

## Audi A6

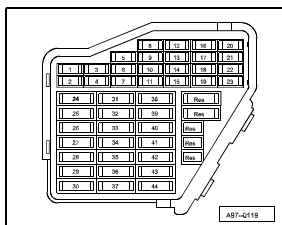
## Current Flow Diagram

No. 10/1

## 4.2 litre fuel injection engine (220 kW, 250 kW-Motronic-8-cylinder), engine codes ASG, ANK

From model year 2002

Fuse box

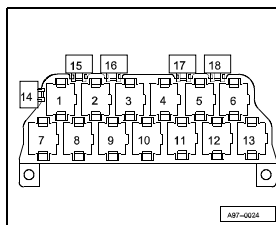


Fuse colours:

- 30 A - green
- 25 A - white
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige

From fuse number 23 upwards the fuses in the fuse box are designated as 223 etc. in the Current Flow Diagram.

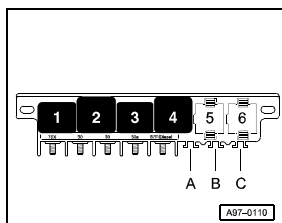
13-point relay carrier



Position of relays:

- 4** - Starter inhibitor relay (J207)

Micro-central electrics



Position of relays:

- 4** - Fuel pump relay (J17)
- 5** - Automatic intermittent wash/wipe relay (J31)
- 6** - Automatic intermittent wash/wipe relay (J31)

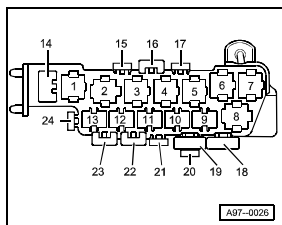
Edition 03.01

## Audi A6

## Current Flow Diagram

No. 10/2

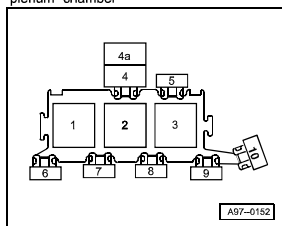
8-point relay carrier



Position of relays:

- 2** - Radiatorfan 2nd speed relay (J101)
- 3** - Radiatorfan relay (J26)
- 20** - Radiatorfan fuse (S42)
- 21** - Radiatorfan control unit fuse (S142)

3-point relay carrier in electronics box, plenum chamber



Position of relays:

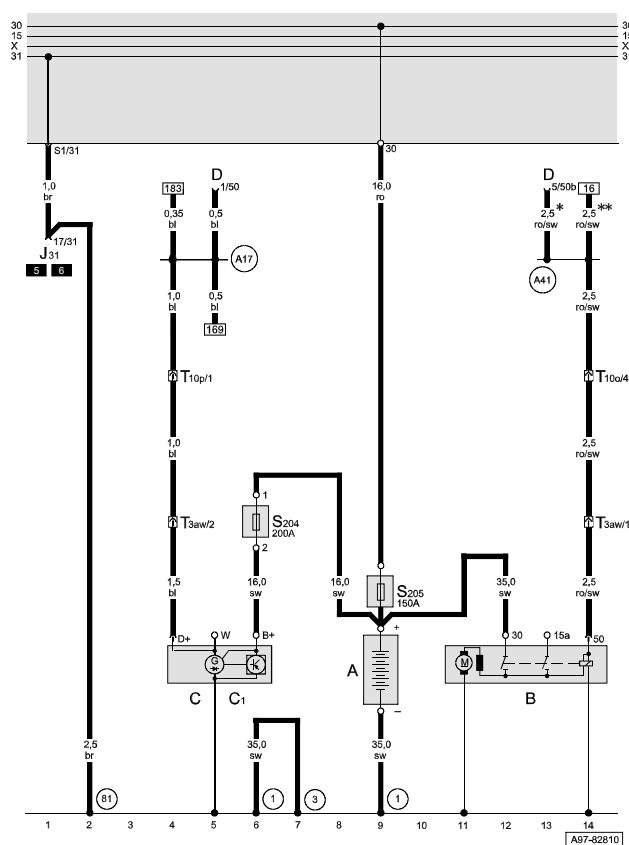
- 2** - Secondary air pump relay (J299)
- 3** - Motronic current supply relay (J271)
- 7** - Secondary air pump fuse (S130)

Edition 03.01

## Audi A6

## Current Flow Diagram

No. 10 / 2



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

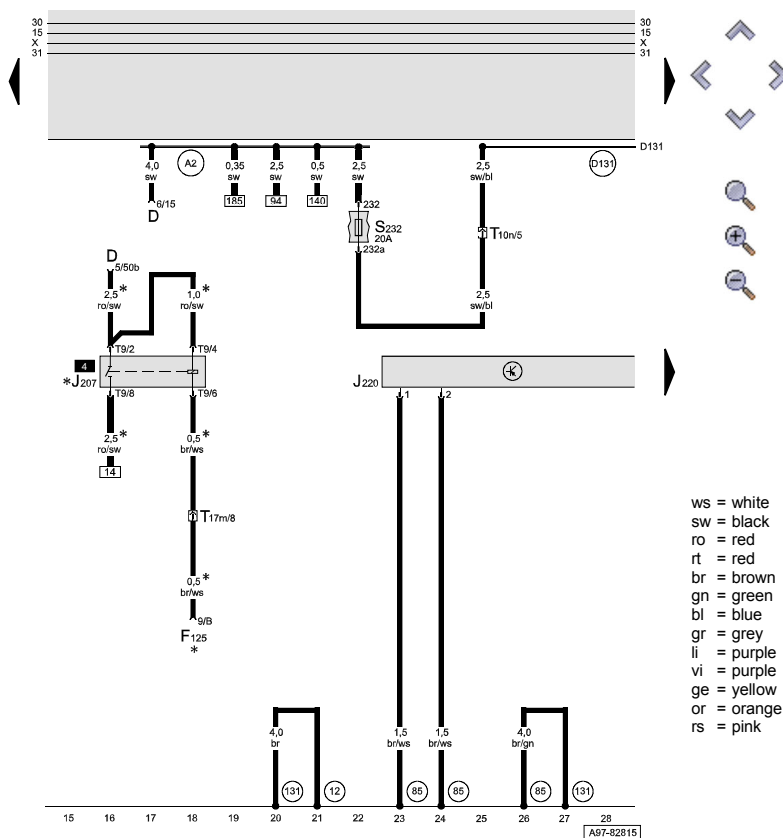
## Battery, starter, alternator

- A - Battery
- B - Starter
- C - Alternator
- C1 - Voltage regulator
- D - Ignition/starter switch
- J31 - Automatic intermittent wash/wipe relay
- S204 - Fuse -1- (30)
- S205 - Fuse -2- (30)
- T3aw - 3-pin connector, black, in engine compartment, right
- T10o - 10-pin connector, brown, connector point, electronics box, plenum chamber
- T10p - 10-pin connector, black, connector point, electronics box, plenum chamber
- 1 - Earth strap, battery - body
- 3 - Earth strap, engine - body
- 81 - Earth connection -1-, in dash panel wiring harness
- A17 - Connection (61), in dash panel wiring harness
- A41 - Positive (+) connection (50), in dash panel wiring harness
- \* - Models with manual gearbox
- \*\* - Models with automatic gearbox

## Audi A6

## Current Flow Diagram

No. 10 / 3

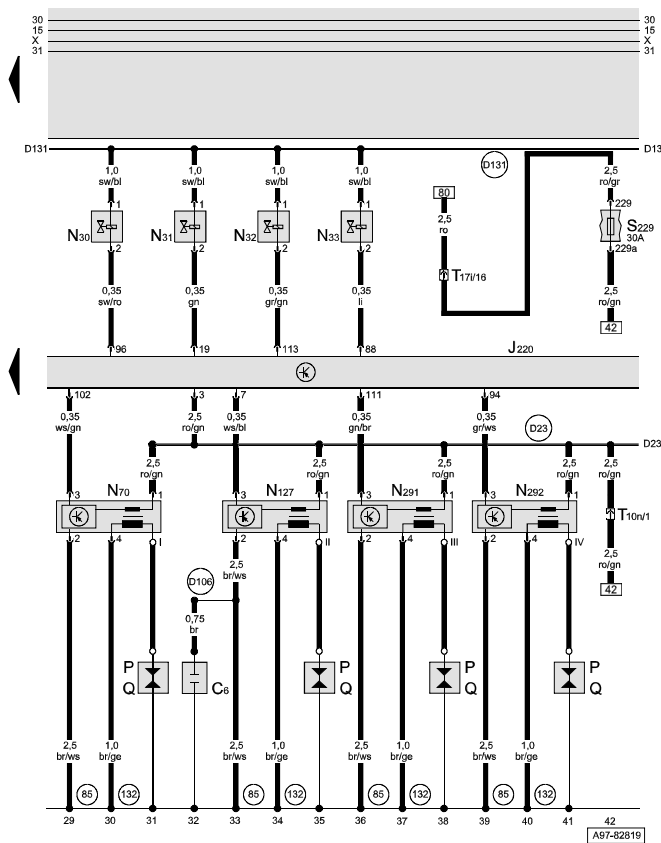
**Motronic control unit, starter inhibitor relay**

- D - Ignition/starter switch
- F125 - Multi-function switch
- J207 - Starter inhibitor relay
- J220 - Motronic control unit
- S232 - Fuse 32 in fuse box
- T9 - 9-pin connector, brown, at starter inhibitor relay
- T10n - 10-pin connector, orange, connector point, electronics box, plenum chamber
- T17m - 17-pin connector, blue, connector point, A pillar, right
- 12 - Earth point, in engine compartment, left
- 85 - Earth connection -1-, in engine compartment wiring harness
- 131 - Earth connection -2-, in engine compartment wiring harness
- A2 - Positive (+) connection (15), in dash panel wiring harness
- D131 - Connection (15) via fuse 232, in engine compartment wiring harness
- \* - Models with automatic gearbox

## Audi A6

## Current Flow Diagram

No. 10 / 4



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

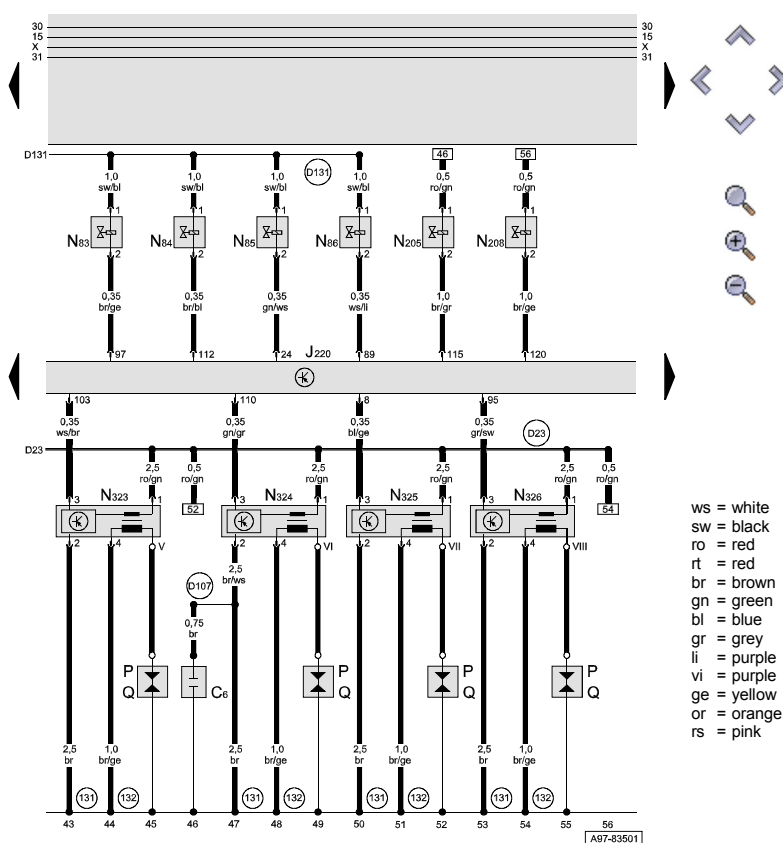
### Motronic control unit, injectors and ignition coils for cylinders 1-4

- C6 - Coil condenser
- J220 - Motronic control unit
- N30 - Injector, cylinder 1
- N31 - Injector, cylinder 2
- N32 - Injector, cylinder 3
- N33 - Injector, cylinder 4
- 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
- S229 - Fuse 29 in fuse box
- T10n - 10-pin connector, orange, connector point, electronics box, plenum chamber
- T17i - 17-pin connector, white, connector point, electronics box, plenum chamber
- 85 - Earth connection -1-, in engine compartment wiring harness
- 132 - Earth connection -3-, in engine compartment wiring harness
- D23 - Connection (via fuse 229), in front right wiring harness
- D106 - Connection -4-, in engine compartment wiring harness
- D131 - Connection (15) via fuse 232, in engine compartment wiring harness

## Audi A6

## Current Flow Diagram

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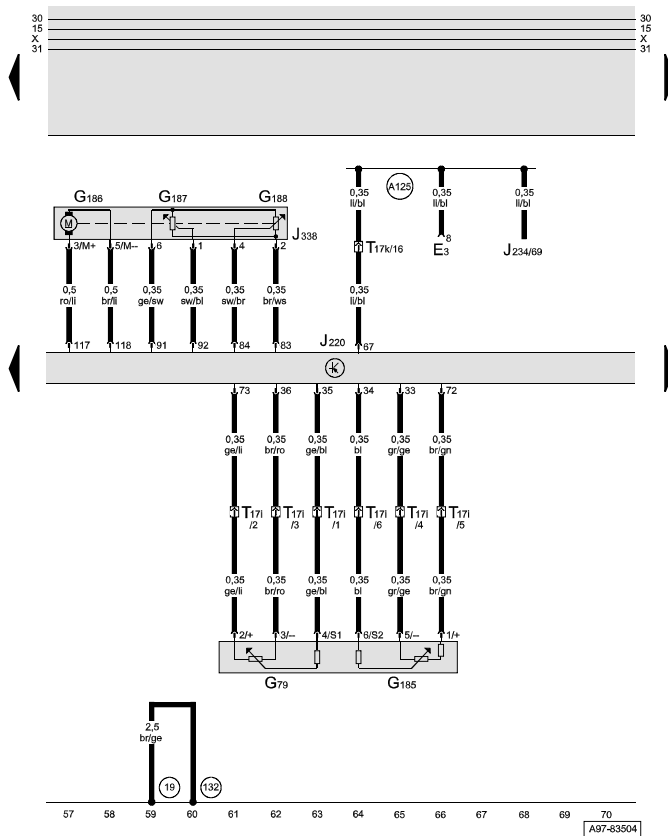
**Motronic control unit, injectors and ignition coils for cylinders 5-8**

- C6 - Coil condenser
- J220 - Motronic control unit
- N83 - Injector, cylinder 5
- N84 - Injector, cylinder 6
- N85 - Injector, cylinder 7
- N86 - Injector, cylinder 8
- N205 - Inlet camshaft timing adjustment valve -1-
- N208 - Inlet camshaft timing adjustment valve -2-
- N323 - Ignition coil 5 with final output stage
- N324 - Ignition coil 6 with final output stage
- N325 - Ignition coil 7 with final output stage
- N326 - Ignition coil 8 with final output stage
- P - Spark plug connector
- Q - Spark plugs
- 131 - Earth connection -2-, in engine compartment wiring harness
- 132 - Earth connection -3-, in engine compartment wiring harness
- D23 - Connection (via fuse 229), in front right wiring harness
- D107 - Connection -5-, in engine compartment wiring harness
- D131 - Connection (15) via fuse 232, in engine compartment wiring harness

## Audi A6

## Current Flow Diagram

No. 10 / 6

**Motronic control unit, throttle valve control unit, accelerator pedal position senders**

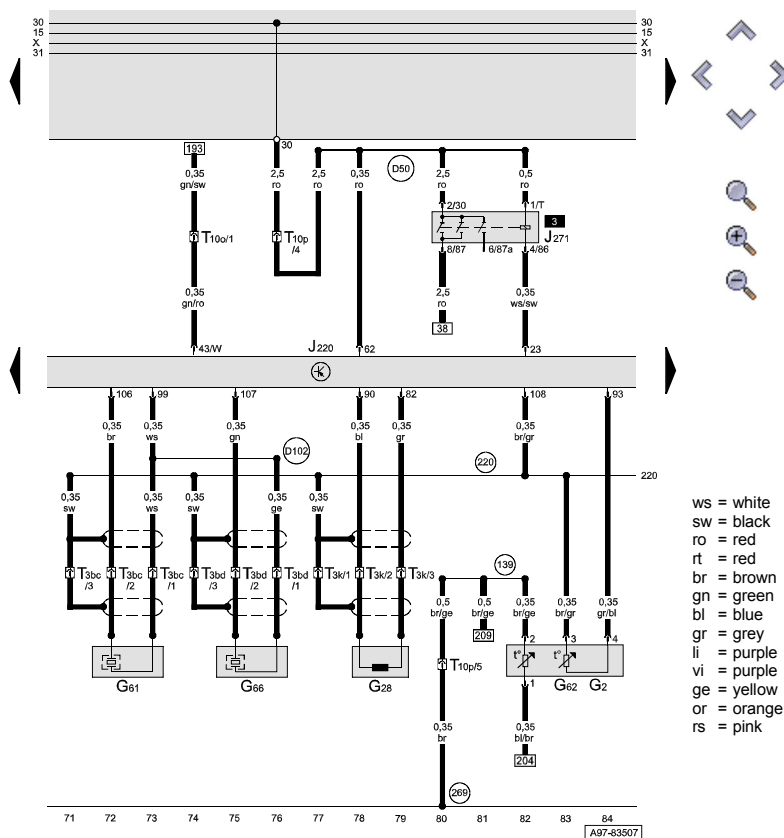
- E3 - Hazard warning light switch
- G79 - Accelerator pedal position sender
- G185 - Accelerator pedal position sender -2-
- G186 - Throttle valve drive (electric throttle operation)
- G187 - Throttle valve drive angle sender -1- (electric throttle operation)
- G188 - Throttle valve drive angle sender -2- (electric throttle operation)
- J220 - Motronic control unit
- J234 - Airbag control unit
- J338 - Throttle valve control unit
- T171 - 17-pin connector, white, connector point, electronics box, plenum chamber
- T17k - 17-pin connector, red, connector point, electronics box, plenum chamber
- 19 - Earth point, near ignition coil
- 132 - Earth connection -3-, in engine compartment wiring harness
- A125 - Connection (crash signal), in dash panel wiring harness

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. 10 / 7



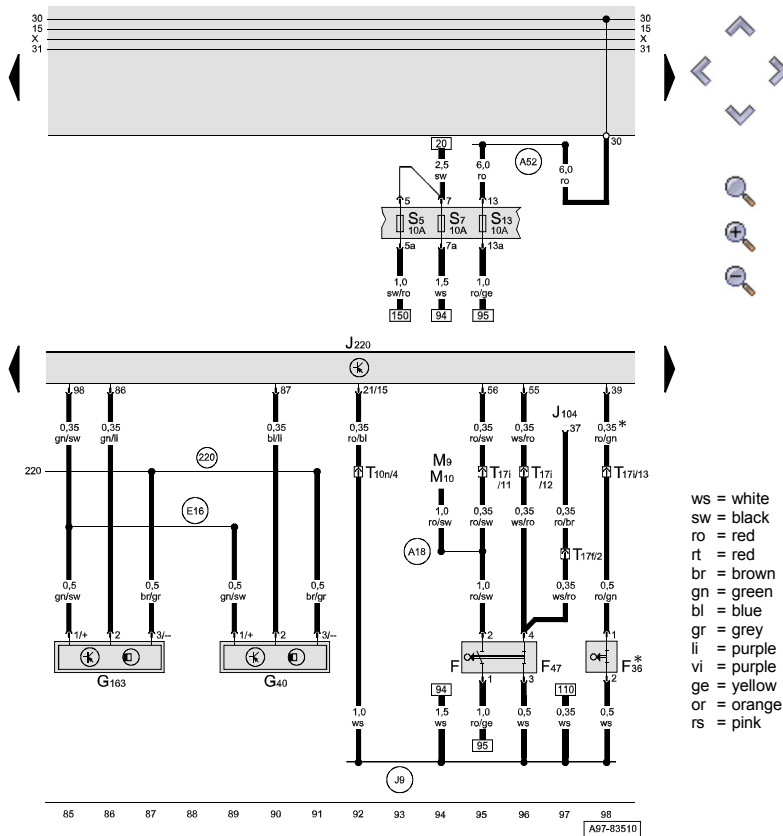
**Motronic control unit, knock sensor 1, engine speed sender, coolant temperature senders, Motronic current supply relay**

- G2 - Coolant temperature sender
- G28 - Engine speed sender
- G61 - Knock sensor 1
- G62 - Coolant temperature sender
- G66 - Knock sensor 2
- J220 - Motronic control unit
- J271 - Motronic current supply relay
- T3k - 3-pin connector, grey, on engine speed sender
- T3bc - 3-pin connector, green, at knock sensor 1
- T3bd - 3-pin connector, green, at knock sensor 2
- T10o - 10-pin connector, brown, connector point, electronics box, plenum chamber
- T10p - 10-pin connector, black, connector point, electronics box, plenum chamber
- 139 - Earth connection (sender earth), in Motronic wiring harness
- 220 - Earth connection (sender earth), in engine wiring harness
- 269 - Earth connection (sender earth) -1-, in dash panel wiring harness
- D50 - Positive (+) connection (30), in engine compartment wiring harness
- D102 - Connection -2-, in engine compartment wiring harness

## Audi A6

## Current Flow Diagram

No. 10 / 8

**Motronic control unit, Hall senders, brake light switch**

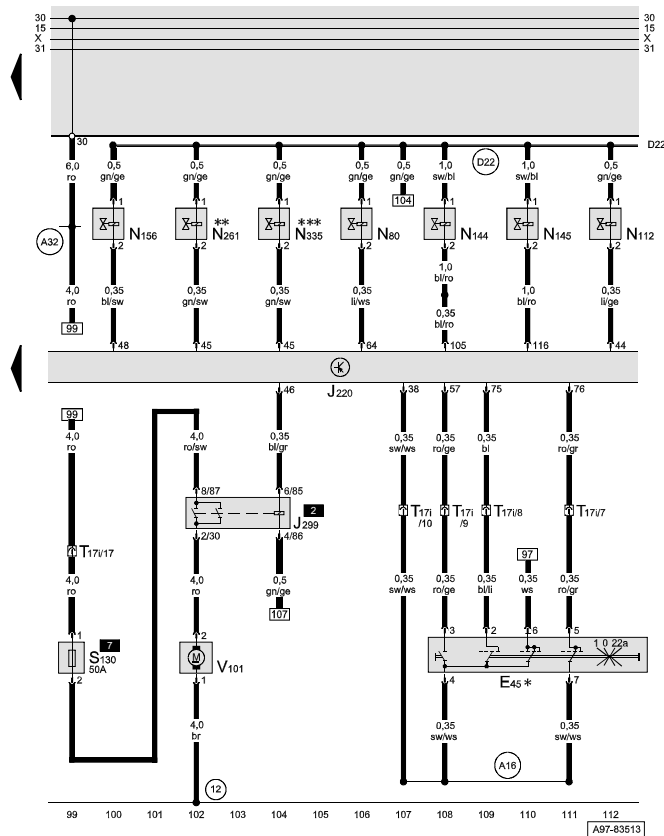
- F - Brake light switch
- F36 - Clutch pedal switch
- F47 - Cruise control system brake pedal switch
- G40 - Hall sender
- G163 - Hall sender 2
- J104 - ABS with EDL control unit
- J220 - Motronic control unit
- M9 - Brake light bulb, left
- M10 - Brake light bulb, right
- S5 - Fuse in fuse box
- S7 - Fuse in fuse box
- S13 - Fuse in fuse box
- T10n - 10-pin connector, orange, connector point, electronics box, plenum chamber
- T17f - 17-pin connector, black, in 8-point relay carrier, behind driver's storage compartment
- T17i - 17-pin connector, white, connector point, electronics box, plenum chamber
- 220 - Earth connection (sender earth), in engine wiring harness
- A18 - Connection (54), in dash panel wiring harness
- A52 - Positive (+) connection 2 (30), in dash panel wiring harness
- E16 - Positive (+) connection (5 volts), in Motronic wiring harness
- J9 - Connection -1- (15a), in ABS wiring harness
- \* - Models with manual gearbox

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. 10 / 9



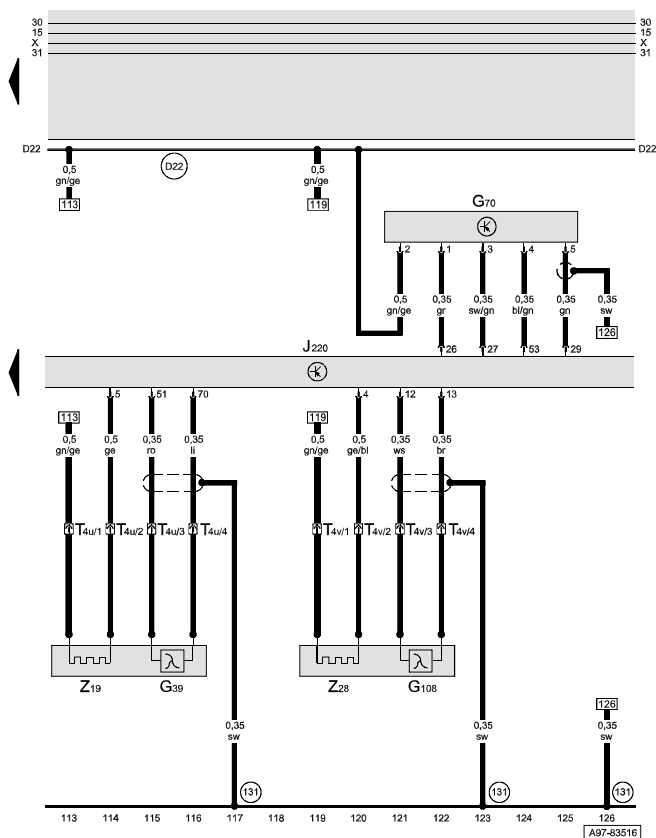
### Motronic control unit, secondary air pump relay, activated charcoal filter system solenoid valve 1 (pulsed), cruise control system switch

- E45 - Cruise control system switch
- J220 - Motronic control unit
- J299 - Secondary air pump relay
- N80 - Activated charcoal filter system solenoid valve 1 (pulsed)
- N112 - Secondary air inlet valve
- N144 - Electro/hydraulic engine mounting solenoid valve, left
- N145 - Electro/hydraulic engine mounting solenoid valve, right
- N156 - Intake manifold change-over valve
- N261 - Intake manifold change-over valve 2
- N335 - Variable intake manifold change-over valve
- S130 - Secondary air pump fuse
- T17i - 17-pin connector, white, connector point, electronics box, plenum chamber
- V101 - Secondary air pump motor
- 12 - Earth point, in engine compartment, left
- A16 - Connection (cruise control system), in dash panel wiring harness
- A32 - Positive (+) connection (30), in dash panel wiring harness
- D22 - Connection (via fuse 234), in front right wiring harness
- \* - Models with cruise control system
- \*\* - Engine code ASG
- \*\*\* - Engine code ANK (S6 models)

## Audi A6

## Current Flow Diagram

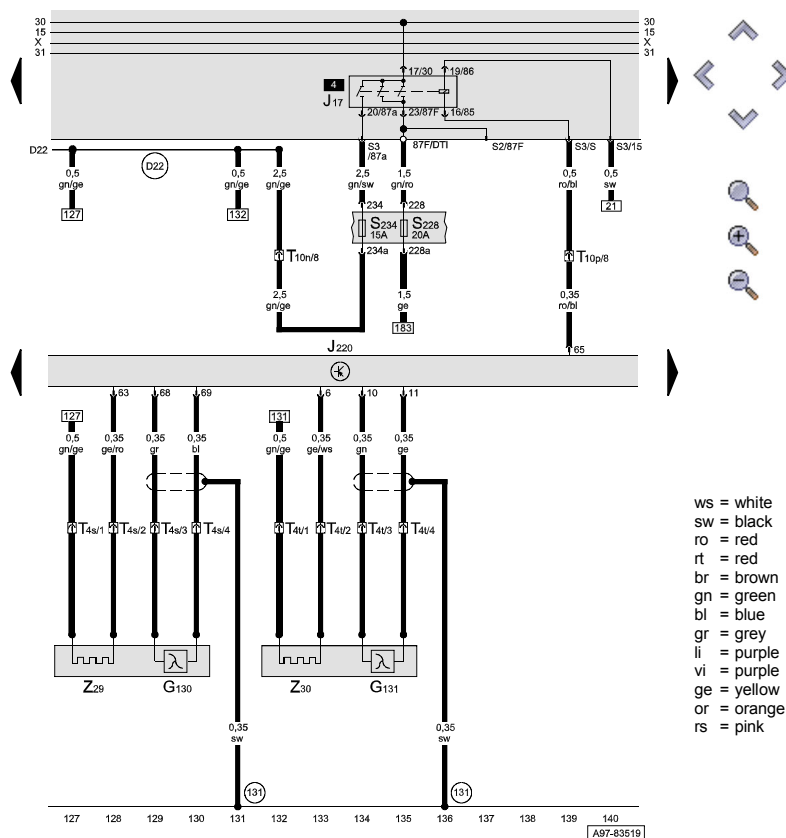
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## Audi A6

## Current Flow Diagram

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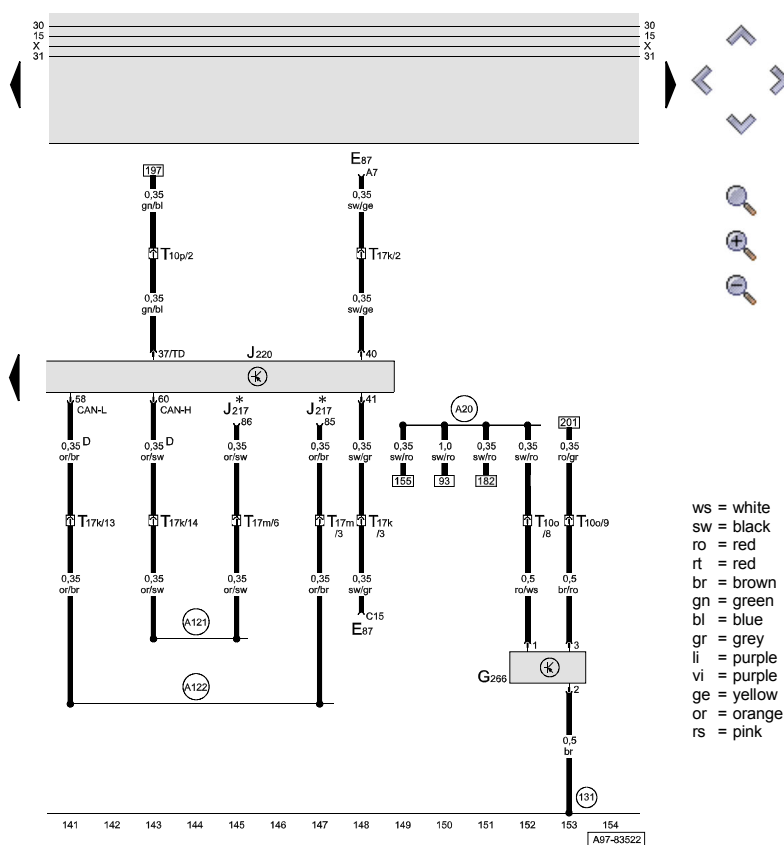
**Motronic control unit, fuel pump relay, lambda probes downstream of catalytic converter**

- G130 - Lambda probe downstream of catalytic converter
- G131 - Lambda probe 2 downstream of catalytic converter
- J17 - Fuel pump relay
- J220 - Motronic control unit
- S228 - Fuse 28 in fuse box
- S234 - Fuse 34 in fuse box
- T4s - 4-pin connector, green, for lambda probe 1 downstream of catalytic converter
- T4t - 4-pin connector, brown, for lambda probe 2 downstream of catalytic converter
- T10n - 10-pin connector, orange, connector point, electronics box, plenum chamber
- T10p - 10-pin connector, black, connector point, electronics box, plenum chamber
- Z29 - Lambda probe 1 heater, downstream of catalytic converter
- Z30 - Lambda probe 2 heater, downstream of catalytic converter
- 131 - Earth connection -2-, in engine compartment wiring harness
- D22 - Connection (via fuse 234), in front right wiring harness

## Audi A6

## Current Flow Diagram

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**Motronic control unit, CAN bus, oil level thermo sender (service interval)**

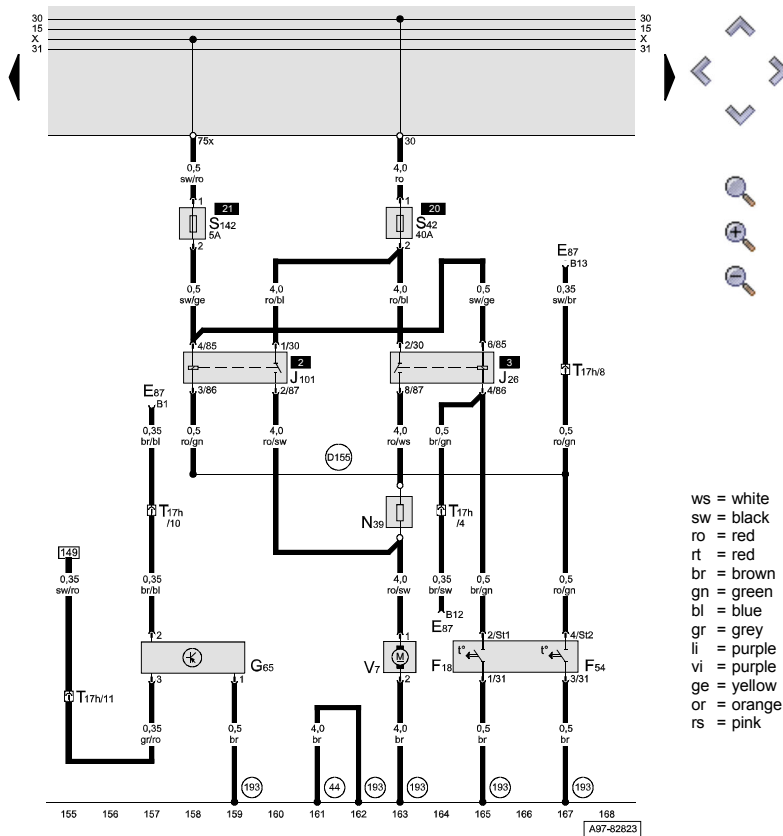
- E87 - Control and display unit for air conditioner
- G266 - Oil level thermo sender, service interval
- J217 - Automatic gearbox control unit
- J220 - Motronic control unit
- T10o - 10-pin connector, brown, connector point, electronics box, plenum chamber
- T10p - 10-pin connector, black, connector point, electronics box, plenum chamber
- T17k - 17-pin connector, red, connector point, electronics box, plenum chamber
- T17m - 17-pin connector, blue, connector point, A pillar, right
- 131 - Earth connection -2-, in engine compartment wiring harness
- A20 - Connection (15a), in dash panel wiring harness
- A121 - Connection (high bus), in dash panel wiring harness
- A122 - Connection (low bus), in dash panel wiring harness
- \* - CAN bus (data wire)
- \* - Models with automatic gearbox

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

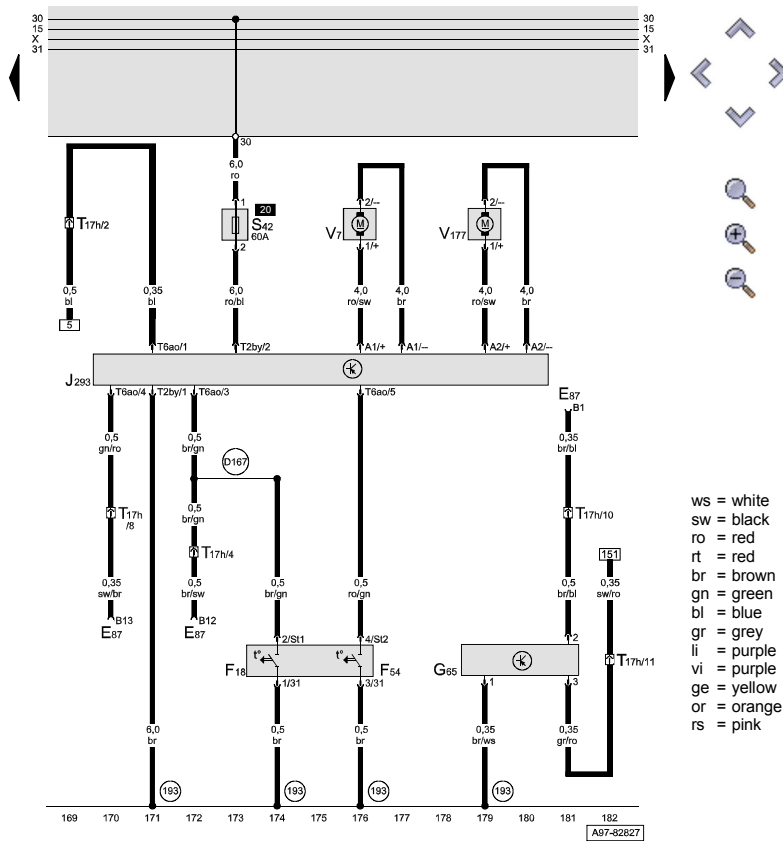
No. 10 / 13



## Audi A6

## Current Flow Diagram

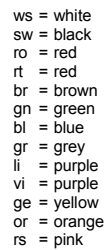
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## Engine cooling with radiator fan control unit

- E87 - Control and display unit for air conditioner
- F18 - Radiator fan thermo-switch
- F54 - Radiator fan thermo-switch
- G65 - High pressure sender
- J293 - Radiator fan control unit, in engine compartment, front left
- S42 - Radiator fan single fuse
- T2by - 2-pin connector, on radiator fan control unit
- T6ao - 6-pin connector, on radiator fan control unit
- T17h - 17-pin connector, brown, connector point, A pillar, left
- V7 - Radiator fan
- V177 - Radiator fan -2-
- 193 - Earth connection -1-, in radiator fan wiring harness
- D167 - Connection (radiator fan stage I), in engine compartment wiring harness

## No. 10 / 15



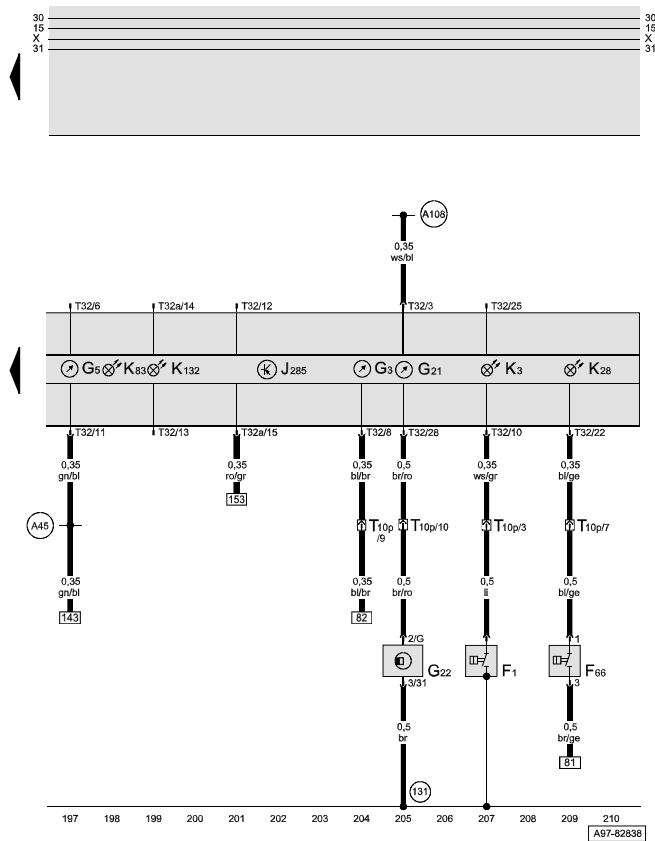
- G - Fuel gauge sender
- G1 - Fuel gauge
- G6 - Fuel pump (pre-supply pump)
- G169 - Fuel gauge sender 2
- G237 - Fuel gauge sender 3
- J285 - Control unit with display in dash panel insert

- G - Fuel gauge sender
- G1 - Fuel gauge
- G6 - Fuel pump (pre-supply pump)
- G169 - Fuel gauge sender 2
- G237 - Fuel gauge sender 3
- J285 - Control unit with display in dash panel insert
- K2 - Alternator warning lamp
- T10f - 10-pin connector, brown, connector point, A pillar, left
- T10ba - 10-pin connector, blue, connector point, A pillar, left
- T16a - 16-pin connector, diagnosis connection
- T32 - 32-pin connector, blue, on dash panel insert
- T32a - 32-pin connector, green, on dash panel insert
- 86 - Earth connection -1-, in rear wiring harness
- 269 - Earth connection (sender earth) -1-, in dash panel wiring harness
- A76 - Connection (diagnosis wire K), in dash panel wiring harness
- \* - Models with front-wheel drive
- \*\* - Models with four-wheel drive
- \*\*\* - Wiring in fuel tank
- # - Sender earth output

## Audi A6

## Current Flow Diagram

No. 10 / 16



## Dash panel insert

- F1 - Oil pressure switch
- F66 - Coolant shortage indicator switch
- G3 - Coolant temperature gauge
- G5 - Rev. counter
- G21 - Speedometer
- G22 - Speedometer sender (Hall sender, on gearbox)
- J285 - Control unit with display in dash panel insert
- K3 - Oil pressure warning lamp
- K28 - Coolant temperature/coolant shortage warning lamp
- K83 - Fault warning lamp for self-diagnosis/exhaust emissions
- K132 - Electronic power control fault lamp
- T10p - 10-pin connector, black, connector point, electronics box, plenum chamber
- T32 - 32-pin connector, blue, on dash panel insert
- T32a - 32-pin connector, green, on dash panel insert
- 131 - Earth connection -2-, in engine compartment wiring harness
- A45 - Connection (engine speed signal), in dash panel wiring harness
- A108 - Connection (speed signal), in dash panel wiring harness

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