

# Audi A6

## Current Flow Diagram

No. 66 / 1

Edition 08.2008

**Audi A6 2,7 I - TDI, Common Rail (120 kW - 6-cylinder), engine code BSG**

from model year 2007

**Audi A6 2,7 I - TDI, Common Rail (132 kW - 6-cylinder), engine code BPP**

from model year 2007

**Audi A6 3,0 I - TDI, Common Rail (155 kW - 6-cylinder), engine code BNG**

from model year 2007

**Audi A6 3,0 I - TDI, Common Rail (165 kW - 6-cylinder), engine code BMK**

from model year 2007

**Audi A6 3,0 I - TDI, Common Rail (171 kW - 6-cylinder), engine code ASB**

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

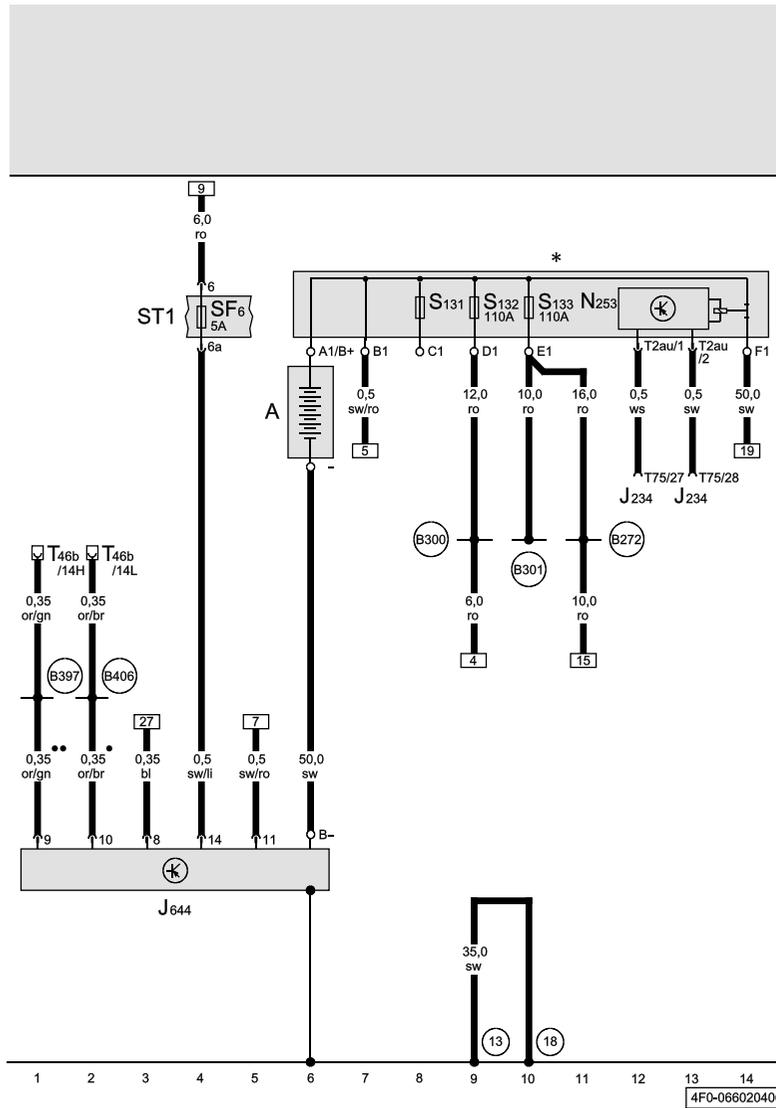
- ◆ Fault Finding Programs

→ guided fault finding

# Audi A6

## Current Flow Diagram

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### Battery, energy management control unit, fuses

- A - Battery
- J234 - Airbag control unit
- J644 - Energy management control unit
- N253 - Battery isolation igniter
- S131 - Fuse 1
- S132 - Fuse 2
- S133 - Fuse 3
- SF6 - Fuse 6 on fuse holder F
- T2au - 2-pin connector, purple, on battery isolation igniter
- T46b - 46-pin connector, CAN separating connector right
- T75 - 75-pin connector, grey, on airbag control unit
- 13 - Earth point, on right in engine compartment
- 18 - Earth point on engine block
- B272 - Positive connection (30), in main wiring harness
- B300 - Positive connection 4 (30), in main wiring harness
- B301 - Positive connection 5 (30), 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
- - CAN bus (data wire)
- \* - main fuse box, in luggage compartment, rear right, on the battery

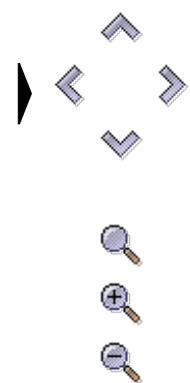
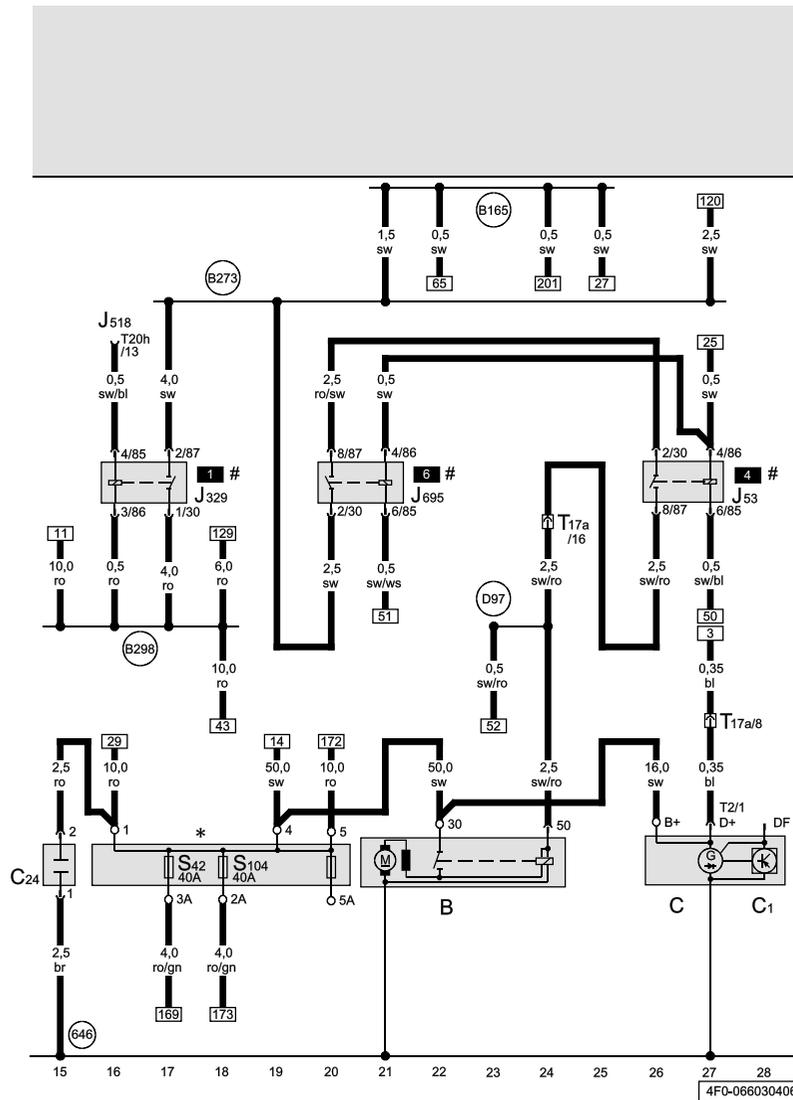
ws = white  
 sw = black  
 ro = red  
 rt = red  
 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = purple  
 vi = purple  
 ge = yellow  
 or = orange  
 rs = pink

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# Audi A6

## Current Flow Diagram

### No. 66 / 3



#### Starter, alternator, terminal 15 voltage supply relay, starter motor relay, suppression filter

- B - Starter
- C - Alternator
- C1 - Voltage regulator
- C24 - Suppression filter
- J53 - Starter motor relay
- J329 - Terminal 15 voltage supply relay
- J518 - Entry and start authorisation control unit
- J695 - Starter motor relay 2
- S42 - Radiator fan single fuse
- S104 - Radiator fan fuse for 2nd speed
- T2 - 2-pin connector, black, on alternator
- T17a - 17-pin connector, red, coupling station on electronics box, left in plenum chamber
- T20h - 20-pin connector, black, connector A, on entry and start authorisation control unit
- 646 - Earth point 2, on bulkhead
- B165 - Positive connection 2 (15), in interior wiring harness
- B273 - Positive connection (15), in main wiring harness
- B298 - Positive connection 2 (30), in main wiring harness
- D97 - Connection (50), in engine compartment right wiring harness
- \* - Main fuse carrier electronics box right in plenum chamber
- # - 9-point relay carrier, behind driver storage compartment

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

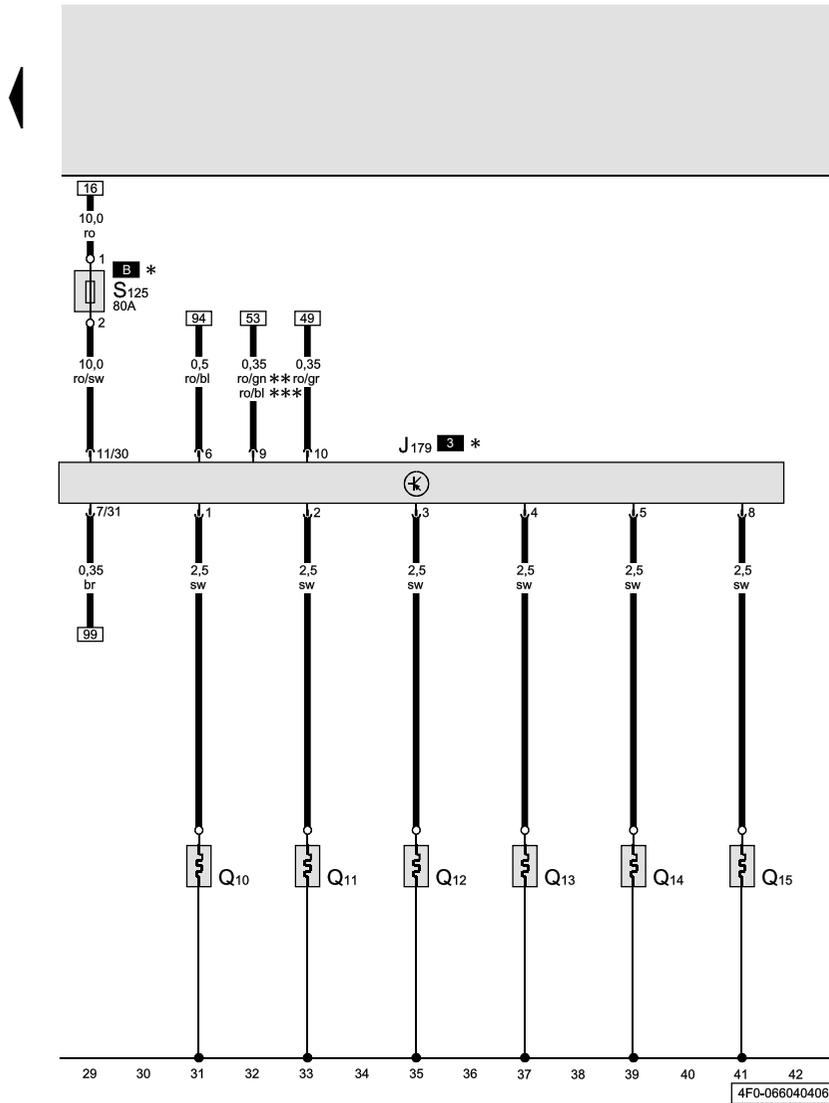
# Audi A6

## Current Flow Diagram

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### Automatic glow period control unit, glow plugs fuse, glow plugs

- J179 - Automatic glow period control unit 
- Q10 - Glow plug 1
- Q11 - Glow plug 2
- Q12 - Glow plug 3
- Q13 - Glow plug 4
- Q14 - Glow plug 5
- Q15 - Glow plug 6
- S125 - Glow plug fuse 
- \* - Relay carrier electronics box on right in plenum chamber
- \*\* - only 3,0 l diesel engine
- \*\*\* - only 2.7 l diesel engine



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

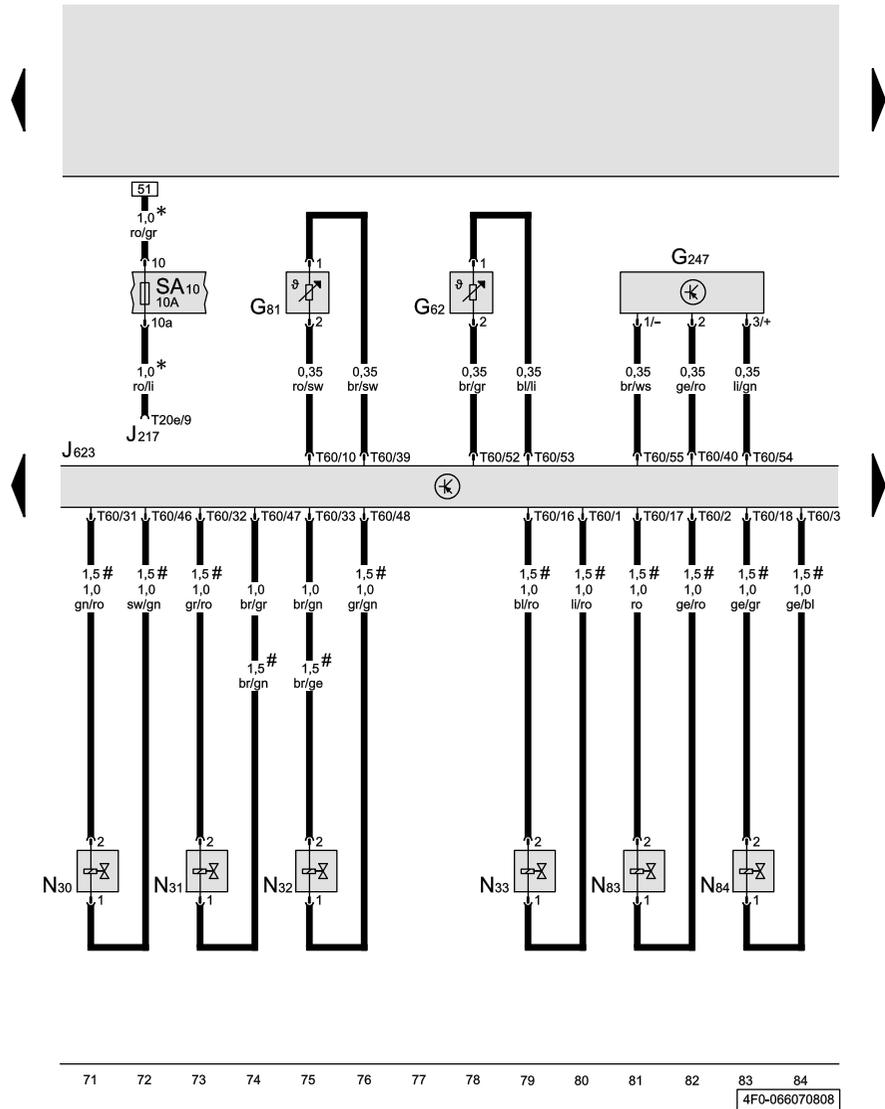




# Audi A6

## Current Flow Diagram

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### Engine control unit, injector, cylinder 1 up to 6, coolant temperature sender, fuel temperature sender, fuel pressure sender

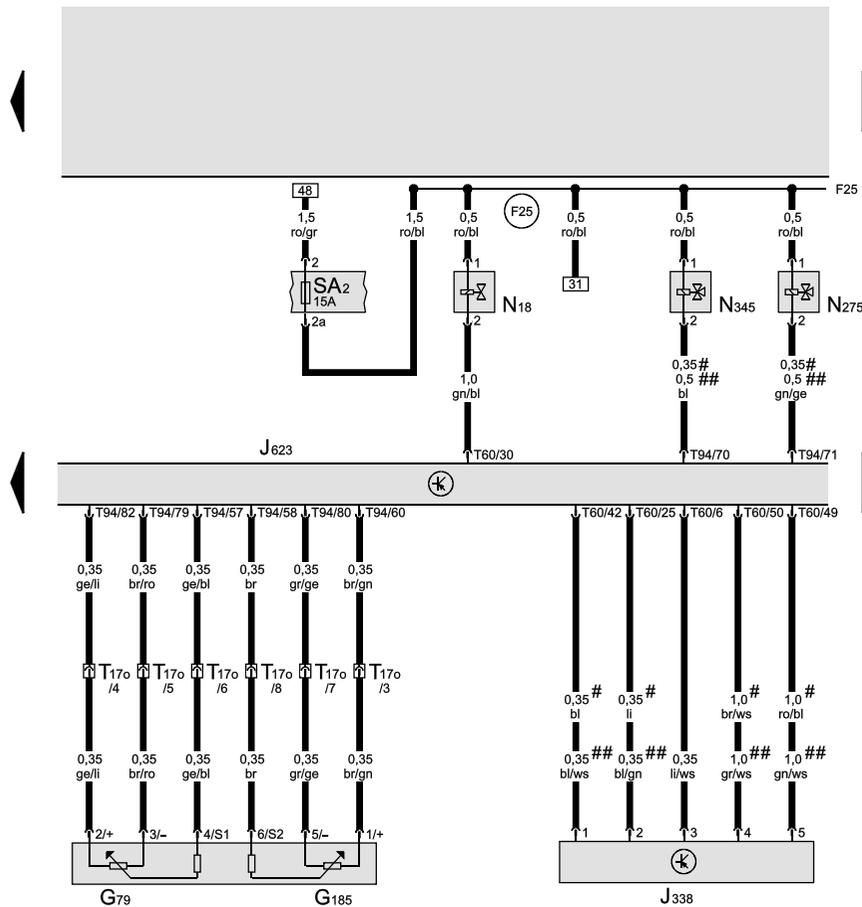
- G62 - Coolant temperature sender
  - G81 - Fuel temperature sender
  - G247 - Fuel pressure sender
  - J217 - Automatic gearbox control unit
  - J623 - Engine control unit
  - N30 - Injector, cylinder 1
  - N31 - Injector, cylinder 2
  - N32 - Injector, cylinder 3
  - N33 - Injector, cylinder 4
  - N83 - Injector, cylinder 5
  - N84 - Injector, cylinder 6
  - SA10 - Fuse 10 on fuse holder A
  - T20e - 20-pin connector, black, on automatic gearbox control unit
  - T60 - 60-pin connector, black, connector A, on engine control unit
- \* - models with automatic gearbox 01J  
 # - only 2.7 l diesel engine

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

# Audi A6

## Current Flow Diagram

### No. 66 / 8



**Engine control unit, accelerator position sender, throttle valve module, exhaust gas recirculation valve, exhaust gas recirculation cooler change-over valve, air filter bypass flap valve**

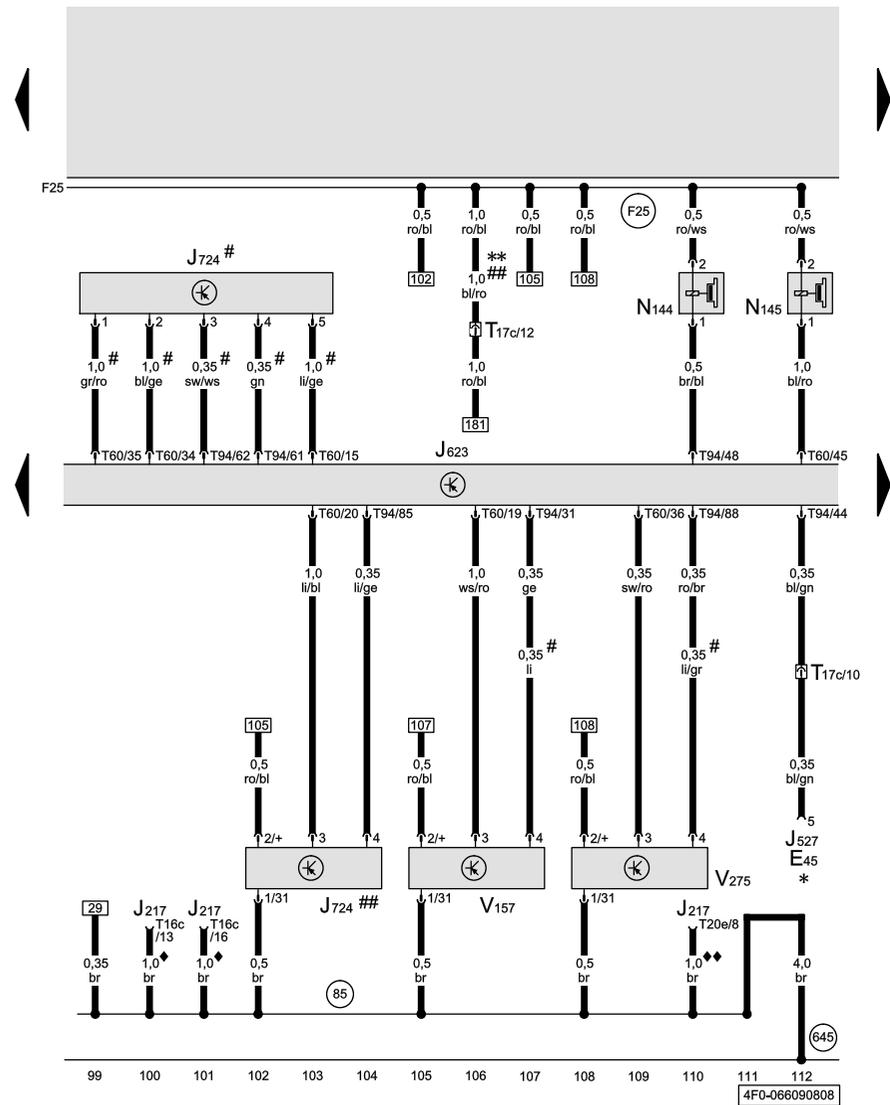
- G79 - Accelerator position sender
- G185 - Accelerator position sender 2
- J338 - Throttle valve module
- J623 - Engine control unit
- N18 - Exhaust gas recirculation valve
- N275 - Air filter bypass flap valve
- N345 - Exhaust gas recirculation cooler change-over valve
- SA2 - Fuse 2 on fuse holder A
- T170 - 17-pin connector, brown, coupling station on electronics box, left in plenum chamber
- T60 - 60-pin connector, black, connector A, on engine control unit
- T94 - 94-pin connector, black, connector B, on engine control unit
- F25 - Connection 1, in diesel direct injection system wiring harness
- # - 2.7 l diesel engine
- ## - 3.0 l diesel engine

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

# Audi A6

## Current Flow Diagram

### No. 66 / 9



#### Engine control unit, intake manifold flap motor, intake manifold flap 2 motor, turbocharger 1 control unit, left electrohydraulic engine mounting solenoid valve

- E45 - Cruise control system switch
- J217 - Automatic gearbox control unit
- J527 - Steering column electronics control unit
- J623 - Engine control unit
- J724 - Turbocharger 1 control unit
- N144 - Left electrohydraulic engine mounting solenoid valve
- N145 - Right electrohydraulic engine mounting solenoid valve
- T16c - 16-pin connector, black, on automatic gearbox control unit
- T17c - 17-pin connector, white, coupling station on electronics box, left in plenum chamber
- T20e - 20-pin connector, black, on automatic gearbox control unit
- T60 - 60-pin connector, black, connector A, on engine control unit
- T94 - 94-pin connector, black, connector B, on engine control unit
- V157 - Intake manifold flap motor
- V275 - Intake manifold flap 2 motor
- 85 - Earth connection 1, in engine compartment wiring harness
- 645 - Earth point 1, on bulkhead
- F25 - Connection 1, in diesel direct injection system wiring harness
- \* - models with cruise control system
- \*\* - from May 2007
- # - 2.7 l diesel engine
- ## - 3.0 l diesel engine
- ◆ - models with automatic gearbox 09L
- ◆◆ - models with automatic gearbox 01J

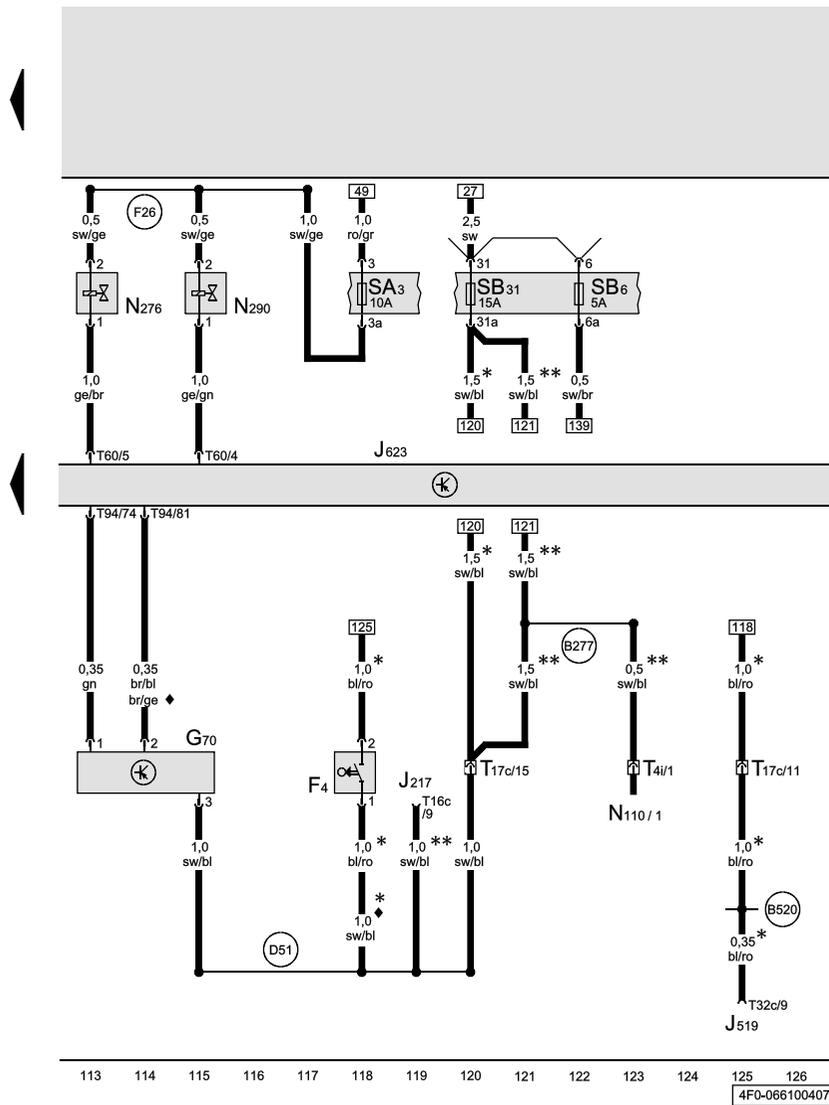
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 br = brown  
 gn = green  
 bl = blue  
 gr = grey  
 li = purple  
 vi = purple  
 ge = yellow  
 or = orange  
 rs = pink

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# Audi A6

## Current Flow Diagram

# No. 66 / 10



### Engine control unit, fuel pressure regulating valve, fuel metering valve

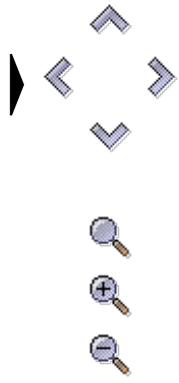
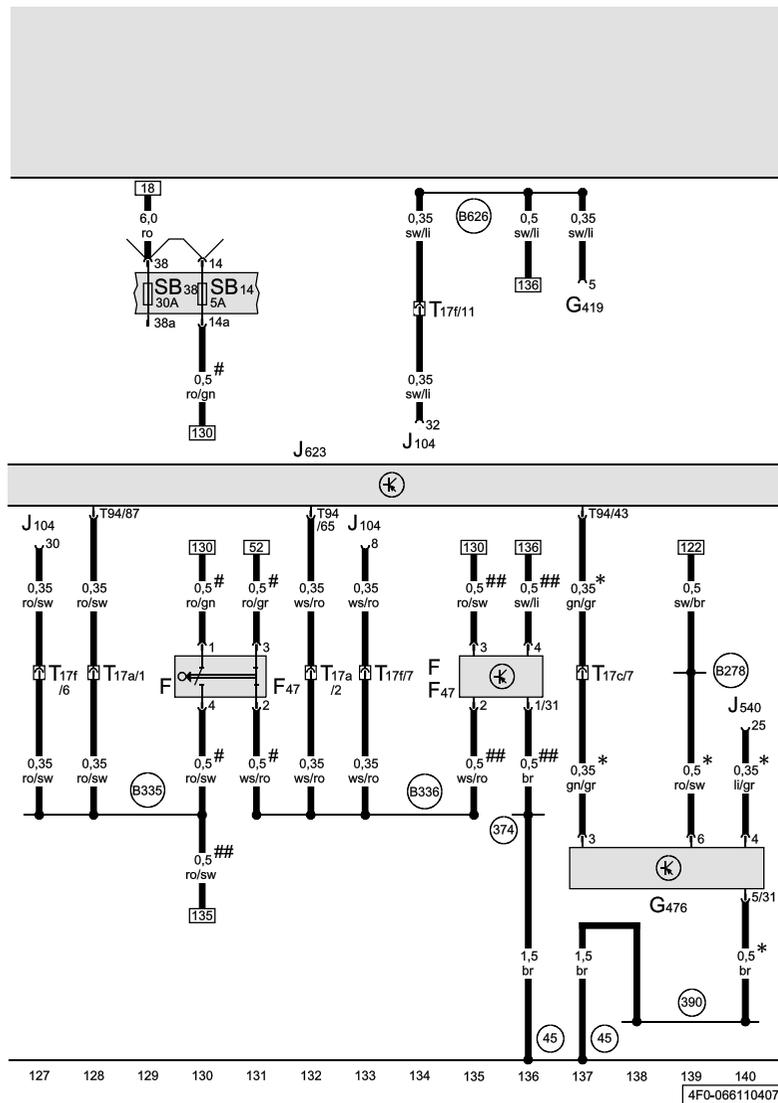
- F4 - Reversing light switch
  - G70 - Air mass meter
  - J217 - Automatic gearbox control unit
  - J519 - Onboard supply control unit
  - J623 - Engine control unit
  - N110 - Selector lever lock solenoid
  - N276 - Fuel pressure regulating valve
  - N290 - Fuel metering valve
  - SA3 - Fuse 3 on fuse holder A
  - SB6 - Fuse 6 on fuse holder B
  - SB31 - Fuse 31 on fuse holder B
  - T4i - 4-pin connector, black, in centre console on selector lever console
  - T16c - 16-pin connector, black, on automatic gearbox control unit
  - T17c - 17-pin connector, white, coupling station on electronics box, left in plenum chamber
  - T32c - 32-pin connector, white, connector C, on onboard supply control unit
  - T60 - 60-pin connector, black, connector A, on engine control unit
  - T94 - 94-pin connector, black, connector B, on engine control unit
  - B277 - Positive connection 1 (15a), in main wiring harness
  - B520 - Connection (RL), in main wiring harness
  - D51 - Positive connection 1 (15), in engine compartment wiring harness
  - F26 - Connection 2, in diesel direct injection system wiring harness
- \* - models with manual gearbox  
 \*\* - models with automatic gearbox 09L  
 ◆ - only 2.7 l diesel engine

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

# Audi A6

## Current Flow Diagram

### No. 66 / 11



#### Engine control unit, brake light switch, brake pedal switch, clutch position sender

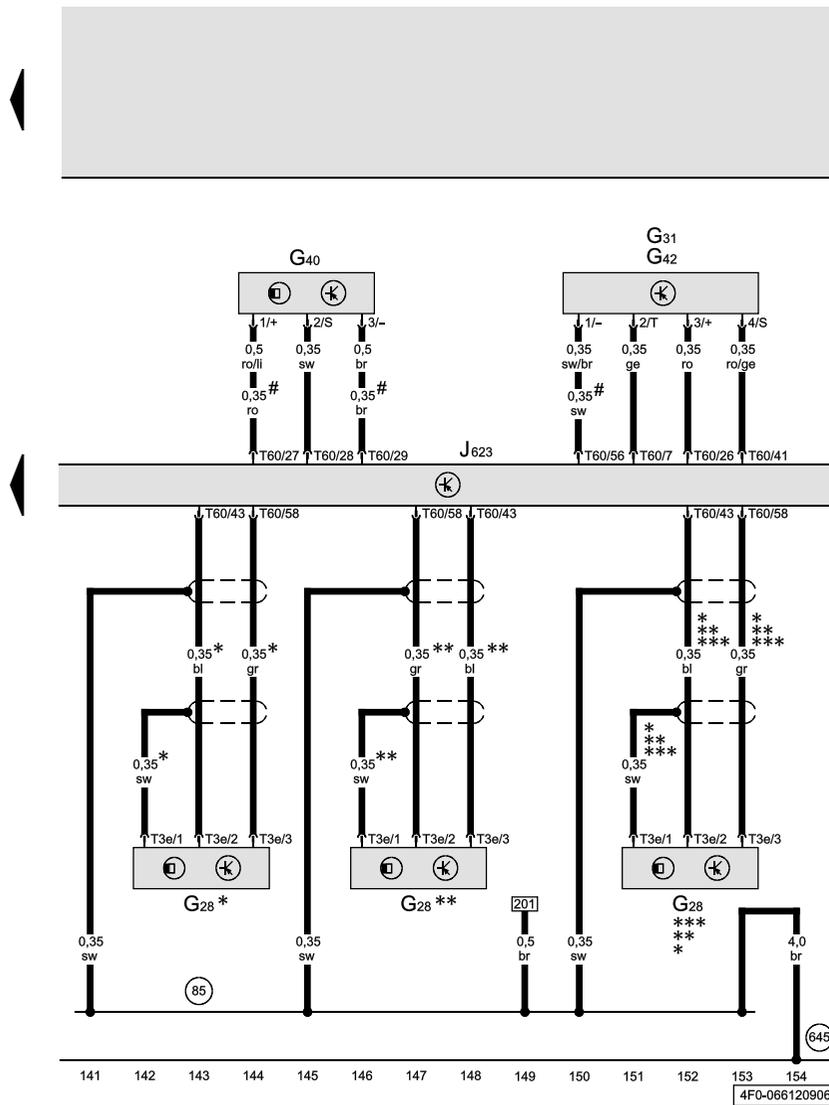
- F - Brake light switch
- F47 - Brake pedal switch
- G419 - ESP sensor unit
- G476 - Clutch position sender
- J104 - ABS control unit
- J540 - Electric park and handbrake control unit
- J623 - Engine control unit
- SB14 - Fuse 14 on fuse holder B
- SB38 - Fuse 38 on fuse holder B
- T17a - 17-pin connector, red, coupling station on electronics box, left in plenum chamber
- T17f - 17-pin connector, green, coupling station on left of A-pillar
- T94 - 94-pin connector, black, connector B, on engine control unit
- 45 - Earth point, centre behind dash panel
- 374 - Earth connection 9, in main wiring harness
- 390 - Earth connection 25, in main wiring harness
- B278 - Positive connection 2 (15a), in main wiring harness
- B335 - Connection 1 (54), in main wiring harness
- B336 - Connection 2 (54), in main wiring harness
- B626 - Positive connection 2 (15), in main wiring harness
- \* - models with manual gearbox
- # - up to May 2007
- ## - from June 2007

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

# Audi A6

## Current Flow Diagram

# No. 66 / 12



**Engine control unit, engine speed sender, charge air pressure sender, Hall sender, intake air temperature sender**

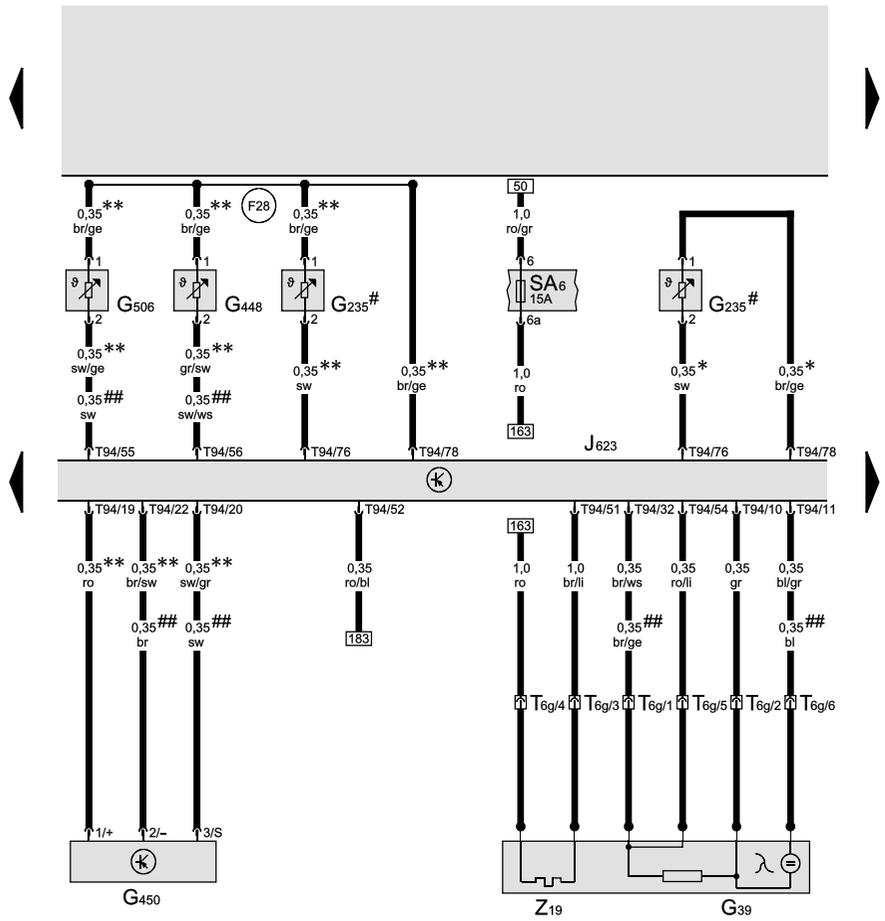
- G28 - Engine speed sender
- G31 - Charge air pressure sender
- G40 - Hall sender
- G42 - Intake air temperature sender
- J623 - Engine control unit 
- T3e - 3-pin connector, grey, on engine speed sender
- T60 - 60-pin connector, black, connector A, on engine control unit
- 85 - Earth connection 1, in engine compartment wiring harness
- 645 - Earth point 1, on bulkhead 
- \* - models with manual gearbox
- \*\* - models with automatic gearbox 09L
- \*\*\* - phased from March 2006, when replacing the gearbox, observe the version of the drive plate
- # - only 2.7 l diesel engine

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

# Audi A6

## Current Flow Diagram

# No. 66 / 13



**Engine control unit, exhaust gas temperature sender 1, lambda probe, exhaust gas pressure sensor 1, temperature sender before particulate filter**

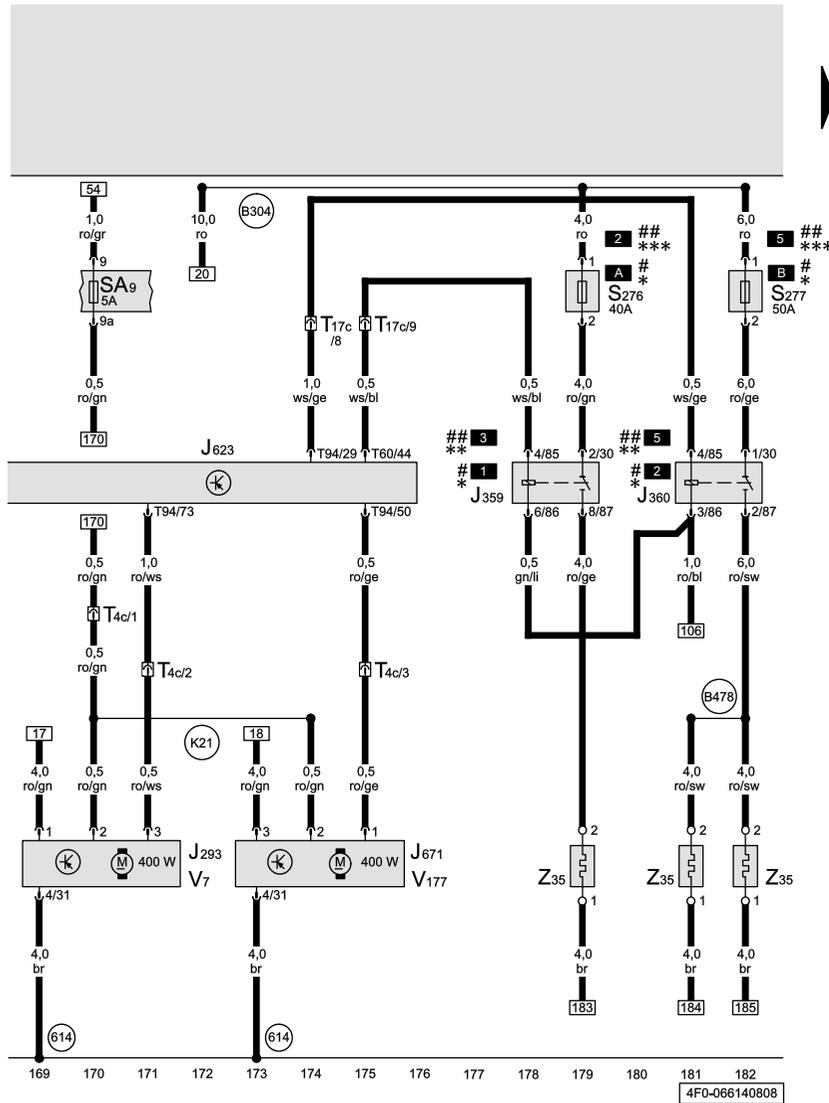
- G39 - Lambda probe
- G235 - Exhaust gas temperature sender 1
- G448 - Bank 1 exhaust gas temperature sender 2
- G450 - Exhaust gas pressure sensor 1
- G506 - Temperature sender before particulate filter
- J623 - Engine control unit
- SA6 - Fuse 6 on fuse holder A
- T6g - 6-pin connector, brown, for lambda probe
- T94 - 94-pin connector, black, connector B, on engine control unit
- Z19 - Lambda probe heater
- F28 - Connection 3, in diesel direct injection system wiring harness
- \* - models with particulate filter
- \*\* - models with particulate filter
- # - only 3,0 l diesel engine
- ## - only 2.7 l diesel engine

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

# Audi A6

## Current Flow Diagram

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

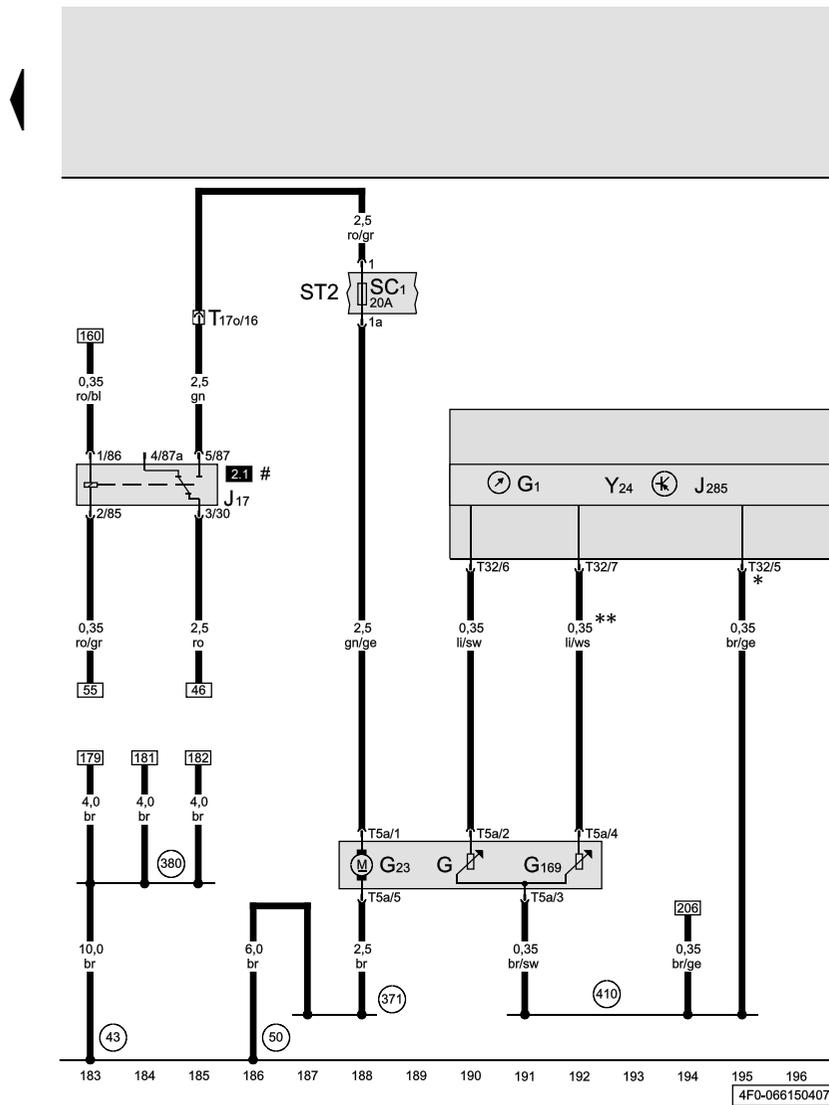
### Engine control unit, low heat output relay, high heat output relay, radiator fan, auxiliary heating heater element, fuses

- J293 - Radiator fan control unit
- J359 - Low heat output relay
- J360 - High heat output relay
- J623 - Engine control unit
- J671 - Radiator fan control unit 2
- S276 - Heater element fuse 1
- S277 - Heater element fuse 2
- SA9 - Fuse 9 on fuse holder A
- T4c - 4-pin connector, black, electronics box, right in plenum chamber, radiator fan
- T17c - 17-pin connector, white, coupling station on electronics box, left in plenum chamber
- T60 - 60-pin connector, black, connector A, on engine control unit
- T94 - 94-pin connector, black, connector B, on engine control unit
- V7 - Radiator fan
- V177 - Radiator fan 2
- Z35 - Auxiliary heating heater element
- 614 - Earth point 2, on right in engine compartment
- B304 - Positive connection 8 (30), in main wiring harness
- B478 - Connection 14 in main wiring harness
- K21 - Connection 1, in radiator fan wiring harness
- \* - relay carrier on steering cross member
- \*\* - 9-point relay carrier, behind driver storage compartment
- \*\*\* - fuses on bottom onboard supply control unit
- # - up to May 2007
- ## - from June 2007

# Audi A6

## Current Flow Diagram

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### Fuel pump relay, control unit in dash panel insert, fuel pump, fuel gauge sender, fuel gauge, fuel gauge sender 2

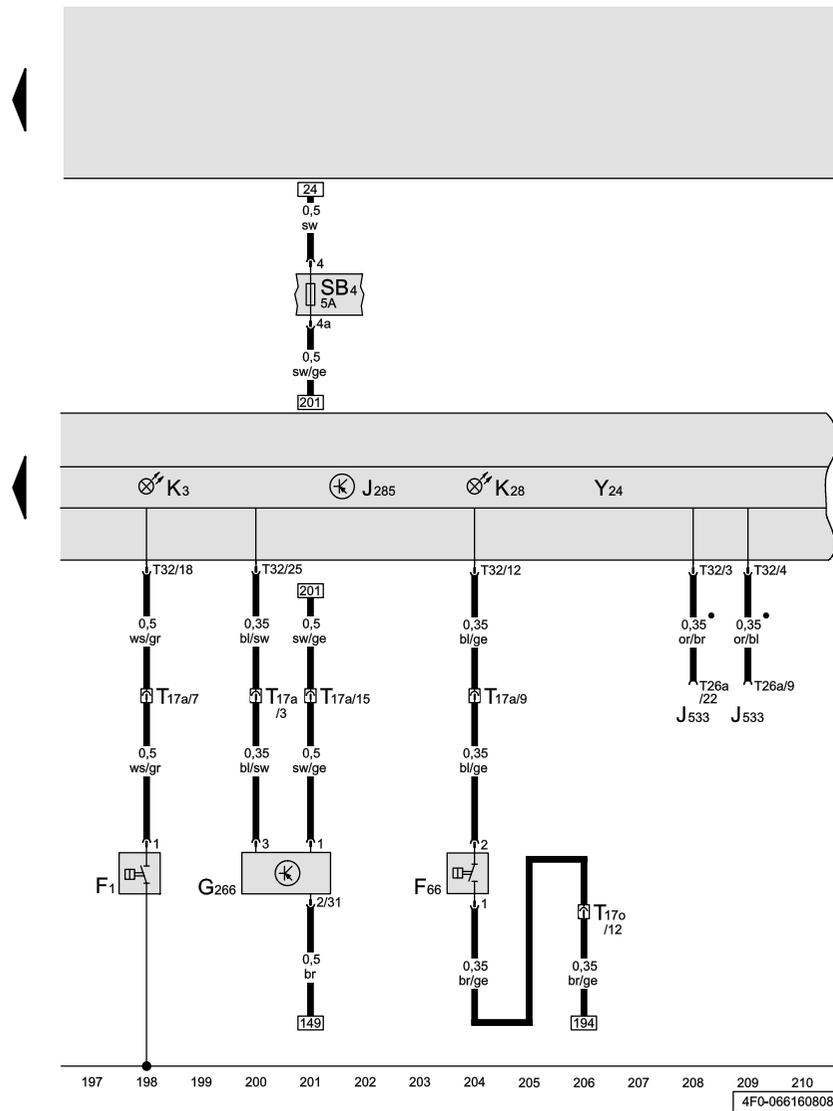
- G - Fuel gauge sender
- G1 - Fuel gauge
- G23 - Fuel pump
- G169 - Fuel gauge sender 2
- J17 - Fuel pump relay
- J285 - Control unit in dash panel insert
- SC1 - Fuse 1 on fuse holder C
- T5a - 5-pin connector, black, on fuel tank
- T170 - 17-pin connector, brown, coupling station on electronics box, left in plenum chamber
- T32 - 32-pin connector, grey, on dash panel insert
- Y24 - Display in dash panel insert
- 43 - Earth point, lower part of right A-pillar
- 50 - Earth point, on left in luggage compartment
- 371 - Earth connection 6, in main wiring harness
- 380 - Earth connection 15, in main wiring harness
- 410 - Earth connection 1 (sender earth), in main wiring harness
- \* - output sender earth
- \*\* - only four-wheel drive
- # - Relay carrier electronics box left in plenum chamber

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

# Audi A6

## Current Flow Diagram

### No. 66 / 16



**Control unit in dash panel insert, oil pressure warning lamp, coolant temperature and coolant shortage warning lamp, oil pressure switch, oil level and oil temperature sender**

- F1 - Oil pressure switch
- F66 - Coolant shortage indicator switch
- G266 - Oil level and oil temperature sender
- J285 - Control unit in dash panel insert
- J533 - Data bus diagnostic interface
- K3 - Oil pressure warning lamp
- K28 - Coolant temperature and coolant shortage warning lamp
- SB4 - Fuse 4 on fuse holder
- T17a - 17-pin connector, red, coupling station on electronics box, left in plenum chamber
- T17o - 17-pin connector, brown, coupling station on electronics box, left in plenum chamber
- T26a - 26-pin connector, black, on data bus diagnostic interface
- T32 - 32-pin connector, grey, on dash panel insert
- Y24 - Display in dash panel insert
- - CAN bus (data wire)

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