

# Audi A3

## Current Flow Diagram

**No. 118 / 1**

Edition 10.2007

### **1.6 I - Fuel injection engine (85 kW - FSI - 4 cylinder), engine code BLF**

from model year 2006

#### **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

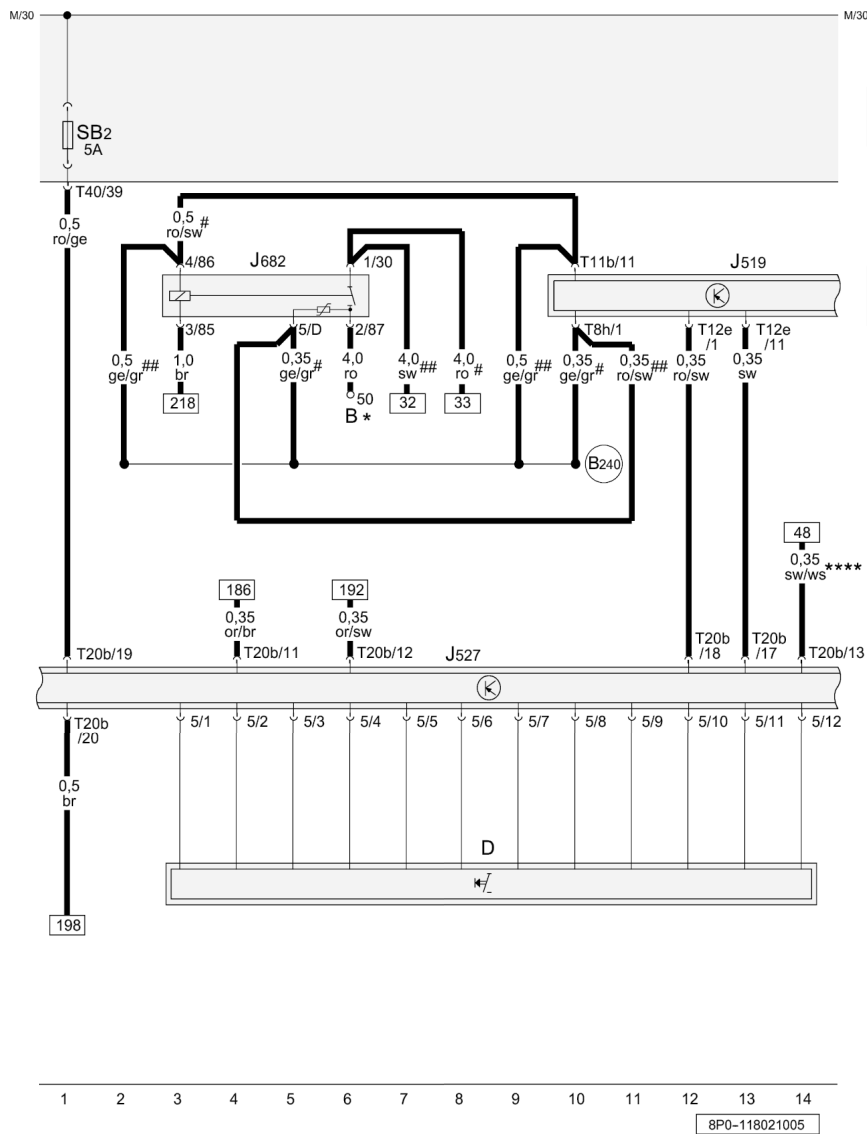
- ◆ Fault Finding Programs

→ guided fault finding

# Audi A3

## Current Flow Diagram

# No. 118 / 2



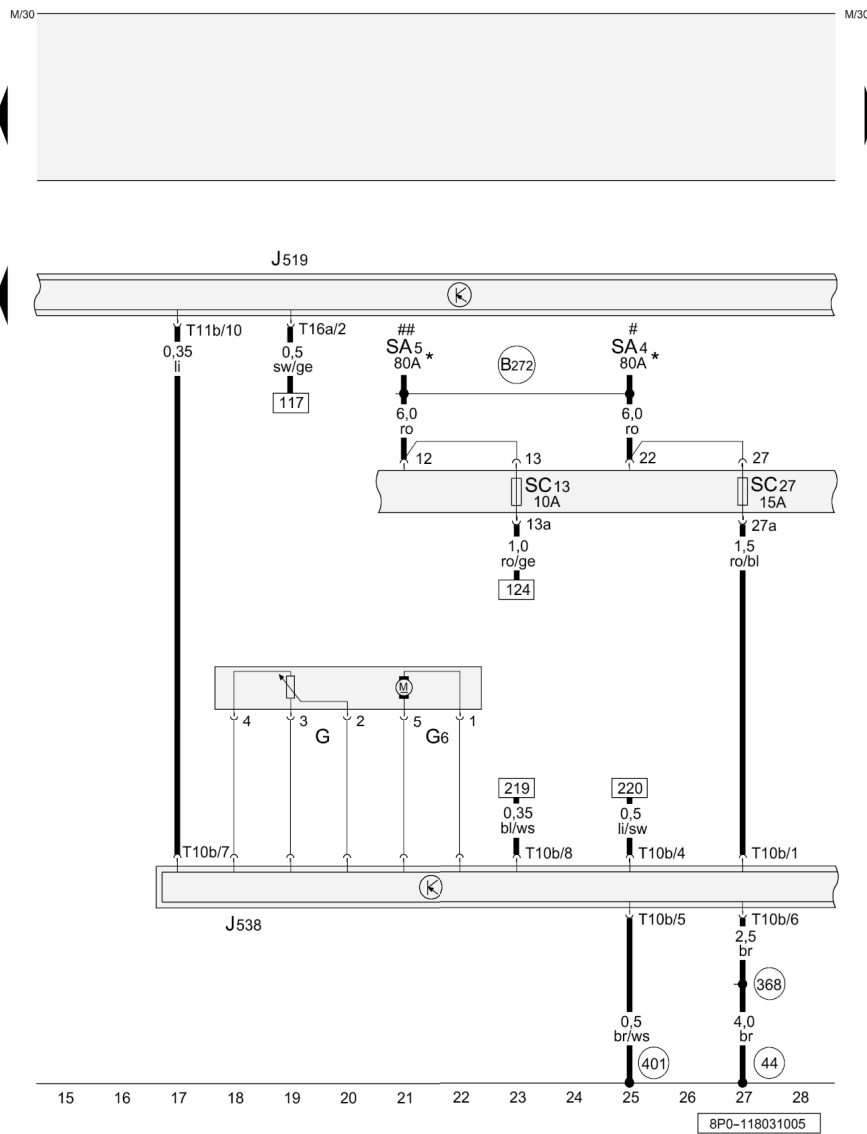
- Terminal 50 voltage supply relay, ignition/starter switch**
- B - Starter
  - D - Ignition/starter switch
  - J519 - Onboard supply control unit
  - J527 - Steering column electronics control unit
  - J682 - Terminal 50 voltage supply relay
  - SB2 - Fuse 2 on fuse holder B
  - T8h - 8-pin connector, black (connector F)
  - T11b - 11-pin connector, black (connector A)
  - T12e - 12-pin connector, black (connector G)
  - T20b - 20-pin connector, black (connector A)
  - T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
  - B240 - Positive connection 2 (50), in interior wiring harness
  - \* - => applicable Current Flow Diagram for models with battery in engine compartment
  - \*\*\*\* - for models with cruise control system only
  - # - is dropped from November 2005
  - ## - applicable from November 2005

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

# Audi A3

## Current Flow Diagram

# No. 118 / 3



**Fuel gauge sender, fuel system pressurisation pump**

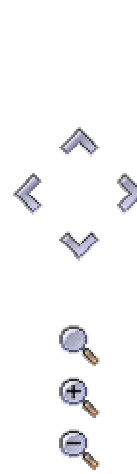
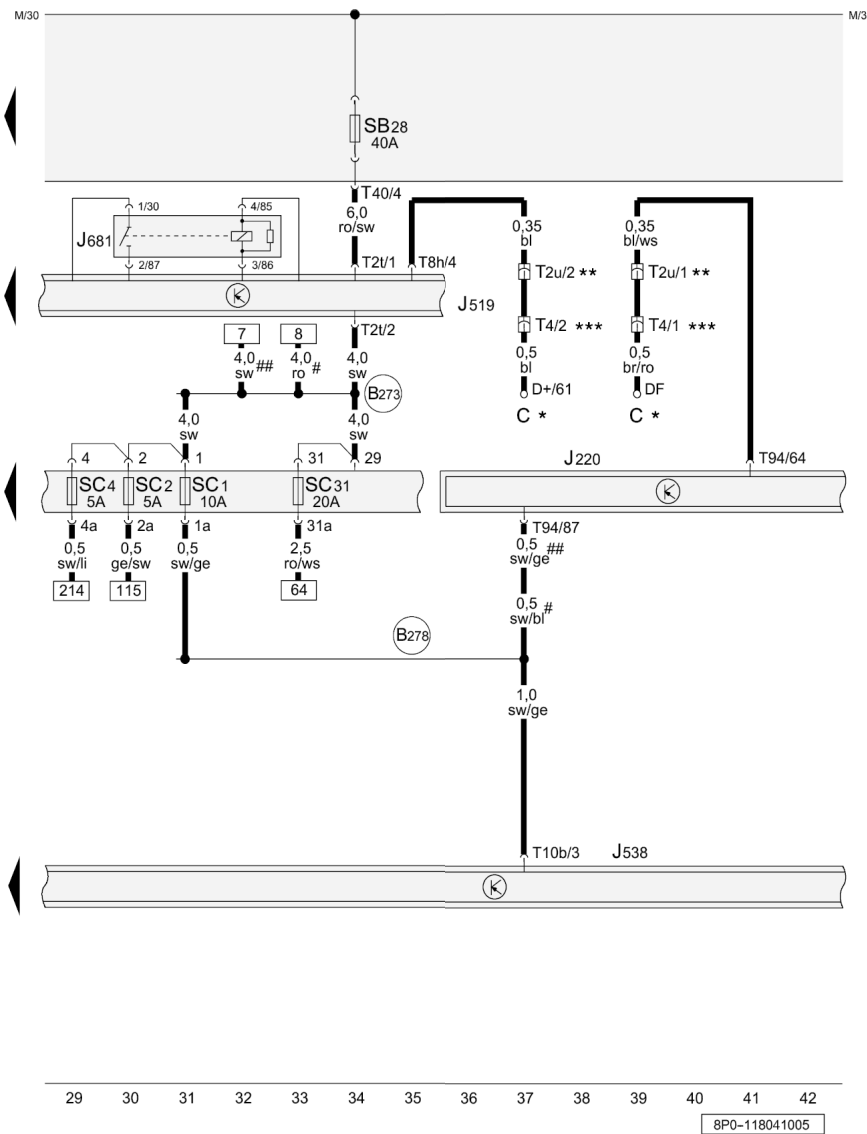
- G - Fuel gauge sender
- G6 - Fuel system pressurisation pump
- J519 - Onboard supply control unit
- J538 - Fuel pump control unit
- SA4 - Fuse 4 on fuse holder A
- SA5 - Fuse 5 on fuse holder A
- SC13 - Fuse 13 on fuse holder C
- SC27 - Fuse 27 on fuse holder C
- T10b - 10-pin connector, black (connector A)
- T11b - 11-pin connector, black (connector A)
- T16a - 16-pin connector, black (connector E)
- 44 - Earth point, lower part of left A-pillar
- 368 - Earth connection 3, in main wiring harness
- 401 - Earth connection (sender earth), in interior wiring harness
- B272 - Positive connection (30), in main wiring harness
- \* - => applicable Current Flow Diagram for models with battery in engine compartment
- # - is dropped from November 2005
- ## - applicable from November 2005

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

# Audi A3

## Current Flow Diagram

# No. 118 / 4



### Fuses on fuse holder

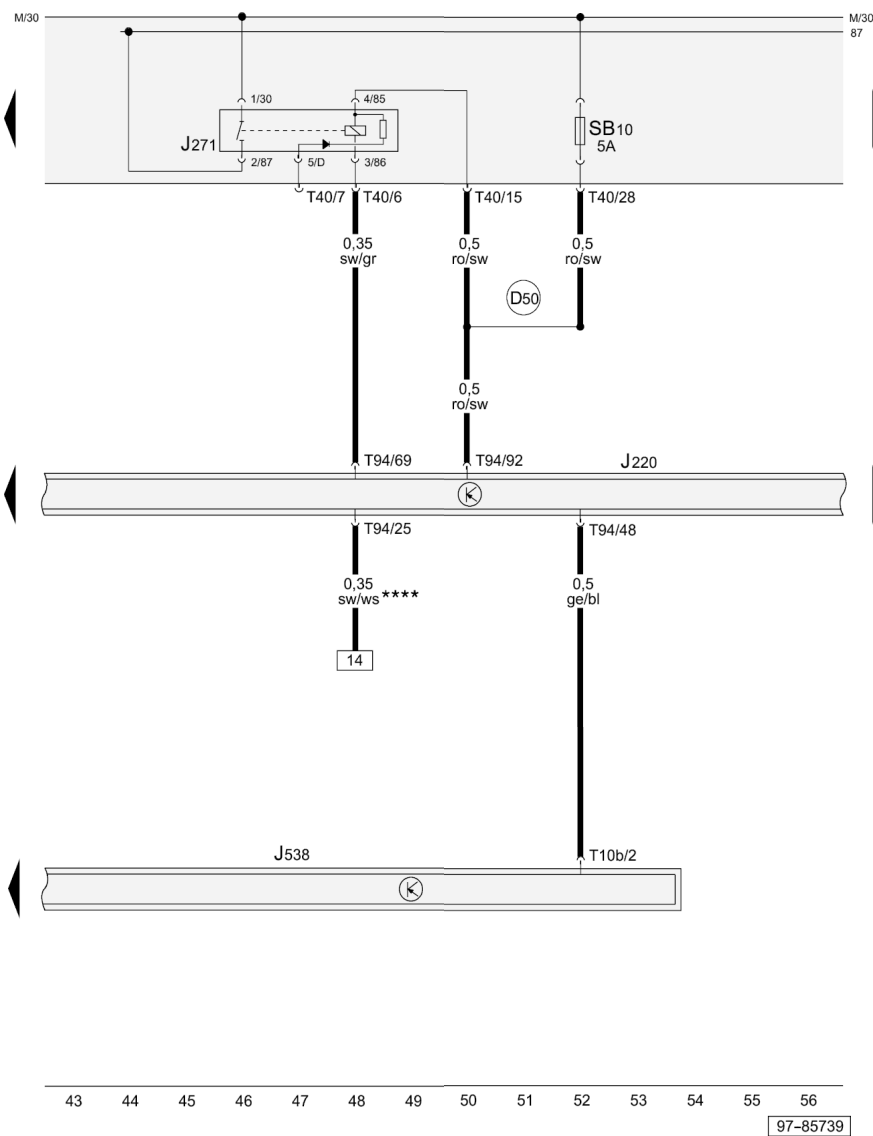
- C - Alternator
- J220 - Motronic control unit
- J519 - Onboard supply control unit
- J538 - Fuel pump control unit
- J681 - Terminal 15 voltage supply relay 2
- SB28 - Fuse 28 on fuse holder B
- SC1 - Fuse 1 on fuse holder C
- SC2 - Fuse 2 on fuse holder C
- SC4 - Fuse 4 on fuse holder C
- SC31 - Fuse 31 on fuse holder C
- T2t - 2-pin connector, black (connector L)
- T2u - 2-pin connector, brown, in front left engine compartment
- T4 - 4-pin connector, black, in front left engine compartment
- T8h - 8-pin connector, black (connector F)
- T10b - 10-pin connector, black (connector A)
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T94 - 94-pin connector, black (connector B)
- B273 - Positive connection (15), in main wiring harness
- B278 - Positive connection 2 (15a), in main wiring harness
- \* - => applicable Current Flow Diagram for models with battery in engine compartment
- \*\* - for models without air conditioning system only
- \*\*\* - for models with air conditioning system only
- # - is dropped from November 2005
- ## - applicable from November 2005

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

# Audi A3

## Current Flow Diagram

# No. 118 / 5



**Motronic current supply relay**

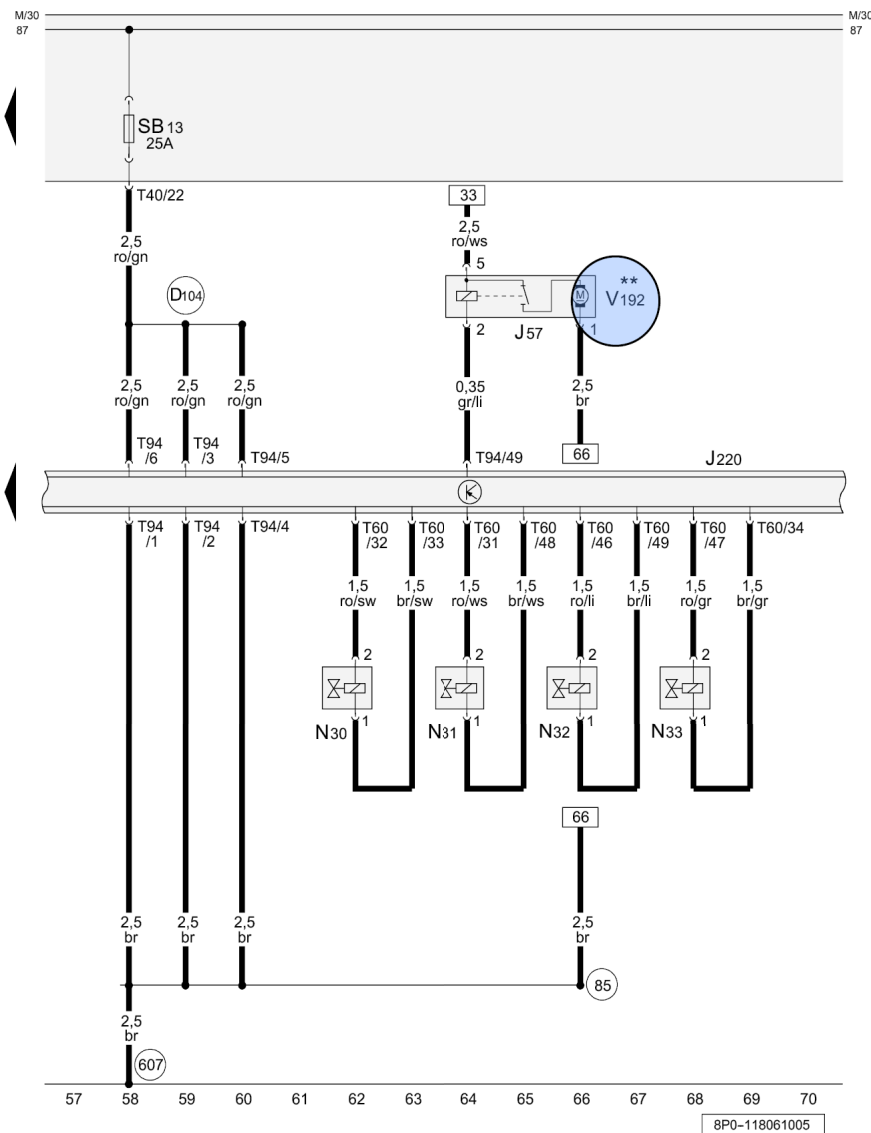
- J220 - Motronic control unit
- J271 - Motronic current supply relay
- J538 - Fuel pump control unit
- SB10 - Fuse 10 on fuse holder B
- T10b - 10-pin connector, black (connector A)
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T94 - 94-pin connector, black (connector B)
- D50 - Positive connection (30), in engine compartment wiring harness
- \*\*\*\* - for models with cruise control system only

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

# Audi A3

## Current Flow Diagram

# No. 118 / 6



### Injectors, vacuum pump for brakes

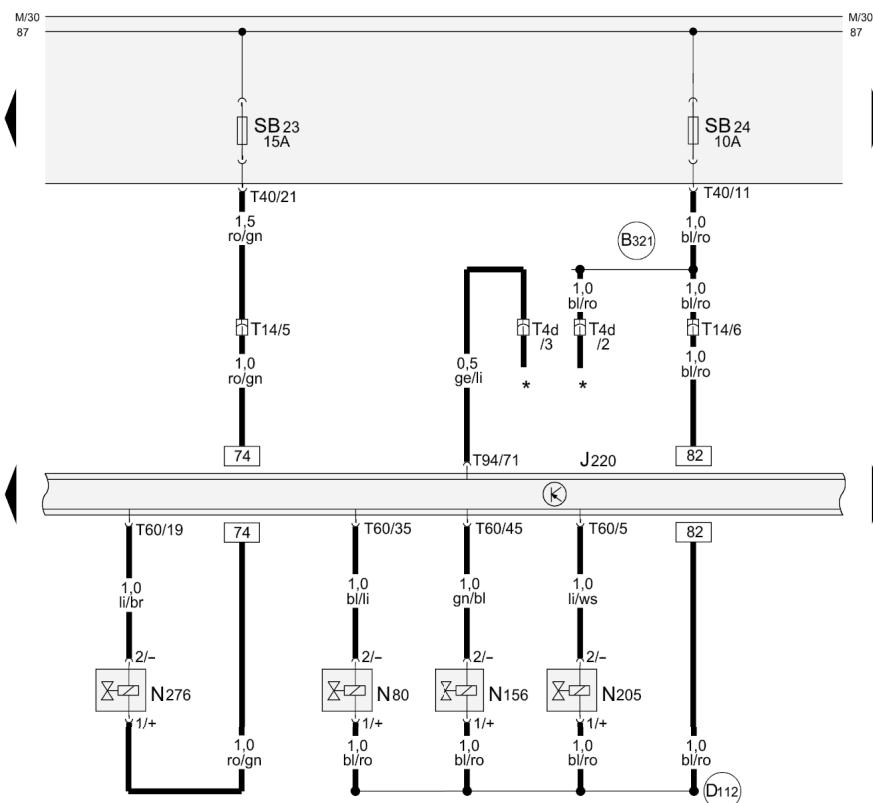
- J57 - Vacuum pump relay
- J220 - Motronic control unit
- N30 - Injector, cylinder 1
- N31 - Injector, cylinder 2
- N32 - Injector, cylinder 3
- N33 - Injector, cylinder 4
- SB13 - Fuse 13 on fuse holder B
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T60 - 60-pin connector, black (connector A)
- T94 - 94-pin connector, black (connector B)
- V192 - Vacuum pump for brakes
- 85 - Earth connection 1, in engine compartment wiring harness
- 607 - Earth point, on left in plenum chamber
- D104 - Positive connection 2 (30a), in engine compartment wiring harness
- \*\* - for models with automatic gearbox only

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

# Audi A3

## Current Flow Diagram

# No. 118 / 7



**Solenoid valves**

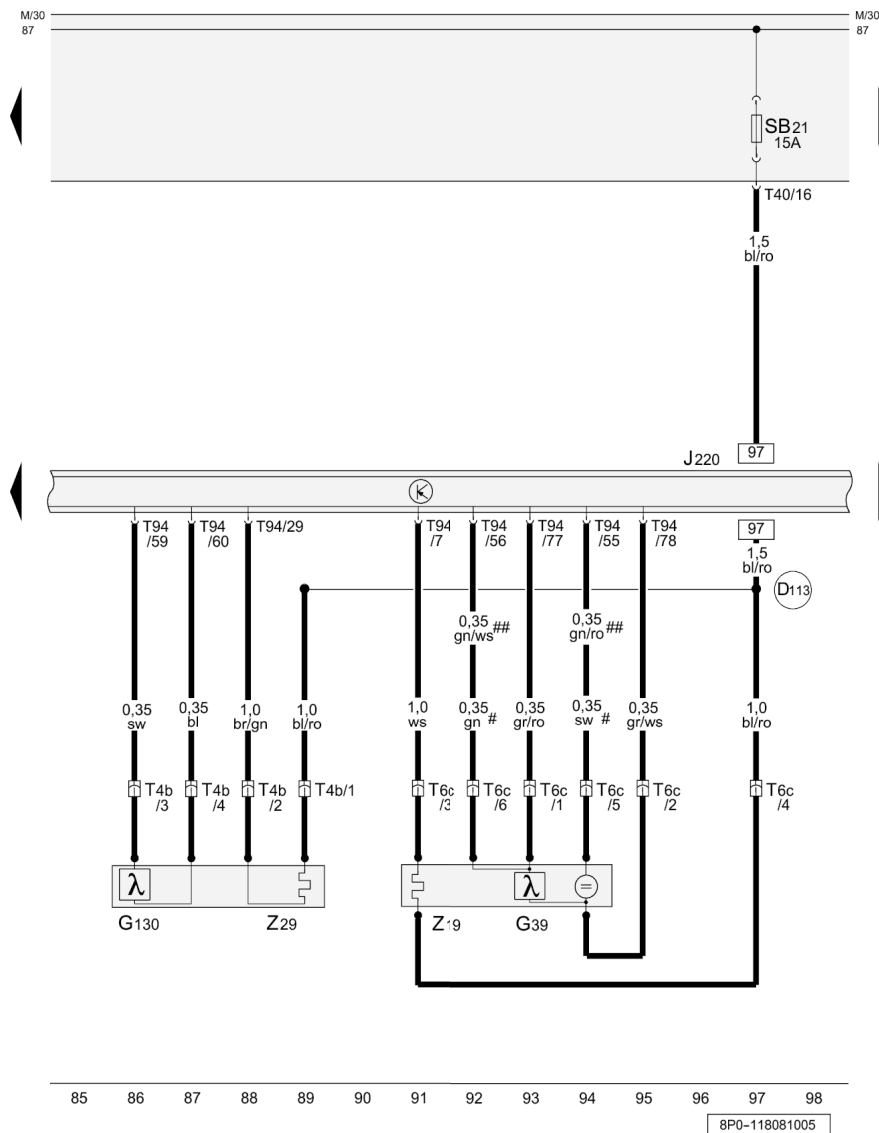
- J220 - Motronic control unit
- N80 - Activated charcoal filter system solenoid valve 1
- N156 - Variable intake manifold change-over valve
- N205 - Inlet camshaft control valve 1
- N276 - Fuel pressure regulating valve
- SB23 - Fuse 23 on fuse holder B
- SB24 - Fuse 24 on fuse holder B
- T4d - 4-pin connector, black, on radiator fan (front end)
- T14 - 14-pin connector, black, near longitudinal member, front left
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T60 - 60-pin connector, black (connector A)
- T94 - 94-pin connector, black (connector B)
- B321 - Positive connection 7 (30a), in main wiring harness
- D112 - Connection 10, in engine compartment wiring harness
- \* - => applicable Current Flow Diagram: radiator fan control

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

# Audi A3

## Current Flow Diagram

# No. 118 / 8



### Lambda probe, lambda probe after catalytic converter

- G39 - Lambda probe
- G130 - Lambda probe after catalytic converter
- J220 - Motronic control unit
- SB21 - Fuse 21 on fuse holder B
- T4b - 4-pin connector, black, on lambda probe after catalytic converter
- T6c - 6-pin connector, black, on lambda probe upstream of catalytic converter
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T94 - 94-pin connector, black (connector B)
- Z19 - Lambda probe heater
- Z29 - Lambda probe 1 heater after catalytic converter
- D113 - Connection 11, in engine compartment wiring harness

- # - No longer fitted, phased-in modification
- ## - phased-in modification

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

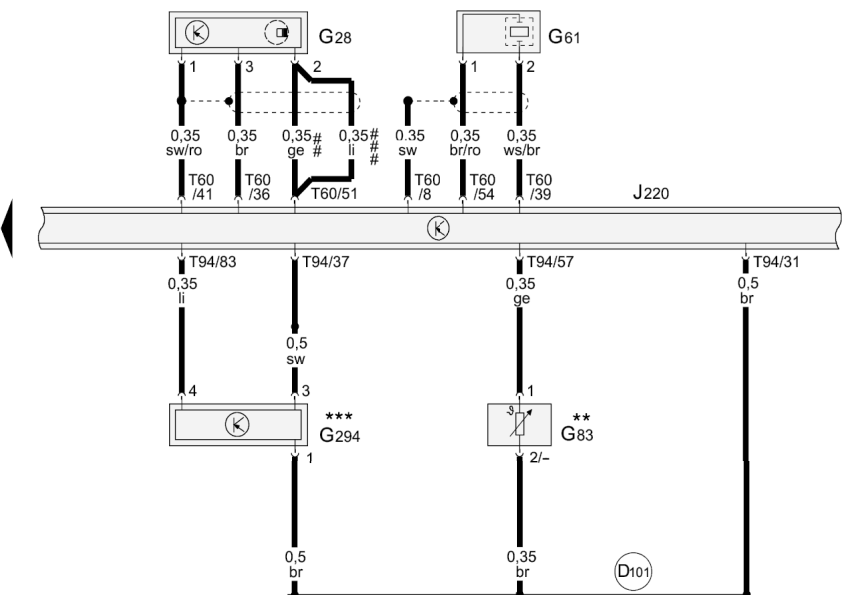
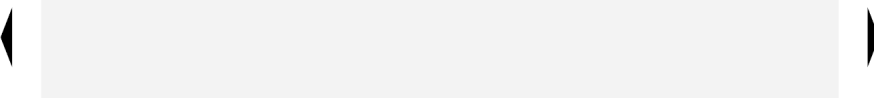
# Audi A3

## Current Flow Diagram

# No. 118 / 9



M/30 87 M/30 87



**Radiator outlet coolant temperature sender, brake servo pressure sensor**

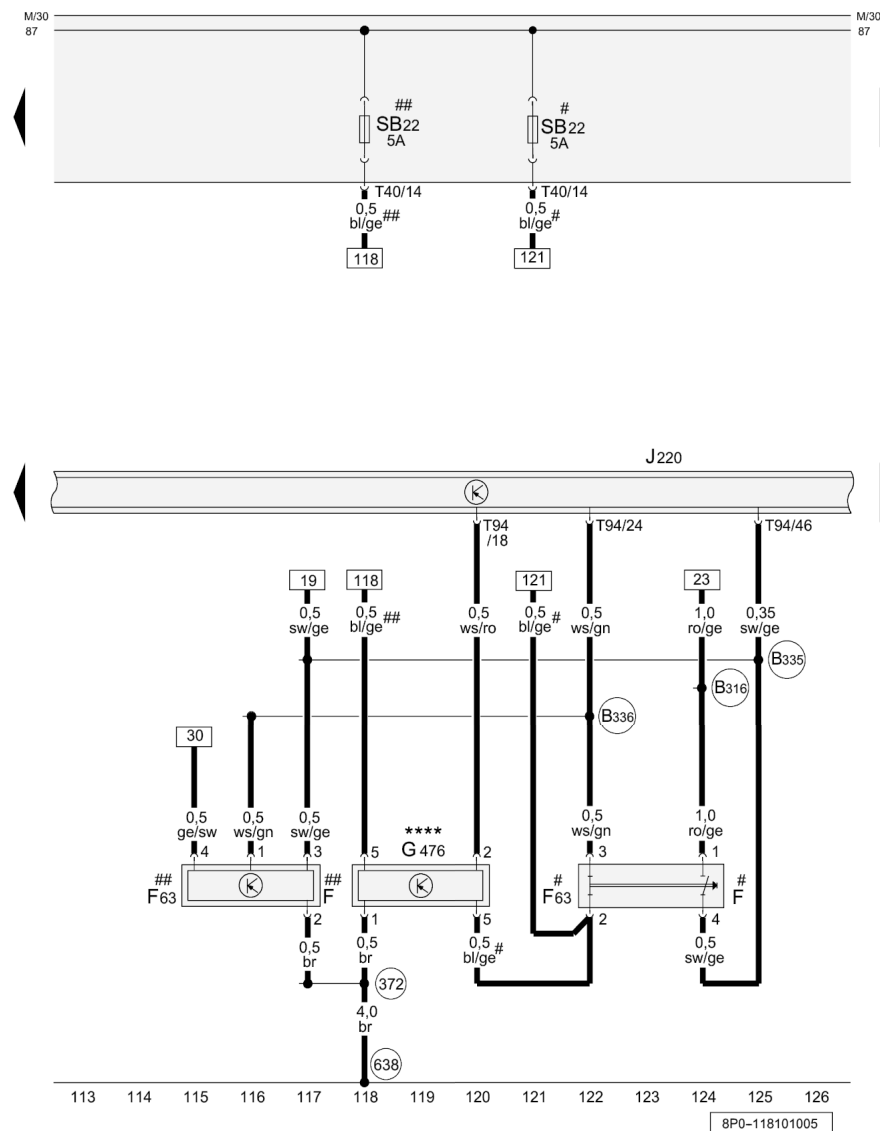
- G28 - Engine speed sender
- G61 - Knock sensor 1
- G83 - Radiator outlet coolant temperature sender
- G294 - Brake servo pressure sensor
- J220 - Motronic control unit
- T60 - 60-pin connector, black (connector A)
- T94 - 94-pin connector, black (connector B)
- D101 - Connection 1, in engine compartment wiring harness
- \*\* - for models with air conditioning system only
- \*\*\* - for models with brake servo pressure sensor only
- ## - for models with manual gearbox only
- ### - for models with automatic gearbox only

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

# Audi A3

## Current Flow Diagram

# No. 118 / 10



### Brake light switch, brake pedal switch, clutch position sender

- F - Brake light switch
- F63 - Brake pedal switch
- G476 - Clutch position sender
- J220 - Motronic control unit
- SB22 - Fuse 22 on fuse holder B
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T94 - 94-pin connector, black (connector B)
- 372 - Earth connection 7, in main wiring harness
- 638 - Earth point, right A-pillar
- B316 - Positive connection 2 (30a), in main wiring harness
- B335 - Connection 1 (54), in main wiring harness
- B336 - Connection 2 (54), in main wiring harness

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

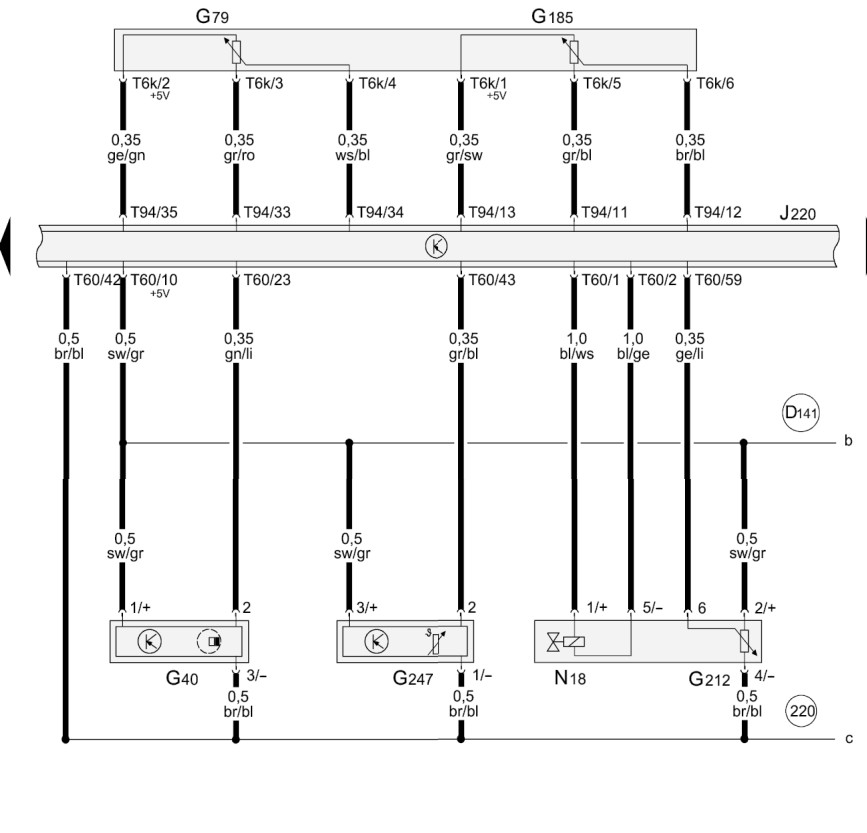
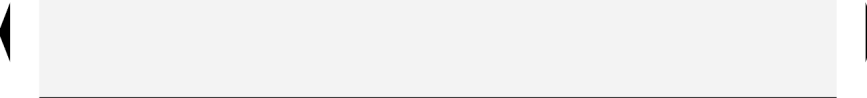
- \*\*\*\* - for models with manual gearbox only
- # - is dropped from November 2005
- ## - applicable from November 2005

# Audi A3

## Current Flow Diagram

# No. 118 / 11

M/30 87



**Hall sender, accelerator position sender, fuel pressure sender**

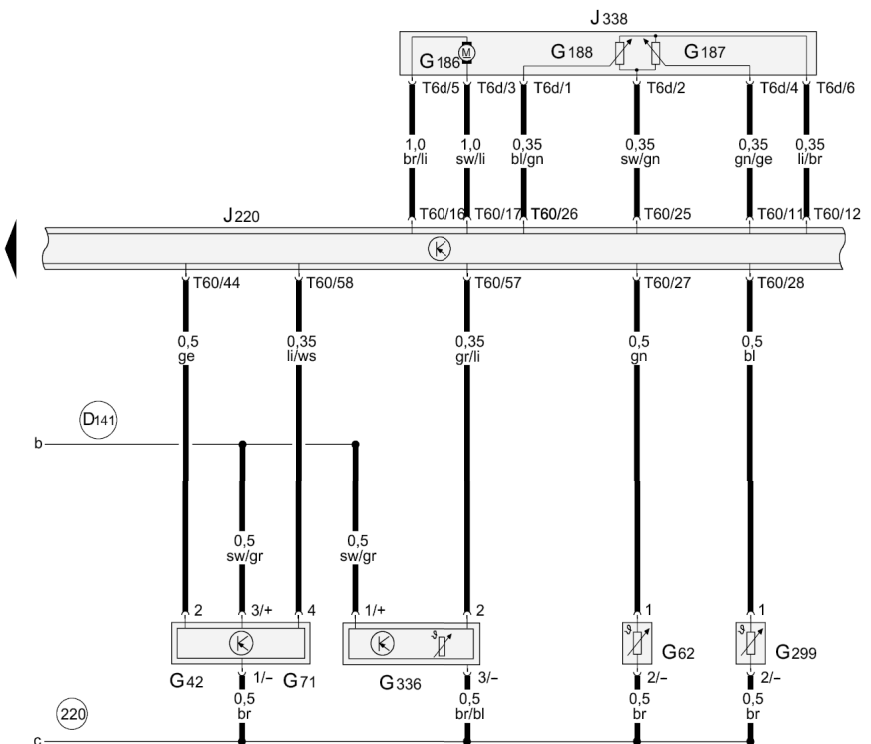
- G40 - Hall sender
- G79 - Accelerator position sender
- G185 - Accelerator position sender 2
- G212 - Exhaust gas recirculation potentiometer
- G247 - Fuel pressure sender
- J220 - Motronic control unit
- N18 - Exhaust gas recirculation valve
- T6k - 6-pin connector, black, near accelerator position sender
- T60 - 60-pin connector, black (connector A)
- T94 - 94-pin connector, black (connector B)
- 220 - Earth connection (sender earth), in engine wiring harness
- D141 - Connection (5V), in engine wiring harness

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

# Audi A3

## Current Flow Diagram

# No. 118 / 12



### Intake air temperature sender, coolant temperature sender, intake manifold pressure sender

- G42 - Intake air temperature sender
- G62 - Coolant temperature sender
- G71 - Intake manifold pressure sender
- G186 - Throttle valve drive (electric power control)
- G187 - Throttle valve drive angle sender 1 for electric throttle
- G188 - Throttle valve drive angle sender 2 for electric throttle
- G299 - Intake air temperature sender 2
- G336 - Intake manifold flap potentiometer
- J220 - Motronic control unit
- J338 - Throttle valve module
- T6d - 6-pin connector, black, near throttle valve module
- T60 - 60-pin connector, black (connector A)
- 220 - Earth connection (sender earth), in engine wiring harness
- D141 - Connection (5V), in engine wiring harness

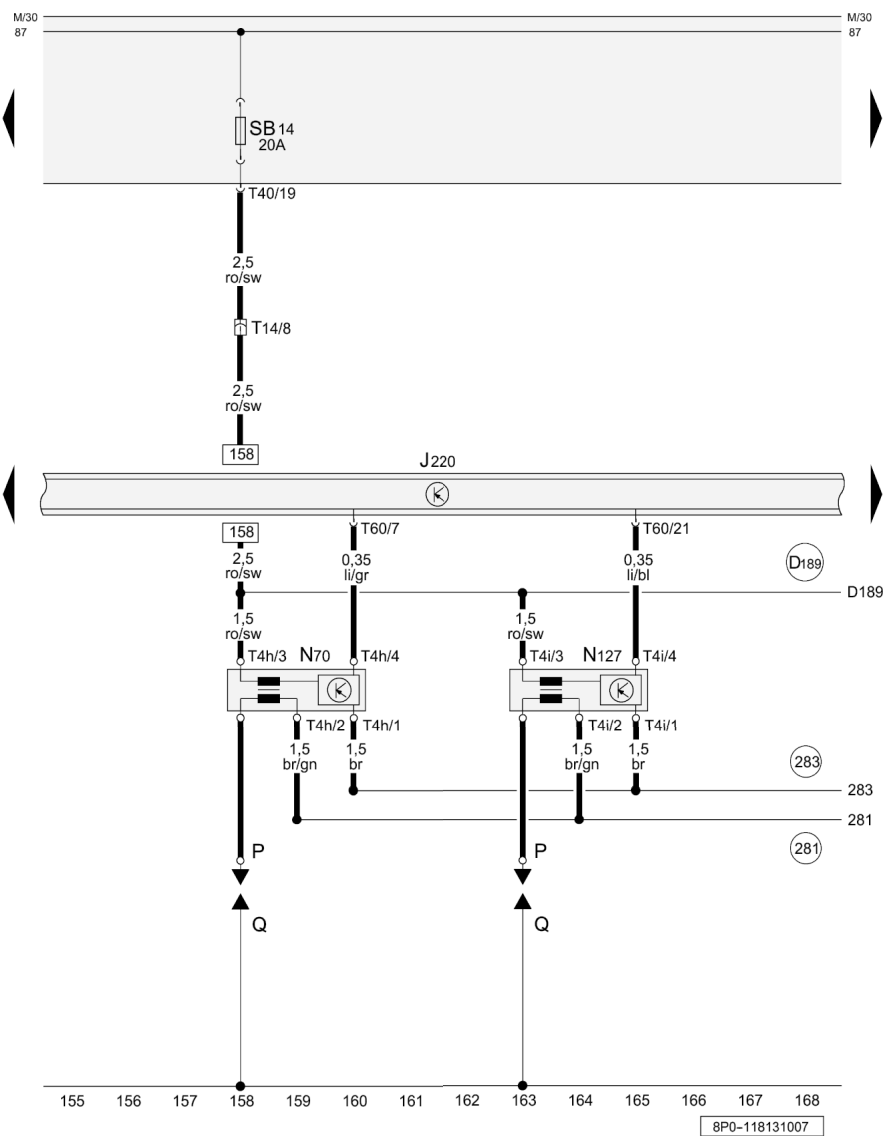
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange
- rs = pink

141 142 143 144 145 146 147 148 149 150 151 152 153 154  
97-85746

# Audi A3

## Current Flow Diagram

# No. 118 / 13



### Ignition coils 1 and 2 with output stage, spark plug connector, spark plugs

- J220 - Motronic control unit
- N70 - Ignition coil 1 with output stage
- N127 - Ignition coil 2 with output stage
- P - Spark plug connector
- Q - Spark plugs
- SB14 - Fuse 14 on fuse holder B
- T4h - 4-pin connector, black, on ignition coil 1 with output stage
- T4i - 4-pin connector, black, on ignition coil 2 with output stage
- T14 - 14-pin connector, black, near longitudinal member, front left
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- T60 - 60-pin connector, black (connector A)
- 281 - Earth connection 1, in engine harness
- 283 - Earth connection 2, in engine harness
- D189 - Connection (87a), in engine wiring harness

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

# Audi A3

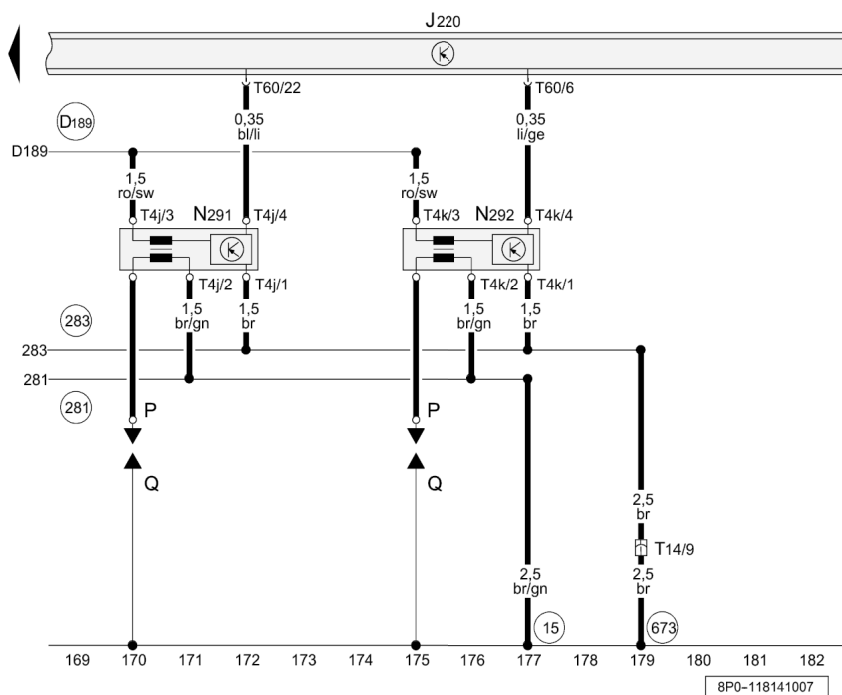
## Current Flow Diagram

# No. 118 / 14



### Ignition coils 3 and 4 with output stage, spark plug connector, spark plugs

- J220 - Motronic control unit
- N291 - Ignition coil 3 with output stage
- N292 - Ignition coil 4 with output stage
- P - Spark plug connector
- Q - Spark plugs
- T4j - 4-pin connector, black, on ignition coil 3 with output stage
- T4k - 4-pin connector, black, on ignition coil 4 with output stage
- T14 - 14-pin connector, black, near longitudinal member, front left
- T60 - 60-pin connector, black (connector A)
- 15 - Earth point, on cylinder head
- 281 - Earth connection 1, in engine harness
- 283 - Earth connection 2, in engine harness
- 673 - Earth point 3, on front of left longitudinal member
- D189 - Connection (87a), in engine wiring harness



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

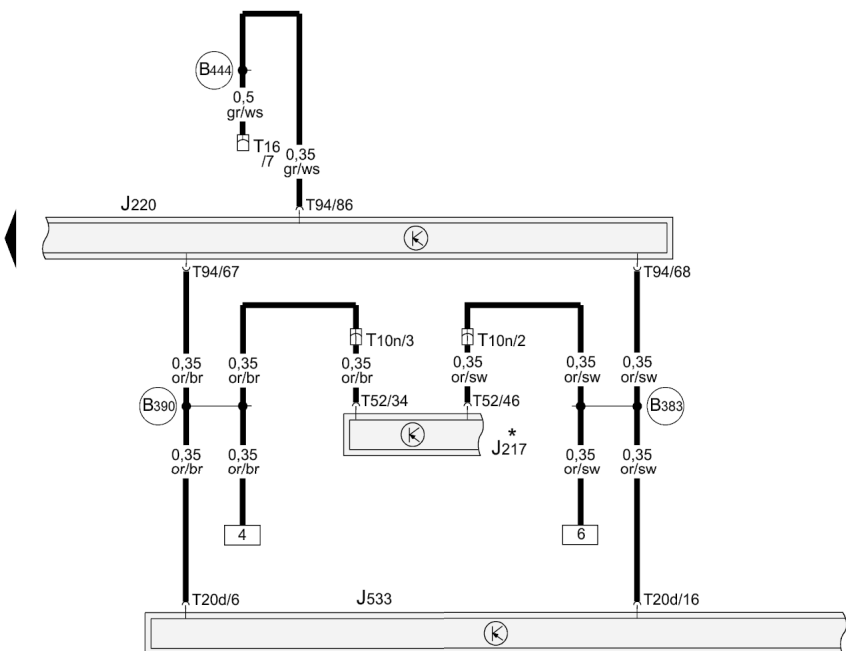
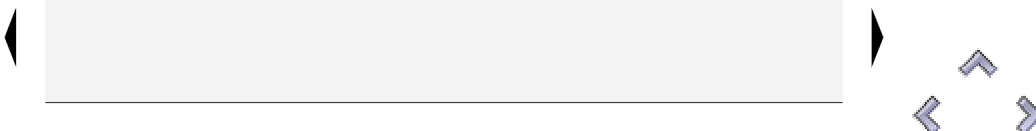
# Audi A3

## Current Flow Diagram

# No. 118 / 15

8P0-118141007

M/30 87 M/30 87



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

### Drive train CAN bus, diagnosis

- J217 - Automatic gearbox control unit
- J220 - Motronic control unit
- J533 - Data bus diagnostic interface
- T10n - 10-pin connector, black, near longitudinal member, front left
- T16 - 16-pin connector, black, dash panel, driver side, bottom left (diagnostic connector)
- T20d - 20-pin connector, yellow (connector A)
- T52 - 52-pin connector, black (connector A)
- T94 - 94-pin connector, black (connector B)
- B383 - Connection 1 (drive train CAN bus, high), in main wiring harness
- B390 - Connection 1 (drive train CAN bus, low), in main wiring harness
- B444 - Connection 1 (diagnosis), in main wiring harness
- \* - for models with automatic gearbox (09G) only

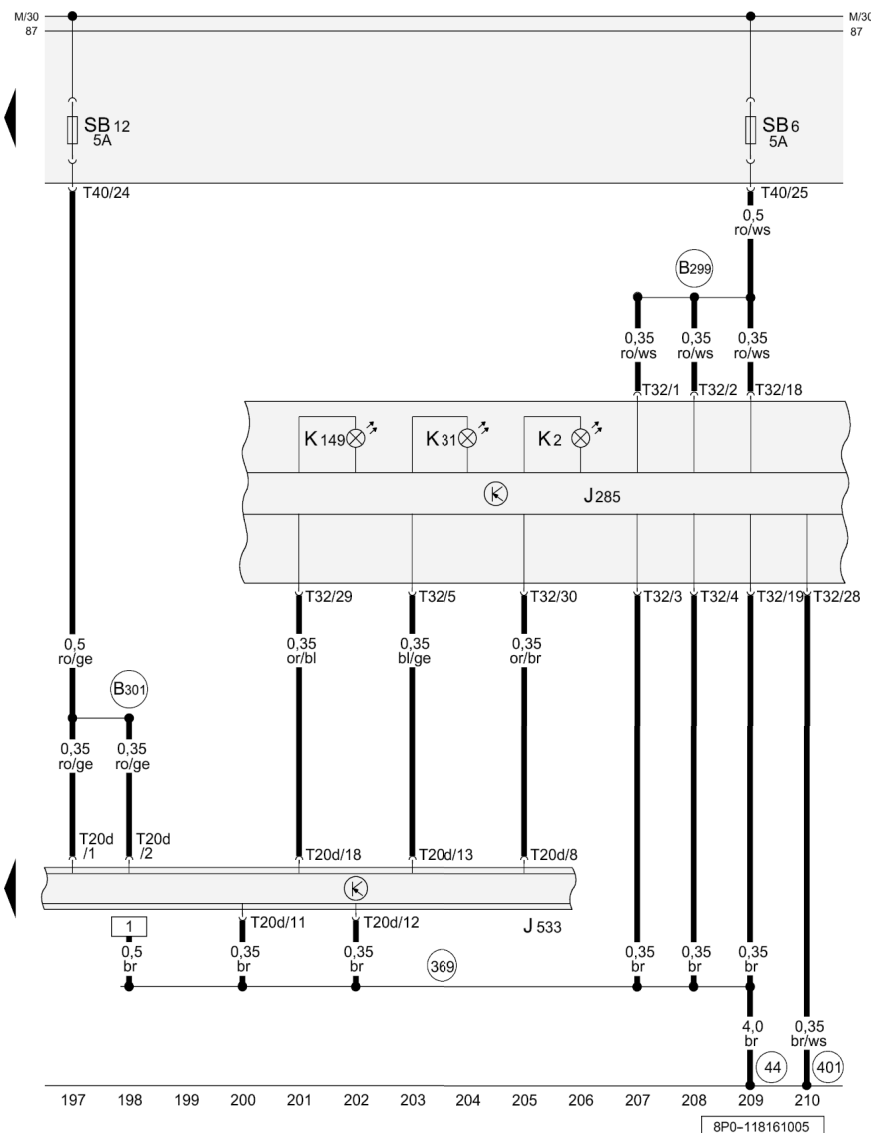
183 184 185 186 187 188 189 190 191 192 193 194 195 196

97-85749

# Audi A3

## Current Flow Diagram

# No. 118 / 16



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

### Data bus diagnostic interface

- J285 - Control unit in dash panel insert
- J533 - Data bus diagnostic interface
- K2 - Alternator warning lamp
- K31 - Cruise control system warning lamp
- K149 - Engine electronics warning lamp
- SB6 - Fuse 6 on fuse holder B
- SB12 - Fuse 12 on fuse holder B
- T20d - 20-pin connector, yellow (connector A)
- T32 - 32-pin connector, blue (connector A)
- T40 - 40-pin connector, black, on electronics box in engine compartment (connector J)
- 44 - Earth point, lower part of left A-pillar
- 369 - Earth connection 4, in main wiring harness
- 401 - Earth connection (sender earth), in interior wiring harness
- B299 - Positive connection 3 (30), in main wiring harness
- B301 - Positive connection 5 (30), in main wiring harness

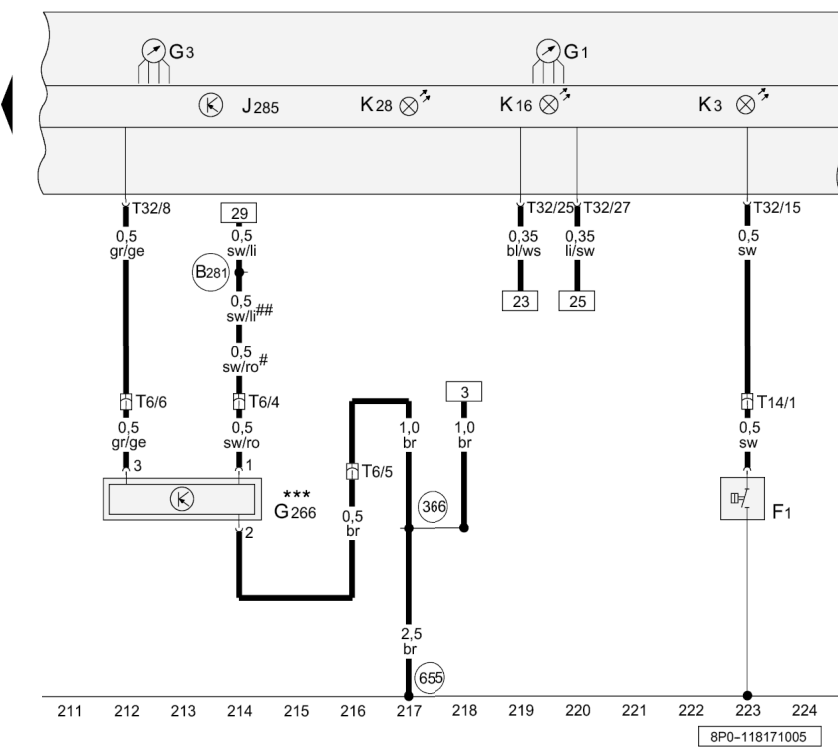
# Audi A3

## Current Flow Diagram

# No. 118 / 17




M/30 87 M/30 87



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

**Oil pressure switch, oil level and oil temperature sender**

- F1 - Oil pressure switch
- G1 - Fuel gauge
- G3 - Coolant temperature gauge
- G266 - Oil level and oil temperature sender
- J285 - Control unit in dash panel insert 
- K3 - Oil pressure warning lamp
- K16 - Reserve fuel warning lamp
- K28 - Coolant temperature and coolant shortage warning lamp
- T6 - 6-pin connector, black, near longitudinal member, front left
- T14 - 14-pin connector, black, near longitudinal member, front left
- T32 - 32-pin connector, blue (connector A)
- 366 - Earth connection 1, in main wiring harness
- 655 - Earth point, on left headlight
- B281 - Positive connection 5 (15a), in main wiring harness
- \*\*\* - for models with extended servicing intervals (ESI) only
- # - No longer fitted, phased-in modification
- ## - phased-in modification