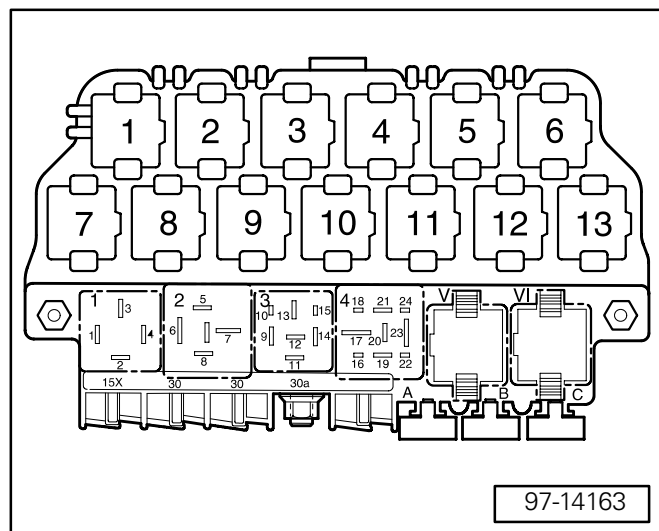


**1.8L - Engine - Motronic Multiport Fuel Injection (MFI)/132 kW, code AWP,**

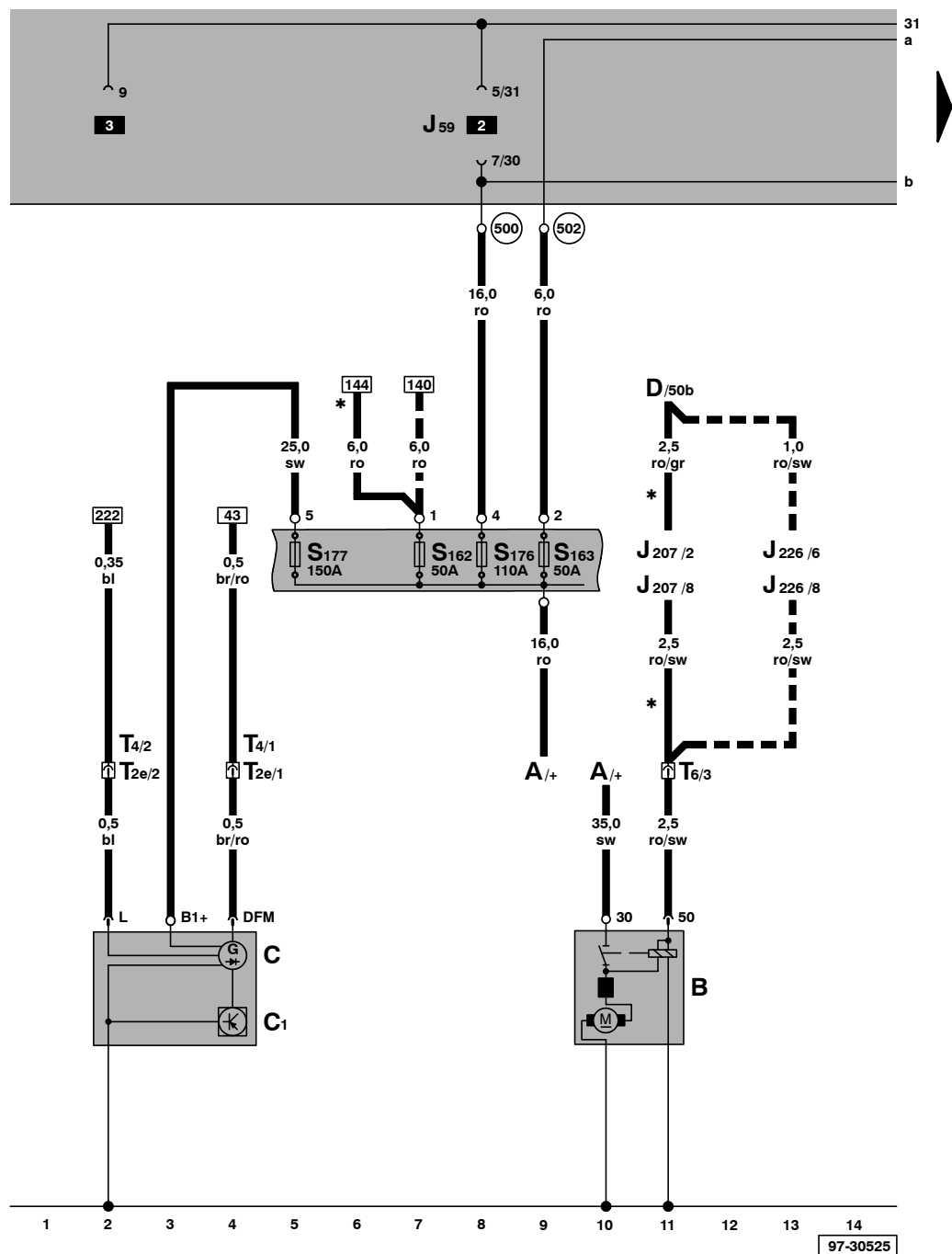
from June 2001

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

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

**Relay panel:**

- 2 J52 - Load Reduction Relay (100)
- 4 J17 - Fuel Pump (FP) Relay (409)



## Generator (GEN), starter

- A - Battery
- B - Starter
- C - Generator (GEN)
- C1 - Voltage Regulator (VR)
- D - Ignition/Starter Switch
- J59 - Load Reduction Relay
- J207 - Starting Interlock Relay
- J226 - Park/Neutral Position (PNP) Relay
- S162 - Fuse -1- (30) in fuse bracket/battery
- S163 - Fuse -2- (30) in fuse bracket/battery
- S176 - Fuse -4- (30) in fuse bracket/battery
- S177 - Fuse -5- (30) in fuse bracket/battery
- T2e - Double Connector, near starter (vehicles without air conditioning)
- T4 - 4-Pin Connector, near starter (vehicles with air conditioning only)
- T6 - 6-Pin Connector, brown, in protective housing for connectors, in plenum chamber, left

- (500) - Threaded connection -1- (30) on the relay plate
- (502) - Threaded connection -1- (30a) on the relay plate
- \* - Manual transmission only
- - Automatic transmission only

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

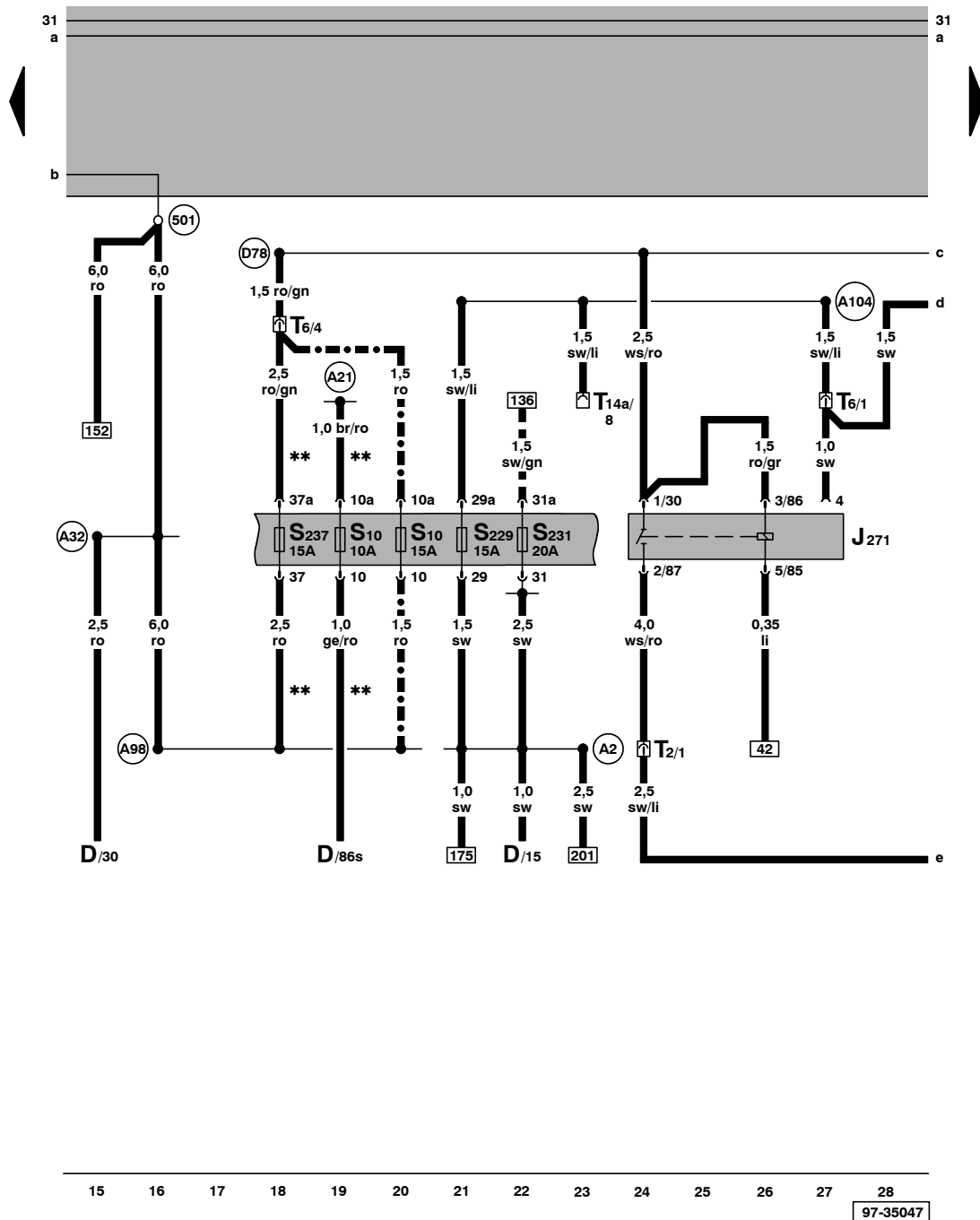
**Motronic engine control module (ECM) power supply relay**

- D - Ignition/Starter Switch  
 J271 - Motronic engine control module (ECM) power supply relay, in protective housing, in engine compartment, left, production 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 engine compartment, left  
 T6 - 6-Pin Connector, brown, in protective housing for connectors, in plenum chamber, left  
 T14a - 14-Pin Connector, near battery

- (501) - Threaded connection -2- (30) on the relay plate  
 (A2) - Plus connection (15), in instrument panel wiring harness  
 (A21) - Wire connection (86s), in instrument panel wiring harness  
 (A32) - Plus connection (30), in instrument panel wiring harness  
 (A98) - Plus connection -4- (30), in instrument panel wiring harness  
 (A104) - Plus connection -2- (15), in instrument panel wiring harness  
 (D78) - Plus connection -1- (30a), in engine compartment wiring harness

- Automatic transmission only  
 \*\* - Beginning November 2001  
 -.-.- Through October 2001

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

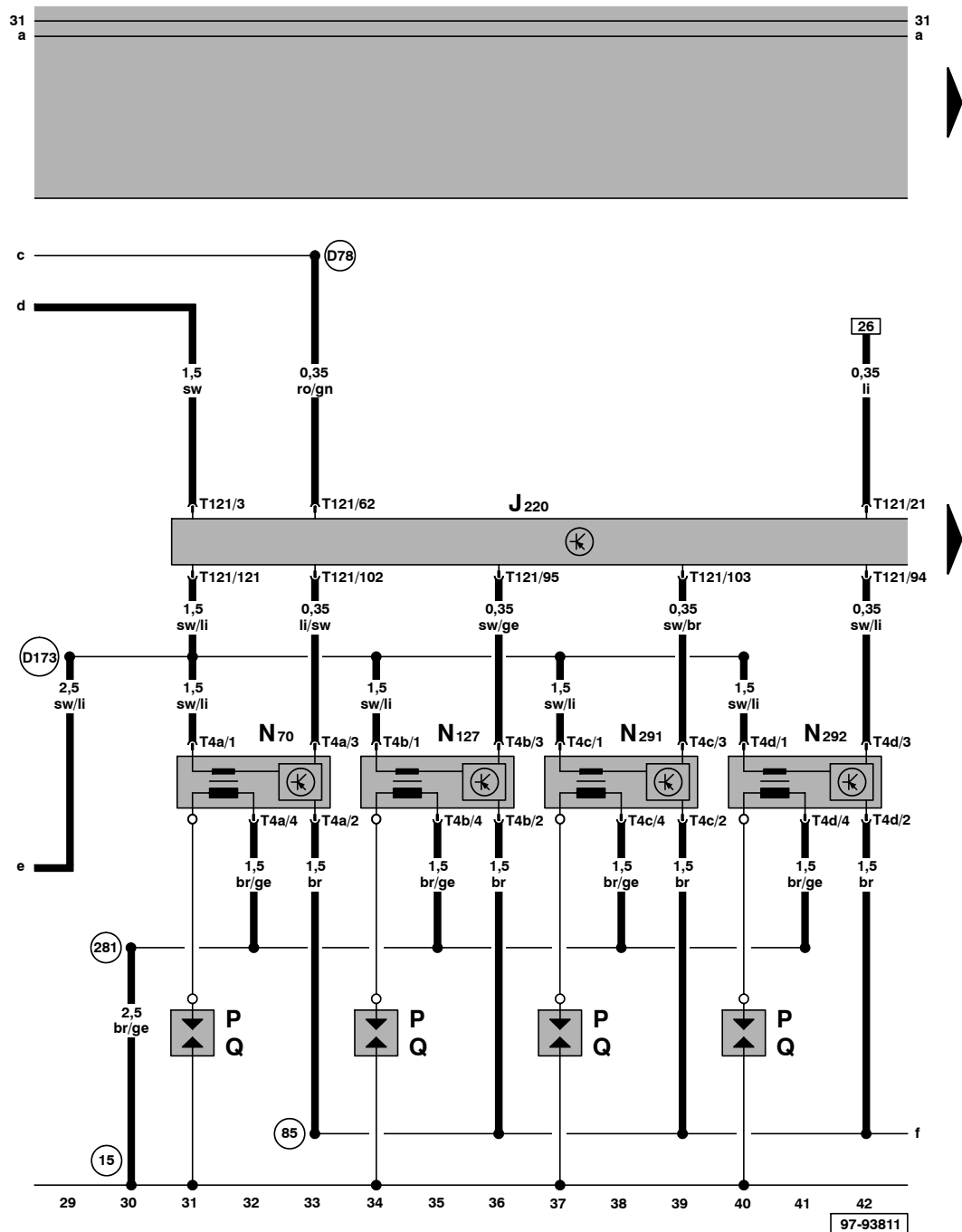


## Motronic engine control module (ECM), ignition system

- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center  
 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  
 T4a - 4-Pin Connector  
 T4b - 4-Pin Connector  
 T4c - 4-Pin Connector  
 T4d - 4-Pin Connector  
 T121 - 121-Pin Connector

- (15) - Ground connection, on cylinder head  
 (85) - Ground connection -1-, in engine compartment wiring harness  
 (281) - Ground connection -1-, in wiring harness engine pre-wiring  
 (D78) - Plus connection -1- (30a), in engine compartment wiring harness  
 (D173) - Connection (87) in engine wiring harness

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



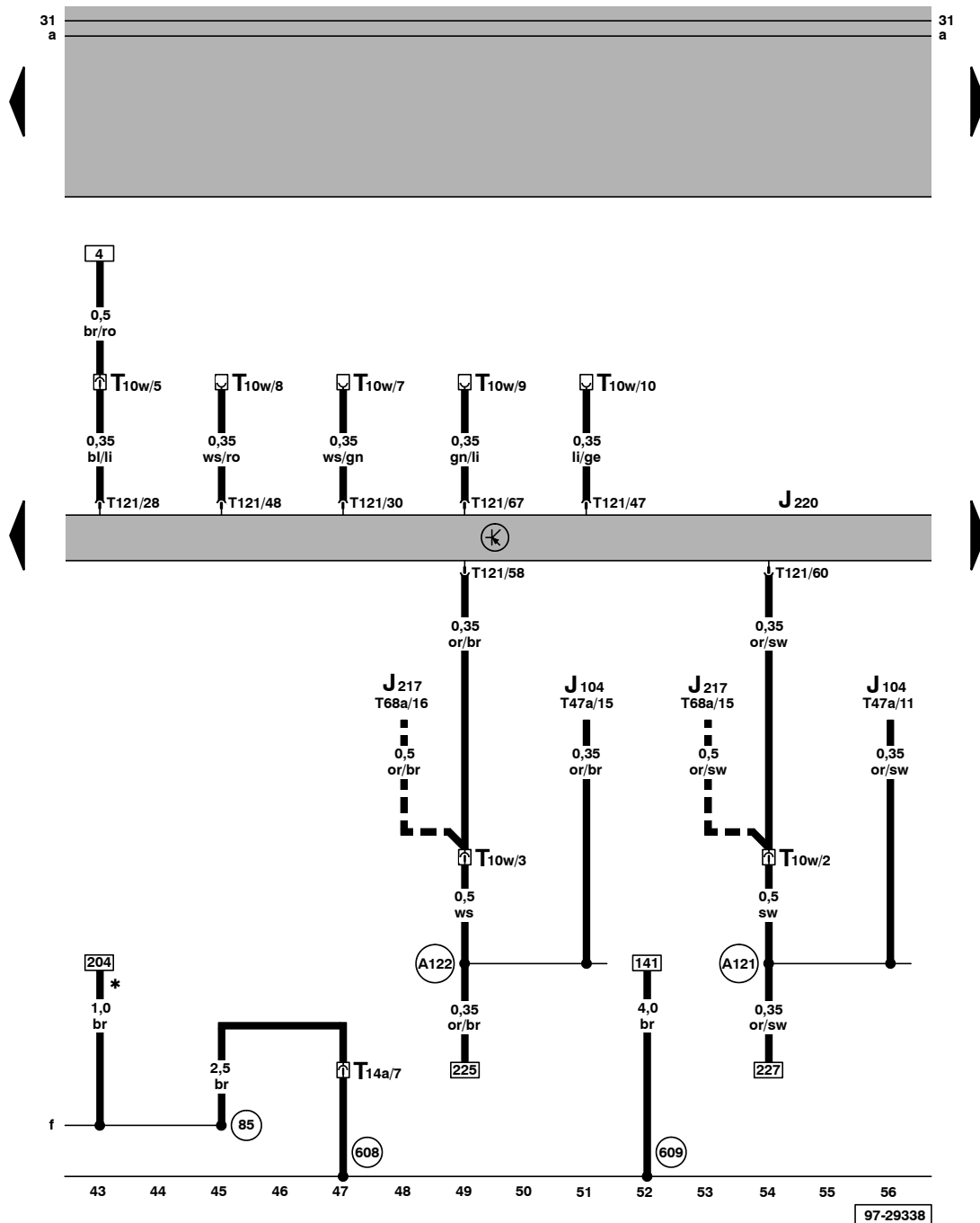
**Motronic engine control module (ECM)**

- J104 - ABS Control Module (w/EDL), in engine compartment, left  
 J217 - Transmission Control Module (TCM)  
 J220 - Motronic Engine Control Module (ECM), in plenum chamber, center  
 T10w- 10-Pin Connector, white, in protective housing for connectors, in plenum chamber, left  
 T14a - 14-Pin Connector, near battery  
 T47a - 47-Pin Connector, on ABS Control Module  
 T68a - 68-Pin Connector, on Transmission Control Module (TCM)  
 T121 - 121-Pin Connector

- (85) - Ground connection -1-, in engine compartment wiring harness  
 (608) - Ground connection (in center plenum chamber)  
 (609) - Ground connection (in right plenum chamber)  
 (A121) - Connection (high bus), in instrument panel wiring harness  
 (A122) - Connection (low bus), in instrument panel wiring harness

- \* - Manual transmission only  
 --- Automatic transmission only

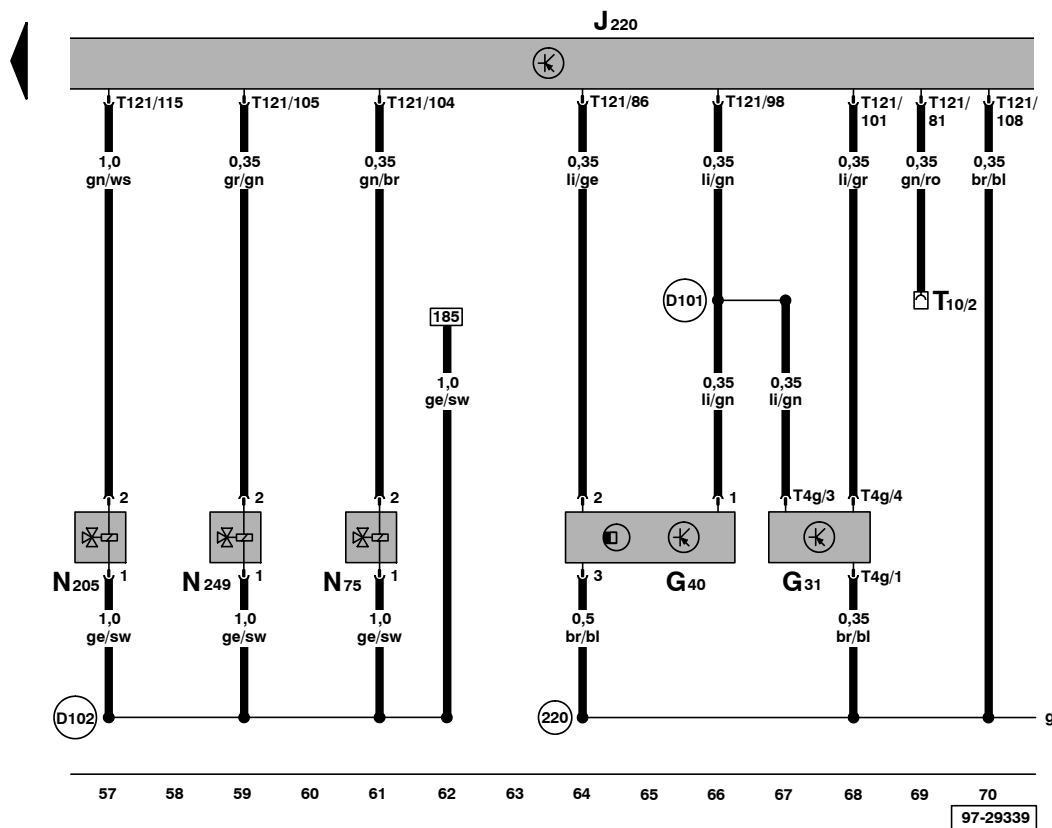
ws = white  
 sw = black  
 ro = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = lilac  
 ge = yellow  
 or = orange



**Charge air pressure sensor, camshaft position (CMP) sensor, wastegate bypass regulator valve, recirculating valve for turbocharger, valve for camshaft adjustment**

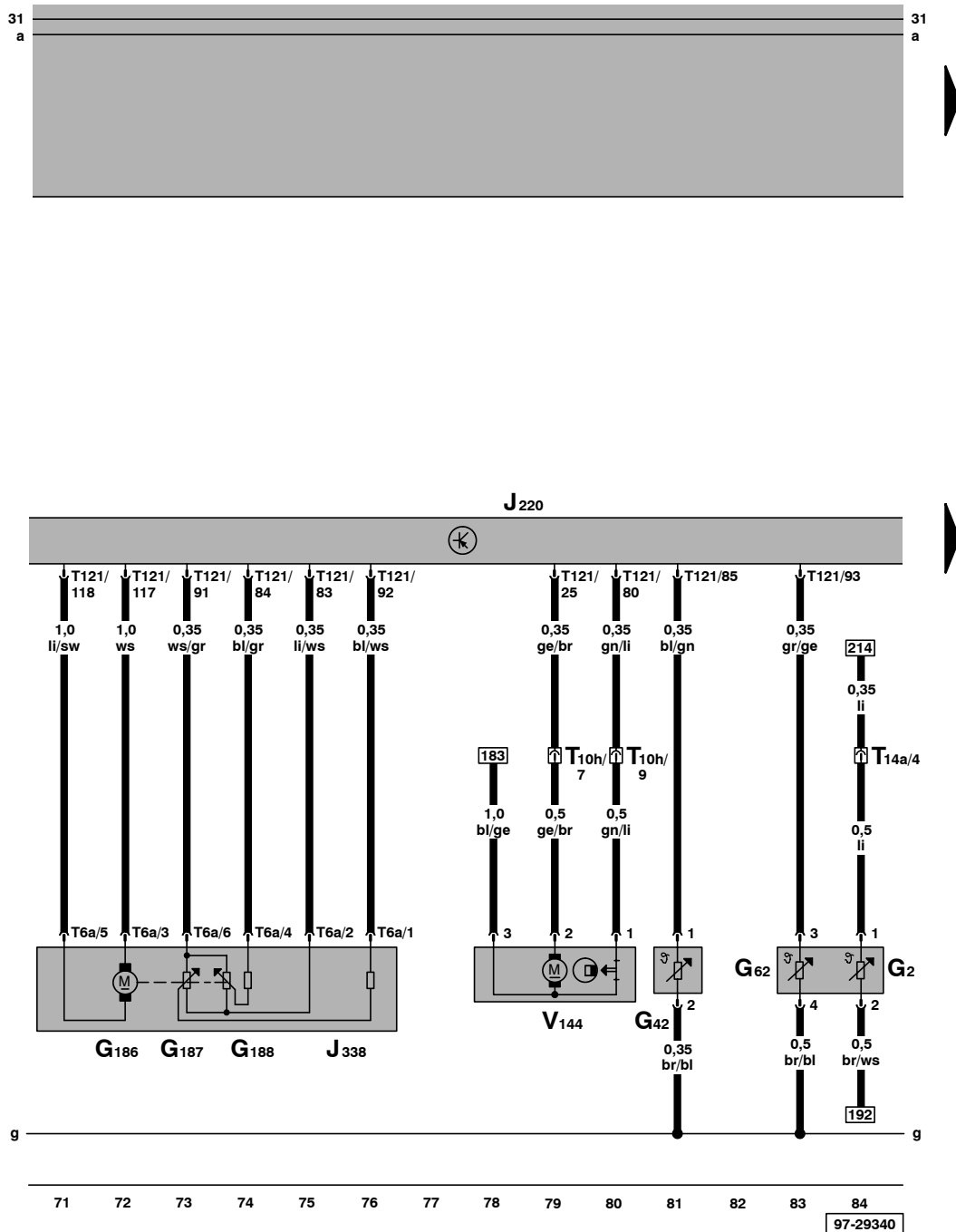
- G31 - Charge Air Pressure Sensor
- G40 - Camshaft Position (CMP) Sensor
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- N75 - Wastegate Bypass Regulator Valve
- N205- Valve -1- for camshaft adjustment
- N249- Recirculating valve for turbocharger
- T4g - 4-Pin Connector
- T10 - 10-Pin Connector, orange, in protective housing for connectors, in plenum chamber, left
- T121 - 121-Pin Connector

- (220) - Ground connection (sensor ground), in engine compartment wiring harness
- (D101) - Wire connection -1-, in engine compartment wiring harness
- (D102) - Wire connection -2-, in engine compartment wiring harness



**Motronic engine control module (ECM), angle sensor for throttle drive (power accelerator actuation), intake air temperature (IAT) sensor, (ECT) sensor, leak detection pump (LDP)**

- G2 - Engine Coolant Temperature (ECT) Sensor
- G42 - Intake Air Temperature (IAT) Sensor
- G62 - Engine Coolant Temperature (ECT) Sensor
- 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)
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- J338 - Throttle Valve Control Module
- T6a - 6-Pin Connector
- T10h - 10-Pin Connector, blue, in protective housing for connectors, in plenum chamber, left
- T14a - 14-Pin Connector, near battery
- T121 - 121-Pin Connector
- V144 - Leak detection pump (LDP)



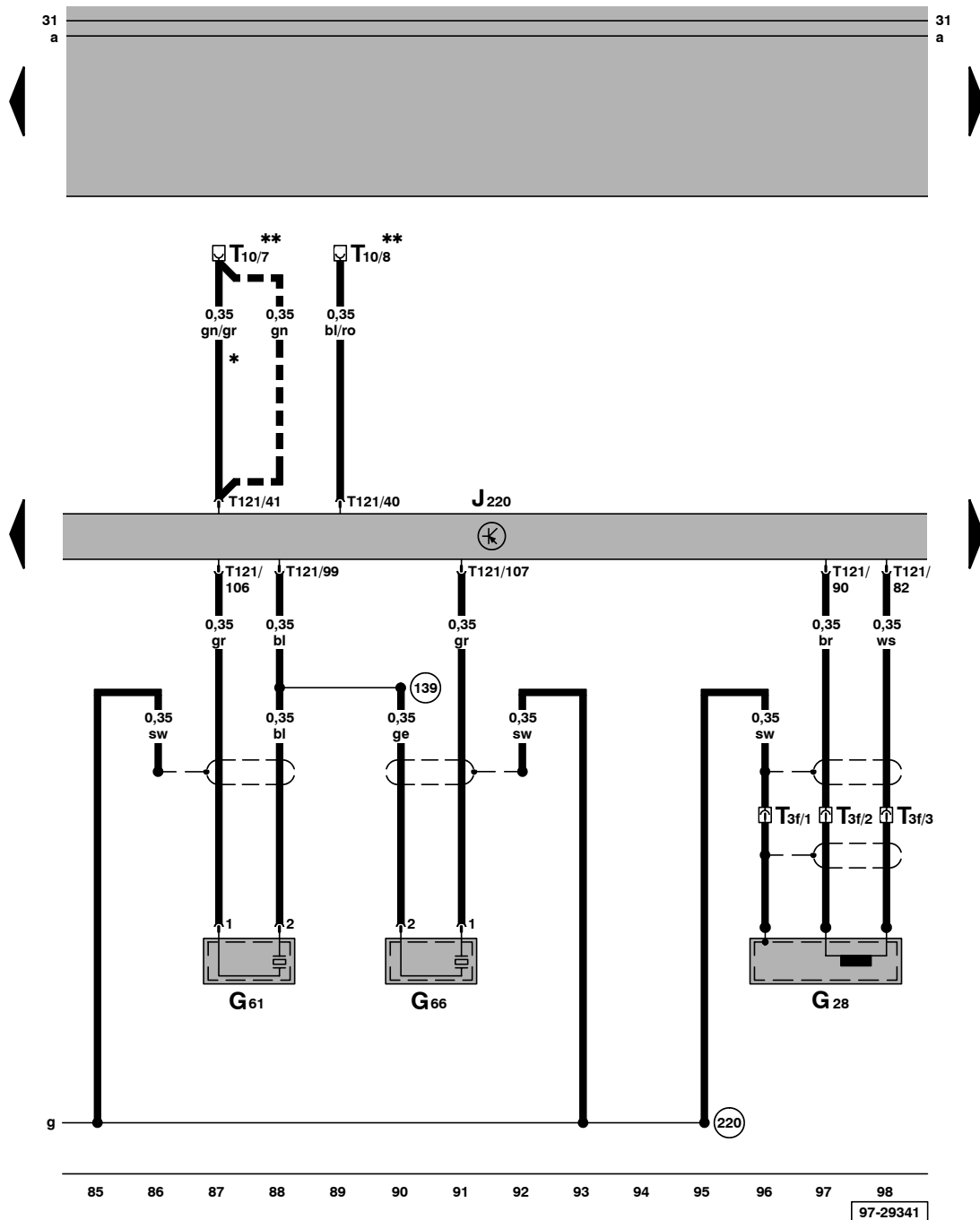
**Motronic engine control module (ECM), engine speed (RPM) sensor, knock sensor (KS) 1, knock sensor (KS) 2**

- G28 - Engine Speed (RPM) Sensor  
 G61 - Knock Sensor (KS) 1  
 G66 - Knock Sensor (KS) 2  
 J220 - Motronic Engine Control Module (ECM), in plenum chamber, center  
 T3f - 3-Pin Connector, in engine compartment, front  
 T10 - 10-Pin Connector, orange, in protective housing for connectors, in plenum chamber, left  
 T121 - 121-Pin Connector

- (139) - Ground connection (sensor Ground), in Motronic Multiport Fuel Injection (MFI) wiring harness  
 (220) - Ground connection (sensor ground), in engine compartment wiring harness

- \* - Manual transmission only  
 \*\* - A/C connection  
 --- Automatic transmission only

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



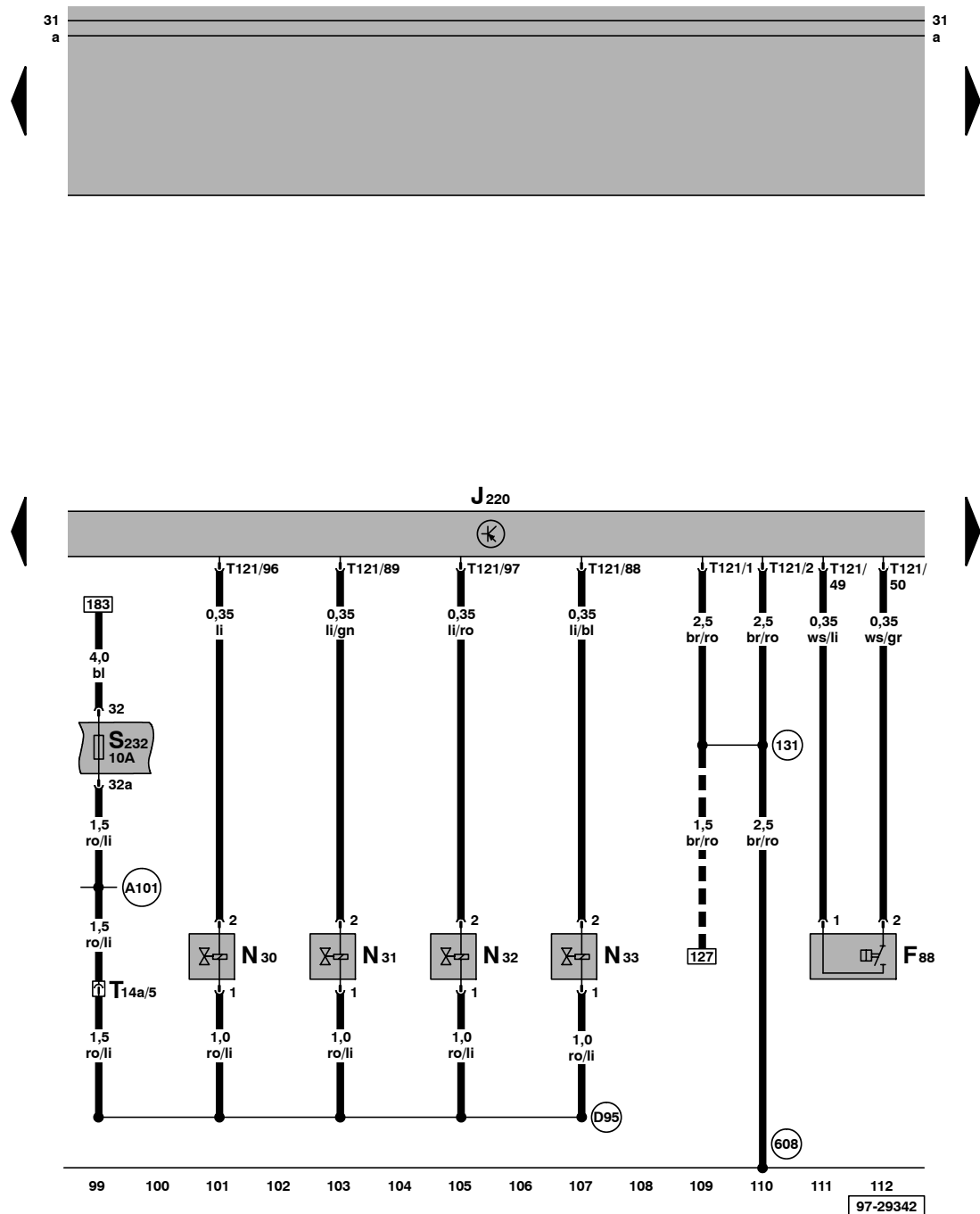


**Motronic engine control module (ECM), pressure switch/power steering, injectors**

- F88 - Pressure switch/power steering  
 J220 - Motronic Engine Control Module (ECM), in plenum chamber, center  
 N30 - Cylinder 1 Fuel Injector  
 N31 - Cylinder 2 Fuel Injector  
 N32 - Cylinder 3 Fuel Injector  
 N33 - Cylinder 4 Fuel Injector  
 S232 - Fuse 32 in fuse holder  
 T14a - 14-Pin Connector, near battery  
 T121 - 121-Pin Connector

- (131) - Ground connection -2-, in engine compartment wiring harness  
 (608) - Ground Connection (in center plenum chamber)  
 (A101) - Connection -3- (87a), in instrument panel wiring harness  
 (D95) - Wire connection (injectors), in engine compartment wiring harness

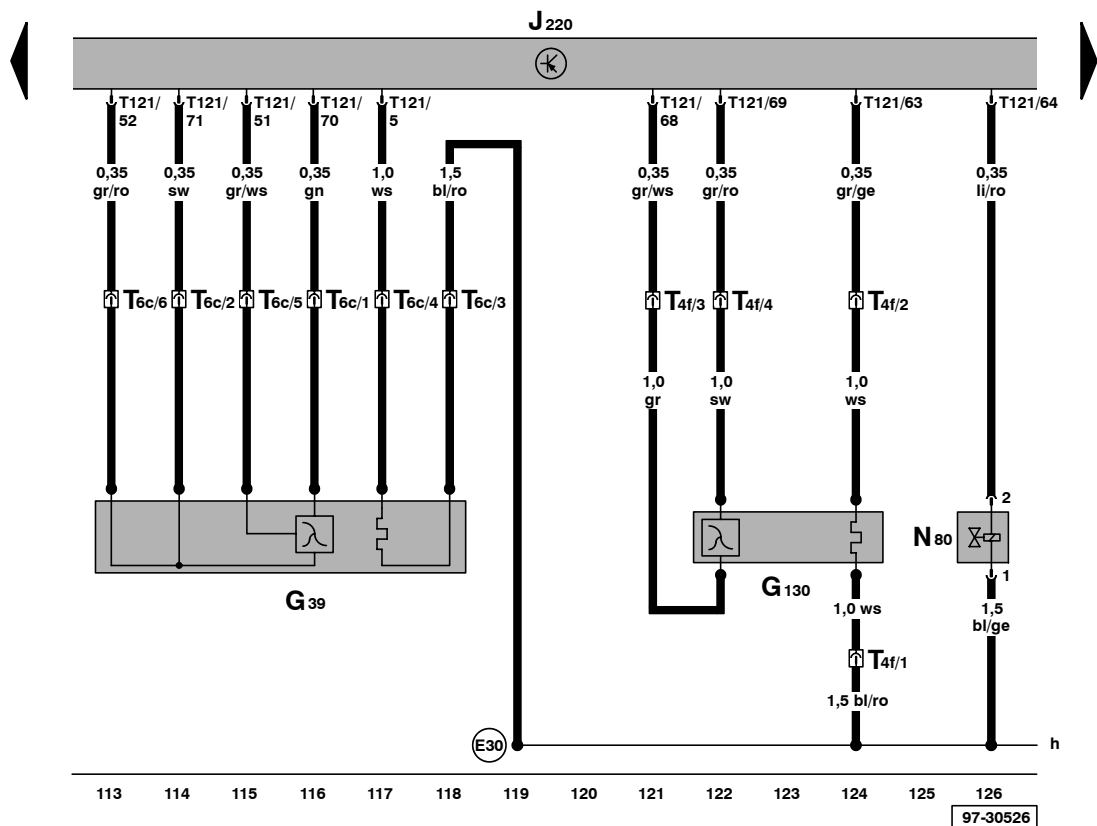
--- Automatic transmission only



**Motronic engine control module (ECM), heated oxygen sensor (HO2S), oxygen sensor (O2S) behind three way catalytic converter (TWC), (EVAP) canister purge regulator valve**

- G39 - Heated Oxygen Sensor (HO2S)
- G130 - Oxygen Sensor (O2S) behind Three Way Catalytic Converter (TWC)
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- N80 - Evaporative Emission (EVAP) Canister Purge Regulator Valve
- T4f - 4-Pin Connector, in protective housing for connectors under right floor
- T6c - 6-Pin Connector, in protective housing for connectors under right floor
- T121 - 121-Pin Connector

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

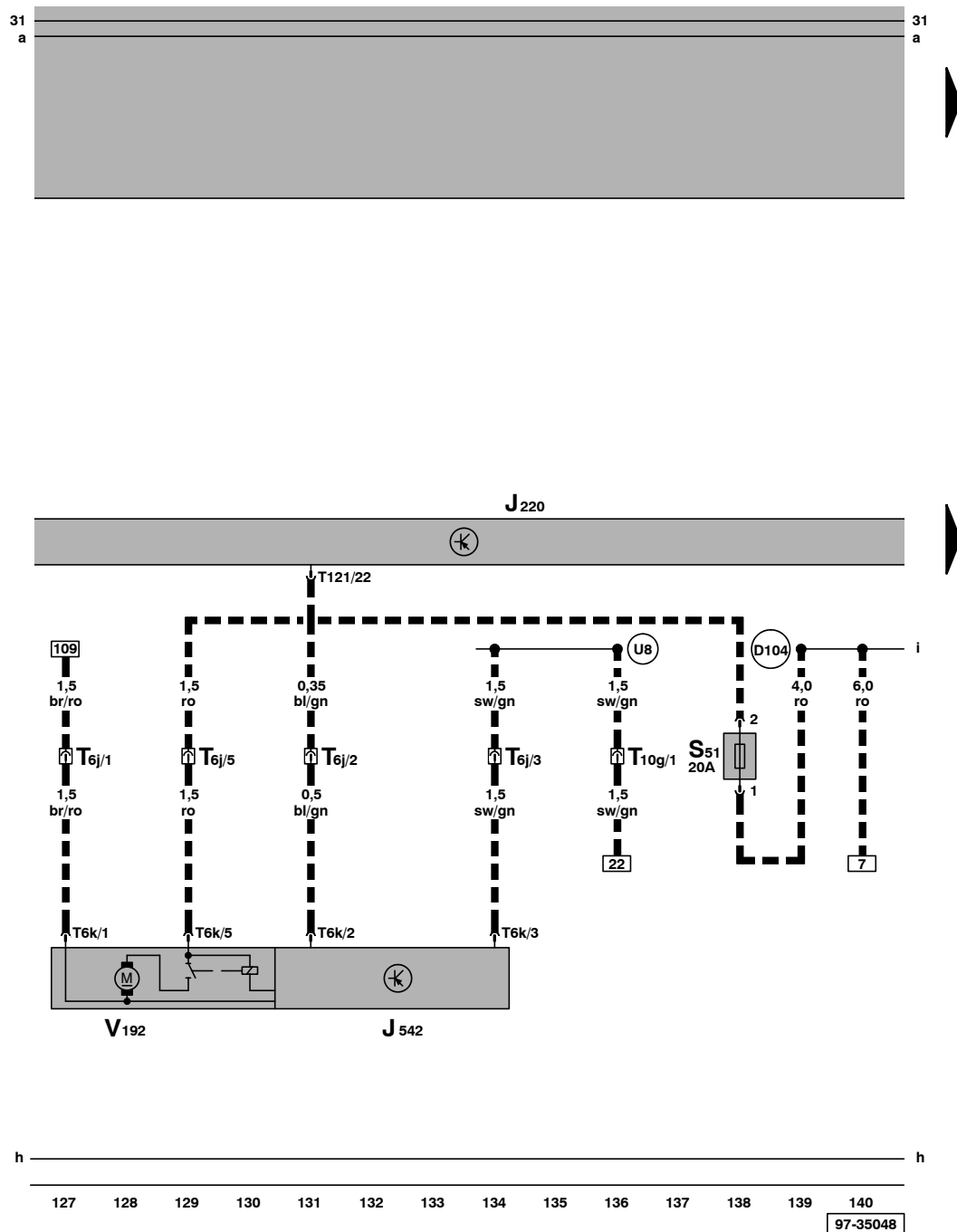


**Motronic engine control module (ECM), brake booster control module, brake system vacuum pump**

- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center  
 J542 - Brake Booster Control Module  
 S51 - Fuse, in protective housing, in engine compartment, left  
 T6j - 6-Pin Connector, in engine compartment left  
 T6k - 6-Pin Connector  
 T10g - 10-Pin Connector, grey, in protective housing for connectors, in plenum chamber, left  
 T121 - 121-Pin Connector  
 V192 - Brake System Vacuum Pump

- (D104) - Plus connection -2- (30a), in engine compartment wiring harness  
 (U8) - Plus connection (15a) in automatic transmission wiring harness

--- Automatic transmission only



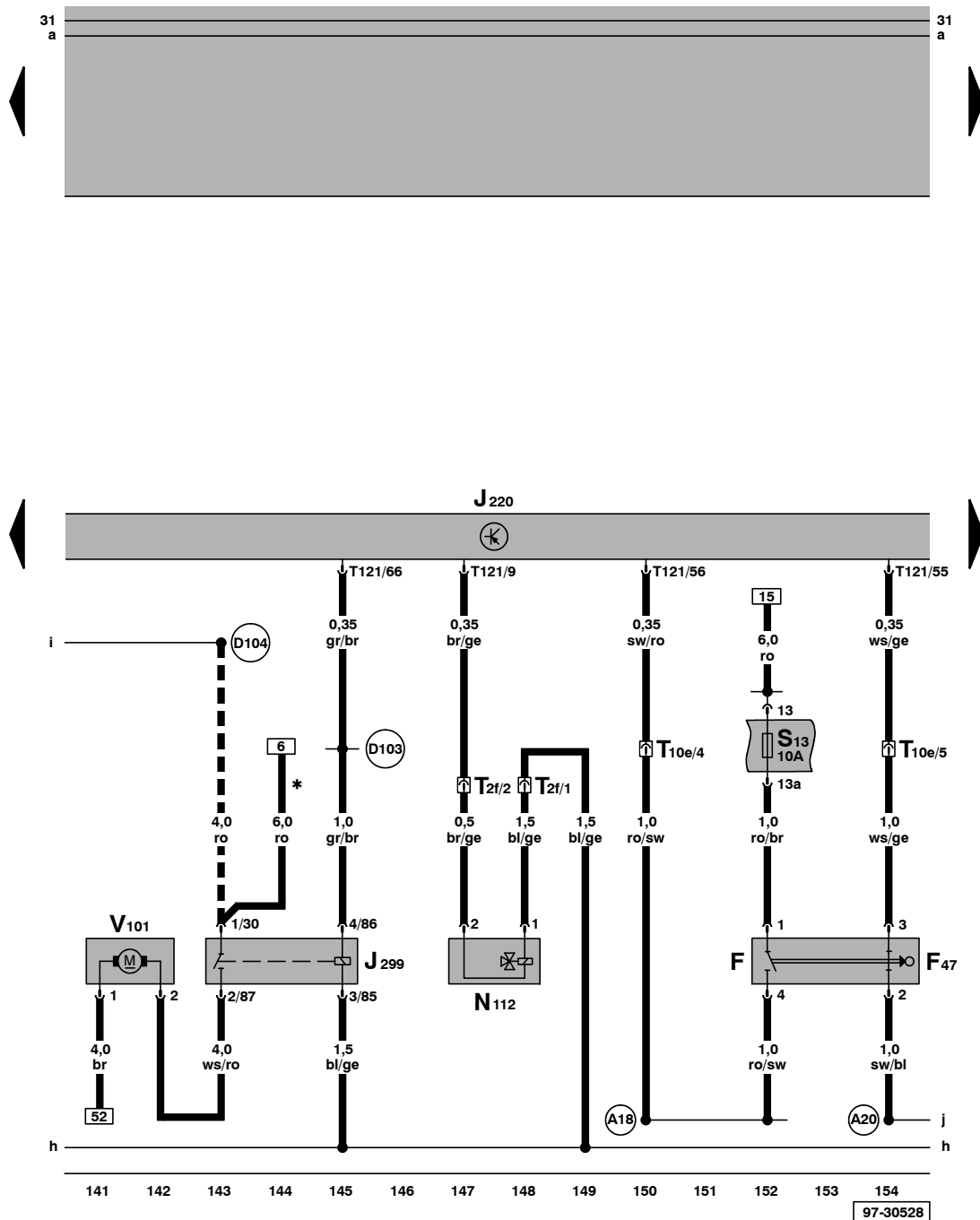
**Motronic engine control module (ECM), secondary air injection (AIR) pump system, brake light switch, brake vacuum vent valve switch for cruise control**

- F - Brake Light Switch
- F47 - Brake Vacuum Vent Valve Switch for cruise control
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- J299 - Secondary Air Injection (AIR) Pump Relay, in protective housing, in engine compartment, left, production control number (100)
- N112 - Secondary Air Injection (AIR) Solenoid Valve
- S13 - Fuse 13 in fuse holder
- T2f - Double Connector, in engine compartment left
- T10e - 10-Pin Connector, black, in protective housing for connectors, in plenum chamber, left
- T121 - 121-Pin Connector
- V101 - Secondary Air Injection (AIR) Pump Motor

- (A18) - Wire connection (54), in instrument panel
- (A20) - Wire connection (15a), in instrument panel wiring harness
- (D103) - Wire connection -3-, in engine compartment wiring harness
- (D104) - Plus connection -2- (30a), in engine compartment wiring harness

- \* - Manual transmission only
- - Automatic transmission only

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

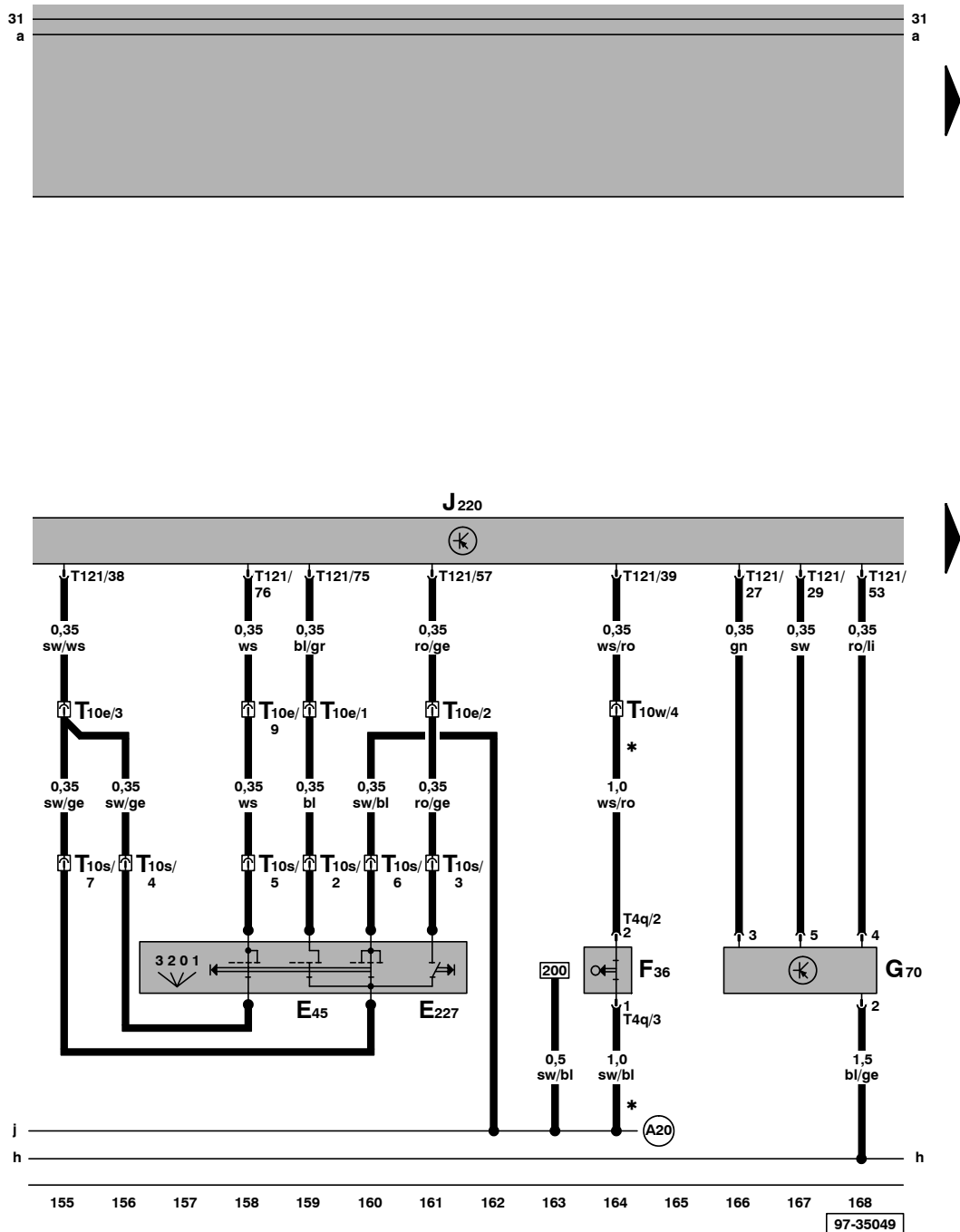


**Motronic engine control module (ECM), cruise control switch, mass air flow (MAF) sensor, clutch vacuum vent valve switch**

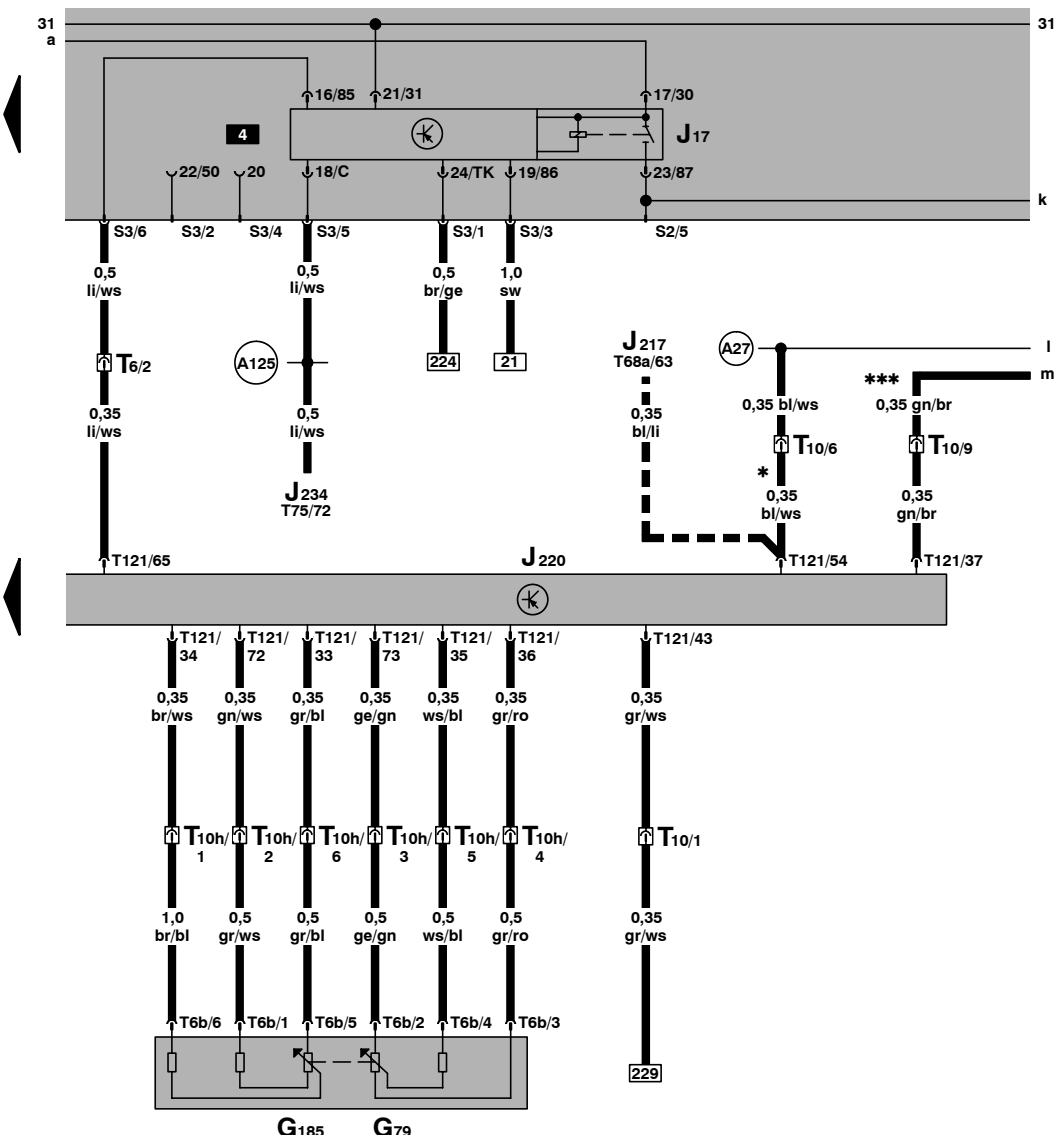
- E45 - Cruise Control Switch
- E227 - Cruise Control Push Button (SET)
- F36 - Clutch Vacuum Vent Valve Switch
- G70 - Mass Air Flow (MAF) Sensor
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- T4q - 4-Pin Connector (beginning May 2001)
- T10e - 10-Pin Connector, black, in protective housing for connectors, in plenum chamber, left
- T10s - 10-Pin Connector, near steering column
- T10w - 10-Pin Connector, white, in protective housing for connectors, in plenum chamber, left
- T121 - 121-Pin Connector

(A20) - Wire connection (15a), in instrument panel wiring harness

\* - Manual transmission only



ws = white  
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gn = green  
bl = blue  
gr = grey  
li = lilac  
ge = yellow  
or = orange

**Motronic engine control module (ECM), throttle position (TP) sensor, fuel pump (FP) relay**

- G79 - Throttle Position (TP) Sensor
- G185- Sender -2- for accelerator pedal position
- J17 - Fuel Pump (FP) Relay
- J217 - Transmission Control Module (TCM)
- J220 - Motronic Engine Control Module (ECM), in plenum chamber, center
- J234 - Airbag Control Module
- T6 - 6-Pin Connector, brown, in protective housing for connectors, in plenum chamber, left
- T6b - 6-Pin Connector
- T10 - 10-Pin Connector, orange, in protective housing for connectors, in plenum chamber, left
- T10h - 10-Pin Connector, blue, in protective housing for connectors, in plenum chamber, left
- T68a - 68-Pin Connector, on Transmission Control Module (TCM)
- T75 - 75-Pin Connector
- T121 - 121-Pin Connector

- (A27) - Wire connection (vehicle speed signal), in instrument panel wiring harness
- (A125) - Connection (crash signal) in instrument panel wiring harness

- \* - Manual transmission only
- Automatic transmission only
- \*\*\* - Through April 2002

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

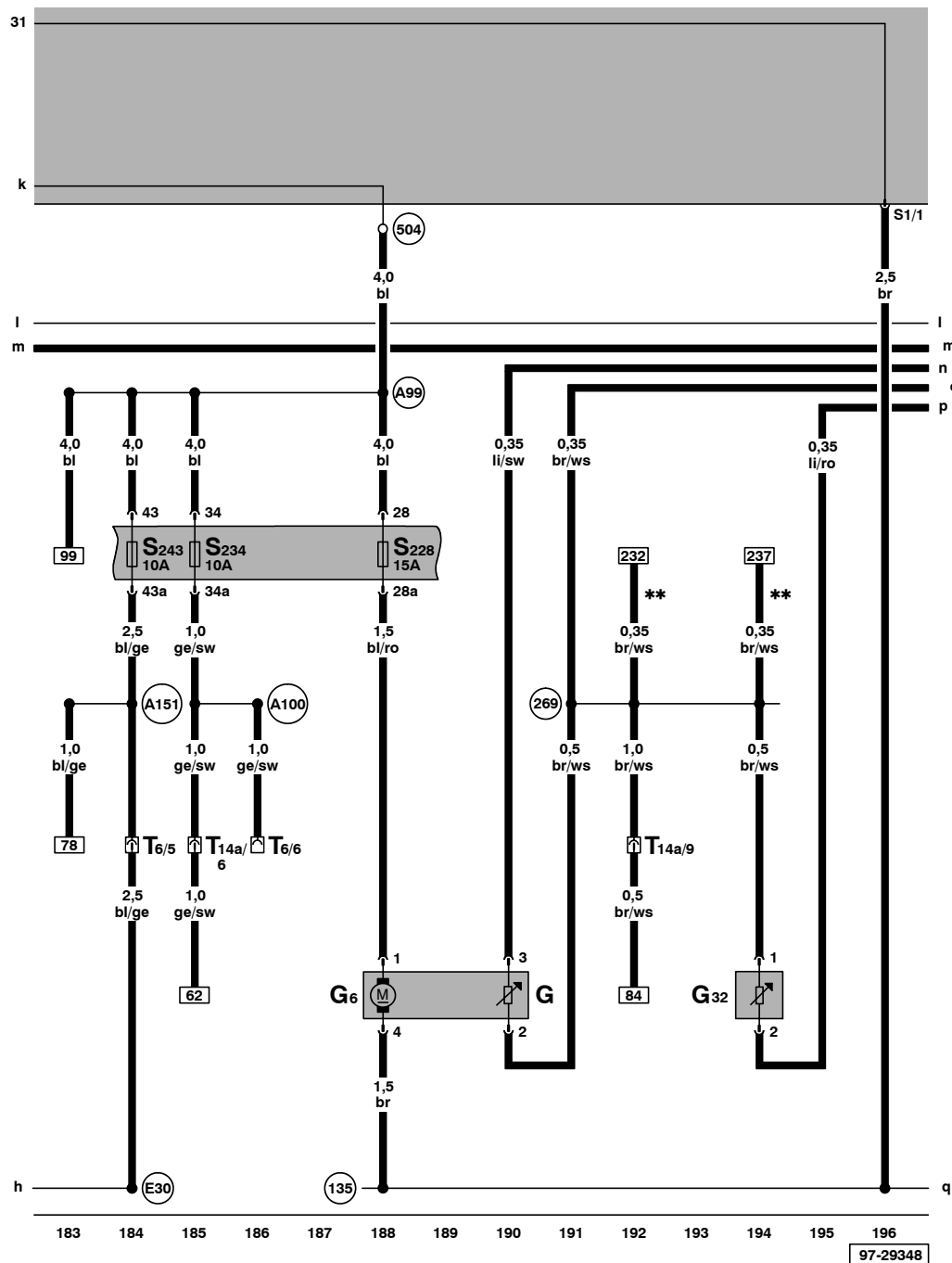
**Fuel pump (FP), fuel level sensor, engine coolant level (ECL) sensor**

- G - Fuel Level Sensor  
 G6 - Fuel Pump (FP)  
 G32 - Engine Coolant Level (ECL) Sensor  
 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, in plenum chamber, left  
 T14a - 14-Pin Connector, near battery

- 135 - Ground connection -2-, in instrument panel wiring harness  
 269 - Ground connection (sensor ground) -1-, in instrument panel wiring harness  
 504 - Threaded connection -1- (87) on the relay plate  
 A99 - Connection -1- (87), in instrument panel wiring harness  
 A100 - Connection -2- (87), in instrument panel wiring harness  
 A151 - Connection -4- (87), in instrument panel wiring harness  
 E30 - Connection (87a), in wiring harness engine

- \*\* - Vehicles with Multi-Function Indicator (MFI) only  
 --- Automatic transmission only

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



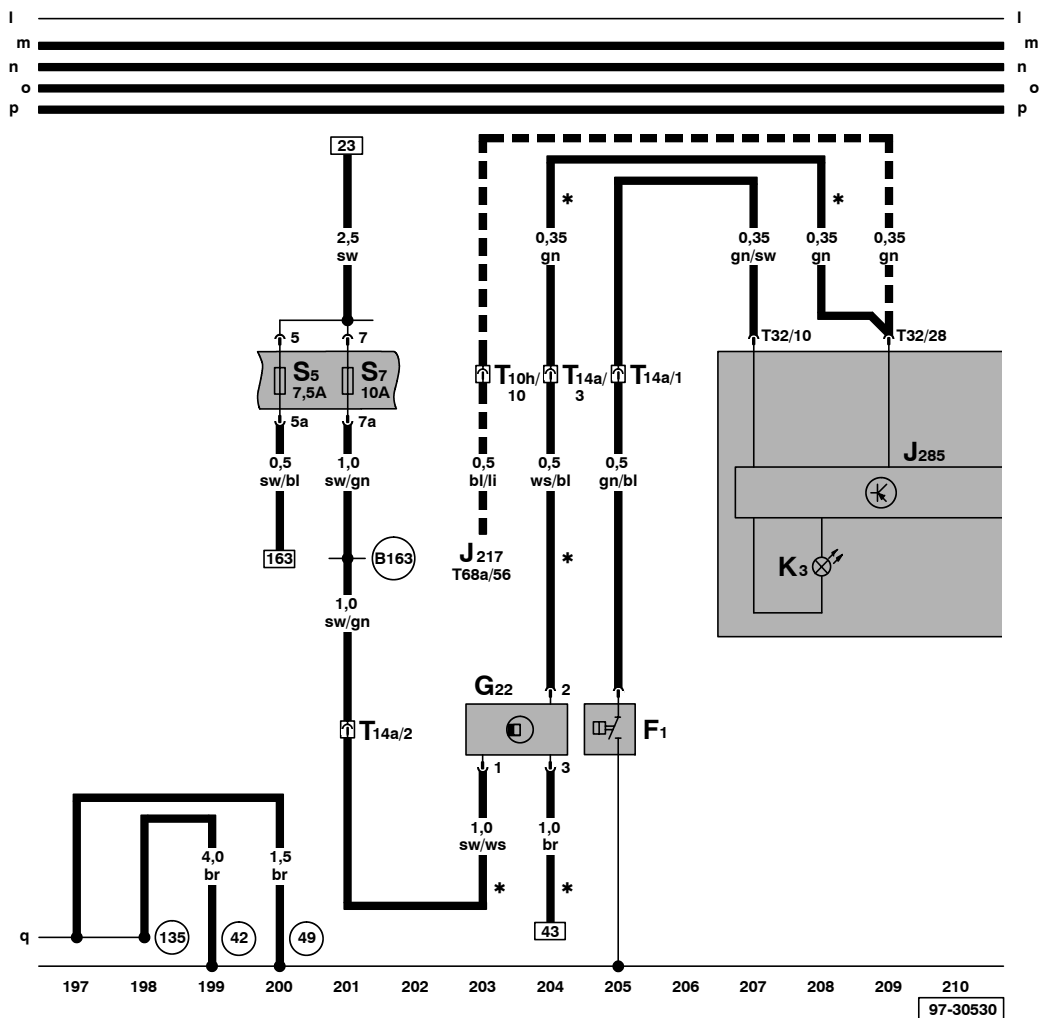
**Instrument cluster, oil pressure switch, speedometer vehicle speed sensor (VSS), oil pressure warning light**

- F1 - Oil Pressure Switch  
 G22 - Speedometer Vehicle Speed Sensor (VSS)  
 J217 - Transmission Control Module (TCM)  
 J285 - Control module with indicator unit in instrument panel insert  
 K3 - Oil Pressure Warning Light  
 S5 - Fuse 5 in fuse holder  
 S7 - Fuse 7 in fuse holder  
 T10h - 10-Pin Connector, blue, in protective housing for connectors, in plenum chamber, left  
 T14a - 14-Pin Connector, near battery  
 T32 - 32-Pin Connector, blue  
 T68a - 68-Pin Connector, on Transmission Control Module (TCM)

- (42) - Ground connection, beside steering column  
 (49) - Ground connection, on steering column  
 (135) - Ground connection -2-, in instrument panel wiring harness  
 (B163) - Plus connection -1- (15) in wiring harness interior

- \* - Manual transmission only  
 --- - Automatic transmission only

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



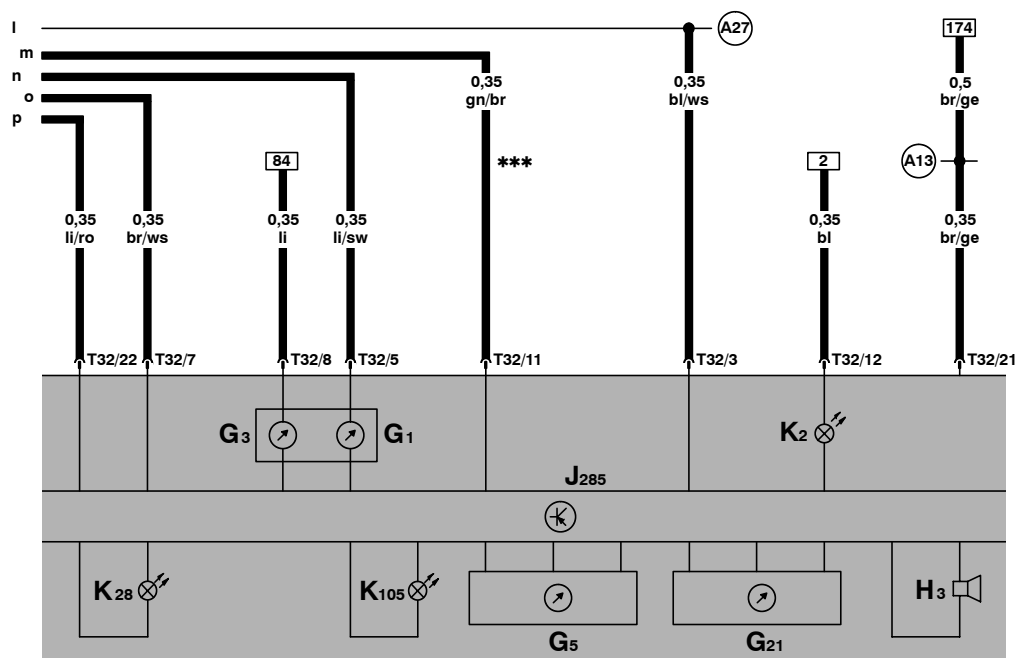


**Instrument cluster, engine coolant temperature (ECL/ECT) gauge, fuel gauge, tachometer, speedometer, generator (GEN) warning light, low fuel level warning light**

- G1 - Fuel gauge
- G3 - Engine Coolant Temperature (ECT) Gauge
- G5 - Tachometer
- G21 - Speedometer
- H3 - Warning Buzzer
- J285 - Control module with indicator unit in instrument panel insert
- K2 - Generator (GEN) Warning Light
- K28 - Engine Coolant Level/Temperature (ECL/ECT) Warning Light
- K105 - Low Fuel Level Warning Light
- T32 - 32-Pin Connector, blue

- (A13) - Wire connection (door contact switch), in instrument panel wiring harness
- (A27) - Wire connection (vehicle speed signal), in instrument panel wiring harness

\*\*\* - Through April 2002



ws = white  
sw = black  
ro = red  
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gn = green  
bl = blue  
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li = lilac  
ge = yellow  
or = orange

**Instrument cluster, multi-function indicator (MFI), outside air temperature sensor, electronic power control (EPC) warning lamp, cruise control indicator light, malfunction indicator lamp**

- E86 - Multi-Function Indicator Mode Select Switch
- E109 - Multi-Function Indicator Memory Switch
- G17 - Outside Air Temperature Sensor
- J119 - Multi-function Indicator (MFI)
- J285 - Control module with indicator unit in instrument panel insert
- J533 - Data Bus On Board Diagnostic Interface
- K31 - Cruise Control Indicator Light
- K83 - Malfunction Indicator Lamp (MIL)
- K132 - Electronic Power Control (EPC) Warning Lamp
- T6e - 6-Pin Connector
- T16 - Data Link Connector (DLC), below instrument panel, left
- T32 - 32-Pin Connector, blue
- T32a - 32-Pin Connector, green

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

\*\* - Vehicles with Multi-Function Indicator (MFI) only

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

