

1,8L-Engine - Motronic Multiport Fuel Injection (MFI)/125 kW, code AWM

from October 2000

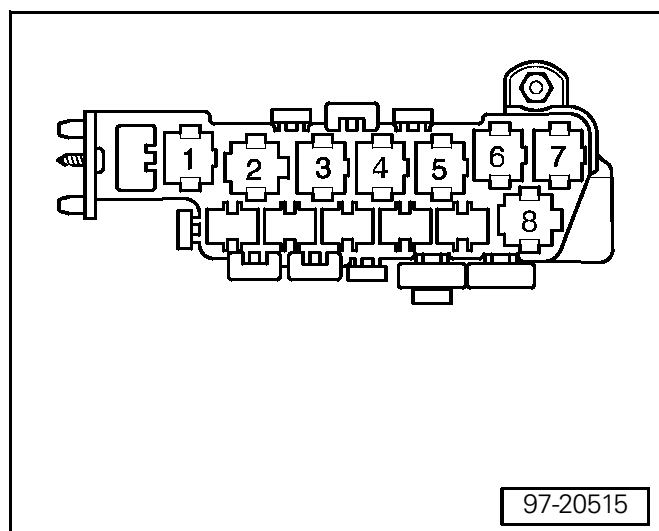
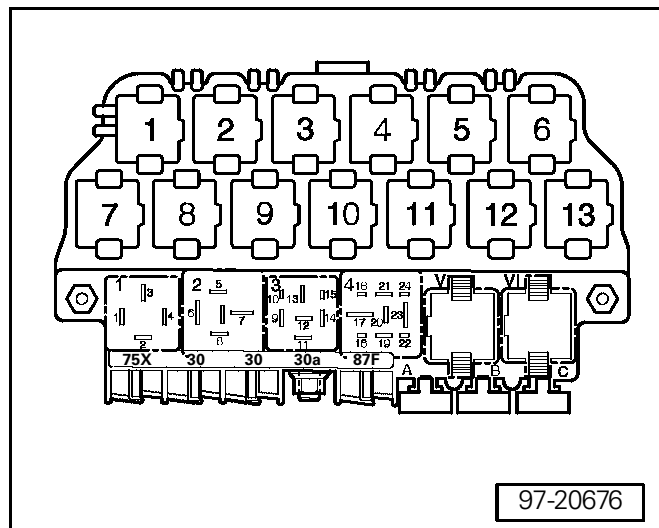
Deviate relay location and fuseplacements as well as the locations of multiple connectors see section "component locations"

Relay location on the thirteen position auxiliary relay panel, above relay panel:

10 - Brake Booster Relay (373)

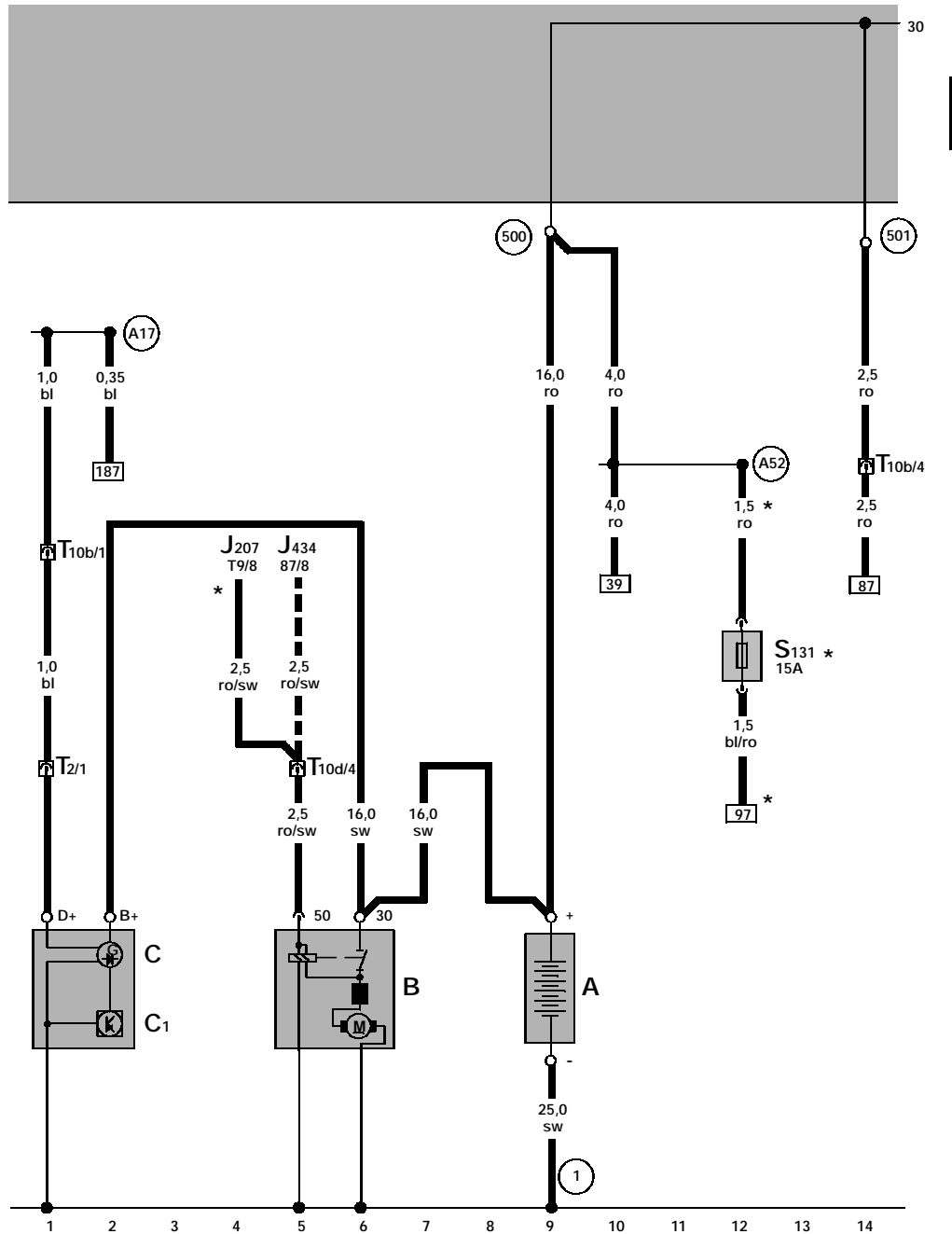
Relay panel:

4 - Fuel Pump (FP) Relay (372)



Relay location on the eight position auxiliary relay panel, above relay panel:

Battery, Starter, Generator (GEN)



- 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
- T2 - Double Connector, black
- 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

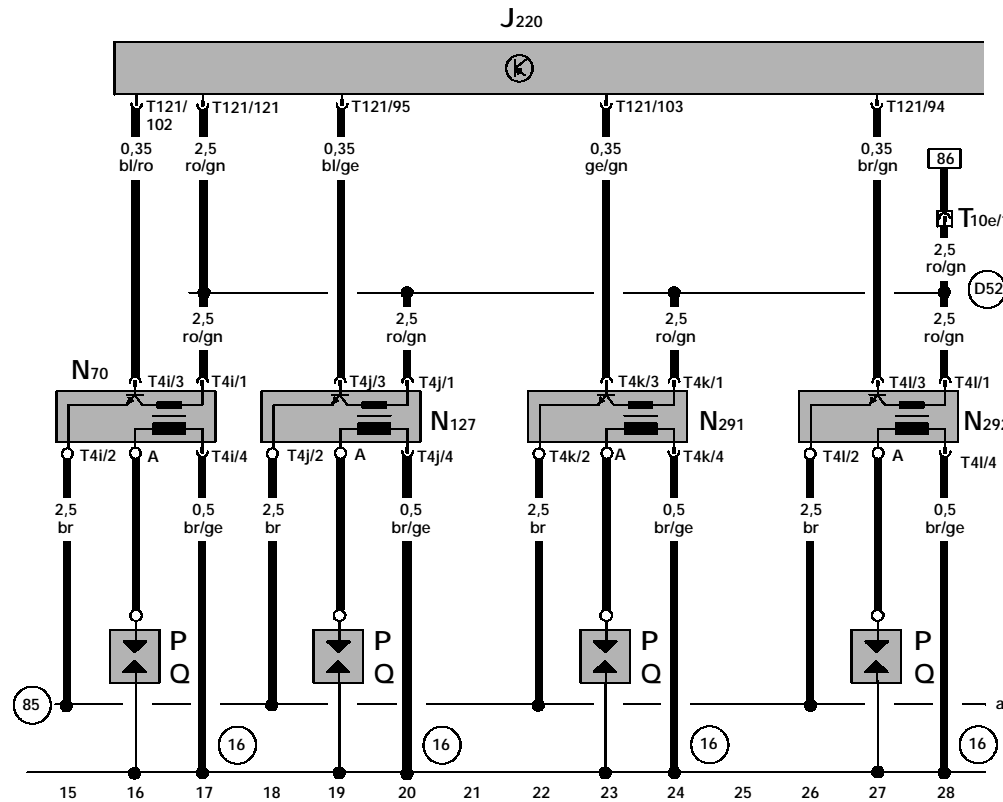
- ① - Ground strap, battery to body
- ⑤00 - Threaded connection -1- (30), on the relay plate
- ⑤01 - Threaded connection -2- (30), on the relay plate
- Ⓐ17 - wire connection (61), in instrument panel wiring harness
- Ⓐ52 - Plus Connection 2 (30) (in instrument panel wiring harness)

- * - automatic transmission only
- - - - manual transmission only

ws = white
 sw = black
 ro = red
 br = brown
 gn = green
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Ignition system, Motronic Engine Control Module (ECM), Spark Plug Connectors, Spark Plugs

- 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



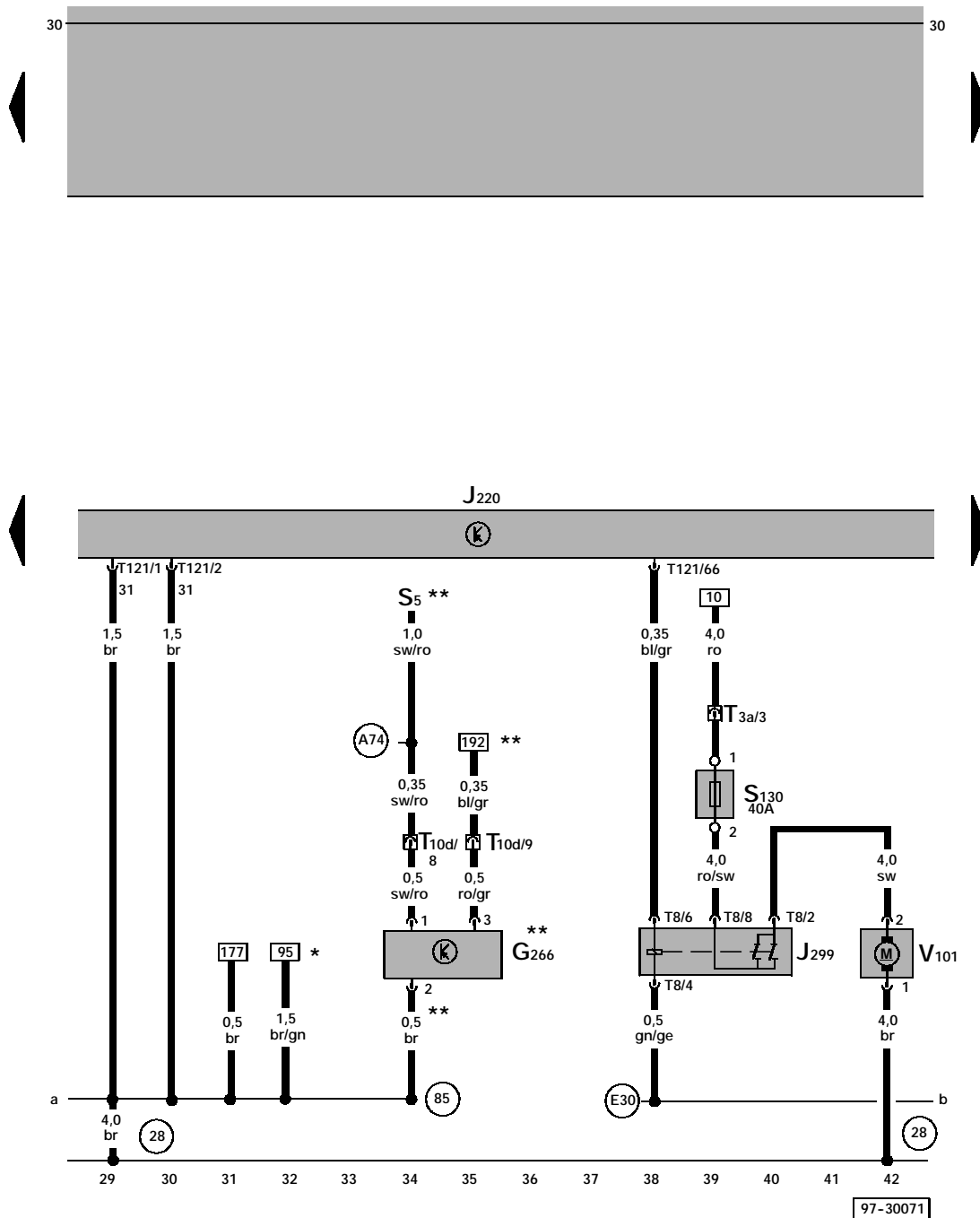
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Motronic Engine Control Module (ECM), Secondary Air Injection (AIR) Pump Motor/Relay

- 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)
- (28) - Ground connection, on firewall
- (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

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- ** - discontinued from June 2001

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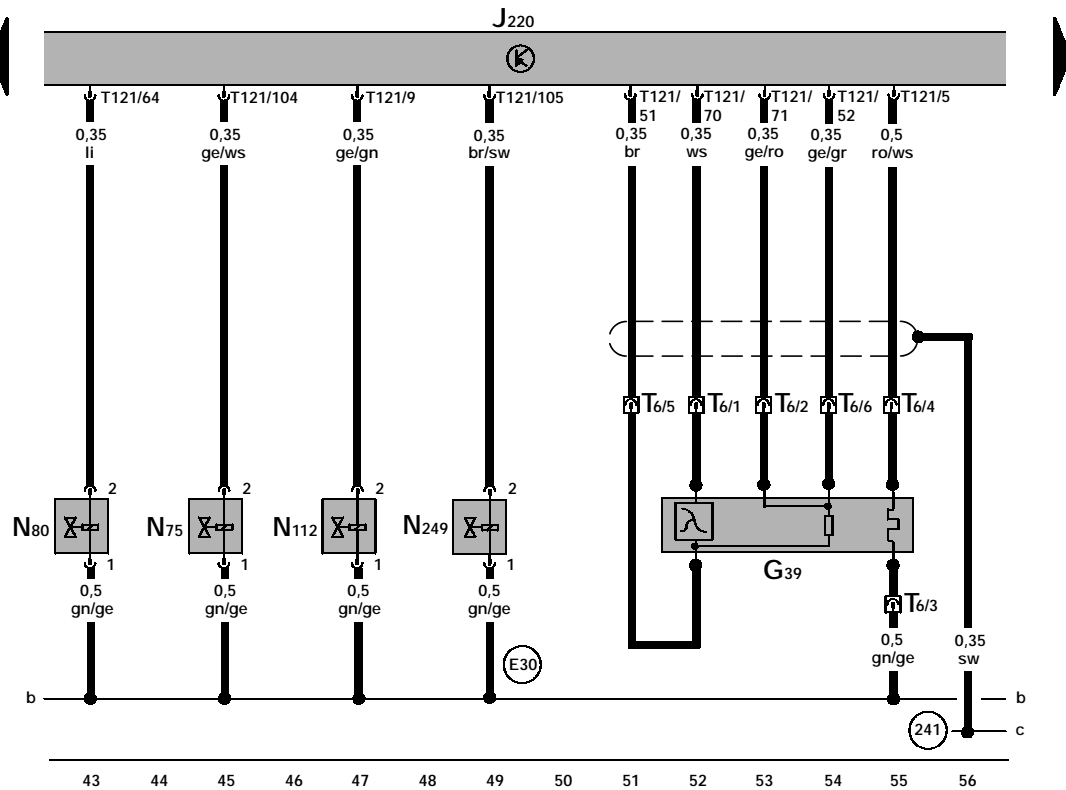
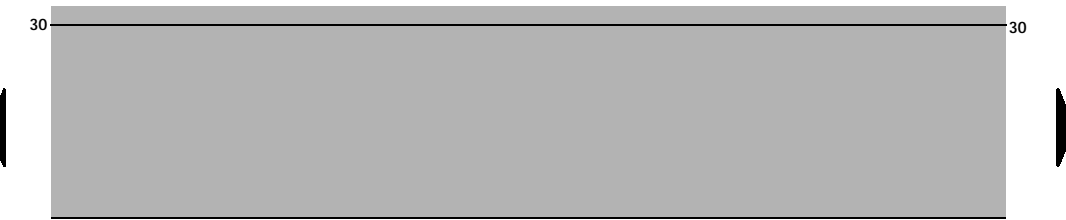


97-30071

Motronic ECM, Wastegate Bypass Reg. Valve, EVAP Canister Purge Reg. Valve, Secondary Air Injection Solenoid Valve, Recirc. valve for turbocharger, HO2S sensor

- 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 Infection (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

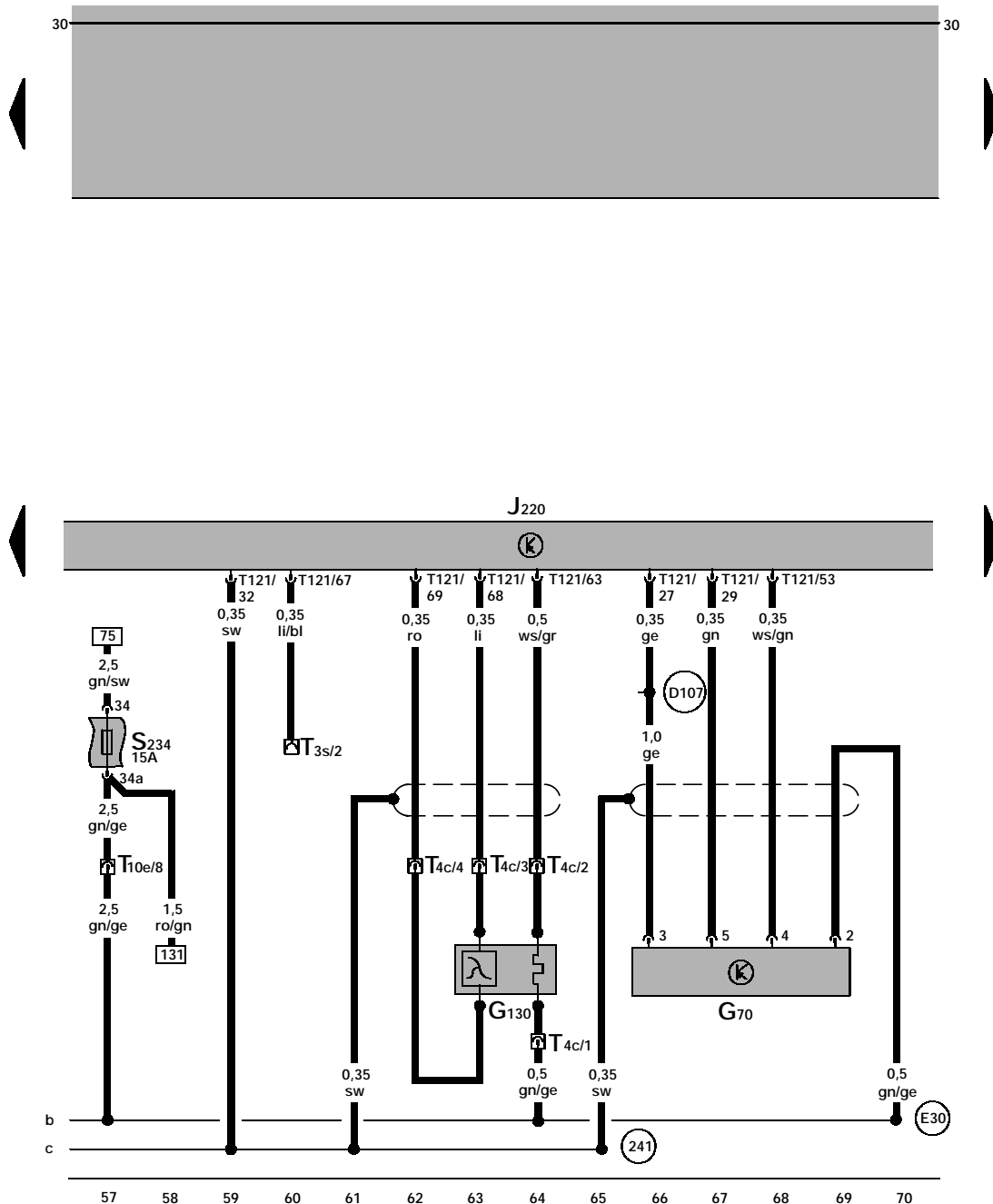


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Motronic Engine Control Module (ECM), Oxygen Sensor, Mass Air Flow Sensor

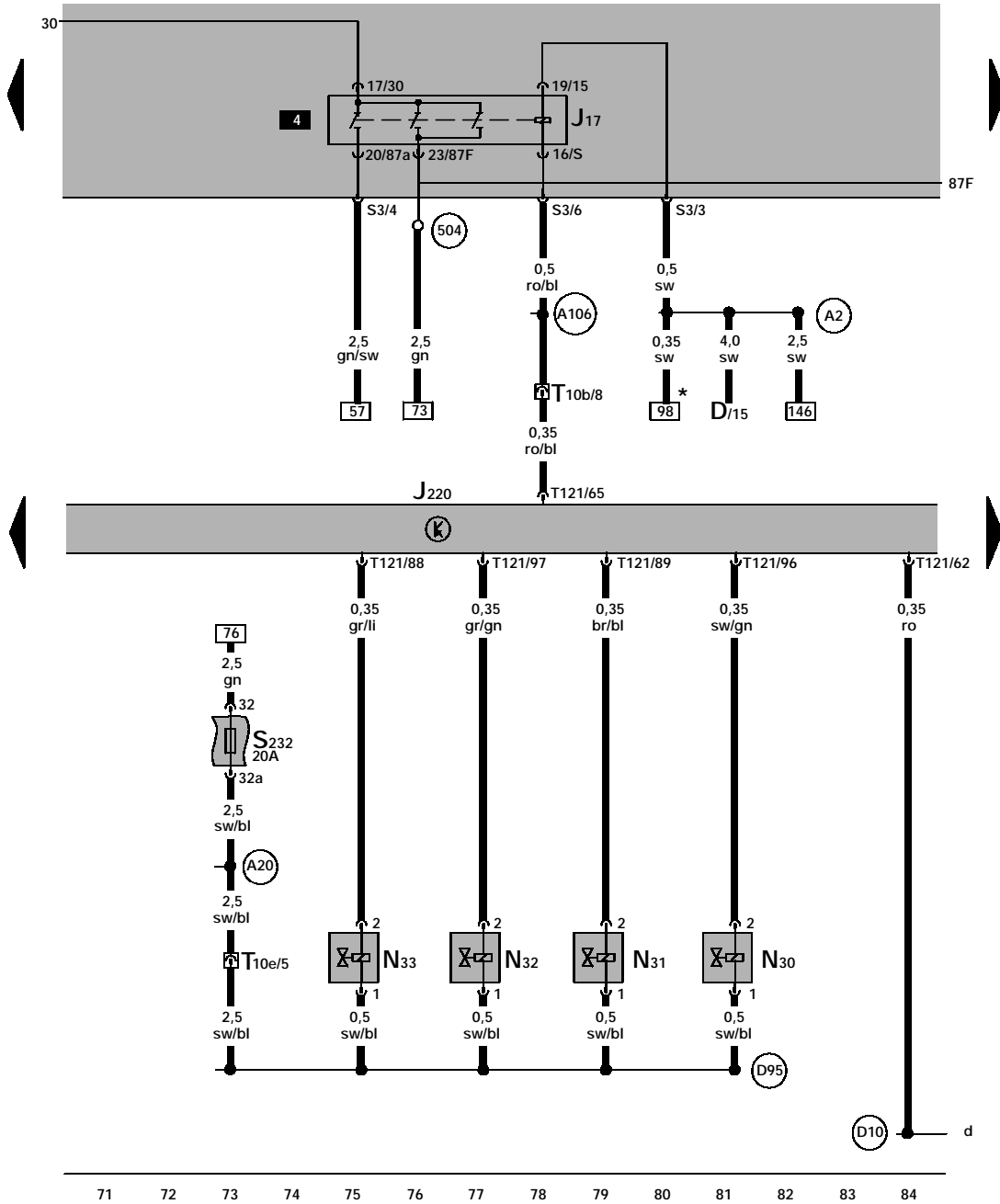
- G70 - Mass Air Flow (MAF) Sensor
- G130- Oxygen Sensor (O2S) Behind Three Way Catalytic Converter (TWC)
- J220 - Motronic Engine Control Module (ECM)
- S234 - Fuse in fuse holder
- T3s - 3-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T4c - 4-Pin Connector,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



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Motronic Engine Control Module (ECM), Fuel Pump Relay, Fuel Injectors



- D - Ignition/Starter Switch
- J17 - Fuel Pump (FP) Relay (372)
- J220 - Motronic Engine Control Module (ECM)
- 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)

- (504) - Threaded connection -1- (87) on the relay plate
- (A2) - plus connection (15), in instrument panel wiring harness
- (A20) - wire connection (15a), 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

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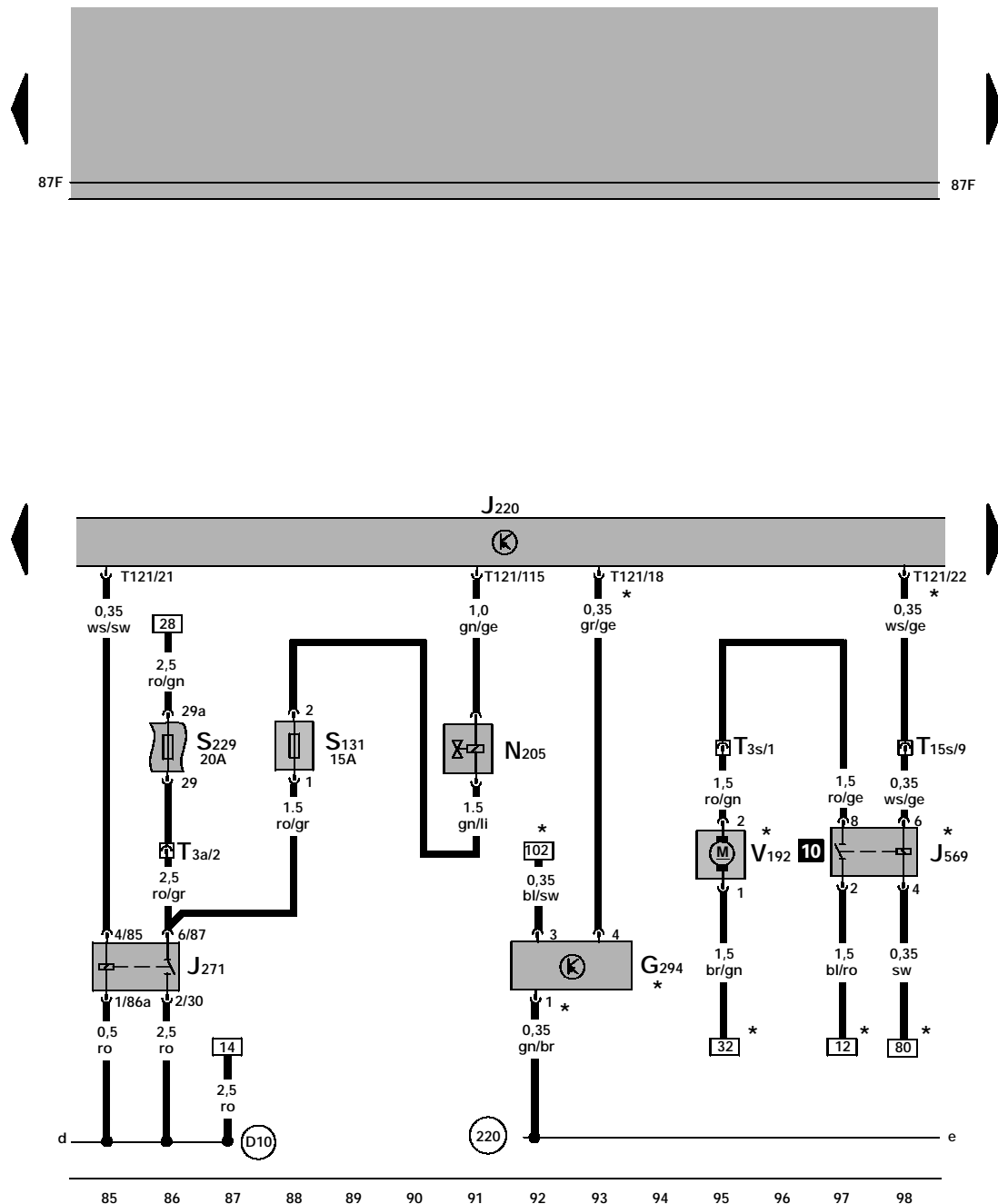
Motronic Engine Control Module (ECM), Motronic Power Supply Relay, Brake Booster Pressure Sensor, Brake System Vacuum Pump

- G294 - Brake Booster Pressure Sensor
- J220 - Motronic Engine Control Module (ECM)
- J271 - Motronic Engine Control (ECM) Power Supply Relay
- J569 - Brake Booster Relay
- 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 - Brake System Vacuum Pump

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

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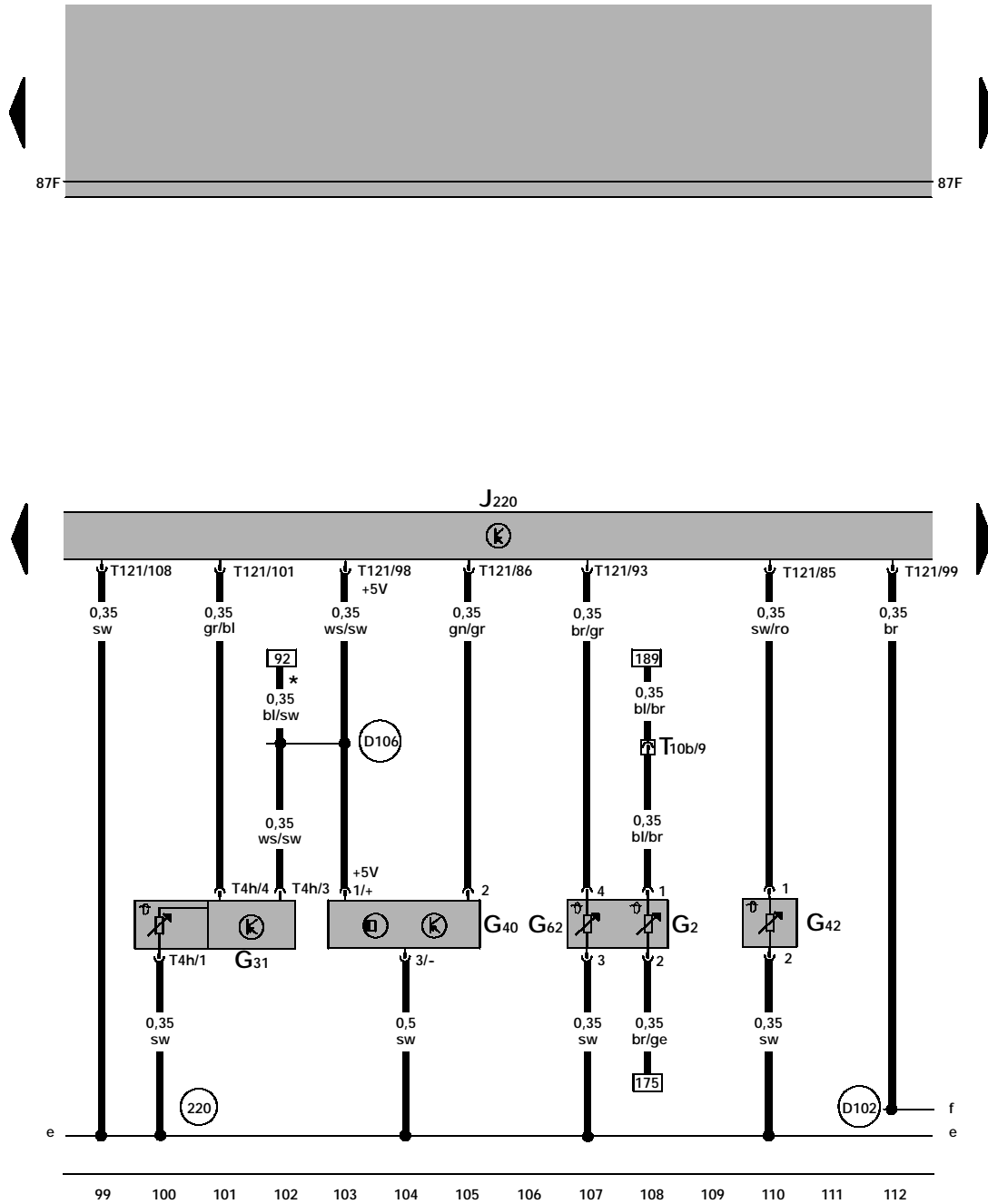
Motronic Engine Control Module (ECM), Engine Coolant Temperature Sensor, Camshaft Position Sensor, Intake Air Temperature

- G2 - Engine Coolant Temperature (ECT) Sensor
- G40 - Camshaft Position (CMP) Sensor
- G42 - Intake Air Temperature (IAT) Sensor
- G62 - Engine Coolant Temperature (ECT) Sensor
- G31 - Charge Air Pressure 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

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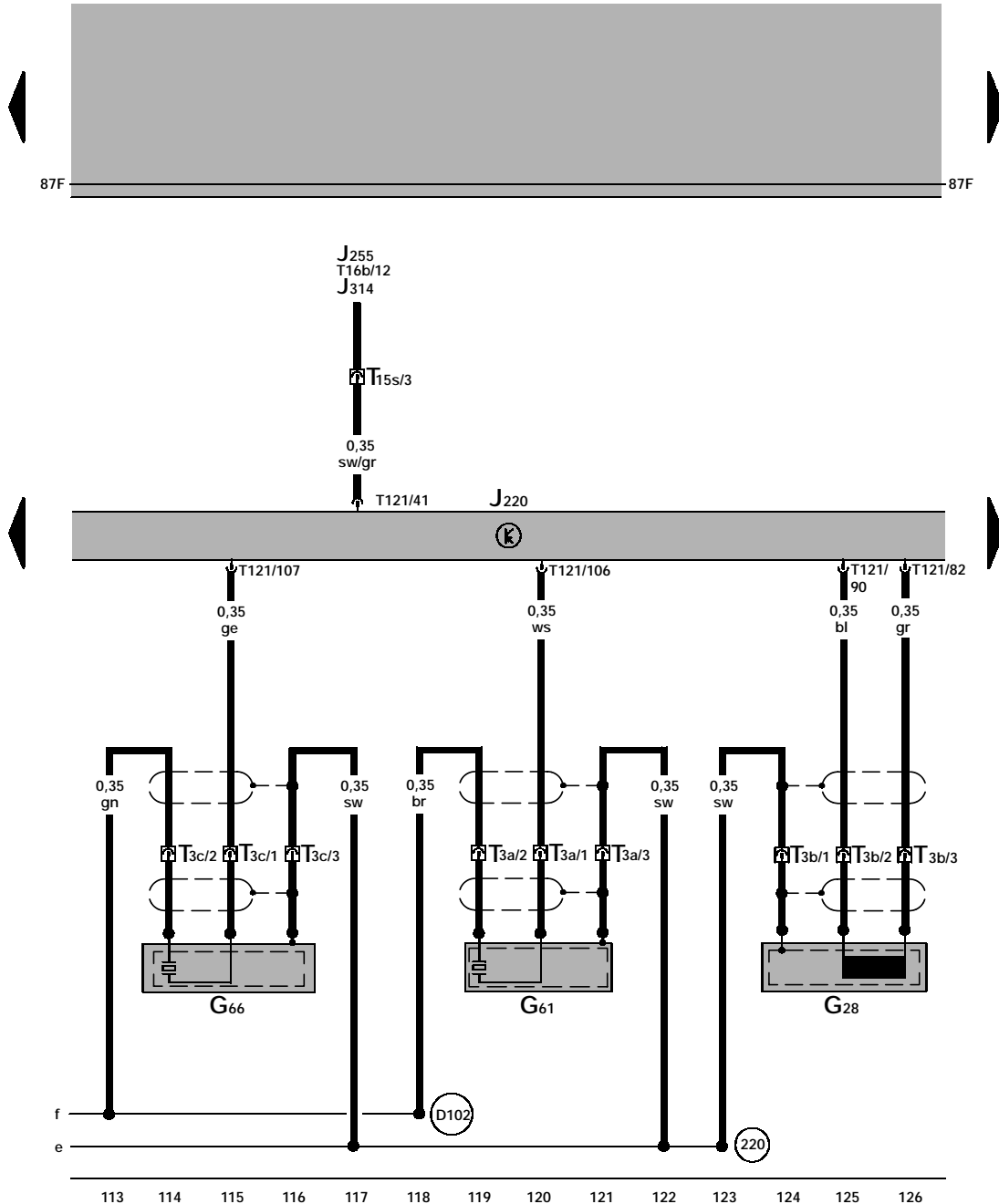


Motronic Engine Control Module (ECM), Knock Sensor 1 and 2, Engine Speed Sensor

- 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)

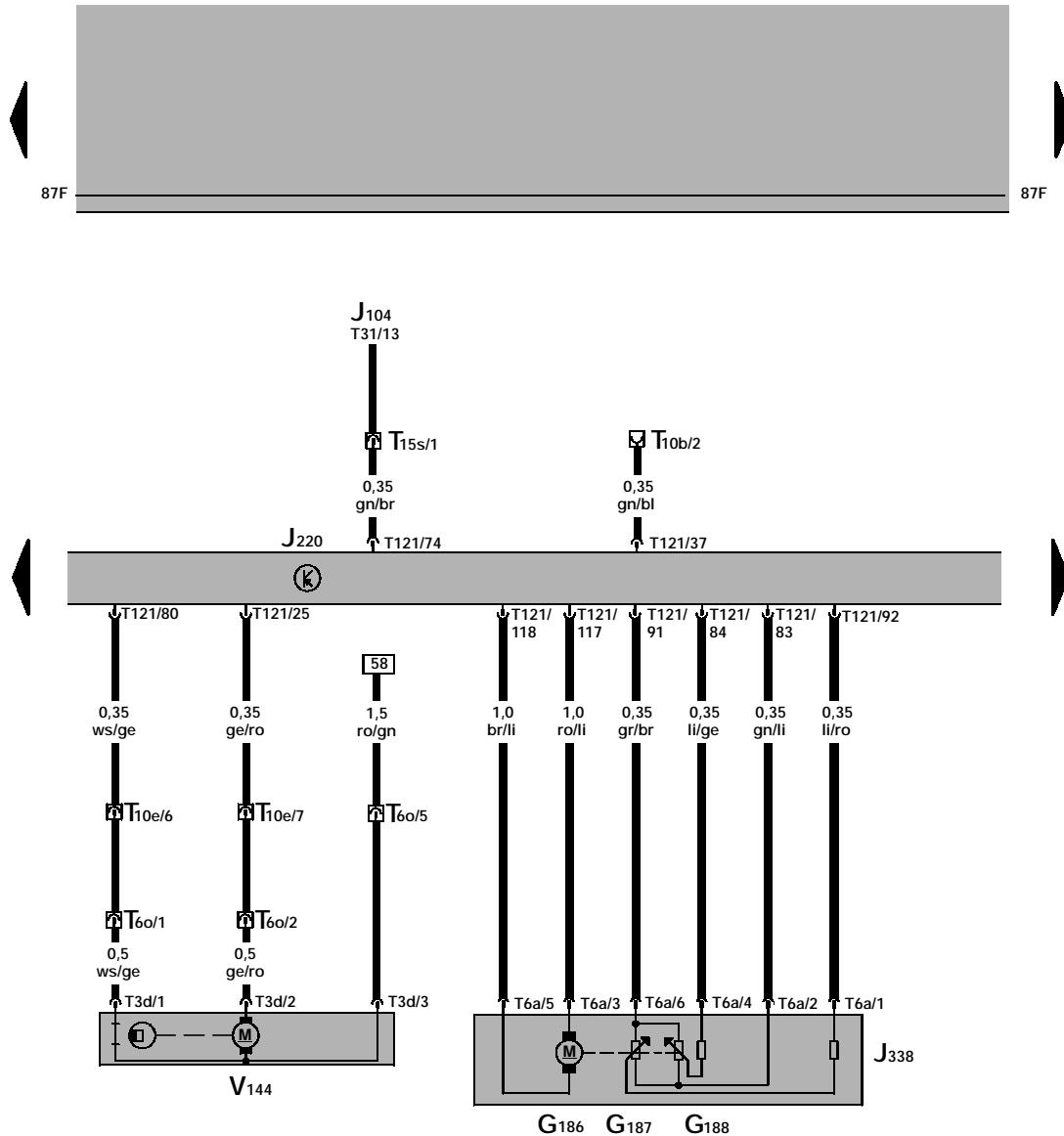
- (220) - Ground connection (sensor ground), in engine compartment wiring harness
- (D102) - Wire connection -2-, in engine compartment wiring harness

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Motronic Engine Control Module (ECM), Leak de-tection pump (LDP), Throttle Valve Control Module



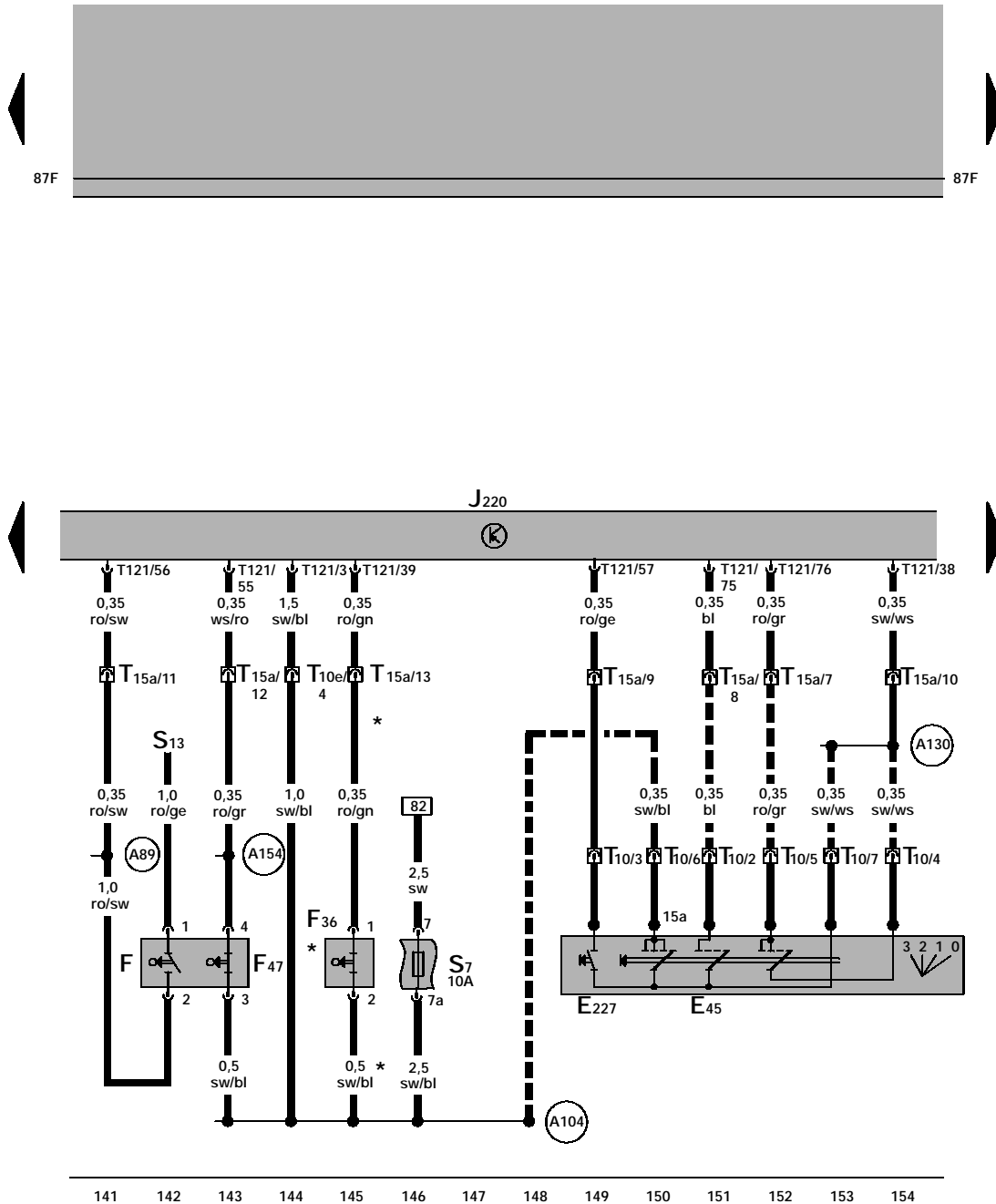
- G186 - Throttle drive (power accelerator actuation)
- G187 - Angle sensor -1- for throttle drive (power accelerator actuation)
- G188 - Angle sensor -2- for throttle drive (power accelerator actuation)
- J104 - ABS Control Module
- J220 - Motronic Engine Control Module (ECM)
- J338 - Throttle Valve Control Module
- T3d - 3-Pin Connector, black
- T6a - 6-Pin Connector, black
- T6o - 6-Pin Connector, brown, connector station A-pillar, right
- 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
- T15s - 15-Pin Connector, red, on protective housing for control module, in engine compartment, left
- T31 - 31-Pin Connector, on ABS Control Module
- T121 - 121-Pin Connector, on Motronic Engine Control Module (ECM)
- V144 - Leak detection pump (LDP)

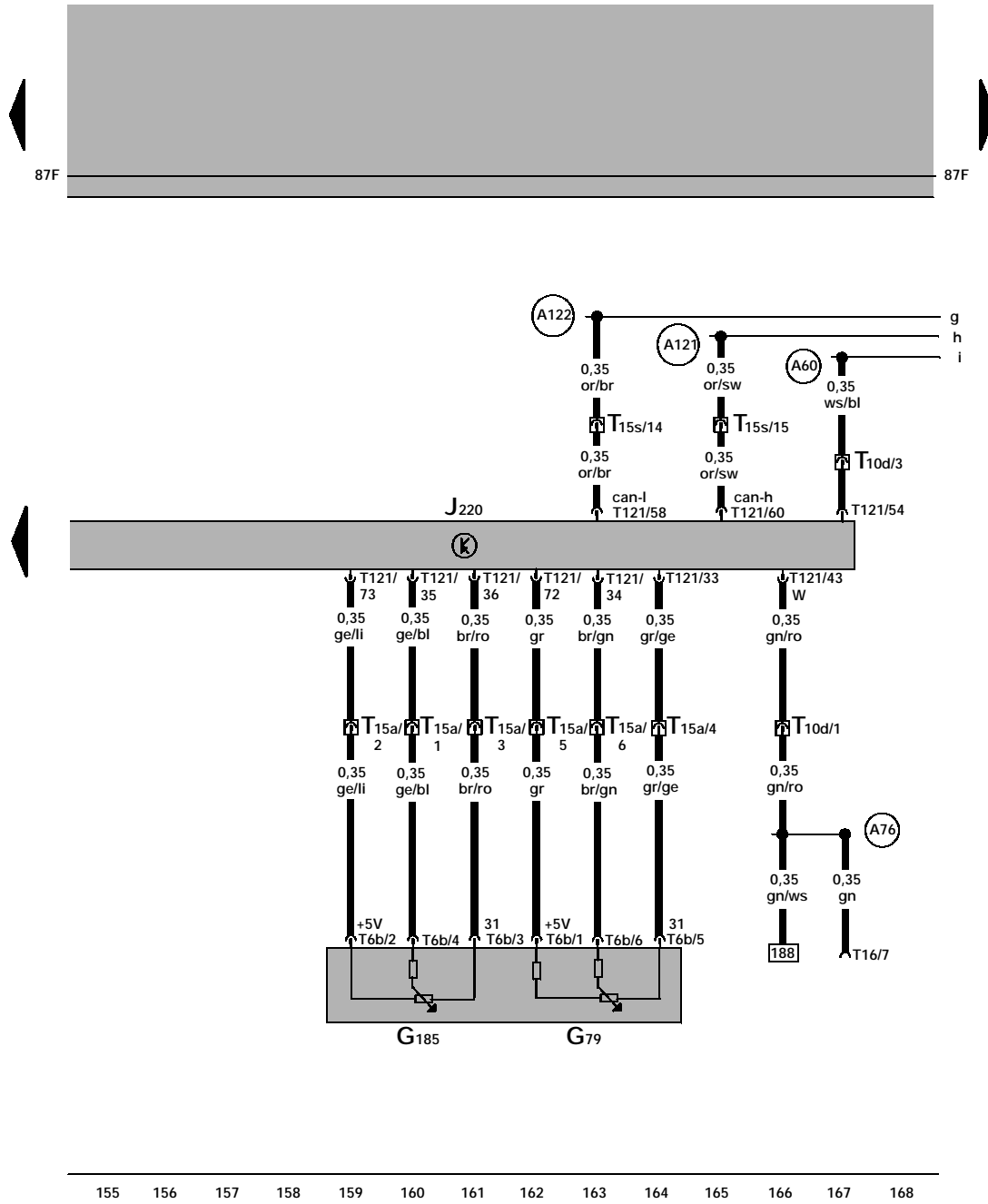
Motronic Engine Control Module (ECM), Cruise Control Switch, Brake Light Switch, Clutch Vacuum Vent Valve Switch

- 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)
- S7 - Fuse 7 in Fuse holder
- S13 - Fuse 13 in Fuse holder
- 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

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Motronic Engine Control Module (ECM), Throttle Position Sensor, Sender -2- for accelerator pedal position, Data Link Connector (DLC)

- 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
- 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)

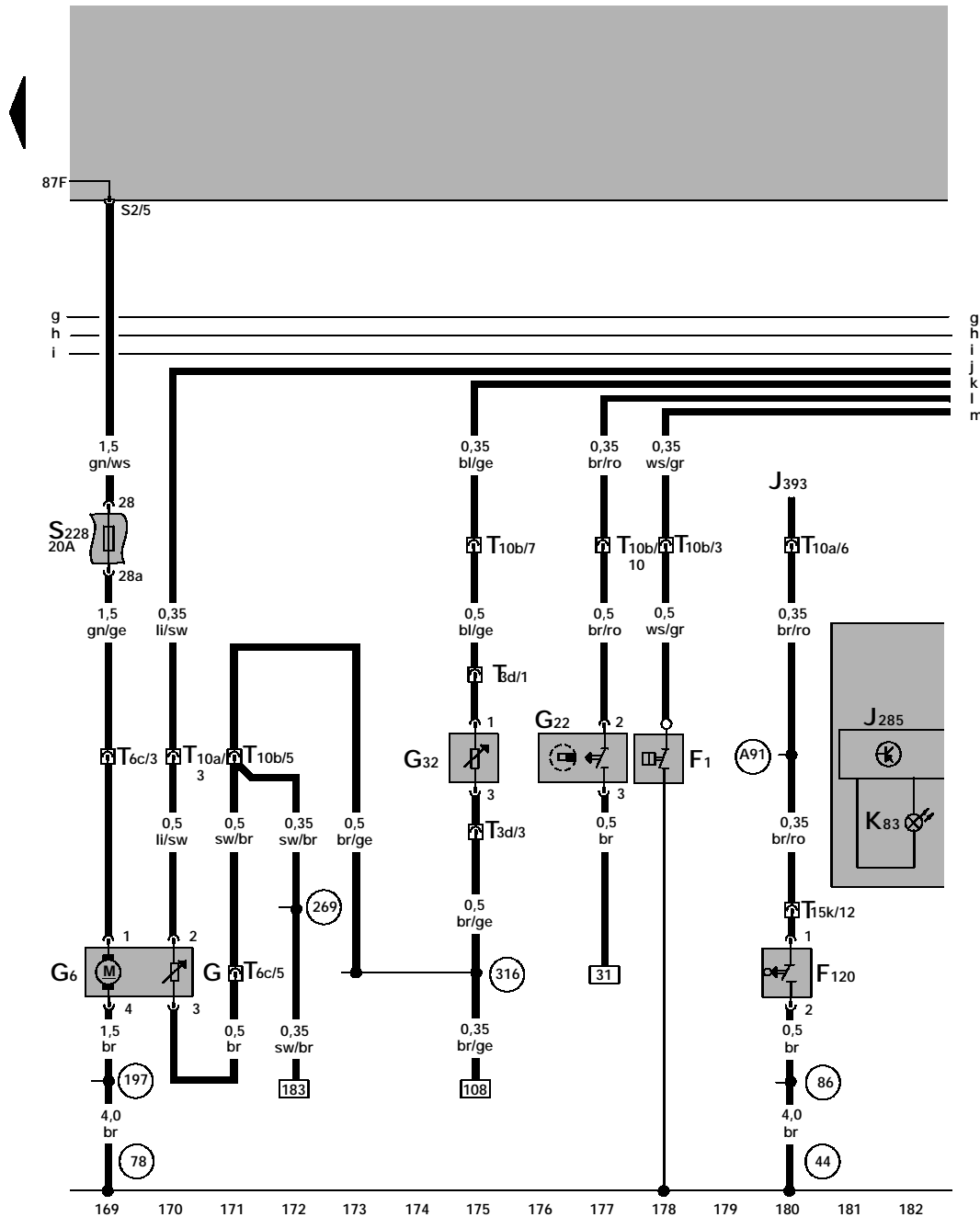
- (A60) - Wire connection (Vehicle speed signal) , in instrument cluster wiring harness
- (A76) - Connector (K-diagnosis wire) in instrument panel wiring harness
- (A121) - Connection (high bus) in instrument panel wiring harness
- (A122) - Connection (low bus) in instrument panel wiring harness

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Oil Pressure Switch, Hood Alarm Switch, Sender for fuel gauge, Fuel Pump, Speedometer VSS, ECL Sensor, Control module with indicator unit in instrument panel insert

- 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)
- S228 - Fuse in fuse holder
- T3d - 3-Pin Connector
- T6c - 6-Pin Connector, blue
- 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
- T15k - 15-Pin Connector, green
- (44) - Ground connection, on left A-pillar, lower part
- (78) - Ground connection, (lower right B-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)
- (A91) - Connector (signal for instrument panel insert), in instrument panel wiring harness

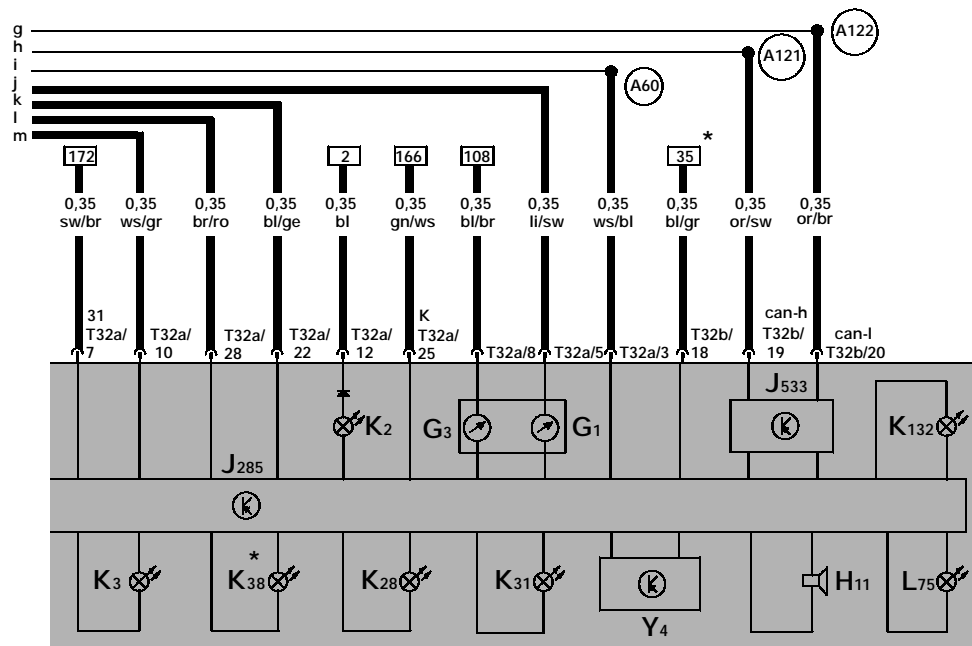
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Control module with indicator unit in instrument panel insert

- 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
- * - discontinued from June 2001



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