

2.0 l/85 kW Motronic, engine code BHY

From June 2005

Notes:

Information concerning

- ◆ Relay locations and fuse assignment

- ◆ Multi-pin connectors

- ◆ Control units and relays

- ◆ Earth connections

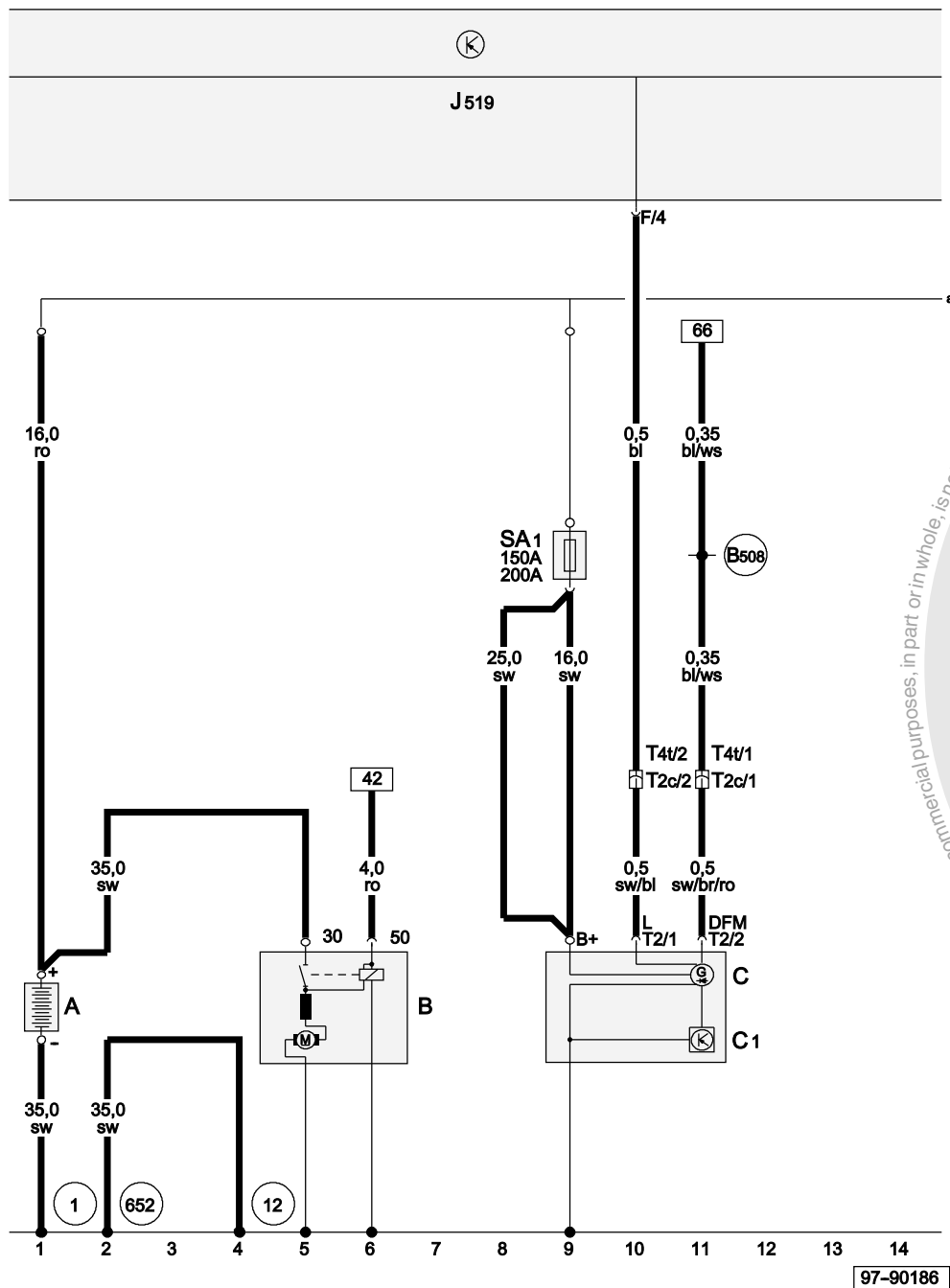
⇒ Fitting locations overview!

Information concerning

- ◆ Fault finding programs

⇒ Guided fault finding



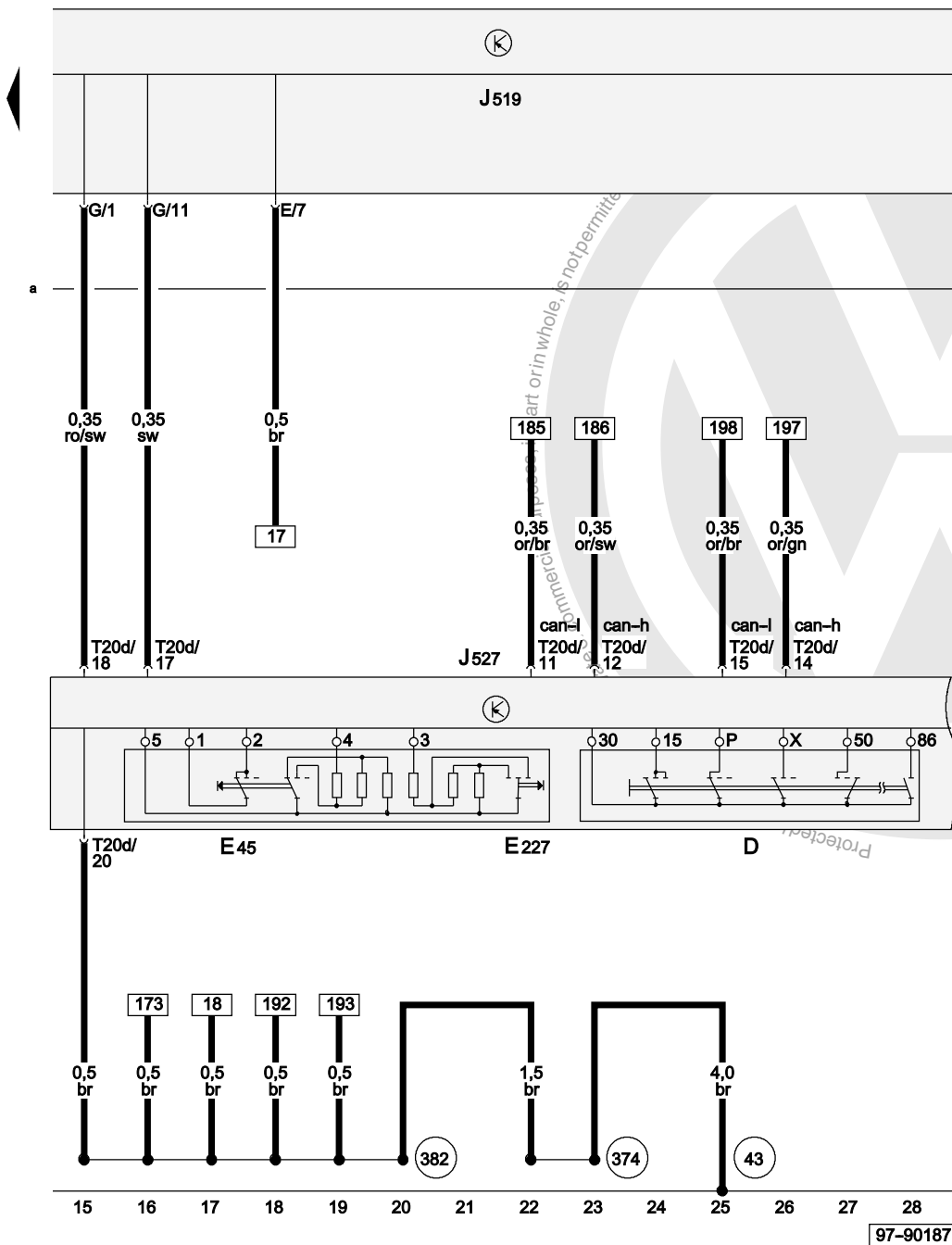


Battery, Starter, Alternator, Onboard power supply control unit

- A Battery
- B Starter
- C Alternator
- C1 Voltage regulator
- J519 Onboard power supply control unit
- SA1 Fuse -1- on battery fuse holder
- T2 2-Pin Connector
- T2c 2-Pin Connector, near starter (only models not fitted with air conditioner)
- T4t 4-Pin Connector, near starter (only models fitted with air conditioner)

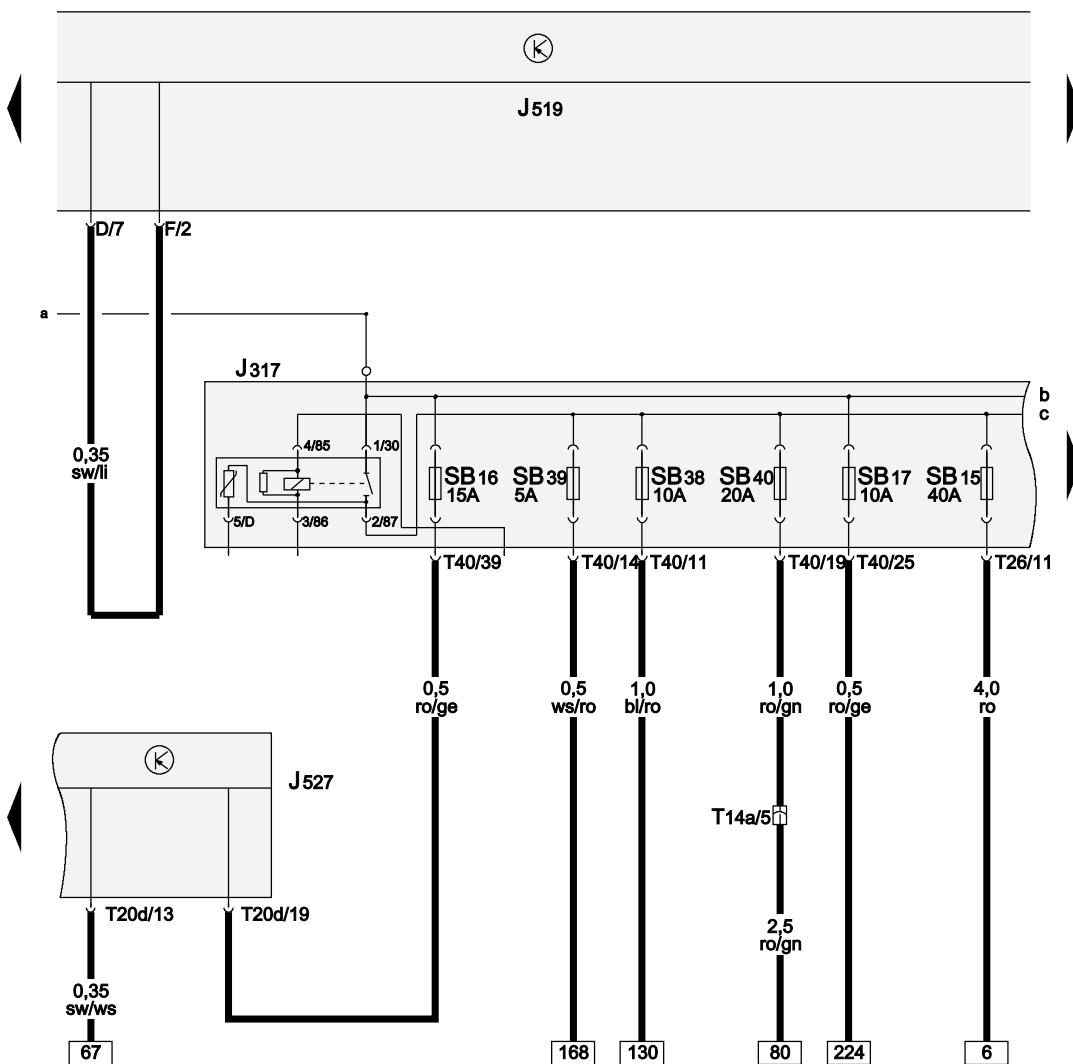
- 1 Earth strap, battery body
- 12 Earth point, on left in engine compartment
- 652 Earth point, engine/gearbox earth
- B508 Connection (DF), in interior wiring harness

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



Ignition/starter switch, Cruise control system switch, Onboard power supply control unit, Steering column electronics control unit

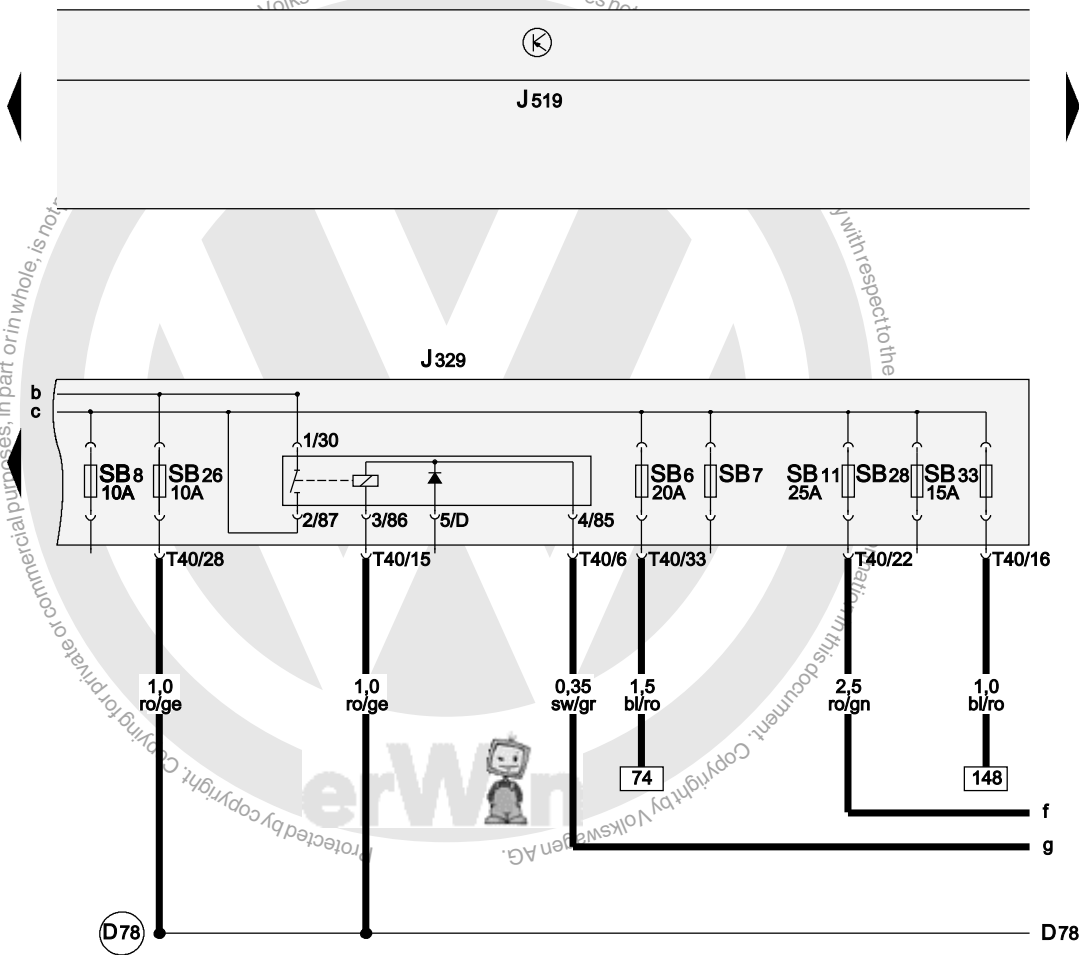
- D Ignition/starter switch
- E45 Cruise control system switch
- E227 Cruise control system (CCS) button (Set)
- J519 Onboard power supply control unit
- J527 Steering column electronics control unit
- T20d 20-Pin connector
- 43 Earth point, lower part of right A-pillar
- 374 Earth connection -9-, in main wiring harness
- 382 Earth connection -17-, in main wiring harness



Terminal 30 voltage supply relay (458), on E-box on left in engine compartment, Onboard power supply control unit, Steering column electronics control unit

- J317 Terminal 30 voltage supply relay (458), on E-box on left in engine compartment
- J519 Onboard power supply control unit
- J527 Steering column electronics control unit
- SB15 Fuse -15- on fuse holder
- SB16 Fuse -16- on fuse holder
- SB17 Fuse -17- on fuse holder
- SB38 Fuse -38- on fuse holder
- SB39 Fuse -39- on fuse holder
- SB40 Fuse -40- on fuse holder
- T14a 14-Pin Connector, near battery
- T20d 20-Pin Connector
- T26 26-Pin Connector
- T40 40-Pin Connector

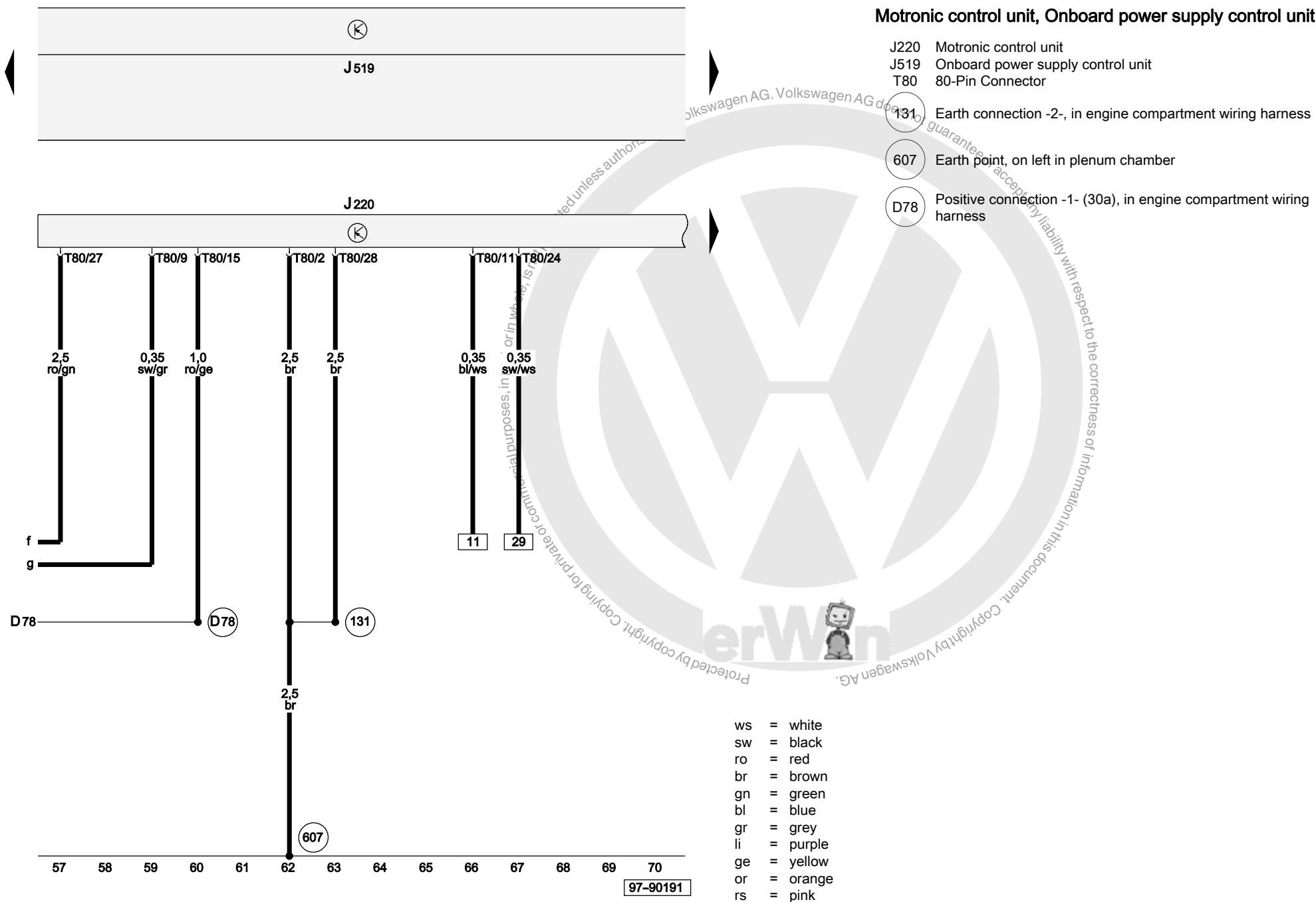
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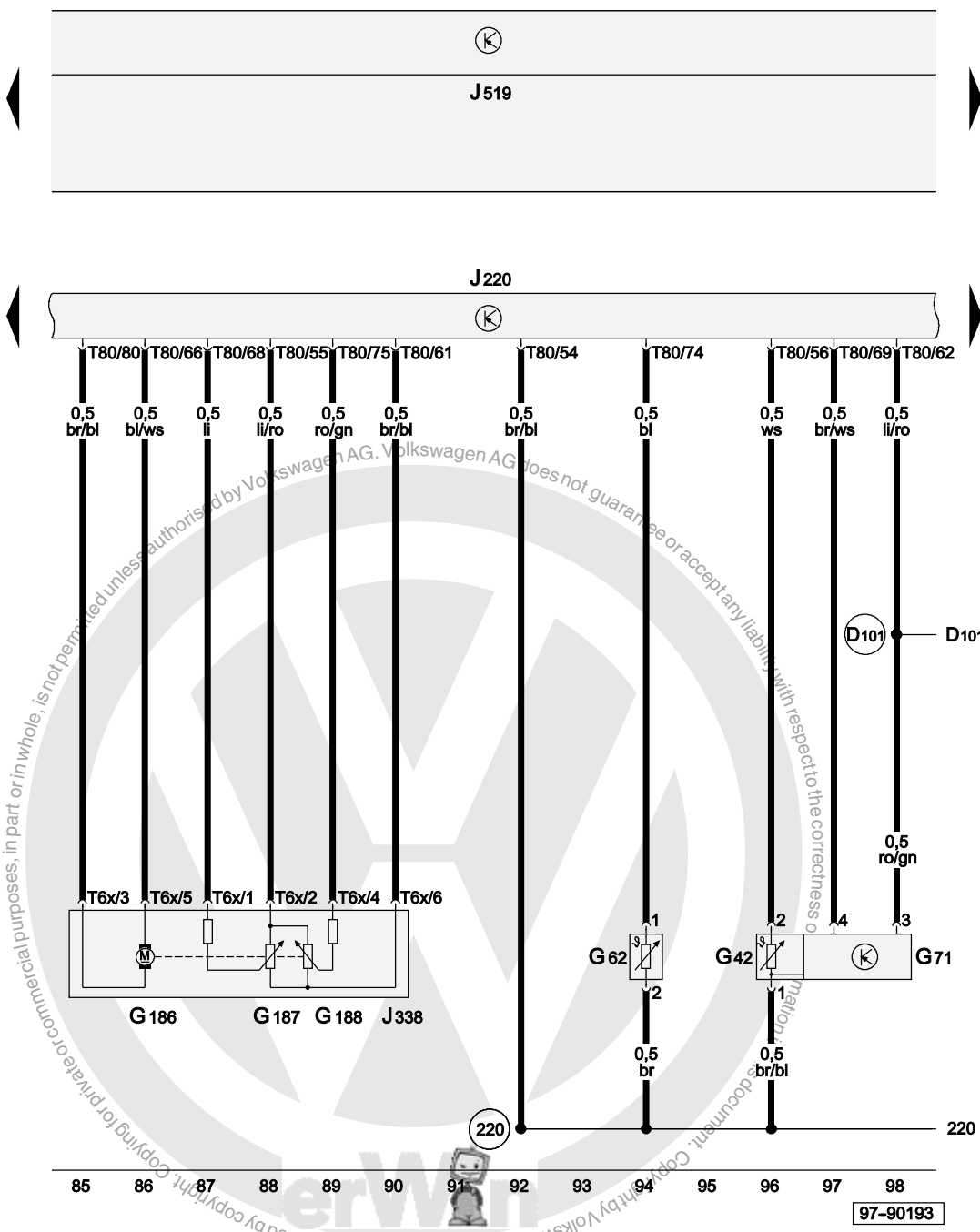


Terminal 15 voltage supply relay (433), in E-box on left in engine compartment, Onboard power supply control unit

- J329 Terminal 15 voltage supply relay (433), in E-box on left in engine compartment
- J519 Onboard power supply control unit
- SB6 Fuse -6- on fuse holder
- SB7 Fuse -7- on fuse holder
- SB8 Fuse -8- on fuse holder
- SB11 Fuse -11- on fuse holder
- SB26 Fuse -26- on fuse holder
- SB28 Fuse -28- on fuse holder
- SB33 Fuse -33- on fuse holder
- T40 40-Pin Connector
- D78 Positive connection -1- (30a), in engine compartment wiring harness

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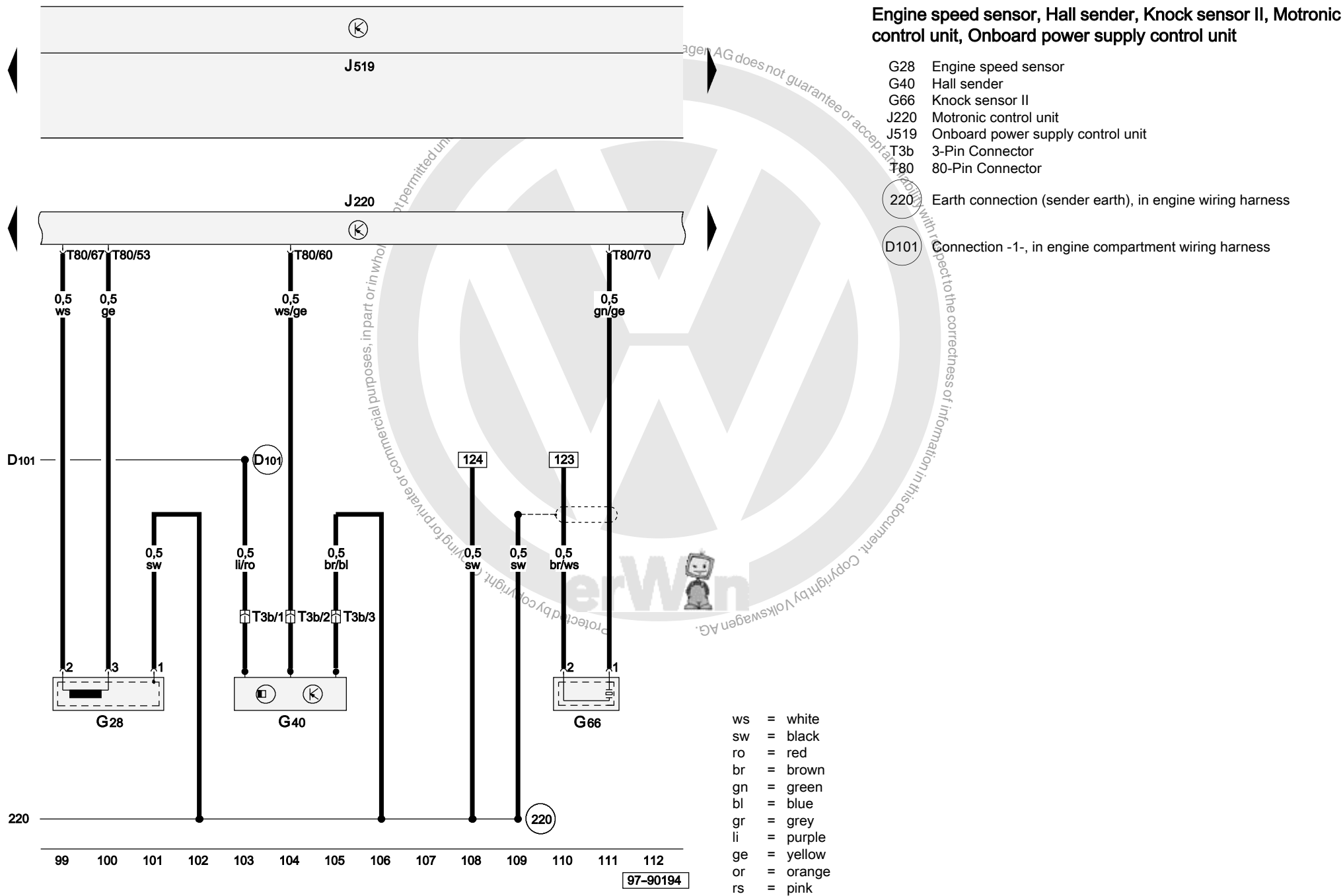


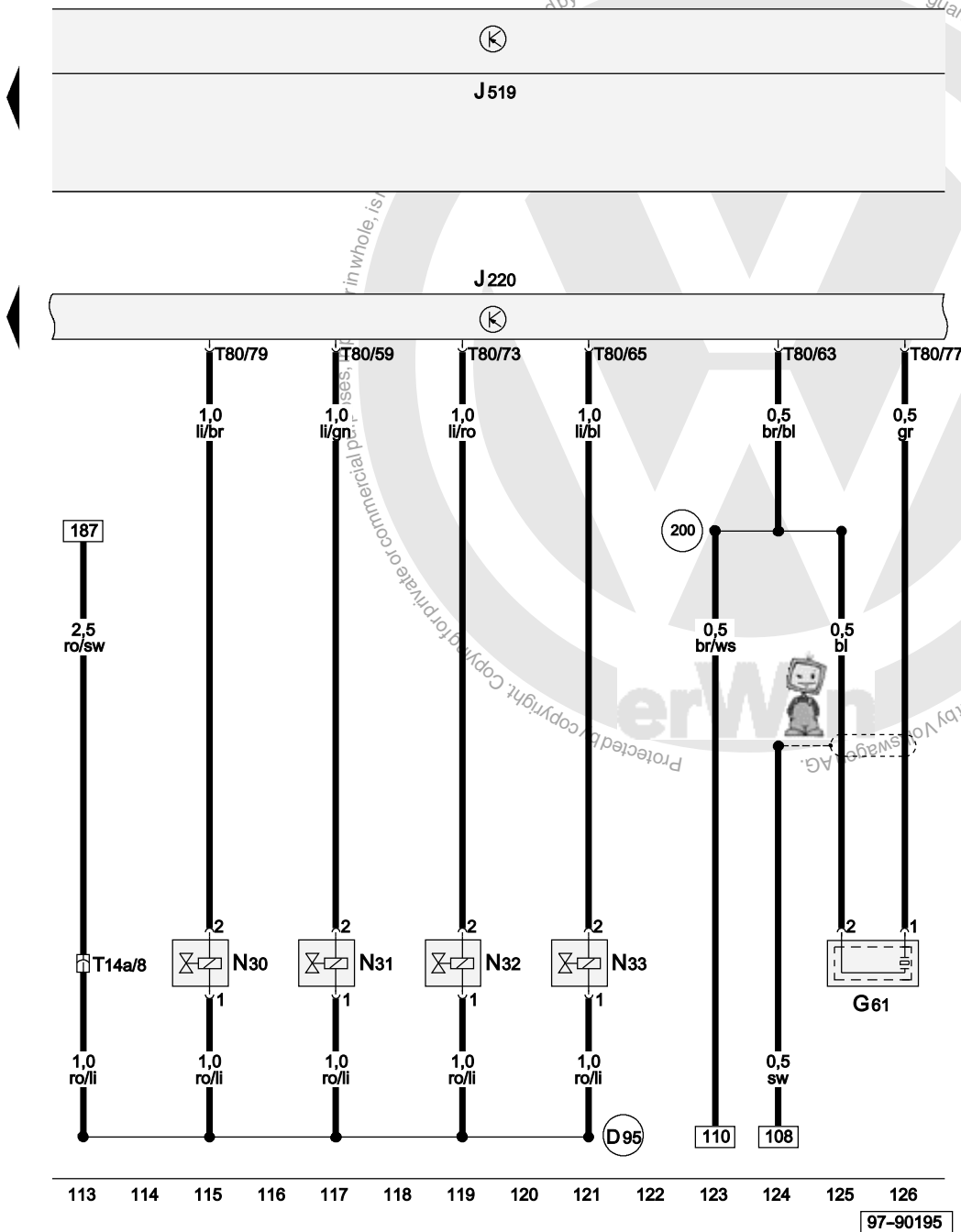
Intake air temperature sender, Coolant temperature sender, Intake manifold pressure sender, Motronic control unit, Throttle valve control module

- G42 Intake air temperature sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure 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)
- J220 Motronic control unit
- J388 Throttle valve control module
- J519 Onboard power supply control unit
- T6x 6-Pin Connector
- T80 80-Pin Connector

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

D101 Connection -1-, in engine compartment wiring harness

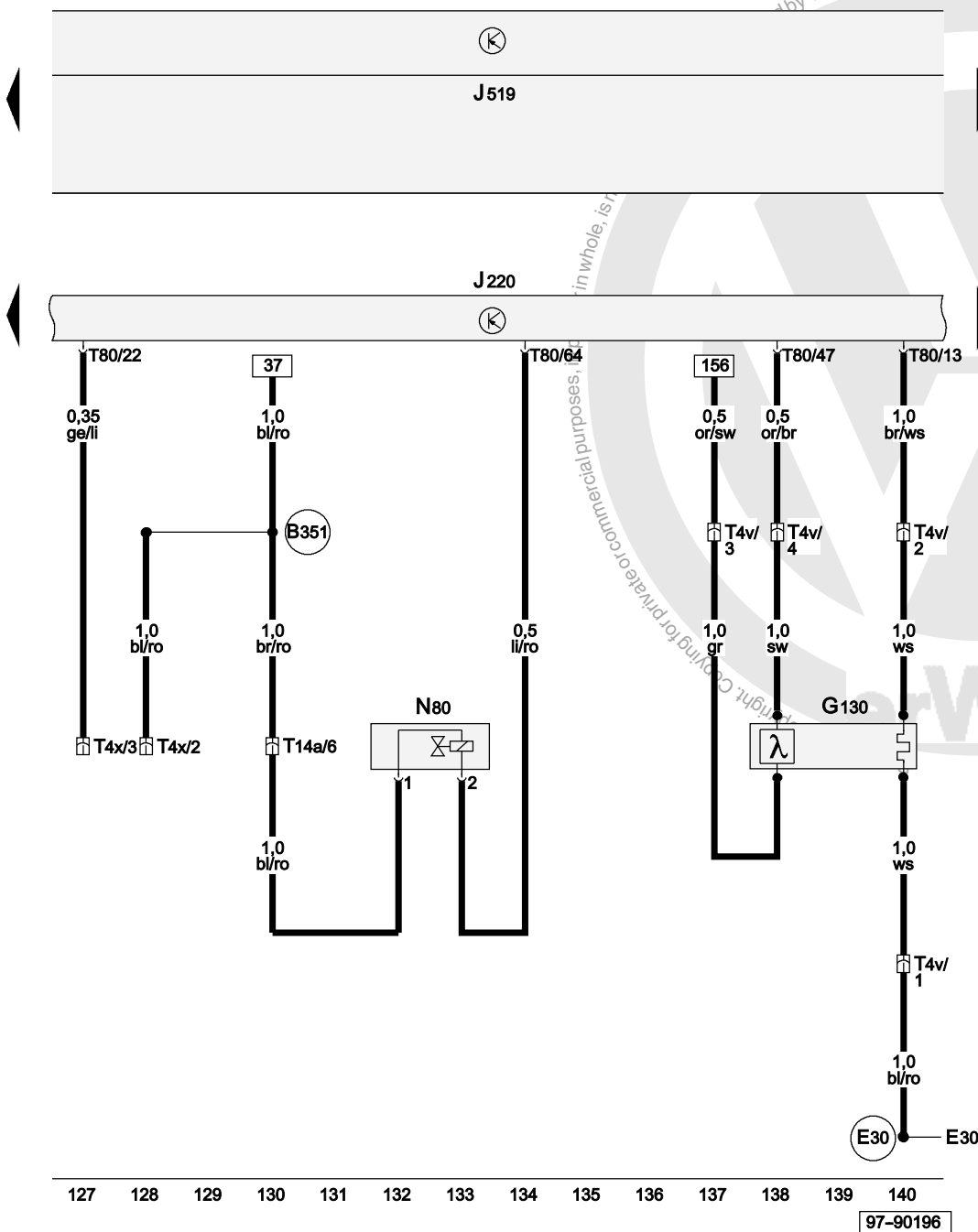




Motronic control unit, Onboard power supply control unit, Knock sensor I, Injectors

- G61 Knock sensor I
- J220 Motronic control unit
- J519 Onboard power supply control unit
- N30 Injector, cylinder 1
- N31 Injector, cylinder 2
- N32 Injector, cylinder 3
- N33 Injector, cylinder 4
- T14a 14-Pin Connector, near battery
- T80 80-Pin Connector
- 200 Earth connection (screening), in engine compartment wiring harness
- D95 Connection (injectors), in engine compartment wiring harness

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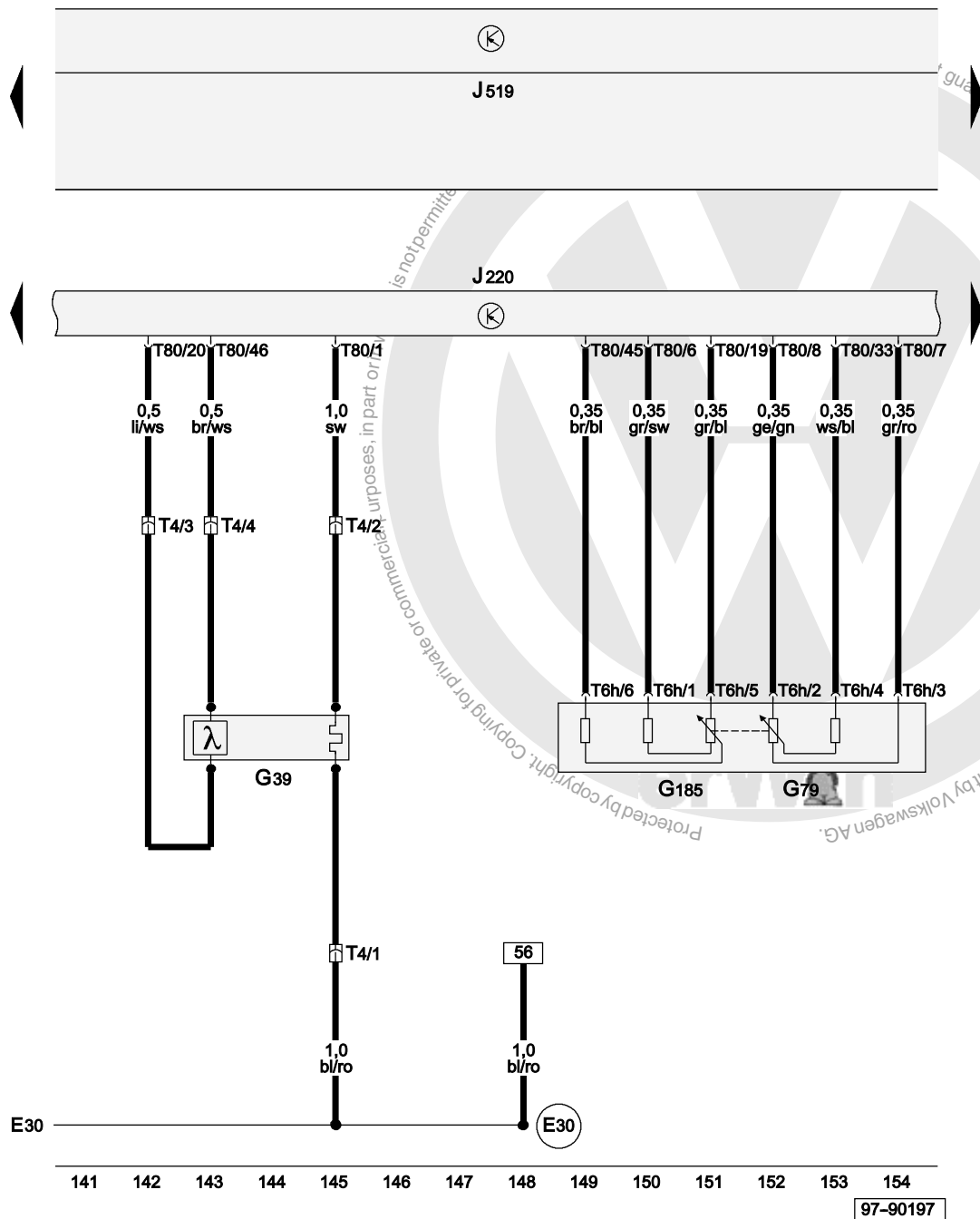


Lambda probe after catalytic converter, Motronic control unit, Onboard power supply control unit, Active charcoal filter system solenoid valve 1 (pulsed)

- G130 Lambda probe after catalytic converter
- J220 Motronic control unit
- J519 Onboard power supply control unit
- N80 Active charcoal filter system solenoid valve 1 (pulsed)
- T4v 4-Pin Connector, near catalytic converter
- T4x 4-Pin Connector, bottom left on radiator
- T14a 14-Pin Connector, near battery
- T80 80-Pin Connector

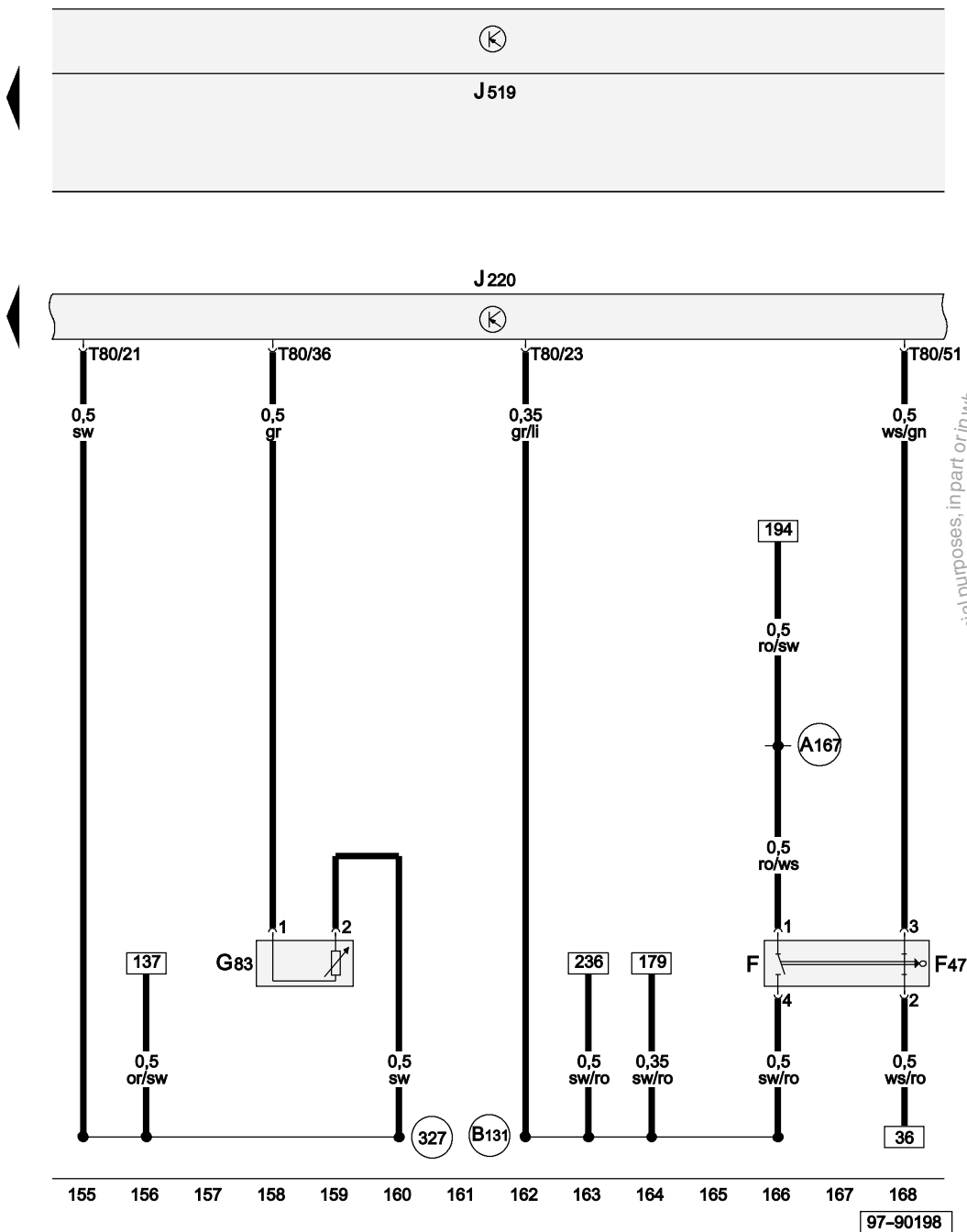
B351 Connection -2- (87a), in main wiring harness

E30 Connection (87a), in engine wiring harness



Lambda probe, Accelerator pedal position sender, Motronic control unit, Onboard power supply control unit

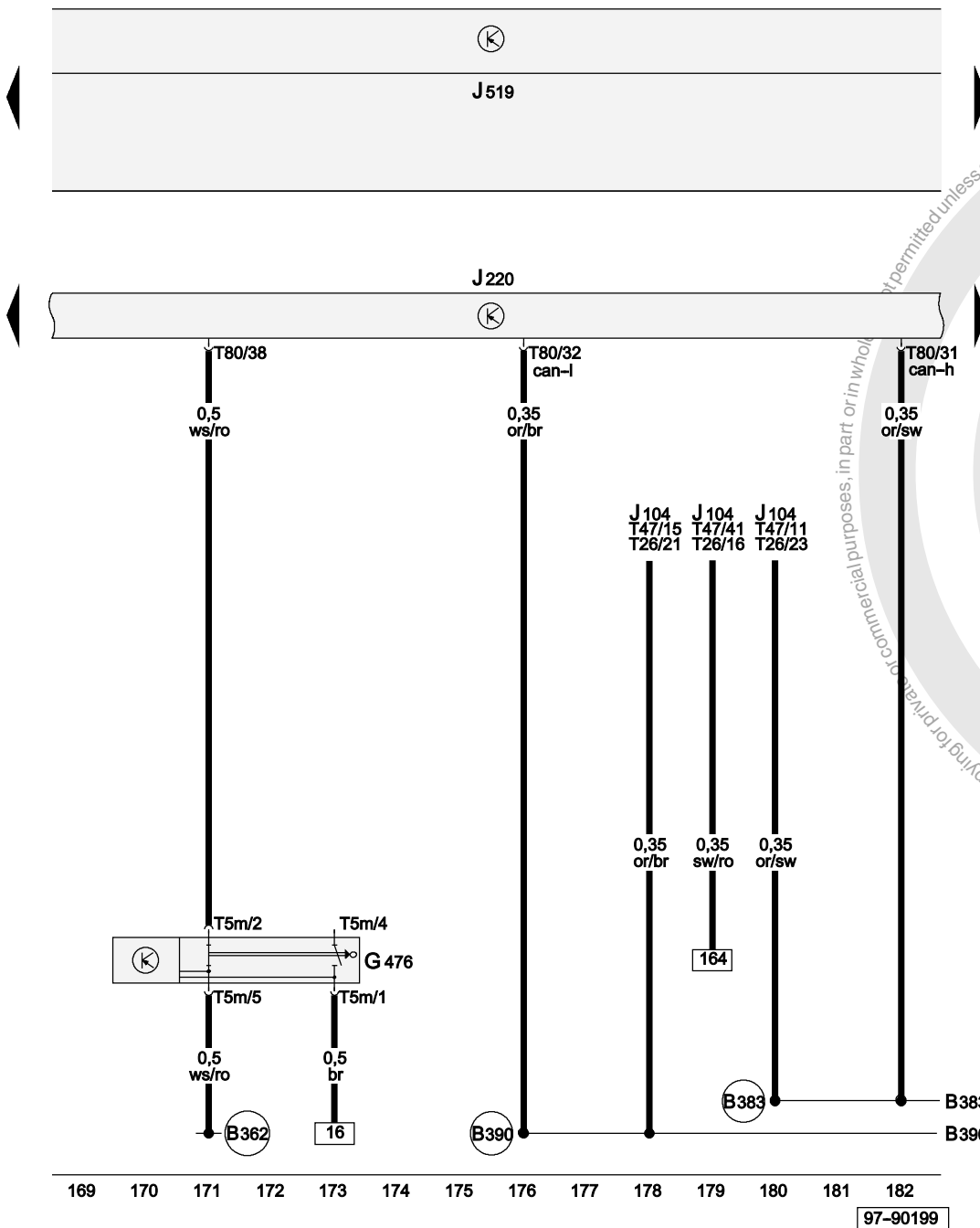
- G39 Lambda probe
- G79 Accelerator pedal position sender
- G185 Accelerator pedal position sender -2-
- J220 Motronic control unit
- J519 Onboard power supply control unit
- T4 4-Pin Connector
- T6h 6-Pin Connector
- T80 80-Pin Connector
- E30 Connection (87a), in engine wiring harness



Brake light switch, Radiator outlet coolant temperature sender, Motronic control unit, Onboard power supply control unit

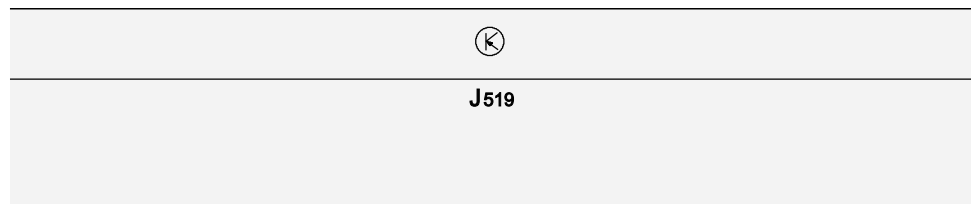
- F Brake light switch
- F47 Cruise control system brake pedal switch
- G83 Radiator outlet coolant temperature sender
- J220 Motronic control unit
- J519 Onboard power supply control unit
- T80 80-Pin Connector
- 327 Earth connection (sender earth), in engine compartment wiring harness
- A167 Positive connection -3- (30a), in dash panel wiring harness
- B131 Connection (54), in interior wiring harness

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Clutch position sender, ABS and EDL/ESP control unit,
Motronic control unit, Onboard power supply control unit

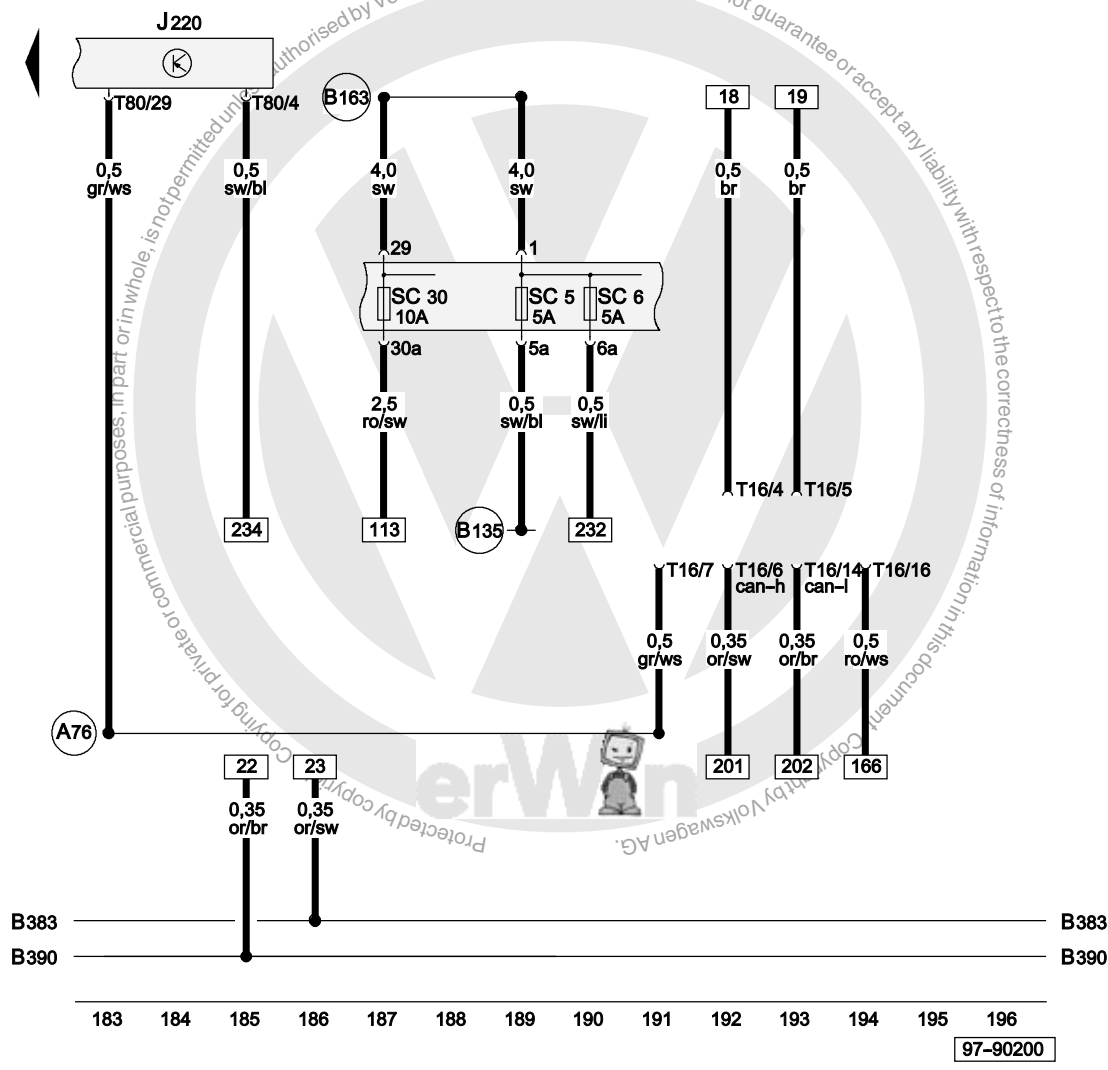
- G476 Clutch position sender
- J104 ABS and EDL/ESP control unit
- J220 Motronic control unit
- J519 Onboard power supply control unit
- T5m 5-Pin Connector
- T26 26-Pin Connector, on ABS and EDL/ESP control unit
- T47 80-Pin Connector, on ABS and EDL/ESP control unit
- T80 80-Pin Connector
- B362 Connection -13- (87a), in main wiring harness
- B383 Connection -1- (drive train CAN bus, high), in main wiring harness
- B390 Connection -1- (drive train CAN bus, low), in main wiring harness



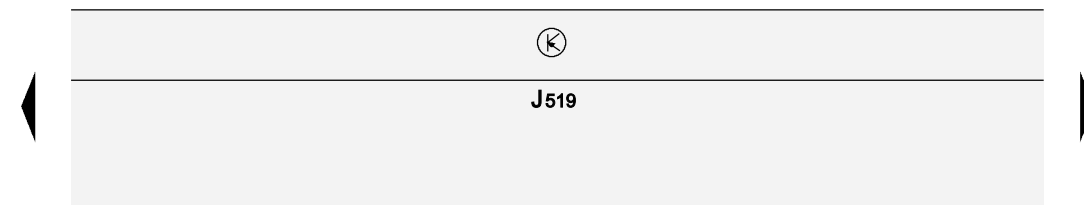
Motronic control unit, Onboard power supply control unit,
Fuses, Diagnostic socket

- J220 Motronic control unit
- J519 Onboard power supply control unit
- SC5 Fuse -5- on fuse holder
- SC6 Fuse -6- on fuse holder
- SC30 Fuse -30- on fuse holder
- T16 16-Pin Connector, diagnostic socket
- T80 80-Pin Connector

- (A76) Connection (diagnosis wire K), in dash panel wiring harness
- (B135) Connection -1- (15a), in interior wiring harness
- (B163) Positive connection -1- (15), in interior wiring harness



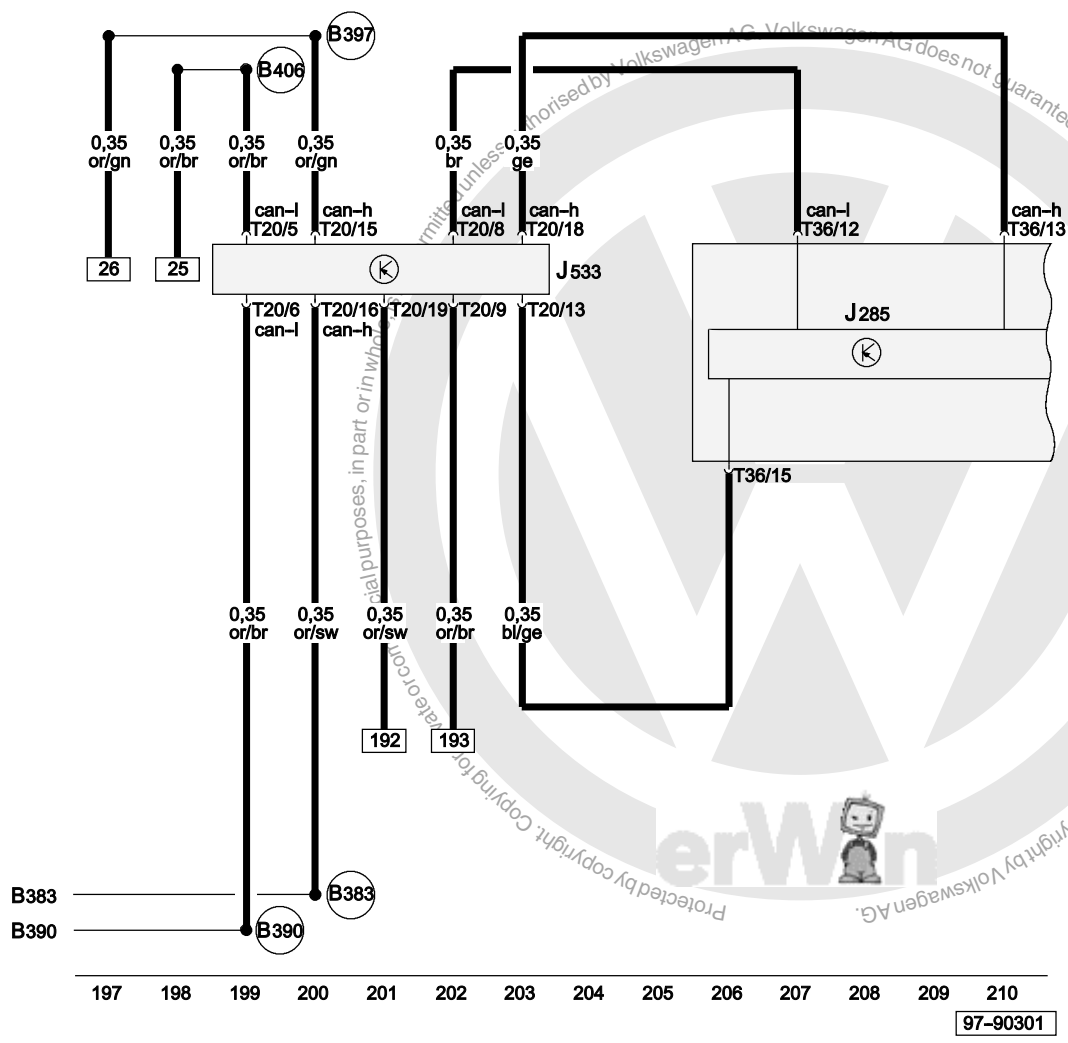
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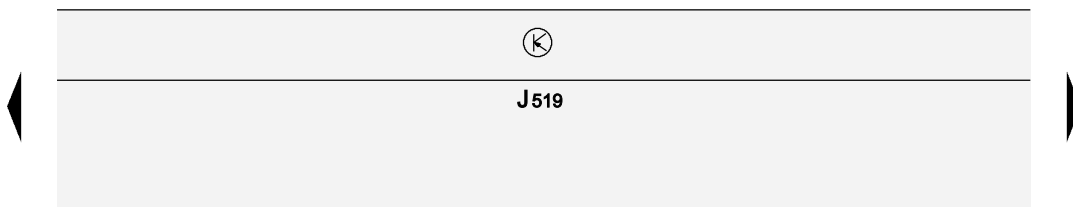


Control unit with display in dash panel insert, Onboard power supply control unit, Data bus diagnostic interface

- J285 Control unit with display in dash panel insert
- J519 Onboard power supply control unit
- J533 Data bus diagnostic interface
- T20 20-Pin Connector
- T36 36-Pin Connector

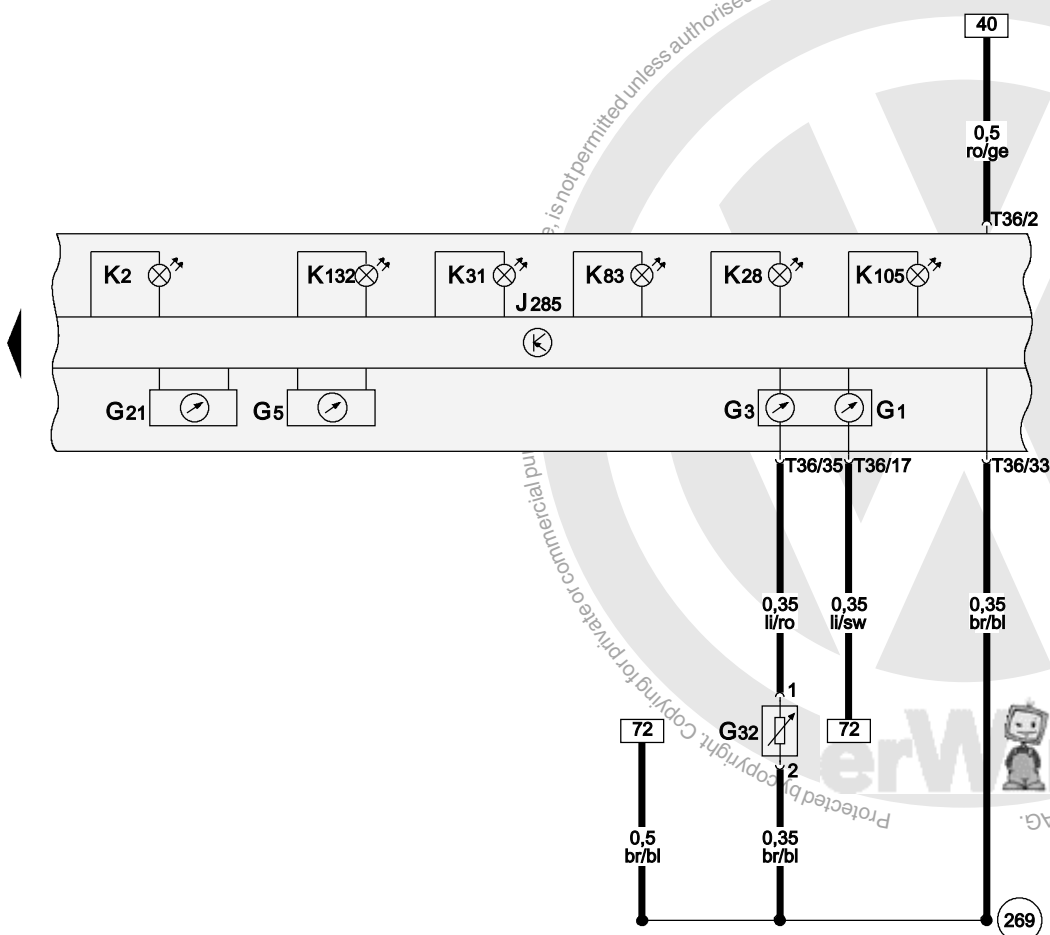
- B383 Connection -1- (drive train CAN bus, high), in main wiring harness
- B390 Connection -1- (drive train CAN bus, low), in main wiring harness
- B397 Connection -1- (convenience CAN bus, high), in main wiring harness
- B406 Connection -1- (convenience CAN bus, low), in main wiring harness





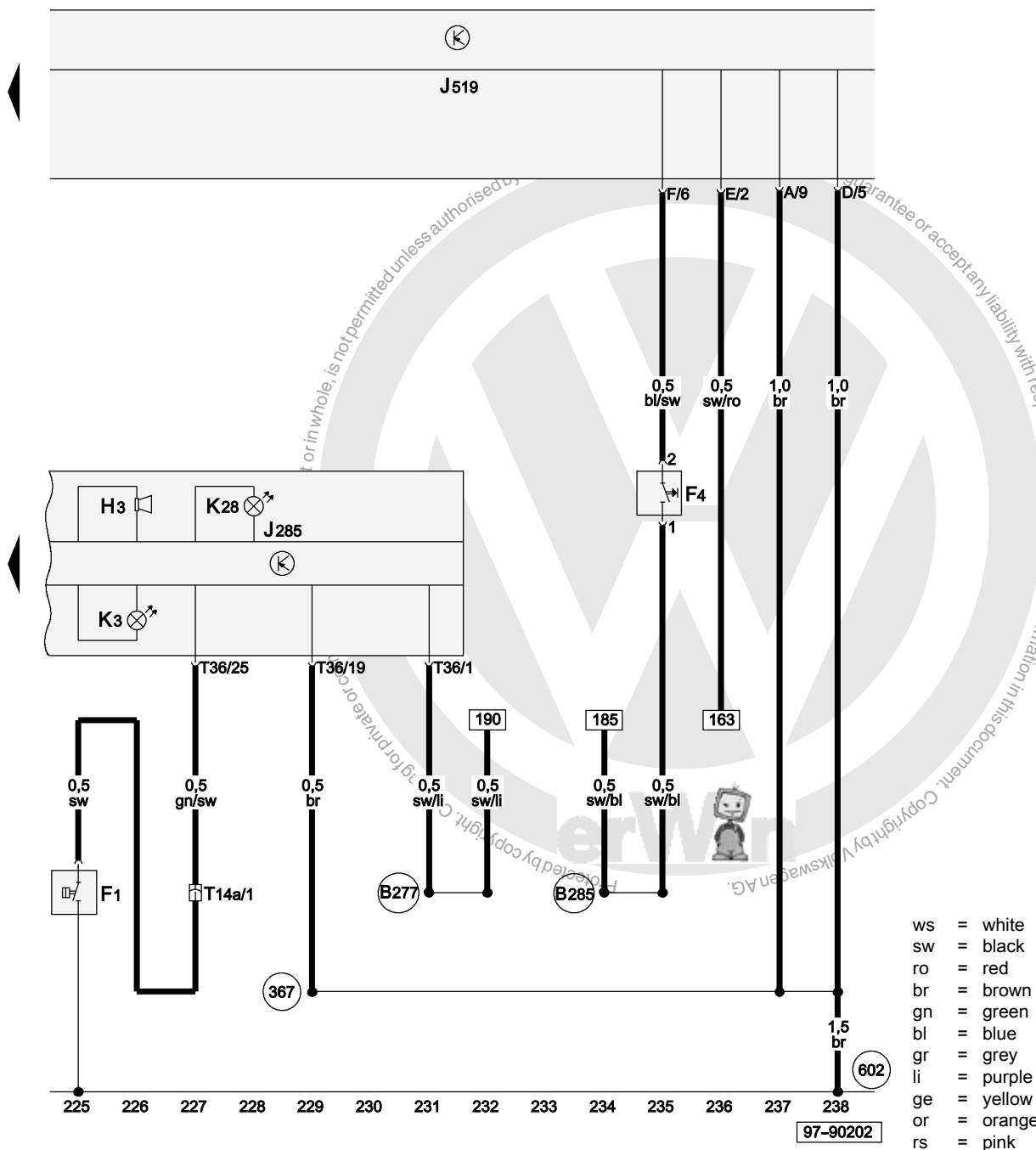
Fuel gauge, Coolant temperature gauge, Rev. Counter, Speedometer, Coolant shortage indicator sender, Control unit with display in dash panel insert

- G1 Fuel gauge
- G3 Coolant temperature gauge
- G5 Rev. Counter
- G21 Speedometer
- G32 Coolant shortage indicator sender
- J285 Control unit with display in dash panel insert
- J519 Onboard power supply control unit
- K2 Alternator warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- K31 Cruise control system (CCS) warning lamp
- K83 Exhaust emissions warning lamp
- K105 Reserve fuel warning lamp
- K132 Electric power control fault lamp
- T36 36-Pin Connector
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness



211 212 213 214 215 216 217 218 219 220 221 222 223 224
97-90201

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Oil pressure switch, Reversing light switch, Warning buzzer, Control unit with display in dash panel insert, Onboard power supply control unit

- F1 Oil pressure switch
- F4 Reversing light switch
- H3 Warning buzzer
- J285 Control unit with display in dash panel insert
- J519 Onboard power supply control unit
- K3 Oil pressure warning lamp
- K28 Coolant temperature/coolant shortage warning lamp
- T14a 14-Pin Connector, near battery
- T36 36-Pin Connector

- 367 Earth connection -2-, in main wiring harness
- 602 Earth point, in footwell, front left
- B277 Positive connection -1- (15a), in main wiring harness
- B285 Positive connection -9- (15a), in main wiring harness