

Audi Q7

Current Flow Diagram

No. 3 / 1

Edition 02.2006

Audi Q7 4.2 I Fuel injection engine (257 kW - 8 cylinder), engine code BAR

from model year 2007

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

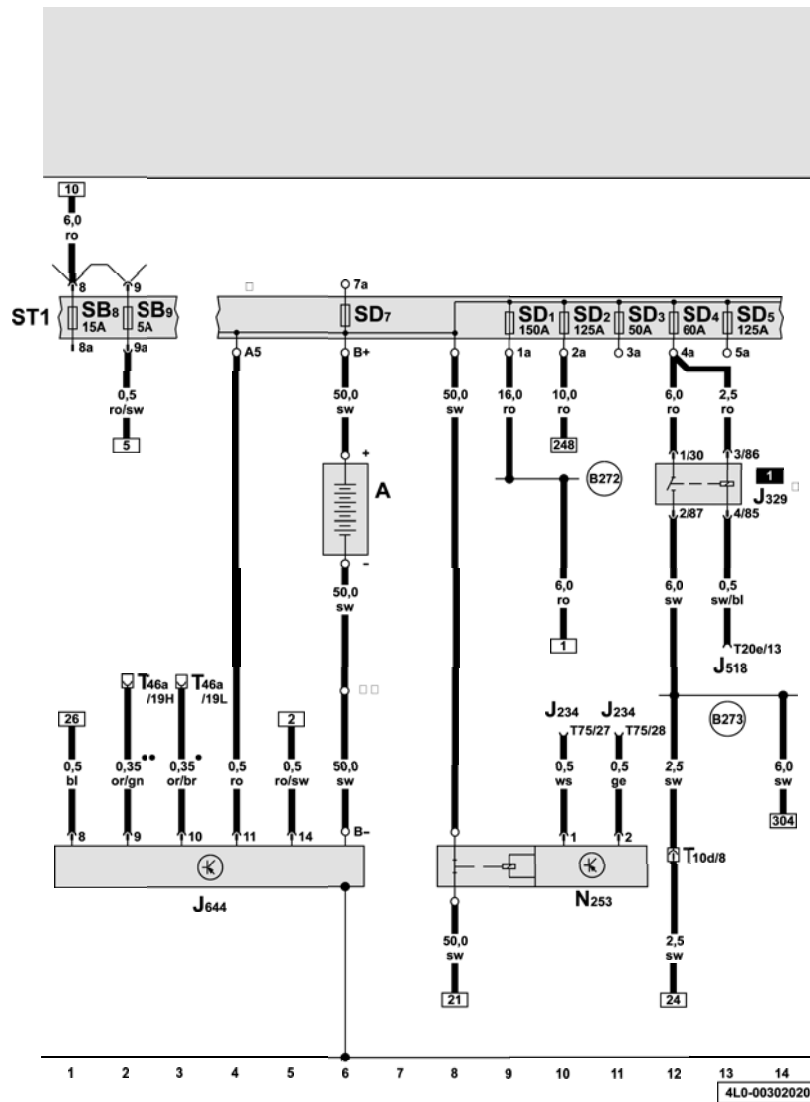
- ◆ Fault Finding Programs

→ [guided fault finding](#)

Audi Q7

Current Flow Diagram

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Battery, terminal 15 voltage supply relay, energy management control unit, battery isolation igniter, fuses

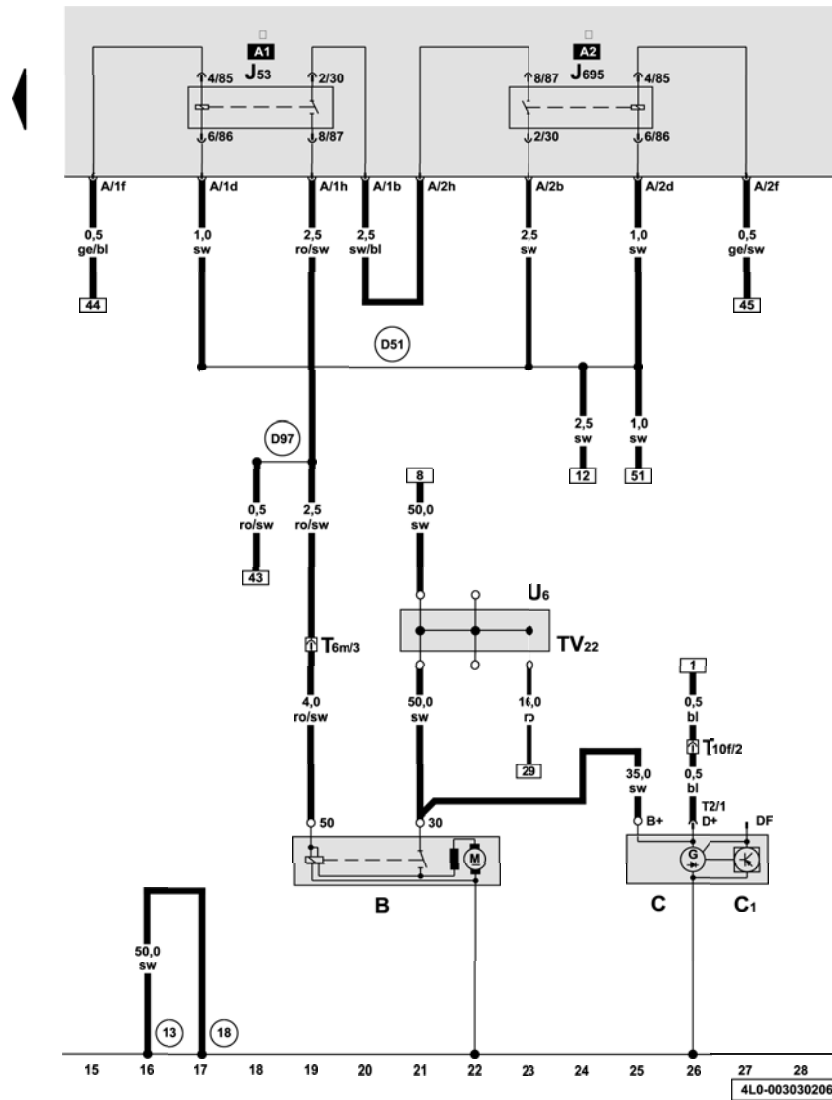
- A - Battery
- J234 - Airbag control unit
- J329 - Terminal 15 voltage supply relay
- J518 - Entry and start authorisation control unit
- J644 - Energy management control unit
- N253 - Battery isolation igniter
- SB8 - Fuse 8 on fuse holder B
- SB9 - Fuse 9 on fuse holder B
- SD1 - Fuse 1 on fuse holder D
- SD2 - Fuse 2 on fuse holder D
- SD3 - Fuse 3 on fuse holder D
- SD4 - Fuse 4 on fuse holder D
- SD5 - Fuse 5 on fuse holder D
- SD7 - Fuse 7 on fuse holder D
- T10d - 10-pin connector, blue, coupling station on electronics box, plenum chamber
- T20e - 20-pin connector, black, on entry and start authorisation control unit
- T46a - 46-pin connector, black, CAN separating connector left
- T75 - 75-pin connector, grey, on airbag control unit (USA: white)
- B272 - Positive connection (30), in main wiring harness
- B273 - Positive connection (15), in main wiring harness
- - CAN bus (data wire)
- * - Relay and fuse carrier under driver seat
- ** - screw connection (31) battery wire before driver seat

ws = white
 sw = black
 ro = red
 br = brown
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 or = orange
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Current Flow Diagram

No. 3 / 3



Starter, alternator, starter motor relay, starter motor relay 2, slave start socket

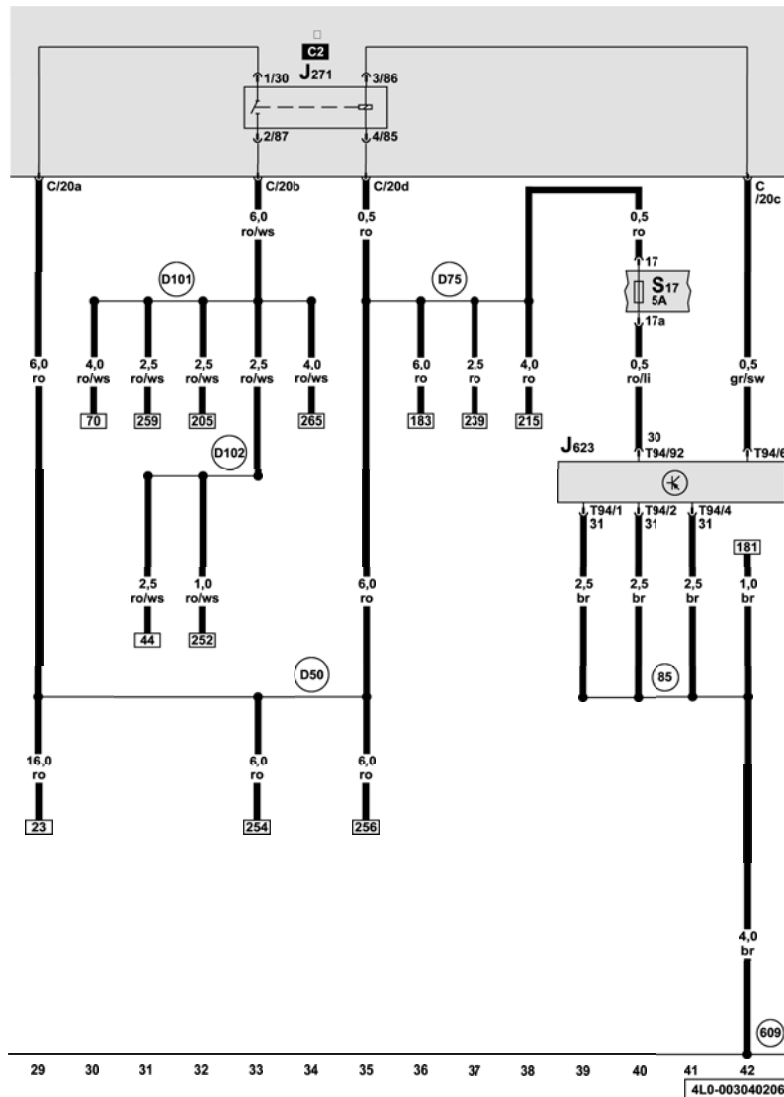
- B - Starter
- C - Alternator
- C1 - Voltage regulator
- J53 - Starter motor relay
- J695 - Starter motor relay 2
- T2 - 2-pin connector, black, on alternator
- T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber
- T10f - 10-pin connector, red, coupling station on electronics box, plenum chamber
- TV22 - Terminal 30 wiring junction 2
- U6 - Slave start socket
- 13 - Earth point, on right in engine compartment
- 18 - Earth point on engine block
- D51 - Positive connection 1 (15), in engine compartment wiring harness
- D97 - Connection (50), in engine compartment wiring harness
- * - Relay and fuse carrier, electronics box plenum chamber

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Current Flow Diagram

No. 3 / 4



Engine control unit, Motronic current supply relay

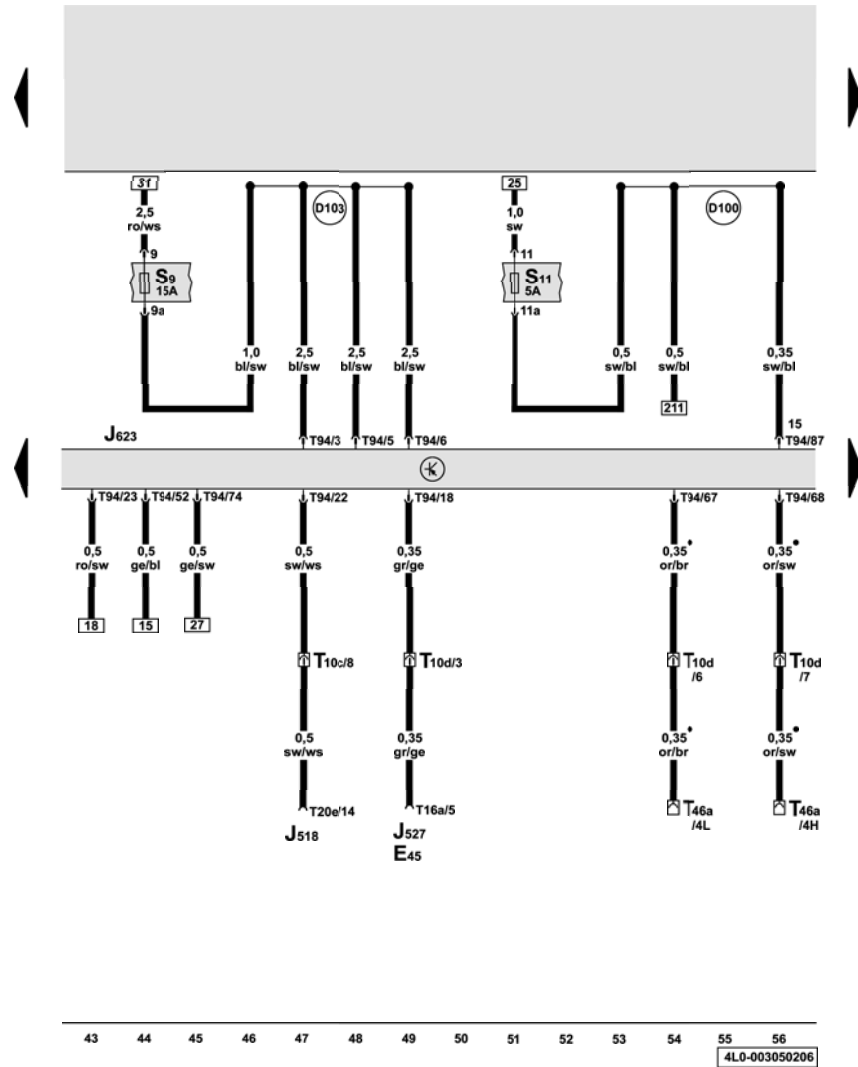
- J271 - Motronic current supply relay
- J623 - Engine control unit
- S17 - Fuses in relay plate fuse holder
- T94 - 94-pin connector, black, on engine control unit
- 85 - Earth connection 1, in engine compartment wiring harness
- 609 - Earth point, on right in plenum chamber
- D50 - Positive connection (30), in engine compartment wiring harness
- D75 - Positive connection 2 (30), in engine compartment wiring harness
- D101 - Connection 1, in engine compartment wiring harness
- D102 - Connection 2, in engine compartment wiring harness
- * - Relay and fuse carrier, electronics box plenum chamber

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Current Flow Diagram

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Engine control unit

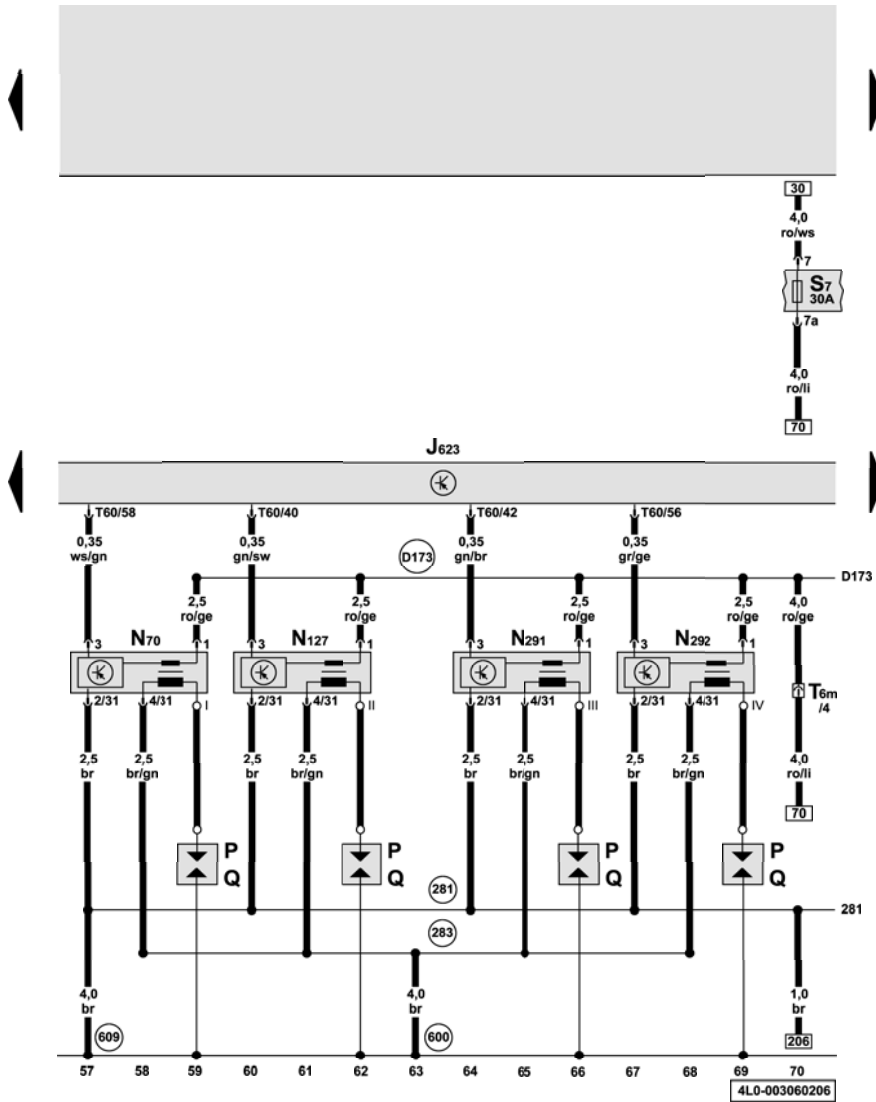
- E45 - Cruise control system switch
- J518 - Entry and start authorisation control unit
- J527 - Steering column electronics control unit
- J623 - Engine control unit
- S9 - Fuses in relay plate fuse holder
- S11 - Fuses in relay plate fuse holder
- T10c - 10-pin connector, pink, coupling station on electronics box, plenum chamber
- T10d - 10-pin connector, blue, coupling station on electronics box, plenum chamber
- T16a - 16-pin connector, on steering column electronics control unit
- T20e - 20-pin connector, black, on entry and start authorisation control unit
- T46a - 46-pin connector, black, CAN separating connector left
- T94 - 94-pin connector, black, on engine control unit
- D100 - Positive connection 2 (15), in engine compartment wiring harness
- D103 - Connection 3, in engine compartment wiring harness
- - CAN bus (data wire)

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Current Flow Diagram

No. 3 / 6



Engine control unit, ignition coil 1 - 4 with output stage

- J623 - Engine control unit
- 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
- S7 - Fuses in relay plate fuse holder
- T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber
- T60 - 60-pin connector, black, on engine control unit
- 281 - Earth connection 1, in engine harness
- 283 - Earth connection 2, in engine harness
- 600 - Earth point, on right of cylinder head
- 609 - Earth point, on right in plenum chamber
- D173 - Connection (87), in engine wiring harness

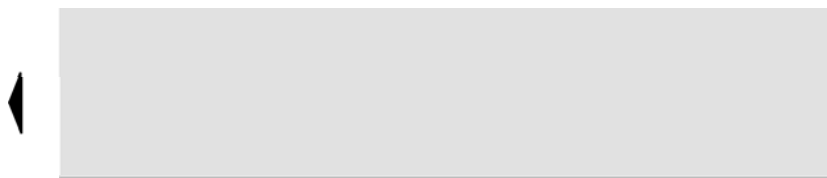
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Audi Q7

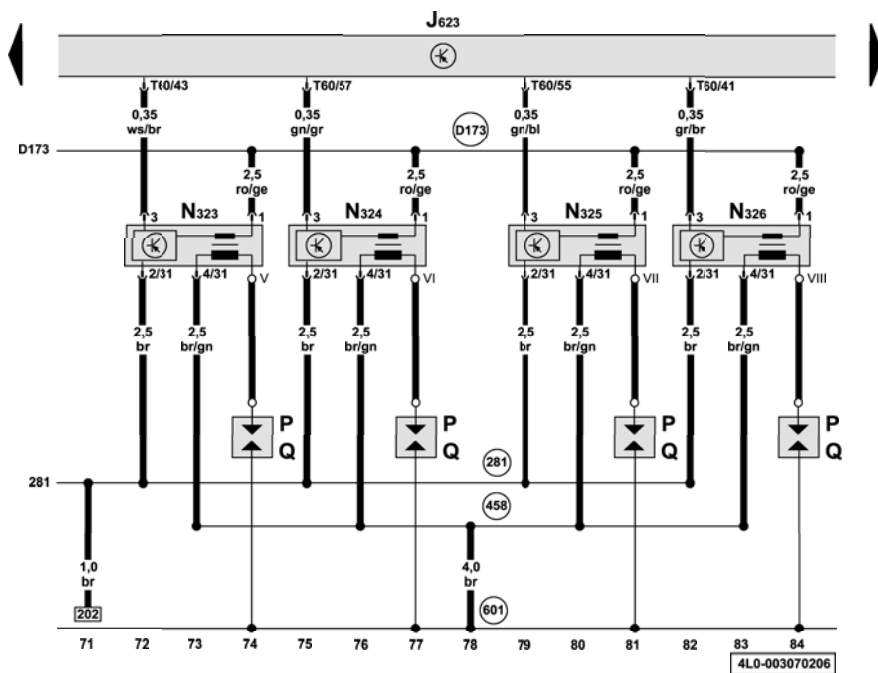
Current Flow Diagram

No. 3 / 7



Engine control unit, ignition coil 5 -8 with output stage

- J623 - Engine control unit
- N323 - Ignition coil 5 with output stage
- N324 - Ignition coil 6 with output stage
- N325 - Ignition coil 7 with output stage
- N326 - Ignition coil 8 with output stage
- P - Spark plug connector
- Q - Spark plugs
- T60 - 60-pin connector, black, on engine control unit
- 281 - Earth connection 1, in engine harness
- 458 - Earth connection 3, in engine harness
- 601 - Earth point, on left of cylinder head
- D173 - Connection (87), in engine wiring harness



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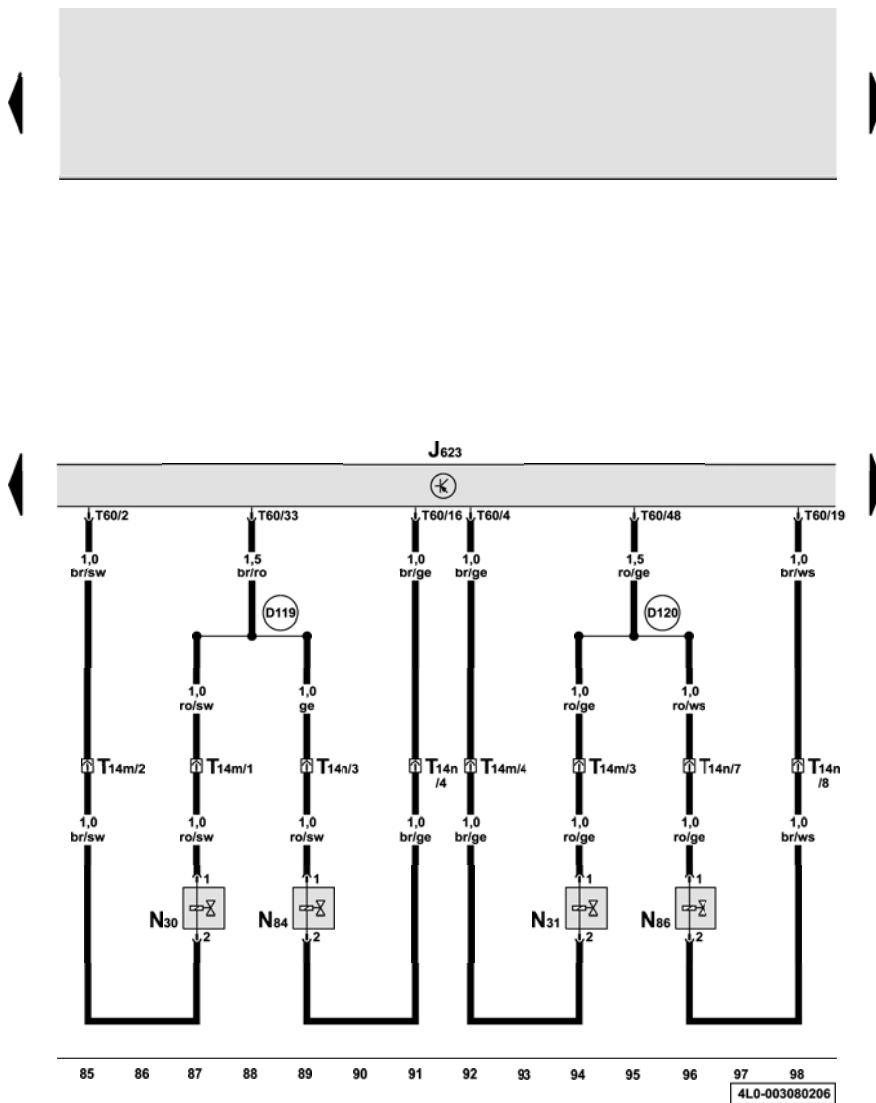
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Current Flow Diagram

No. 3 / 8

Engine control unit, injector for cylinders 1, 2, 6, 8

- J623 - Engine control unit
- N30 - Injector, cylinder 1
- N31 - Injector, cylinder 2
- N84 - Injector, cylinder 6
- N86 - Injector, cylinder 8
- T14m - 14-pin connector, black, in engine compartment, bank 1
- T14n - 14-pin connector, black, in engine compartment, bank 2
- T60 - 60-pin connector, black, on engine control unit
- D119 - Connection 17, in engine compartment wiring harness
- D120 - Connection 18, in engine compartment wiring harness



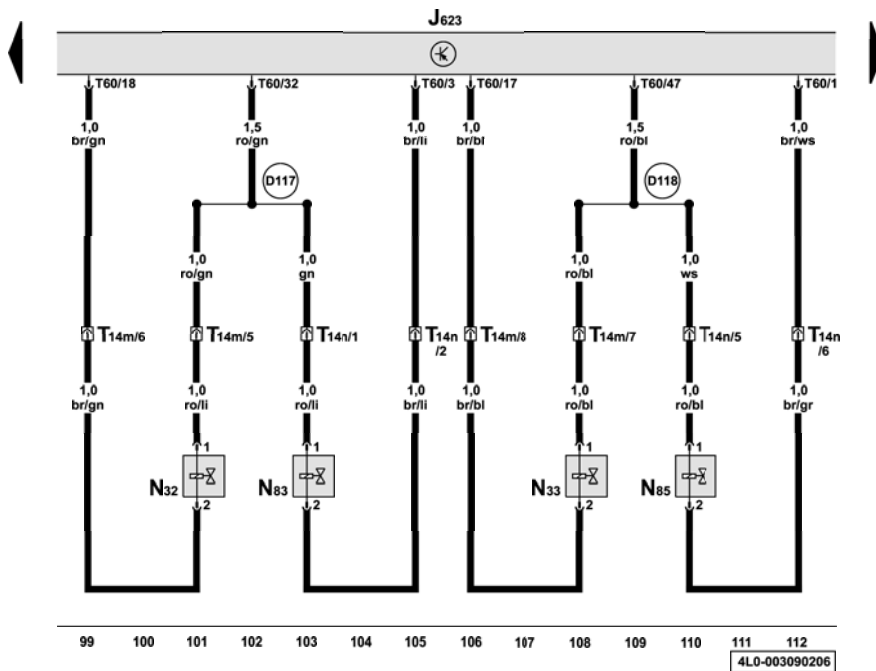
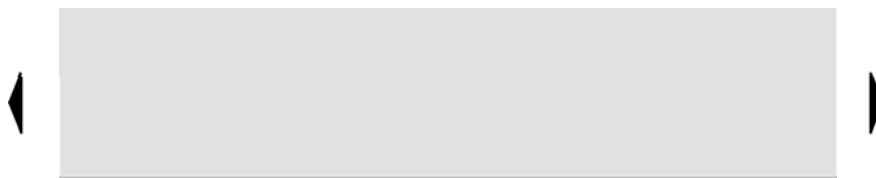
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Current Flow Diagram

No. 3 / 9

Engine control unit, injector for cylinders 3, 4, 5, 7

- J623 - Engine control unit
- N32 - Injector, cylinder 3
- N33 - Injector, cylinder 4
- N83 - Injector, cylinder 5
- N85 - Injector, cylinder 7
- T14m - 14-pin connector, black, in engine compartment, bank 1
- T14n - 14-pin connector, black, in engine compartment, bank 2
- T60 - 60-pin connector, black, on engine control unit
- D117 - Connection 15, in engine compartment wiring harness
- D118 - Connection 16, in engine compartment wiring harness



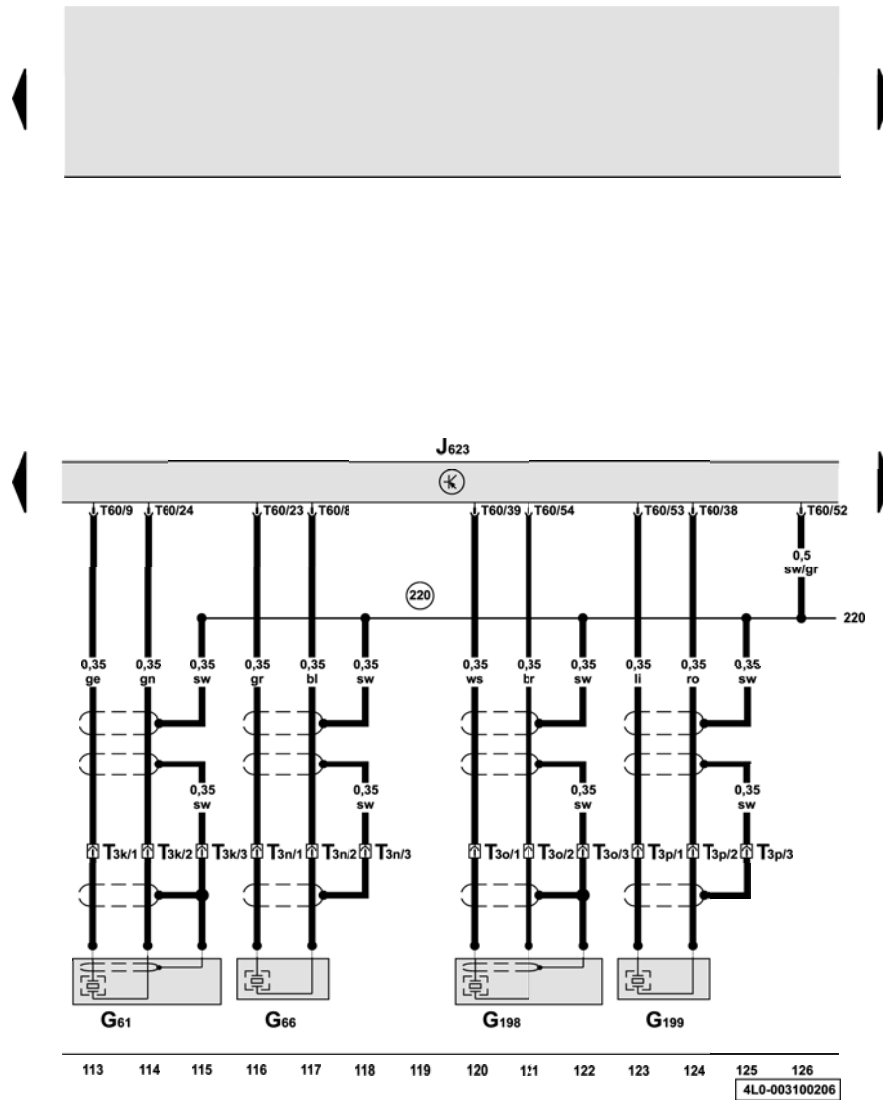
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Current Flow Diagram

No. 3 / 10

Engine control unit, knock sensor

- G61 - Knock sensor 1
- G66 - Knock sensor 2
- G198 - Knock sensor 3
- G199 - Knock sensor 4
- J623 - Engine control unit
- T3k - 3-pin connector, black, on knock sensor 1
- T3n - 3-pin connector, brown, on knock sensor 2
- T3o - 3-pin connector, black, on knock sensor 3
- T3p - 3-pin connector, brown, on knock sensor 4
- T60 - 60-pin connector, black, on engine control unit
- 220 - Earth connection (sender earth), in engine wiring harness



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113 114 115 116 117 118 119 120 121 122 123 124 125 126
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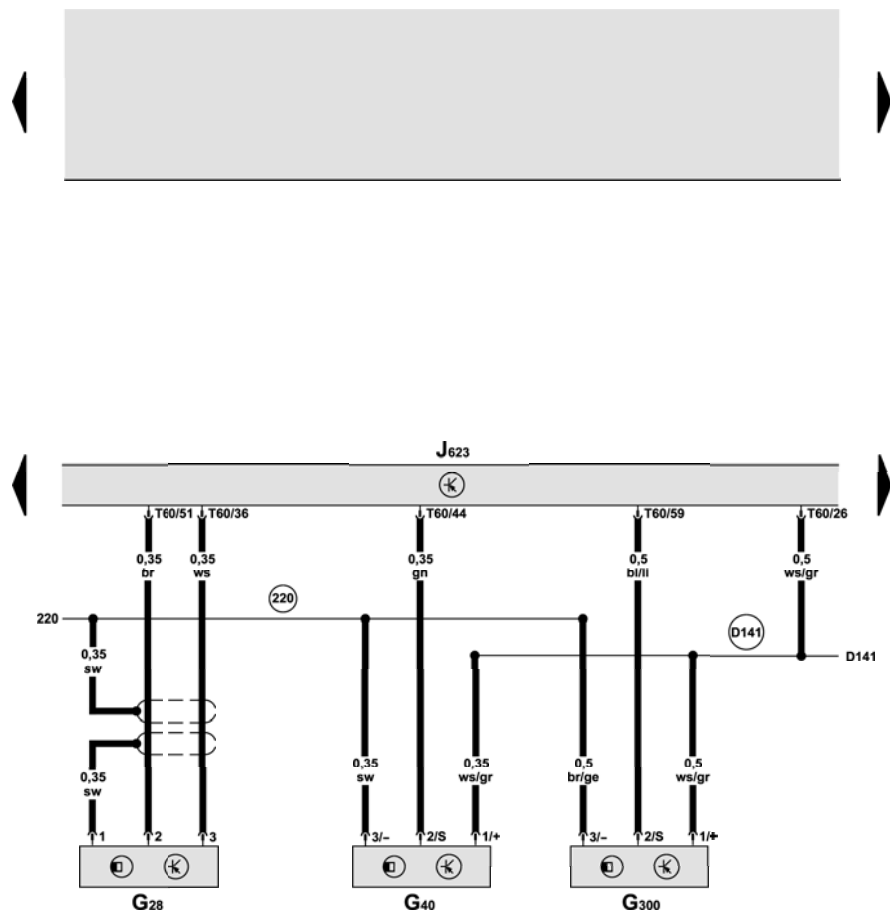
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Current Flow Diagram

No. 3 / 11

Engine control unit, engine speed sender, Hall sender

- G28 - Engine speed sender
- G40 - Hall sender
- G300 - Hall sender 3
- J623 - Engine control unit
- T60 - 60-pin connector, black, on engine control unit
- 220 - Earth connection (sender earth), in engine wiring harness
- D141 - Connection (5V), in engine wiring harness

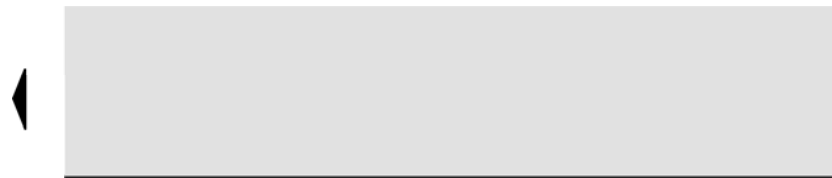


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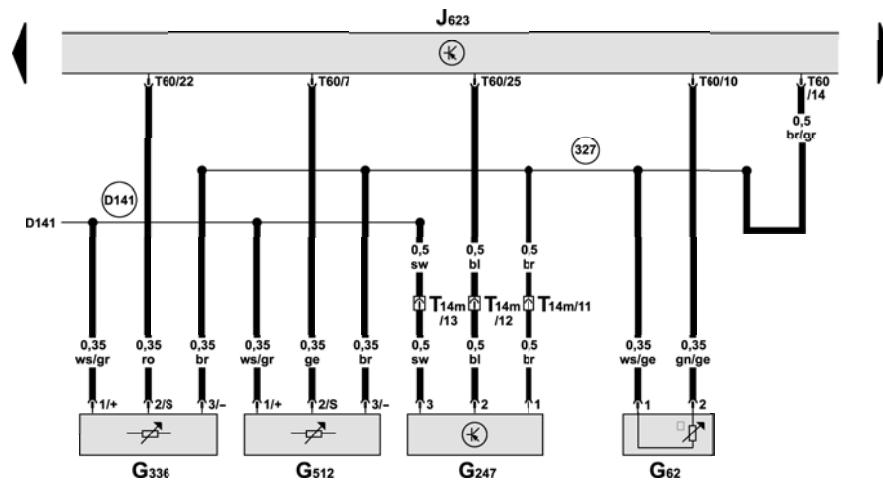
Current Flow Diagram

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Engine control unit, coolant temperature sender, fuel pressure sender, intake manifold flap potentiometer

- G62 - Coolant temperature sender
- G247 - Fuel pressure sender
- G336 - Intake manifold flap potentiometer
- G512 - Intake manifold flap 2 potentiometer
- J623 - Engine control unit
- T14m - 14-pin connector, black, in engine compartment, bank 1
- T60 - 60-pin connector, black, on engine control unit
- 327 - Earth connection (sender earth), in engine compartment wiring harness
- D141 - Connection (5V), in engine wiring harness

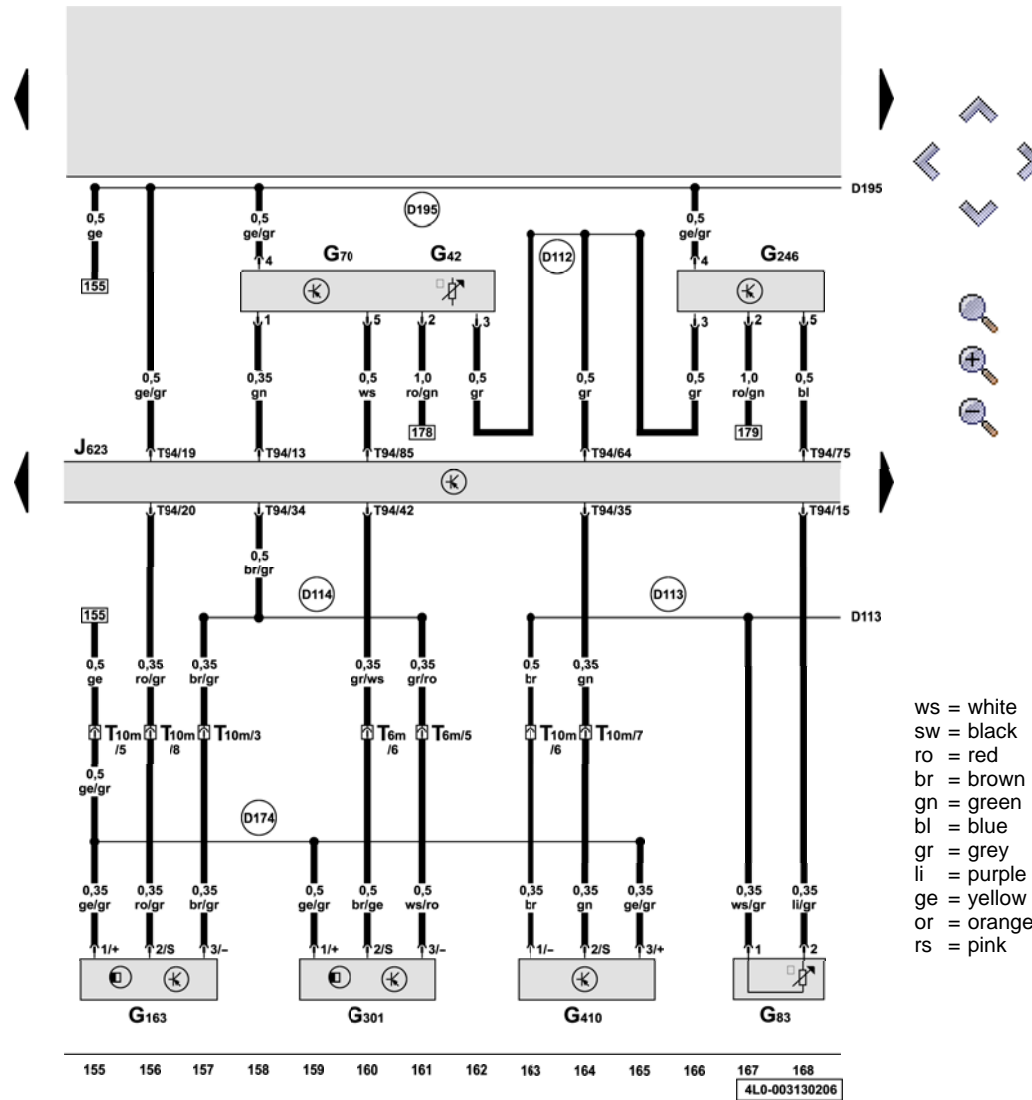


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Current Flow Diagram

No. 3 / 13



Engine control unit, air mass meter, radiator outlet coolant temperature sender, Hall sender, fuel pressure sender for low pressure, intake air temperature sender

- G42 - Intake air temperature sender
- G70 - Air mass meter
- G83 - Radiator outlet coolant temperature sender
- G163 - Hall sender 2
- G246 - Air mass meter 2
- G301 - Hall sender 4
- G410 - Fuel pressure sender for low pressure
- J623 - Engine control unit
- T6m - 6-pin connector, white, coupling station on electronics box, plenum chamber
- T10m - 10-pin connector, black, coupling station on electronics box, plenum chamber
- T94 - 94-pin connector, black, on engine control unit
- D112 - Connection 10, in engine compartment wiring harness
- D113 - Connection 11, in engine compartment wiring harness
- D114 - Connection 12, in engine compartment wiring harness
- D174 - Earth connection 2 (5V), in engine wiring harness
- D195 - Connection 1 (5V), in engine compartment wiring harness

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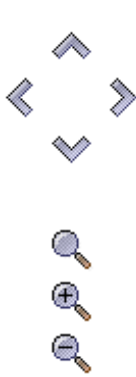
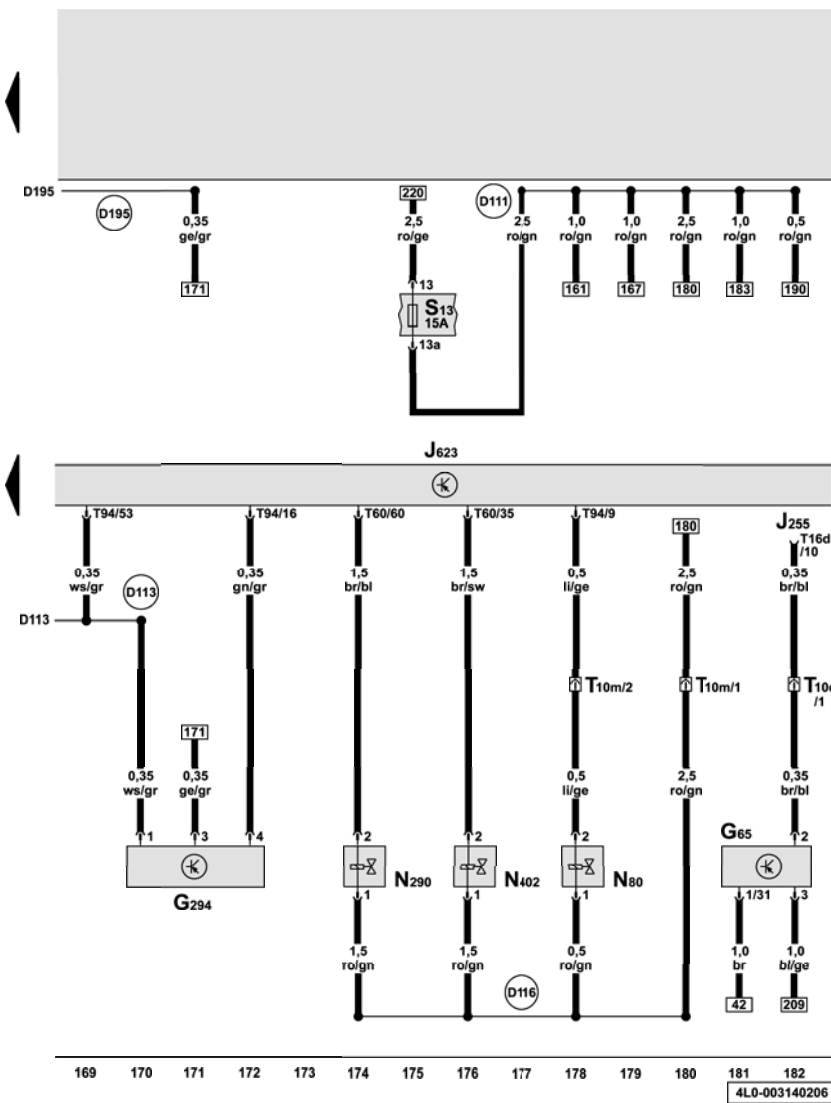
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Current Flow Diagram

No. 3 / 14

Engine control unit, high pressure sender, brake servo pressure sensor, active charcoal filter system solenoid valve 1, fuel metering valve

- G65 - High pressure sender
- G294 - Brake servo pressure sensor



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