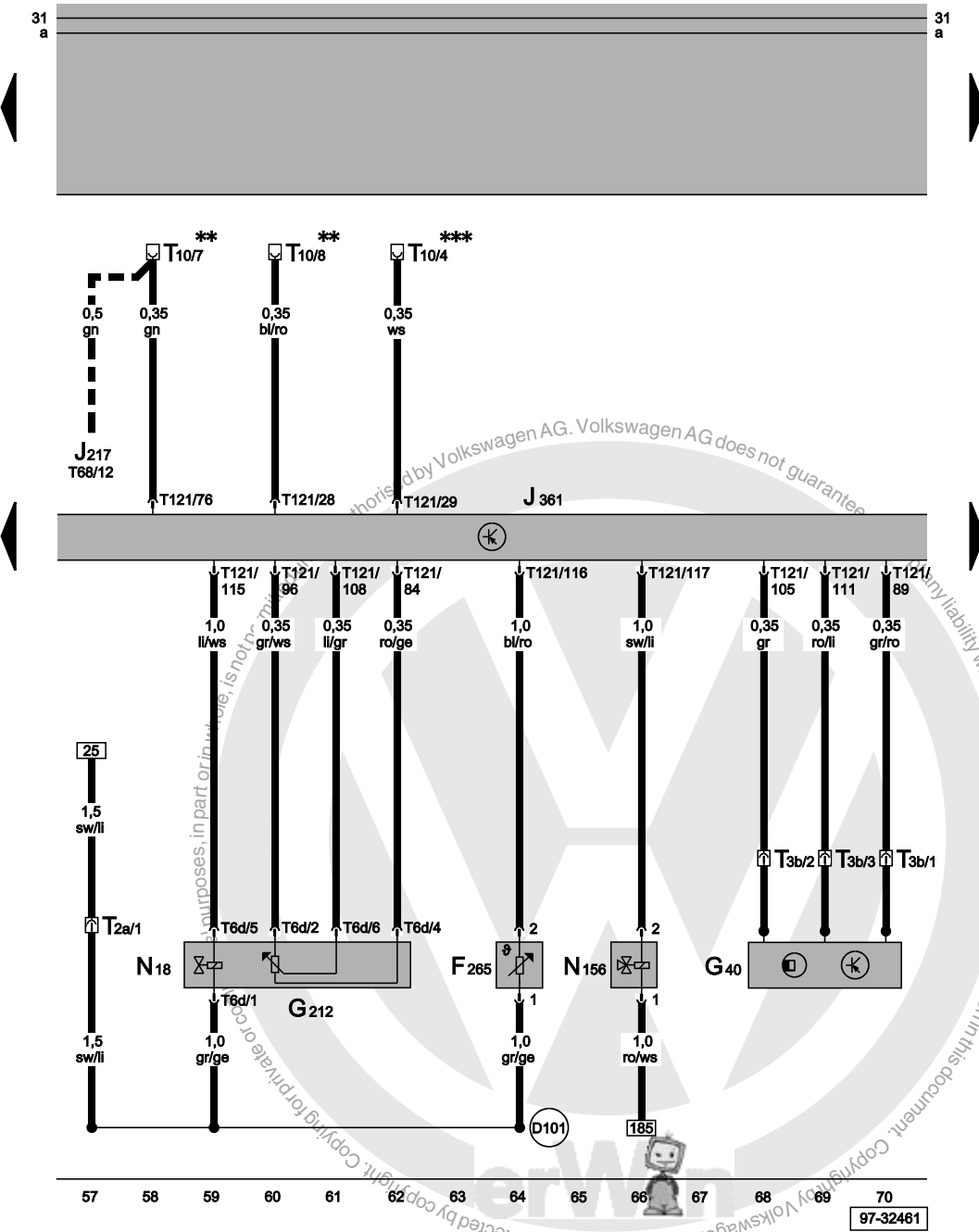
- F88 Power assisted steering pressure switch
- G2 Coolant temperature sender
- G28 Engine speed sender
- G61 Knock sensor 1
- G62 Coolant temperature sender
- J361 Simos control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T3a 3-pin connector, on front of engine
- T14a 14-pin connector, near battery
- T121 121-pin connector



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Simos control unit, Hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, variable intake manifold change-over valve, map-controlled engine cooling system thermostat

- F265 Map-controlled engine cooling system thermostat
- G40 Hall sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit, in centre plenum chamber
- J361 Simos control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N156 Variable intake manifold change-over valve
- T2a 2-pin connector, in cable channel left in engine compartment
- T3b 3-pin connector, on front of engine
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector
- D101 Connection 1, in engine compartment wiring harness

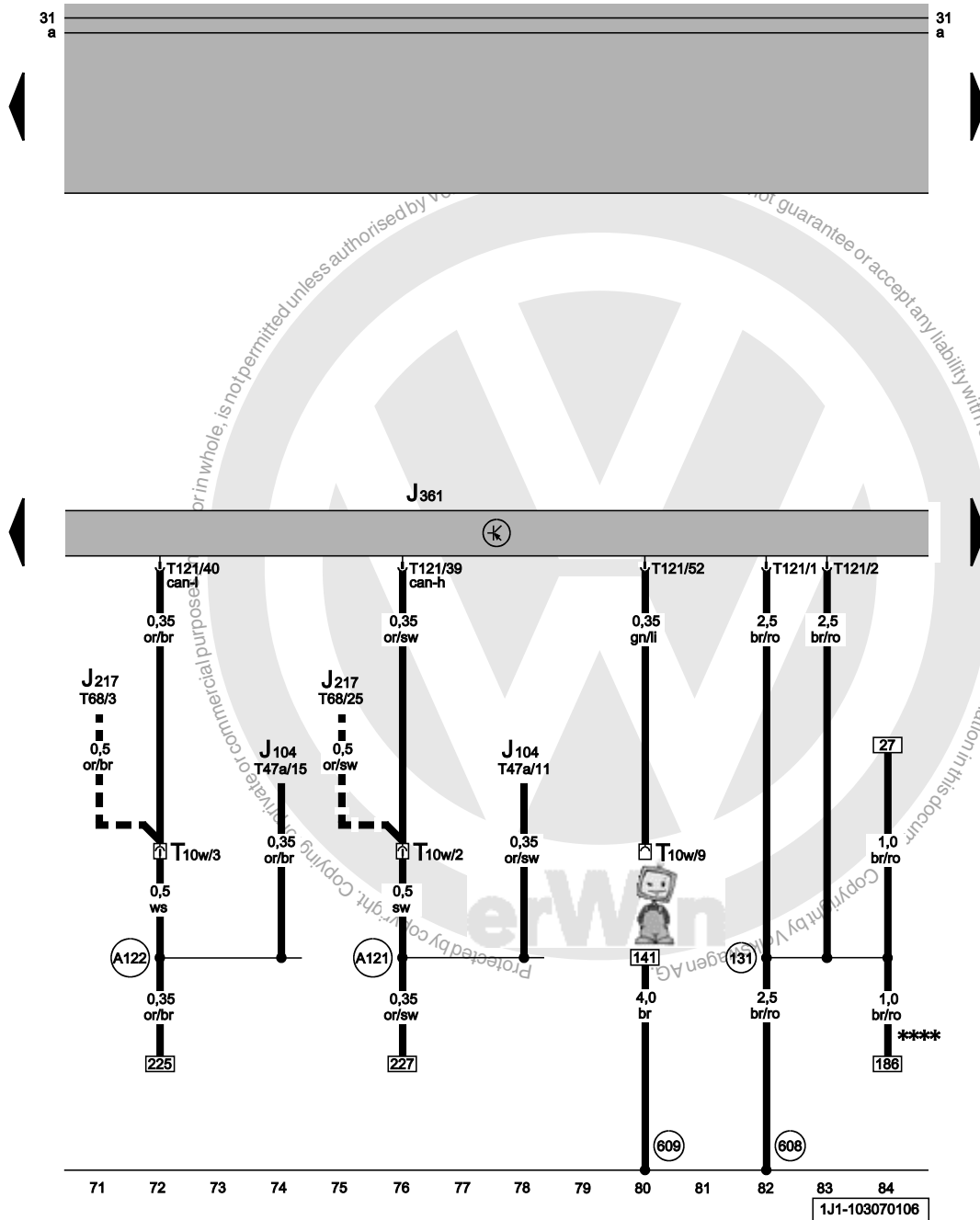


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Simos control unit

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J361 Simos control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector
- T121 121-pin connector

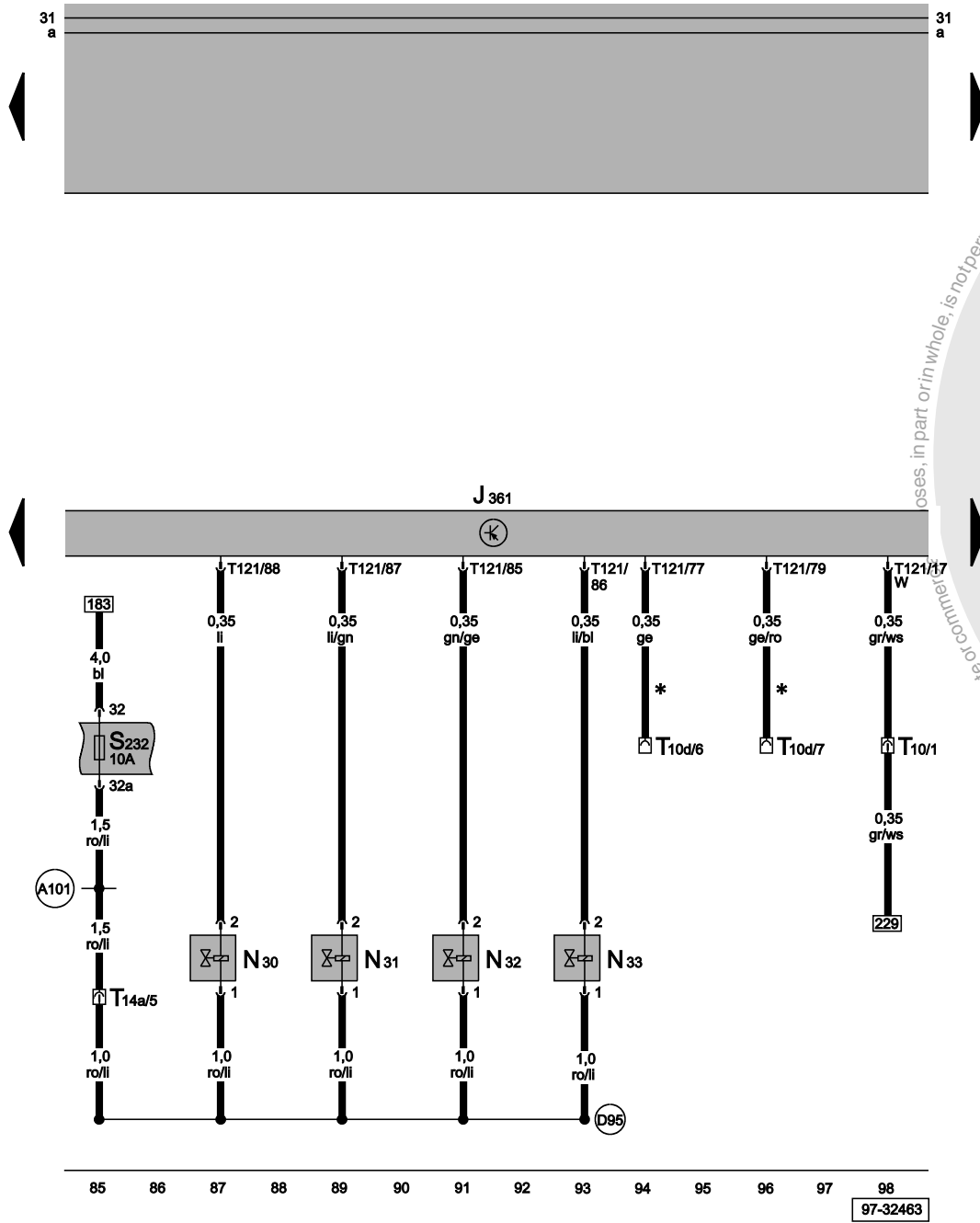
- (131) Earth connection -2-, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (609) Earth point, on right in plenum chamber
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only
- **** models with heater element for crankcase breather only



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Simos control unit, injectors

- J361 Simos control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- * Radiator fan control unit connection

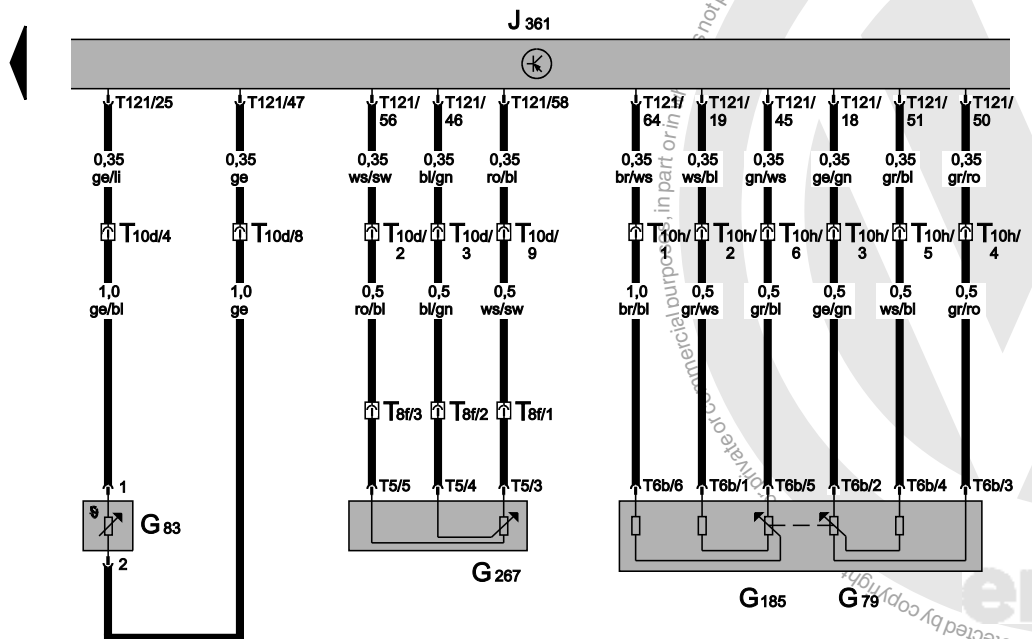
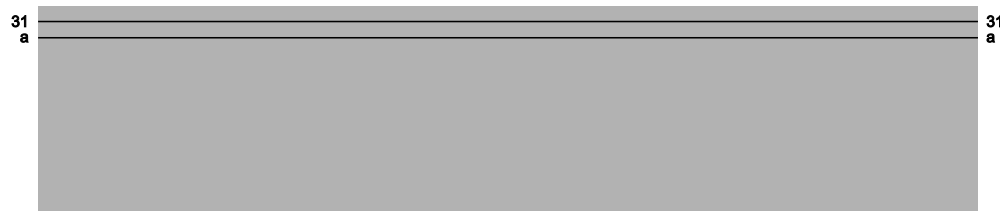


- ws = white
- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-32463

Simos control unit, radiator outlet coolant temperature sender, potentiometer, temperature selection rotary knob, accelerator position sender

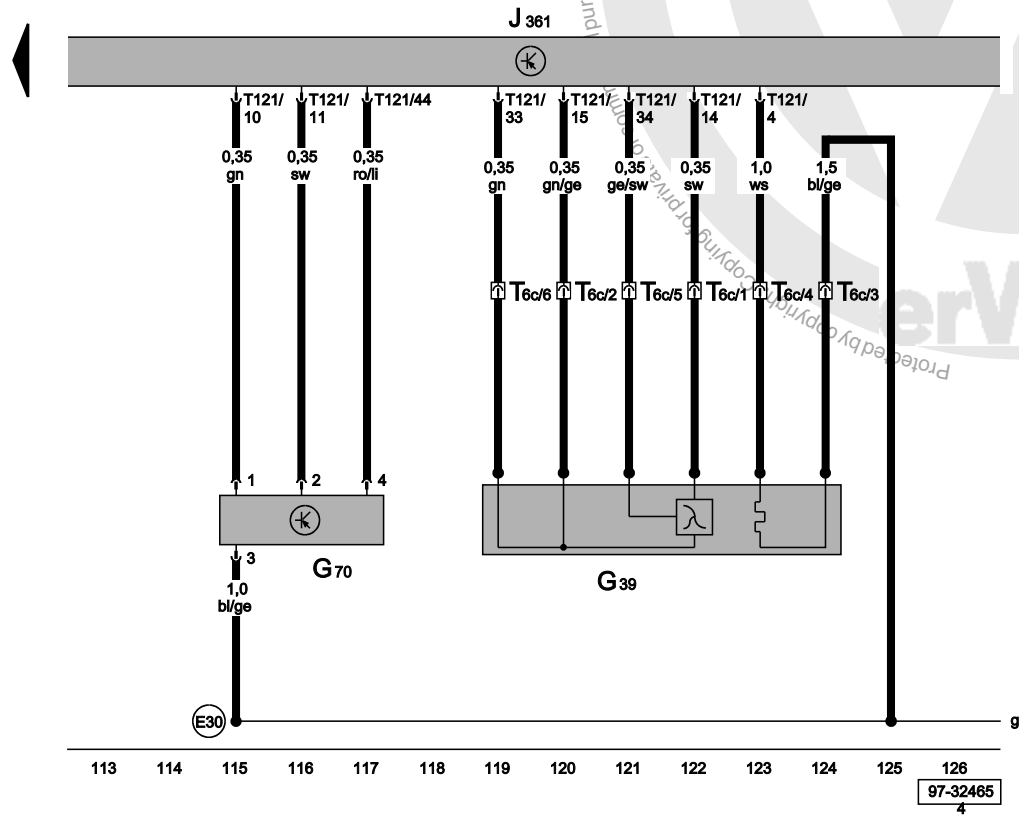
- G79 Accelerator position sender
- G83 Radiator outlet coolant temperature sender
- G185 Accelerator position sender -2-
- G267 Potentiometer, temperature selection rotary knob
- J361 Simos control unit, in centre plenum chamber
- T5 5-pin connector
- T6b 6-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector



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Simos control unit, air mass meter, lambda probe

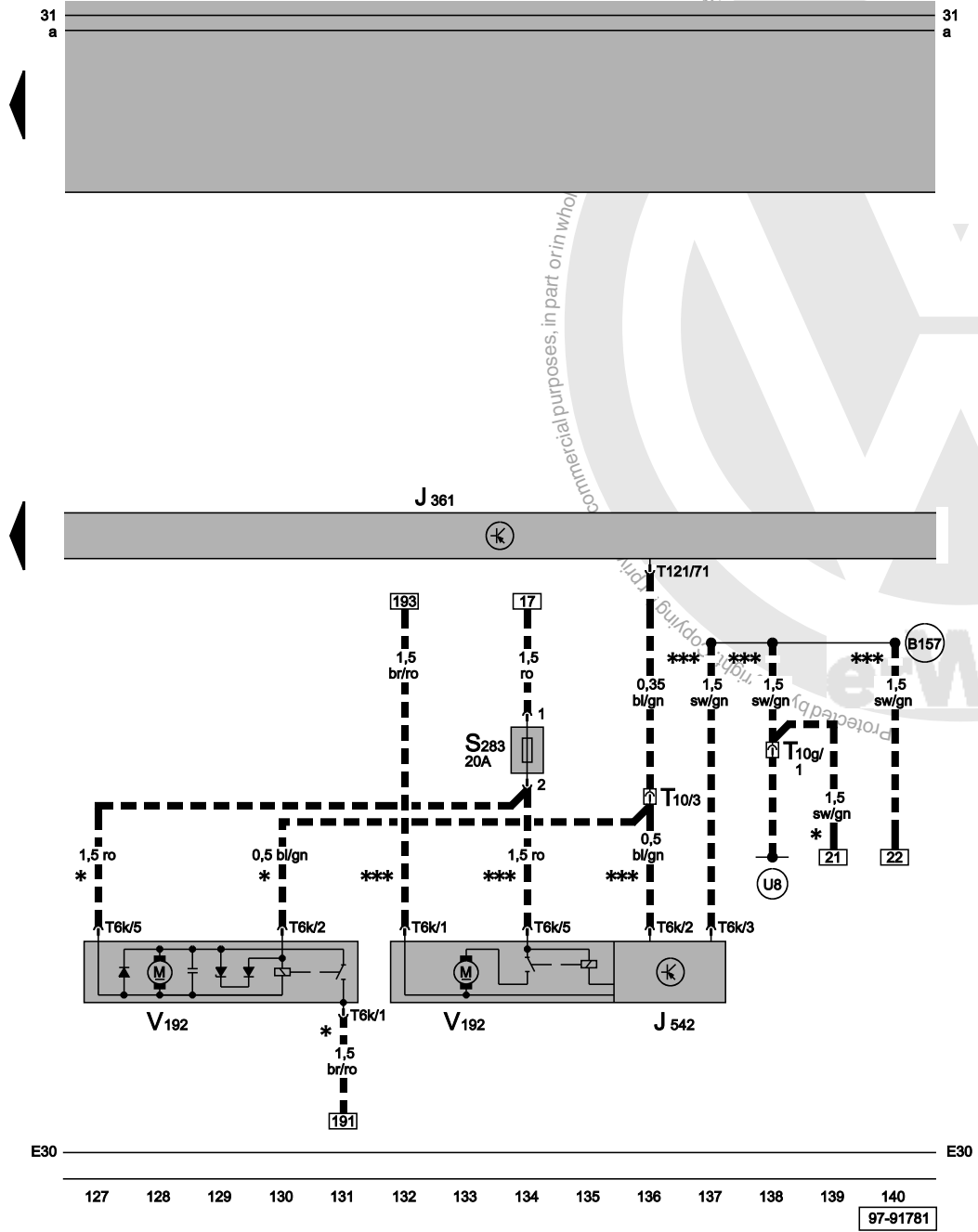
- G39 Lambda probe
- G70 Air mass meter
- J361 Simos control unit, in centre plenum chamber
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector
- E30 Connection (87a), in engine wiring harness



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Simos control unit, brake servo control unit, vacuum pump for brakes

- J361 Simos control unit, in centre plenum chamber
- J542 Brake servo control unit
- S283 Brake vacuum pump fuse, above the relay plate
- T6k 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes
- (B157) Positive connection 3 (15a), in interior wiring harness
- (U8) Positive connection (15a), in automatic gearbox wiring harness
- * from May 2003
- *** up to April 2003
- models with automatic gearbox only

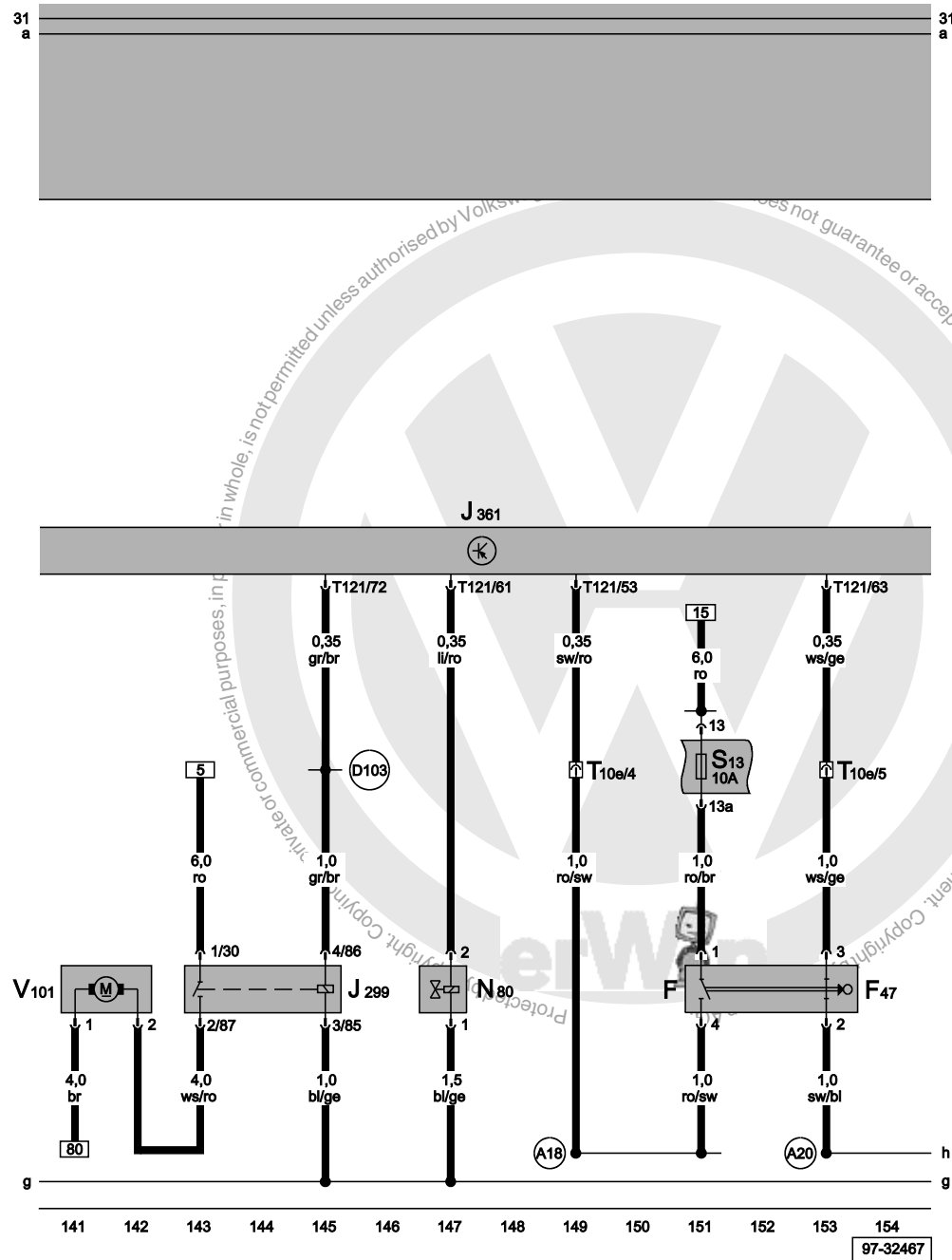


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Simos control unit, secondary air pump motor, cruise control system brake pedal switch, brake light switch, active charcoal filter system solenoid valve

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- J361 Simos control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- S13 Fuse 13 in fuse holder
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D103) Connection 3, in engine compartment wiring harness
- (D104) Positive connection 2 (30a), in engine compartment wiring harness



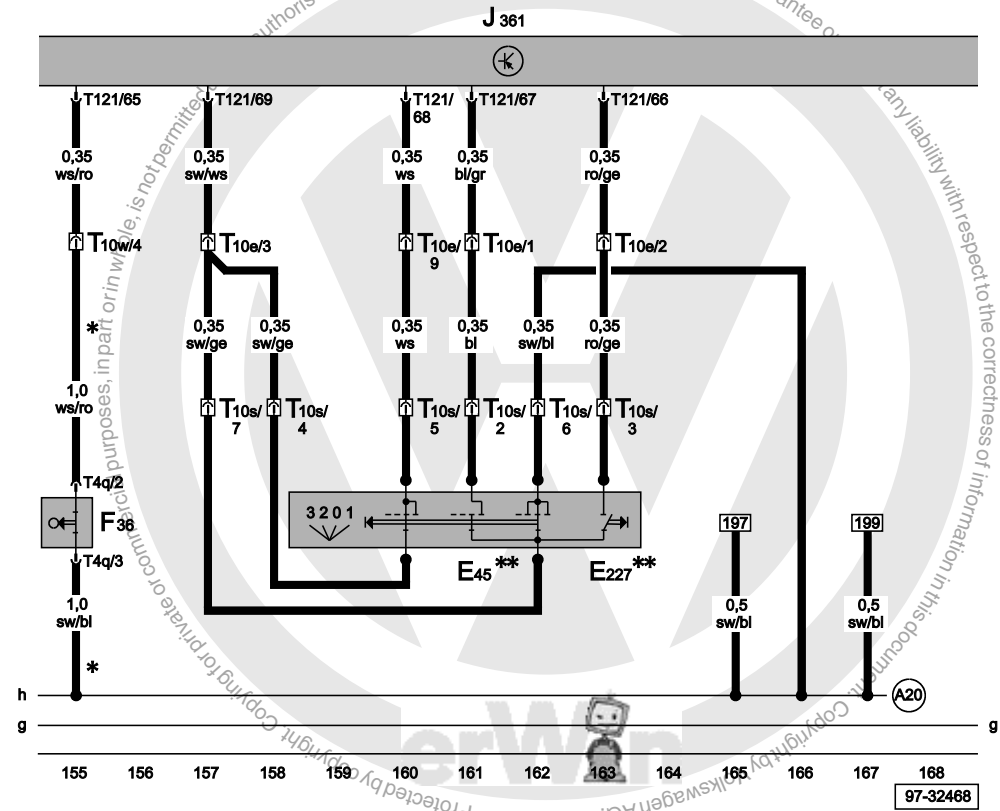
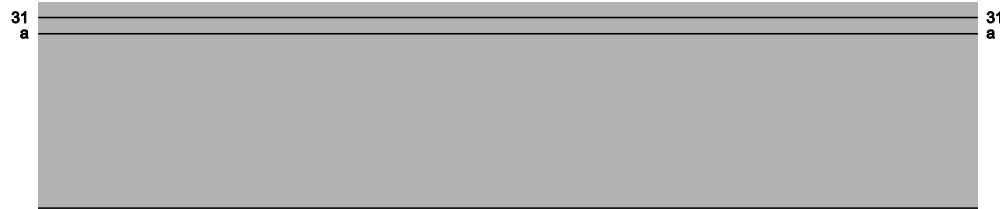
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Simos control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch*
- J361 Simos control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(A20) Connection (15a), in dash panel wiring harness

- * only models with manual gearbox
- ** only models with GND, models with multifunction display → Current Flow Diagram multifunction steering wheel for cruise control system and radio

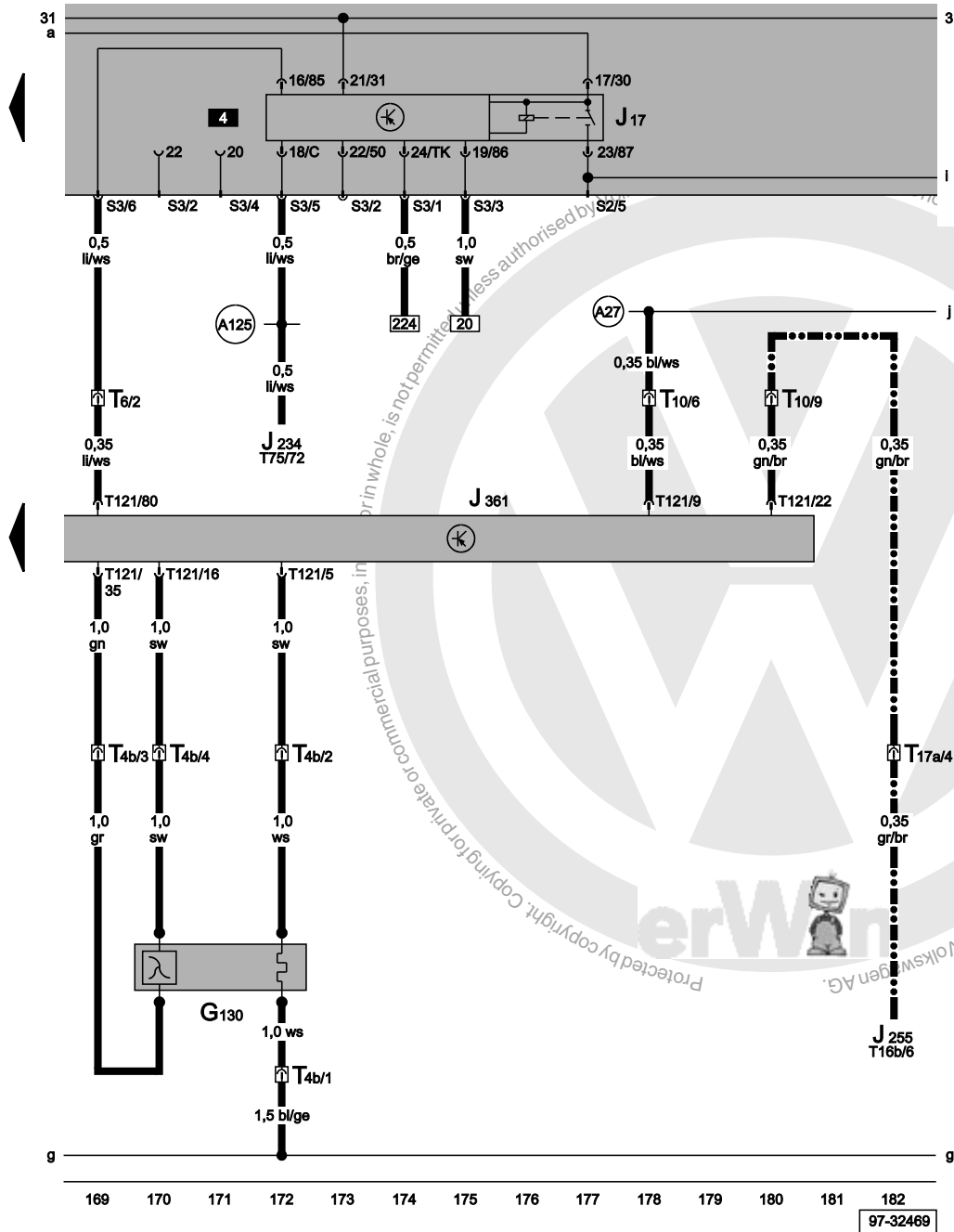


97-32468

Simos control unit, lambda probe after catalytic converter, fuel pump relay

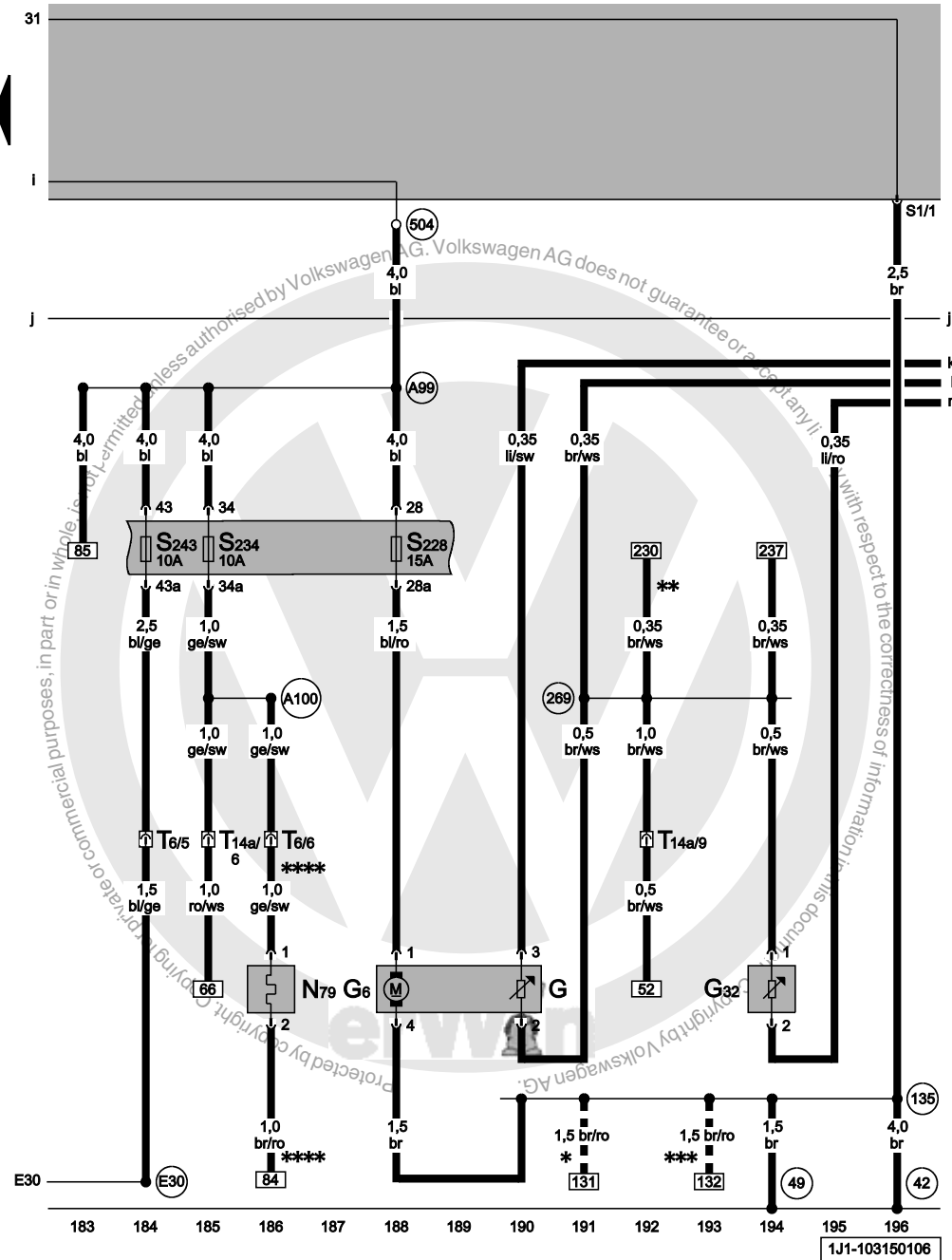
- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit, behind the lower console
- J255 Climatronic control unit
- J361 Simos control unit, in centre plenum chamber
- T4b 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector

- (A27) Connection (speed signal), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness
- only models with Climatronic



Fuel pump, fuel gauge sender, coolant shortage indicator sender, heater element for crankcase breather

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- N79 Heater element for crankcase breather
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * from May 2003
- *** up to April 2003
- models with automatic gearbox only
- ** only models without Climatronic
- **** models with heater element for crankcase breather only

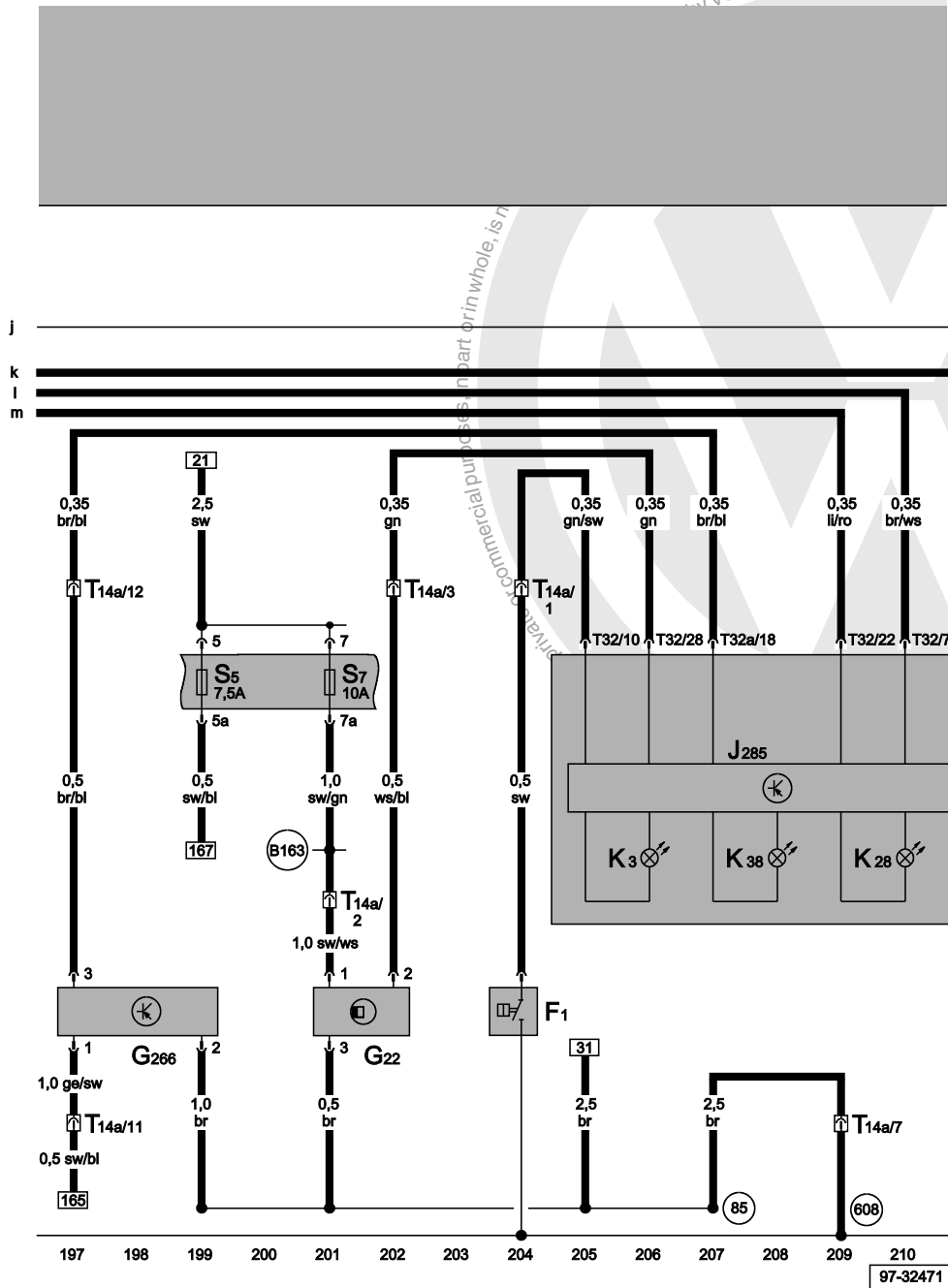


ws = white
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 rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

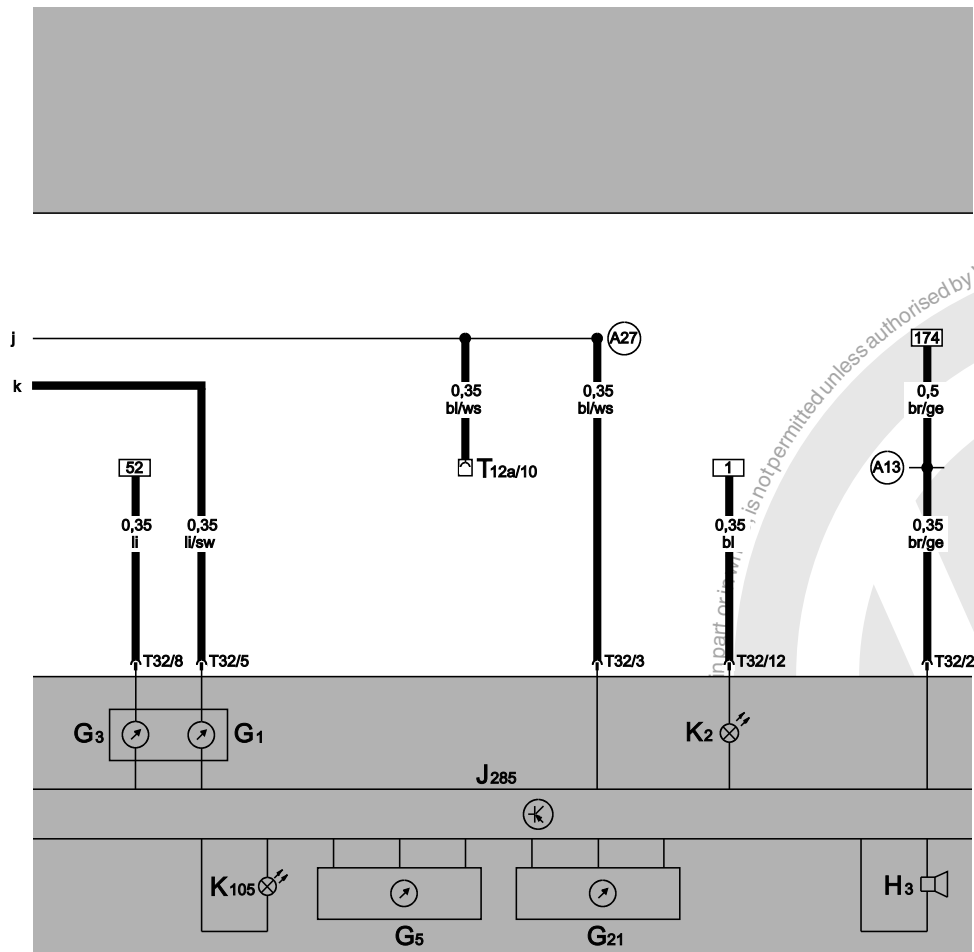
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness
* only flexible service interval display



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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T12a 12-pin connector, Climatronic connection only
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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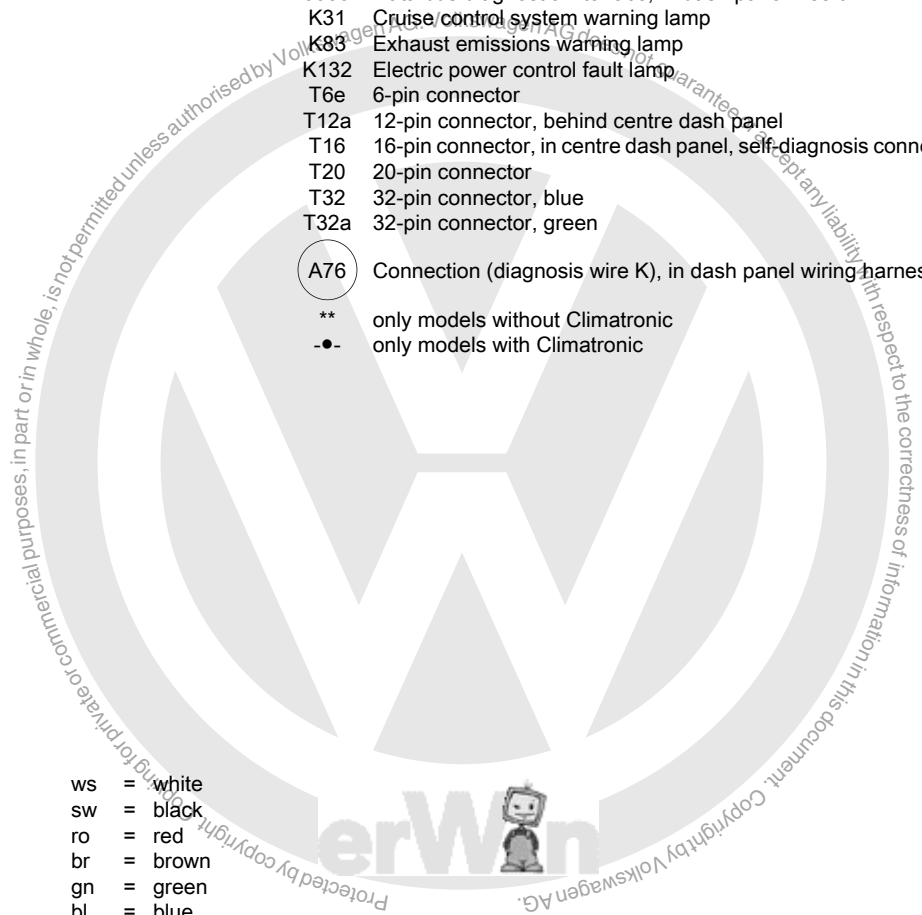
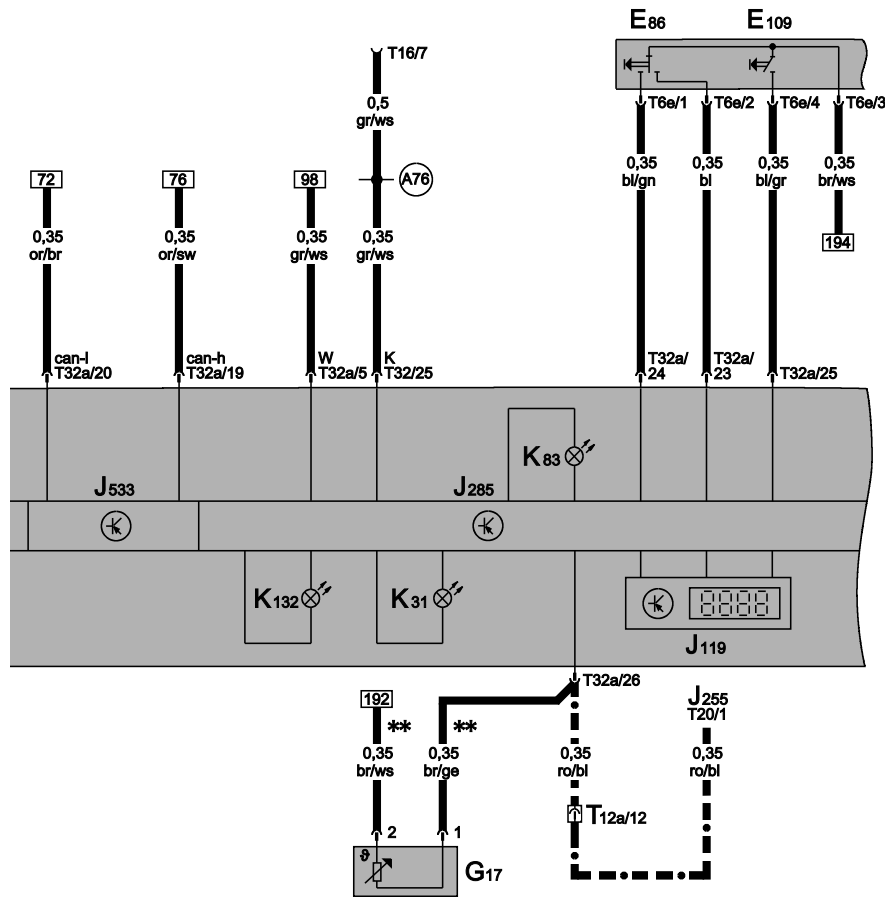
211 212 213 214 215 216 217 218 219 220 221 222 223 224

97-32472

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** only models without Climatronic
- only models with Climatronic



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Gas discharge headlights with automatic headlight range control

from May 2002

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

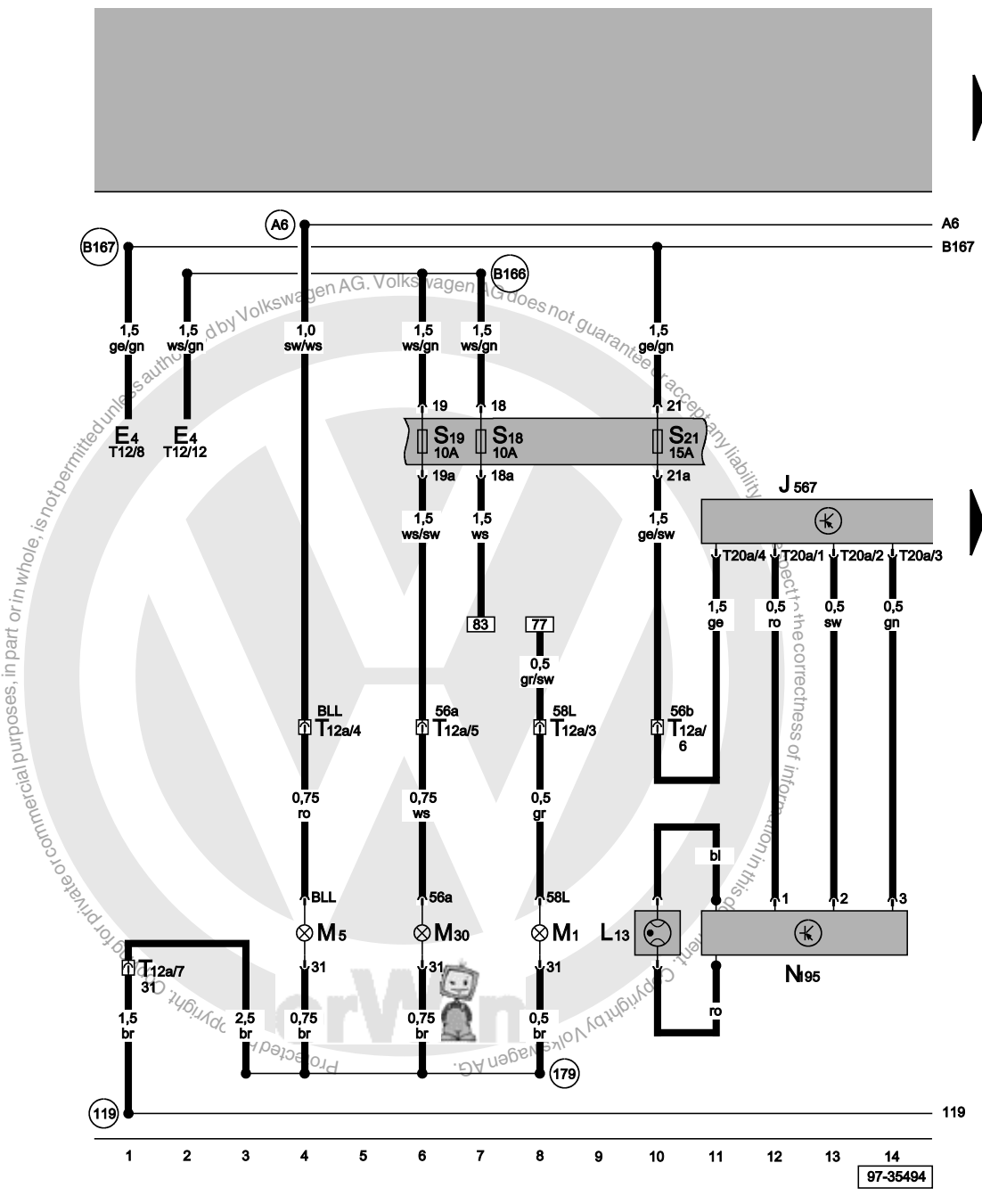
⇒ guided fault finding



Gas discharge light control unit with headlight range control left, left gas discharge light control unit, left gas discharge (xenon) bulb, left headlight main beam bulb, left side light bulb, front left turn signal bulb

- E4 Headlight dipper/flasher switch
- J567 Gas discharge light control unit with headlight range control left, in left headlight
- L13 Left gas discharge (xenon) bulb
- M1 Left side light bulb
- M5 Front left turn signal bulb
- M5 Front left turn signal bulb
- N195 Gas discharge light starter unit
- S18 Fuse 18 in fuse holder
- S19 Fuse 19 in fuse holder
- S21 Fuse 21 in fuse holder
- T12a 12-pin connector, on left headlight
- T20a 20-pin connector

- 119 Earth connection 1, in headlight wiring harness
- 179 Earth connection, in left headlight wiring harness
- A6 Positive connection (left turn signal), in dash panel wiring harness
- B166 Connection (56a), in interior wiring harness
- B167 Connection (56b), in interior wiring harness

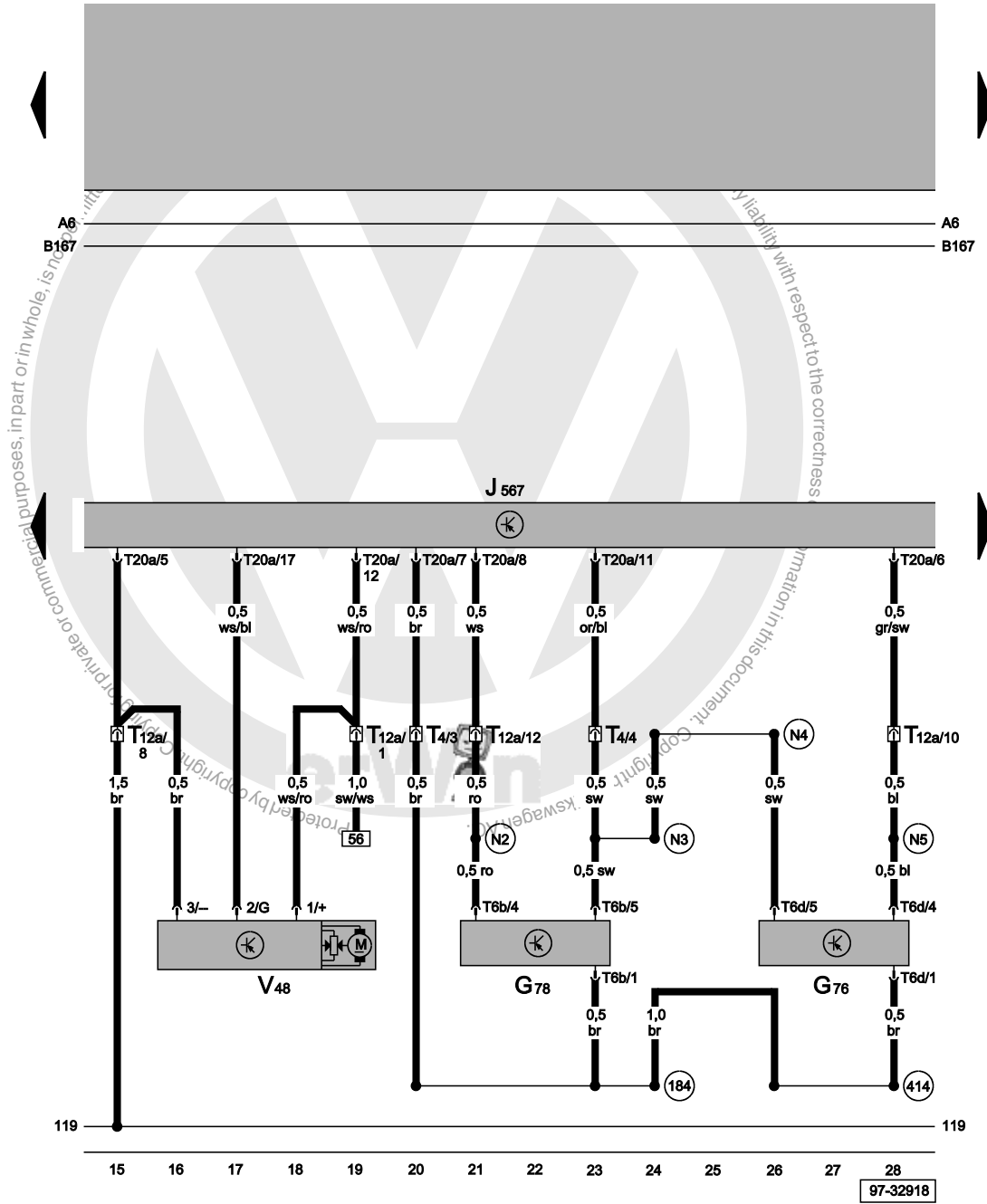


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97-35494

Gas discharge light control unit with headlight range control left, left headlight range control motor, rear left vehicle level sender, front left vehicle level sender

- G76 Rear left vehicle level sender
- G78 Front left vehicle level sender
- J567 Gas discharge light control unit with headlight range control left, in left headlight
- T4 4-pin connector, on left headlight
- T6b 6-pin connector
- T6d 6-pin connector
- T12a 12-pin connector, on left headlight
- T20a 20-pin connector
- V48 Left headlight range control motor
- 184 Earth connection (headlight range control), in engine compartment wiring harness
- 414 Earth connection (headlight range control), in interior wiring harness
- N2 Connection 1, in headlight range control wiring harness
- N3 Connection 2, in headlight range control wiring harness
- N4 Connection 3, in headlight range control wiring harness
- N5 Connection 4, in headlight range control wiring harness

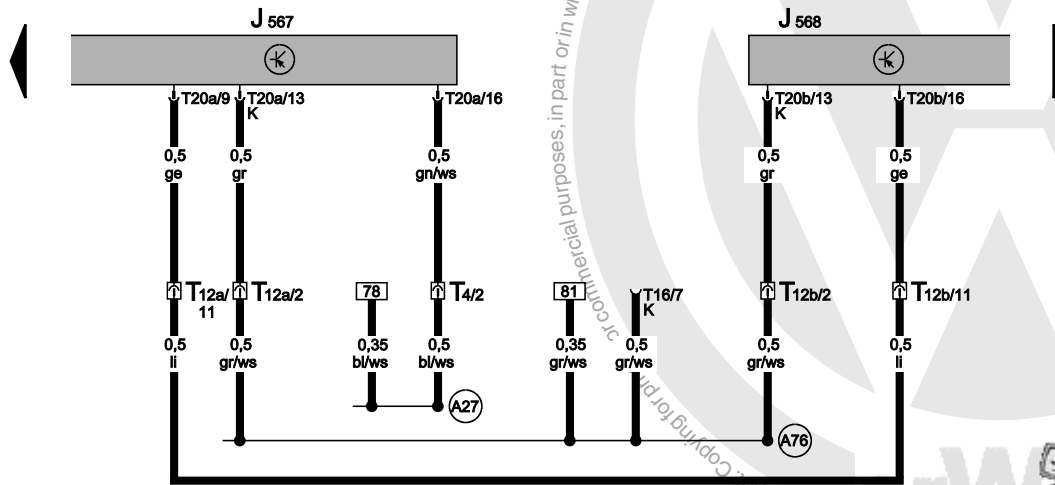
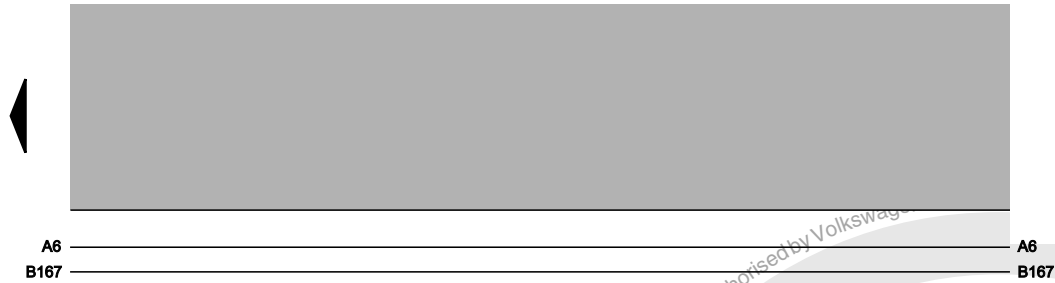


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- ro = red
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- gn = green
- bl = blue
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- ge = yellow
- or = orange
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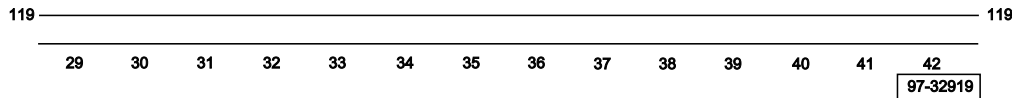
Gas discharge light control unit with headlight range control left, gas discharge light control unit with headlight range control right

- J567 Gas discharge light control unit with headlight range control left, in left headlight
- J568 Gas discharge light control unit with headlight range control right, in right headlight
- T4 4-pin connector, on left headlight
- T12a 12-pin connector, on left headlight
- T12b 12-pin connector, on right headlight
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20a 20-pin connector
- T20b 20-pin connector

- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness



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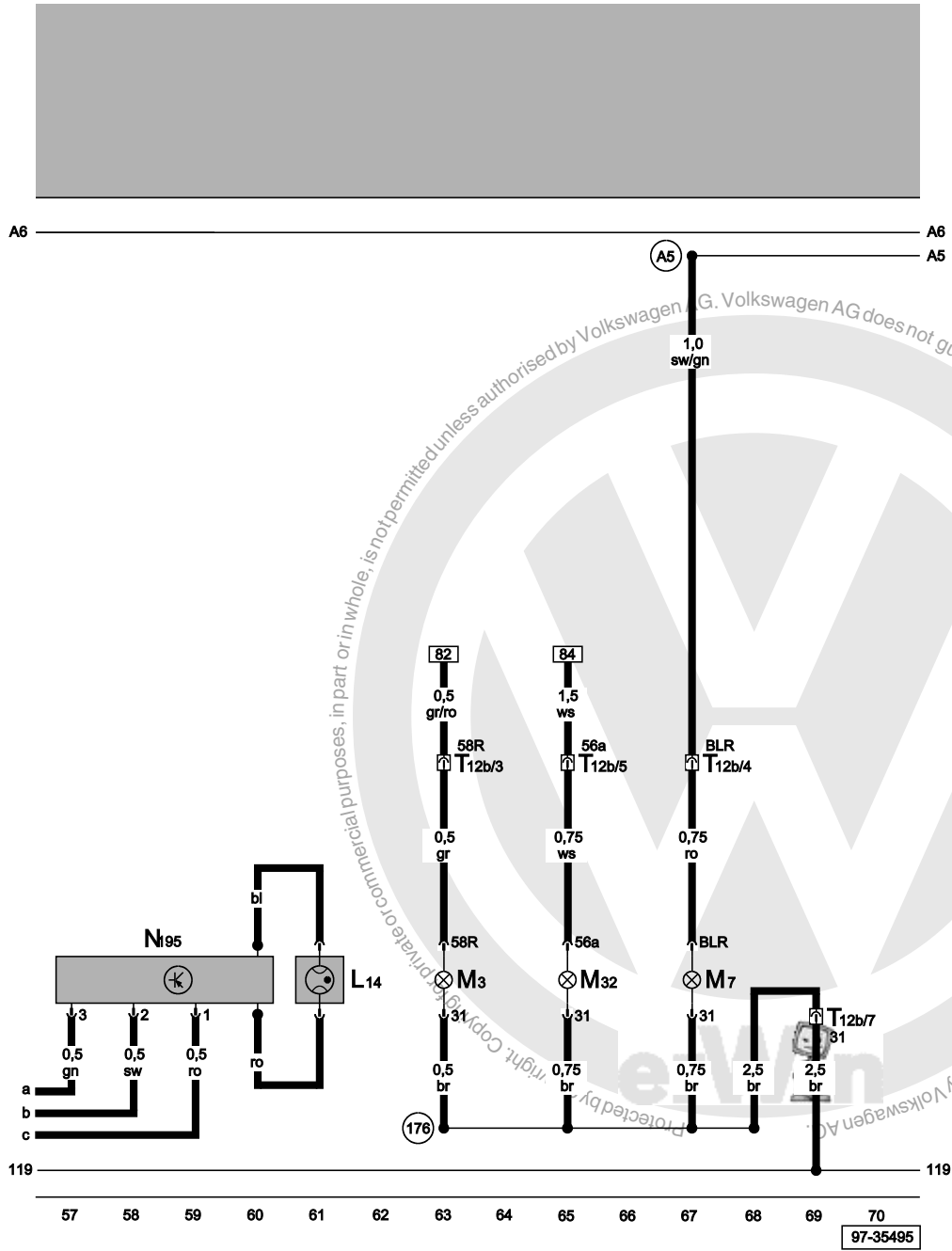


Right gas discharge light control unit, right gas discharge bulb, right main beam bulb, right side light bulb, front right turn signal bulb

- L14 Right gas discharge (xenon) bulb
- M3 Right side light bulb
- M7 Front right turn signal bulb
- M32 Right main beam bulb
- N195 Gas discharge light starter unit
- T12b 12-pin connector, on right headlight

176 Earth connection, in right headlight wiring harness

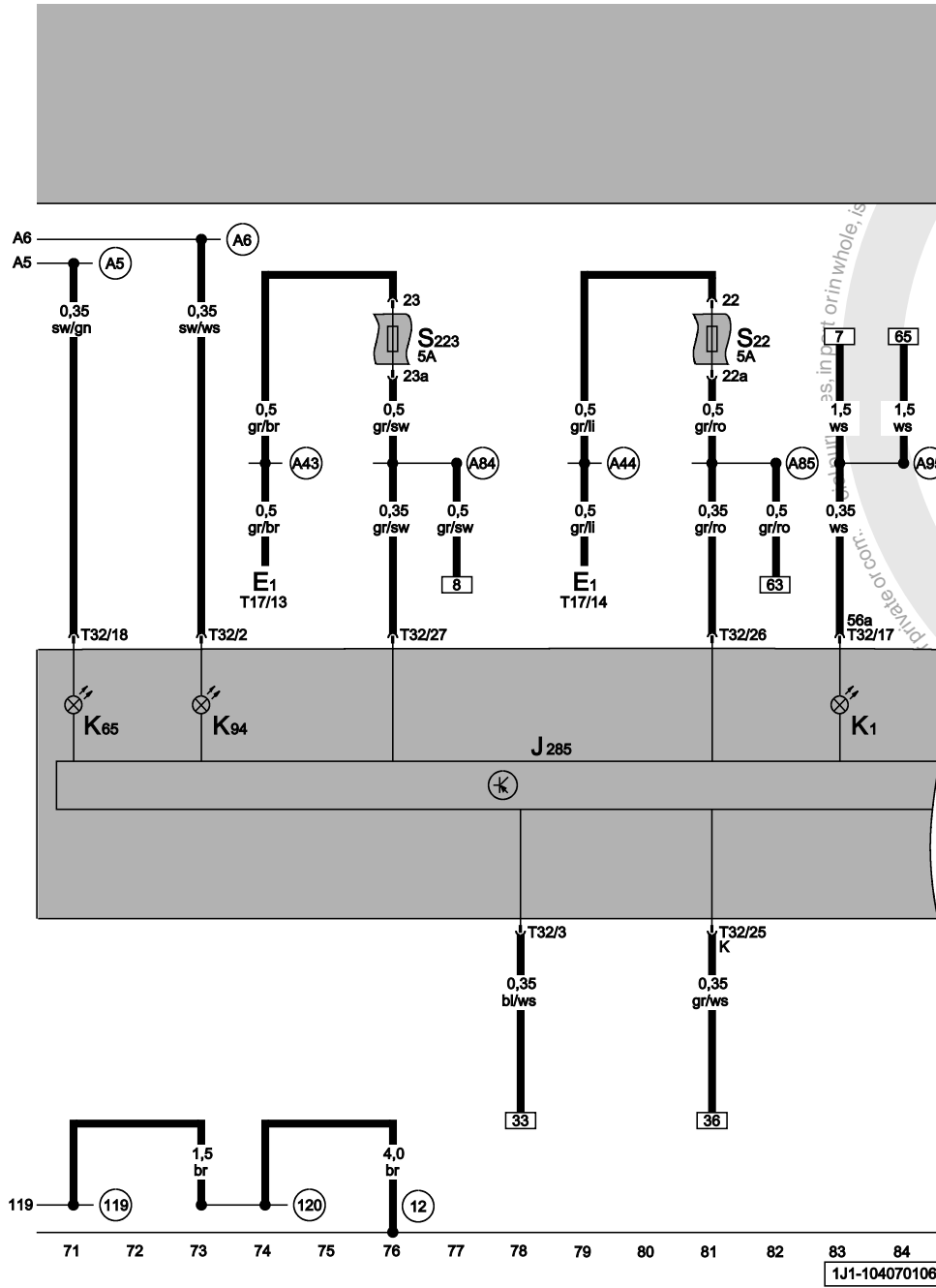
A5 Positive connection (right turn signal), in dash panel wiring harness



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Dash panel insert, turn signal warning lamp, main beam warning lamp

- E1 Light switch
 - J285 Control unit with display in dash panel insert
 - K1 Main beam warning lamp
 - K65 Left turn signal warning lamp
 - K94 Right turn signal warning lamp
 - S22 Fuse 22 in fuse holder
 - S223 Fuse 23 in fuse holder
 - T17 17-pin connector
 - T32 32-pin connector, blue
- 12 Earth point, on left in engine compartment
 - 119 Earth connection 1, in headlight wiring harness
 - 120 Earth connection 2, in headlight wiring harness
 - A5 Positive connection (right turn signal), in dash panel wiring harness
 - A6 Positive connection (left turn signal), in dash panel wiring harness
 - A43 Connection (57L), in dash panel wiring harness
 - A44 Connection (57R), in dash panel wiring harness
 - A84 Connection (58L), in dash panel wiring harness
 - A85 Connection (58R), in dash panel wiring harness
 - A95 Connection 1 (56a), in dash panel wiring harness



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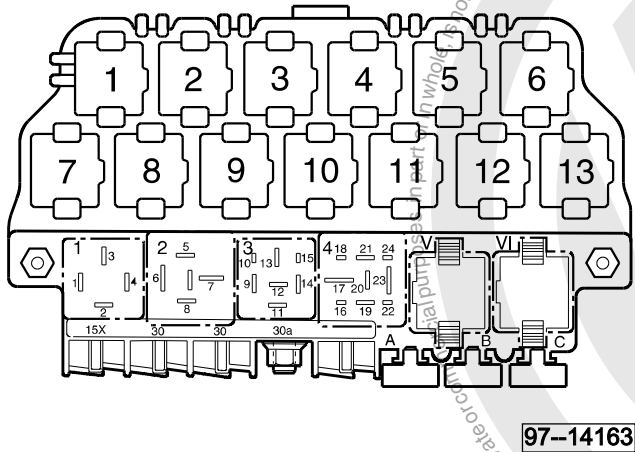
1J1-104070106

1.6 I/74 kW Simos, engine codes AEH

From November 2001

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:



Relay locations on relay plate:

2 - J59 - X contact relief relay (100)

4 - J17 - Fuel pump relay (409)

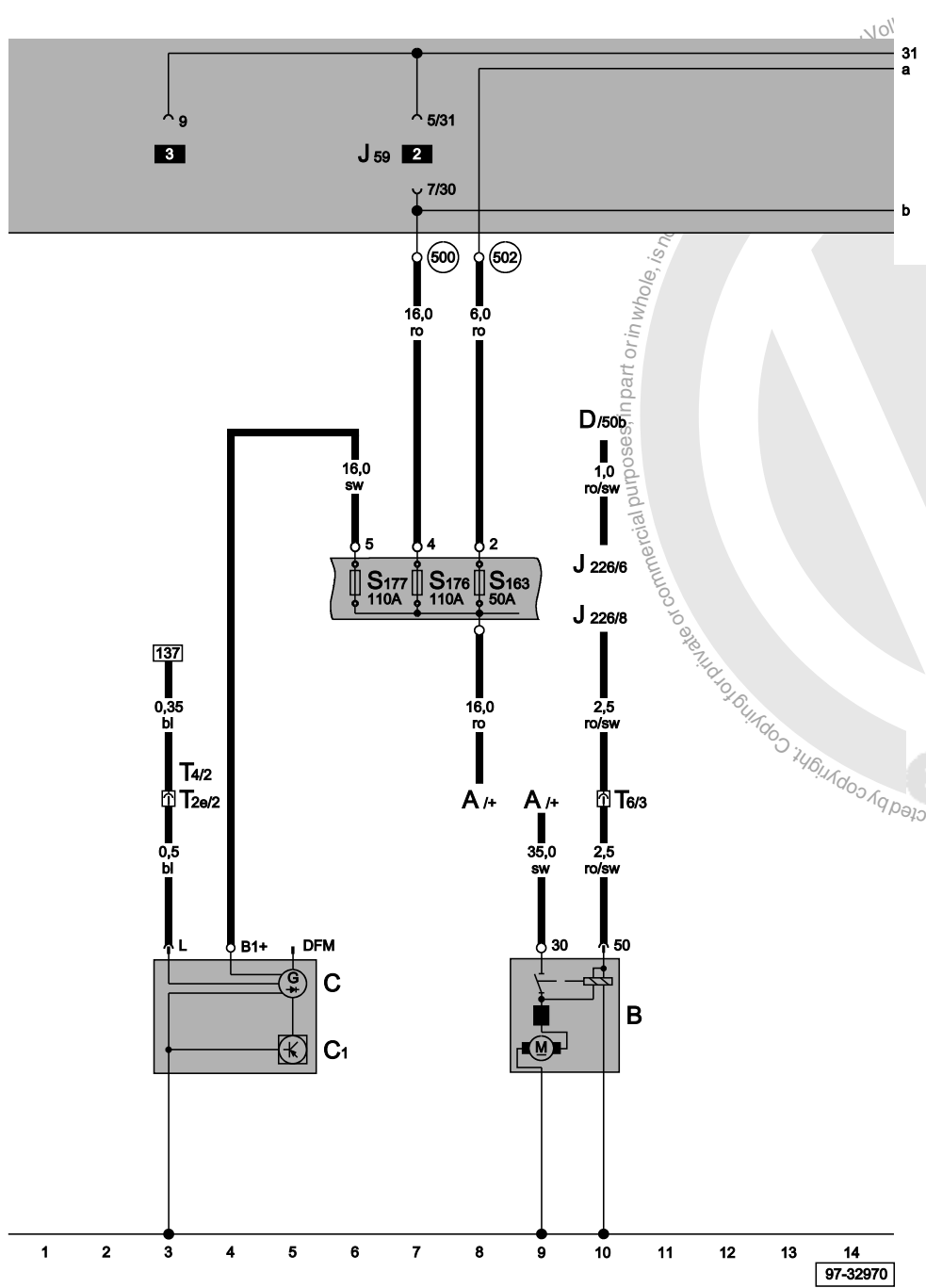


Note!

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate

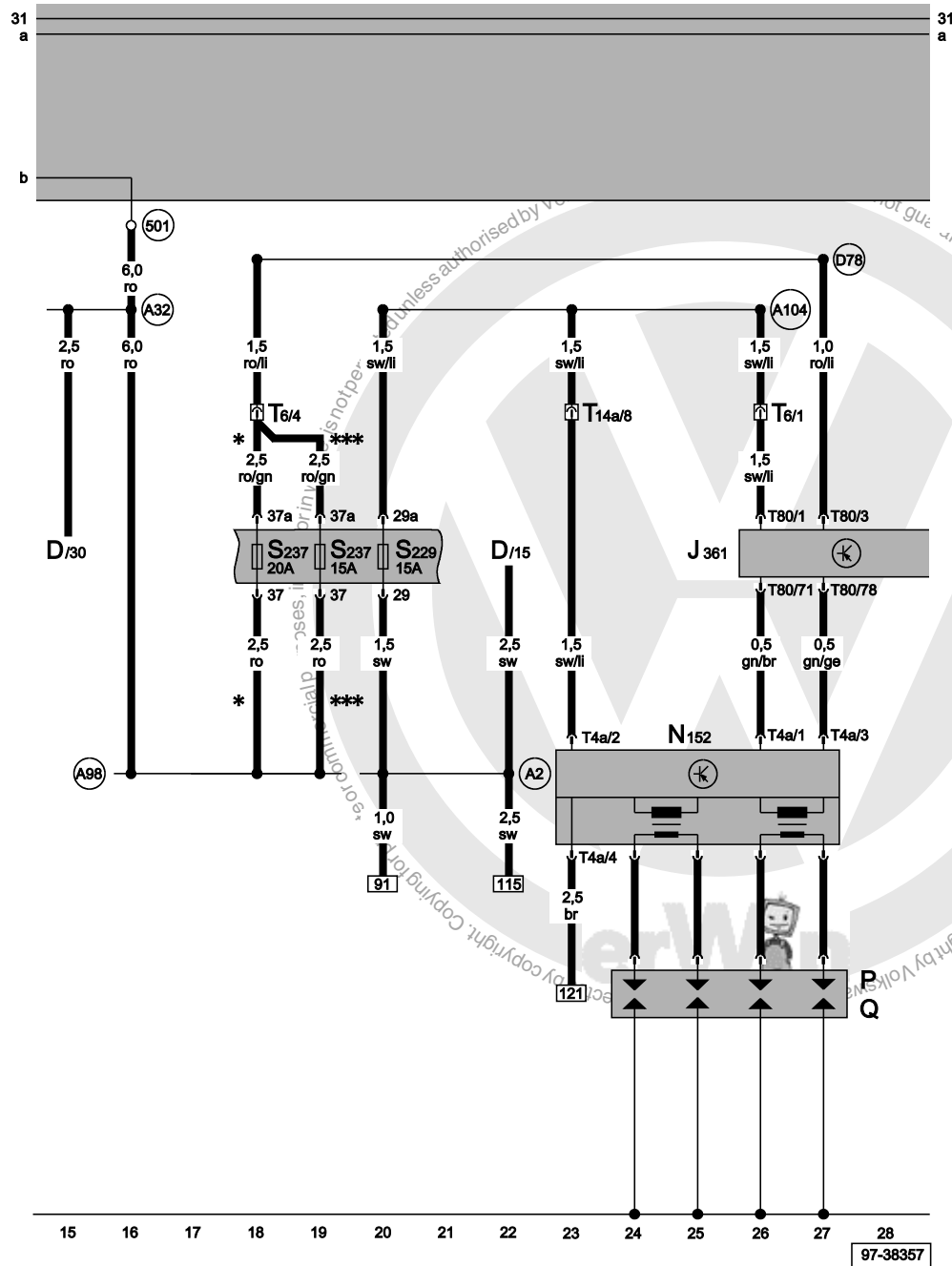
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97-32970

Alternator, starter

- D Ignition and starter switch
- J361 Simos control unit, in centre of plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T4a 4-pin connector
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector

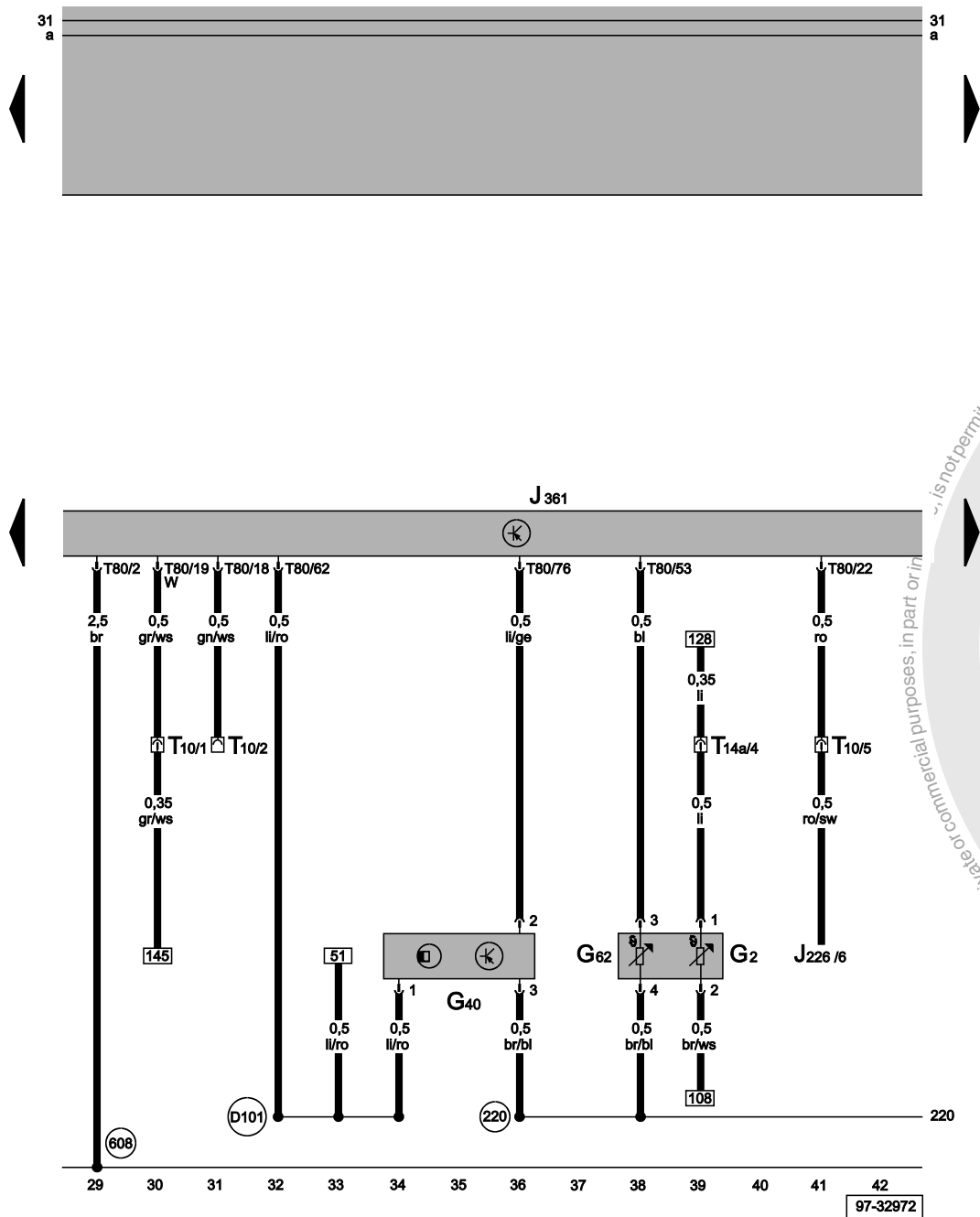
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- * From May 2003
- *** Up to April 2003



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Dash panel insert, CCS warning lamp, multi-function display, ambient temperature display, exhaust emissions warning lamp, diagnostic socket

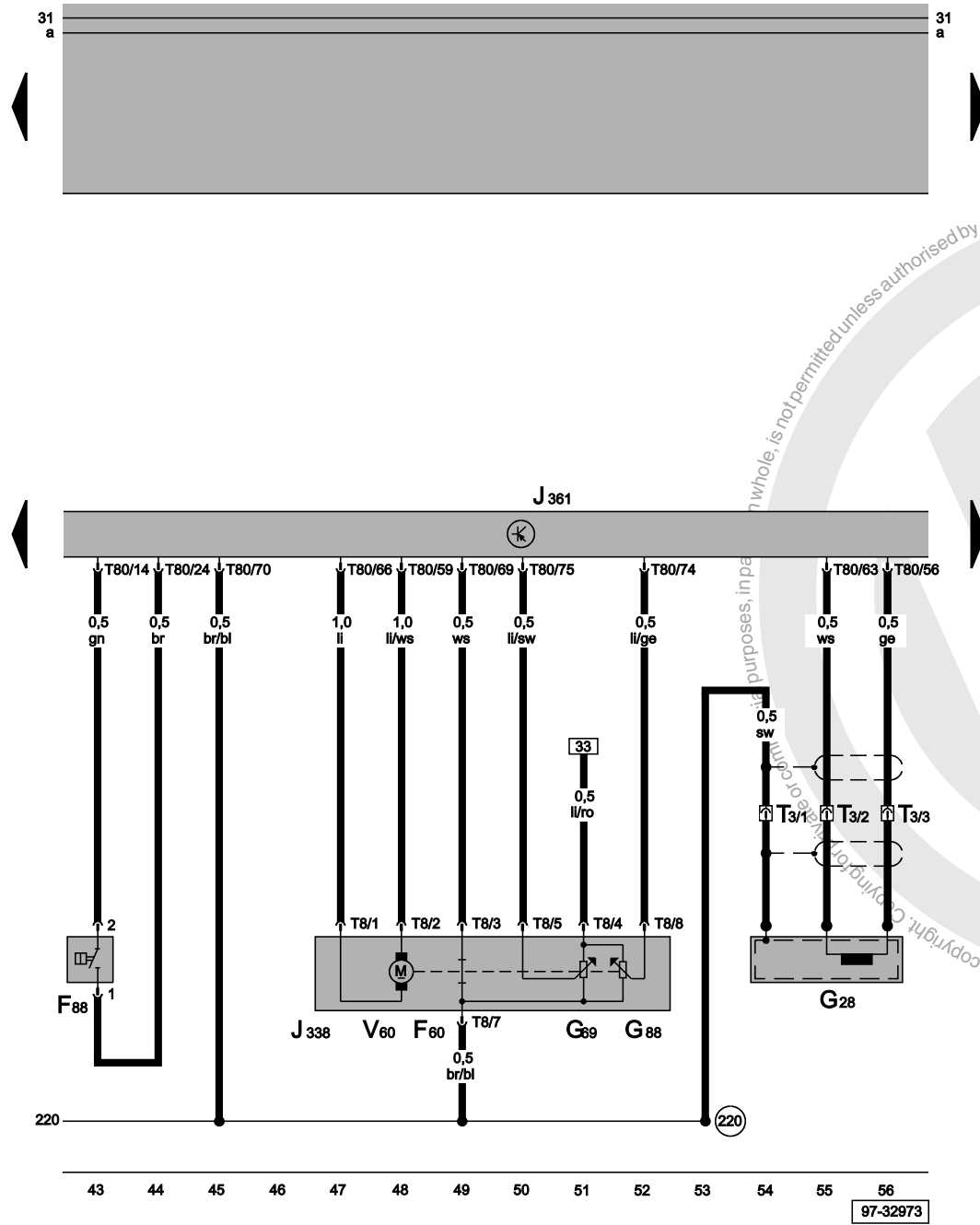
- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J226 Starter inhibitor and reversing light relay
- J361 Simos control unit, in plenum chamber, centre
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in plenum chamber, centre
- D101 Connection -1-, in engine wiring harness



97-32972

Simos control unit, ignition system

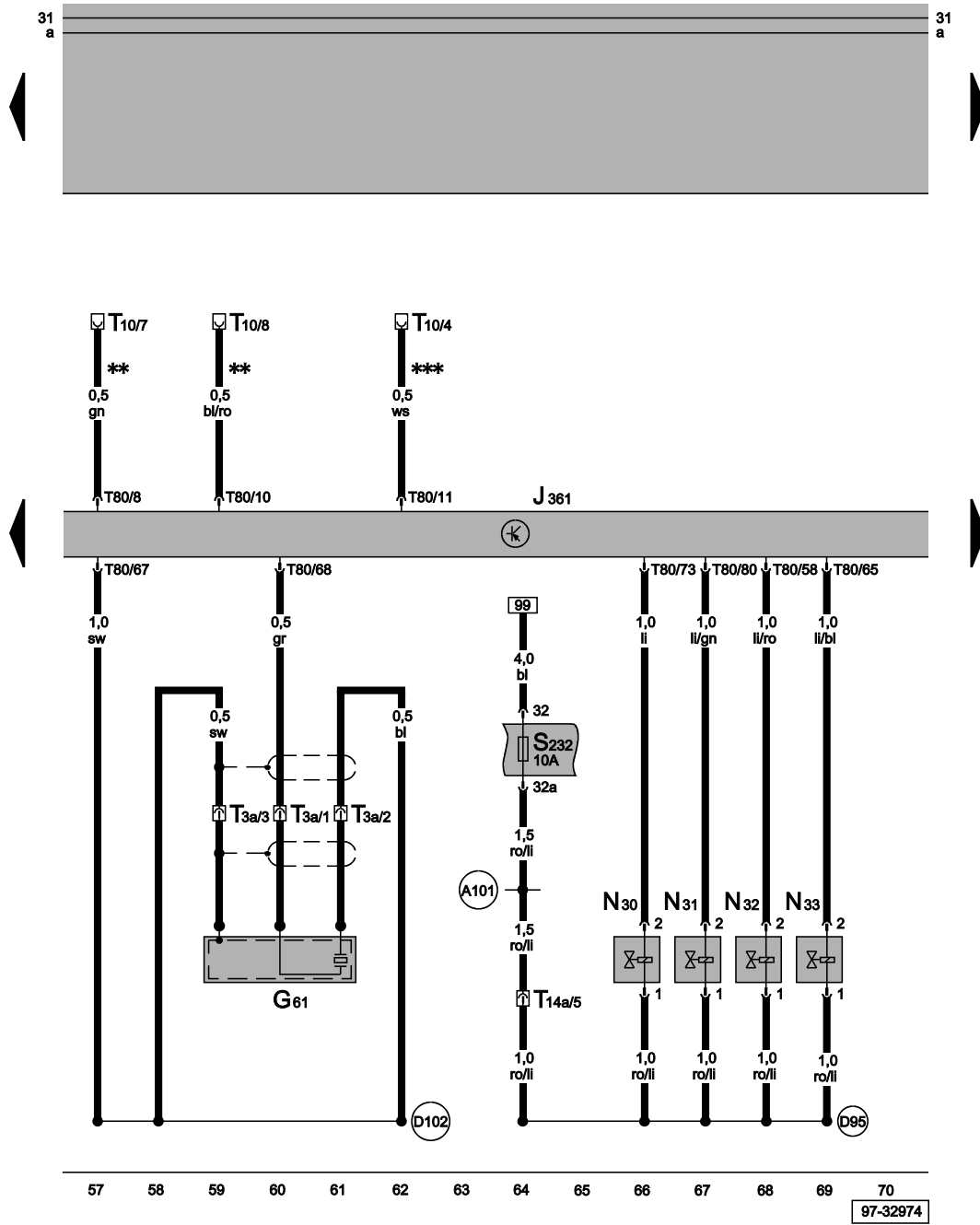
- F60 Idling switch
- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J338 Throttle valve control unit*
- J361 Simos control unit, in plenum chamber, centre
- T3 3-pin connector, near intake manifold
- T8 8-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner
- 220 Earth connection (sender earth), in engine wiring harness
- * Models with CCS => Current Flow cruise control system



Simos control unit, coolant temperature sender, hall sender

- G61 Knock sensor
- J361 Simos control unit, in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse box
- T3a 3-pin connector, near intake manifold
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector

- A101 Connection -3- (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- D102 Connection -2-, in engine compartment wiring harness
- ** Connection for air conditioner
- *** Connection for radiator fan control unit



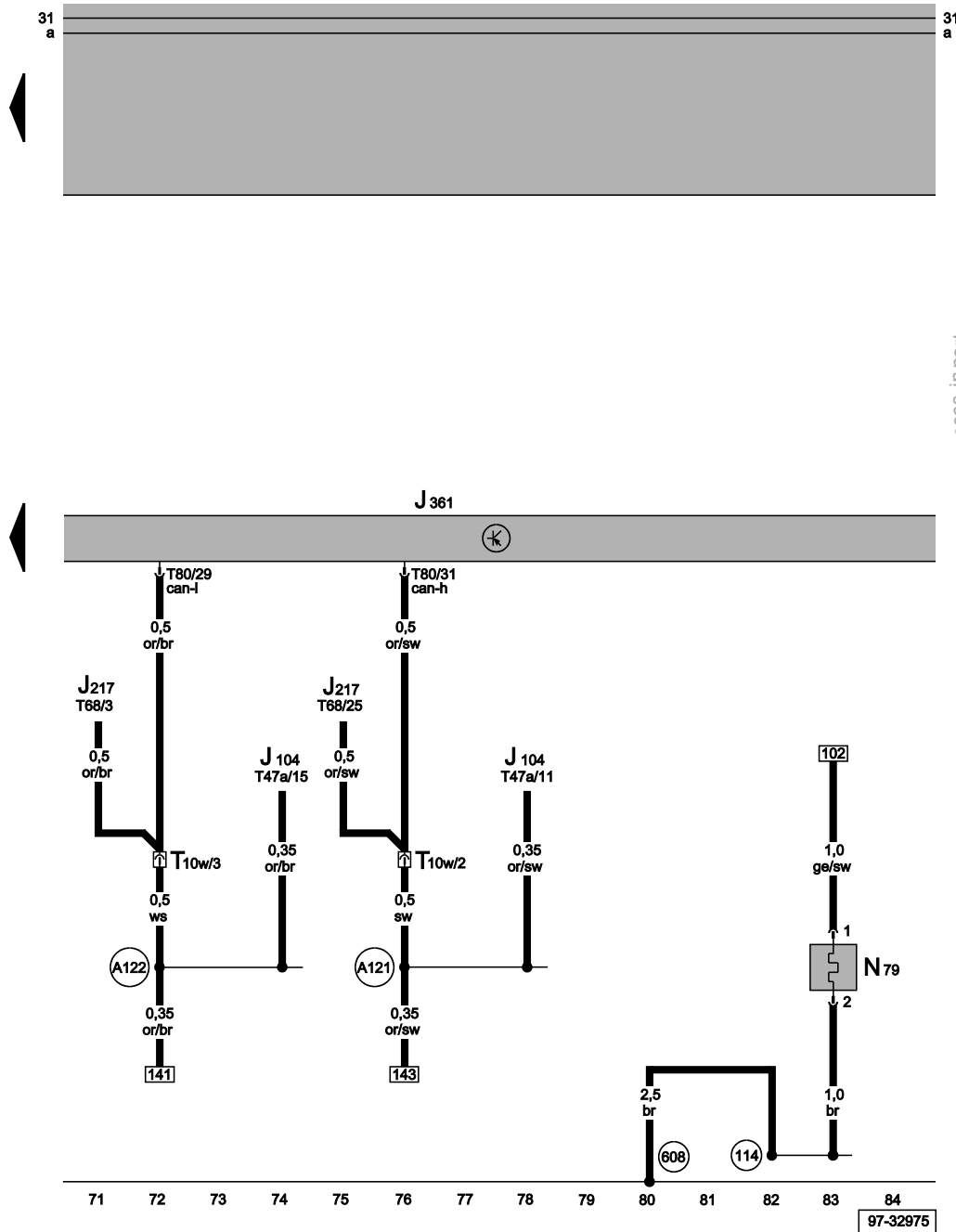
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- gr = grey
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97-32974

Simos control unit, throttle valve control module, engine speed sender, power assisted steering pressure switch

- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J361 Simos control unit, in plenum chamber, centre
- N79 Heater element (crankcase breather)
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS with EDL/TCS/ESP control unit
- T68 68-pin connector
- T80 80-pin connector

- 114 Earth connection, in automatic gearbox wiring harness
- 608 Earth point, in plenum chamber, centre
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness



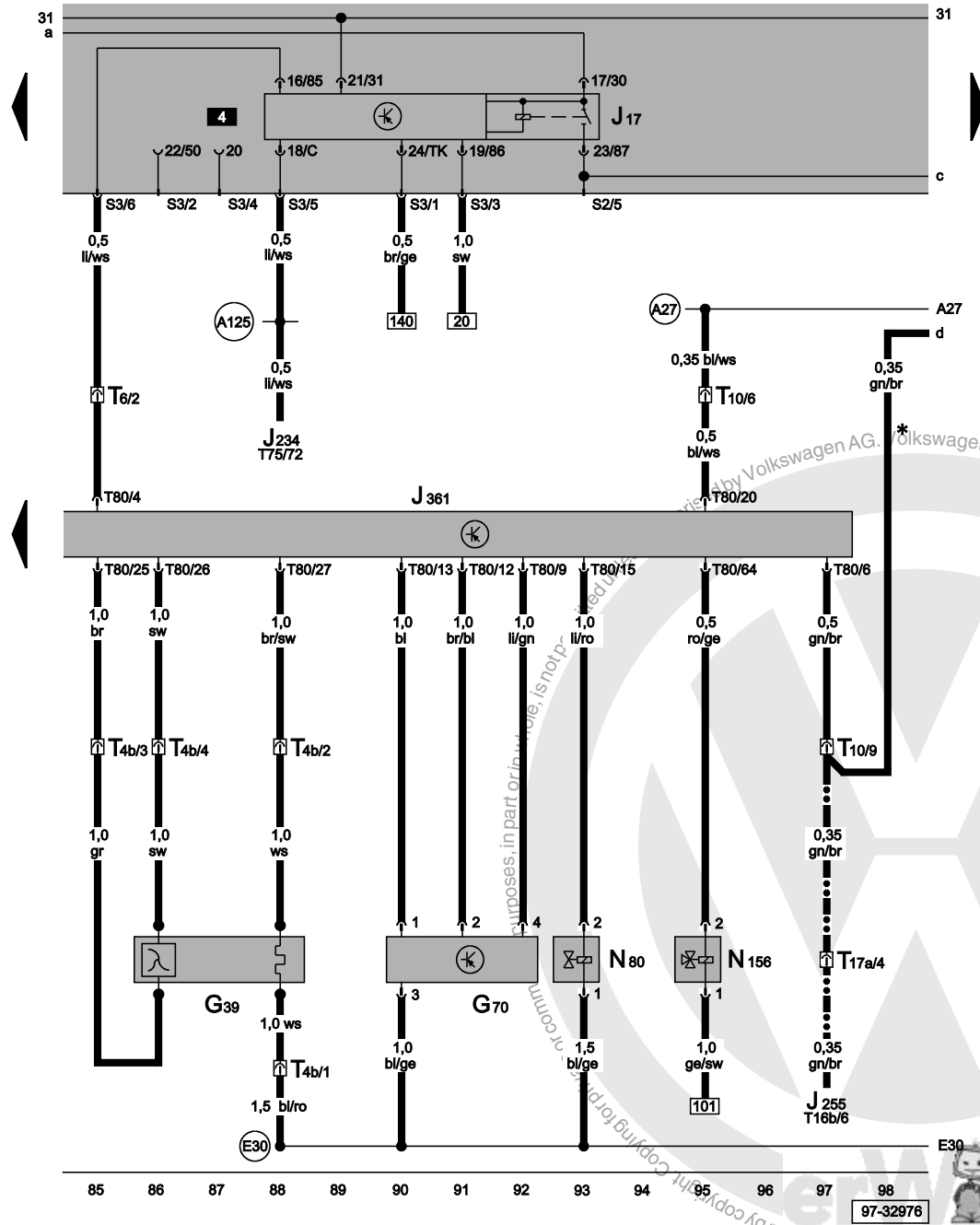
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Simos control unit, knock sensor, injectors

- G39 Lambda probe
- G70 Air mass meter
- J17 Fuel pump relay
- J234 Airbag control unit
- J255 Climatronic control unit
- J361 Simos control unit, in plenum chamber, centre
- N80 Activated charcoal filter system solenoid valve 1
- N156 Intake manifold change-over valve
- T4b 4-pin connector, near catalyst
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind dash panel, centre
- T75 75-pin connector
- T80 80-pin connector

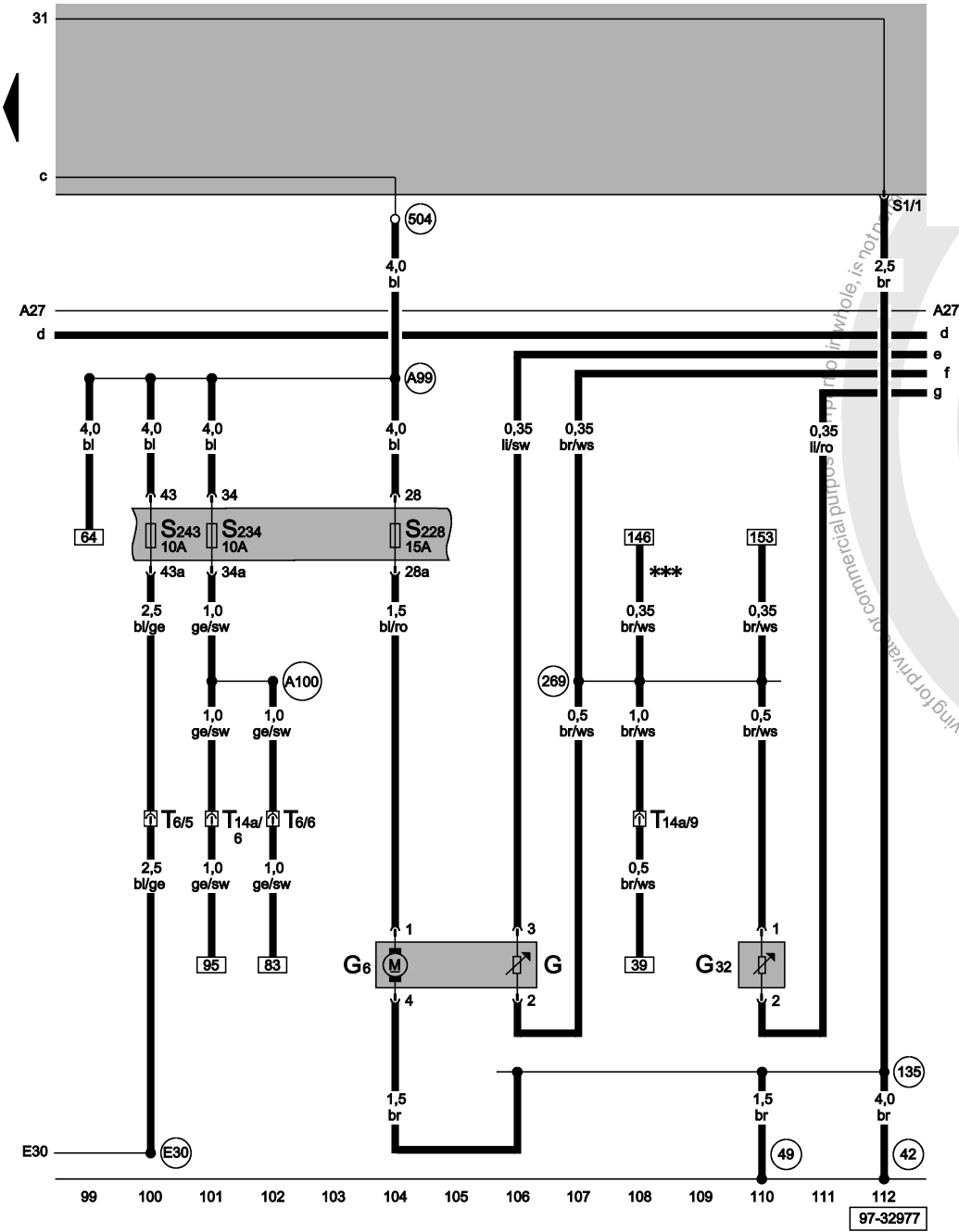
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- Engine speed signal from engine control unit up to April 2002
- Only models with Climatronic

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Simos control unit, heater element (crankcase breather)

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** Only models without Climatronic

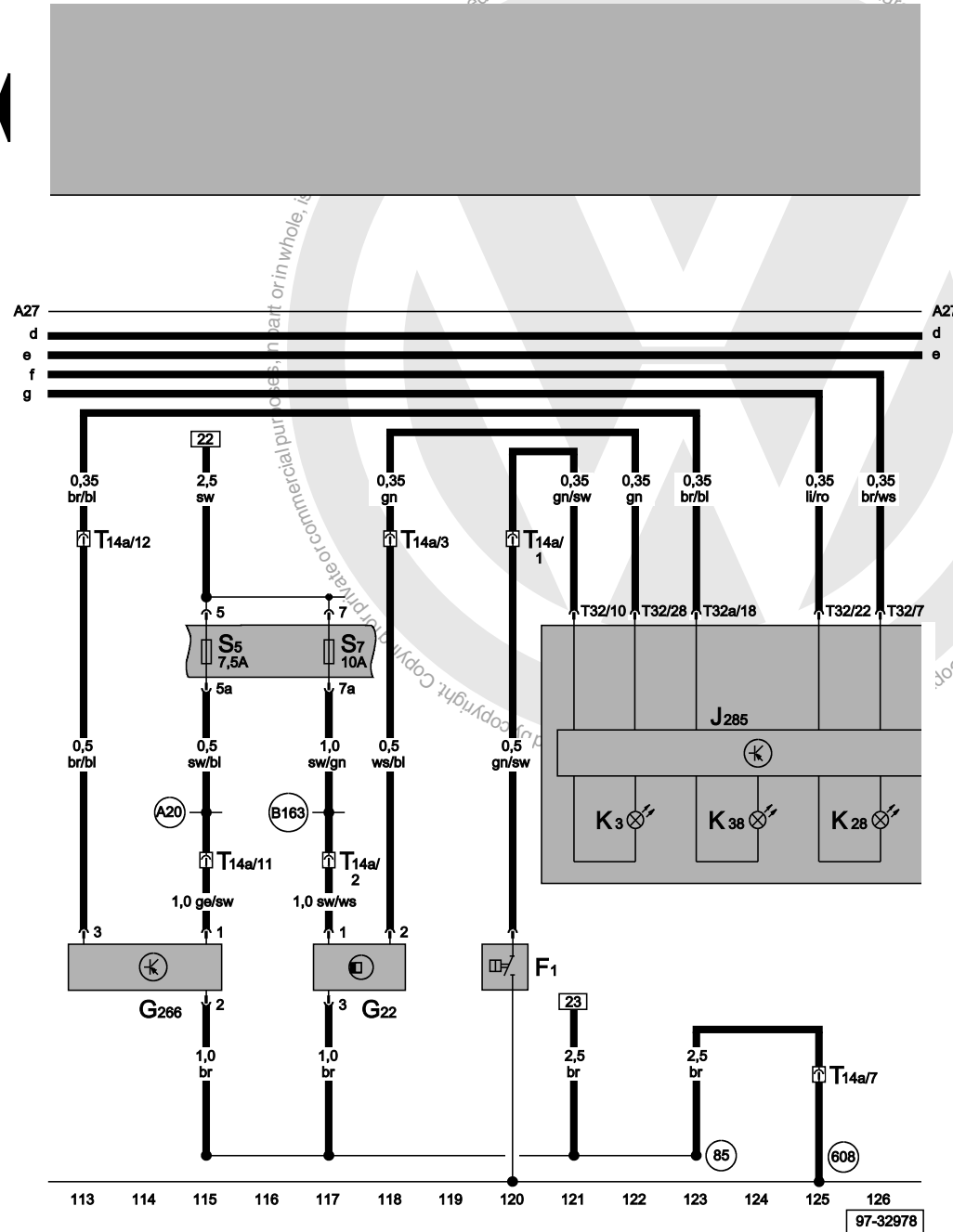


ws = white
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Simos control unit, lambda probe, air mass meter, active charcoal filter system solenoid valve, intake manifold change-over valve, fuel pump relay

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level/oil temperature sender*
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse in fuse box
- S7 Fuse in fuse box
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

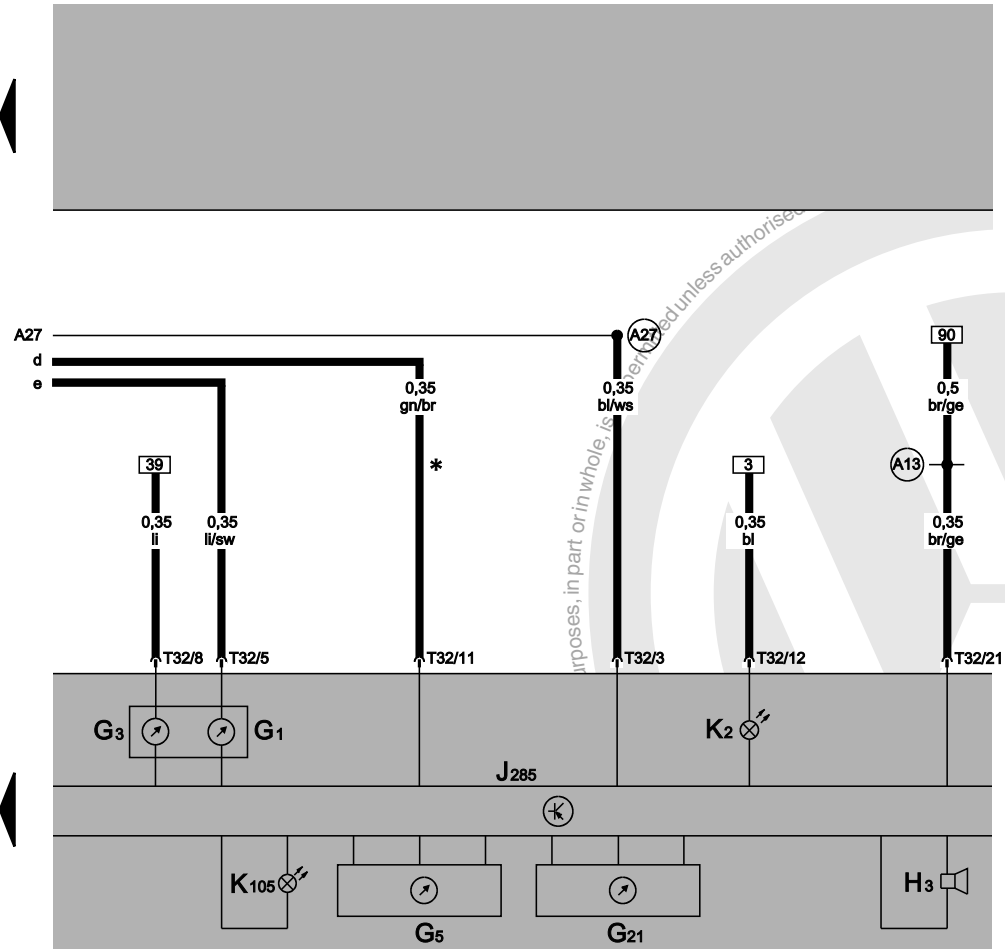
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive (+) connection -1- (15), in interior wiring harness
- * Only with flexible service interval display



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Fuel pump, fuel gauge sender, coolant shortage indicator sender

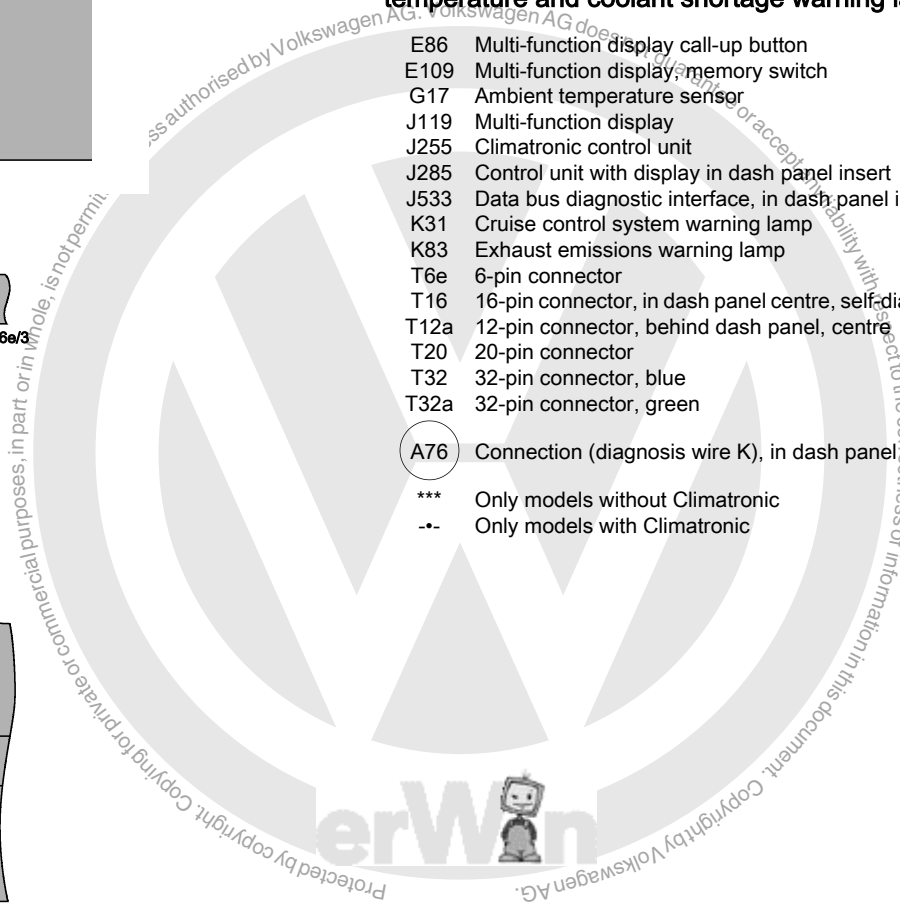
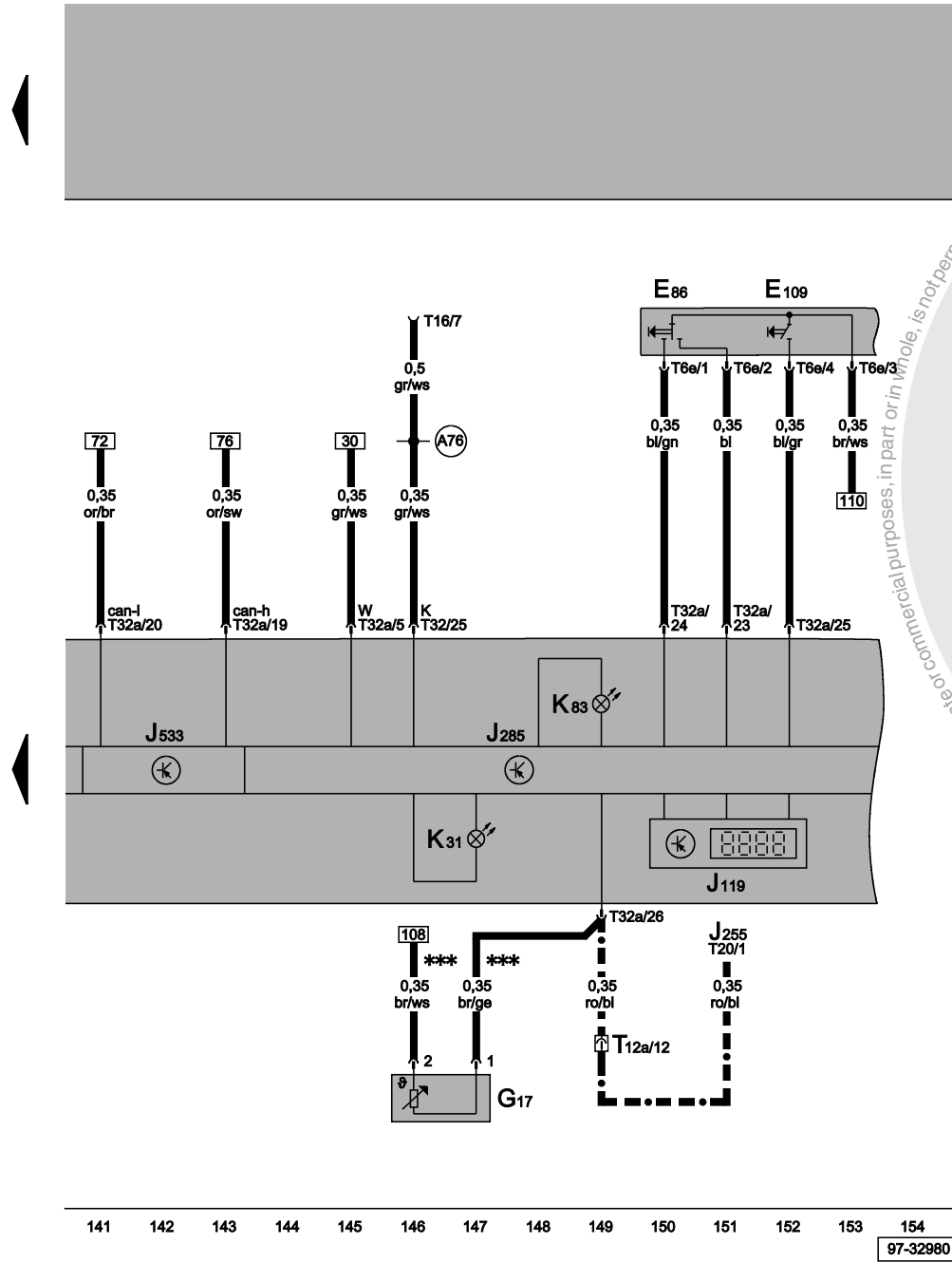
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Engine speed signal from engine control unit up to April 2002



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Dash panel insert, oil pressure warning, oil level and oil temperature warning, speedometer sender, coolant temperature and coolant shortage warning lamp

- E86 Multi-function display call-up button
- E109 Multi-function display memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- T6e 6-pin connector
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T12a 12-pin connector, behind dash panel, centre
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** Only models without Climatronic
- Only models with Climatronic

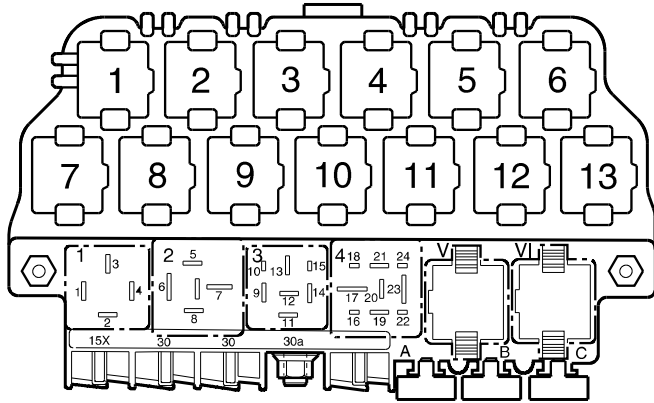


1.6 I/75 kW Simos, engine code AVU

from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

2 - J59 - X-contact relief relay (100)

4 - J17 - Fuel pump relay (409)



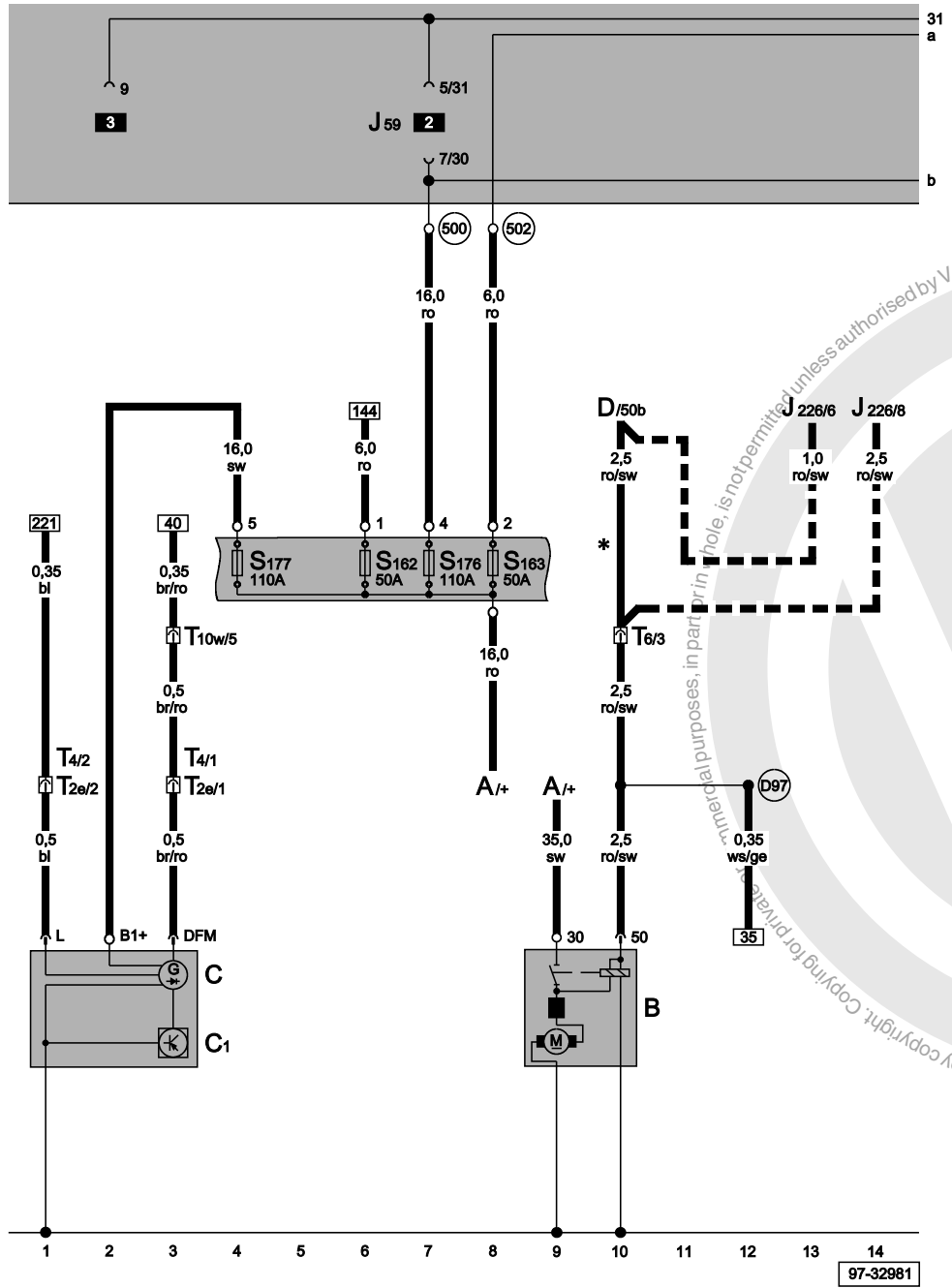
Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





Alternator, starter

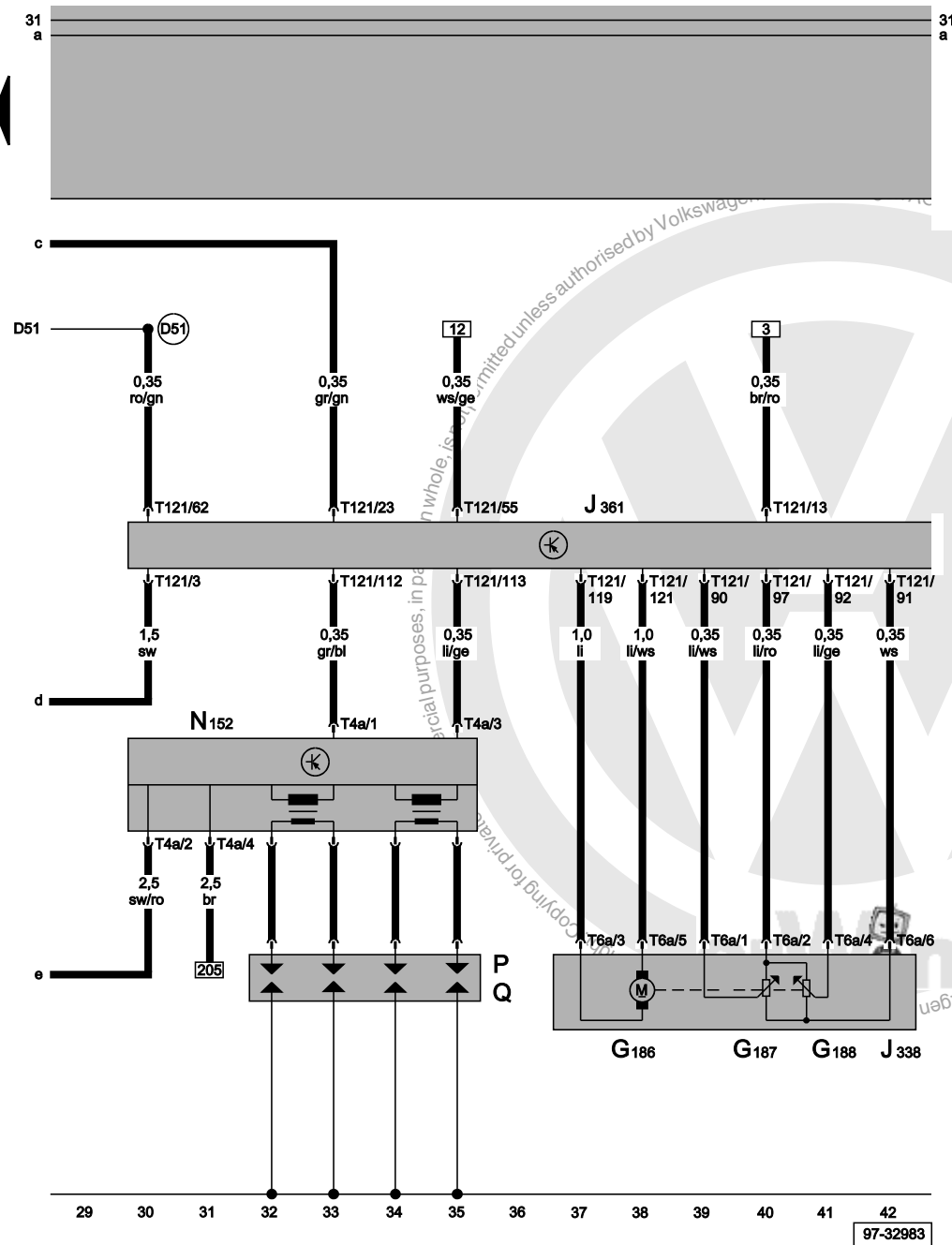
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse -1- (30), in fuse holder on battery
- S163 Fuse -2- (30), in fuse holder on battery
- S176 Fuse -4- (30), in fuse holder on battery
- S177 Fuse -5- (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- D97 Connection (50), in engine compartment wiring harness
- * only models with manual gearbox
- models with automatic gearbox only

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Simos control unit, ignition system, throttle valve module, throttle valve drive angle sender for electric throttle

- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender -1- (electric power control)
- G188 Throttle valve drive angle sender -2- (electric power control)
- J338 Throttle valve module
- J361 Simos control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T6a 6-pin connector
- T121 121-pin connector

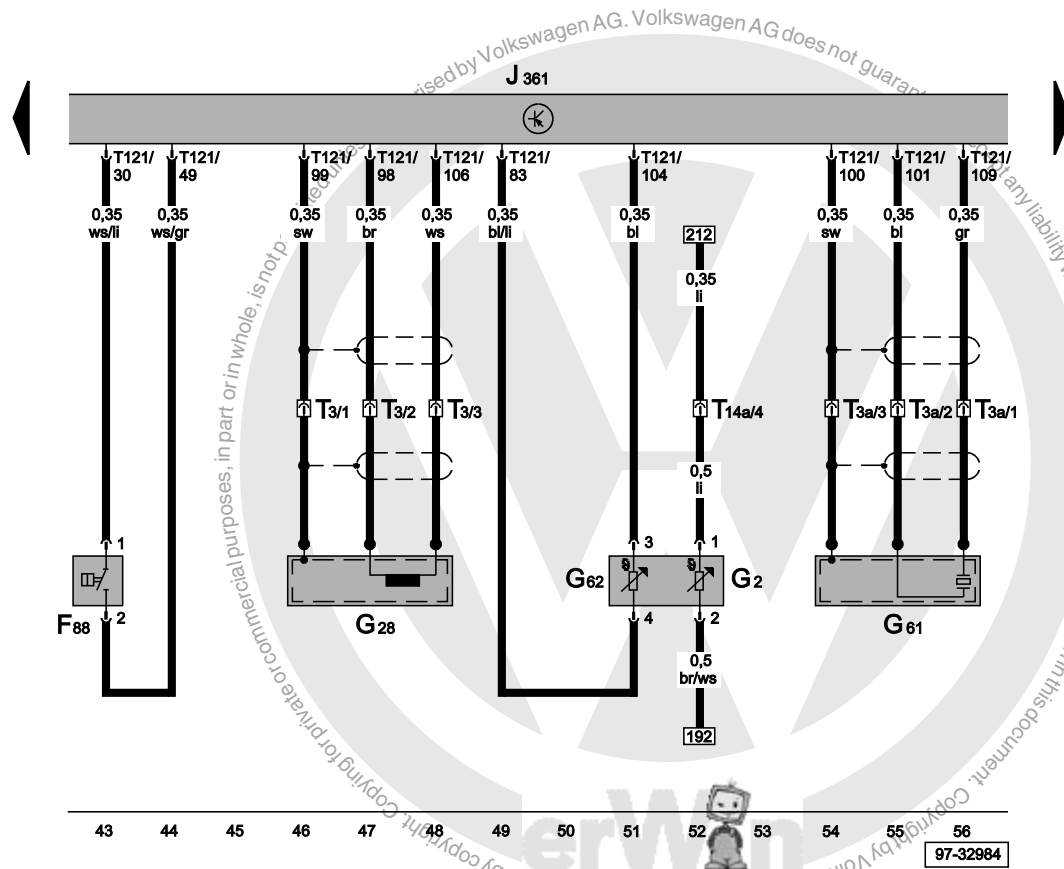
(D51) Positive connection 1 (15), in engine compartment wiring harness



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- bl = blue
- gr = grey
- li = purple
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- or = orange
- rs = pink

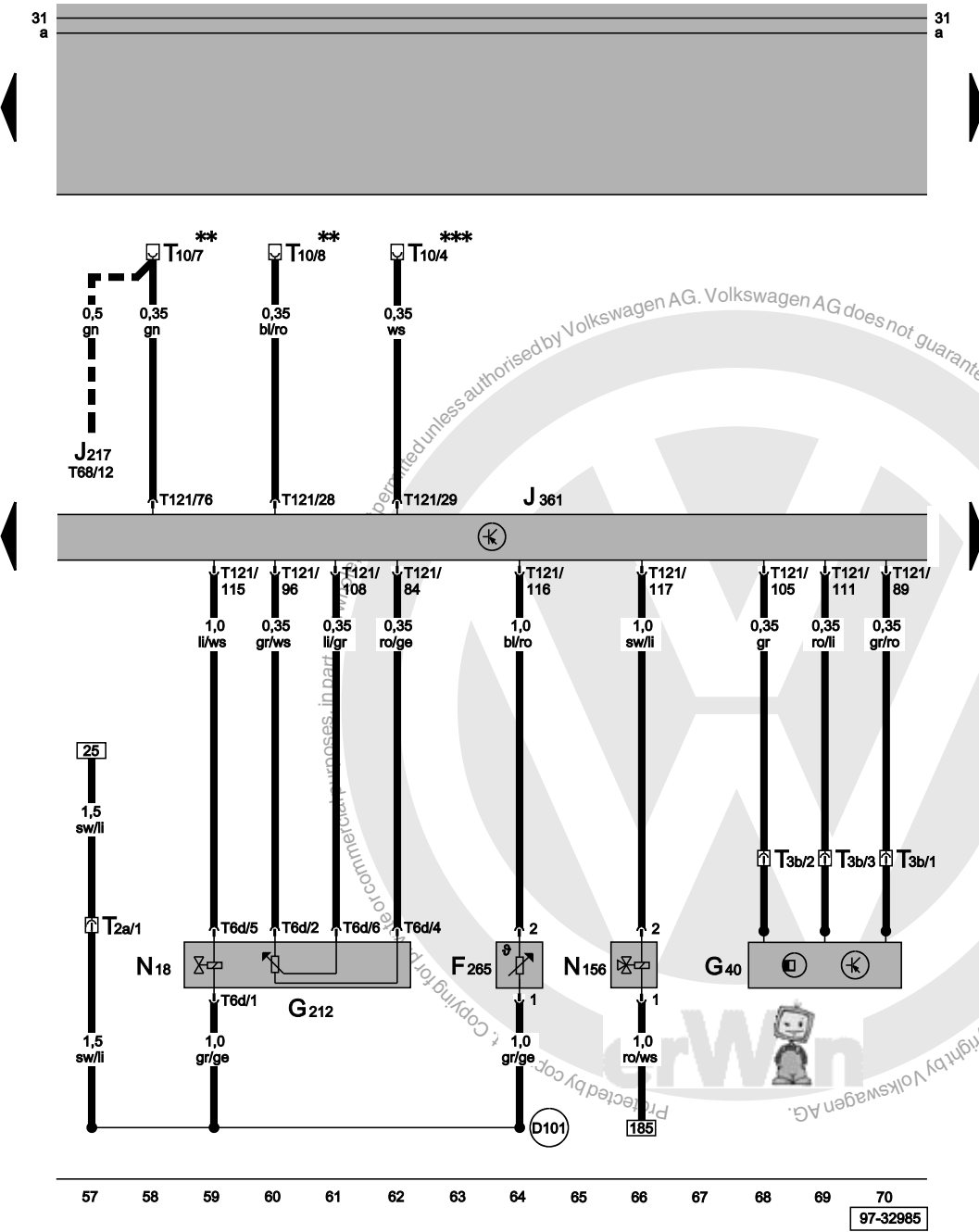
Simos control unit, engine speed sender, power assisted steering pressure switch, coolant temperature sender, knock sensor

- F88 Power assisted steering pressure switch
- G2 Coolant temperature sender
- G28 Engine speed sender
- G61 Knock sensor I
- G62 Coolant temperature sender
- J361 Simos control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T3a 3-pin connector, on front of engine
- T14a 14-pin connector, near battery
- T121 121-pin connector



Simos control unit, Hall sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, variable intake manifold change-over valve, map-controlled engine cooling system thermostat

- F265 Map-controlled engine cooling system thermostat
- G40 Hall sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit, in centre plenum chamber
- J361 Simos control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N156 Variable intake manifold change-over valve
- T2a 2-pin connector, in cable channel left in engine compartment
- T3b 3-pin connector, on front of engine
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector
- D101 Connection -1-, in engine compartment wiring harness

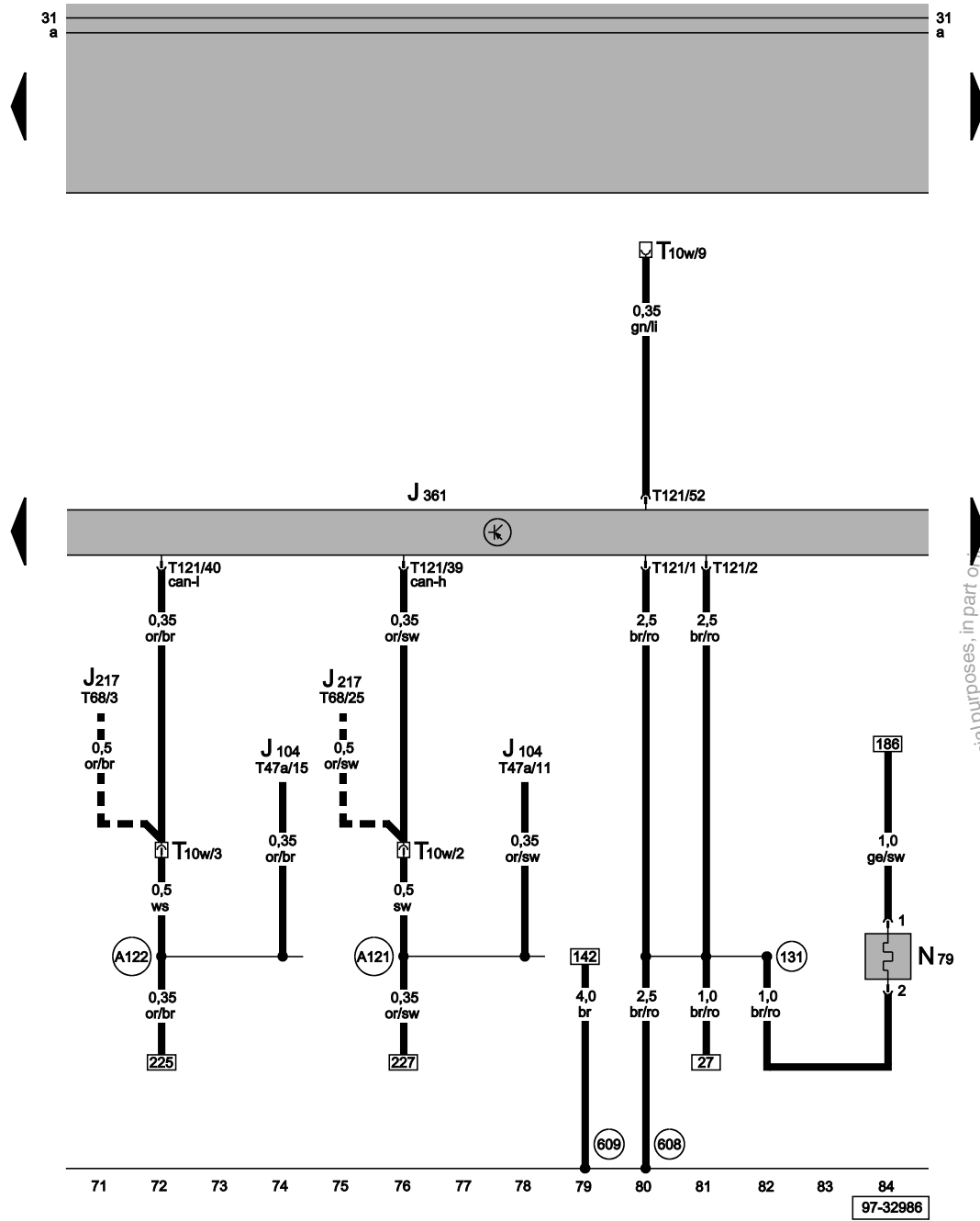


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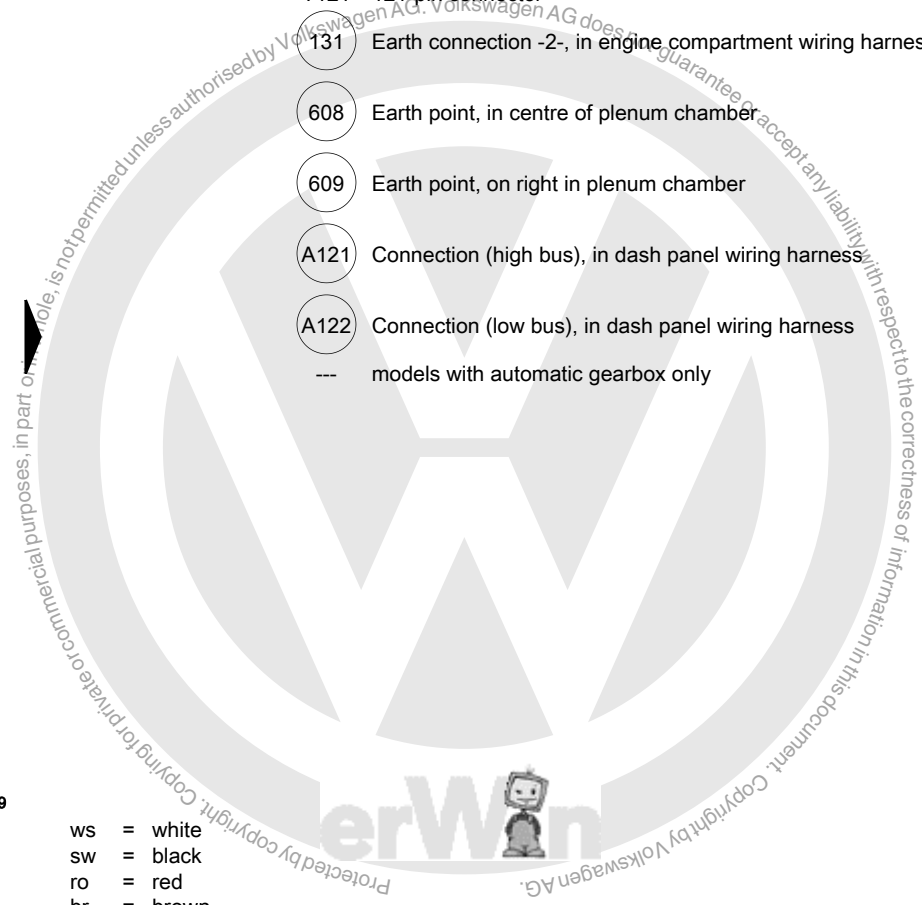
Simos control unit, heater element for crankcase breather

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J361 Simos control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only

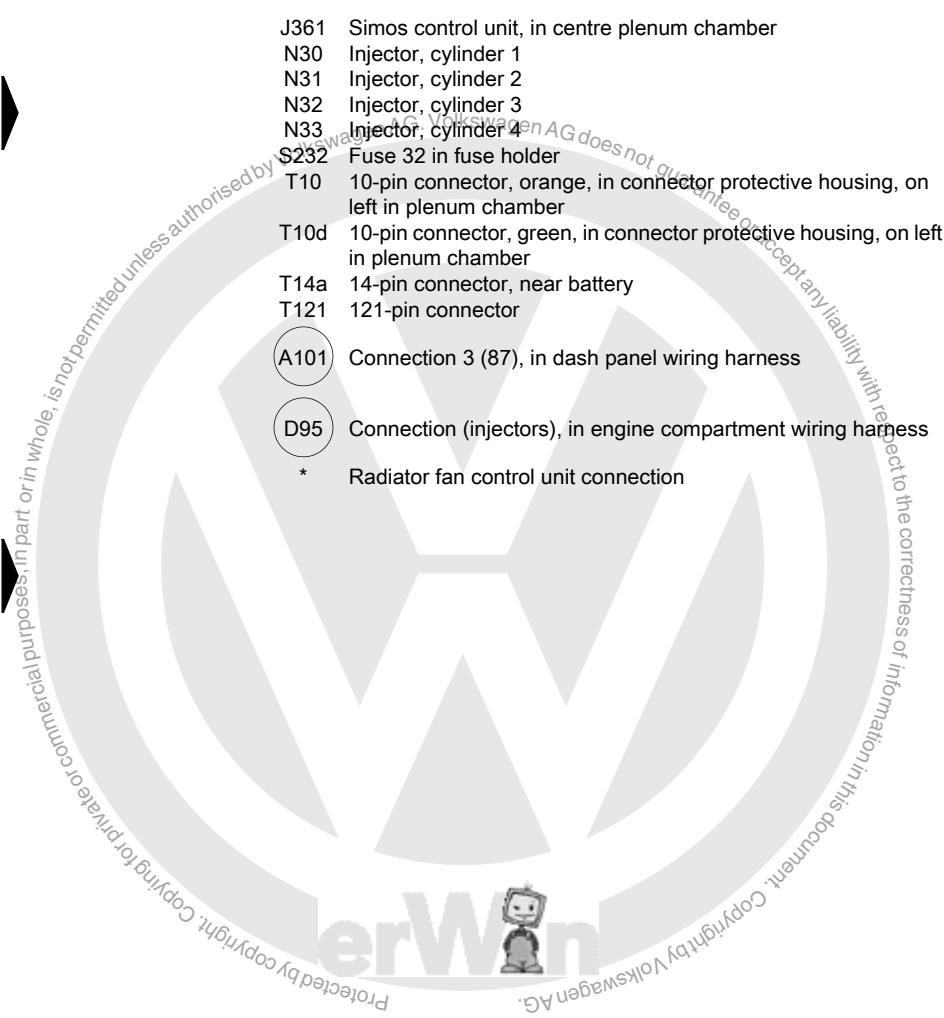
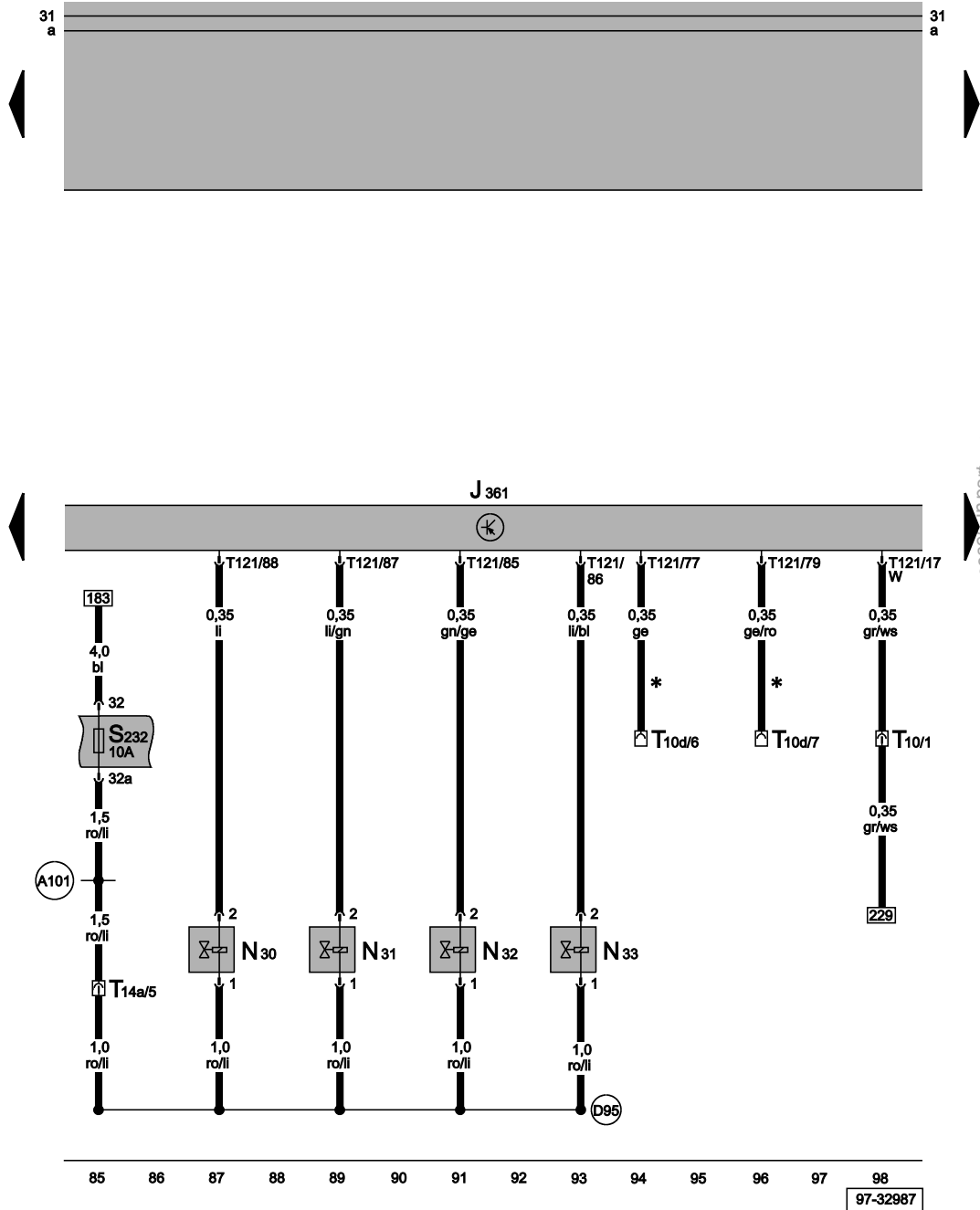


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- ge = yellow
- or = orange
- rs = pink



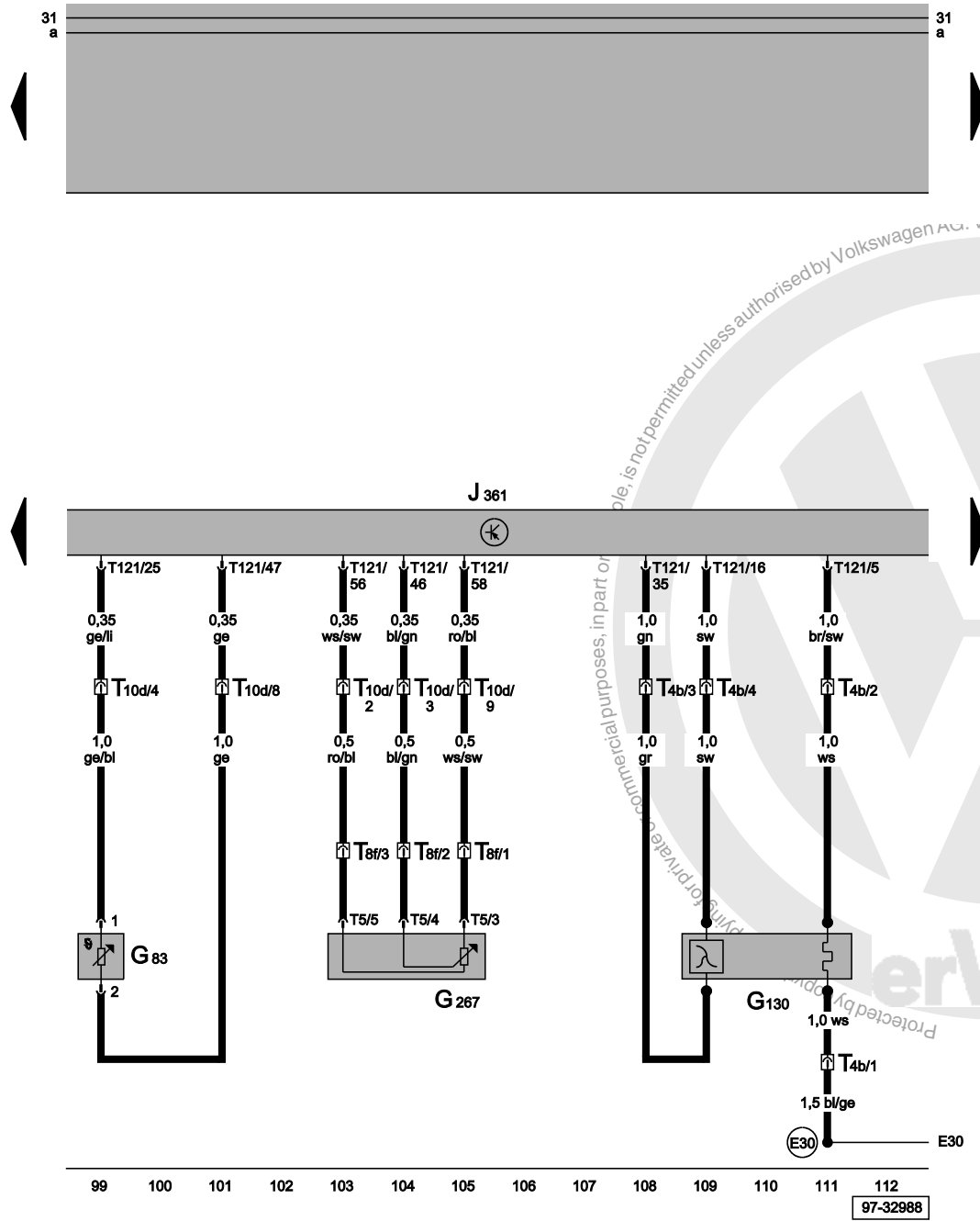
Simos control unit, injectors

- J361 Simos control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- * Radiator fan control unit connection



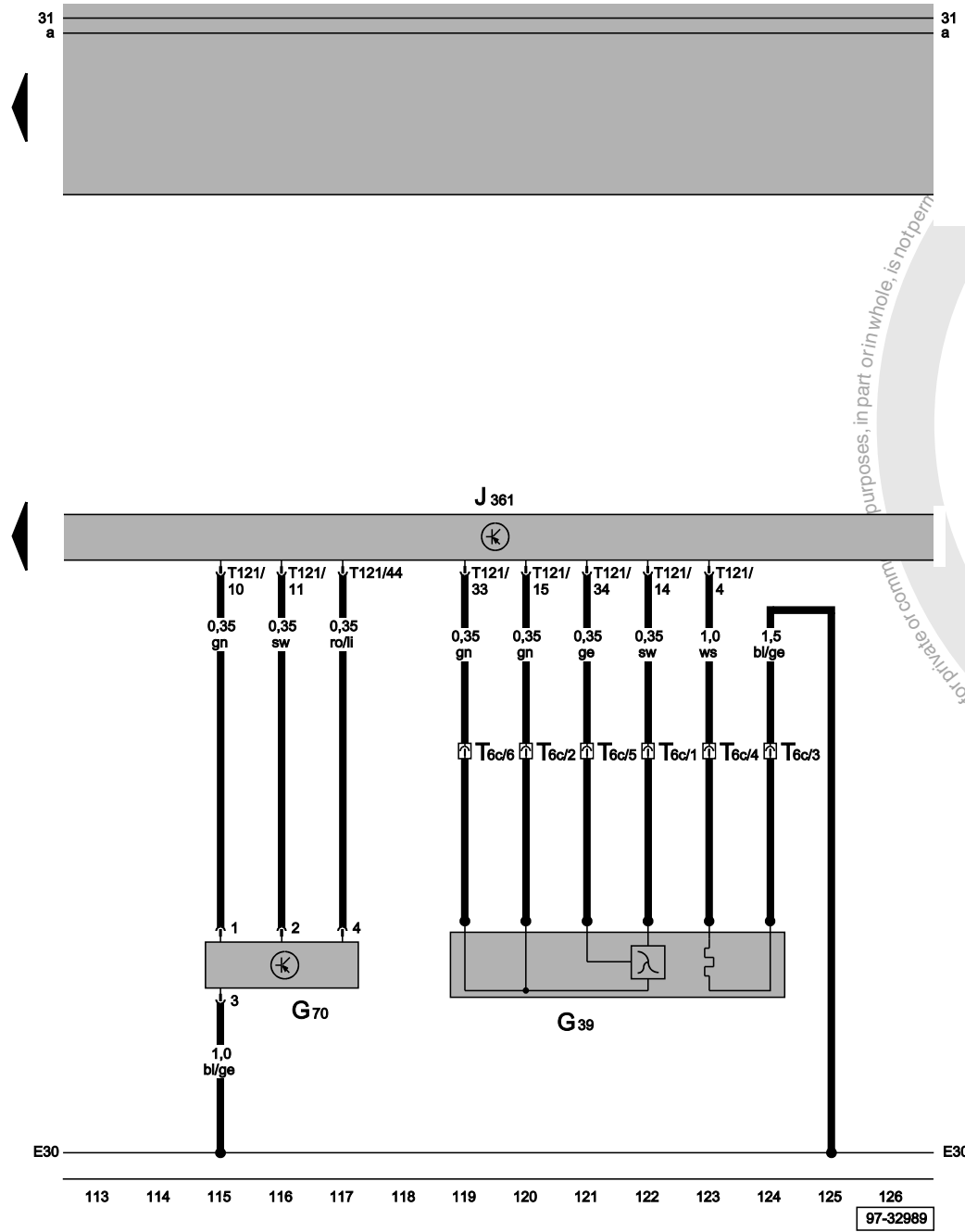
Simos control unit, radiator outlet coolant temperature sender, potentiometer, temperature selection rotary knob, lambda probe after catalytic converter

- G83 Radiator outlet coolant temperature sender
- G130 Lambda probe after catalytic converter
- G267 Potentiometer, temperature selection rotary knob
- J361 Simos control unit, in centre plenum chamber
- T4b 4-pin connector, near catalytic converter
- T5 5-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E30 Connection (87a), in engine wiring harness



Simos control unit, air mass meter, lambda probe

- G39 Lambda probe
- G70 Air mass meter
- J361 Simos control unit, in centre plenum chamber
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector



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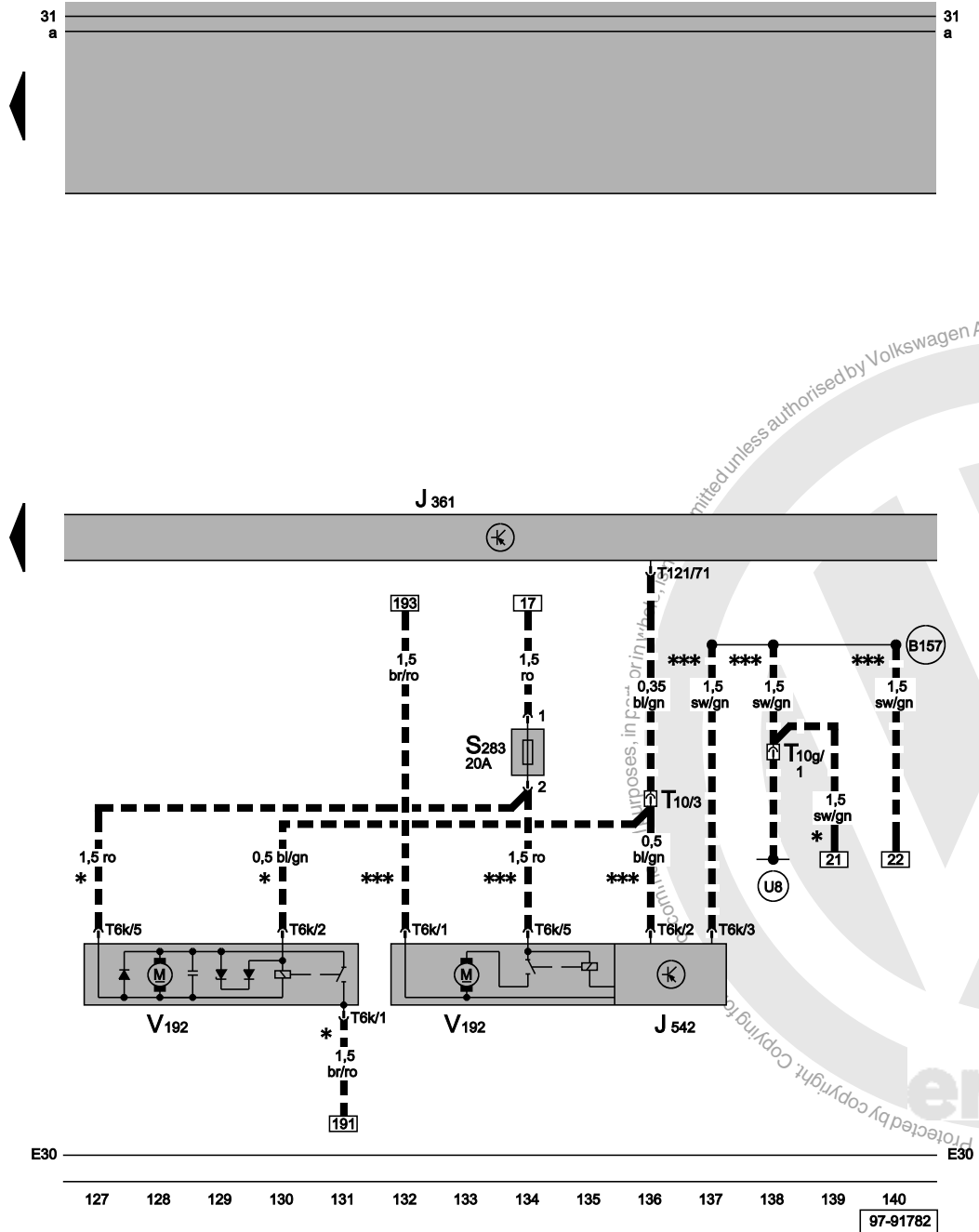
97-32989

Simos control unit, brake servo control unit, vacuum pump for brakes

- J361 Simos control unit, in centre plenum chamber
- J542 Brake servo control unit
- S283 Brake vacuum pump fuse, above the relay plate
- T6k 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes

- (B157) Positive connection 3 (15a), in interior wiring harness
- (U8) Positive connection (15a), in automatic gearbox wiring harness

- * from May 2003
- *** up to April 2003
- models with automatic gearbox only



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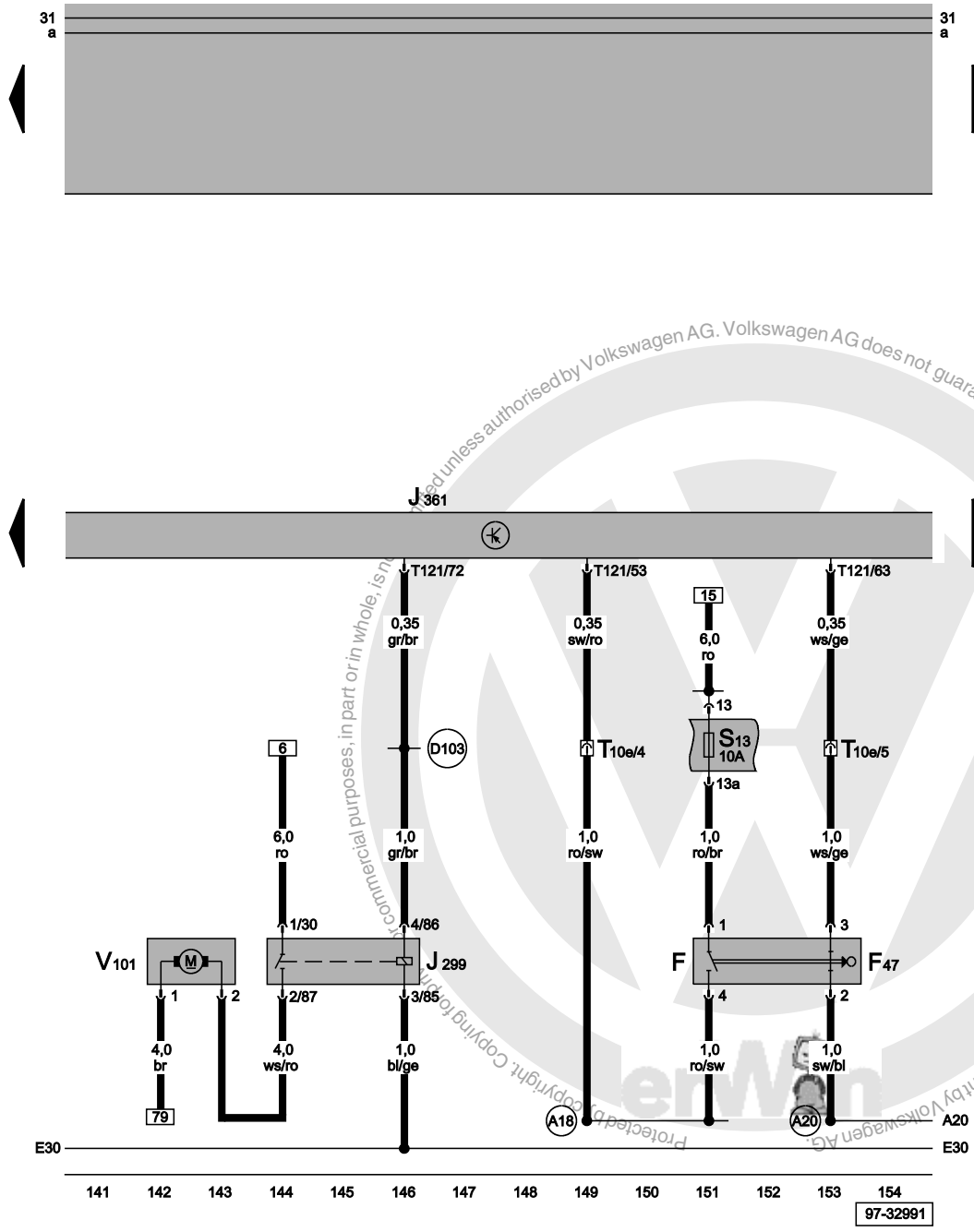
Simos control unit, secondary air pump motor, cruise control system brake pedal switch, brake light switch

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- J361 Simos control unit, in centre plenum chamber
- S13 Fuse 13 in fuse holder
- S130 Secondary air pump fuse, in protective housing on left in engine compartment
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

(A18) Connection (54), in dash panel wiring harness

(A20) Connection (15a), in dash panel wiring harness

(D103) Connection -3-, in engine compartment wiring harness

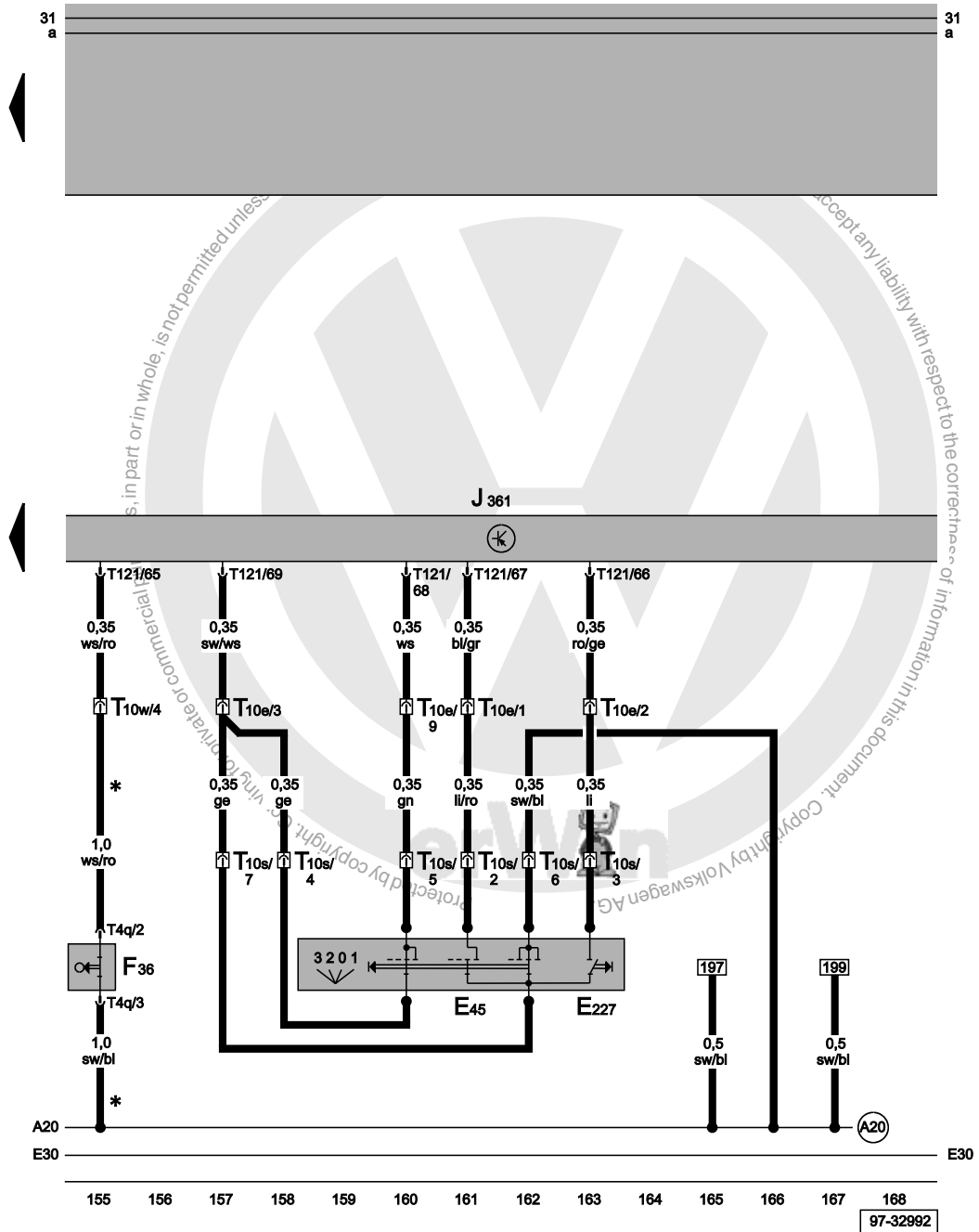


Simos control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch*
- J361 Simos control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

(A20) Connection (15a), in dash panel wiring harness

- * only models with manual gearbox
- ** only models with GND



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Simos control unit, active charcoal filter system solenoid valve, accelerator position sender, fuel pump relay

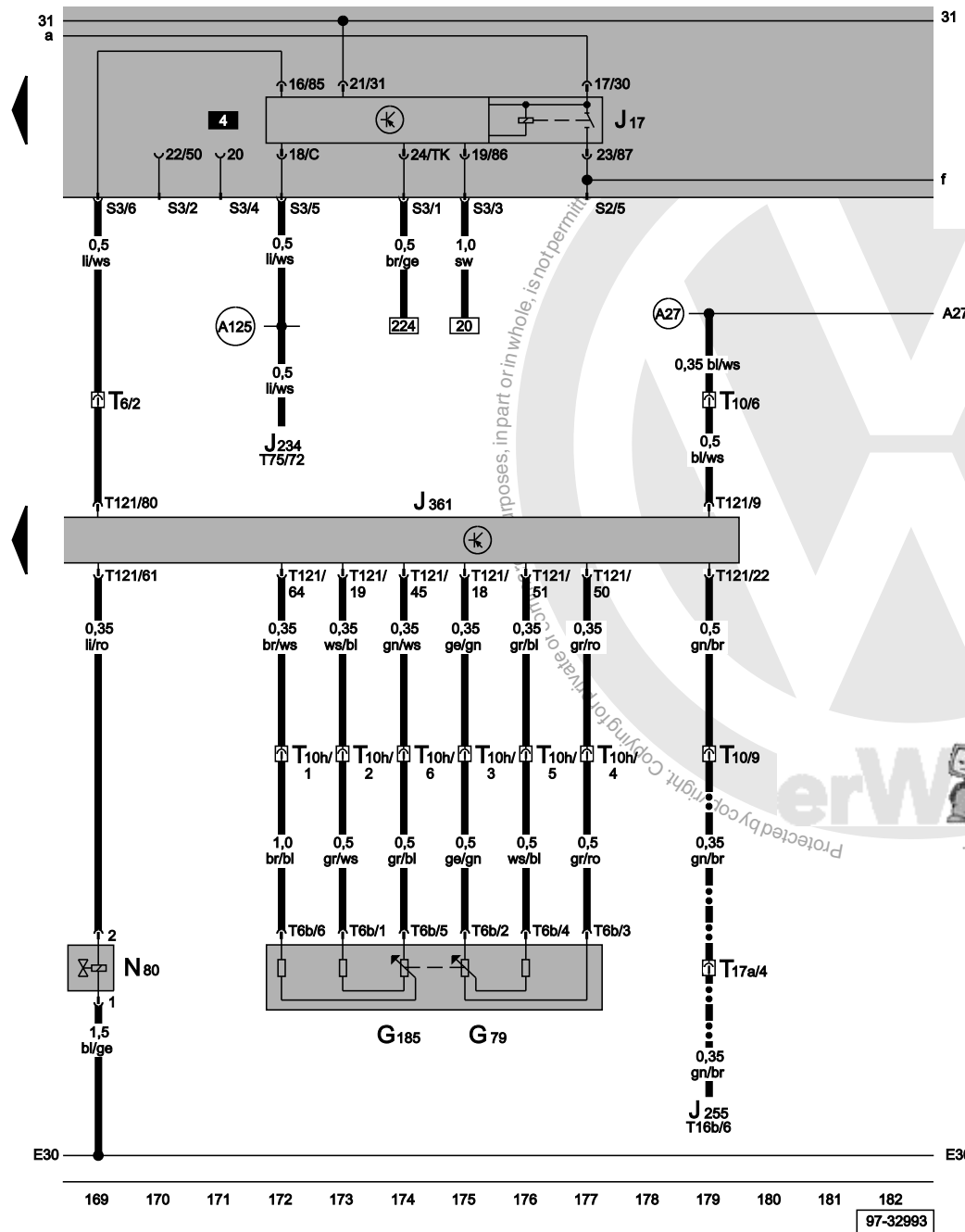
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J17 Fuel pump relay
- J234 Airbag control unit
- J255 Climatronic control unit
- J361 Simos control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6b 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector

A27 Connection (speed signal), in dash panel wiring harness

A125 Connection (crash signal), in dash panel wiring harness

--- only models with Climatronic

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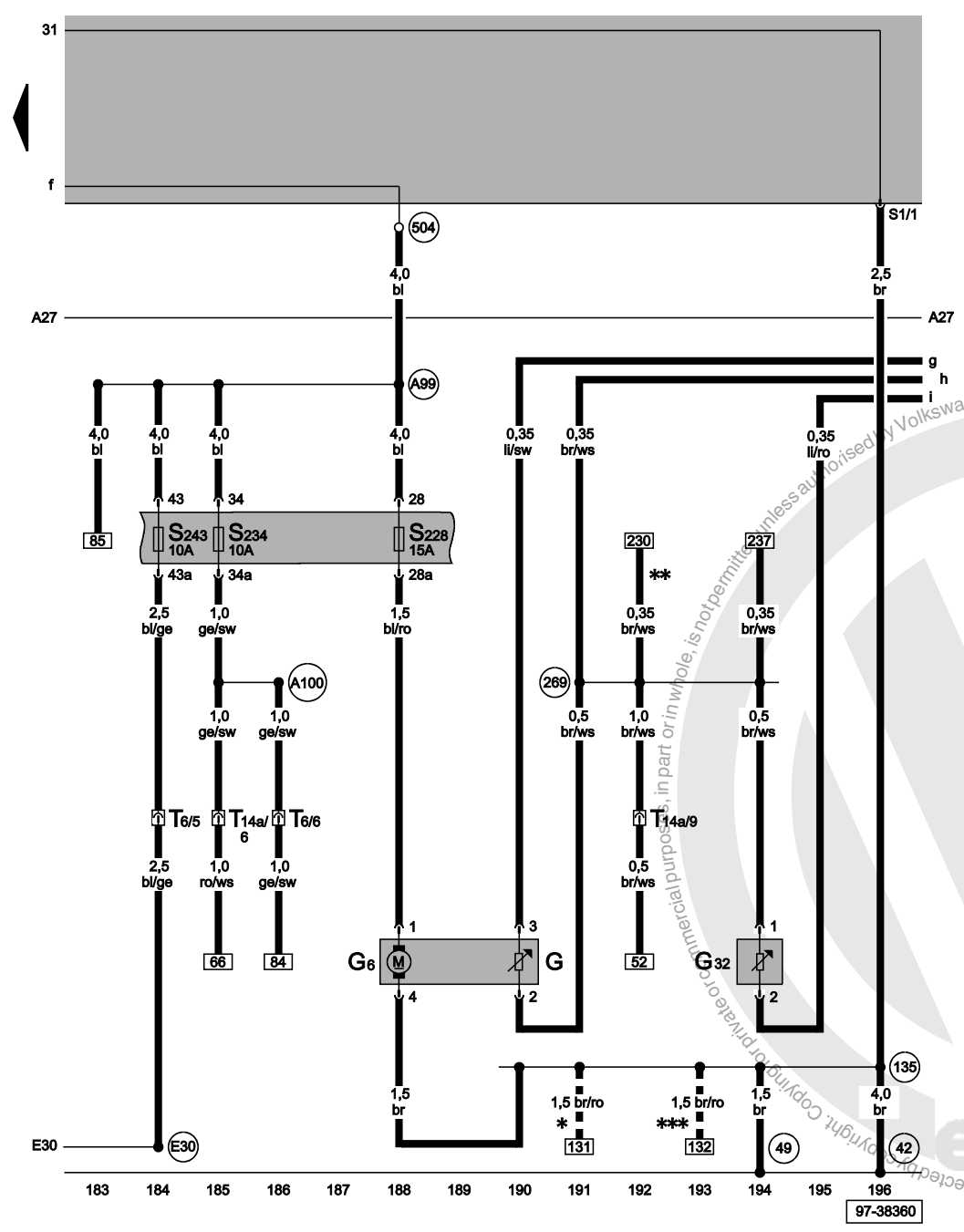


Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- (42) Earth point, next to steering column
 - (49) Earth point, on top end of steering column
 - (135) Earth connection 2, in dash panel wiring harness
 - (269) Earth connection (sender earth) 1, in dash panel wiring harness
 - (504) Screw connection 1 (87), on relay plate
 - (A99) Connection 1 (87), in dash panel wiring harness
 - (A100) Connection 2 (87), in dash panel wiring harness
 - (E30) Connection (87a), in engine wiring harness
- * from May 2003
 *** up to April 2003
 --- models with automatic gearbox only
 ** only models without Climatronic

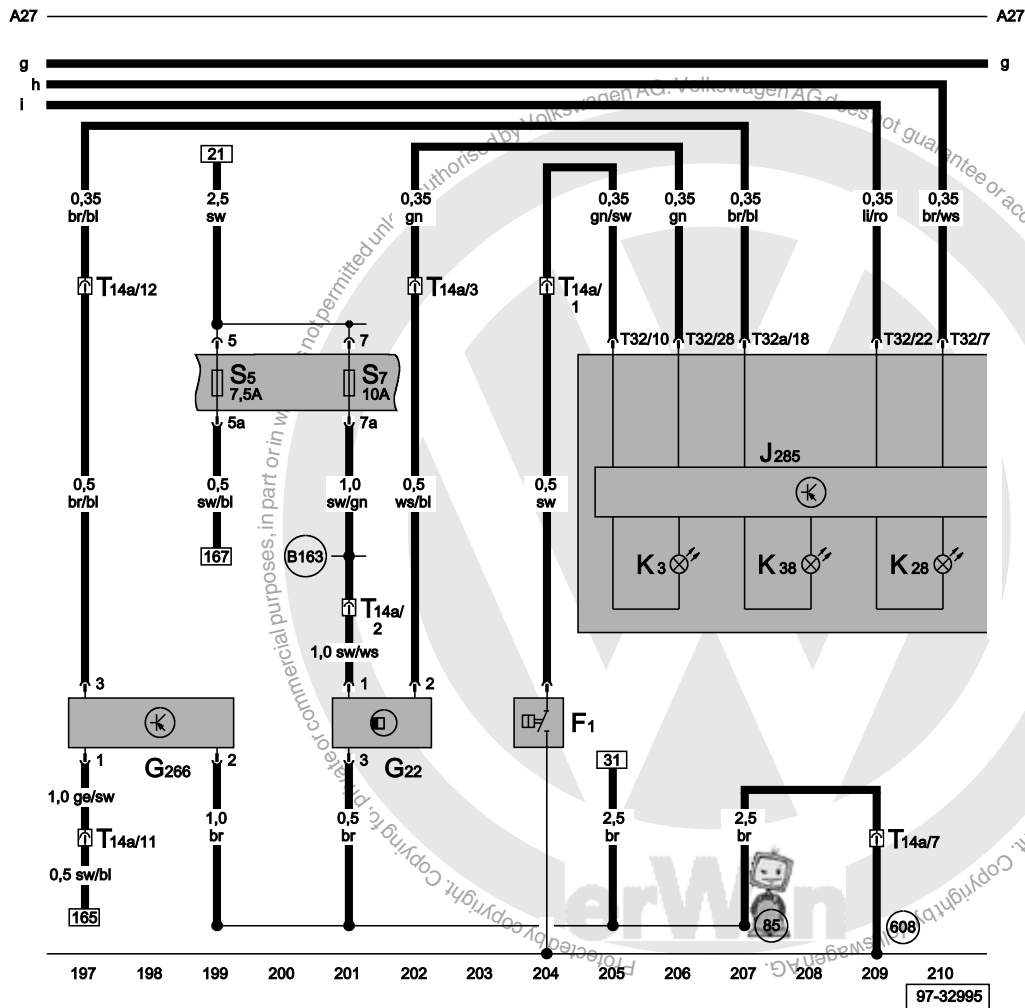
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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G266 Oil level and oil temperature sender
- J285 Control unit with display in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

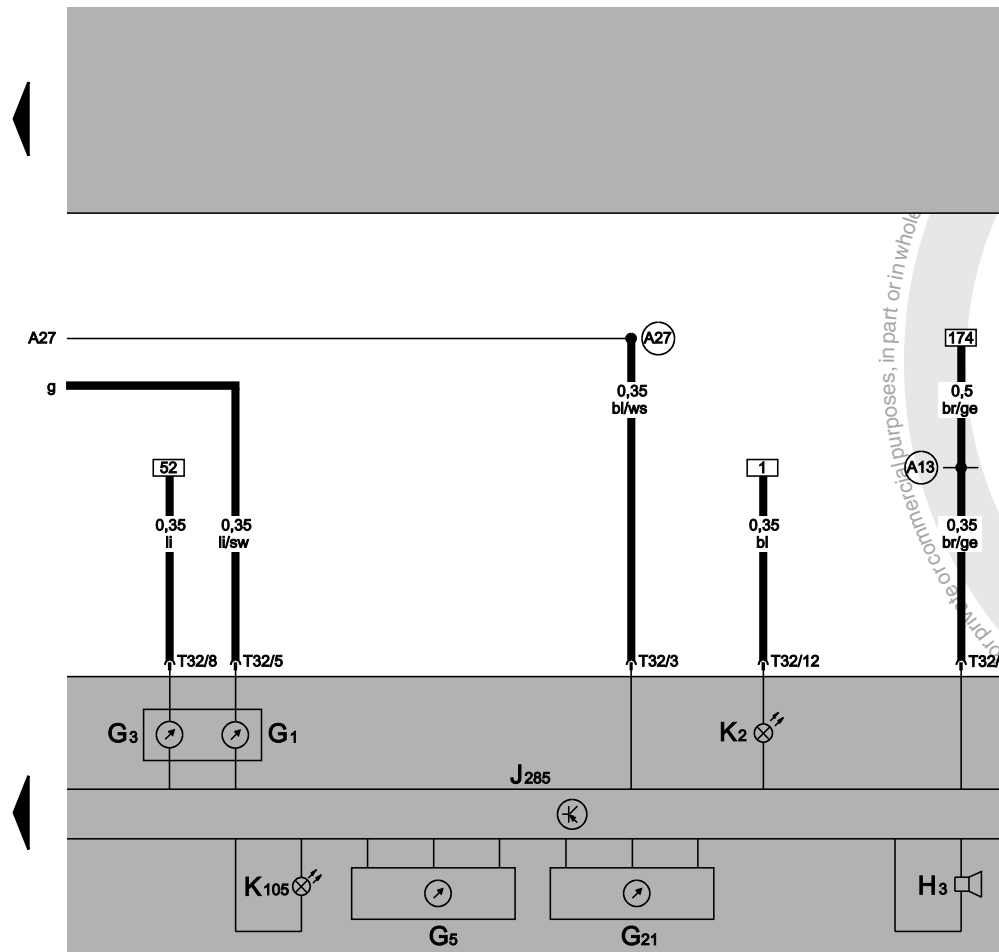
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- B163 Positive connection -1- (15), in interior wiring harness
- * only flexible service interval display



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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

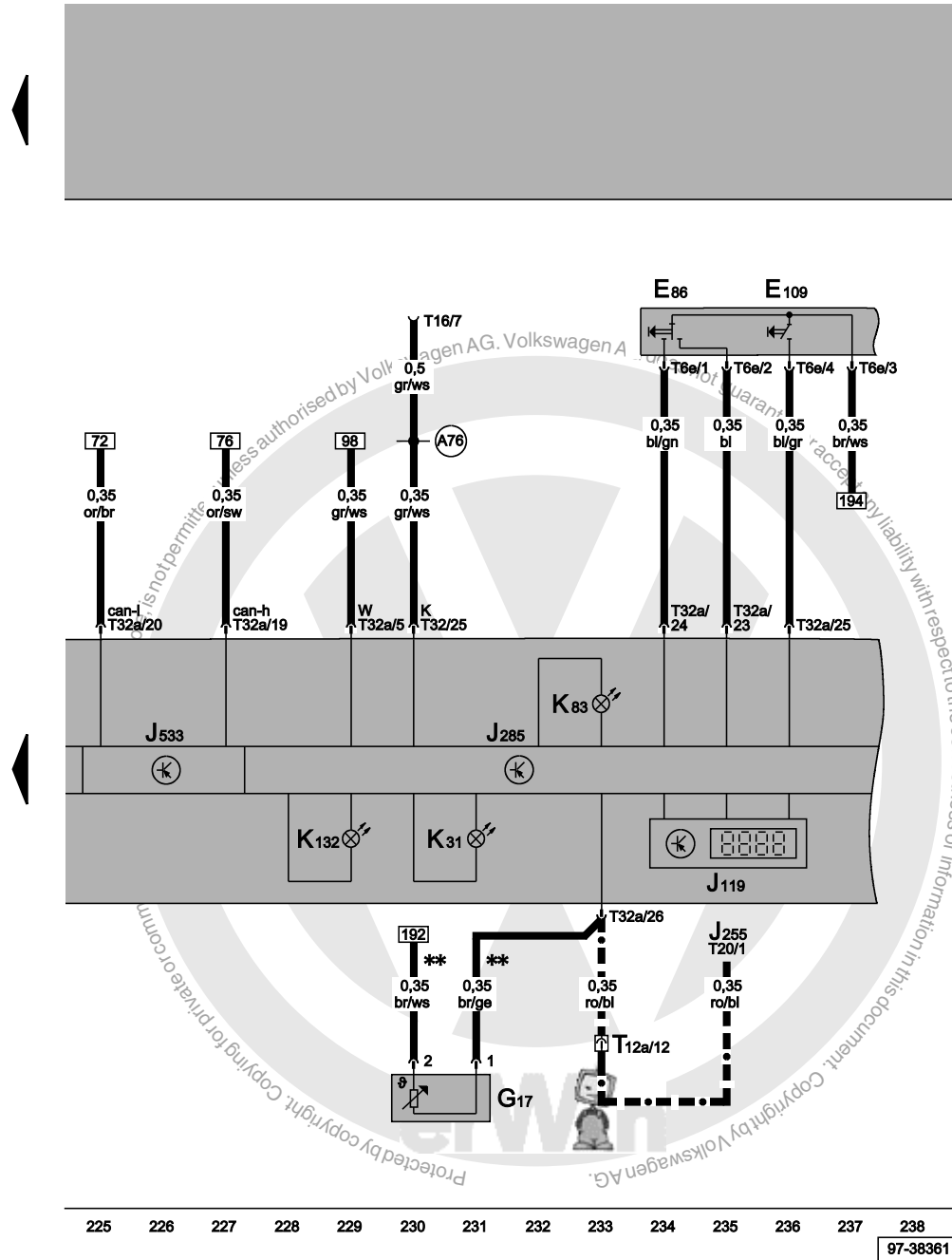
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** only models without Climatronic
- .- only models with Climatronic



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1.6 I/77 kW, 4MV, engine code AZD

from May 2002

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

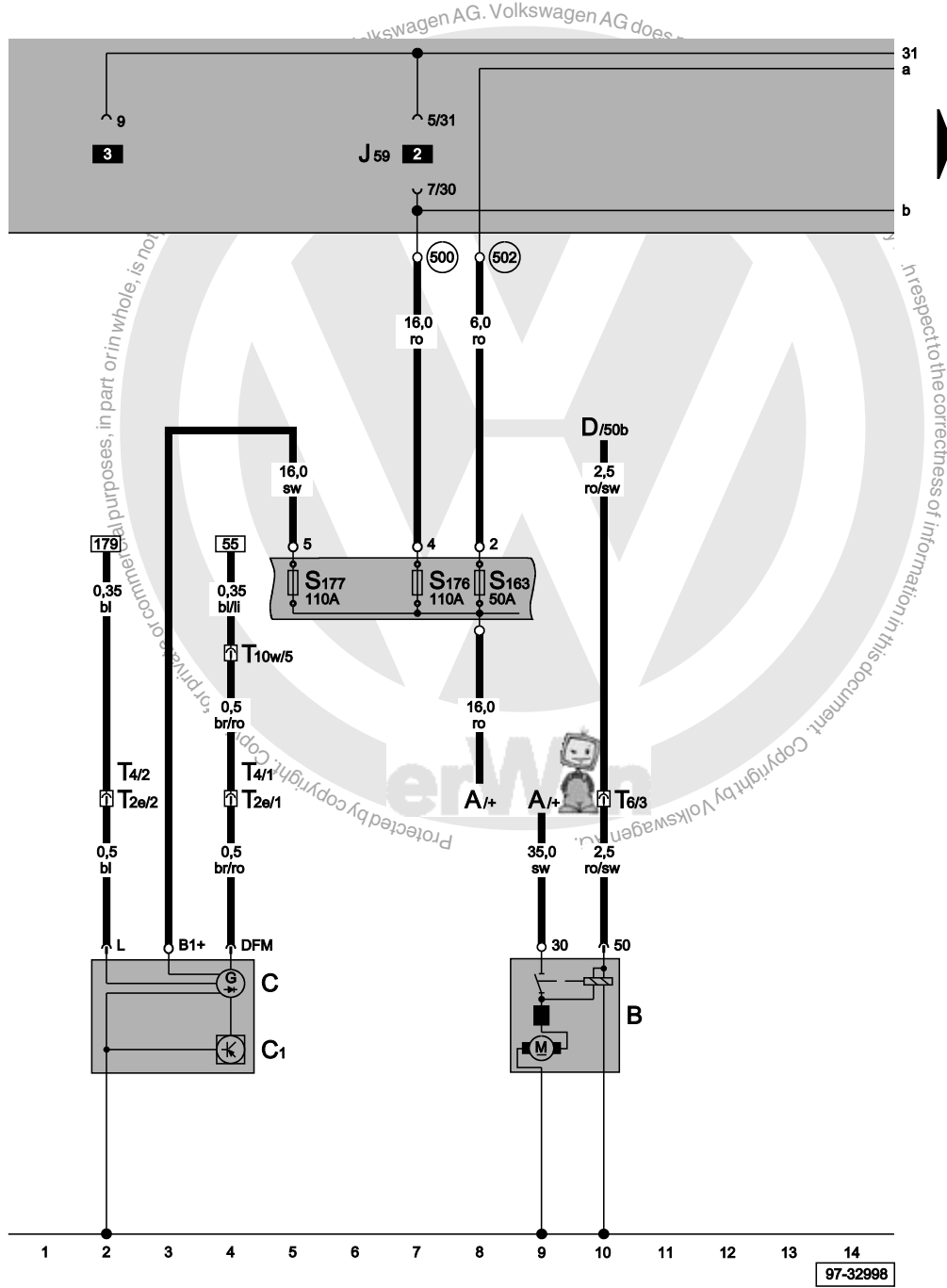
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

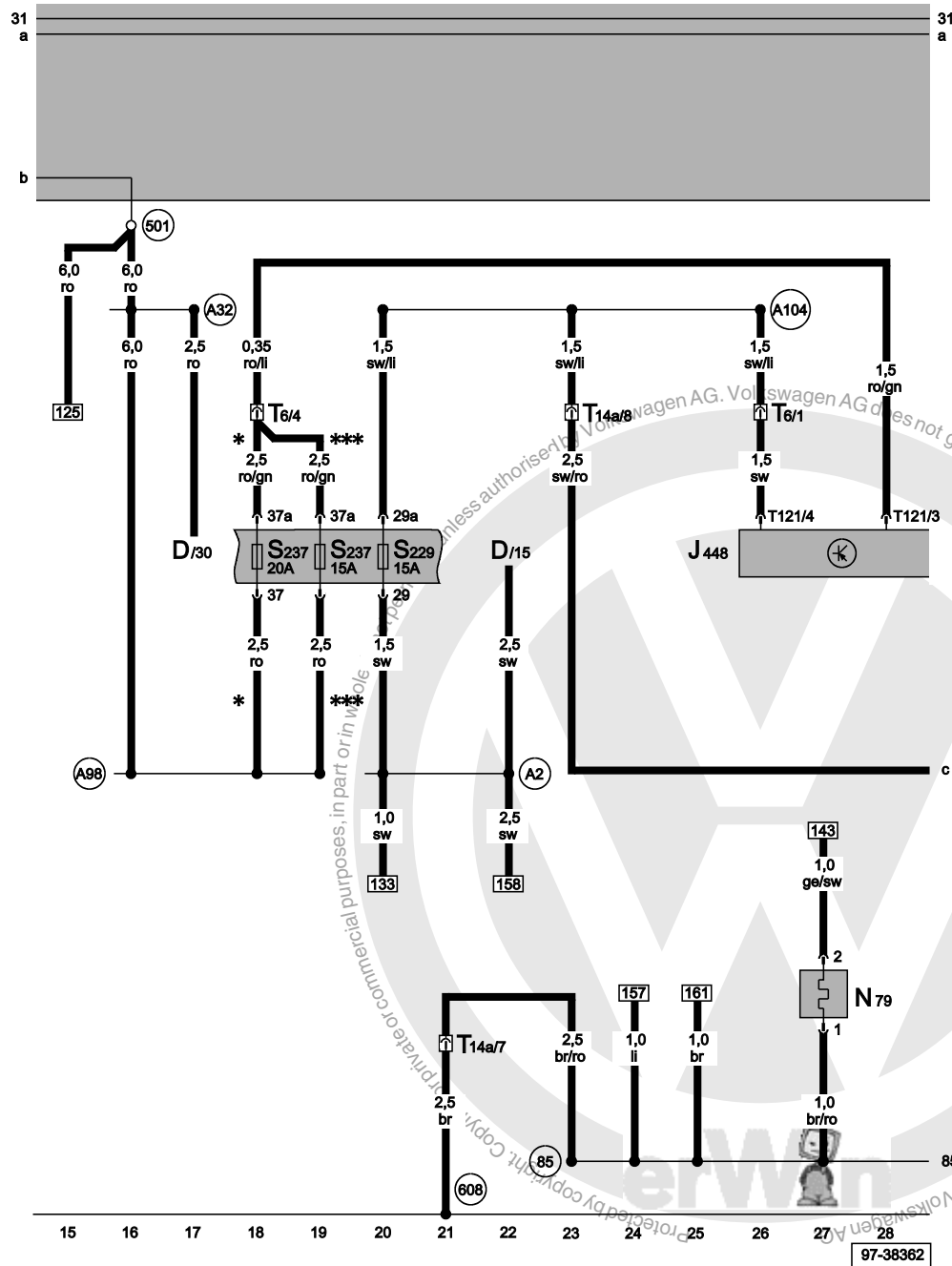
4MV injection system control unit, heater element for crankcase breather

- D Ignition/starter switch
- J448 4AV/ 4CV injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- S229 Fuse 29 in fuse holder
- S237 Fuse 237 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 85 Earth connection 1, in engine compartment wiring harness
- 501 Screw connection 2 (30), on relay plate
- 608 Earth point, in centre of plenum chamber
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness

* from May 2003
 *** up to April 2003

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- ro = red
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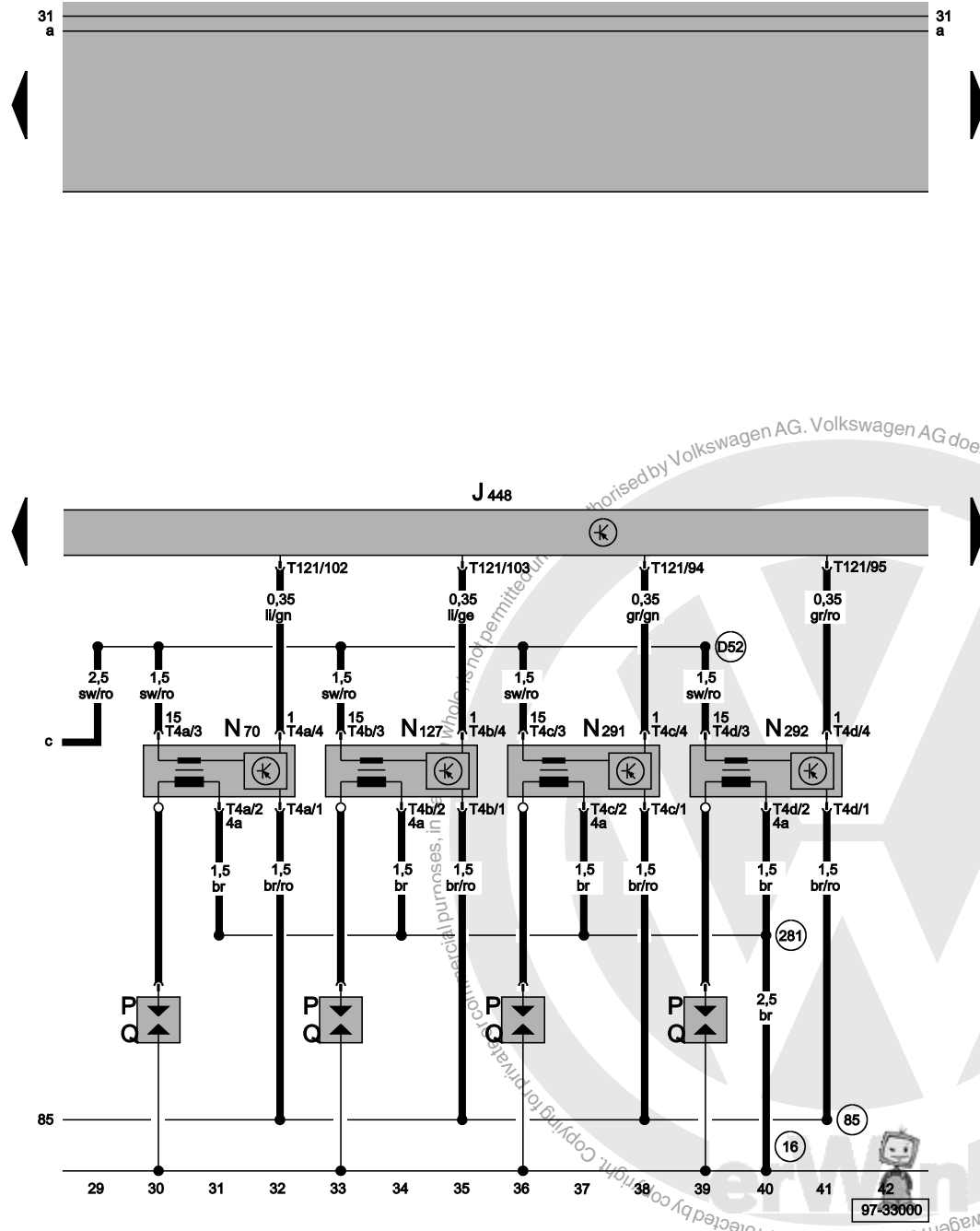


97-38362

4MV injection system control unit, ignition system

- J448 4MV injection system control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

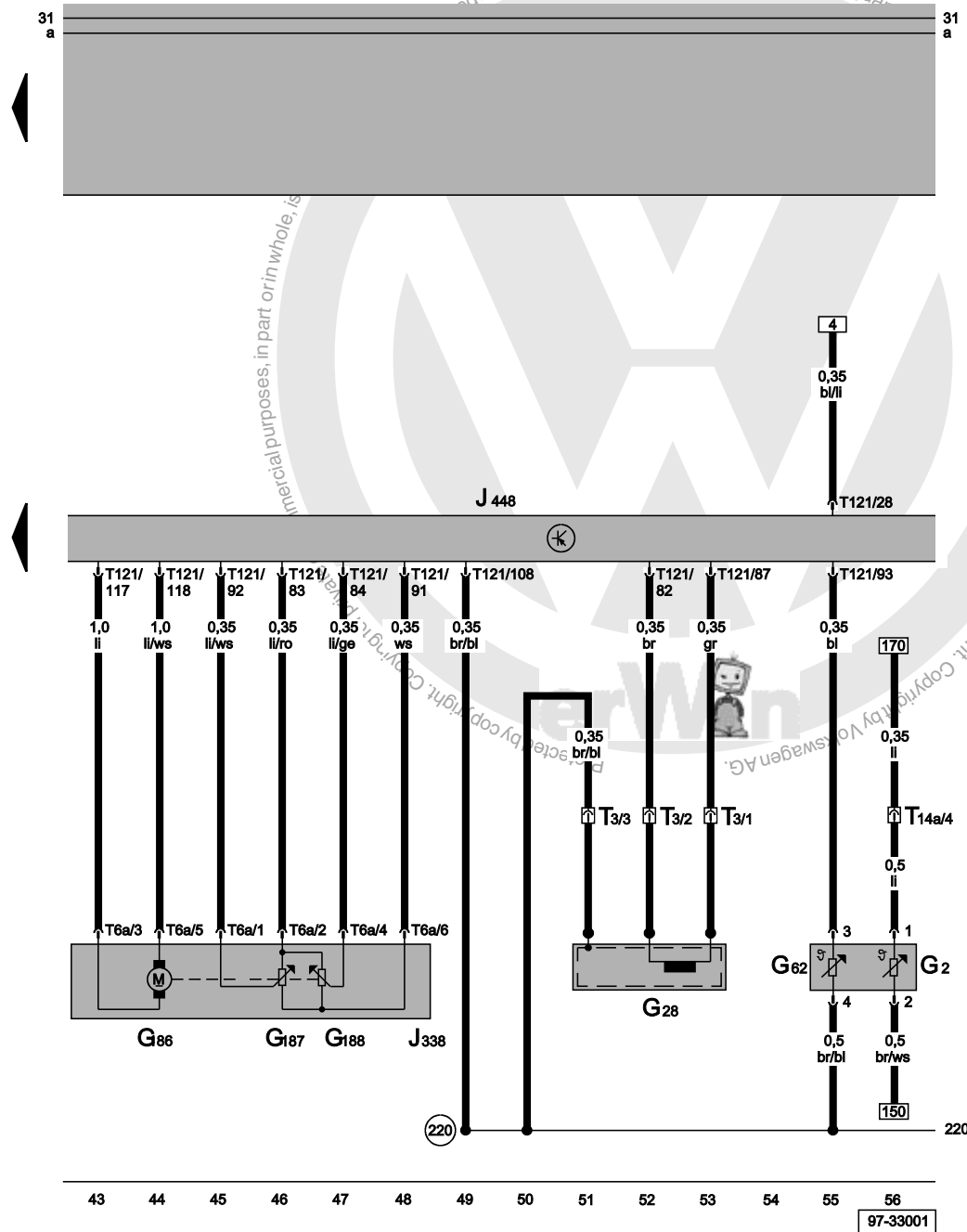
- 16 Earth point 1, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection 1, in engine wiring harness
- D52 Positive connection (15a), in engine compartment wiring harness



4MV injection system control unit, throttle valve module, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J338 Throttle valve module
- J448 4MV injection system control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector

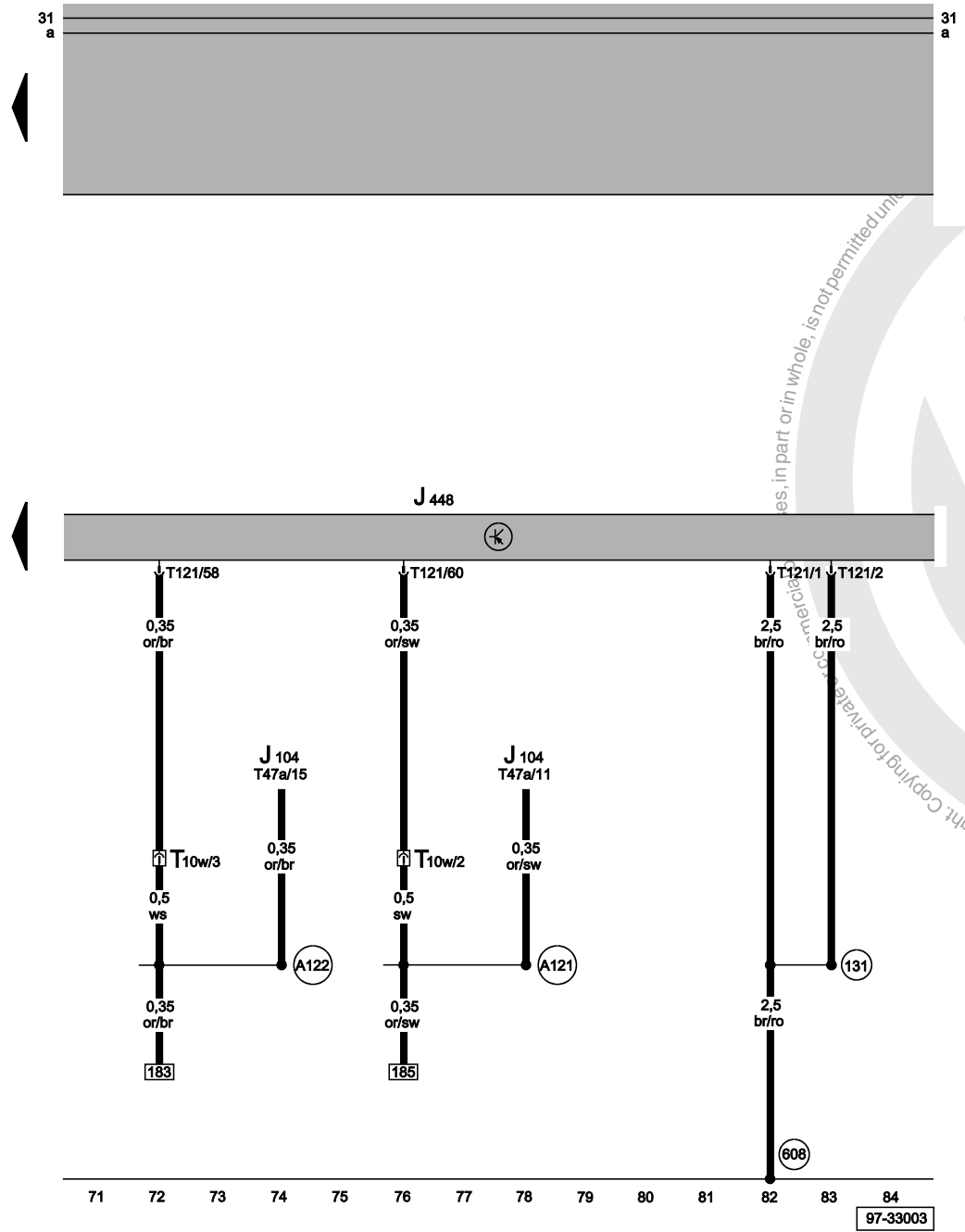
220 Earth connection (sender earth), in engine wiring harness



4MV injection system control unit

- J104 ABS/ABS control unit with EDL
- J448 4MV injection system control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

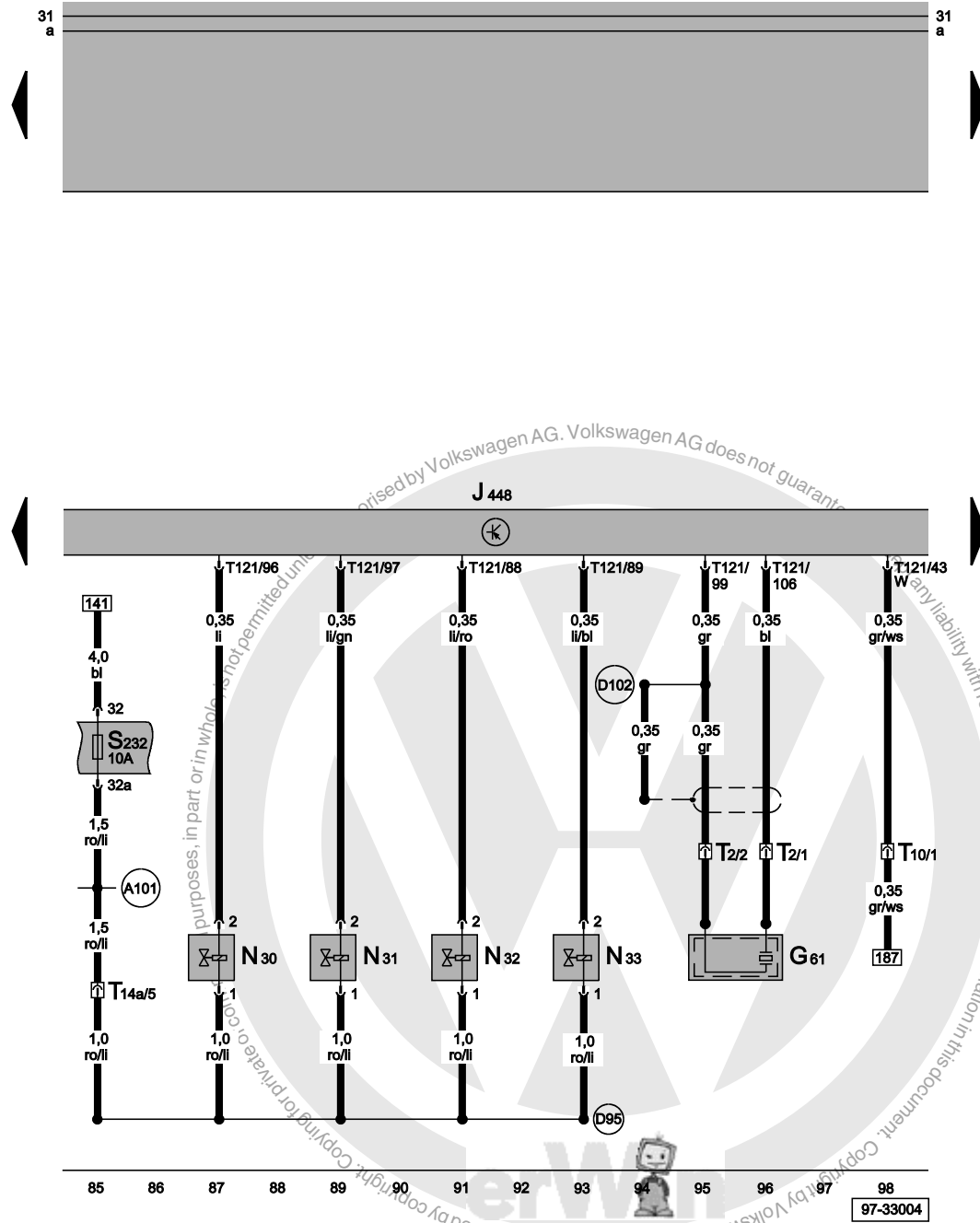
- (131) Earth connection -2-, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness



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- gn = green
- bl = blue
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- li = purple
- ge = yellow
- or = orange
- rs = pink

4MV injection system control unit, injectors, knock sensor

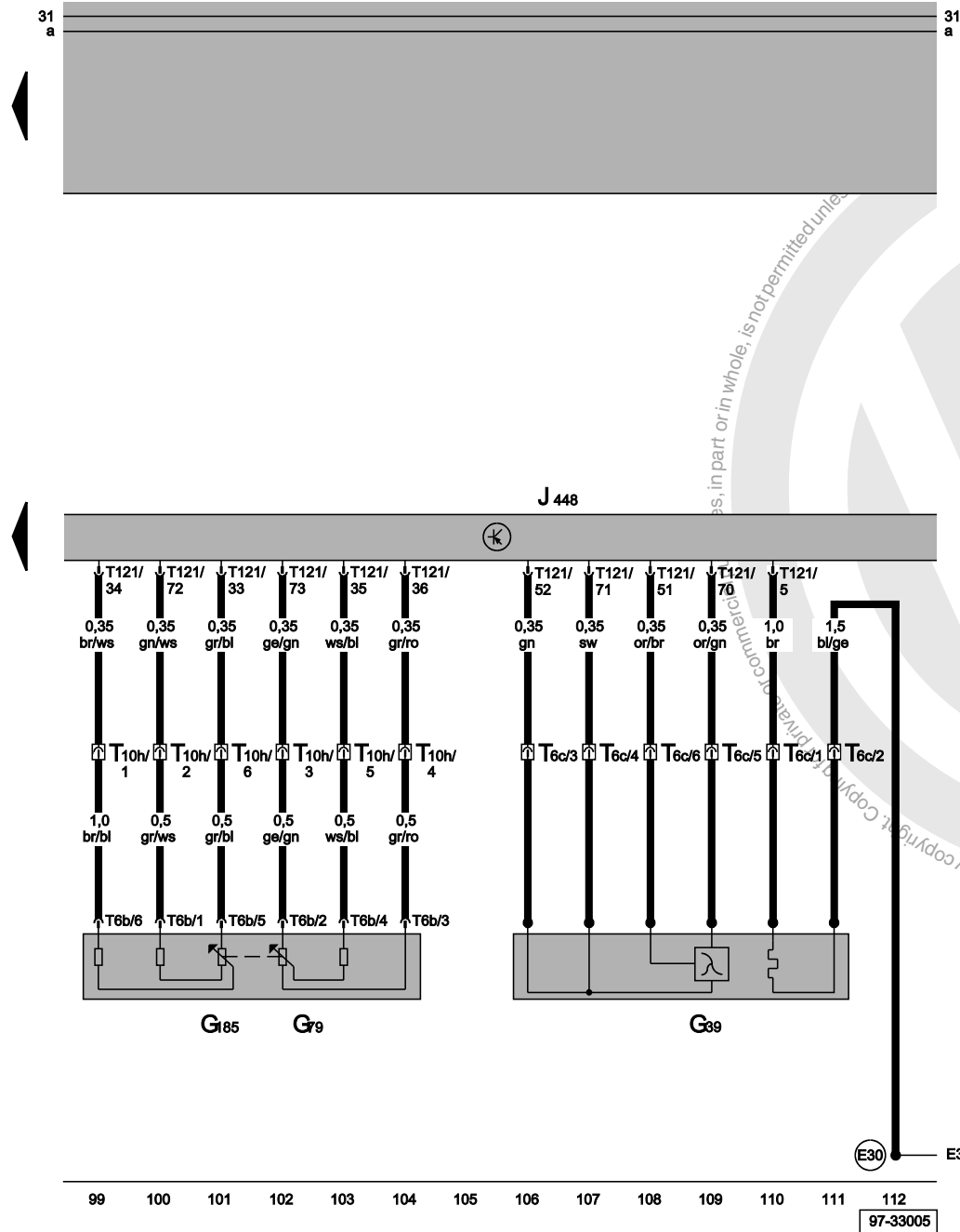
- G61 Knock sensor 1
- J448 4MV injection system control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T2 2-pin connector, on left of cylinder head
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection 2, in engine compartment wiring harness



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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
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4MV injection system control unit, accelerator position sender, lambda probe upstream of catalytic converter

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J448 4MV injection system control unit, in centre plenum chamber
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- (E30) Connection (87a), in engine wiring harness



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- li = purple
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- or = orange
- rs = pink

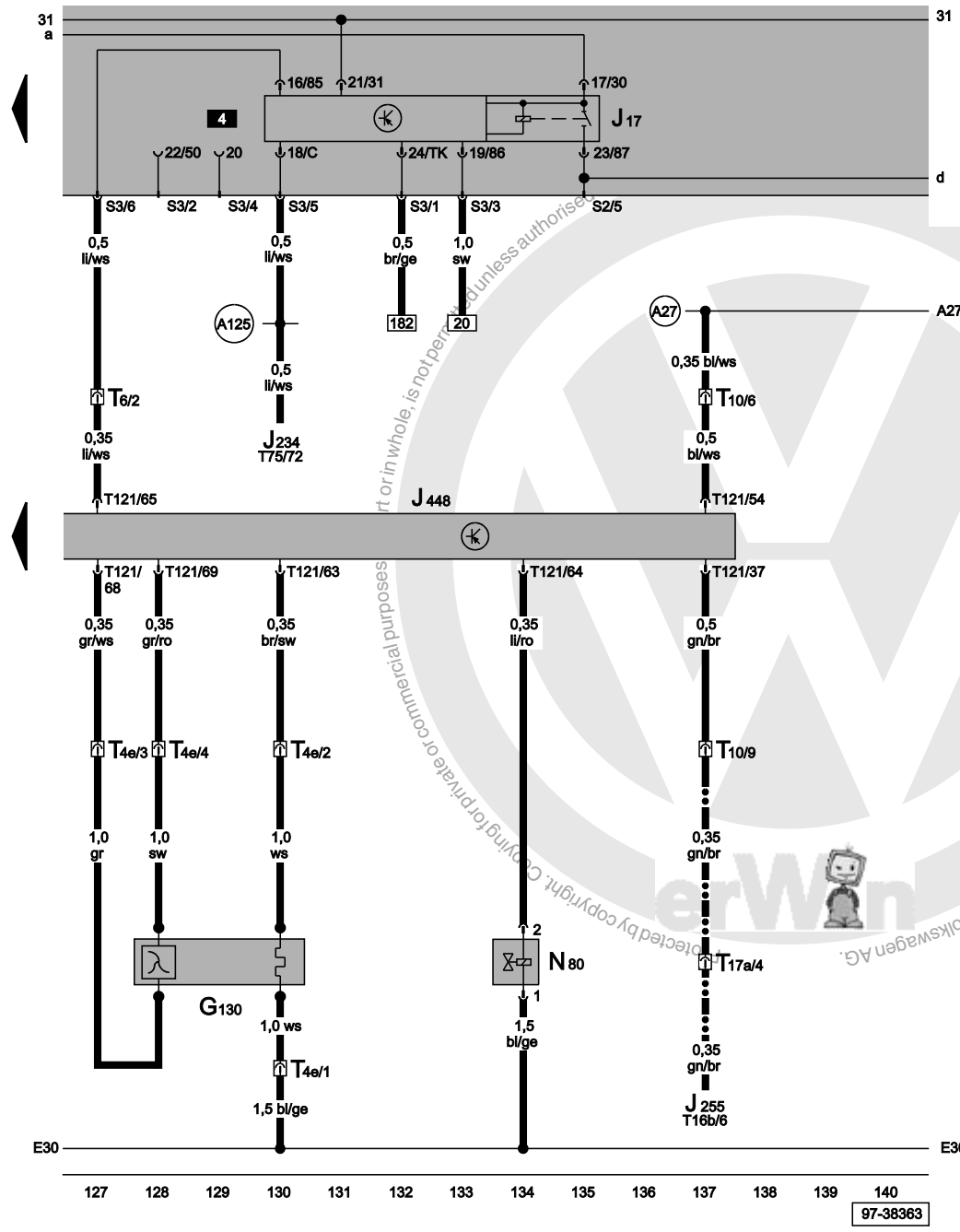
4MV injection system control unit, fuel pump relay, lambda probe after catalytic converter, activated charcoal filter system solenoid valve

- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit
- J255 Climatronic control unit
- J448 4AV/ 4CV injection system control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4e 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector

(A27) Connection (speed signal), in dash panel wiring harness

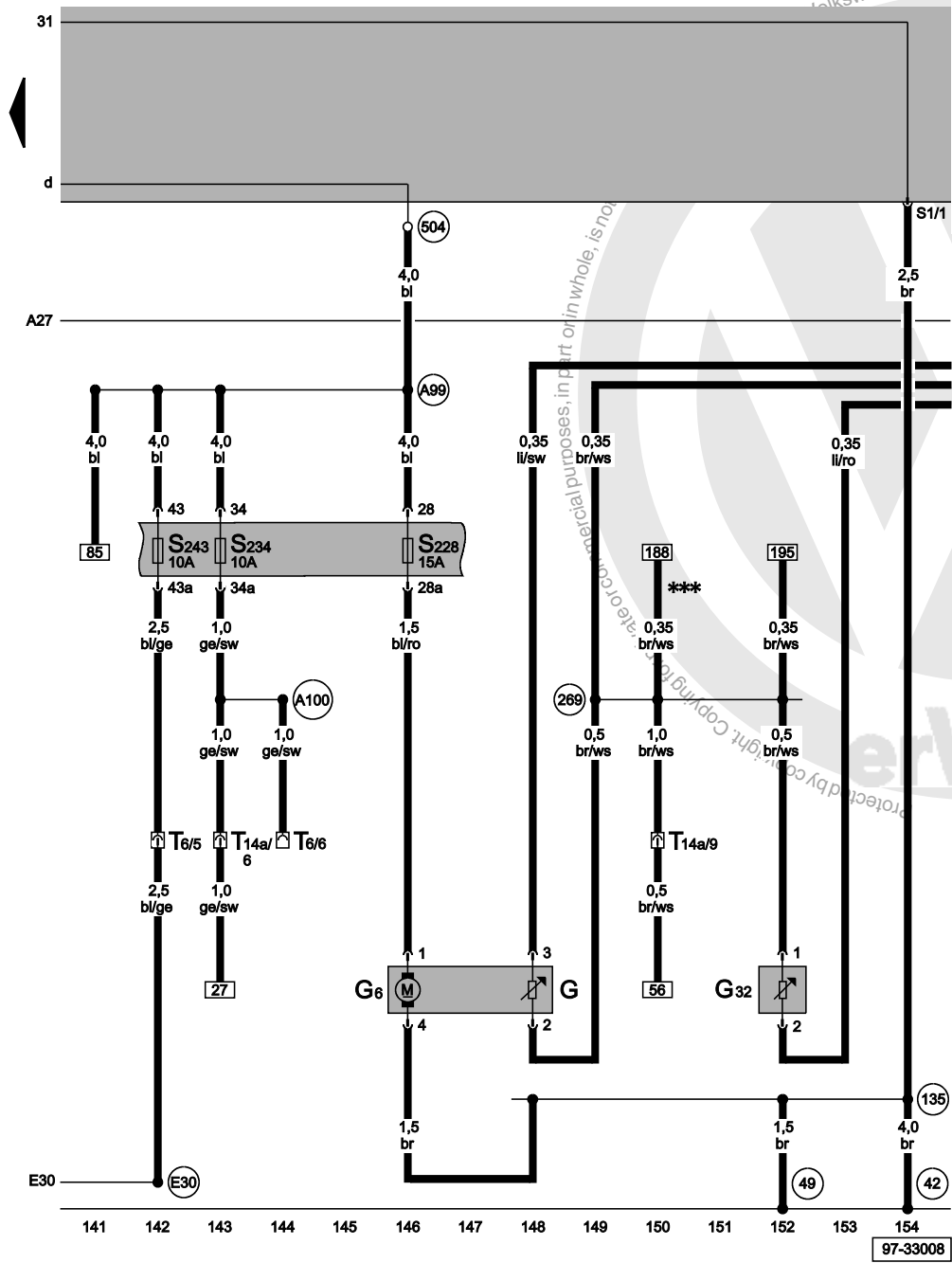
(A125) Connection (crash signal), in dash panel wiring harness

-●- only models with Climatronic



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- gn = green
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Fuel pump, fuel gauge sender, coolant shortage indicator sender



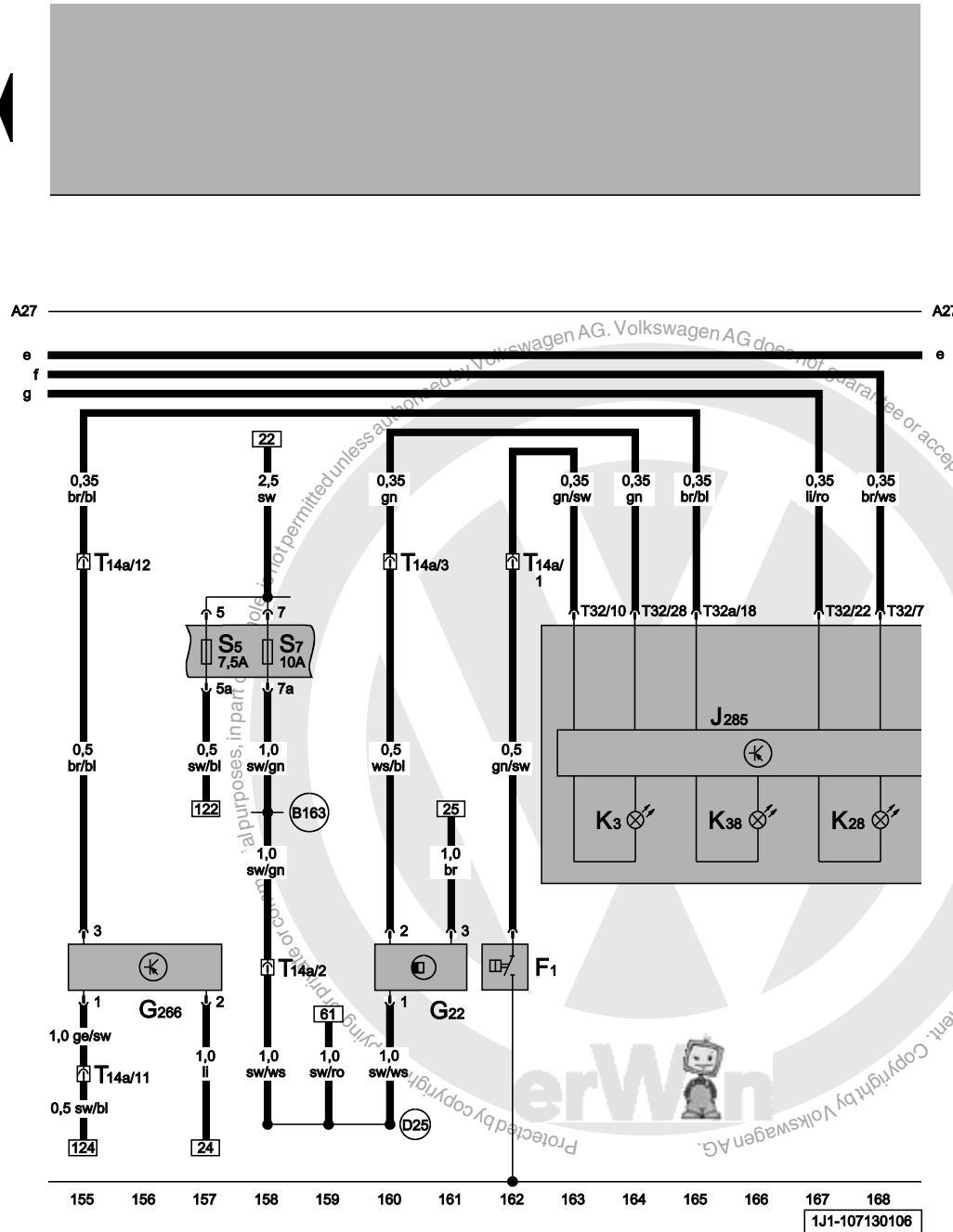
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, next to steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** only models without Climatronic

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender*
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, in cable channel left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

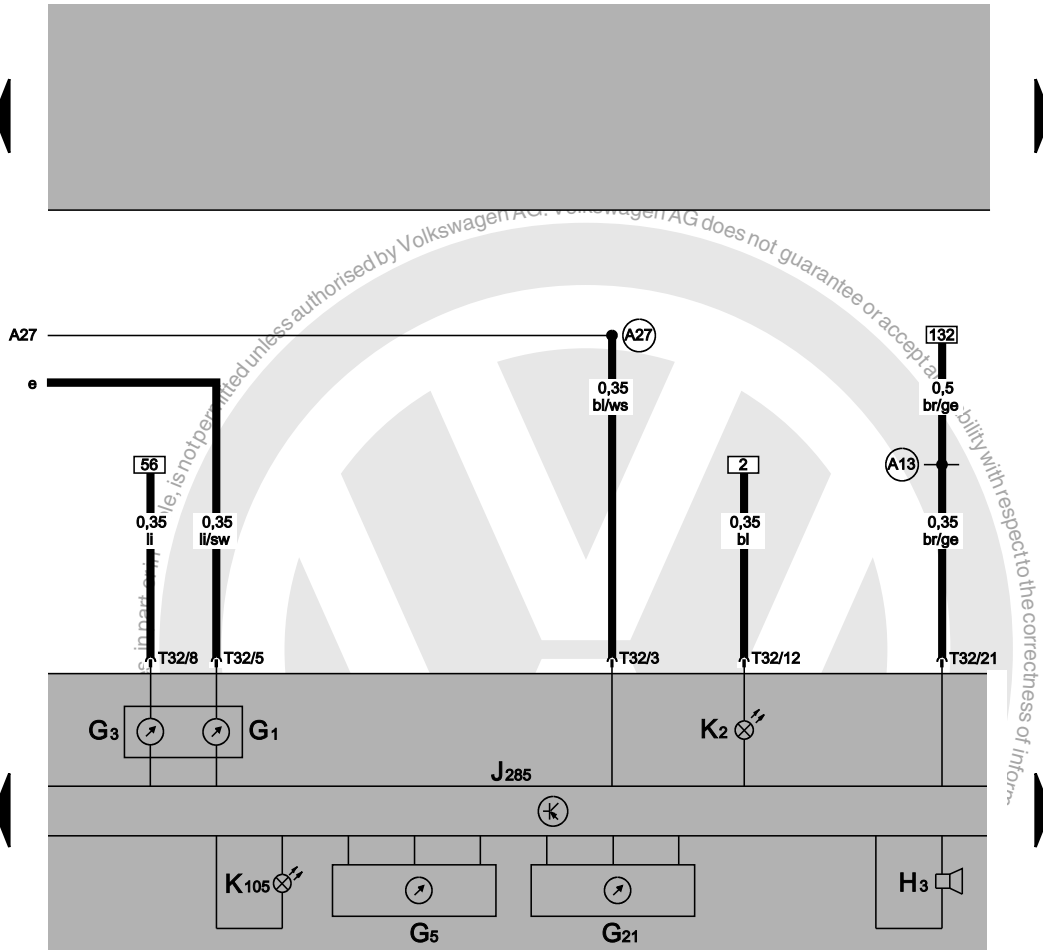
- (B163) Positive connection 1 (15), in interior wiring harness
- (D25) Positive connection (15), in engine wiring harness
- * only flexible service interval display



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- gr = grey
- li = purple
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- rs = pink

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

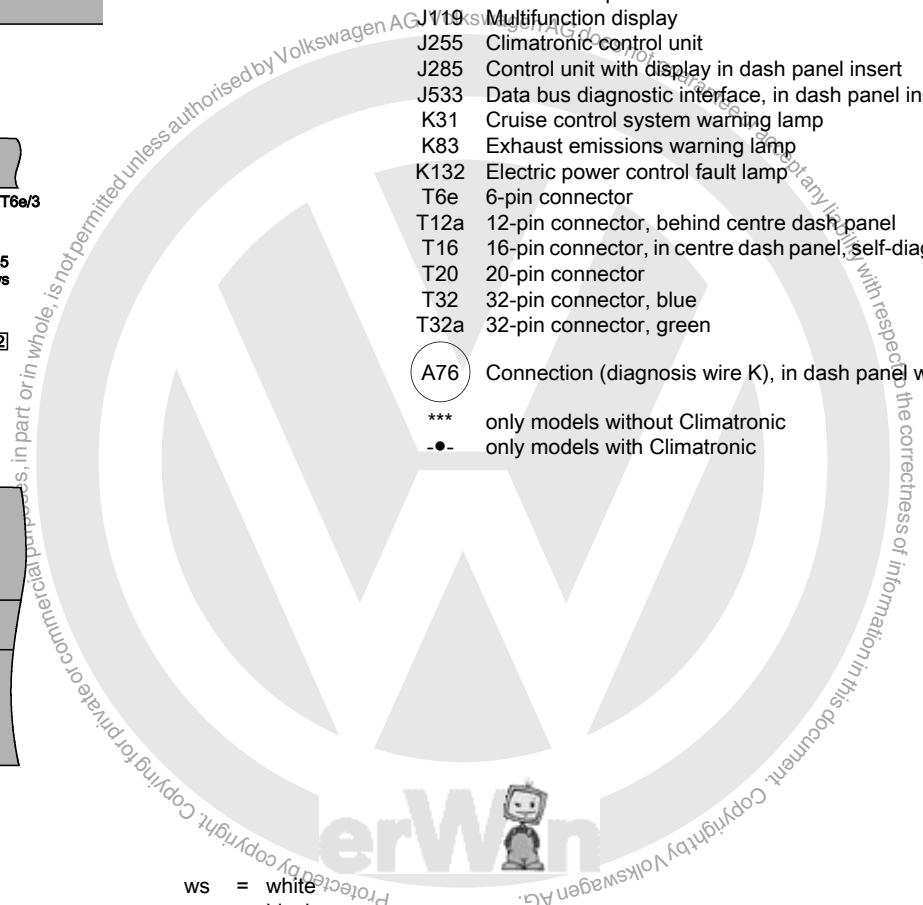
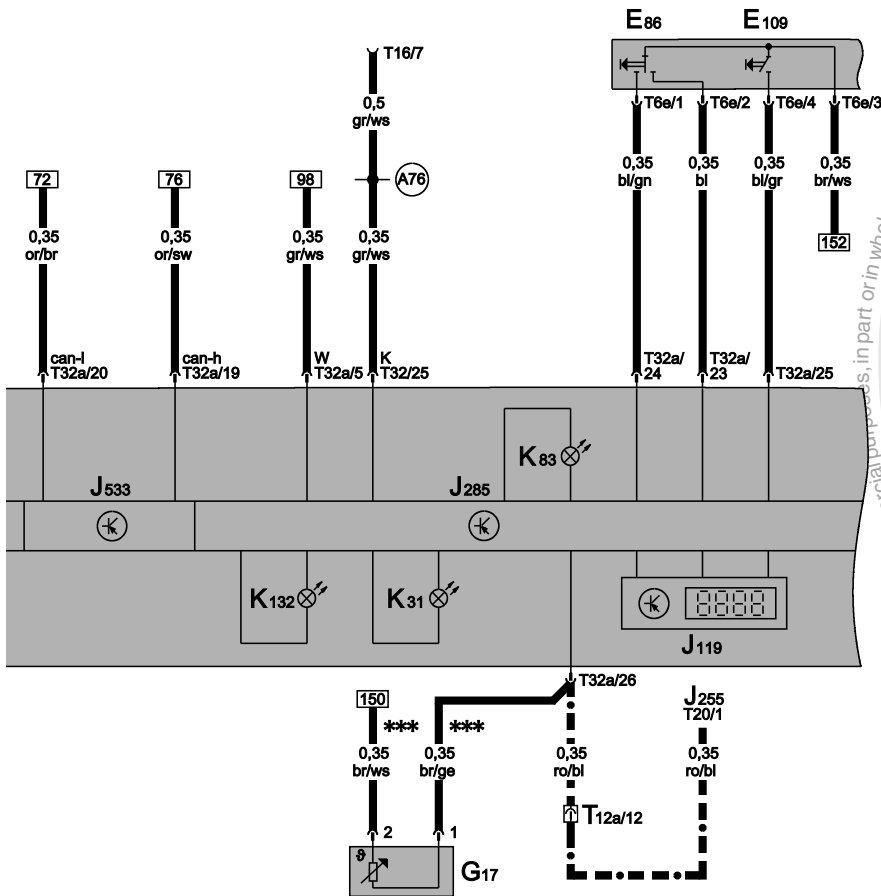
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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- gn = green
- bl = blue
- gr = grey
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- rs = pink

Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green



- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** only models without Climatronic
- only models with Climatronic

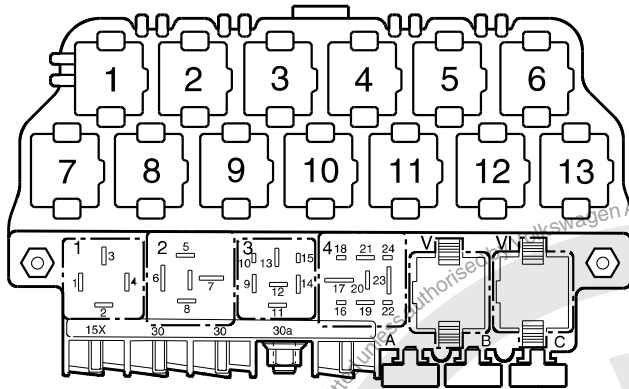
- ws = white
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1.6 I/77 kW 4LV, engine codes BCB

From May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

2 - J59 - X contact relief relay (100)

4 - J17 - Fuel pump relay (409)

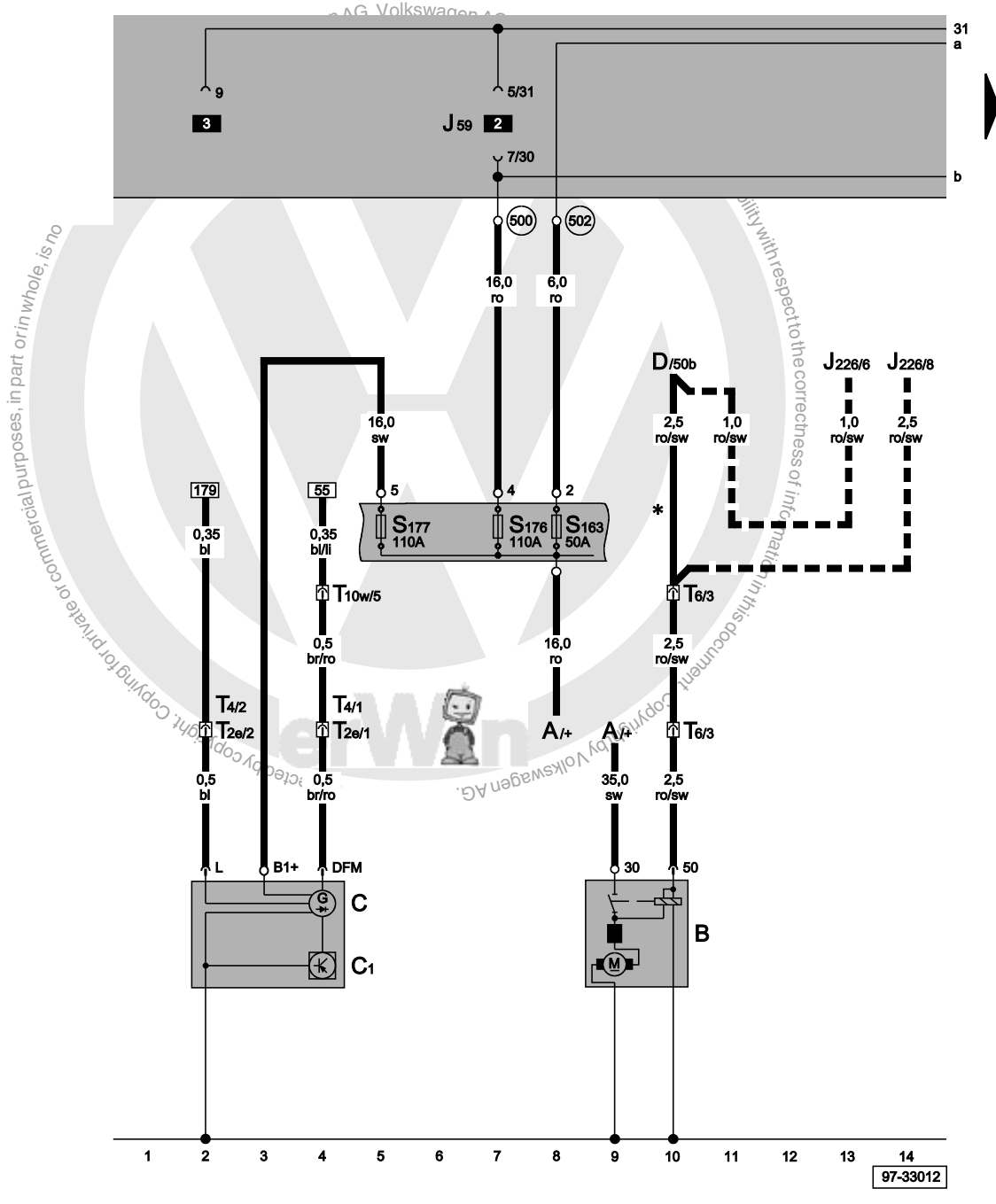


Note!

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X contact relief relay
- J226 Starter inhibitor and reversing light relay
- S163 Fuse -2- (30), in fuse box/battery
- S176 Fuse -4- (30), in fuse box/battery
- S177 Fuse -5- (30), in fuse box/battery
- T2e 2-pin connector, near starter (only models without air conditioner)
- T4 4-pin connector, near starter (only models with air conditioner)
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- 500 Screw connection -1- (30), on relay plate
- 502 Screw connection -1- (30a), on relay plate
- * Only models with manual gearbox
- Only models with automatic gearbox

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- rs = pink

4LV control unit (injection system), crankcase breather heater element

- D Ignition and starter switch
- J448 4AV/4CV control unit, injection system, in centre of plenum chamber
- N79 Crankcase breather heater element
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

85 Earth connection 1, in engine compartment wiring harness

501 Screw connection 2 (30), on relay plate

608 Earth point, in centre of plenum chamber

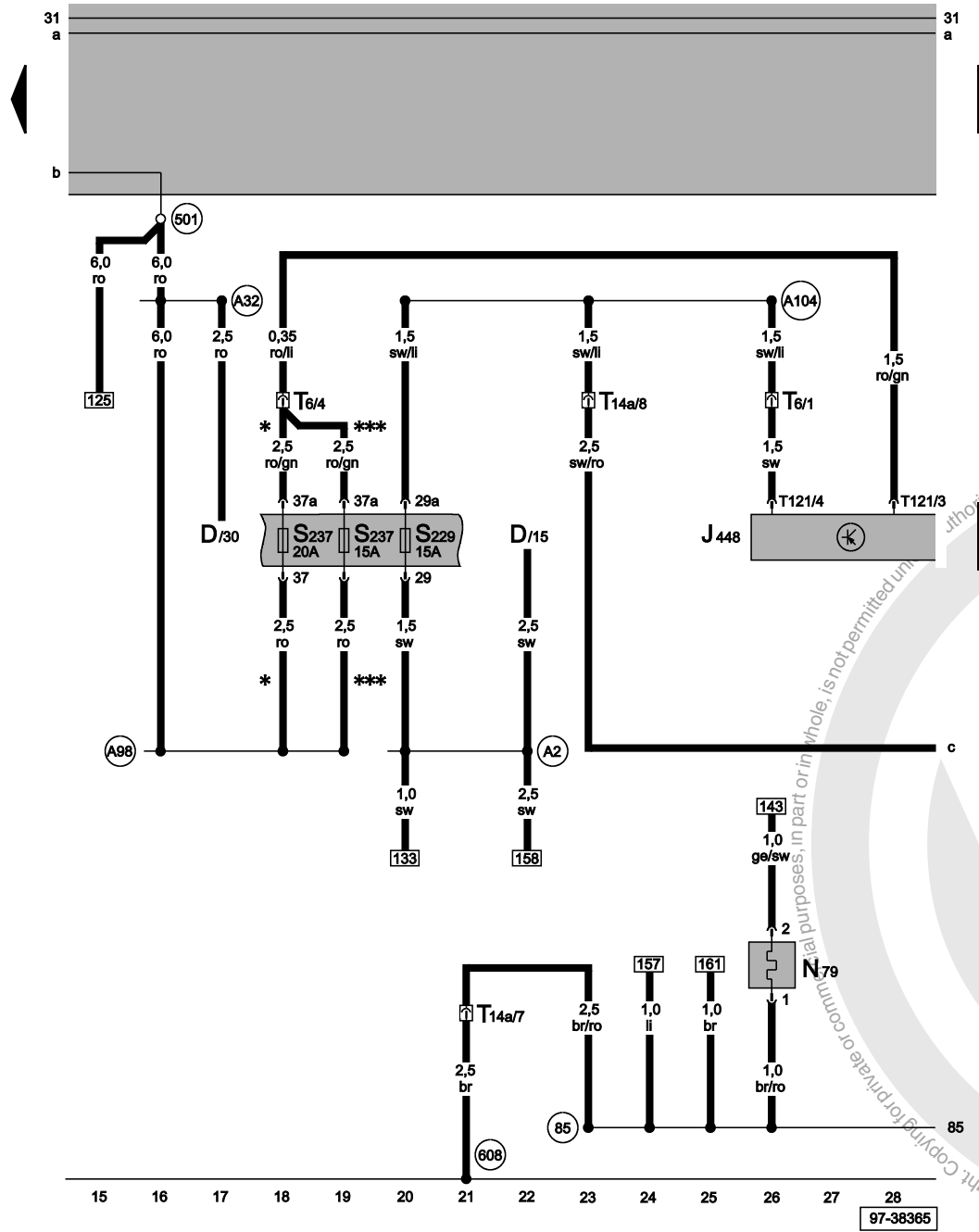
A2 Positive connection (15), in dash panel wiring harness

A32 Positive connection (30), in dash panel wiring harness

A98 Positive connection 4 (30), in dash panel wiring harness

A104 Positive connection 2 (15), in dash panel wiring harness

* From May 2003
 *** Up to April 2003



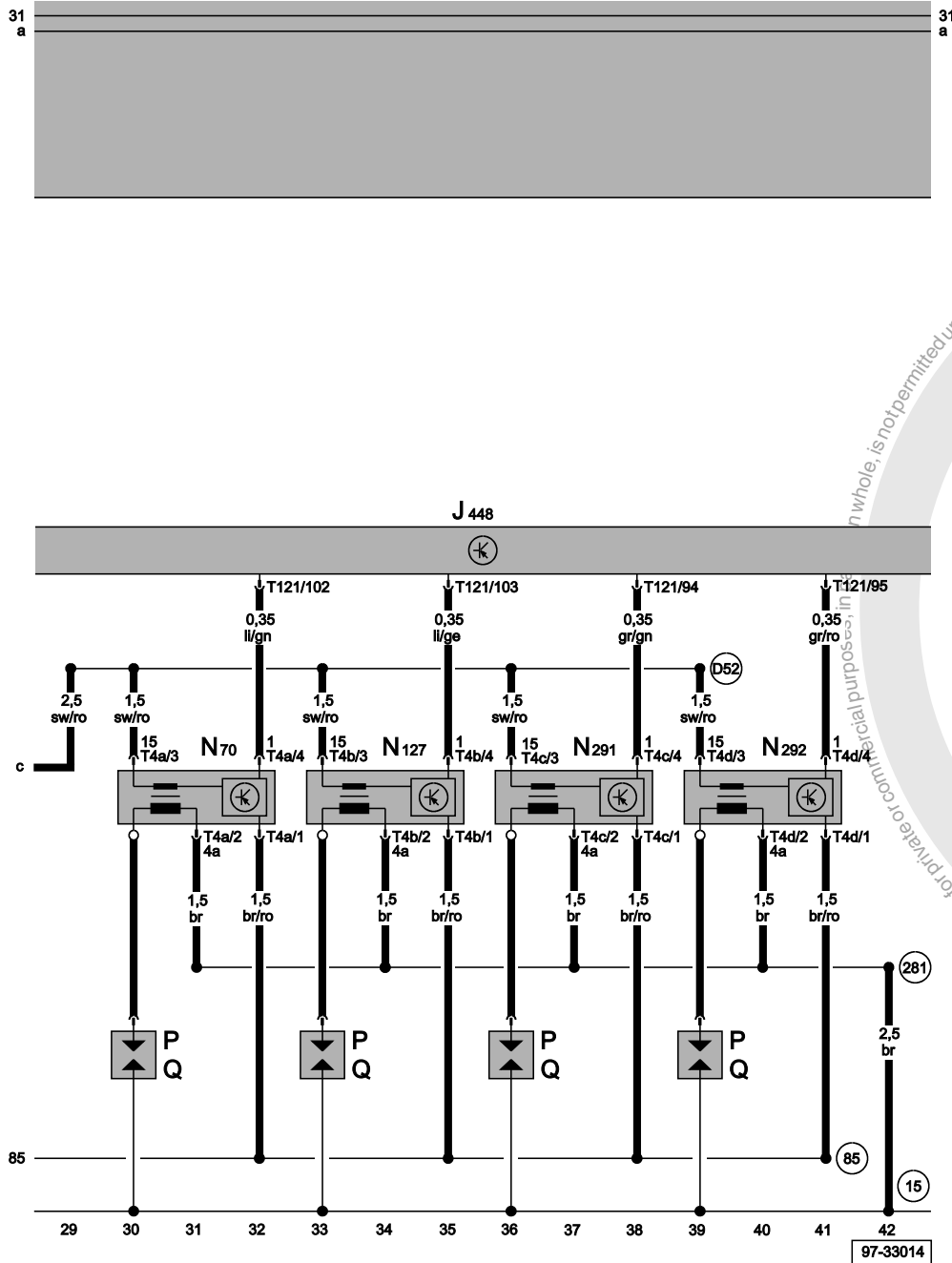
- ws = white
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- or = orange
- rs = pink

97-38365

4LV control unit (injection system), ignition system

- J448 4LV control unit (injection system), in plenum chamber, centre
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection -1-, in engine prewiring wiring harness
- D52 Positive (+) connection (15a), in engine compartment wiring harness



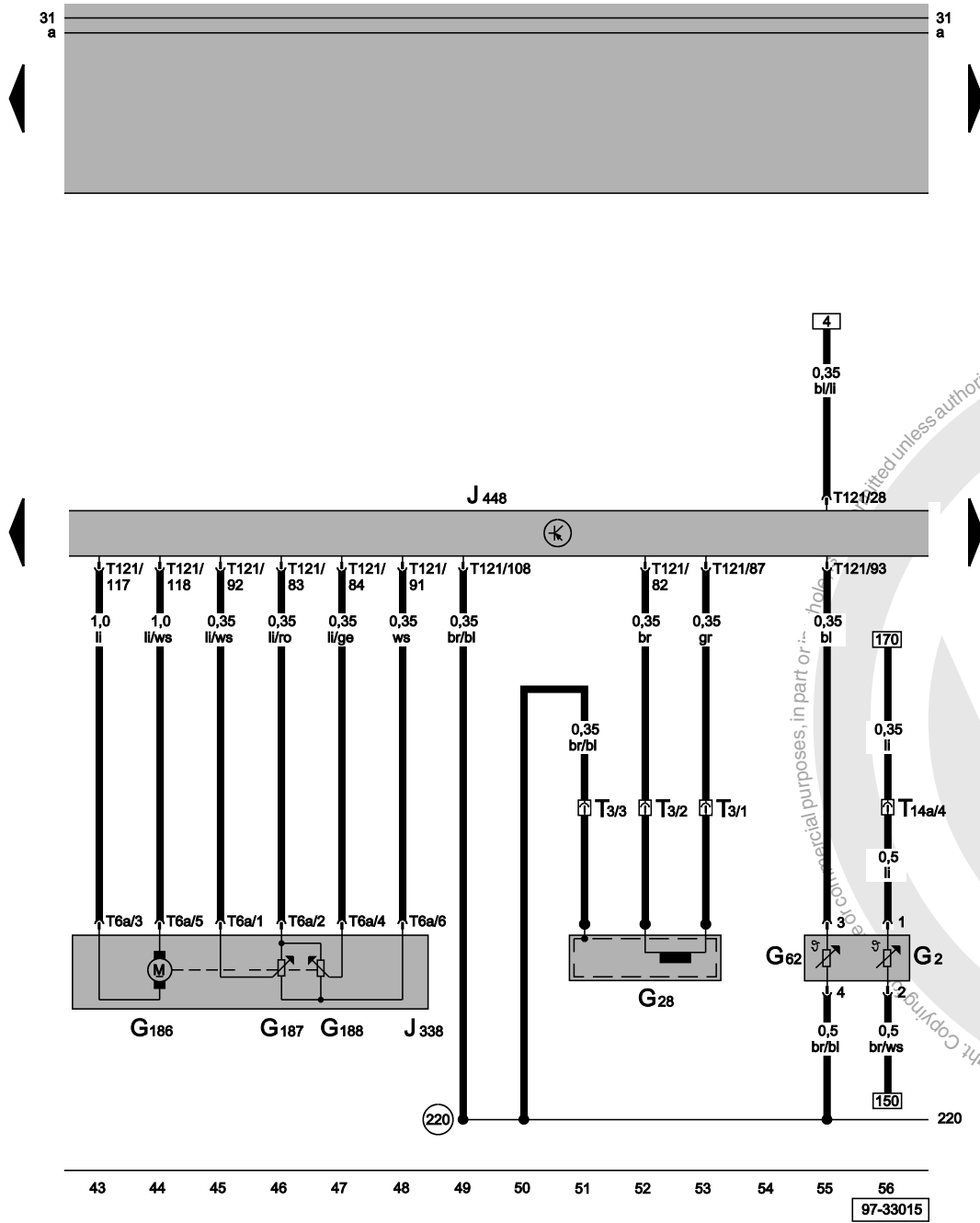
- ws = white
- sw = black
- ro = red
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- bl = blue
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- rs = pink

97-33014

4LV control unit (injection system), throttle valve control module, engine speed sender, coolant temperature sender

- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric throttle operation)
- G187 Throttle valve drive angle sender -1- (electric throttle operation)
- G188 Throttle valve drive angle sender -2- (electric throttle operation)
- J338 Throttle valve control unit
- J448 4LV control unit (injection system), in plenum chamber, centre
- T3 3-pin connector, on engine front
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T124 121-pin connector

220 Earth connection (sender earth), in engine wiring harness



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97-33015

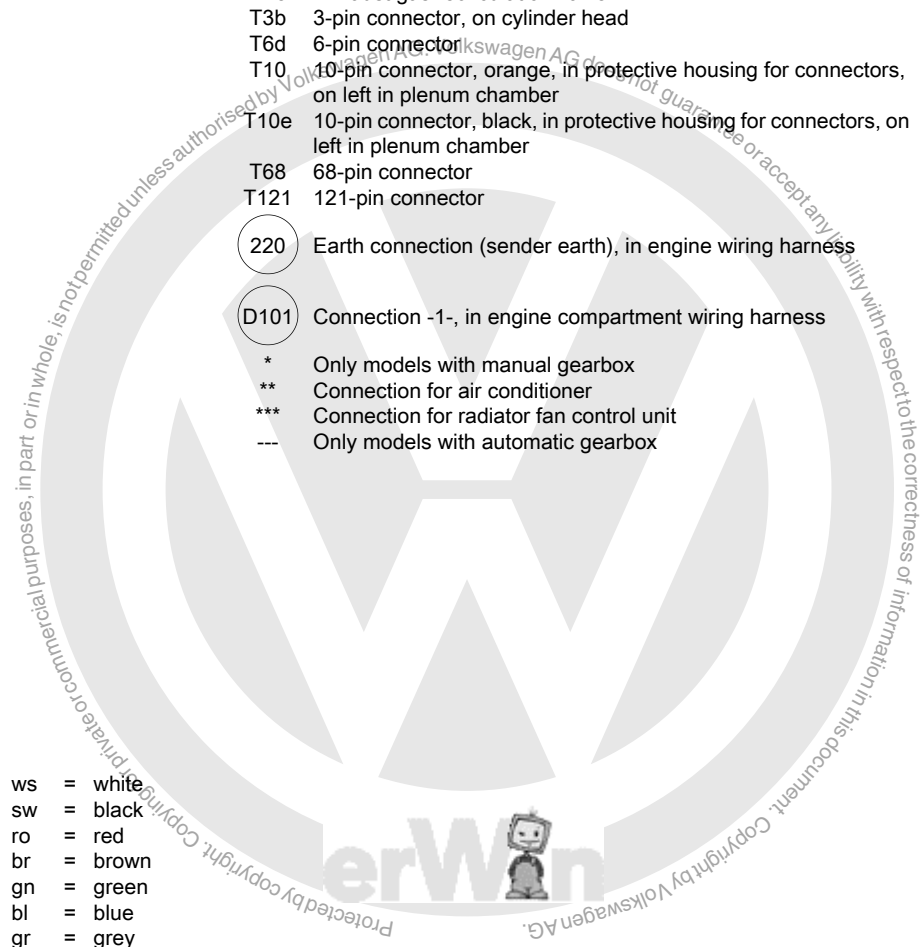
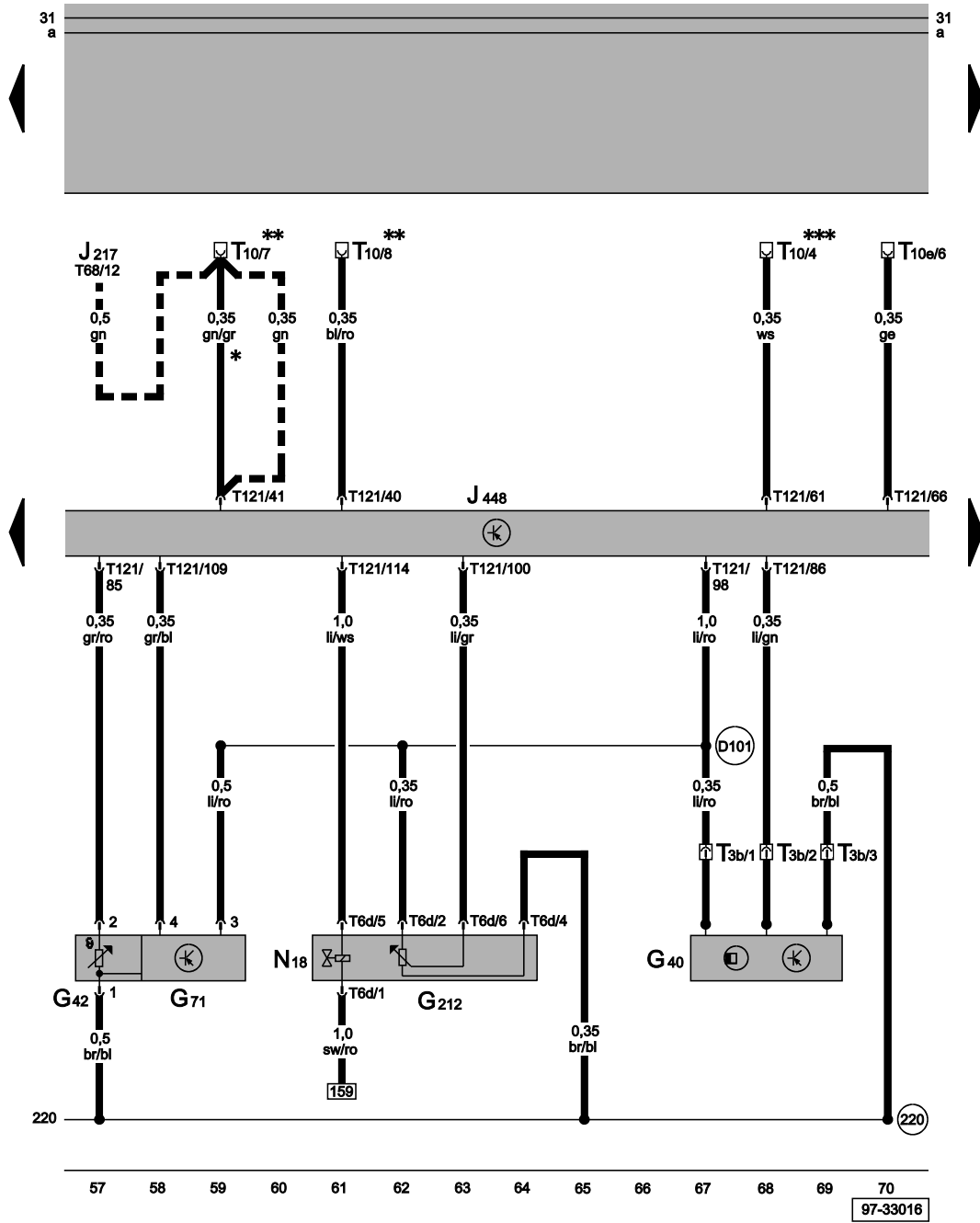
4LV control unit (injection system), intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, hall sender

- G40 Hall sender
- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- J217 Automatic gearbox control unit
- J448 4LV control unit (injection system), in plenum chamber, centre
- N18 Exhaust gas recirculation valve
- T3b 3-pin connector, on cylinder head
- T6d 6-pin connector
- T10 10-pin connector, orange, in protective housing for connectors, on left in plenum chamber
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber
- T68 68-pin connector
- T121 121-pin connector

(220) Earth connection (sender earth), in engine wiring harness

(D101) Connection -1-, in engine compartment wiring harness

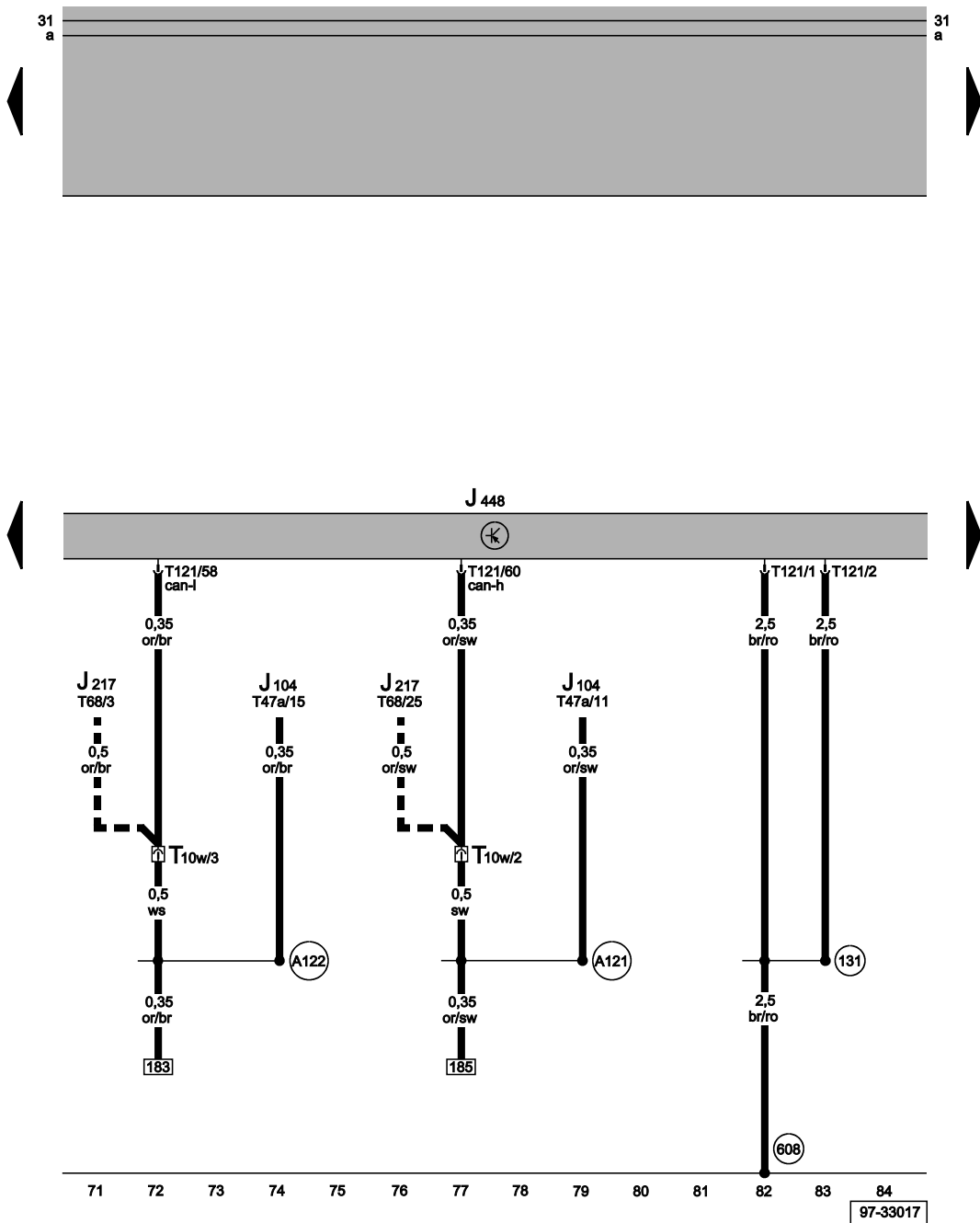
- * Only models with manual gearbox
- ** Connection for air conditioner
- *** Connection for radiator fan control unit
- Only models with automatic gearbox



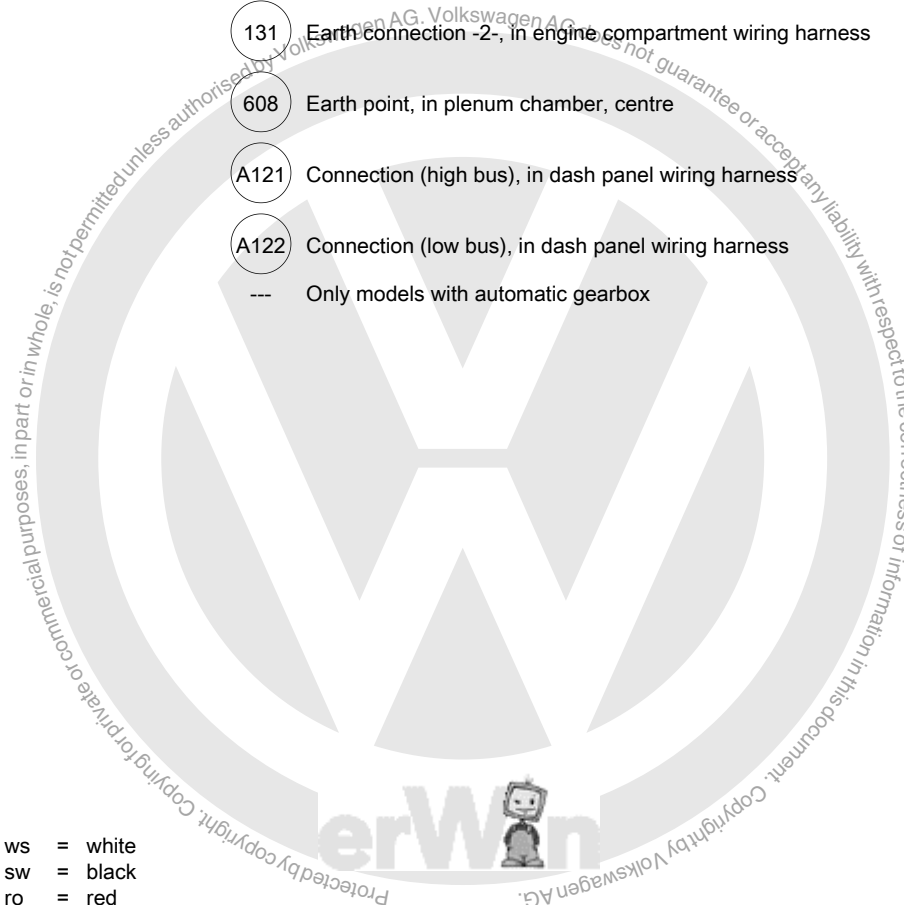
4LV control unit (injection system)

- J104 ABS/ABS with EDL control unit
- J217 Automatic gearbox control unit
- J448 4LV control unit (injection system), in plenum chamber, centre
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T47a 47-pin connector, ABS with EDL/TCS/ESP control unit
- T68 68-pin connector
- T121 121-pin connector

- 131 Earth connection -2-, in engine compartment wiring harness
- 608 Earth point, in plenum chamber, centre
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- Only models with automatic gearbox



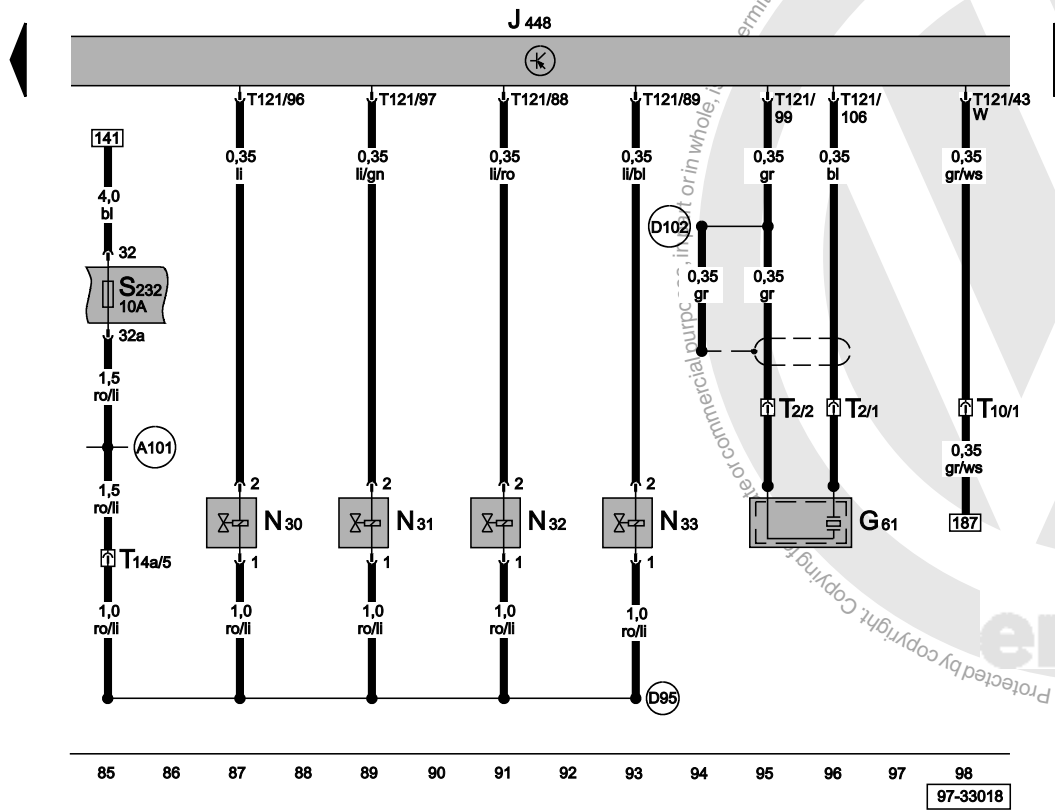
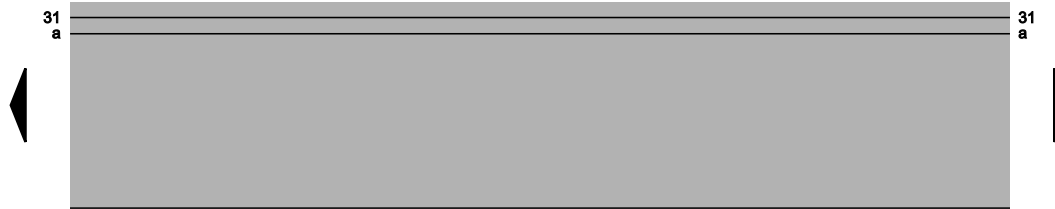
- ws = white
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- rs = pink



4LV control unit (injection system), injectors, knock sensor

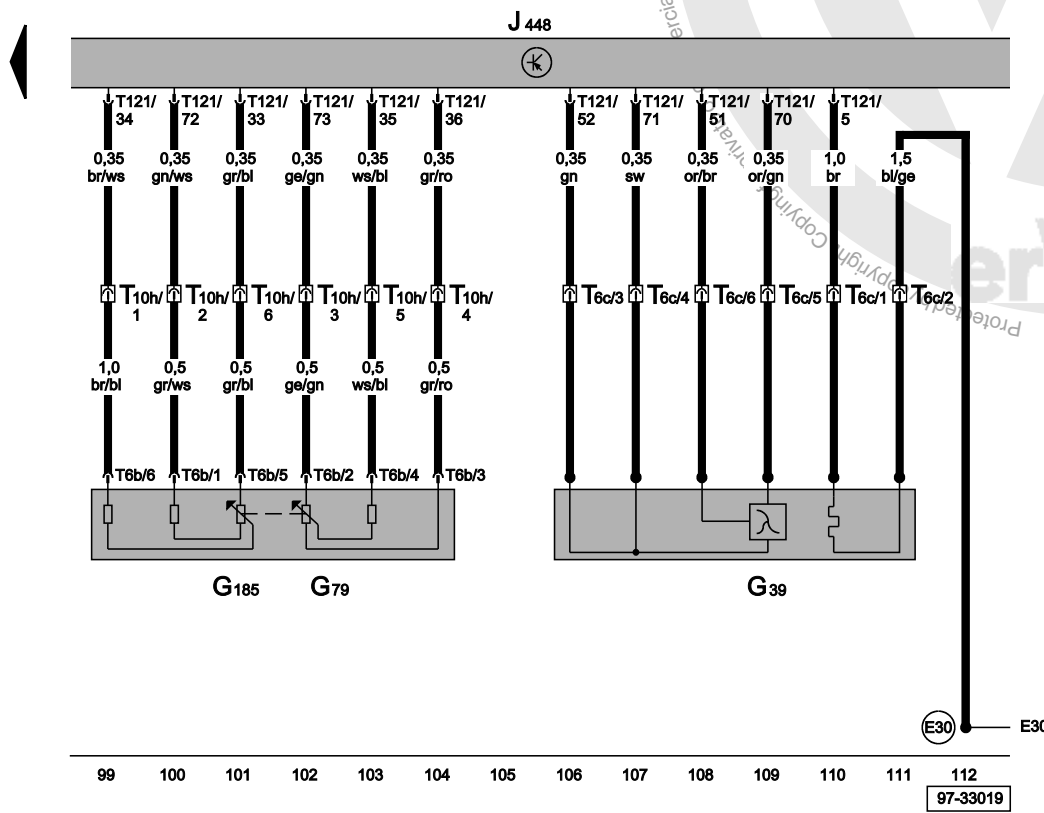
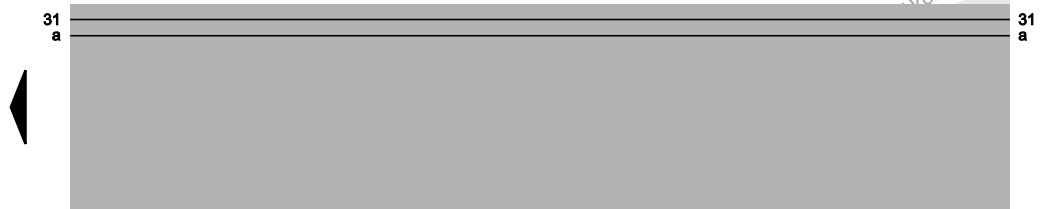
- G61 Knock sensor I
- J448 4LV control unit (injection system), in plenum chamber, centre
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse in fuse box
- T2 2-pin connector, on cylinder head, left
- T10 10-pin connector, orange, in protective housing for connectors, in plenum chamber, left
- T14a 14-pin connector, near battery
- T121 121-pin connector

- (A101) Connection -3- (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (D102) Connection -2-, in engine compartment wiring harness



4LV control unit (injection system), accelerator pedal position sender, lambda probe (before catalytic converter)

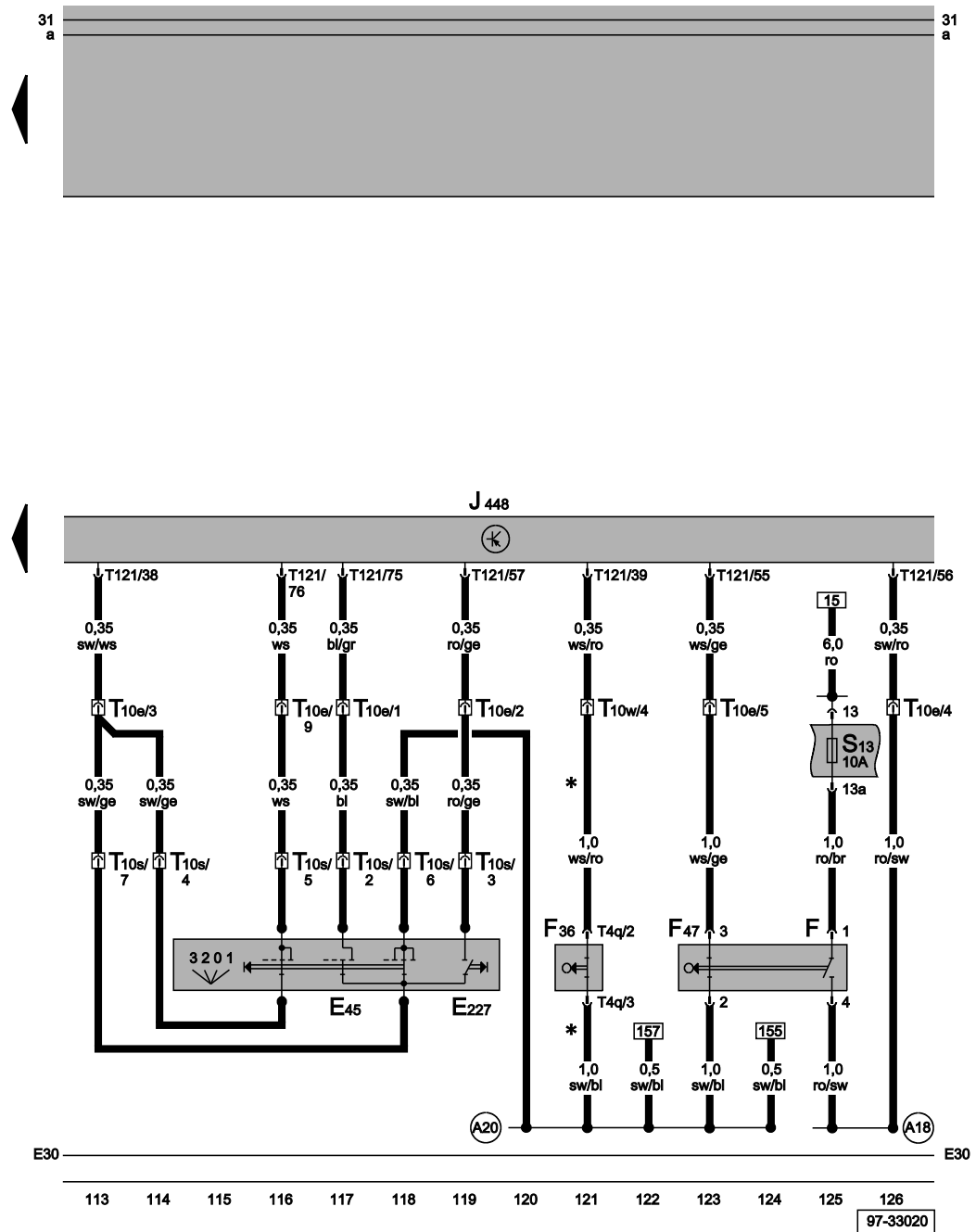
- G39 Lambda probe
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender -2-
- J448 4LV control unit (injection system), in plenum chamber, centre
- T6b 6-pin connector
- T6c 6-pin connector, near catalyst
- T10h 10-pin connector, blue, in protective housing for connectors, on left in plenum chamber
- T121 121-pin connector
- (E30) Connection (87a), in engine wiring harness



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4LV control unit (injection system), cruise control system switch (CCS), clutch pedal switch, CCS brake pedal switch, brake light switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) button (Set)**
- F Brake light switch
- F36 Clutch pedal switch**
- F47 Cruise control system brake pedal switch
- J448 4LV control unit (injection system), in plenum chamber, centre
- S13 Fuse in fuse box
- T4q 4-pin connector
- T10e 10-pin connector, black, in protective housing for connectors, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in protective housing for connectors, on left in plenum chamber
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- * Only models with manual gearbox
- ** Only models with CCS



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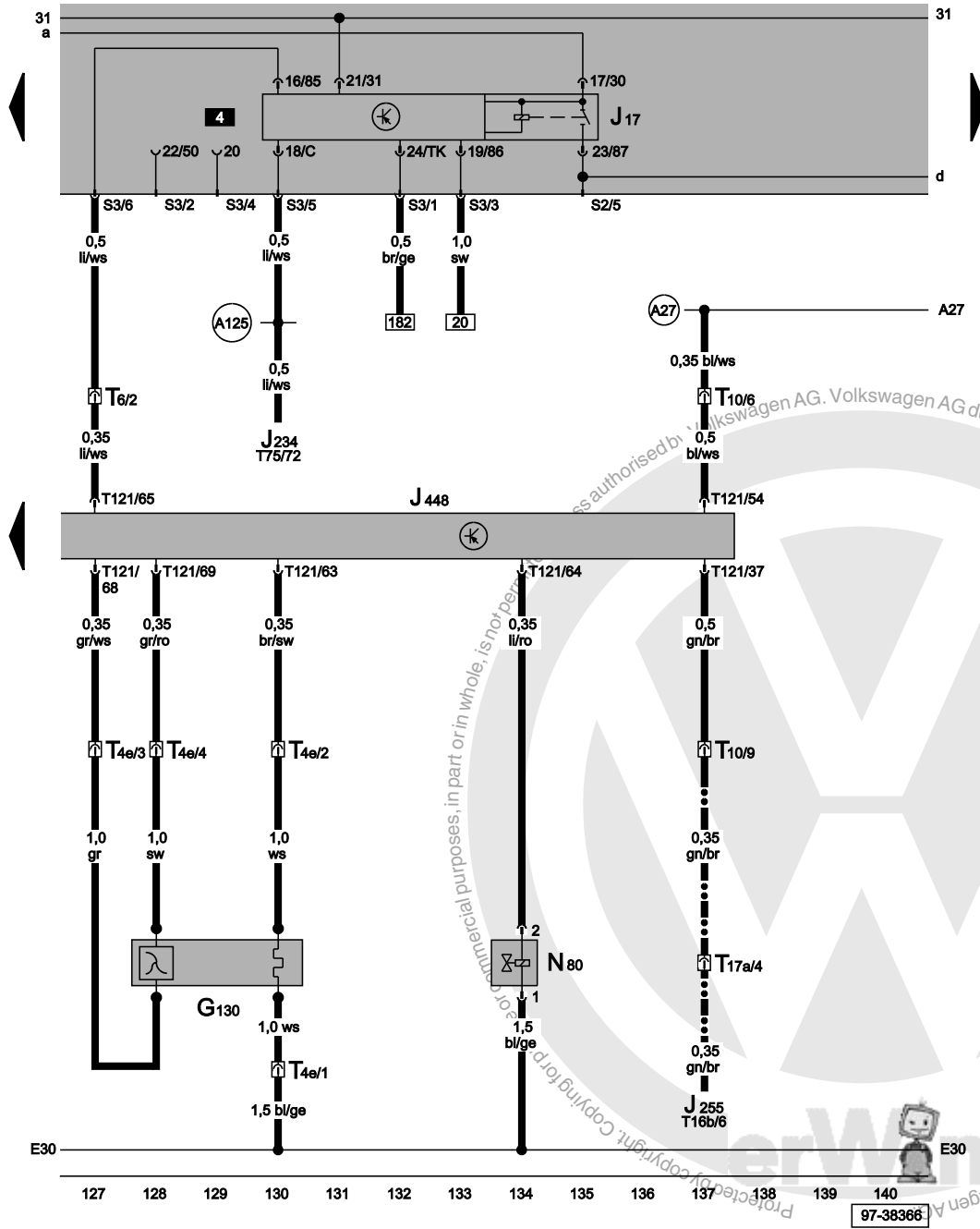
4LV control unit (injection system), fuel pump relay, lambda probe after catalytic converter, active charcoal filter solenoid valve

- G130 Lambda probe after catalytic converter
- J17 Fuel pump relay
- J234 Airbag control unit
- J255 Climatronic control unit
- J448 4AV/4CV control unit, injection system, in centre of plenum chamber
- N80 Active charcoal filter system solenoid valve 1
- T4e 4-pin connector, near catalytic converter
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T10 10-pin connector, orange, in protective housing for connectors on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, in centre behind dash panel
- T75 75-pin connector
- T121 121-pin connector

A27 Connection (speed signal), in dash panel wiring harness

A125 Connection (crash signal), in dash panel wiring harness

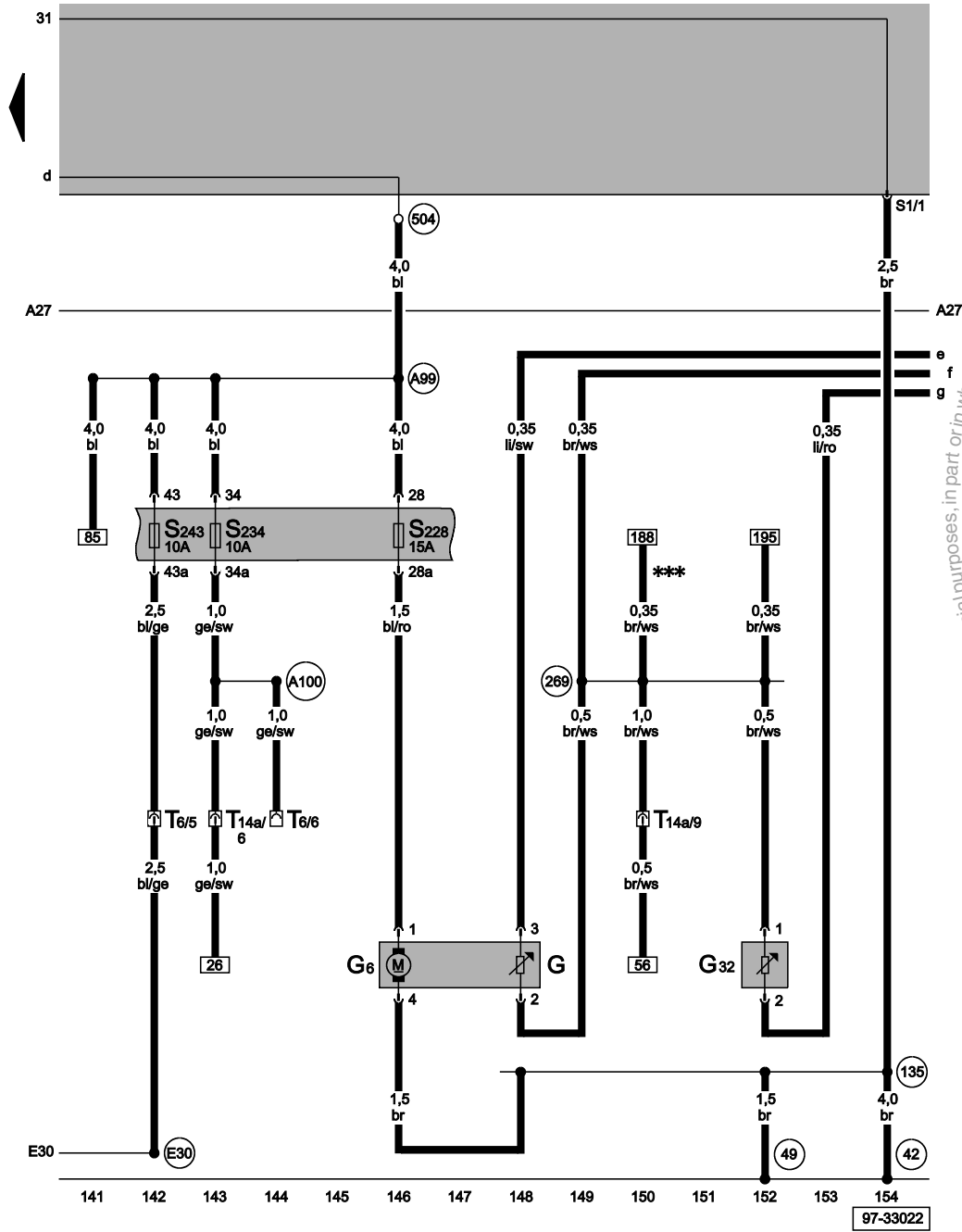
--- Applies only to models fitted with Climatronic



- ws = white
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- bl = blue
- gr = grey
- li = purple
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- or = orange
- rs = pink

Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse box
- S234 Fuse in fuse box
- S243 Fuse 43 in fuse box
- T6 6-pin connector, brown, in protective housing for connectors, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, next to steering column
- 135 Earth connection -2-, in dash panel wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness
- 504 Screw connection -1- (87F), on relay plate
- A99 Connection -1- (87), in dash panel wiring harness
- A100 Connection -2- (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** Only models without Climatronic

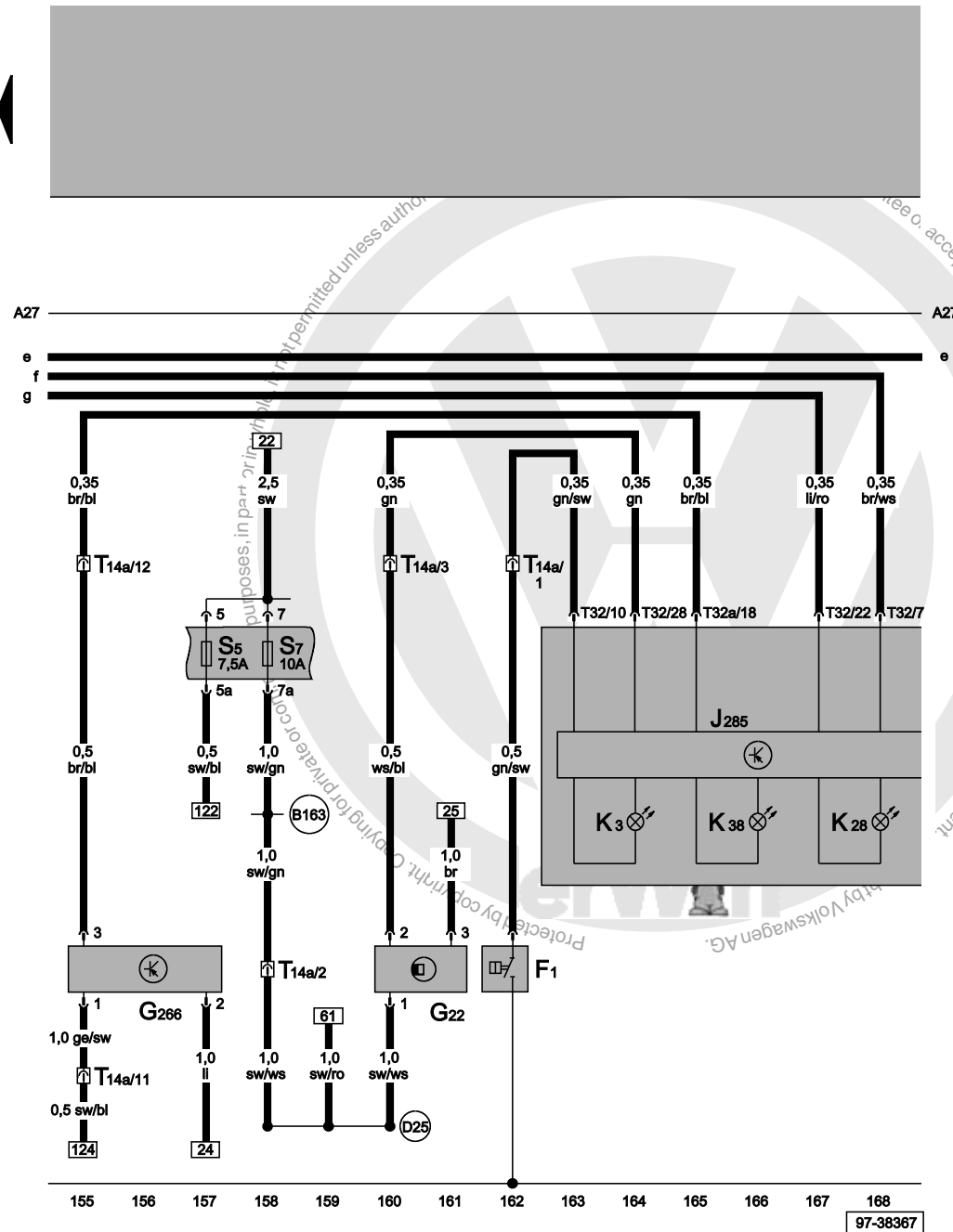


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
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- rs = pink

Dash panel insert, oil pressure warning, oil level and oil temperature warning, speedometer sender, coolant temperature and coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender*
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, in cable channel on left in engine compartment
- T32 32-pin connector, blue
- T32a 32-pin connector, green

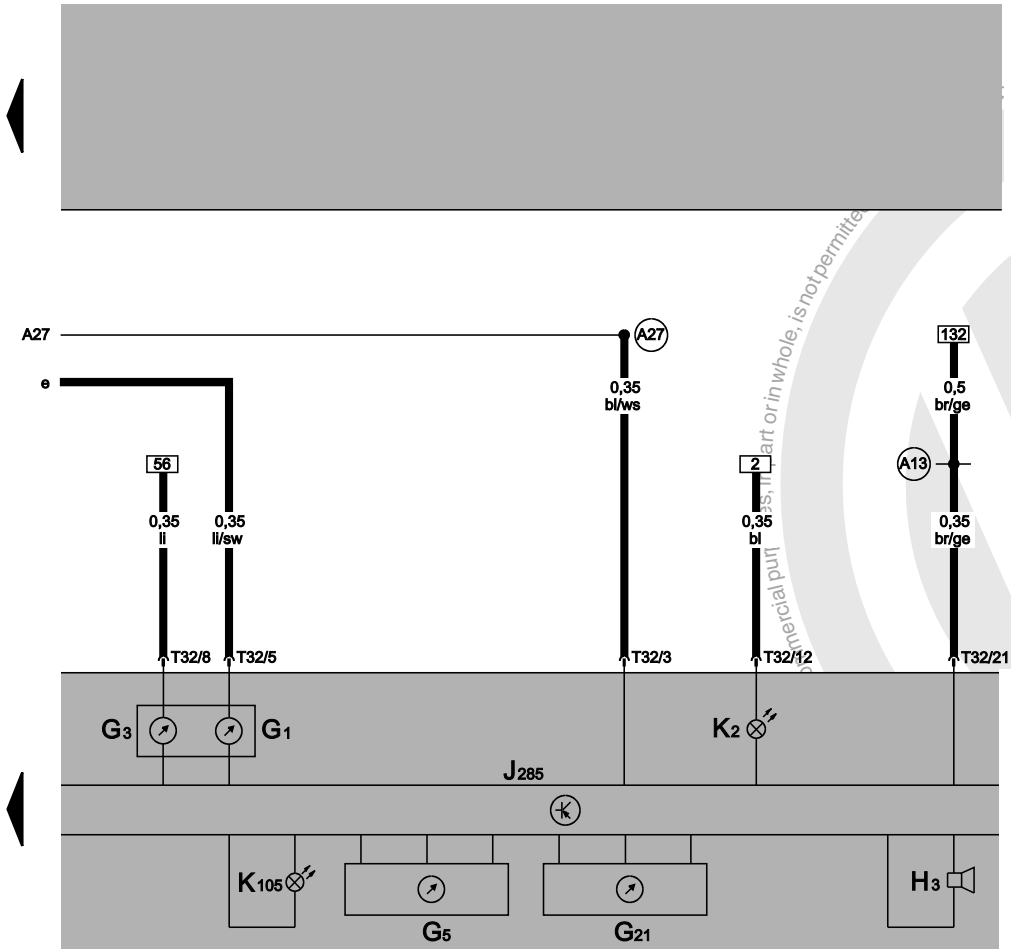
- (B163) Positive connection 1 (15), in interior wiring harness
- (D25) Positive connection (15), in engine pre-wiring harness
- * Applies only with flexible service interval display



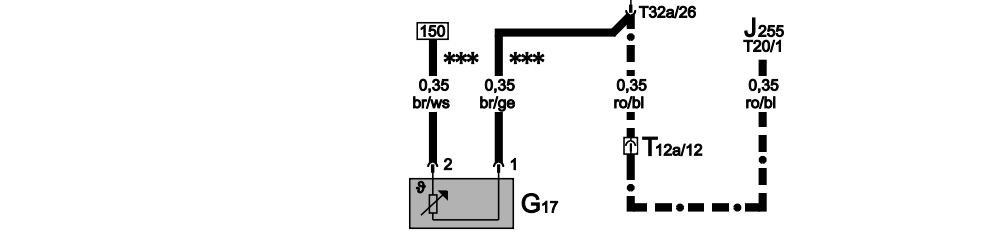
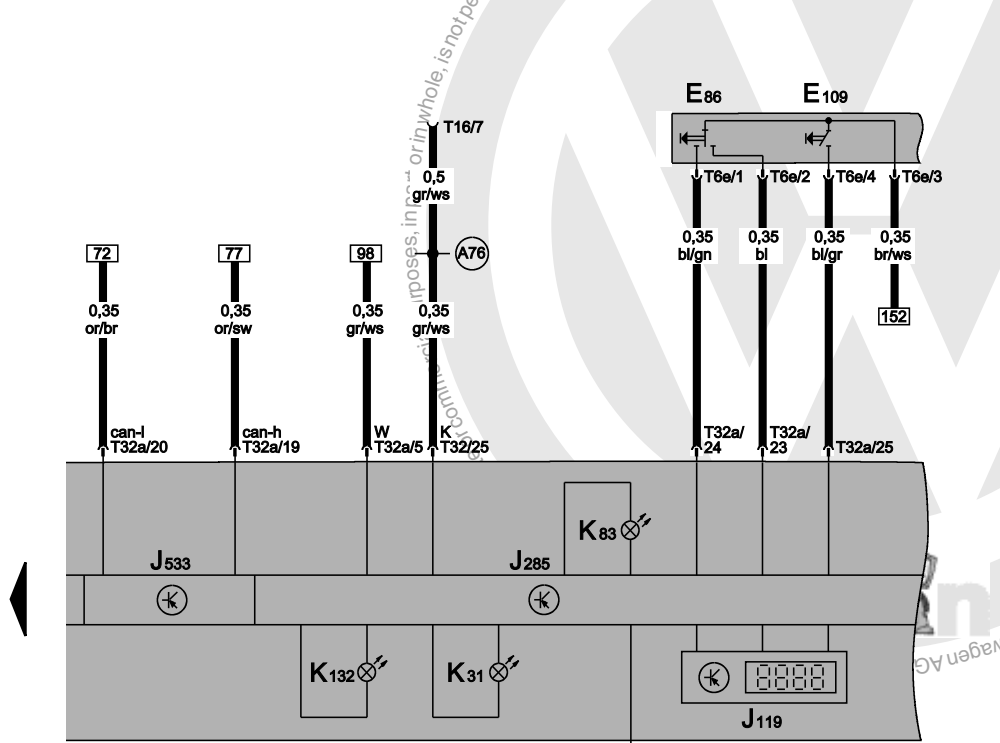
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Dash panel insert, coolant temperature and coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electrically operated throttle fault lamp, CCS warning lamp, multi-function display, ambient temperature display, exhaust emissions warning lamp, diagnostic socket

- E86 Multi-function display call-up button
- E109 Multi-function display, memory switch
- G17 Ambient temperature sensor
- J119 Multi-function display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electronic power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind dash panel, centre
- T16 16-pin connector, in dash panel centre, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** Only models without Climatronic
- .- Only models with Climatronic

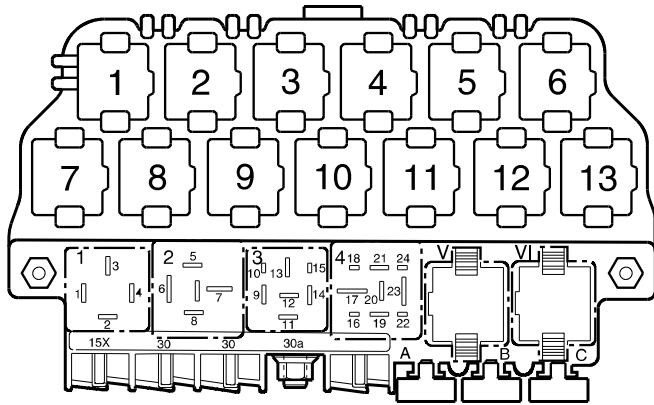
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1.6 l/81 kW Motronic, engine code BAD

from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

2 - J59 - X-contact relief relay (100)

4 - J17 - Fuel pump relay (409)



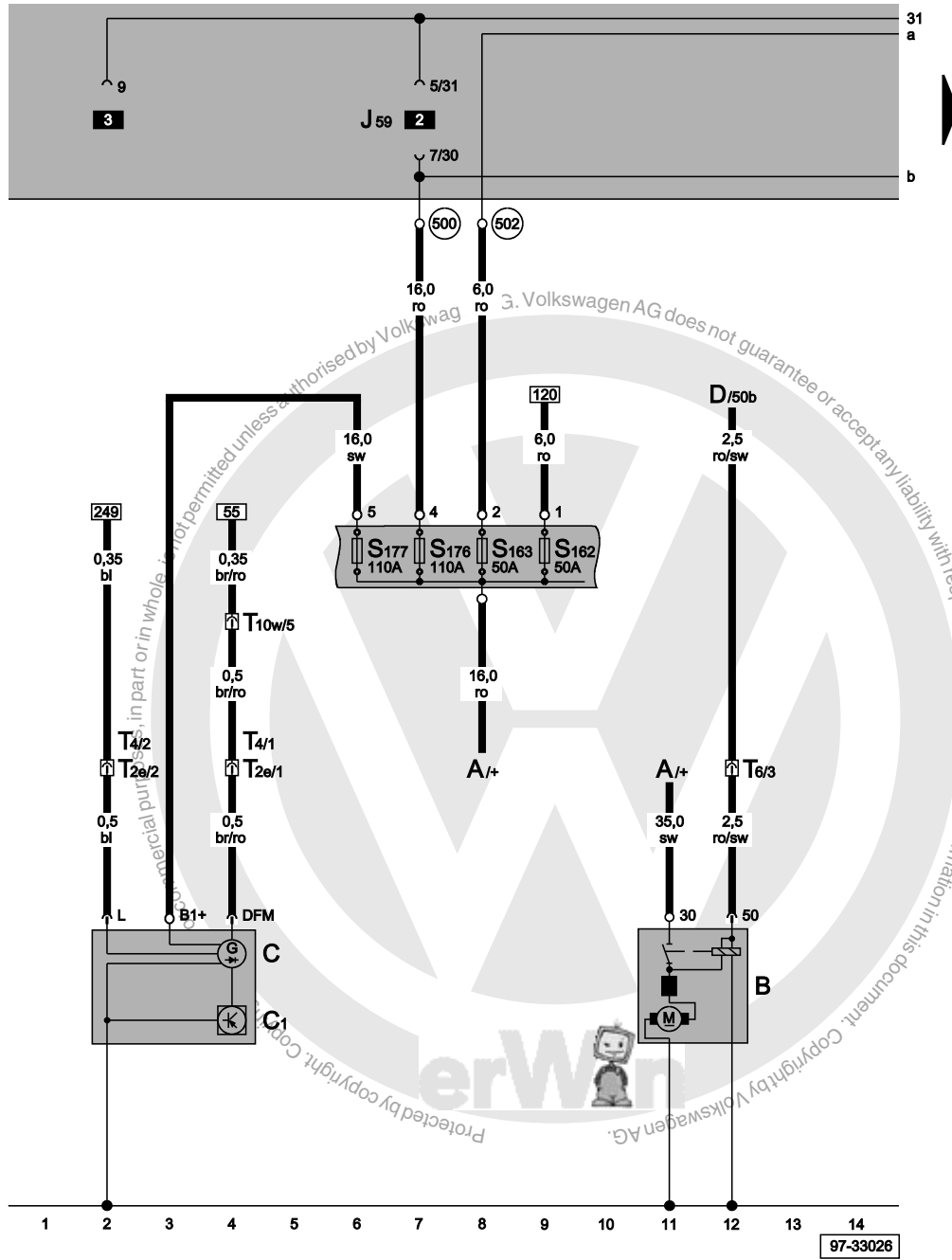
Note:

◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





Alternator, starter

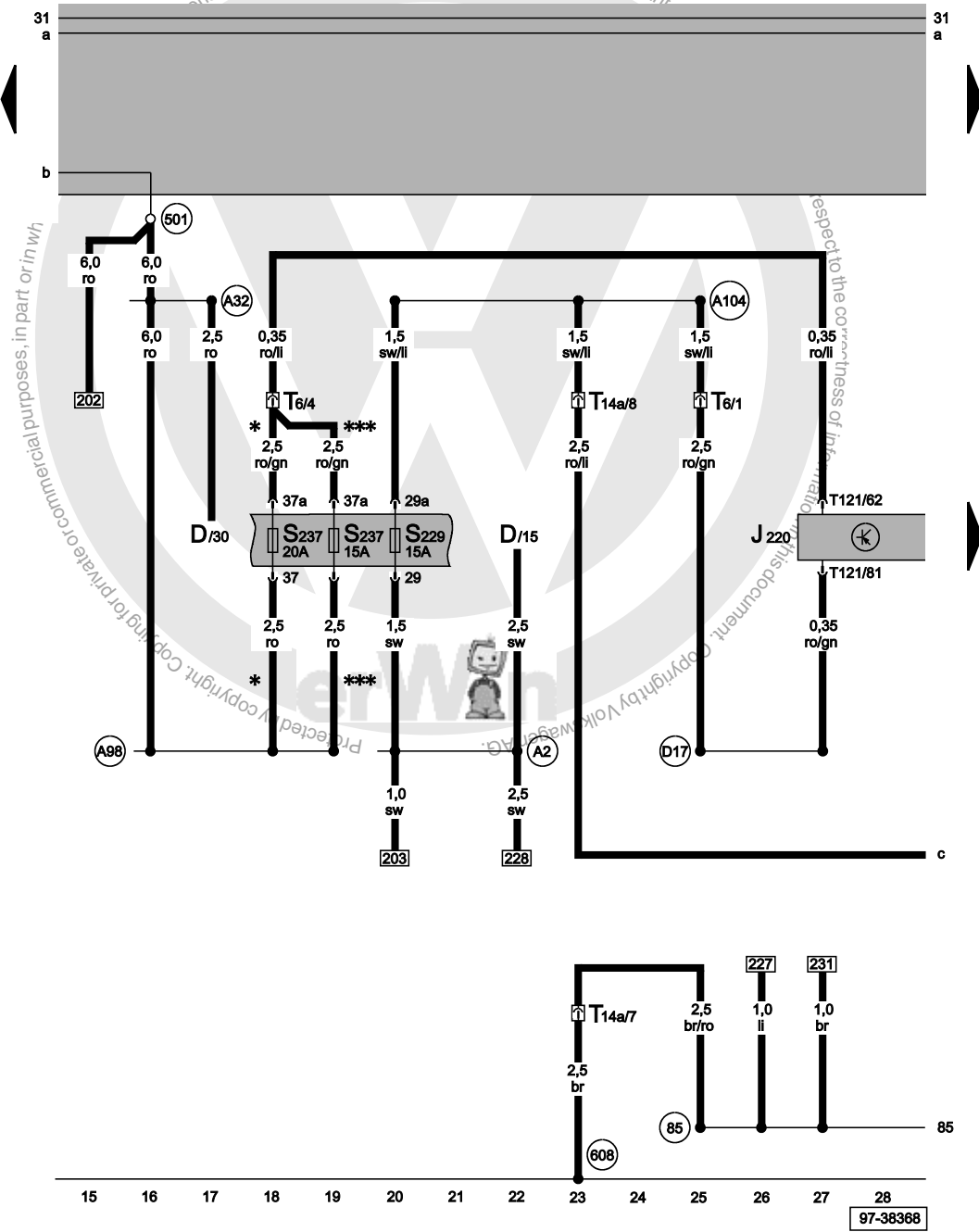
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse -1- (30), in fuse holder on battery
- S163 Fuse -2- (30), in fuse holder on battery
- S176 Fuse -4- (30), in fuse holder on battery
- S177 Fuse -5- (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

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- rs = pink

Motronic control unit

- D Ignition/starter switch
- J220 Motronic control unit, in centre plenum chamber
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

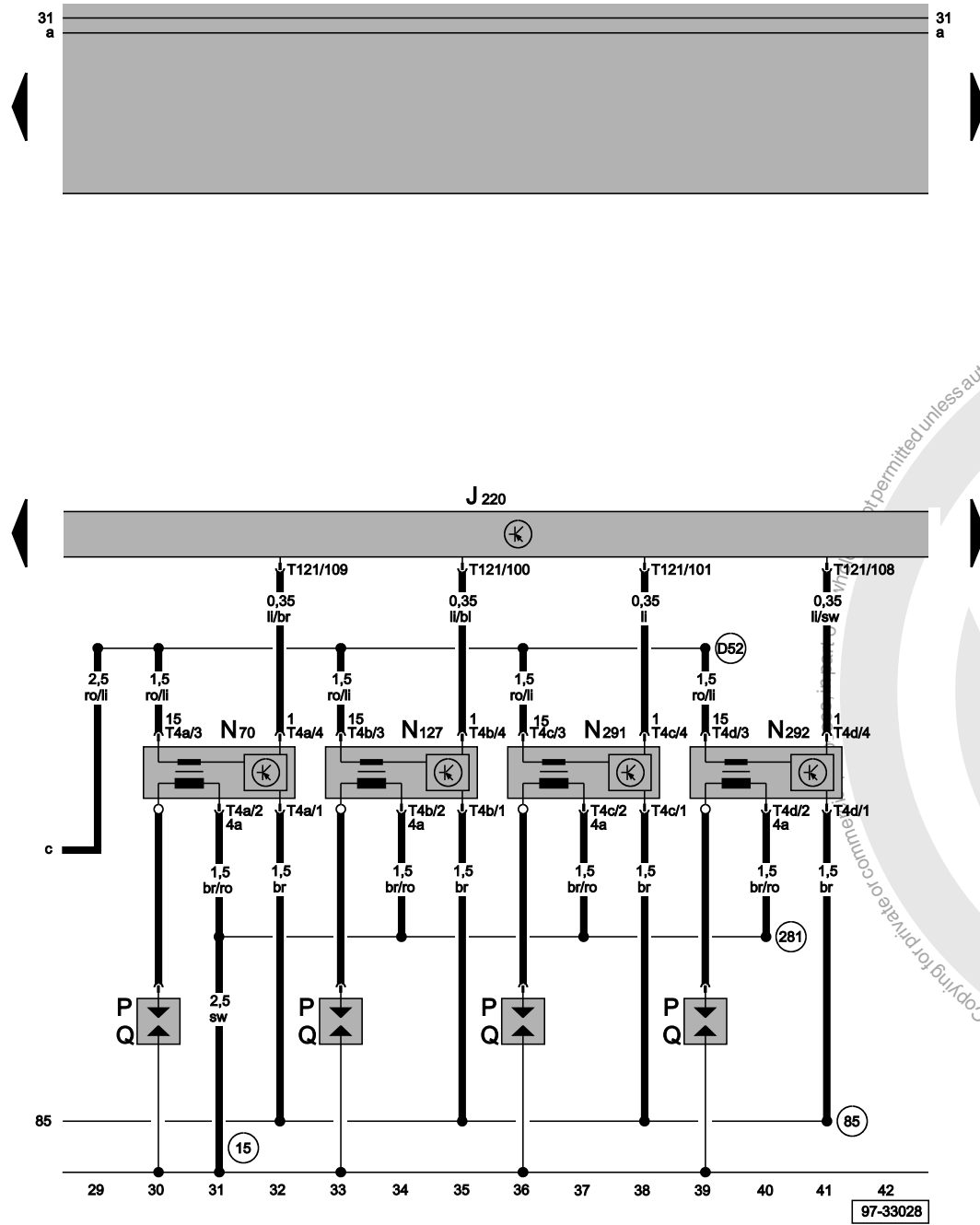
- (85) Earth connection 1, in engine compartment wiring harness
- (501) Screw connection 2 (30), on relay plate
- (608) Earth point, in centre of plenum chamber
- (A2) Positive connection (15), in dash panel wiring harness
- (A32) Positive connection (30), in dash panel wiring harness
- (A98) Positive connection 4 (30), in dash panel wiring harness
- (A104) Positive connection 2 (15), in dash panel wiring harness
- (D17) Positive connection 1 (15), in engine harness
- * from May 2003
- *** up to April 2003



Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection -1-, in engine compartment wiring harness
- 281 Earth connection -1-, in engine wiring harness
- D52 Positive connection (15a), in engine compartment wiring harness



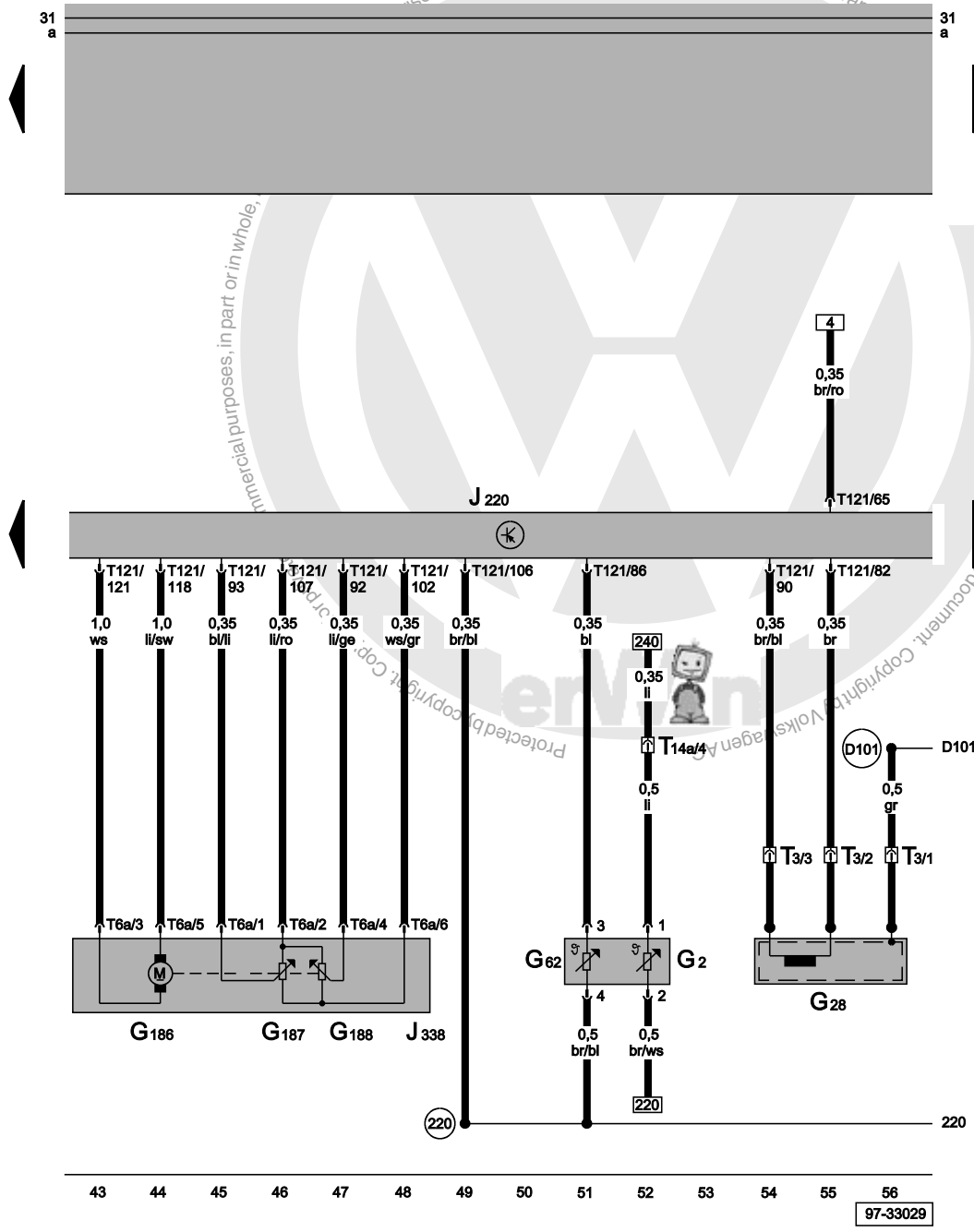
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97-33028

Motronic control unit, throttle valve module, engine speed sender, coolant temperature sender

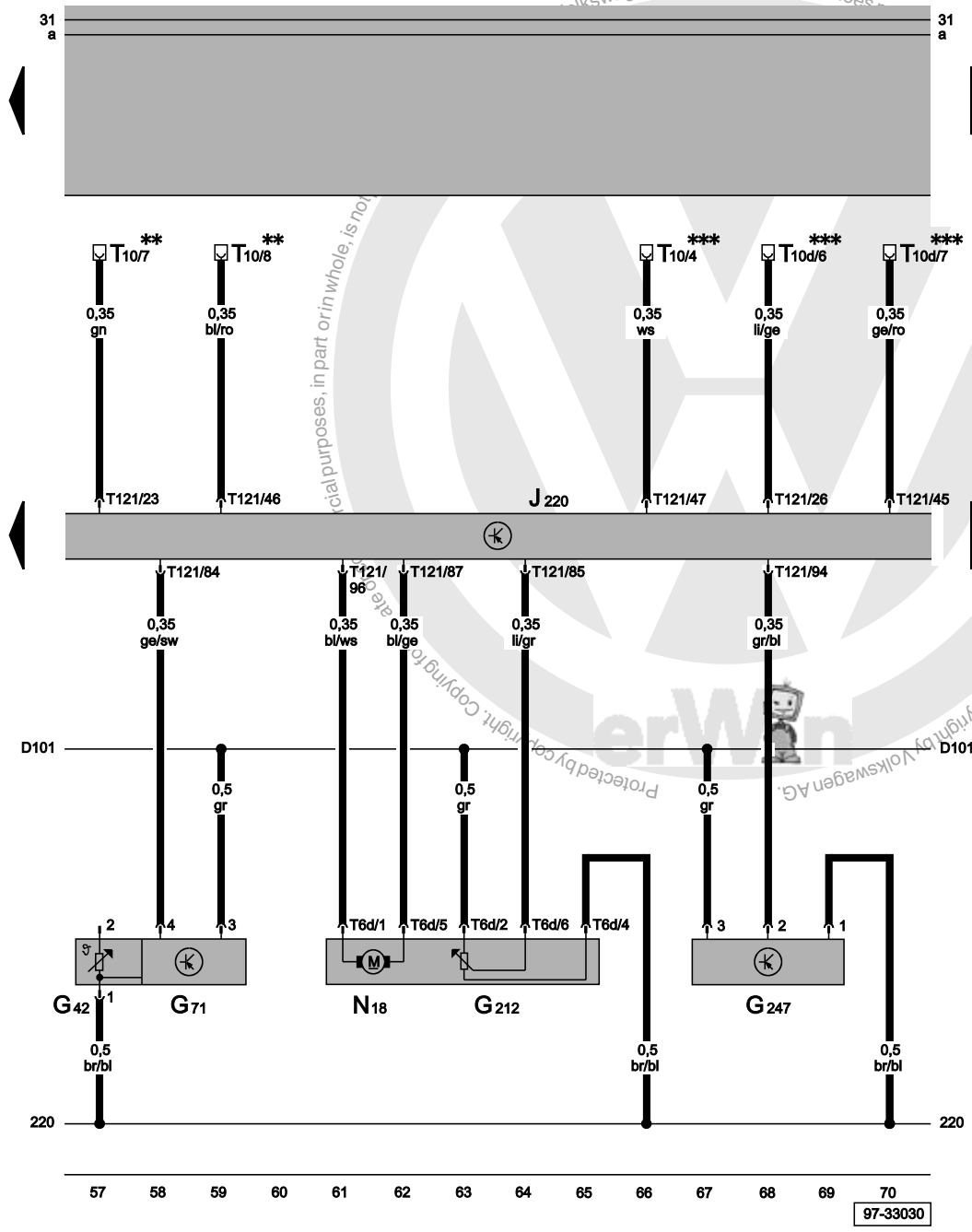
- G2 Coolant temperature sender
- G28 Engine speed sender
- G62 Coolant temperature sender
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender -1- (electric power control)
- G188 Throttle valve drive angle sender -2- (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector

- (220) Earth connection (sender earth), in engine wiring harness
- (D101) Connection 1, in engine compartment wiring harness



Motronic control unit, intake air temperature sender, intake manifold pressure sender, exhaust gas recirculation potentiometer, exhaust gas recirculation valve, fuel pressure sender

- G42 Intake air temperature sender
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- G247 Fuel pressure sender
- J220 Motronic control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- T6d 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- ** connection air conditioning
- *** radiator fan control unit connection

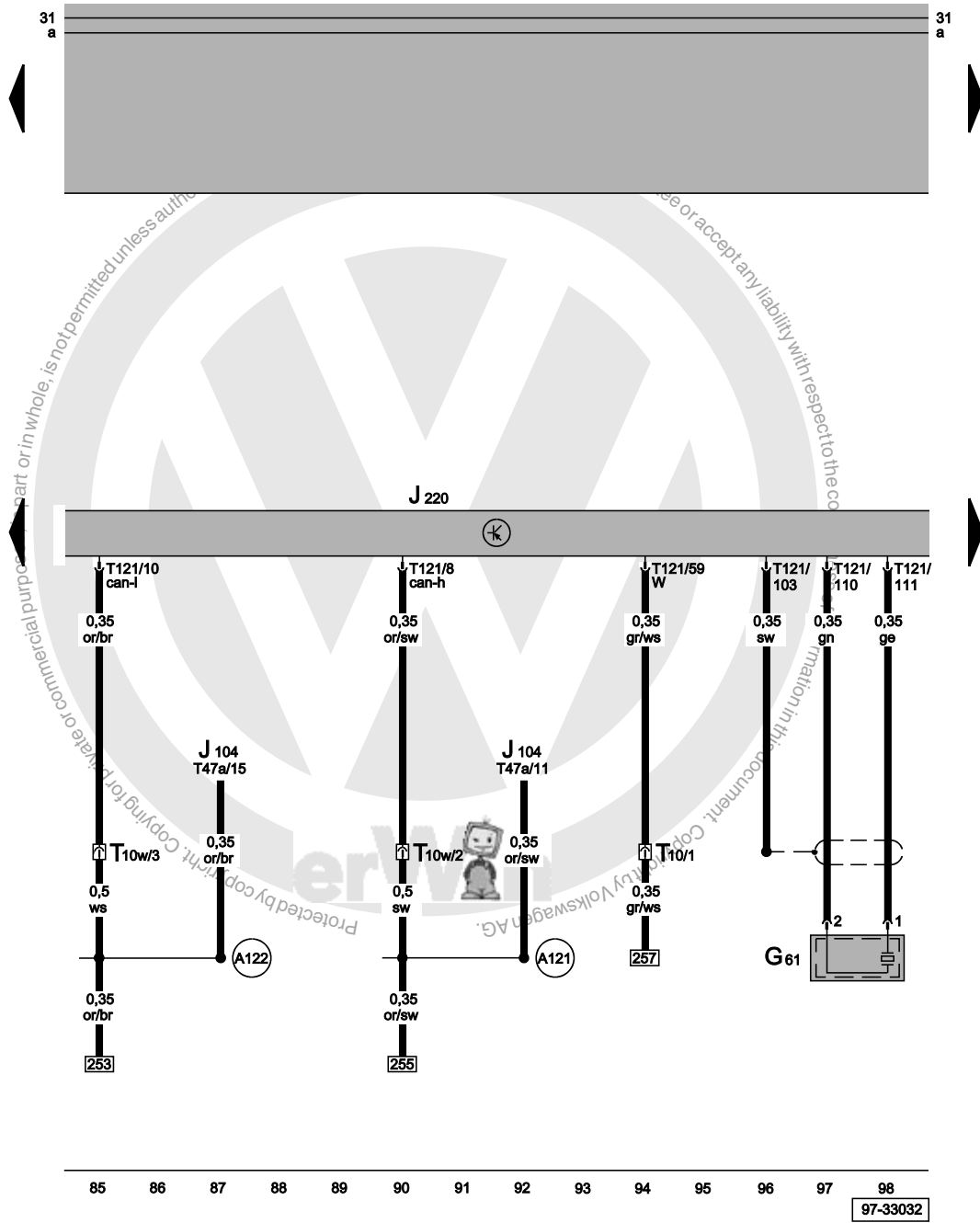


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- rs = pink

Motronic control unit, knock sensor

- G61 Knock sensor I
- J104 ABS/ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness



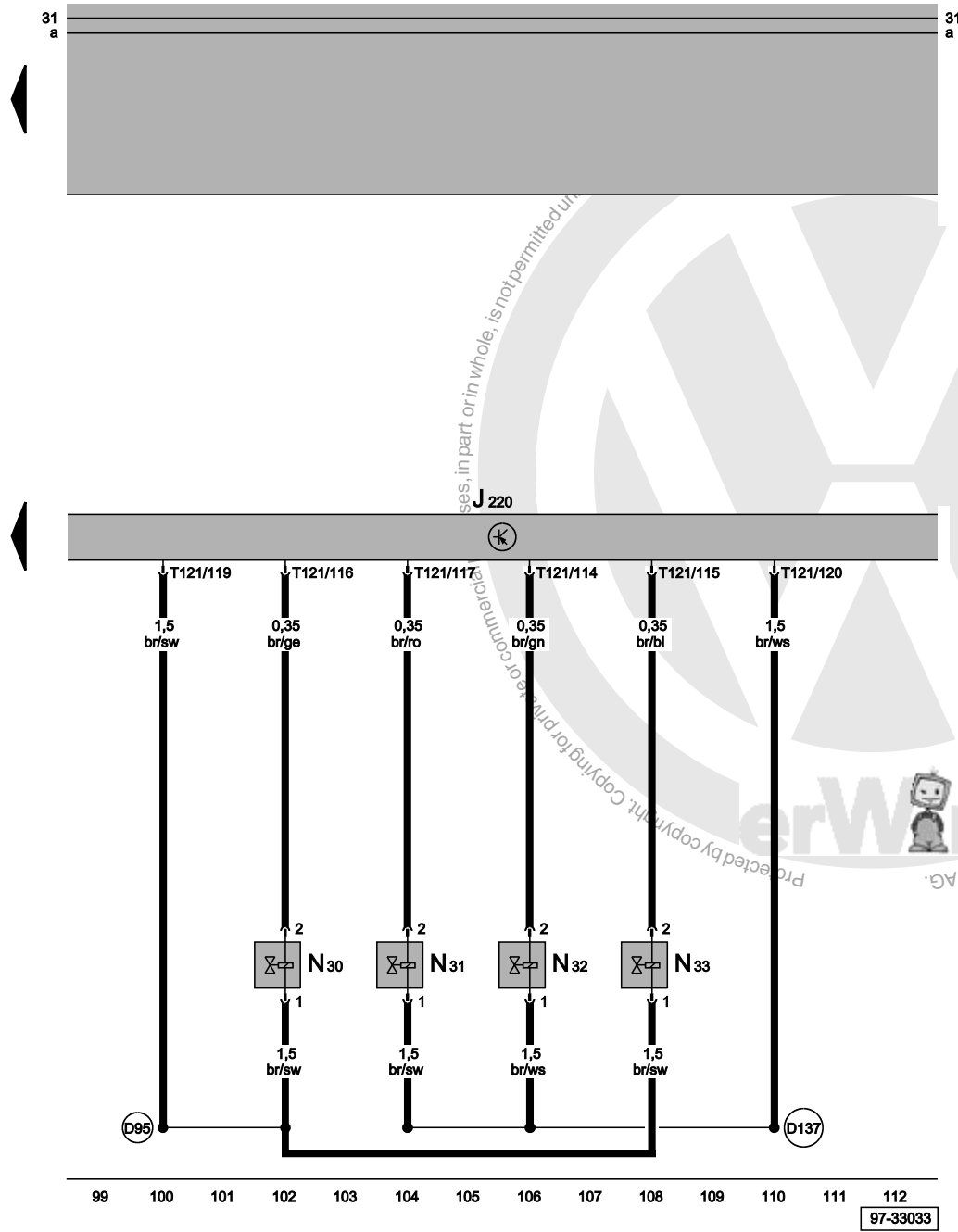
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Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- T121 121-pin connector

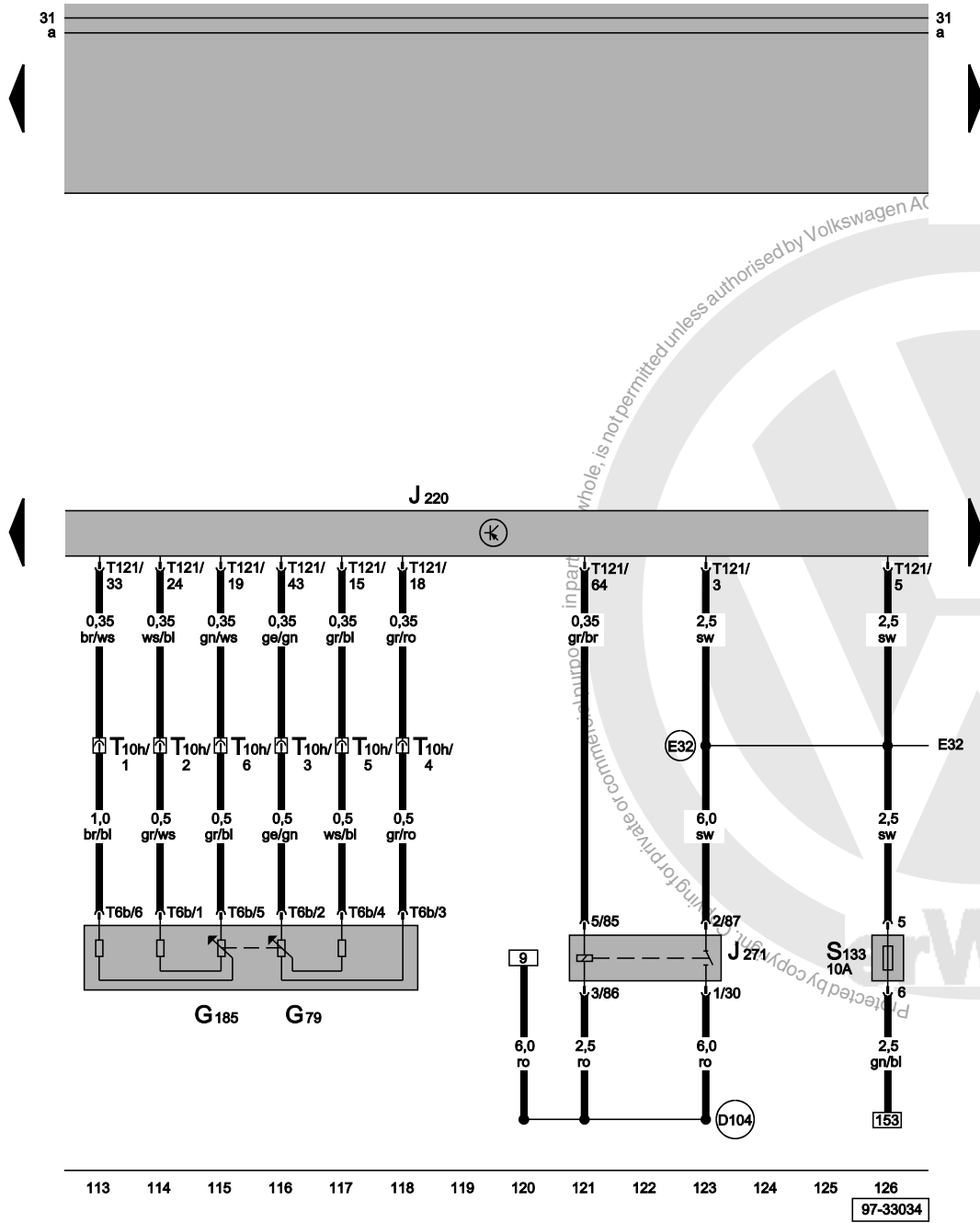
(D95) Connection (injectors), in engine compartment wiring harness

(D137) Connection -2- (injectors), in engine compartment wiring harness



Motronic control unit, accelerator position sender, Motronic current supply relay

- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S133 Fuse 3, in protective housing on left in engine compartment
- T6b 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E32 Connection (87), in Motronic wiring harness
- D104 Positive connection 2 (30a), in engine compartment wiring harness

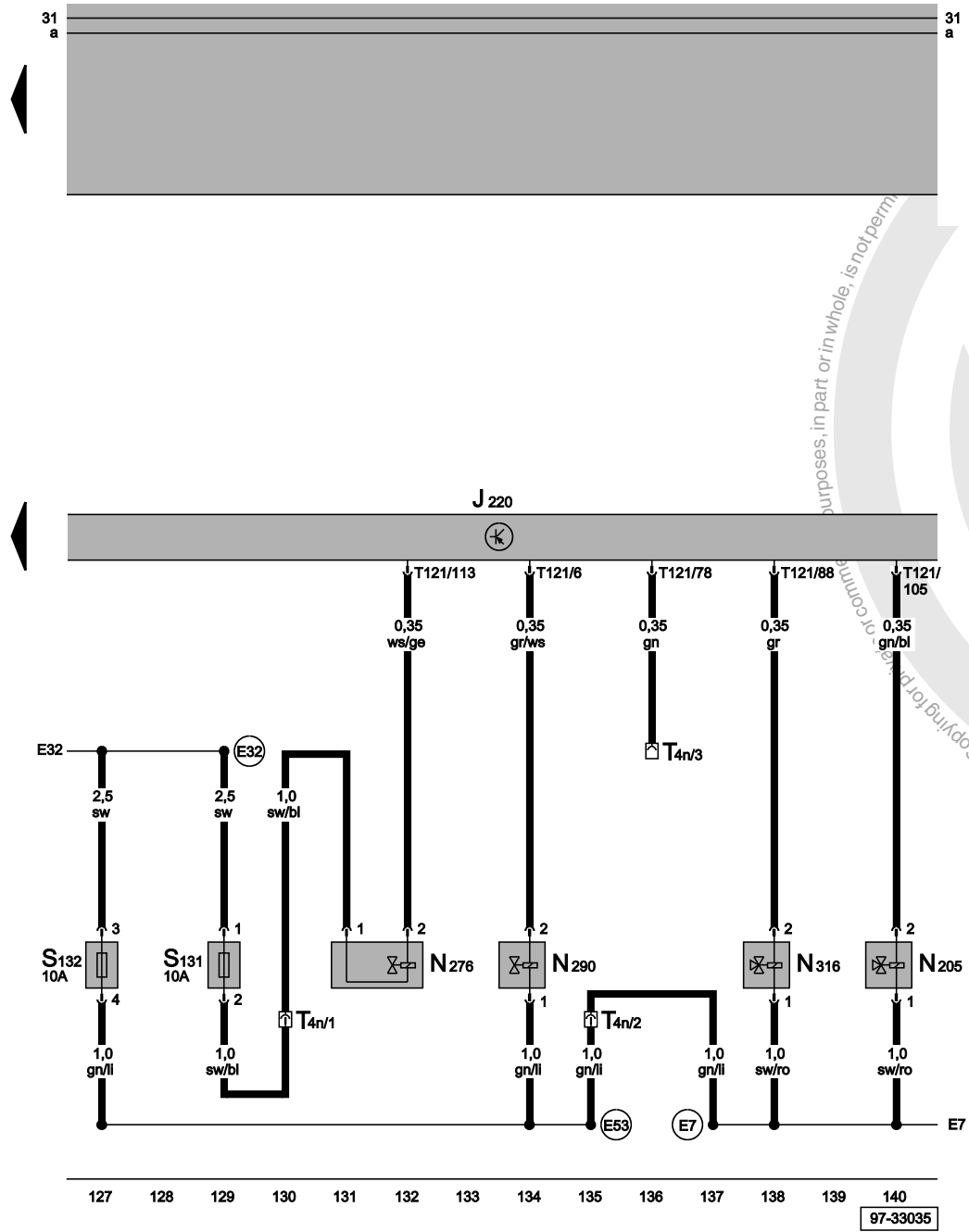


97-33034

Motronic control unit, inlet camshaft control valve, fuel pressure regulating valve, fuel metering valve, intake manifold flap air flow control valve

- J220 Motronic control unit, in centre plenum chamber
- N205 Inlet camshaft control valve -1-
- N276 Fuel pressure regulating valve
- N290 Fuel metering valve
- N316 Intake manifold flap air flow control valve
- S131 Fuse 1, in protective housing on left in engine compartment
- S132 Fuse 2, in protective housing on left in engine compartment
- T4n 4-pin connector, in cable channel left in engine compartment
- T121 121-pin connector

- (E7) Positive connection (87a), in Motronic wiring harness
- (E32) Connection (87), in Motronic wiring harness
- (E53) Connection 2 (87a), in engine wiring harness



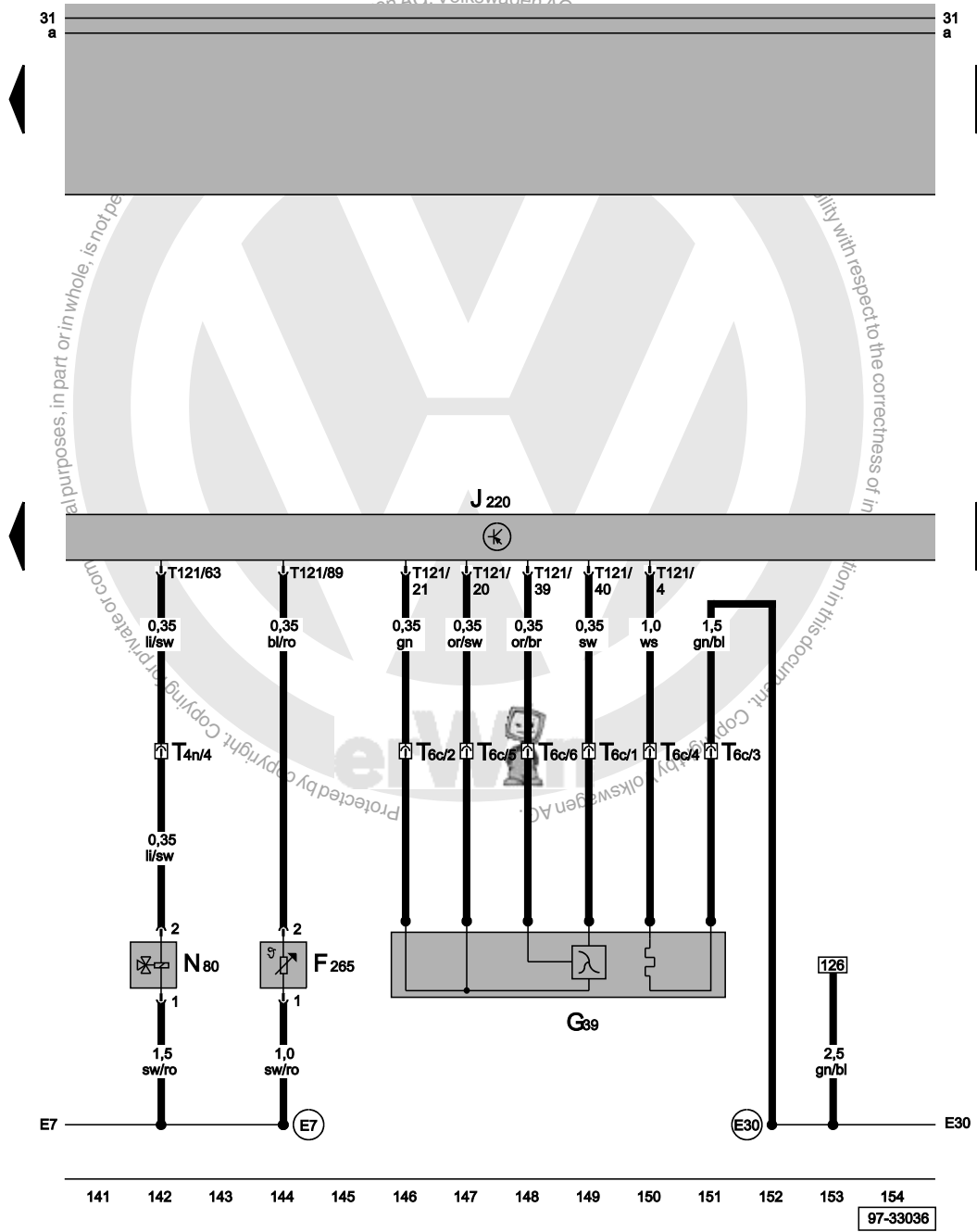
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- rs = pink

97-33035

Motronic control unit, lambda probe, map-controlled engine cooling system thermostat, active charcoal filter system solenoid valve

- F265 Map-controlled engine cooling system thermostat
- G39 Lambda probe
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T4n 4-pin connector, in cable channel left in engine compartment
- T6c 6-pin connector, near catalytic converter
- T121 121-pin connector

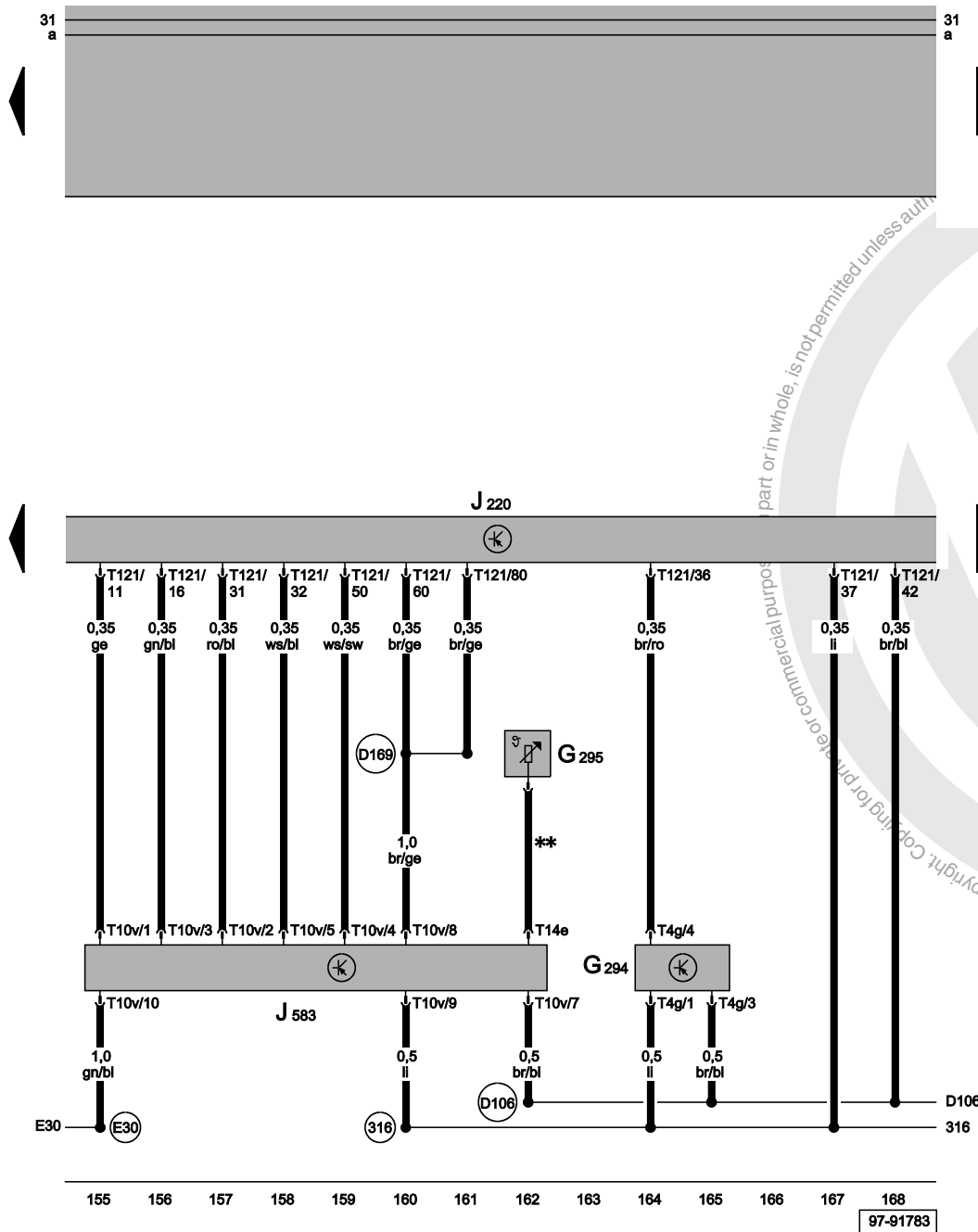
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness



Motronic control unit, NOx sensor control unit, NOx sender, brake servo pressure sensor

- G294 Brake servo pressure sensor
- G295 NOx sender
- J220 Motronic control unit, in centre plenum chamber
- J583 NOx sensor control unit, in connector protective housing, near catalytic converter
- T4g 4-pin connector
- T10v 10-pin connector
- T14e 14-pin connector**
- T121 121-pin connector

- (316) Earth connection (sender earth 2), in engine wiring harness
- (D106) Connection 4, in engine compartment wiring harness
- (D169) Connection (NOx), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness
- ** Connection is composed of several single wires

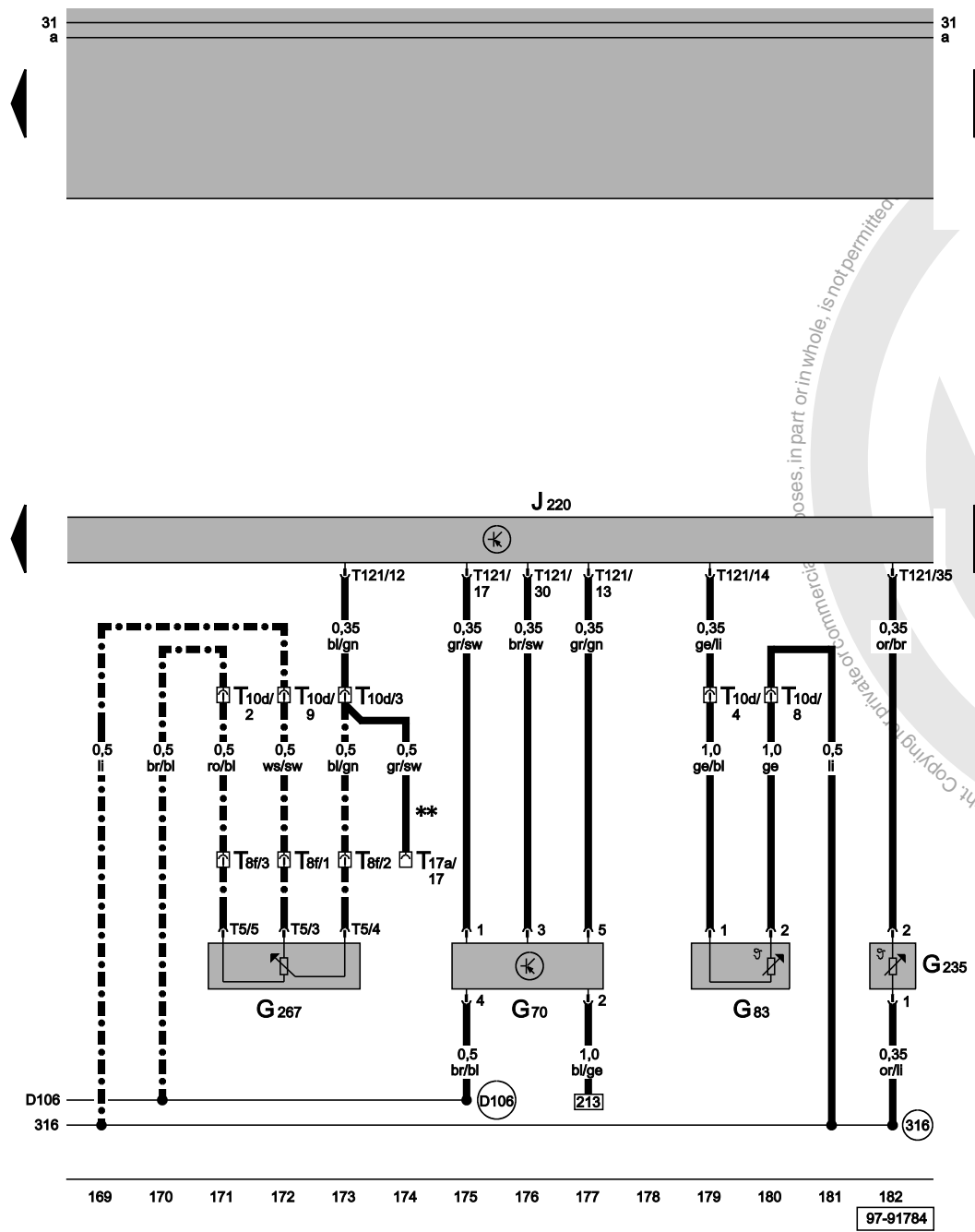


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Motronic control unit, potentiometer for temperature selection rotary knob, exhaust temperature sender, radiator outlet coolant temperature sender, air mass meter

- G70 Air mass meter
- G83 Radiator outlet coolant temperature sender
- G235 Exhaust gas temperature sender 1
- G267 Potentiometer, temperature selection rotary knob
- J220 Motronic control unit, in centre plenum chamber
- T5 5-pin connector
- T8f 8-pin connector, behind centre dash panel
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T17a 17-pin connector, behind centre dash panel
- T121 121-pin connector

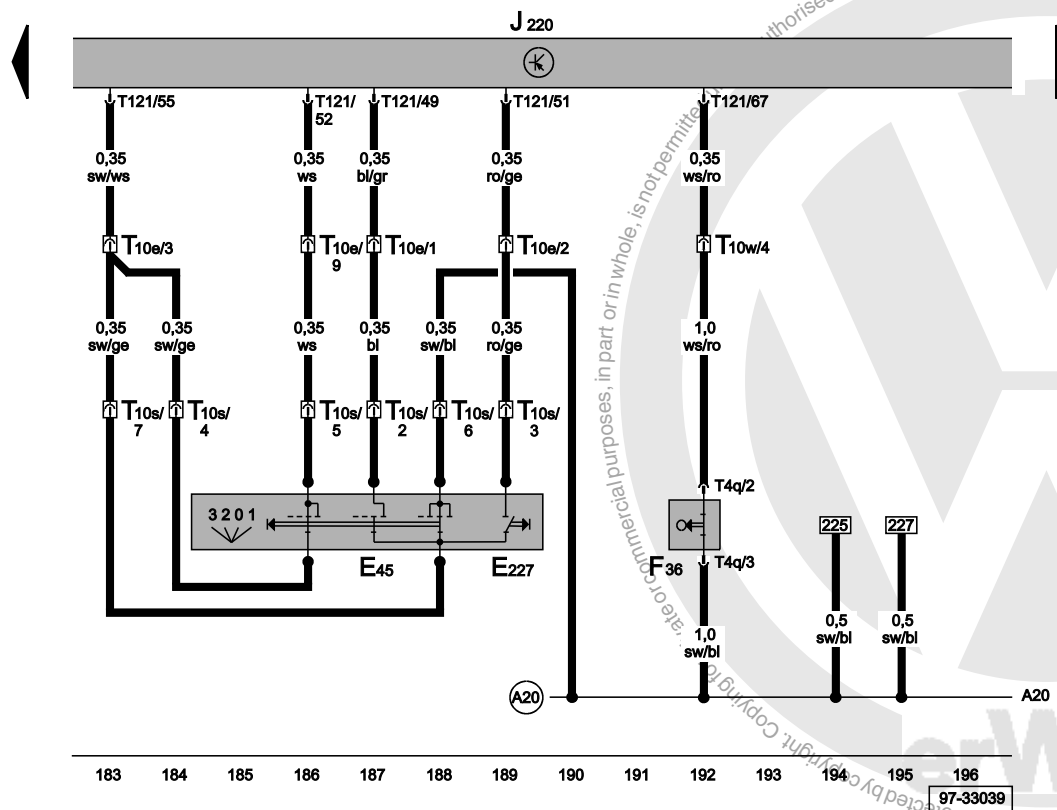
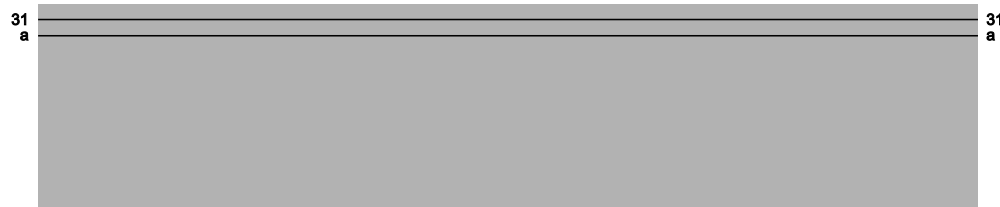
- (316) Earth connection (sender earth 2), in engine wiring harness
- (D106) Connection 4, in engine compartment wiring harness
- ** only models with Climatronic
- only models without air conditioning system/Climatronic



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Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch
- E227 Cruise control system (CCS) SET button
- F36 Clutch pedal switch
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- A20 Connection (15a), in dash panel wiring harness

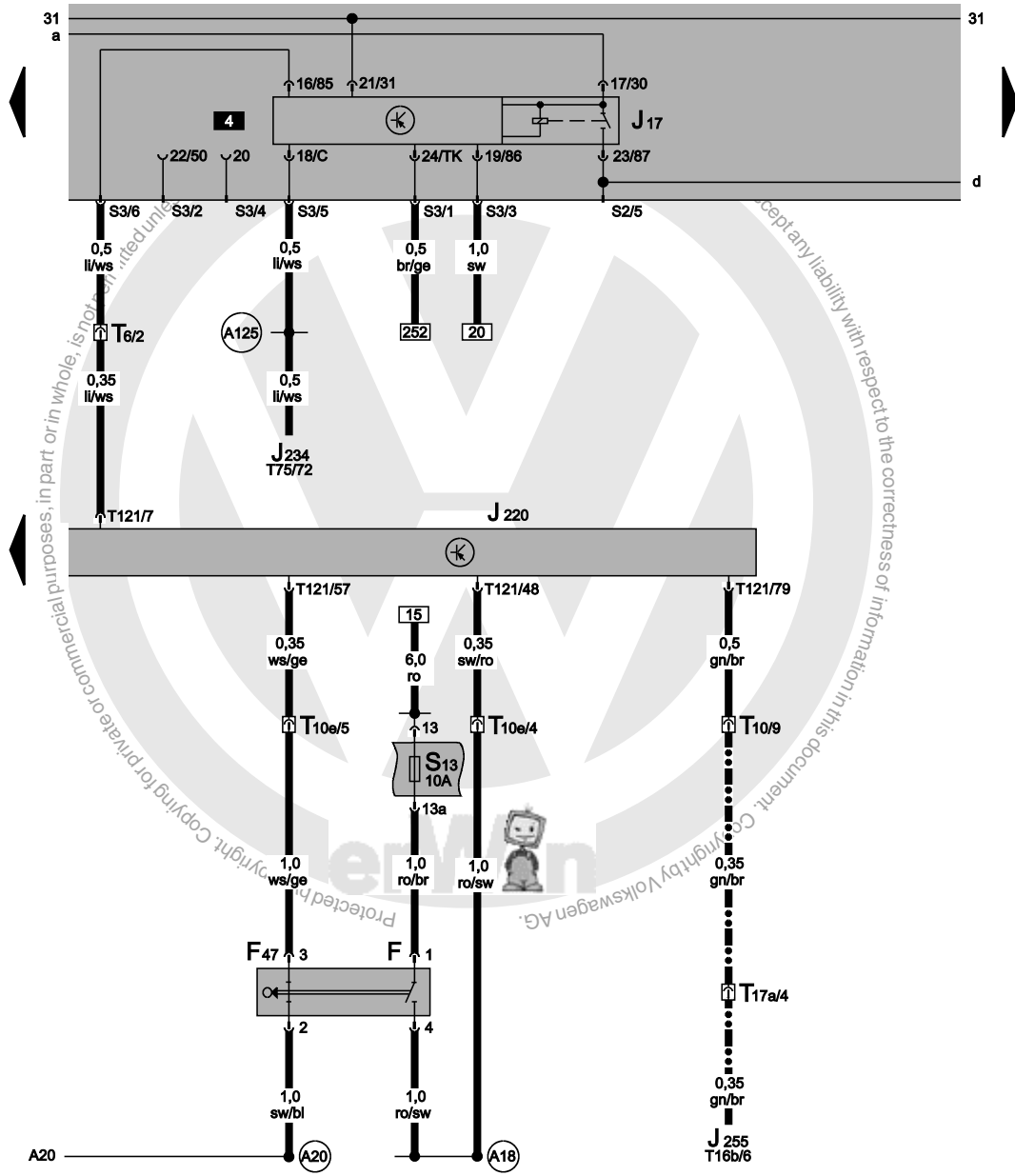


Motronic control unit, fuel pump relay, brake light switch, brake pedal switch

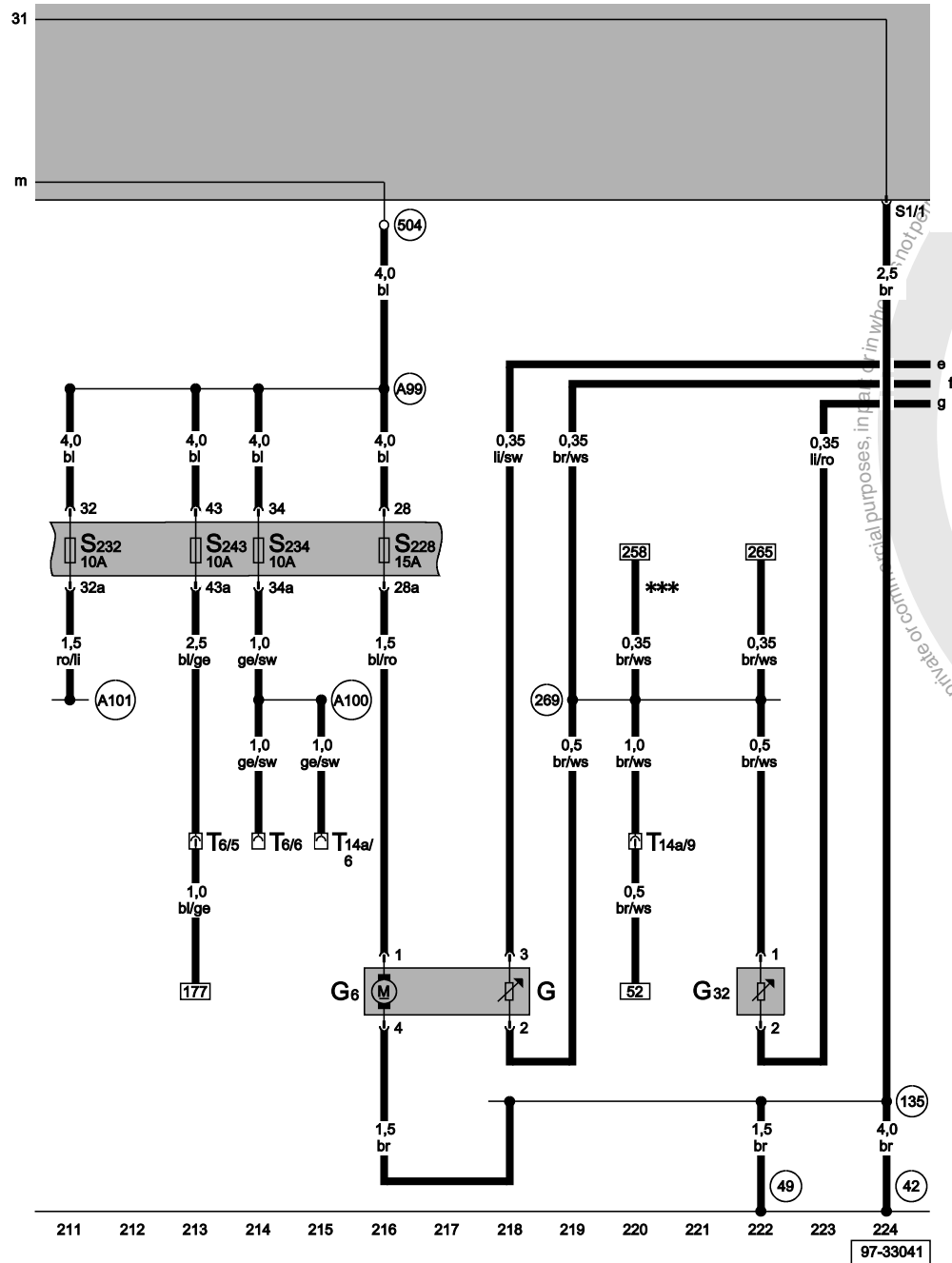
- F Brake light switch
- F47 Brake pedal switch
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- J255 Climatronic control unit
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector

- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (A125) Connection (crash signal), in dash panel wiring harness
- ...- only models with Climatronic

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Fuel pump, fuel gauge sender, coolant shortage indicator sender



- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in engine compartment wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A101 Connection 3 (87), in dash panel wiring harness
- *** only models without Climatronic

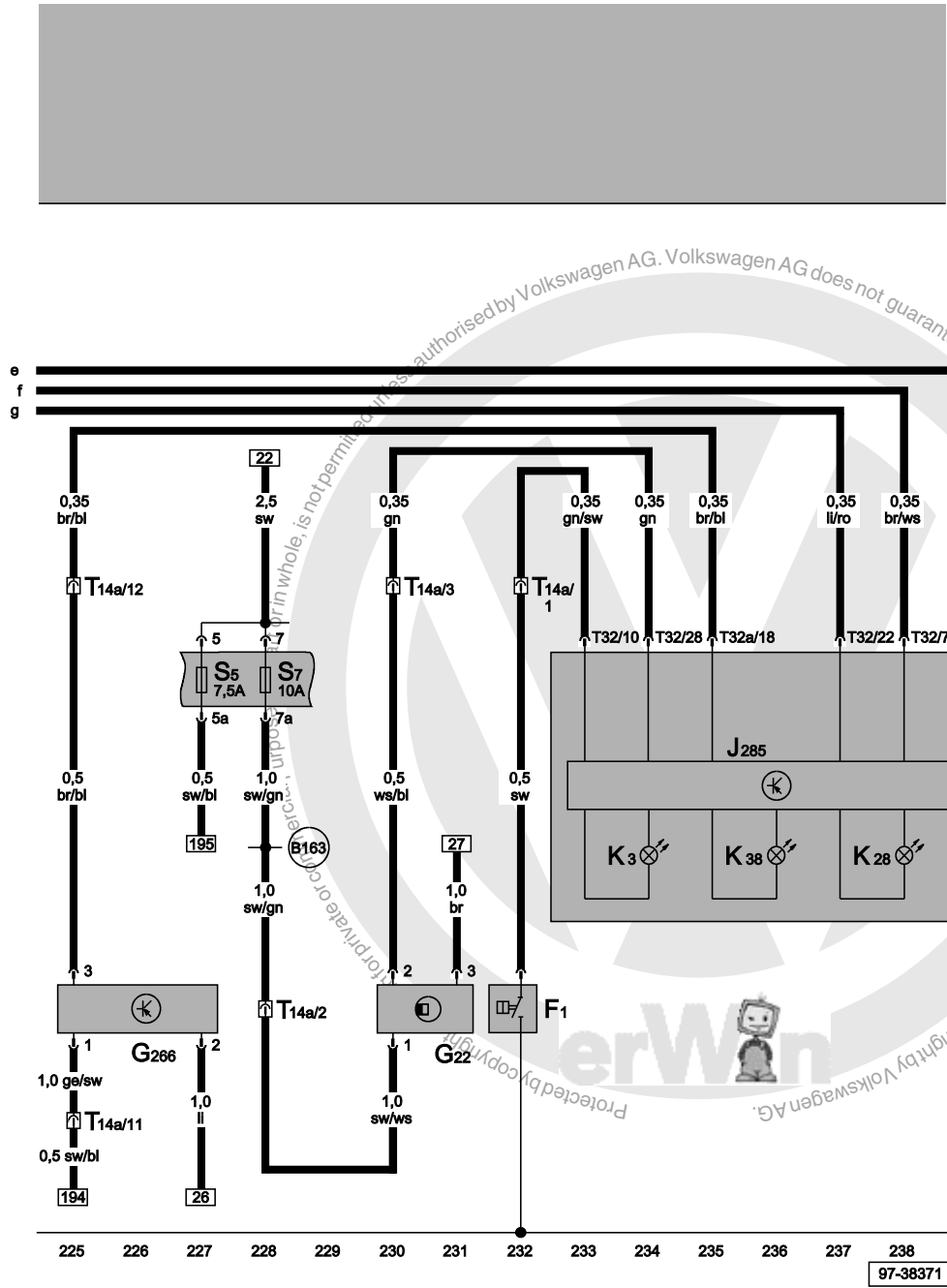
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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender*
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp*
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green

(B163) Positive connection 1 (15), in interior wiring harness

* only flexible service interval display



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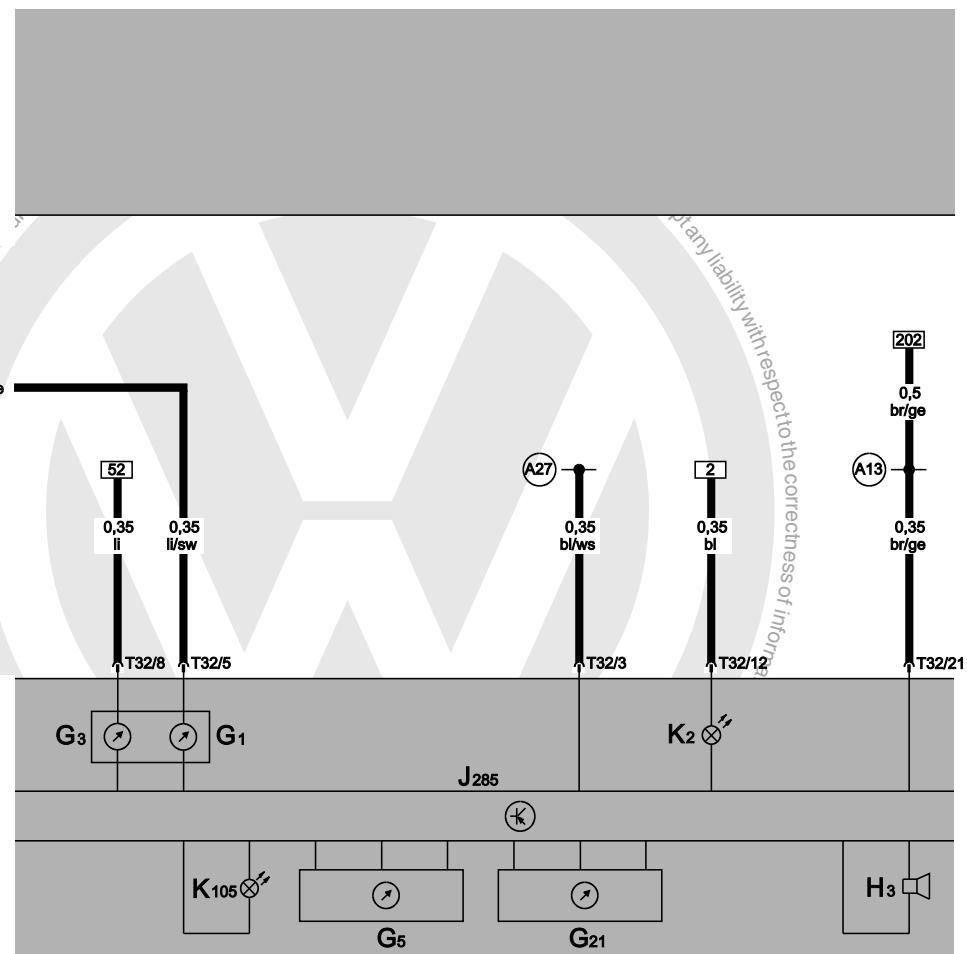
97-38371

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

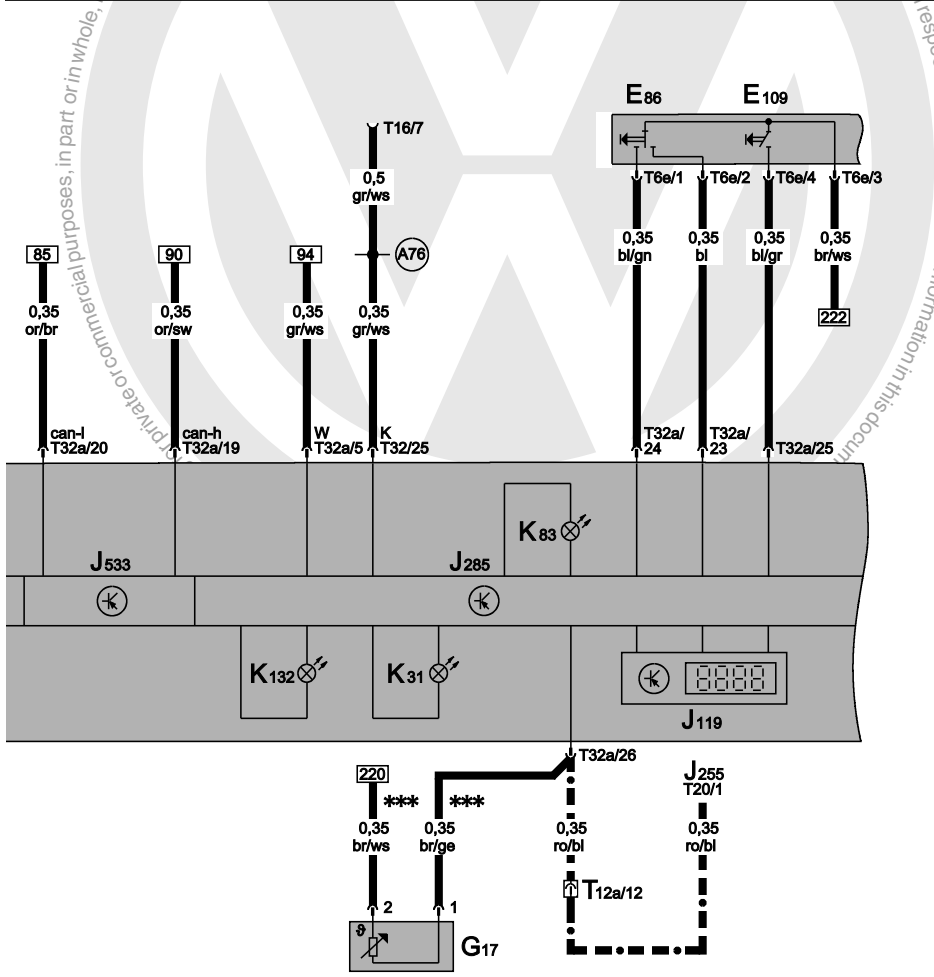
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * revolution signal engine control unit

Private or commercial purposes, in part or in whole, is not permitted.

No liability with respect to the correctness of information.



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** only models without Climatronic
- .- only models with Climatronic

1.8 I/110 kW Motronic, engine code AUM

from May 2002

1.8 I/132 kW Motronic, engine code AUQ

from May 2002

Notes:

For information concerning

- ◆ Position of relays and fuses

- ◆ Multi-pin connections

- ◆ Control units and relays

- ◆ Earth connections

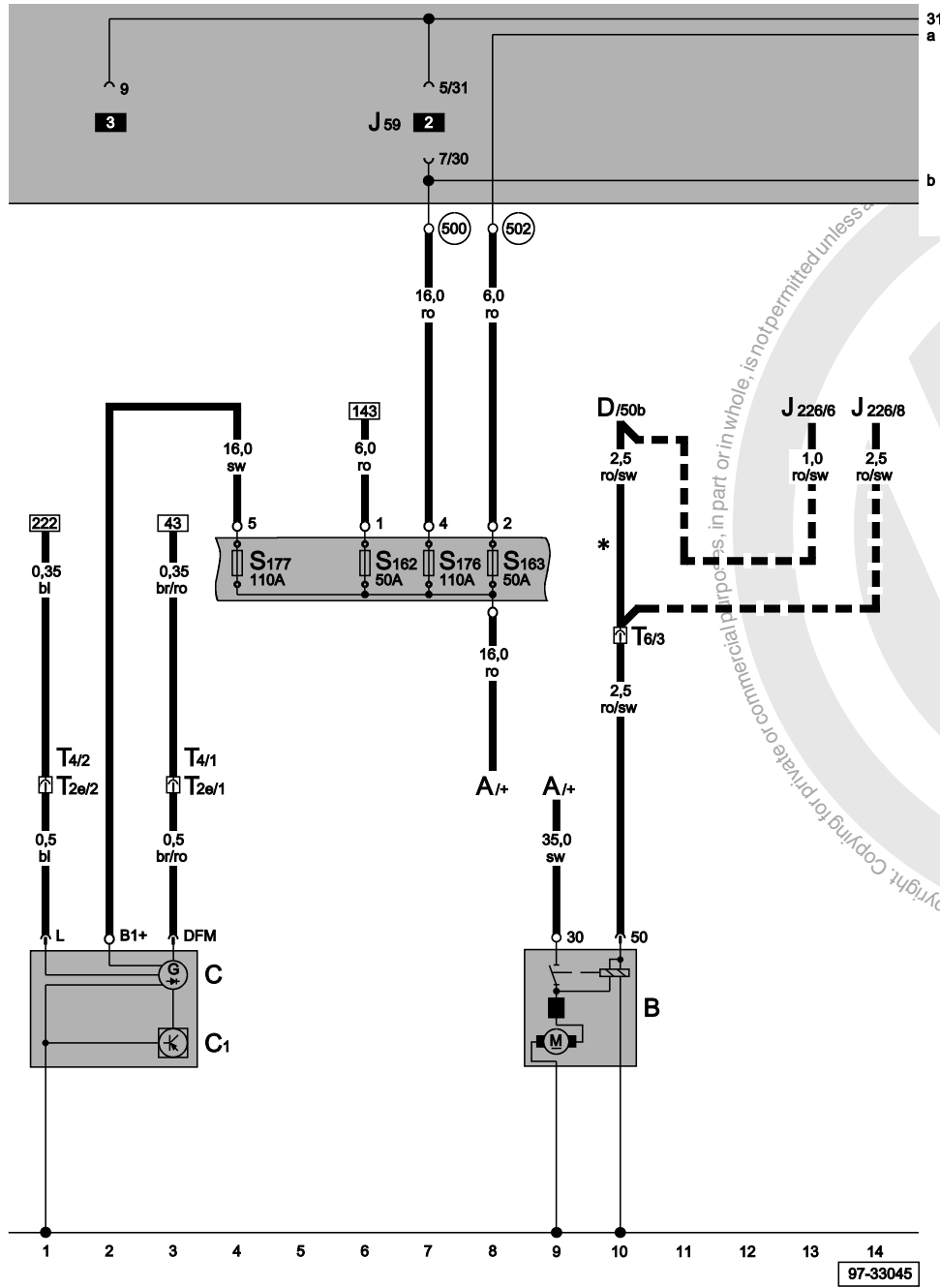
- ⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

- ⇒ guided fault finding





Alternator, starter

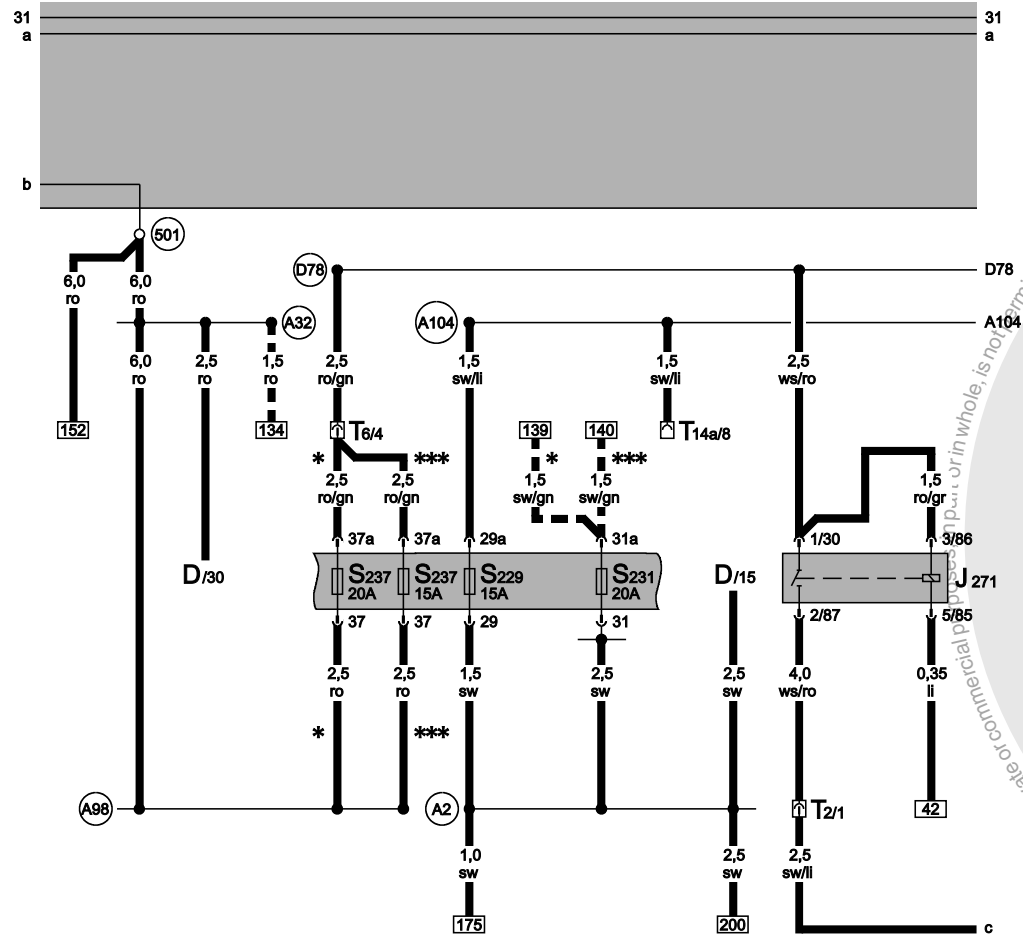
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse 1 (30), in fuse holder on battery
- S163 Fuse 2 (30), in fuse holder on battery
- S176 Fuse 4 (30), in fuse holder on battery
- S177 Fuse 5 (30), in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- models with automatic gearbox only

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-33045

Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S229 Fuse 29 in fuse holder
- S231 Fuse 31 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- * from May 2003
- *** up to April 2003
- models with automatic gearbox only

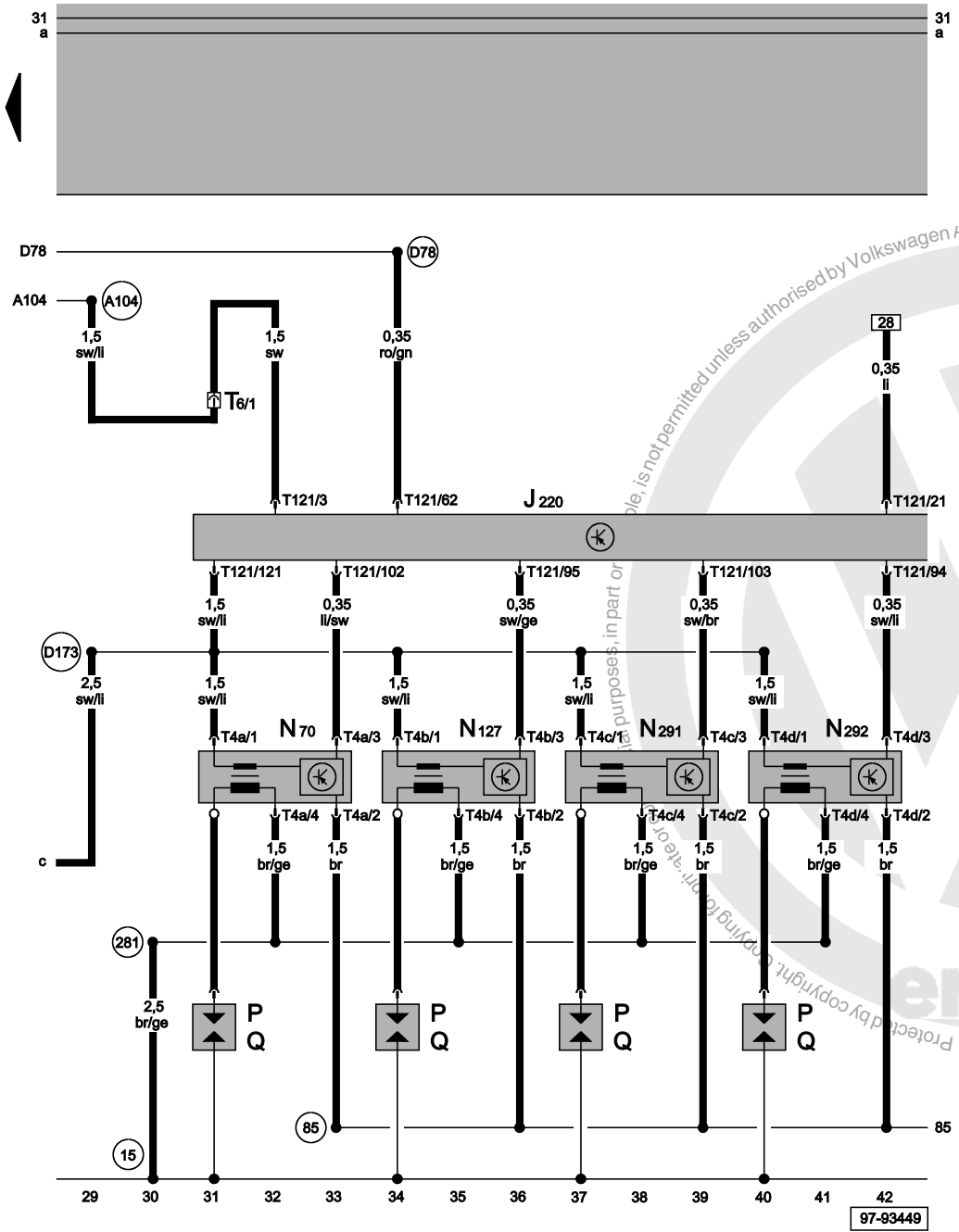


- ws = white
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- bl = blue
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- li = purple
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- rs = pink

Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 2 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection 1, in engine compartment wiring harness
- 281 Earth connection 1, in engine harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness

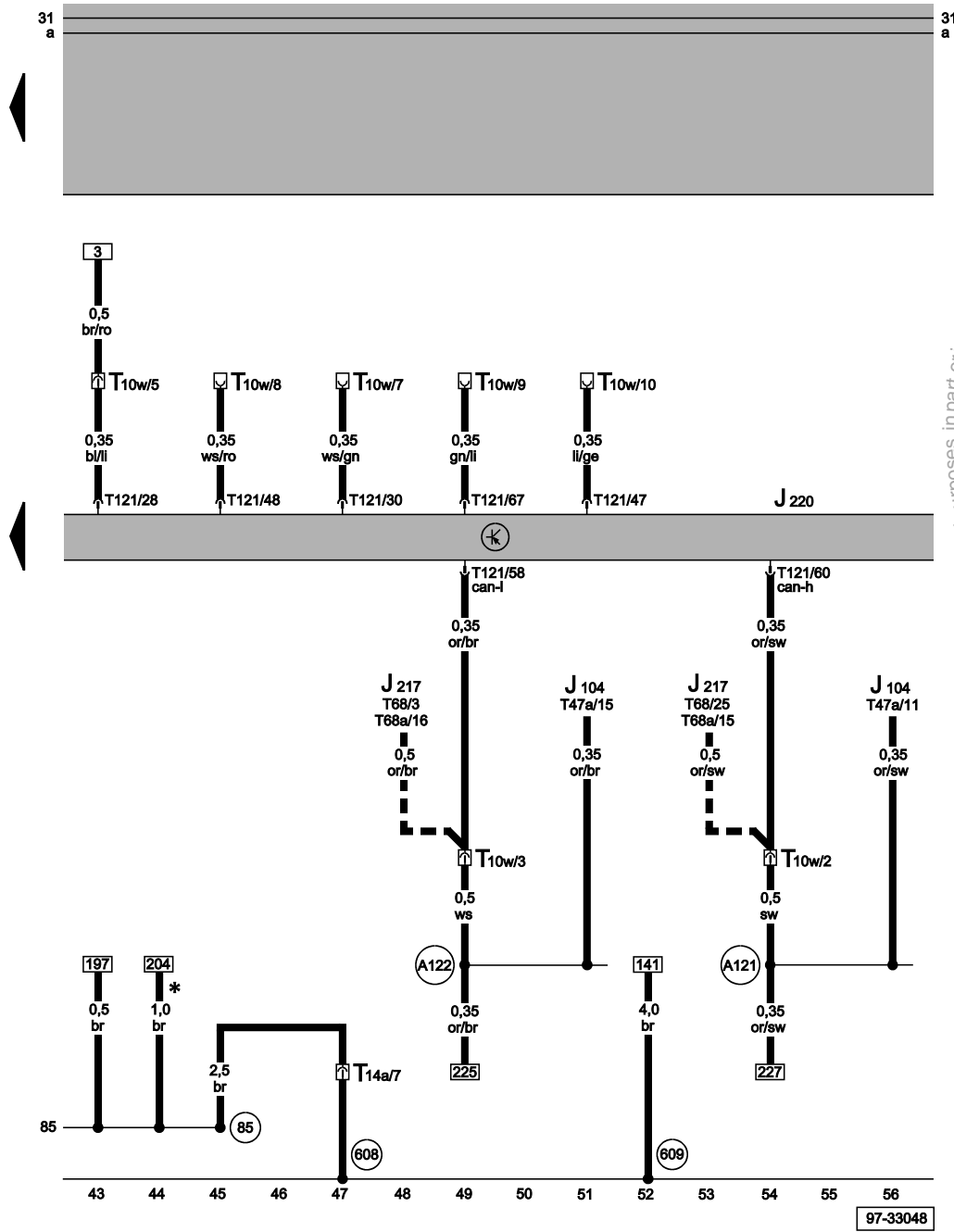


- ws = white
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- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
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97-93449

Motronic control unit

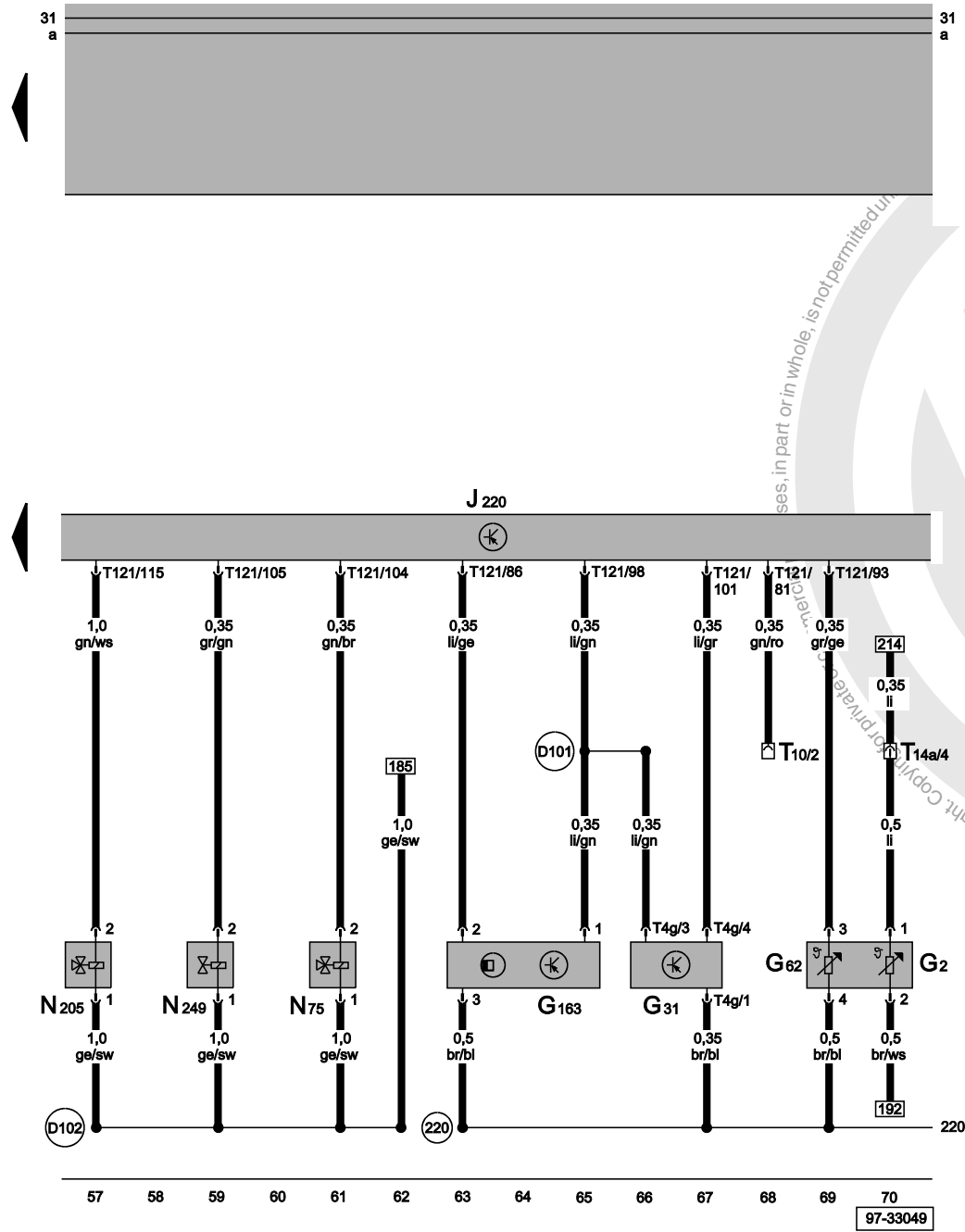
- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector, models with 4-speed automatic gearbox (AG4)
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector
- 85 Earth connection -1-, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- * models with manual gearbox/automatic gearbox (AG4) only
- models with automatic gearbox only



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Motronic control unit, coolant temperature sender, Hall sender, charge air pressure sender, charge pressure control solenoid valve, turbocharger air recirculation valve, inlet camshaft control valve 1

- G2 Coolant temperature sender
- G31 Charge air pressure sender
- G62 Coolant temperature sender
- G163 Hall sender
- J220 Motronic control unit, in centre plenum chamber
- N75 Charge pressure control solenoid valve
- N205 Inlet camshaft control valve 1
- N249 Turbocharger air recirculation valve
- T4g 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- D101 Connection 1, in engine wiring harness
- D102 Connection 2, in engine wiring harness

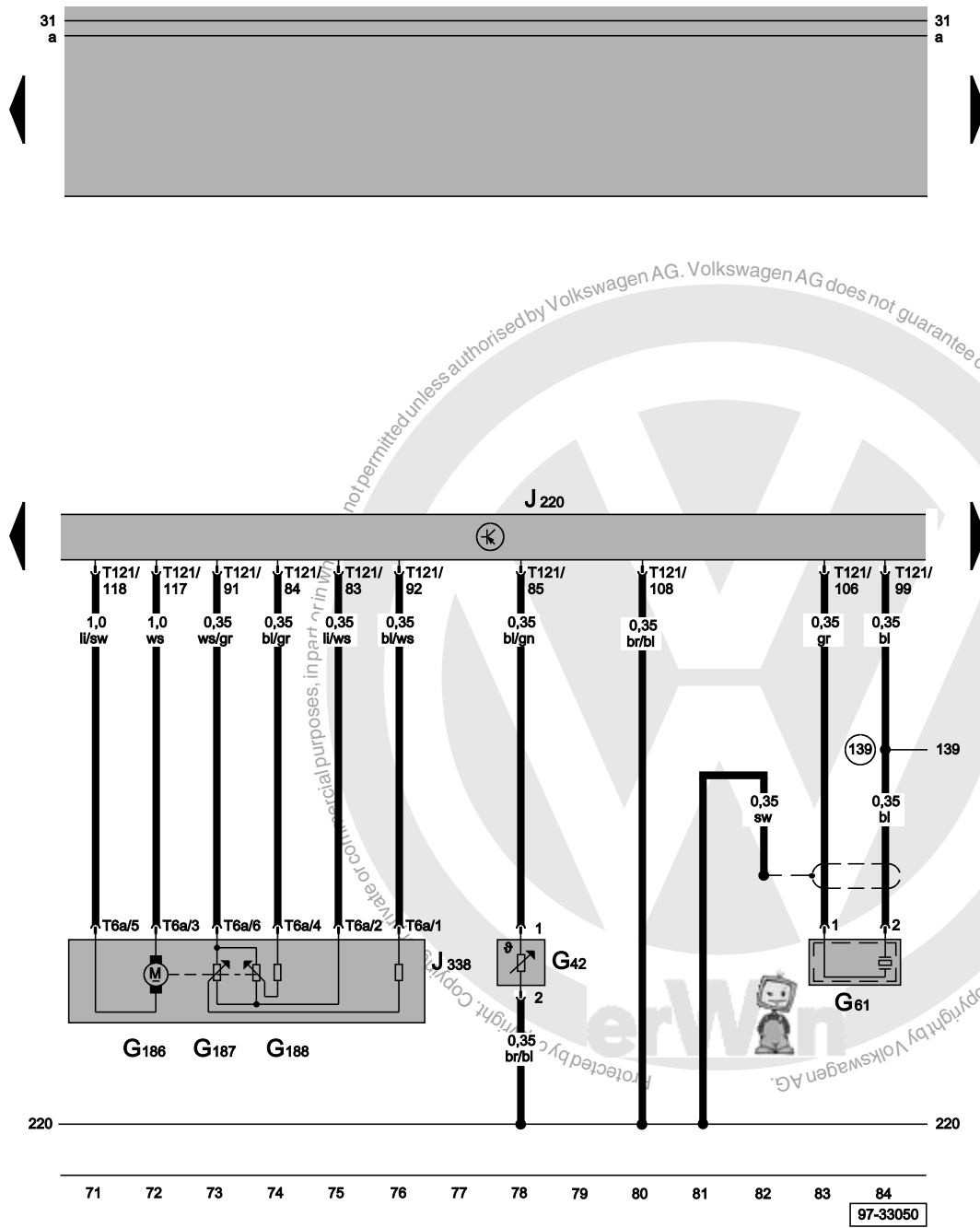


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Motronic control unit, throttle valve module, throttle valve drives angle sender (electric throttle), knock sensor 1, intake air temperature sender

- G42 Intake air temperature sender
- G61 Knock sensor 1
- G186 Throttle valve drive (electric power control)
- G187 Throttle valve drive angle sender 1 (electric power control)
- G188 Throttle valve drive angle sender 2 (electric power control)
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T6a 6-pin connector
- T121 121-pin connector

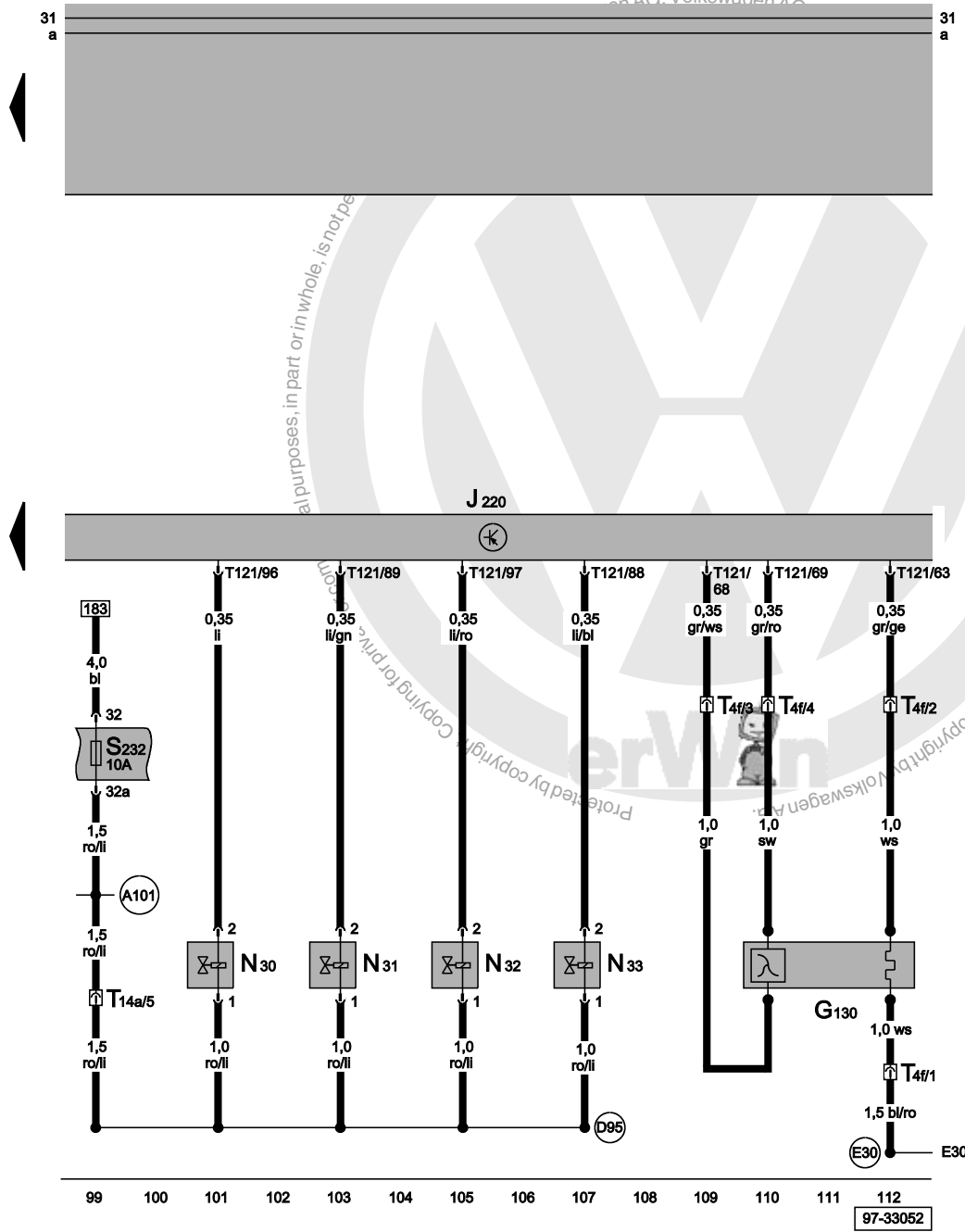
139 Earth connection (sender earth), in Motronic wiring harness



Motronic control unit, injectors, lambda probe after catalytic converter

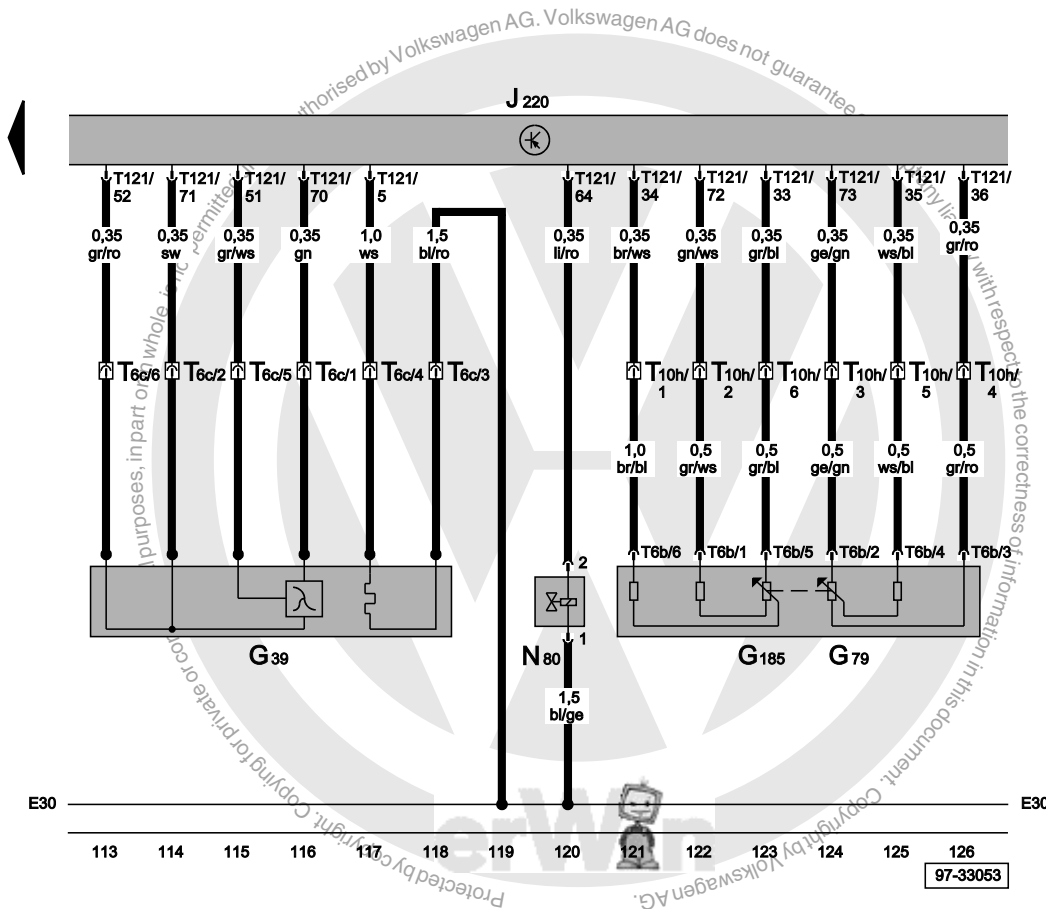
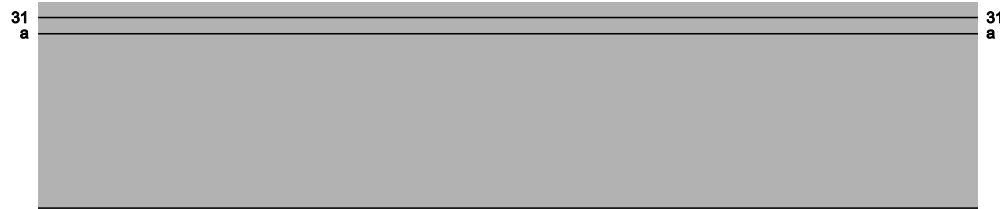
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4f 4-pin connector, near catalytic converter
- T14a 14-pin connector, near battery
- T121 121-pin connector

- (A101) Connection 3 (87), in dash panel wiring harness
- (D95) Connection (injectors), in engine compartment wiring harness
- (E30) Connection (87a), in engine wiring harness



Motronic control unit, accelerator position sender, lambda probe, active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender -2-
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

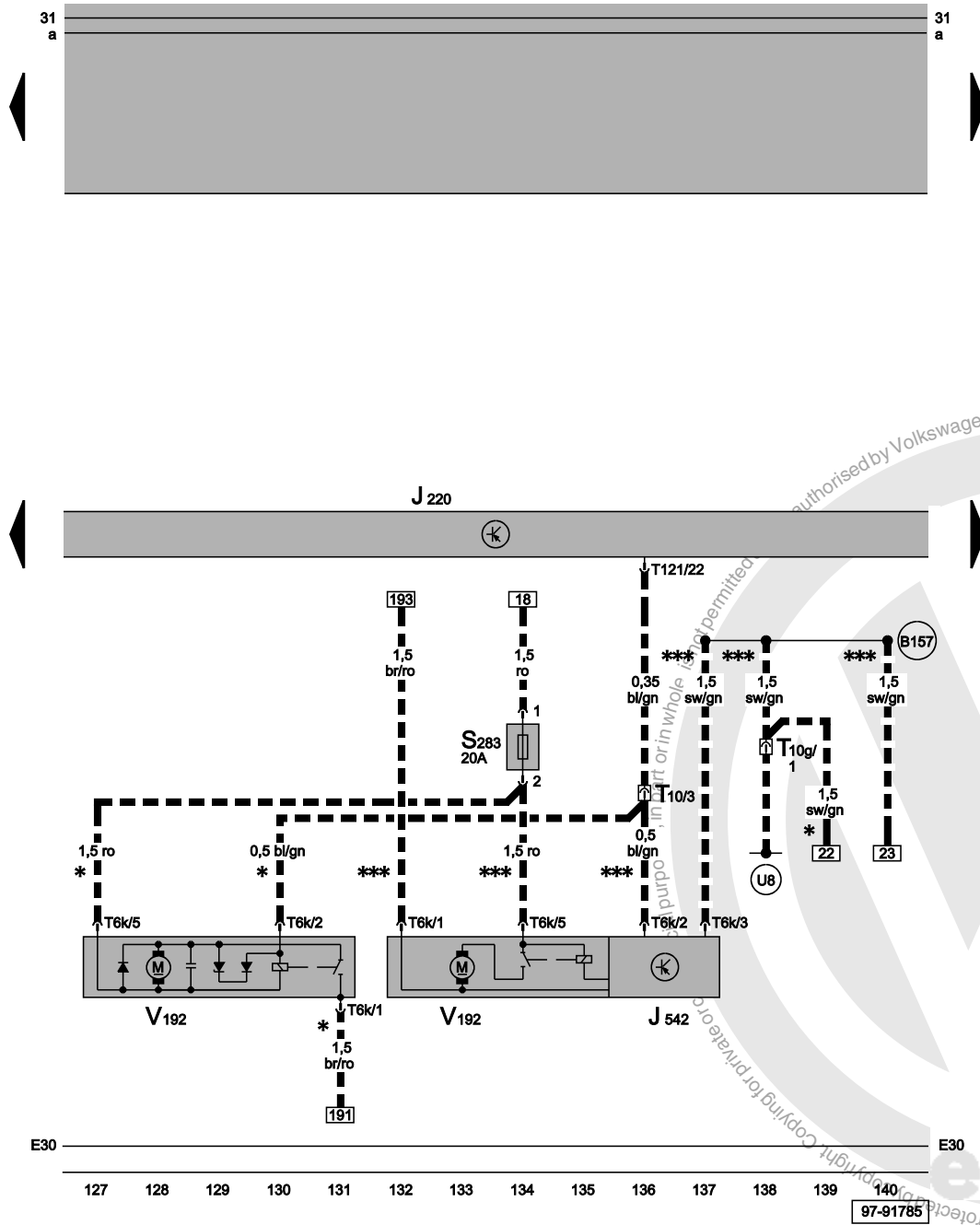


Simos control unit, brake servo control unit, vacuum pump for brakes

- J220 Motronic control unit, in centre plenum chamber
- J542 Brake servo control unit
- S283 Brake vacuum pump fuse, above the relay plate
- T6k 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V192 Vacuum pump for brakes

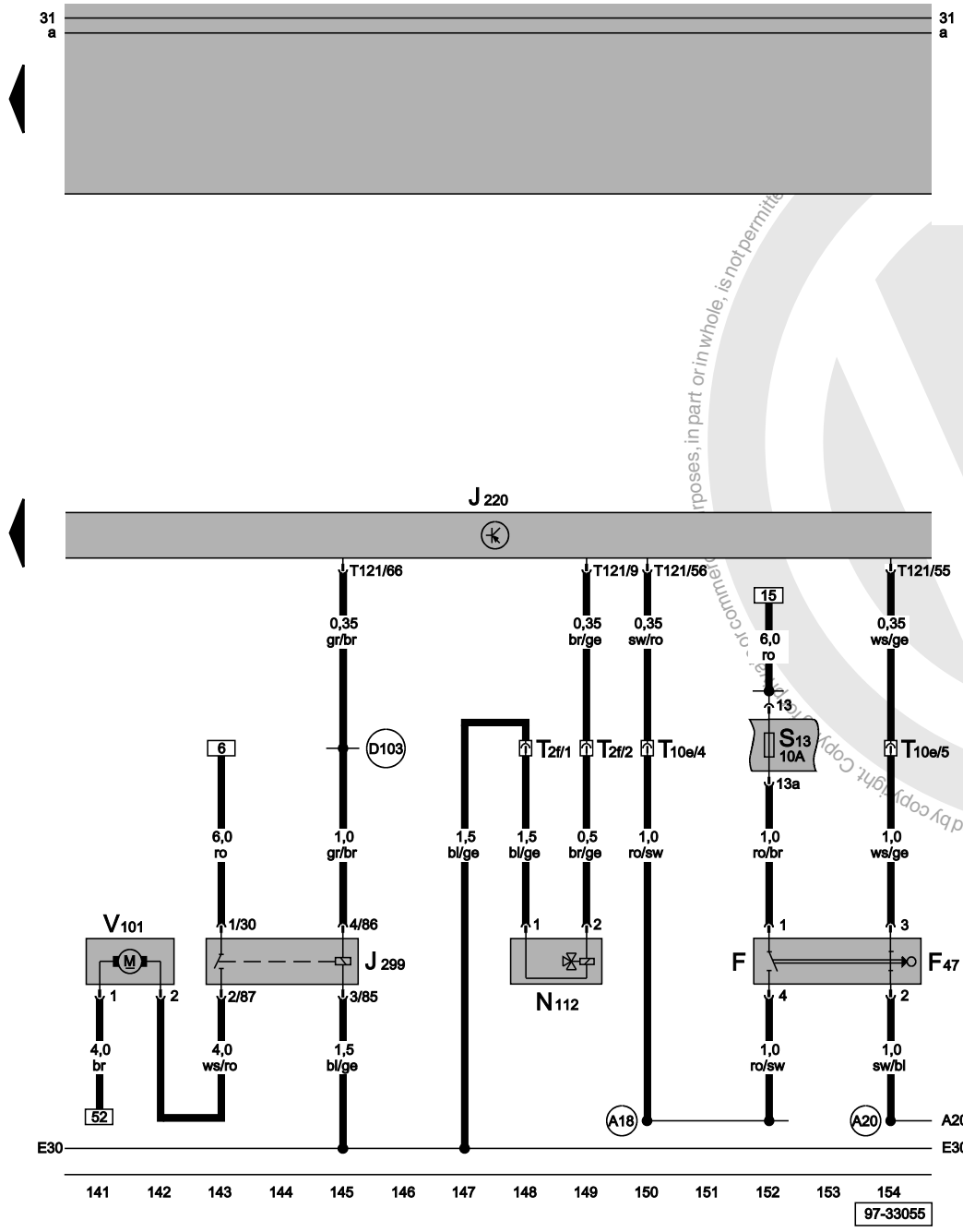
- (B157) Positive connection 3 (15a), in interior wiring harness
- (U8) Positive connection (15a), in automatic gearbox wiring harness

* from May 2003
 *** up to April 2003
 --- models with automatic gearbox only



Motronic control unit, secondary air pump relay, secondary air pump motor, secondary air inlet valve, brake light switch, cruise control system brake pedal switch

- F Brake light switch
- F47 Cruise control system brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- T2f 2-pin connector, in left engine compartment
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor
- (A18) Connection (54), in dash panel wiring harness
- (A20) Connection (15a), in dash panel wiring harness
- (D103) Connection 3, in engine compartment wiring harness



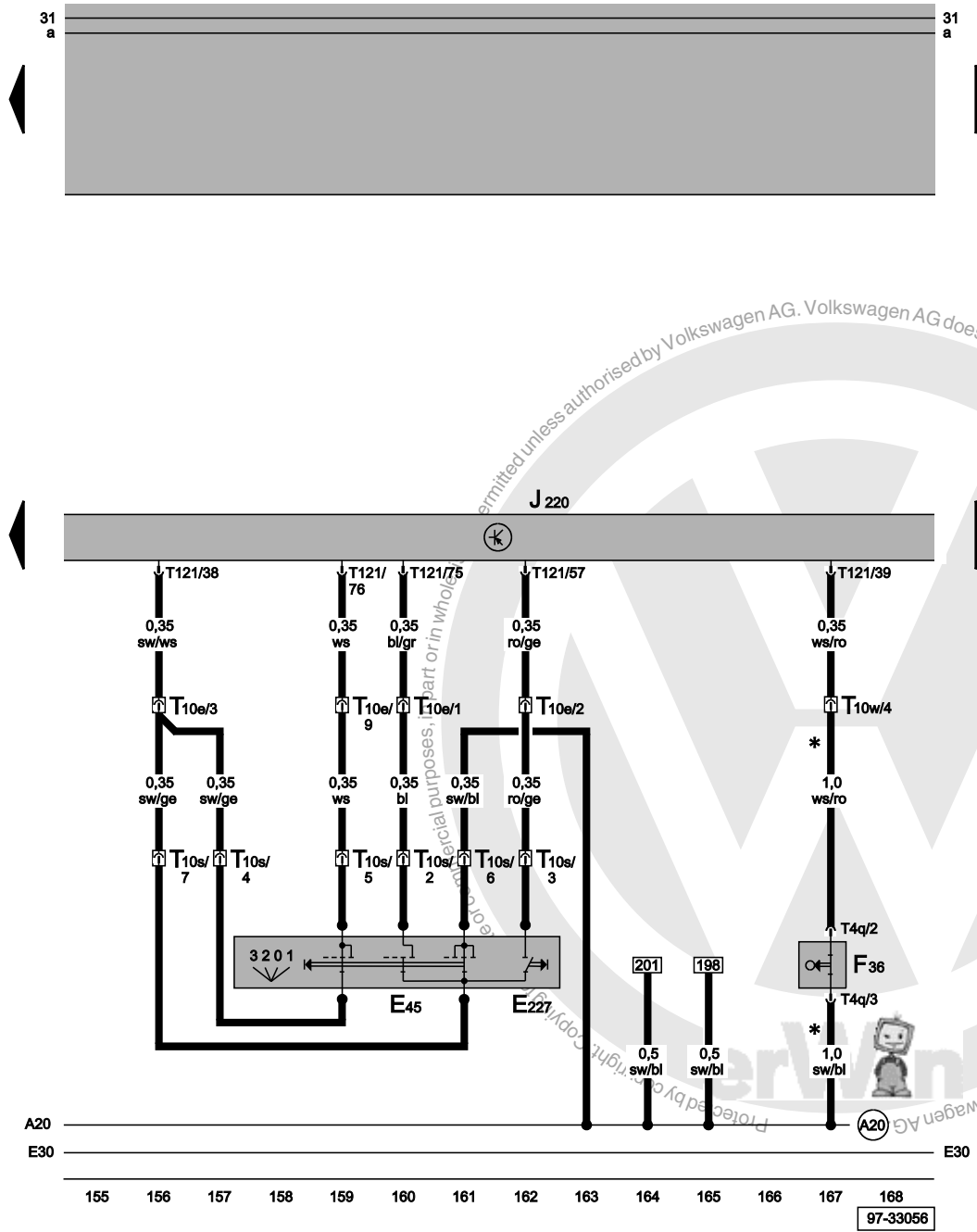
- ws = white
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- rs = pink

Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

A20 Connection (15a), in dash panel wiring harness

- * only models with manual gearbox
- ** only models with GND

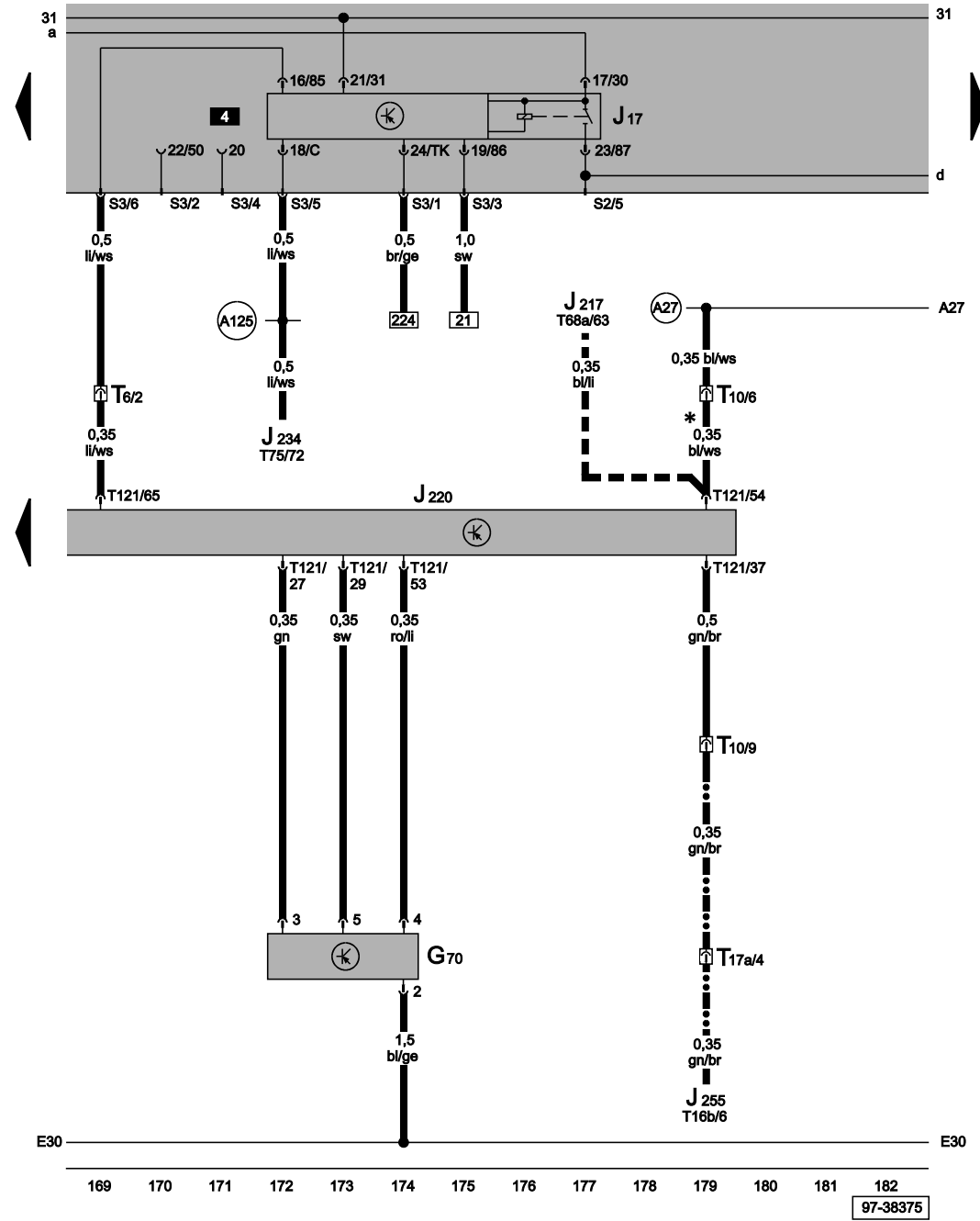


Motronic control unit, fuel pump relay, air mass meter

- G70 Air mass meter
- J17 Fuel pump relay
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- J255 Climatronic control unit
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector

- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- * only models with manual gearbox
- models with automatic gearbox only
- only models with Climatronic

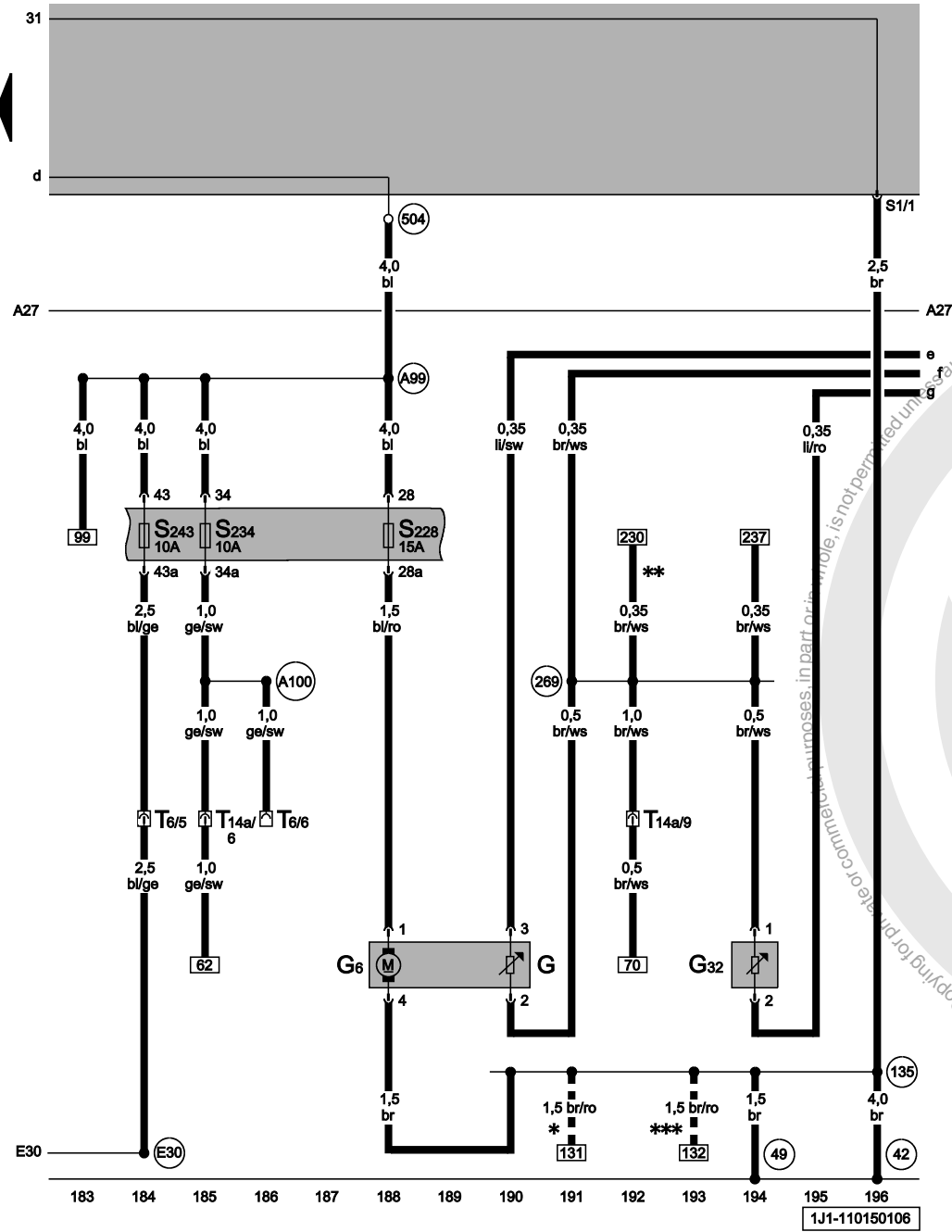
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Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) in dash panel wiring harness
- 504 Screw connection 1 (87), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * from May 2003
- *** up to April 2003
- models with automatic gearbox only
- ** only models without Climatronic



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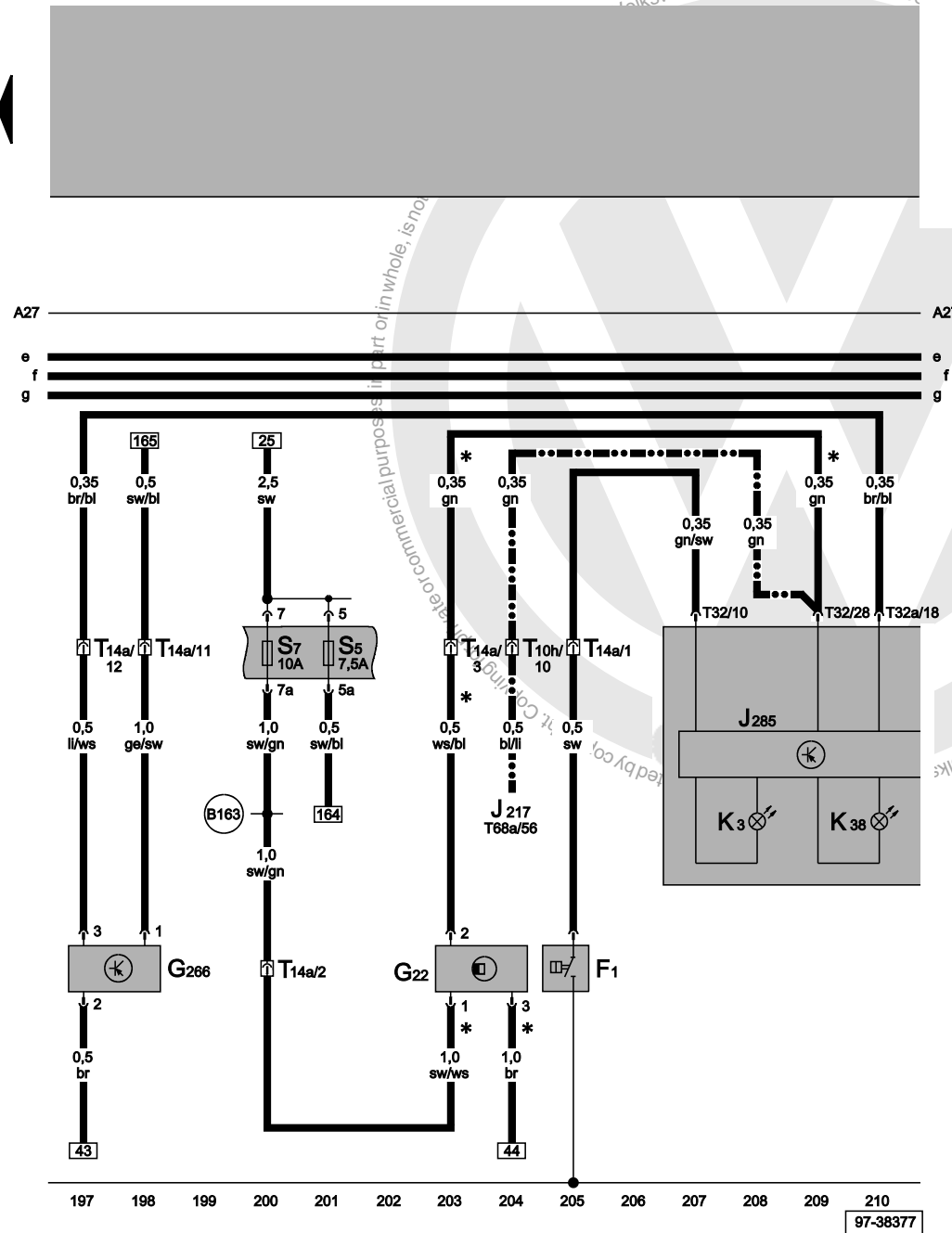
1J1-110150106

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender**
- J217 Automatic gearbox control unit
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)

(B163) Positive connection 1 (15), in interior wiring harness

- * models with manual gearbox/automatic gearbox (AG4) only
- ** only flexible service interval display
- models with 5-speed automatic gearbox (AG5) only

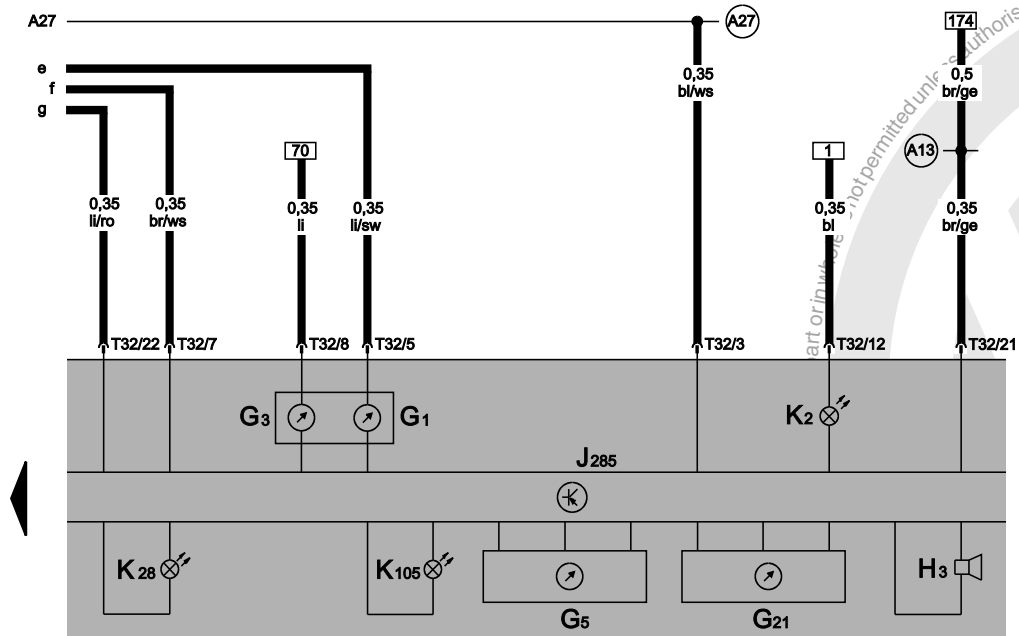


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97-38377

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

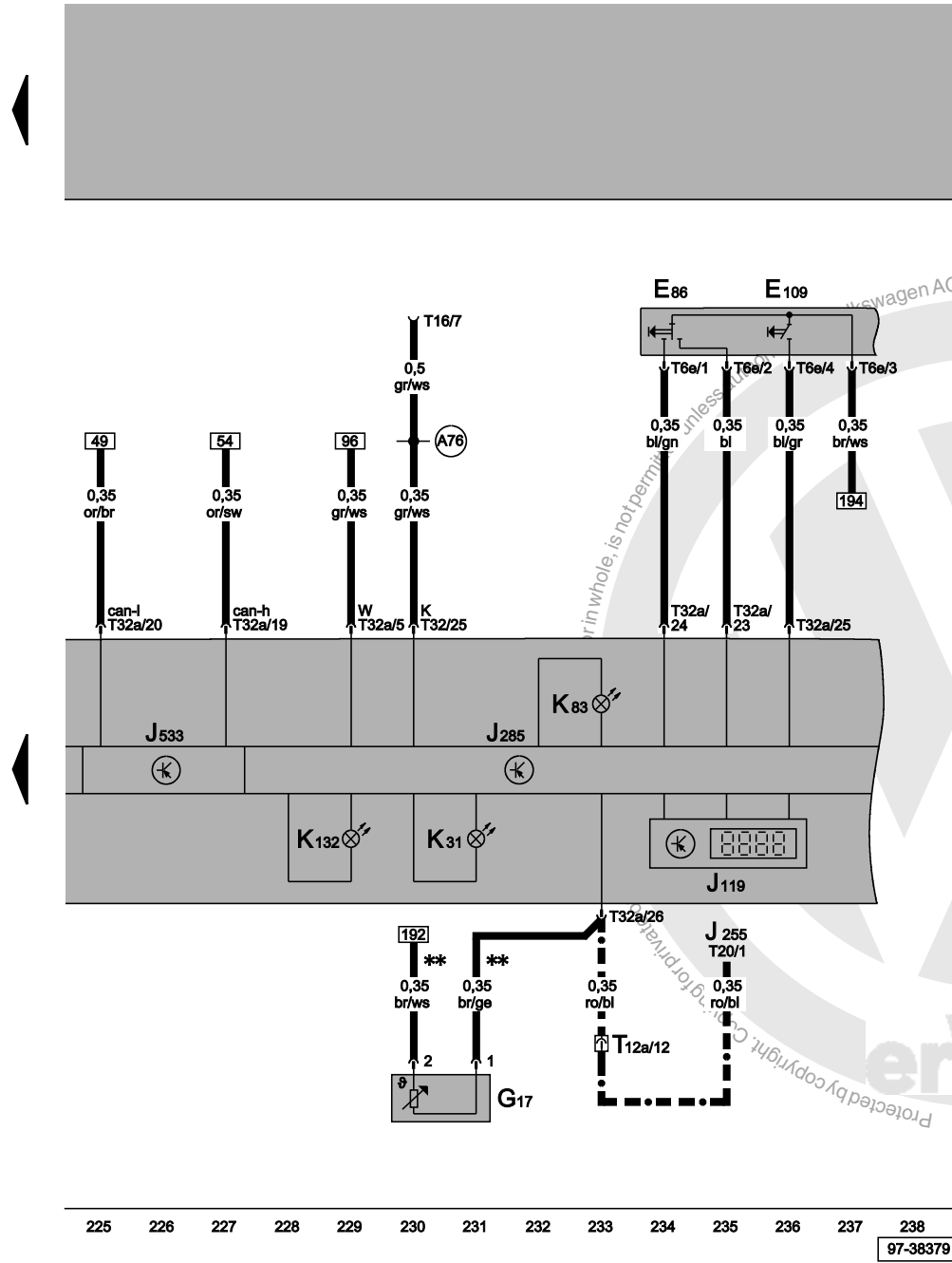
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- ** only models without Climatronic
- .- only models with Climatronic



2.0 I/85 kW Motronic, engine code AQY

from November 2001

2.0 I/85 kW Motronic, engine code APK

from November 2001

Notes:

For information concerning

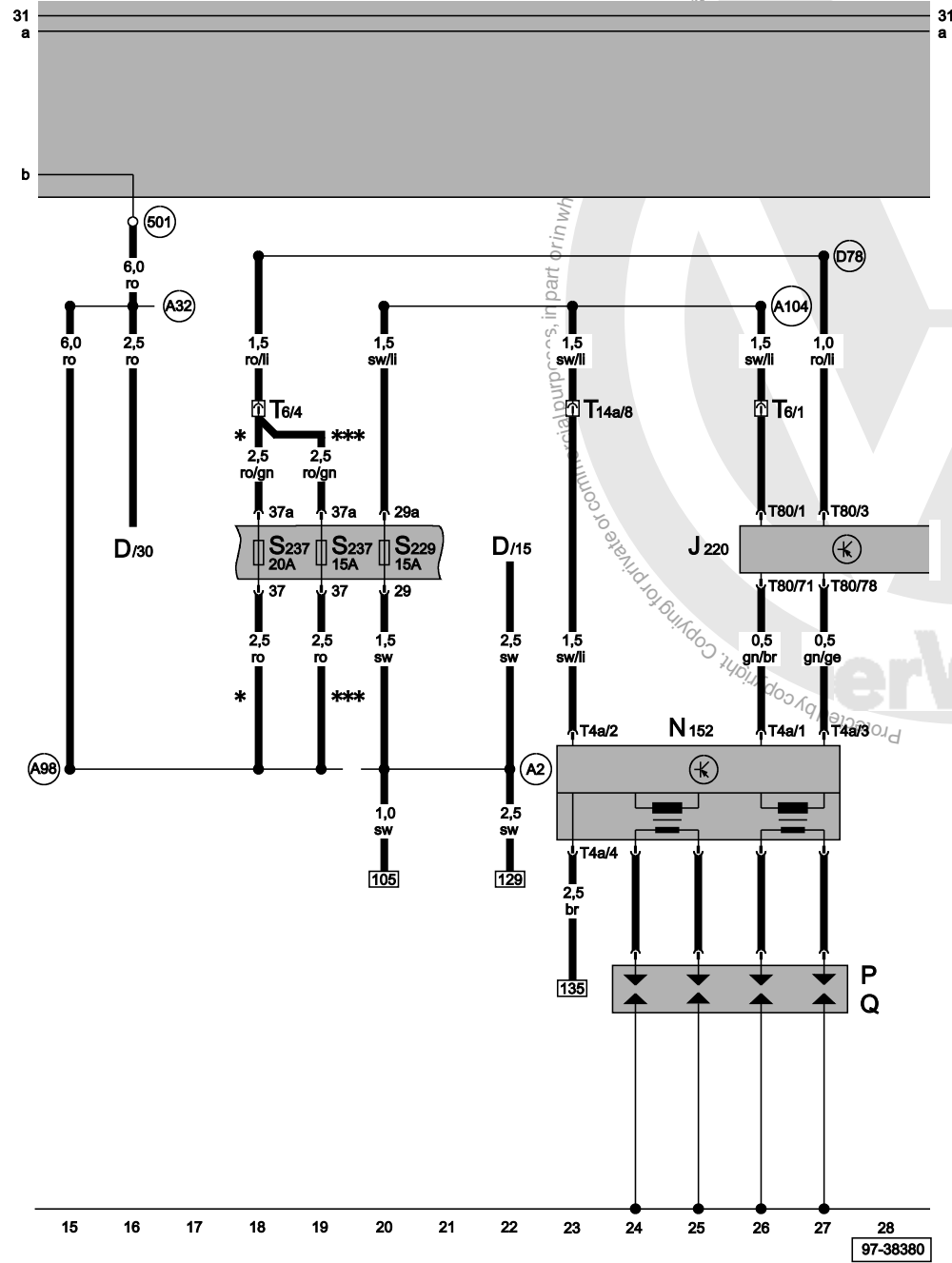
- ◆ Position of relays and fuses
 - ◆ Multi-pin connections
 - ◆ Control units and relays
 - ◆ Earth connections
 - ⇒ List of Fitting Locations!
- For information concerning
- ◆ Fault Finding Programs
 - ⇒ guided fault finding



Motronic control unit, ignition system

- D Ignition/starter switch
- J220 Motronic control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T4a 4-pin connector
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- * from May 2003
- *** up to April 2003



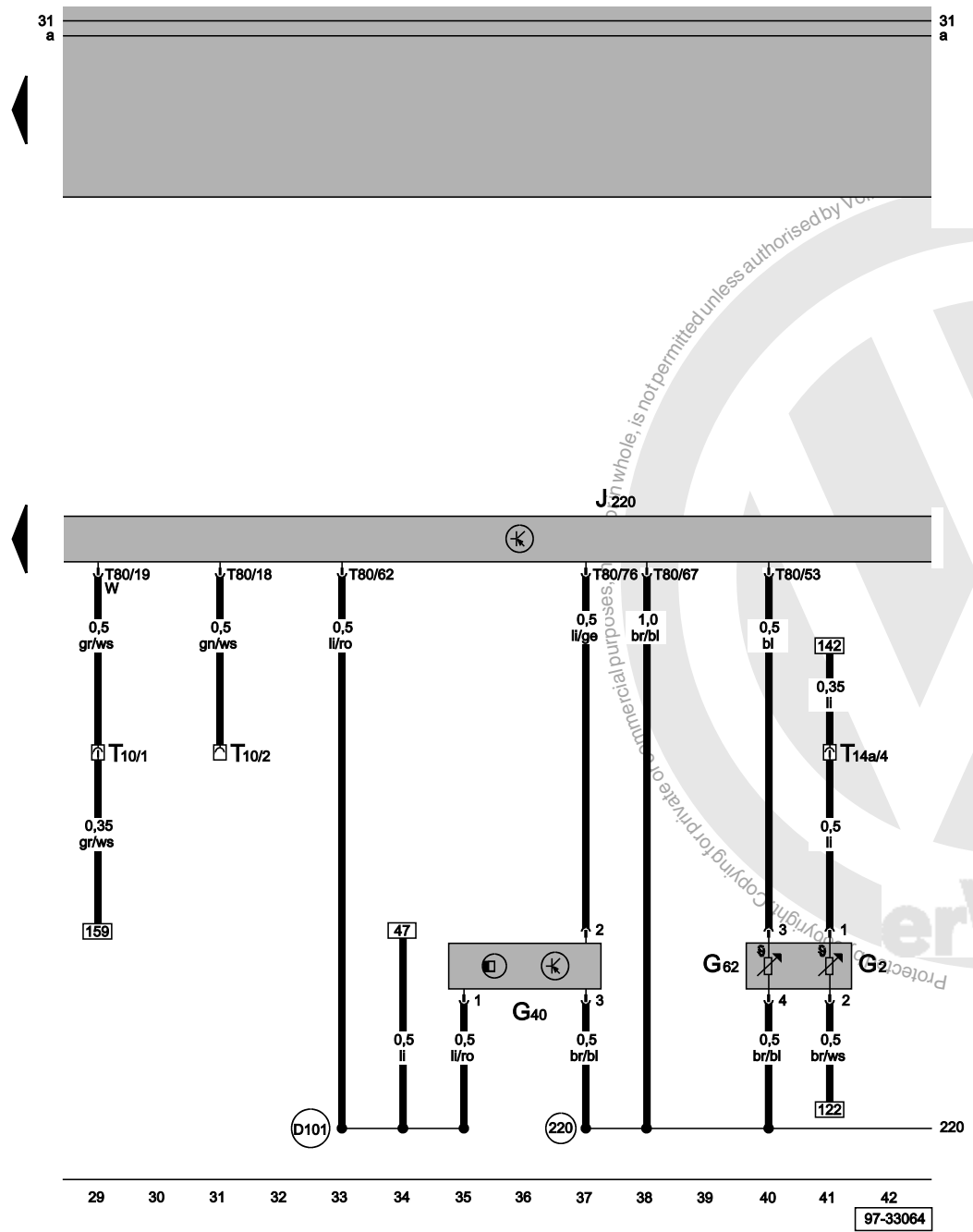
97-38380

Motronic control unit, coolant temperature sender, Hall sender

- G2 Coolant temperature sender
- G40 Hall sender
- G62 Coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T80 80-pin connector

220 Earth connection (sender earth), in engine wiring harness

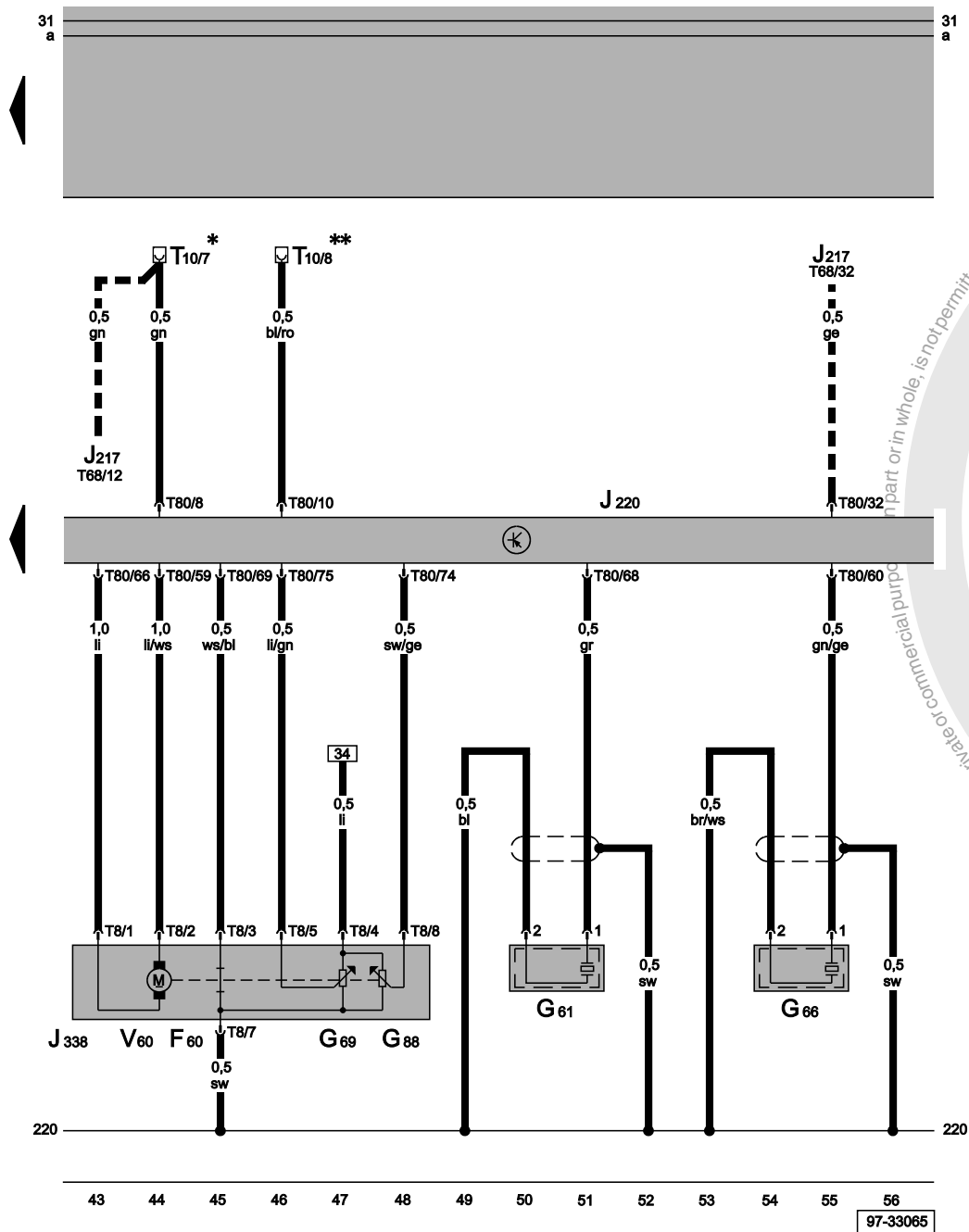
D101 Connection 1, in engine wiring harness



- ws = white
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- rs = pink

Motronic control unit, throttle valve module, knock sensor 1, knock sensor 2

- F60 Idling speed switch
- G61 Knock sensor 1
- G66 Knock sensor 2
- G69 Throttle valve potentiometer
- G88 Throttle valve positioner potentiometer
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module***
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T68 68-pin connector
- T80 80-pin connector
- V60 Throttle valve positioner compressor switch-off
- * compressor switch-off
- ** air conditioner "ready" connection
- models with automatic gearbox only
- *** models with CCS => cruise control system



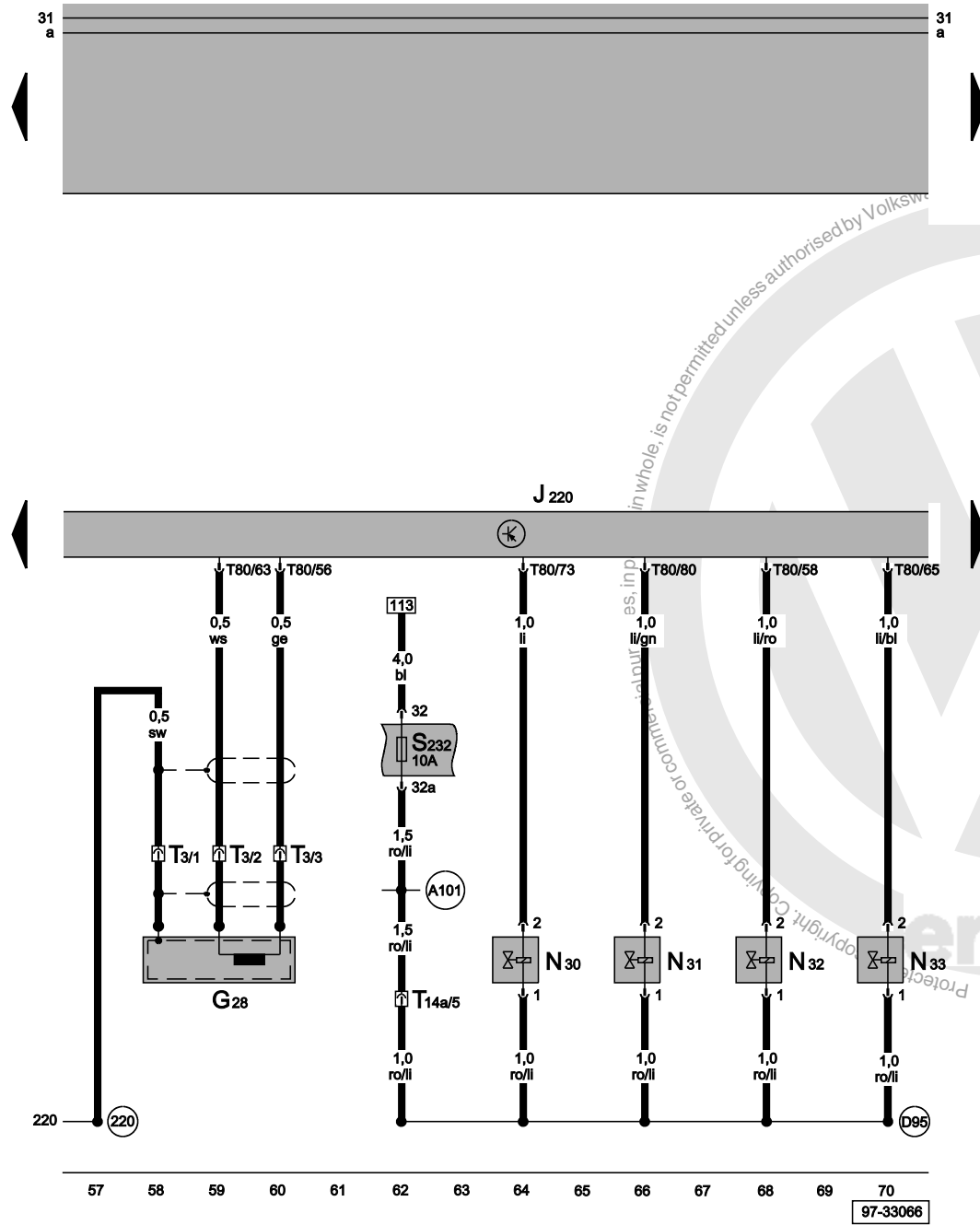
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97-33065

Motronic control unit, engine speed sender, injectors

- G28 Engine speed sender
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T3 3-pin connector, near intake manifold
- T14a 14-pin connector, near battery
- T80 80-pin connector

- 220 Earth connection (sender earth), in engine wiring harness
- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness



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Motronic control unit, heater element for crankcase breather

- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector
- T80 80-pin connector

131 Earth connection -2-, in engine compartment wiring harness

608 Earth point, in centre of plenum chamber

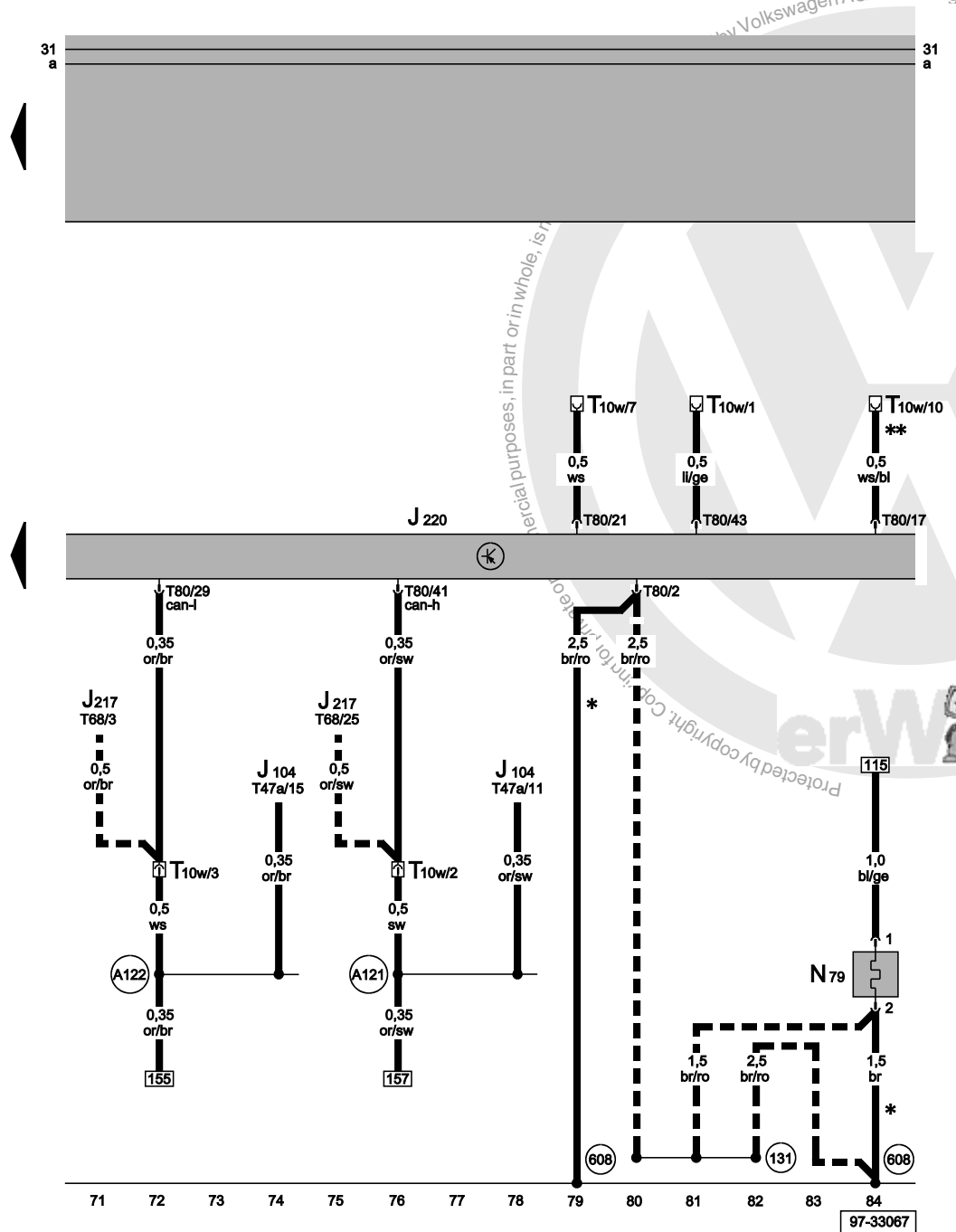
A121 Connection (high bus), in dash panel wiring harness

A122 Connection (low bus), in dash panel wiring harness

* only models with manual gearbox

--- models with automatic gearbox only

** not for engine code APK



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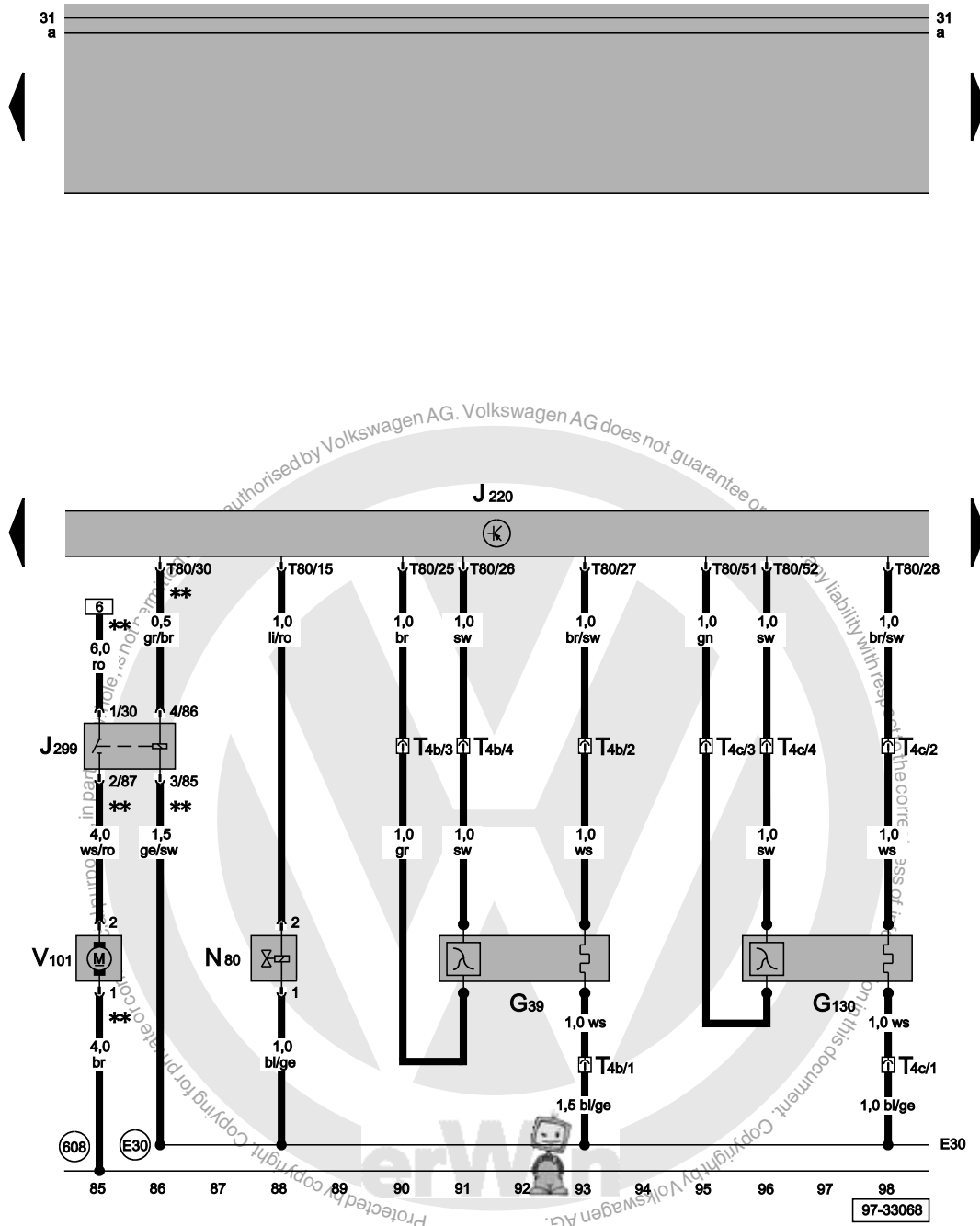
Motronic control unit, lambda probe, lambda probe after catalytic converter, activated charcoal filter system solenoid valve 1, secondary air pump relay, secondary air pump motor

- G39 Lambda probe
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N80 Activated charcoal filter system solenoid valve 1
- T4b 4-pin connector, near catalytic converter
- T4c 4-pin connector, near catalytic converter
- T80 80-pin connector
- V101 Secondary air pump motor

608 Earth point, in centre of plenum chamber

E30 Connection (87a), in engine wiring harness

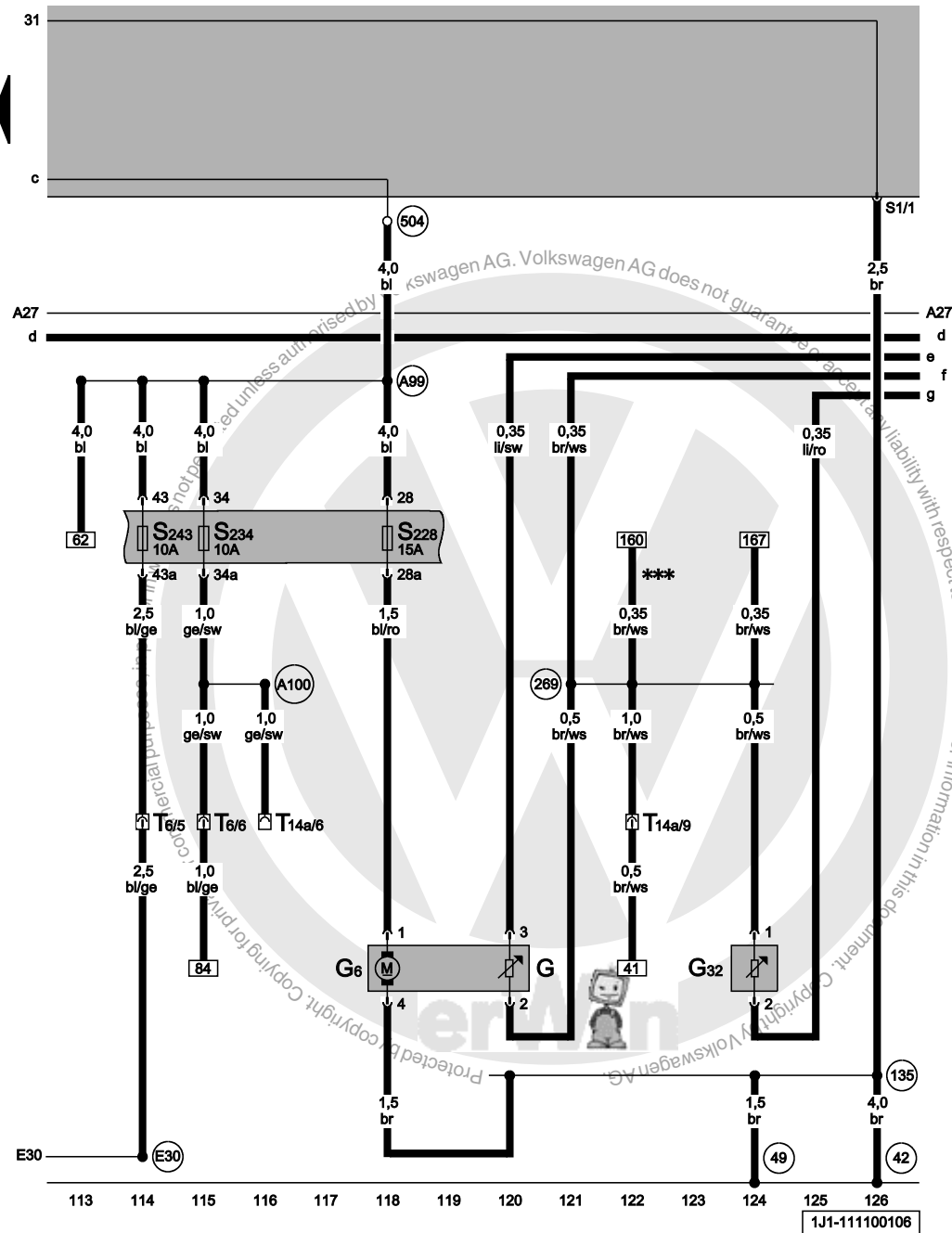
** not for engine code APK



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Fuel pump, fuel gauge sender, coolant shortage indicator sender

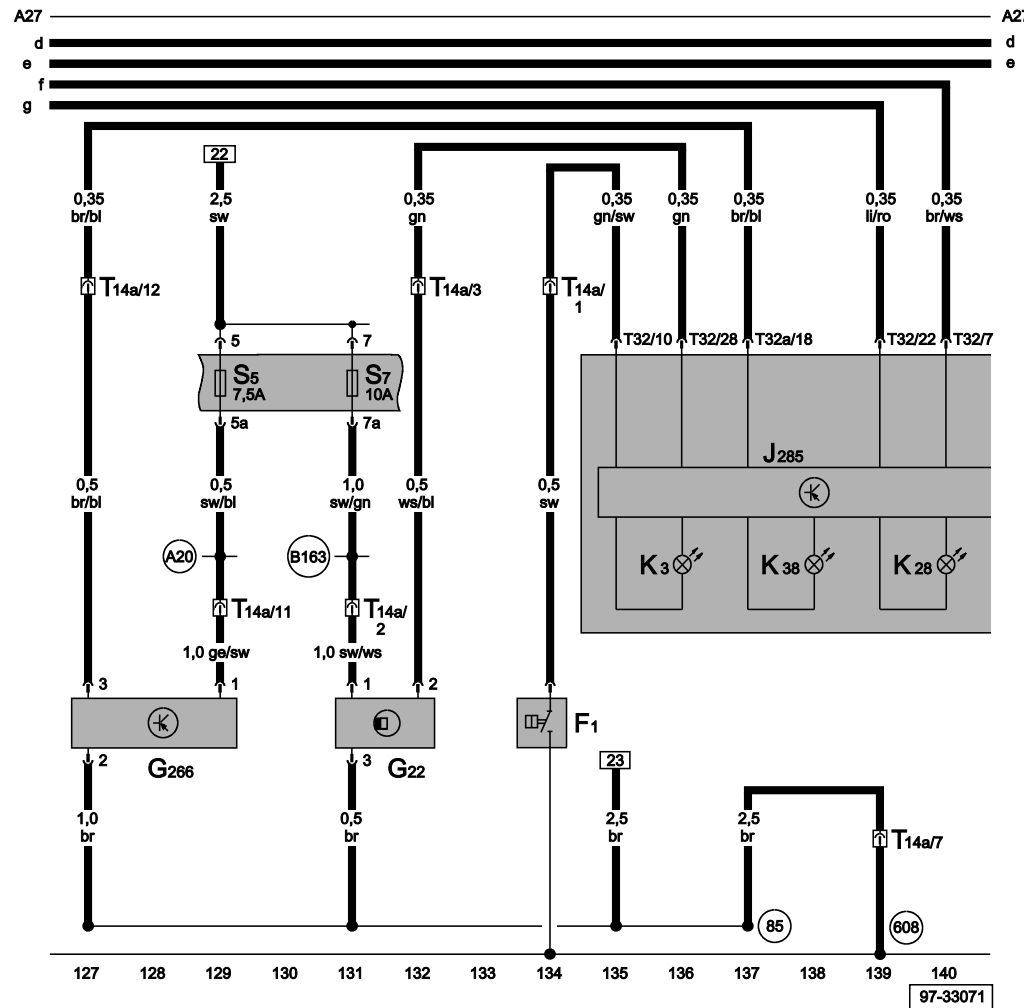
- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- *** only models without Climatronic



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 rs = pink

Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
 - G22 Speedometer sender (Hall sender, on gearbox)
 - G266 Oil level and oil temperature sender
 - J285 Control unit with display in dash panel insert
 - K3 Oil pressure warning lamp
 - K28 Coolant temperature/coolant shortage warning lamp
 - K38 Oil level warning lamp*
 - S5 Fuse 5 in fuse holder
 - S7 Fuse 7 in fuse holder
 - T14a 14-pin connector, near battery
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
- 85 Earth connection -1-, in engine compartment wiring harness
 - 608 Earth point, in centre of plenum chamber
 - A20 Connection (15a), in dash panel wiring harness
 - B163 Positive connection 1 (15), in interior wiring harness
- * only flexible service interval display



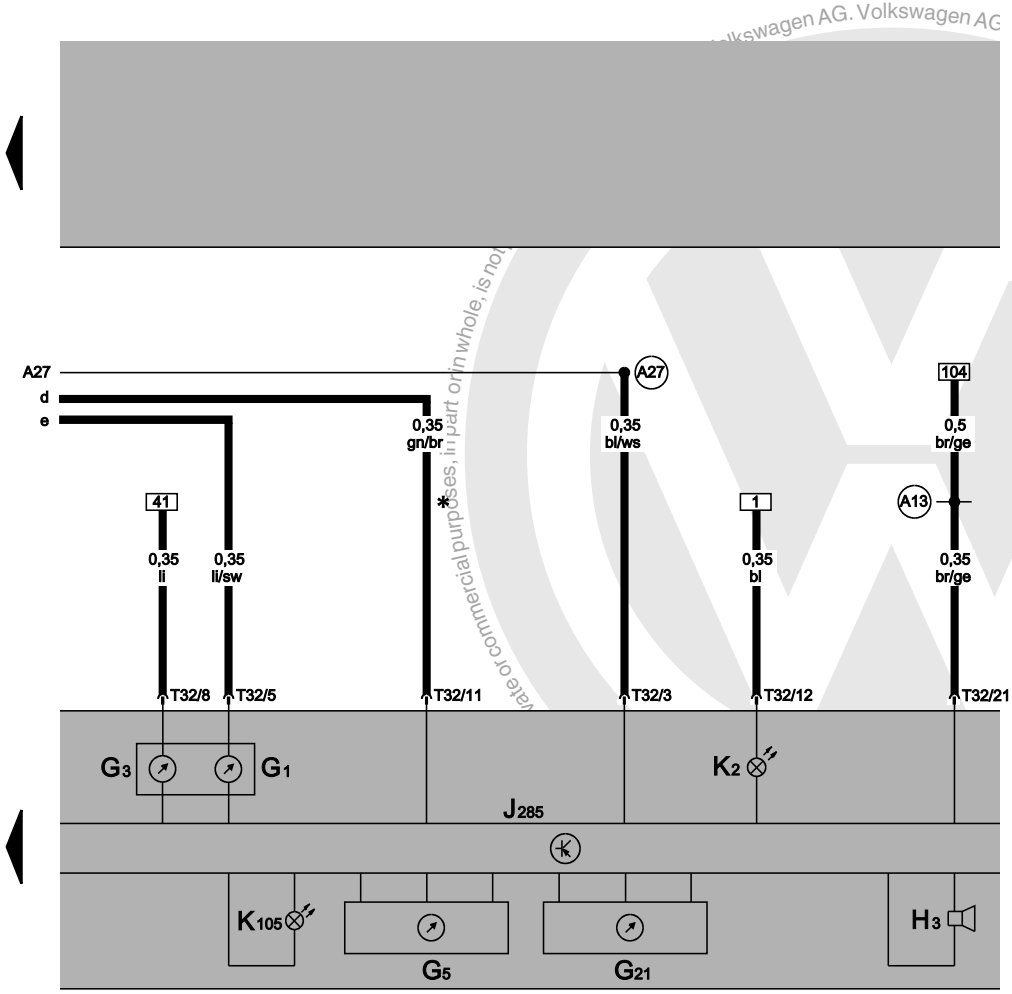
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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-33071

Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

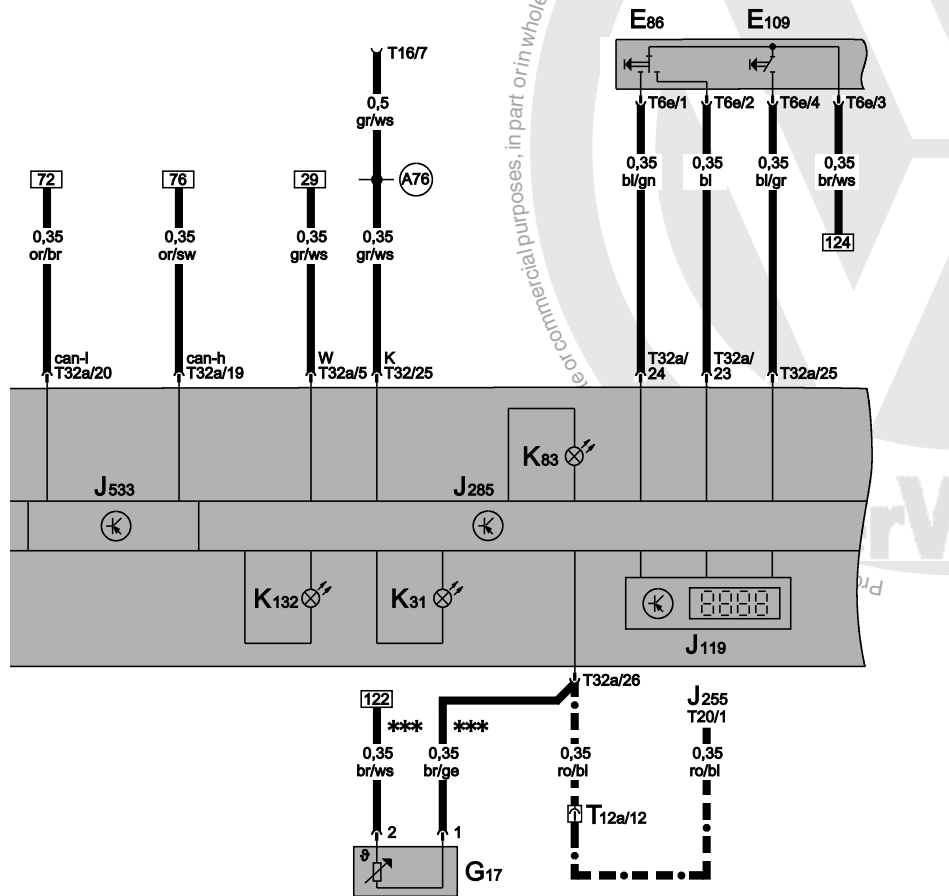
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue

- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- * Revolution signal engine control unit up to April 2002



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection



- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T12a 12-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- *** only models without Climatronic
- only models with Climatronic

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155 156 157 158 159 160 161 162 163 164 165 166 167 168

1J1-111130106

Double clutch gearbox 02E (DSG)

⇒ 3.2 l/177 kW Motronic, engine code BFH

from June 2003

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

⇒ List of Fitting Locations!

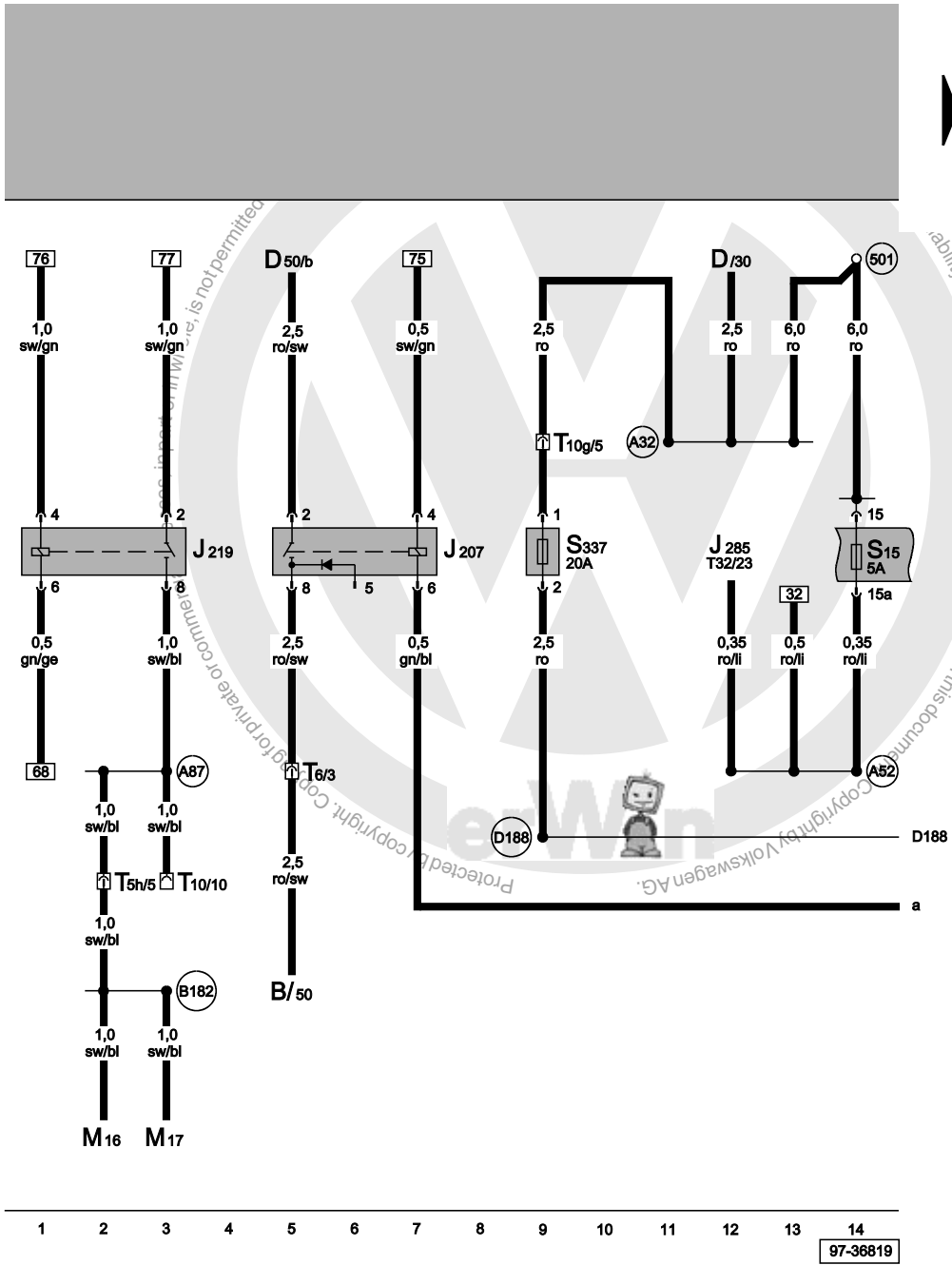
For information concerning

- ◆ Fault Finding Programs
- ⇒ guided fault finding



Starter motor relay, reversing light relay

- B Starter
- D Ignition/starter switch
- J207 Starter motor relay
- J219 Reversing light relay
- J285 Control unit in dash panel insert
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- S15 Fuse 15 in fuse holder
- S337 Mechatronic unit for direct shift gearbox, in protective housing on left in engine compartment
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A52 Positive connection (30a), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- D188 Positive connection 3 (30a), in engine compartment wiring harness

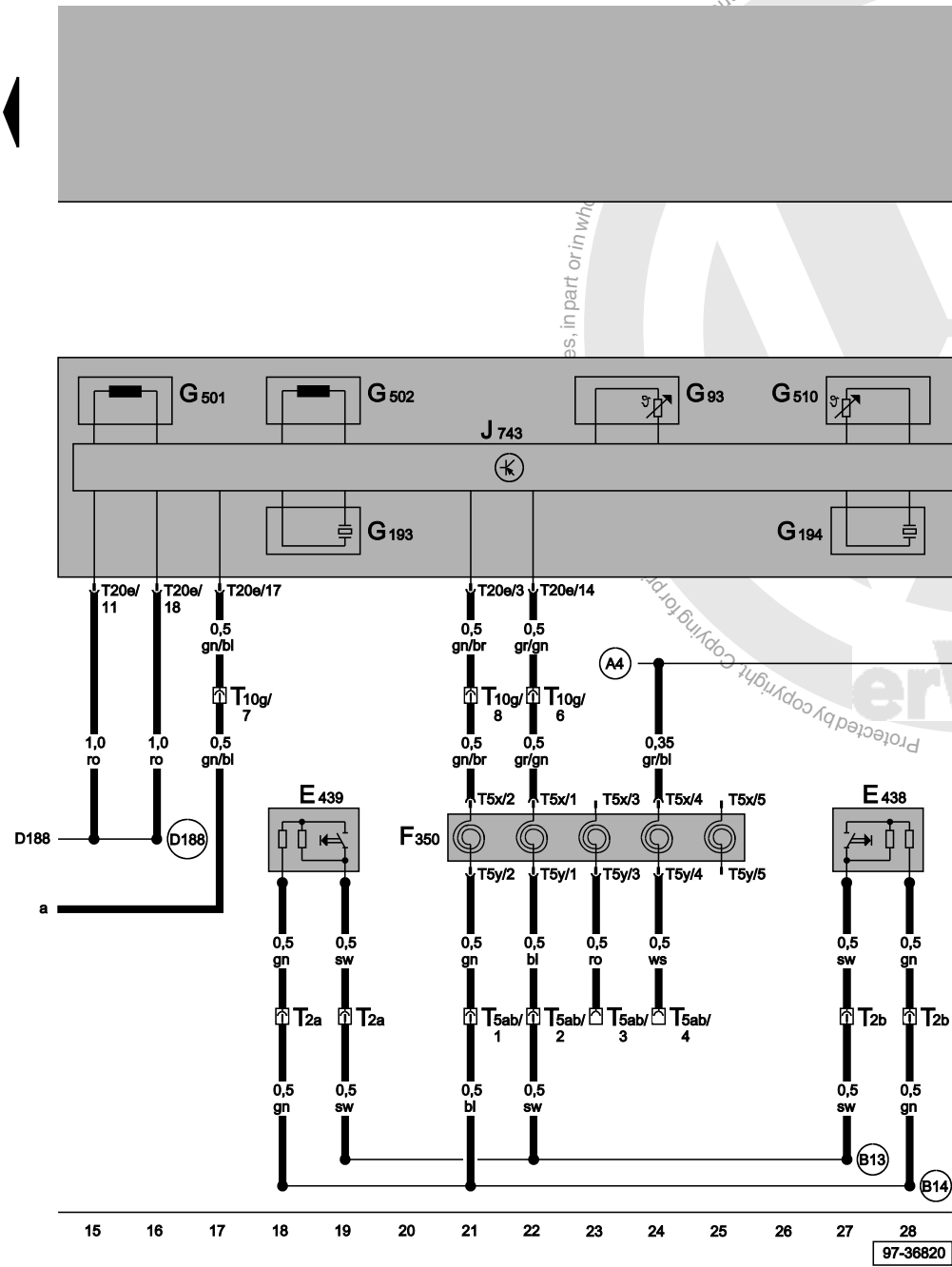


- ws = white
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Mechatronic unit for double clutch gearbox, input shaft speed sender, gearbox oil temperature sender, temperature sender in control unit, hydraulic pressure sender, Tiptronic switch in steering wheel

- E438 Tiptronic switch in steering wheel to shift up
- E439 Tiptronic switch in steering wheel to shift down
- F350 Coil connector
- G93 Gearbox oil temperature sender
- G193 Automatic gearbox hydraulic pressure sender 1
- G194 Automatic gearbox hydraulic pressure sender 2
- G501 Input shaft speed sender 1
- G502 Input shaft speed sender 2
- G510 Temperature sender in control unit
- J743 Mechatronic unit for double clutch gearbox, in gearbox
- T2a 2-pin connector, in the steering wheel
- T2b 2-pin connector, in the steering wheel
- T5x 5-pin connector
- T5y 5-pin connector
- T5ab 5-pin connector, in the steering wheel
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T20e 20-pin connector

- A4 Positive connection (58b), in dash panel wiring harness
- B13 Connection 1 (15), in steering wheel wiring harness
- B14 Connection 2 (15), in steering wheel wiring harness
- D188 Positive connection 3 (30a), in engine compartment wiring harness



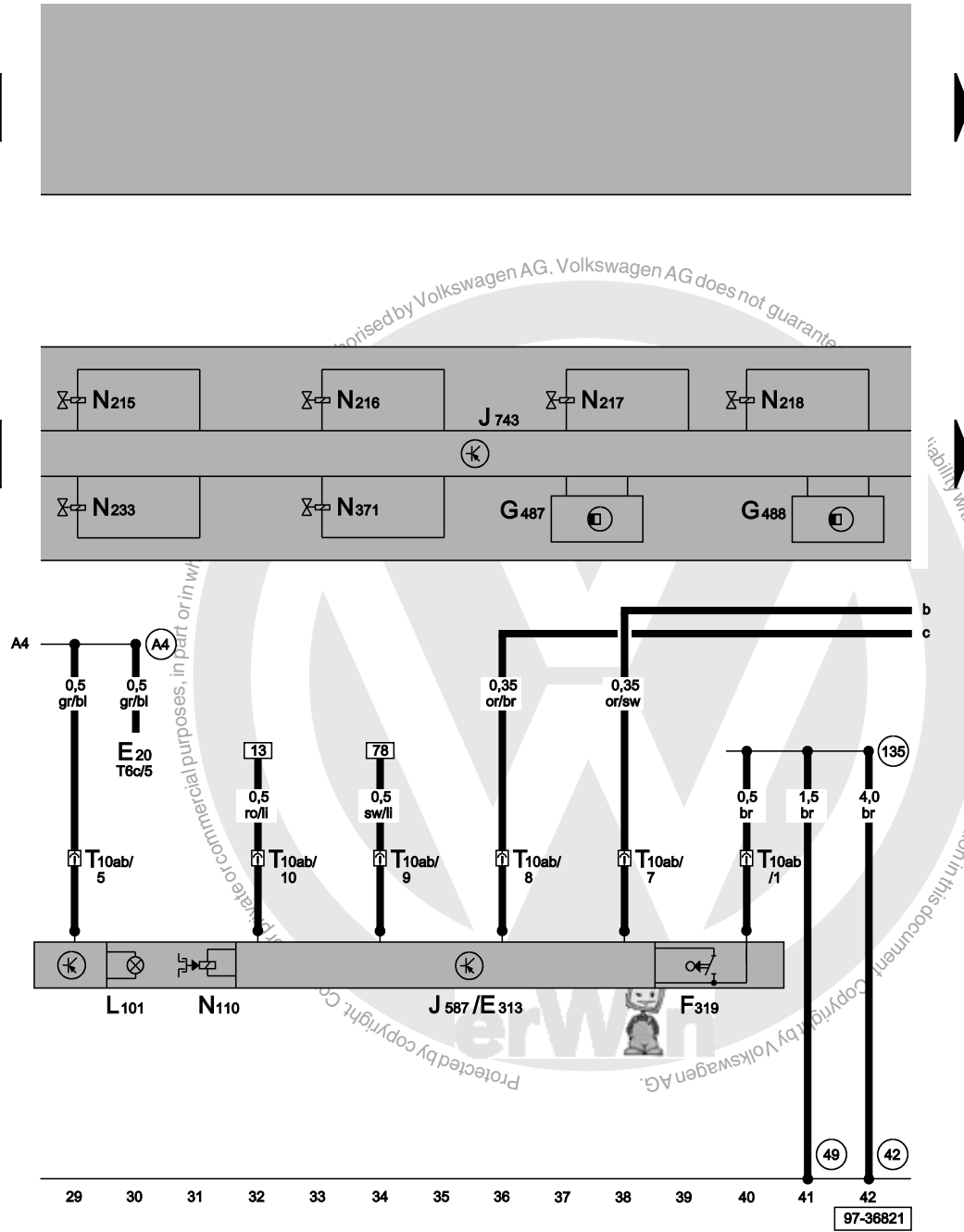
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97-36820

Mechatronics for direct shift gearbox, selector lever lock solenoid, selector lever sensors control unit, selector lever position display, gear selector movement sensor

- E20 Illumination regulators, switches, instruments
- E313 Selector lever
- F319 Selector lever locked in position P switch
- G487 Gear selector movement sensor 1
- G488 Gear selector movement sensor 2
- J587 Selector lever sensors control unit
- J743 Mechatronic unit for double clutch gearbox, in gearbox
- L101 Selector lever display illumination bulb
- N110 Selector lever lock solenoid
- N215 Automatic gearbox pressure regulating valve 1
- N216 Automatic gearbox pressure regulating valve 2
- N217 Automatic gearbox pressure regulating valve 3
- N218 Automatic gearbox pressure regulating valve 4
- N233 Automatic gearbox pressure regulating valve 5
- N371 Automatic gearbox pressure regulating valve 6
- T6c 6-pin connector
- T10ab 10-pin connector, under selector lever cover

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness



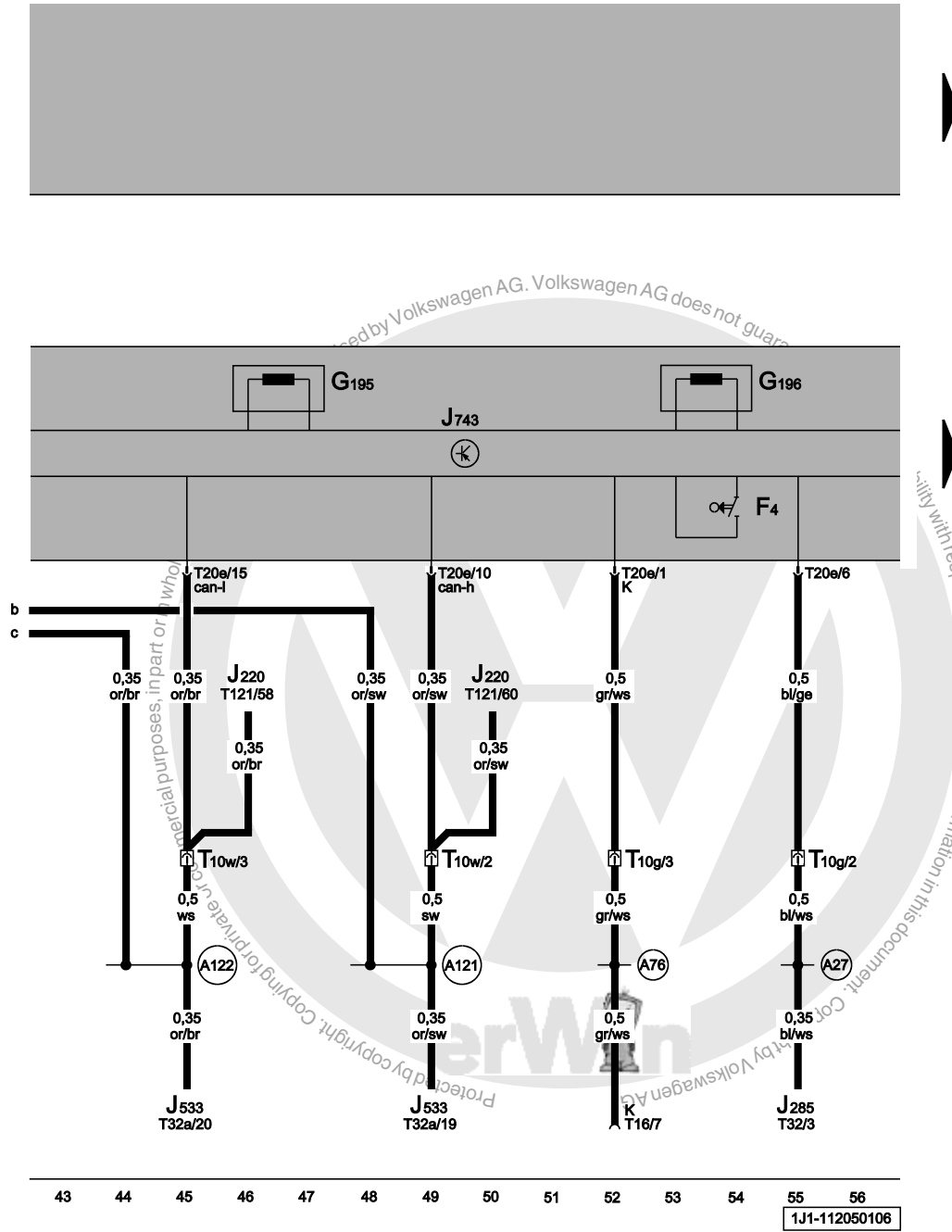
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Mechatronic unit for double clutch gearbox, gearbox output speed sender, reversing light switch

- F4 Reversing light switch
- G195 Gearbox output speed sender
- G196 Gearbox output speed sender 2
- J220 Motronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface
- J743 Mechatronic unit for double clutch gearbox, in gearbox
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20e 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- T121 121-pin connector

- (A27) Connection (speed signal), in dash panel wiring harness
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness

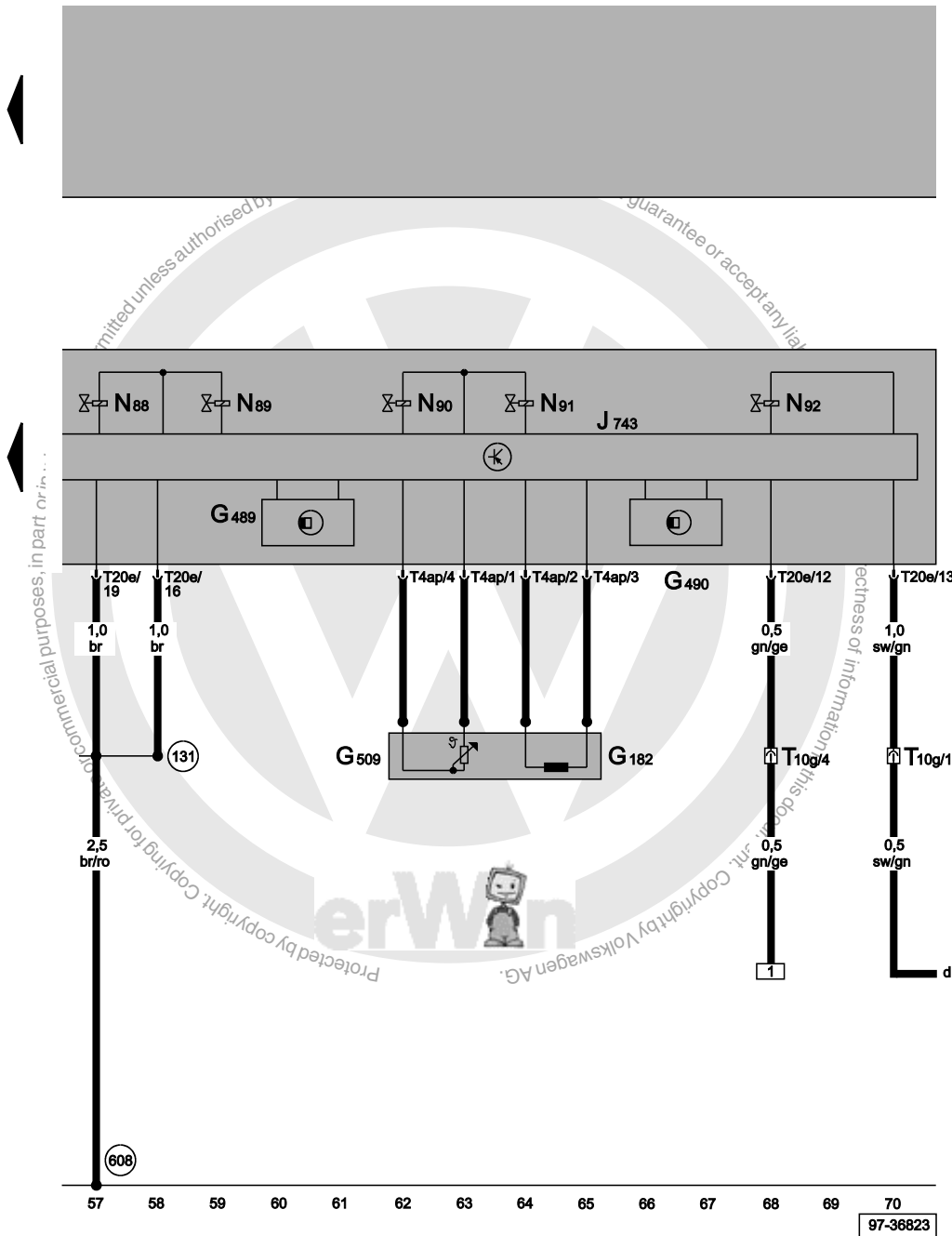
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- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
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- or = orange
- rs = pink



Mechatronic unit for double clutch gearbox, gear selector movement sensor, solenoid valves, gearbox input speed sender, clutch temperature sender

- G182 Gearbox input speed sender
- G489 Gear selector movement sensor 3
- G490 Gear selector movement sensor 4
- G509 Clutch temperature sender
- J743 Mechatronic unit for double clutch gearbox, in gearbox
- N88 Solenoid valve 1
- N89 Solenoid valve 2
- N90 Solenoid valve 3
- N91 Solenoid valve 4
- N92 Solenoid valve 5
- T4ap 4-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T20e 20-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber

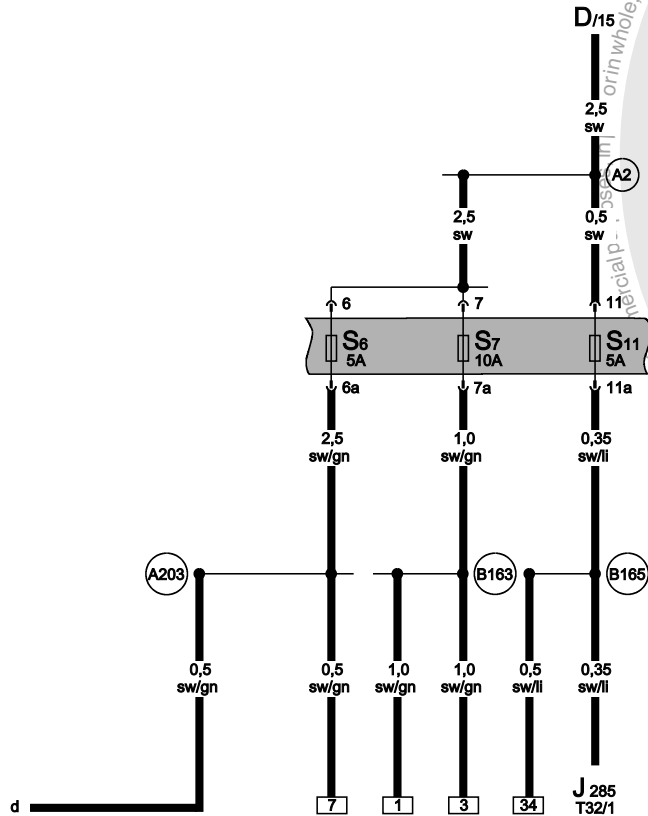


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Fuse locations

- D Ignition/starter switch
- J285 Control unit in dash panel insert
- S5 Fuse 5 in fuse holder
- S6 Fuse 6 in fuse holder
- S11 Fuse 11 in fuse holder
- T32 32-pin connector, blue
- A2 Positive connection (15), in dash panel wiring harness
- A203 Positive connection 3 (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- B165 Positive connection 2 (15), in interior wiring harness



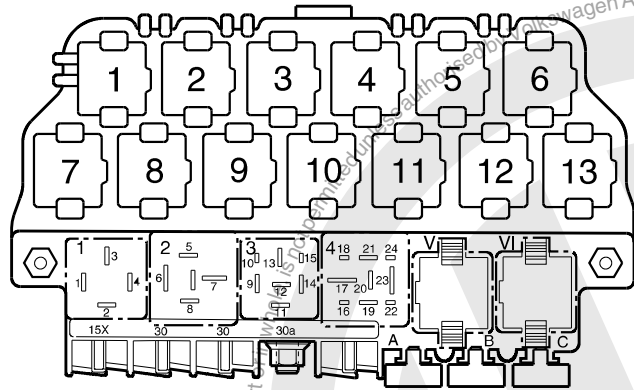
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Radio "gamma" with CD changer and "digital sound package"

From November 2001

For alternatives to relay and fuse locations as well as multi-pin connector assignment see "Fitting locations" section.

Relay locations on the 13 position additional relay carrier above the relay plate:



97--14163

Relay locations on relay plate:



Note!

- ◆ The number in brackets behind the part designation denotes the control number on the housing.

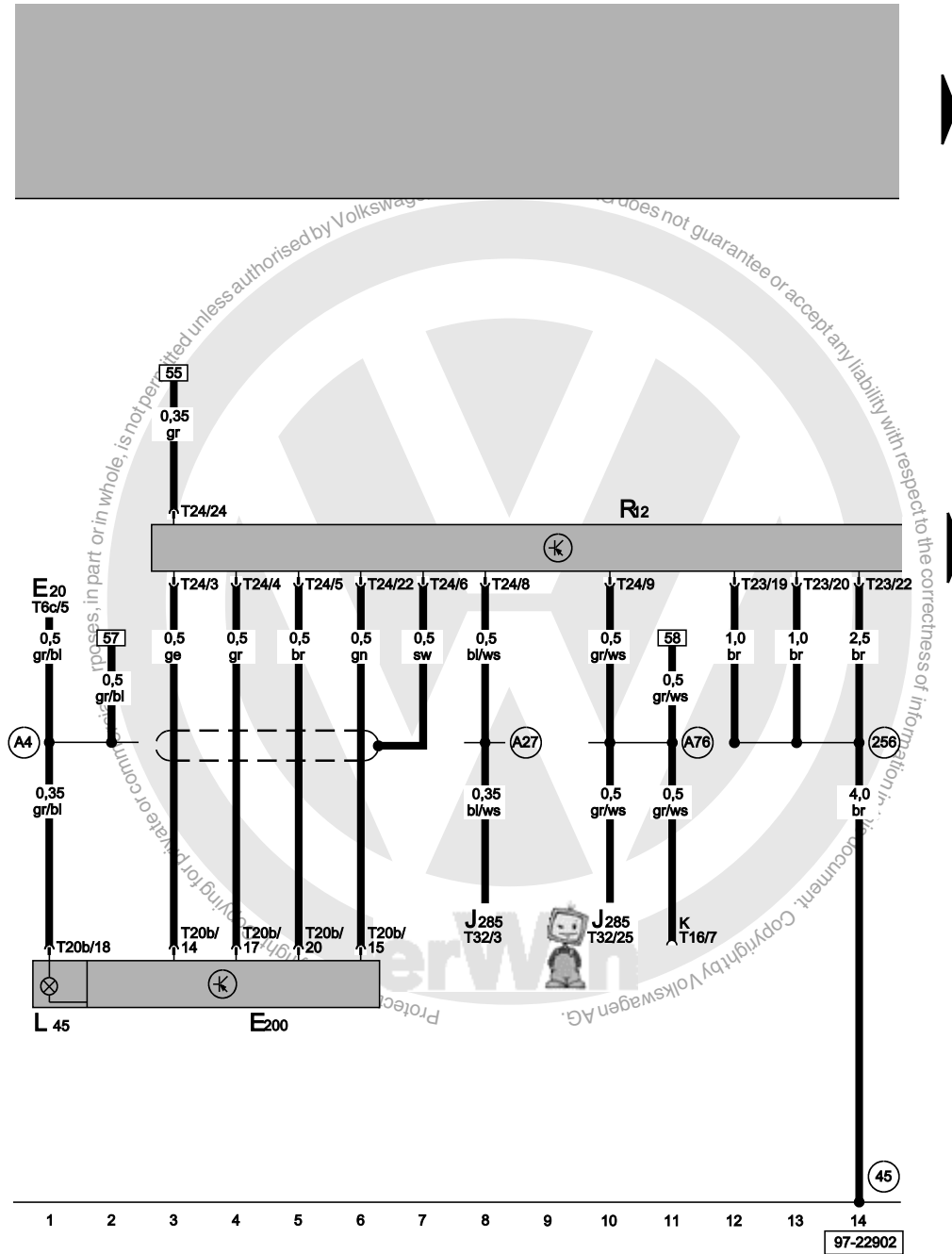
Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - lilac

Amplifier for 'Digital sound package', programme selection operating unit

- E20 Switches and instruments lighting regulator
- E200 Programme selection operating unit
- J285 Control unit with display in dash panel insert
- L45 Operating unit lighting bulb
- R12 Amplifier, on left in luggage compartment
- T6c 6-pin connector
- T16 16-pin connector, in centre of dash panel, self-diagnosis connection
- T20b 20-pin connector
- T23 23-pin connector
- T24 24-pin connector
- T32 32-pin connector, blue

- 45 Earth point, in centre behind dash panel
- 256 Earth connection -2-, in radio wiring harness
- A4 Positive connection (58b), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A76 Connection (K-diagnosis wire), in dash panel wiring harness

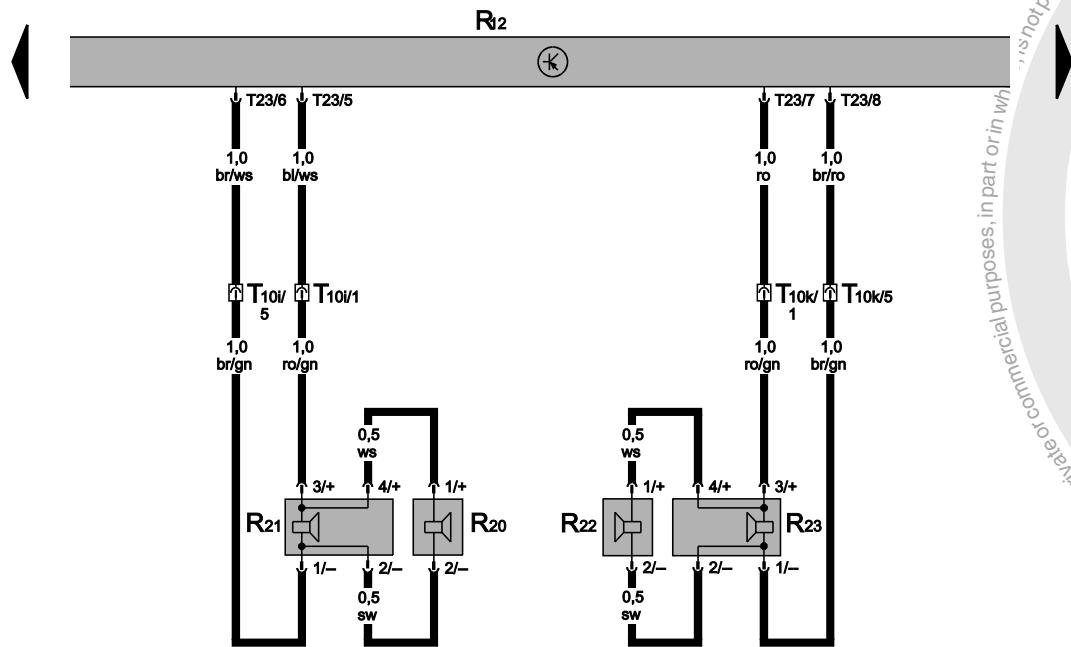


- ws = white
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- gr = grey
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- rs = pink

97-22902

Amplifier 'Digital sound package', front loudspeakers

- R12 Amplifier, on left in luggage compartment
- R20 Front left treble loudspeaker, in door
- R21 Front left bass loudspeaker, in door
- R22 Front right treble loudspeaker, in door
- R23 Front right bass loudspeaker, in door
- T10i 10-pin connector, black, coupling station, left A-pillar
- T10k 10-pin connector, black, coupling station, right A-pillar
- T23 23-pin connector

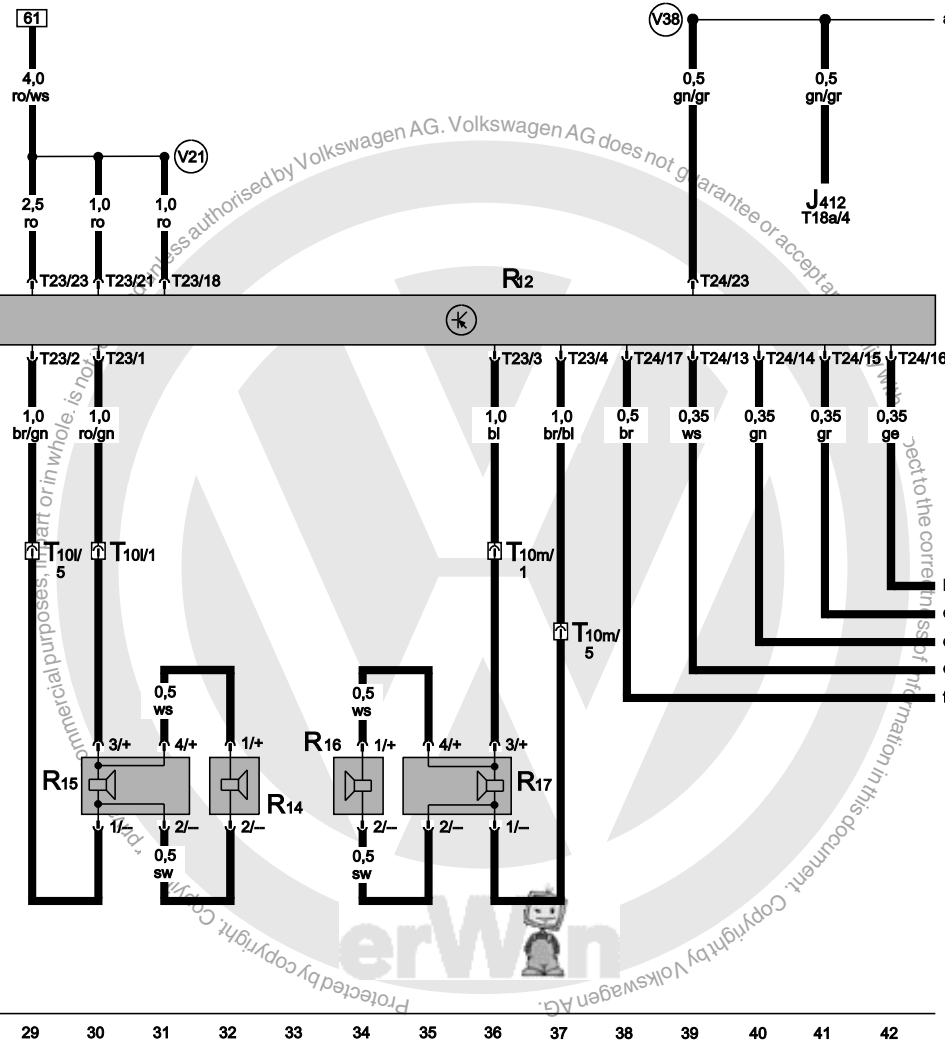


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- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Amplifier for 'Digital sound package', rear loudspeakers

- F4 Reversing light switch
- J412 Mobile telephone operating electronics control unit, next to handbrake lever
- R12 Amplifier, on left in luggage compartment
- R14 Rear left treble loudspeaker, in door
- R15 Rear left bass loudspeaker, in door
- R16 Rear right treble loudspeaker, in door
- R17 Rear right bass loudspeaker, in door
- T10l 10-pin connector, black, coupling station left B-pillar
- T10m 10-pin connector, black, right B-pillar coupling station
- T18a 18-pin connector
- T23 23-pin connector
- T24 24-pin connector

- V21 Positive connection (30), in radio amplifier wiring harness
- V38 Connection (muting), in DSP/telephone wiring harness

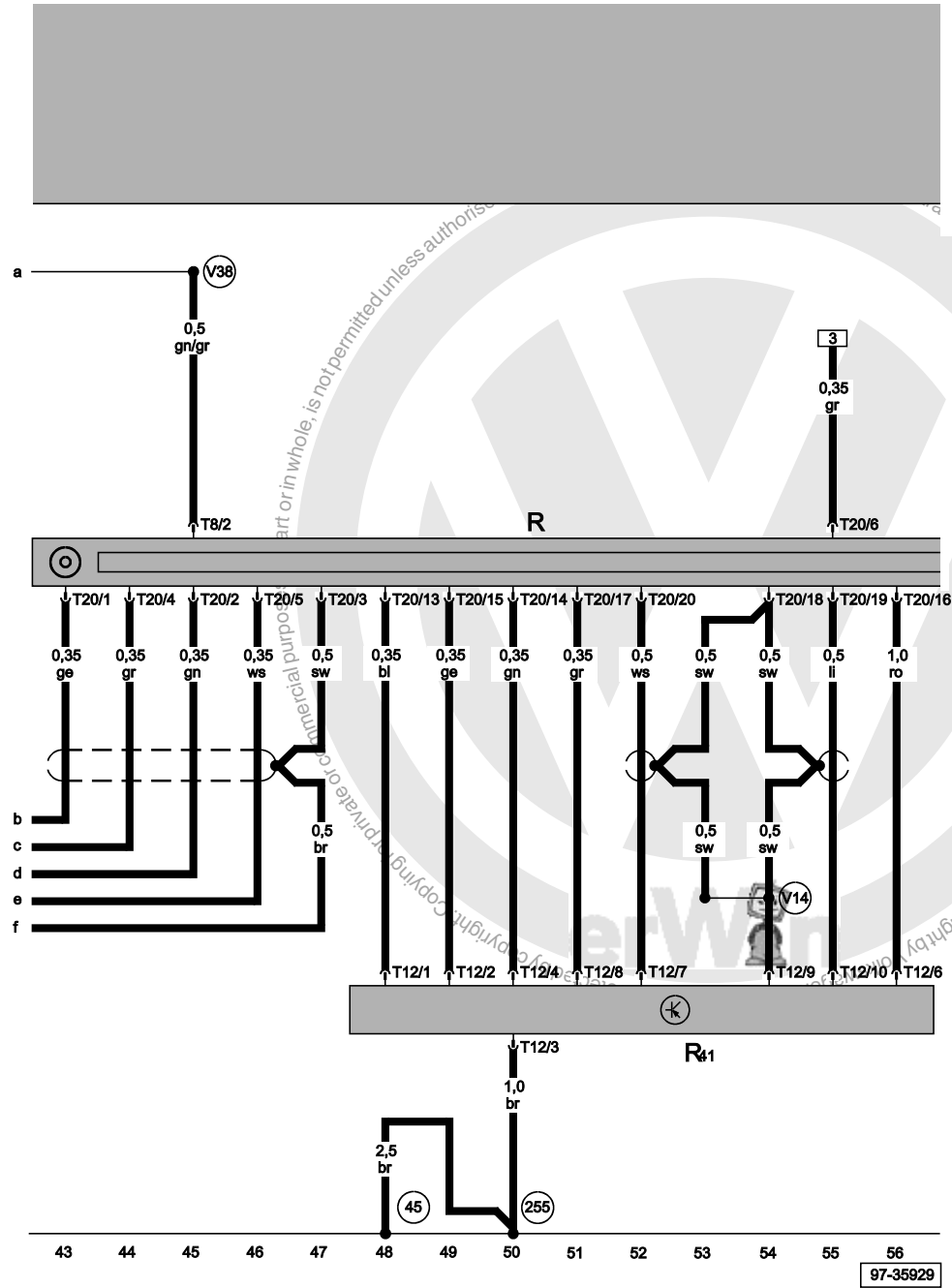


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- ge = yellow
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- rs = pink

Radio, CD changer

- R Radio
- R41 CD changer
- T8 8-pin connector
- T12 12-pin connector
- T20 20-pin connector

- (45) Earth point, in centre behind dash panel
- (255) Earth connection -1-, in radio wiring harness
- (V14) Connection (screening), in CD changer wiring harness
- (V38) Connection (muting), in DSP/telephone wiring harness



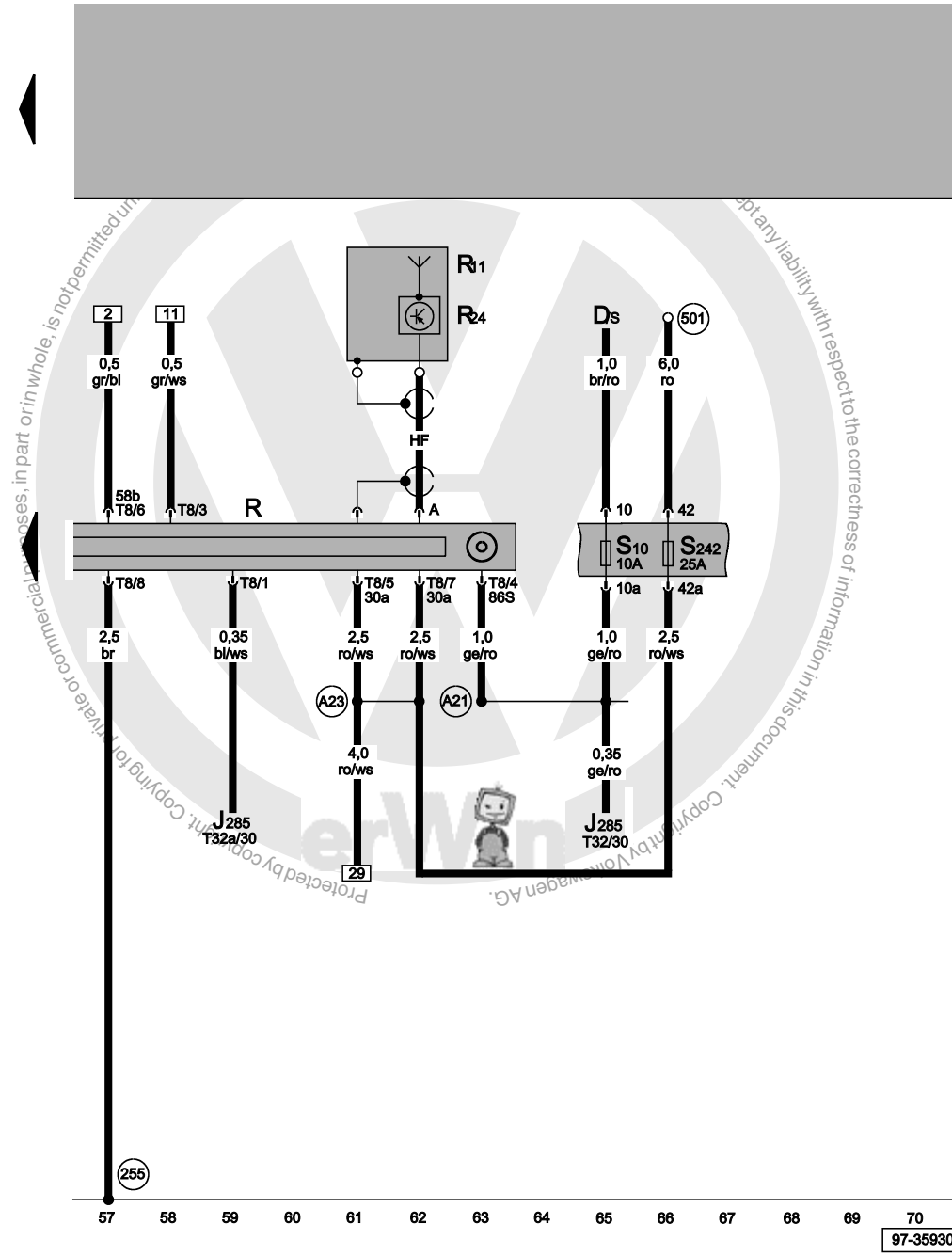
- ws = white
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- ge = yellow
- or = orange
- rs = pink

97-35929

Radio, aerial

- F4 Reversing light switch
- D Ignition/starter switch
- J285 Control unit with display in dash panel insert
- R Radio
- R11 Aerial
- R24 Aerial amplifier
- S10 Fuse 10 in fuse holder
- S12 Fuse 12 in fuse holder
- T8 8-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green

- (255) Earth connection -1-, in radio wiring harness
- (501) Screw connection -2- (30), on relay plate
- (A21) Connection (86s), in dash panel wiring harness
- (A23) Connection (30a), in dash panel wiring harness
- (B111) Positive connection -1- (30a), in interior wiring harness



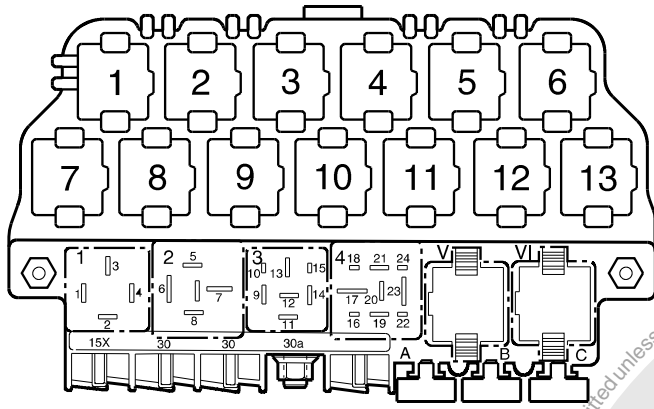
- ws = white
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- rs = pink

Climatronic

⇒ 1.6 I/81 kW Motronic, engine code BAD
from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

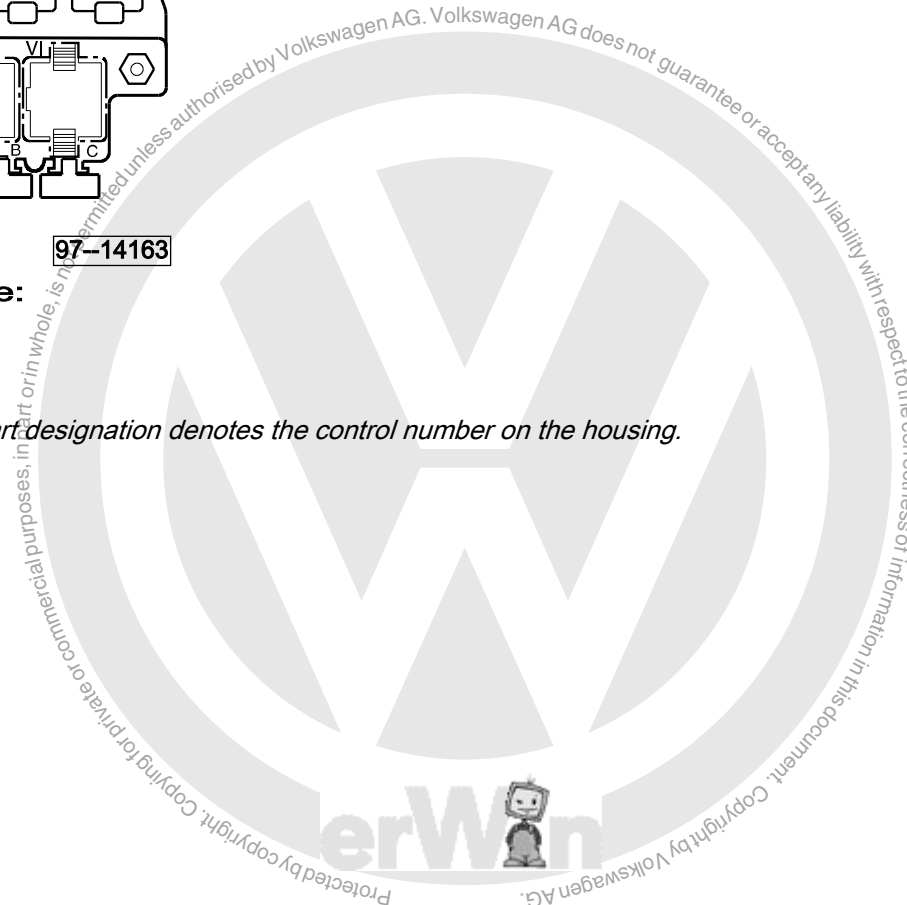


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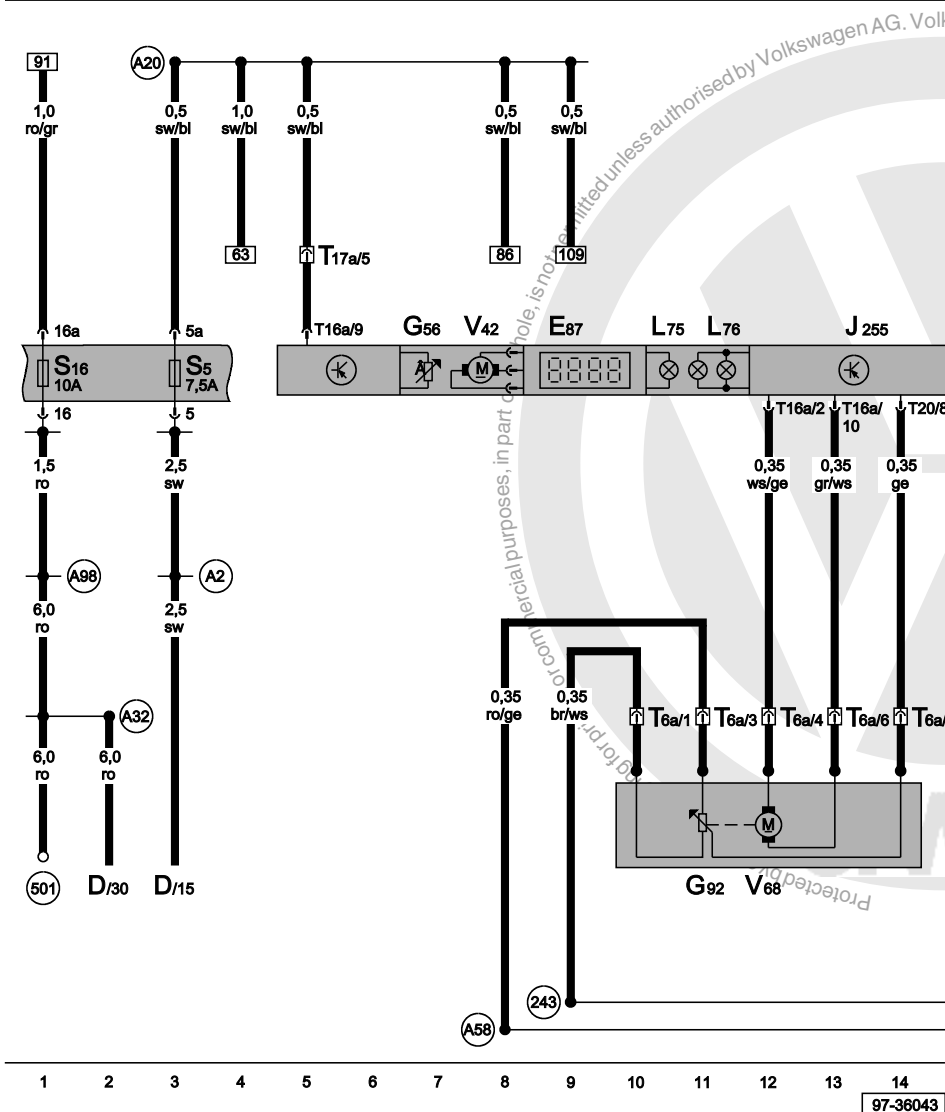
- ◆ The number in brackets behind the part designation denotes the control number on the housing.

Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Climatronic control unit, temperature flap control motor



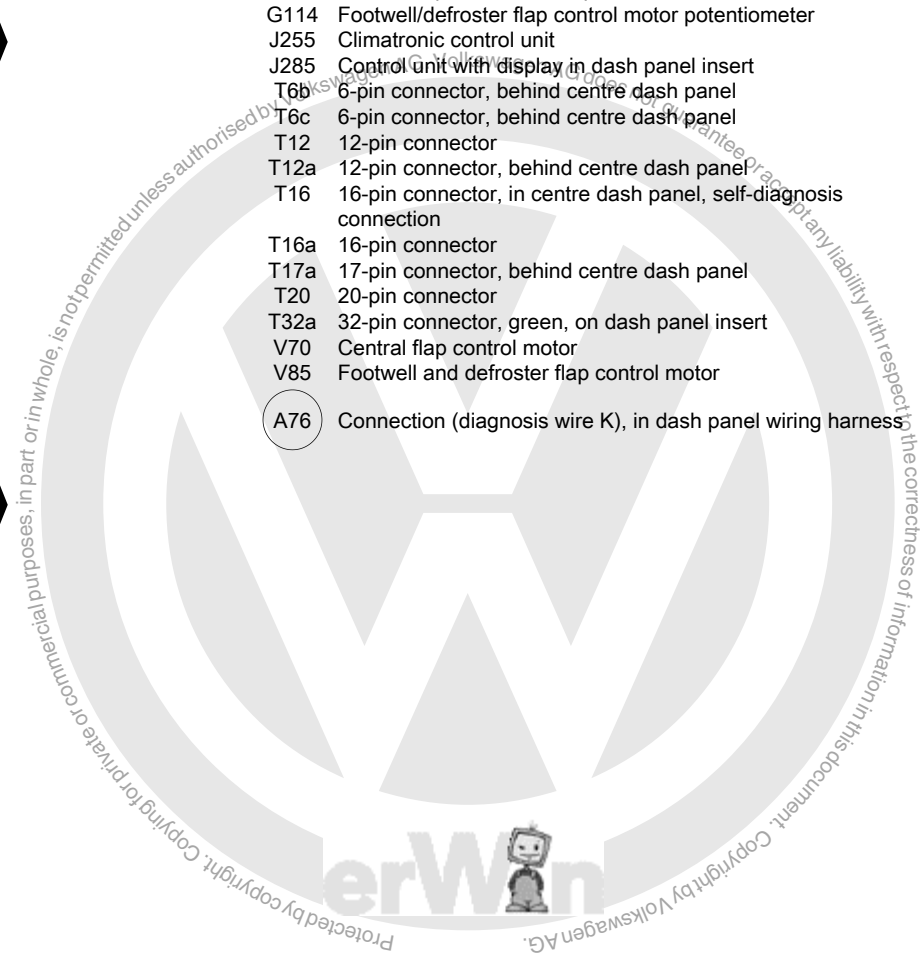
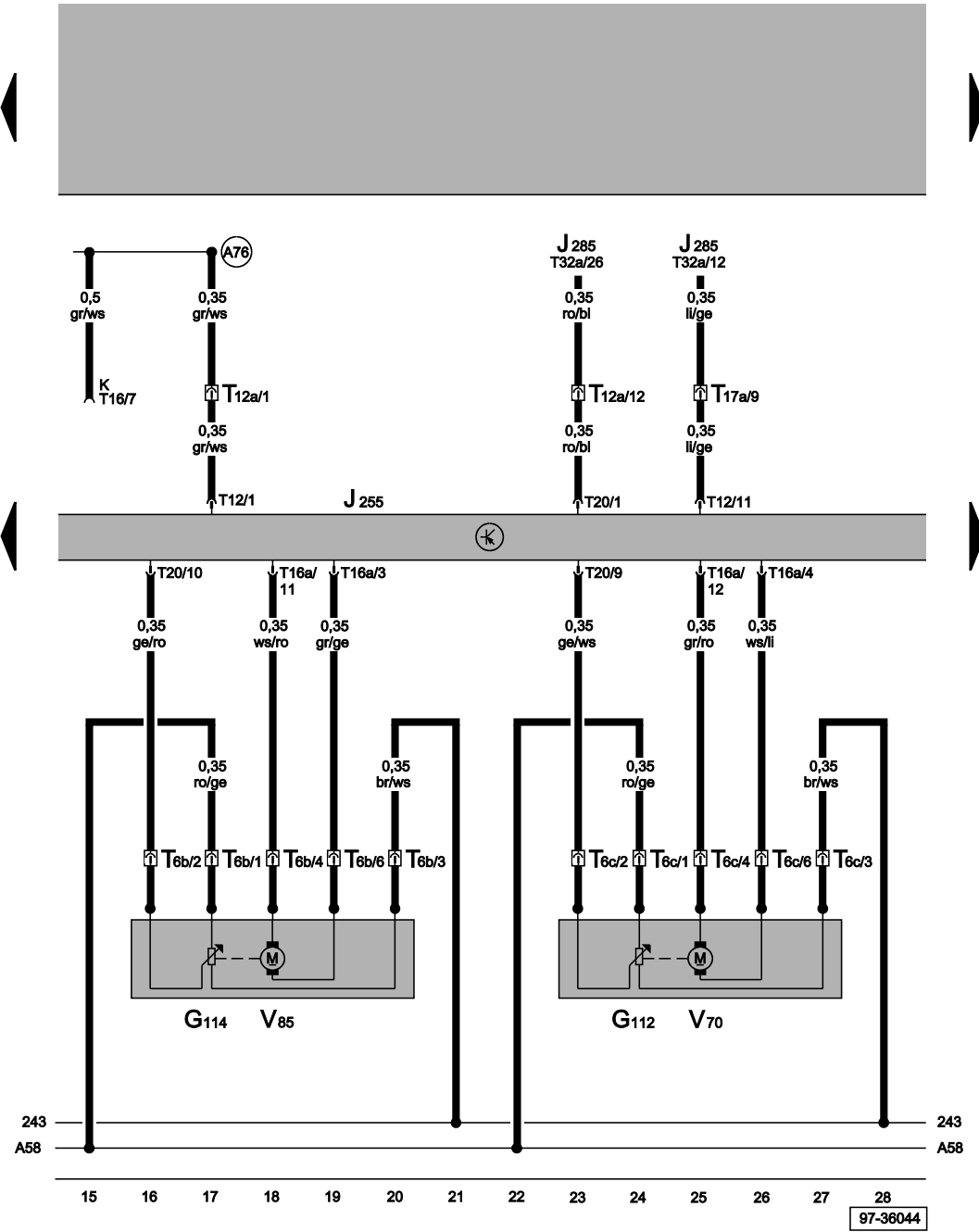
- D Ignition/starter switch
- E87 Rear Climatronic operating and display unit
- G56 Dash panel temperature sensor
- G92 Potentiometer for temperature flap control motor
- J255 Climatronic control unit
- L75 Digital display illumination bulb
- L76 Button illumination bulb
- S5 Fuse 5 in fuse holder
- S16 Fuse 16 in fuse holder
- T6a 6-pin connector, behind centre dash panel
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V42 Temperature sensor blower
- V68 Temperature flap control motor
- 243 Earth connection 1, in Climatronic wiring harness
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A58 Connection (5 volt), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness

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- rs = pink

97-36043

Climatronic control unit, central flap control motor, footwell and defroster flap control motor

- G112 Central flap control motor potentiometer
- G114 Footwell/defroster flap control motor potentiometer
- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- T6b 6-pin connector, behind centre dash panel
- T6c 6-pin connector, behind centre dash panel
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32a 32-pin connector, green, on dash panel insert
- V70 Central flap control motor
- V85 Footwell and defroster flap control motor
- A76 Connection (diagnosis wire K), in dash panel wiring harness



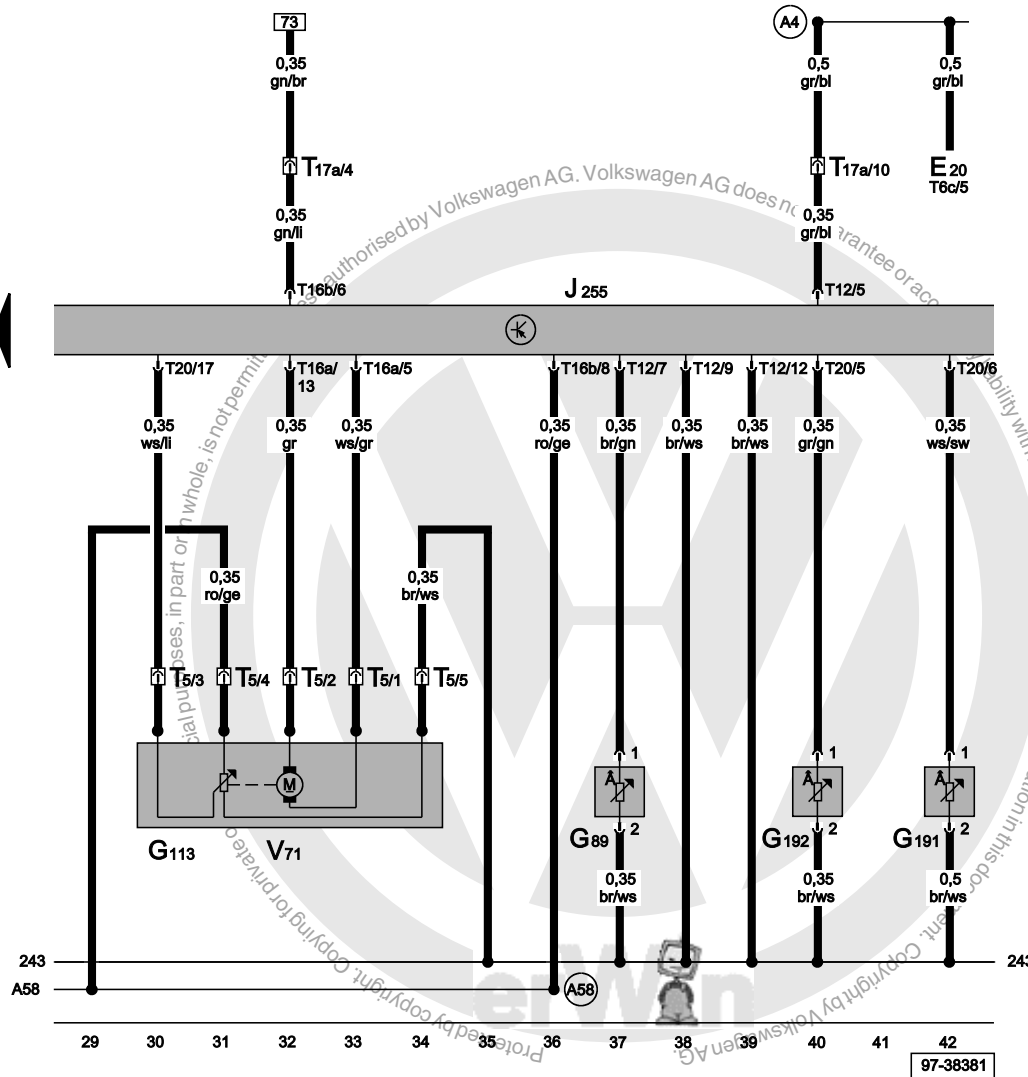
97-36044

Climatronic control unit, air flow flap control motor, vent temperature sender, fresh air intake duct temperature sensor

- E20 Illumination regulators, switches, instruments
- G89 Fresh air intake duct temperature sensor, below the dash panel on right
- G113 Air flow flap control motor potentiometer
- G191 Centre vent temperature sender
- G192 Footwell vent temperature sender
- J255 Climatronic control unit
- T5 5-pin connector, behind centre dash panel
- T6c 6-pin connector
- T12 12-pin connector
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V71 Air flow flap control motor

A4 Positive connection (58b), in dash panel wiring harness

A58 Connection (5 volt), in dash panel wiring harness

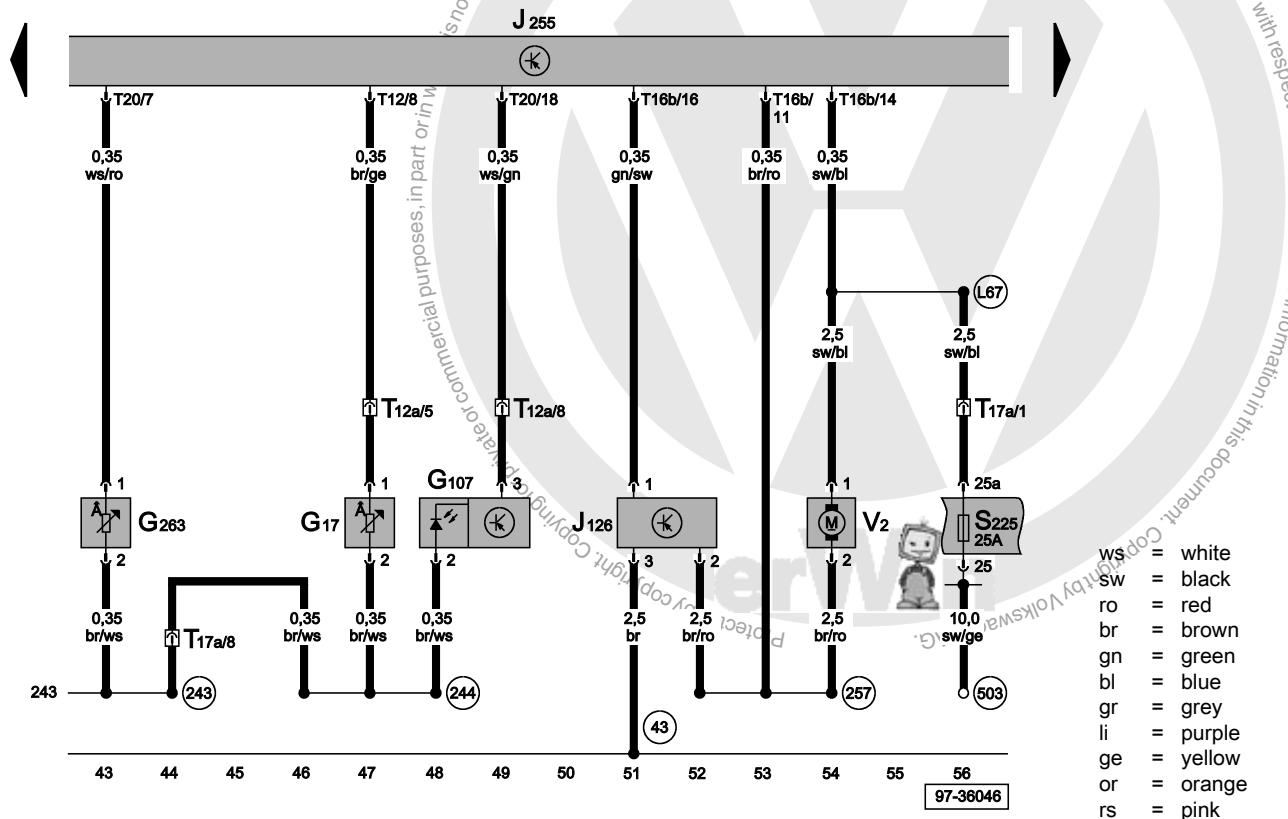


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Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, evaporator output temperature sender, sunlight penetration photosensor

- G17 Ambient temperature sensor, on bumper front left
- G107 Sunlight penetration photosensor, on centre dash panel
- G263 Evaporator output temperature sender
- J126 Fresh air blower control unit, below the dash panel on right
- J255 Climatronic control unit
- S225 Fuse 25 in fuse holder
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V2 Fresh air blower

- 43 Earth point, lower part of right A-pillar
- 243 Earth connection 1, in Climatronic wiring harness
- 244 Earth connection (sender earth), in Climatronic wiring harness
- 257 Earth connection 2, in Climatronic wiring harness
- 503 Screw connection (75x), on relay plate
- L67 Positive connection (75x), in engine compartment wiring harness

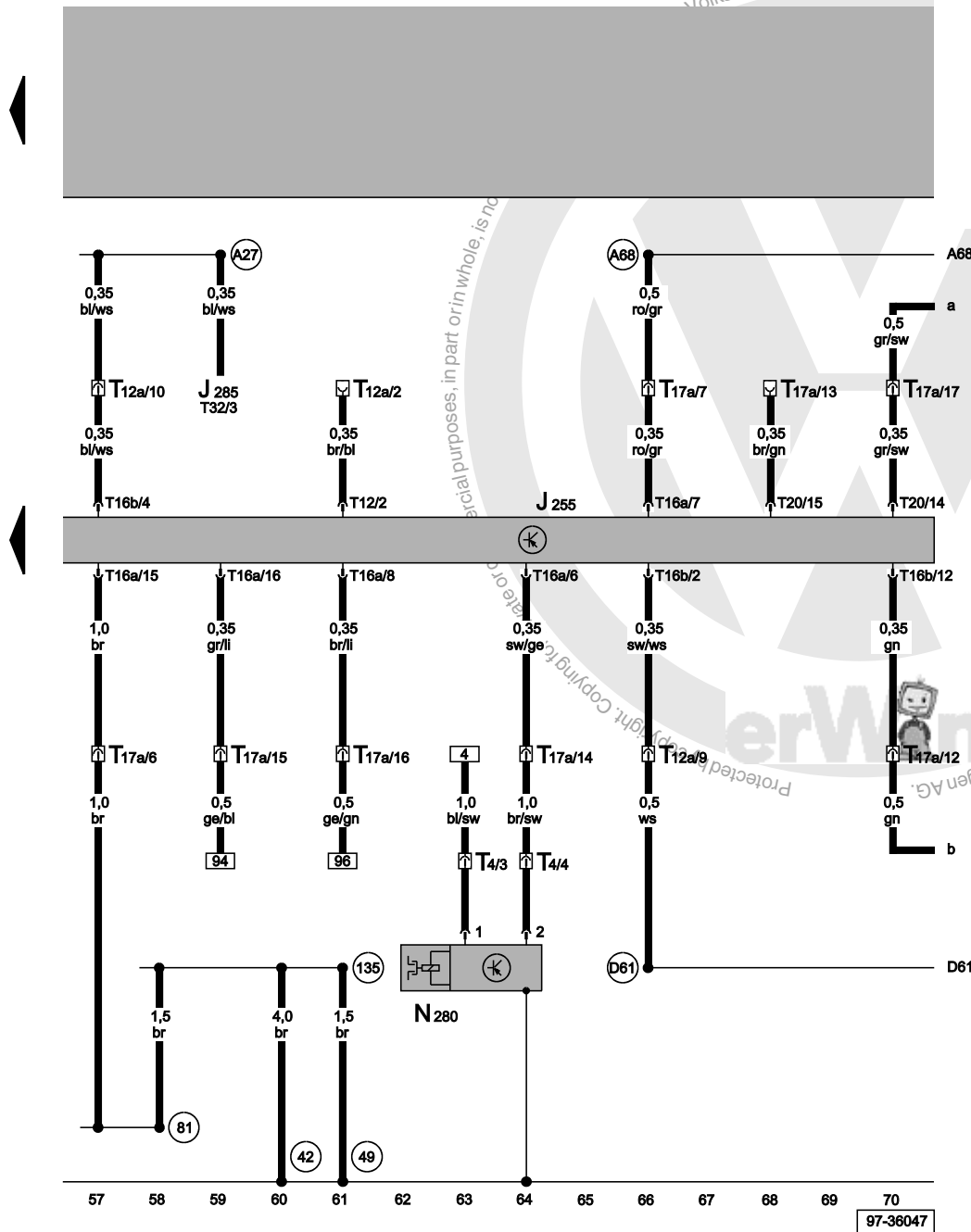


Climatronic control unit, air conditioner compressor regulating valve

- J255 Climatronic control unit
- J285 Control unit with display in dash panel insert
- N280 Air conditioning system compressor regulating valve
- T4 4-pin connector, near starter
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- D61 Connection (air conditioning system), in engine compartment wiring harness

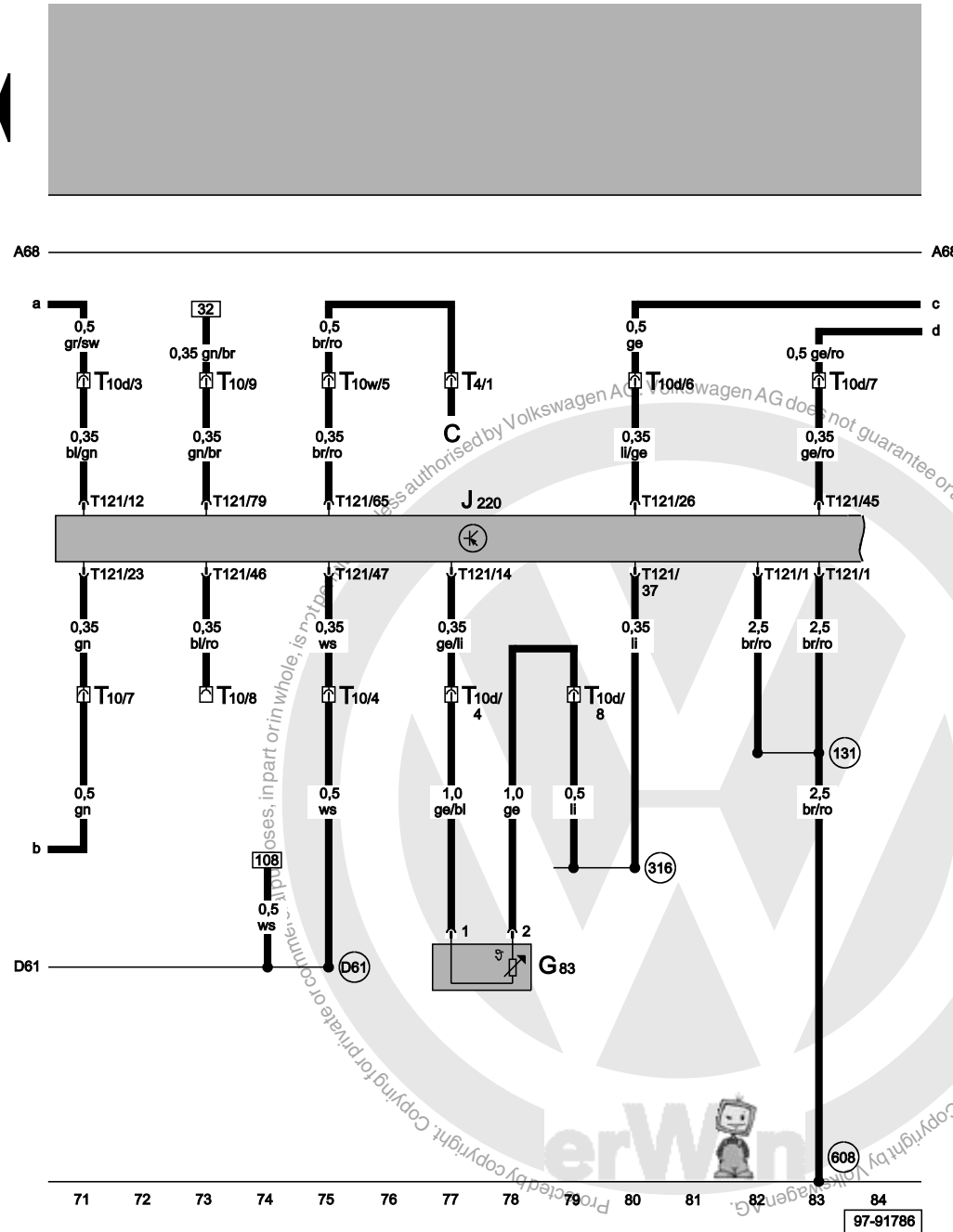
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97-36047

Motronic control unit, radiator outlet coolant temperature sender

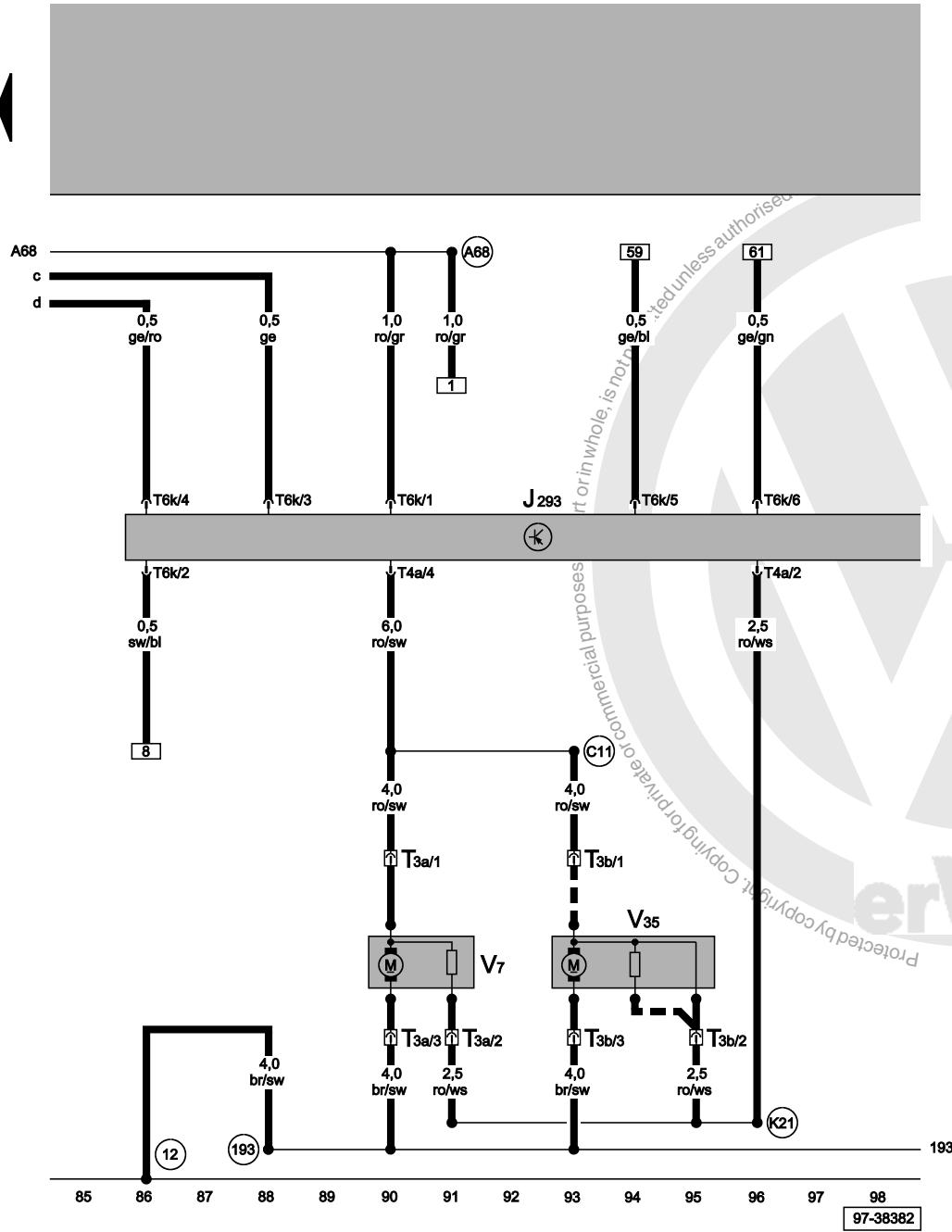
- C Alternator
- G83 Radiator outlet coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- T4 4-pin connector, near starter
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 131 Earth connection -2-, in engine compartment wiring harness
- 316 Earth connection (sender earth 2), in engine wiring harness
- 608 Earth point, in centre of plenum chamber
- D61 Connection (air conditioning system), in engine compartment wiring harness



Radiator fan control unit, radiator fan

- J293 Radiator fan control unit, in engine compartment, front left
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4a 4-pin connector
- T6k 6-pin connector
- V7 Radiator fan
- V35 Right fan for radiator*

- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in coolant fan wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- C11 Connection in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- * depends on equipment with series resistor/ without series resistor
- not with all levels of equipment exist

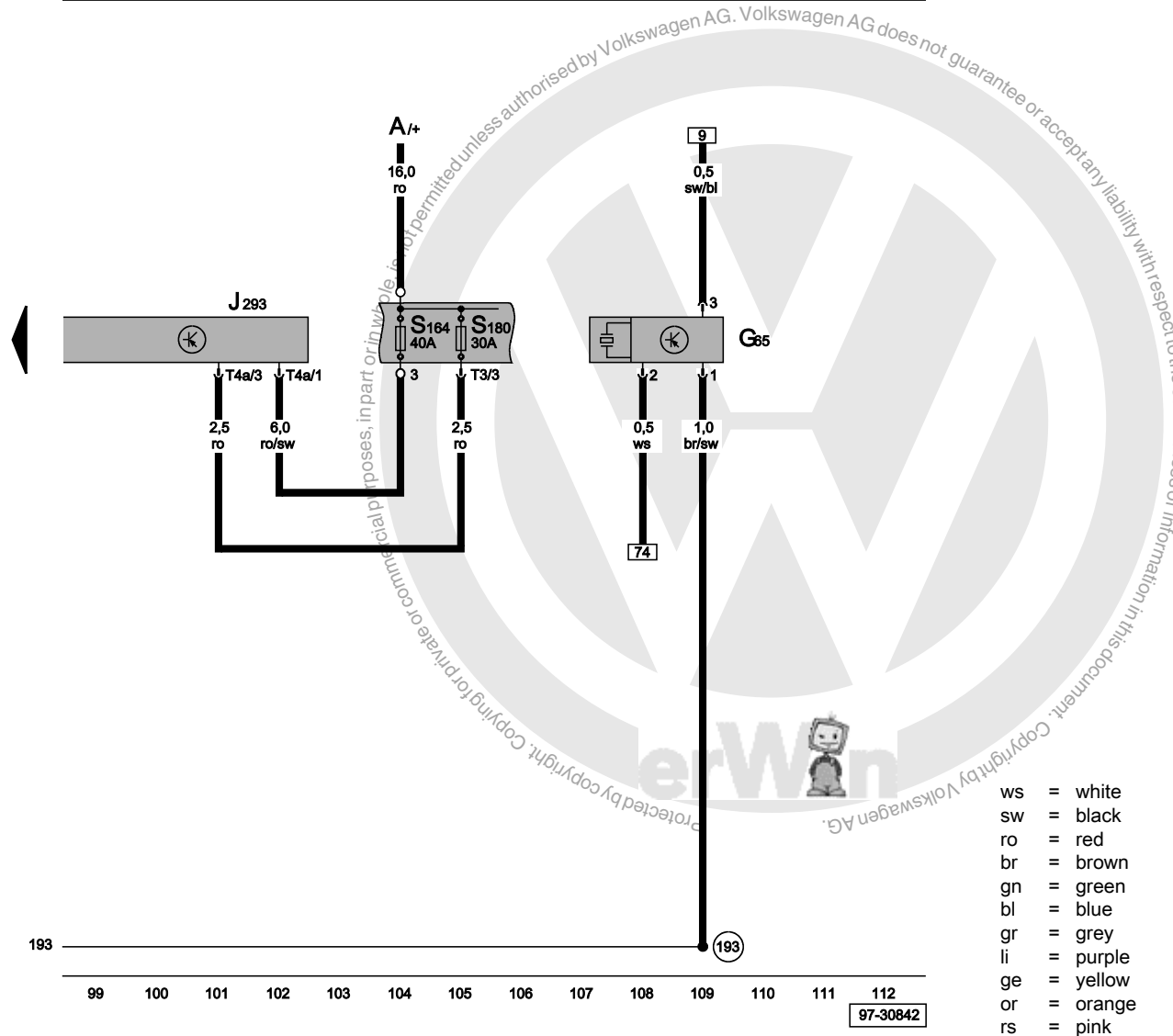


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Radiator fan control unit, high pressure sender

- A Battery
- G65 High pressure sender
- J293 Radiator fan control unit, in engine compartment, front left
- S164 Fuse -3- (30), in fuse holder on battery
- S180 Fuse -8- (30), in fuse holder on battery
- T3 3-pin connector
- T4a 4-pin connector

193 Earth connection 1, in coolant fan wiring harness



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1.8 I/132 kW Motronic, engine code BEK

from March 2002

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

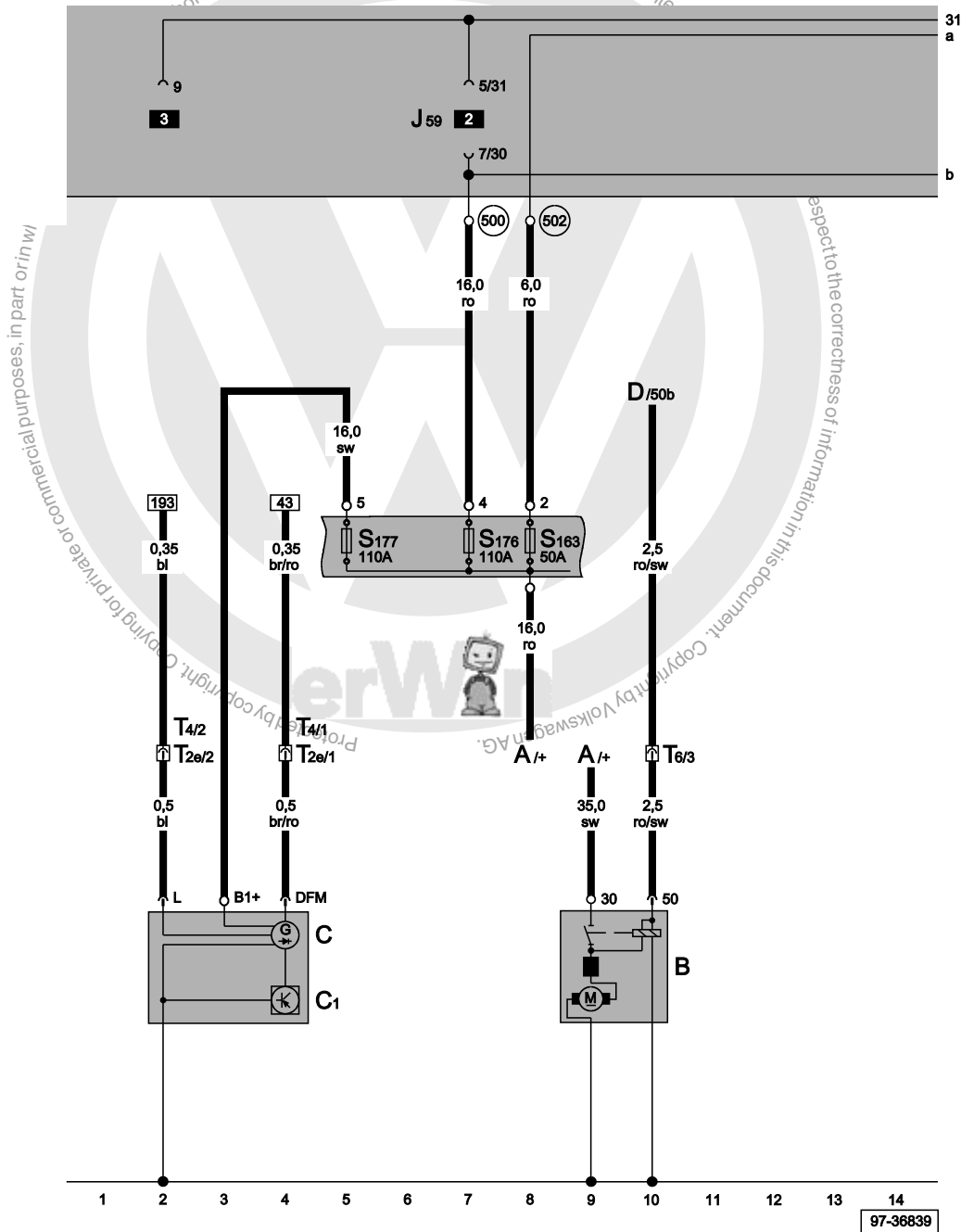
⇒ List of Fitting Locations!

For information concerning

◆ Fault Finding Programs

⇒ guided fault finding

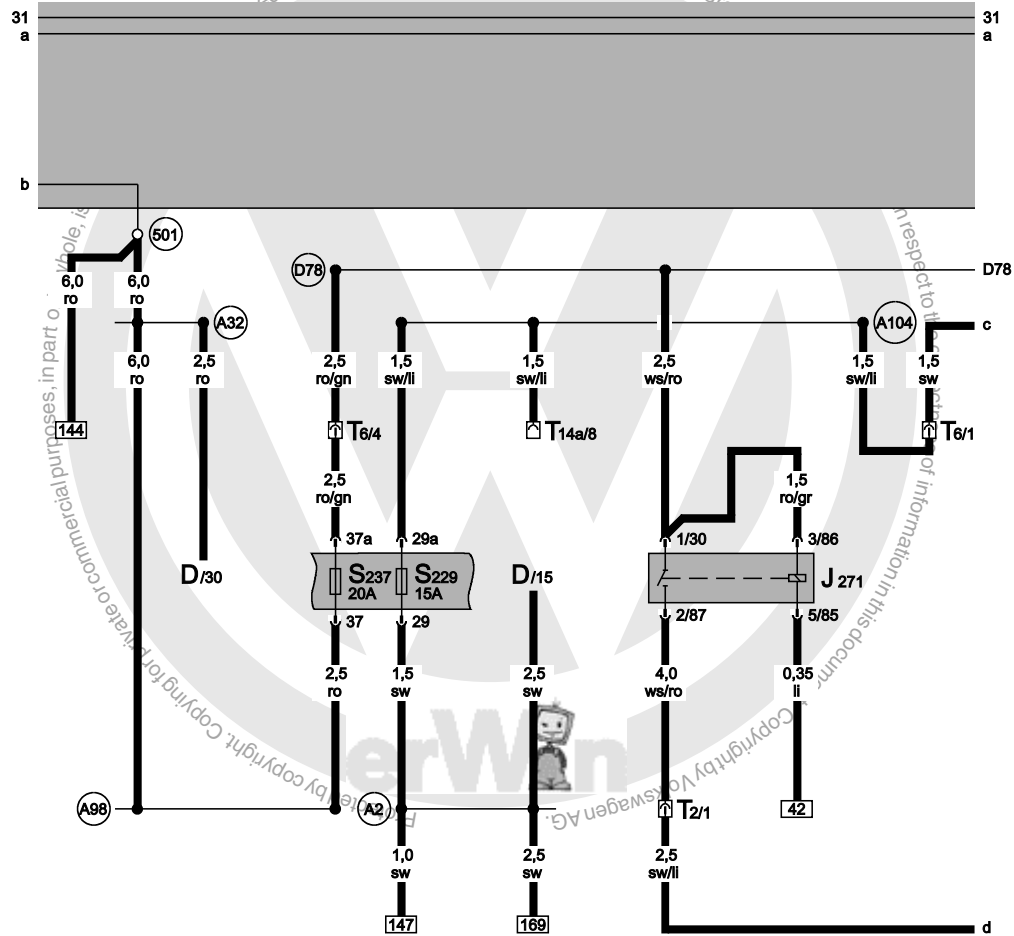




Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

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Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness

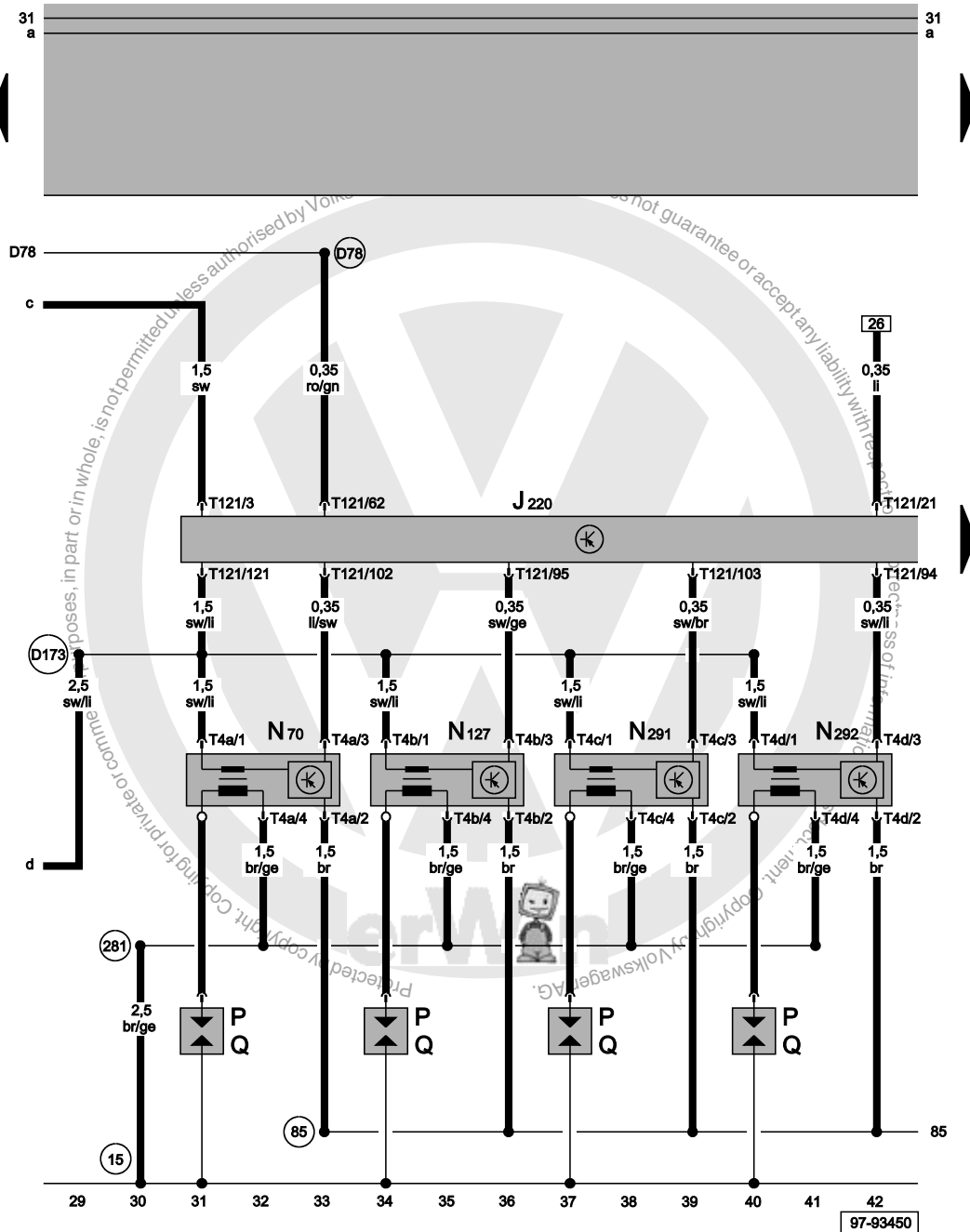
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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- N292 Ignition coil 4 with output stage
- P Spark plug connector
- Q Spark plugs
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T4d 4-pin connector
- T121 121-pin connector

- 15 Earth point, on cylinder head
- 85 Earth connection 1, in engine compartment wiring harness
- 281 Earth connection 1, in engine harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D173 Connection (87), in engine wiring harness

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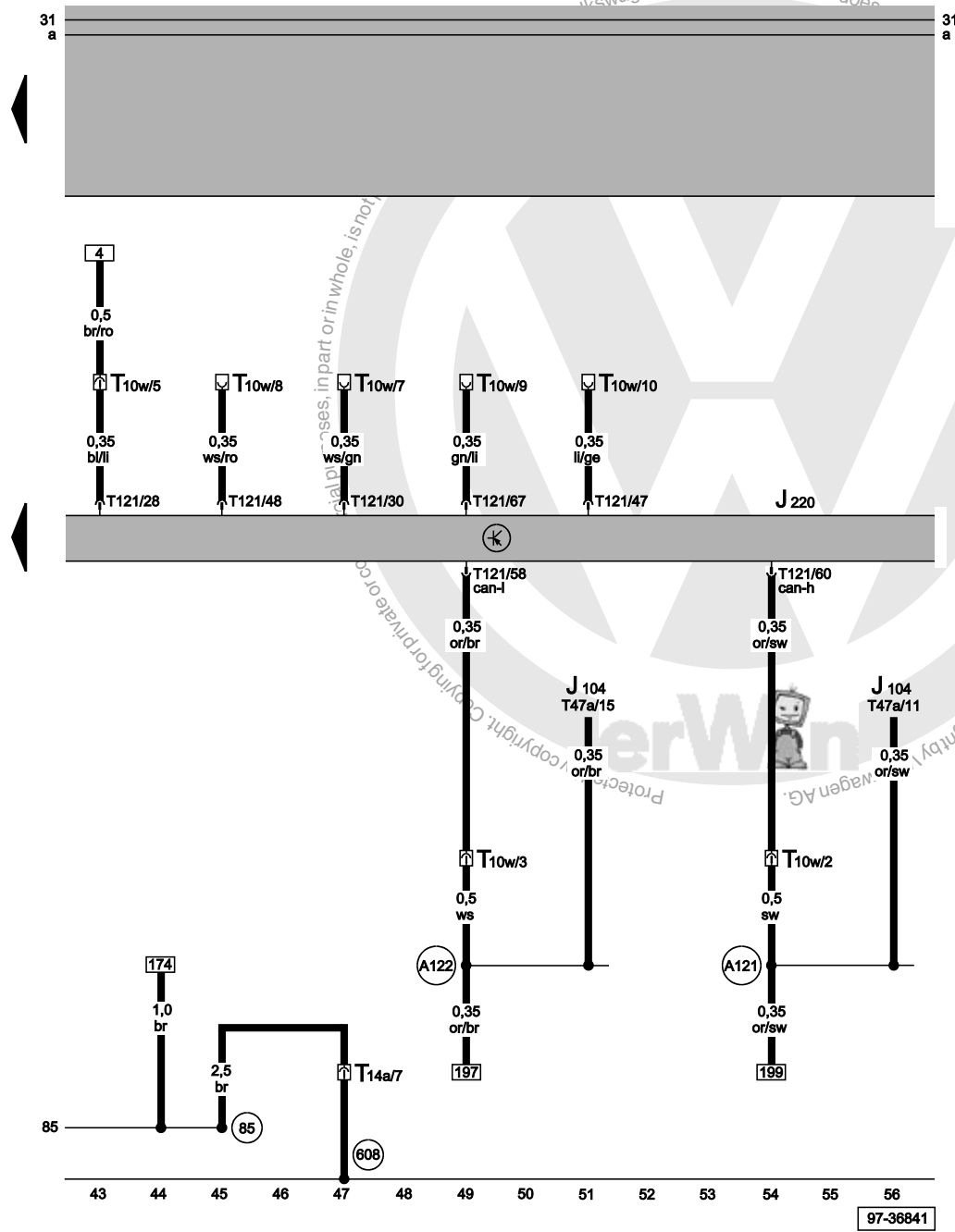


97-93450

Motronic control unit

- J104 ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

- (85) Earth connection 1, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness



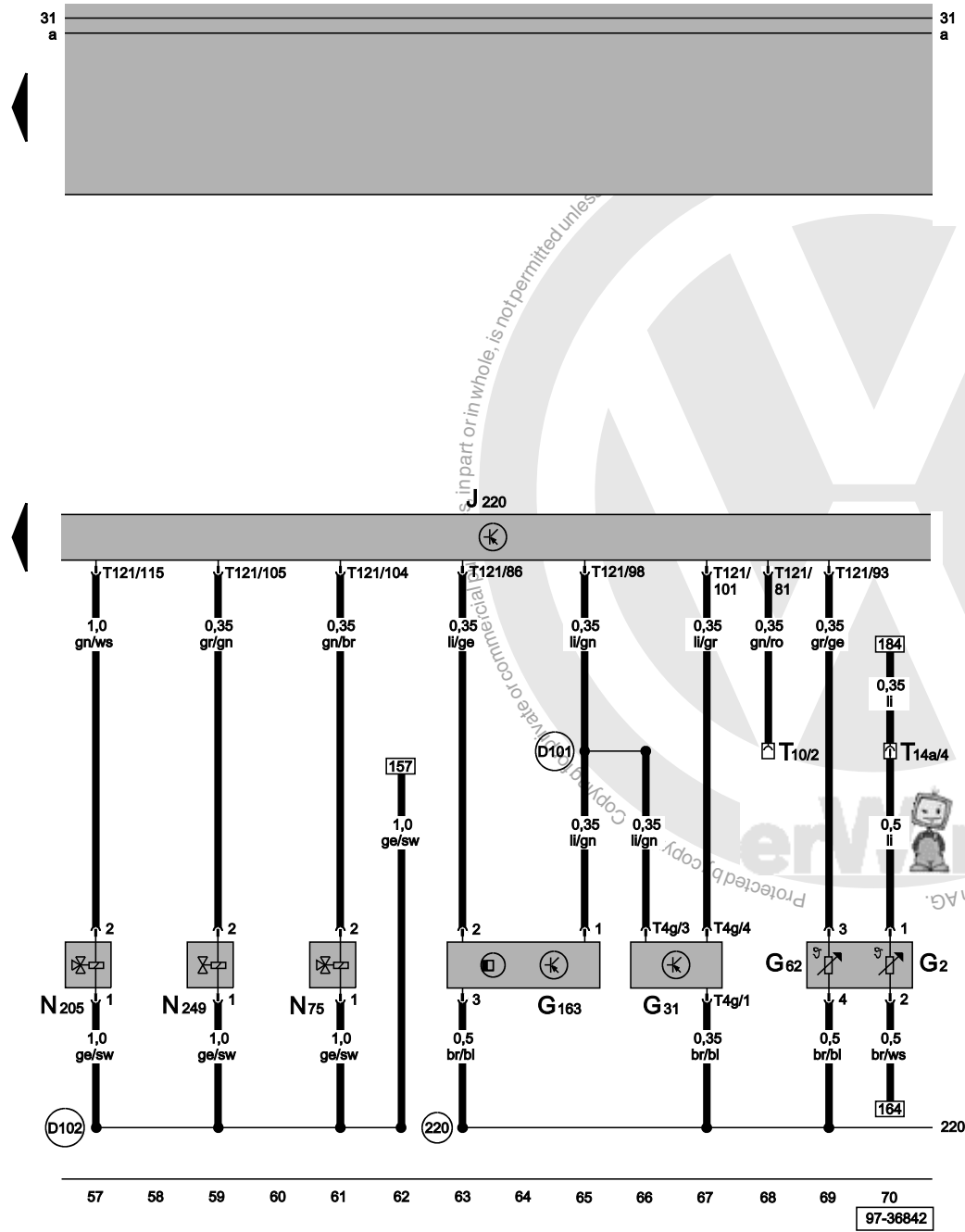
Motronic control unit, coolant temperature sender, Hall sender, charge air pressure sender, charge pressure control solenoid valve, turbocharger air recirculation valve, inlet camshaft control valve

- G2 Coolant temperature display sender
- G31 Charge air pressure sender
- G62 Coolant temperature sender
- G163 Hall sender
- J220 Motronic control unit, in centre plenum chamber
- N75 Charge pressure control solenoid valve
- N205 Inlet camshaft control valve 1
- N249 Turbocharger air recirculation valve
- T4g 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

220 Earth connection (sender earth), in engine wiring harness

D101 Connection 1, in engine wiring harness

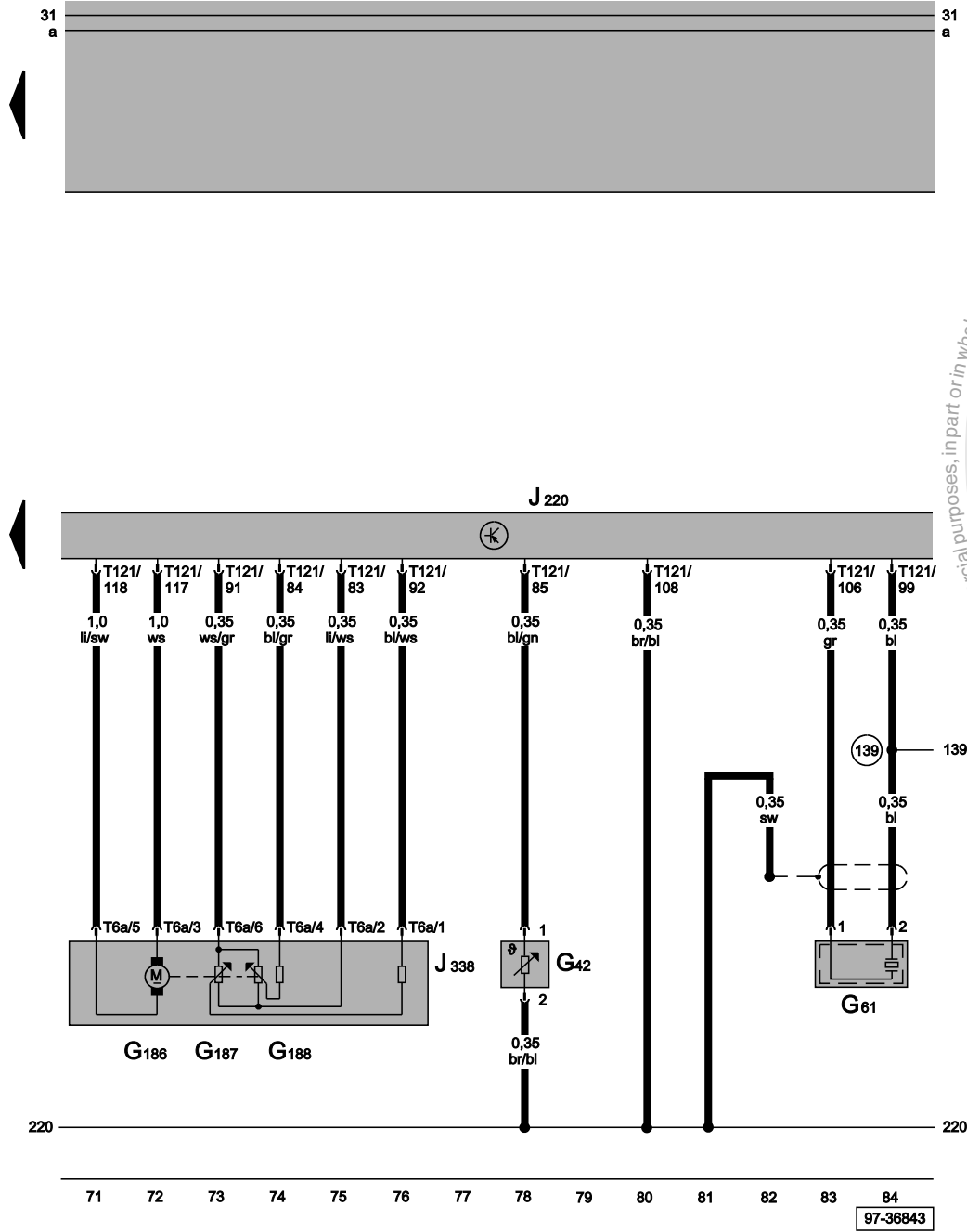
D102 Connection 2, in engine wiring harness



- ws = white
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Motronic control unit, throttle valve module, knock sensor 1, intake air temperature sender

- G42 Intake air temperature sender
- G61 Knock sensor 1
- G186 Throttle valve drive, electric throttle
- G187 Throttle valve drives angle sender 1, electric throttle
- G188 Throttle valve drives angle sender 2, electric throttle
- J220 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T6a 6-pin connector
- T121 121-pin connector
- 139 Earth connection (sender earth), in Motronic wiring harness



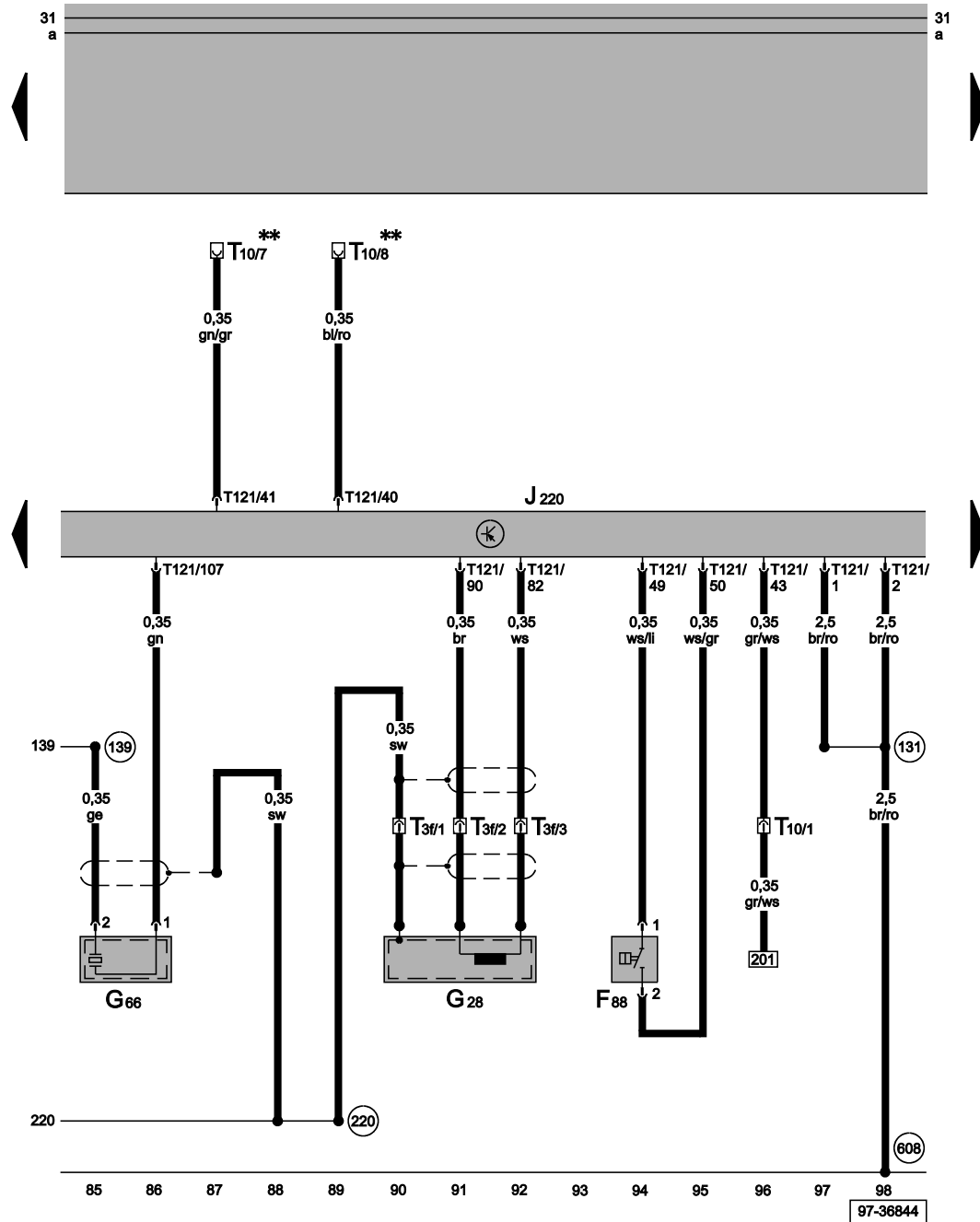
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Motronic control unit, engine speed sender, knock sensor 2, power assisted steering pressure switch

- F88 Power assisted steering pressure switch
- G28 Engine speed sender
- G66 Knock sensor 2
- J220 Motronic control unit, in centre plenum chamber
- T3f 3-pin connector, in front engine compartment
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 139 Earth connection (sender earth), in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

** connection air conditioning system

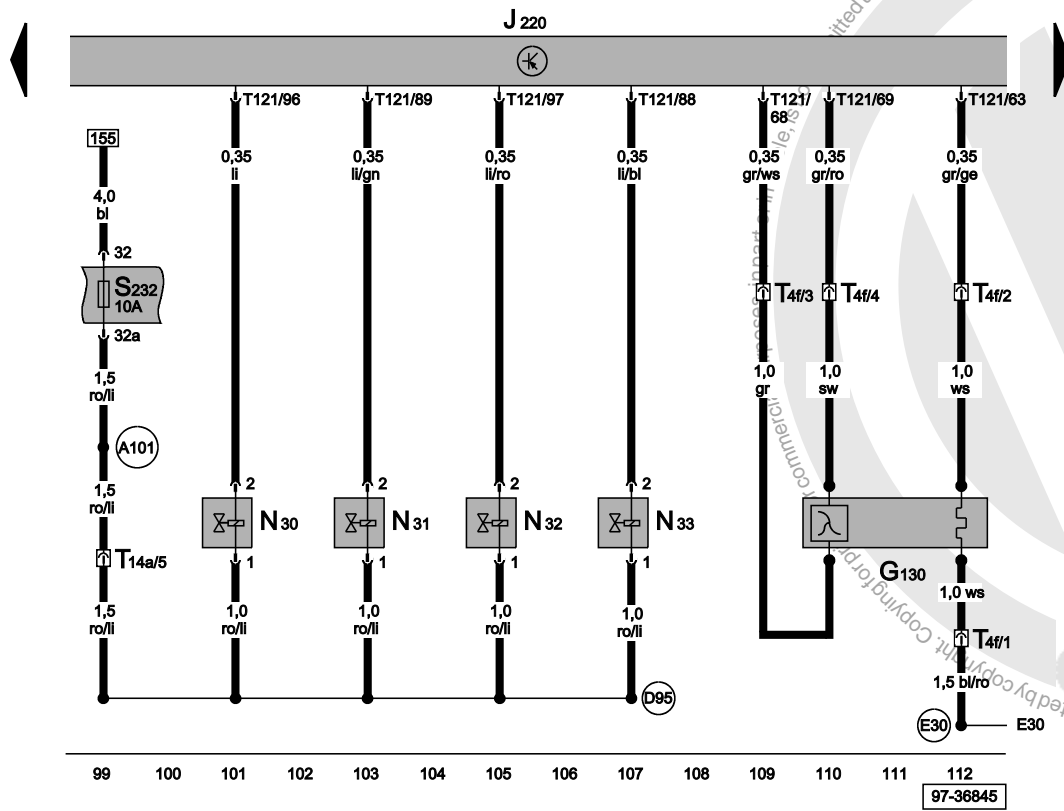


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Motronic control unit, injectors, lambda probe after catalytic converter

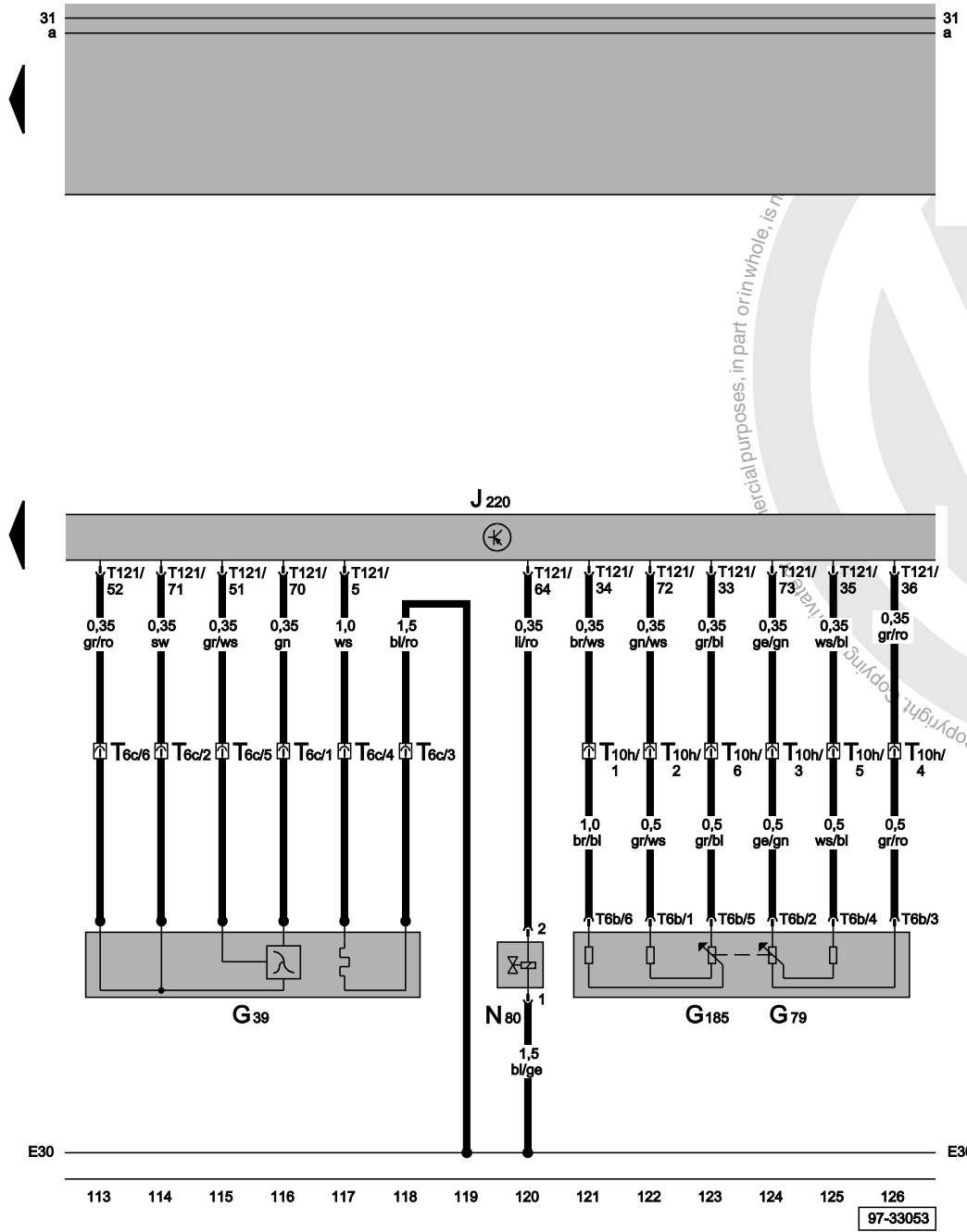
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T4f 4-pin connector, near catalytic converter
- T14a 14-pin connector, near battery
- T121 121-pin connector

- A101 Connection 3 (87), in dash panel wiring harness
- D95 Connection (injectors), in engine compartment wiring harness
- E30 Connection (87a), in engine wiring harness



Motronic control unit, accelerator position sender, lambda probe, active charcoal filter system solenoid valve

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender 2
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector



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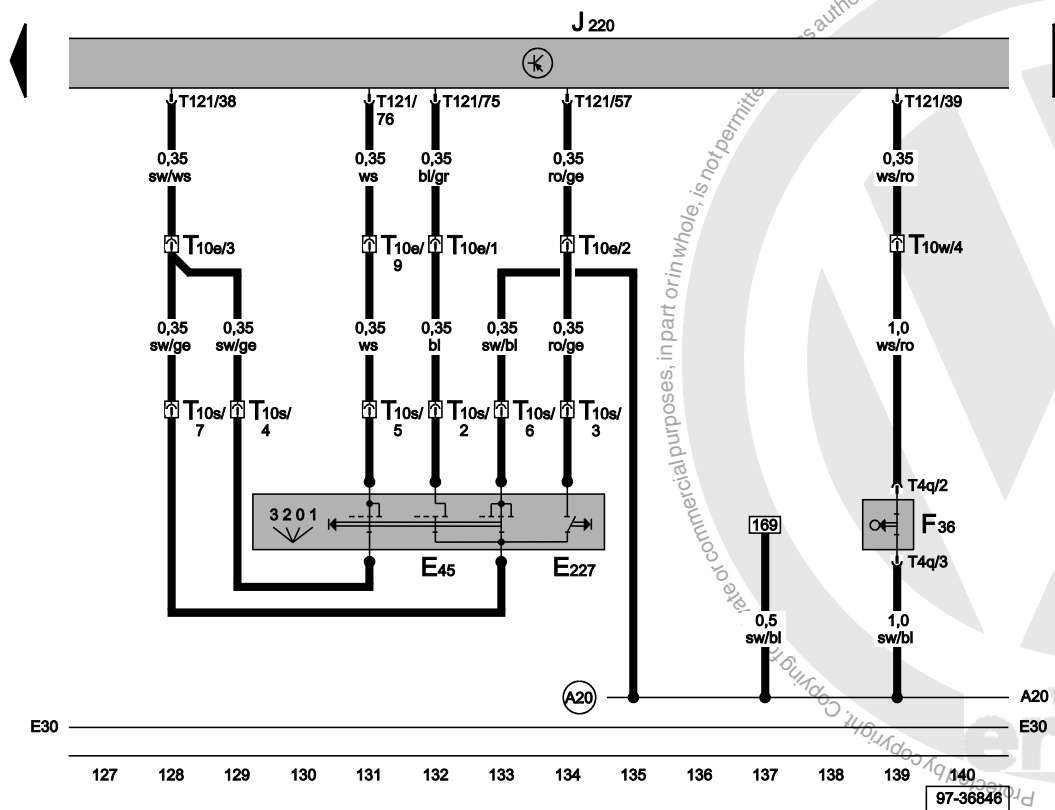
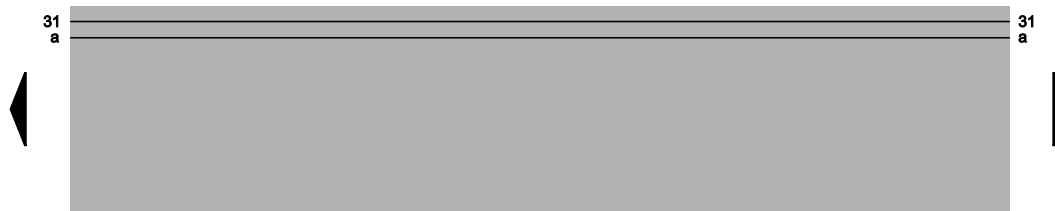
97-33053

Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

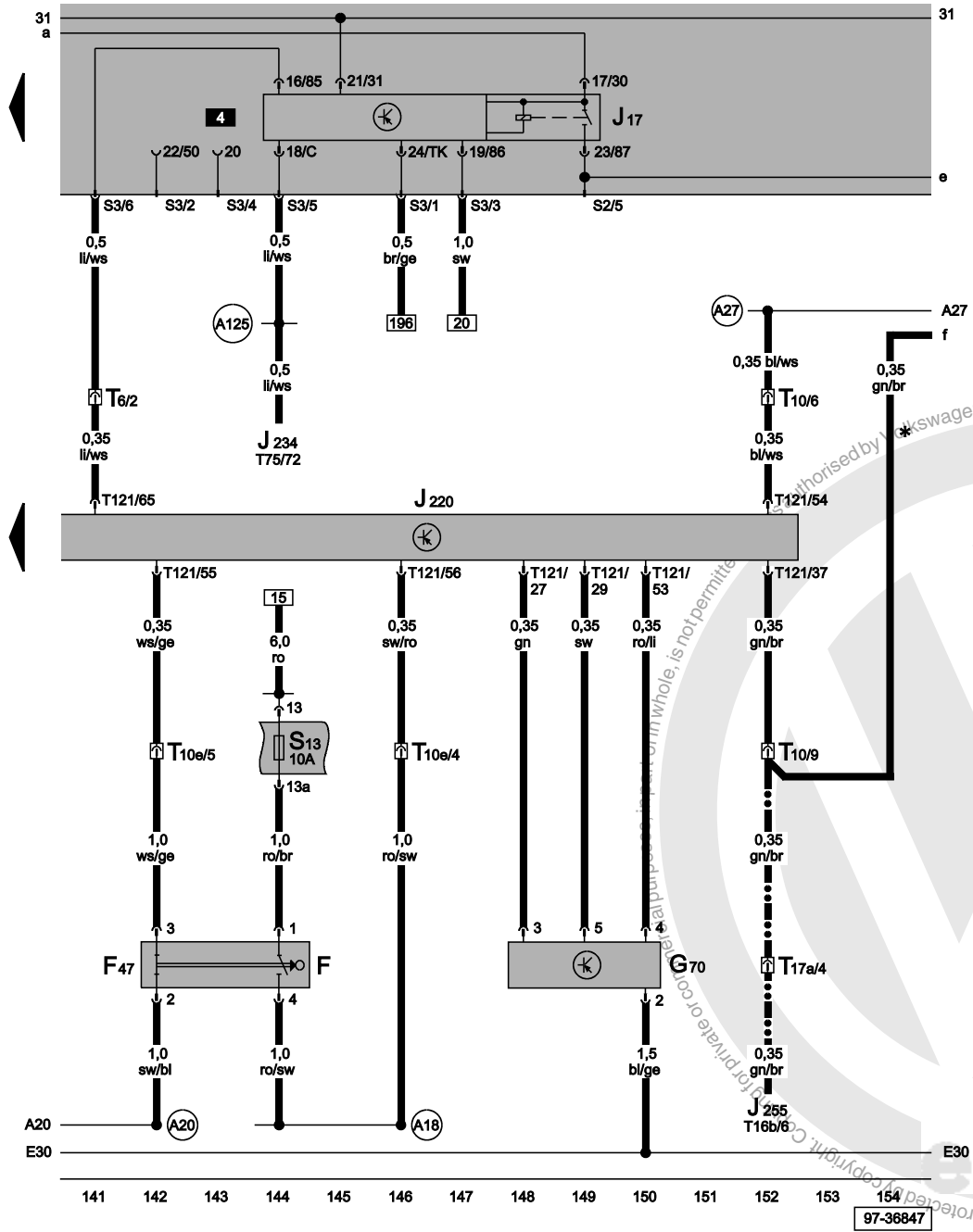
A20 Connection (15a), in dash panel wiring harness

** only models with GND, models with multifunction display ⇒ Current Flow Diagram multifunction steering wheel for cruise control system and radio



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Motronic control unit, fuel pump relay, brake light switch, brake pedal switch, air mass meter

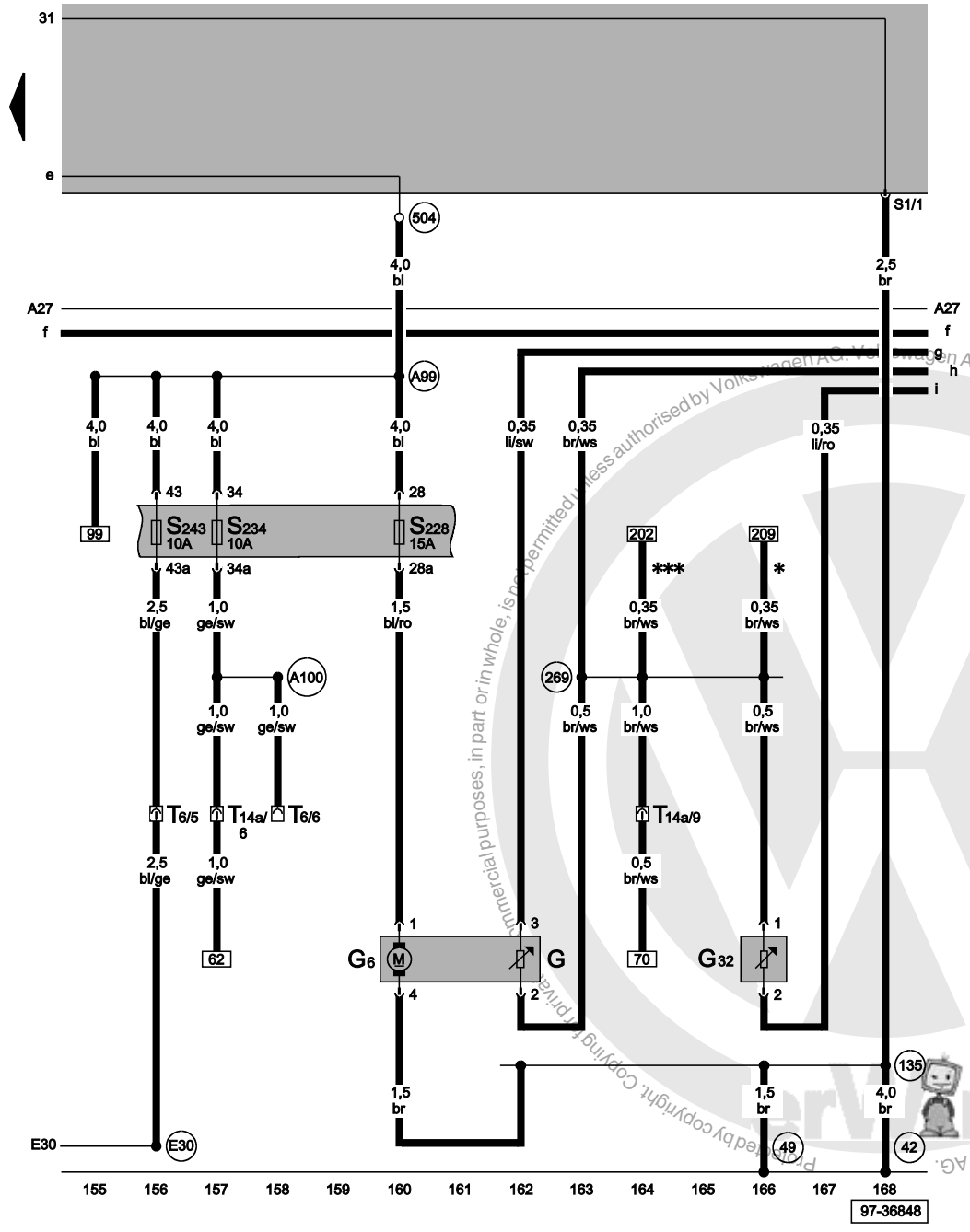


- F Brake light switch
- F47 Brake pedal switch
- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- J255 Climatronic control unit
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- * Revolution signal engine control unit up to April 2002
- only models with Climatronic

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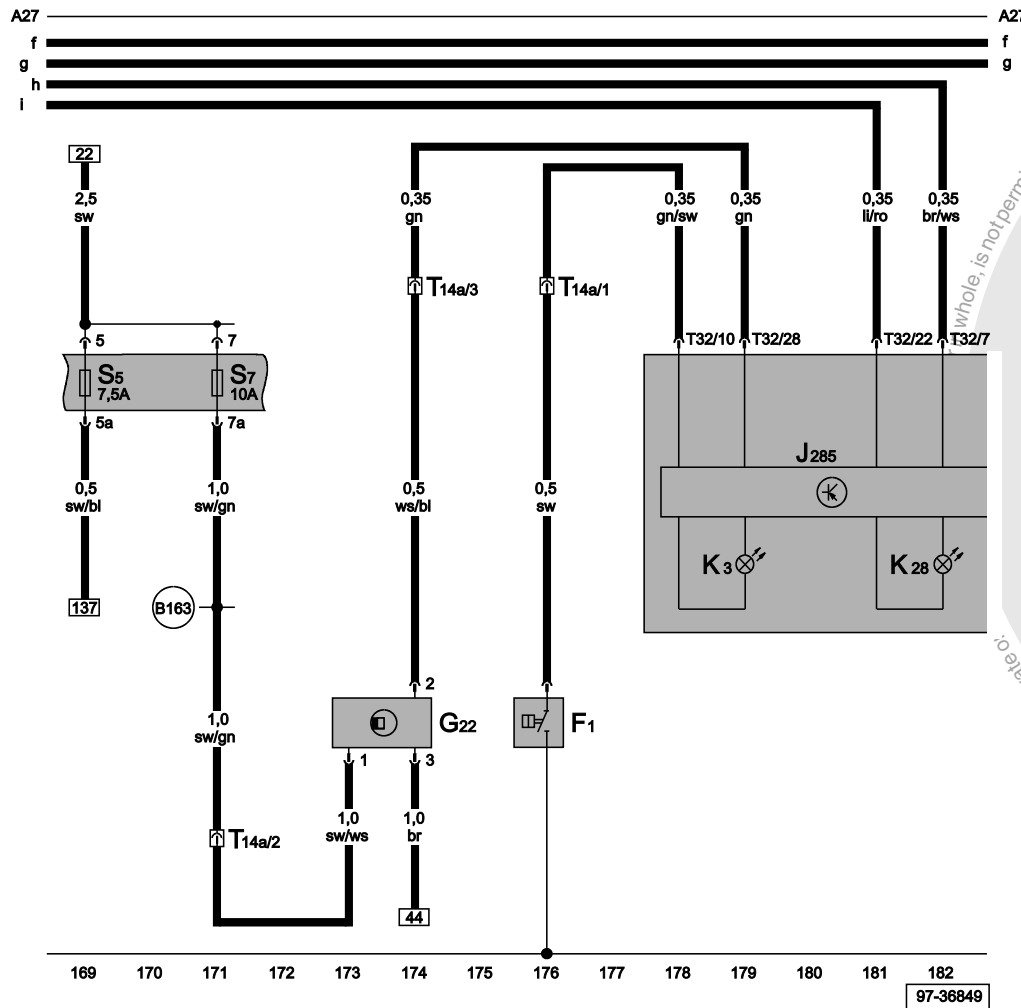
Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only



Dash panel insert, oil pressure warning, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- B163 Positive connection 1 (15), in interior wiring harness

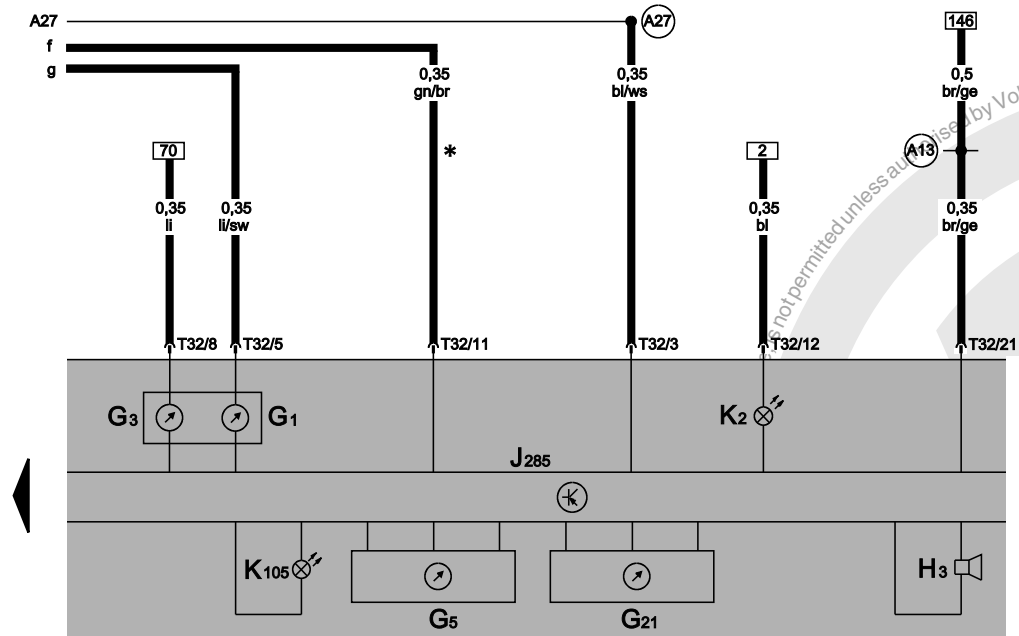


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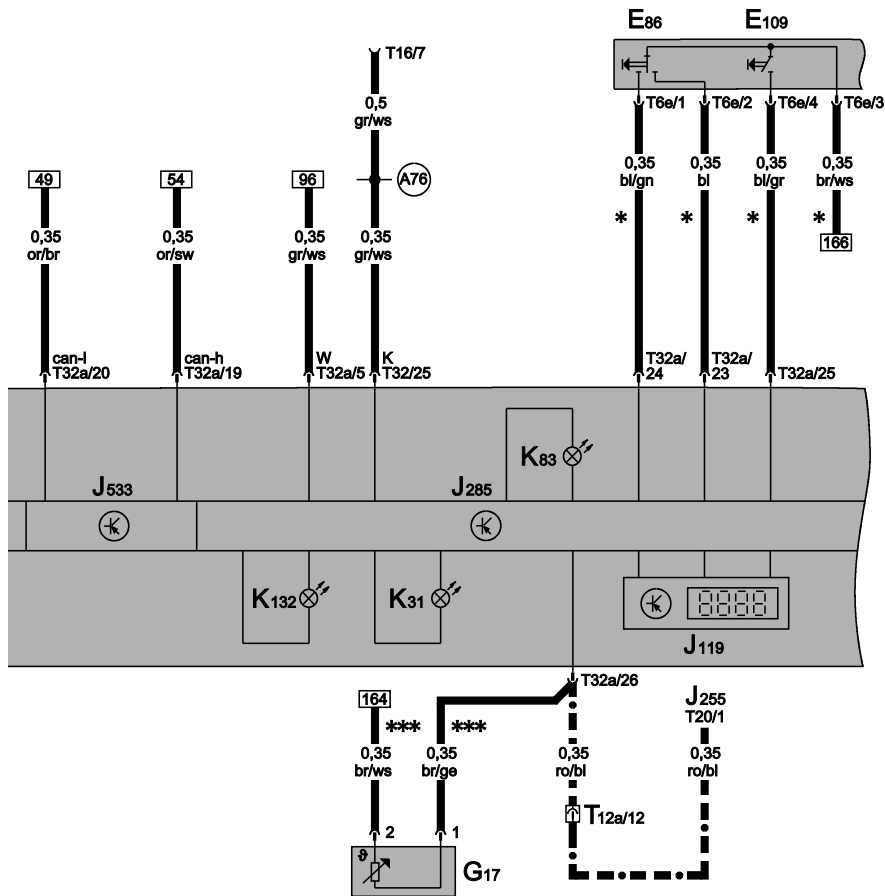
Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness

* Revolution signal engine control unit up to April 2002



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- gn = green
- bl = blue
- gr = grey
- lj = purple
- ge = yellow
- or = orange
- rs = pink



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T12a 12-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only
- only models with Climatronic

2.0 I/85 kW Motronic, engine code BER

from March 2002

2.0 I/85 kW Motronic, engine code BHP

from June 2003

Notes:

For information concerning

◆ Position of relays and fuses

◆ Multi-pin connections

◆ Control units and relays

◆ Earth connections

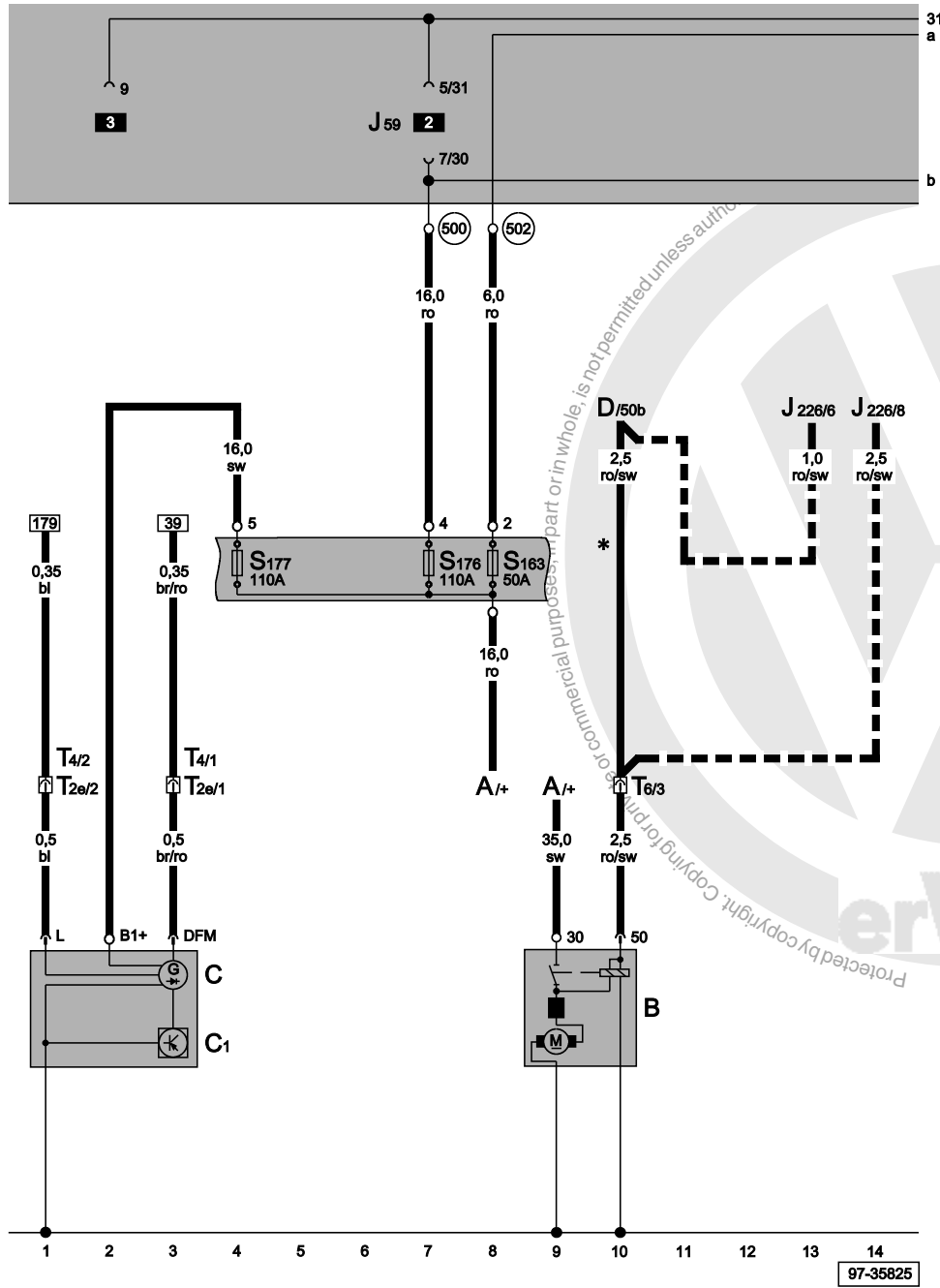
⇒ List of Fitting Locations!

For information concerning

◆ Fault Finding Programs

⇒ guided fault finding



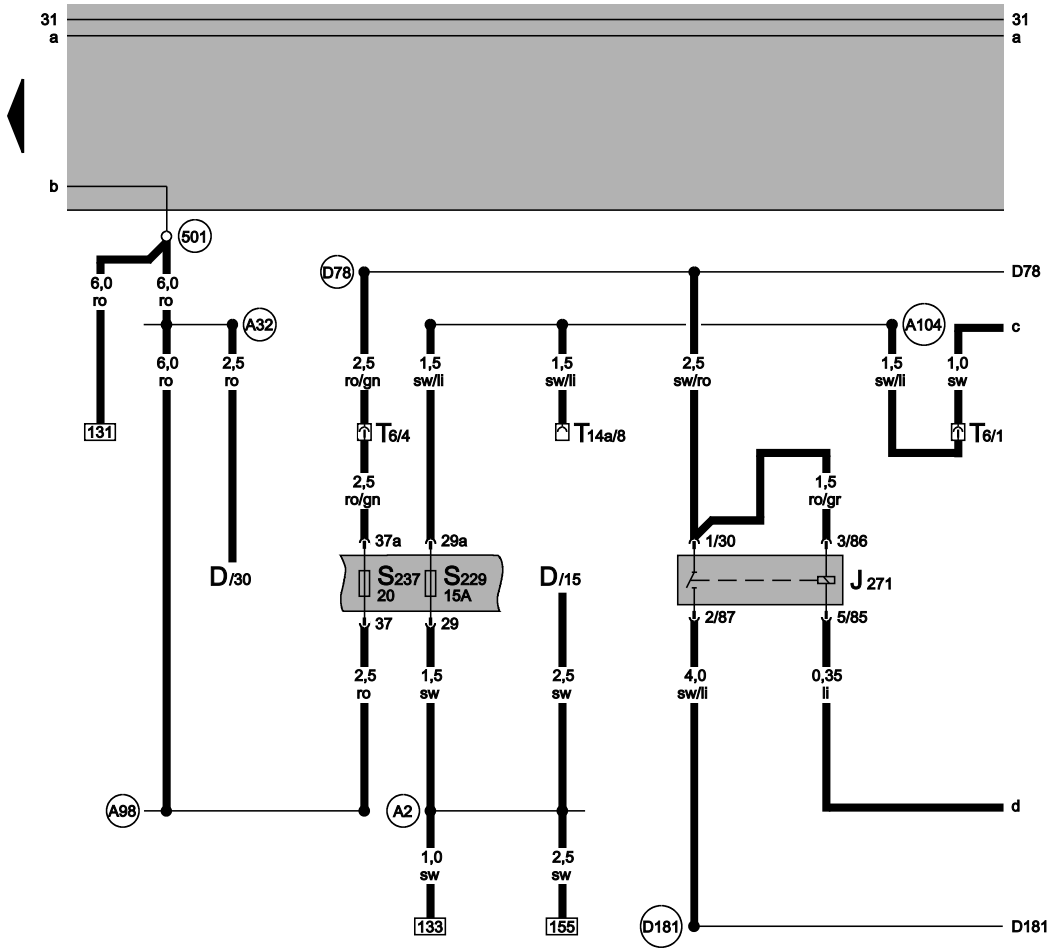


Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- models with automatic gearbox only

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Motronic current supply relay



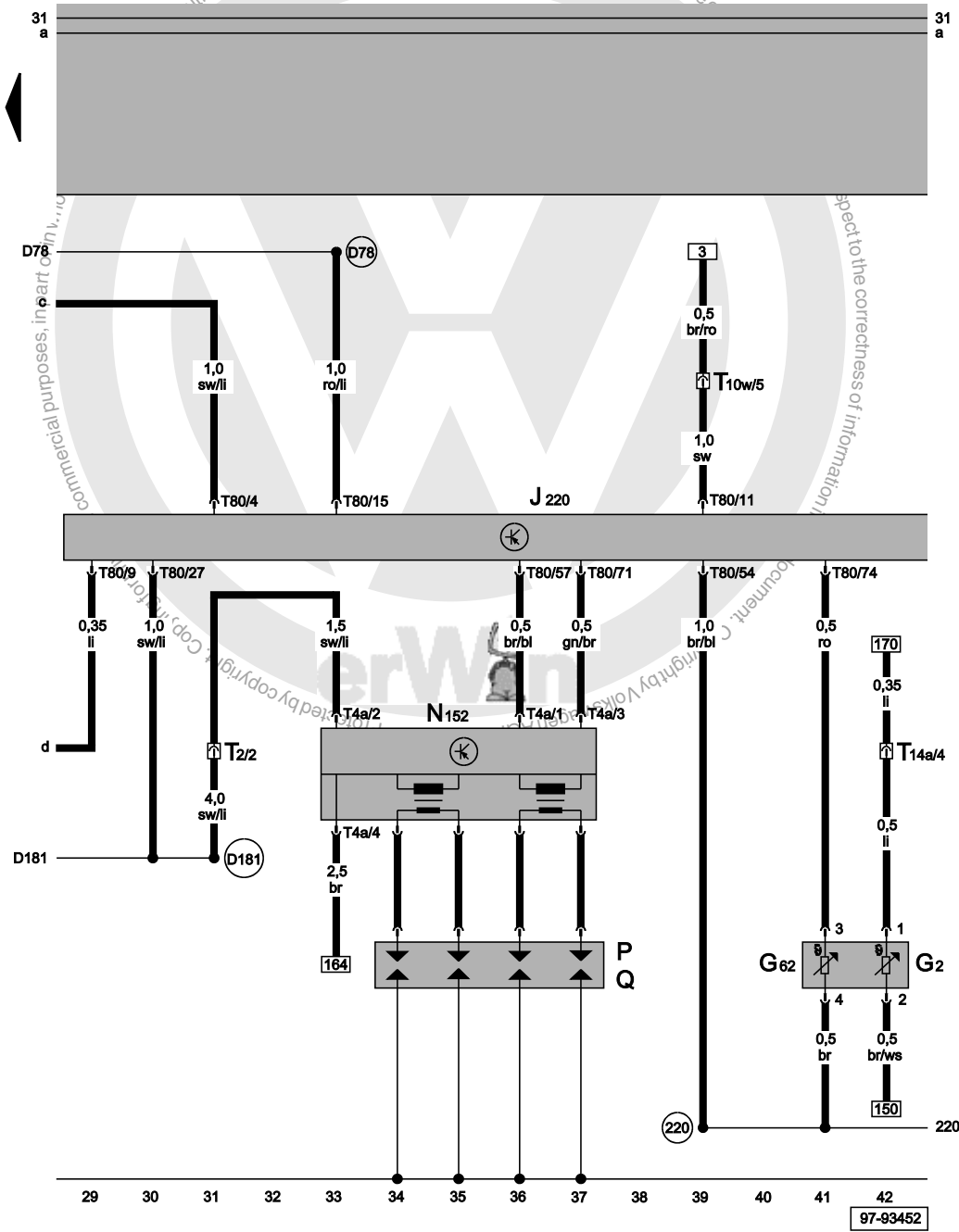
- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- (501) Screw connection 2 (30), on relay plate
- (A2) Positive connection (15), in dash panel wiring harness
- (A32) Positive connection (30), in dash panel wiring harness
- (A98) Positive connection 4 (30), in dash panel wiring harness
- (A104) Positive connection 2 (15), in dash panel wiring harness
- (D78) Positive connection 1 (30a), in engine compartment wiring harness
- (D181) Connection 2 (87a), in engine compartment wiring harness

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Motronic control unit, ignition system, coolant temperature sender

- G2 Coolant temperature display sender
- G62 Coolant temperature sender
- J220 Motronic control unit, in centre plenum chamber
- N152 Ignition transformer
- P Spark plug connector
- Q Spark plugs
- T2 2-pin connector, in left engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T4a 4-pin connector
- T14a 14-pin connector, near battery
- T80 80-pin connector

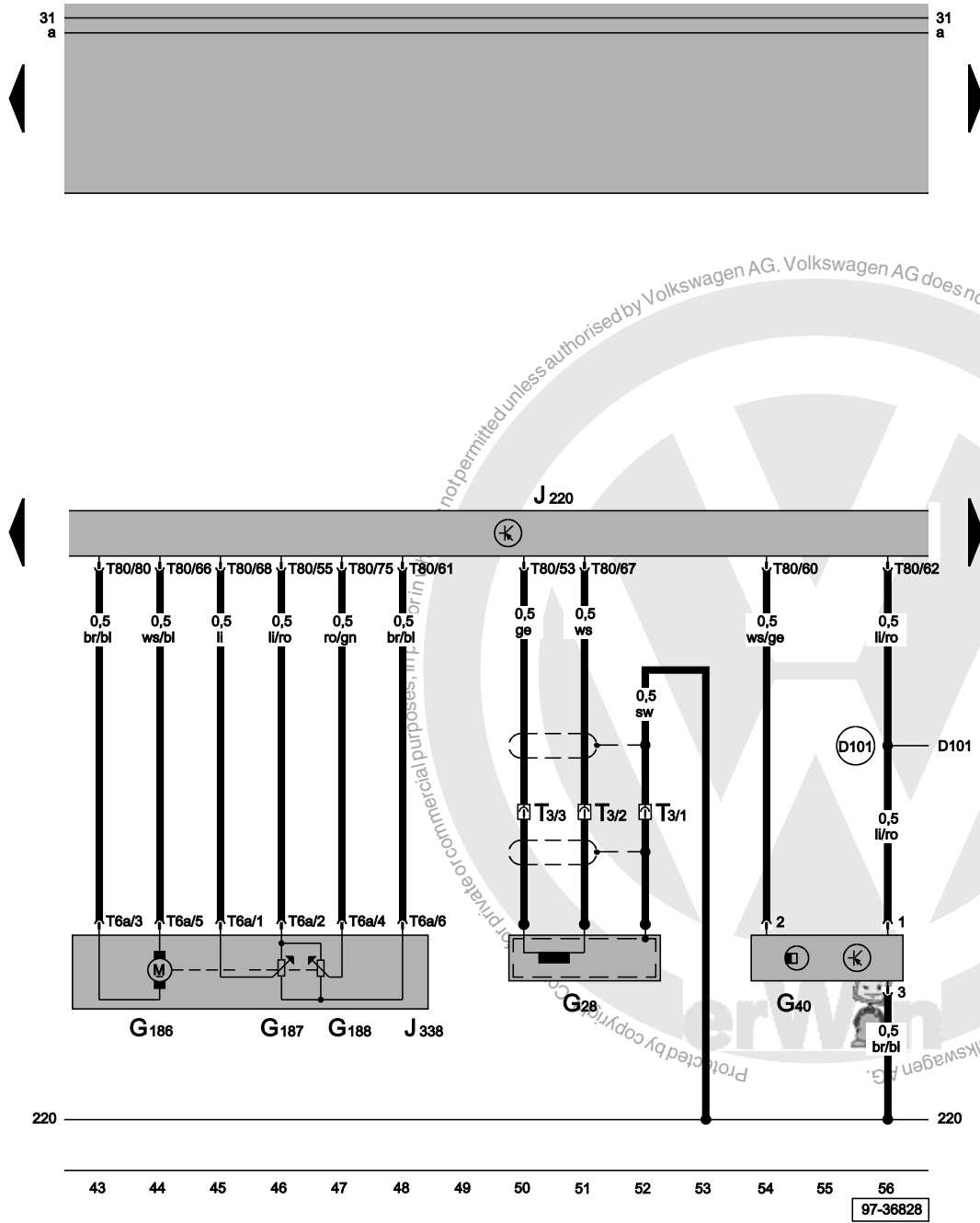
- 220 Earth connection (sender earth), in engine wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness
- D181 Connection 2 (87a), in engine compartment wiring harness



Motronic control unit, throttle valve module, engine speed sender, Hall sender

- G28 Engine speed sender
- G186 Throttle valve drive, electric throttle
- G187 Throttle valve drives angle sender 1, electric throttle
- G188 Throttle valve drives angle sender 2, electric throttle
- J338 Motronic control unit, in centre plenum chamber
- J338 Throttle valve module
- T3 3-pin connector, on front of engine
- T6a 6-pin connector
- T80 80-pin connector

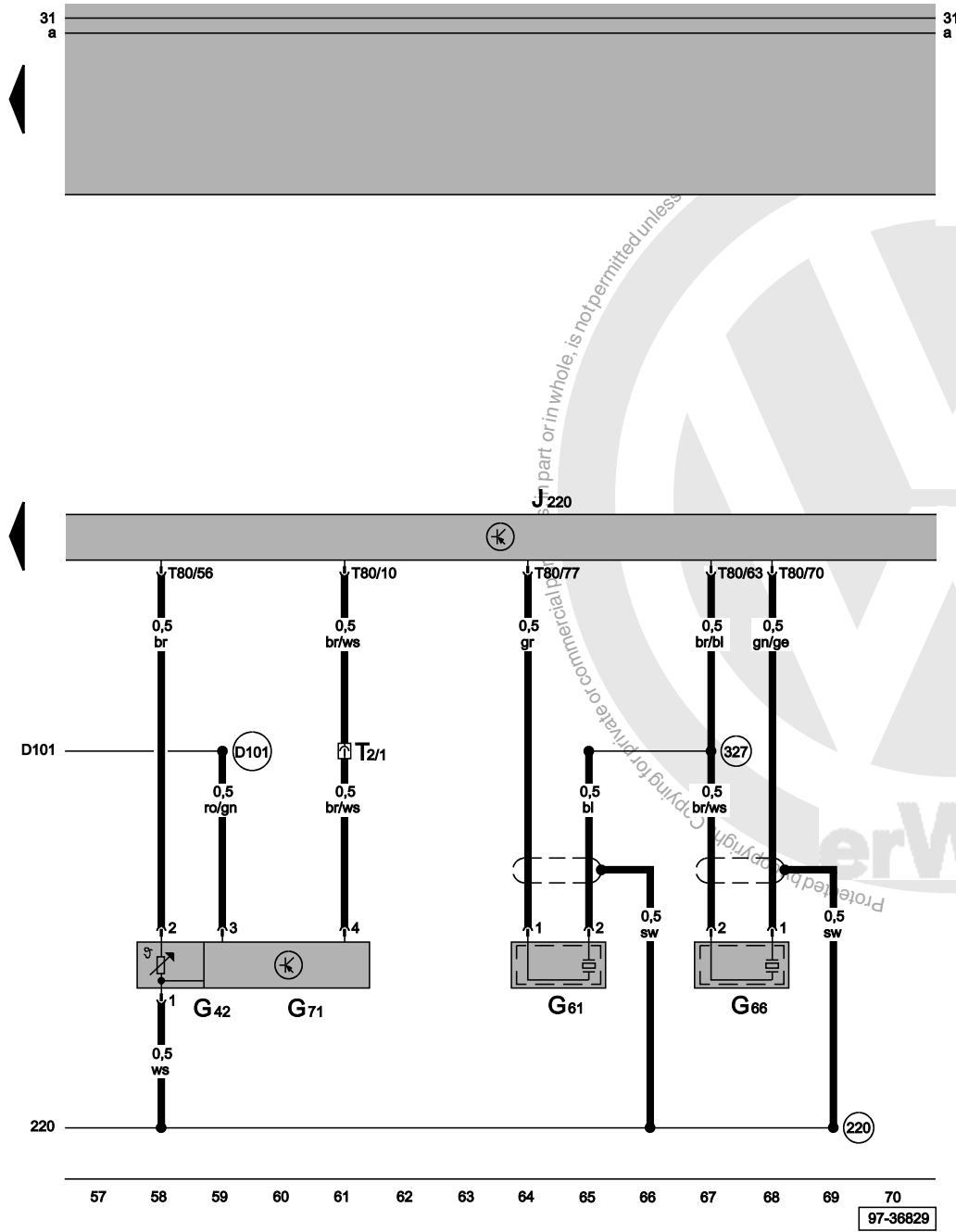
(D101) Connection 1, in engine compartment wiring harness



Motronic control unit, intake air temperature sender, intake manifold pressure sender, knock sensors

- G42 Intake air temperature sender
- G61 Knock sensor 1
- G66 Knock sensor 2
- G71 Intake manifold pressure sender
- G212 Exhaust gas recirculation potentiometer
- J220 Motronic control unit, in centre plenum chamber
- T2 2-pin connector, in left engine compartment
- T80 80-pin connector

- (220) Earth connection (sender earth), in engine wiring harness
- (327) Earth connection (sender earth), in engine compartment wiring harness
- (D101) Connection 1, in engine compartment wiring harness



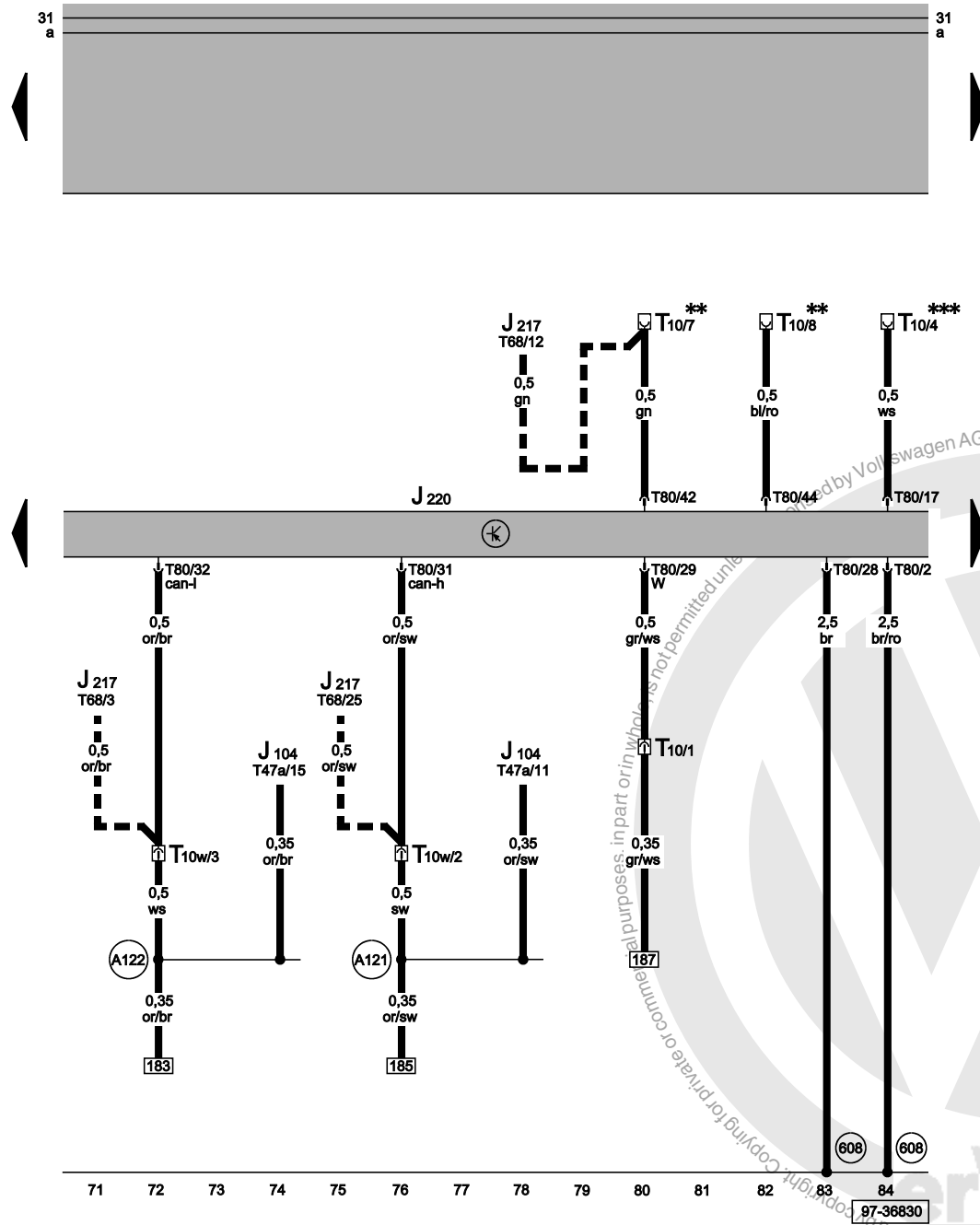
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Motronic control unit

- J104 ABS control unit with EDL
- J217 Automatic gearbox control unit
- J220 Motronic control unit, in centre plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector, on ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector, models with 4-speed automatic gearbox (AG4)
- T80 80-pin connector

- (608) Earth point, in centre of plenum chamber
- (A121) Connection (high bus), in dash panel wiring harness
- (A122) Connection (low bus), in dash panel wiring harness

- ** connection air conditioning system
- *** radiator fan control unit connection
- models with automatic gearbox only



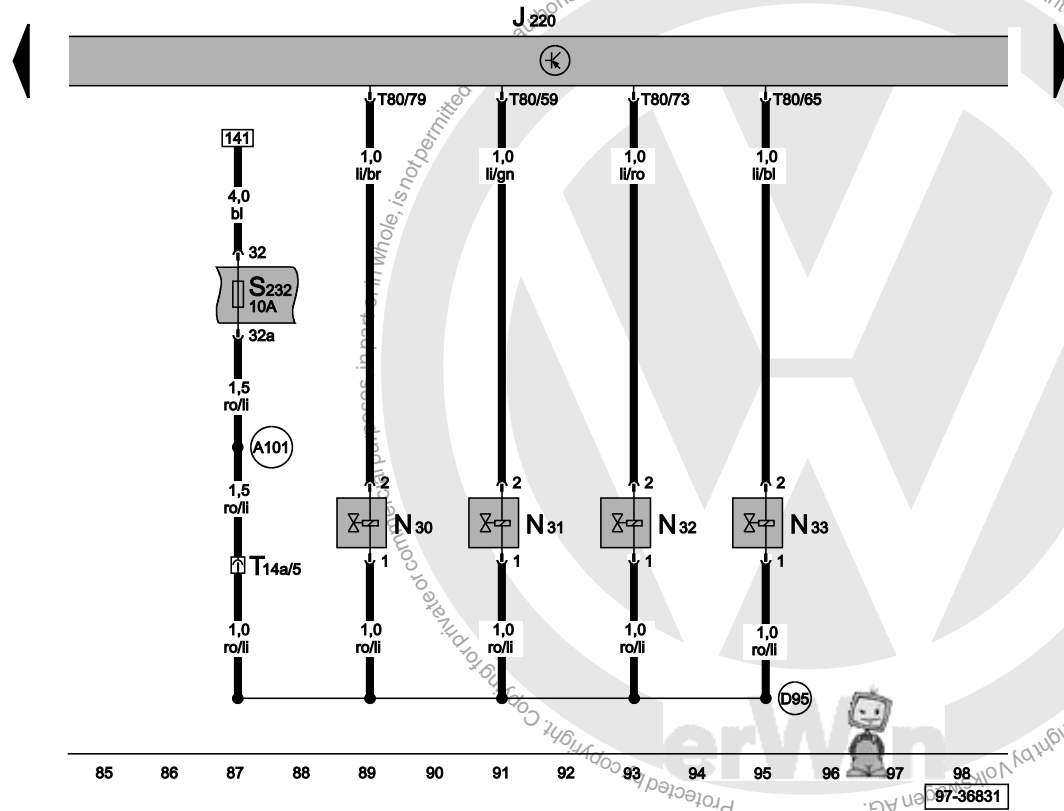
97-36830

Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- S232 Fuse 32 in fuse holder
- T14a 14-pin connector, near battery
- T80 80-pin connector

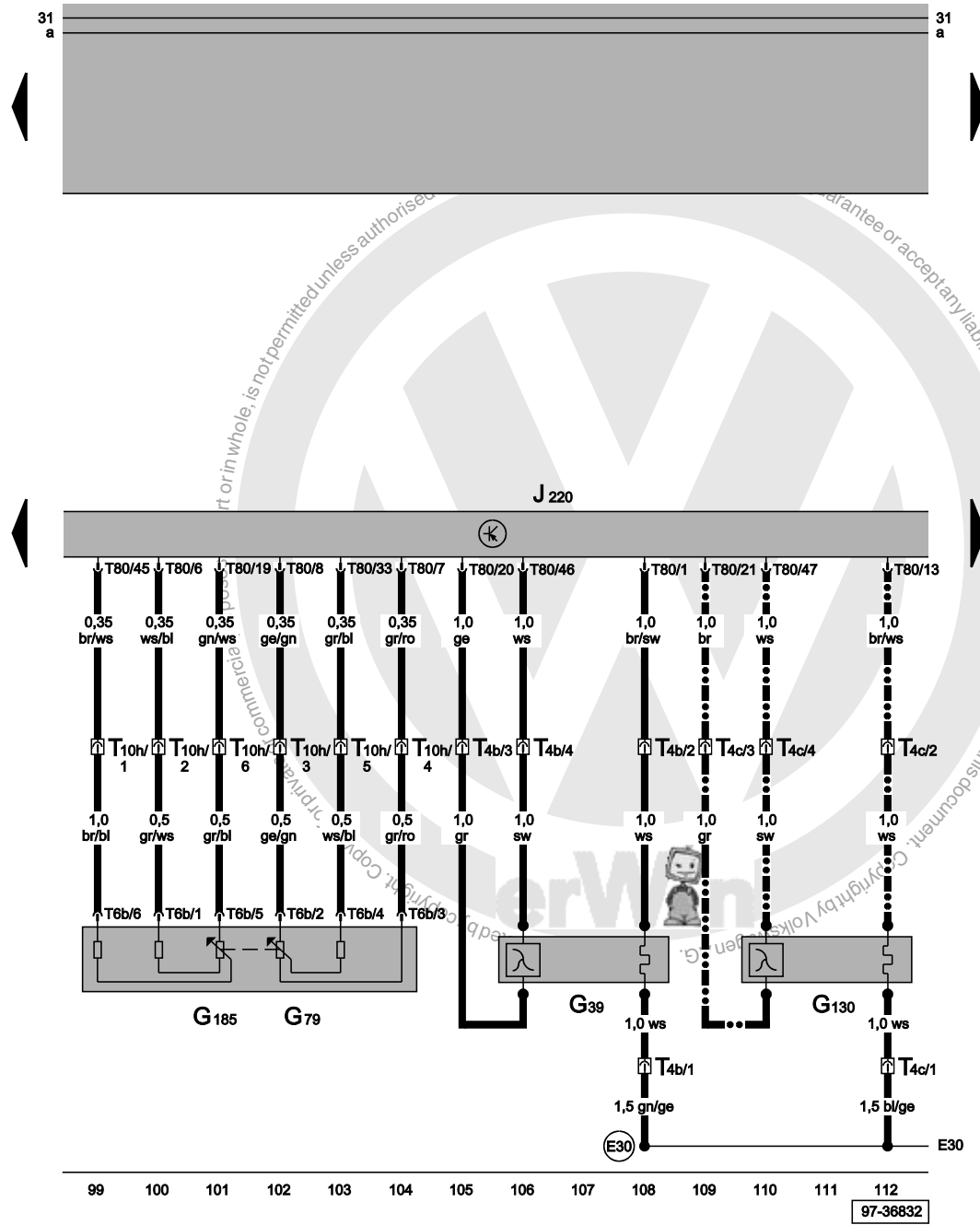
(A101) Connection 3 (87), in dash panel wiring harness

(D95) Connection (injectors), in engine compartment wiring harness



Motronic control unit, accelerator position sender, lambda probe upstream of catalytic converter, lambda probe after catalytic converter

- G39 Lambda probe
- G130 Lambda probe after catalytic converter
- G79 Accelerator position sender
- G185 Accelerator position sender 2
- J220 Motronic control unit, in centre plenum chamber
- T4b 4-pin connector, in connector protective housing, underneath vehicle floor
- T4c 4-pin connector, in connector protective housing, underneath vehicle floor
- T6b 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T80 80-pin connector
- E30 Connection (87a), in engine wiring harness
- engine code BHP only

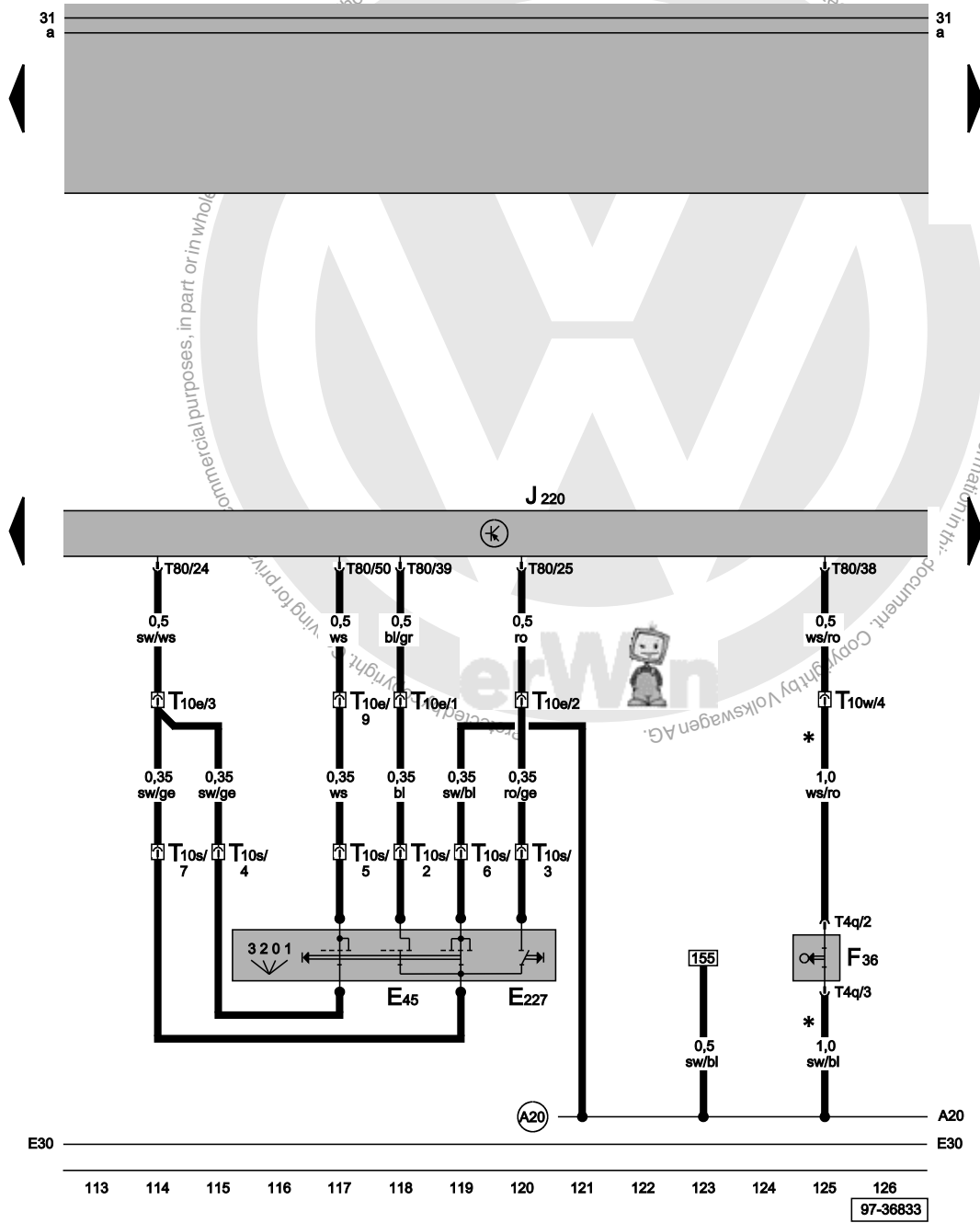


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Motronic control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J220 Motronic control unit, in centre plenum chamber
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T80 80-pin connector
- A20 Connection (15a), in dash panel wiring harness

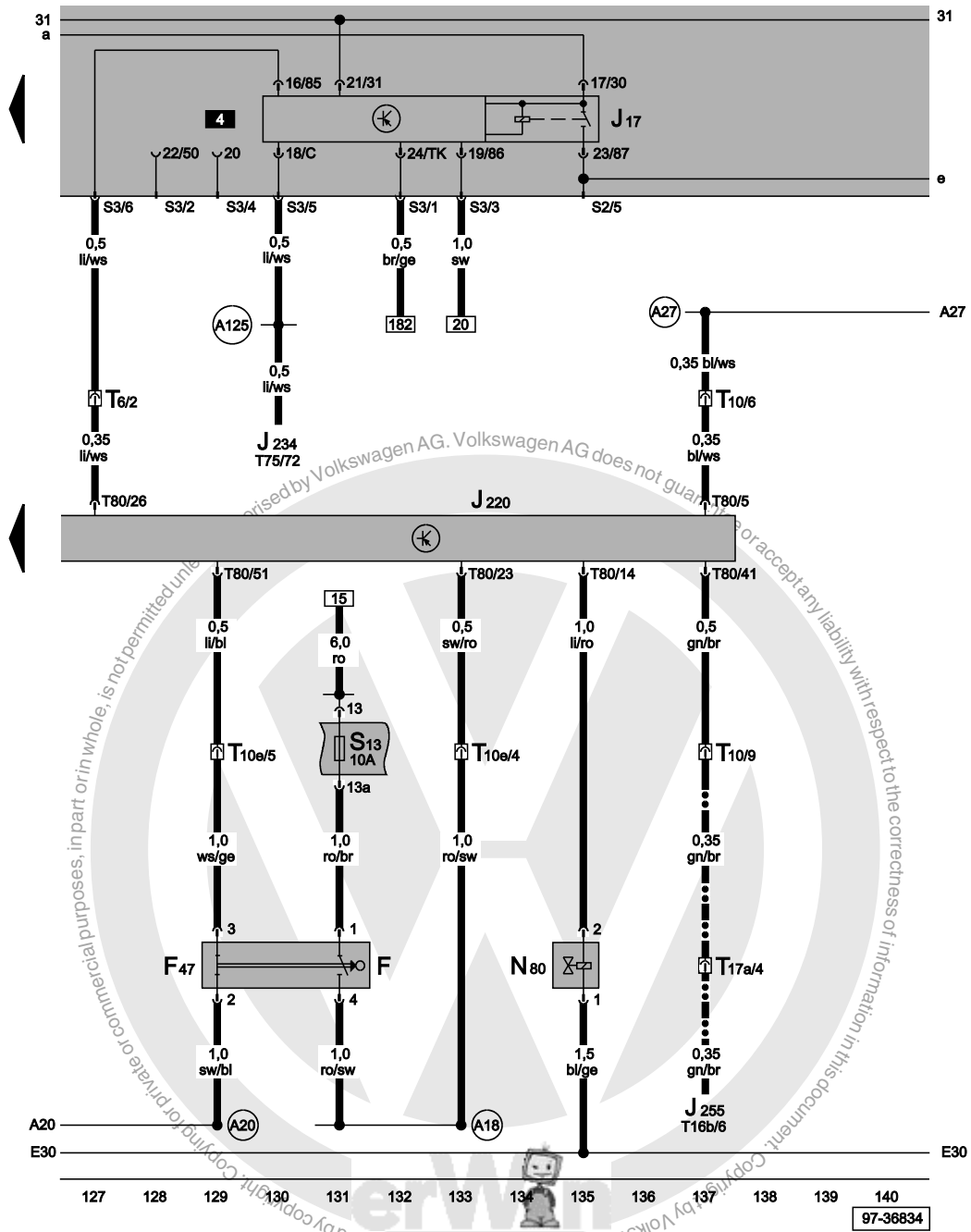
* only models with manual gearbox
 ** only models with GND, models with multifunction display => Current Flow Diagram multifunction steering wheel for cruise control system and radio



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

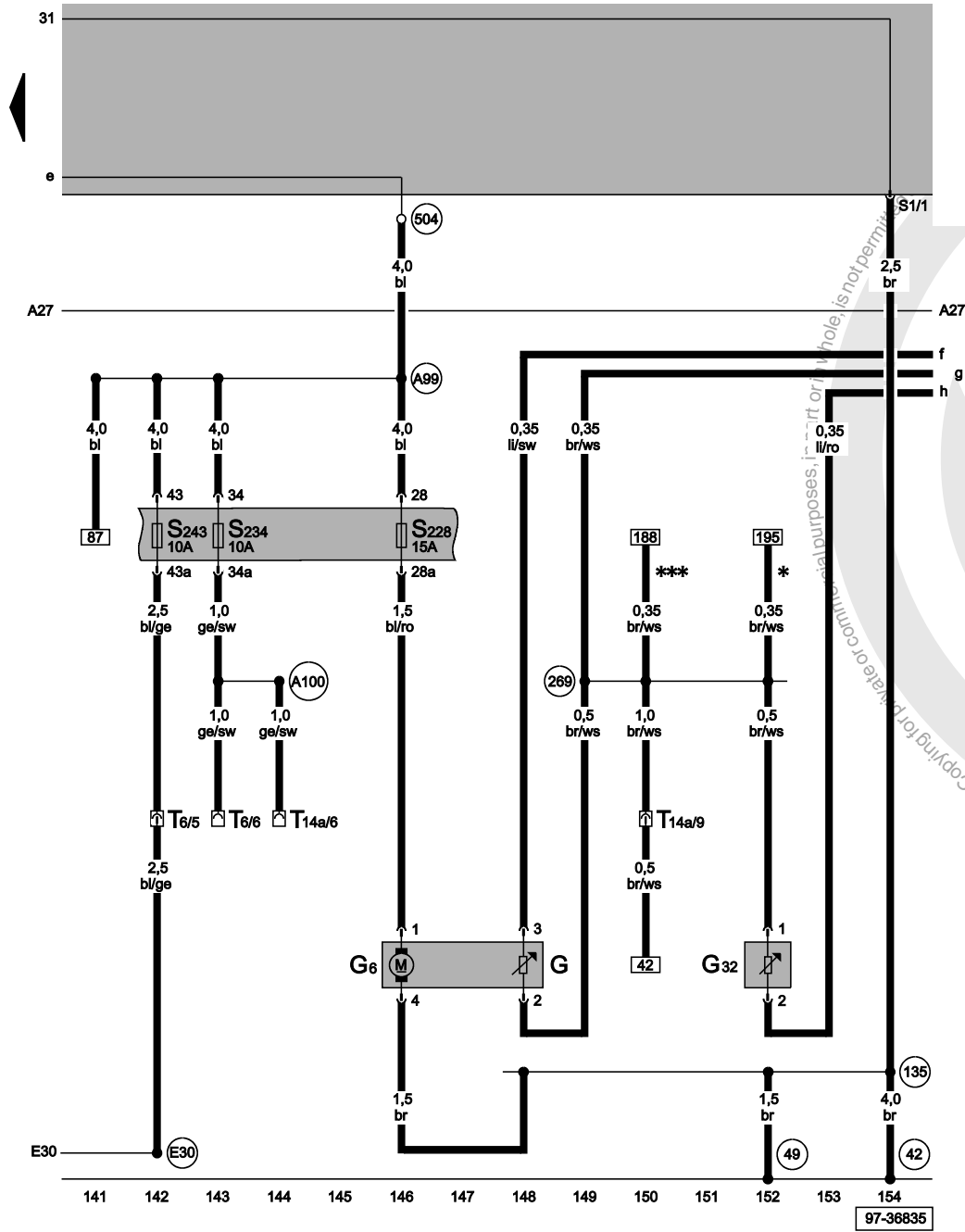
Motronic control unit, fuel pump relay, active charcoal filter system solenoid valve, brake light switch, brake pedal switch

- F Brake light switch
- F47 Brake pedal switch
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit
- J255 Climatronic control unit
- N80 Activated charcoal filter system solenoid valve 1
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T80 80-pin connector
- A18 Connection (54), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- only models with Climatronic



Fuel pump, fuel gauge sender, coolant shortage indicator sender

- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- S228 Fuse 28 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F), on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only

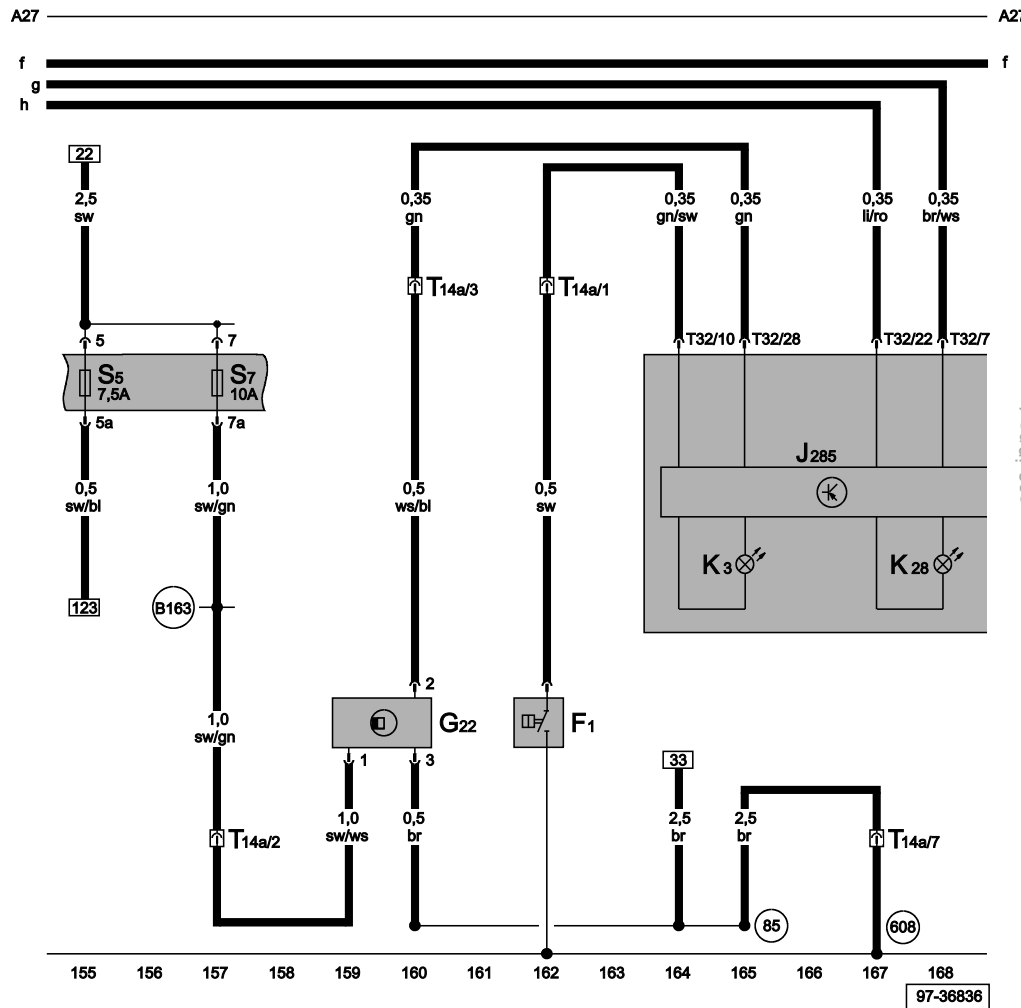


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Dash panel insert, oil pressure warning, speedometer sender, coolant temperature/coolant shortage warning lamp

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue

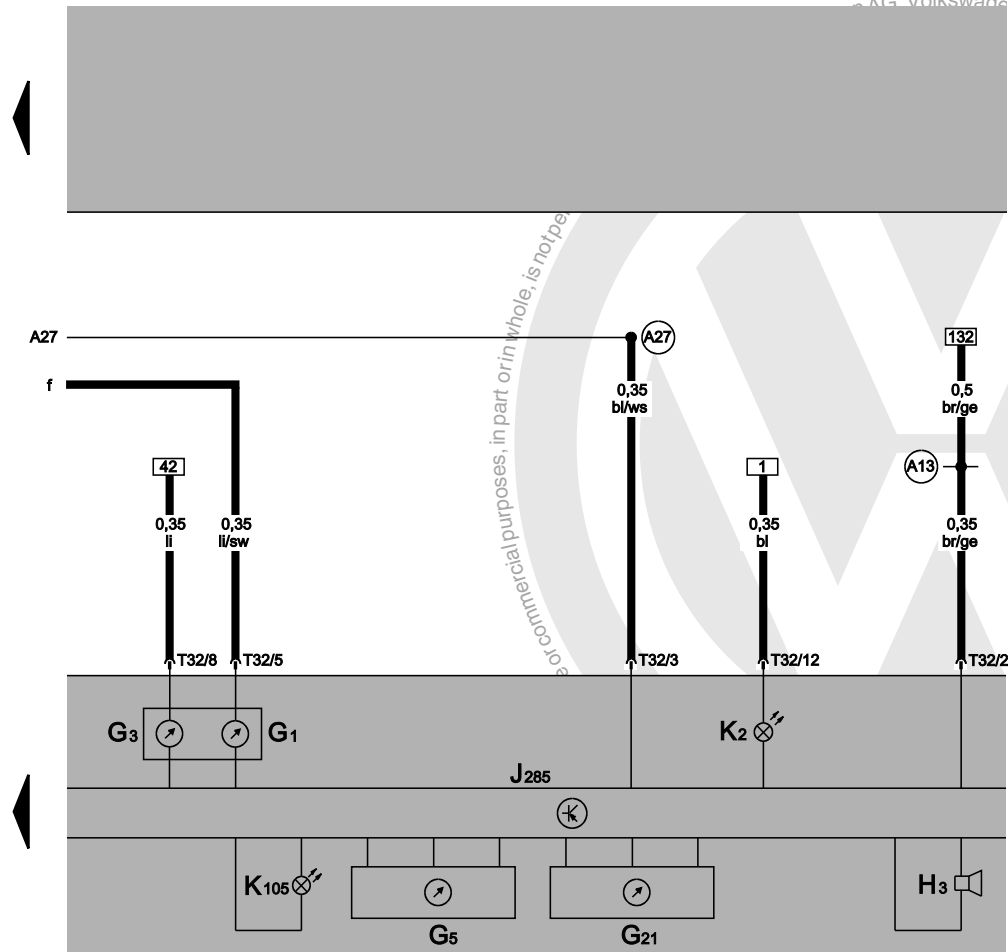
- 85 Earth connection 1, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- B163 Positive connection 1 (15), in interior wiring harness



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Dash panel insert, coolant temperature gauge, fuel gauge, rev. counter, speedometer, alternator warning lamp

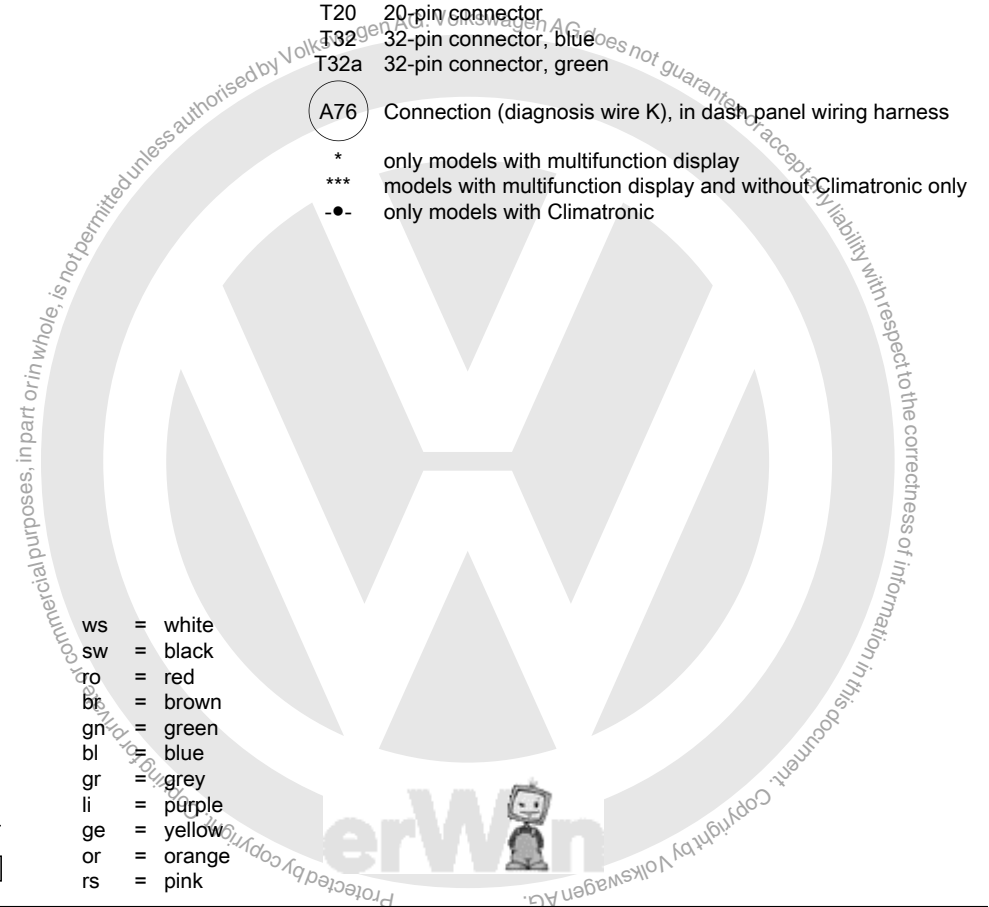
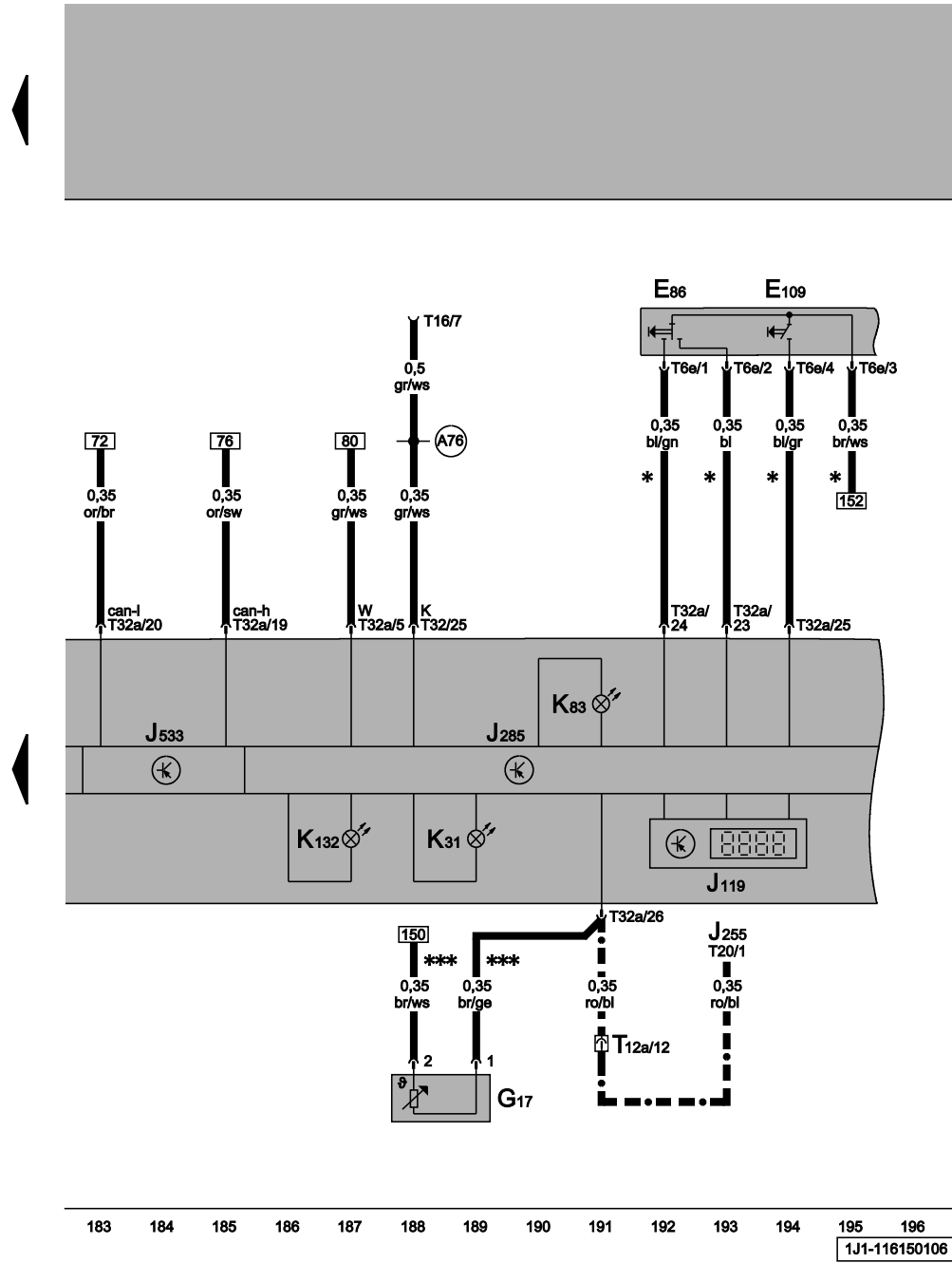
- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T12a 12-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only
- only models with Climatronic



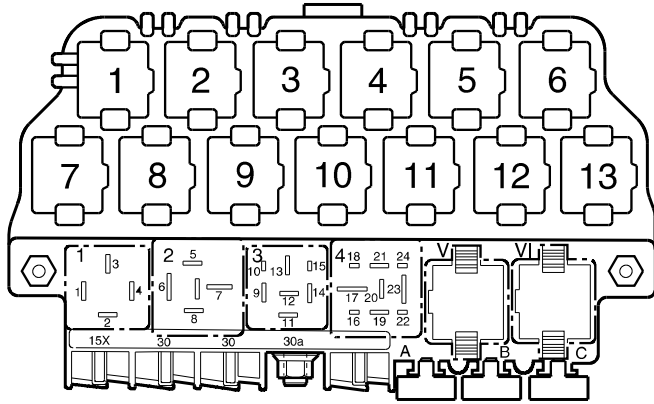
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1.9 I/110 kW - Turbo diesel engine with unit injectors, engine code ARL

from June 2003

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

10 - J17 - Fuel pump relay (167)

12 - J317 - Terminal 30 voltage supply relay (109)

Relay locations on relay plate:

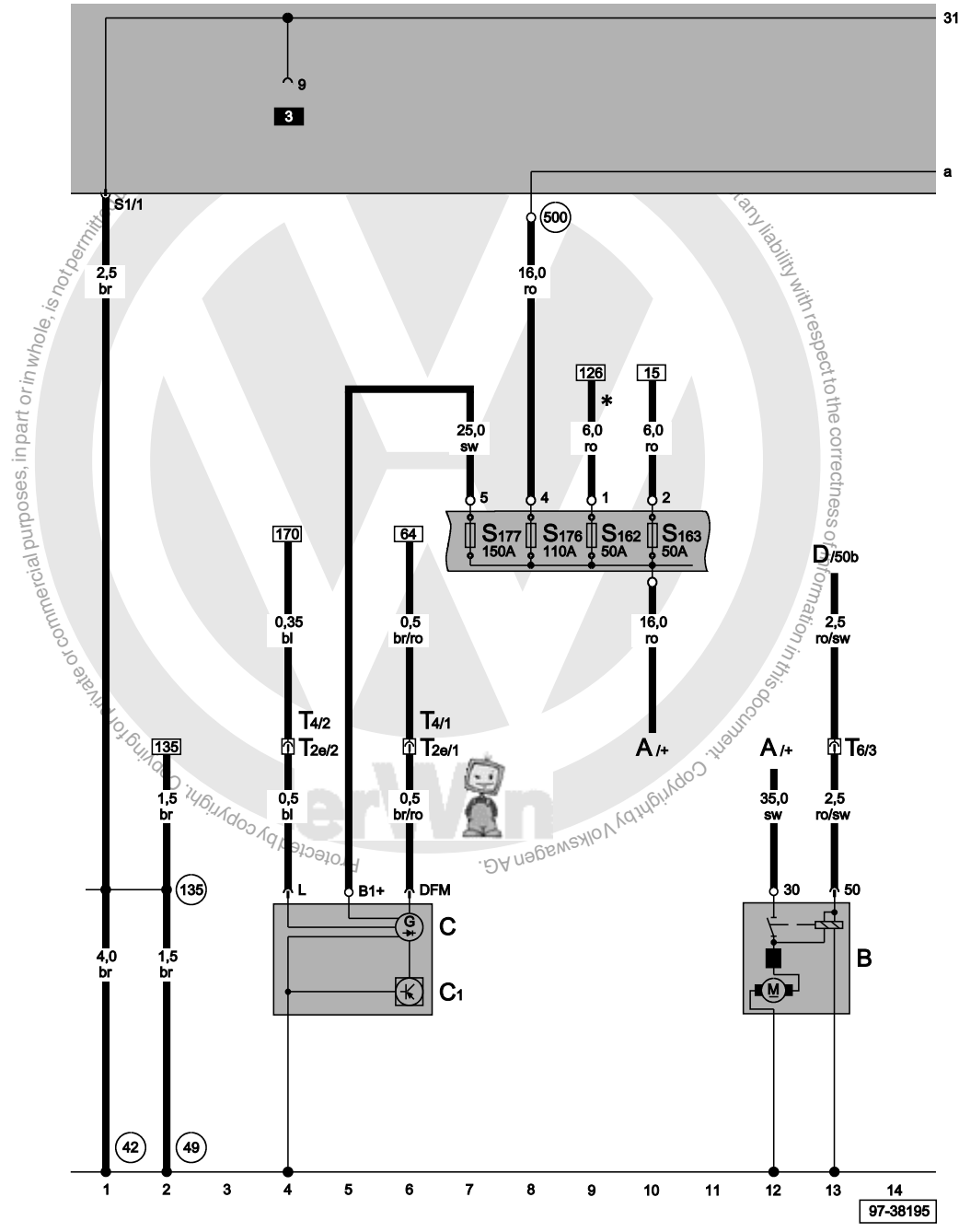
1 - J4 - Dual tone horn relay (53)

2 - J59 - X-contact relief relay (100)



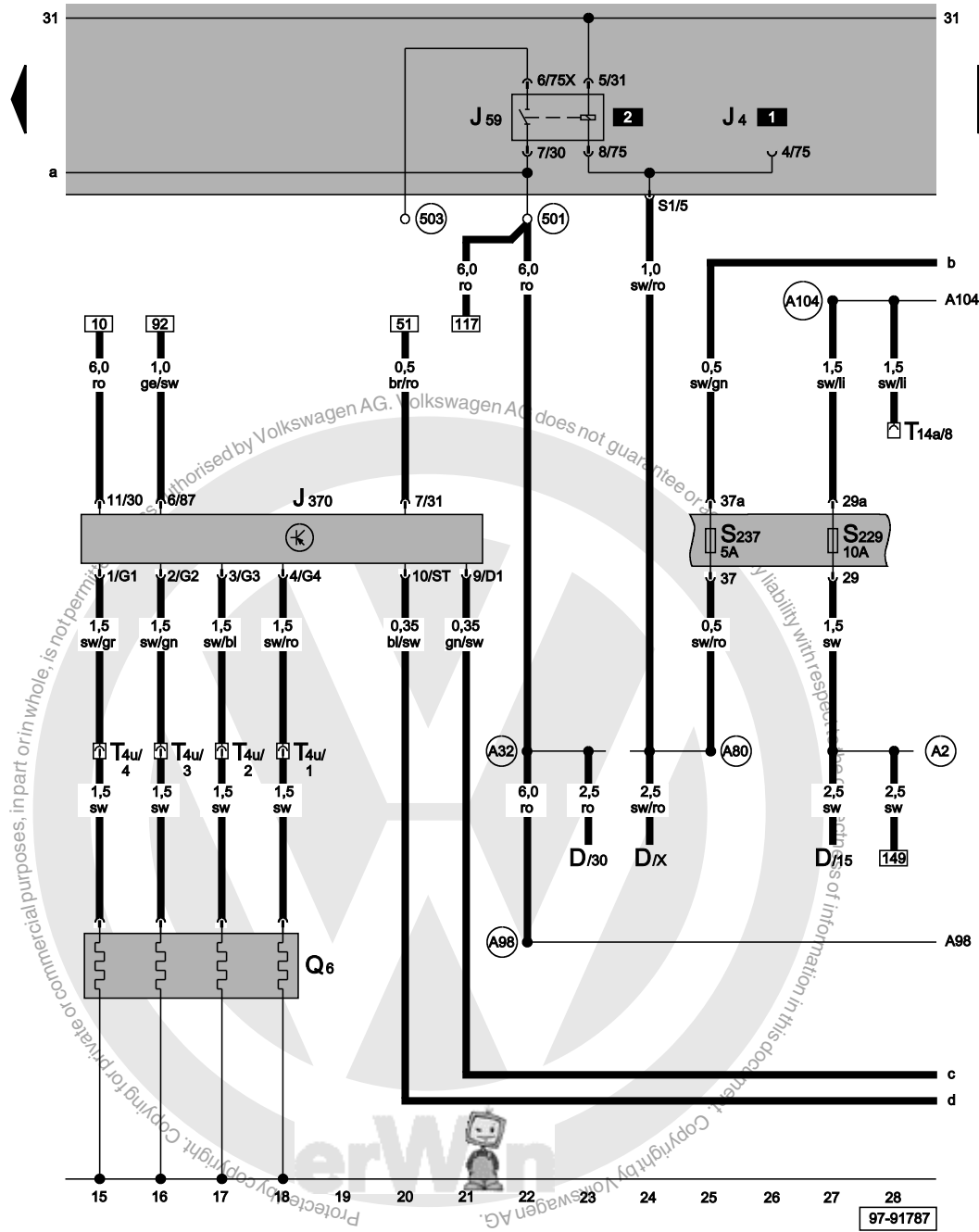
Alternator, starter

- A Battery
 - B Starter
 - C Alternator
 - C1 Voltage regulator
 - D Ignition/starter switch
 - S162 Fuse 1 (30) in fuse holder on battery
 - S163 Fuse 2 (30) in fuse holder on battery
 - S176 Fuse 4 (30) in fuse holder on battery
 - S177 Fuse 5 (30) in fuse holder on battery
 - T2e 2-pin connector, near starter (in models without air conditioning system)
 - T4 4-pin connector, near starter (in models with air conditioning system)
 - T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 42 Earth point, next to steering column
 - 49 Earth point, on steering column
 - 135 Earth connection 2, in dash panel wiring harness
 - 500 Screw connection 1 (30), on relay plate
- * only models with glow plugs coolant heating



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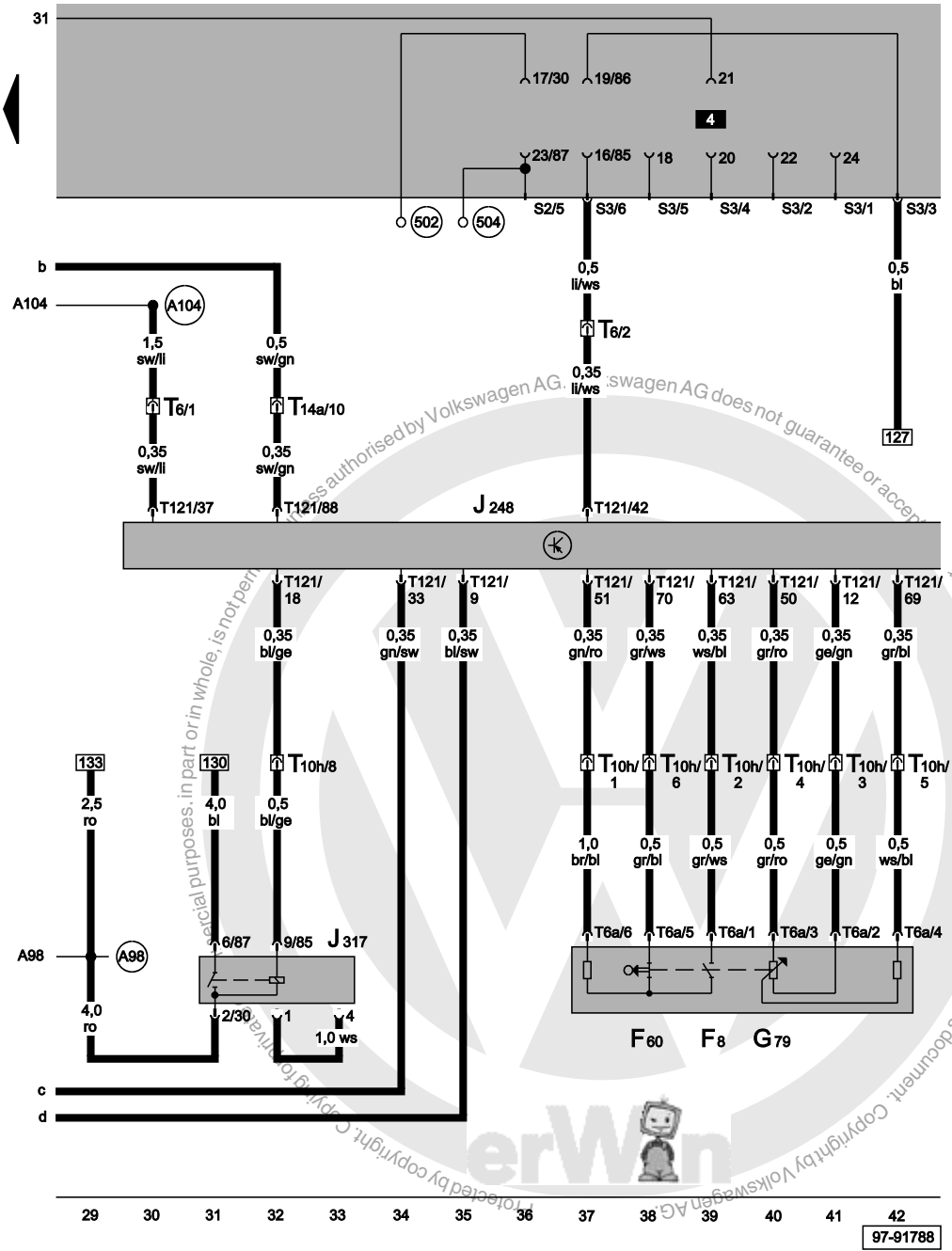
Glow plug activation control unit, glow plugs - engine



- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- J370 Glow plug activation control unit, in centre plenum chamber
- Q6 Glow plugs, engine
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T4u 4-pin connector, in left engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 501 Screw connection 2 (30), on relay plate
- 503 Screw connection (75x), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness

Diesel direct injection system control unit, kickdown switch, idling speed switch, accelerator position sender, terminal 30 voltage supply relay

- F8 Kick-down switch
- F60 Idling speed switch
- G79 Accelerator position sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- A98 Positive connection 4 (30), in dash panel wiring harness
- 502 Screw connection 1 (30a), on relay plate
- 504 Screw connection 1 (87), on relay plate
- A104 Positive connection 2 (15), in dash panel wiring harness



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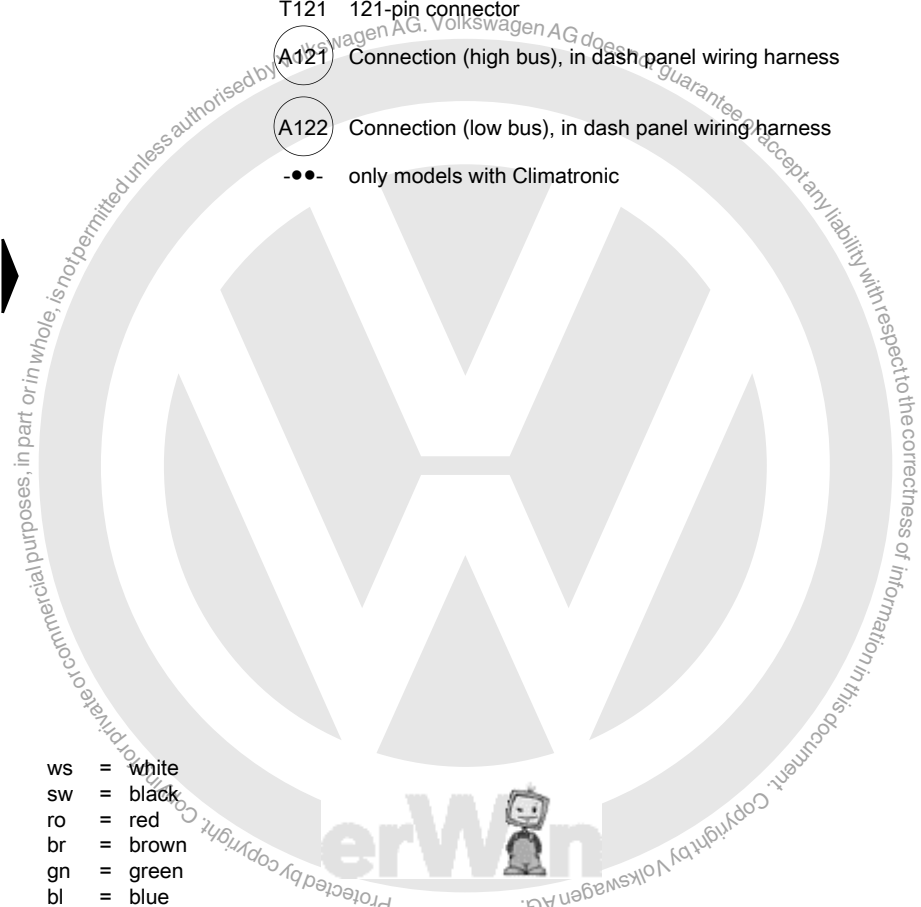
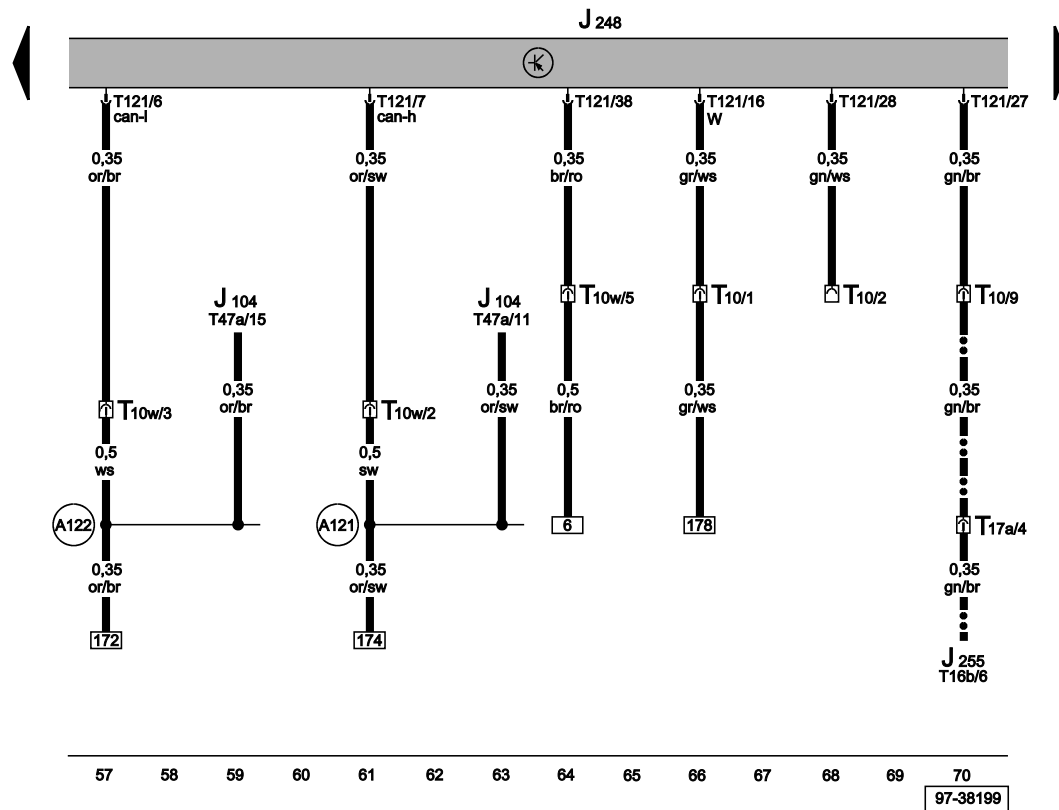
Diesel direct injection system control unit

- J104 ABS control unit with EDL
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J255 Climatronic control unit
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T47a 47-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T121 121-pin connector

A121 Connection (high bus), in dash panel wiring harness

A122 Connection (low bus), in dash panel wiring harness

-••- only models with Climatronic



Diesel direct injection system control unit, unit injector valves, Hall sender

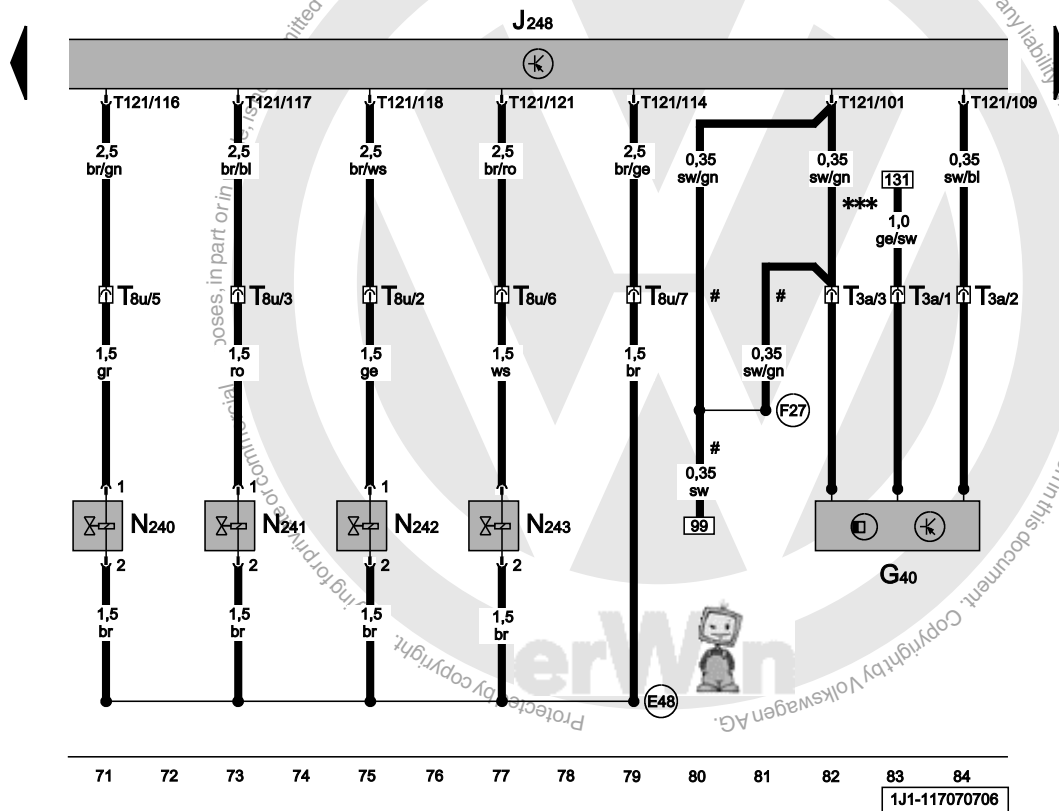
- G40 Hall sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N240 Unit injector valve, No. 1 cyl.
- N241 Unit injector valve, No. 2 cyl.
- N242 Unit injector valve, No. 3 cyl.
- N243 Unit injector valve, No. 4 cyl.
- T3a 3-pin connector, on front of engine
- T8u 8-pin connector, on left of cylinder head
- T121 121-pin connector

E48 Connection (injectors), in injection system wiring harness

F27 Connection (screening), in diesel direct injection wiring harness

from August 2004

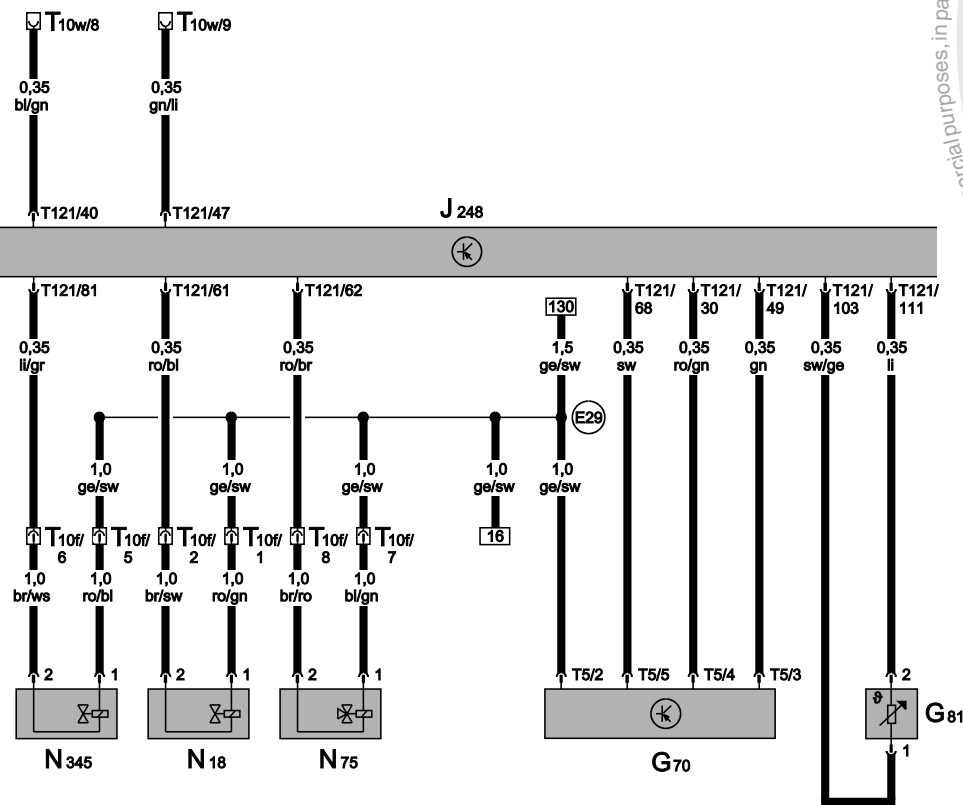
*** up to July 2004



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Diesel direct injection system control unit, air mass meter, fuel temperature sender, exhaust gas recirculation valve and charge pressure control, exhaust gas recirculation cooler change-over valve

- G70 Air mass meter
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N345 Exhaust gas recirculation cooler change-over valve
- T5 5-pin connector
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E29 Connection, in engine wiring harness



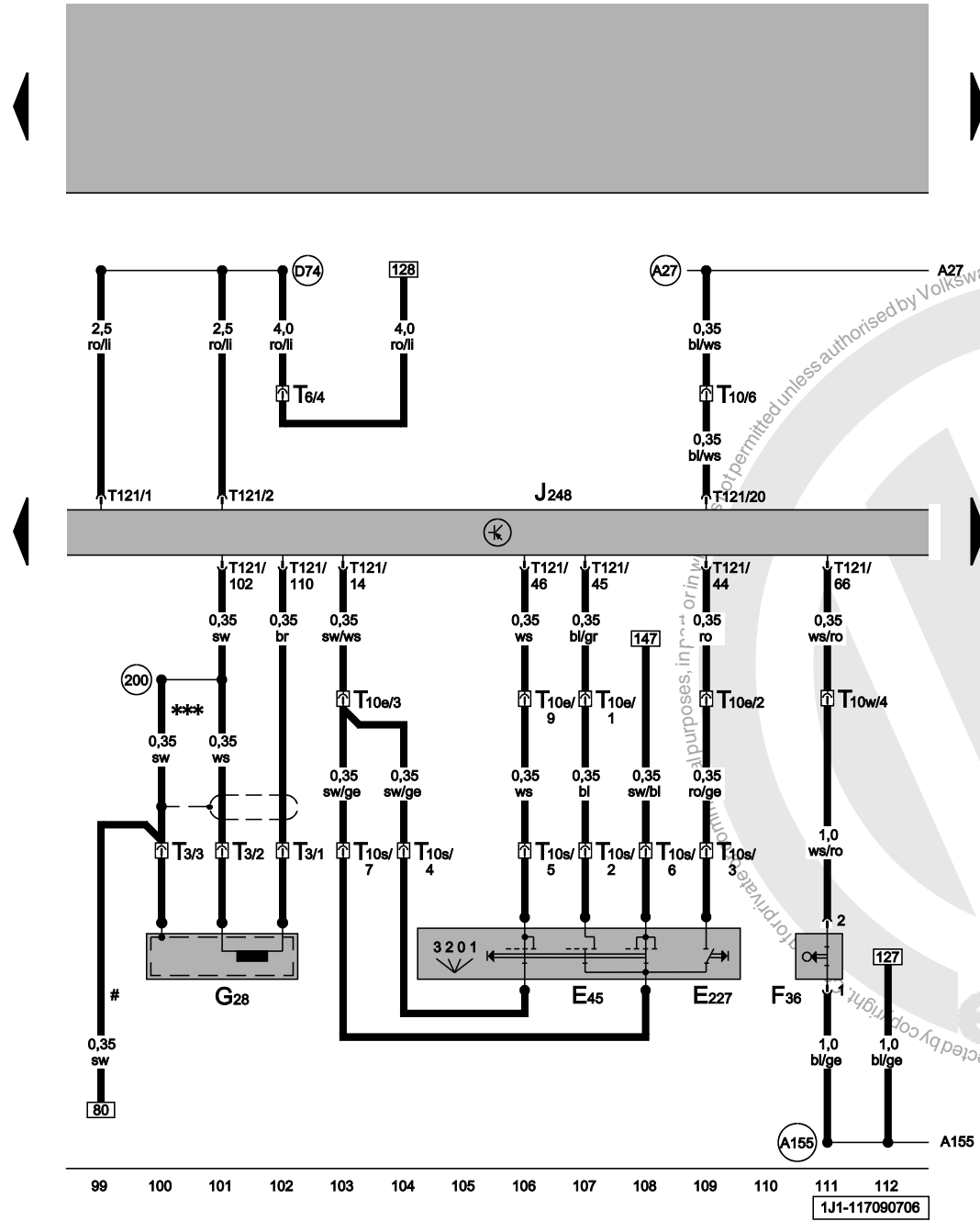
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Diesel direct injection system control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch
- E227 Cruise control system (CCS) SET button
- F36 Clutch pedal switch
- G28 Engine speed sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T3 3-pin connector, on front of engine
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- 200 Earth connection (screening) in engine compartment wiring harness***
- A27 Connection (speed signal), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness
- * only models with manual gearbox
- ** only models with GND, models with multifunction display => Current Flow Diagram multifunction steering wheel for cruise control system and radio from August 2004
- # from August 2004
- *** up to July 2004

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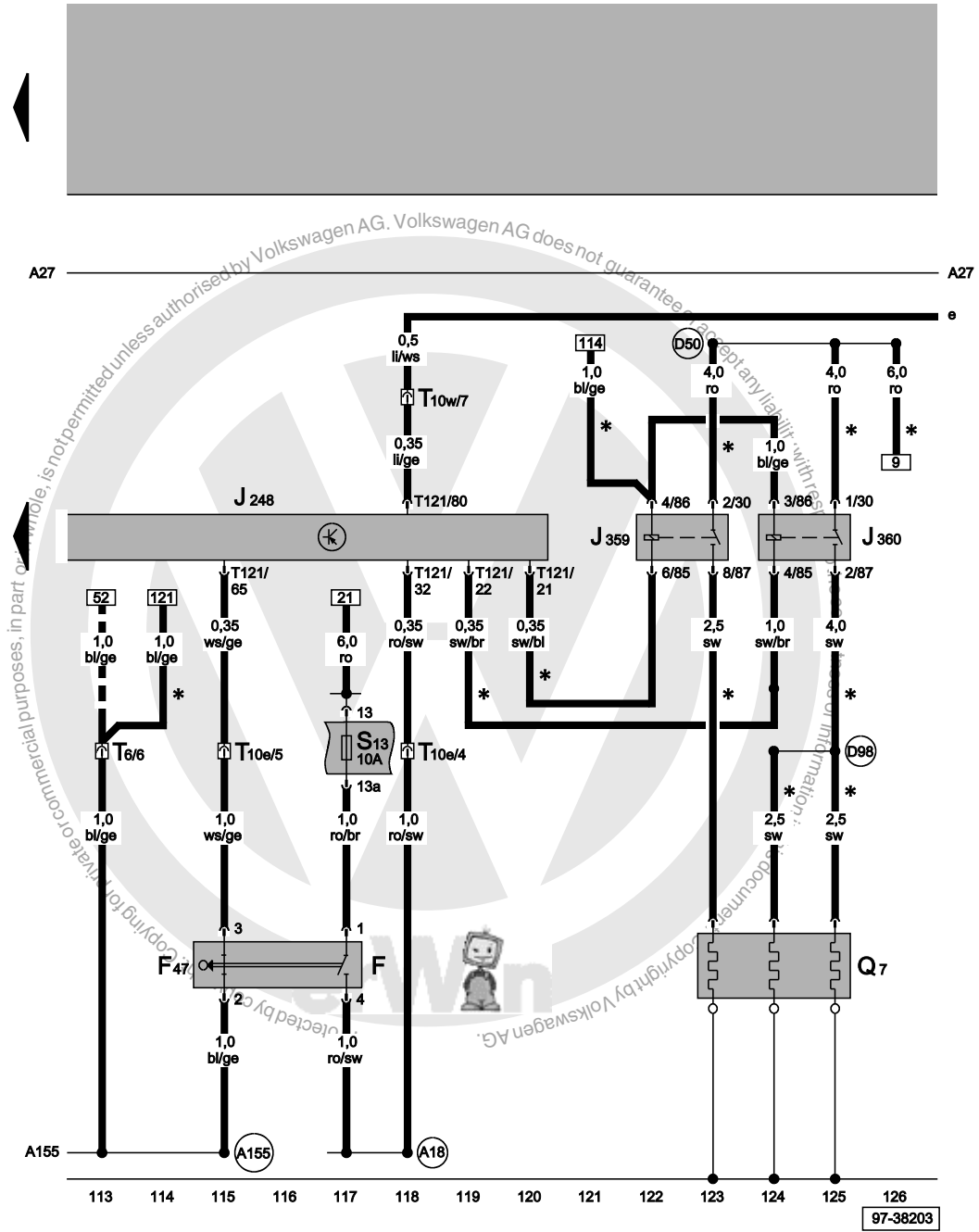


1J1-117090706

Diesel direct injection system control unit, coolant heating element, brake pedal switch, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Brake pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay*, in protective housing on left in engine compartment (53)
- J360 High heat output relay*, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant*
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- A18 Connection (54), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- * only models with glow plugs coolant heating
- for models with heater element for crankcase breather only



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Fuel pump relay, fuel gauge sender, fuel system pressurisation pump

- G Fuel gauge sender**
- G6 Fuel system pressurisation pump
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

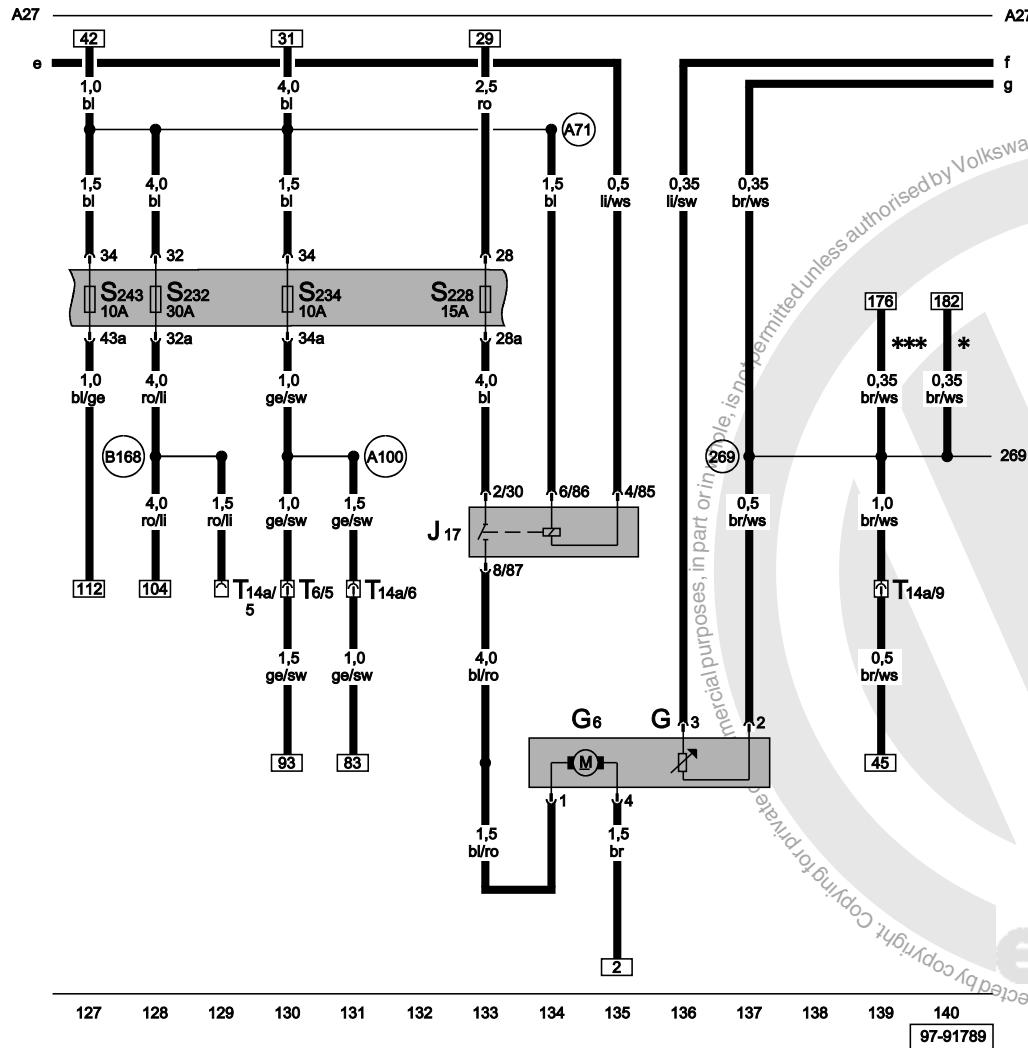
269 Earth connection (sender earth) 1, in dash panel wiring harness

A71 Connection (86), in dash panel wiring harness

A100 Connection 2 (87), in dash panel wiring harness

B168 Connection (86), in interior wiring harness

- * only models with multifunction display
- ** models with four-wheel drive => four-wheel drive Current Flow Diagram
- *** models with multifunction display and without Climatronic only

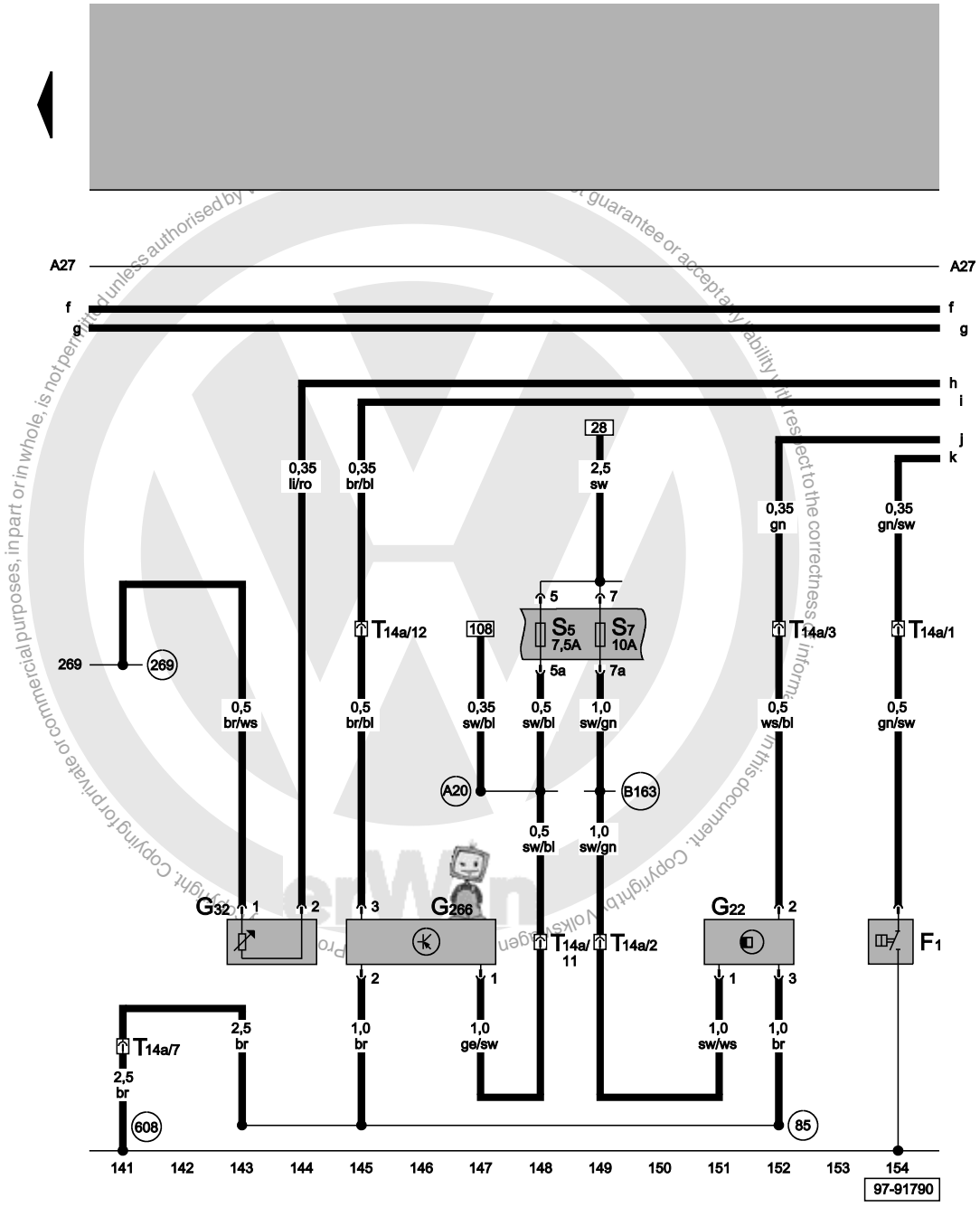


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Oil level and oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery

- (85) Earth connection 1, in engine compartment wiring harness
- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (608) Earth point, in centre of plenum chamber
- (A20) Connection (15a), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- *** only flexible service interval display



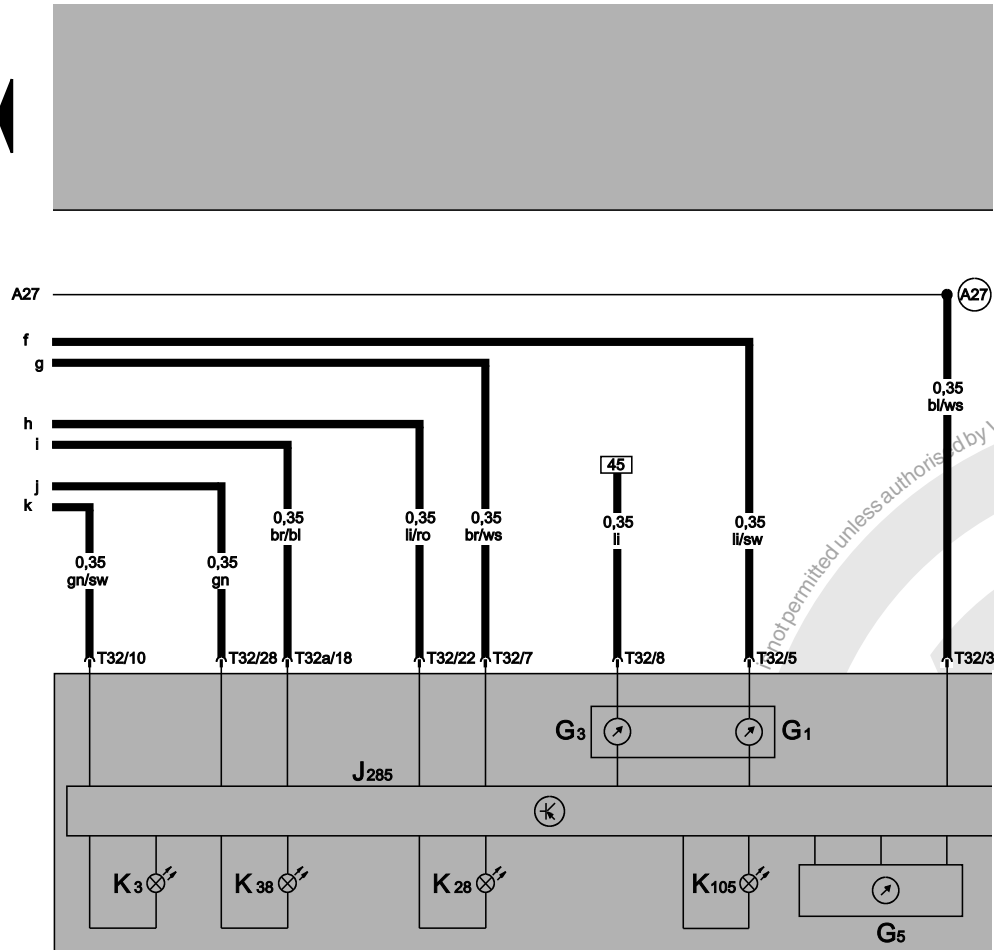
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Dash panel insert, coolant temperature and coolant shortage warning lamp, fuel gauge, rev. counter, oil pressure warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A27 Connection (speed signal), in dash panel wiring harness

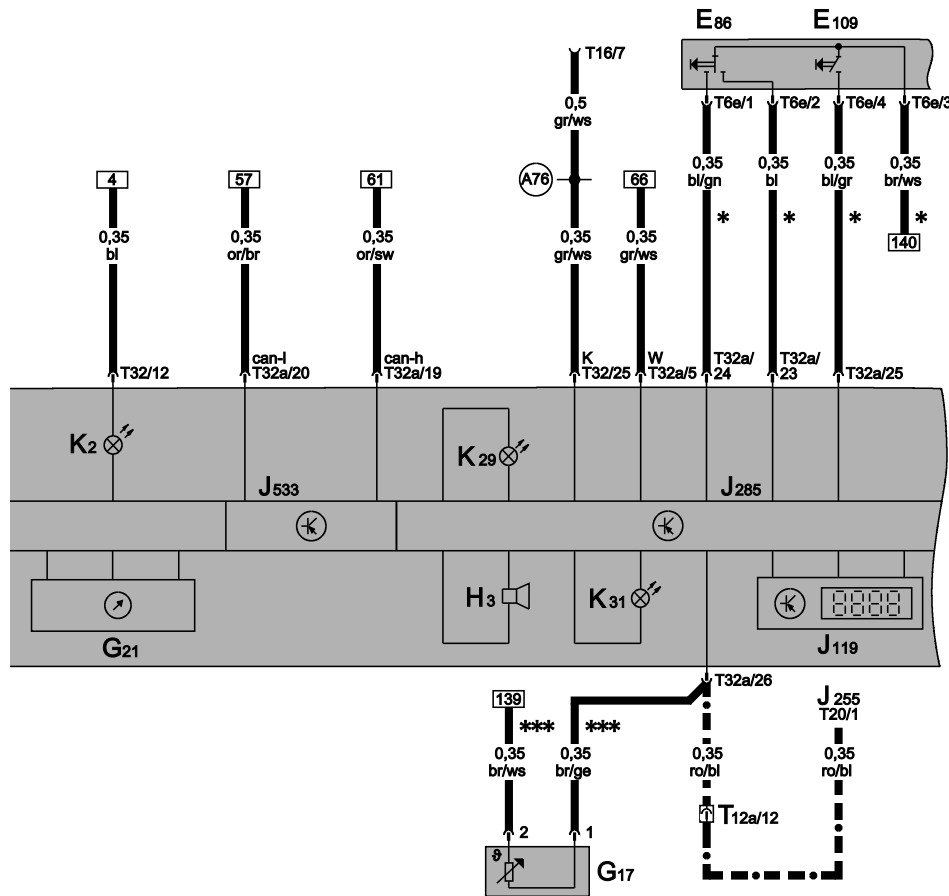
*** only flexible service interval display



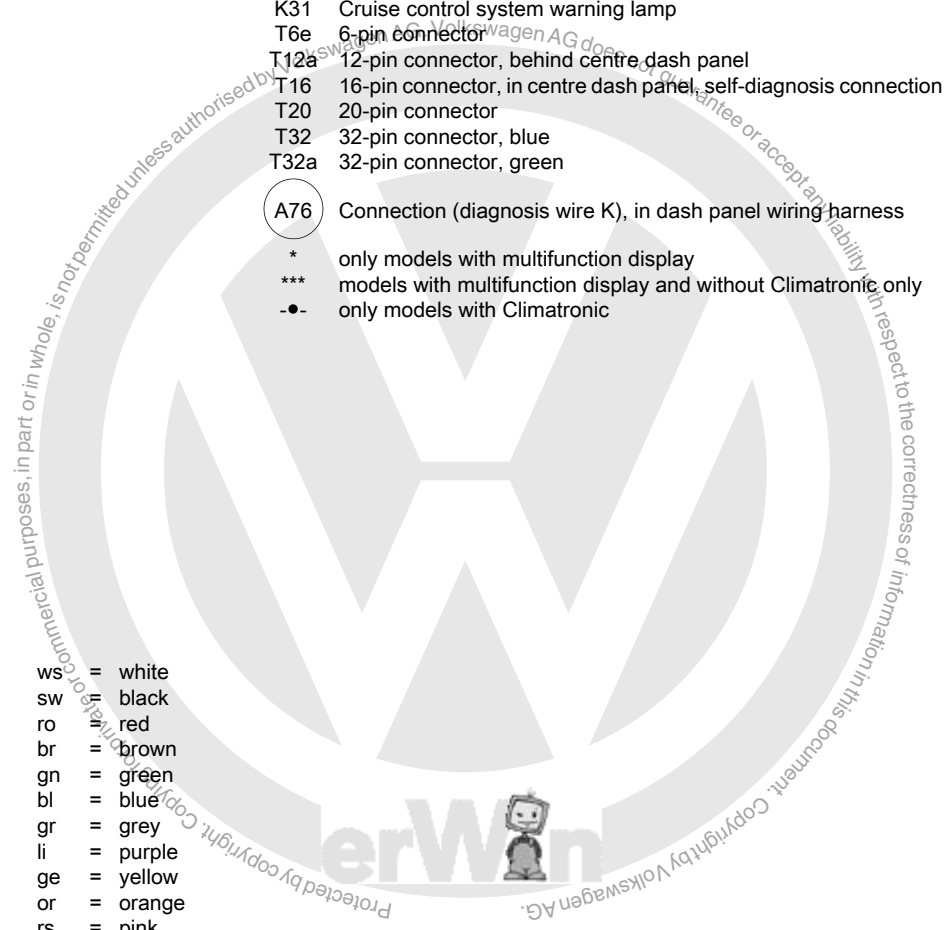
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Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, glow period warning lamp, cruise control system warning lamp, alternator warning lamp

- E86 Multifunction display call-up button
 - E109 Multifunction display memory switch
 - G17 Ambient temperature sensor
 - G21 Speedometer
 - H3 Buzzer
 - J119 Multifunction display
 - J255 Climatronic control unit
 - J285 Control unit in dash panel insert
 - J533 Data bus diagnostic interface, in dash panel insert
 - K2 Alternator warning lamp
 - K29 Glow period warning lamp
 - K31 Cruise control system warning lamp
 - T6e 6-pin connector
 - T12a 12-pin connector, behind centre dash panel
 - T16 16-pin connector, in centre dash panel, self-diagnosis connection
 - T20 20-pin connector
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * only models with multifunction display
 - *** models with multifunction display and without Climatronic
 - .- only models with Climatronic



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2.8 I/150 kW Motronic, engine code BDE

from November 2001

Notes:

For information concerning

- ◆ Position of relays and fuses
- ◆ Multi-pin connections
- ◆ Control units and relays
- ◆ Earth connections

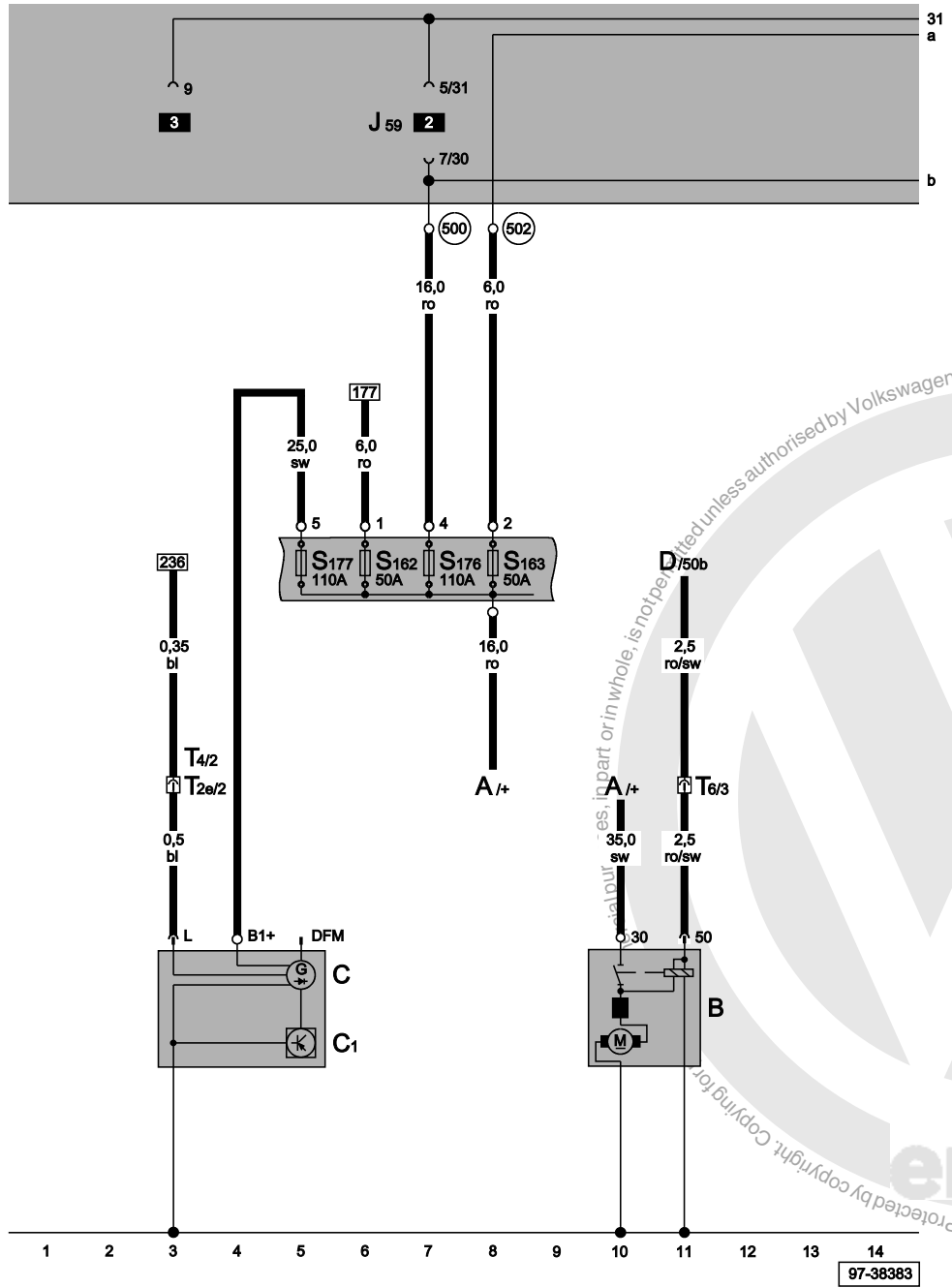
⇒ List of Fitting Locations!

For information concerning

- ◆ Fault Finding Programs

⇒ guided fault finding





Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J59 X-contact relief relay
- S162 Fuse 1 (30) in fuse holder on battery
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

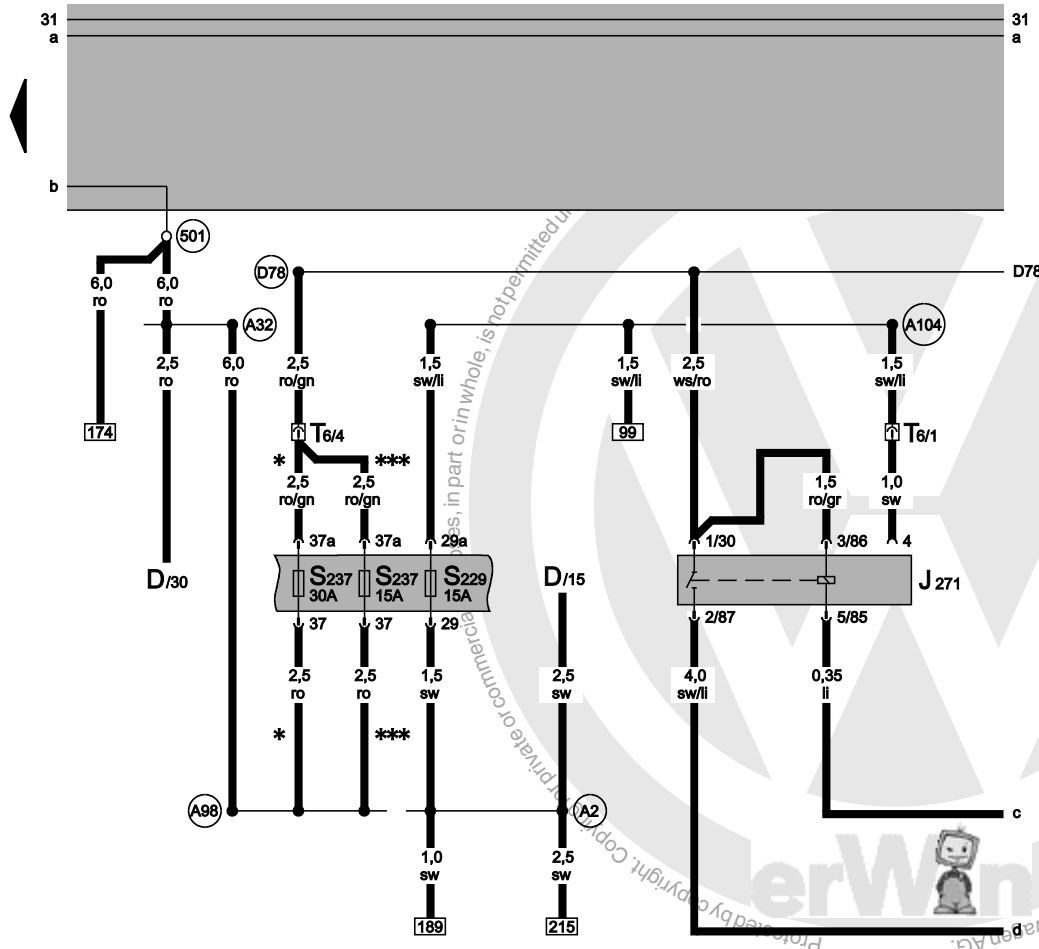
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Motronic current supply relay

- D Ignition/starter switch
- J271 Motronic current supply relay, in protective housing on left in engine compartment (control number 428)
- S10 Fuse 10 in fuse holder
- S229 Fuse 29 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber

- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness
- D78 Positive connection 1 (30a), in engine compartment wiring harness

* from May 2003
 *** up to April 2003

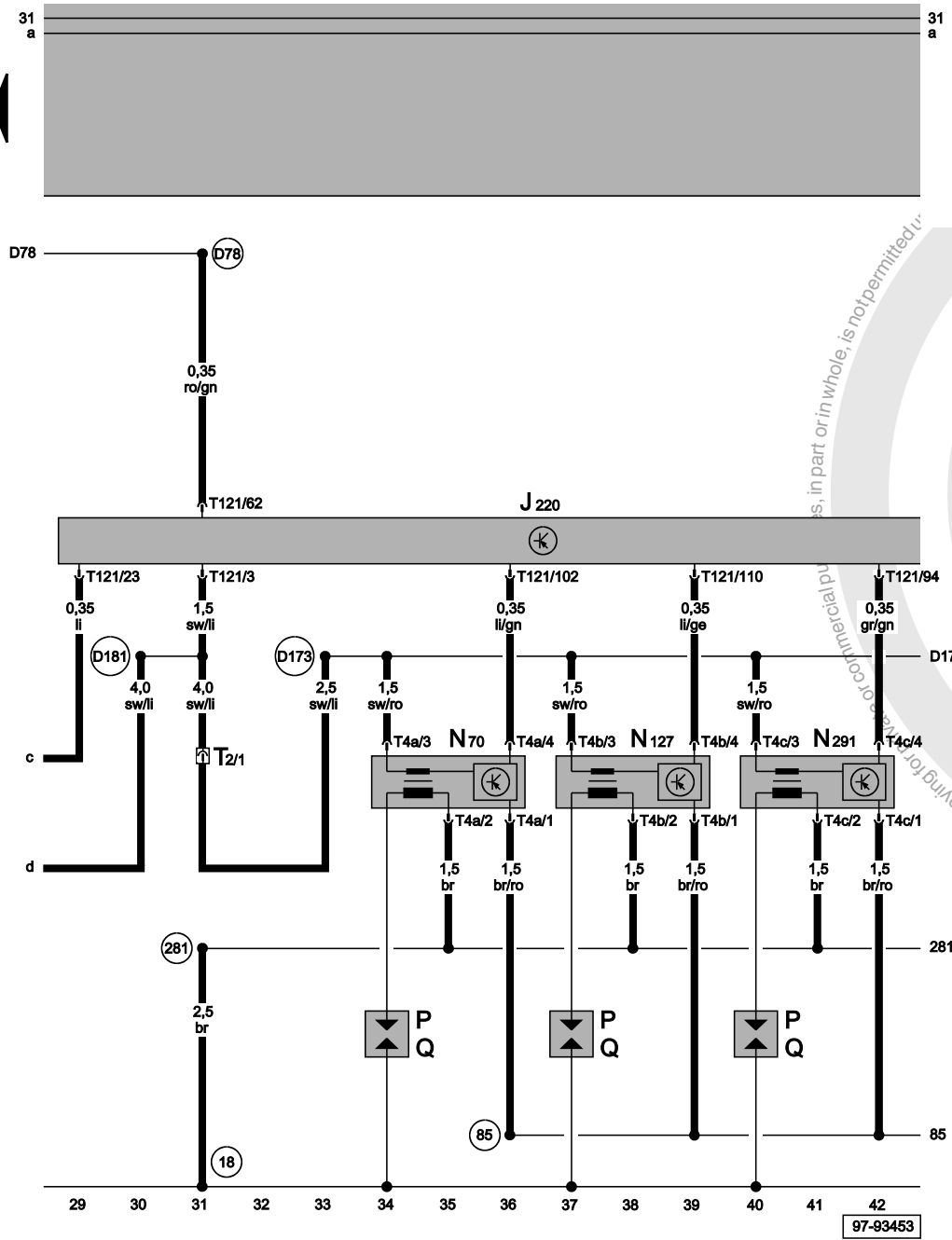


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Motronic control unit, ignition system

- J220 Motronic control unit, in centre plenum chamber
- N70 Ignition coil 1 with output stage
- N127 Ignition coil 2 with output stage
- N291 Ignition coil 3 with output stage
- P Spark plug connector
- Q Spark plugs
- T2 2-pin connector, in left engine compartment
- T4a 4-pin connector
- T4b 4-pin connector
- T4c 4-pin connector
- T121 121-pin connector

- (18) Earth point on engine block
- (85) Earth connection 1, in engine compartment wiring harness
- (281) Earth connection 1, in engine harness
- (D78) Positive connection 1 (30a), in engine compartment wiring harness
- (D173) Connection (87), in engine wiring harness
- (D181) Connection 2 (87a), in engine compartment wiring harness

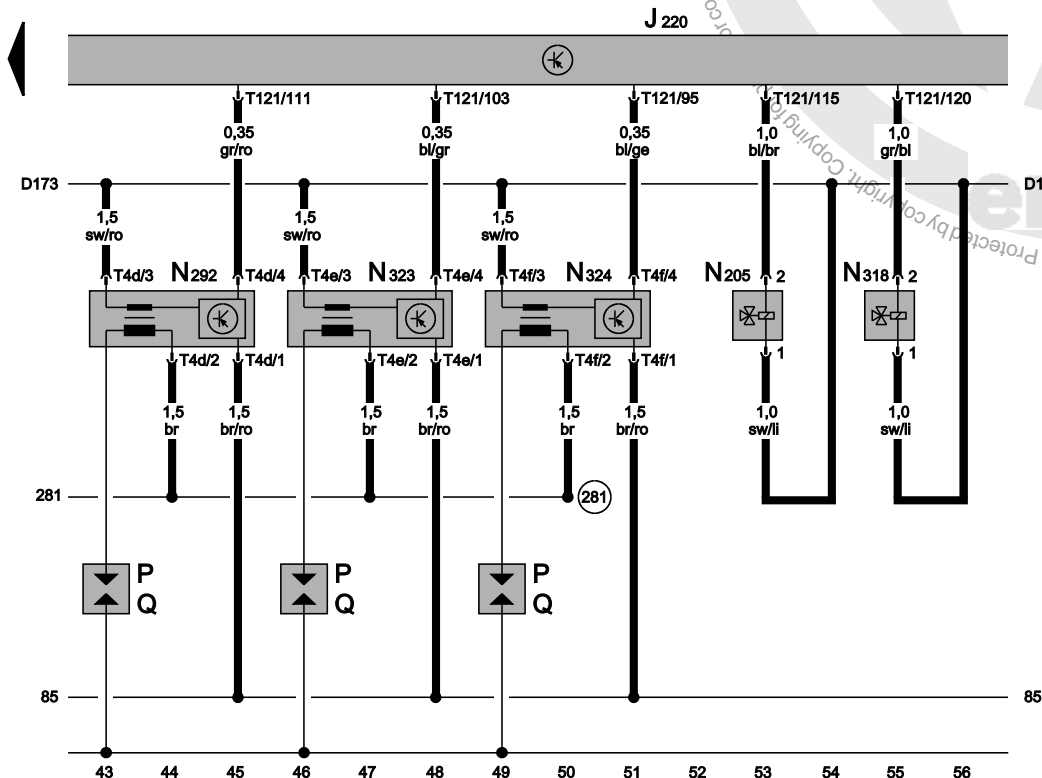
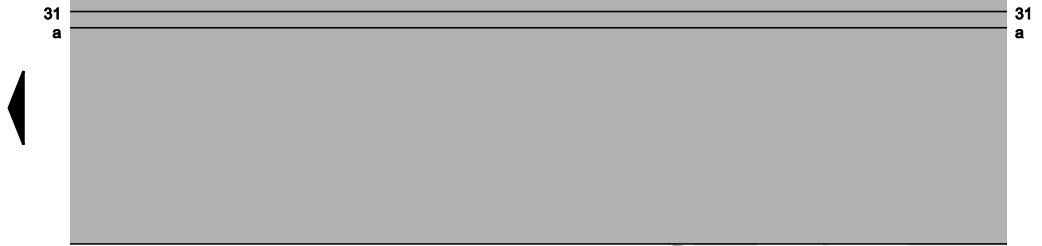


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-93453

Motronic control unit, ignition system, inlet camshaft control valve

- J220 Motronic control unit, in centre plenum chamber
- N205 Inlet camshaft control valve 1
- N292 Ignition coil 4 with output stage
- N318 Exhaust camshaft control valve 1
- N323 Ignition coil 5 with output stage
- N324 Ignition coil 6 with output stage
- P Spark plug connector
- Q Spark plugs
- T4d 4-pin connector
- T4e 4-pin connector
- T4f 4-pin connector
- T121 121-pin connector
- 281 Earth connection 1, in engine harness



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97-93454

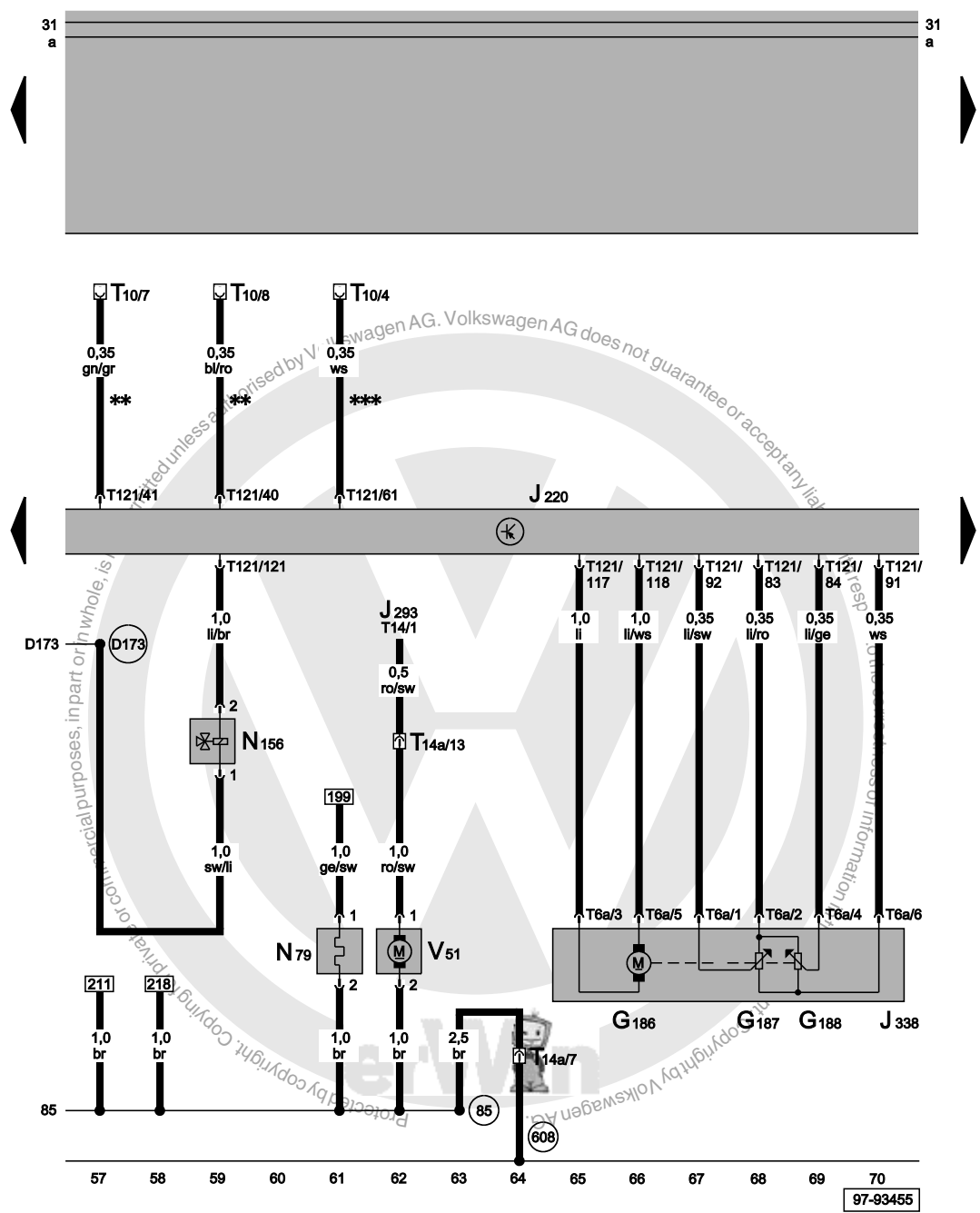
Motronic control unit, throttle valve module, variable intake manifold change-over valve, continued coolant circulation pump, heater element for crankcase breather

- G186 Throttle valve drive, electric throttle
- G187 Throttle valve drives angle sender 1, electric throttle
- G188 Throttle valve drives angle sender 2, electric throttle
- J220 Motronic control unit, in centre plenum chamber
- J293 Radiator fan control unit
- J338 Throttle valve module
- N79 Heater element for crankcase breather
- N156 Variable intake manifold change-over valve
- T6a 6-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- T14a 14-pin connector, near battery
- T121 121-pin connector
- V51 Continued coolant circulation pump

- (85) Earth connection 1, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber
- (D173) Connection (87), in engine wiring harness

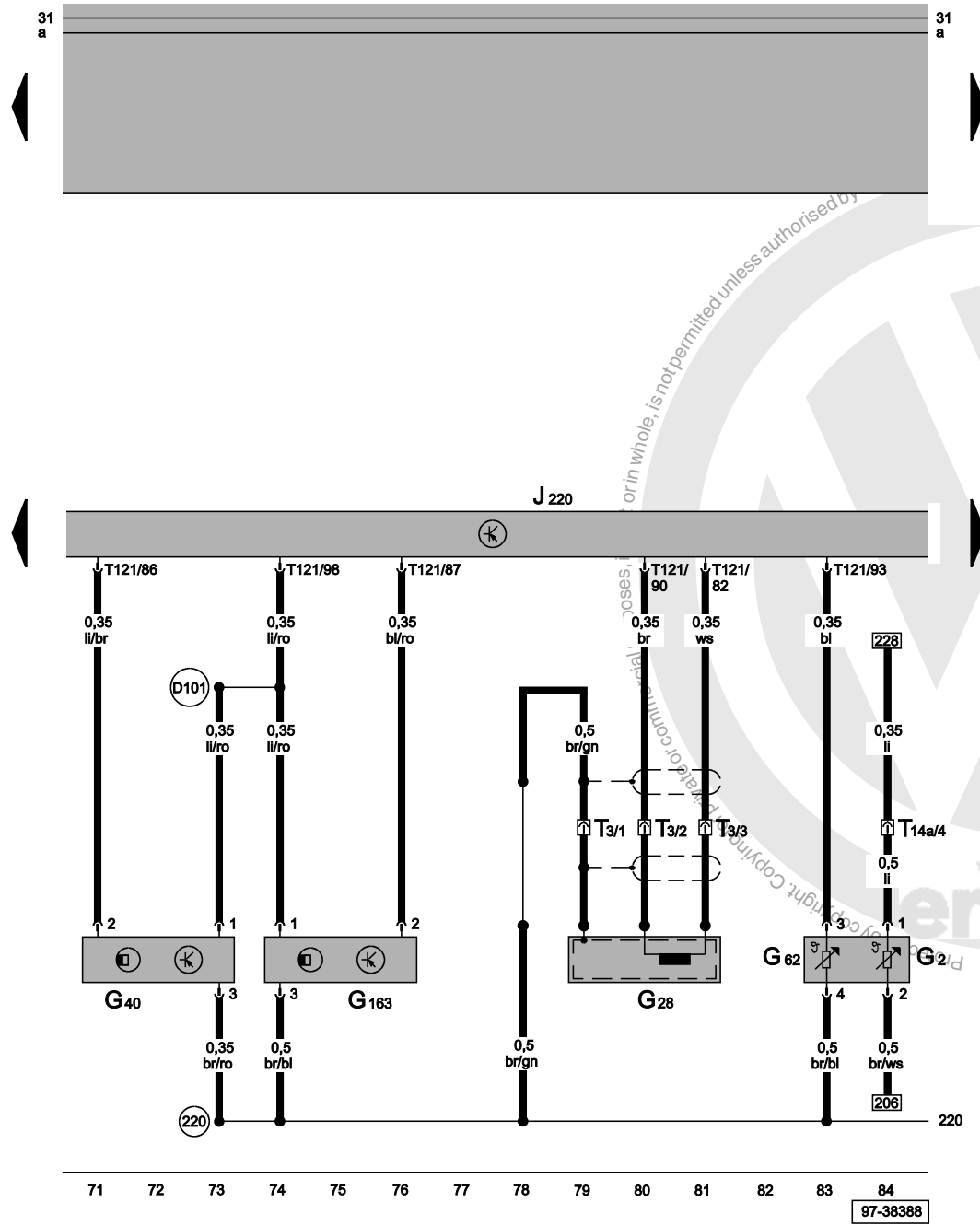
- ** connection air conditioning system
- *** Radiator fan control unit connection

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Motronic control unit, engine speed sender, Hall sender, coolant temperature sender

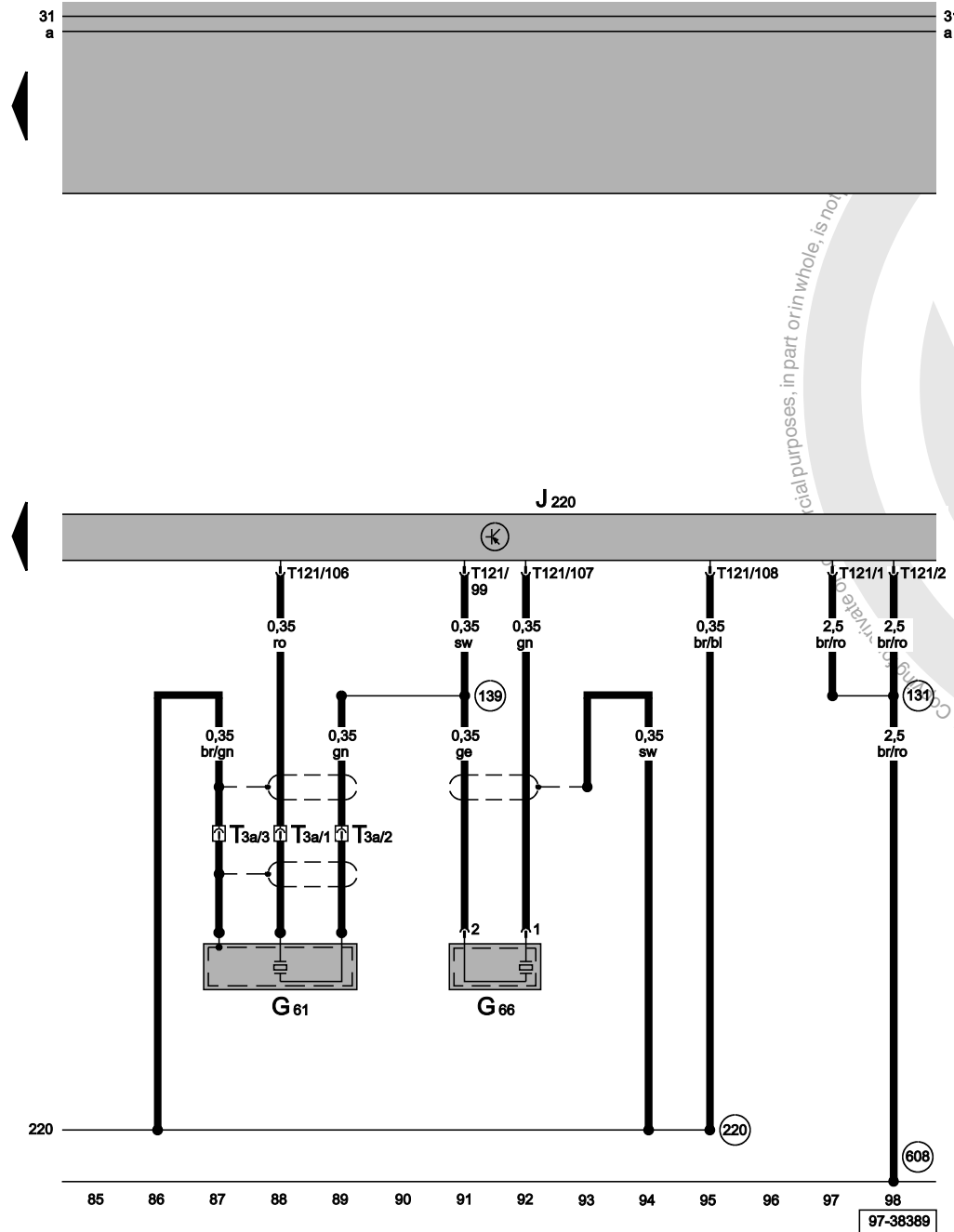
- G2 Coolant temperature display sender
- G28 Engine speed sender
- G40 Hall sender
- G62 Coolant temperature sender
- G163 Hall sender 2
- J220 Motronic control unit, in centre plenum chamber
- T3 3-pin connector, near intake manifold
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 220 Earth connection (sender earth), in engine wiring harness
- D101 Connection 1, in engine compartment wiring harness



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Motronic control unit, knock sensors

- G61 Knock sensor 1
- G66 Knock sensor 2
- J220 Motronic control unit, in centre plenum chamber
- T3a 3-pin connector, in rear engine compartment
- T121 121-pin connector
- 131 Earth connection 2, in engine compartment wiring harness
- 139 Earth connection (sender earth) in Motronic wiring harness
- 220 Earth connection (sender earth), in engine wiring harness
- 608 Earth point, in centre of plenum chamber

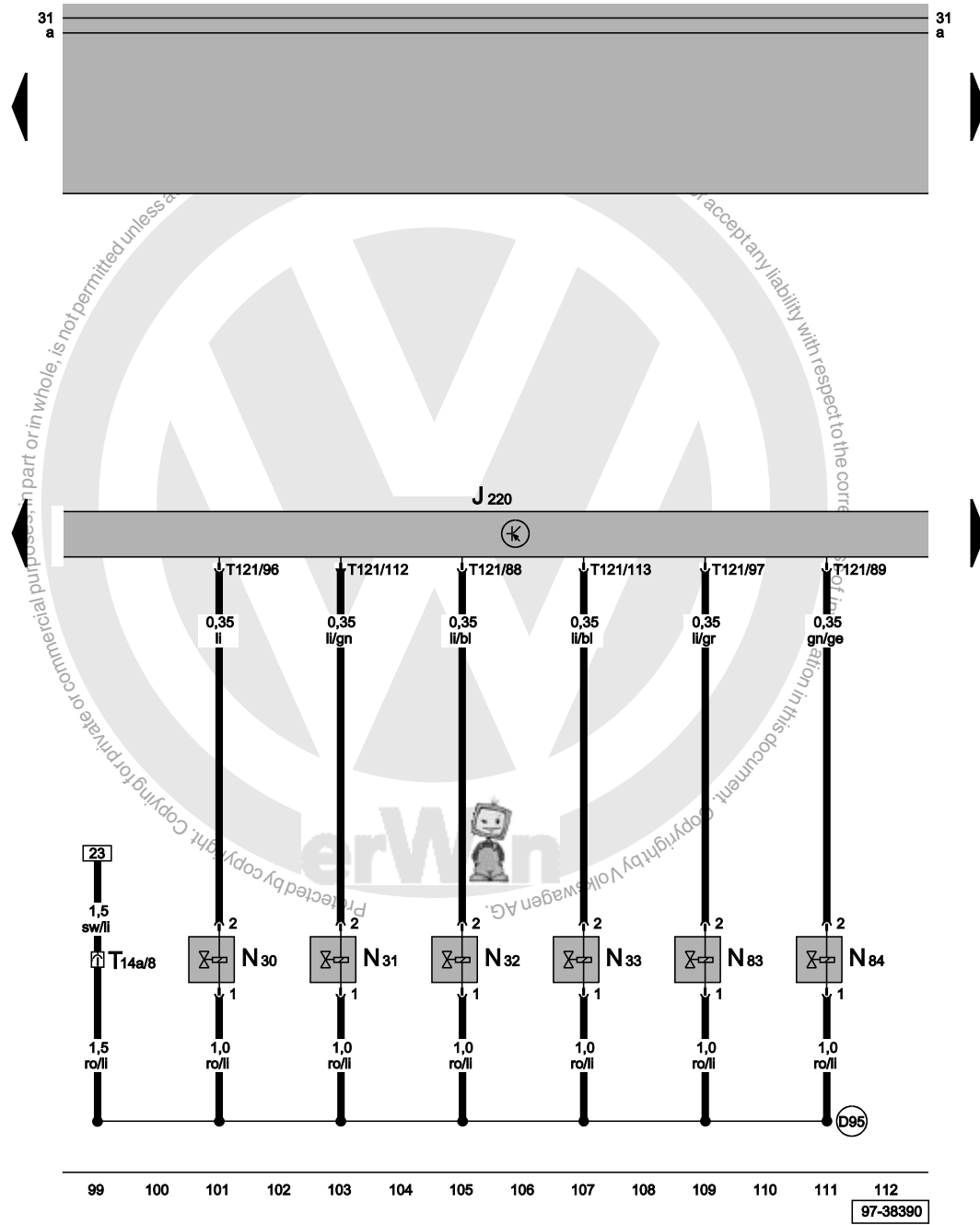


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97-38389

Motronic control unit, injectors

- J220 Motronic control unit, in centre plenum chamber
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- N83 Injector, cylinder 5
- N84 Injector, cylinder 6
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (D95) Connection (injectors), in engine compartment wiring harness

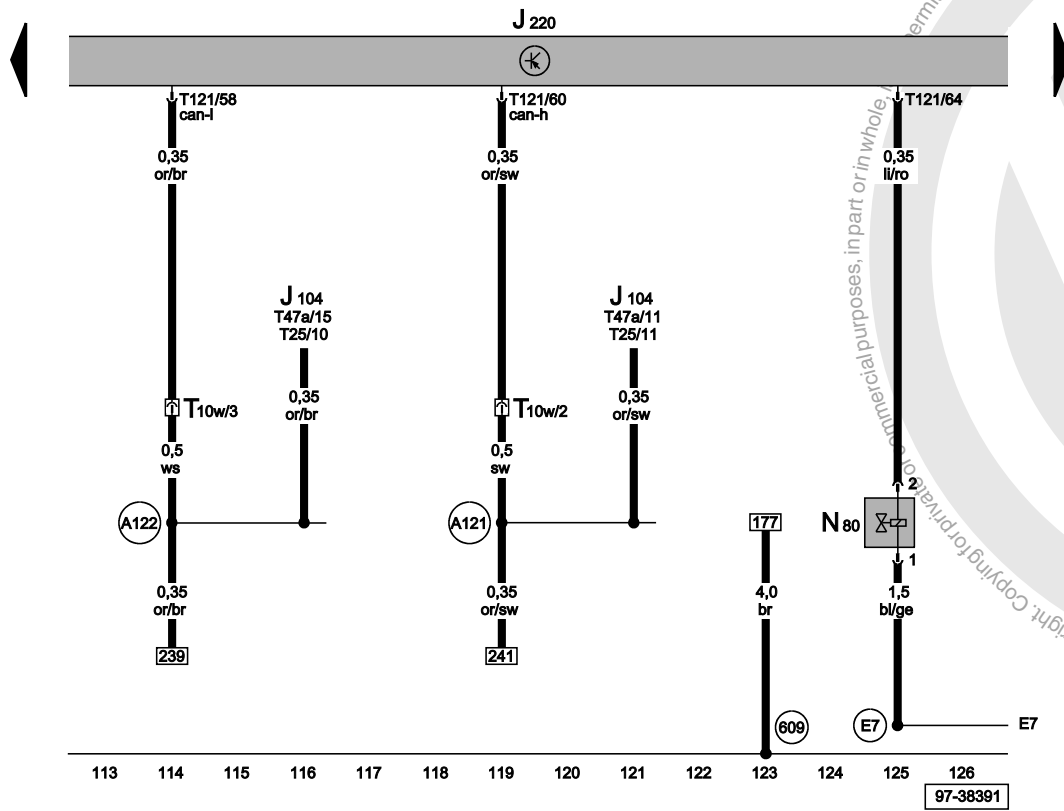
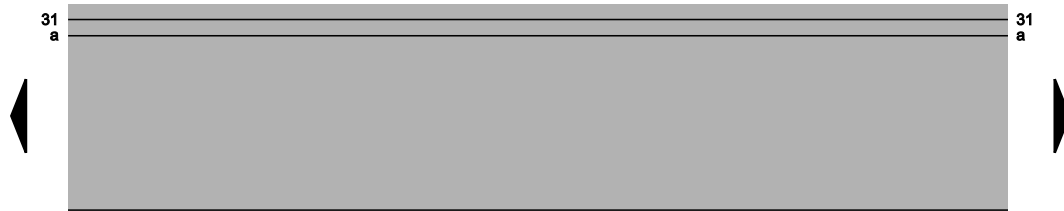


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Motronic control unit, active charcoal filter system solenoid valve

- J104 ABS control unit with EDL
- J220 Motronic control unit, in centre plenum chamber
- N80 Activated charcoal filter system solenoid valve 1
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T121 121-pin connector

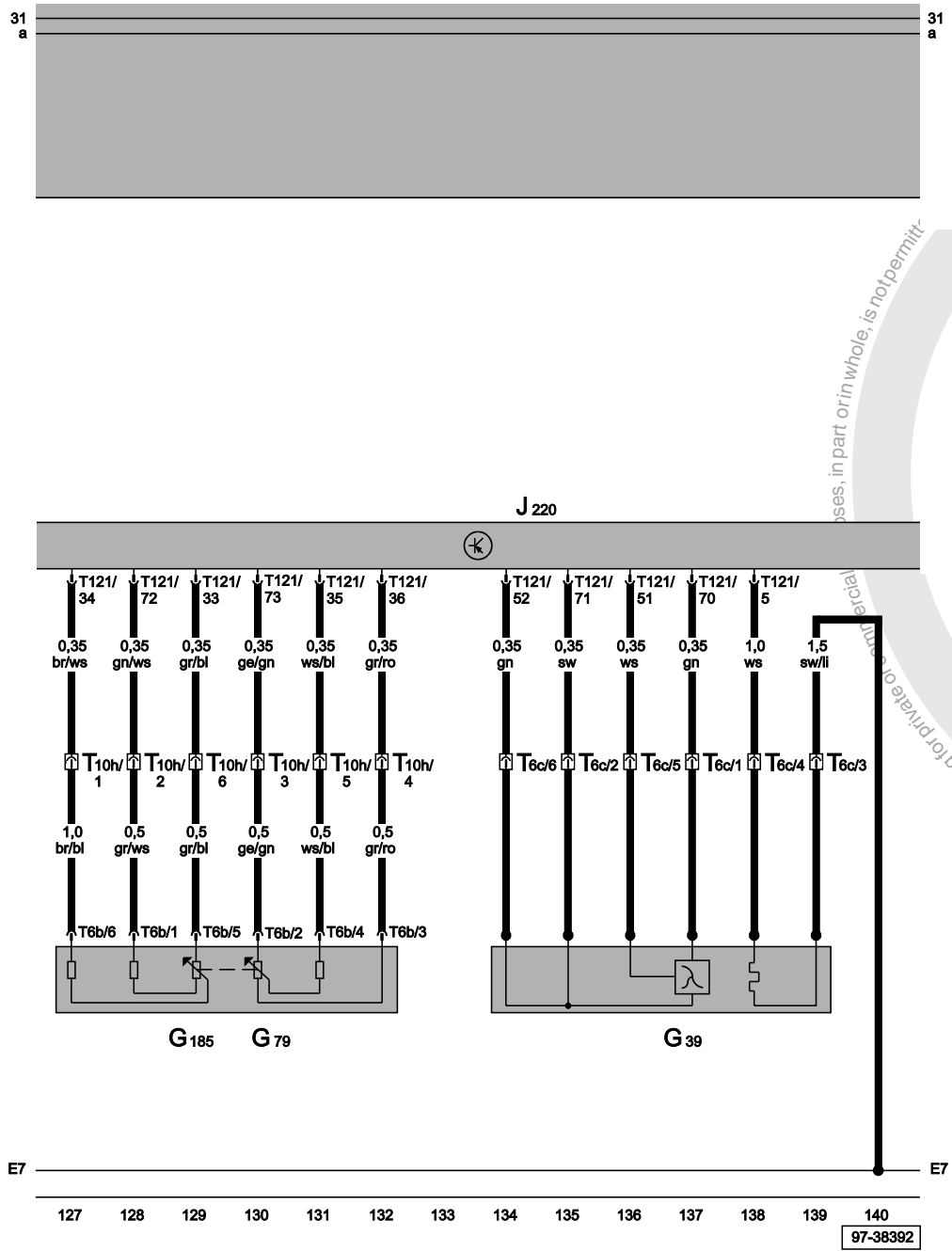
- 609 Earth point, on right in plenum chamber
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- E7 Positive connection (87a), in Motronic wiring harness



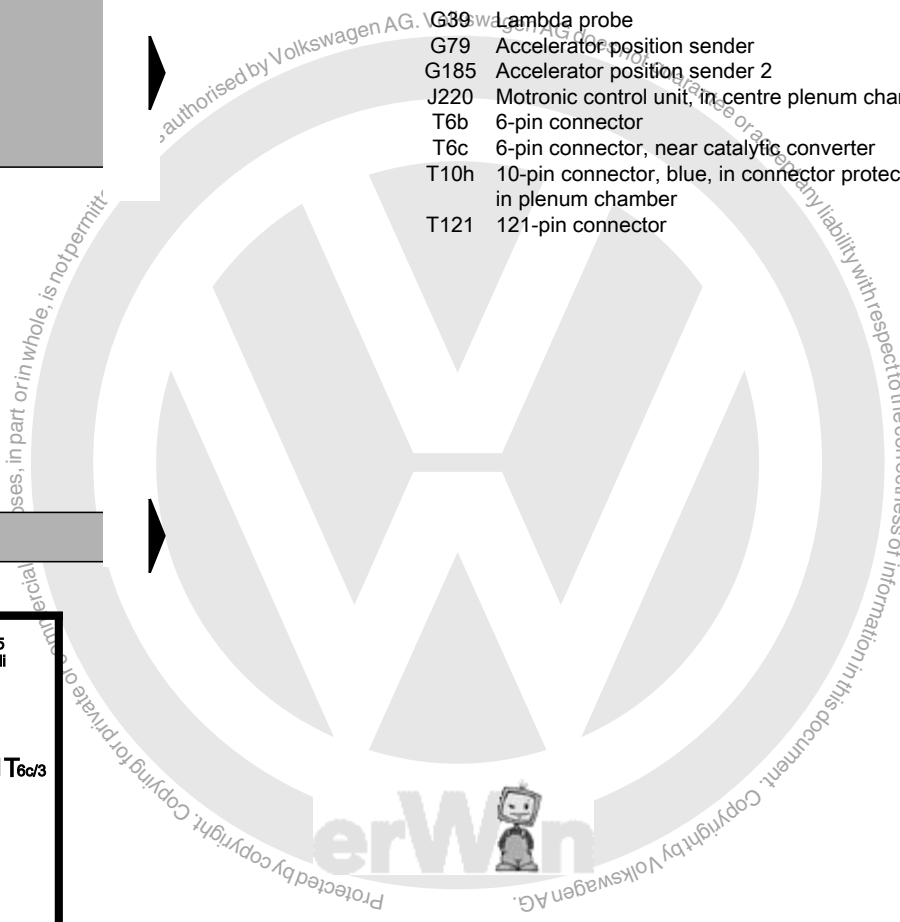
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Motronic control unit, accelerator position sender, lambda probe

- G39 Lambda probe
- G79 Accelerator position sender
- G185 Accelerator position sender 2
- J220 Motronic control unit, in centre plenum chamber
- T6b 6-pin connector
- T6c 6-pin connector, near catalytic converter
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

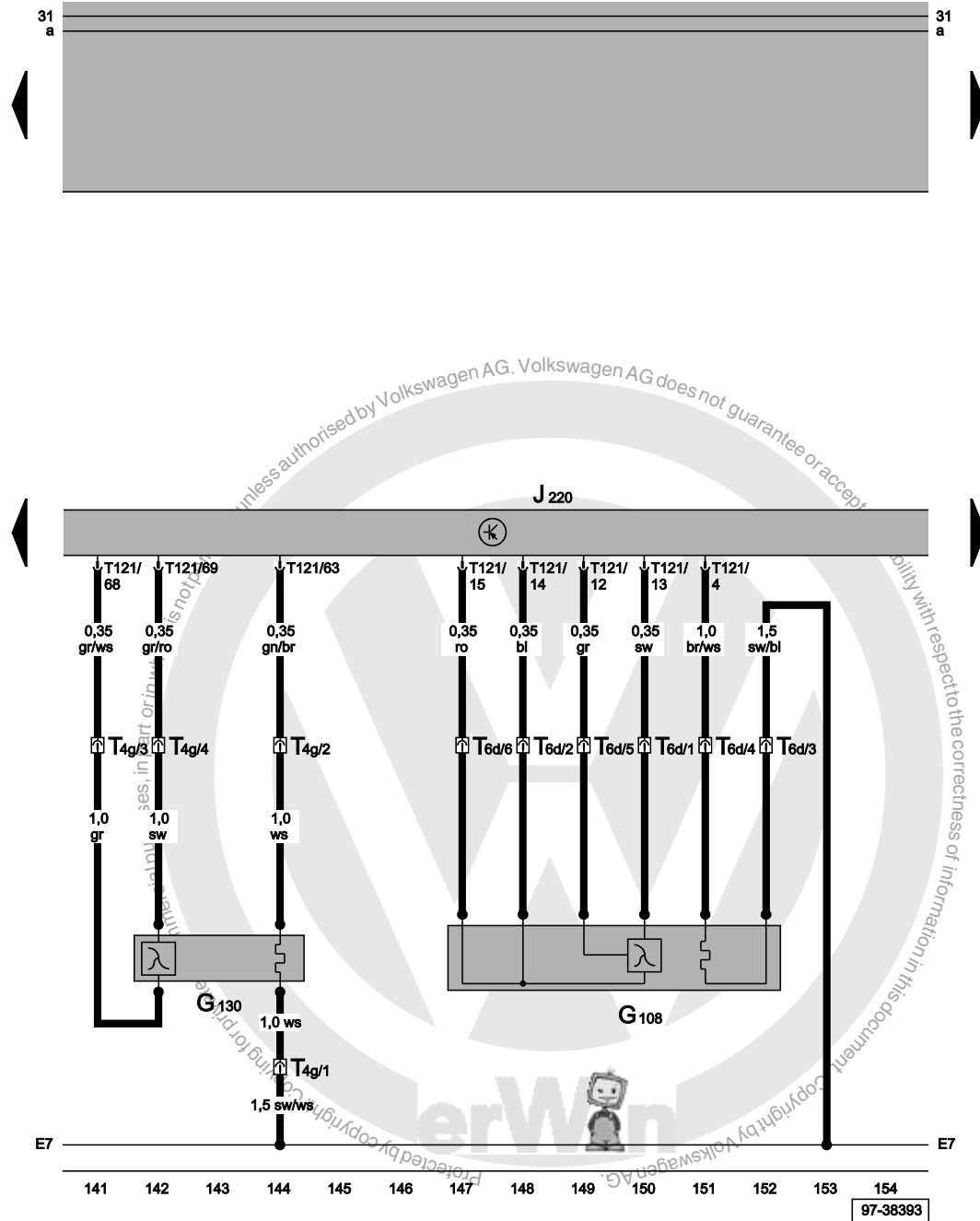


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Motronic control unit, lambda probe after catalytic converter, lambda probe 2

- G108 Lambda probe 2
- G130 Lambda probe after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4g 4-pin connector, near catalytic converter
- T6d 6-pin connector, near catalytic converter
- T121 121-pin connector

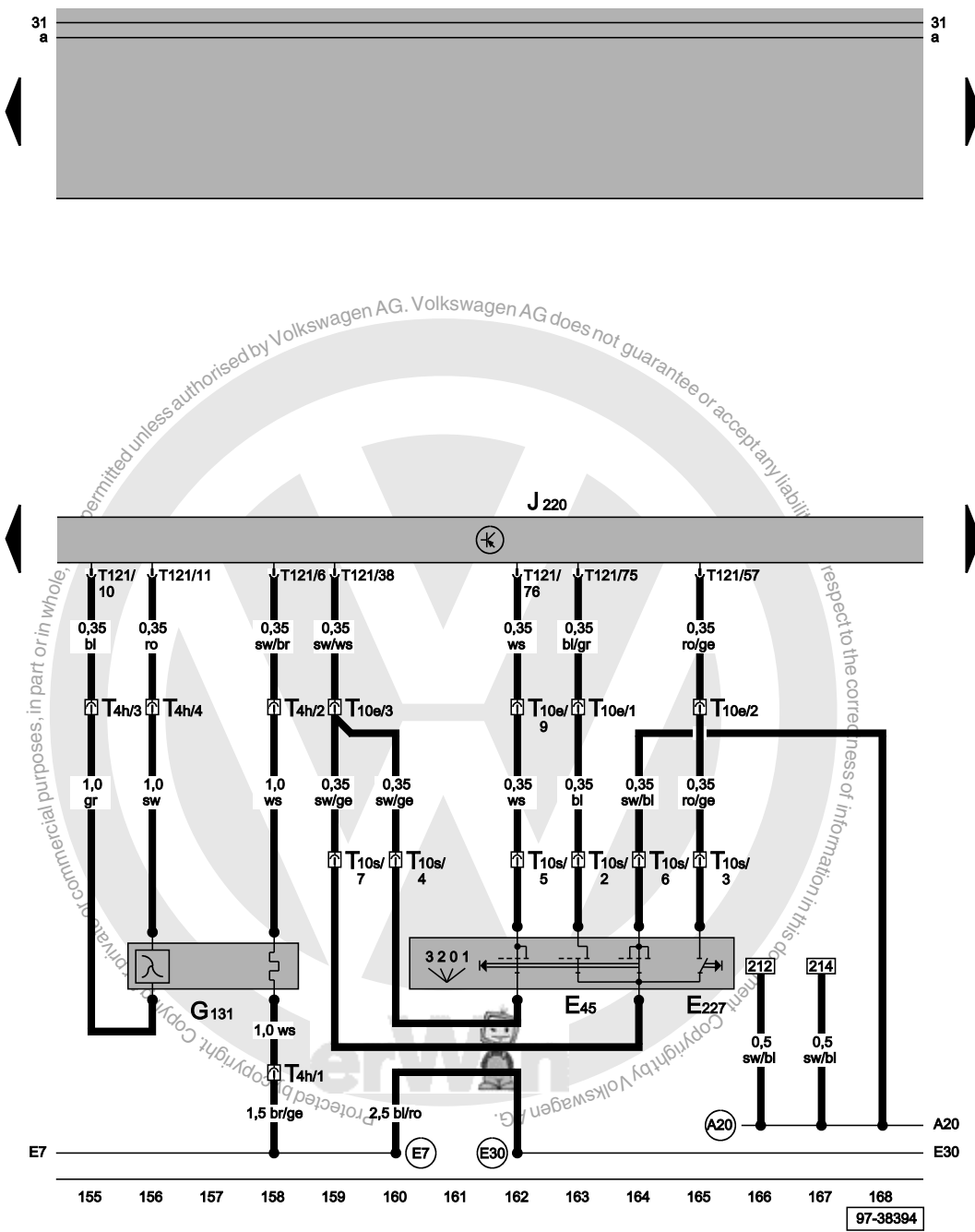


Motronic control unit, cruise control system switch, lambda probe 2 after catalytic converter

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- G131 Lambda probe 2 after catalytic converter
- J220 Motronic control unit, in centre plenum chamber
- T4h 4-pin connector, near catalytic converter
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T121 121-pin connector

- (A20) Connection (15a), in dash panel wiring harness
- (E7) Positive connection (87a), in Motronic wiring harness
- (E30) Connection (87a), in engine wiring harness

** only models with GND, models with multifunction display => Current Flow Diagram multifunction steering wheel for cruise control system and radio



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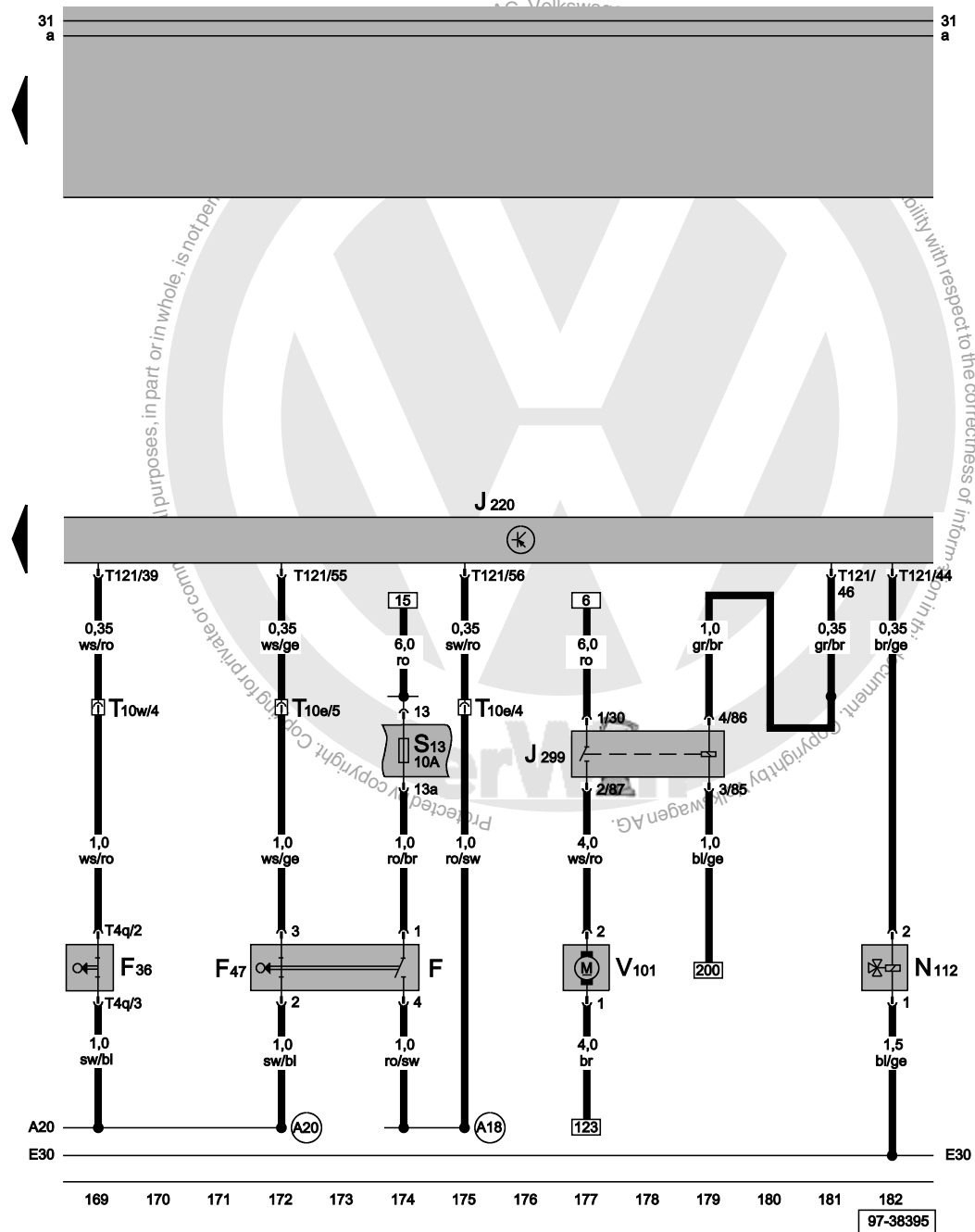
97-38394

Motronic control unit, secondary air pump motor, secondary air inlet valve, clutch pedal switch, brake pedal switch, brake light switch

- F Brake light switch
- F36 Clutch pedal switch
- F47 Brake pedal switch
- J220 Motronic control unit, in centre plenum chamber
- J299 Secondary air pump relay, in protective housing on left in engine compartment (control number 100)
- N112 Secondary air inlet valve
- S13 Fuse 13 in fuse holder
- T4q 4-pin connector
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V101 Secondary air pump motor

A18 Connection (54), in dash panel wiring harness

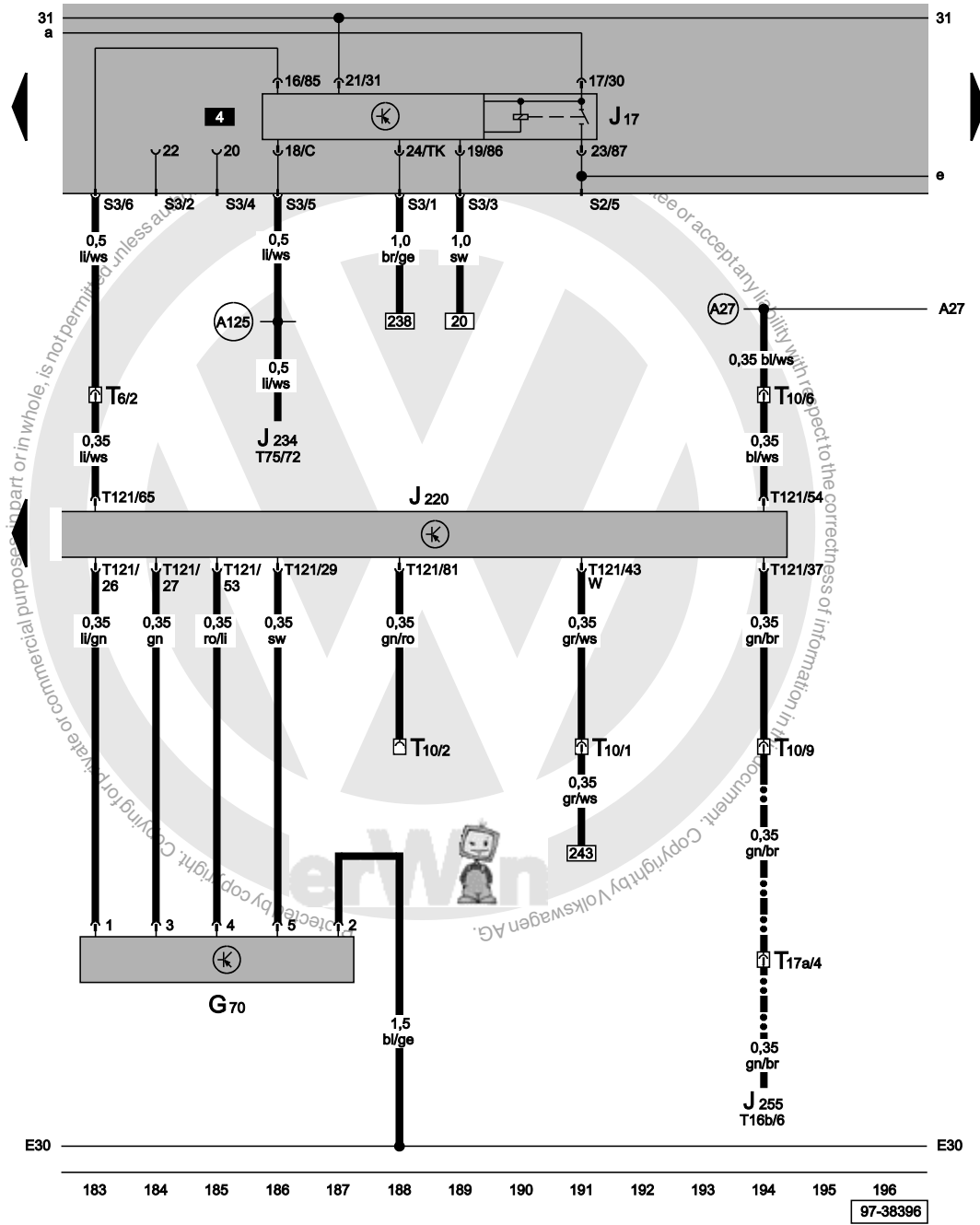
A20 Connection (15a), in dash panel wiring harness



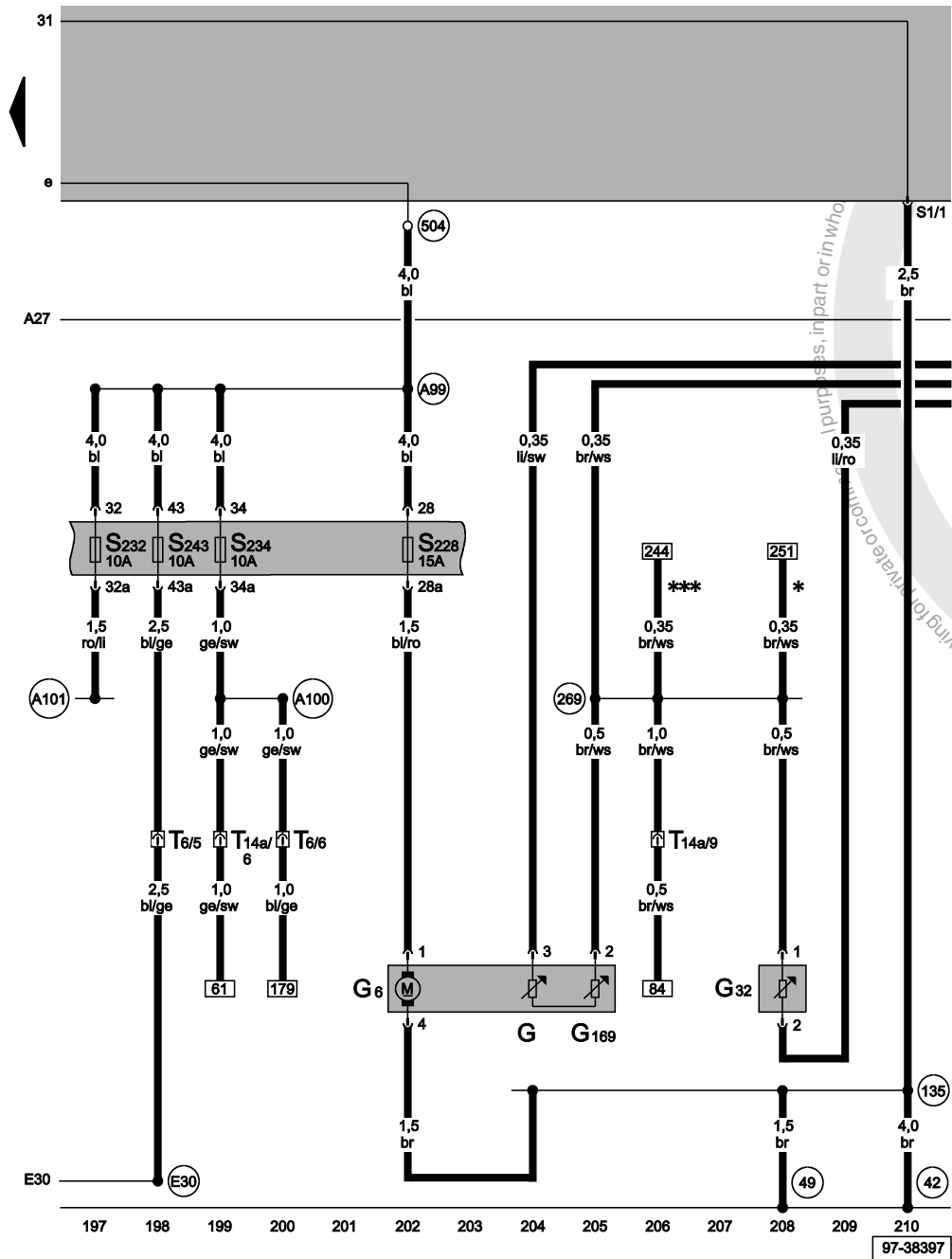
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Motronic control unit, air mass meter, fuel pump relay

- G70 Air mass meter
- J17 Fuel pump relay
- J220 Motronic control unit, in centre plenum chamber
- J234 Airbag control unit, behind the lower console
- J255 Climatronic control unit
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T75 75-pin connector
- T121 121-pin connector
- A27 Connection (speed signal), in dash panel wiring harness
- A125 Connection (crash signal), in dash panel wiring harness
- only models with Climatronic



Fuel pump, fuel gauge sender, coolant shortage indicator sender

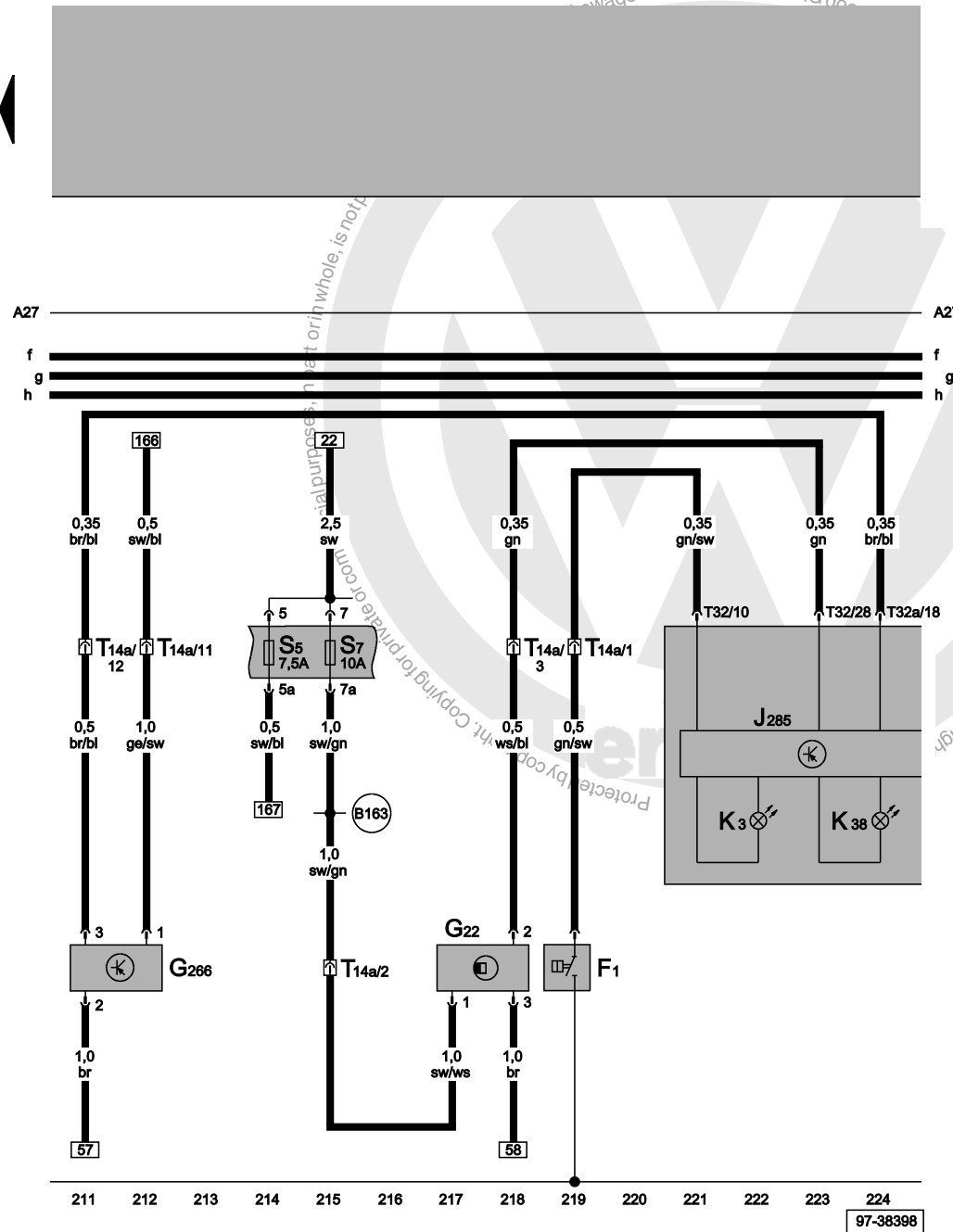


- G Fuel gauge sender
- G6 Fuel pump
- G32 Coolant shortage indicator sender
- G169 Fuel gauge sender 2
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 504 Screw connection (87F) on relay plate
- A99 Connection 1 (87), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- A101 Connection 3 (87), in dash panel wiring harness
- E30 Connection (87a), in engine wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only

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Dash panel insert, oil pressure warning, oil level/oil temperature sender, speedometer sender

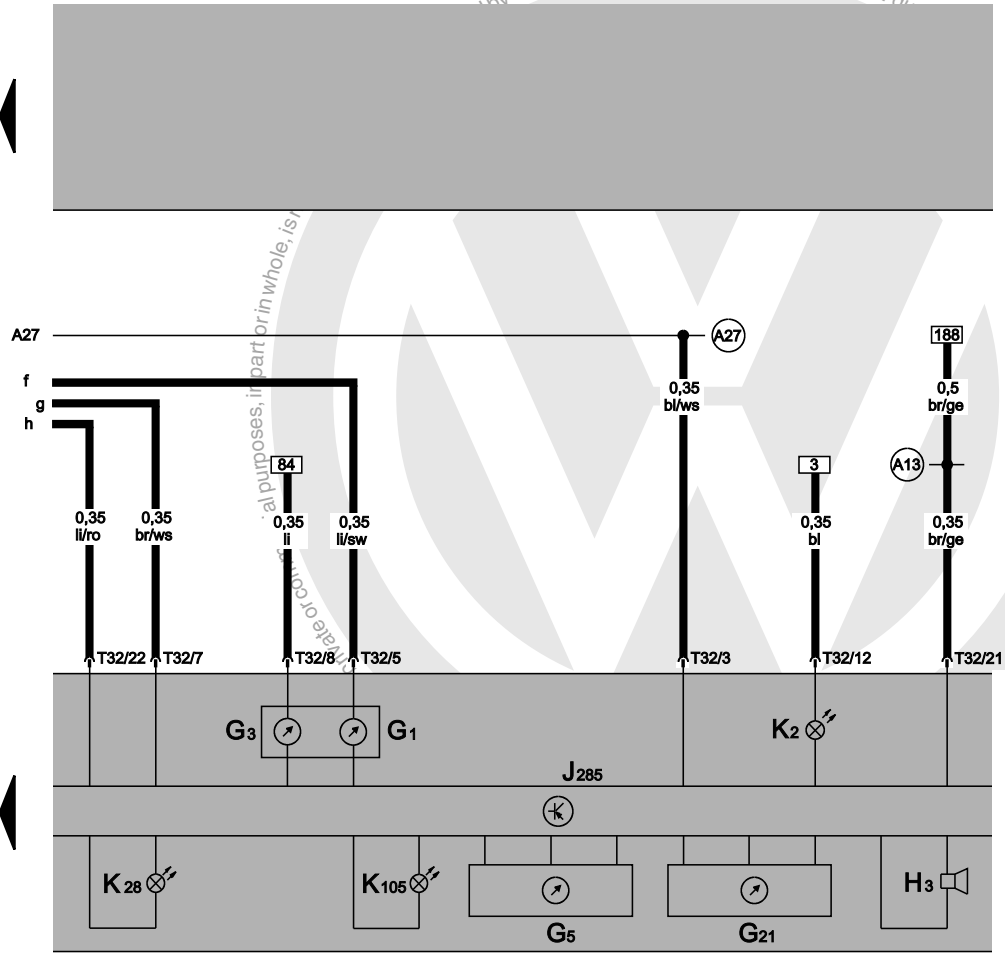
- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G266 Oil level and oil temperature sender**
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K38 Oil level warning lamp**
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- (B163) Positive connection 1 (15), in interior wiring harness
- ** only flexible service interval display



Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, speedometer, alternator warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- G21 Speedometer
- H3 Warning buzzer
- J285 Control unit in dash panel insert
- K2 Alternator warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue

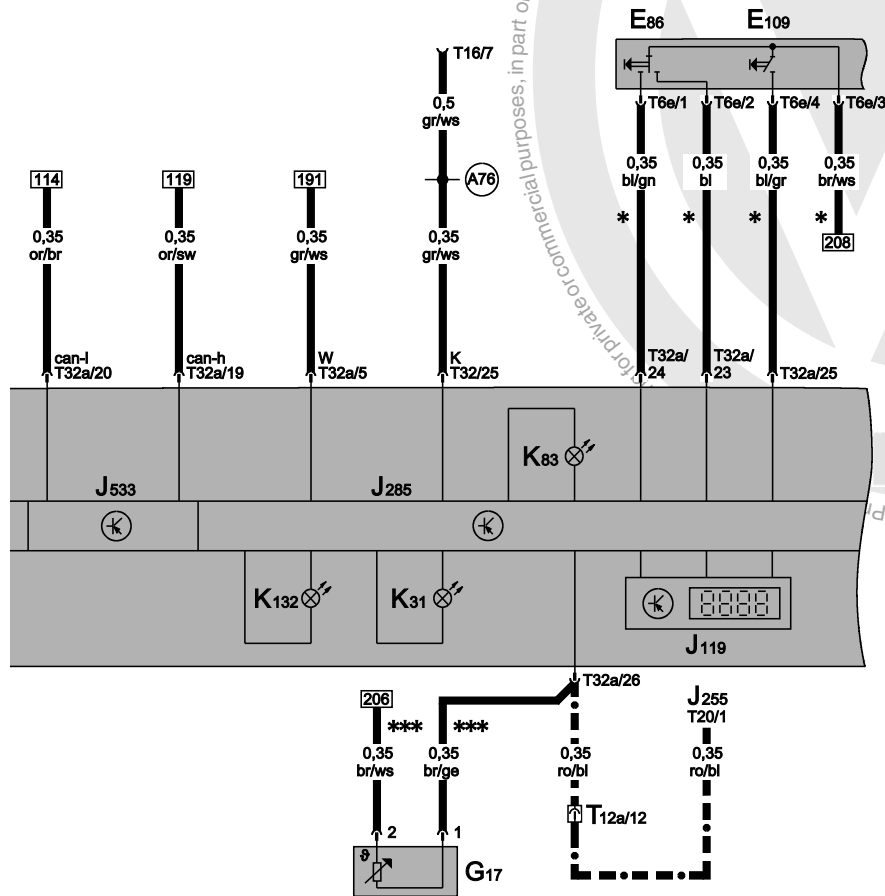
- A13 Connection (door contact switch), in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness



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Dash panel insert, electronic power control fault lamp, cruise control system warning lamp, multifunction display, ambient temperature indicator, exhaust emissions warning lamp, self-diagnosis connection

- E86 Multifunction display call-up button
- E109 Multifunction display memory switch
- G17 Ambient temperature sensor
- J119 Multifunction display
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- J533 Data bus diagnostic interface, in dash panel insert
- K31 Cruise control system warning lamp
- K83 Exhaust emissions warning lamp
- K132 Electric power control fault lamp
- T6e 6-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T20 20-pin connector
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * only models with multifunction display
- *** models with multifunction display and without Climatronic only
- only models with Climatronic



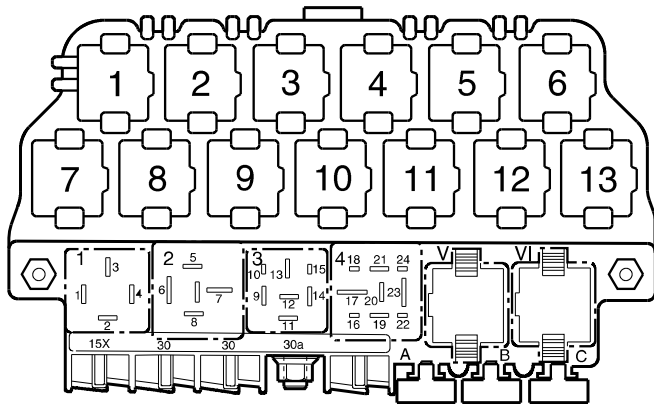
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Climatronic

- ⇒ 1.6 l/75 kW Simos, engine code AVU
 - ⇒ 1.6 l/75 kW Simos, engine code BFQ
- from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:



Note:

- ◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

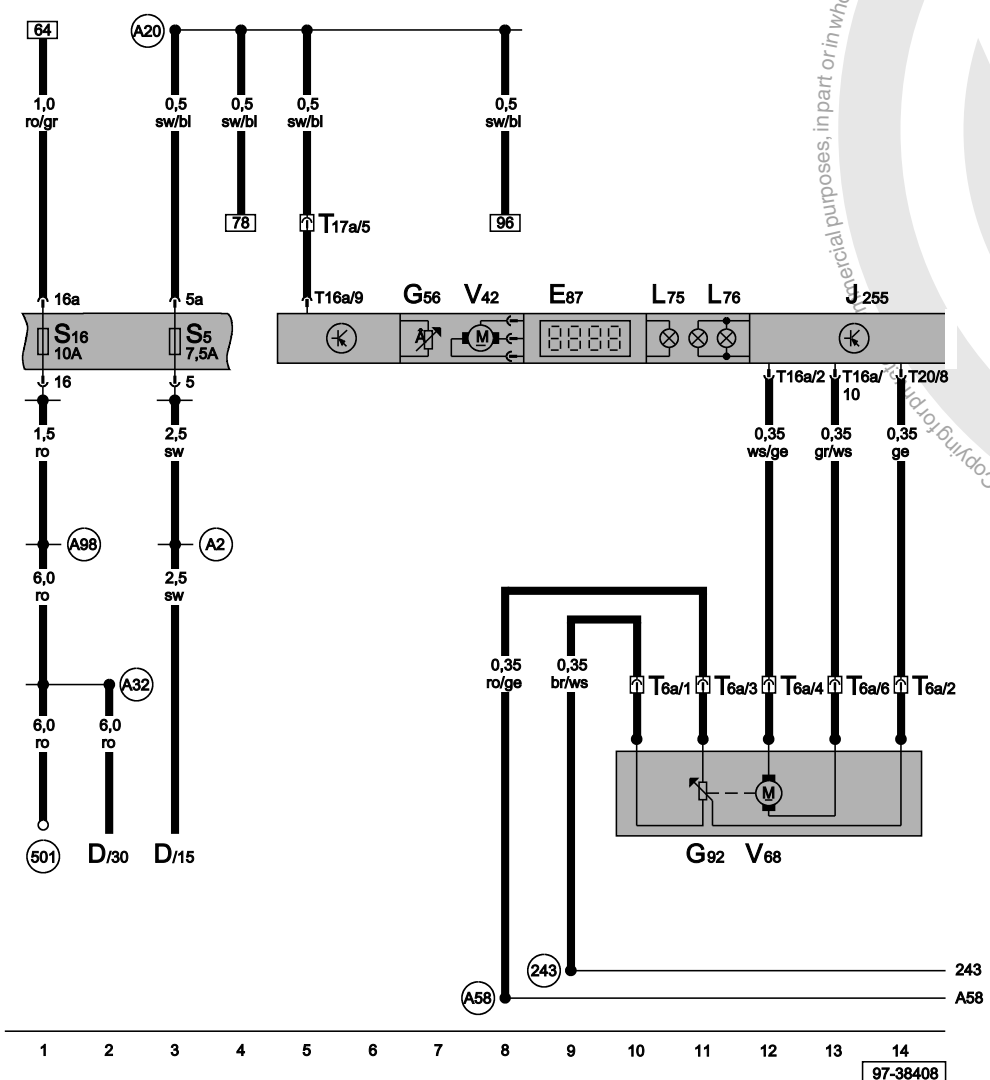
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Climatronic control unit, temperature flap control motor

- D Ignition/starter switch
- E87 Operating and display unit for air conditioning system/ Climatronic
- G56 Dash panel temperature sensor
- G92 Potentiometer for temperature flap control motor
- J255 Climatronic control unit
- L75 Digital display illumination bulb
- L76 Button illumination bulb
- S5 Fuse 5 in fuse holder
- S16 Fuse 16 in fuse holder
- T6a 6-pin connector, behind centre dash panel
- T16a 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V42 Temperature sensor blower
- V68 Temperature flap control motor

- 243 Earth connection 1, in Climatronic wiring harness
- 501 Screw connection 2 (30), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A20 Connection (15a), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A58 Connection (5 volt), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness

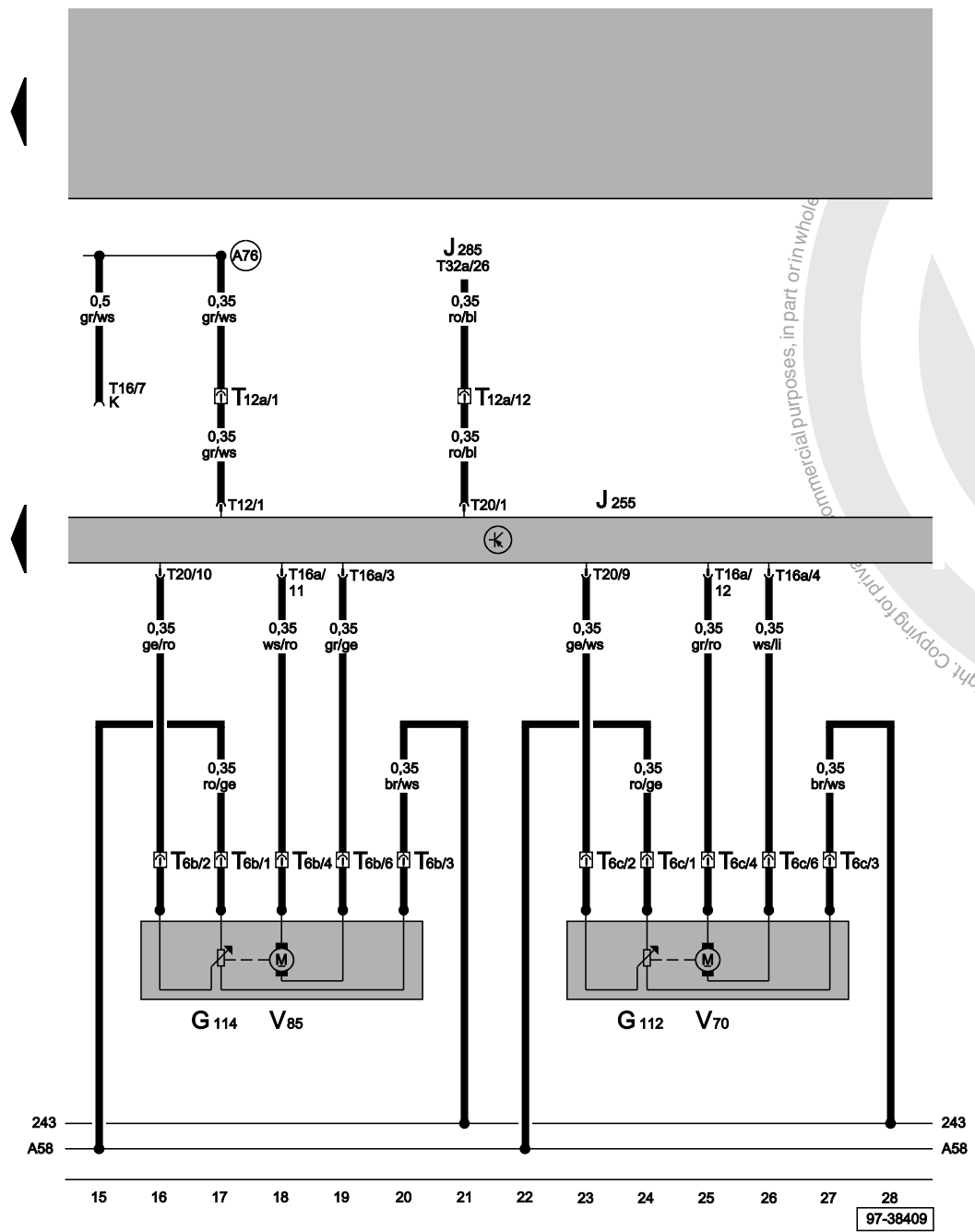


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Climatronic control unit, central flap control motor, footwell and defroster flap control motor

- G112 Central flap control motor potentiometer
- G114 Footwell/defroster flap control motor potentiometer
- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- T6b 6-pin connector, behind centre dash panel
- T6c 6-pin connector, behind centre dash panel
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T16a 16-pin connector
- T20 20-pin connector
- T32a 32-pin connector, green, on dash panel insert
- V70 Central flap control motor
- V85 Footwell and defroster flap control motor

A76 Connection (diagnosis wire K), in dash panel wiring harness

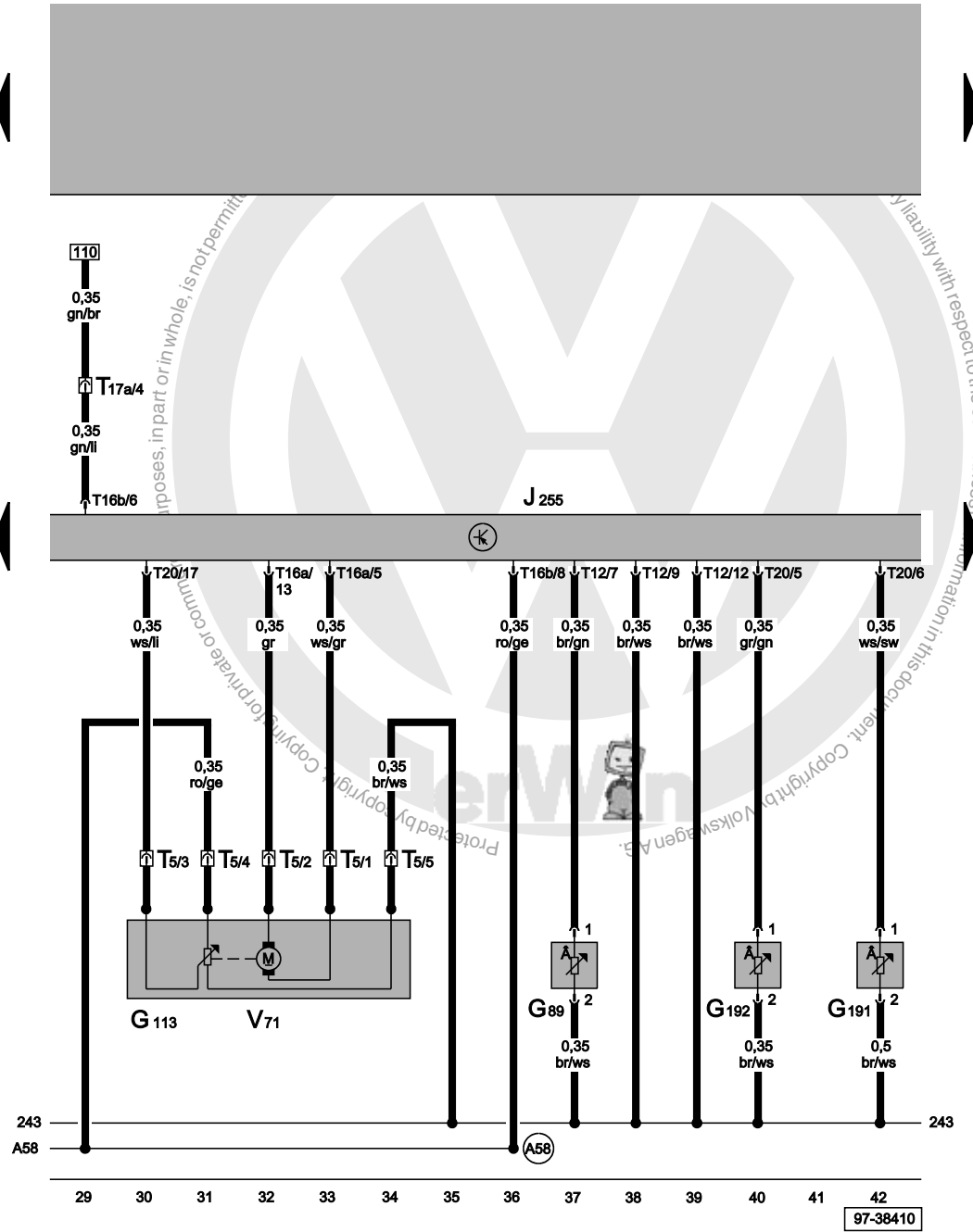


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97-38409

Climatronic control unit, air flow flap control motor, vent temperature sender, fresh air intake duct temperature sensor

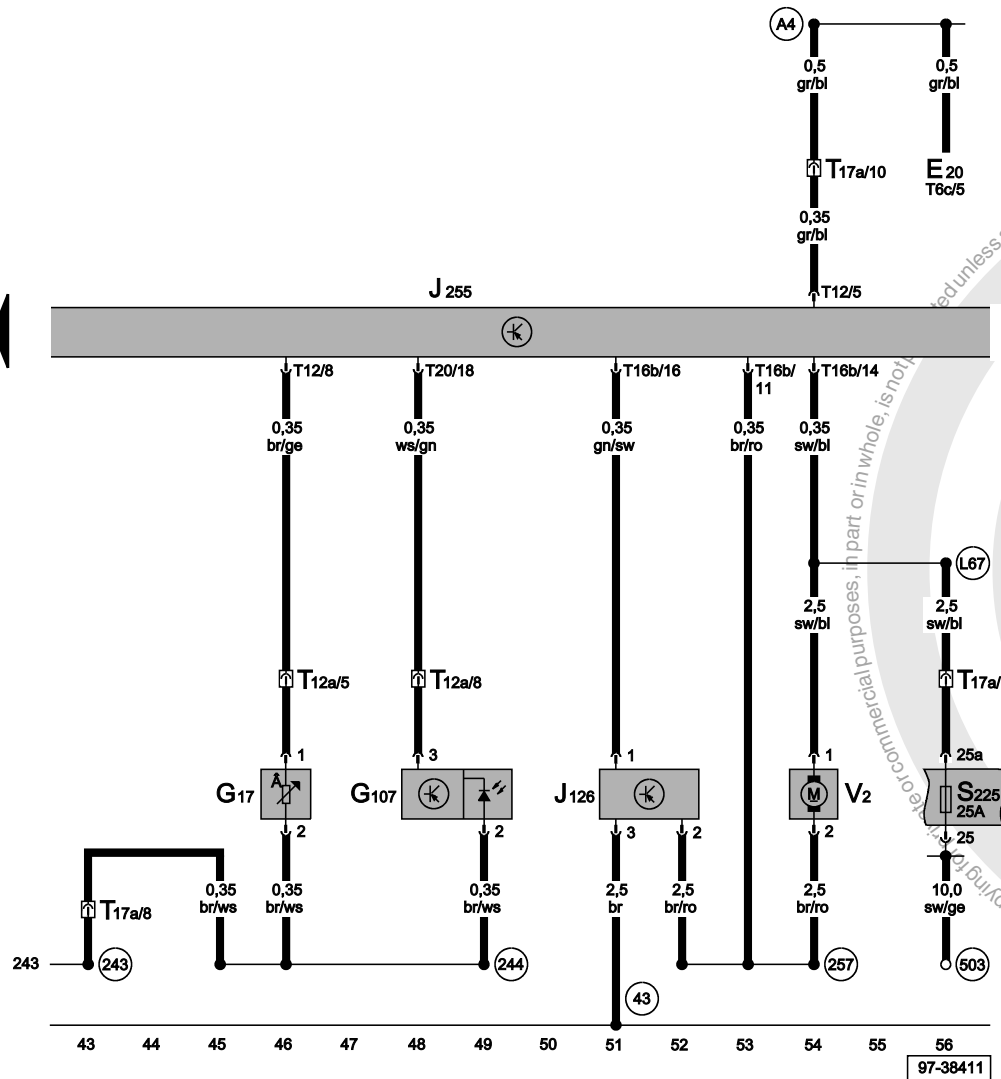
- G89 Fresh air intake duct temperature sensor, below the dash panel on right
 - G113 Air flow flap control motor potentiometer
 - G191 Centre vent temperature sender
 - G192 Footwell vent temperature sender
 - J255 Climatronic control unit
 - T5 5-pin connector, behind centre dash panel
 - T12 12-pin connector
 - T16a 16-pin connector
 - T16b 16-pin connector
 - T17a 17-pin connector, behind centre dash panel
 - T20 20-pin connector
 - V71 Air flow flap control motor
- (A58) Connection (5 volt), in dash panel wiring harness



Climatronic control unit, ambient temperature sensor, fresh air blower, fresh air blower control unit, sunlight penetration photosensor

- E20 Illumination regulators, switches, instruments
- G17 Ambient temperature sensor, on bumper front left
- G107 Sunlight penetration photosensor, on centre dash panel
- J126 Fresh air blower control unit, below the dash panel on right
- J255 Climatronic control unit
- S225 Fuse 25 in fuse holder
- T6c 6-pin connector
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- V2 Fresh air blower

- 43 Earth point, lower part of right A-pillar
- 243 Earth connection 1, in Climatronic wiring harness
- 244 Earth connection (sender earth), in Climatronic wiring harness
- 257 Earth connection 2, in Climatronic wiring harness
- 503 Screw connection (75x), on relay plate
- A4 Positive connection (58b), in dash panel wiring harness
- L67 Positive connection (75x), in engine compartment wiring harness



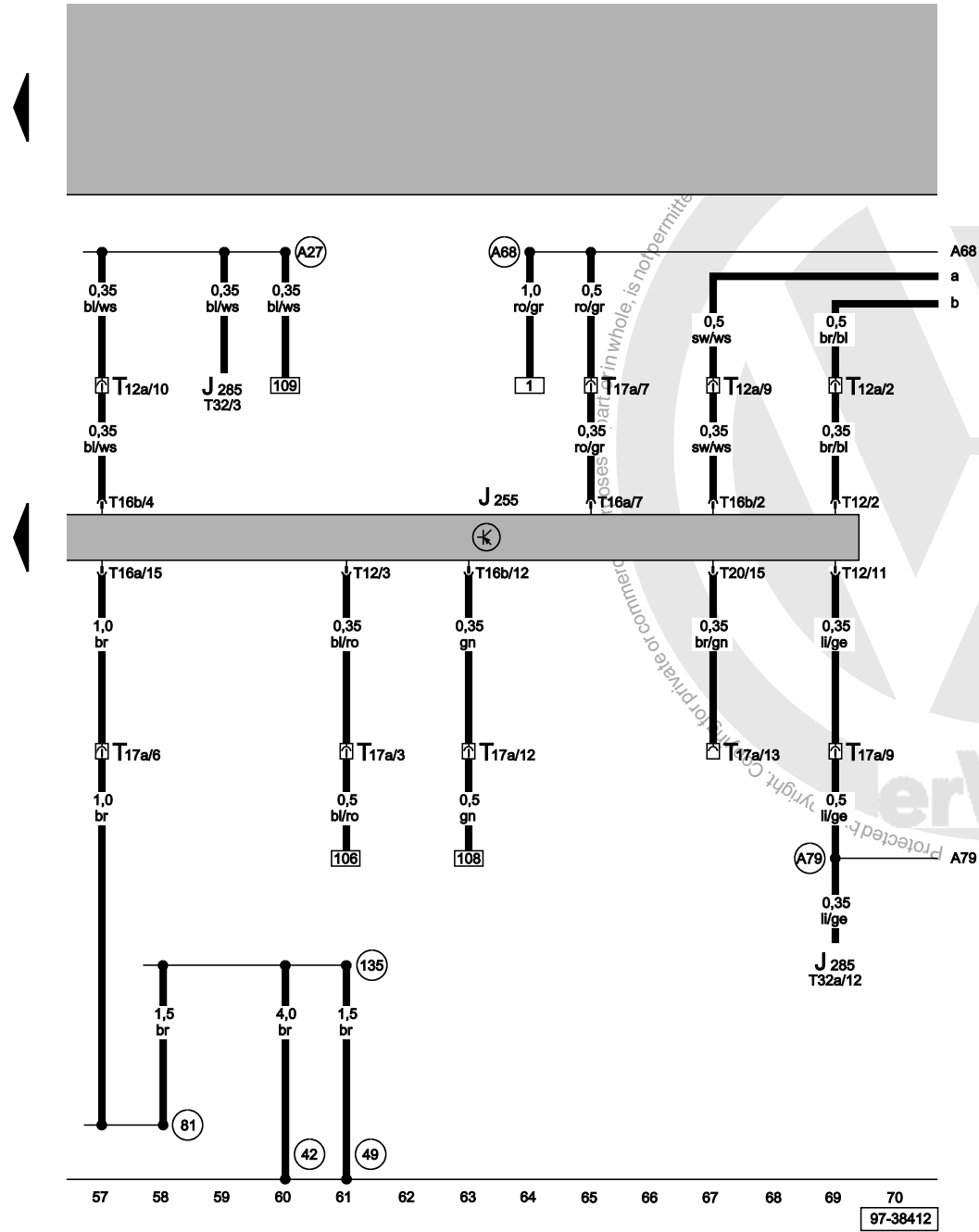
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Climatronic control unit

- J255 Climatronic control unit
- J285 Control unit in dash panel insert
- T12 12-pin connector
- T12a 12-pin connector, behind centre dash panel
- T16a 16-pin connector
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T20 20-pin connector
- T32 32-pin connector, blue, on dash panel insert
- T32a 32-pin connector, green, on dash panel insert

- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A27 Connection (speed signal), in dash panel wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- A79 Connection (hot light switch), in dash panel wiring harness

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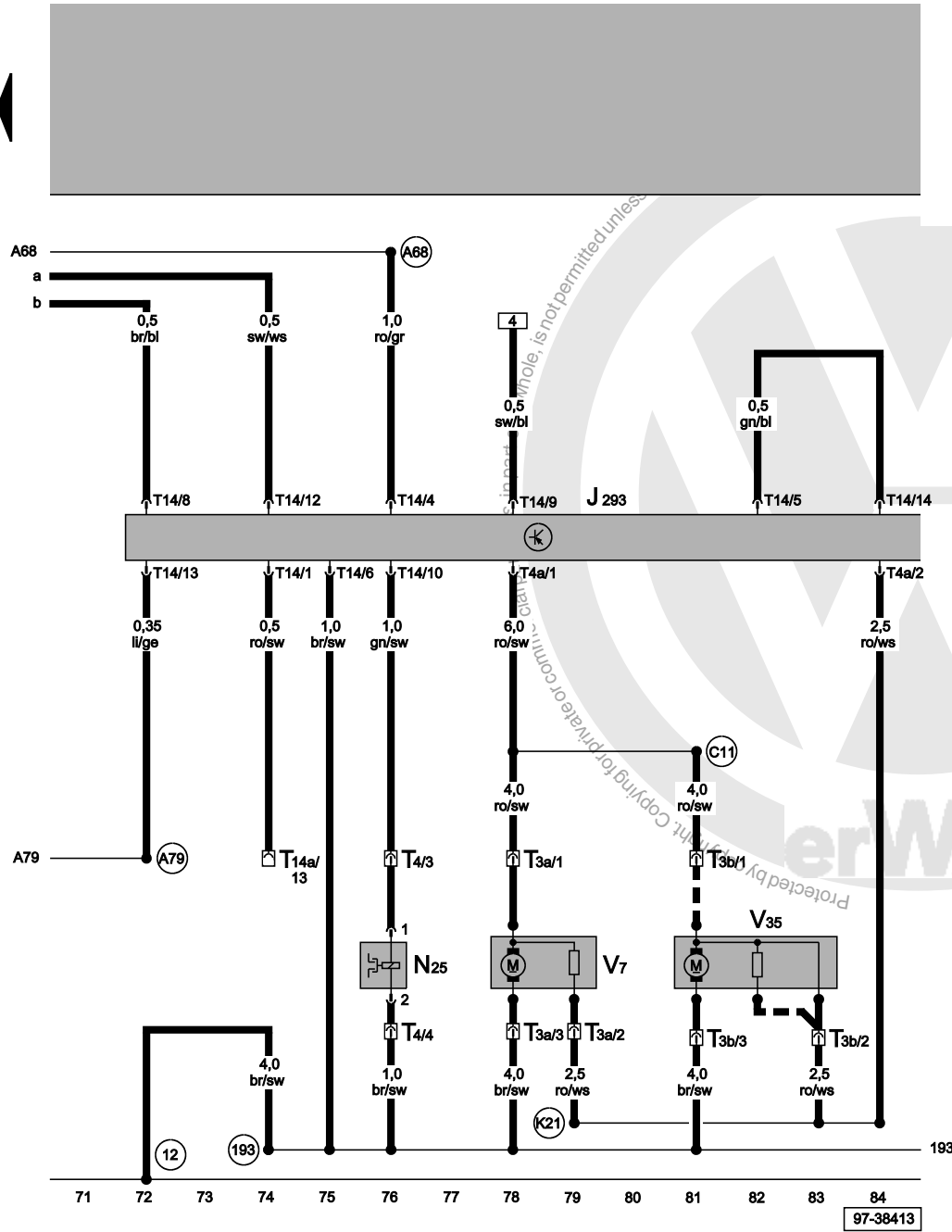


97-38412

Radiator fan control unit, radiator fan, air conditioning system magnetic coupling

- J293 Radiator fan control unit, in engine compartment, front left
- N25 Air conditioning system magnetic coupling
- T3a 3-pin connector, in front left engine compartment
- T3b 3-pin connector, in front left engine compartment
- T4 4-pin connector, near starter
- T4a 4-pin connector
- T14 14-pin connector
- T14a 14-pin connector, near battery
- V7 Radiator fan
- V35 Right fan for radiator*

- 12 Earth point, on left in engine compartment
- 193 Earth connection 1, in coolant fan wiring harness
- A68 Connection (30, air conditioning system), in dash panel wiring harness
- A79 Connection (hot light switch), in dash panel wiring harness
- C11 Connection in radiator fan wiring harness
- K21 Connection 1, in radiator fan wiring harness
- * depends on equipment with series resistor/ without series resistor
not with all levels of equipment exist

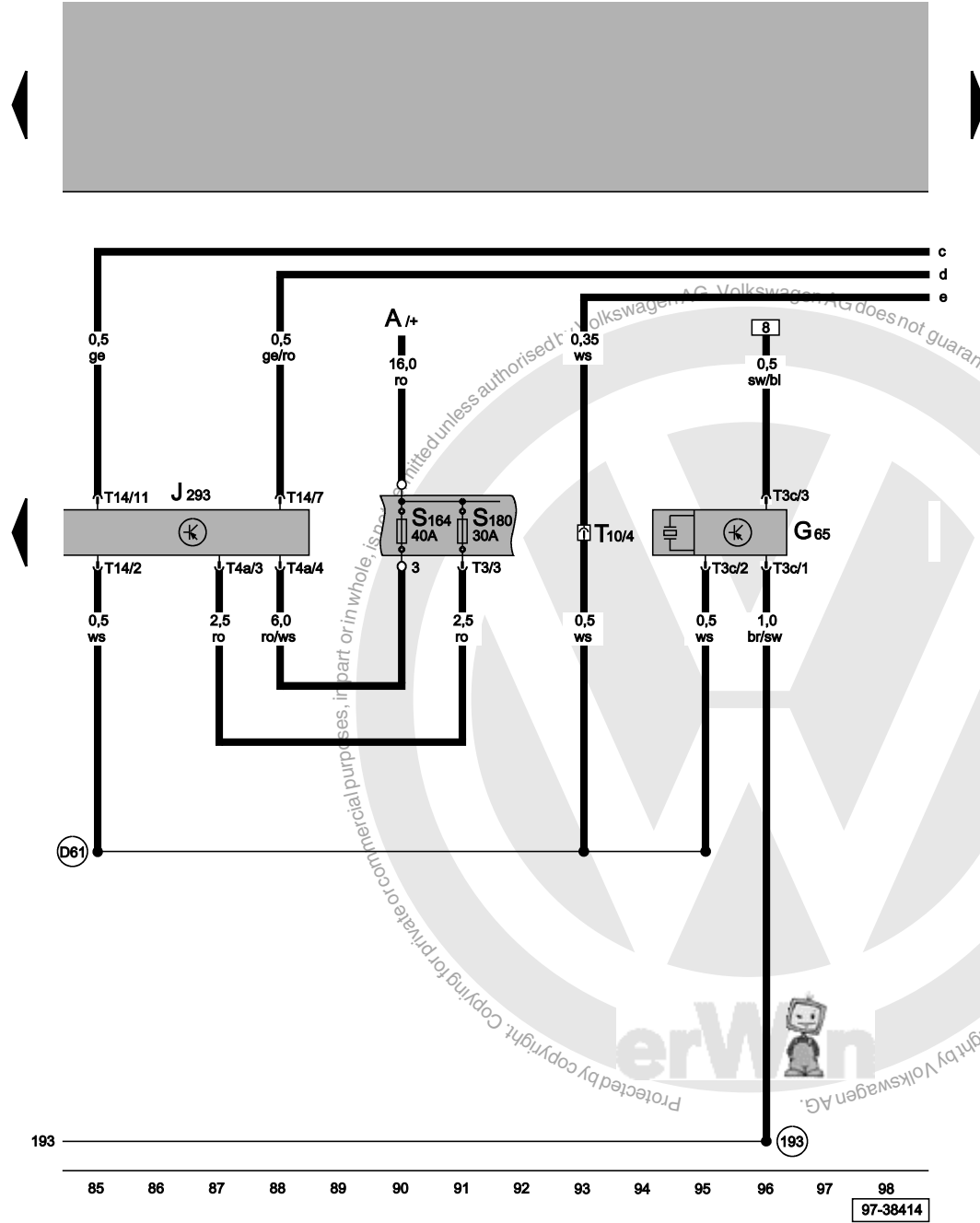


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97-38413

Radiator fan control unit, high pressure sender

- A Battery
- G65 High pressure sender
- J293 Radiator fan control unit, in engine compartment, front left
- S164 Fuse 3 (30) in fuse holder on battery
- S180 Fuse 8 (30) in fuse holder on battery
- T3 3-pin connector
- T3c 3-pin connector
- T4a 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T14 14-pin connector
- 193 Earth connection 1, in coolant fan wiring harness
- D61 Connection (air conditioning system), in engine compartment wiring harness

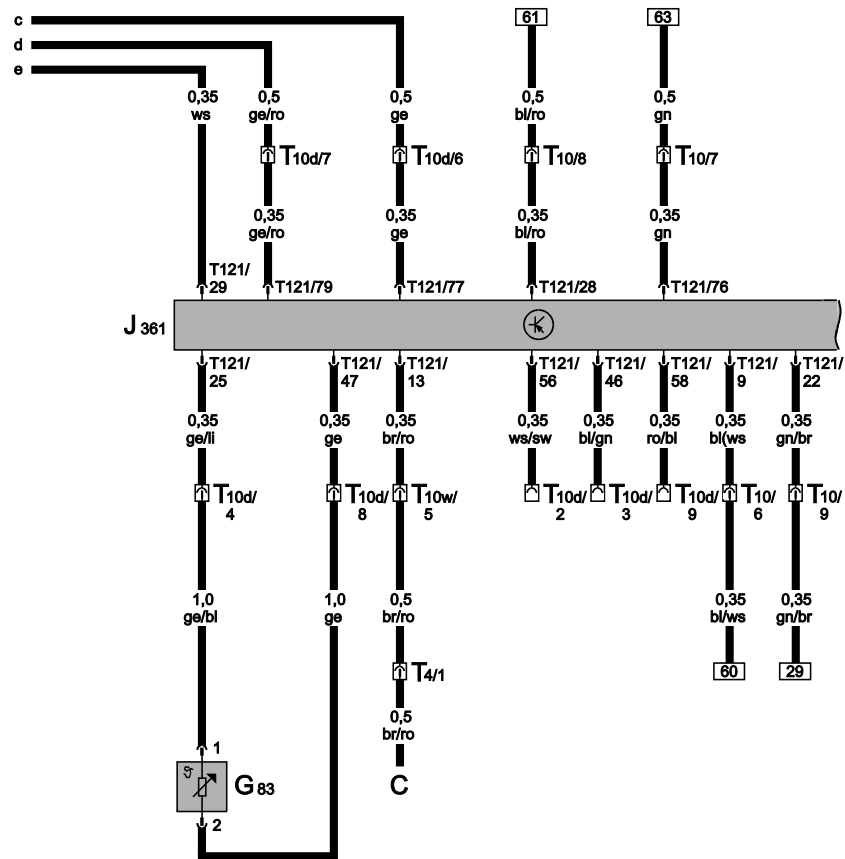


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Simos control unit, radiator outlet coolant temperature sender

- C Alternator
- G83 Radiator outlet coolant temperature sender
- J361 Simos control unit
- T4 4-pin connector, near starter
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10d 10-pin connector, green, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector



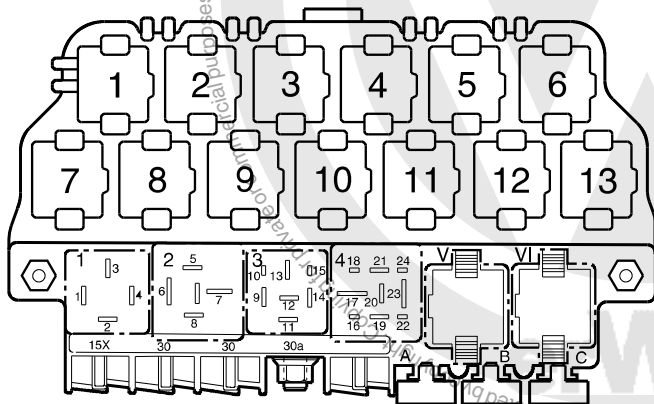
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

4-speed automatic gearbox (AG4)

- ⇒ 2.0 l/85 kW Motronic, engine codes AQY, APK, AZJ, BER, BHP
 - ⇒ 1.6 l/74 kW Simos, engine code AEH
 - ⇒ 1.6 l/75 kW Simos, engine code AVU, BFQ
 - ⇒ 1.6 l/4LV/77 kW, engine code BCB
 - ⇒ 1.8 l/92 kW Motronic, engine code AGN
 - ⇒ 1.8 l/110 kW Motronic, engine code AUM
- from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

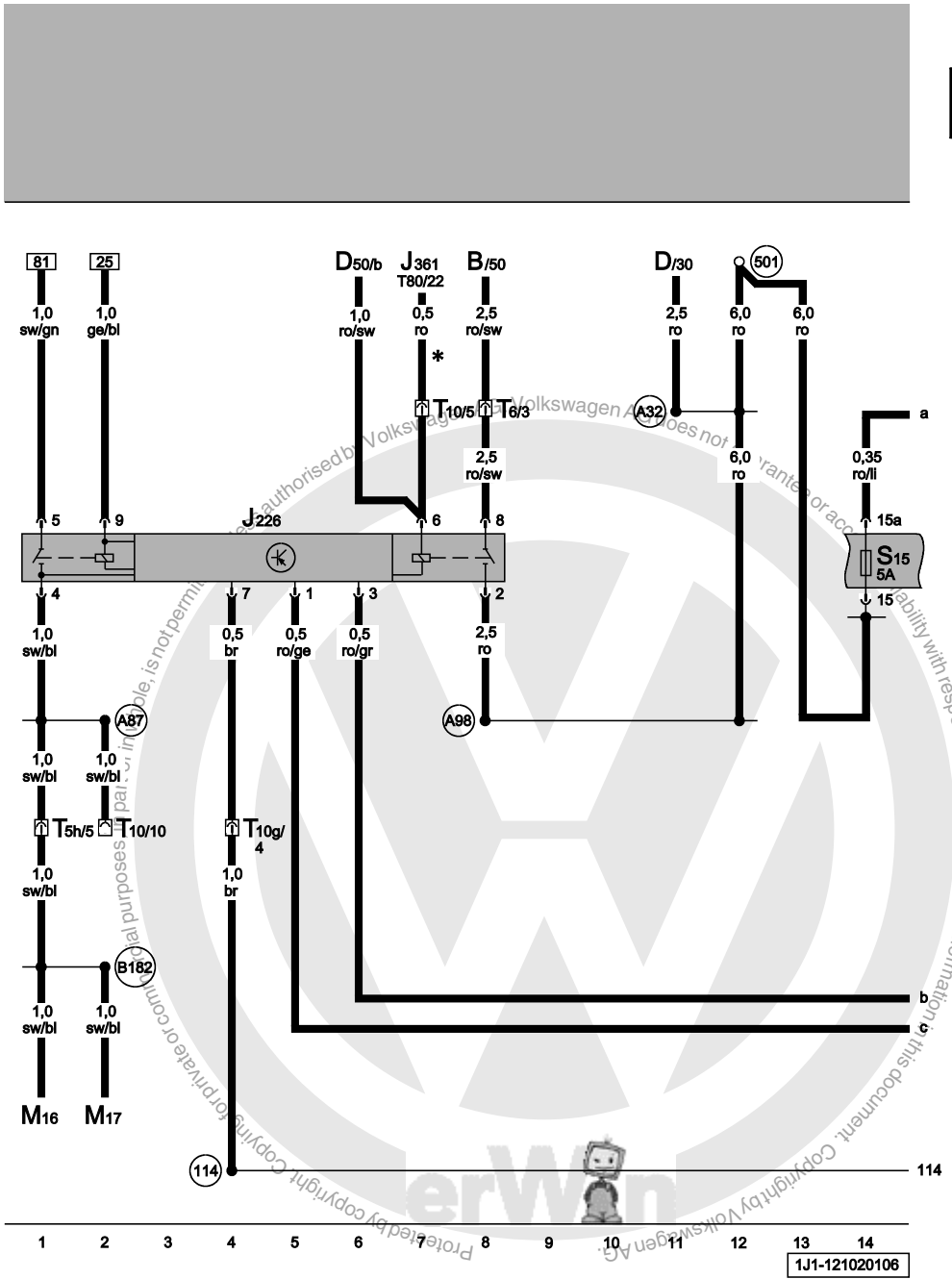
4 - J17 - Fuel pump relay (409)

11 - J226 - Starter inhibitor and reversing light relay (175)

Relay locations on relay plate:

Starter inhibitor and reversing light relay

- B Starter
- D Ignition/starter switch
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- J361 Simos control unit
- M16 Left reversing light bulb
- M17 Right reversing light bulb
- S15 Fuse 15 in fuse holder
- T5h 5-pin connector, near lower left A-pillar, entwined in wiring harness
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T80 80-pin connector
- 114 Earth connection, in automatic gearbox wiring harness
- 501 Screw connection 2 (30), on relay plate
- A32 Positive connection (30), in dash panel wiring harness
- A87 Connection (RL), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- B182 Connection (RL), in interior wiring harness
- * engine code AEH only

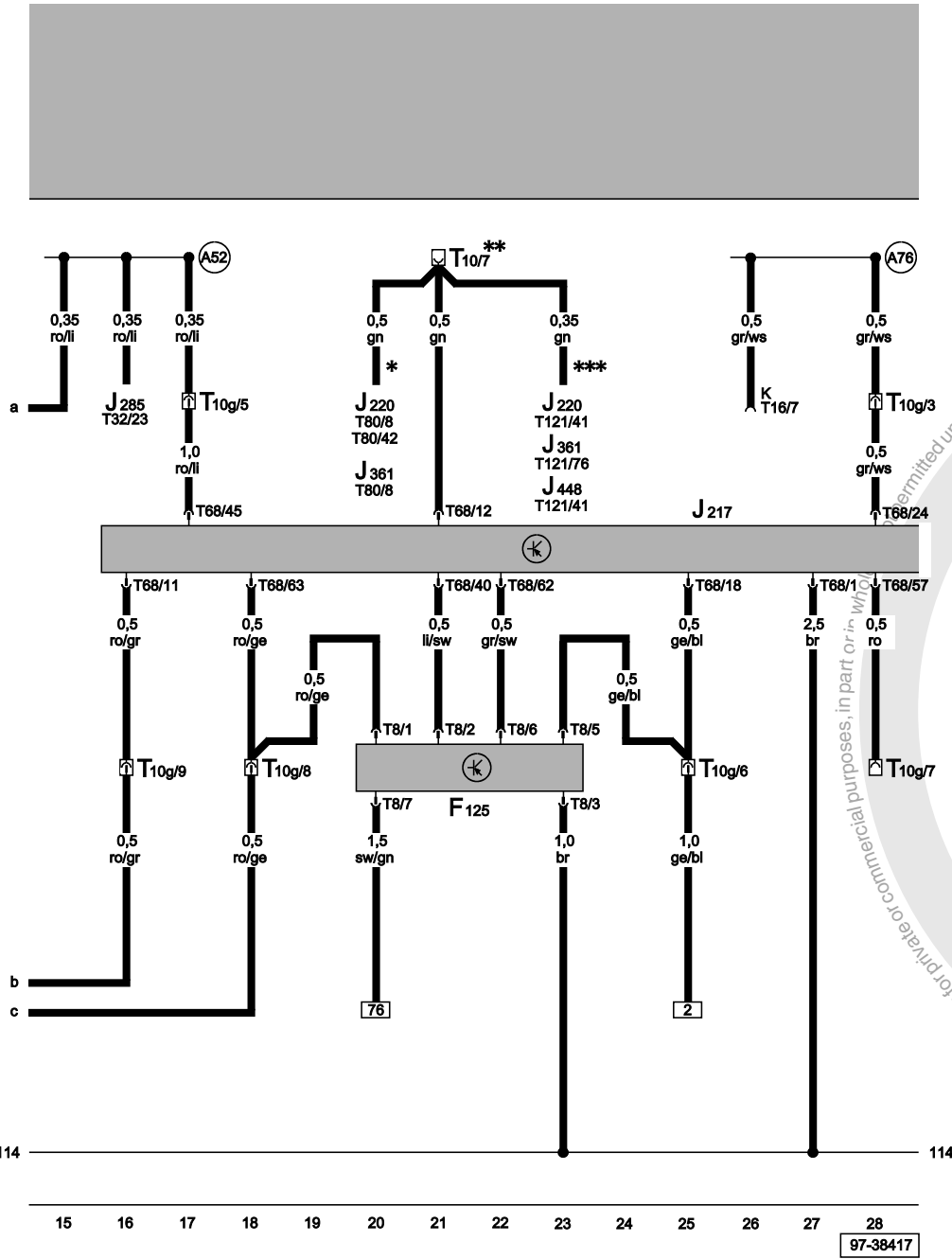


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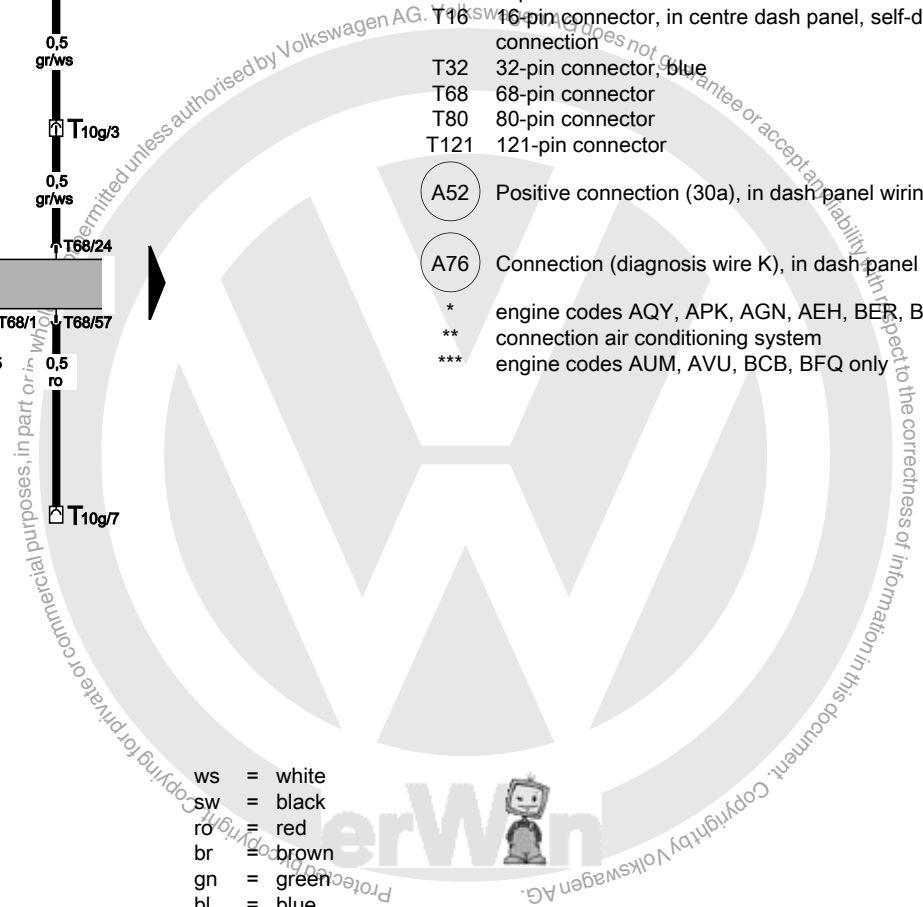
Automatic gearbox control unit, multifunction switch

- F125 Multifunction switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- J285 Control unit in dash panel insert
- J361 Simos control unit
- J448 4LV injection system control unit
- T8 8-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T16 16-pin connector, in centre dash panel, self-diagnosis connection
- T32 32-pin connector, blue
- T68 68-pin connector
- T80 80-pin connector
- T121 121-pin connector

- A52 Positive connection (30a), in dash panel wiring harness
- A76 Connection (diagnosis wire K), in dash panel wiring harness
- * engine codes AQY, APK, AGN, AEH, BER, BHP only
- ** connection air conditioning system
- *** engine codes AUM, AVU, BCB, BFQ only



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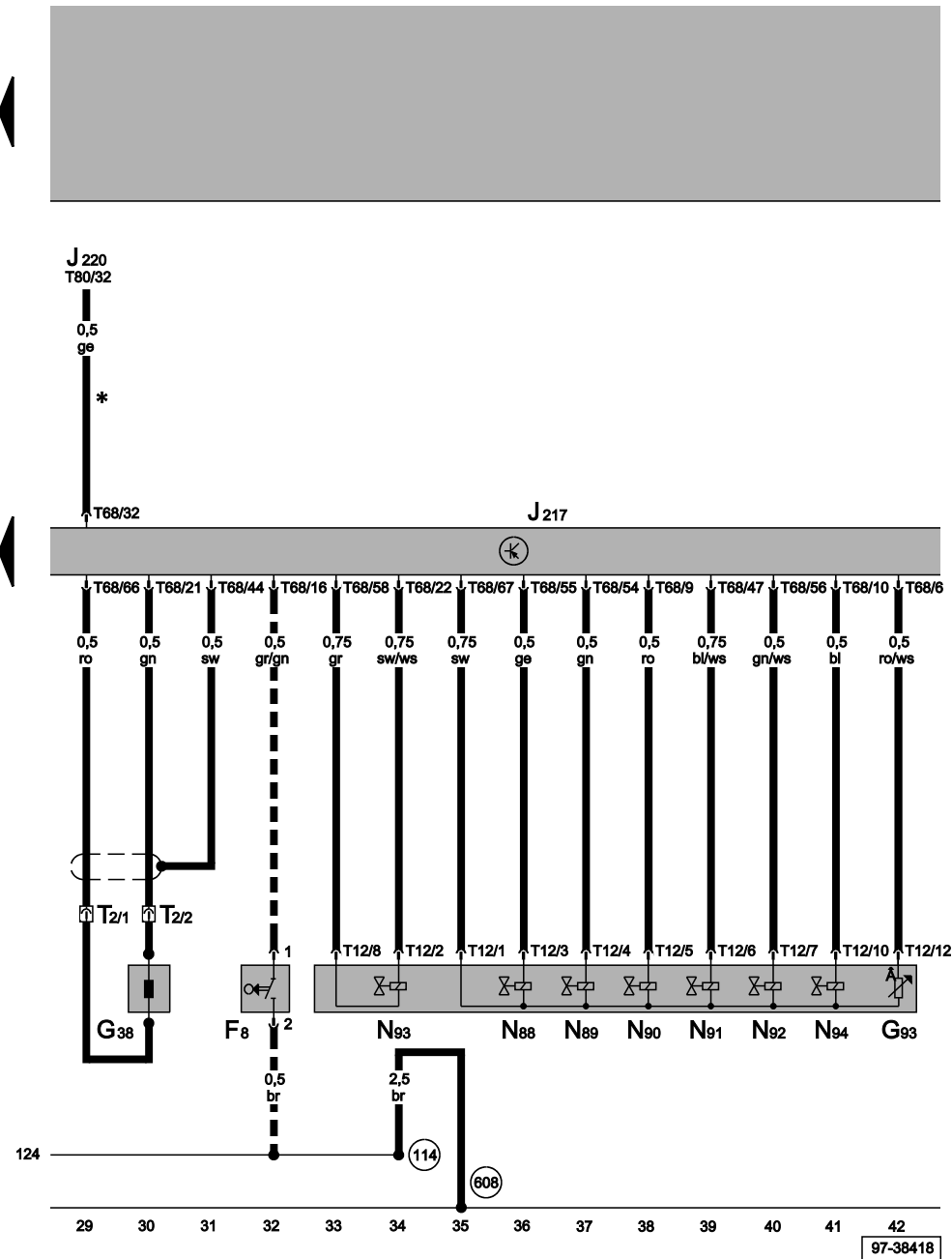
Automatic gearbox control unit, solenoid valves, gearbox speed sender, kickdown switch, gearbox oil temperature sender

- F8 Kick-down switch
- G38 Gearbox output speed sender
- G93 Gearbox oil temperature sender
- J217 Automatic gearbox control unit, in centre plenum chamber
- J220 Motronic control unit
- N88 Solenoid valve 1
- N89 Solenoid valve 2
- N90 Solenoid valve 3
- N91 Solenoid valve 4
- N92 Solenoid valve 5
- N93 Solenoid valve 6
- N94 Solenoid valve 7
- T2 2-pin connector, on gearbox
- T12 12-pin connector
- T68 68-pin connector
- T80 80-pin connector

114 Earth connection, in automatic gearbox wiring harness

608 Earth point, in centre of plenum chamber

* engine codes AQY, APK only
 --- engine codes AEH, AQY, APK only

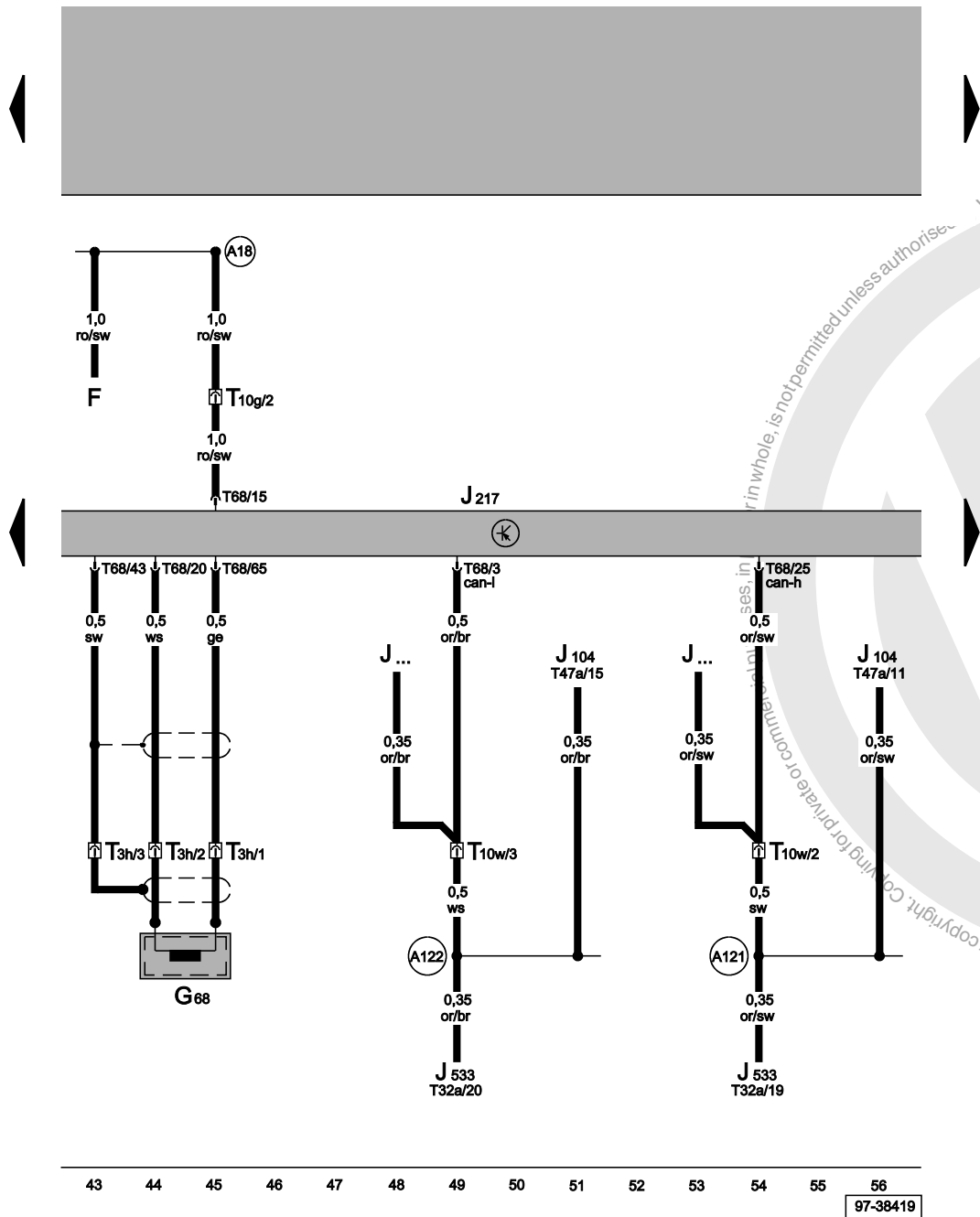


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Automatic gearbox control unit, vehicle speed sender

- F Brake light switch
- G68 Vehicle speed sender
- J104 ABS/ABS control unit with EDL
- J217 Automatic gearbox control unit, in centre plenum chamber
- J533 Data bus diagnostic interface, in dash panel insert
- J... Engine control units
- T3h 3-pin connector, on gearbox
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T32a 32-pin connector, green, on dash panel insert
- T47a 47-pin connector, on ABS/ABS control unit with EDL/ ASR/ ESP
- T68 68-pin connector

- A18 Connection (54), in dash panel wiring harness
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness

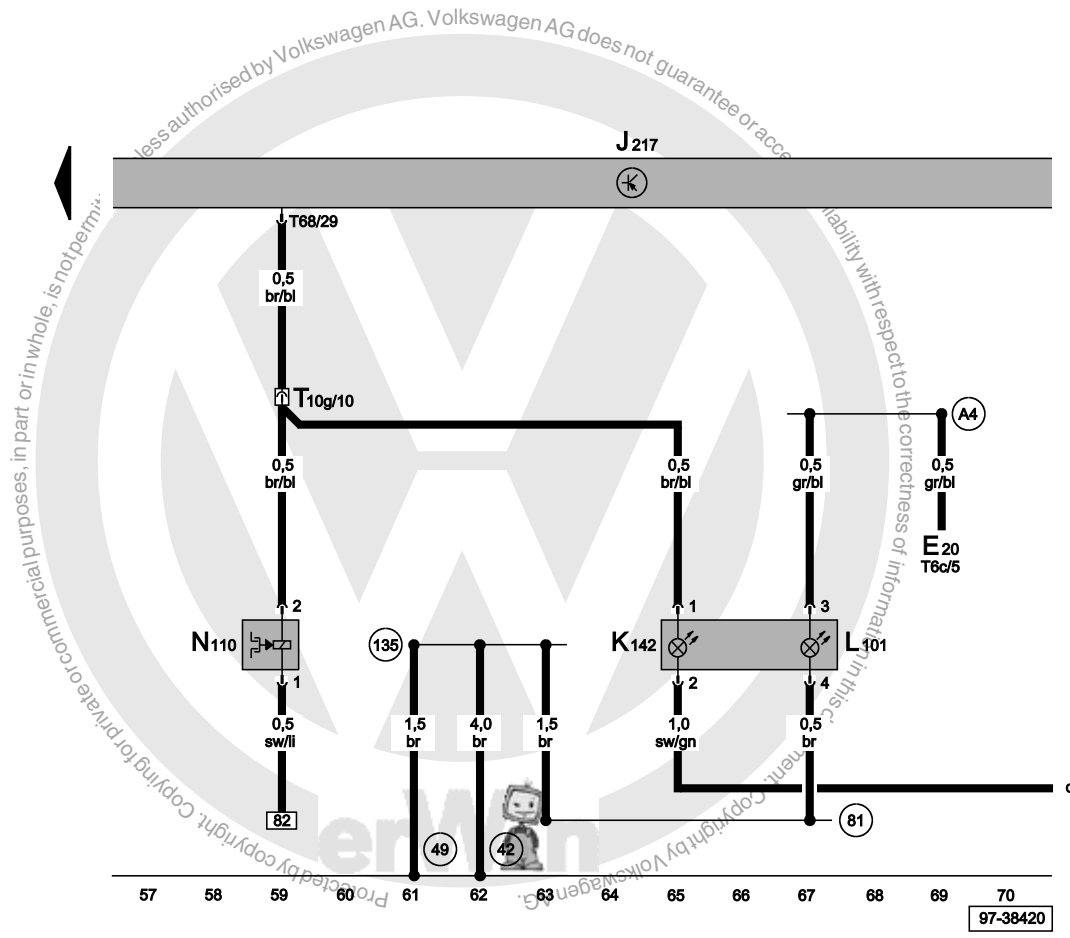


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Automatic gearbox control unit, selector lever lock solenoid

- E20 Illumination regulators, switches, instruments
- J217 Automatic gearbox control unit, in centre plenum chamber
- K142 Selector lever position P/N warning lamp
- L101 Selector lever display illumination bulb
- N110 Selector lever lock solenoid
- T6c 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T68 68-pin connector

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- A4 Positive connection (58b), in dash panel wiring harness

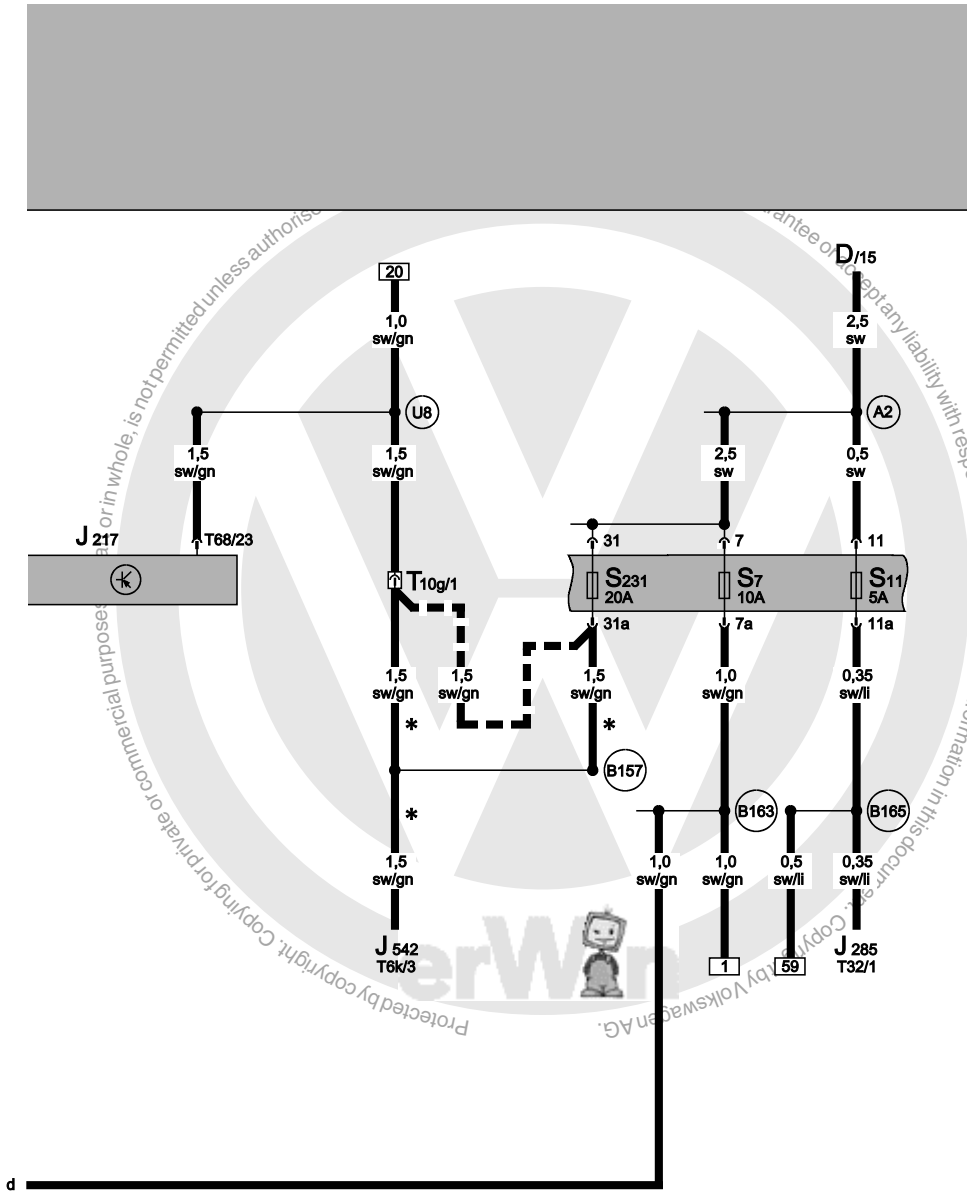


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Automatic gearbox control unit, selector lever lock solenoid

- D Ignition/starter switch
- J217 Automatic gearbox control unit, in centre plenum chamber
- J285 Control unit in dash panel insert
- J542 Brake servo control unit
- N110 Selector lever lock solenoid
- S7 Fuse 7 in fuse holder
- S11 Fuse 11 in fuse holder
- S231 Fuse 31 in fuse holder
- T6k 6-pin connector
- T10g 10-pin connector, grey, in connector protective housing, on left in plenum chamber
- T32 32-pin connector, blue
- T68 68-pin connector

- (A2) Positive connection (15), in dash panel wiring harness
- (B157) Positive connection 3 (15a), in interior wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- (B165) Positive connection 2 (15), in interior wiring harness
- (U8) Connection (15a), in automatic gearbox wiring harness
- * only models with brake servo control unit up to April 2003
- only models without brake servo control unit



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1.9 I/110 kW - Turbo diesel engine with unit injectors, engine code ARL

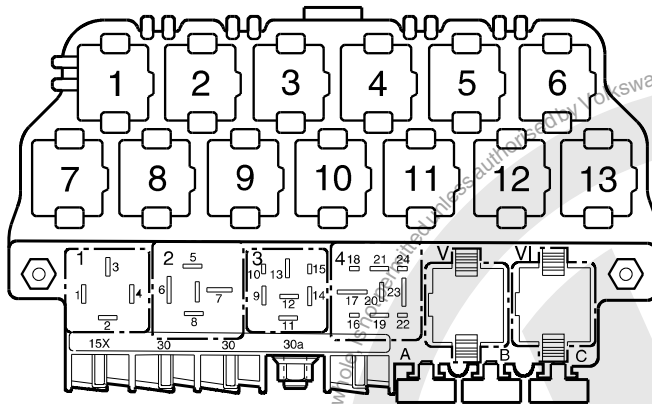
from May 2002

1.9 I/96 kW - Turbo diesel engine with unit injectors, engine code ASZ

from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

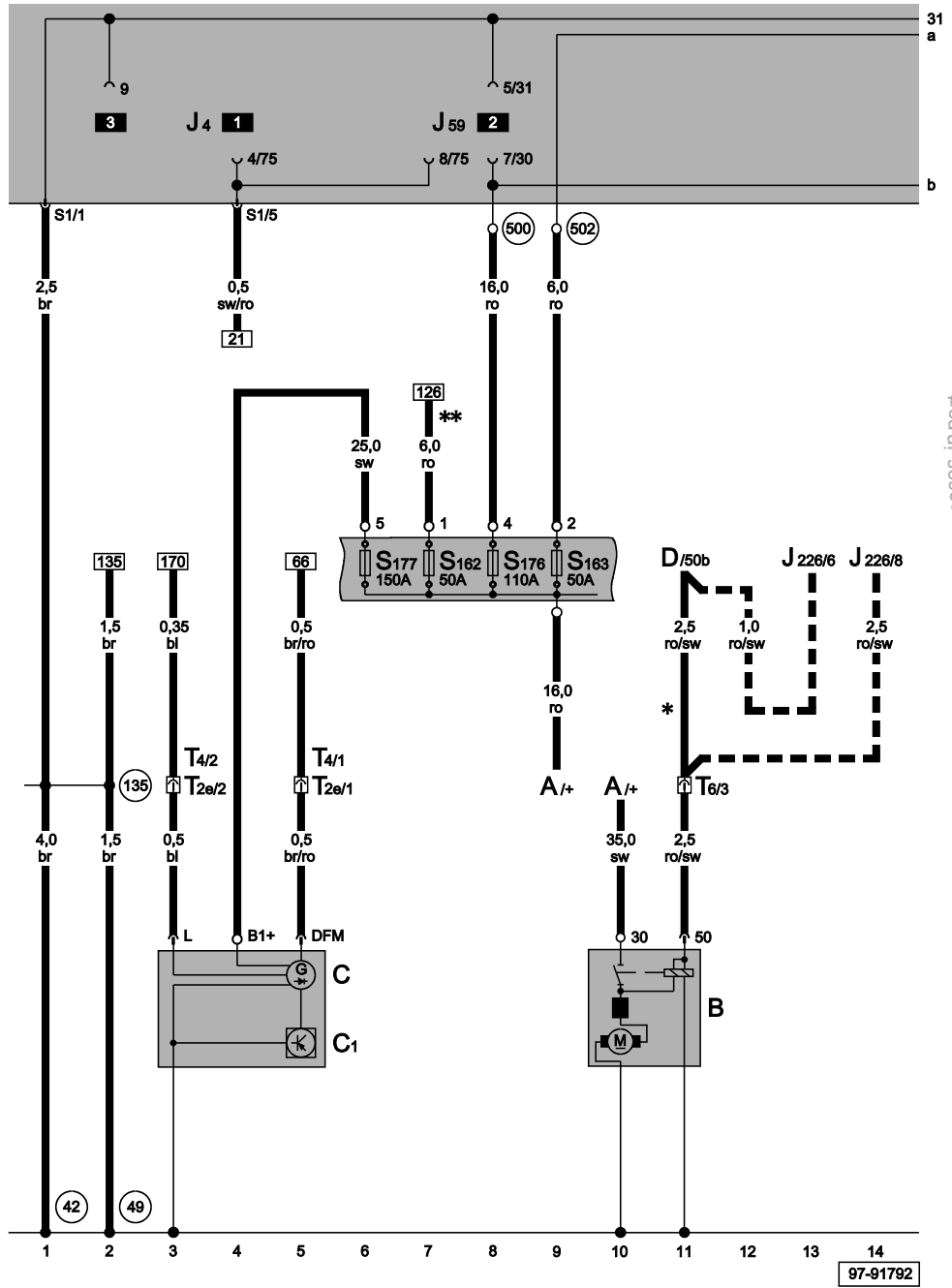
10 - J17 - Fuel pump relay (167)

12 - J317 - Terminal 30 voltage supply relay (109)

Relay locations on relay plate:

1 - J4 - Dual tone horn relay (53)

2 - J59 - X-contact relief relay (100)



Alternator, starter

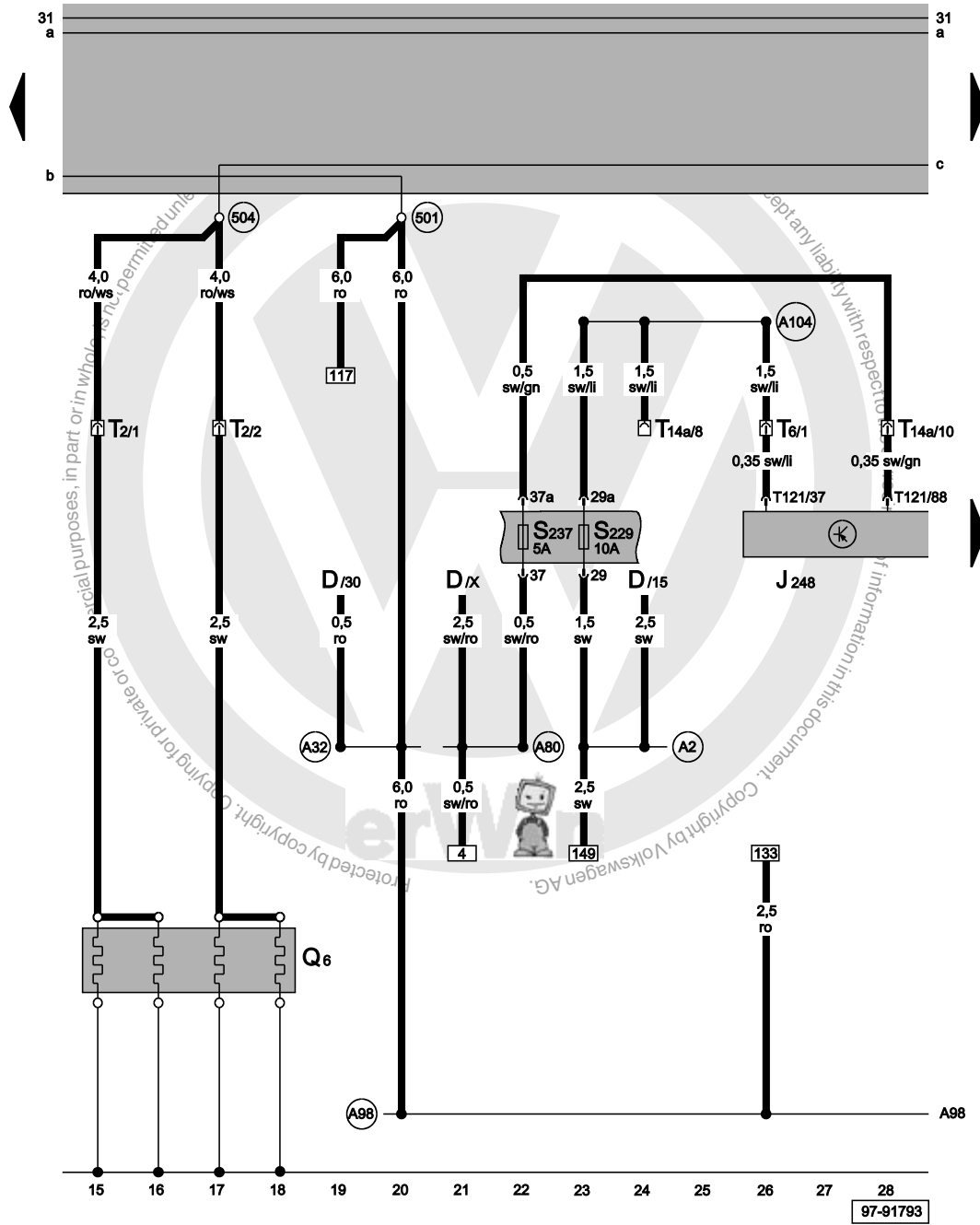
- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- J226 Starter inhibitor and reversing light relay, on the 13 position additional relay carrier
- S162 Fuse 1 (30) in fuse holder on battery
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate
- * only models with manual gearbox
- models with automatic gearbox only
- ** only models with glow plugs coolant heating

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97-91792

Diesel direct injection system control unit, glow plugs - engine

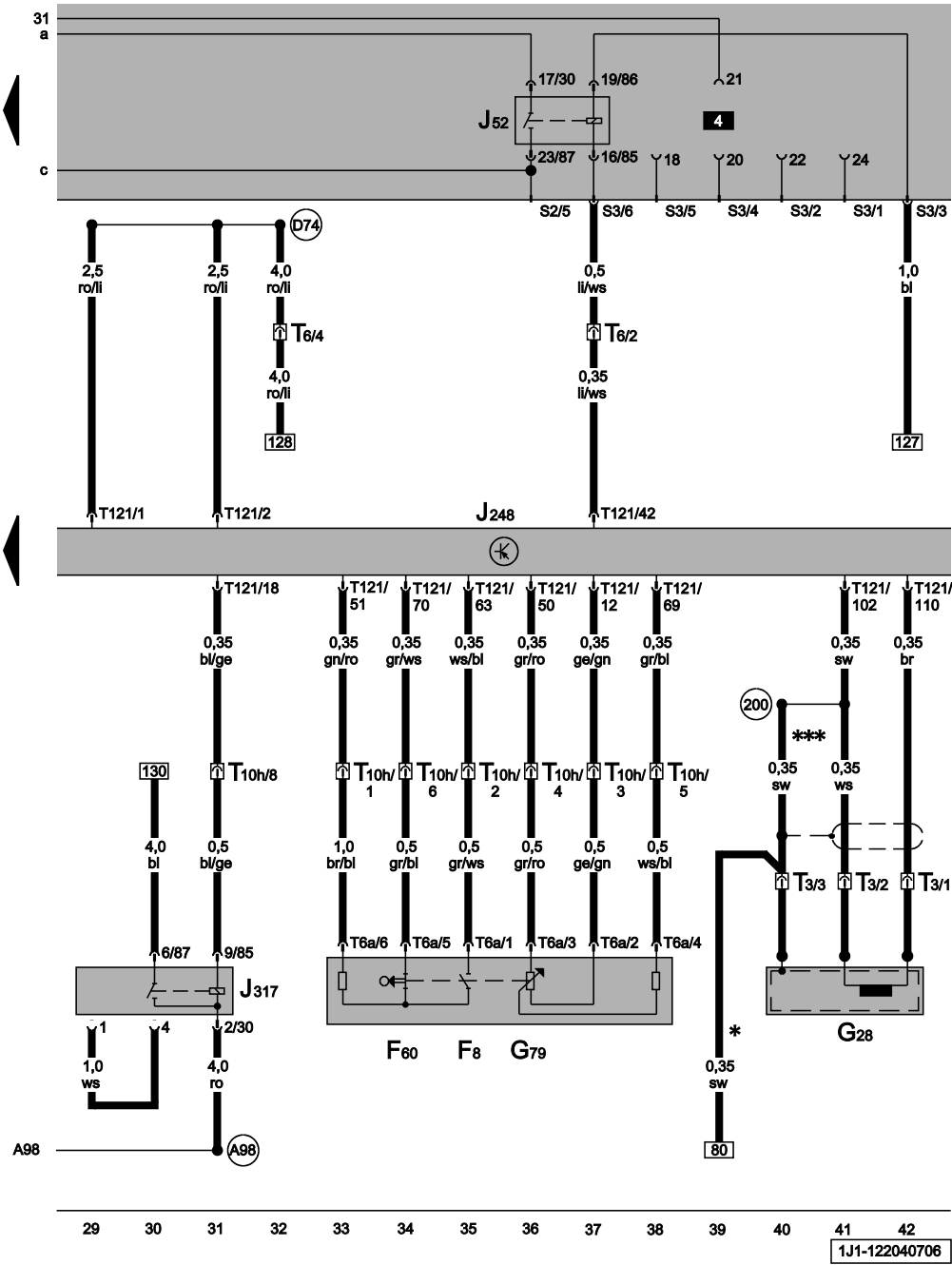
- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- Q6 Glow plugs, engine
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness



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Diesel direct injection system control unit, glow plug relay, kickdown switch, engine speed sender, idling speed switch, accelerator position sender, terminal 30 voltage supply relay

- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- T3 3-pin connector, on front of engine
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing on left in plenum chamber
- T121 121-pin connector
- 200 Earth connection (screening), in engine compartment wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness
- * from August 2004
- *** up to July 2004

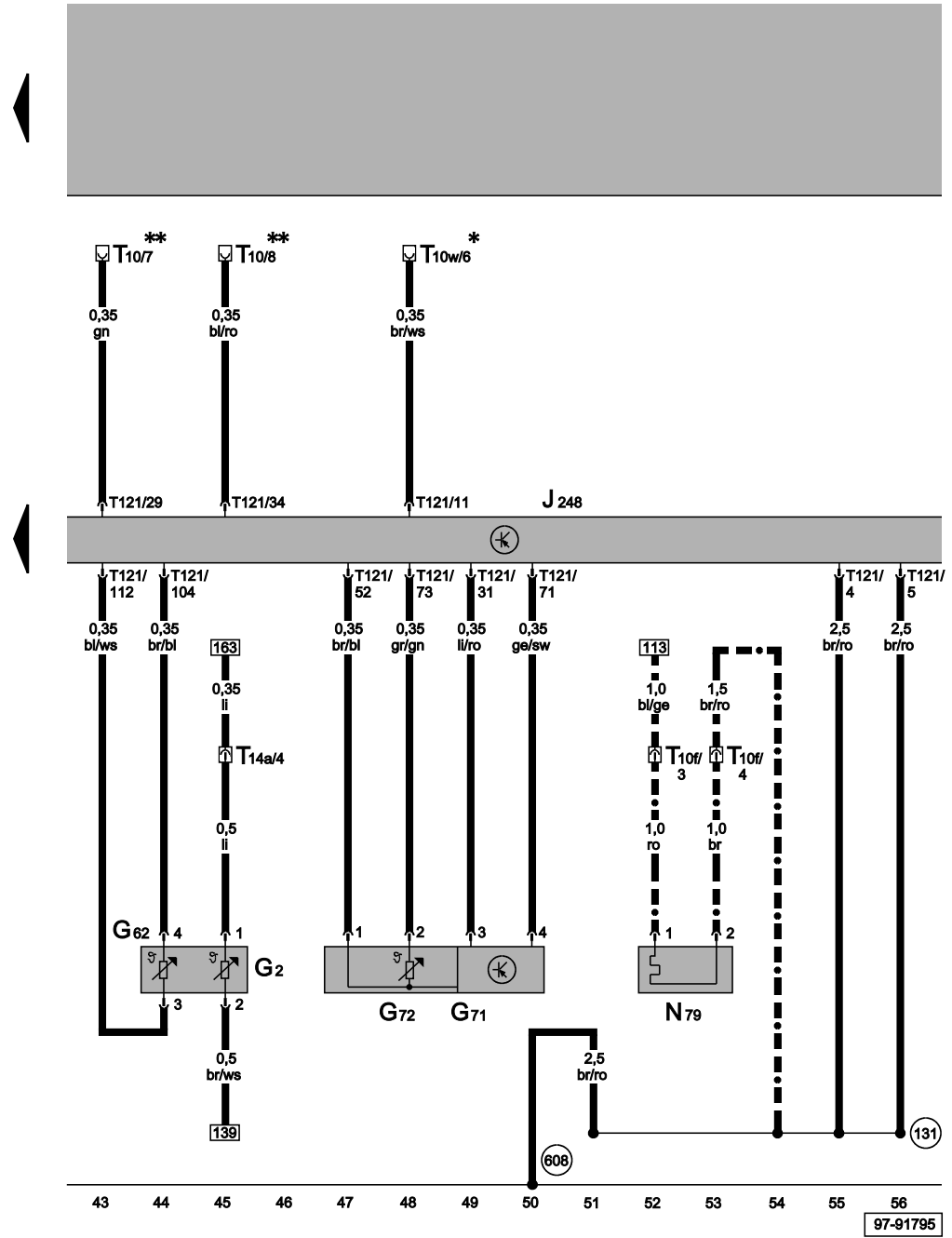


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Diesel direct injection system control unit, coolant temperature display sender, intake manifold pressure sender, intake manifold temperature sender, heater element for crankcase breather

- G2 Coolant temperature display sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 131 Earth connection 2, in engine compartment wiring harness
- 608 Earth point, in centre of plenum chamber
- * connection for radiator fan control unit/ radiator fan relay
- ** connection air conditioning system
- for models with heater element for crankcase breather only



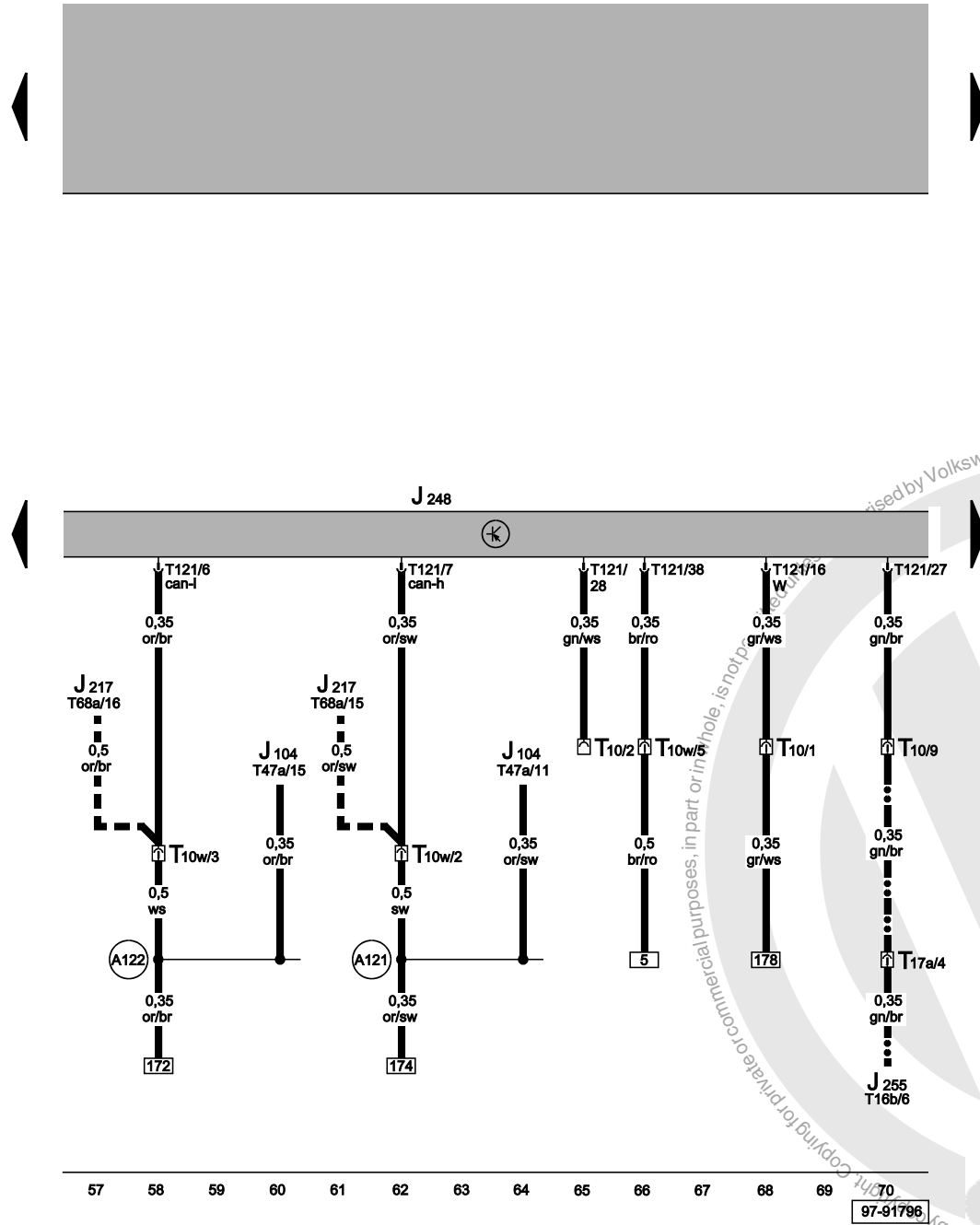
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97-91795

Diesel direct injection system control unit

- J104 ABS control unit
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J255 Climatronic control unit
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T47a 47-pin connector
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector

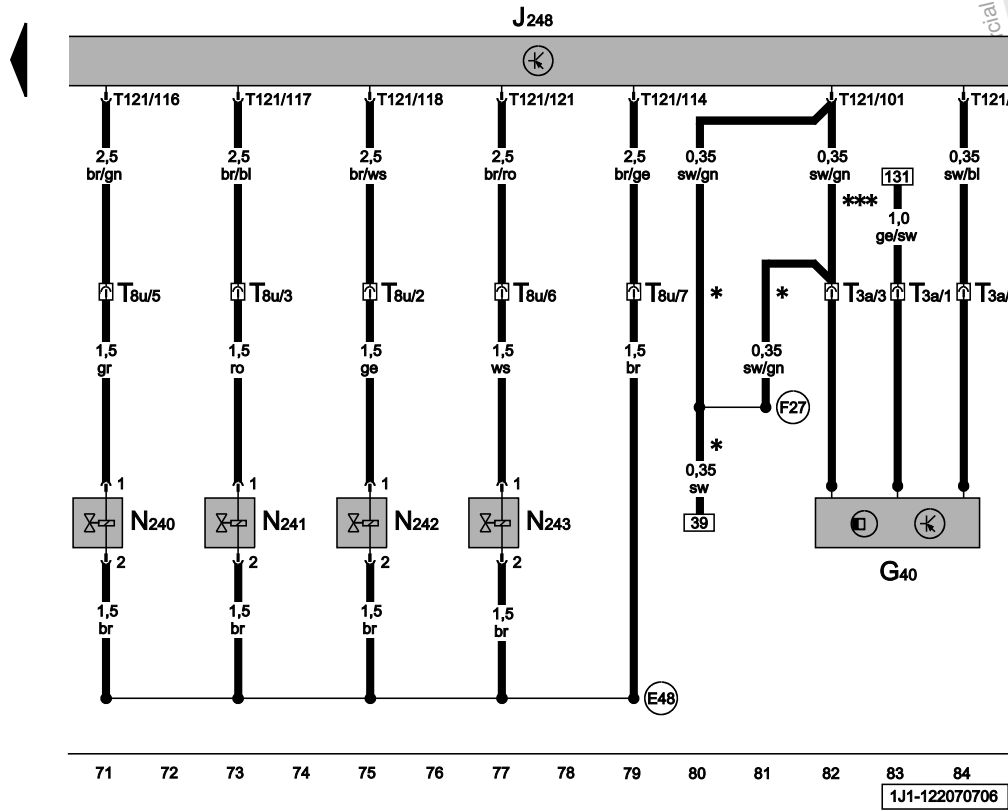
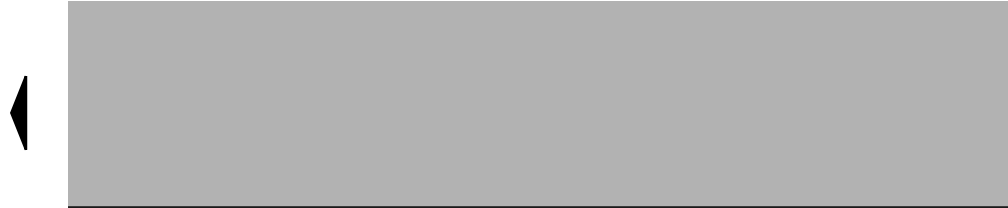
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- models with automatic gearbox only
- only models with Climatronic



- ws = white
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Diesel direct injection system control unit, unit injector valves, Hall sender

- G40 Hall sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N240 Unit injector valve, No. 1 cyl.
- N241 Unit injector valve, No. 2 cyl.
- N242 Unit injector valve, No. 3 cyl.
- N243 Unit injector valve, No. 4 cyl.
- T3a 3-pin connector, on front of engine
- T8u 8-pin connector, on left of cylinder head
- T121 121-pin connector
- E48 Connection (injectors), in injection system wiring harness
- F27 Connection (screening), in diesel direct injection wiring harness
- * from August 2004
- *** up to July 2004

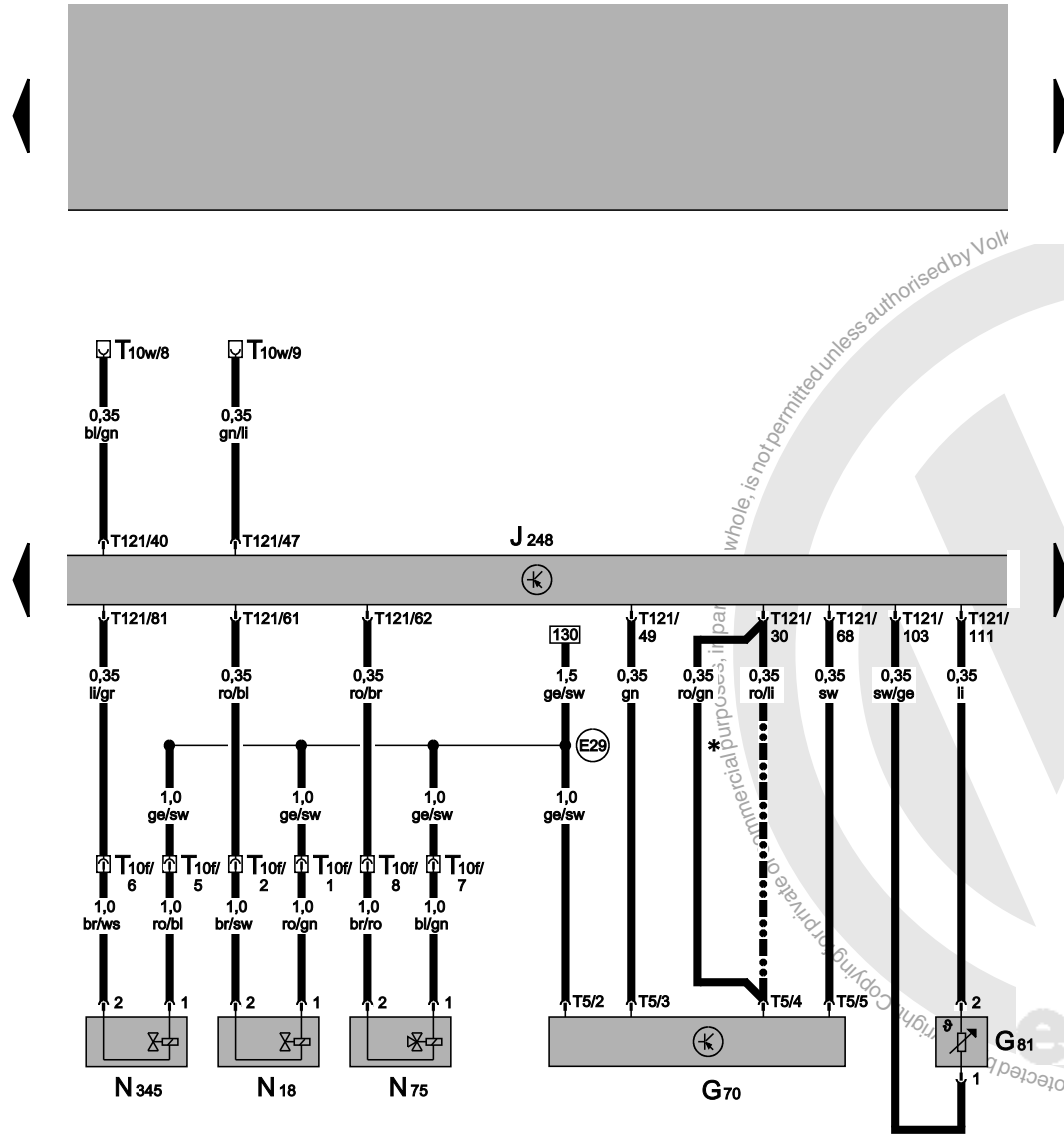


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1J1-122070706

Diesel direct injection system control unit, air mass meter, fuel temperature sender, exhaust gas recirculation valve and charge pressure control, exhaust gas recirculation cooler change-over valve

- G70 Air mass meter
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N345 Exhaust gas recirculation cooler change-over valve
- T5 5-pin connector
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- E29 Connection, in engine wiring harness
- * only models with glow plugs coolant heating
- only models without glow plugs coolant heating



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Diesel direct injection system control unit, cruise control system switch, clutch pedal switch

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T4q 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)
- T121 121-pin connector

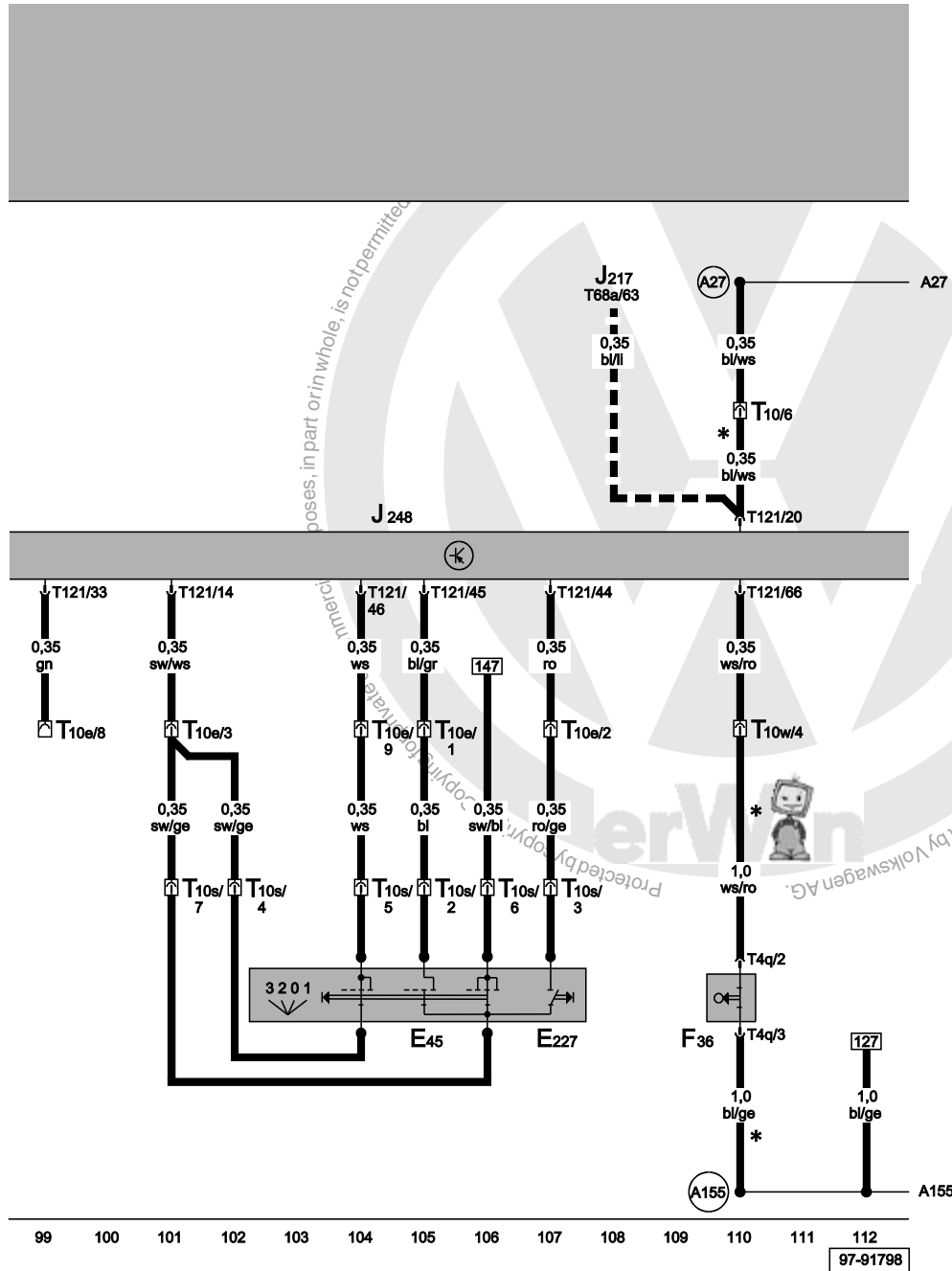
A27 Connection (speed signal), in dash panel wiring harness

A155 Connection 2 (86), in dash panel wiring harness

* only models with manual gearbox

** only models with GND

--- models with automatic gearbox only



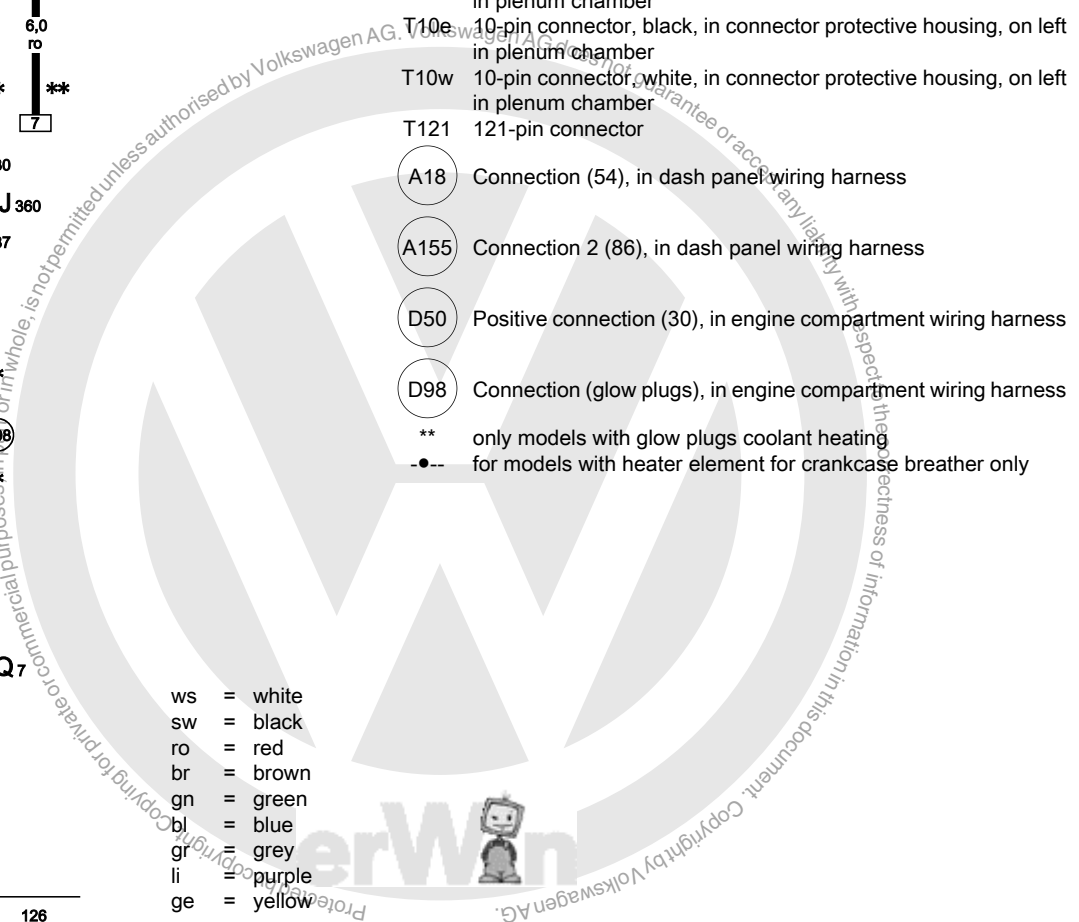
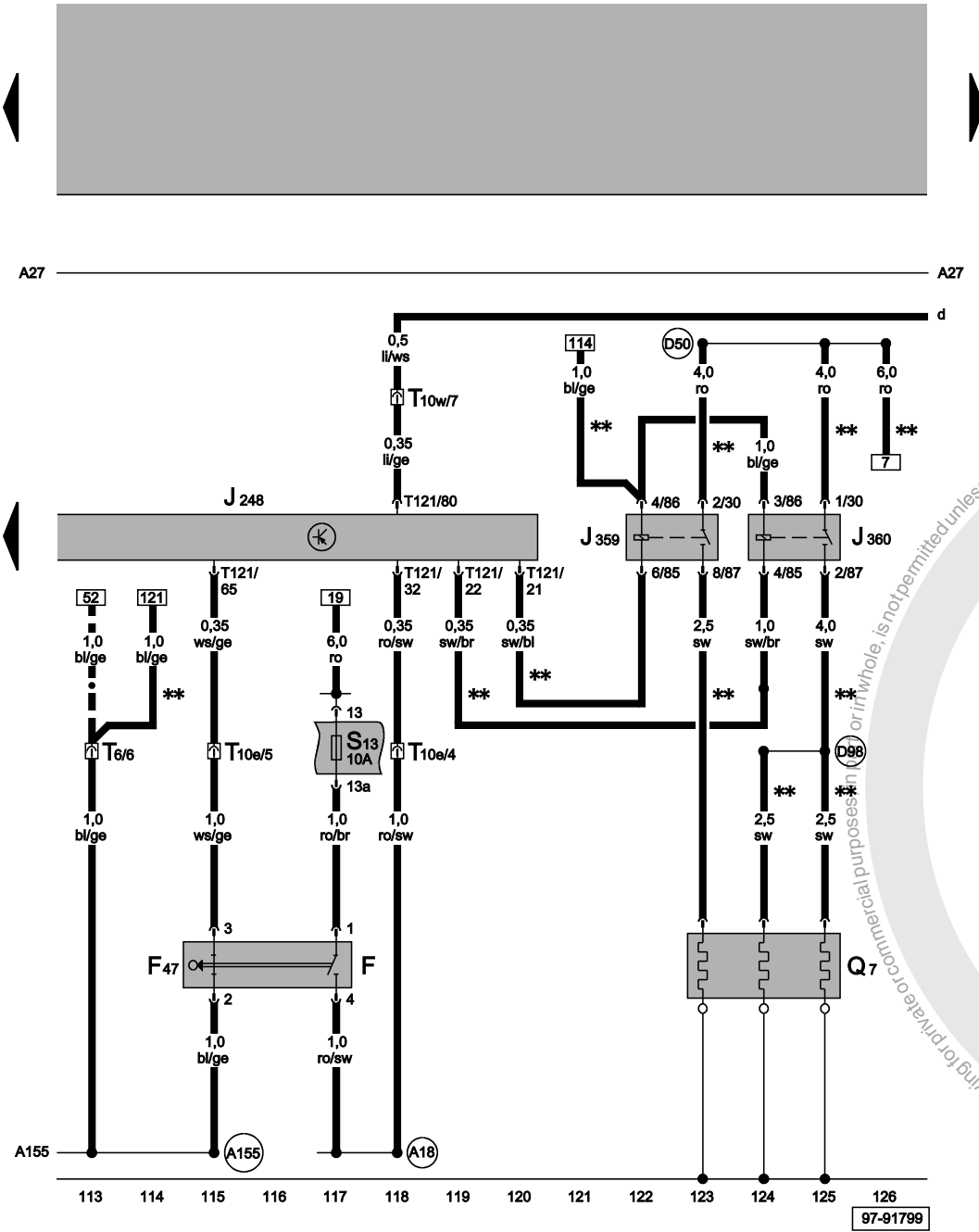
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Diesel direct injection system control unit, coolant heating element, brake pedal switch, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Brake pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay**, in protective housing on left in engine compartment (53)
- J360 High heat output relay**, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant**
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- A18 Connection (54), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- ** only models with glow plugs coolant heating
- - for models with heater element for crankcase breather only

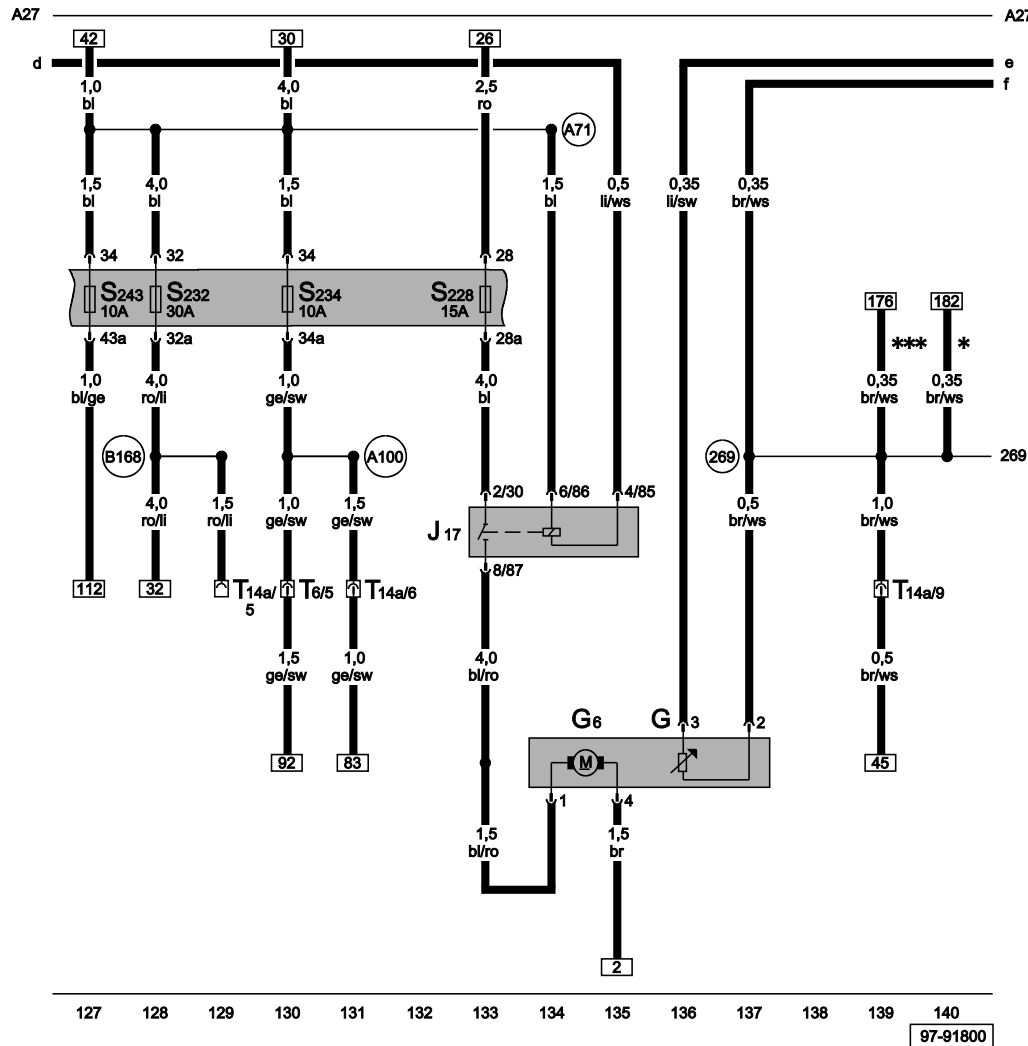
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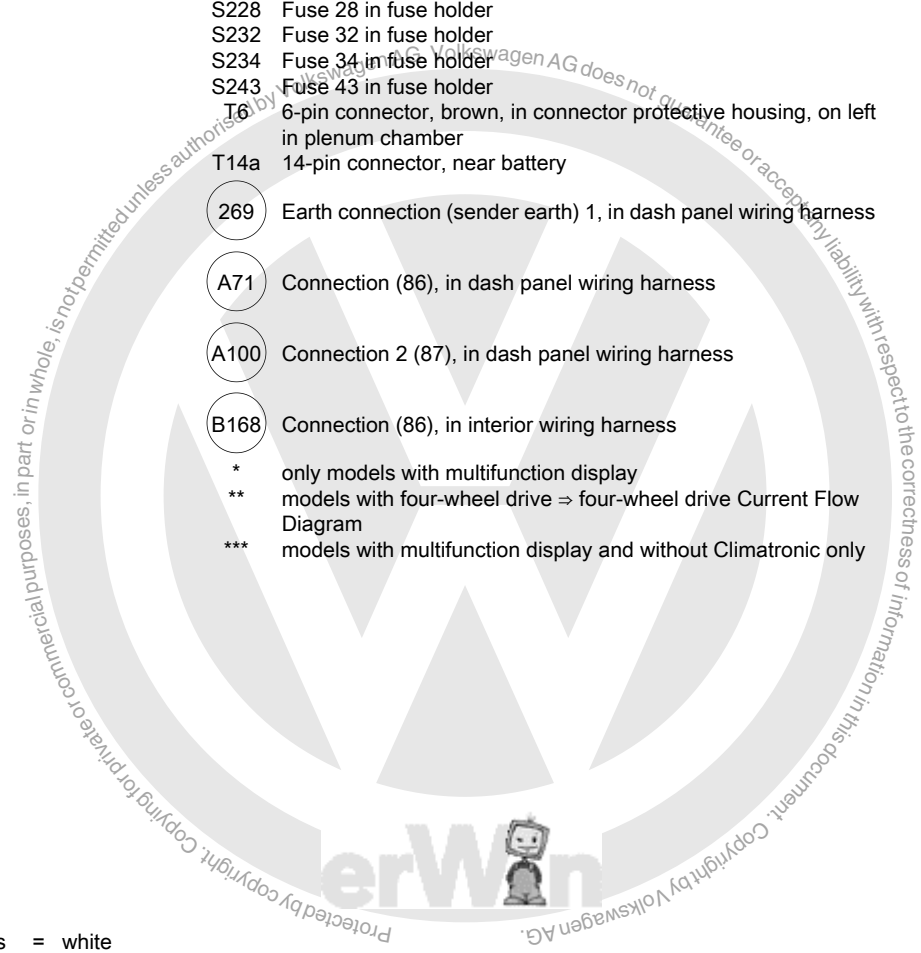
Fuel pump relay, fuel gauge sender, fuel system pressurisation pump

- G Fuel gauge sender**
- G6 Fuel system pressurisation pump
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness
- * only models with multifunction display
- ** models with four-wheel drive => four-wheel drive Current Flow Diagram
- *** models with multifunction display and without Climatronic only



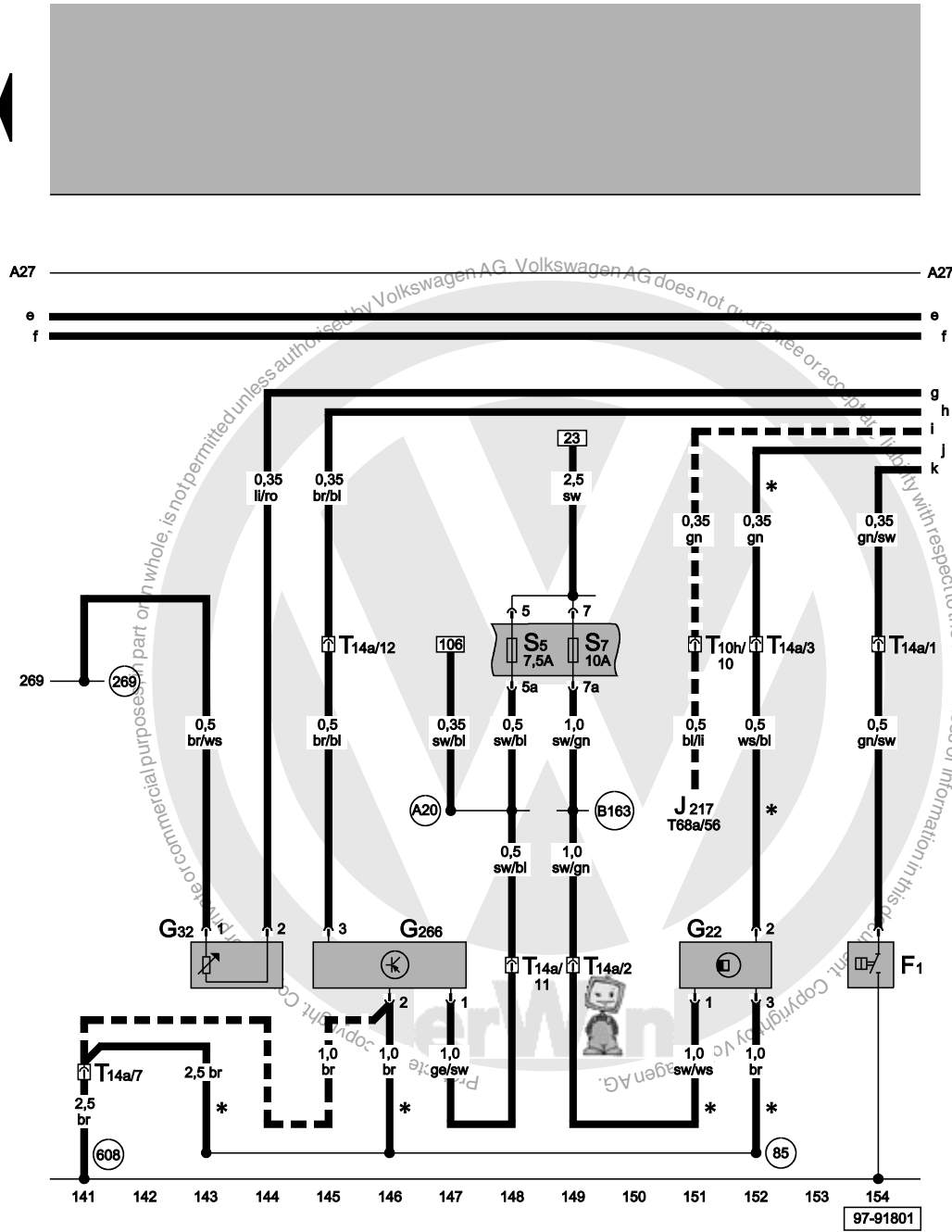
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Oil level and oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

- F1 Oil pressure switch
- G22 Speedometer sender, on gearbox
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- J217 Automatic gearbox control unit
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T68a 68-pin connector, models with 5-speed automatic gearbox (AG5)

- (85) Earth connection 1, in engine compartment wiring harness
- (269) Earth connection (sender earth) 1, in dash panel wiring harness
- (608) Earth point, in centre of plenum chamber
- (A20) Connection (15a), in dash panel wiring harness
- (B163) Positive connection 1 (15), in interior wiring harness
- * only models with manual gearbox
- *** only flexible service interval display
- models with automatic gearbox only



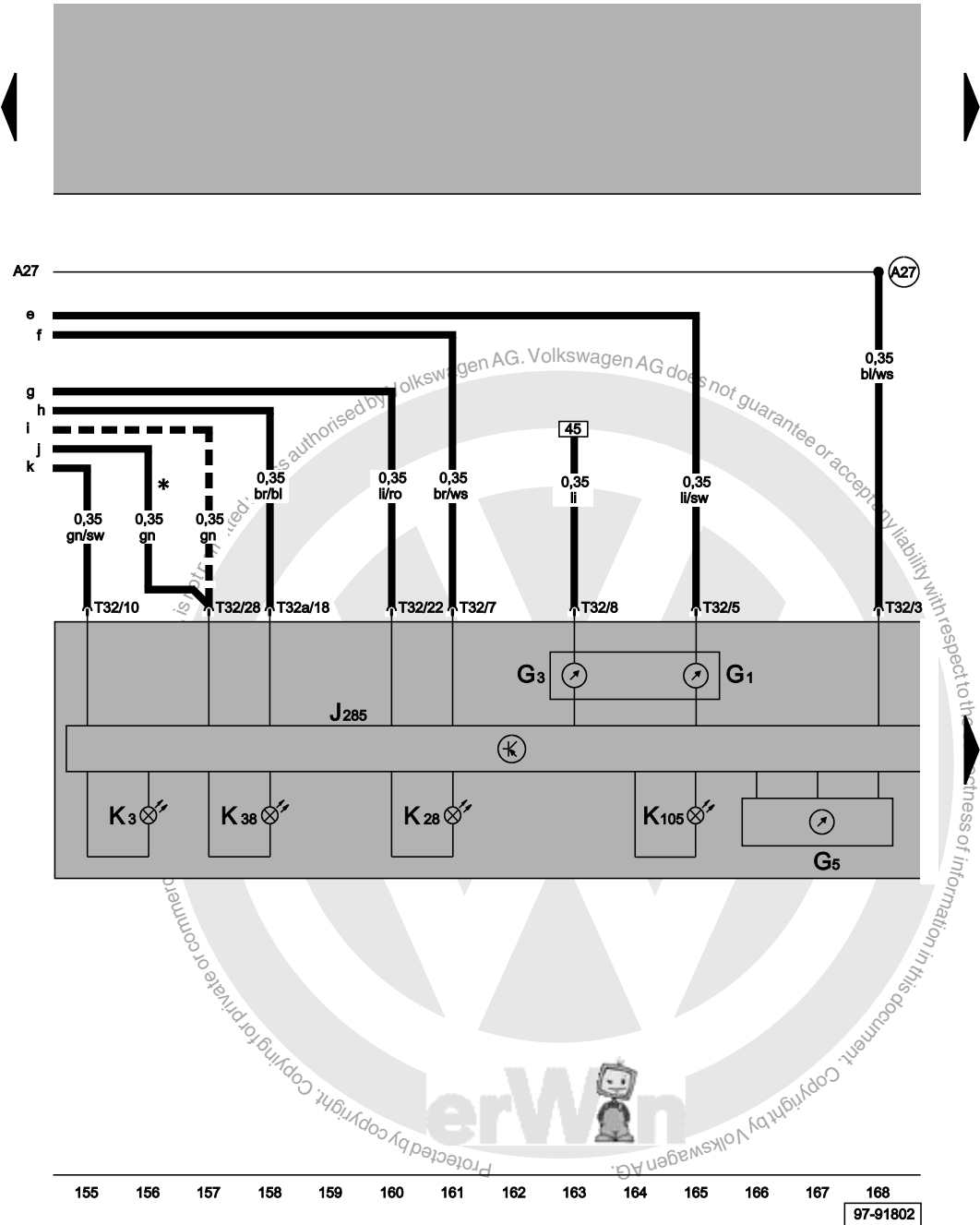
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Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, oil pressure warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- T32a 32-pin connector, green

A27 Connection (speed signal), in dash panel wiring harness

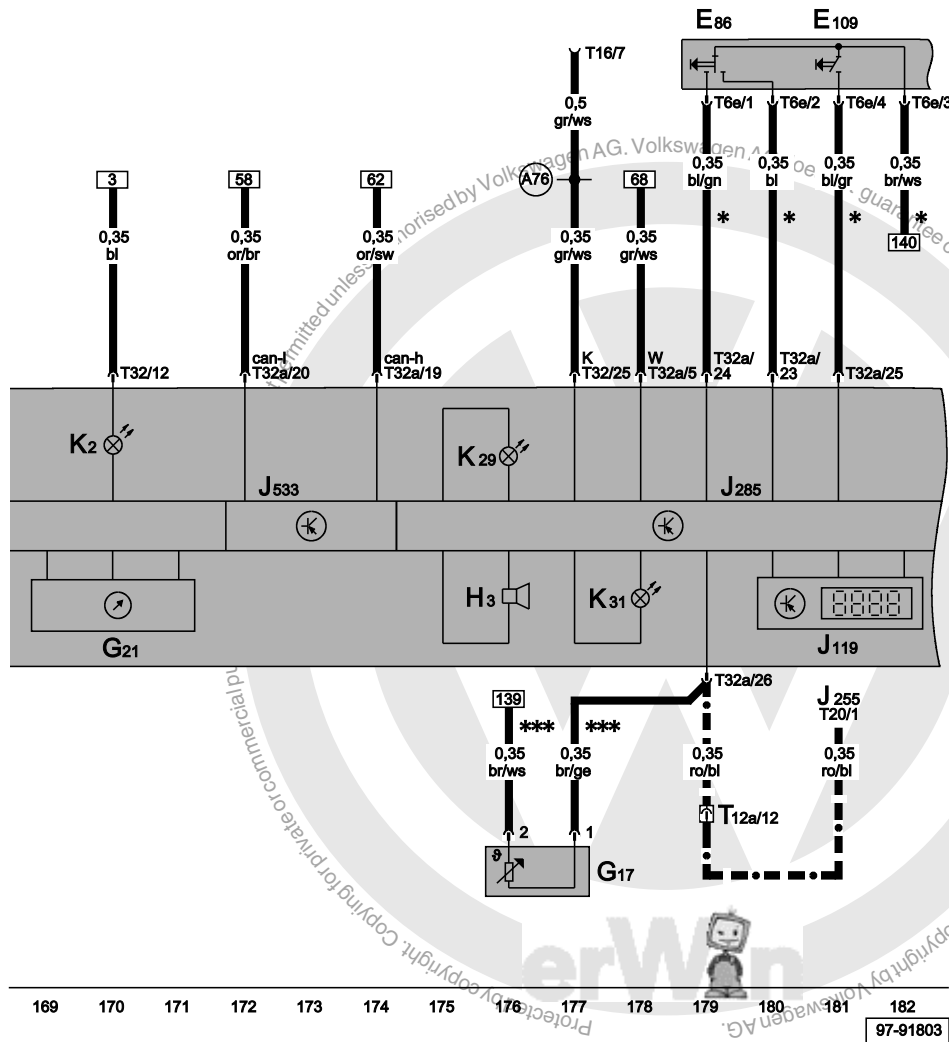
- * only models with manual gearbox
- *** only flexible service interval display models with automatic gearbox only



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Dash panel insert, multifunction display, ambient temperature indicator, self-diagnosis connection, glow period warning lamp, cruise control system warning lamp, alternator warning lamp

- E86 Multifunction display call-up button
 - E109 Multifunction display memory switch
 - G17 Ambient temperature sensor
 - G21 Speedometer
 - H3 Buzzer
 - J119 Multifunction display
 - J255 Climatronic control unit
 - J285 Control unit in dash panel insert
 - J533 Data bus diagnostic interface, in dash panel insert
 - K2 Alternator warning lamp
 - K29 Glow period warning lamp
 - K31 Cruise control system warning lamp
 - T6e 6-pin connector
 - T12a 12-pin connector, behind centre dash panel
 - T16 16-pin connector, in centre dash panel, self-diagnosis connection
 - T20 20-pin connector
 - T32 32-pin connector, blue
 - T32a 32-pin connector, green
- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- * only models with multifunction display
 - *** models with multifunction display and without Climatronic only
 - only models with Climatronic



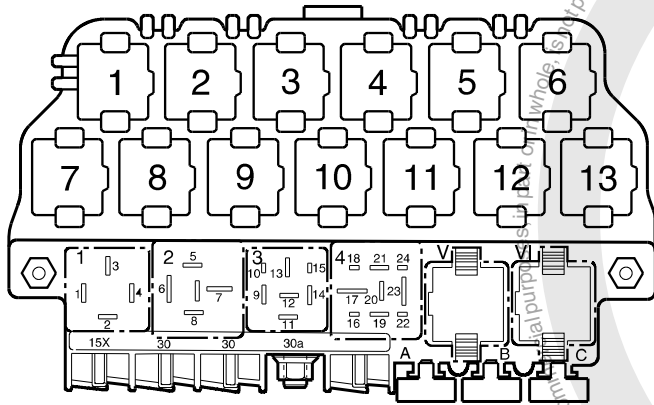
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1.9 l/74 kW - Turbo diesel engine with unit injectors, engine code AXR

from May 2002

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

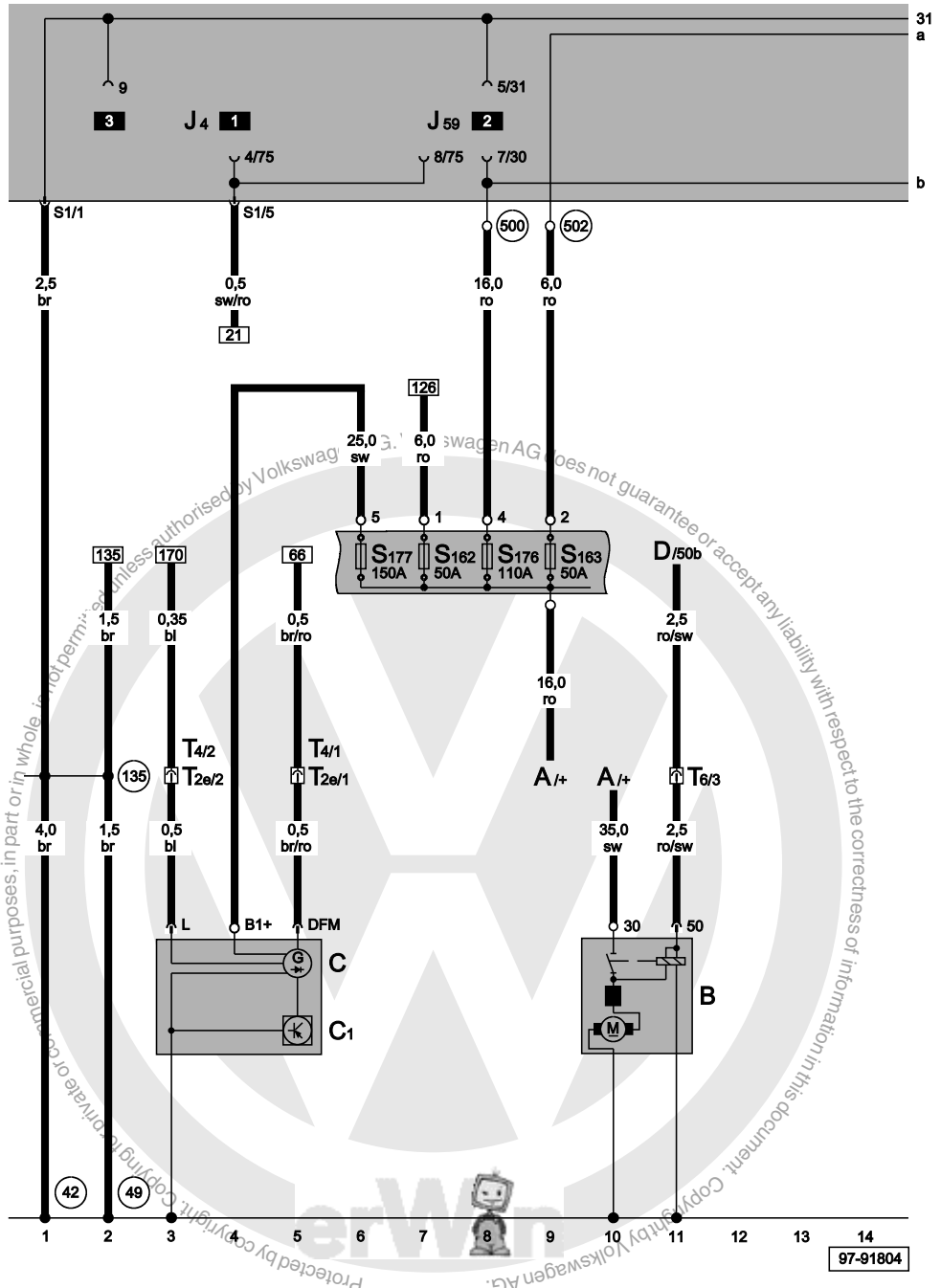
10 - J17 - Fuel pump relay (167)

12 - J317 - Terminal 30 voltage supply relay (109)

Relay locations on relay plate:

1 - J4 - Dual tone horn relay (53)

2 - J59 - X-contact relief relay (100)



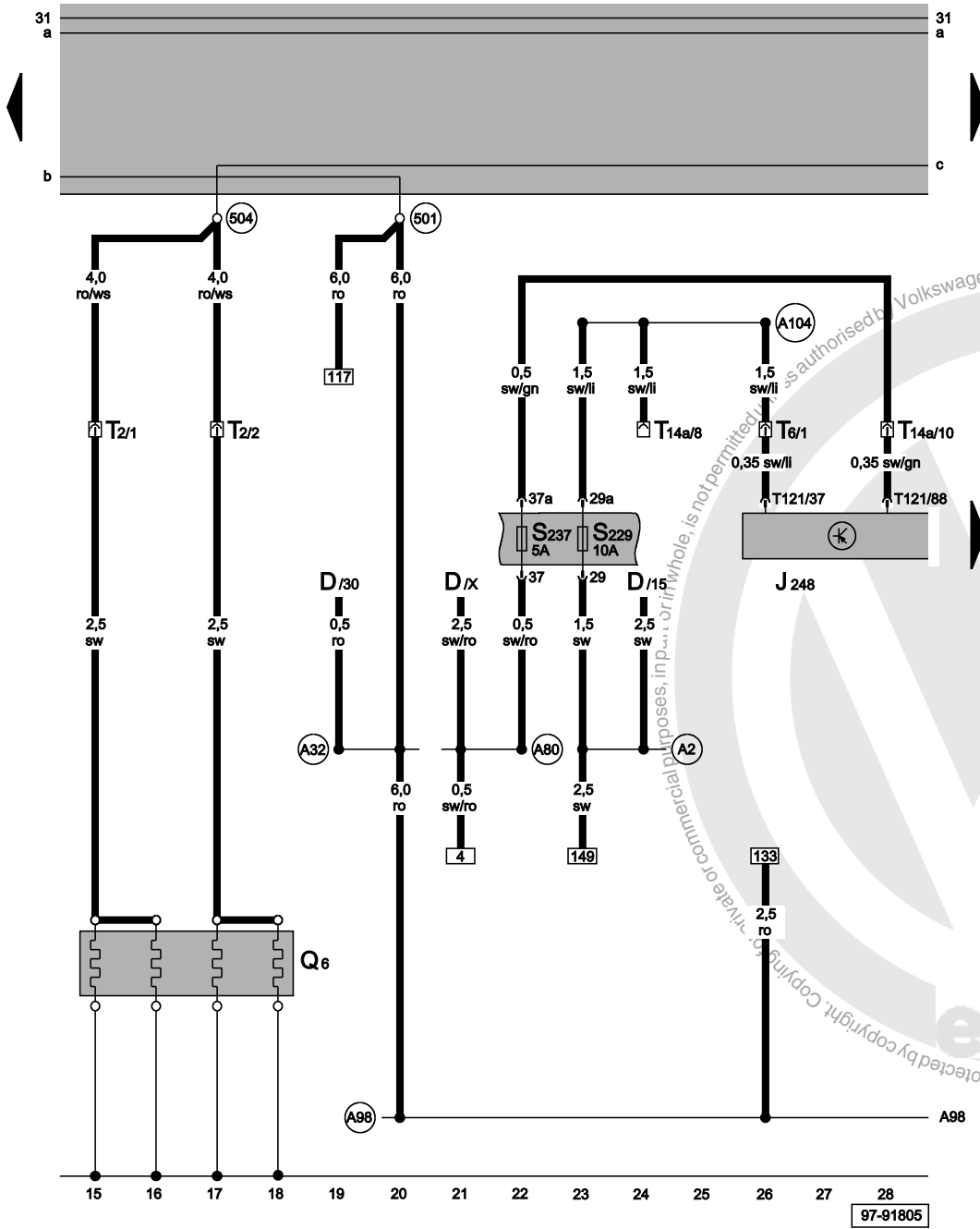
Alternator, starter

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- D Ignition/starter switch
- J4 Dual tone horn relay
- J59 X-contact relief relay
- S162 Fuse 1 (30) in fuse holder on battery
- S163 Fuse 2 (30) in fuse holder on battery
- S176 Fuse 4 (30) in fuse holder on battery
- S177 Fuse 5 (30) in fuse holder on battery
- T2e 2-pin connector, near starter (in models without air conditioning system)
- T4 4-pin connector, near starter (in models with air conditioning system)
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 135 Earth connection 2, in dash panel wiring harness
- 500 Screw connection 1 (30), on relay plate
- 502 Screw connection (30a), on relay plate

- ws = white
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-91804

Diesel direct injection system control unit, glow plugs - engine



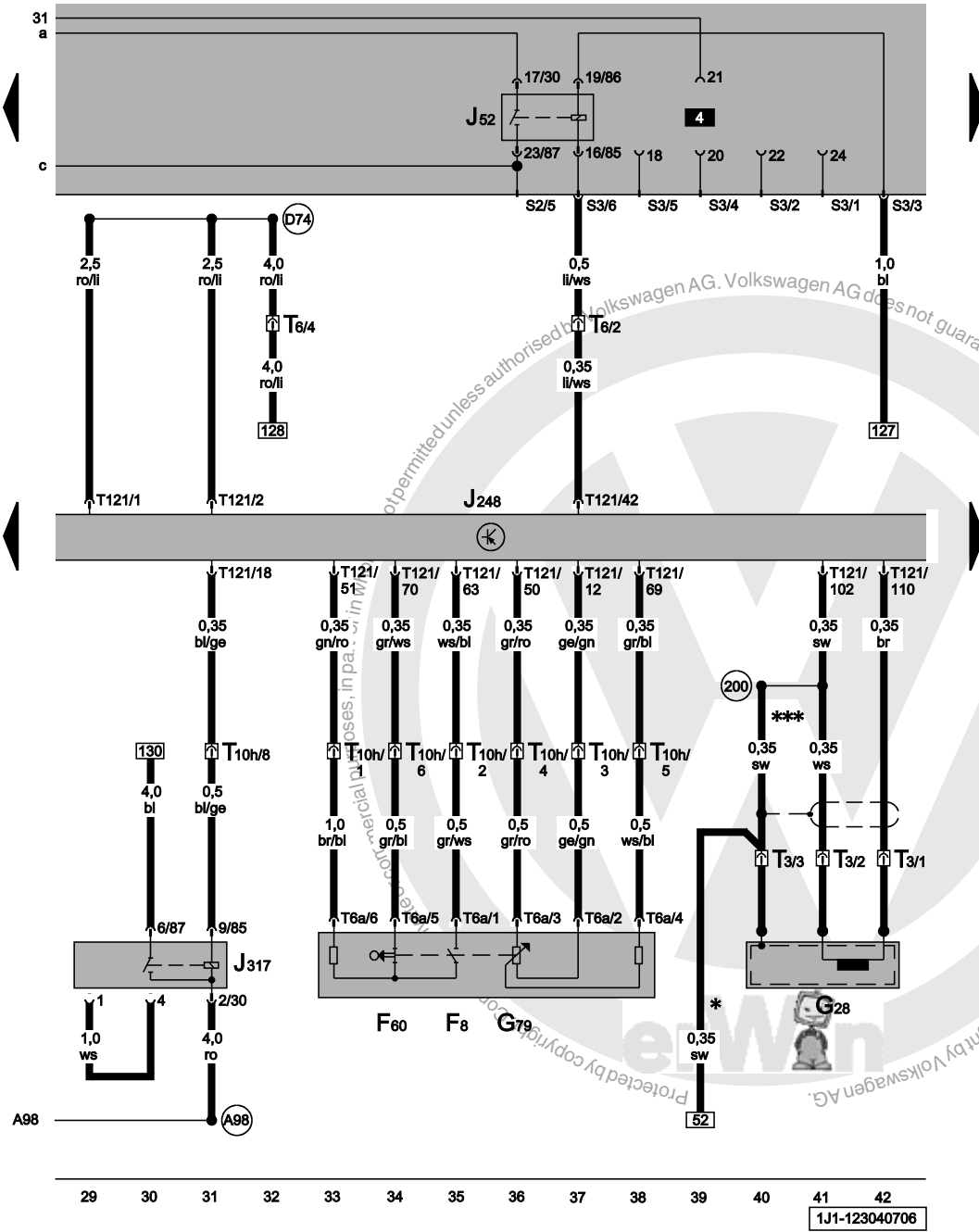
- D Ignition/starter switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- Q6 Glow plugs, engine
- S229 Fuse 29 in fuse holder
- S237 Fuse 37 in fuse holder
- T2 2-pin connector, in cable channel left in engine compartment
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector

- 501 Screw connection 2 (30), on relay plate
- 504 Screw connection (87F), on relay plate
- A2 Positive connection (15), in dash panel wiring harness
- A32 Positive connection (30), in dash panel wiring harness
- A80 Connection 1 (X), in dash panel wiring harness
- A98 Positive connection 4 (30), in dash panel wiring harness
- A104 Positive connection 2 (15), in dash panel wiring harness

- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, glow plug relay, kickdown switch, engine speed sender, idling speed switch, accelerator position sender, terminal 30 voltage supply relay

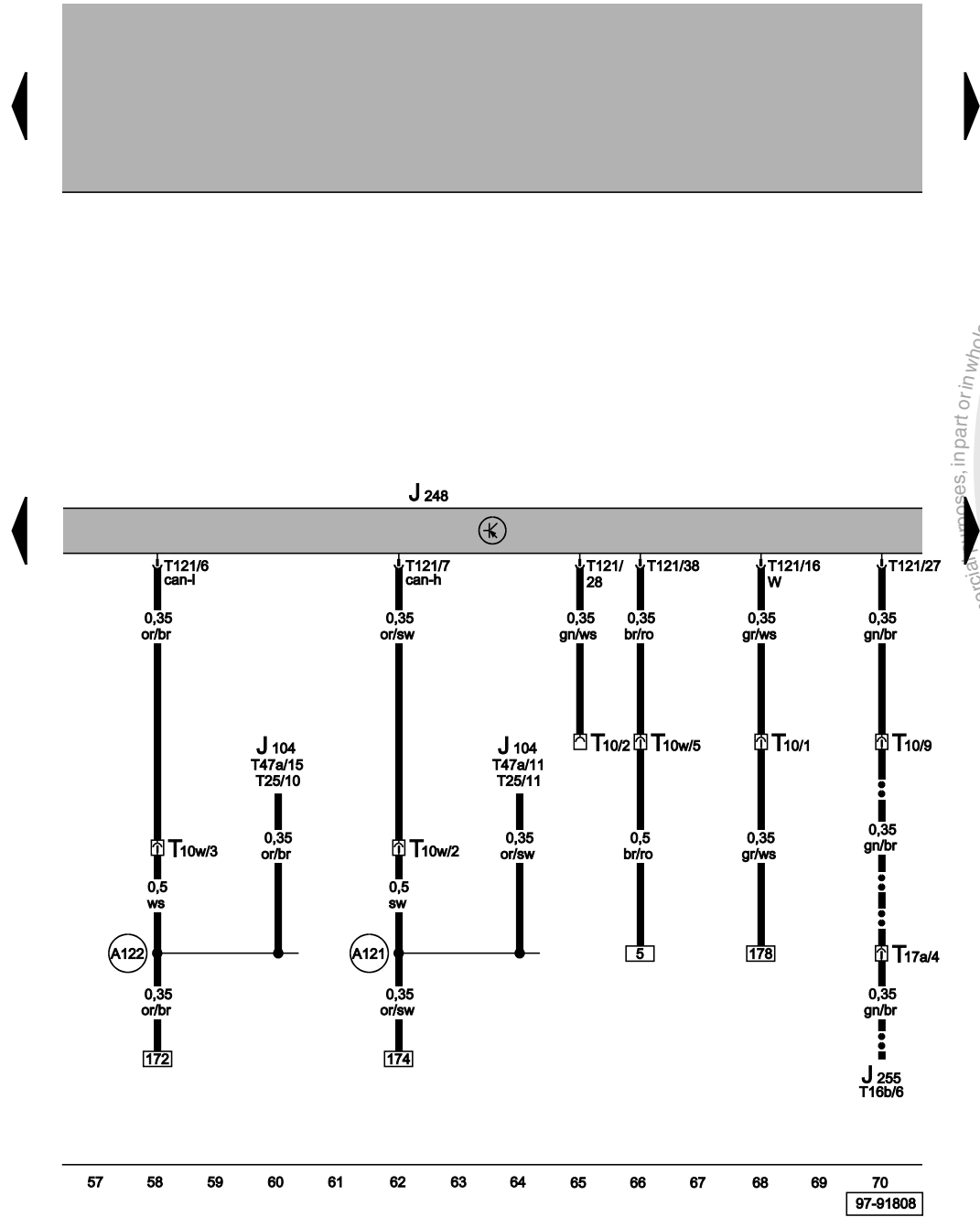
- F8 Kick-down switch
- F60 Idling speed switch
- G28 Engine speed sender
- G79 Accelerator position sender
- J52 Glow plug relay
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J317 Terminal 30 voltage supply relay, above the central electrics
- T3 3-pin connector, on front of engine
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T6a 6-pin connector
- T10h 10-pin connector, blue, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- 200 Earth connection (screening), in engine compartment wiring harness***
- A98 Positive connection 4 (30), in dash panel wiring harness
- D74 Connection (86), in engine compartment wiring harness
- * from August 2004
- *** up to July 2004



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit

- J104 ABS control unit
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J255 Climatronic control unit
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T16b 16-pin connector
- T17a 17-pin connector, behind centre dash panel
- T25 25-pin connector, on ABS/ABS control unit with EDL
- T47a 47-pin connector
- T121 121-pin connector
- A121 Connection (high bus), in dash panel wiring harness
- A122 Connection (low bus), in dash panel wiring harness
- only models with Climatronic

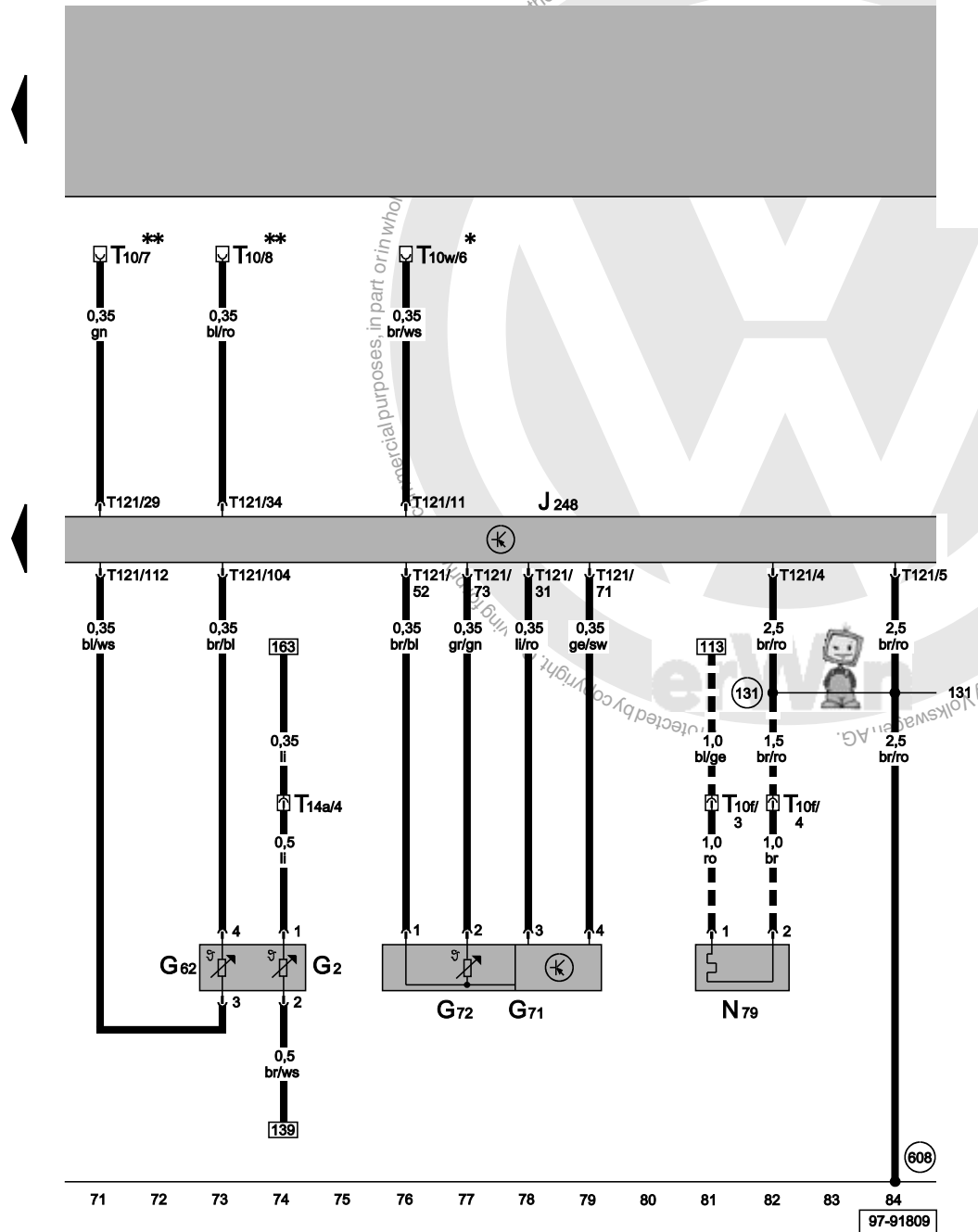


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, coolant temperature display sender, intake manifold pressure sender, intake manifold temperature sender, heater element for crankcase breather

- G2 Coolant temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N79 Heater element for crankcase breather
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery
- T121 121-pin connector
- (131) Earth connection 2, in engine compartment wiring harness
- (608) Earth point, in centre of plenum chamber

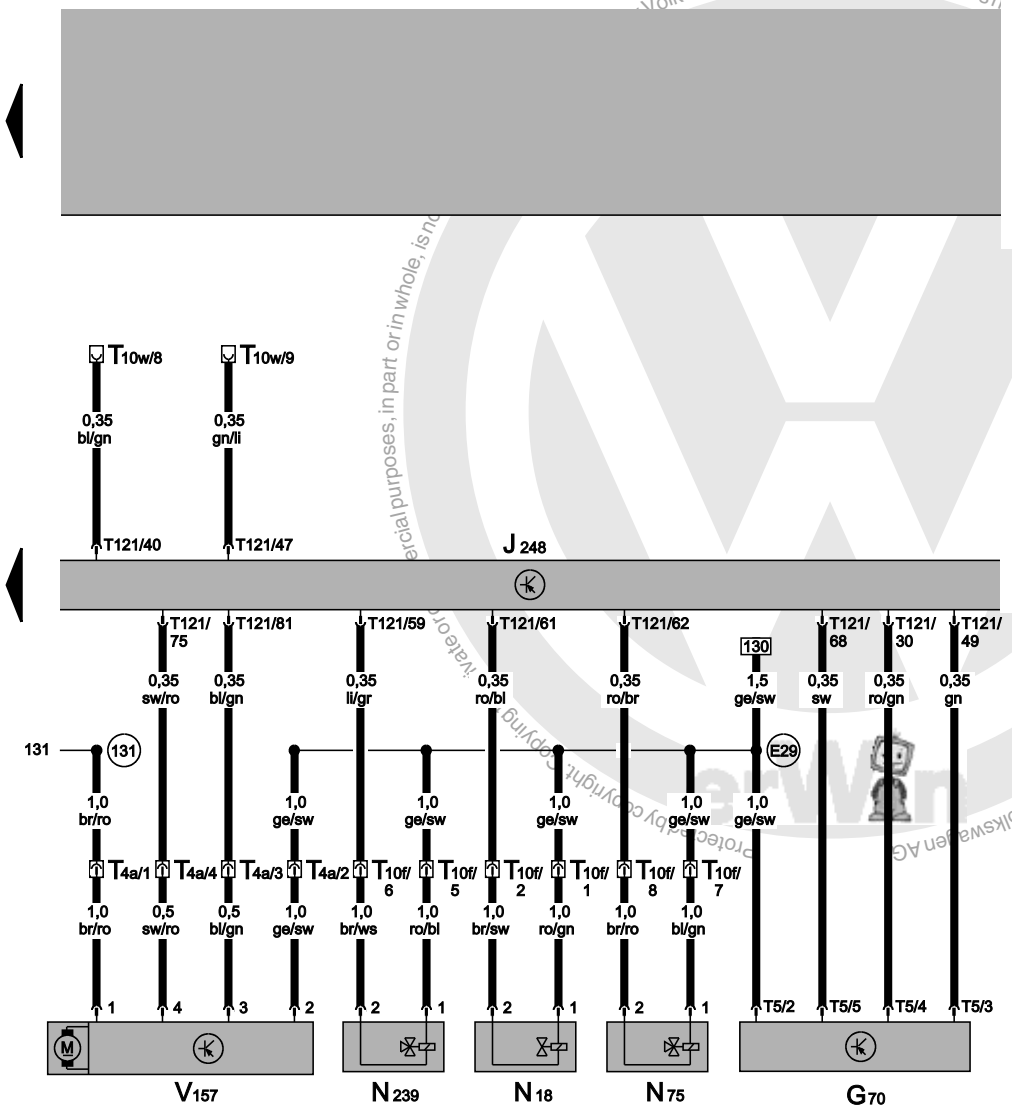
- * connection for radiator fan control unit/ radiator fan relay
- ** connection air conditioning system
- for models with heater element for crankcase breather only



- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, air mass meter, variable intake manifold flap change-over valve, exhaust gas recirculation valve, charge pressure control solenoid valve, intake manifold flap motor

- G70 Air mass meter
- J248 Diesel direct injection system control unit, in centre plenum chamber
- N18 Exhaust gas recirculation valve
- N75 Charge pressure control solenoid valve
- N239 Variable intake manifold flap change-over valve
- T4a 4-pin connector, on right in bulkhead
- T5 5-pin connector
- T10f 10-pin connector, in front engine compartment
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector
- V157 Intake manifold flap motor
- 131 Earth connection 2, in engine compartment wiring harness
- E29 Connection, in engine wiring harness



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- sw = black
- ro = red
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

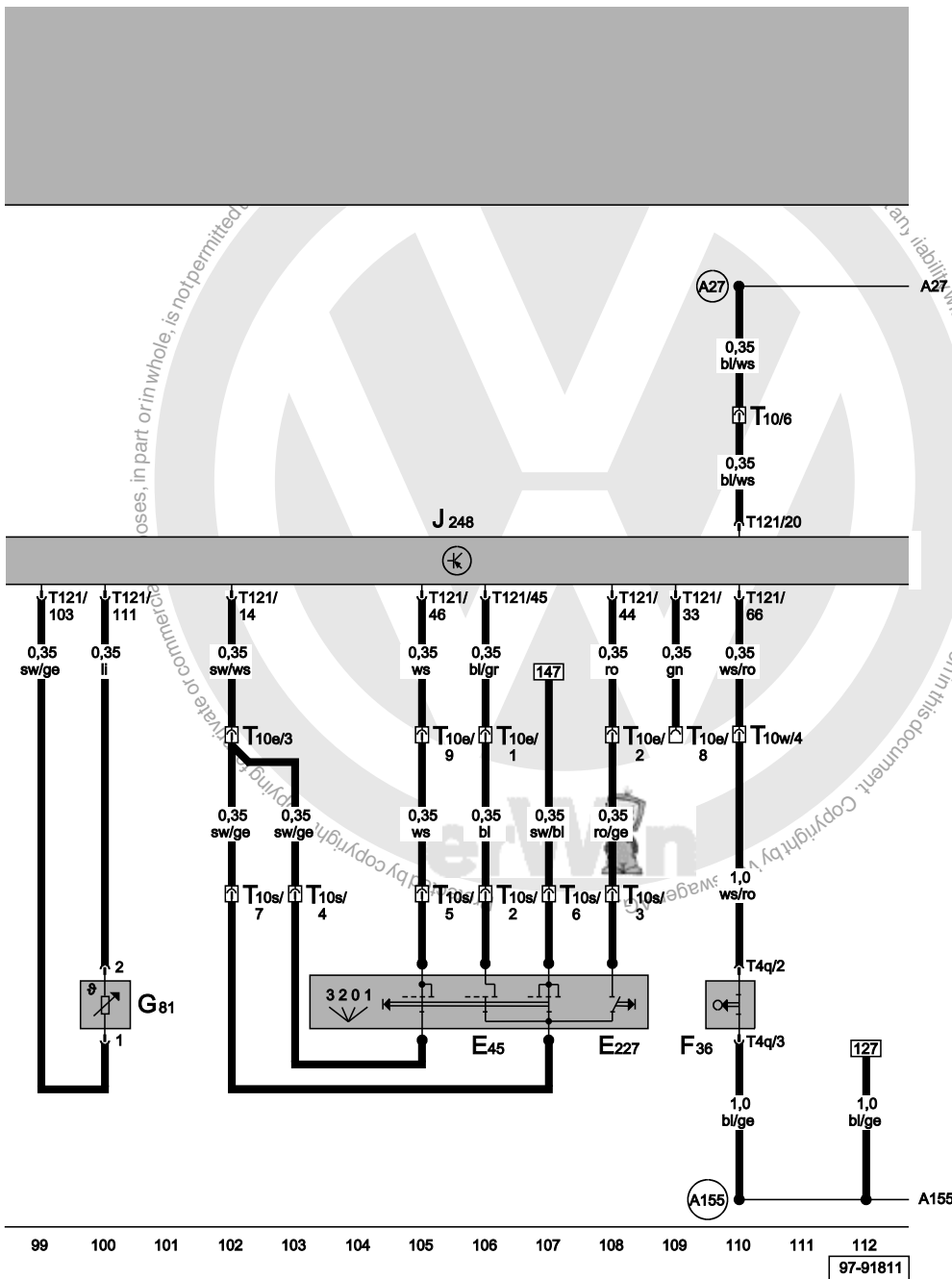
Diesel direct injection system control unit, cruise control system switch (GND), clutch pedal switch, fuel temperature sender

- E45 Cruise control system switch**
- E227 Cruise control system (CCS) SET button**
- F36 Clutch pedal switch
- G81 Fuel temperature sender
- J248 Diesel direct injection system control unit, in centre plenum chamber
- T4q 4-pin connector
- T10 10-pin connector, orange, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10s 10-pin connector, next to steering column
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

A27 Connection (speed signal), in dash panel wiring harness

A155 Connection 2 (86), in dash panel wiring harness

** only models with GND

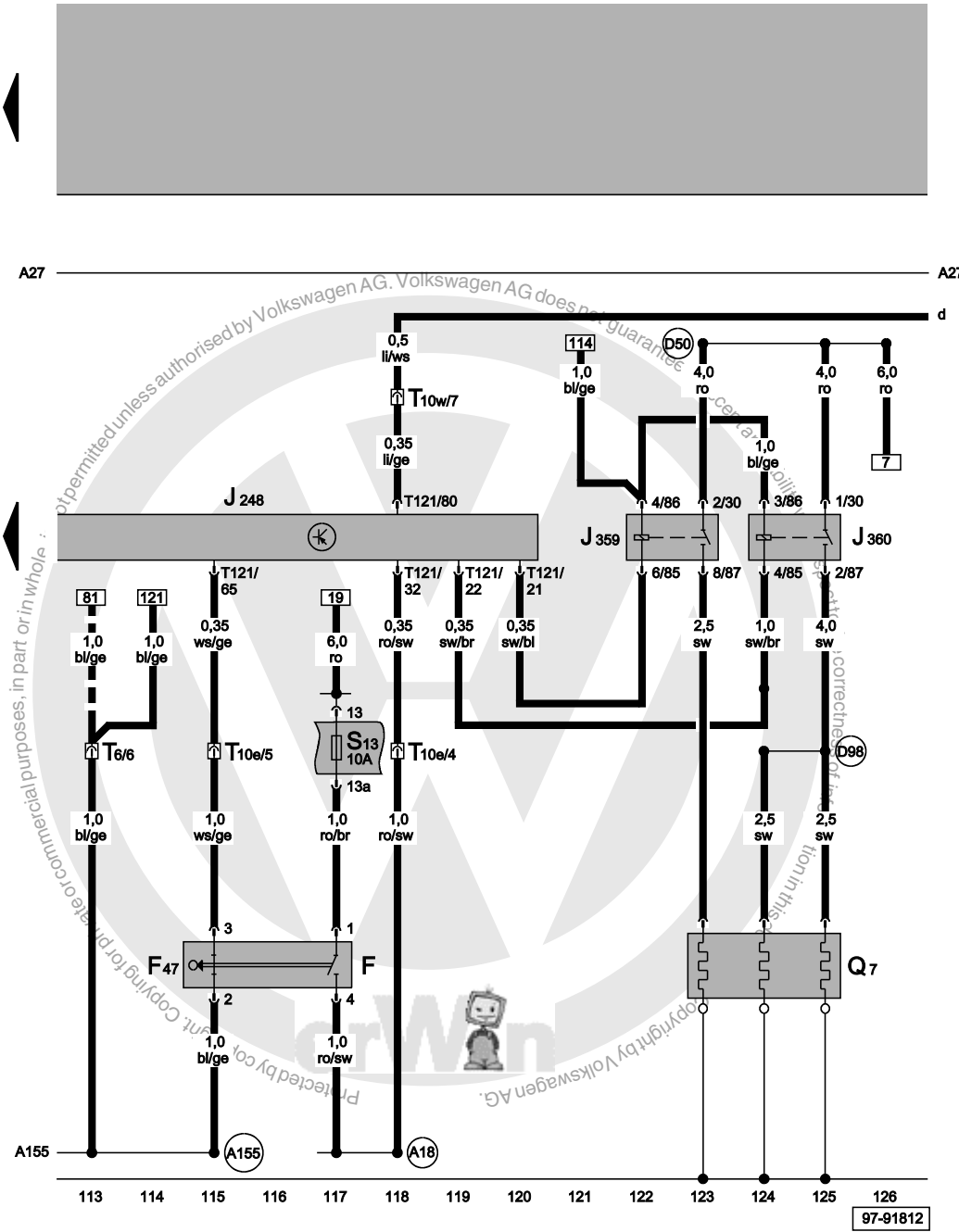


- ws = white
- sw = black
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- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Diesel direct injection system control unit, coolant heating element, brake pedal switch, brake light switch, high and low heat output relay

- F Brake light switch
- F47 Brake pedal switch
- J248 Diesel direct injection system control unit, in centre plenum chamber
- J359 Low heat output relay, in protective housing on left in engine compartment (53)
- J360 High heat output relay, in protective housing on left in engine compartment (100)
- Q7 Glow plugs, coolant
- S13 Fuse 13 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T10e 10-pin connector, black, in connector protective housing, on left in plenum chamber
- T10w 10-pin connector, white, in connector protective housing, on left in plenum chamber
- T121 121-pin connector

- A18 Connection (54), in dash panel wiring harness
- A155 Connection 2 (86), in dash panel wiring harness
- D50 Positive connection (30), in engine compartment wiring harness
- D98 Connection (glow plugs), in engine compartment wiring harness
- for models with heater element for crankcase breather only



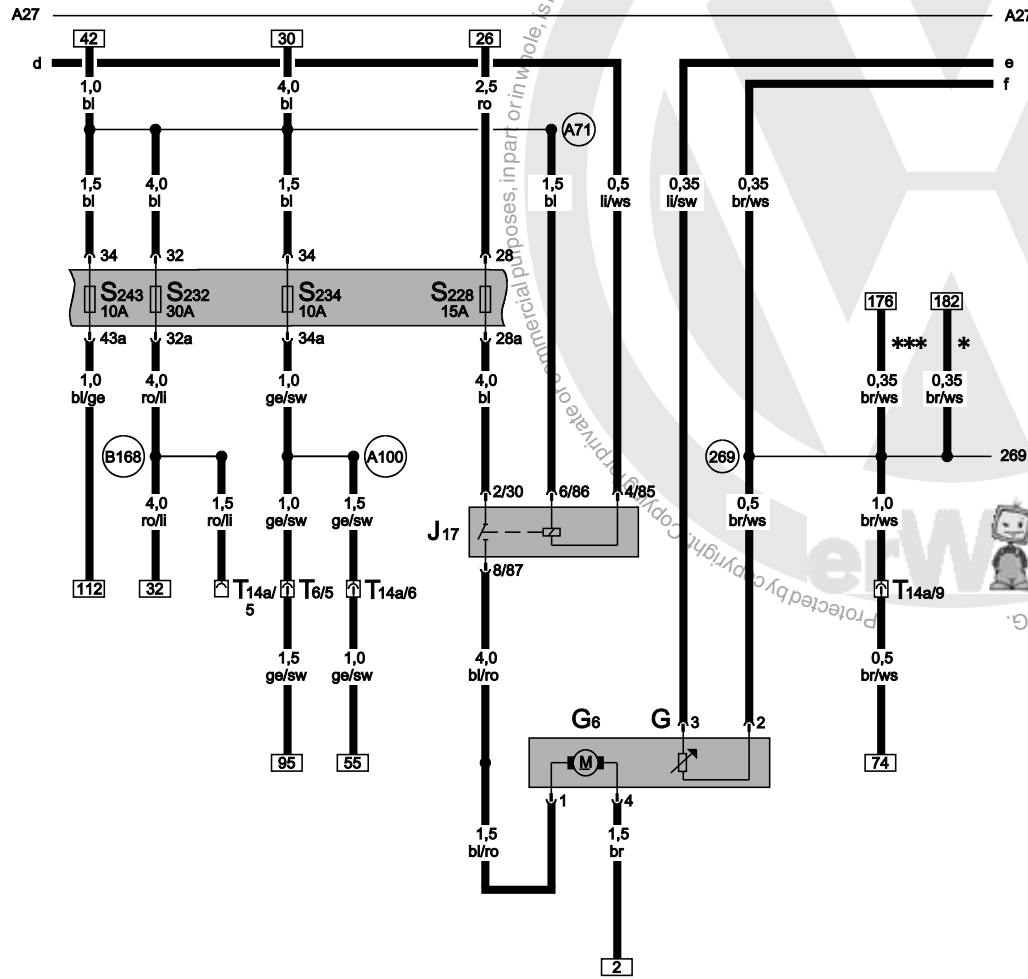
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Fuel pump relay, fuel gauge sender, fuel system pressurisation pump

- G Fuel gauge sender**
- G6 Fuel system pressurisation pump
- J17 Fuel pump relay, on additional relay carrier above the relay plate
- S228 Fuse 28 in fuse holder
- S232 Fuse 32 in fuse holder
- S234 Fuse 34 in fuse holder
- S243 Fuse 43 in fuse holder
- T6 6-pin connector, brown, in connector protective housing, on left in plenum chamber
- T14a 14-pin connector, near battery

- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- A71 Connection (86), in dash panel wiring harness
- A100 Connection 2 (87), in dash panel wiring harness
- B168 Connection (86), in interior wiring harness

* only models with multifunction display
 ** models with four-wheel drive => four-wheel drive Current Flow Diagram
 *** models with multifunction display and without Climatronic only

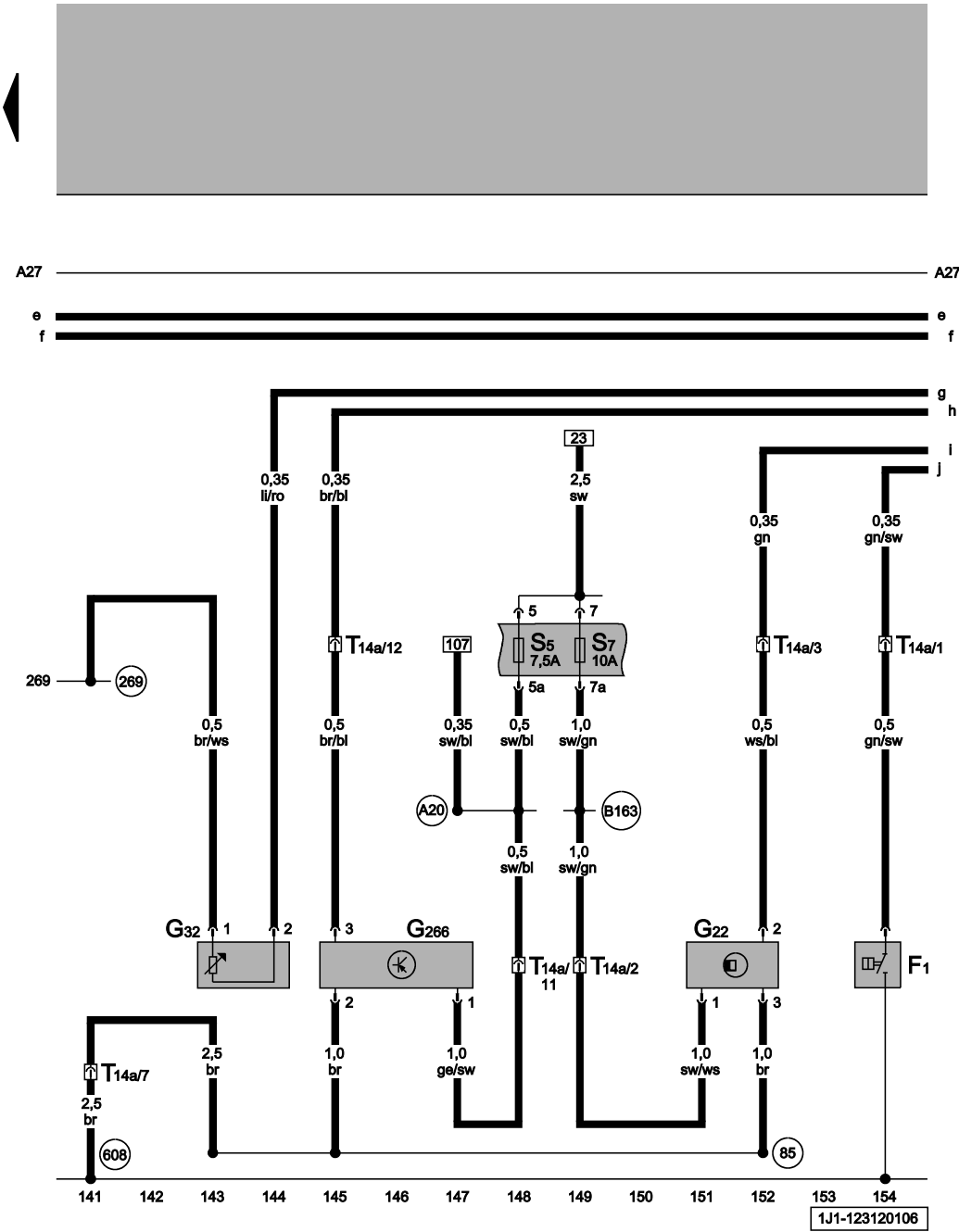


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Oil level and oil temperature sender, oil pressure switch, speedometer sender, coolant shortage indicator sender

- F1 Oil pressure switch
- G22 Speedometer sender (Hall sender, on gearbox)
- G32 Coolant shortage indicator sender
- G266 Oil level and oil temperature sender***
- S5 Fuse 5 in fuse holder
- S7 Fuse 7 in fuse holder
- T14a 14-pin connector, near battery

- 85 Earth connection 1, in engine compartment wiring harness
- 269 Earth connection (sender earth) 1, in dash panel wiring harness
- 608 Earth point, in centre of plenum chamber
- A20 Connection (15a), in dash panel wiring harness
- B163 Positive connection 1 (15), in interior wiring harness
- *** only flexible service interval display

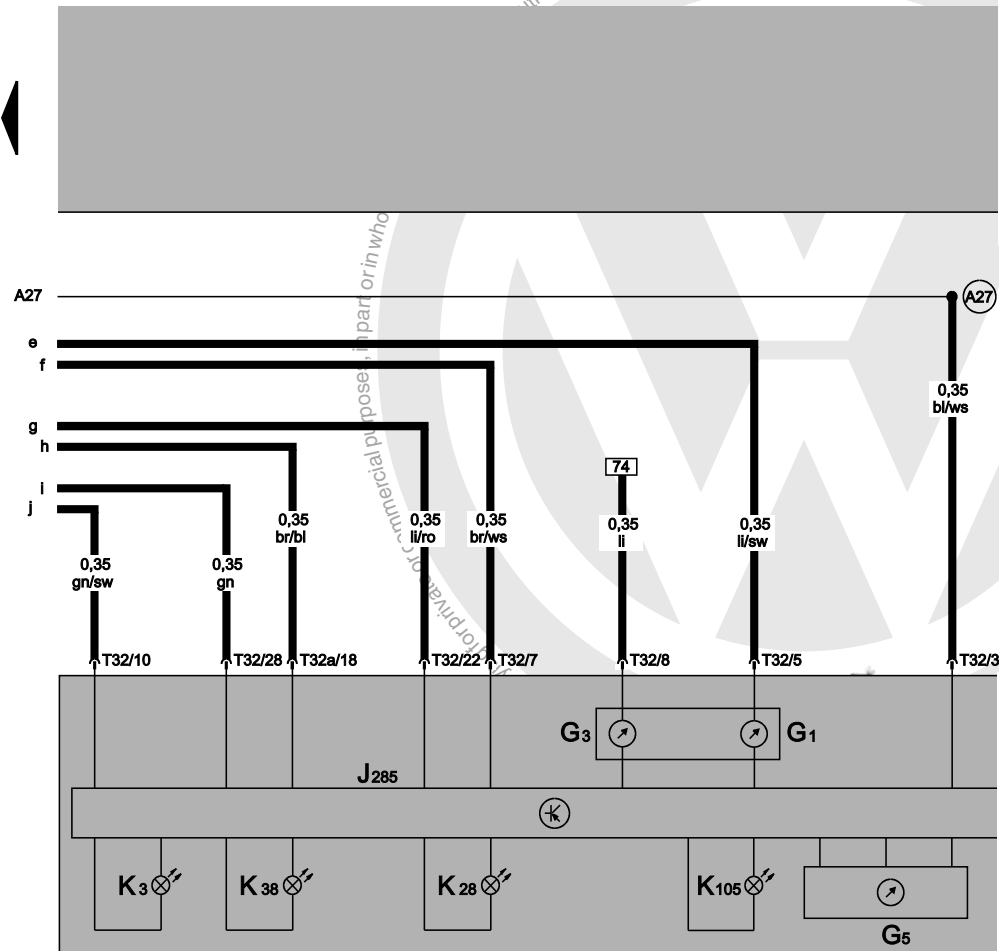


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1J1-123120106

Dash panel insert, coolant temperature/coolant shortage indicator, fuel gauge, rev. counter, oil pressure warning lamp

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. counter
- J285 Control unit in dash panel insert
- K3 Oil pressure warning lamp
- K28 Coolant temperature and coolant shortage warning lamp
- K38 Oil level warning lamp***
- K105 Reserve fuel warning lamp
- T32 32-pin connector, blue
- T32a 32-pin connector, green
- A27 Connection (speed signal), in dash panel wiring harness
- *** only flexible service interval display



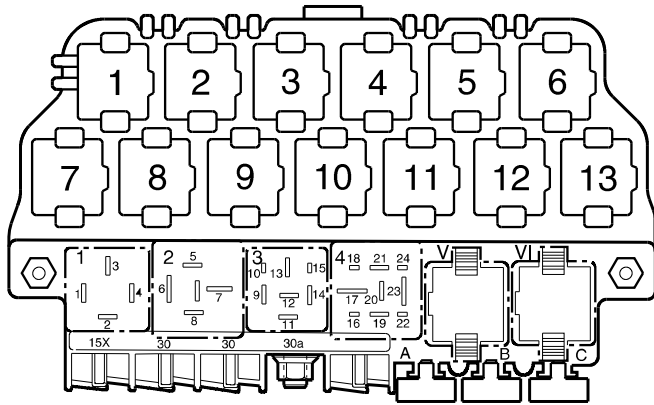
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

Heated rear window with automatic time switch

from May 1999

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

Relay locations on relay plate:

2 - J59 - X-contact relief relay (100)

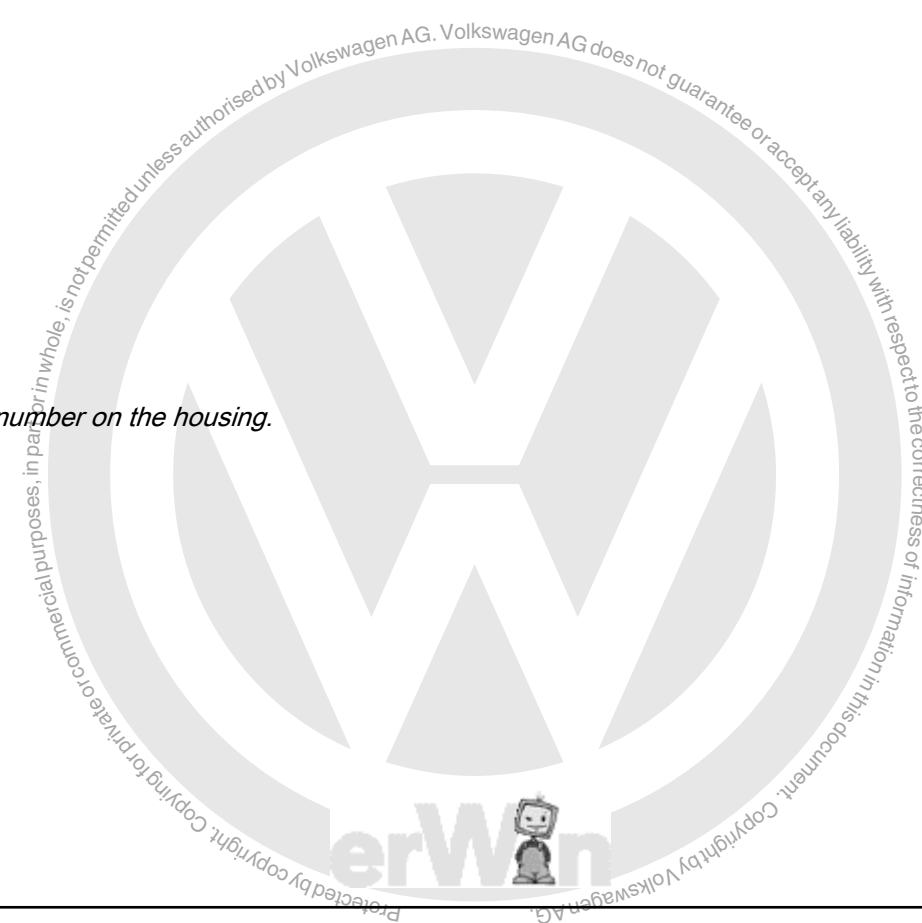


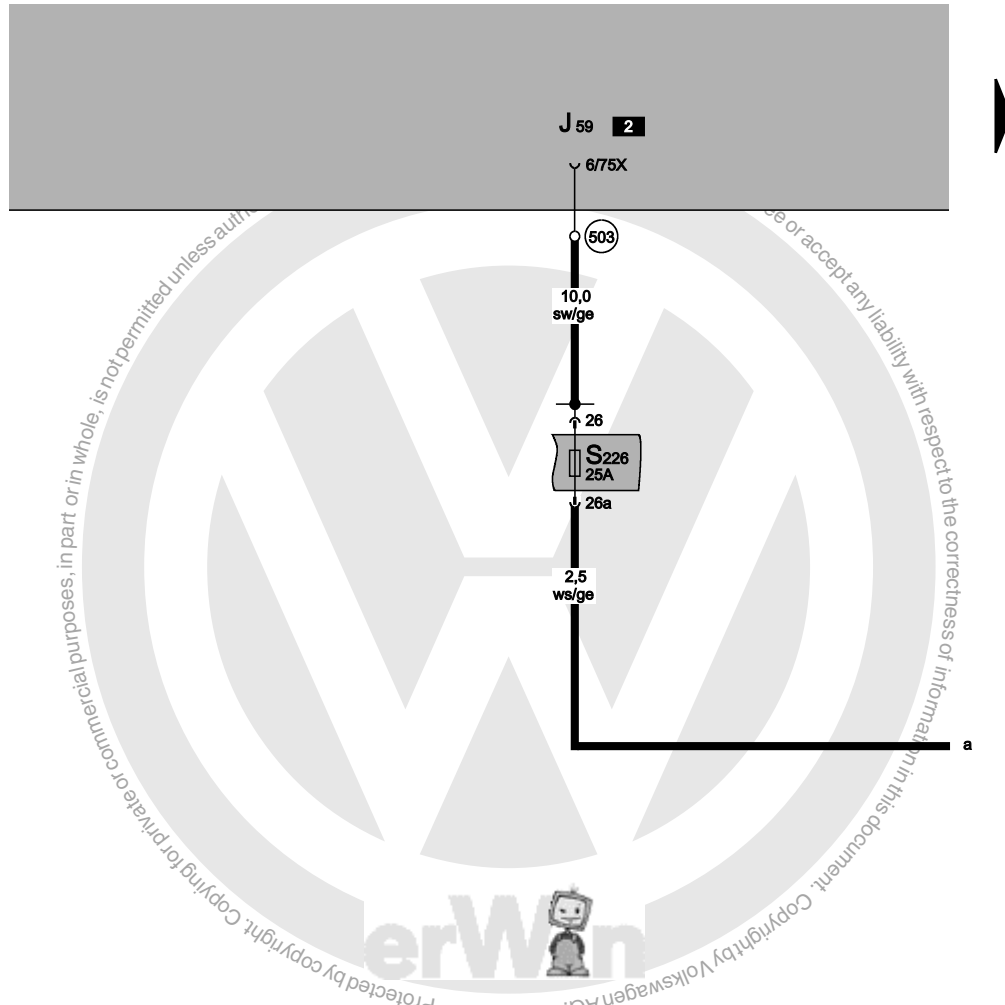
Note:

◆ *The number in brackets behind the part designation denotes the control number on the housing.*

Fuse colours

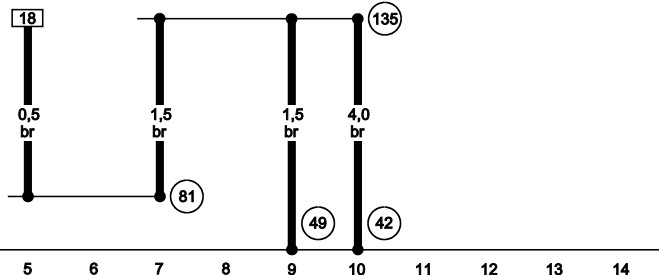
- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple





Fuse 26 in fuse holder

- J59 X-contact relief relay
- S226 Fuse 26 in fuse holder
- 42 Earth point, next to steering column
- 49 Earth point, on top end of steering column
- 81 Earth connection 1, in dash panel wiring harness
- 135 Earth connection 2, in dash panel wiring harness
- 503 Screw connection (75x), on relay plate



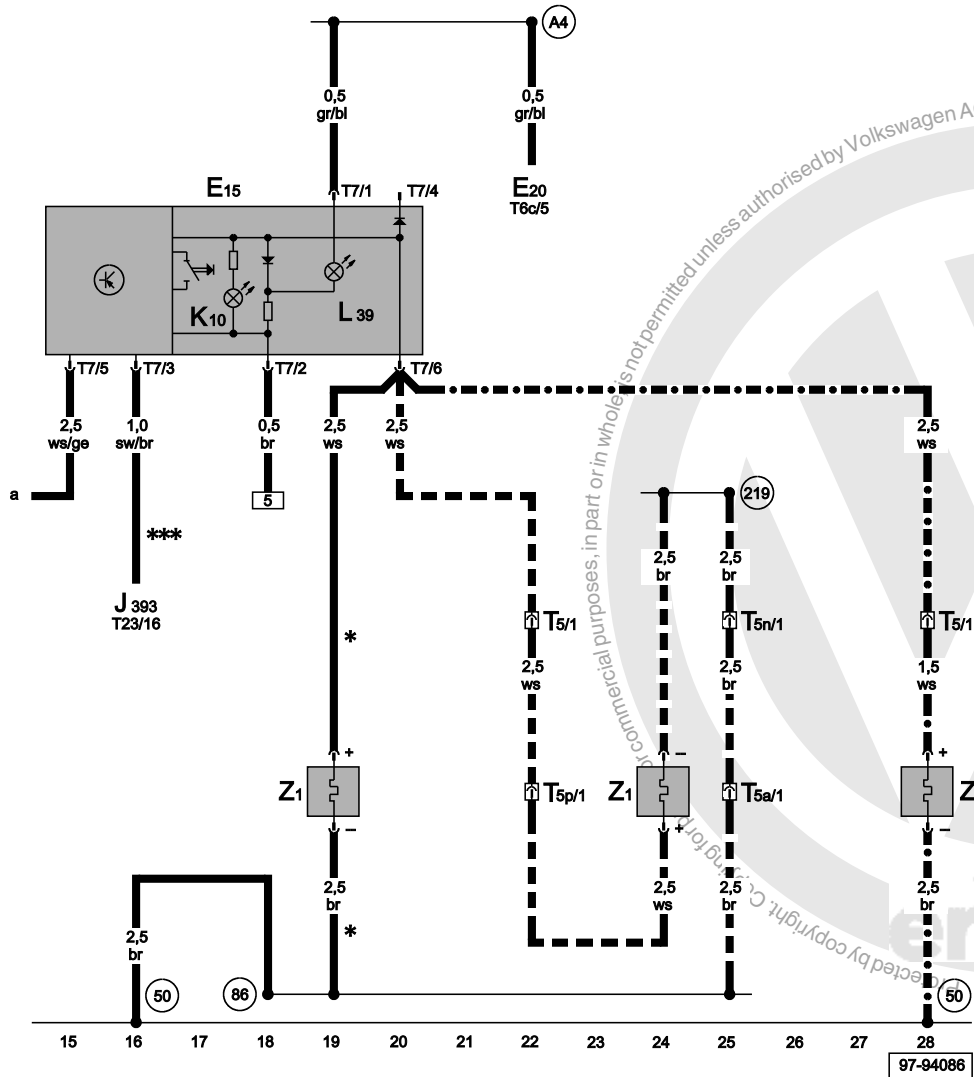
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

97-94085

Heated rear window switch, heated rear window

- E15 Heated rear window switch
- E20 Switches and instruments illumination regulator
- J393 Convenience system central control unit
- K10 Heated rear window warning lamp
- L39 Heated rear window switch illumination bulb
- T5 5-pin connector, black, coupling station on left of C-pillar (Golf/ Bora), coupling station on left of D-pillar (Golf Variant/ Bora Variant)
- T5a 5-pin connector, pink, coupling station on right D-pillar
- T5n 5-pin connector, pink, in rear lid
- T5p 5-pin connector, black, in rear lid
- T6c 6-pin connector
- T7 7-pin connector
- T23 23-pin connector
- Z1 Heated rear window

- (50) Earth point, on left in luggage compartment
- (86) Earth connection 1, in rear wiring harness
- (219) Earth connection 2, in rear lid wiring harness
- (A4) Positive connection (58b), in dash panel wiring harness
- * only Bora
- .- only Golf
- *** models without separate exterior mirror heating
- only Golf Variant/ Bora Variant



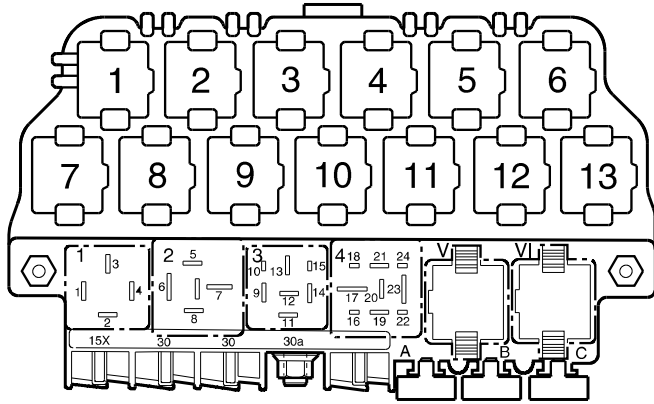
97-94086

Socket (12V)

from December 2005

For alternatives to relay and fuse positions as well as multi-pin connector wiring - see "Fitting locations" section

Relay locations on the 13 position additional relay carrier above the relay plate:



97-14163

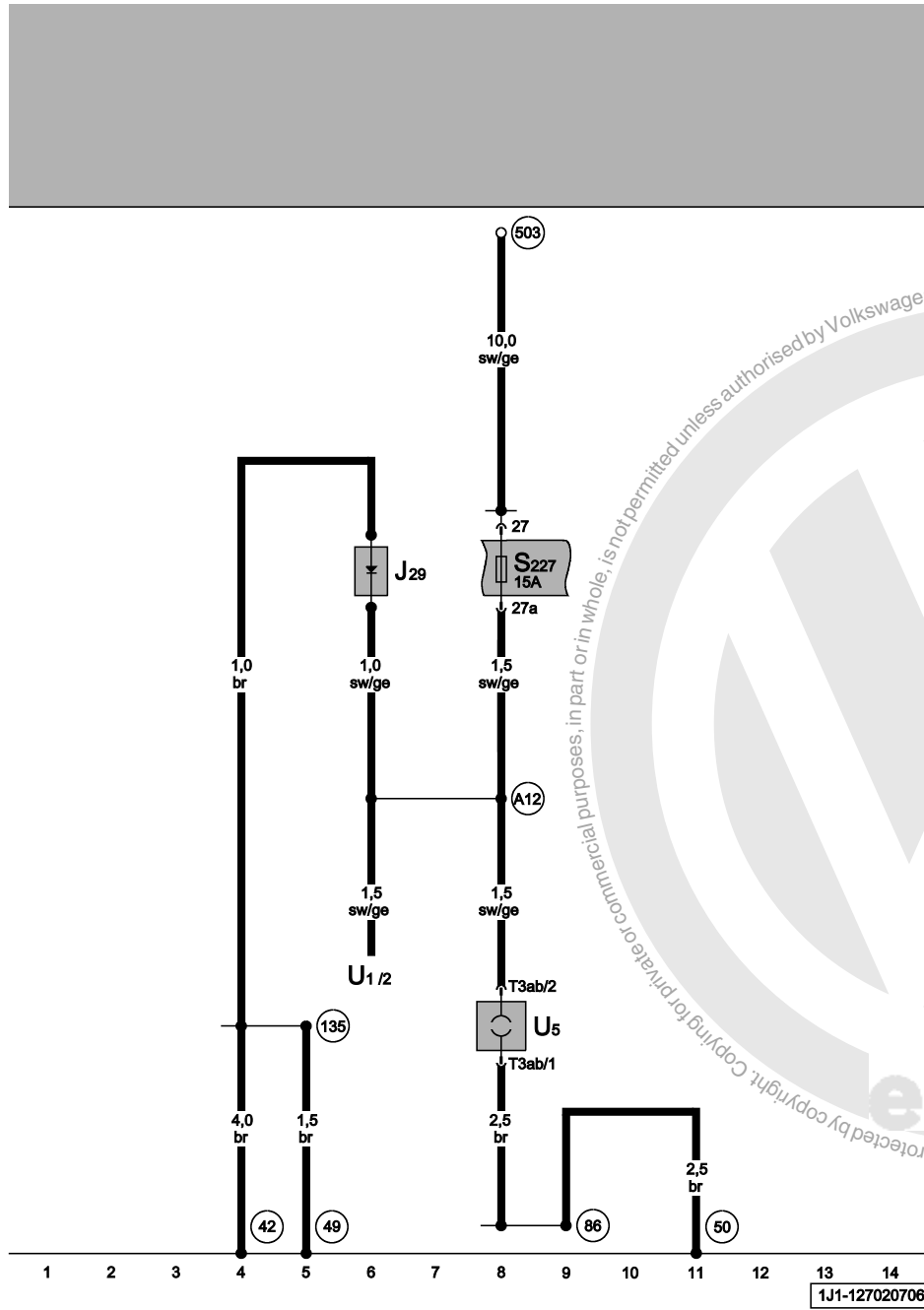
Relay locations on relay plate:



12 V socket

- S227 Fuse 27 in fuse holder
- J29 Blocking diode, near coupling station on left of A-pillar
- T3ab 3-pin connector
- U1 Cigarette lighter
- U5 12 V socket, on left in luggage compartment

- 42 Earth point, next to steering column
- 49 Earth point, on steering column
- 50 Earth point, on left in luggage compartment
- 86 Earth connection 1, in rear wiring harness
- 503 Screw connection (75x), on relay plate
- A12 Positive connection (75a), in dash panel wiring harness



- ws = white
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- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

1J1-127020706

1 Position of relays and fuses

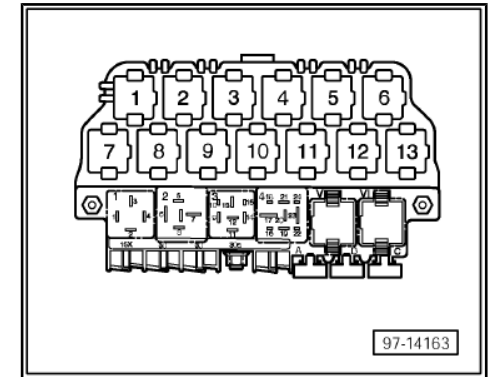
1.1 Position of relays and fuses

1.1.1 Relay positions on relay plate:

- 1 - J4 - Dual tone horn relay (53)
- 2 - J59 - X-contact relief relay (18) J59 - X-contact relief relay (100)
- 3 - Vacant
- 4 - J17 - Fuel pump relay (409) J52 - Glow plug relay (103)
- V / VI - J31 - Automatic intermittent wash and wipe relay, without headlight washer system (377), -with headlight washer system (389), -with rain sensor (192)

1.1.2 Fuse locations on relay plate:

- A - Seat adjustment fuse
- B - Fuses for V192 - Vacuum pump for brakes (from May 2002)
- C - Window regulator fuse, central locking and heated exterior mirror (only models with convenience system and window regulator)

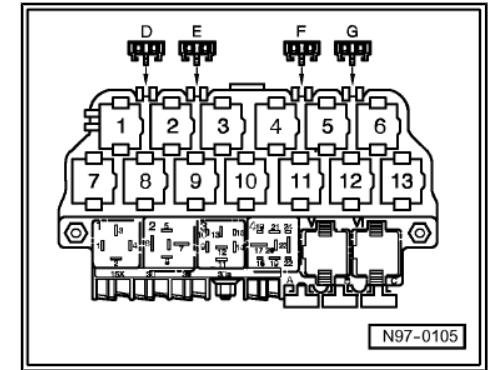


1.1.3 Relay locations on the 13 position additional relay carrier above the relay plate, left-handdrive vehicles:

- 1 - Vacant
- 2 - J398 - Rear lid remote release relay (79) J546 - Rear lid remote release control unit (407)
- 3 - Vacant
- 4 - J5 - Fog light relay (53)
- 5 - J453 - Multifunction steering wheel control unit (450)
- 6 - J453 - Multifunction steering wheel control unit (450)
- 7 - J508 - Brake light suppression relay (206)
- 8 - J99 - Heated exterior mirror relay (53) J541 - Coolant shut-off valve relay (53)
- 9 - J17 - Fuel pump relay, four-wheel-diesel, (53)
- 10 - J17 - Fuel pump relay (pre-supply pump) (167)
- 11 - J226 - Starter inhibitor and reversing light relay (175)
- 12 - J317 - Terminal 30 voltage supply relay (109)
- 13 - J151 - Continued coolant circulation relay (53)

1.1.4 Fuse locations on 13 position additional relay carrier, left-handdrive vehicles:

- D - Vacant
- E - Vacant
- F - S30 - Rear window wiper single fuse 15A (from December 2005), S144 - Anti-theft alarm system central locking fuse (ATA turn signal) 15A
- G - S111 - Anti-theft alarm system fuse (ATA horn), 15A

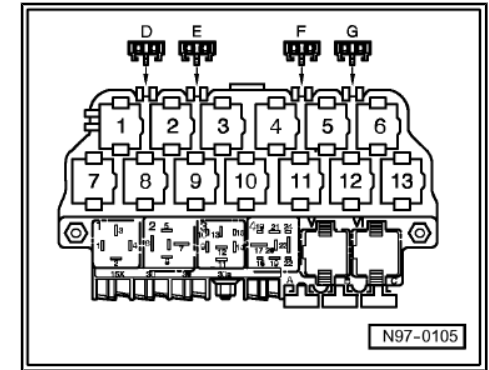


1.1.5 Relay locations on the 13 position additional relay carrier above the relay plate, right-handdrive vehicles:

- 1 - J453 - Multifunction steering wheel control unit (450)
- 2 - J453 - Multifunction steering wheel control unit (450)
- 3 - J5 - Fog light relay (53)
- 4 - Vacant
- 5 - J398 - Rear lid remote release relay (79) J546 - Rear lid remote release control unit (407)
- 6 - Vacant
- 7 - J151 - Continued coolant circulation relay (53)
- 8 - J317 - Terminal 30 voltage supply relay (109)
- 9 - J226 - Starter inhibitor and reversing light relay (175)
- 10 - J17 - Fuel pump relay (pre-supply pump) (167)
- 11 - J17 - Fuel pump relay, four-wheel-diesel, (53)
- 12 - J99 - Heated exterior mirror relay (53) J541 - Coolant shut-off valve relay (53) J193 - Cigarette lighter relay (53)
- 13 - J508 - Brake light suppression relay (206)

1.1.6 Fuse on 13 position additional relay carrier, right-handdrive vehicles:

- D - S144 - Anti-theft alarm system central locking fuse (ATA turn signal), 15A
- E - S111 - Anti-theft alarm system fuse (ATA horn) 15A, S30 - Rear window wiper single fuse 15A (from December 2005)
- F - Vacant
- G - Vacant



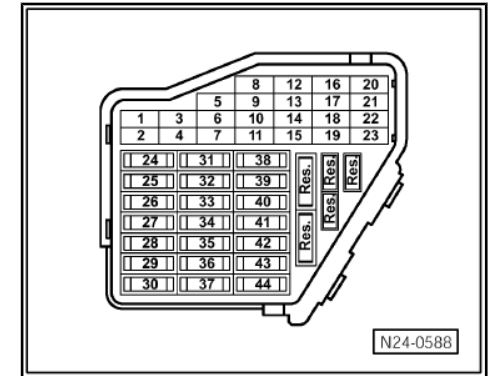
1.1.7 Fuse colours

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7,5 A - brown
- 5 A - beige
- 3 A - purple



Notes:

- ◆ Fuses from S 23 are designated with an additional 2 in the Current Flow Diagram.
- ◆ Example: S 40 is designated as S 240.



1.1.8 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
1	- S1 - Fuse 1 in fuse holder	5 A	- Z4 - Driver side heated exterior mirror (models without ohne electric window regulator) Z5 - Front passenger side heated exterior mirror (models without ohne electric window regulator) Z20 - Left washer jet heater element Z21 - Right washer jet heater element	X
2	- S2 - Fuse 2 in fuse holder	5 A	- E3 - Hazard warning light switch J1 - Turn signal relay M5 - Front left turn signal bulb M6 - Rear left turn signal bulb M7 - Front right turn signal bulb M8 - Rear right turn signal bulb J567 - Left gas discharge light control unit J568 - gas discharge light control unit with headlight range control right	75x
3	- S3 - Fuse 3 in fuse holder	5 A	- J5 - Fog light relay E20 - Switches and instruments illumination regulator	58a
4	- S4 - Fuse 4 in fuse holder	5 A	- X - Number plate lights	58a



1.1.9 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
5	- S5 - Fuse 5 in fuse holder	7.5 A	- E45 - Cruise control system switch E221 - Operating unit in steering wheel E227 - Cruise control system button (CCS) SET button G65 - High pressure sender (air conditioning system) J131 - Heated driver seat control unit J132 - Heated front passenger seat control unit J245 - Sliding sunroof adjustment control unit (models without central locking) J255 - Climatronic G266 - Oil level and oil temperature sender J293 - Radiator fan control unit, multifunction steering wheel J393 - Convenience system (E231 - Exterior mirror heater button), J453 - Multifunction steering wheel control unit J446 - Parking aid control unit J503 - Control unit with display for radio and navigation system N147 - 2-way valve for coolant shut-off valve (above F269 - temperature flap position switch) V154 - Fresh air/recirculated air flap control motor	15a
6	- S6 - Fuse 6 in fuse holder	5 A 5 A	- Up to April 2001: J379 - Central locking and anti-theft alarm system control unit from September 2002: J651 - Shut-off valve relay 1 (engine code BEH)	15a
7	- S7 - Fuse 7 in fuse holder	10 A	- K142 - Selector lever position P/N warning lamp M16 - Left reversing light bulb M17 - Right reversing light bulb	15a
8	- S8 - Fuse 8 in fuse holder	5 A	- J412 - Mobile telephone operating electronics control unit	15a
9	- S9 - Fuse 9 in fuse holder	5 A	- E256 - TCS and ESP button G85 - Steering angle sender J104 - ABS/ABS control unit with EDL/ ASR/ ESP	15a

1.1.10 Fuses in fuse holder:

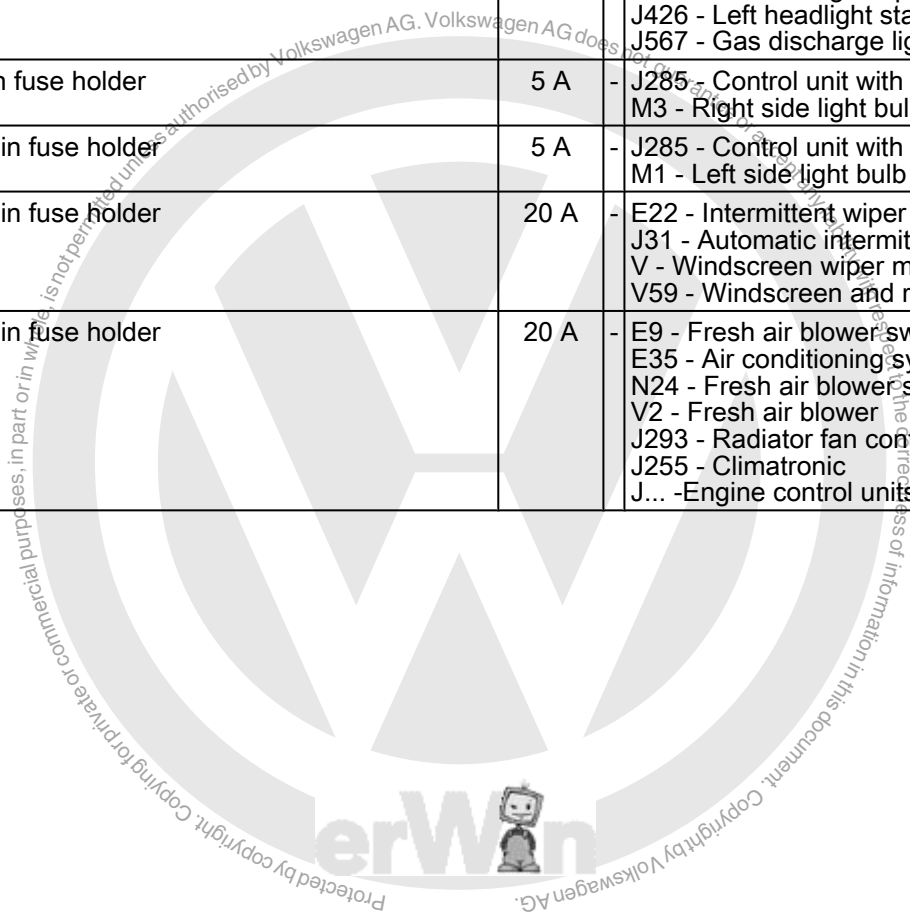
No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
10	- S10 - Fuse 10 in fuse holder	15 A 5 A 10 A	- up to October 2001: Engine management: Petrol Engine management: Diesel from November 2001: R - Radio (S-contact) J285 - Display in dash panel insert J503 - Control unit with display for radio and navigation	30a 86s
11	- S11 - Fuse 11 in fuse holder	5 A	- J285 - Control unit with display in dash panel insert N110 - Selector lever lock solenoid	15a
12	- S12 - Fuse 12 in fuse holder	7.5 A	- J412 - Mobile telephone operating electronics control unit G273 - Interior monitoring sensor G274 - Interior monitoring sender T16 - 16-pin connector, (in centre dash panel, self-diagnosis connection) W11 - Rear left reading light (models with interior monitor) W12 - Rear right reading light (models with interior monitor)	30a
13	- S13 - Fuse 13 in fuse holder	10 A	- F - Brake light switch M9 - Left brake light bulb (only Golf/Bora) J..... - Engine control units J104 - ABS/ABS control unit with EDL/ ASR/ ESP M9 - Left brake light bulb (only Golf/Bora) M10 - Right brake light bulb (only Golf/Bora) M21 - Left brake and tail light bulb (only Golf Variant/Bora Variant) M25 - High level brake light bulb	30a 54

1.1.11 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
14	- S14 - Fuse 14 in fuse holder	10 A	- J393 - Convenience system central control unit (models without central lock) J546 - Rear lid remote release control unit models without central lock: M27 - Left door warning lamp M28 - Right door warning lamp W - Front interior light W3 - Luggage compartment light W11 - Rear left reading light W12 - Rear right reading light W14 - Illuminated vanity mirror (front passenger side) W18 - Luggage compartment light on left W19 - Reading light/driver side W20 - Illuminated vanity mirror (driver side)	30a
15	- S15 - Fuse 15 in fuse holder	5 A	- G85 - Steering angle sender J217 - Automatic gearbox control unit J285 - Control unit with display in dash panel insert	30a
16	- S16 - Fuse 16 in fuse holder	10 A	- J255 - Climatronic J293 - Radiator fan control unit	30a
17	- Vacant	-	-	-
18	- S18 - Fuse 18 in fuse holder	10 A	- J285 - Control unit with display in dash panel insert L2 - Right twin filament bulb (only Bora) M32 - Right main beam bulb (only Golf)	56a

1.1.12 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
19	- S19 - Fuse 19 in fuse holder	10 A	- L1 - Left twin filament bulb (only Bora) M30 - Left headlight main beam bulb (only Golf)	56a
20	- S20 - Fuse 20 in fuse holder	15 A	- E102 - Headlight range control regulator J427 - Right headlight starter for gaseous discharge light J568 - Gas discharge light control unit with headlight range control right L2 - Right twin filament bulb (only Bora) M31 - Right headlight dipped beam bulb (only Golf) V48 - Left headlight range control motor V49 - Right headlight range control motor	56b
21	- S21 - Fuse 21 in fuse holder	15 A	- L1 - Left twin filament bulb (only Bora), M29 - Left headlight dipped beam bulb (only Golf) J426 - Left headlight starter for gaseous discharge light, J567 - Gas discharge light control unit with headlight range control left	56b
22	- S22 - Fuse 22 in fuse holder	5 A	- J285 - Control unit with display in dash panel insert M3 - Right side light bulb	58R
23	- S223 - Fuse 23 in fuse holder	5 A	- J285 - Control unit with display in dash panel insert M1 - Left side light bulb	58L
24	- S224 - Fuse 24 in fuse holder	20 A	- E22 - Intermittent wiper switch, windscreen wiper motor J31 - Automatic intermittent wash and wipe relay V - Windscreen wiper motor V59 - Windscreen and rear window washer pump	75x
25	- S225 - Fuse 25 in fuse holder	20 A	- E9 - Fresh air blower switch E35 - Air conditioning system switch N24 - Fresh air blower series resistor with overheating fuse V2 - Fresh air blower J293 - Radiator fan control unit J255 - Climatronic J... -Engine control units	75x



1.1.13 Fuses in fuse holder:

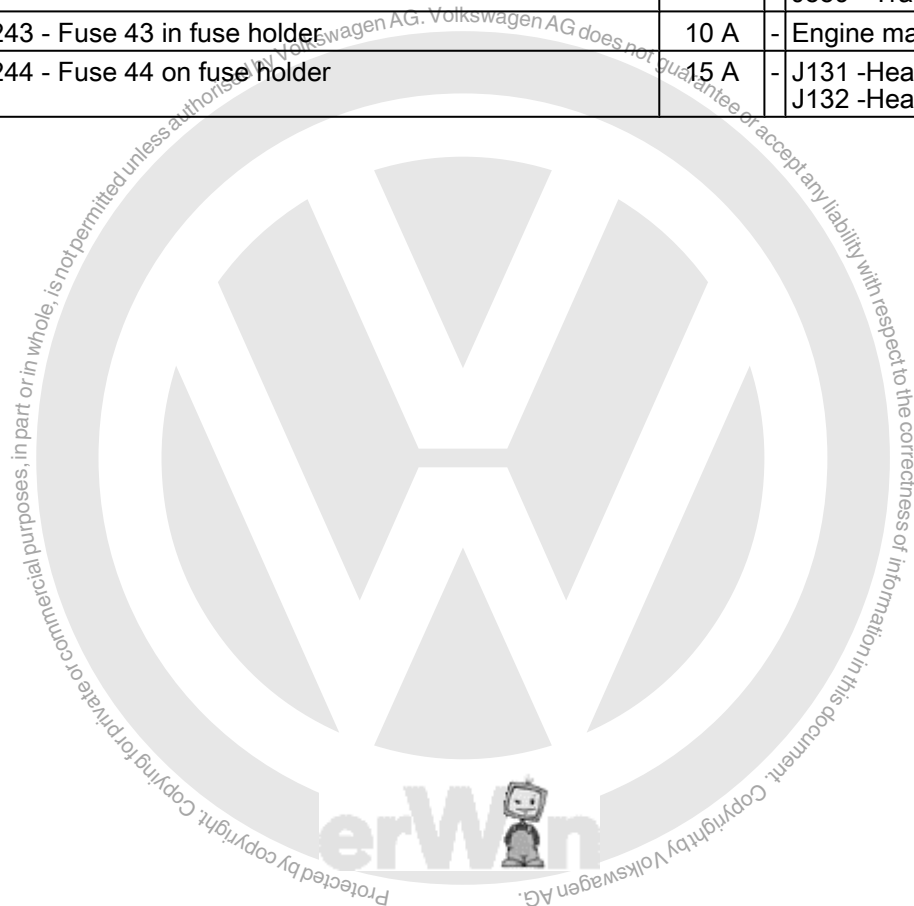
No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
26	- S226 - Fuse 26 in fuse holder	25 A	- Z1 - Heated rear window	75x
27	- S227 - Fuse 27 in fuse holder	15 A 15 A	- up to November 2005: V12 - Rear window wiper motor from December 2005: U1 - Cigarette lighter U5 - 12 V socket, on left in luggage compartment	75x 75x
28	- S228 - Fuse 28 in fuse holder	15 A	- G6 - Fuel pump (pre-supply pump)	75x
29	- S229 - Fuse 29 in fuse holder	15 A 20 A 10 A	- Petrol (not for engine code BDE) Engine management: Engine code BDE Engine management: Diesel	15a
30	- S230 - Fuse 30 in fuse holder	20 A	J245 - Sliding sunroof adjustment control unit V1 - Sliding sunroof motor	30a
31	- S231 - Fuse 31 in fuse holder	20 A 5 A	- J217 - Automatic gearbox control unit F125 - Multifunction switch J542 - Brake servo control unit J492 - Four-wheel drive control unit (4 Motion)	15a
32	- S232 - Fuse 32 in fuse holder	10 A 30 A	- Injectors: Petrol Engine management: Diesel	87
33	- S233 - Fuse 33 on fuse holder	20 A	J31 - Automatic intermittent wash and wipe relay V11 - Headlight washer system pump	30a
34	- S234 - Fuse 34 on fuse holder	10 A	- Engine management	87
35	- S235 - Fuse 35 on fuse holder	30 A	- U10 - Trailer socket up to November 2005: U5-12 V socket, on left in luggage compartment	30a

1.1.14 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
36	- S236 - Fuse 36 on fuse holder	15 A	- J5 - Fog light relay L22 - Left fog light bulb L23 - Right fog light bulb L46 - Rear left fog light bulb J285 - Control unit with display in dash panel insert	X
37	- S237 - Fuse 37 in fuse holder	15 A 5 A 10 A	- up to October 2001: J285 - Control unit with display in dash panel insert J503 - Control unit with display for radio and navigation system R - Radio, S-contact from November 2001: Engine management: Petrol Engine management: Diesel	30a 86s
38	- S238 - Fuse 38 in fuse holder	15 A	- E204 - Tank filler flap remote release switch J379 - Central locking and anti-theft alarm system control unit J386 - Driver door control unit J387 - Front passenger door control unit J388 - Rear left door control unit J389 - Rear right door control unit J398 - Rear lid remote release relay V155- Tank filler flap locking motor	30a
39	- S223 - Fuse 39 in fuse holder	15 A	- E3 - Hazard warning light switch J1 - Turn signal relay J567 - Gas discharge light control unit with headlight range control right J568 - Gas discharge light control unit with headlight range control right M5 - Front left turn signal bulb M6 - Rear left turn signal bulb M7 - Front right turn signal bulb M8 - Rear right turn signal bulb	30a

1.1.15 Fuses in fuse holder:

No.	Current Flow Diagram designation	Nominal value	Function/component	Terminal
40	- S240 - Fuse 40 in fuse holder	20 A	- H1 - Dual tone horn	30a
41	- S241 - Fuse 41 in fuse holder	15 A	- up to November 2005: U1-Cigarette lighter	30a
42	- S242 - Fuse 42 in fuse holder	25 A	- R - Radio R12 - Amplifier J503 - Control unit with display for radio and navigation system J415 - Navigation system tuner for TV J559 - Traffic information control unit	30a
43	- S243 - Fuse 43 in fuse holder	10 A	- Engine management	87
44	- S244 - Fuse 44 on fuse holder	15 A	- J131 -Heated driver seat control unit J132 -Heated front passenger seat control unit	30a

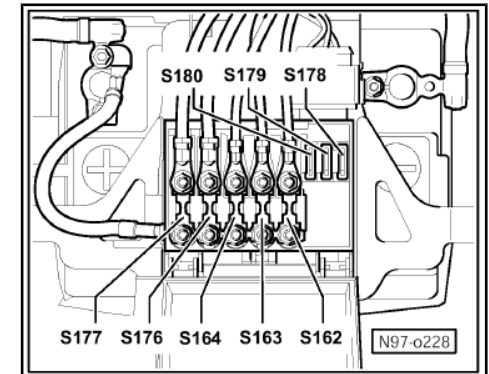
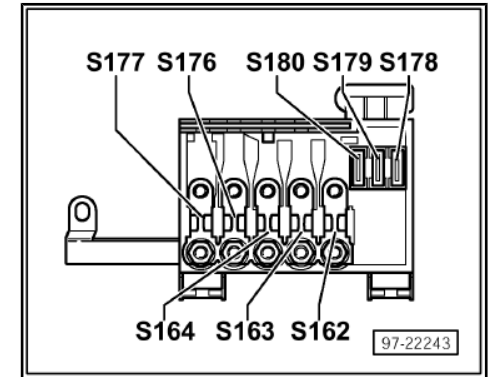


1.1.16 Position of fuses in fuse holder/battery (up to August 2000):

- S162 - Heated pin heating 50 A
- S163 - Engine management 50 A
- S164 - Radiator fan 40 A
- S176 - Interior 110 A
- S177 - Alternator (90 A), 110 A
- Alternator (120 A), 150 A
- S178 - ABS (pump) 30 A
- S179 - ABS 30 A
- S180 - Radiator fan 30 A

1.1.17 Position of fuses in fuse holder/battery (from September 2000):

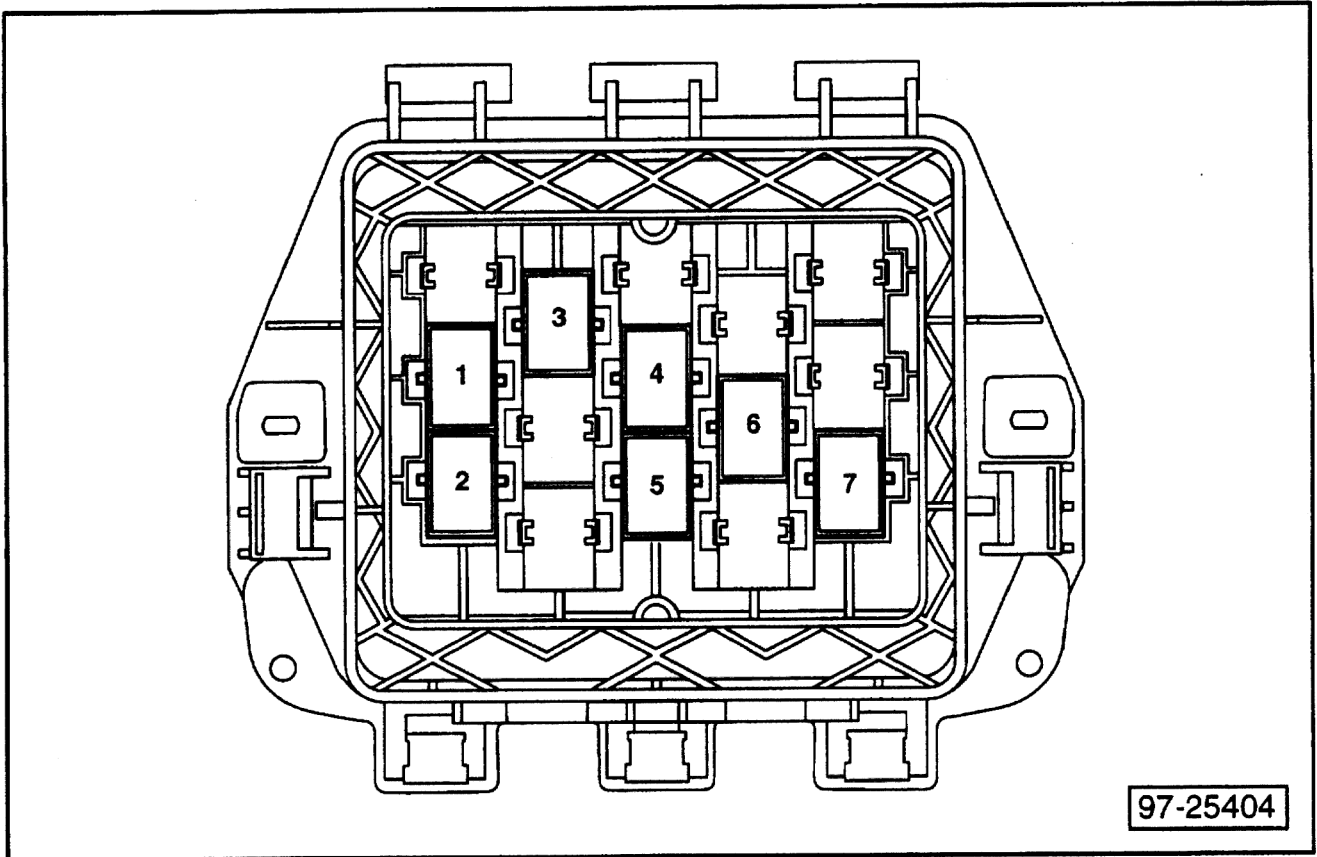
- S162 - Heated pin heating 50 A
- S163 - Engine management 50 A
- S164 - Radiator fan 40 A
- S176 - Interior 110 A
- S177 - Alternator (90 A), 110 A
- Alternator (120 A), 150 A
- S178 - ABS (pump) 30 A
- S179 - ABS 30 A
- S180 - Radiator fan 30 A



Wiring harness coupling stations

- Coupling station in protective housing in plenum chamber2/2
- Coupling stations on left and right-hand A-pillars2/3
- Coupling station on left-hand C-pillar, Golf2/3
- Coupling station on left-hand C-pillar, Bora2/4
- Coupling station on tailgate, Golf estate/Bora estate.....2/4
- Coupling station on right-hand D-pillar, Golf estate/Bora estate.....2/4

Coupling station in protective housing on left in plenum chamber



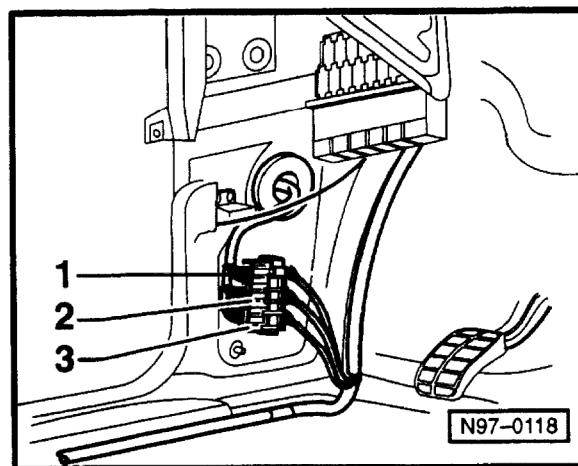
Pos.	Function	Connector colour
1	- Mapped cooling	Green
2	- Idling switch, kick-down switch, accelerator pedal position sender, voltage supply relay	Blue
3	- Starter, reversing lights, engine control unit voltage supply	Brown
4	- Air conditioner, immobilizer/diagnosis, dash panel insert	Orange
5	- Cruise control system	Black
6	- Alternator, data bus wire	White
7	- Automatic gearbox	Grey

Assignment for A-pillar coupling stations

Lower left-hand A-pillar coupling station

The wire routing on the right-hand A-pillar is a mirror image!

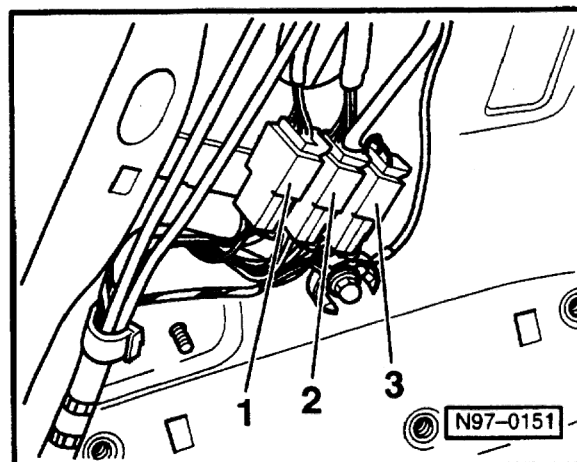
- | | |
|--------------------------------|-------|
| 1 - Central locking | Brown |
| 2 - Electric mirror adjustment | Blue |
| 3 - Radio/electric windows | Black |



Assignment for C-pillar coupling station

Left-hand C-pillar coupling station

- | | |
|--|-------|
| 1 - Rear window heating,
additional brake light | Black |
| 2 - Rear window wiper | Pink |
| 3 - Central locking | Brown |

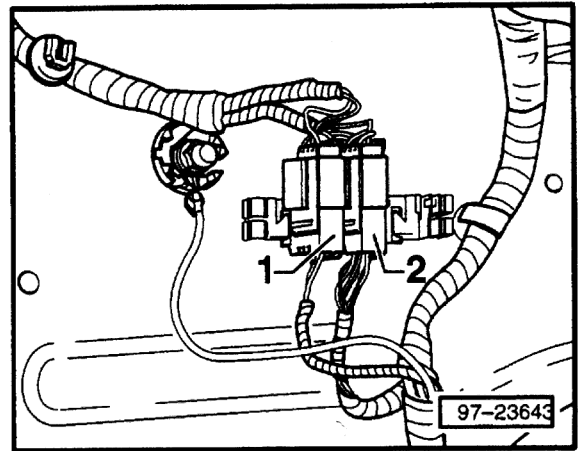


Assignment for C-pillar coupling station, Bora

Left-hand C-pillar coupling station

The wire routing on the right-hand A-pillar is a mirror image!

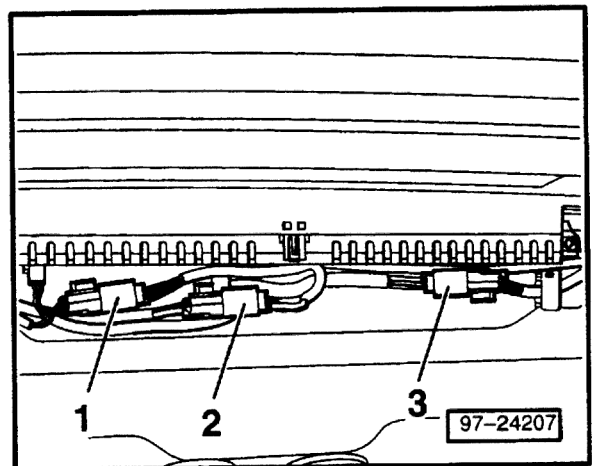
- 1 - Rear window heating, additional brake light Black
- 2 - Central locking Brown



Assignment for tailgate coupling station, Golf estate/Bora estate

Tailgate coupling station

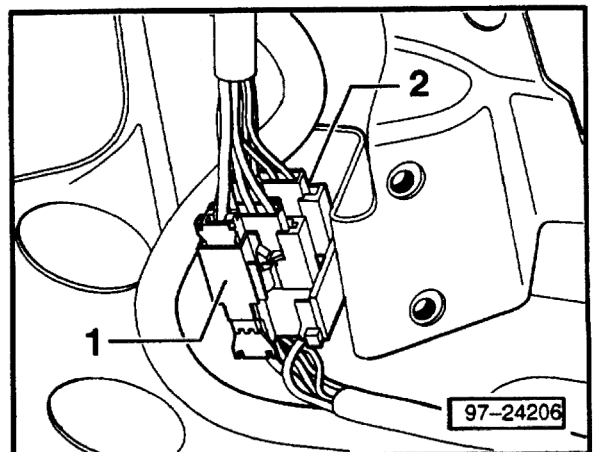
- 1 - Rear window heating, additional brake light Black
- 2 - Rear window wiper Pink
- 3 - Central locking Brown



Assignment for D-pillar coupling station, Golf estate/Bora estate

Right-hand D-pillar coupling station

- 1 - Rear window wiper Pink
- 2 - Central locking, tailgate remote release Brown

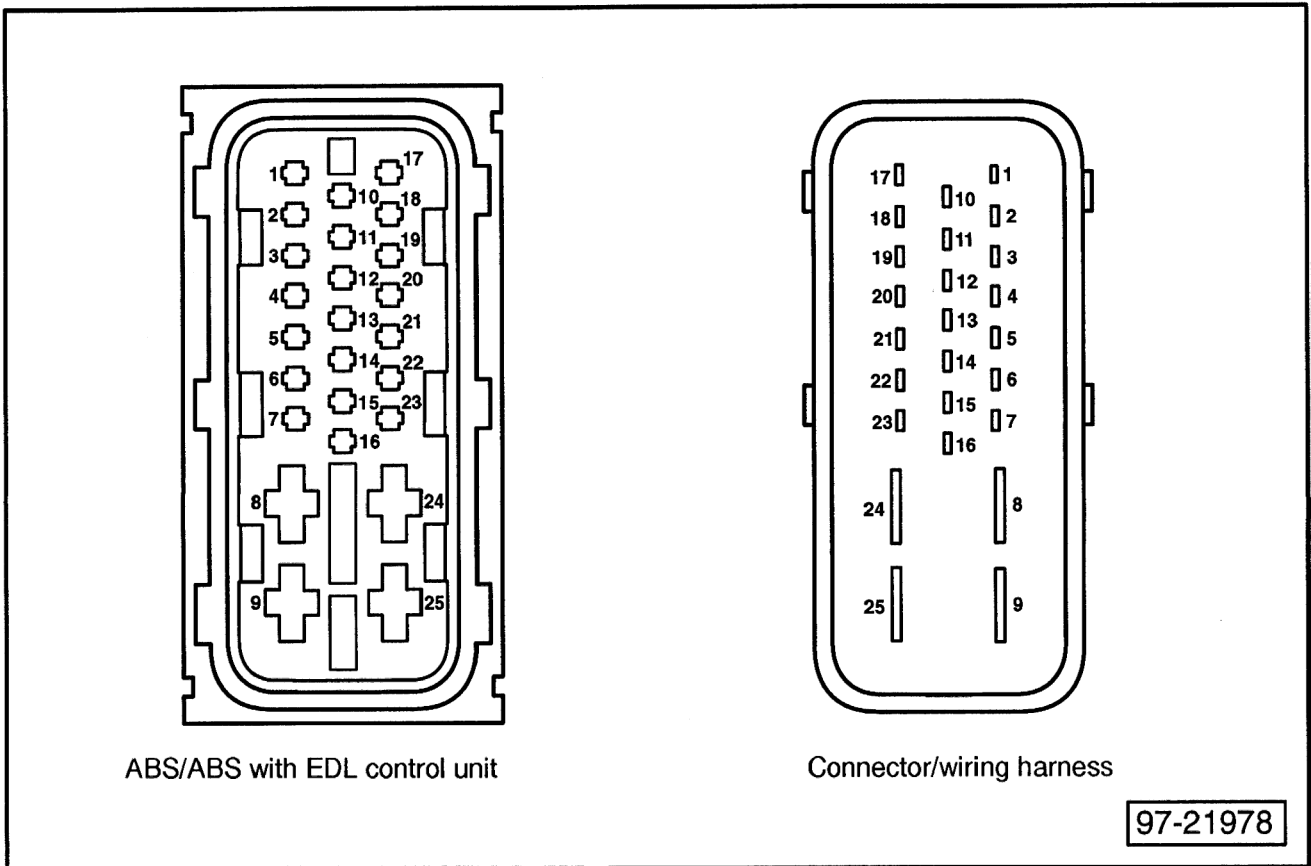


Control units and relays

- Control unit for ABS/ABS with EDL.....3/2
- Central control unit for convenience system/control unit for central locking and anti-theft alarm system.....3/3
- Control unit for sliding sunroof adjustment3/3
- Control unit for Climatronic3/4
- Door control unit for electric windows, driver's and front passenger's sides3/5
- Door control unit for electric windows, rear left and rear right.....3/6
- Control unit for radiator fan, 2 speed with fan run-on.....3/7
- Operating and control unit for heater with mapped cooling.....3/8

Control unit for ABS/ABS with EDL

Location: In engine compartment, left

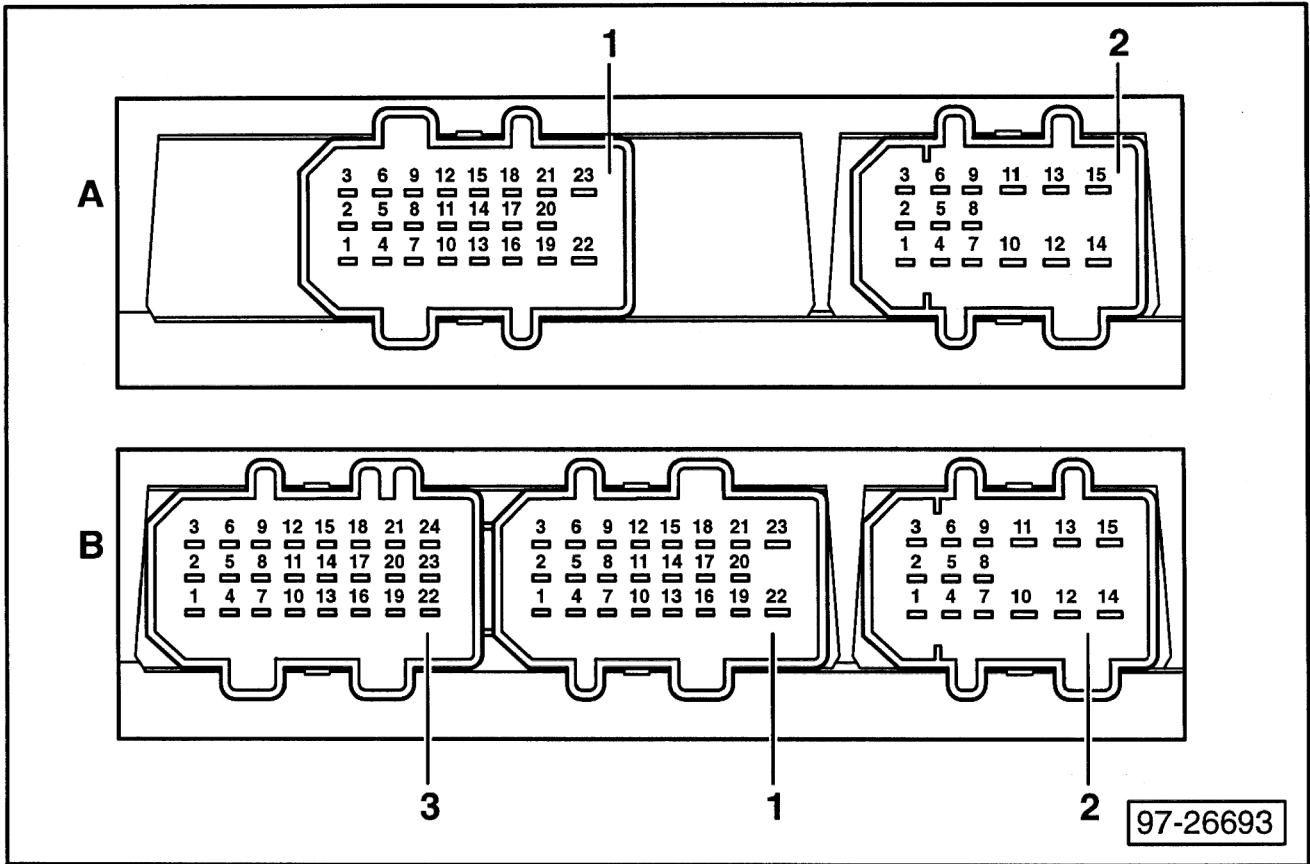


Multi-pin connector:

T25 - 25-pin connector

Central control unit for convenience system/control unit for central locking and anti-theft alarm system

Location: On left behind dash panel



Connector assignment:

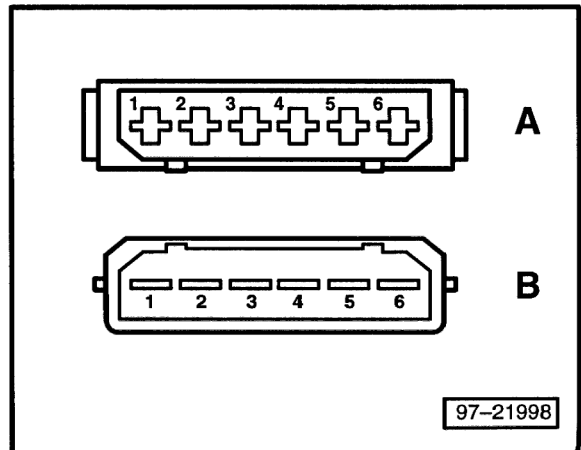
(A) central control unit for convenience system, **(B)** control unit for central locking and anti-theft alarm system

- 1 = T23 23-pin multi-pin connector
- 2 = T15 15-pin multi-pin connector, vehicles with anti-theft alarm system only
- 3 = T24 24-pin multi-pin connector

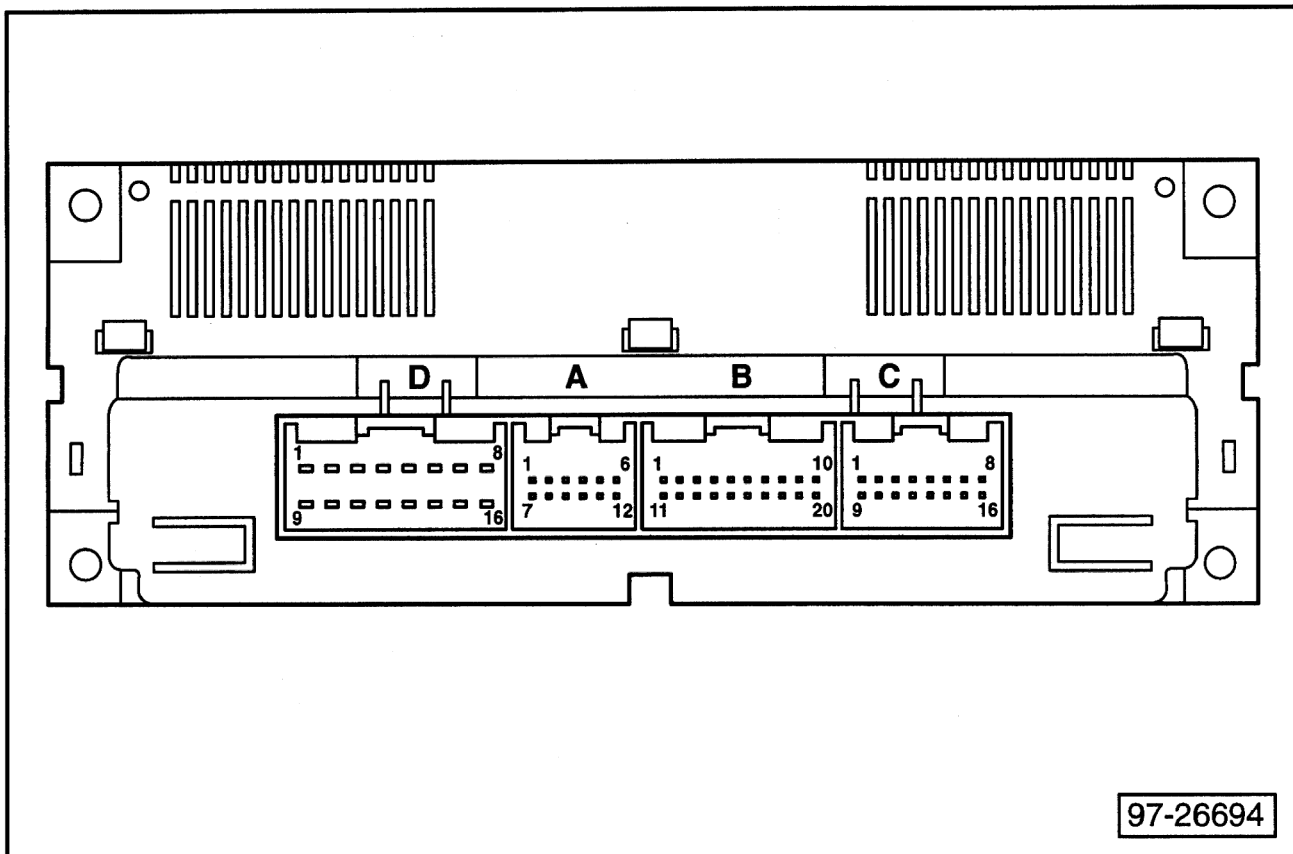
Control unit for sliding sunroof adjustment

Location: Behind the front interior light

- A - Connector/wiring harness
- B - Control unit



Control unit for Climatronic

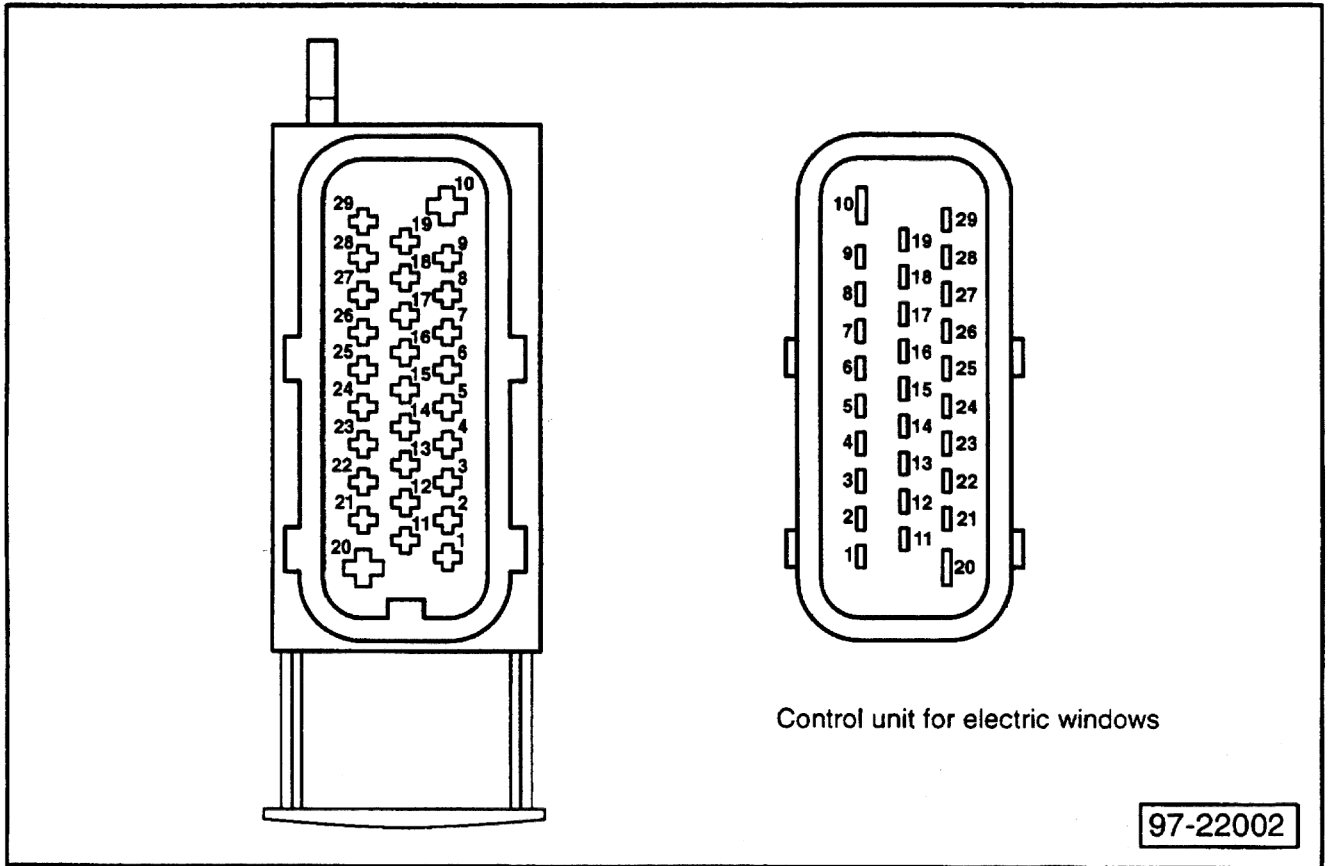


Connector assignment:

- A = T12 - 12-pin multi-pin connector
- B = T20 - 20-pin multi-pin connector
- C = T16b - 16-pin multi-pin connector
- D = T16a - 16-pin multi-pin connector

Door control unit for driver's and front passenger's sides

Location: On the control/motor unit for electric windows in the doors on driver's and front passenger's sides

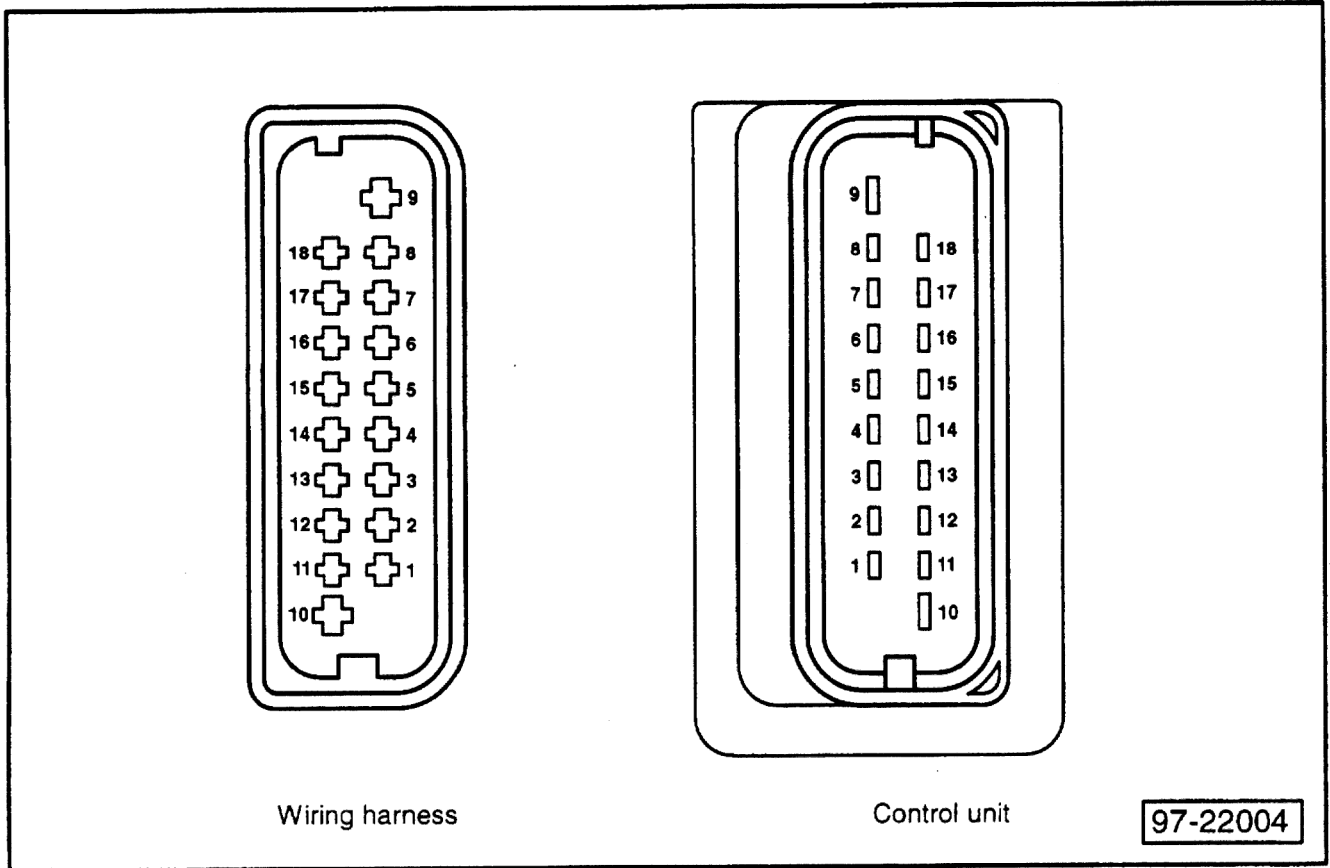


Multi-pin connector:

- T29 - 29-pin connector
- T29a - 29-pin connector

Door control unit rear left and rear right

Location: On the control/motor unit for electric windows in the doors on rear left and rear right

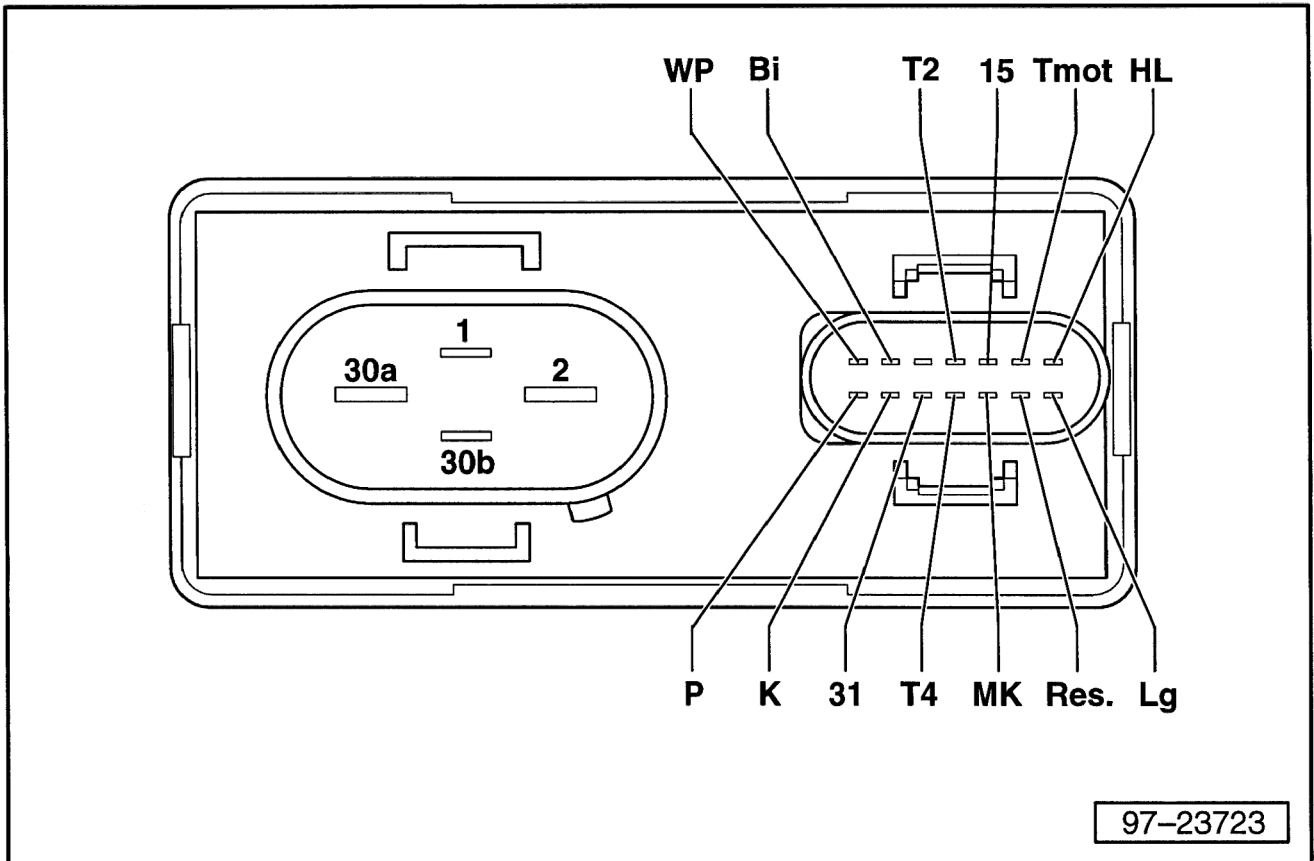


Multi-pin connector:

- T18a - 18-pin connector
- T18b - 18-pin connector

Control unit for radiator fan, 2-speed with fan run-on

Location: Front left in engine compartment

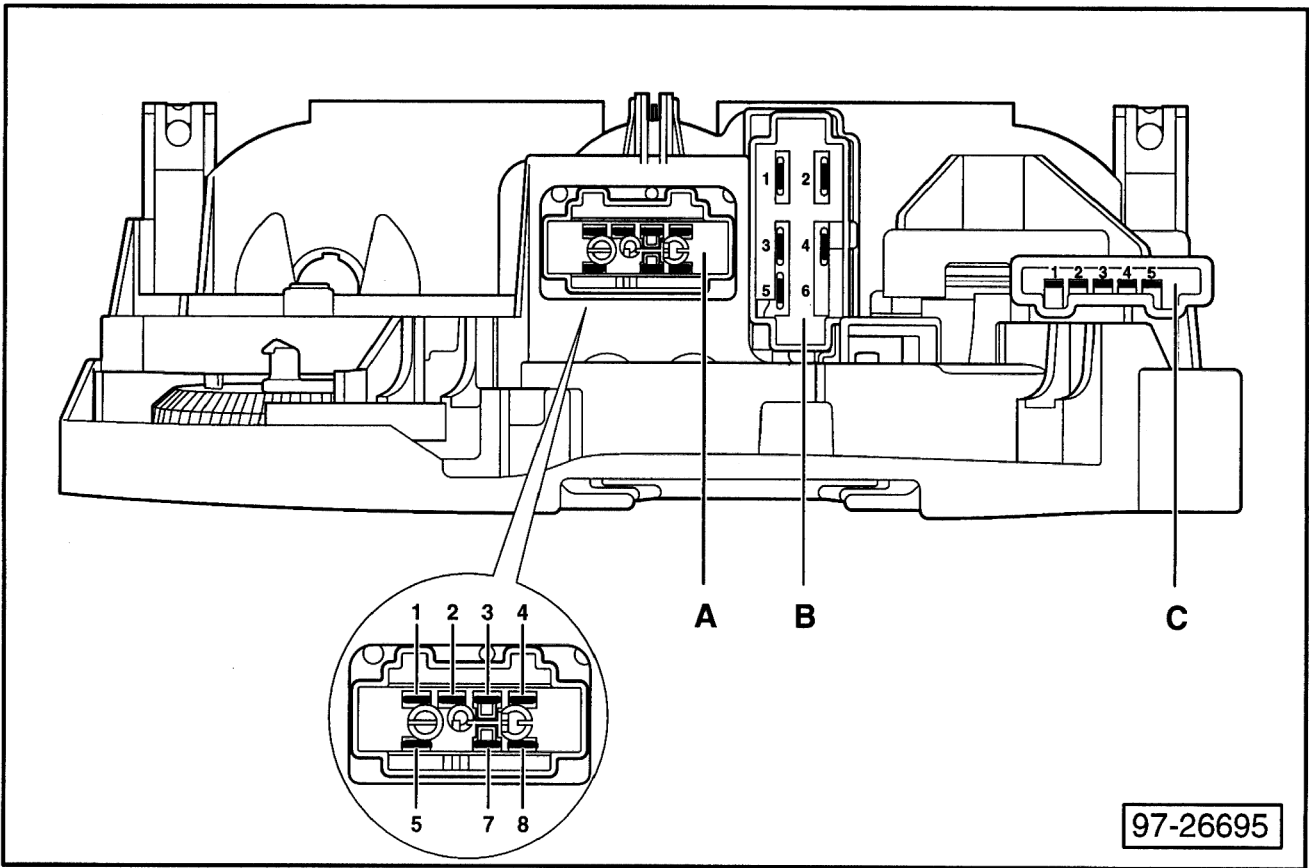


Multi-pin connector:

T4 - 4-pin connector

T14 - 14-pin connector

Operating and control unit for heater with mapped cooling



Connector assignment:

- A = T8b - 8-pin multi-pin connector
- B = T6d - 6-pin multi-pin connector
- C = T5 - 5-pin multi-pin connector

Multi-pin connectors

Note:

Multi-pin connectors on control units and relays ⇒ Fitting locations No. 3

Contents

Automatic gearbox:

- Solenoid valve and sender for gearbox oil temperature (G93) 4/2
- Sender for road speed (G68) 4/2
- Multi-function switch (F125) 4/3

Self-diagnosis

- 16-pin connector, in centre of dash panel 4/3

Lights, lamps, switches - interior, anti-theft alarm:

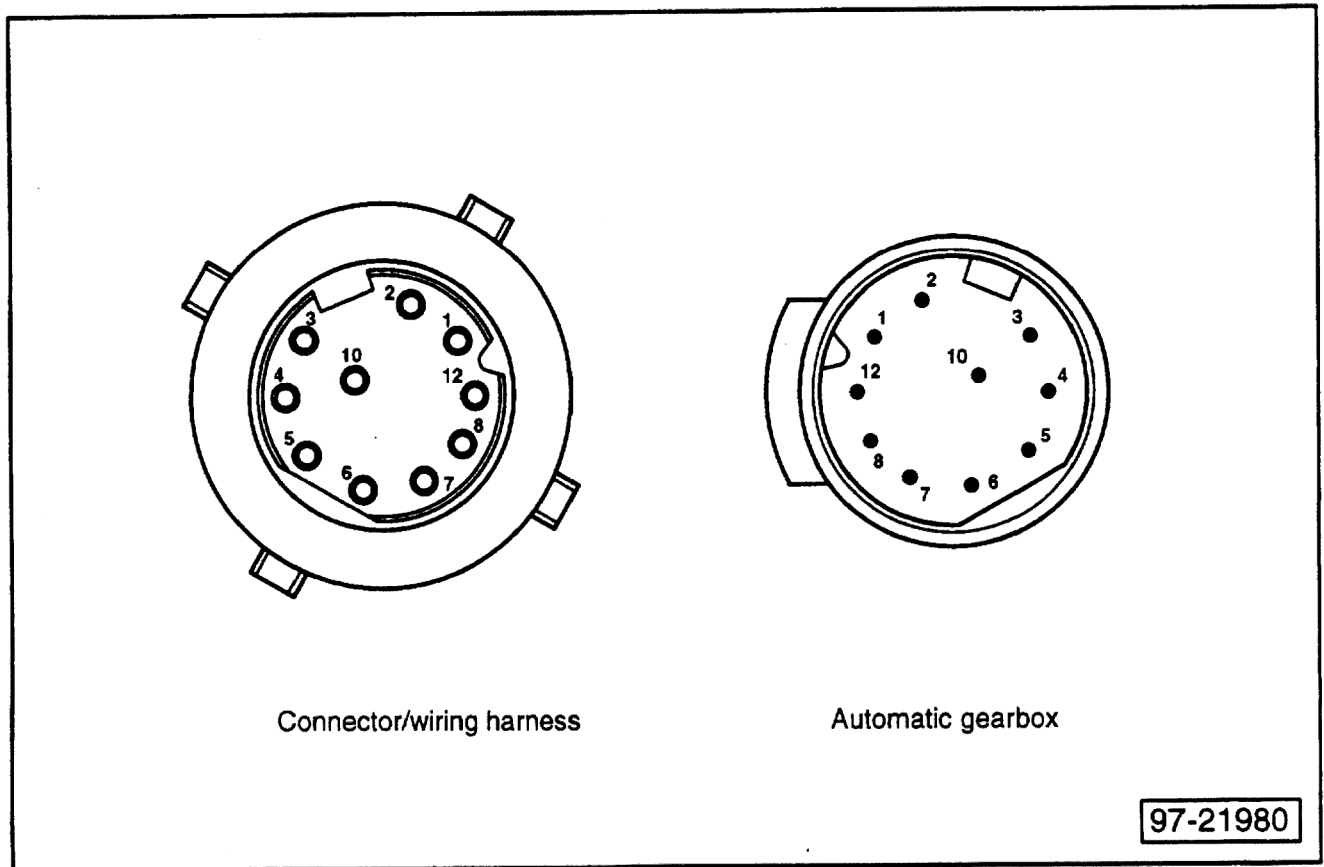
- Adjuster for headlight range control (E102) and adjuster for switches and instruments illumination (E20) 4/3
- Lighting switch (E1) 4/4
- Switch for mirror adjustment (E43) and change-over switch for mirror adjustment (E48) 4/4
- 12-pin connector, mirror adjustment and heating 4/5
- Switch for front right electric window (E41), switch for rear left electric window (E52) and switch for rear right electric window (E54) 4/5
- Convenience system with electric windows, operating unit for electric windows and central locking in the driver's door 4/6
- Regulator for sliding roof adjustment (E139) 4/6
- Switch for cruise control system (E45) and button for cruise control system (E227) 4/7

Wiring:

- 10-pin connector, in coupling station in protective housing on left in plenum chamber, in the coupling stations lower left and right A pillars and in the coupling stations in the B pillar on left and right 4/7
- 6-pin connector in the coupling station in protective housing on left in plenum chamber and under the driver's and front passenger's seats 4/8
- 5-pin connector, black, on the C pillar/rear lid 4/9
- 5-pin connector, pink, on the C pillar/rear lid/D pillar 4/9
- 5-pin connector, brown, on the C pillar/rear lid/D pillar 4/9

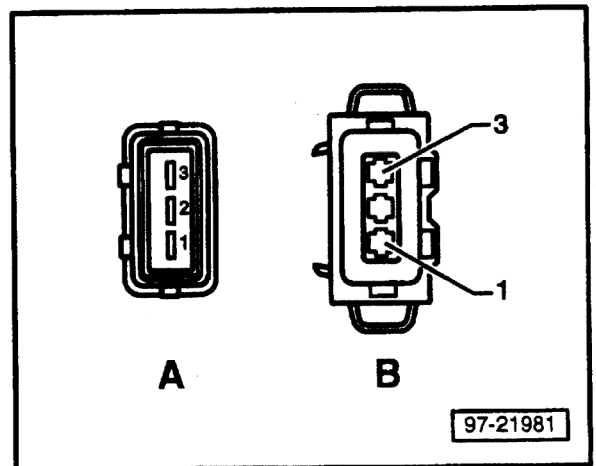
Automatic gearbox

Solenoid valve and sender for gearbox temperature (G93)

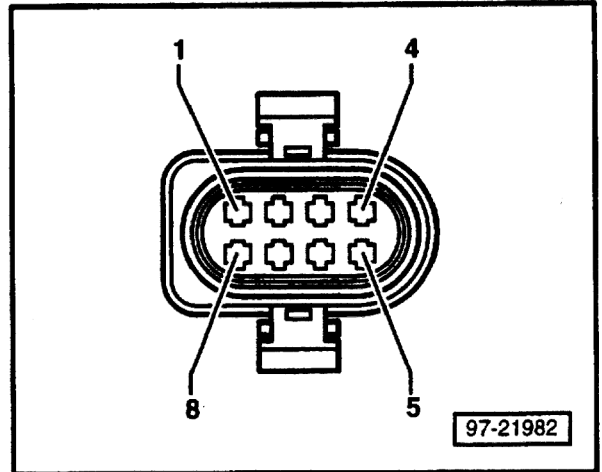


Road speed sender (G68)

- A - Road speed sender (G68)
- B - Connector/wiring loom



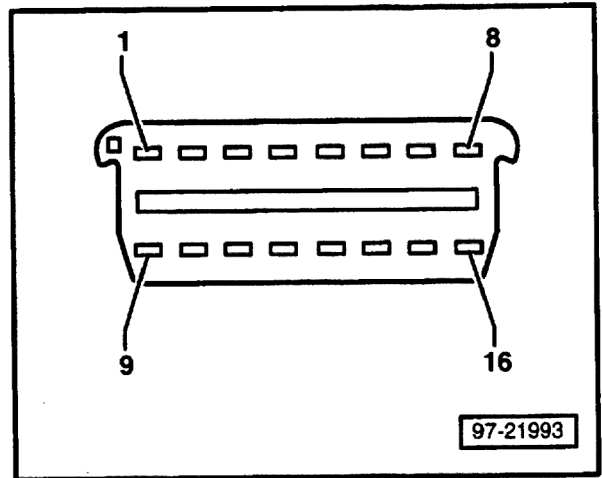
Multi-function switch (F125)



Self-diagnosis

16-pin connector

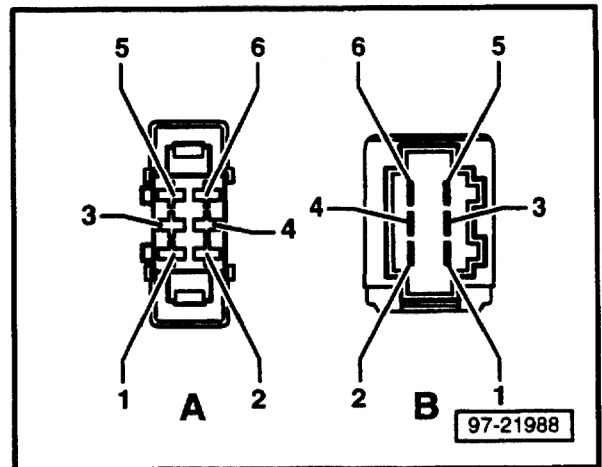
Fitting location: In centre of dash panel



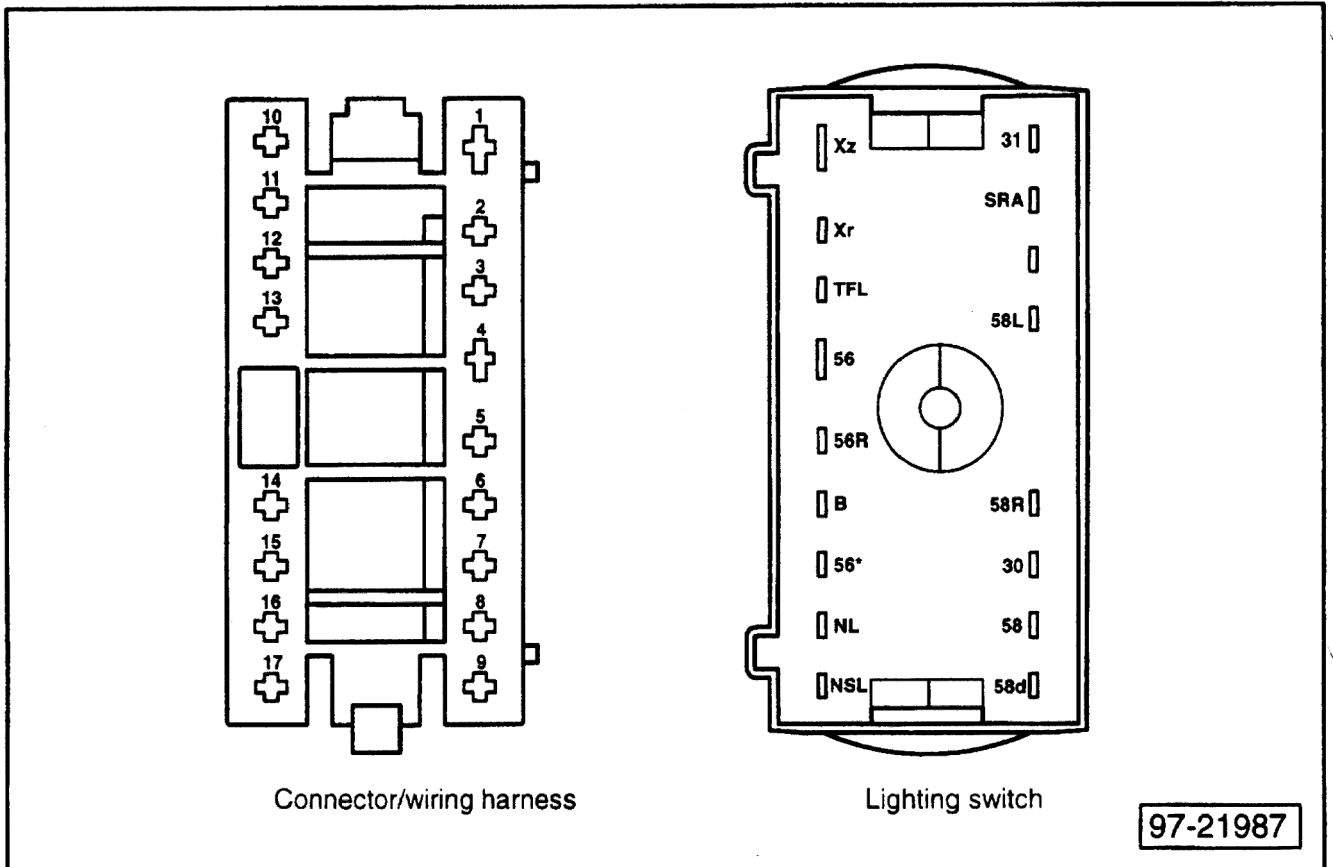
Lights, lamps, switches - interior, anti-theft alarm

Adjuster for headlight range control (E102) and switches and instruments lighting regulator (E20)

- A - Connector/wiring harness
- B - Adjuster for headlight range control (E102) and switches and instruments lighting regulator (E20)

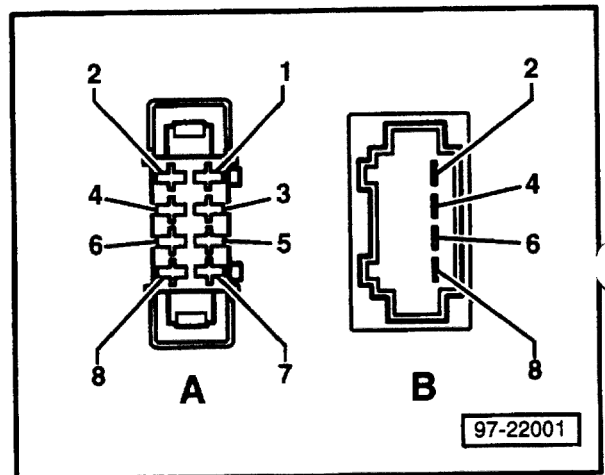


Lighting switch (E1)



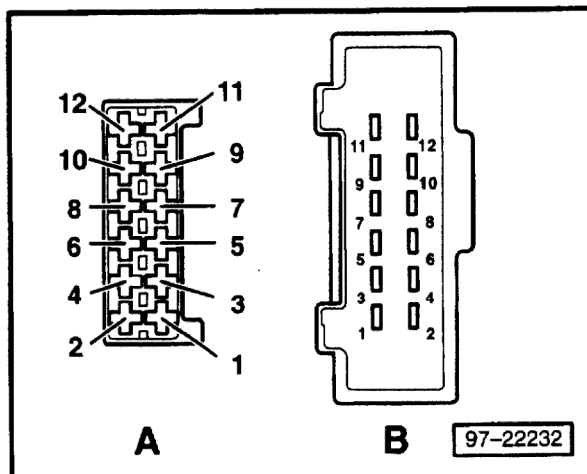
Switch for mirror adjustment (E43) and change-over switch mirror adjustment (E48)

- A - Connector/wiring harness
- B - Switch for mirror adjustment (E43) and change-over switch mirror adjustment (E48)



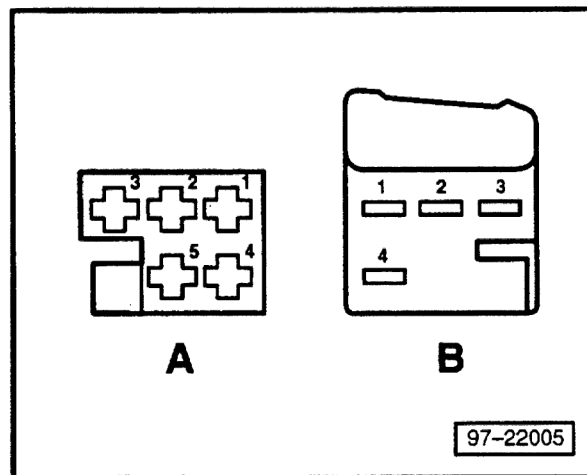
12-pin connector, mirror adjustment and heating
 Fitting location: In the driver's and front passenger's doors

- A - Connector/wiring harness
- B - Mirror adjustment and heating



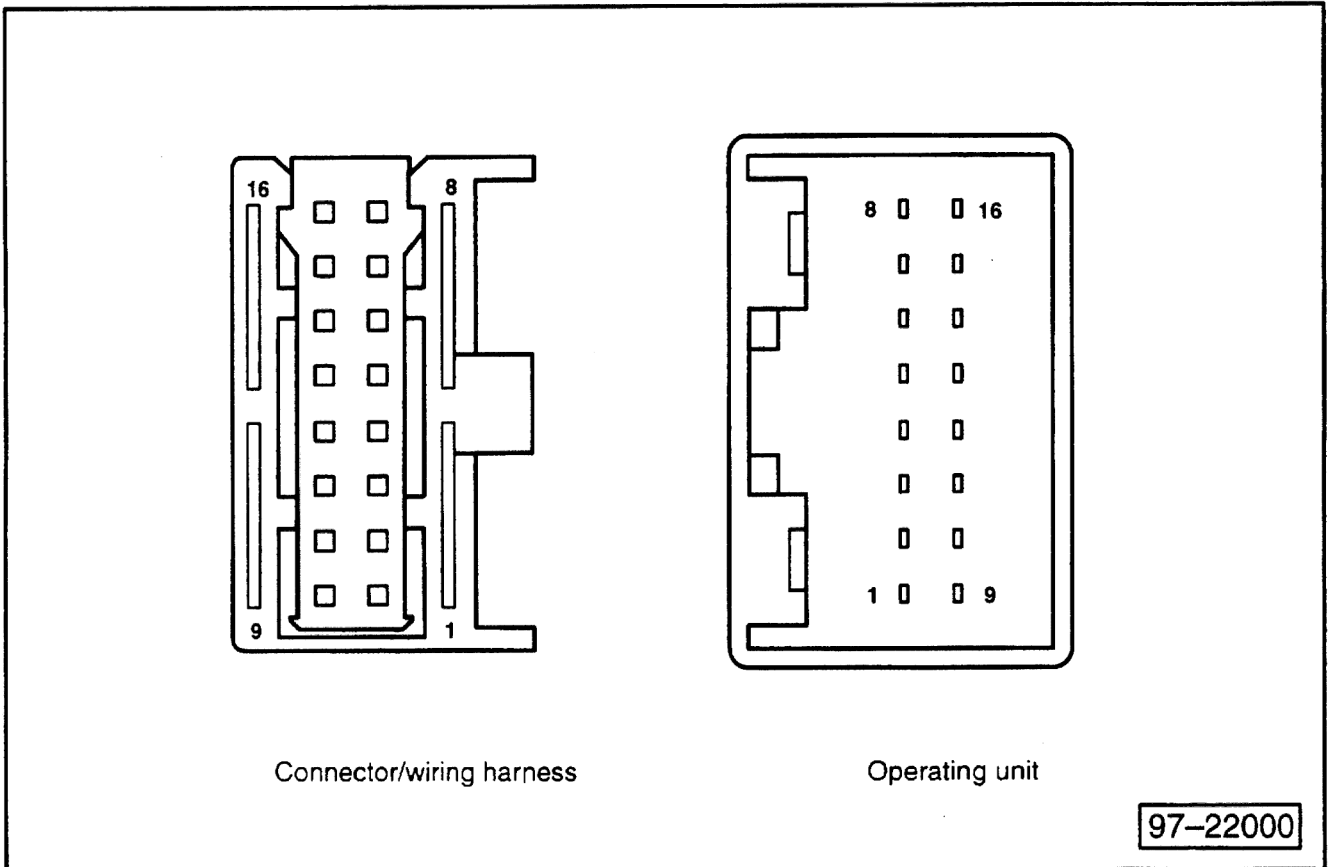
Front right electric window switch (E41), rear left electric window switch (E52), rear right electric window switch (E54)

- A - Connector/wiring harness
- B - Front right electric window switch (E41), rear left electric window switch (E52), rear right electric window switch (E54)



Convenience system with electric windows, electric window and central locking operating unit

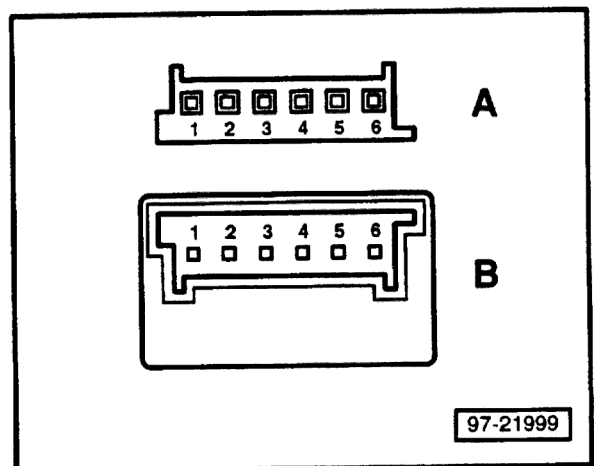
Fitting location: In the driver's door



Regulator for sliding roof adjustment (E139)

Fitting location: Near front interior light

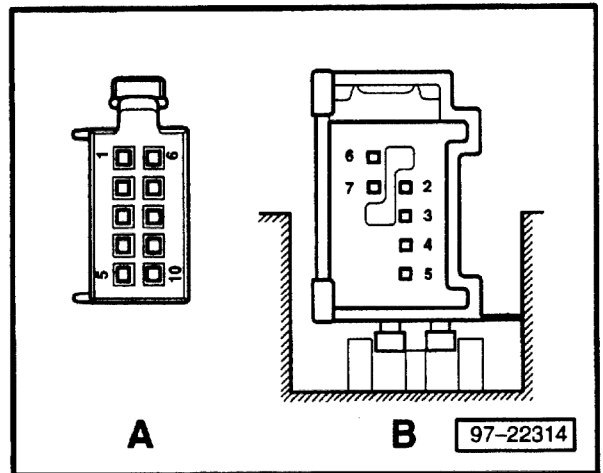
- A - Connector/wiring harness
- B - Regulator for sliding roof adjustment (E139)



Switch for cruise control system (E45) and button for cruise control system (E227)

Fitting location: Next to steering column

- A - Connector/wiring harness
- B - Switch for cruise control system (E45) and button for cruise control system (E227)



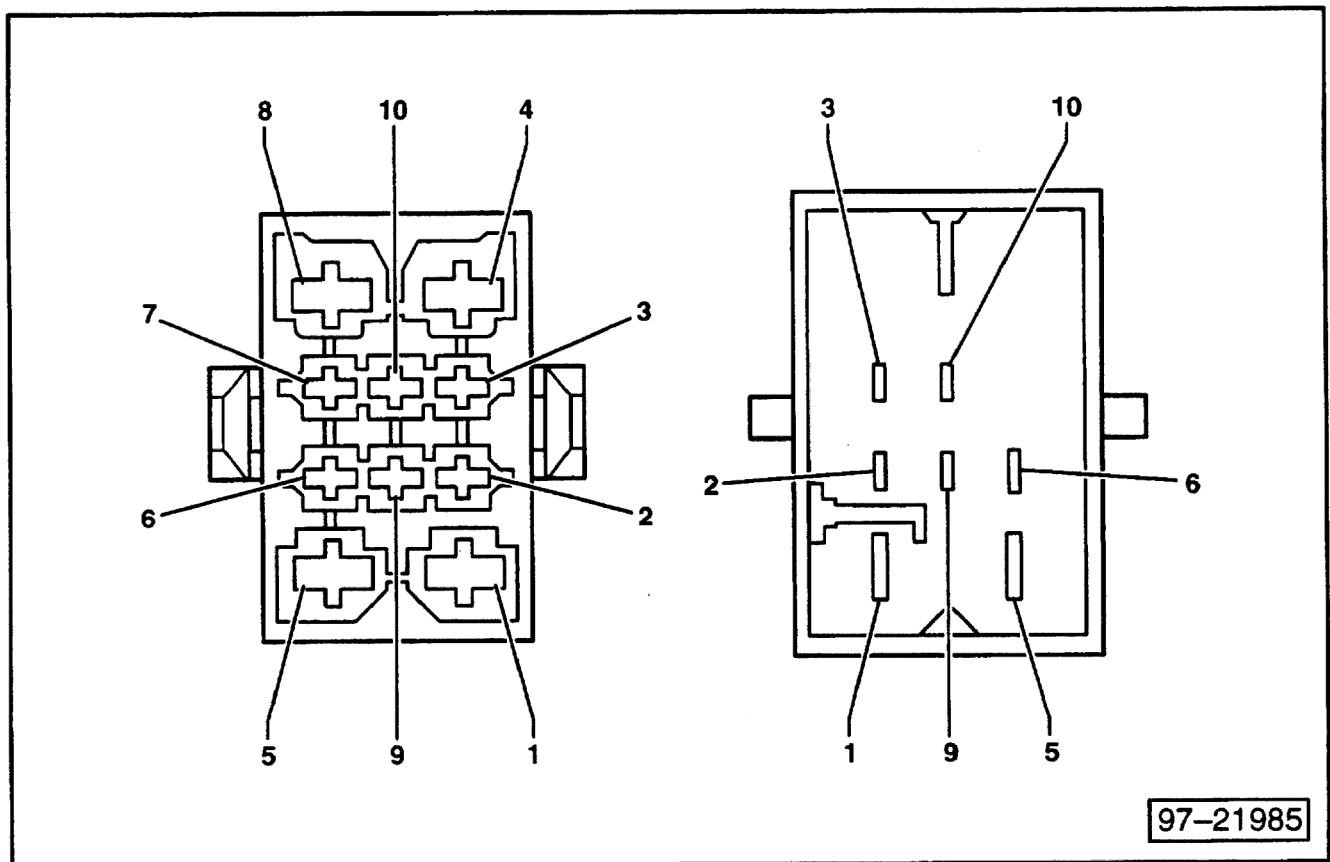
Wiring

10-pin connector

- ◆ Fitting location: Coupling station, in protective housing, on left in plenum chamber
- ◆ Fitting location: Coupling stations, lower left and right A pillars
- ◆ Fitting location: Coupling station, left and right B pillars

Note:

The pin numbering of the multi-pin connectors is the same, the multi-pin connectors differ only in the colour and the mechanical coding.

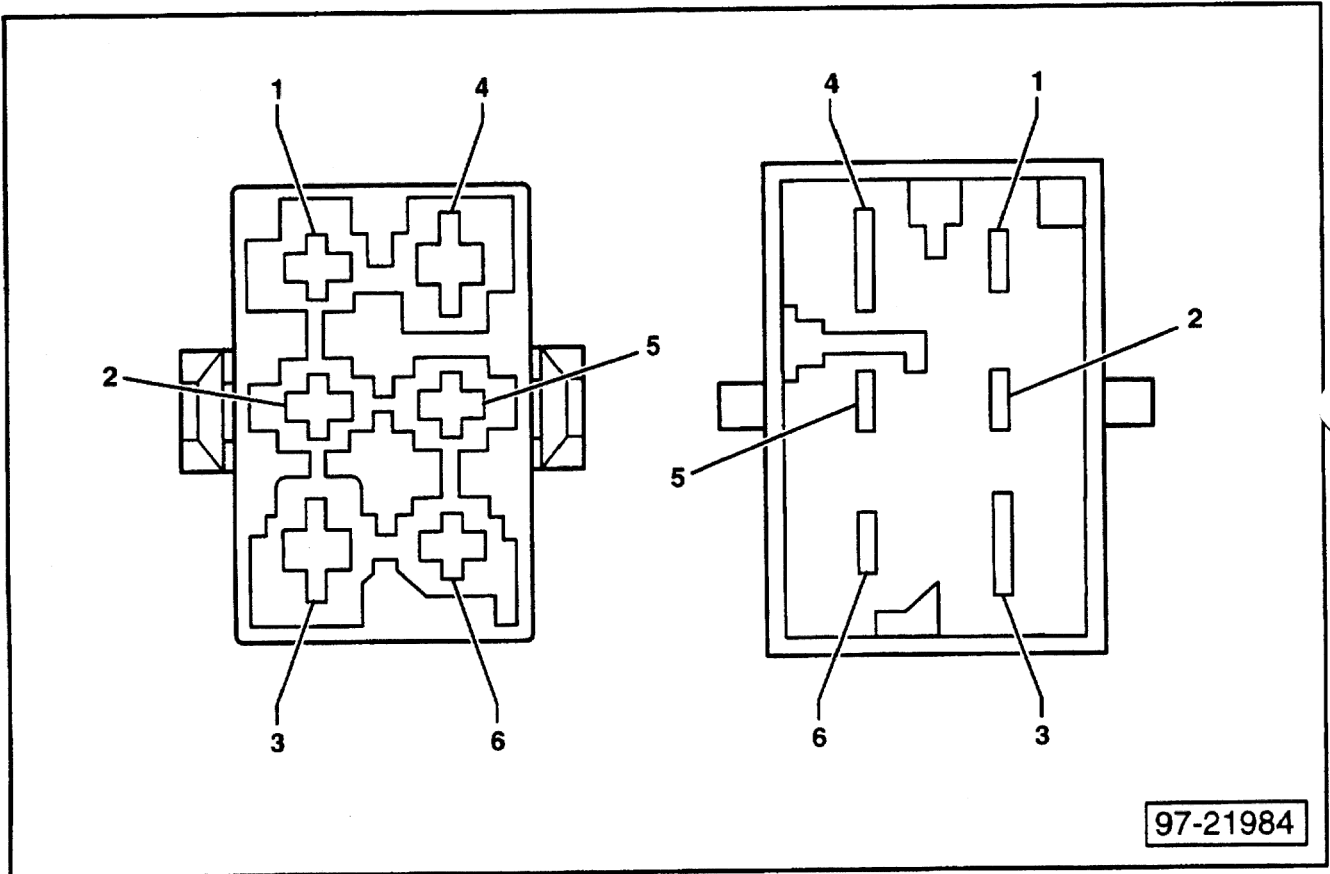


6-pin connector

- ◆ Fitting location: Coupling station, in protective housing, on left in plenum chamber
- ◆ Fitting location: Under driver's and front passenger's seats

Note:

The pin numbering of the multi-pin connectors is the same, the multi-pin connectors differ only in the colour and the mechanical coding.

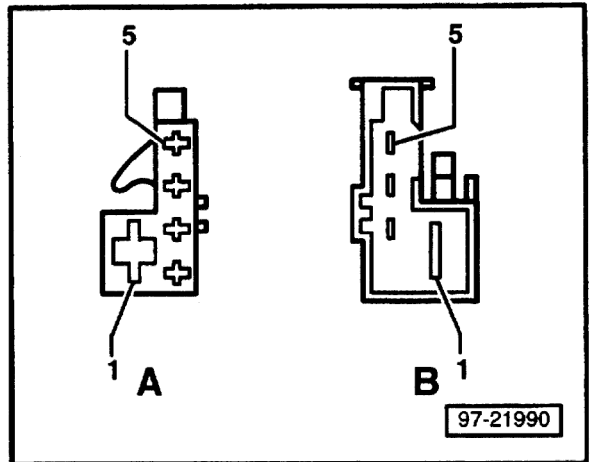


5-pin connector, black

Fitting location Golf/Bora: Coupling station, left C pillar

Fitting location Golf estate/Bora estate: Coupling station, rear lid

- A - Wiring harness interior
- B - Wiring harness rear lid



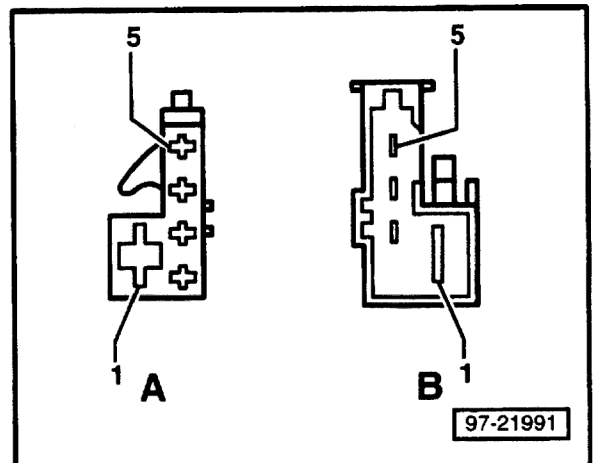
5-pin connector, pink

Fitting location Golf/Bora: Coupling station, left C pillar

Fitting location Golf estate/Bora estate: Coupling station, rear lid

Fitting location Golf estate/Bora estate: Coupling station, right D pillar

- A - Wiring harness interior
- B - Wiring harness rear lid



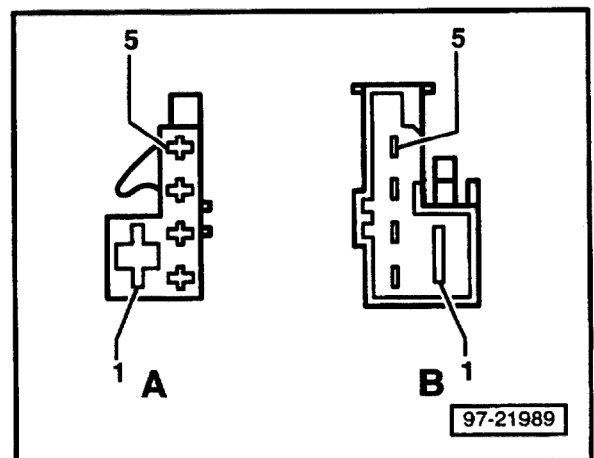
5-pin connector, brown

Fitting location Golf/Bora: Coupling station, left C pillar

Fitting location Golf estate/Bora estate: Coupling station, rear lid

Fitting location Golf estate/Bora estate: Coupling station, right D pillar

- A - Wiring harness interior
- B - Wiring harness rear lid



Battery discharges

(Voltage leakage suspected)

Test prerequisites:

- ◆ Battery tested ⇒ Workshop Manual Electrical System, Repair Group 27
- ◆ Battery charged ⇒ Workshop Manual Electrical System, Repair Group 27

Possible causes of this fault are:

- ◆ Oxidised and dirty contacts
- ◆ Abraded wiring
- ◆ Internal short in assemblies

Equipment required for fault finding:

- ◆ Multimeter V.A.G 1526 A
- ◆ Adapter set V.A.G 1594 A
- ◆ Valid Current Flow Diagram

Note:

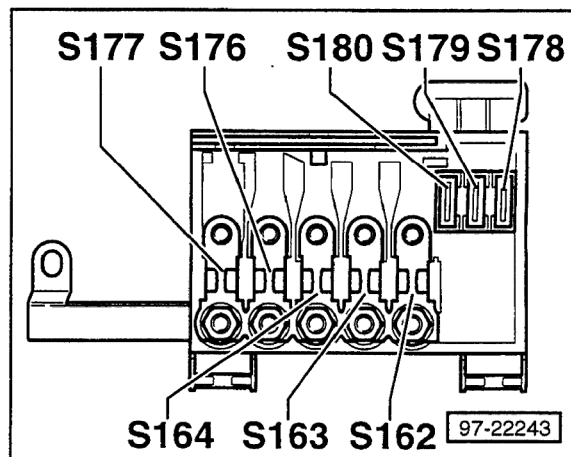
When measuring the battery discharge current ensure that no run-on functions are active (e.g. continued coolant circulation pump, radiator fan run-on etc.).

Before disconnecting the battery obtain the radio code for coded radios. When the battery is reconnected vehicle equipment (radio, clock, electric windows etc.) must be checked according to the workshop manual and/or the owner's manual.

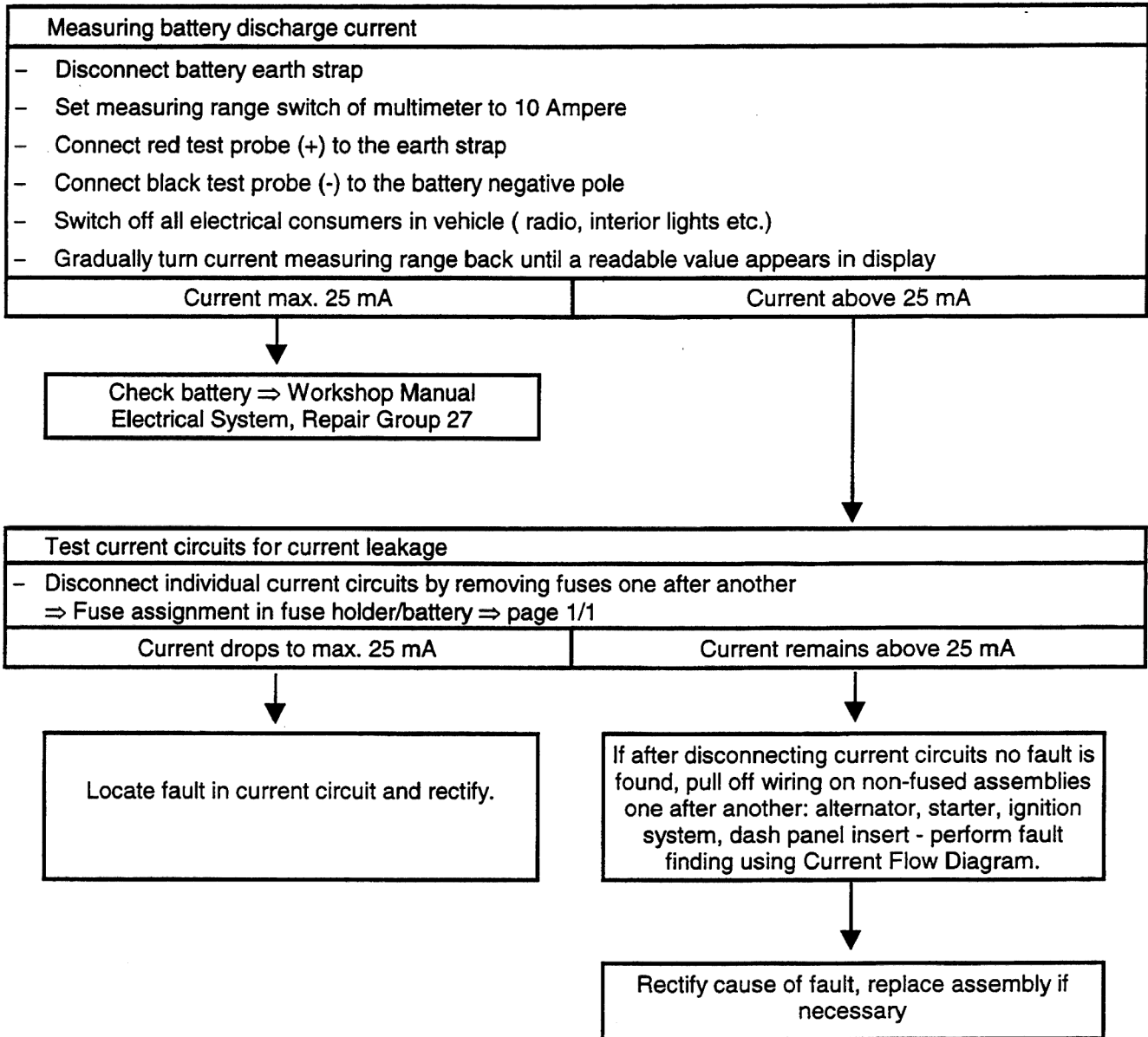
Fuse assignment in fuse holder/battery

Fuse assignment:

S162	- Glow pin heating	50 A
S163	- Engine management	50 A
S164	- Radiator fan	40 A
S176	- Interior	110 A
S177	- Alternator (90 A)	110 A
	- Alternator (120 A)	150 A
S178	- ABS (pump)	30 A
S179	- ABS	30 A
S180	- Radiator fan	30 A



The Fault finding programme starts on the next page!



Starter motor does not turn

Note:

For vehicles fitted with an automatic gearbox ⇒ additional current flow diagram for automatic gearbox.

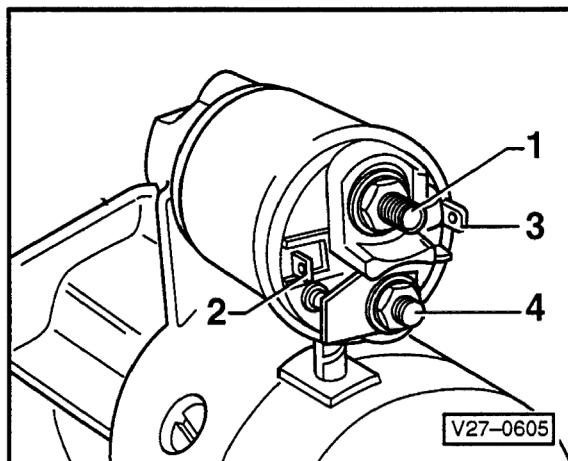
Test prerequisites:

- ◆ Battery tested ⇒ Workshop Manual Electrical System, Repair Group 27
- ◆ Battery charged ⇒ Workshop Manual Electrical System, Repair Group 27
- ◆ Fuse S176 (110A) in fuse holder/battery OK!
- ◆ Wiring connections on solenoid switch and earth strap between engine, body and battery must be tight and must not be oxidised
- ◆ On vehicles fitted with an automatic gearbox, place selector lever in "P" or "N" position!

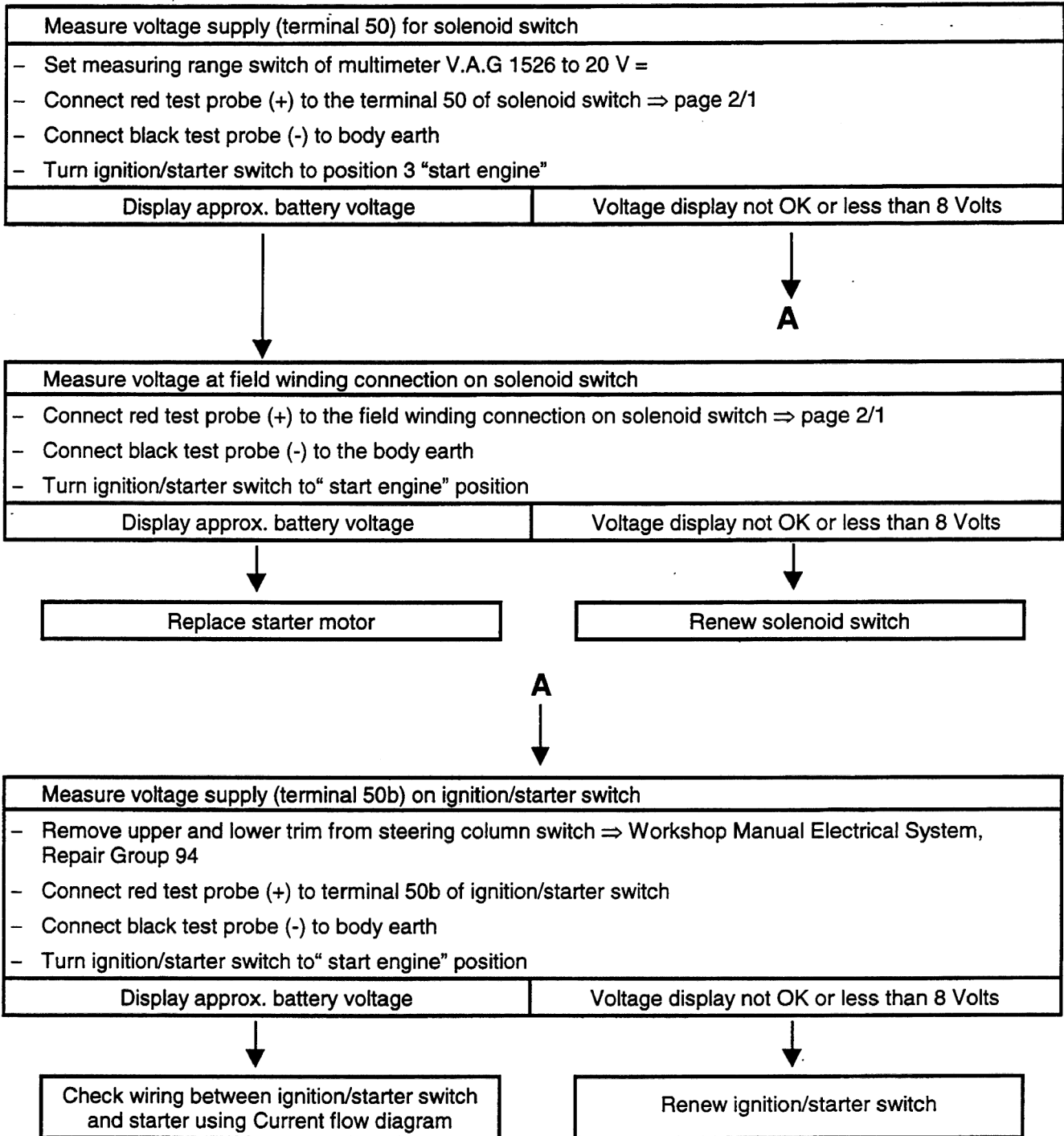
Equipment required for fault finding:

- ◆ Multimeter V.A.G 1526 A
- ◆ Adapter set V.A.G 1594 A
- ◆ Valid Current Flow Diagram

- 1 - Terminal 30 from battery
- 2 - Terminal 50 from ignition/starter switch
- 3 - Terminal 15a
- 4 - Connection for field winding



The Fault finding programme starts on the next page!

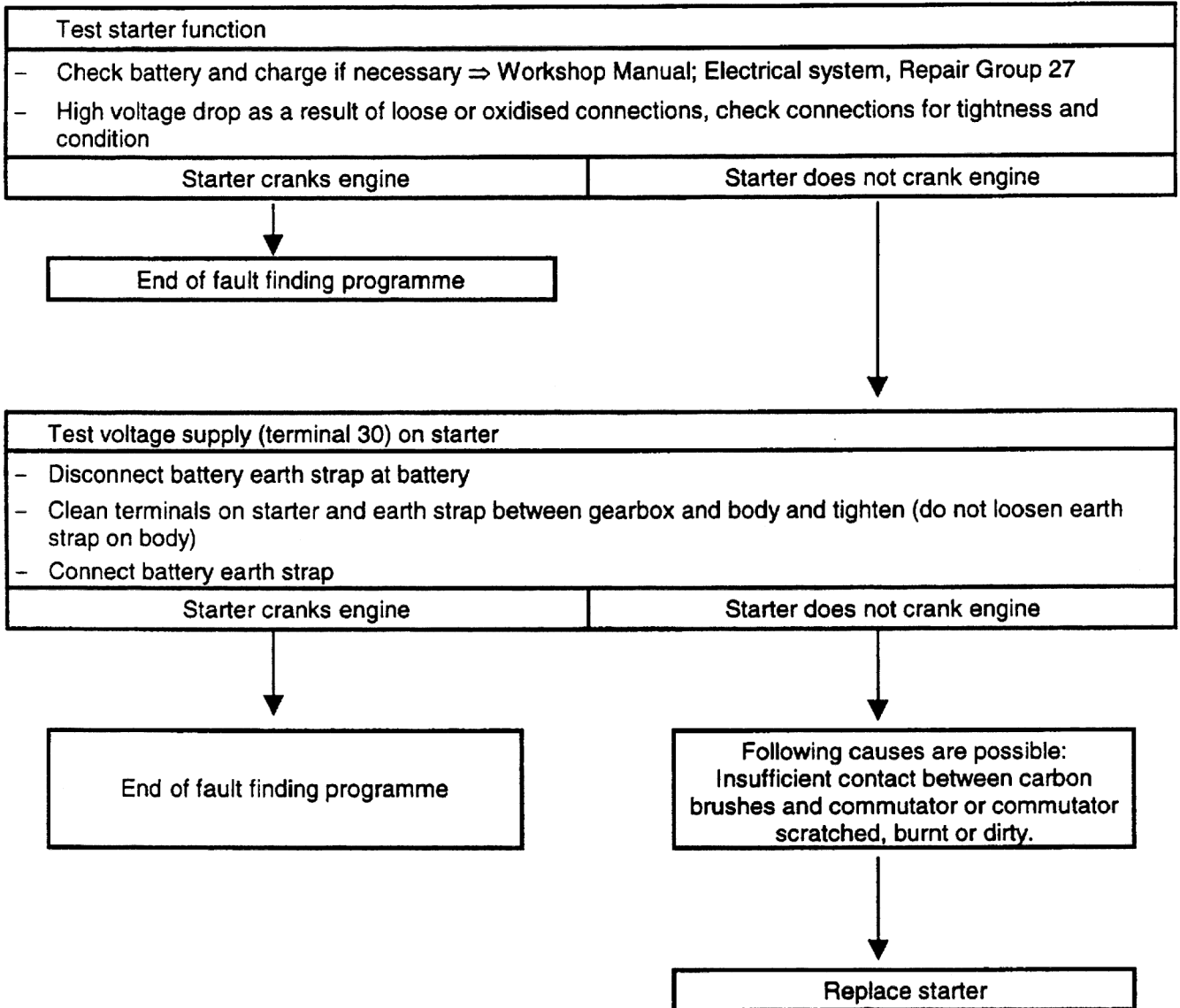


End of Fault finding programme

Starter motor turns too slowly and does not crank engine.

Test prerequisites:

- ◆ V-belt tension OK.!
- ◆ Battery voltage OK.!



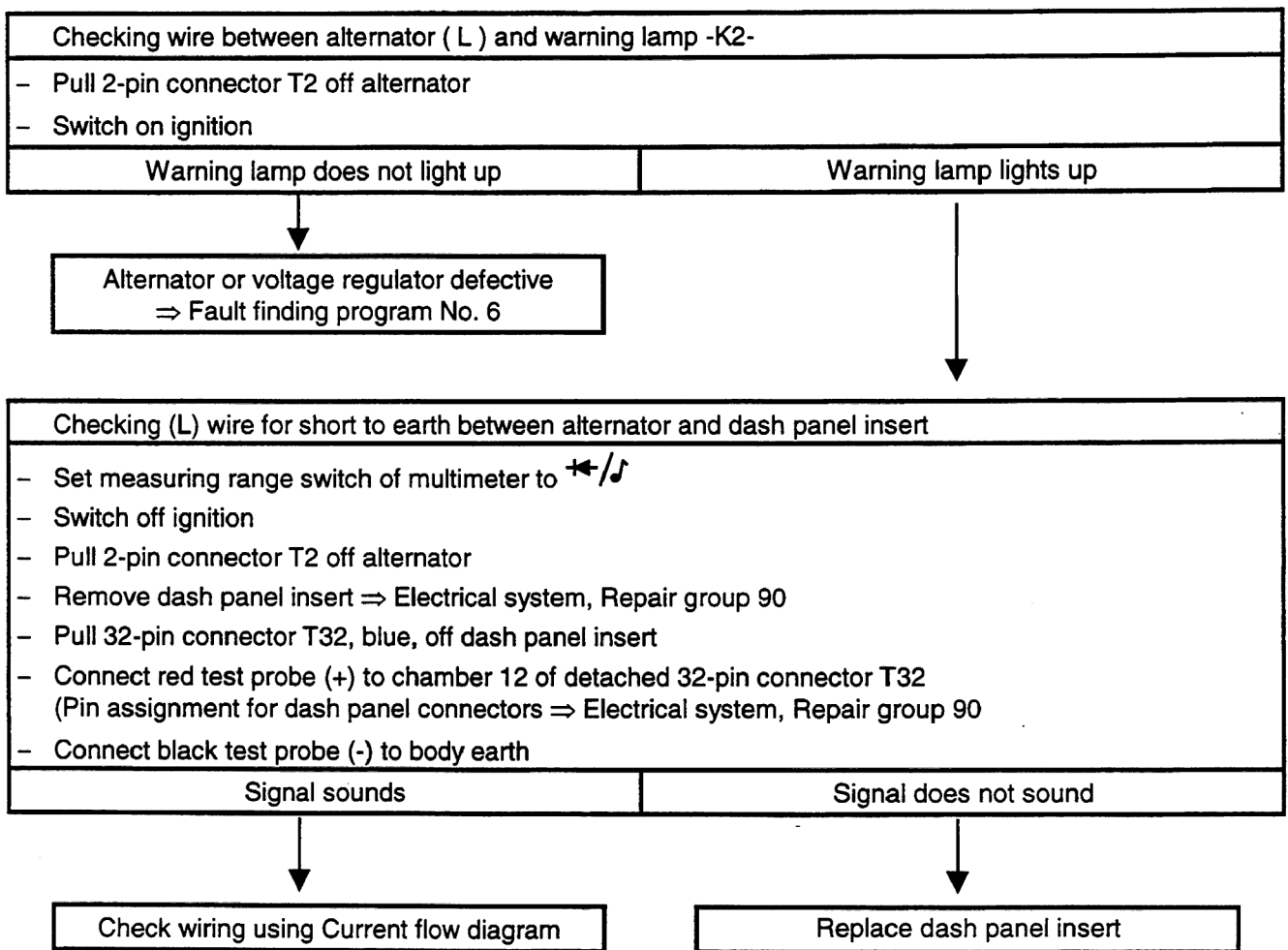
Alternator warning lamp does not go out as speed increases

Equipment required for fault finding:

- ◆ Multimeter V.A.G 1526 A
- ◆ Adapter set V.A.G 1594 A
- ◆ Valid Current Flow Diagram
- ◆ Workshop Manual Electrical system

Note:

New compact alternators with a modified shape and different terminal designations will be introduced from model year 2001. The push on connector for the D+ wire is marked with L and the push on connector for the W wire is marked with DFM!



End of Fault finding programme

Alternator warning lamp does not light up when ignition is switched on

Test prerequisites:

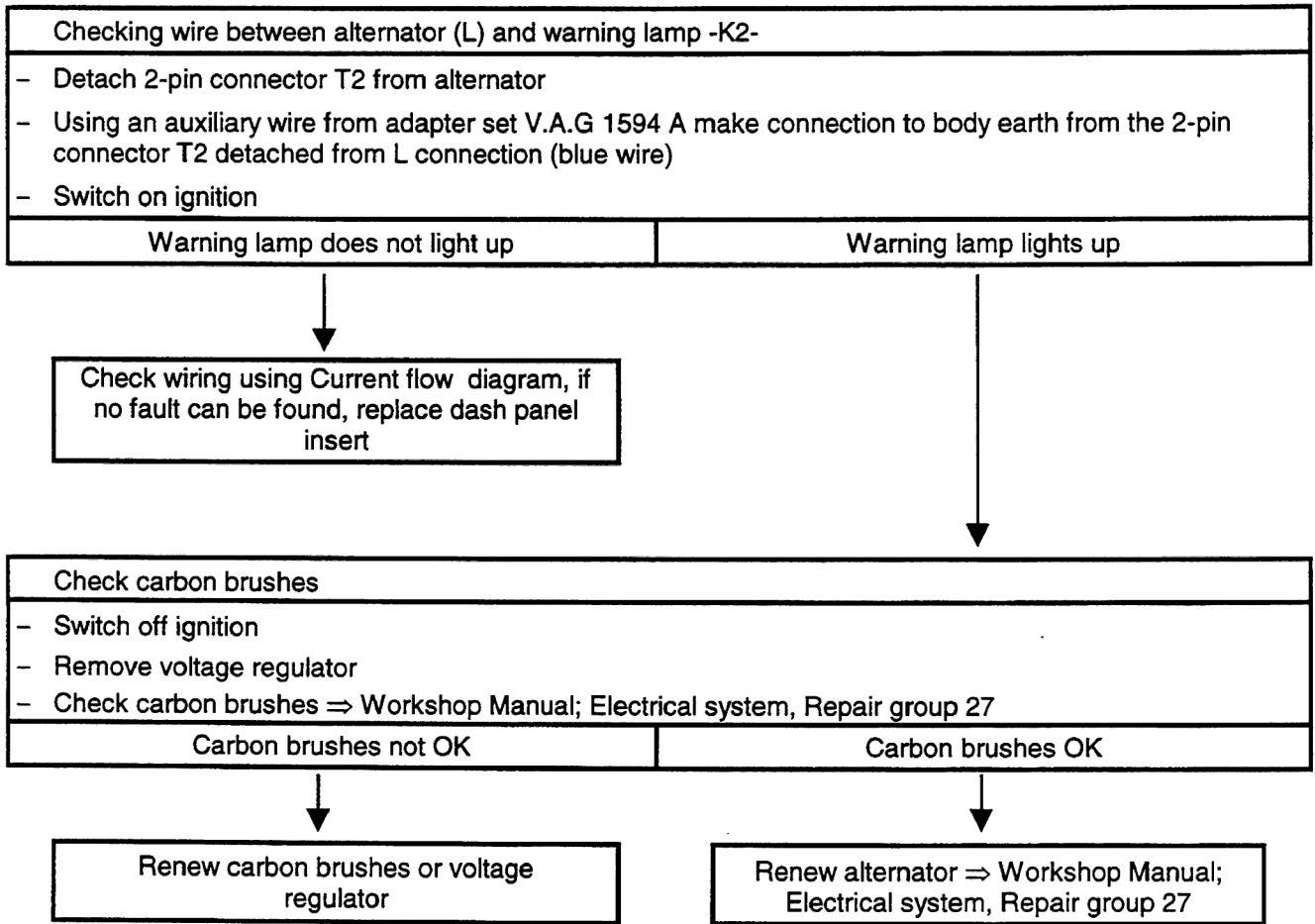
- ◆ V-belt tension and battery OK.!
- ◆ Wiring on alternator and earth straps between engine, body and battery must be tight and not oxidised.

Equipment required for fault finding:

- ◆ Adapter set V.A.G 1594 A
- ◆ Valid Current Flow Diagram

Note:

New compact alternators with a modified shape and different terminal designations will be introduced from model year 2001. The push-on connector for the D+ wire is marked with L and the push on connector for the W wire is marked with DFM!



Checking alternator and voltage regulator

Contents:

- Check function of freewheel coupling in ribbed belt pulley
(only for diesel engines, petrol engines fitted with 120 A alternator and 5-cyl engines) 6/1
- Checking alternator and voltage regulator with V.A.G 1715..... 6/2

**Checking function of freewheel coupling in ribbed belt pulley
(only for diesel engines, petrol engines fitted with 120 A alternator and 5-cyl engines)**

Vehicles with diesel engines, petrol engines fitted with 120 A alternator and 5-cyl engines are fitted with an alternator that is driven by a ribbed belt pulley with a freewheel coupling.

Function of ribbed belt pulley with freewheel coupling:

A freewheel coupling is installed in the ribbed belt pulley. This freewheel coupling ensures that the ribbed belt force is only transmitted to the input shaft of the alternator if the ribbed belt direction of rotation is correct.

A transmission of power opposite to correct direction of rotation is not possible as the alternator input shaft is disengaged by the freewheel coupling and the ribbed belt pulley shaft then freewheels.

Due to the high drive forces that can be transferred by the ribbed belt It is possible to mechanically destroy the freewheel coupling. If the freewheel coupling is defective the ribbed belt pulley will turn when the engine is running but the input shaft of the alternator will not be engaged.

Therefore the alternator is not driven and this will cause complaints regarding the alternator output.

The following are required for the checks:

- ◆ Special tool 3400

Test prerequisites:

- ◆ Ribbed belt tension and alternator security OK.!

Checking function of freewheel in ribbed belt pulley	
<ul style="list-style-type: none"> - Switch off ignition - Remove ribbed belt pulley dust protection cap - Fit special tool 3400 onto splines in ribbed V-belt pulley - Fit 17 mm AF ring spanner onto special tool 3400 - Turn alternator input shaft with ribbed belt pulley to left using ring spanner and special tool 3400 	
Only the input shaft in the ribbed belt pulley turns. The ribbed belt pulley driving surface does not move	The driving surface of the ribbed belt pulley turns together with the input shaft in the ribbed belt pulley

↓

Freewheel coupling in ribbed belt pulley is defective.
Renew ribbed belt pulley with freewheel coupling ⇒ Repair group 27.
Then perform functional check of alternator

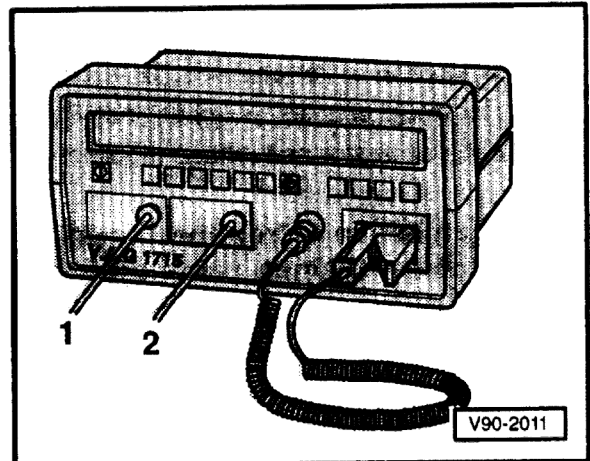
↓

Freewheel coupling in ribbed belt pulley is OK!
Continue fault finding with:
Checking alternator and voltage regulator
⇒ page 6/2

Checking alternator and voltage regulator with V.A.G 1715

Items required for fault finding:

- ◆ Digital multimeter V.A.G 1715
- ◆ Adapter set V.A.G 1594 A
- ◆ Valid Current Flow Diagram

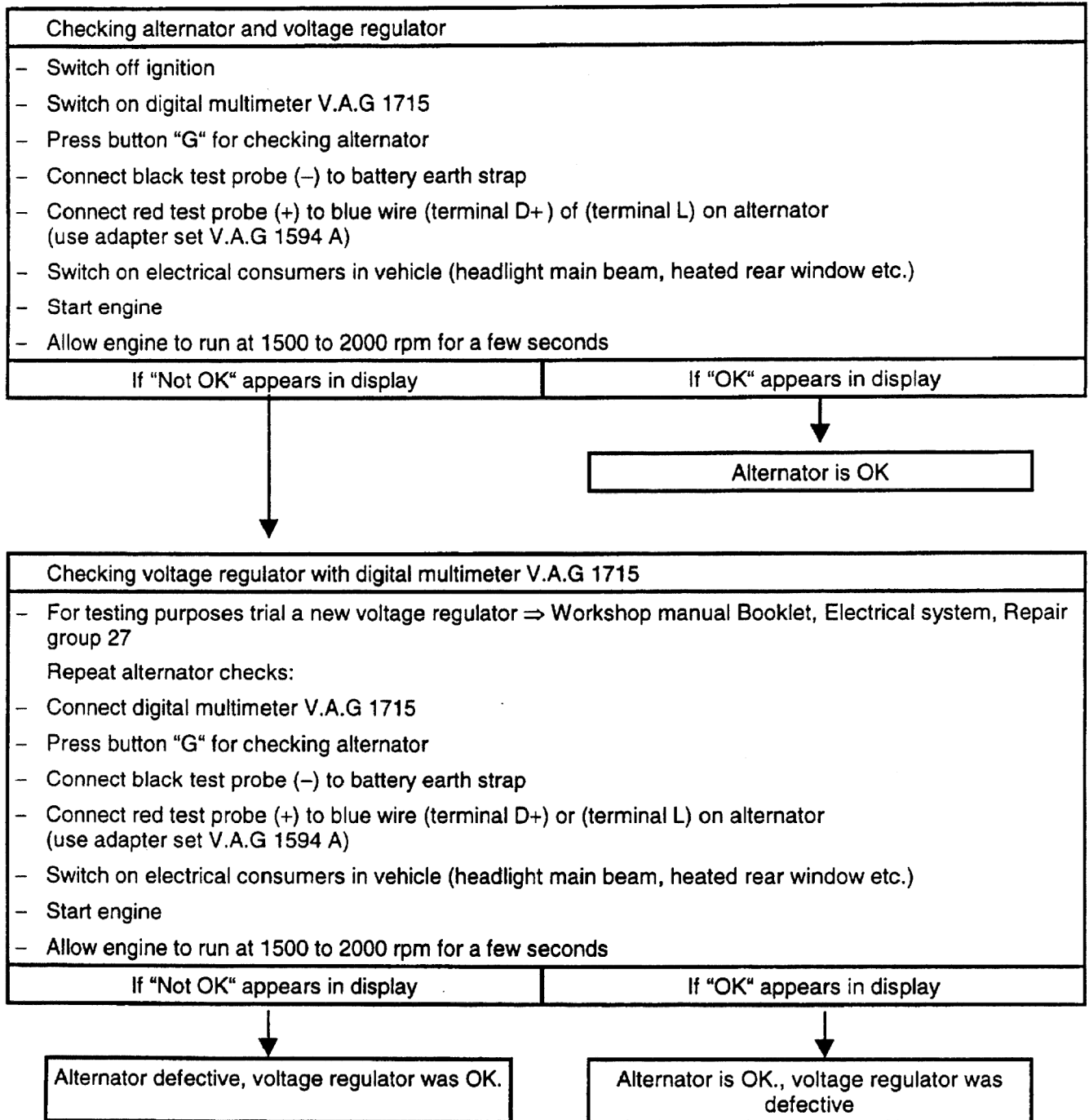
**Test prerequisites:**

- ◆ Wiring and battery earth strap OK.!
- ◆ Ribbed belt tension and alternator security OK.!
- ◆ If fitted: Function of freewheel in ribbed belt pulley OK.!

Note:

New compact alternators with a modified shape and different terminal designations will be introduced for model year 2000. The screwed connection for the B+ wire is marked with B1+ on the compact alternator! and the push on connector for the D+ wire is marked with DFM on the compact alternator!

The Fault finding programme starts on the next page!



Checking cruise control system (CCS)

The cruise control functions are controlled from the engine control unit.
A separate CCS control unit is not fitted.

In addition to the standard equipment vehicles with CCS have the CCS switch (E45) and the CCS button (E227) in the turn signal switch lever.

For complaints concerning the CCS first perform self-diagnosis of the fuel injection system, ⇒ Engine Workshop Manual, Repair group 01

Note for vehicles with engine of engine code AGZ:

Activating and deactivating the cruise control system for an AGZ engine

⇒ Workshop Manual, Motronic injection and ignition system (5-Cyl. Engine)

Note for vehicles with engine of engine code AQY or APK:

It is not possible to activate the cruise control system on vehicles with an engine which has an engine code of AQY or APK, as these vehicles do not have a factory fitted cruise control system.

A replacement engine control unit is required if a cruise control system is to be retrofitted.

Note for vehicles with engine of engine code AEH or AKL:

It is not possible to activate the cruise control system on vehicles with an engine which has an engine code of AEH or AKL, as these vehicles do not have a factory fitted cruise control system.

A replacement engine control unit and throttle valve control part are required if a cruise control system is to be retrofitted along with changes to the wiring harness.

Contents

- Activating or deactivating cruise control system 7/2

Equipment required for fault finding:

- ◆ Fault reader V.A.G 1551 with cable V.A.G 1551/3 A or Vehicle Diagnosis, Test and Information System VAS 5051
- ◆ Valid current flow diagram

Activating or deactivating cruise control system

Test prerequisites:

Fault memory has been interrogated and is OK! ⇒ Engine Workshop Manual; Repair group 01

Coding engine control unit:

- Connect fault reader V.A.G 1551 and select engine electronics control unit (address word 01) ⇒ Engine Workshop Manual; Repair group 01
- Confirm entry with → key after control unit identification has been displayed

Rapid data transfer Select function XX	HELP
---	------

- ◀ Indicated on display:
- Enter 11 for "Login procedure" and confirm with Q key.

Rapid data transfer 11 - Login procedure	Q
---	---

- ◀ Indicated on display:
- Confirm entry with Q key.

Login procedure Enter code number XXXXX
--

- ◀ Indicated on display:
- The cruise control system is activated/deactivated by entering the code number from the following table:

Engine type:	Diesel engine	Motronic 7.1 (up to software version 4 only)	Motronic 7.1 (as of software version 5 only) Motronic 7.5 Motronic 3.8..5 Motronic 3.8.3*	Simos**	Magneti Marrelli
Activating:	11463	00003	11463	11463	11463
Deactivating:	16167	00004	16167	16167	16167

* Not for AGZ engine, activating or deactivating the cruise control system on an engine with engine code AGZ ⇒ Workshop manual Motronic and injection system (5-cyl. Engine)

** Not for engines with engine code AEH or AKL, see note on page 7/1.

- Confirm entry with Q key

Rapid data transfer Select function XX	HELP
---	------

- ◀ Indicated on display:
- Press keys 0 and 6 ("End output" is selected with 06).

Rapid data transfer 06 End output	Q
--------------------------------------	---

- ◀ Indicated on display:
- Confirm entry with Q key.

Rapid data transfer Enter address word XX
--

- ◀ Indicated on display:
- Switch ignition off and disconnect diagnosis connections.

Carry out a road test to perform a functional test of the cruise control system after coding the engine control unit.

Checking sliding/tilting sunroof

Contents

- Checking tilting /sliding roof (vehicles with electric windows) 8/2
- Checking tilting /sliding roof (vehicles without electric windows) 8/2

Equipment required for fault finding:

- ◆ *Multimeter V.A.G 1526*
- ◆ *Adapter set V.A.G 1594 A*
- ◆ *Valid Current flow diagram*
- ◆ *Workshop manual Body self-diagnosis*
- ◆ *Workshop manual General body repairs*
- ◆ *Workshop manual Electrical system*

Always check battery negative terminal for tightness before starting fault finding.

Test prerequisites:

- ◆ Fuse S6 No. 6 (5 A) in fuse holder OK.!
- ◆ Fuse S230 No. 30 (20 A) in fuse holder OK.!
- ◆ Fuse S176 (110 A) in fuse holder/battery OK.!
- ◆ Sliding/tilting sunroof mechanically OK.!

Note:

Vehicles which are fitted with central locking and electric windows have a convenience system. With this system the sliding/tilting roof and any windows which are open can be closed when locking the vehicle from the outside with the vehicle key. To do this the key must be held in the locking position.

Preparing for fault finding:

- Switch off ignition and all electric consumers.
- Remove interior light ⇒ Electrical system Repair group 96.

Carry out a functional test on sliding/tilting sunroof after rectifying faults.

The Fault finding programme begins on the next page!

Checking sliding/tilting sunroof (vehicles with electric windows)

Checking terminal 30 voltage supply for sunroof adjustment control unit (J245)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Pull 6-pin connector T6f off sunroof adjustment control unit - Connect red test probe (+) to chamber 4 (terminal 30) of disconnected 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of disconnected 6-pin connector T6f 	
No voltage indicated	Approx. battery voltage indicated

Check wiring using Current flow diagram

Checking terminal 15 voltage supply for sunroof adjustment control unit (J245)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Connect red test probe (+) to chamber 2 (terminal 15) of disconnected 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of disconnected 6-pin connector T6f - Switch on ignition 	
No voltage indicated	Approx. battery voltage indicated

A

Checking wiring from sunroof adjustment control unit (J245) to central control unit for convenience system (J393)	
<ul style="list-style-type: none"> - Switch off ignition - Set measuring range switch of multimeter V.A.G 1526 to $\overline{\leftarrow/\rightarrow}$ - Pull 23-pin connector T23 off central control unit for convenience system, on left behind dash panel - Perform continuity tests as per table: 	
Red test probe to detached 23-pin connector:	Black test probe to detached 6-pin connector:
Chamber 7	Chamber 2
Chamber 10	Chamber 3
Signal sounds	Signal does not sound

Perform self-diagnosis of convenience system, => Workshop Manual Body Self-diagnosis

Check wiring using Current flow diagram

A
↓

Checking control voltage for convenience locking of the sliding/tilting sunroof	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Reconnect 6-pin connector T6f to sunroof adjustment control unit - Connect red test probe (+) to chamber 3 of attached 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of attached 6-pin connector T6f - Switch on ignition - Open sliding roof. If this is not possible electrically then mechanically with the "emergency crank" - Switch off ignition - Get out of vehicle and ensure that all doors are closed - Mechanically lock vehicle from outside with key, holding key in the locking position 	
<p>The control voltage drops from the displayed battery voltage to 0 Volt after approx. 1 second and the sliding/tilting roof closes. On vehicles with electric windows the control voltage drops from the displayed battery voltage to 0 Volt approx. 1 second after the last window has closed and the sliding/tilting roof then closes.</p>	
Control voltage does not drop, sliding tilting roof remains open	Control voltage drops to 0 Volt

Perform self-diagnosis of convenience system
 ⇒ Workshop Manual Body Self-diagnosis

Sliding/tilting roof remains open

Replace sunroof roof adjustment control unit (J245)

Sliding/tilting roof closes

Checking function of (terminal 15) control voltage for sliding/tilting roof	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Connect red test probe (+) to chamber 2 of attached 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of attached 6-pin connector T6f - Sit in vehicle and close all doors (do not lock!) - Switch on ignition (multimeter displays approx. battery voltage) - Switch off ignition and withdraw key (multimeter displays approx. battery voltage) - Open driver's door 	
Voltage does not drop to 0 Volt when door is opened	Voltages drops to 0 Volt as described

Perform self-diagnosis of convenience system
 ⇒ Workshop Manual Body Self-diagnosis

B

B



Checking regulator for sliding/tilting roof adjustment (E139)	
<ul style="list-style-type: none"> - Switch off ignition - Unclip regulator for sliding/tilting roof adjustment out of interior light - Pull 6-pin connector T6d off regulator for sliding/tilting roof adjustment - Set measuring range switch of multimeter V.A.G 1526 to "Ω" - Connect red test probe (+) to contact 3 of removed regulator for sunroof adjustment - Connect black test probe (-) to contact 1 of removed regulator for sunroof adjustment - Set regulator for sliding/tilting roof adjustment to "Sliding roof fully open" position (specification approx. 200 Ω) - Set regulator for sunroof adjustment in steps to "Sliding roof fully raised" position 100 Ω more is indicated on multimeter after each step. Specification when "Sliding roof fully raised" position is reached approx. 2600 Ω 	
Ω specification not OK	Ω specification OK



Replace regulator for sunroof adjustment
(E139)



Checking regulator for sliding/tilting roof adjustment (E139)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to "Ω" - Connect red test probe (+) to contact 3 of removed regulator for sliding/tilting roof adjustment - Connect black test probe (-) to contact 2 of removed regulator for sliding/tilting roof adjustment - Set regulator for sliding/tilting roof adjustment to "Sliding roof fully open" position (Specification approx. 2600 Ω) - Set regulator for sliding/tilting roof adjustment in steps to "Sliding roof fully raised" position 100 Ω less is indicated on multimeter after each step. Specification when "Sliding roof fully raised" position is reached approx. 200 Ω 	
Ω value display not as described	Ω value display as described



Replace regulator for sunroof adjustment
(E139)



Checking button for "emergency closing"	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to $\overline{+/-}$ - Connect red test probe (+) to contact 5 of removed regulator for sliding/tilting roof adjustment - Connect black test probe (-) to contact 2 of removed regulator for sliding/tilting roof adjustment - Switch regulator for sliding/tilting roof adjustment to closed position and operate button for "emergency closing" 	
Signal does not sound	Signal sounds



Replace regulator for sliding/tilting roof
adjustment (J139)



Replace control unit for sliding/tilting roof
adjustment (J245)

End of Fault finding programme

Checking sliding/tilting sunroof (vehicles without electric windows)

Checking terminal 30 voltage supply for sunroof adjustment control unit (J245)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Pull 6-pin connector T6f off sunroof adjustment control unit - Connect red test probe (+) to chamber 4 (terminal 30) of disconnected 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of disconnected 6-pin connector T6f 	
No voltage indicated	Approx. battery voltage indicated

↓

Check wiring using Current flow diagram

Checking terminal 15 voltage supply for sunroof adjustment control unit (J245)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Connect red test probe (+) to chamber 2 (terminal 15) of disconnected 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of disconnected 6-pin connector T6f - Switch on ignition 	
No voltage indicated	Approx. battery voltage indicated

Checking wiring from sunroof adjustment control unit (J245) to control unit for central locking and anti-theft alarm (J379)	
<ul style="list-style-type: none"> - Switch off ignition - Set measuring range switch of multimeter V.A.G 1526 to $\overleftarrow{\text{A}}/\text{A}$ - Pull 23-pin connector T23 off control unit for central locking, on left behind dash panel - Perform continuity tests as per table: 	
Red test probe to detached 23-pin connector:	Black test probe to detached 6-pin connector:
Chamber 4	Chamber 2
Chamber 8	Chamber 3
Signal sounds	Signal does not sound

↓

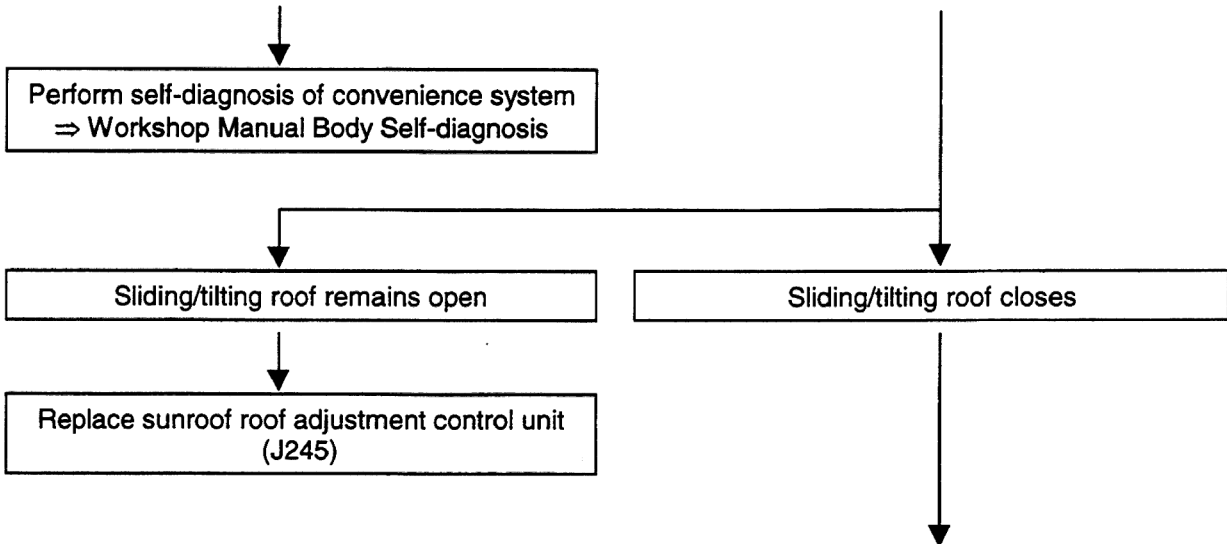
Perform self-diagnosis of central locking, ⇒ Workshop Manual Body Self-diagnosis

↓

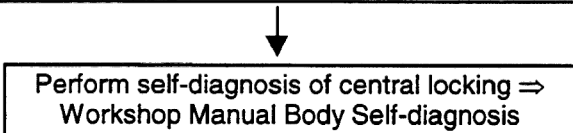
Check wiring using Current flow diagram

A
↓

<p>Checking control voltage for convenience locking of the sliding/tilting sunroof</p> <ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Reconnect 6-pin connector T6f to sunroof adjustment control unit - Connect red test probe (+) to chamber 3 of attached 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of attached 6-pin connector T6f - Switch on ignition - Open sliding roof. If this is not possible electrically then mechanically with the "emergency crank" - Switch off ignition - Get out of vehicle and ensure that all doors are closed - Mechanically lock vehicle from outside with key, holding key in the locking position <p>The control voltage drops from the displayed battery voltage to 0 Volt after approx. 1 second and the sliding/tilting roof closes.</p>	
Control voltage does not drop, sliding tilting roof remains open	Control voltage drops to 0 Volt



<p>Checking function of (terminal 15) control voltage for sliding/tilting roof</p> <ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to 20 V = - Connect red test probe (+) to chamber 2 of attached 6-pin connector T6f - Connect black test probe (-) to chamber 1 (terminal 31) of attached 6-pin connector T6f - Sit in vehicle and close all doors (do not lock!) - Switch on ignition (multimeter displays approx. battery voltage) - Switch off ignition and withdraw key (multimeter displays approx. battery voltage) - Open driver's door 	
Voltage does not drop to 0 Volt when door is opened	Voltages drops to 0 Volt as described



B

B
↓

Checking regulator for sliding/tilting roof adjustment (E139)	
<ul style="list-style-type: none"> - Switch off ignition - Unclip regulator for sliding/tilting roof adjustment out of interior light - Pull 6-pin connector T6d off regulator for sliding/tilting roof adjustment - Set measuring range switch of multimeter V.A.G 1526 to "Ω" - Connect red test probe (+) to contact 3 of removed regulator for sunroof adjustment - Connect black test probe (-) to contact 1 of removed regulator for sunroof adjustment - Set regulator for sliding/tilting roof adjustment to "Sliding roof fully open" position (specification approx. 200 Ω) - Set regulator for sunroof adjustment in steps to "Sliding roof fully raised" position 100 Ω more is indicated on multimeter after each step. Specification when "Sliding roof fully raised" position is reached approx. 2600 Ω 	
Ω specification not OK	Ω specification OK

↓

Replace regulator for sunroof adjustment (E139)

↓

Checking regulator for sliding/tilting roof adjustment (E139)	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to "Ω" - Connect red test probe (+) to contact 3 of removed regulator for sliding/tilting roof adjustment - Connect black test probe (-) to contact 2 of removed regulator for sliding/tilting roof adjustment - Set regulator for sliding/tilting roof adjustment to "Sliding roof fully open" position (Specification approx. 2600 Ω) - Set regulator for sliding/tilting roof adjustment in steps to "Sliding roof fully raised" position 100 Ω less is indicated on multimeter after each step. Specification when "Sliding roof fully raised" position is reached approx. 200 Ω 	
Ω value display not as described	Ω value display as described

↓

Replace regulator for sunroof adjustment (E139)

↓

Checking button for "emergency closing"	
<ul style="list-style-type: none"> - Set measuring range switch of multimeter V.A.G 1526 to $\overleftarrow{\Omega}$ - Connect red test probe (+) to contact 5 of removed regulator for sliding/tilting roof adjustment - Connect black test probe (-) to contact 2 of removed regulator for sliding/tilting roof adjustment - Switch regulator for sliding/tilting roof adjustment to closed position and operate button for "emergency closing" 	
Signal does not sound	Signal sounds

↓

Replace regulator for sliding/tilting roof adjustment (J139)

↓

Replace control unit for sliding/tilting roof adjustment (J245)

End of the fault finding programme