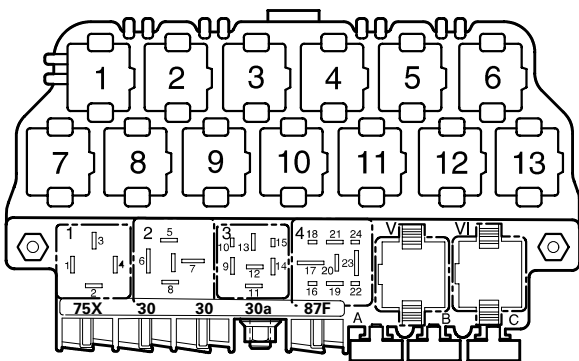


# 1,8L- Engine - Motronic Multiport Fuel Injection (MFI)/110 kW, code AUG

from May 2000

Deviate relay location and fuseplacements as well as the locations of multiple connectors see section "component locations".

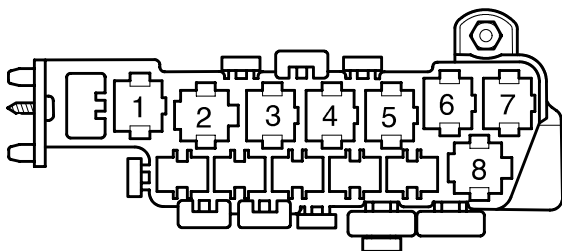


97-20676

Relay location on the thirteenfold auxiliary relay panel, above relay panel:

Relay panel:

- 4** Fuel Pump (FP) Relay (372)
- 10** Brake Booster Relay (569)



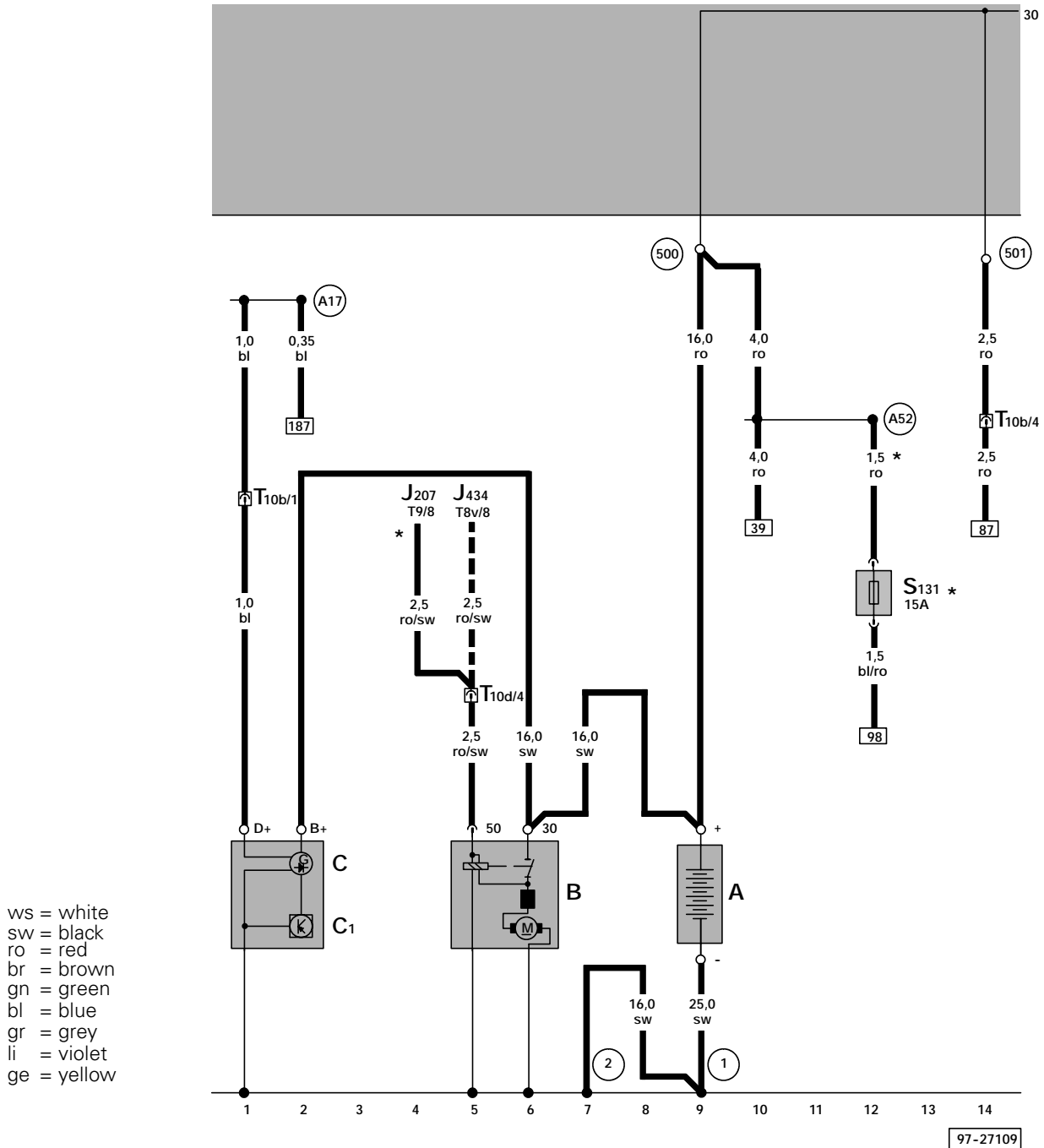
97-20515

Relay location on the eightfold auxiliary relay panel, behind relay panel:

**Fuse colors**

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

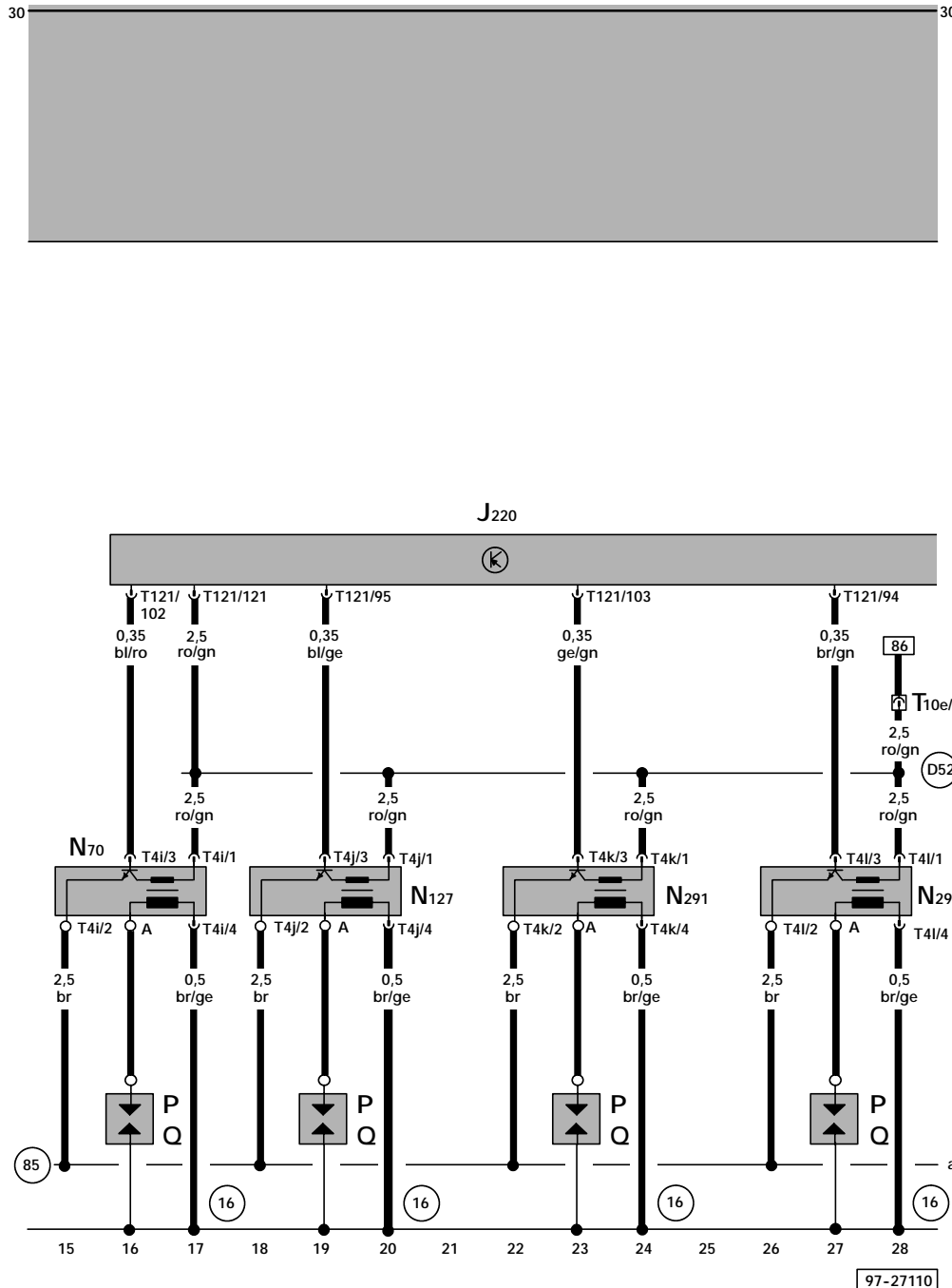
Note: Number in parentheses indicates production control number stamped on relay housing.



ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = violet  
 ge = yellow

- A - Battery
- B - Starter
- C - Generator (GEN)
- C1 - Voltage Regulator (VR)
- J207 - Starting Interlock Relay
- J434 - Locking relay for starter (clutch pedal switch)
- S131 - Safety fuse 1
- T8v - 8-Pin Connector
- T9 - 9-Pin Connector, on Starting Interlock Relay
- T10b - 10-Pin Connector, black, on protective housing for control module, in engine compartment, left
- T10d - 10-Pin Connector, brown, on protective housing for control module, in engine compartment, left

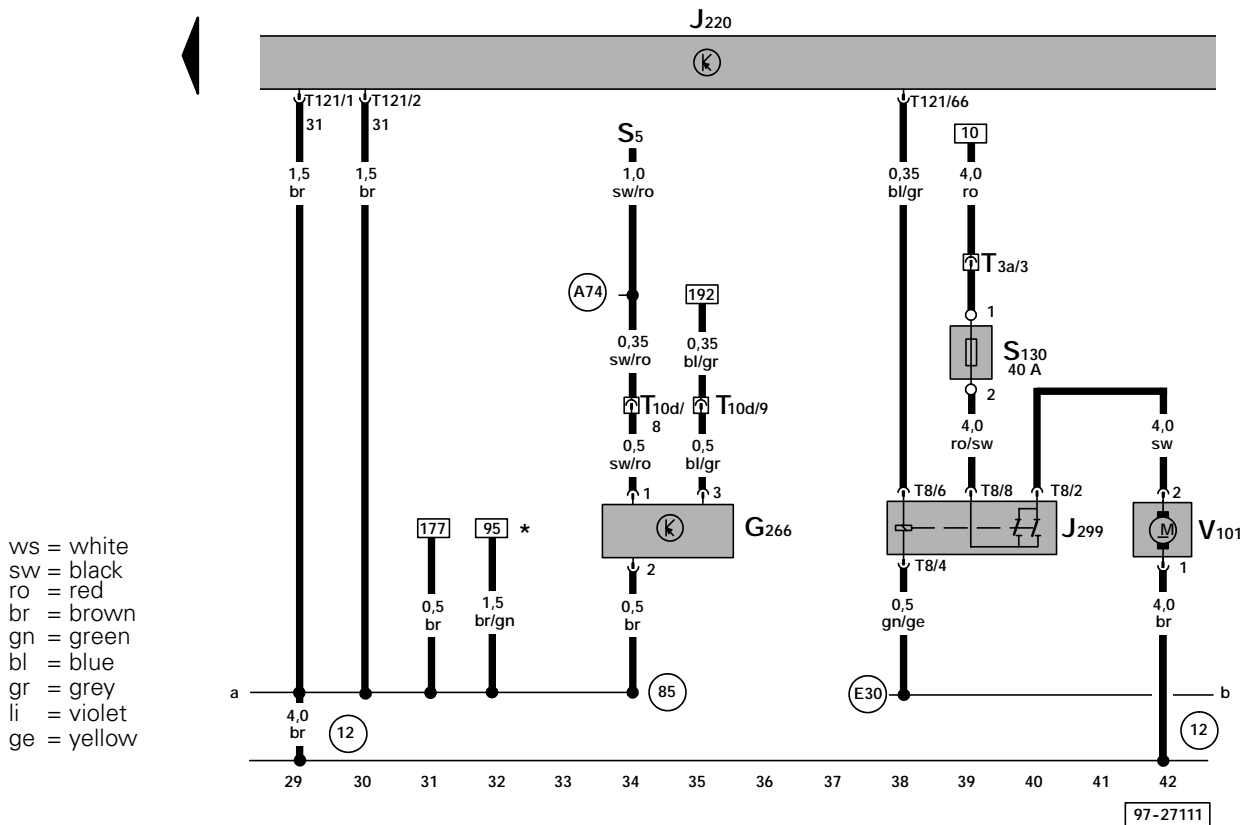
- 1 - Ground strap, battery to body
- 2 - Ground strap, transmission to body
- 500 - Threaded connection -1- (30), on relay plate
- 501 - Threaded connection -2- (30), on relay plate
- A17 - wire connection (61), in instrument panel wiring harness
- A52 - plus connection 2 (30), in instrument panel wiring harness
- \* - automatic transmission only
- - - - manual transmission only



ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = violet  
 ge = yellow

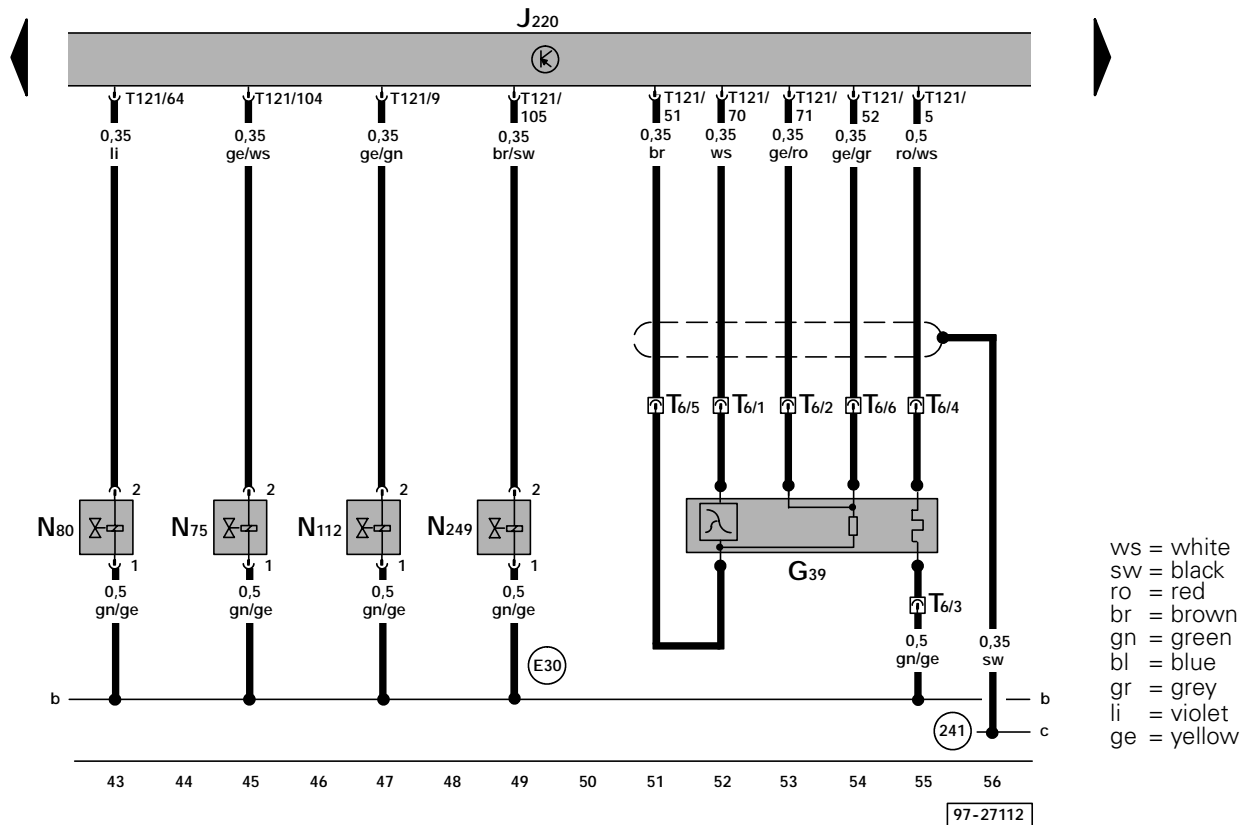
- J220 - Motronic Engine Control Module (ECM)
- N70 - Ignition Coil 1 with Power Output Stage
- N127 - Ignition Coil 2 with Power Output Stage
- N291 - Ignition Coil 3 with Power Output Stage
- N292 - Ignition Coil 4 with Power Output Stage
- P - Spark Plug Connectors
- Q - Spark Plugs
- T4i - 4-Pin Connector, black
- T4j - 4-Pin Connector, black
- T4k - 4-Pin Connector, black
- T4l - 4-Pin Connector, black
- T10e - 10-Pin Connector, orange, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (16) - Ground connection -1-, on valve cover
- (85) - Ground connection -1-, in engine compartment wiring harness
- (D52) - plus connection (15a), in engine compartment wiring harness



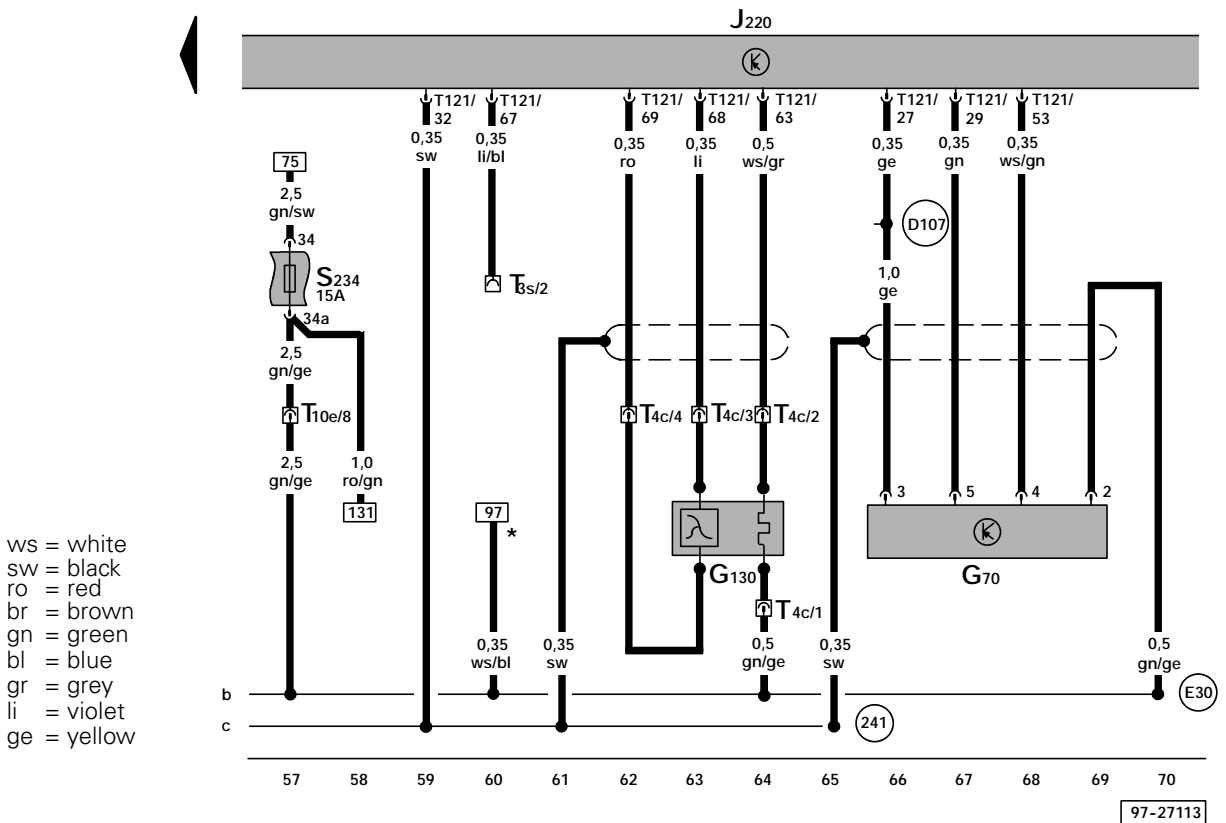
- G266 - Oil Level Thermal Sensor
- J220 - Motronic Engine Control Module (ECM)
- J299 - Secondary Air Injection (AIR) Pump Relay
- S5 - Fuse
- S130 - Fuse for secondary air pump
- T3a - 3-Pin Connector, white
- T8 - 8-Pin Connector, brown
- T10d - 10-Pin Connector, brown, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)
- V101 - Secondary Air Injection (AIR) Pump Motor

- 12 - Ground connection, in engine compartment, left
- 85 - Ground connection -1-, in engine compartment wiring harness
- A74 - Connector (15a - fuse 5) in instrument panel wiring harness
- E30 - Connector (87a), in wiring harness engine
- \* - automatic transmission only



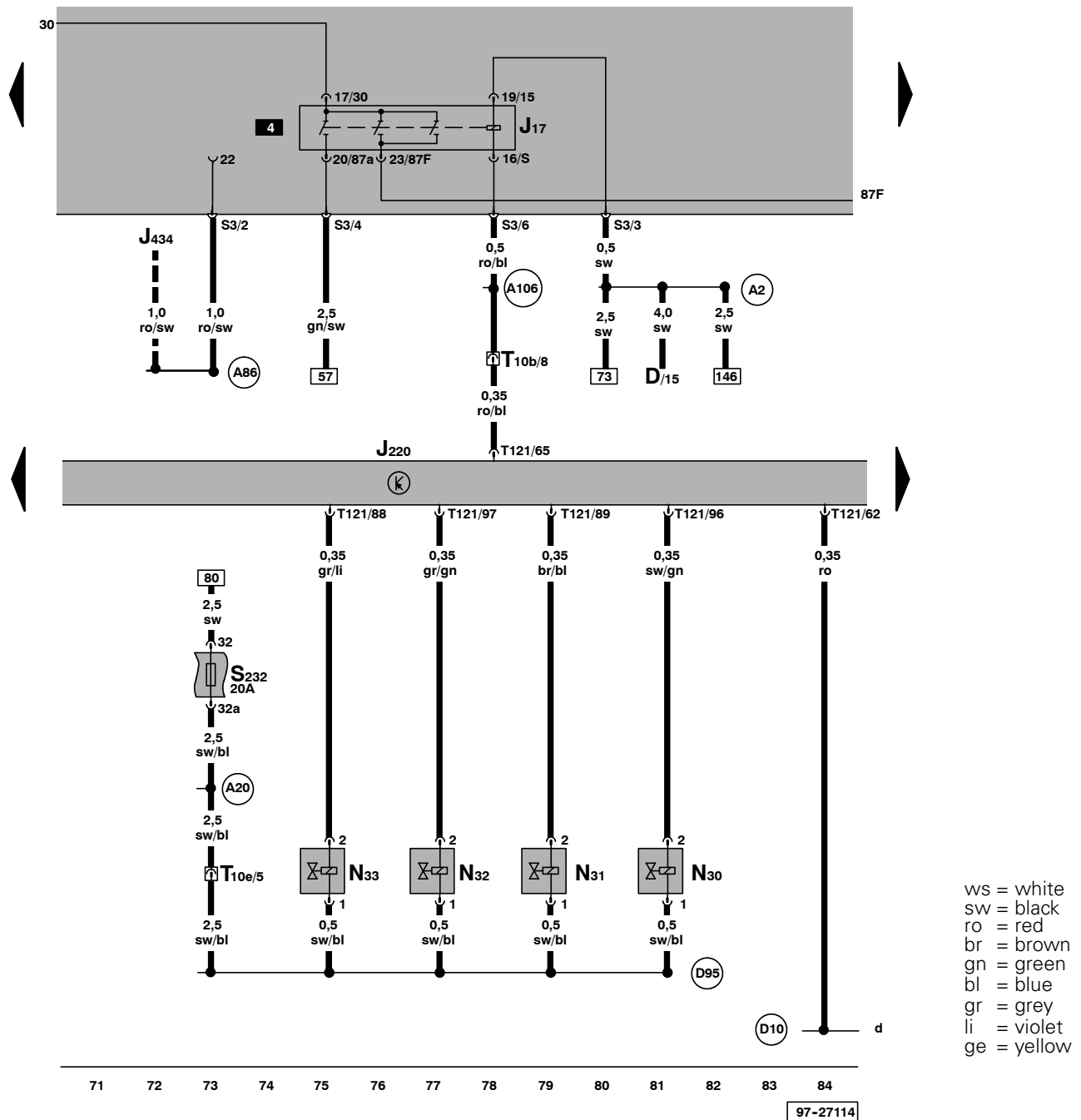
- G39 - Heated Oxygen Sensor (HO2S)
- J220 - Motronic Engine Control Module (ECM)
- N75 - Wastegate Bypass Regulator Valve
- N80 - Evaporative Emission (EVAP) Canister Purge Regulator Valve
- N112 - Secondary Air Injection (AIR) Solenoid Valve
- N249 - Recirculating valve for turbocharger
- T6 - 6-Pin Connector, black
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (241) - Ground connection 2, engine ground in engine wiring harness
- (E30) - Connector (87a), in wiring harness engine



- G70 - Mass Air Flow (MAF) Sensor
- G130 - Oxygen Sensor (O2S) Behind Three Way Catalytic Converter (TWC)
- J220 - Motronic Engine Control Module (ECM)
- S234 - Fuse in fuse holder
- T3s - 3-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T4c - 4-Pin Connector, black
- T10e - 10-Pin Connector, orange, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (241) - Ground connection 2, engine ground in engine wiring harness
- (D107) - wire connection -5-, in engine compartment wiring harness
- (E30) - Connector (87a), in wiring harness engine
- \* automatic transmission only



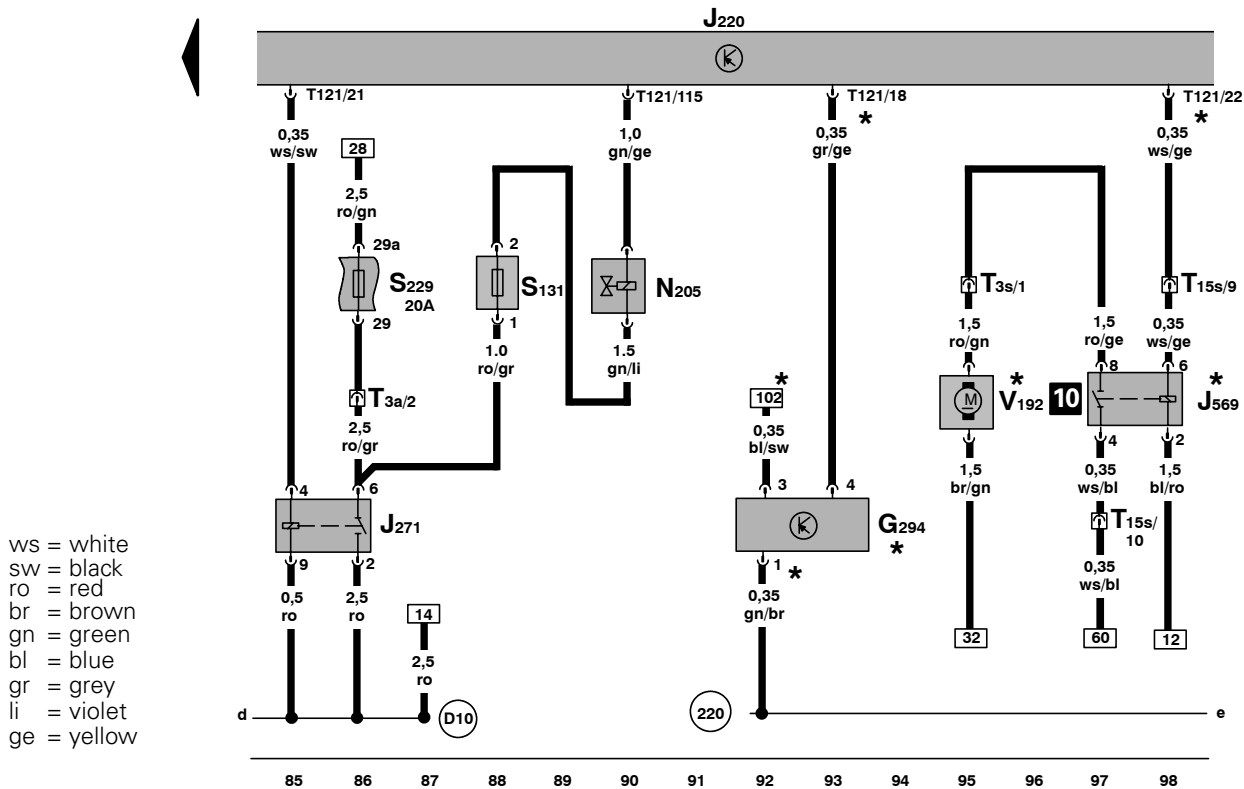
- D - Ignition/Starter Switch
- J17 - Fuel Pump (FP) Relay (372)
- J220 - Motronic Engine Control Module (ECM)
- J434 - Locking relay for starter (clutch pedal switch)
- N30 - Cylinder 1 Fuel Injector
- N31 - Cylinder 2 Fuel Injector
- N32 - Cylinder 3 Fuel Injector
- N33 - Cylinder 4 Fuel Injector
- S232 - Fuse in fuse holder
- T10b - 10-Pin Connector, black, on protective housing for control module, in engine compartment, left
- T10e - 10-Pin Connector, orange, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (A2) - plus connection (15), in instrument panel wiring harness
- (A20) - wire connection (15a), in instrument panel wiring harness
- (A86) - Connection (50a), in instrument panel wiring harness
- (A106) - Connector -2- (86s), in instrument panel wiring harness
- (D10) - plus connection (30), in right front wiring harness
- (D95) - wire connection (injectors), in engine compartment wiring harness
- - - manual transmission only



87F

87F



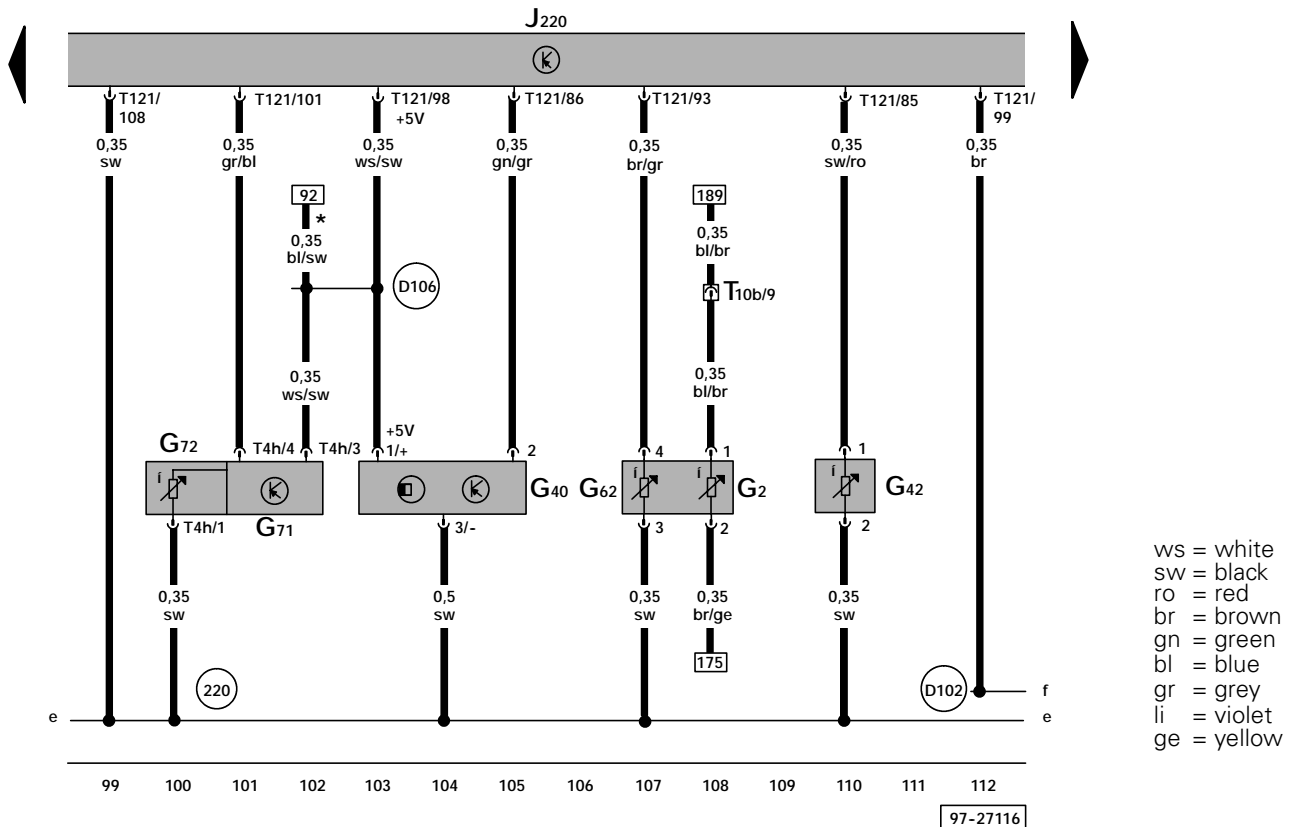
ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = violet  
 ge = yellow

- G294 - Sensor for brake booster
- J220 - Motronic Engine Control Module (ECM)
- J271 - Motronic Engine Control (ECM) Power Supply Relay
- J569 - Relay for brake booster
- N205 - Valve -1- for camshaft adjustment
- S131 - Safety fuse 1
- S229 - Fuse in fuse holder
- T3a - 3-Pin Connector, white
- T3s - 3-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T15s - 15-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)
- V192 - Vacuum pump for brake

- (220) - Ground connection (sensor ground), in engine compartment wiring harness
- (D10) - plus connection (30), in right front wiring harness

\* - automatic transmission only

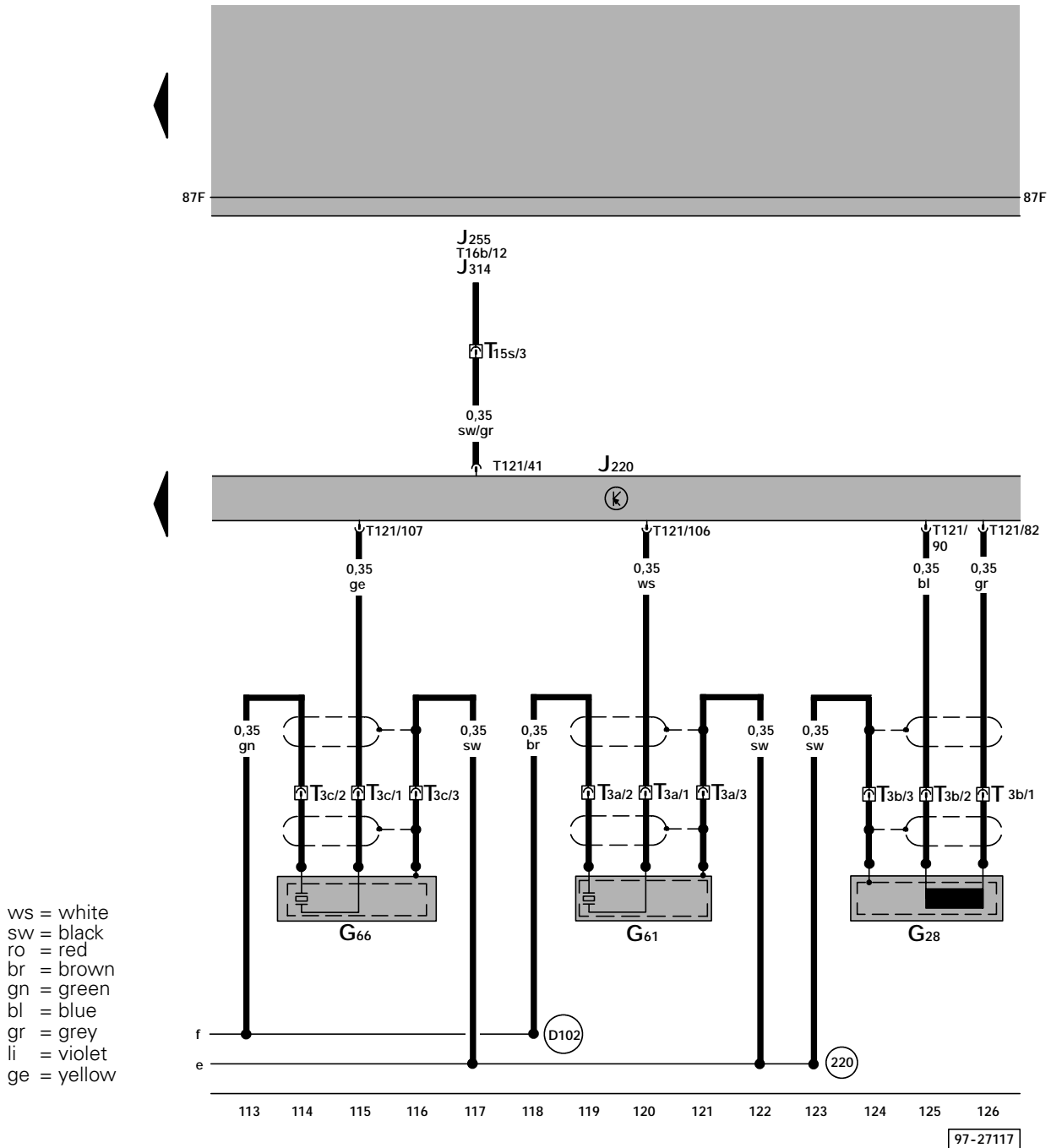




- G2 - Engine Coolant Temperature (ECT) Sensor
- G40 - Camshaft Position (CMP) Sensor
- G42 - Intake Air Temperature (IAT) Sensor
- G62 - Engine Coolant Temperature (ECT) Sensor
- G71 - Manifold Absolute Pressure (MAP) Sensor
- G72 - Intake Air Temperature (IAT) Sensor
- J220 - Motronic Engine Control Module (ECM)
- T4h - 4-Pin Connector, black
- T10b - 10-Pin Connector, black, on protective housing for control module, in engine compartment, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- 220 - Ground connection (sensor ground), in engine compartment wiring harness
- D102 - Wire connection -2-, in engine compartment wiring harness
- D106 - Wire connection -4-, in engine compartment wiring harness

\* - automatic transmission only



- G28 - Engine Speed (RPM) Sensor
- G61 - Knock Sensor (KS) 1
- G66 - Knock Sensor (KS) 2
- J220 - Motronic Engine Control Module (ECM)
- J255 - Climatronic Control Module
- J314 - A/C Cut-Off Control Module
- T3a - 3-Pin Connector, green
- T3b - 3-Pin Connector, grey
- T3c - 3-Pin Connector, blue
- T15s - 15-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T16b - 16-Pin Connector, on Climatronic Control Module
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

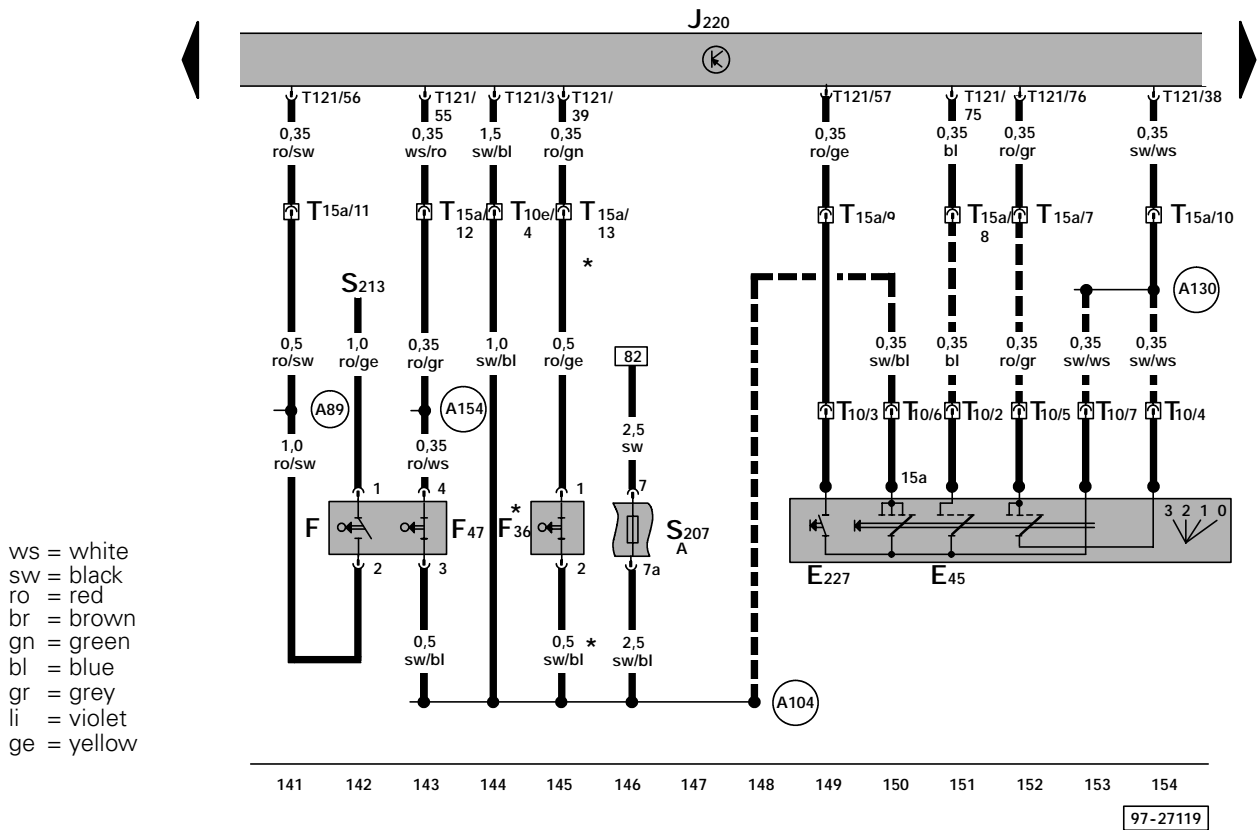
- (220) - Ground connection (sensor ground), in engine compartment wiring harness
- (D102) - Wire connection -2-, in engine compartment wiring harness





87F

87F

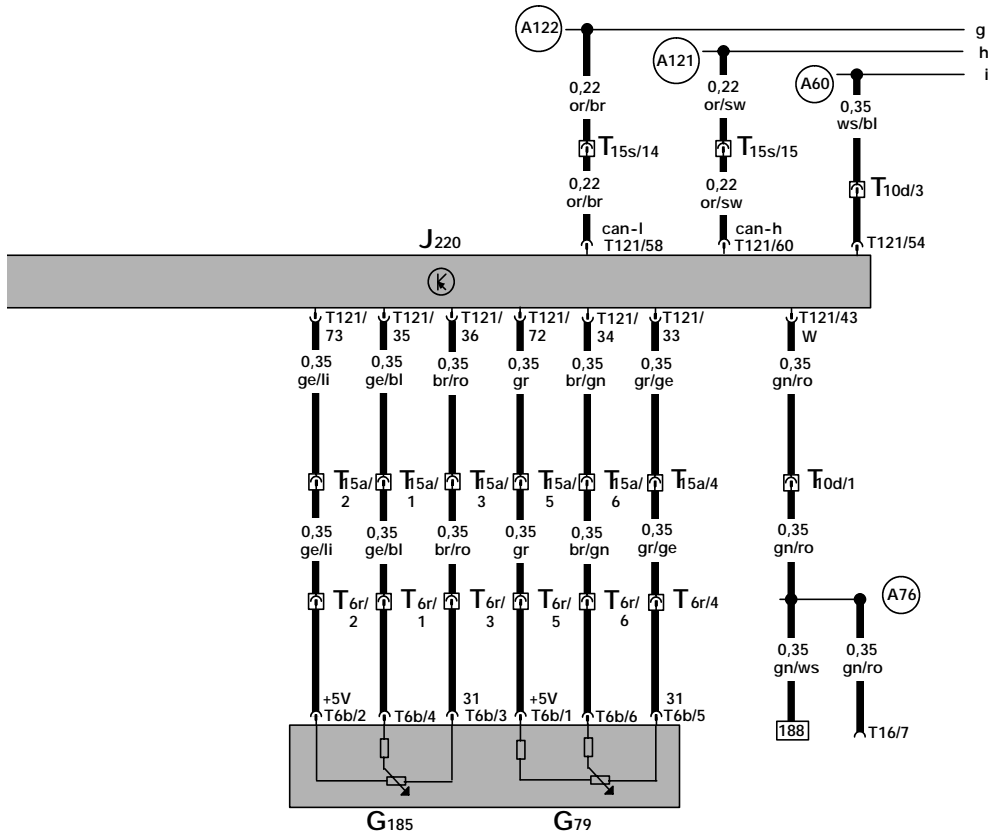


- E45 - Cruise Control Switch
- E227 - Button for cruise control (set)
- F - Brake Light Switch
- F36 - Clutch Vacuum Vent Valve Switch
- F47 - Brake Light Switch for Cruise Control Indicator
- J220 - Motronic Engine Control Module (ECM)
- S207 - Fuse 7 in Fuseholder
- S213 - Fuse 13 in Fuseholder
- T10 - 10-Pin Connector, black
- T10e - 10-Pin Connector, orange, on protective housing for control module, in engine compartment, left
- T15a - 15-Pin Connector, white
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (A89) - Connector 2 (54) in instrument panel wiring harness
- (A104) - Plus Connector -2- 15 in instrument panel wiring harness
- (A130) - Connection for Cruise Control (instrument panel wiring harness)
- (A154) - Brake Pedal Switch connection ( in instrument panel wiring harness)
- \* - manual transmission only
- - - - cruise control only

87F

87F



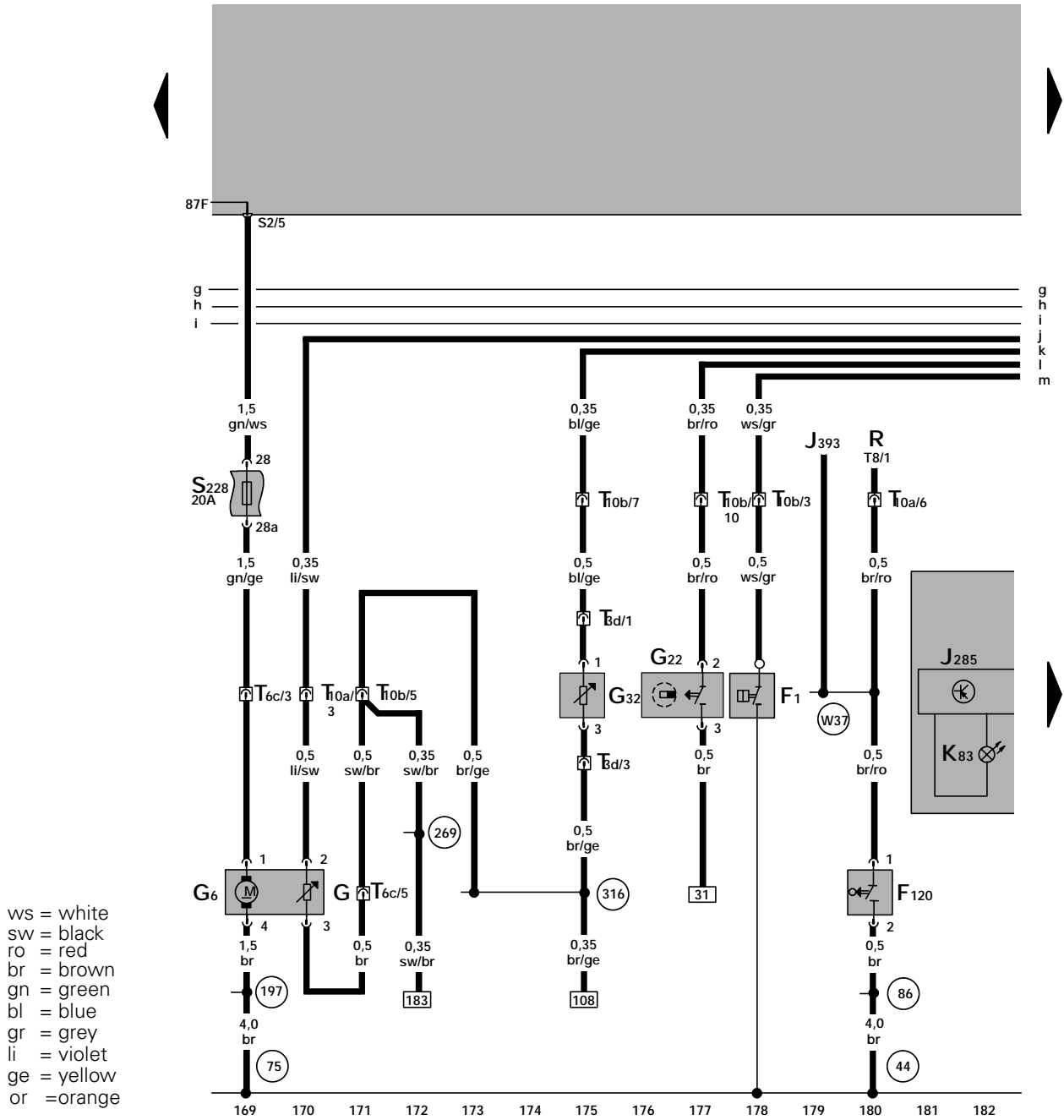
ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = violet  
 ge = yellow  
 or = orange

155 156 157 158 159 160 161 162 163 164 165 166 167 168

97-27120

- G79 - Throttle Position (TP) Sensor
- G185 - Sender -2- for accelerator pedal position
- J220 - Motronic Engine Control Module (ECM)
- T6b - 6-Pin Connector, on Throttle Position Sensor
- T6r - 6-Pin Connector, black
- T10d - 10-Pin Connector, brown, on protective housing for control module, in engine compartment, left
- T15a - 15-Pin Connector, white, on protective housing for control module, in engine compartment, left
- T15s - 15-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T16 - 16-Pin Connector, Data Link Connector (DLC), below instrument panel, left
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)

- (A60) - Wire connection (Vehicle speed signal) , in instrument cluster wiring harness
- (A76) - Connector ( K-diagnosis wire) in instrument panel wiring harness
- (A121) - Connection (high bus) in instrument panel wiring harness
- (A122) - Connection (low bus) in instrument panel wiring harness

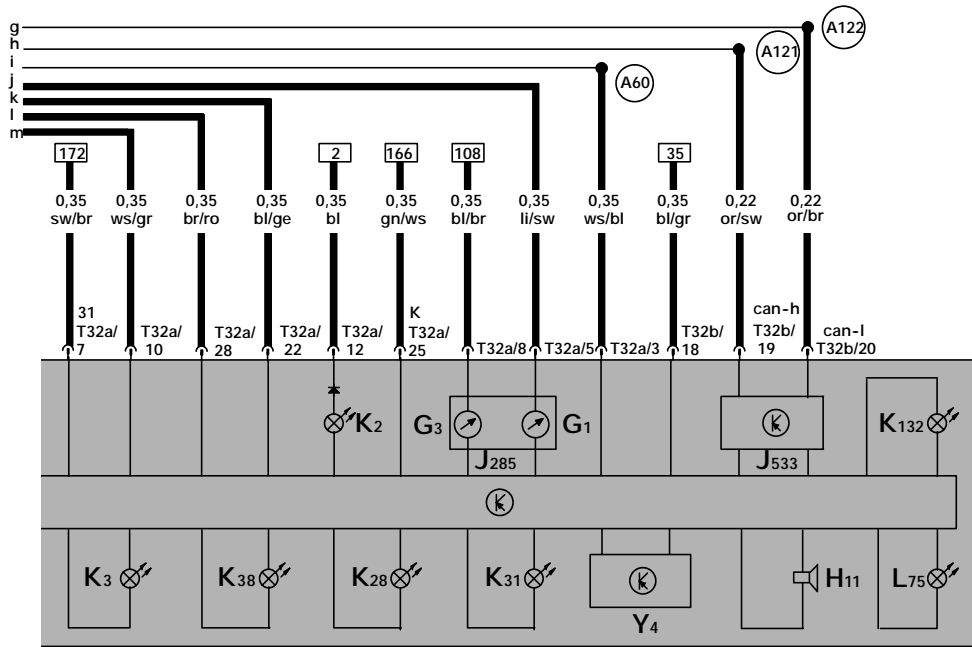


ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = violet  
 ge = yellow  
 or = orange

97-27121

- F1 - Oil Pressure Switch
- F120 - Hood Alarm Switch
- G - Sender for fuel gauge
- G6 - Fuel Pump (FP)
- G22 - Speedometer Vehicle Speed Sensor (VSS)
- G32 - Engine Coolant Level (ECL) Sensor
- J285 - Control module with indicator unit in instrument panel insert
- J393 - Central control module for comfort system
- K83 - Malfunction Indicator Lamp (MIL)
- R - Radio
- S228 - Fuse in fuse holder
- T3d - 3-Pin Connector
- T6c - 6-Pin Connector, blue
- T8 - 8-Pin Connector, black
- T10a - 10-Pin Connector, brown, connector station A-pillar, left

- T10b - 10-Pin Connector, black, on protective housing for control module, in engine compartment, left
- 44 - Ground connection, on left A-pillar, lower part
- 75 - Ground connection, on right rear pillar
- 86 - Ground connection -1-, in rear wiring harness
- 197 - Ground connection -4-, in wiring harness rear
- 269 - Ground connector (sensor ground) -1-, in instrument panel wiring harness
- 316 - Sensor ground connection 2 (in engine compartment wiring harness)
- W37 - Connection (DWA) in floor wiring harness



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

183 184 185 186 187 188 189 190 191 192 193 194 195 196

97-27122

- G1 - Fuel Gauge
- G3 - Engine Coolant Temperature (ECT) Gauge
- H11 - Oil Pressure Warning Buzzer
- J285 - Control module with indicator unit in instrument panel insert
- J533 - Data Bus On Board Diagnostic Interface
- K2 - Generator (GEN) Warning Light
- K3 - Oil Pressure Warning Light
- K28 - Engine Coolant Level/Temperature (ECL/ECT) Warning Light
- K31 - Cruise Control Indicator Light
- K38 - Engine Oil Level Indicator Light
- K132 - Electronic Power Control (EPC) Warning Lamp
- L75 - Digital Display Light
- T32a - 32-Pin Connector, blue, on instrument cluster
- T32b - 32-Pin Connector, green, on instrument cluster

- Y4 - Odometer Display
- A60 - Wire connection (Vehicle speed signal) , in instrument cluster wiring harness
- A121 - Connection (high bus) in instrument panel wiring harness
- A122 - Connection (low bus) in instrument panel wiring harness