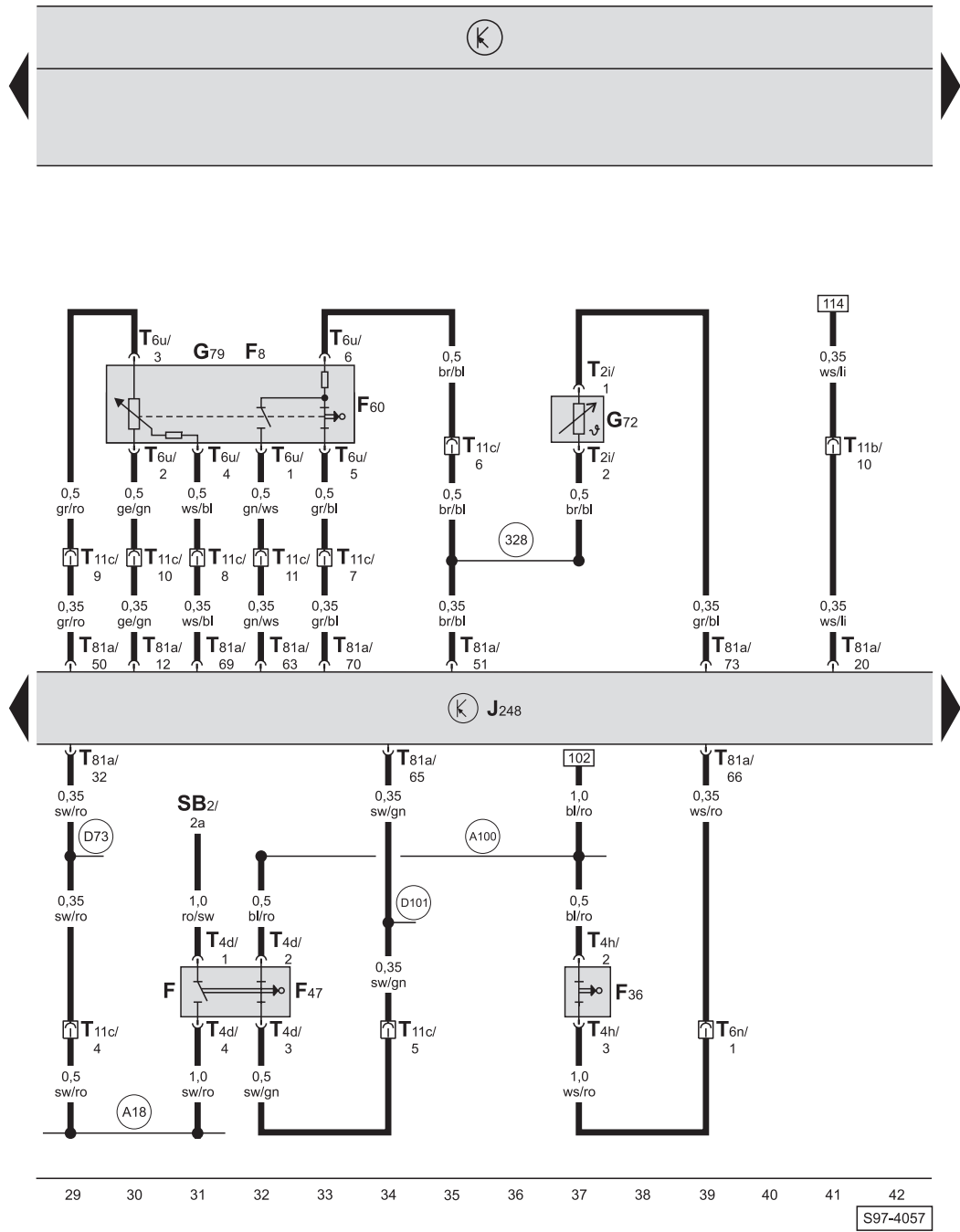


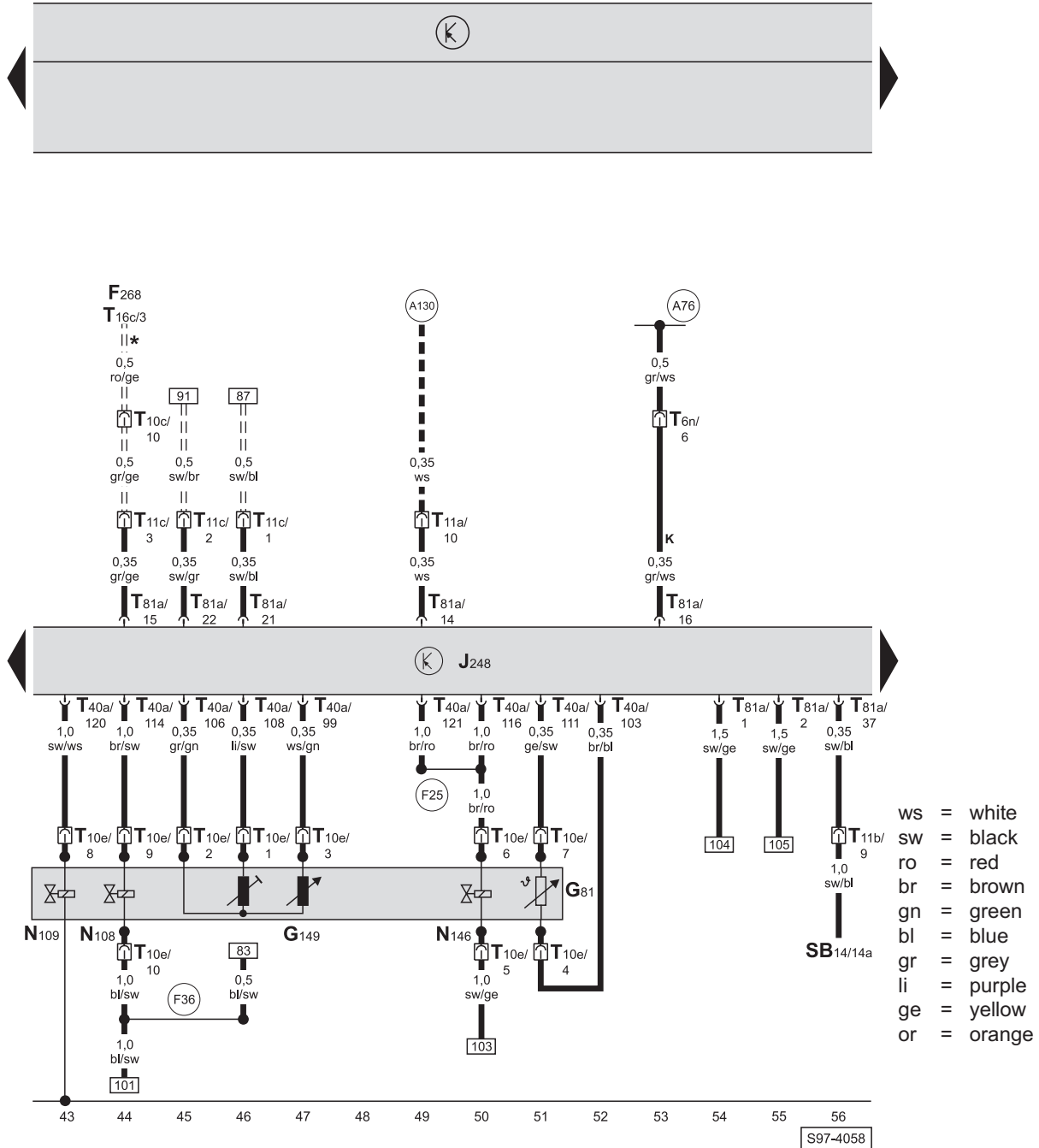
Diesel direct injection system control unit, accelerator pedal position sender, intake manifold temperature sender, brake pedal switch, clutch pedal switch



- F - Brake light switch
- F8 - Kickdown switch
- F36 - Clutch pedal switch
- F47 - Brake pedal switch
- F60 - Idling speed switch
- G72 - Intake manifold temperature sender
- G79 - Accelerator position sender
- J248 - Diesel direct injection system control unit
- SB2 - Fuse, in fuse holder
- T2i - 2-pin connector, at fuel gauge sender
- T4d - 4-pin connector, at brake pedal switch
- T4h - 4-pin connector, at clutch pedal switch
- T6n - 6-pin connector, at left of bulkhead (blue)
- T6u - 6-pin connector, at accelerator pedal position sender
- T11b - 11-pin connector, at left of bulkhead (red)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T81a - 81-pin connector, at engine control unit

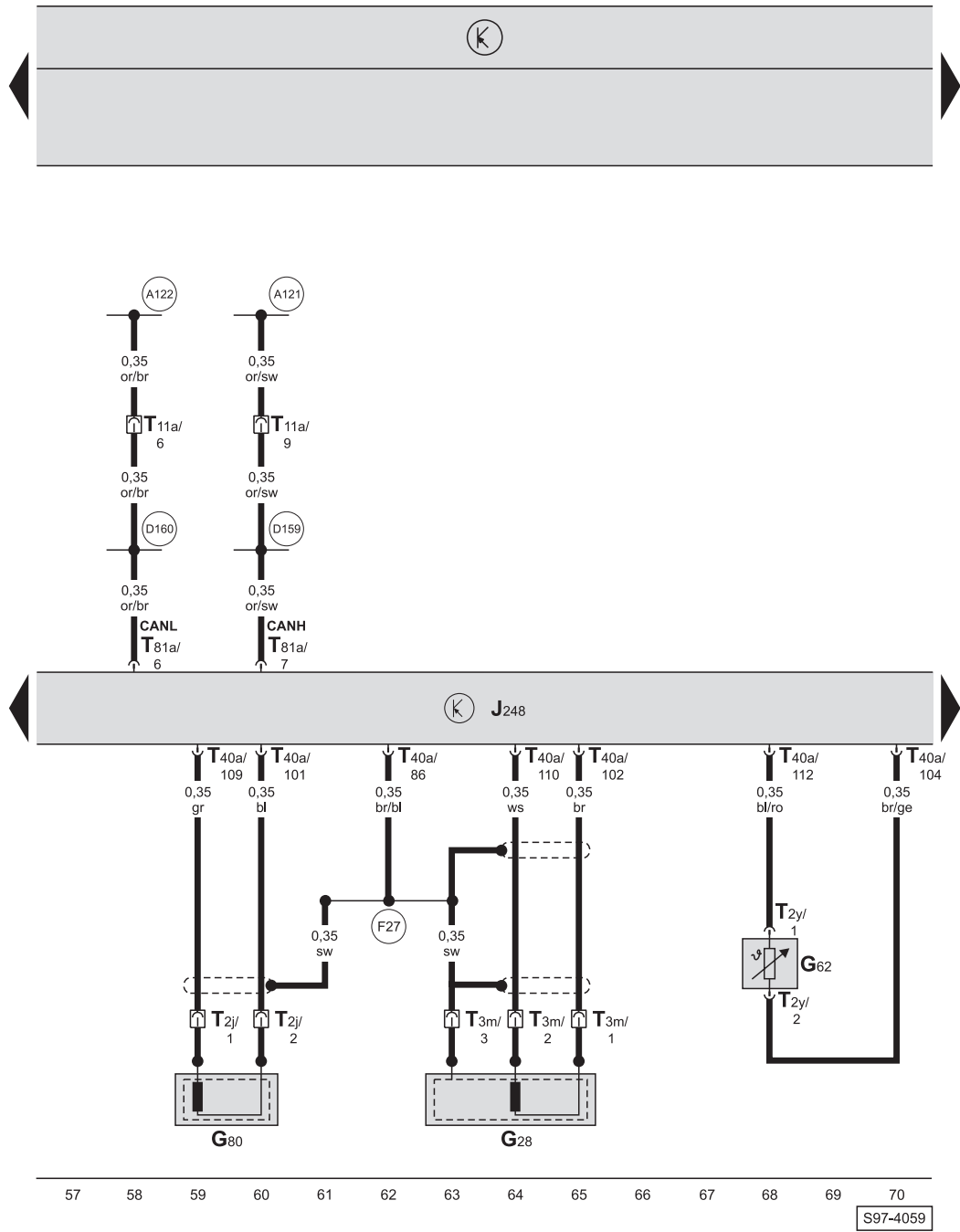
- (328) - Earth connection -2- (sender earth), in engine compartment wiring harness
- (A18) - Connection (54), in wiring loom behind dash panel
- (A100) - Connection (87a), in wiring loom behind dash panel
- (D73) - Connection (54), in left of engine compartment wiring loom
- (D101) - Connection (brake pedal switch), in engine compartment wiring loom

Diesel direct injection system control unit, fuel temperature sender, modulating piston movement sender, quantity adjuster



- F268 - Heater element contact switch (PTC)
- G81 - Fuel temperature sender
- G149 - Modulating piston movement sender
- J248 - Diesel direct injection system control unit
- N108 - Commencement of injection valve
- N109 - Fuel cut off valve
- N146 - Quantity (metering) adjuster
- SB14 - Fuse, in fuse holder
- T6n - 6-pin connector, at left of bulkhead (blue)
- T10c - 10-pin connector, behind dash panel on right
- T10e - 10-pin connector, at injection pump
- T11a - 11-pin connector, at left of bulkhead (white)
- T11b - 11-pin connector, at left of bulkhead (red)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T16c - 16-pin connector, at fresh air controls
- T40a - 40-pin connector, at engine control unit
- T81a - 81-pin connector, at engine control unit
- A76 - Connection (K diagnosis wire), in wiring loom behind dash panel on left
- A130 - Connection (CCS), in wiring loom behind dash panel on left
- F25 - Connection -1-, in engine preassembly wiring loom
- F36 - Connection (87a), in engine preassembly wiring loom
- * - does not apply to models with air conditioning
- - Applies only to models with CCS
- === - Applies only to models with heating element (PTC)

Diesel direct injection system control unit, engine speed sender, coolant temperature sender, needle motion sender

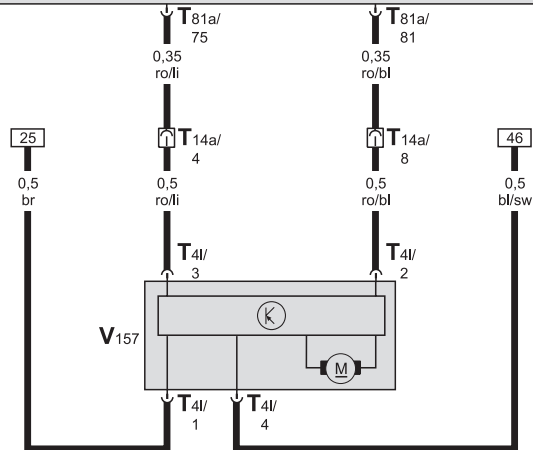
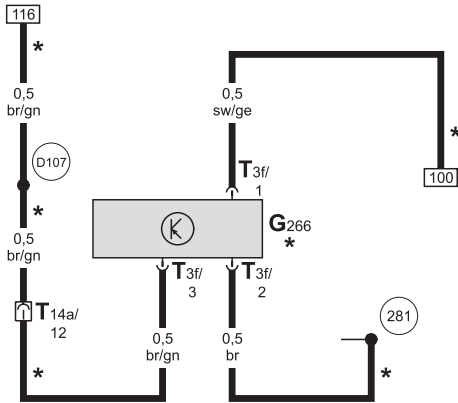
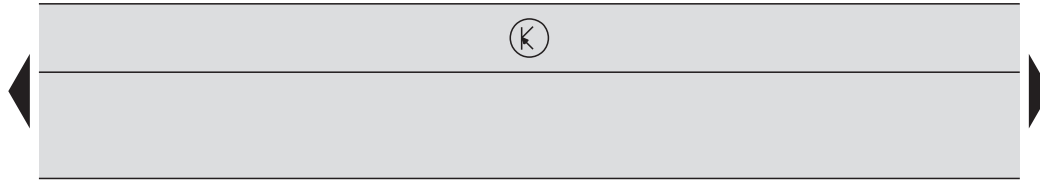


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- G28 - Engine speed sender
- G62 - Coolant temperature sender
- G80 - Needle lift sender
- J248 - Diesel direct injection system control unit
- T2j - 2-pin connector, at needle lift sender
- T2y - 2-pin connector, at coolant temperature sender
- T3m - 3-pin connector, at engine speed sender
- T11a - 11-pin connector, at left of bulkhead (white)
- T40a - 40-pin connector, at engine control unit
- T81a - 81-pin connector, at engine control unit

- (A121) - Connection (CAN-H), in wiring loom behind dash panel on
- (A122) - Connection (CAN-L), in wiring loom behind dash panel
- (D159) - Connection (CAN-H), in engine compartment wiring loom
- (D160) - Connection (CAN-L), in engine compartment wiring loom
- (F27) - Connection (screening), in engine pre-wiring wiring harness

Diesel direct injection system control unit, Intake manifold flap motor, Oil level/oil temperature sender



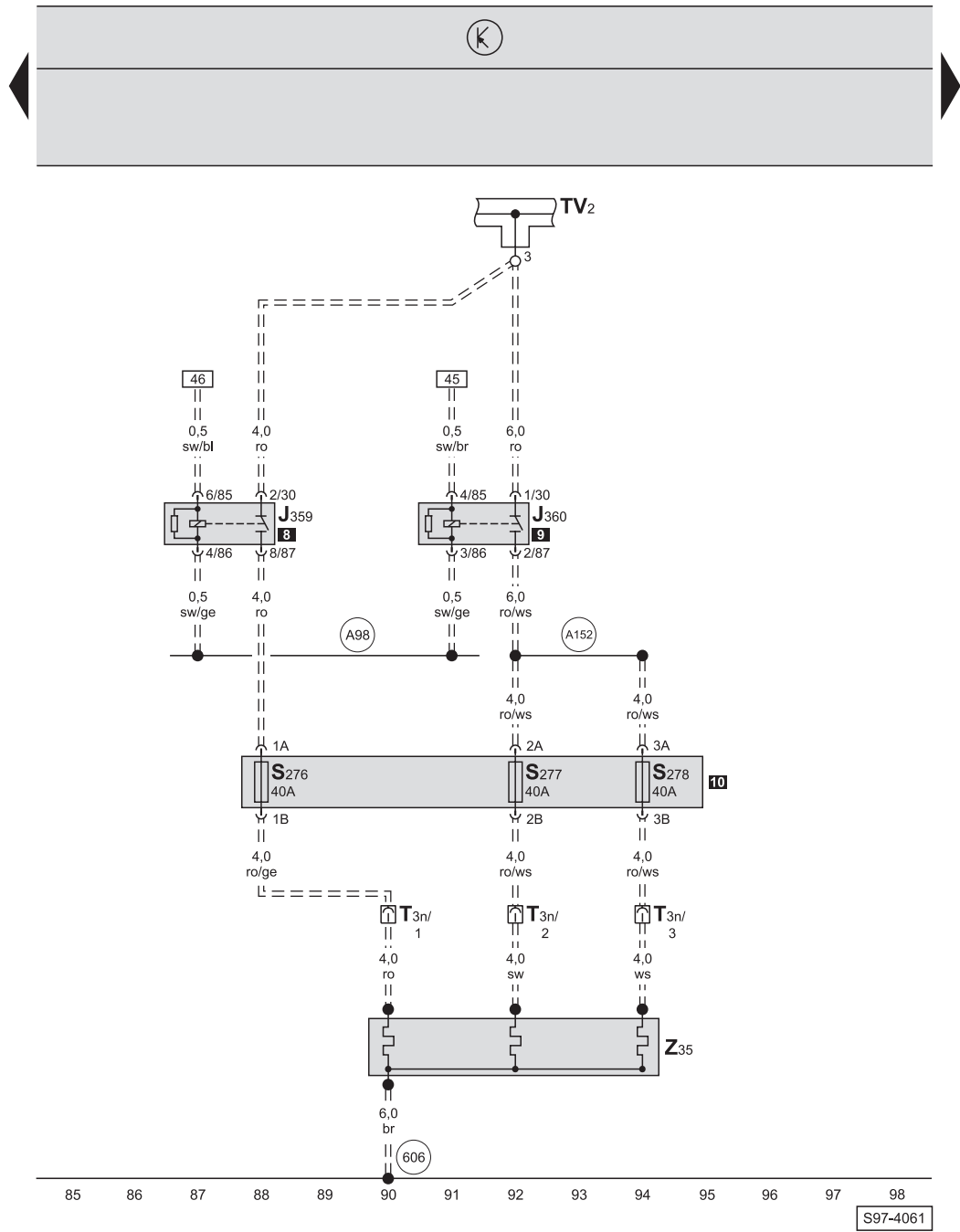
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

71 72 73 74 75 76 77 78 79 80 81 82 83 84
S97-4060

- G266 - Oil level/oil temperature sender
- J248 - Diesel direct injection system control unit
- T3f - Connector, 3-pin, at oil level/oil temperature sender
- T4l - 4-pin connector, at intake manifold flap motor
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)
- T81a - 81-pin connector, at engine control unit
- V157 - Intake manifold flap motor

- (281) - Earth connection -1-, in engine pre-assembly wiring loom
- (D107) - Connection -5- (Oil level/oil temperature sender), left in engine compartment wiring harness
- * - applies only to models with extended service interval (ESI)

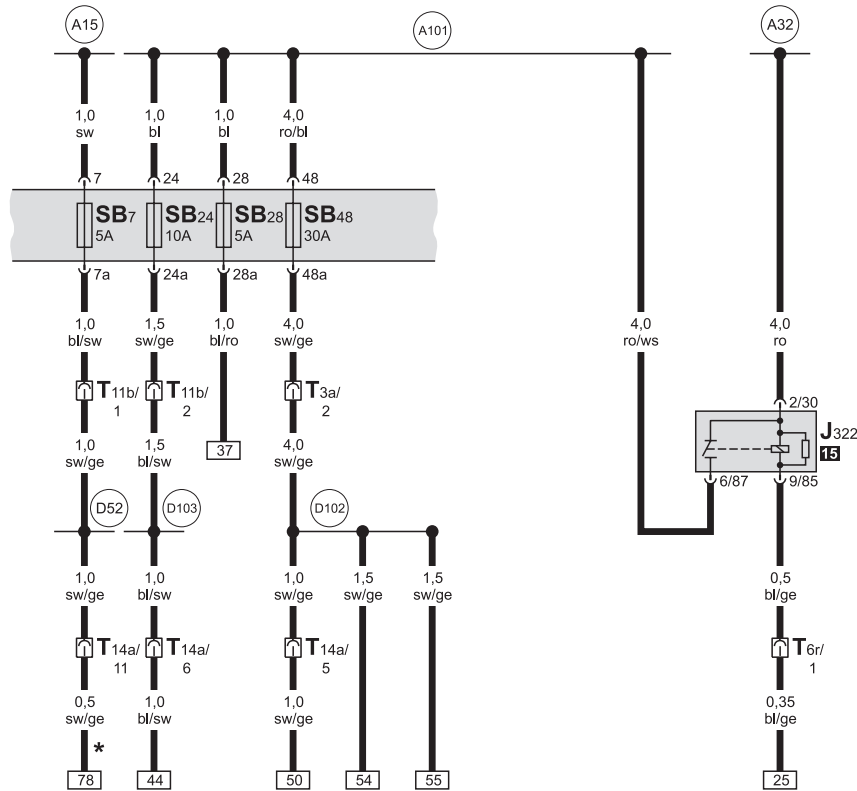
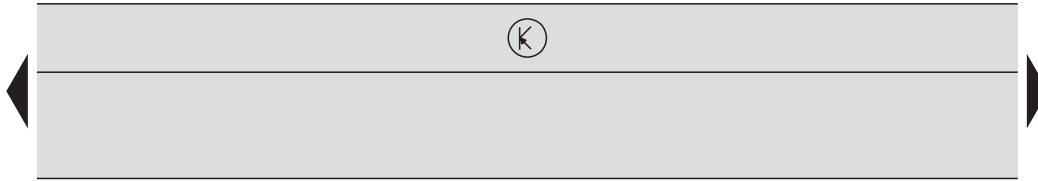
Low heating capacity relay, high heating capacity relay, heating element for additional heater (PTC), additional fuse holder



- J359 - Low heating capacity relay
- J360 - High heating capacity relay
- S276 - Fuse -1- for heater element
- S277 - Fuse -2- for heater element
- S278 - Fuse -3- for heater element
- T3n - 3-pin connector, behind dash panel (at PTC heating element)
- TV2 - Terminal 30 junction, behind dash panel on left
- Z35 - Additional heating heater element (PTC)

- (606) - Earth point, under the centre console, near gear stick
- (A98) - Positive connection (30a), in wiring loom behind dash panel (applies only to models with telephone system)
- (A152) - Connection (87), in wiring harness behind dash panel
- === - Applies only to models with heating element (PTC)

Diesel direct injection system relay, fuse holder



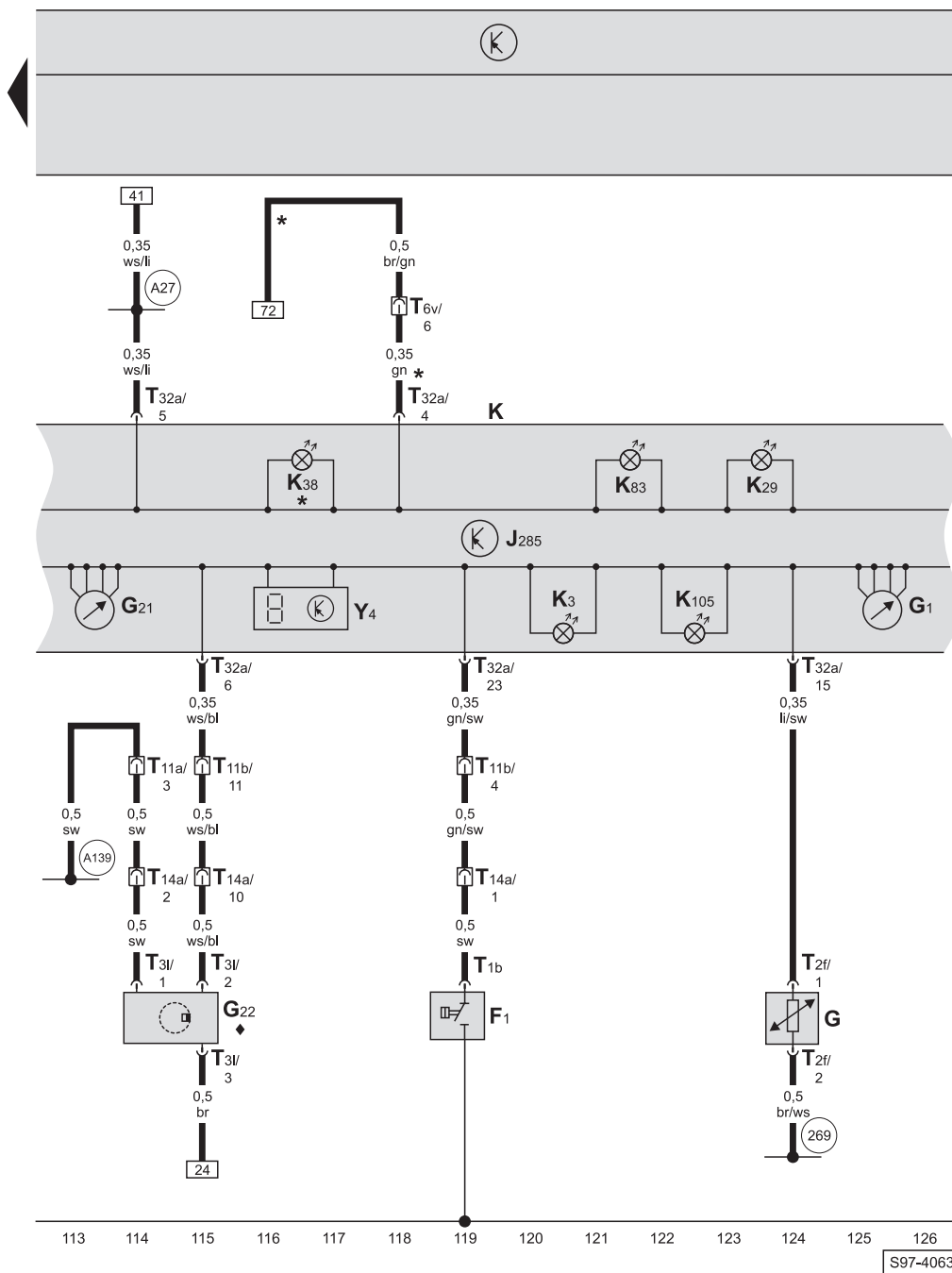
99 100 101 102 103 104 105 106 107 108 109 110 111 112
S97-4062

- J322 - Diesel direct injection system relay
- T3a - 3-pin connector, at left of bulkhead (grey)
- T6r - 6-pin connector, at left of bulkhead (brown)
- T11b - 11-pin connector, at left of bulkhead (red)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)

- (A15) - Positive connection (15), in wiring loom behind dash panel
- (A32) - Positive connection (30a), in wiring loom behind dash panel on left
- (A101) - Connection (87), in wiring loom behind dash panel
- (D52) - Positive connection (15a), in engine compartment wiring loom
- (D102) - Connection -2- (87a), in wiring loom in left of engine compartment
- (D103) - Connection -3- (87a), in engine compartment wiring loom

* - applies only to models with extended service interval (ESI)

Dash panel insert, control unit in dash panel insert, warning lights, oil pressure switch, fuel gauge sender, fuel pump, speedometer sender, fuel gauge, speedometer, odometer display



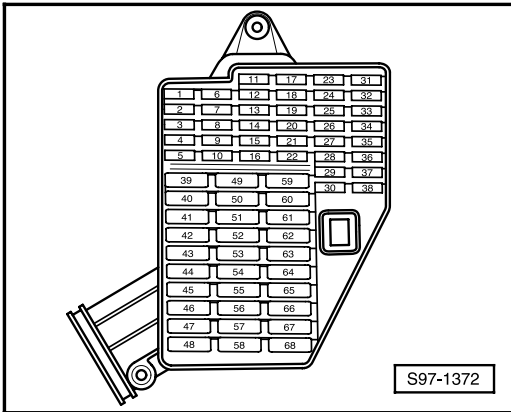
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- F1 - Oil pressure switch
- G - Fuel gauge sender
- G1 - Fuel gauge
- G21 - Speedometer
- G22 - Speedometer sender
- J285 - Control unit in dash panel insert
- K - Dash panel insert
- K3 - Oil pressure warning lamp
- K29 - Glow period warning lamp
- K38 - Oil level indicator light
- K83 - Exhaust gas warning lamp
- K105 - Reserve fuel warning lamp
- T1b - 1-pin connector, at oil pressure switch
- T2f - 2-pin connector, at fuel gauge sender
- T3l - 3-pin connector, at speedometer sender
- T6v - 6-pin connector, at left of bulkhead (green)
- T11a - 11-pin connector, at left of bulkhead (white)
- T11b - 11-pin connector, at left of bulkhead (red)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)
- T32a - 32-pin connector, at dash panel insert
- Y4 - Odometer display
- 269 - Earth connection (sender earth) -1-, in wiring harness behind dash panel
- A27 - Connection (vehicle speed signal), in wiring loom behind dash panel
- A139 - Positive connection (15), in wiring loom behind dash panel
- * - applies only to models with extended service interval (ESI)
- ◆ - not valid for vehicles with ABS/ABS with EDL and TCS/ESP

S97-4063

1.9 I - TDI with unit injection system/74 kW, engine code ATD, from August 2003

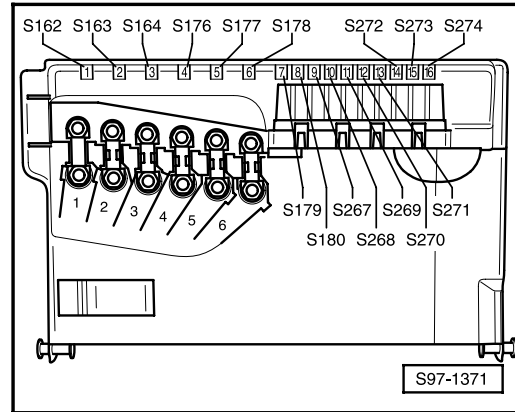
Fuse holder:



Fuse colours

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

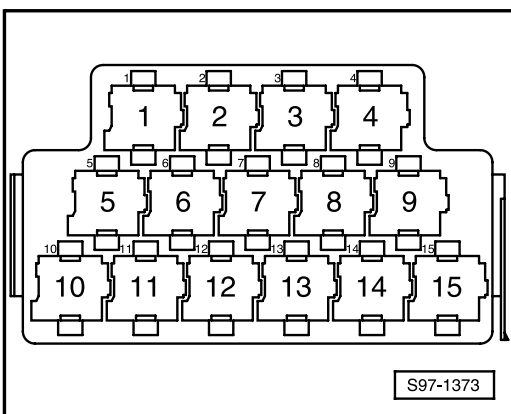
Fuse holder on battery:



Fuse colours

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

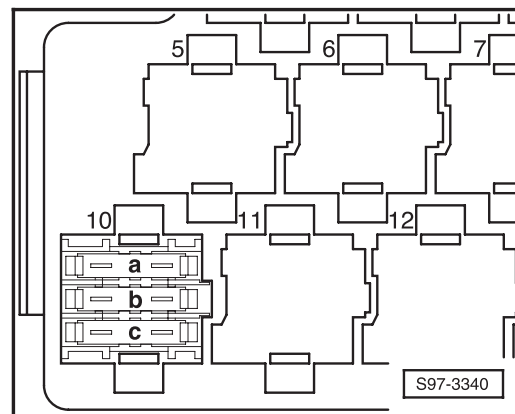
Relay holder:



Relay position assignment:

- 3** - Glow plug relay
- 4** - Fuel pump relay
- 8** - Low heating capacity relay
- 9** - High heating capacity relay
- 15** - Diesel direct injection system relay

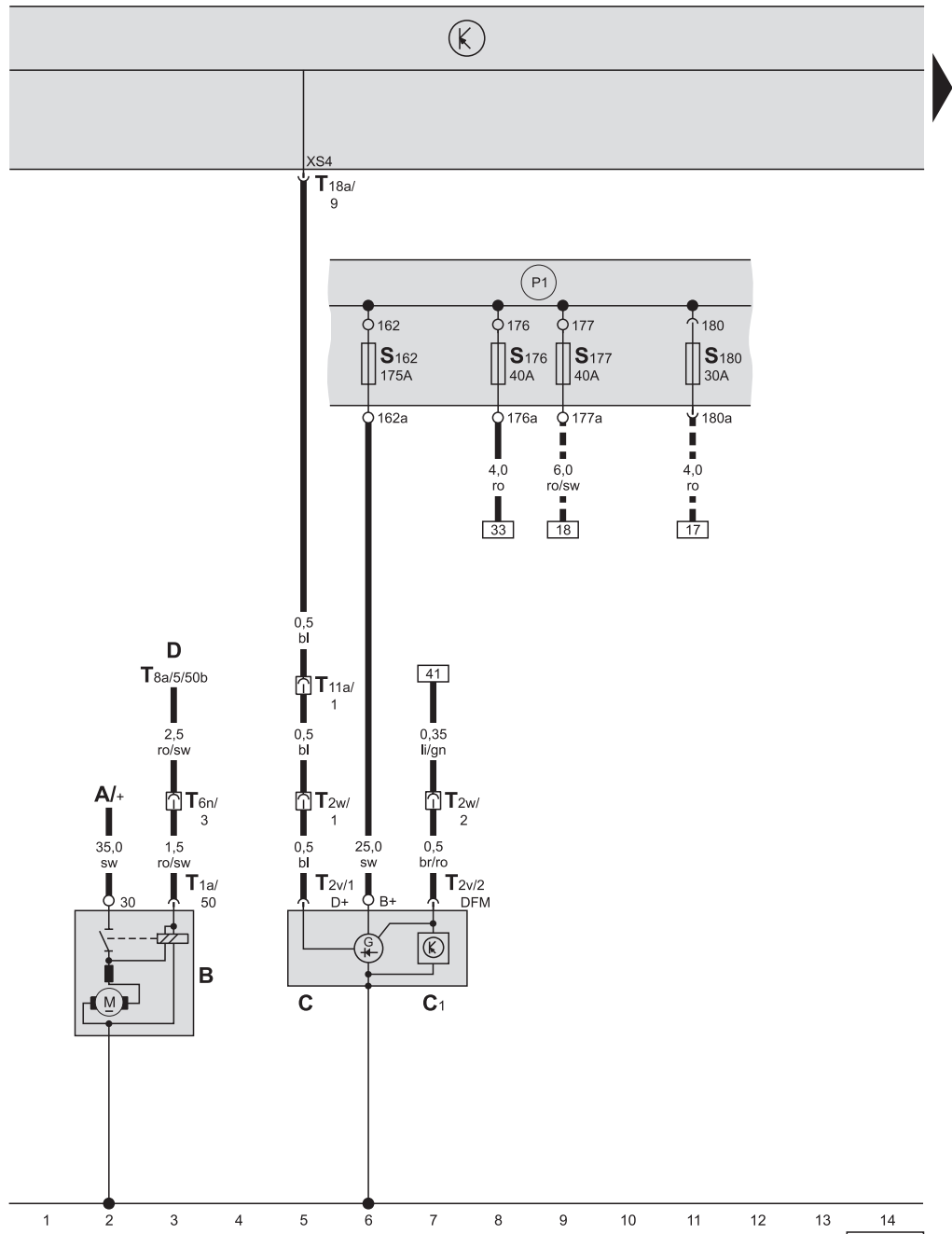
Additional fuse holder:



Fuse position assignment:

- a** - S276 - Fuse -1- for heating element
- b** - S277 - Fuse -2- for heating element
- c** - S278 - Fuse -3- for heating element

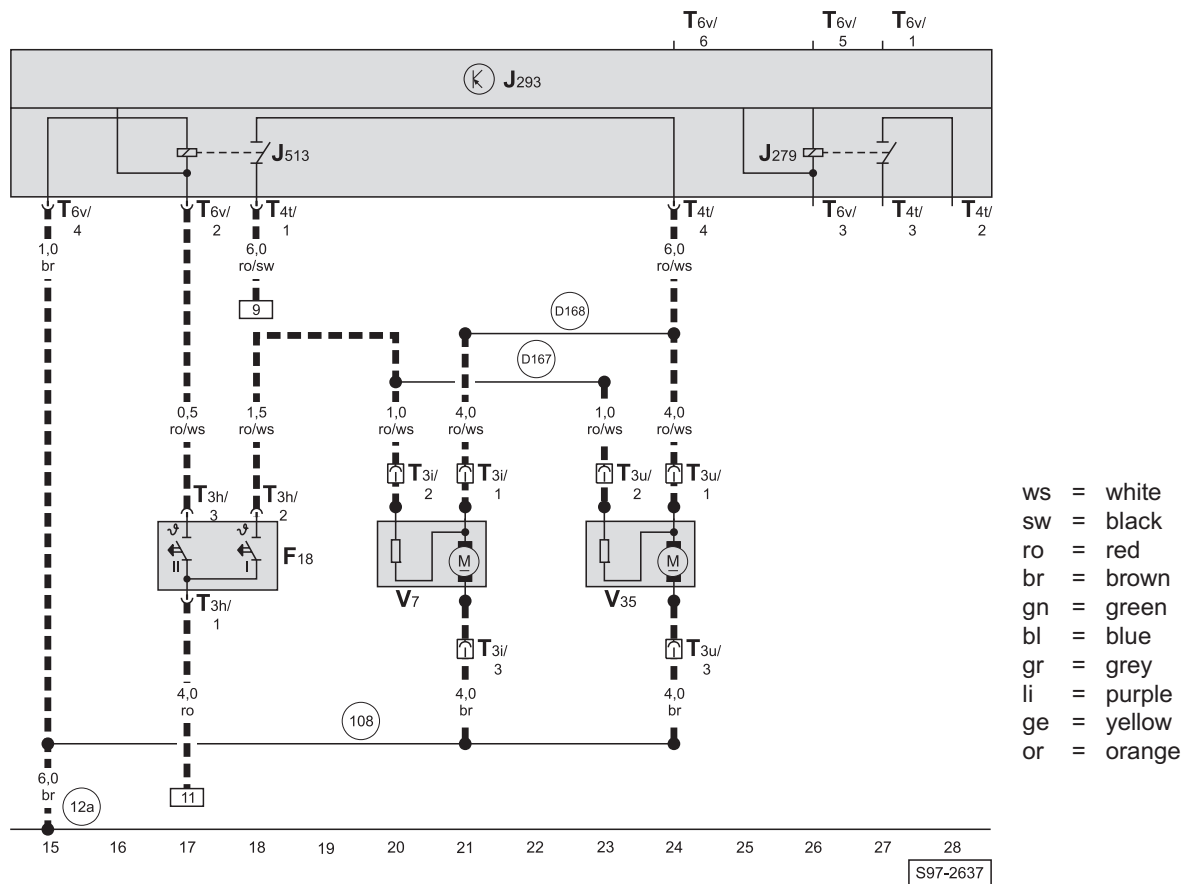
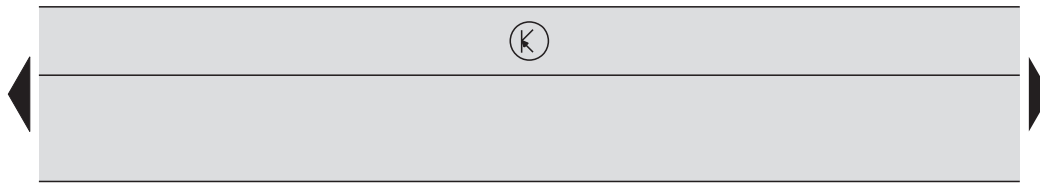
Starter, alternator, fuse holder on battery



S97-3436

- A - Battery
- B - Starter
- C - Alternator
- C1 - Voltage regulator
- D - Ignition/starter switch
- S162 - Fuse -1- (30), in fuse holder on battery
- S176 - Fuse -4- (30), in fuse holder on battery
- S177 - Fuse -5- (30), in fuse holder on battery
- S180 - Fuse -8- (30), in fuse holder on battery
- T1a - 1-pin connector, at starter
- T2v - 2-pin connector, at alternator
- T2w - 2-pin connector, in bracket at gearbox
- T6n - 6-pin connector, at left of bulkhead (blue)
- T8a - 8-pin connector, at ignition/starter switch
- T11a - 11-pin connector, at left of bulkhead (white)
- T18a - 18-pin connector, at electrical system control unit (brown)

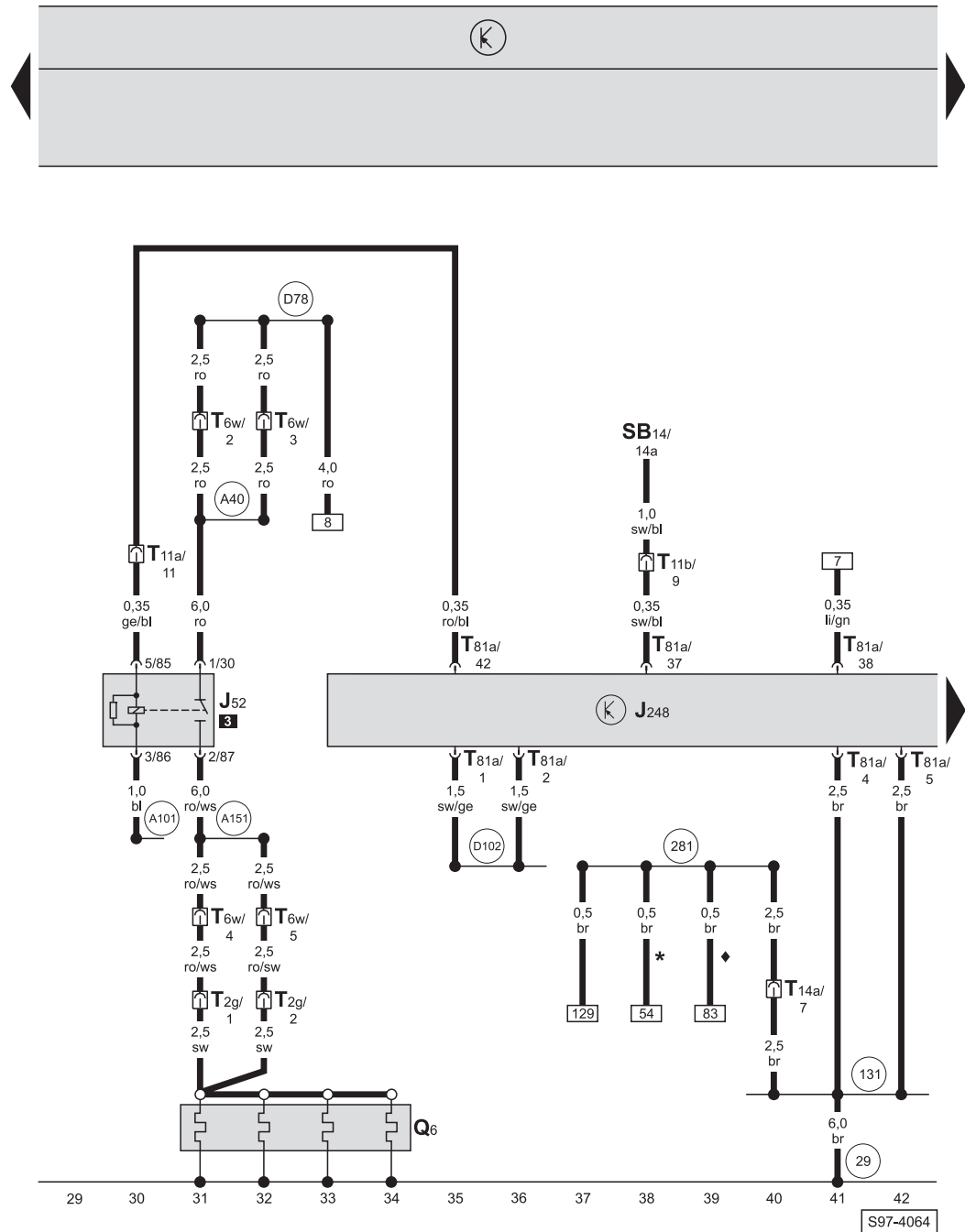
Radiator fan control unit, radiator fan thermoswitch, radiator fan



- F18 - Radiator fan thermoswitch
- J279 - Radiator fan relay, stage 1
- J293 - Radiator fan control unit
- J513 - Radiator fan relay, stage 2
- T3h - 3-pin connector, at radiator fan thermoswitch
- T3i - 3-pin connector, in bracket on left of radiator
- T3u - 3-pin connector, in bracket on left of radiator
- T4t - 4-pin connector, at radiator fan control unit
- T6v - 6-pin connector, at radiator fan control unit
- V7 - Radiator fan
- V35 - Radiator fan, right

- 12a - Earth point -2-, in engine compartment, on left below battery (at side member)
- 108 - Earth connection, in front left wiring harness
- D167 - Connection (fan stage 1), in engine compartment wiring loom
- D168 - Connection (fan stage 2), in engine compartment wiring loom
- - Does not apply to models with air conditioning

Diesel direct injection system control unit, glow plug relay, glow plugs

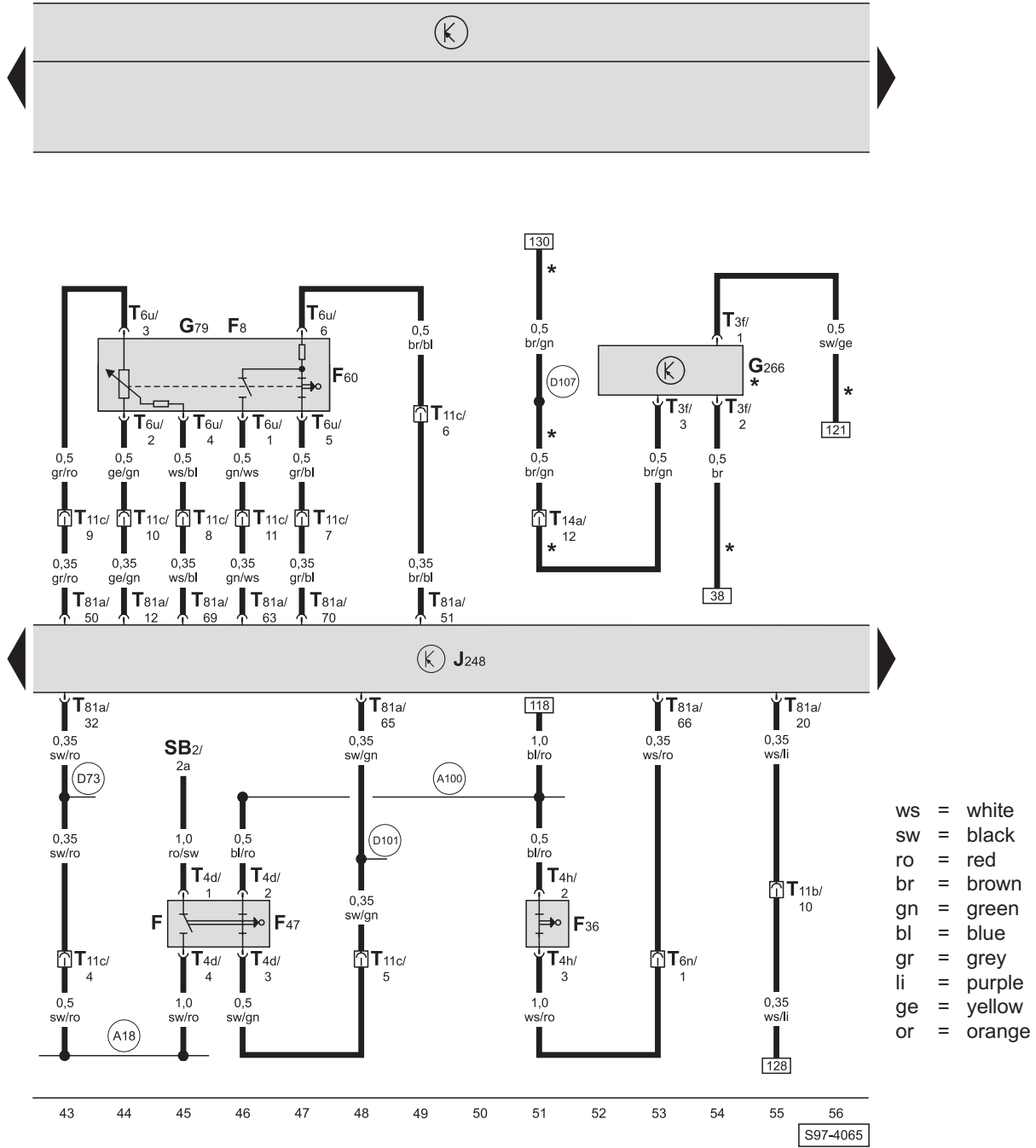


- J52 - Glow plug relay
- J248 - Diesel direct injection system control unit
- Q6 - Glow plugs
- SB14 - Fuse, in fuse holder
- T2g - 2-pin connector, in left of engine compartment (connection of engine assembly wiring loom/engine compartment wiring loom)
- T6w - 6-pin connector, at left of bulkhead (grey)
- T11a - 11-pin connector, at left of bulkhead (white)
- T11b - 11-pin connector, at left of bulkhead (red)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/engine compartment wiring loom)
- T81a - 81-pin connector, at engine control unit

- 29 - Earth point, in left of engine compartment, behind battery (at suspension strut mounting)
- 131 - Earth connection -2-, in engine compartment wiring harness
- 281 - Earth connection -1-, in engine pre-assembly wiring loom
- A40 - Positive connection (30a), in wiring loom behind dash panel
- A101 - Connection (87), in wiring loom behind dash panel
- A151 - Connection (87), in wiring loom behind dash panel
- D78 - Positive connection -1- (30a), in engine compartment wiring loom
- D102 - Connection -2- (87a), in wiring loom in left of engine compartment

- * - applies only to models with extended service interval (ESI)
- ◆ - Applies only to models with optional equipment

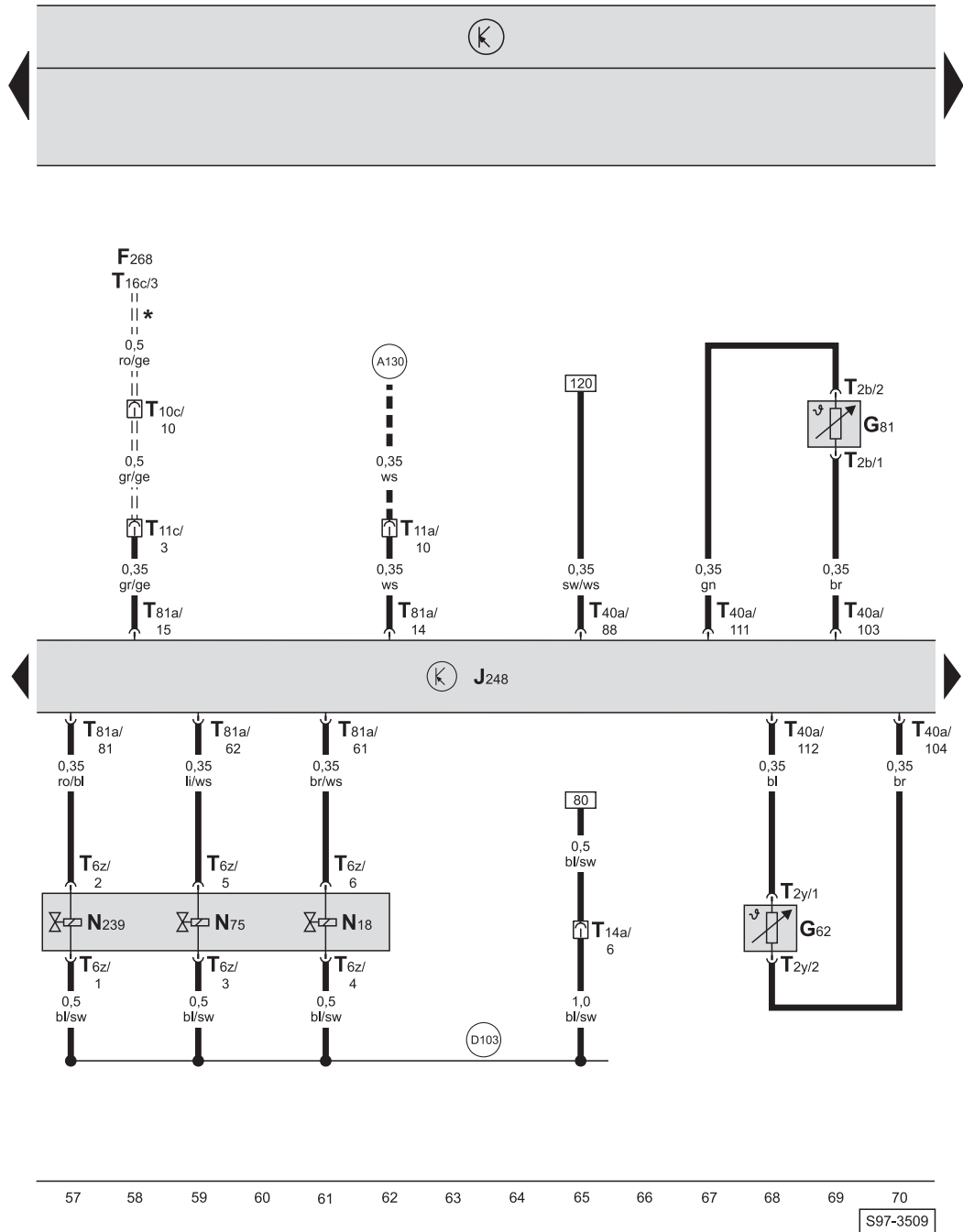
Control unit for Diesel direct injection system, Accelerator pedal position sender, Brake pedal switch, Clutch pedal switch, Oil level/oil temperature sender



- F - Brake light switch
- F8 - Kickdown switch
- F36 - Clutch pedal switch
- F47 - Brake pedal switch
- F60 - Idling speed switch
- G79 - Accelerator position sender
- G266 - Oil level/oil temperature sender
- J248 - Diesel direct injection system control unit
- SB2 - Fuse, in fuse holder
- T3f - Connector, 3-pin, at oil level/oil temperature sender
- T4d - 4-pin connector, at brake pedal switch
- T4h - 4-pin connector, at clutch pedal switch
- T6n - 6-pin connector, at left of bulkhead (blue)
- T6u - 6-pin connector, at accelerator pedal position sender
- T11b - 11-pin connector, at left of bulkhead (red)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)
- T81a - 81-pin connector, at engine control unit

- (A18) - Connection (54), in wiring loom behind dash panel
- (A100) - Connection (87a), in wiring loom behind dash panel
- (D73) - Connection (54), in left of engine compartment wiring loom
- (D101) - Connection (brake pedal switch), in engine compartment wiring loom
- (D107) - Connection -5- (Oil level/oil temperature sender), left in engine compartment wiring harness
- * - applies only to models with extended service interval (ESI)

Diesel direct injection system control unit, coolant temperature sender, fuel temperature sender, exhaust gas recirculation valve, charge pressure control solenoid valve, intake manifold flap changeover valve



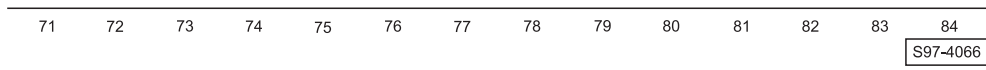
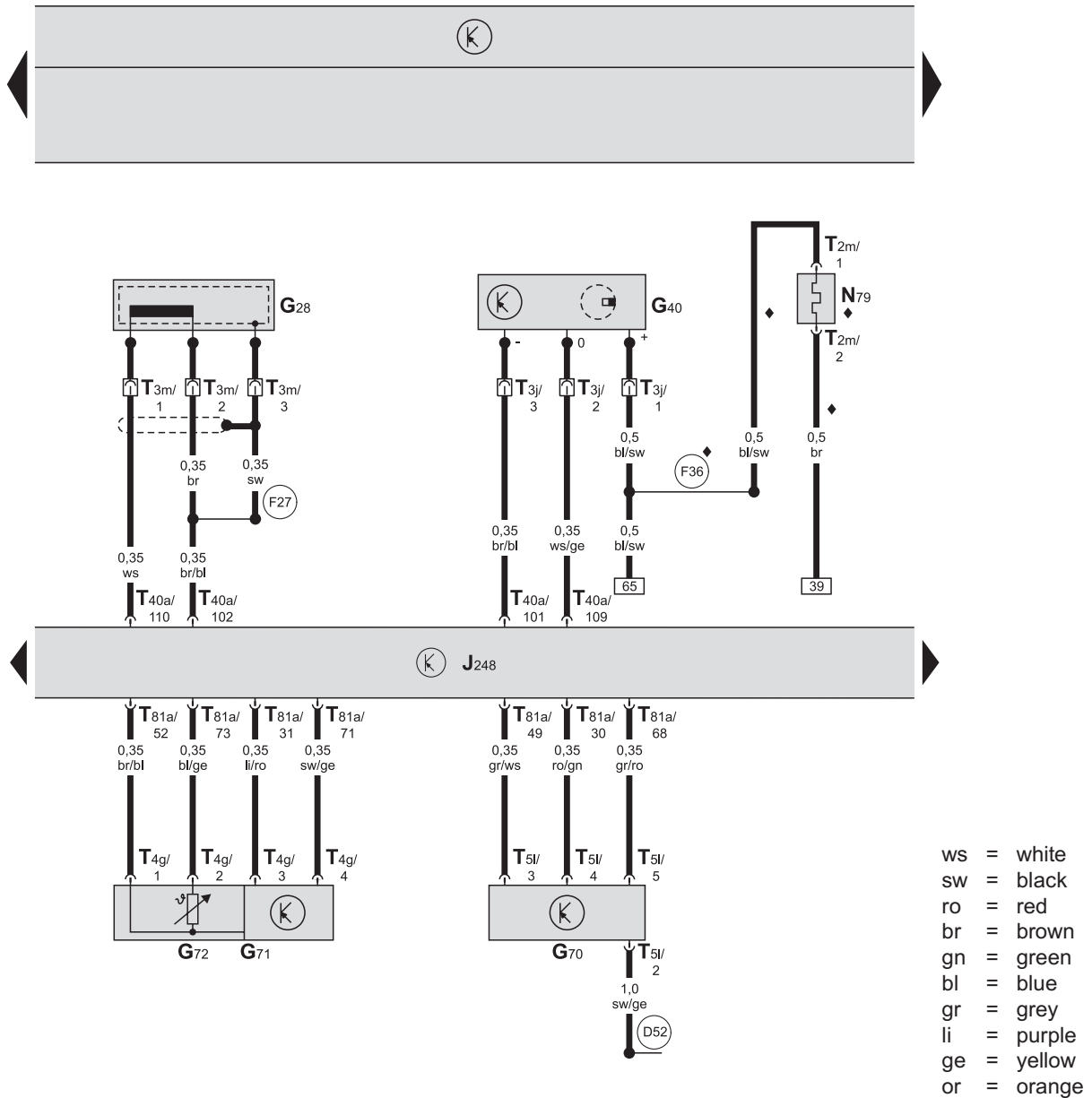
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- F268 - Heater element contact switch (PTC)
- G62 - Coolant temperature sender
- G81 - Fuel temperature sender
- J248 - Diesel direct injection system control unit
- N18 - EGR valve
- N75 - Boost pressure control solenoid valve
- N239 - Intake manifold flap changeover valve
- T2b - Plug connection, 2-pin, at fuel temperature sender
- T2y - 2-pin connector, at coolant temperature sender
- T6z - Connector, 6-pin, at valve block
- T10c - 10-pin connector, behind dash panel on right
- T11a - 11-pin connector, at left of bulkhead (white)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)
- T16c - 16-pin connector, at fresh air controls
- T40a - 40-pin connector, at engine control unit
- T81a - 81-pin connector, at engine control unit

- (A130) - Connection (CCS), in wiring loom behind dash panel on left
- (D103) - Connection -3- (87a), in engine compartment wiring loom

- * - does not apply to models with air conditioning
- ■ ■ - Applies only to models with CCS
- === - Applies only to models with heating element (PTC)

Diesel direct injection system control unit, engine speed sender, camshaft position sender, air mass meter, intake manifold pressure and intake manifold temperature sender

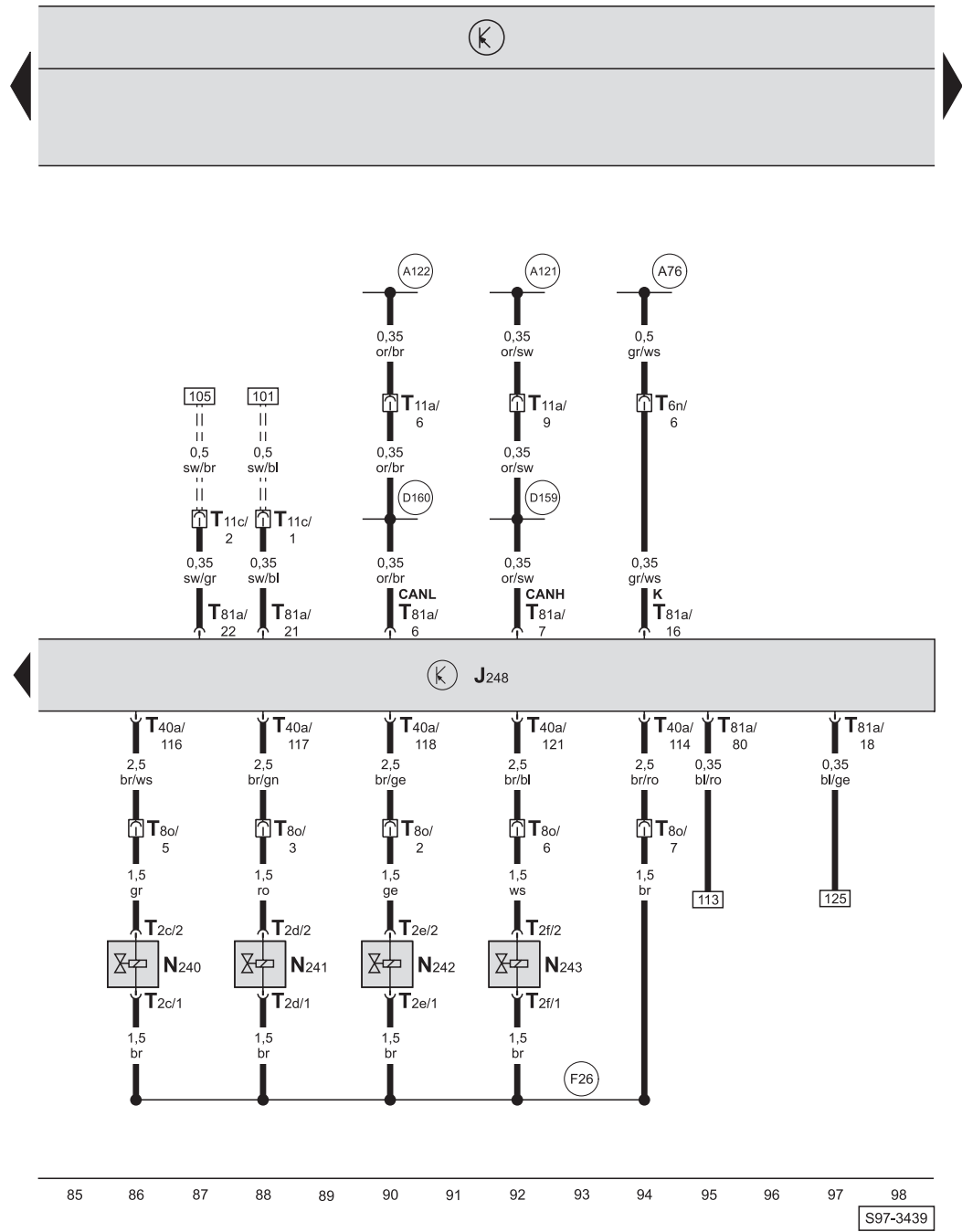


- G28 - Engine speed sender
- G40 - Camshaft position sender
- G70 - Air mass meter
- G71 - Intake manifold pressure sender
- G72 - Intake manifold temperature sender
- N79 - Crankcase breather heater element
- J248 - Diesel direct injection system control unit
- T2m - 2-pin connector, at crankcase breather heater element
- T3j - 3-pin connector, at camshaft position sender
- T3m - 3-pin connector, at engine speed sender
- T4g - 4-pin connector, at intake manifold pressure and intake manifold temperature sender
- T5l - 5-pin connector, at air mass meter
- T40a - 40-pin connector, at engine control unit
- T81a - 81-pin connector, at engine control unit

- (D52) - Positive connection (15a), in engine compartment wiring loom
- (F27) - Connection (screening), in engine pre-wiring wiring harness
- (F36) - Positive connection (87a), in engine assembly wiring loom

◆ - Applies only to models with optional equipment

Diesel direct injection system control unit, unit injectors

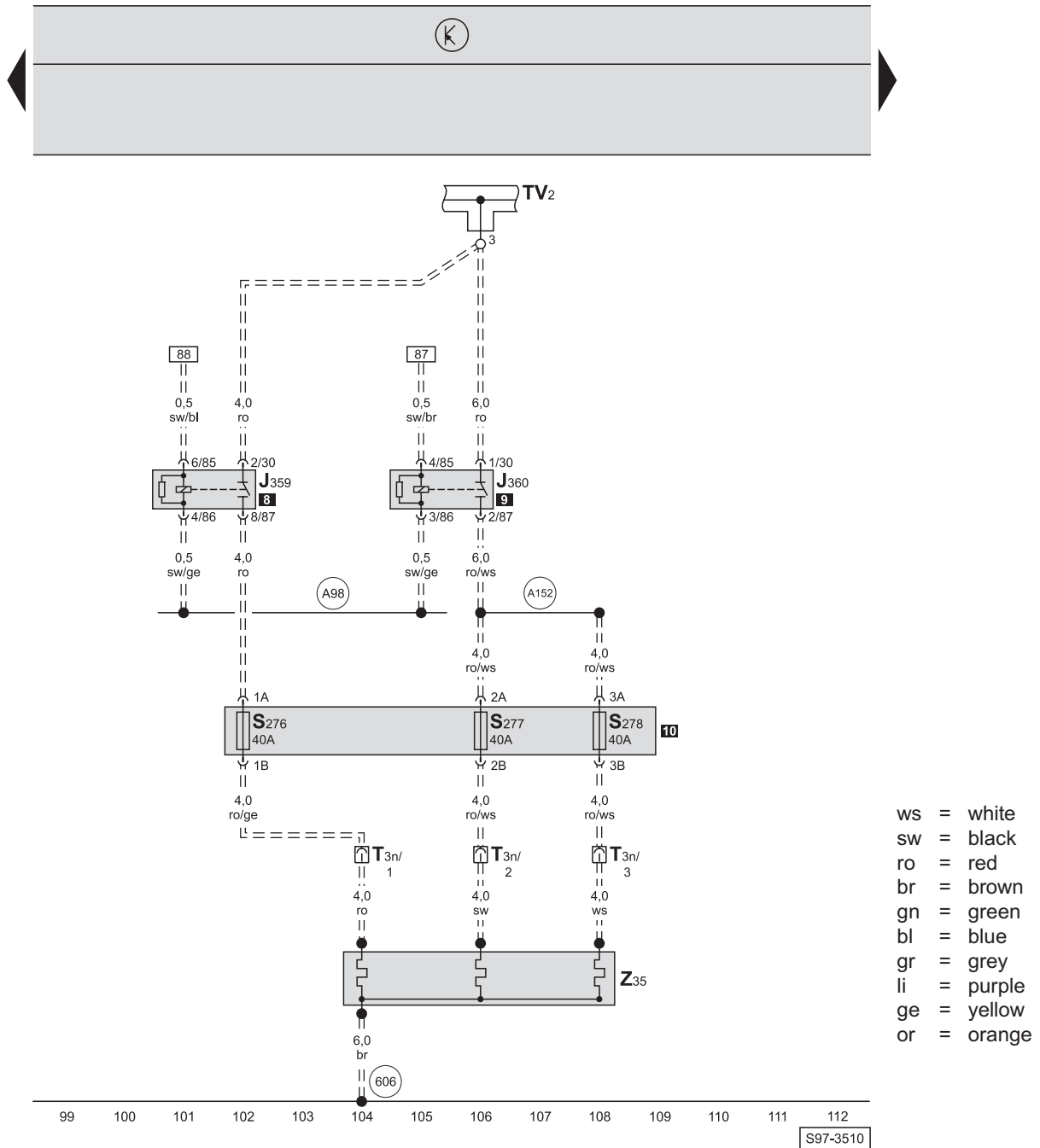


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- J248 - Diesel direct injection system control unit
- N240 - Unit injector, cylinder 1
- N241 - Unit injector, cylinder 2
- N242 - Unit injector, cylinder 3
- N243 - Unit injector, cylinder 4
- T2c - 2-pin connector at unit injector valves, No. 1 cyl
- T2d - Plug connection, 2-pin, at unit injector, cylinder 2
- T2e - Plug connection, 2-pin, at unit injector, cylinder 3
- T2f - Plug connection, 2-pin, at unit injector, cylinder 4
- T6n - 6-pin connector, at left of bulkhead (blue)
- T8o - Plug connection, 8-pin, at cylinder head
- T11a - 11-pin connector, at left of bulkhead (white)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T40a - 40-pin connector, at engine control unit
- T81a - 81-pin connector, at engine control unit

- (A76) - Connection (K diagnosis wire), in wiring loom behind dash panel on left
- (A121) - Connection (CAN-H), in wiring loom behind dash panel on
- (A122) - Connection (CAN-L), in wiring loom behind dash panel
- (D159) - Connection (CAN-H), in engine compartment wiring loom
- (D160) - Connection (CAN-L), in engine compartment wiring loom
- (F26) - Connection (earth), in cylinder head wiring loom
- === - Applies only to models with heating element (PTC)

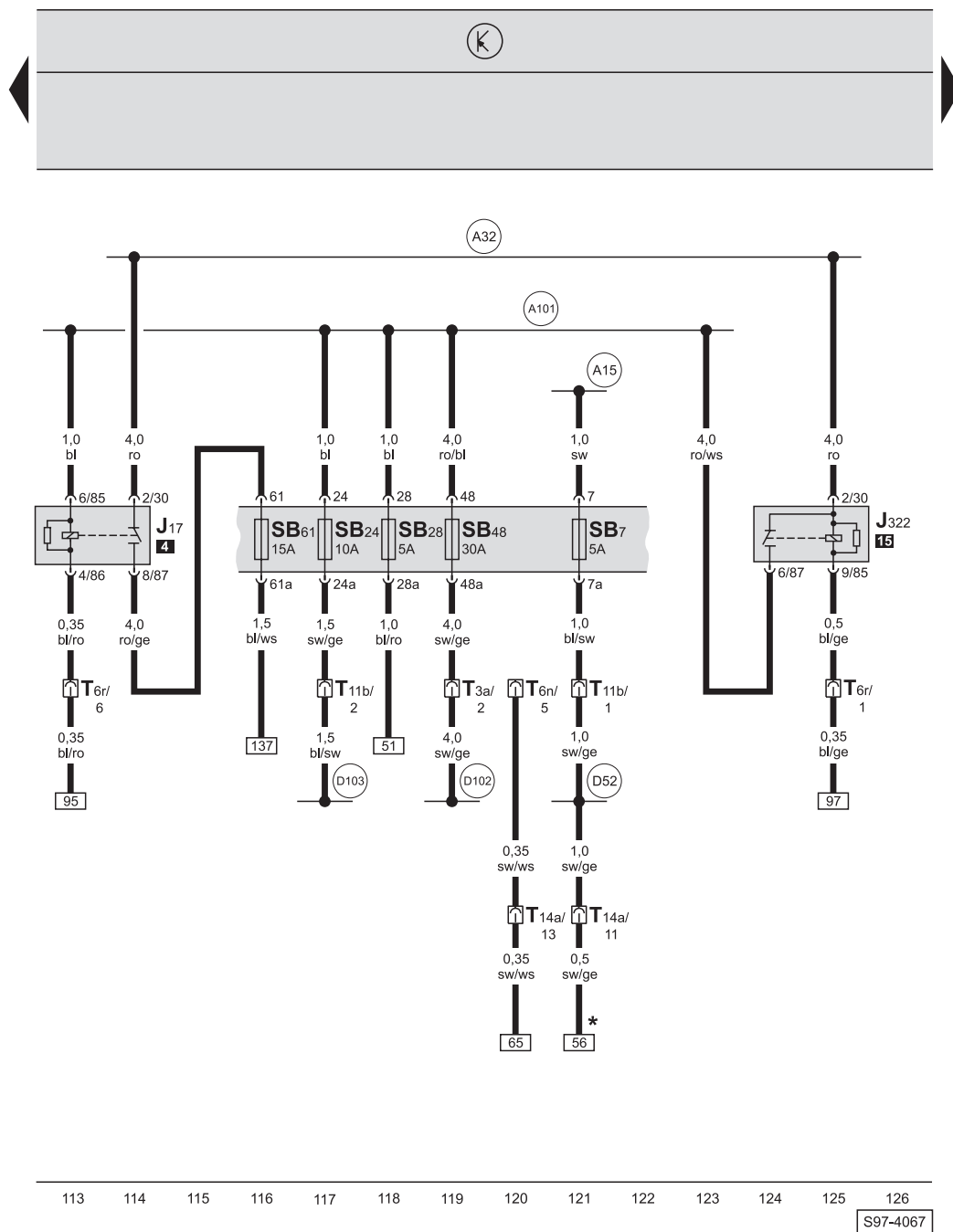
Low heating capacity relay, high heating capacity relay, heating element for additional heater (PTC), additional fuse holder



- J359 - Low heating capacity relay
- J360 - High heating capacity relay
- S276 - Fuse -1- for heater element
- S277 - Fuse -2- for heater element
- S278 - Fuse -3- for heater element
- T3n - 3-pin connector, behind dash panel (at PTC heating element)
- TV2 - Terminal 30 junction, behind dash panel on left
- Z35 - Additional heating heater element (PTC)

- (606) - Earth point, under the centre console, near gear stick
- (A98) - Positive connection (30a), in wiring loom behind dash panel (applies only to models with telephone system)
- (A152) - Connection (87), in wiring harness behind dash panel
- === - Applies only to models with heating element (PTC)

Fuel pump relay, diesel direct injection system relay, fuse holder



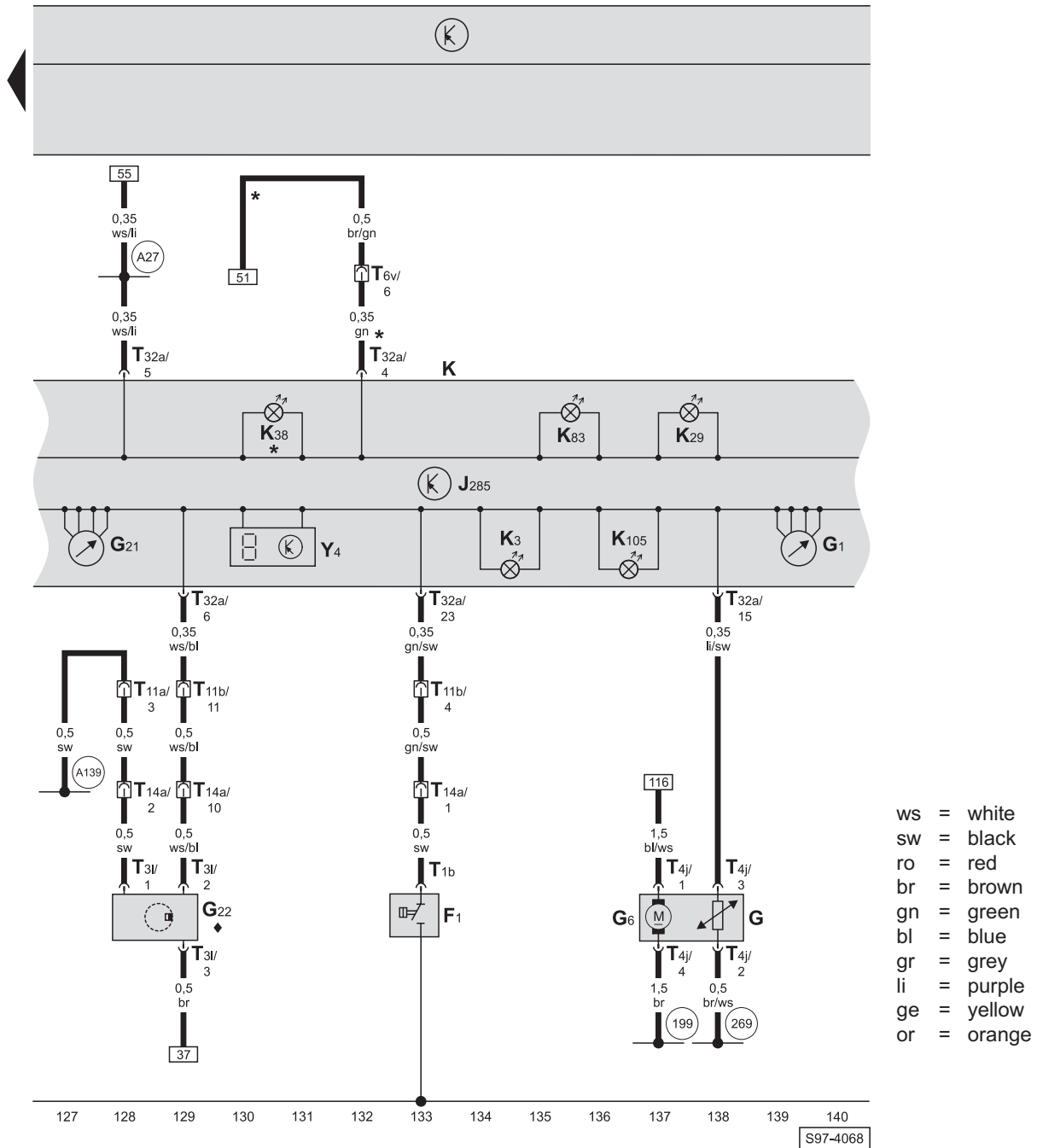
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- J17 - Fuel pump relay
- J322 - Diesel direct injection system relay
- T3a - 3-pin connector, at left of bulkhead (grey)
- T6n - 6-pin connector, at left of bulkhead (blue)
- T6r - 6-pin connector, at left of bulkhead (brown)
- T11b - 11-pin connector, at left of bulkhead (red)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)

- (A15) - Positive connection (15), in wiring loom behind dash panel
- (A32) - Positive connection (30a), in wiring loom behind dash panel on left
- (A101) - Connection (87), in wiring loom behind dash panel
- (D52) - Positive connection (15a), in engine compartment wiring loom
- (D102) - Connection -2- (87a), in wiring loom in left of engine compartment
- (D103) - Connection -3- (87a), in engine compartment wiring loom

* - applies only to models with extended service interval (ESI)

Dash panel insert, control unit in dash panel insert, warning lights, oil pressure switch, fuel gauge sender, fuel pump, speedometer sender, fuel gauge, speedometer, odometer display

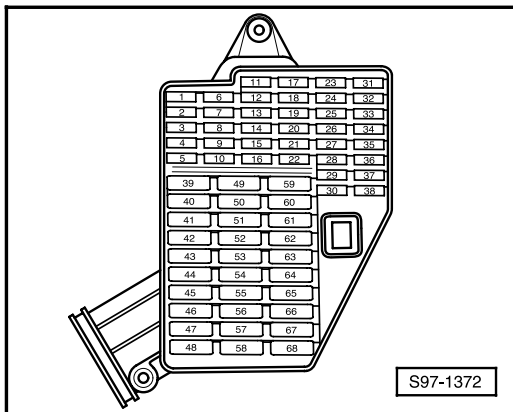


- F1 - Oil pressure switch
- G - Fuel gauge sender
- G1 - Fuel gauge
- G6 - Fuel pump
- G21 - Speedometer
- G22 - Speedometer sender
- J285 - Control unit in dash panel insert
- K - Dash panel insert
- K3 - Oil pressure warning lamp
- K29 - Glow period warning lamp
- K38 - Oil level indicator light
- K83 - Exhaust gas warning lamp
- K105 - Reserve fuel warning lamp
- T1b - 1-pin connector, at oil pressure switch
- T3l - 3-pin connector, at speedometer sender
- T4j - 4-pin connector, at fuel pump
- T6v - 6-pin connector, at left of bulkhead (green)
- T11a - 11-pin connector, at left of bulkhead (white)
- T11b - 11-pin connector, at left of bulkhead (red)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/engine compartment wiring loom)
- T32a - 32-pin connector, at dash panel insert
- Y4 - Odometer display
- 199 - Earth connection, in wiring harness behind dash panel
- 269 - Earth connection (sender earth) -1-, in wiring harness behind dash panel
- A27 - Connection (vehicle speed signal), in wiring loom behind dash panel
- A139 - Positive connection (15), in wiring loom behind dash panel
- * - applies only to models with extended service interval (ESI)
- ◆ - not valid for vehicles with ABS/ABS with EDL and TCS/ESP

Anti-lock brake system (ABS)

Antilock brake system(ABS) with differential lock (EDL) and traction control system (TCS), from August 2003

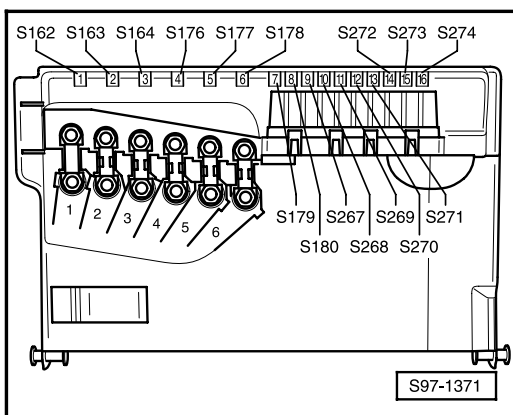
Fuse holder:



Fuse colours

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

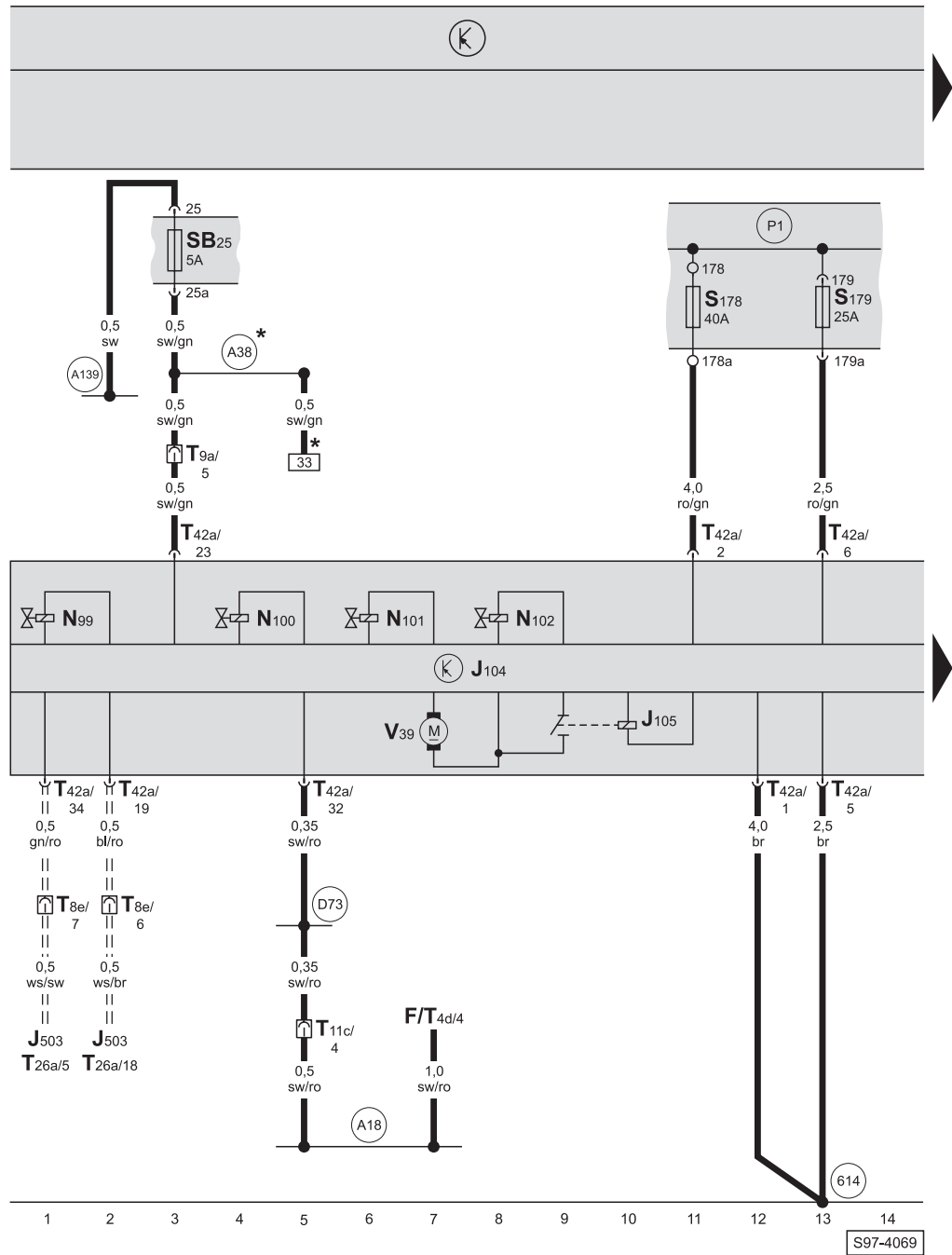
Fuse holder on battery:



Fuse colours

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

ABS/ABS with EDL and TCS control unit, fuse holder on battery, fuse holder



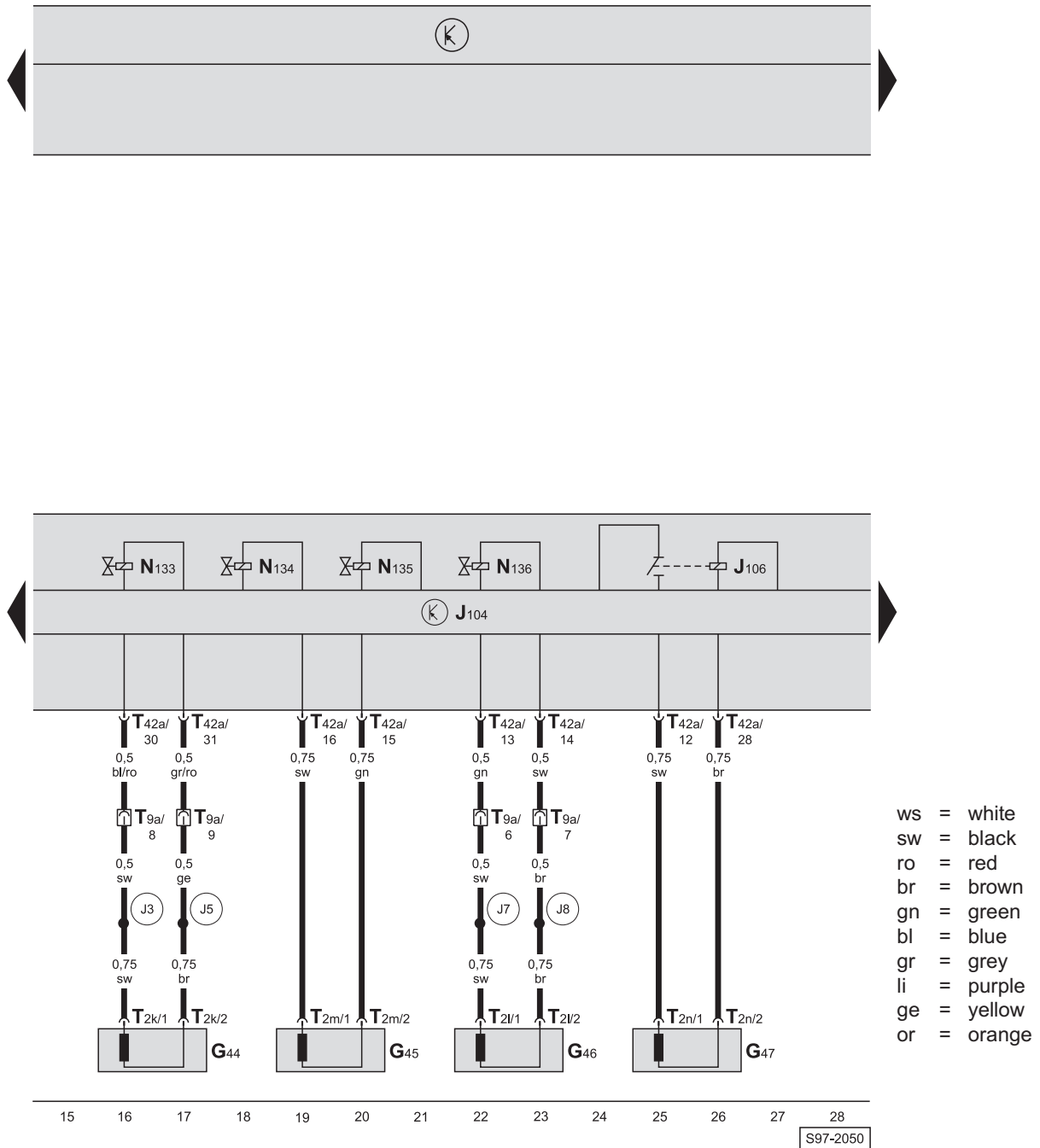
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- F - Brake light switch
- J104 - ABS/ABS with EDL and TCS control unit
- J105 - Return delivery pump relay ABS
- J503 - Navigation system control unit
- N99 - ABS inlet valve, front right
- N100 - ABS outlet valve, front right
- N101 - ABS inlet valve, front left
- N102 - ABS outlet valve, front left
- S178 - Fuse -6- (30), in fuse holder on battery
- S179 - Fuse -7- (30), in fuse holder on battery
- T4d - 4-pin connector, at brake pedal switch
- T8e - Plug connection, 8-pin, at left of bulkhead (orange)
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T26a - 26-pin connector, at navigation system control unit
- T42a - Connector, 42-pin, at ABS/ABS with EDL and TCS control unit
- V39 - ABS return delivery pump

- 614 - Earth point -2-, in rear right of engine compartment
- A18 - Connection (54), in wiring loom behind dash panel
- A38 - Positive connection -2- (15a), in wiring loom behind dash panel
- A139 - Positive connection (15), in wiring loom behind dash panel
- D73 - Connection (54), in left of engine compartment wiring loom
- P1 - Positive connection (30), in fuse holder on battery
- * - Applies only to models with TCS
- === - applies only to models with navigation system

S97-4069

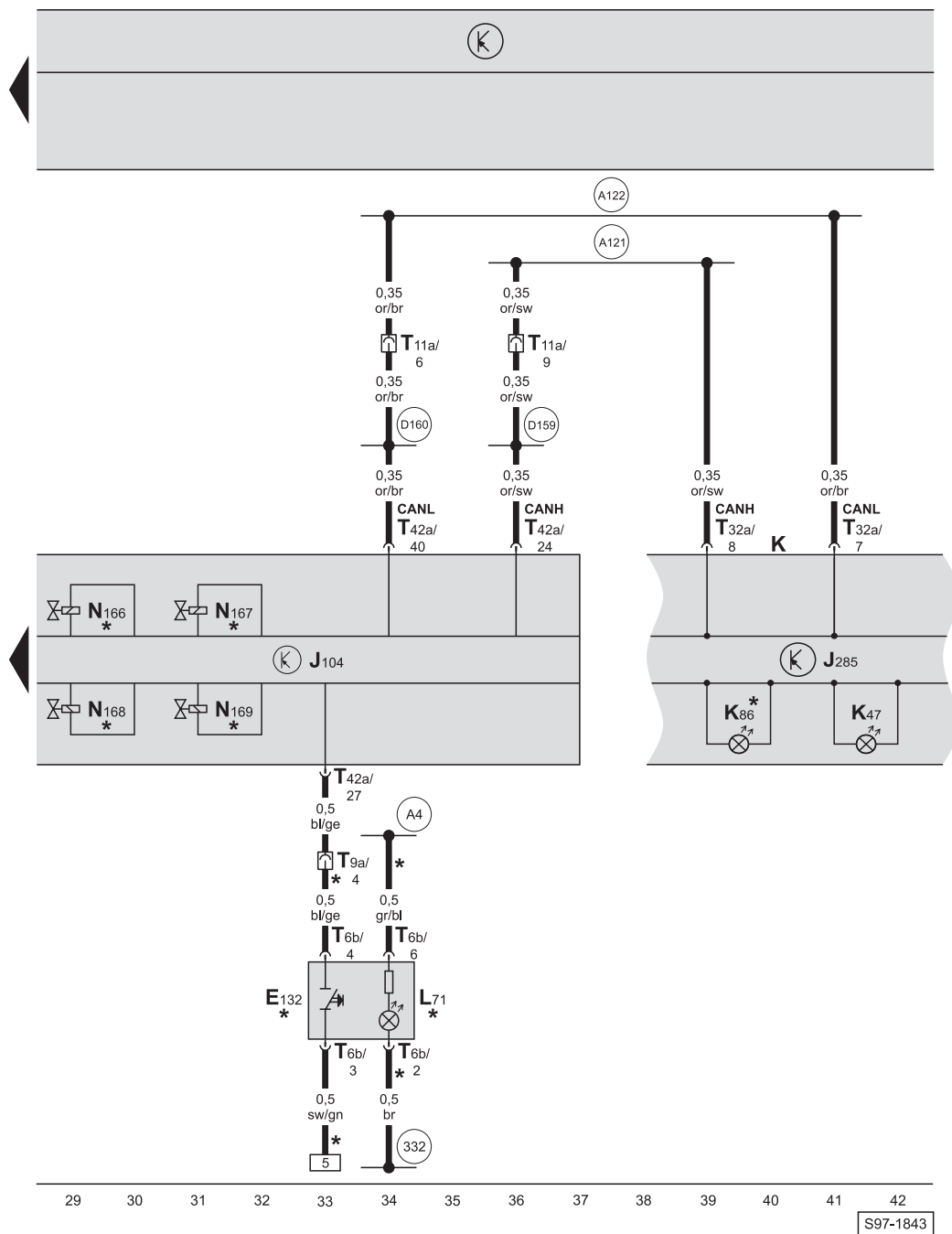
ABS/ABS with EDL and TCS control unit, wheel speed sensors



- G44 - Wheel speed sensor, rear right
- G45 - Wheel speed sensor, front right
- G46 - Wheel speed sensor, rear left
- G47 - Wheel speed sensor, front left
- J104 - ABS/ABS with EDL and TCS control unit
- J106 - ABS solenoid valves relay
- N133 - ABS inlet valve, rear right
- N134 - ABS inlet valve, rear left
- N135 - ABS outlet valve, rear right
- N136 - ABS outlet valve, rear left
- T2k - 2-pin connector, at rear right wheel speed sensor
- T2l - 2-pin connector, at rear left wheel speed sensor
- T2m - 2-pin connector, at front right wheel speed sensor
- T2n - 2-pin connector, at front left wheel speed sensor
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T42a - Connector, 42-pin, at ABS/ABS with EDL and TCS control unit

- J3** - Connection, in rear right wiring loom
- J5** - Connection, in rear right wiring loom
- J7** - Connection, in rear left wiring loom
- J8** - Connection, in rear left wiring loom

ABS/ABS with EDL and TCS control unit, TCS switch, dash panel insert



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

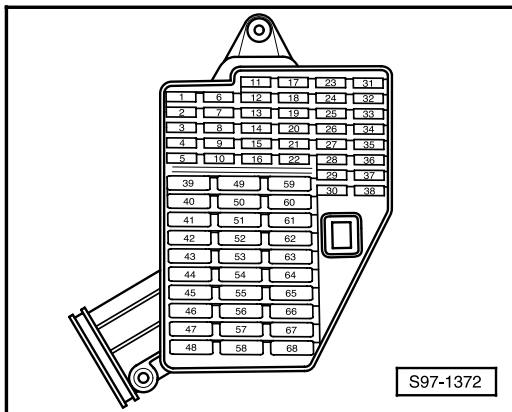
- E132 - TCS switch
- J104 - ABS/ABS with EDL and TCS control unit
- J285 - Control unit in dash panel insert
- K - Dash panel insert
- K47 - ABS warning lamp
- K86 - Traction control system warning lamp
- L71 - TCS switch lighting
- N166 - Front right EDL changeover valve
- N167 - Front right EDL outlet valve
- N168 - Front left EDL changeover valve
- N169 - Front left EDL outlet valve
- T6b - Connector, 6-pin, at TCS switch
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T11a - 11-pin connector, at left of bulkhead (white)
- T32a - 32-pin connector, at dash panel insert
- T42a - Connector, 42-pin, at ABS/ABS with EDL and TCS control unit

- 332 - Earth connection, in wiring harness behind dash panel
- A4 - Positive connection (58b), in wiring loom behind dash panel
- A121 - Connection (CAN-H), in wiring loom behind dash panel on
- A122 - Connection (CAN-L), in wiring loom behind dash panel
- D159 - Connection (CAN-H), in engine compartment wiring loom
- D160 - Connection (CAN-L), in engine compartment wiring loom
- * - Applies only to models with TCS

S97-1843

Anti-lock brake system (ABS) with electronic differential lock (EDL), traction control system (TCS), electronic stabilisation program (ESP), from August 2003

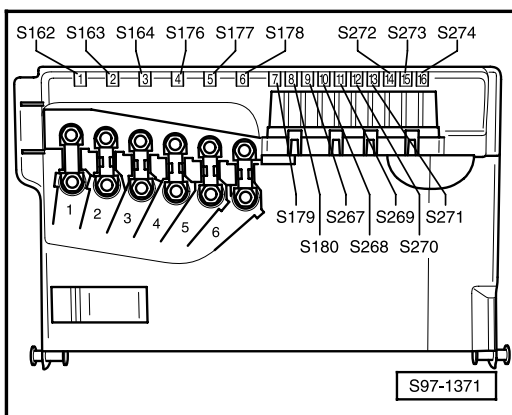
Fuse holder:



Fuse colours

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

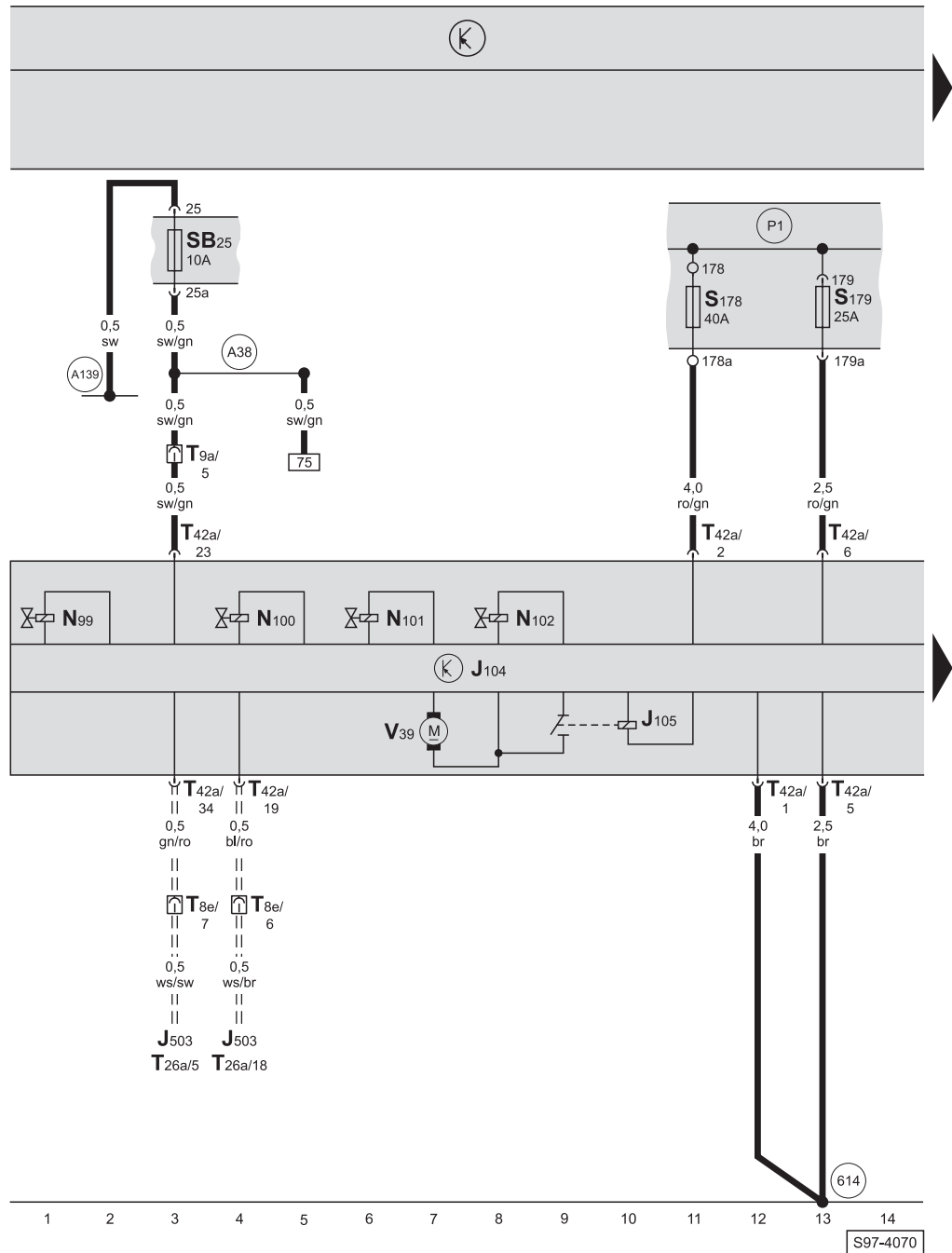
Fuse holder on battery:



Fuse colours

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

ABS with EDL and TCS/ESP control unit, fuse holder on battery, fuse holder



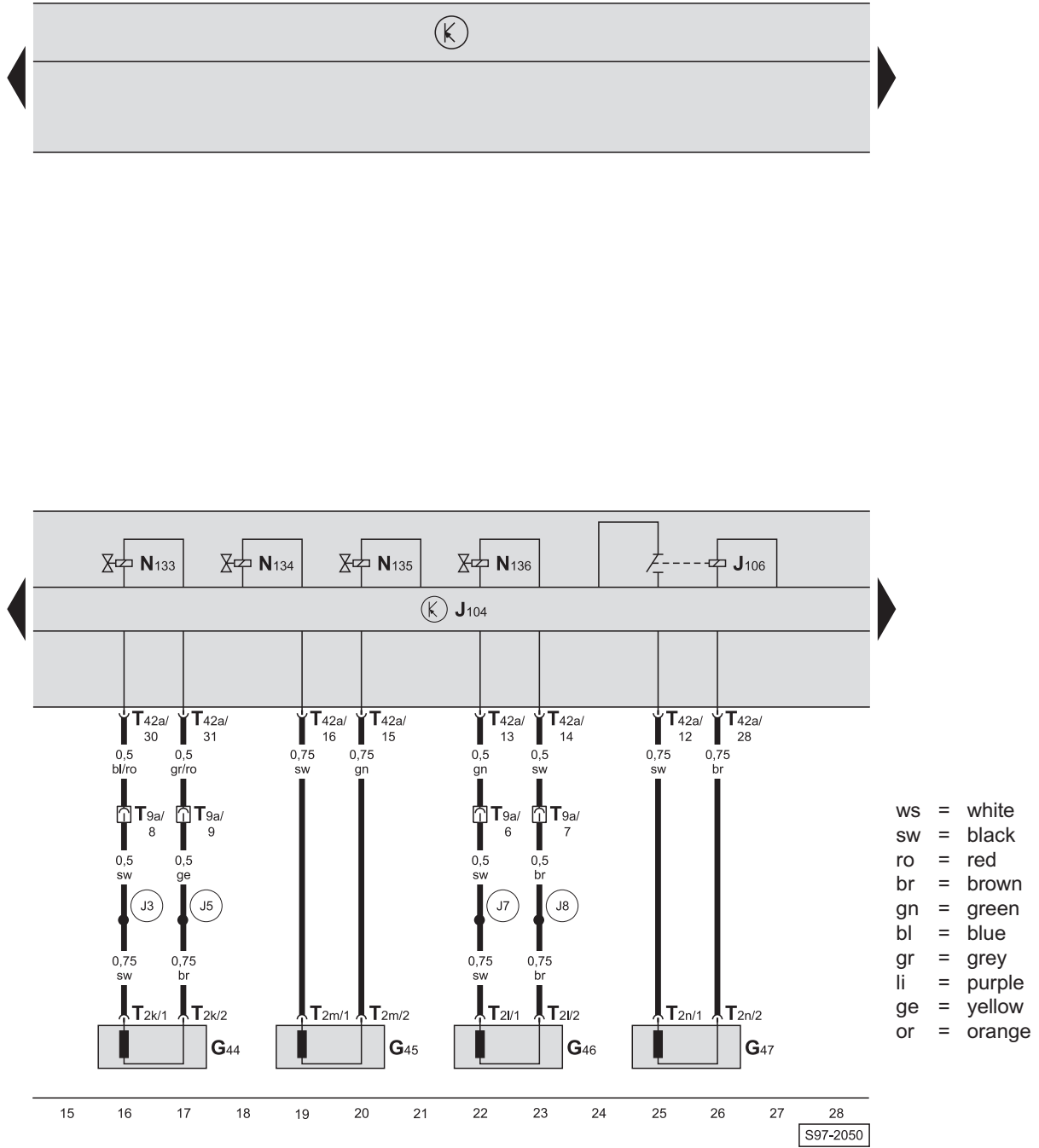
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

T42a/34	T42a/19
0,5 gn/ro	0,5 bl/ro
T8e/7	T8e/6
0,5 ws/sw	0,5 ws/br
J503	J503
T26a/5	T26a/18

- J104 - ABS with EDL and TCS/ ESP control unit
- J105 - Return delivery pump relay - ABS
- J503 - Navigation system control unit
- N99 - ABS inlet valve, front right
- N100 - ABS outlet valve, front right
- N101 - ABS inlet valve, front left
- N102 - ABS outlet valve, front left
- S178 - Fuse -6- (30), in fuse holder on battery
- S179 - Fuse -7- (30), in fuse holder on battery
- T8e - Plug connection, 8-pin, at left of bulkhead (orange)
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T26a - 26-pin connector, at navigation system control unit
- T42a - Connector, 42-pin, at ABS with EDL and TCS/ ESP control unit
- V39 - ABS return delivery pump

- 614 - Earth point -2-, in rear right of engine compartment
- A38 - Positive connection -2- (15a), in wiring loom behind dash panel
- A139 - Positive connection (15), in wiring loom behind dash panel
- P1 - Positive connection (30), in fuse holder on battery
- === - applies only to models with navigation system

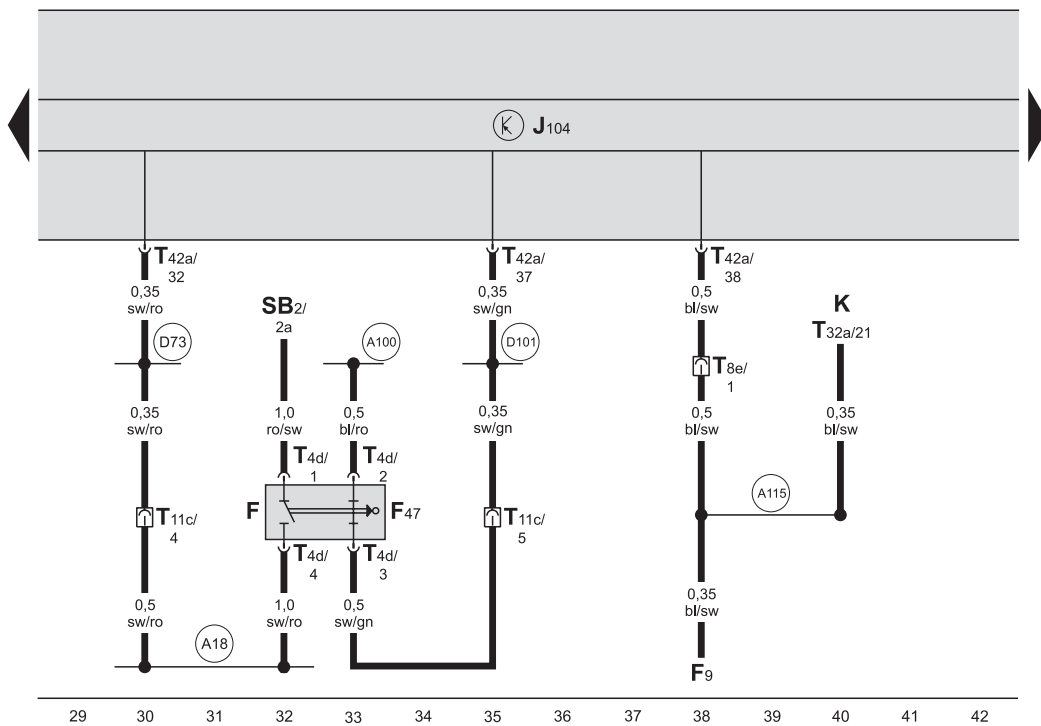
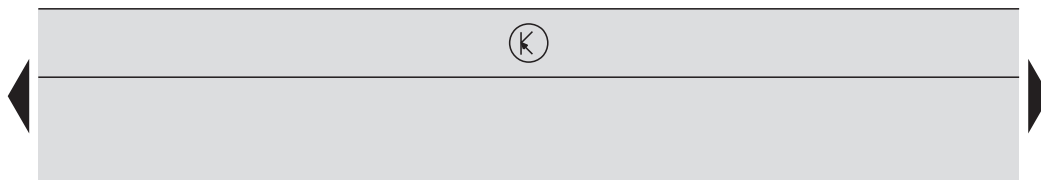
ABS with EDL and TCS/ ESP control unit, wheel speed sensors



- G44 - Wheel speed sensor, rear right
- G45 - Wheel speed sensor, front right
- G46 - Wheel speed sensor, rear left
- G47 - Wheel speed sensor, front left
- J104 - ABS with EDL and TCS/ ESP control unit
- J106 - ABS solenoid valves relay
- N133 - ABS inlet valve, rear right
- N134 - ABS inlet valve, rear left
- N135 - ABS outlet valve, rear right
- N136 - ABS outlet valve, rear left
- T2k - 2-pin connector, at rear right wheel speed sensor
- T2l - 2-pin connector, at rear left wheel speed sensor
- T2m - 2-pin connector, at front right wheel speed sensor
- T2n - 2-pin connector, at front left wheel speed sensor
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T42a - Connector, 42-pin, at ABS with EDL and TCS/ ESP control unit

- J3 - Connection, in rear right wiring loom
- J5 - Connection, in rear right wiring loom
- J7 - Connection, in rear left wiring loom
- J8 - Connection, in rear left wiring loom

ABS with EDL and TCS/ ESP control unit, brake pedal switch



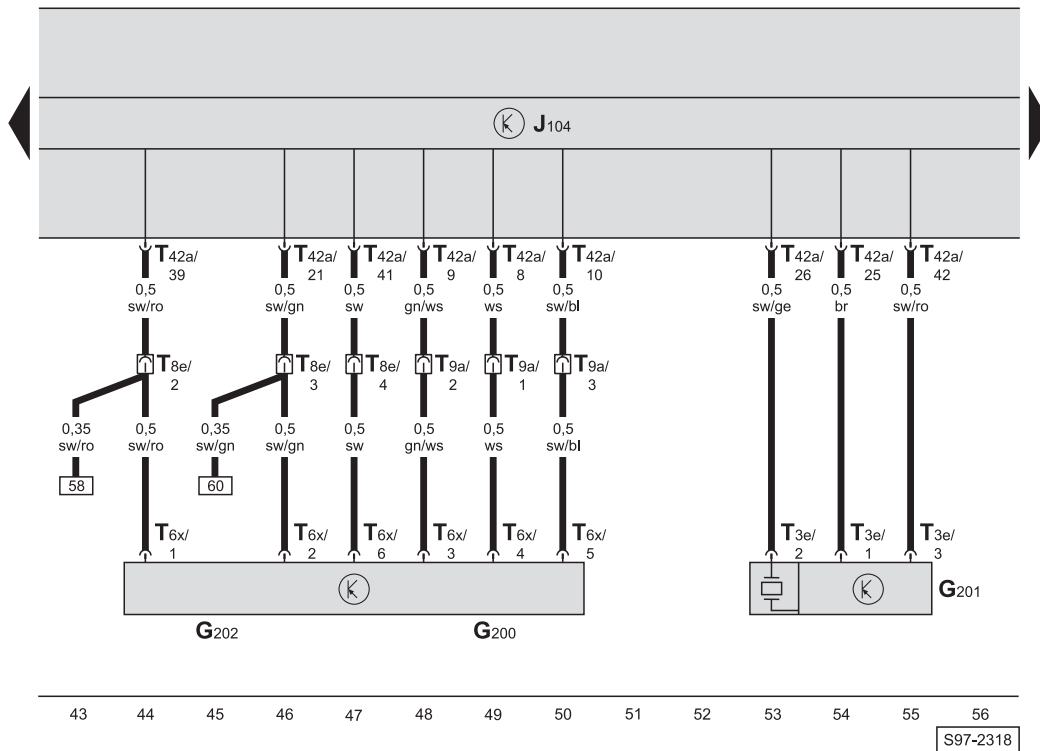
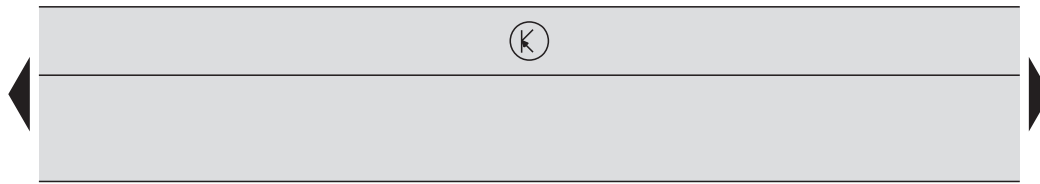
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- F - Brake light switch
- F9 - Handbrake warning switch
- F47 - Brake pedal switch
- J104 - ABS with EDL and TCS/ ESP control unit
- K - Dash panel insert
- SB2 - Fuse, in fuse holder
- T4d - 4-pin connector, at brake pedal switch
- T8e - Plug connection, 8-pin, at left of bulkhead (orange)
- T11c - 11-pin connector, at left of bulkhead (blue)
- T32a - 32-pin connector, at dash panel insert
- T42a - Connector, 42-pin, at ABS with EDL and TCS/ ESP control unit

- (A18) - Connection (54), in wiring loom behind dash panel
- (A100) - Connection (87a), in wiring loom behind dash panel
- (A115) - Connection (handbrake indicator), in wiring loom behind dash panel
- (D73) - Connection (54), in left of engine compartment wiring loom
- (D101) - Connection (brake pedal switch), in engine compartment wiring loom

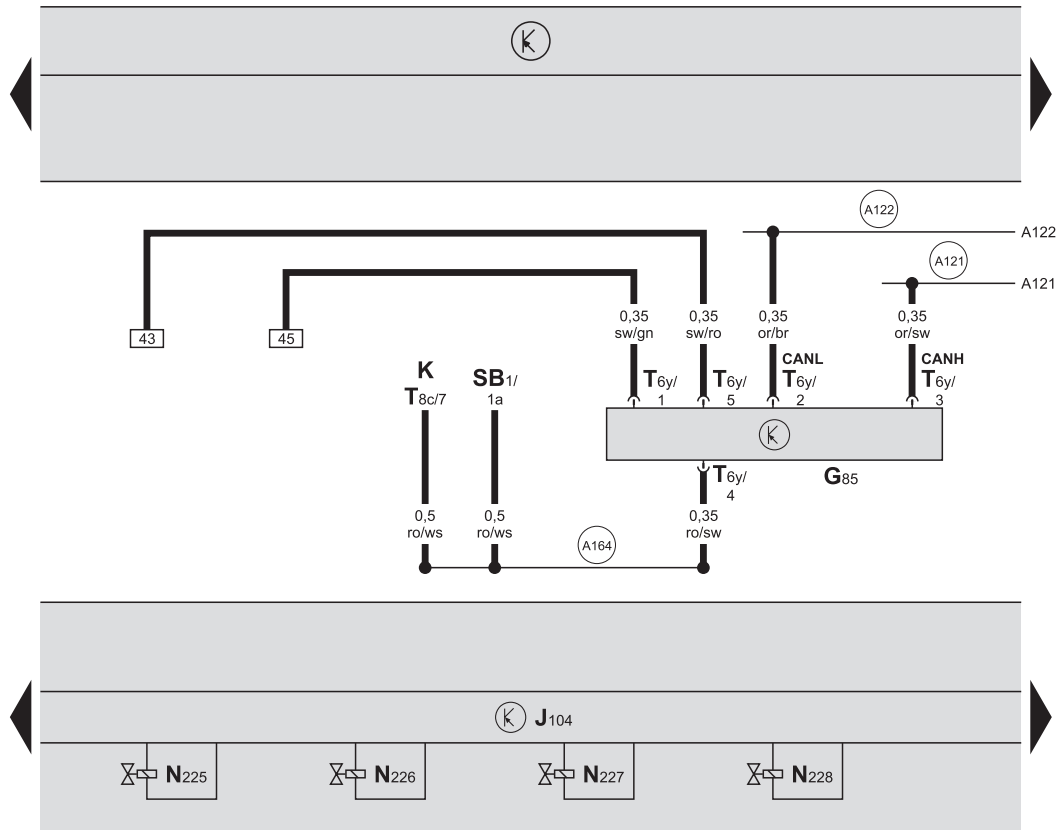
S97-3445

ABS with EDL and TCS/ESP control unit, brake pressure sender -1-, lateral acceleration sender, yaw rate sender



- G200 - Lateral acceleration sender, below driver seat
- G201 - Brake pressure sender -1-, at hydraulic unit
- G202 - Yaw rate sender, below driver seat
- J104 - ABS with EDL and TCS/ ESP control unit
- T3e - Connector, 3-pin, at brake pressure sender -1-, at hydraulic unit
- T6x - Connector, 6-pin, at lateral acceleration and yaw rate sender
- T8e - Plug connection, 8-pin, at left of bulkhead (orange)
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T42a - Connector, 42-pin, at ABS with EDL and TCS/ ESP control unit

ABS with EDL and TCS/ESP control unit, steering angle sender



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

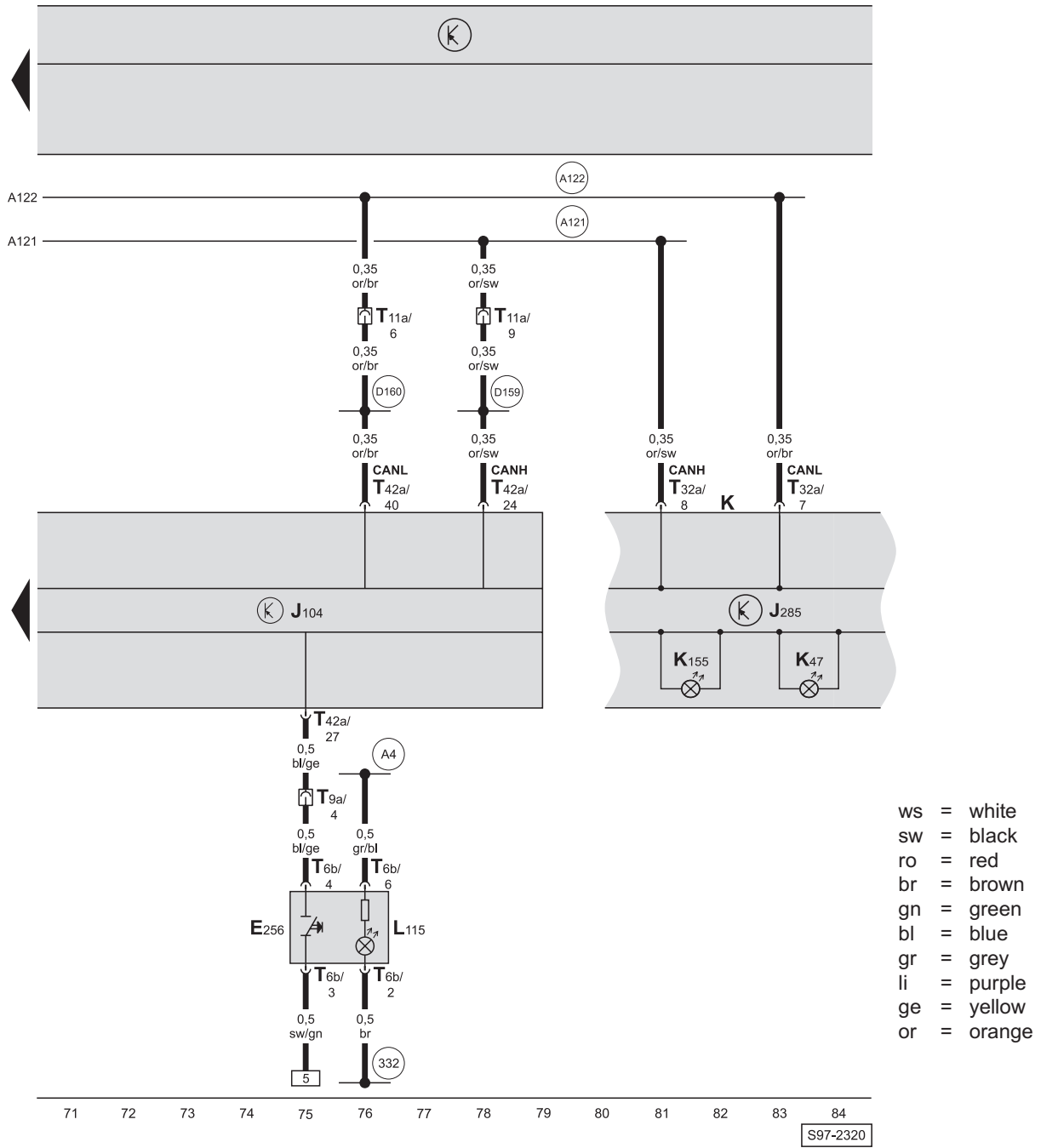
57 58 59 60 61 62 63 64 65 66 67 68 69 70

S97-2319

- G85 - Steering angle sender
- J104 - ABS with EDL and TCS/ ESP control unit
- K - Dash panel insert
- N225 - Electronic stability programme, valve -1-
- N226 - Electronic stability programme, valve -2-
- N227 - Electronic stability programme high pressure valve -1-
- N228 - Electronic stability programme high pressure valve -2-
- SB1 - Fuse, in fuse holder
- T6y - Connector, 6-pin, at steering angle sender
- T8c - 8-pin connector, at dash panel insert

- (A121) - Connection (CAN-H), in wiring loom behind dash panel on
- (A122) - Connection (CAN-L), in wiring loom behind dash panel
- (A164) - Positive connection (30a), in wiring loom behind dash panel

ABS with EDL and TCS/ESP control unit, TCS/ESP switch, dash panel insert



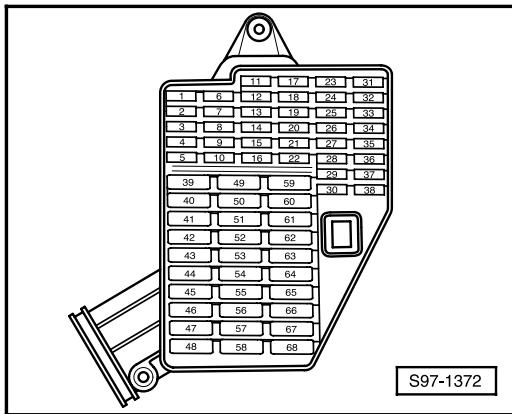
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- E256 - TCS/ ESP switch
- J104 - ABS with EDL and TCS/ ESP control unit
- J285 - Control unit in dash panel insert
- K - Dash panel insert
- K47 - ABS warning lamp
- K155 - Warning lamp for stability programme
- L115 - TCS/ ESP switch illumination
- T6b - Connector, 6-pin, at TCS/ESP switch
- T9a - Connector, 9-pin, at left of bulkhead (yellow)
- T11a - 11-pin connector, at left of bulkhead (white)
- T32a - 32-pin connector, at dash panel insert
- T42a - Connector, 42-pin, at ABS with EDL and TCS/ ESP control unit

- 332 - Earth connection, in wiring harness behind dash panel
- A4 - Positive connection (58b), in wiring loom behind dash panel
- A121 - Connection (CAN-H), in wiring loom behind dash panel on
- A122 - Connection (CAN-L), in wiring loom behind dash panel
- D159 - Connection (CAN-H), in engine compartment wiring loom
- D160 - Connection (CAN-L), in engine compartment wiring loom

Air conditioning, from August 2003

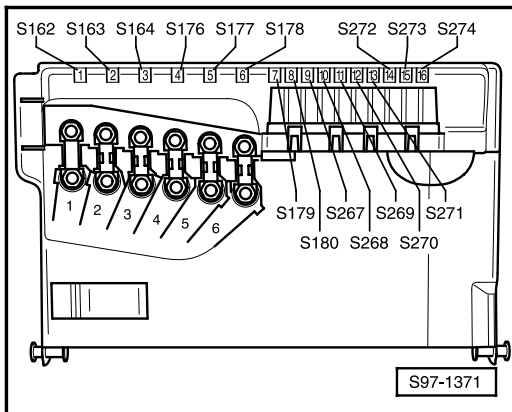
Fuse holder:



Fuse colours

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

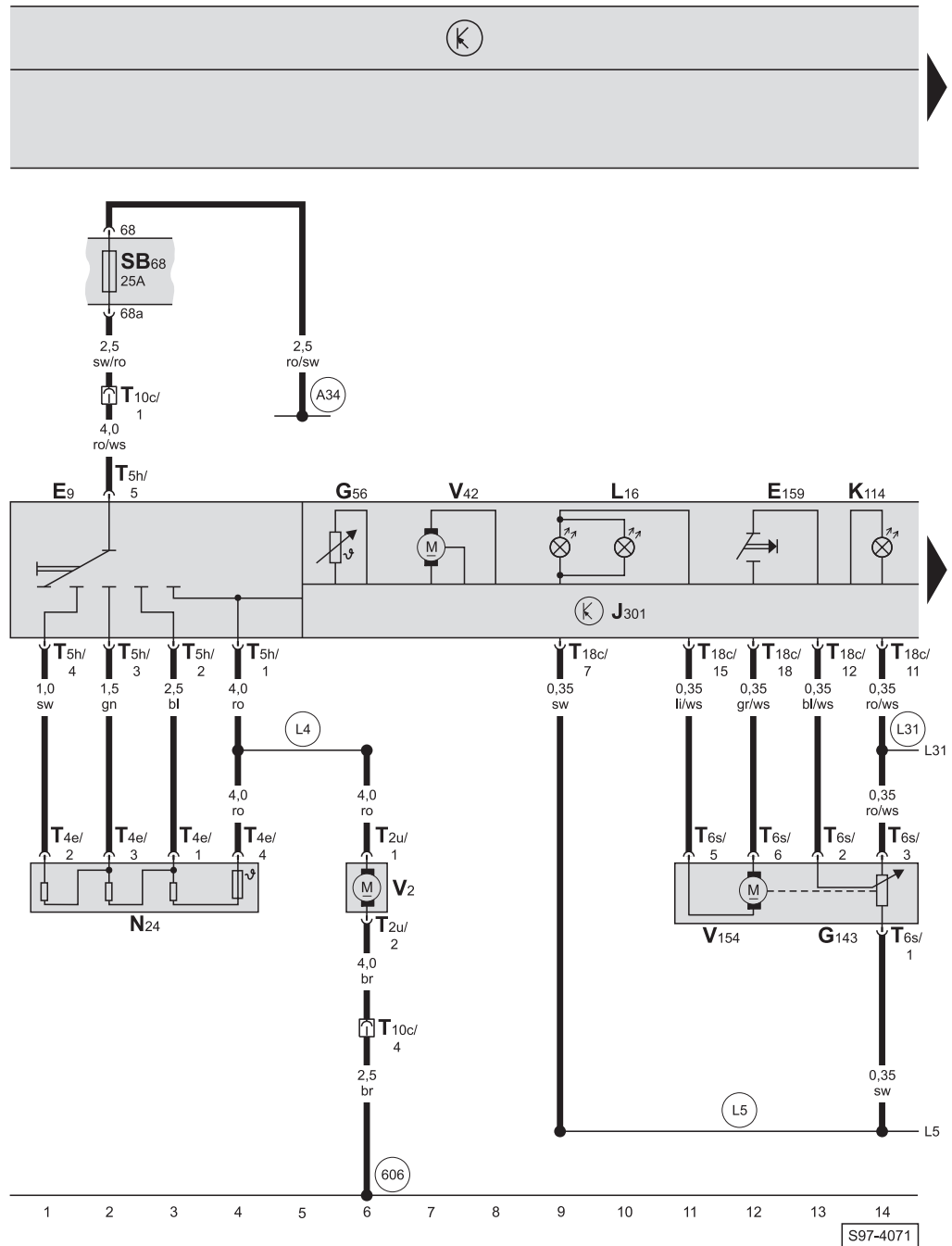
Fuse holder on battery:



Fuse colours

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

Air conditioning control unit, fresh air blower, fresh and recirculated air flap positioning motor, fuse holder



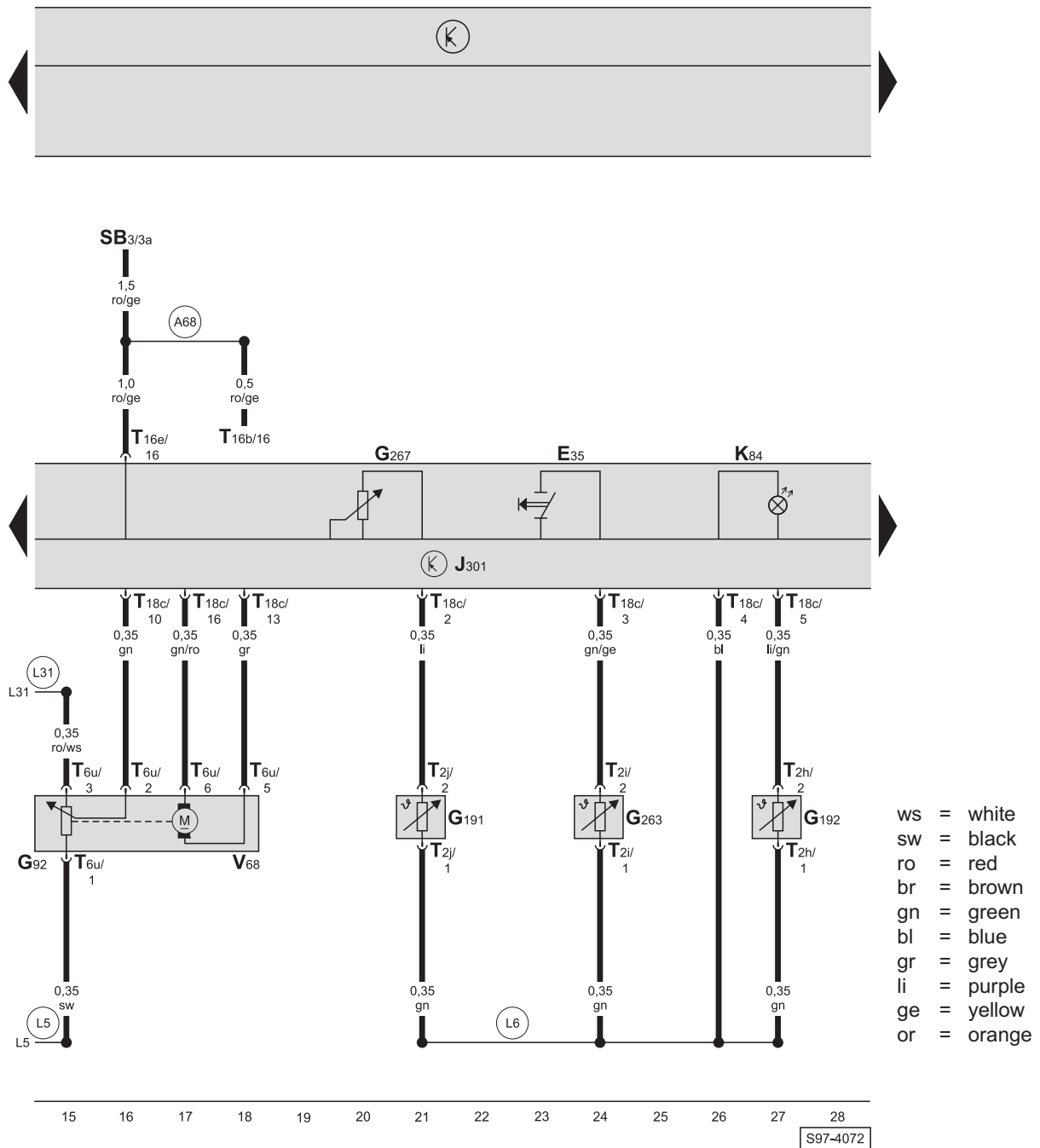
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- E9 - Fresh air blower switch
- E159 - Fresh and recirculated air flap switch
- G56 - Dash panel temperature sensor
- G143 - Fresh and recirculated air flap positioning motor potentiometer
- J301 - AC control unit
- K114 - Fresh air and air recirculation operation warning lamp
- L16 - Air conditioning control lighting
- N24 - Series resistor with overheating fuse
- T2u - 2-pin connector, at fresh air blower
- T4e - 4-pin connector, at fresh air blower series resistor
- T5h - 5-pin connector, at fresh air blower switch
- T6s - 6-pin connector, at fresh/recirculated air flap positioning motor
- T10c - 10-pin connector, behind dash panel on right
- T18c - 18-pin connector, at air conditioning control unit
- V2 - Fresh air blower
- V42 - Temperature sensor blower - dash panel
- V154 - Fresh and recirculated air flap motor

- (606) - Earth point, under the centre console, near gear stick
- (A34) - Positive connection (75x), in wiring loom behind dash panel
- (L4) - Connection (75a), in air conditioning wiring loom
- (L5) - Connection (sender earth), in air conditioning wiring loom
- (L31) - Connection (5V), in air conditioning wiring loom

S97-4071

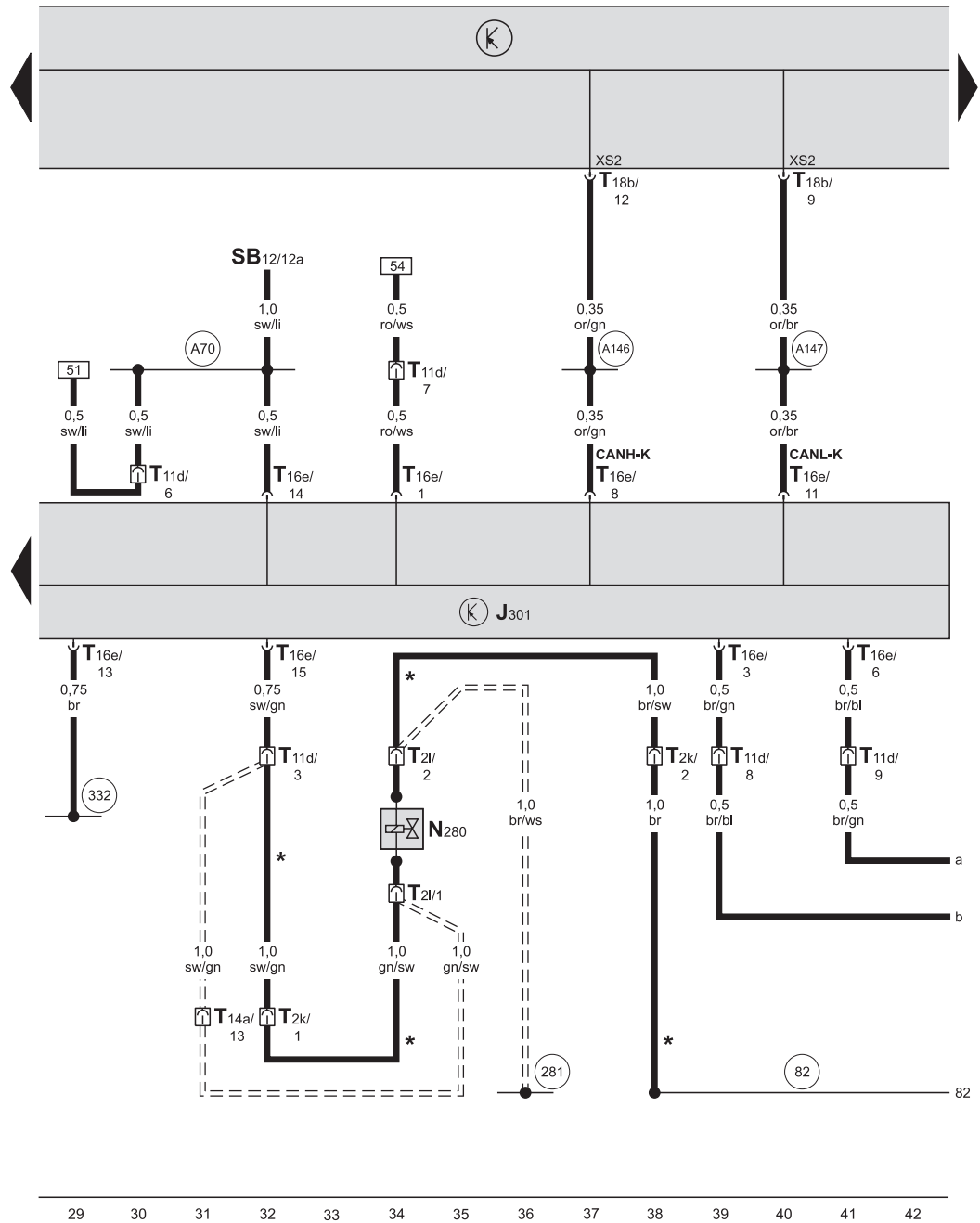
Air conditioning control unit, temperature flap positioning motor, temperature sender



- E35 - Air conditioner switch
- G92 - Temperature flap positioning motor potentiometer
- G191 - Centre outlet air temperature sender
- G192 - Footwell vent temperature sender
- G263 - Evaporator outlet air temperature sender
- G267 - Temperature selector rotary knob potentiometer
- J301 - AC control unit
- K84 - Air conditioning warning light
- SB3 - Fuse, in fuse holder
- T2h - 2-pin connector at footwell vent temperatur sender
- T2i - 2-pin connector at evaporator out-flow temperature sender
- T2j - 2-pin connector at centre footwell vent temperatur sender
- T6u - 6-pin connector, at temperature flap positioning motor
- T16b - 16-pin connector, in glove box on driver's side (diagnosis connection)
- T16e - 16-pin connector, at AC control unit
- T18c - 18-pin connector, at air conditioning control unit
- V68 - Temperature flap positioning motor

- (A68) - Positive connection (30a, AC), in wiring loom behind dash panel
- (L5) - Connection (sender earth), in air conditioning wiring loom
- (L6) - Connection (sender earth), in air conditioning wiring loom
- (L31) - Connection (5V), in air conditioning wiring loom

Air conditioning control unit, AC compressor control valve



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

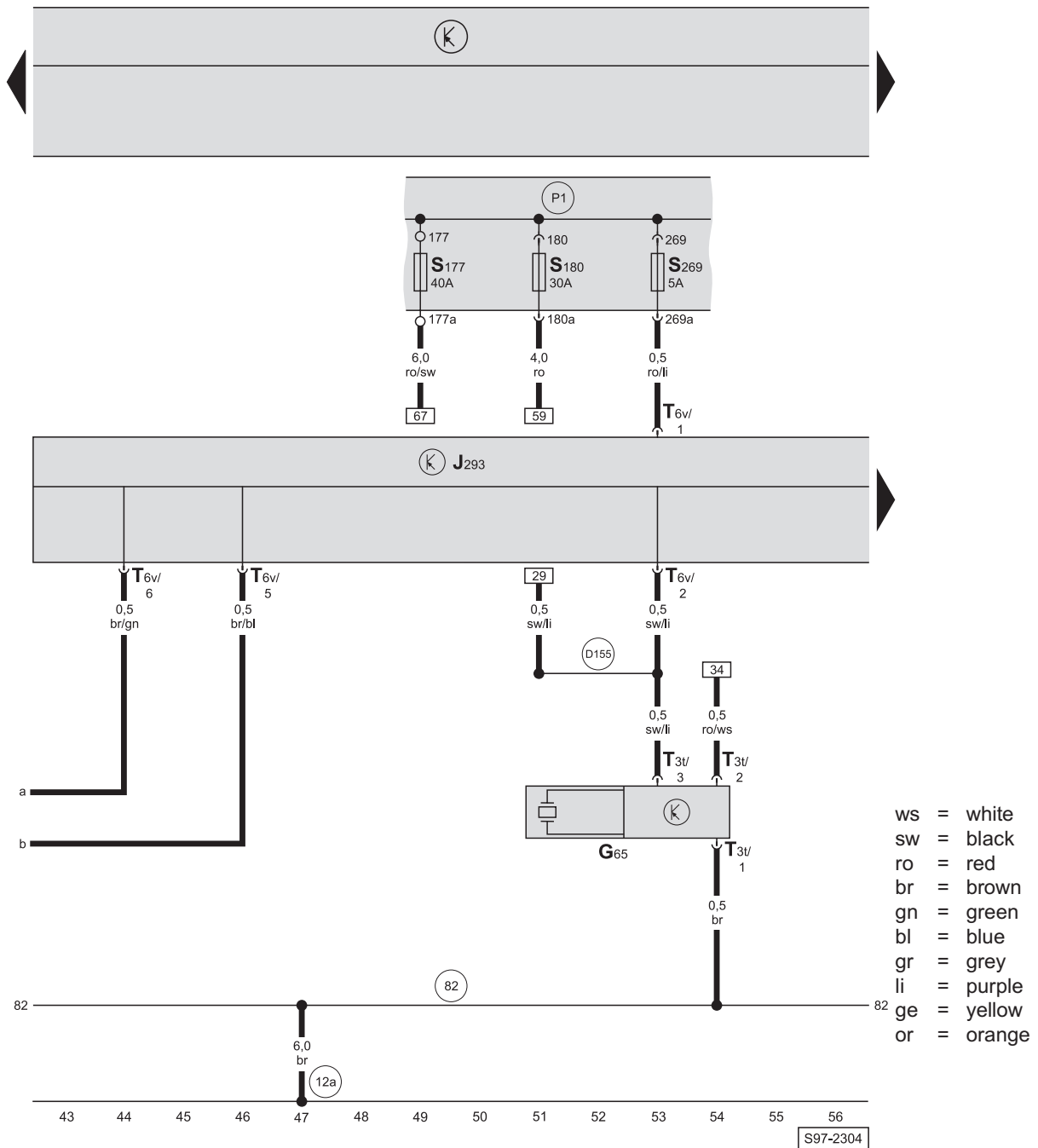
- J301 - AC control unit
- N280 - AC compressor control valve
- SB12 - Fuse, in fuse holder
- T2k - 2-pin connector, in bracket at gearbox
- T2l - 2-pin connector, at compressor
- T11d - 11-pin connector, at left of bulkhead (brown)
- T14a - Connector, 14-pin, in left of engine compartment (connection of the engine pre-assembly wiring loom/ engine compartment wiring loom)
- T16e - 16-pin connector, at AC control unit
- T18b - 18-pin connector, at electrical system control unit (black)

- 82 - Earth connection, in front left wiring harness
- 281 - Earth connection -1-, in engine pre-assembly wiring loom
- 332 - Earth connection, in wiring harness behind dash panel
- A70 - Positive connection (15a), in wiring loom behind dash panel
- A146 - Connection (CAN-H, convenience), in wiring loom behind dash panel
- A147 - Connection (CAN-L, convenience), in wiring loom behind dash panel

- * - does not apply to engine code AWY
- === - applies only to engine codes AWY

S97-3476

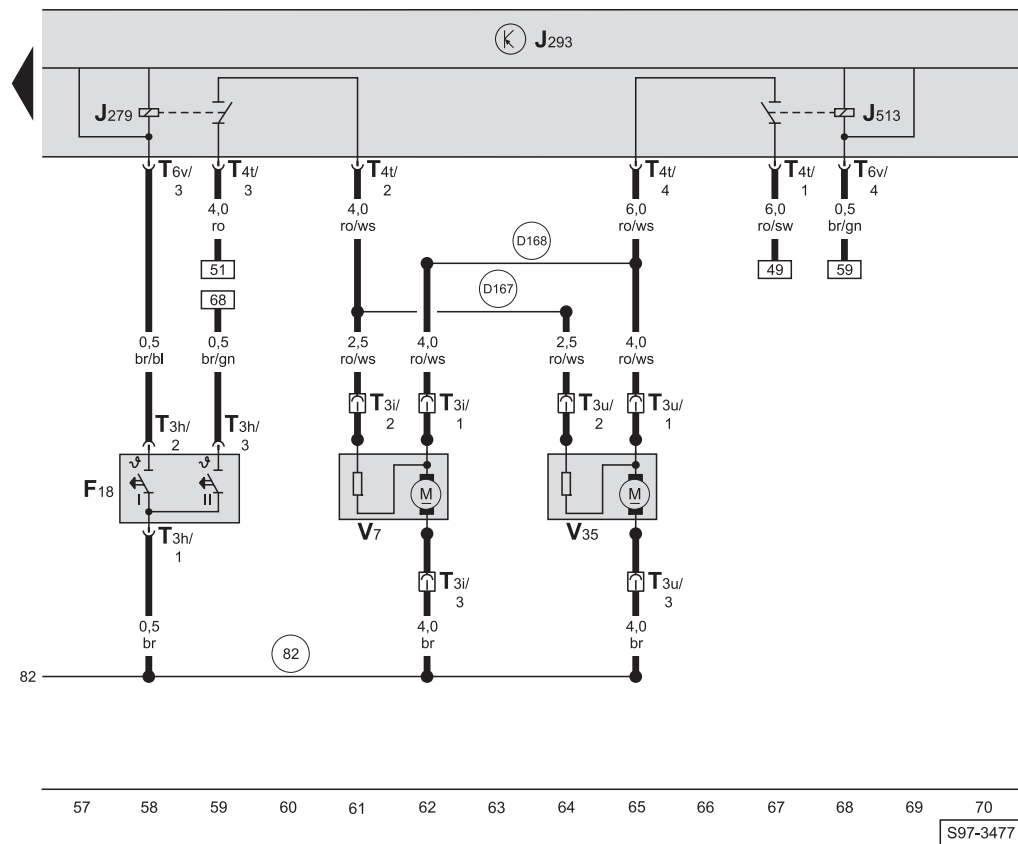
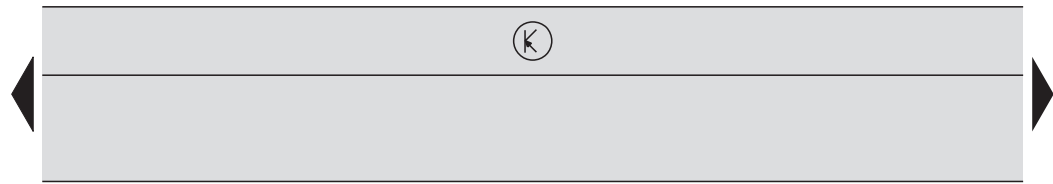
Radiator fan control unit, fuse holder on battery, high-pressure sensor



- G65 - High-pressure sensor
- J293 - Radiator fan control unit
- S177 - Fuse -5- (30), in fuse holder on battery
- S180 - Fuse -8- (30), in fuse holder on battery
- S269 - Fuse -11- (30), in fuse holder on battery
- T3t - 3-pin connector, at high-pressure sensor
- T6v - 6-pin connector, at radiator fan control unit

- (12a) - Earth point -2-, in engine compartment, on left below battery (at side member)
- (82) - Earth connection, in front left wiring harness
- (D155) - Connection (15, high-pressure sender), in engine compartment wiring loom
- (P1) - Positive connection (30), in fuse holder on battery

Radiator fan control unit, Radiator fan thermal switch, Radiator fan (not valid for engine code letters AMF)

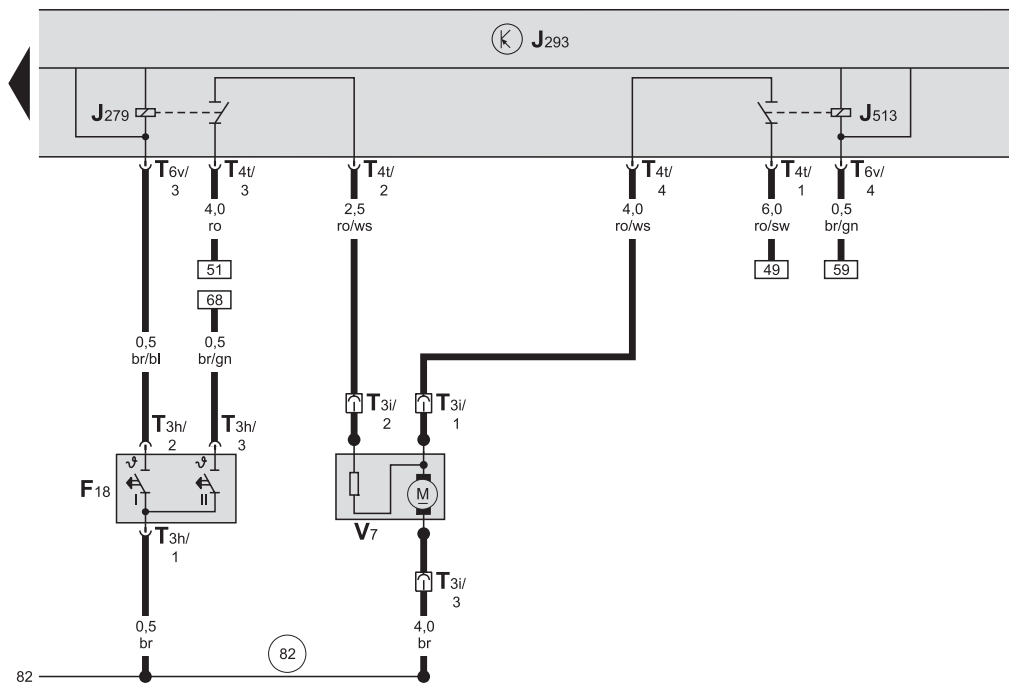
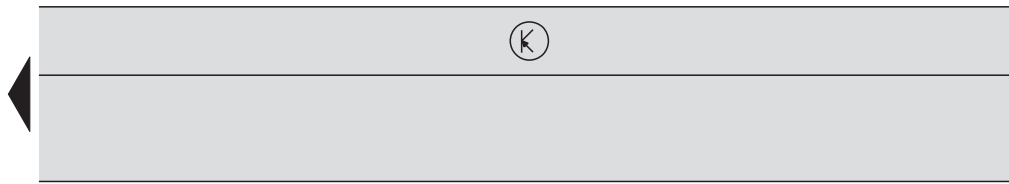


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

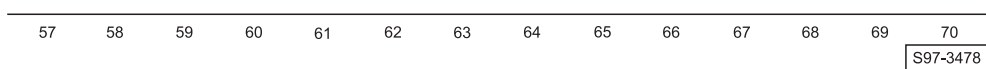
- F18 - Radiator fan thermoswitch
- J279 - Radiator fan relay, stage 1
- J293 - Radiator fan control unit
- J513 - Radiator fan relay, stage 2
- T3h - 3-pin connector, at radiator fan thermoswitch
- T3i - 3-pin connector, in bracket on left of radiator
- T3u - 3-pin connector, in bracket on left of radiator
- T4t - 4-pin connector, at radiator fan control unit
- T6v - 6-pin connector, at radiator fan control unit
- V7 - Radiator fan
- V35 - Radiator fan, right

- 82 - Earth connection, in front left wiring harness
- D167 - Connection (fan stage 1), in engine compartment wiring loom
- D168 - Connection (fan stage 2), in engine compartment wiring loom

Radiator fan control unit, Radiator fan thermal switch, Radiator fan (only for engine code letters AMF)



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

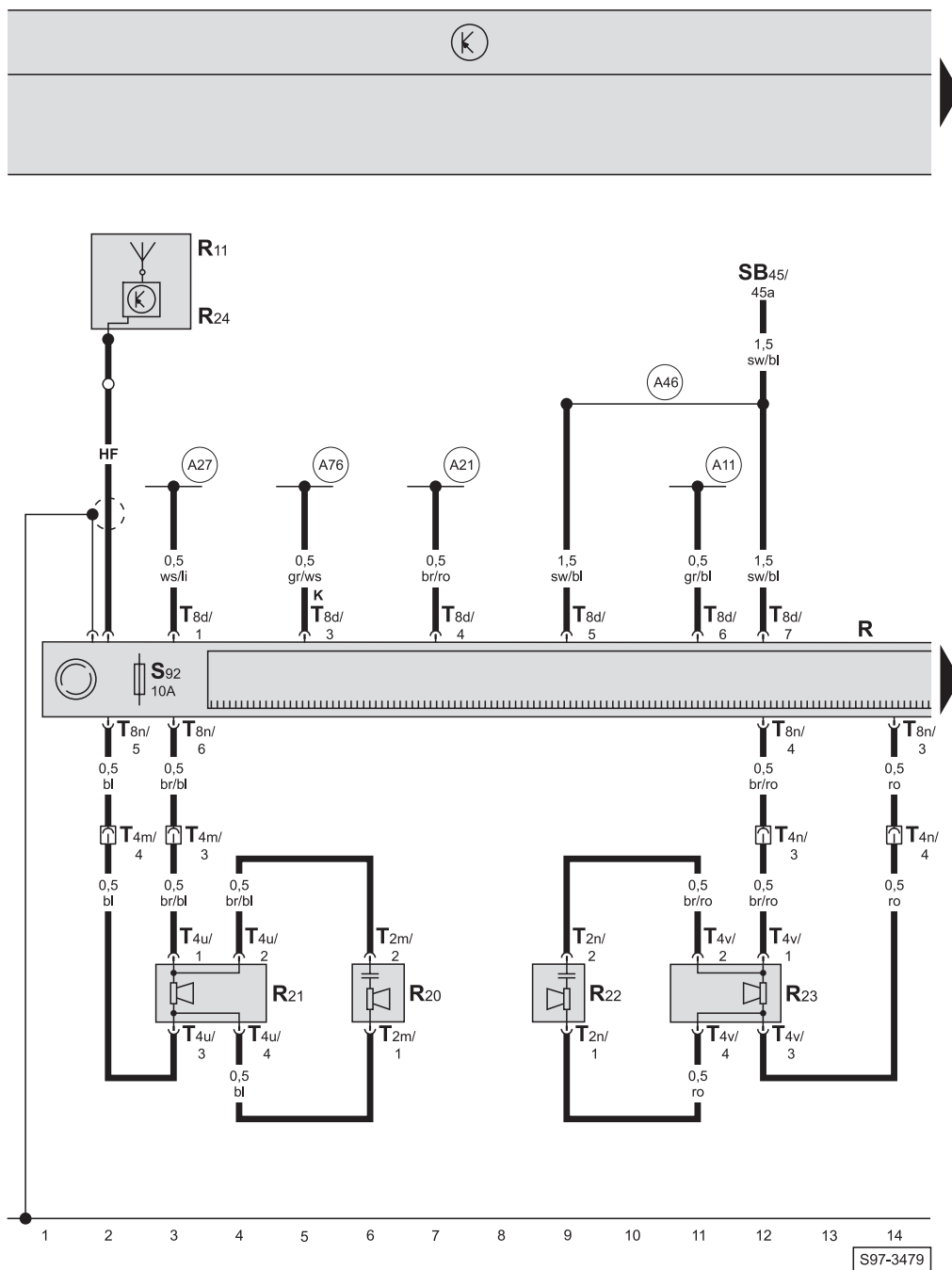


- F18 - Radiator fan thermoswitch
- J279 - Radiator fan relay, stage 1
- J293 - Radiator fan control unit
- J513 - Radiator fan relay, stage 2
- T3h - 3-pin connector, at radiator fan thermoswitch
- T3i - 3-pin connector, in bracket on left of radiator
- T4t - 4-pin connector, at radiator fan control unit
- T6v - 6-pin connector, at radiator fan control unit
- V7 - Radiator fan

82 - Earth connection, in front left wiring harness

Radio system, from August 2003

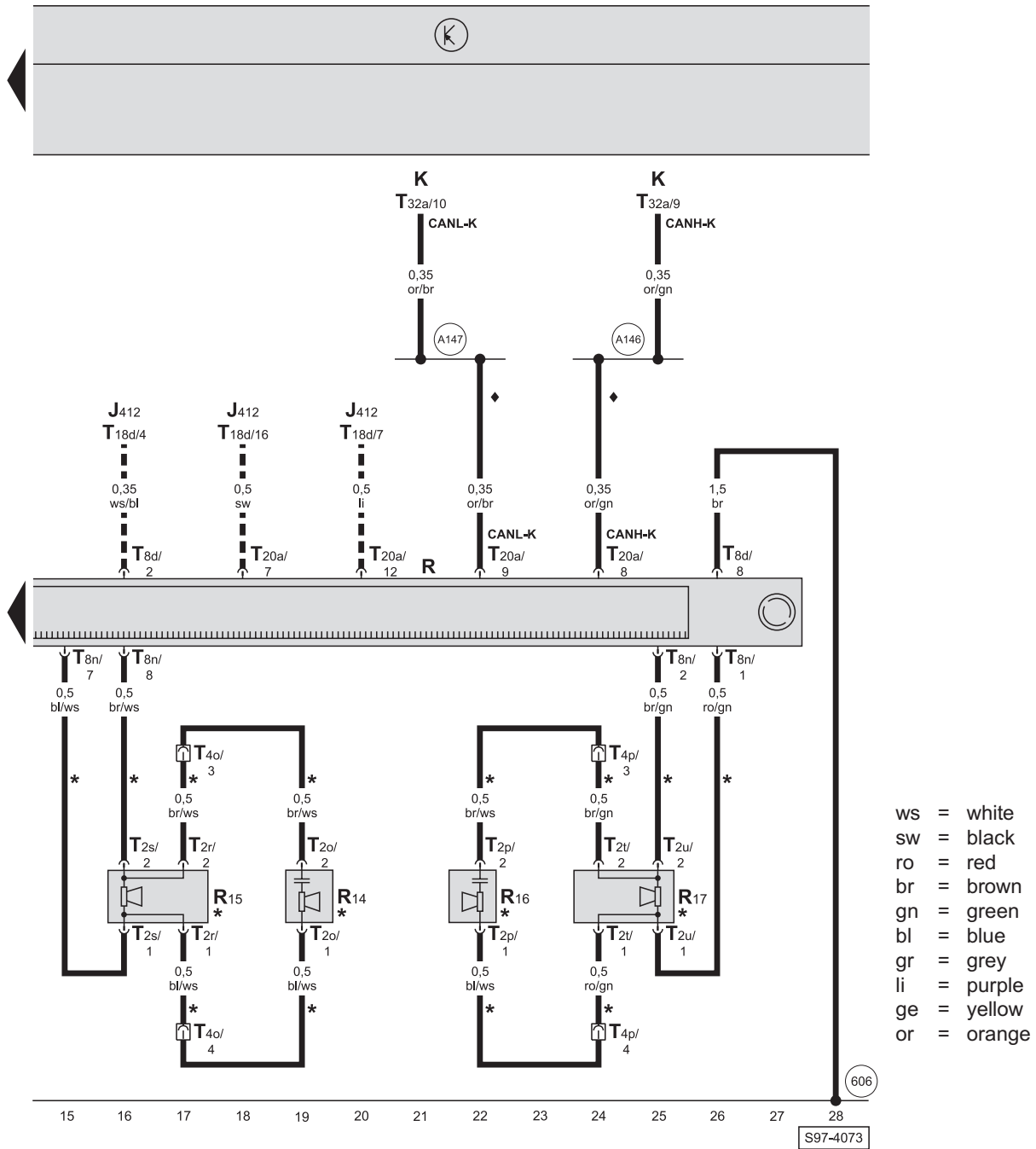
Radio, front speakers, aerial



- R - Radio
- R11 - Aerial
- R20 - Treble loudspeaker, front left
- R21 - Bass loudspeaker, front left
- R22 - Treble loudspeaker, front right
- R23 - Bass loudspeaker, front right
- R24 - Aerial amplifier
- S92 - Radio fuse
- SB45 - Fuse, in fuse holder
- T2m - 2-pin connector, at front left treble loudspeaker
- T2n - 2-pin connector, at front right treble loudspeaker
- T4m - 4-pin connector, at left A pillar (black)
- T4n - 4-pin connector, at right A pillar (black)
- T4u - 4-pin connector, at left front woofer
- T4v - 4-pin connector, at right front woofer
- T8d - 8-pin connector, at radio (black)
- T8n - 8-pin connector, at radio (brown)

- (A11) - Positive connection (58b), in wiring loom behind dash panel
- (A21) - Positive connection (86s), in wiring loom behind dash panel
- (A27) - Connection (vehicle speed signal), in wiring loom behind dash panel
- (A46) - Positive connection (30 - from radio), in wiring loom behind dash panel
- (A76) - Connection (K diagnosis wire), in wiring loom behind dash panel on left

Radio, rear speakers



- J412 - Control unit for telephone operating electronics (interface box)
- K - Dash panel insert
- R - Radio
- R14 - Treble loudspeaker, rear left
- R15 - Bass loudspeaker, rear left
- R16 - Treble loudspeaker, rear right
- R17 - Bass loudspeaker, rear right
- T2o - 2-pin connector, at rear left treble loudspeaker
- T2p - 2-pin connector, at rear right treble loudspeaker
- T2r - 2-pin connector, at rear left bass loudspeaker
- T2s - 2-pin connector, at rear left bass loudspeaker
- T2t - 2-pin connector, at rear right bass loudspeaker
- T2u - 2-pin connector, at rear right bass loudspeaker
- T4o - 4-pin connector, at left B pillar (black)
- T4p - 4-pin connector, at right B pillar (black)
- T8d - 8-pin connector, at radio (black)
- T8n - 8-pin connector, at radio (brown)
- T18d - 18-pin connector, at control unit for telephone operating electronics (interface box)
- T20a - 20-pin connector, at radio

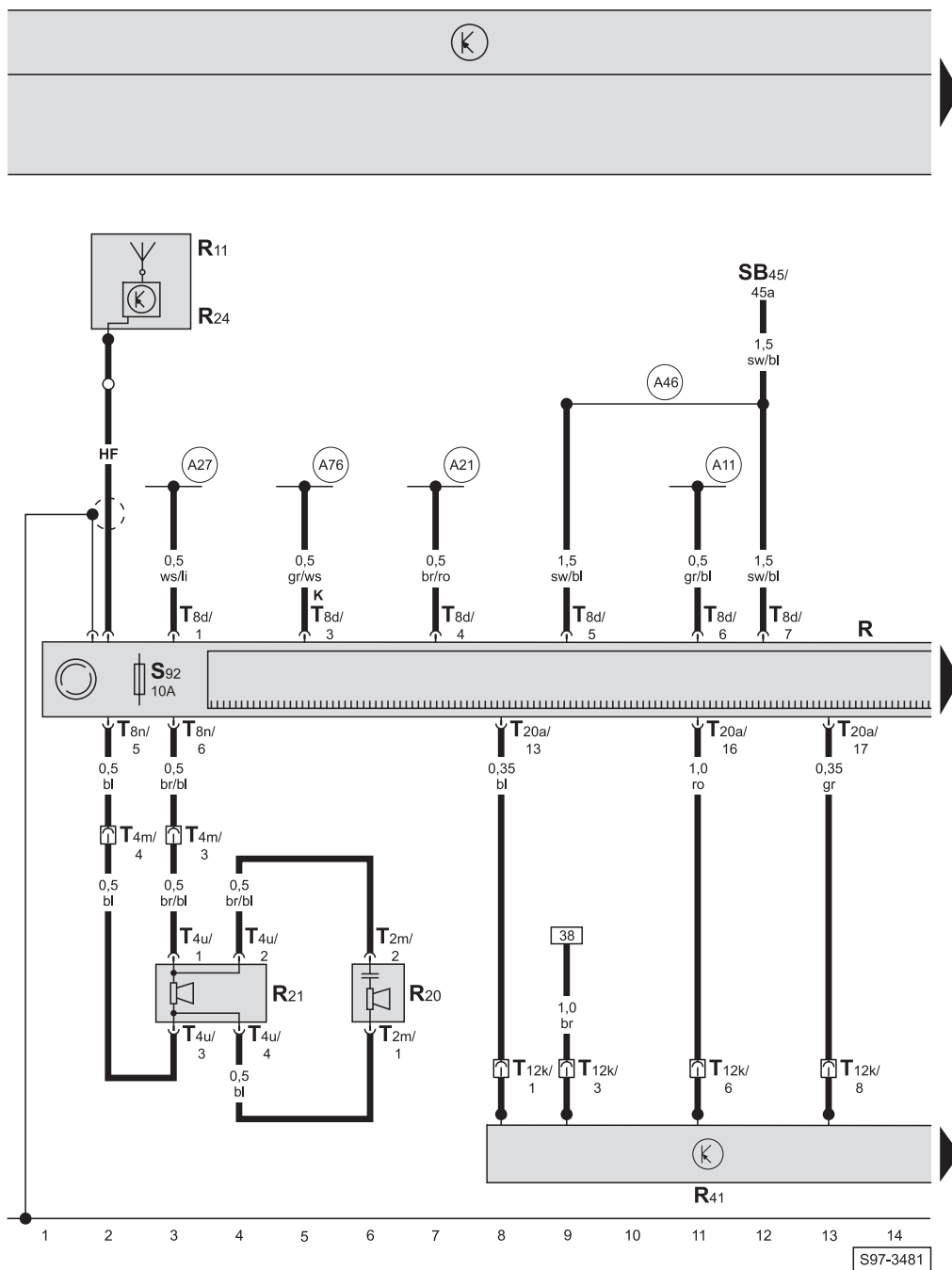
T32a - 32-pin connector, at dash panel insert

- 606 - Earth point, under the centre console, near gear stick
- A146 - Connection (CAN-H, convenience), in wiring loom behind dash panel
- A147 - Connection (CAN-L, convenience), in wiring loom behind dash panel

- * - Applies only to models with 8 speakers
- ◆ - Applies only to Symphony radio with CD and large information display in dash panel insert
- - applies only to models with mobile phone preinstallation 2-Cullmann

Radio system with CD changer, from August 2003

Radio, front speakers, CD changer, aerial



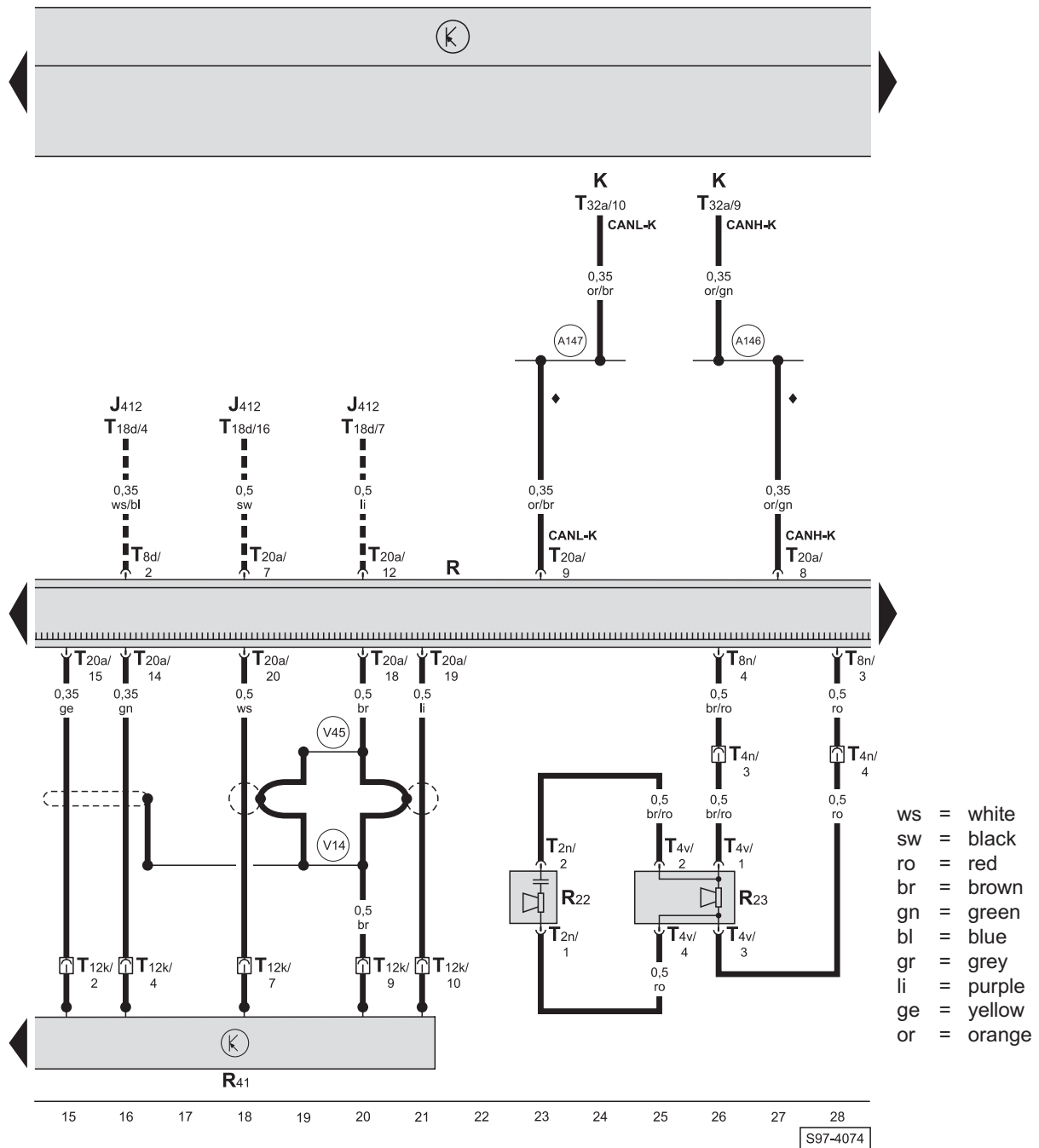
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- R - Radio
- R11 - Aerial
- R20 - Treble loudspeaker, front left
- R21 - Bass loudspeaker, front left
- R24 - Aerial amplifier
- R41 - CD changer
- S92 - Radio fuse
- SB45 - Fuse, in fuse holder
- T2m - 2-pin connector, at front left treble loudspeaker
- T4m - 4-pin connector, at left A pillar (black)
- T4u - 4-pin connector, at left front woofer
- T8d - 8-pin connector, at radio (black)
- T8n - 8-pin connector, at radio (brown)
- T12k - 12-pin connector, at CD changer
- T20a - 20-pin connector, at radio

- (A11) - Positive connection (58b), in wiring loom behind dash panel
- (A21) - Positive connection (86s), in wiring loom behind dash panel
- (A27) - Connection (vehicle speed signal), in wiring loom behind dash panel
- (A46) - Positive connection (30 - from radio), in wiring loom behind dash panel
- (A76) - Connection (K diagnosis wire), in wiring loom behind dash panel on left

S97-3481

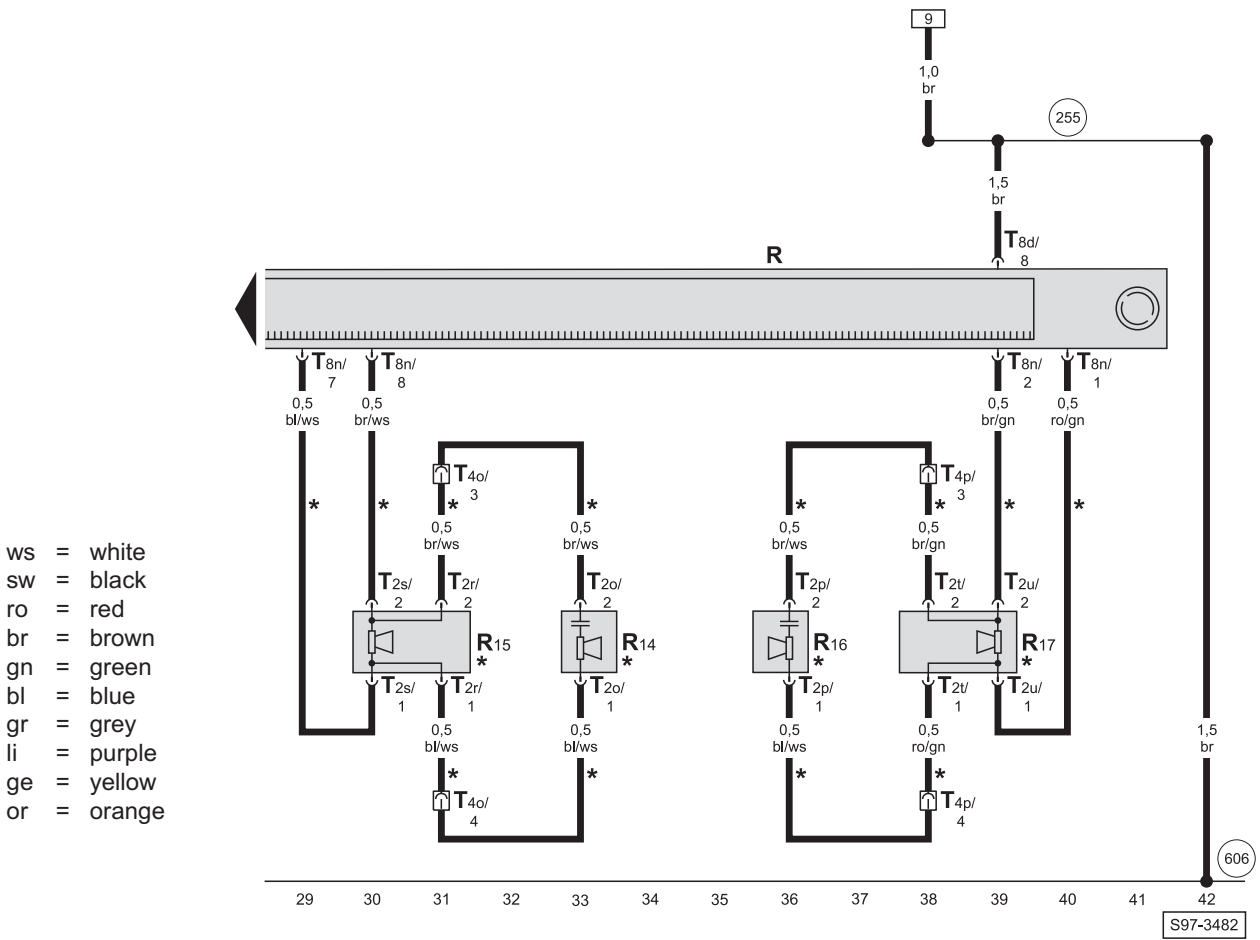
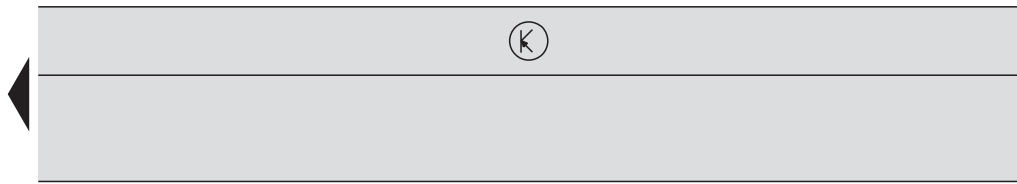
Radio, front speakers, CD changer



- J412 - Operating electronics/telephone control unit (Interface box)
- K - Dash panel insert
- R - Radio
- R22 - Treble loudspeaker, front right
- R23 - Bass loudspeaker, front right
- R41 - CD changer
- T2n - 2-pin connector, at front right treble loudspeaker
- T4n - 4-pin connector, at right A pillar (black)
- T4v - 4-pin connector, at right front woofer
- T8d - 8-pin connector, at radio (black)
- T8n - 8-pin connector, at radio (brown)
- T12k - 12-pin connector, at CD changer
- T18d - 18-pin connector, at control unit for telephone operating electronics (interface box)
- T20a - 20-pin connector, at radio
- T32a - 32-pin connector, at dash panel insert

- (A146) - Connection (CAN-H, convenience), in wiring loom behind dash panel
- (A147) - Connection (CAN-L, convenience), in wiring loom behind dash panel
- (V14) - Connection (screening), in CD changer wiring loom
- (V45) - Connection -2- (screening), in CD changer wiring harness
- ◆ - Applies only to Symphony radio with CD and large information display in dash panel insert
- ■ ■ - applies only to models with mobile phone preinstallation 2-Cullmann

Radio, rear speakers

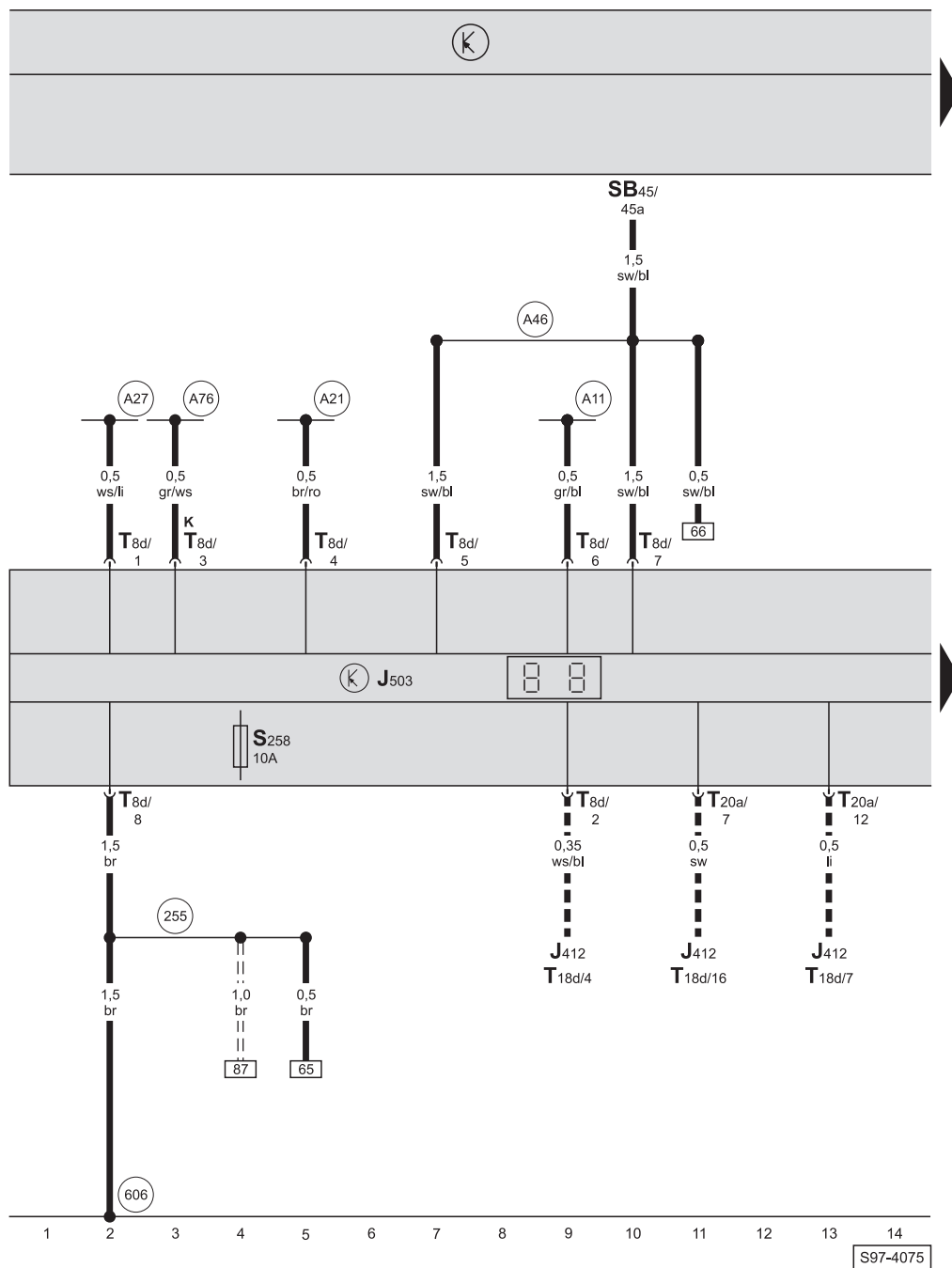


- R - Radio
- R14 - Treble loudspeaker, rear left
- R15 - Bass loudspeaker, rear left
- R16 - Treble loudspeaker, rear right
- R17 - Bass loudspeaker, rear right
- T2o - 2-pin connector, at rear left treble loudspeaker
- T2p - 2-pin connector, at rear right treble loudspeaker
- T2r - 2-pin connector, at rear left bass loudspeaker
- T2s - 2-pin connector, at rear left bass loudspeaker
- T2t - 2-pin connector, at rear right bass loudspeaker
- T2u - 2-pin connector, at rear right bass loudspeaker
- T4o - 4-pin connector, at left B pillar (black)
- T4p - 4-pin connector, at right B pillar (black)
- T8d - 8-pin connector, at radio (black)
- T8n - 8-pin connector, at radio (brown)

- 255 - Earth connection -1-, in wiring loom behind dash panel
- 606 - Earth point, under the centre console, near gear stick
- * - Applies only to models with 8 speakers

Navigation system with CD changer, from August 2003

Navigation system control unit



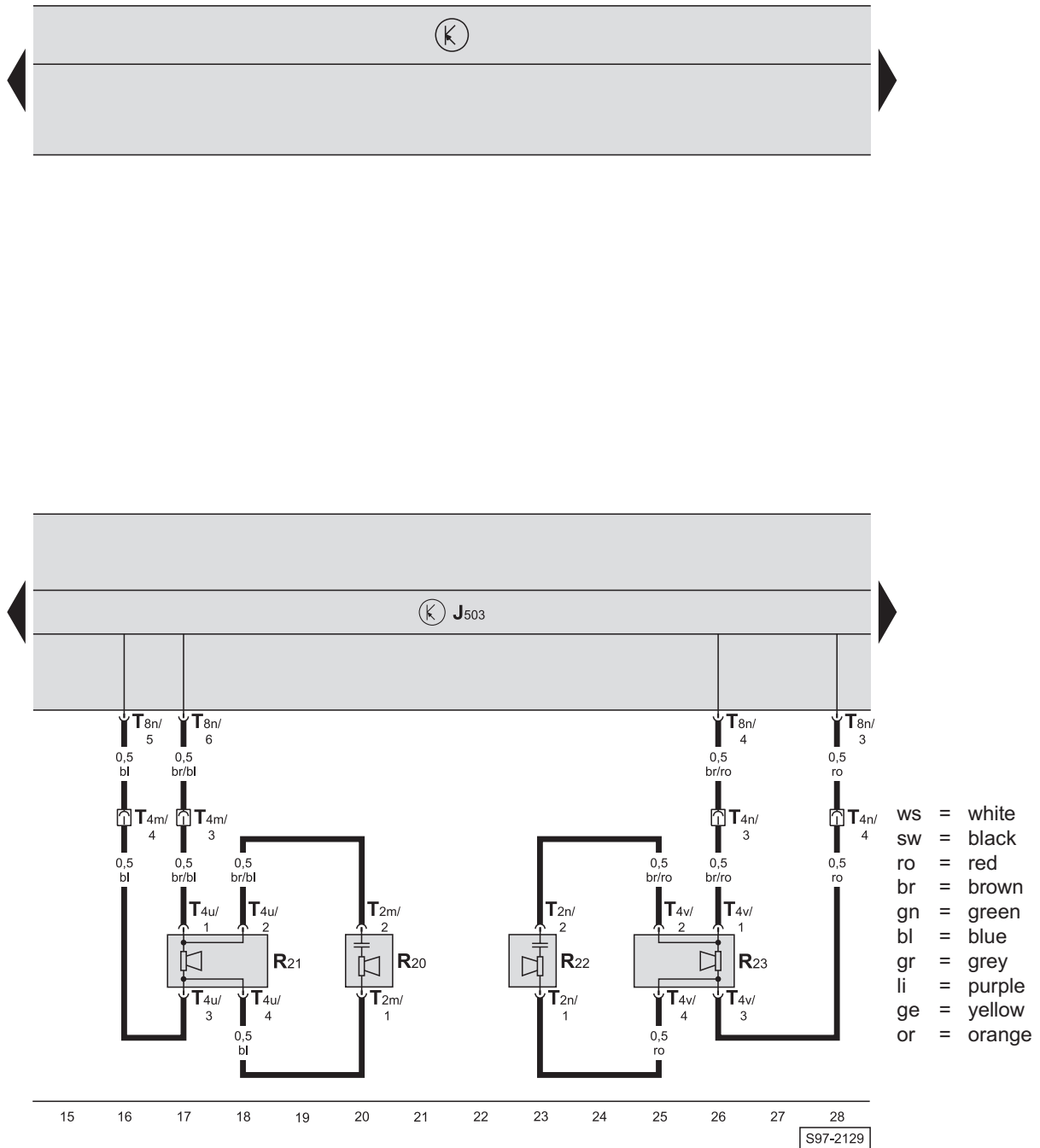
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- J412 - Control unit for telephone operating electronics (interface box)
- J503 - Navigation system control unit
- S258 - Fuse for navigation system
- SB45 - Fuse, in fuse holder
- T8d - 8-pin connector, at navigation system control unit (black)
- T18d - 18-pin connector, at control unit for telephone operating electronics (interface box)
- T20a - 20-pin connector, at navigation system control unit

- (255) - Earth connection -1-, in wiring loom behind dash panel
- (606) - Earth point, under the centre console, near gear stick
- A11 - Positive connection (58b), in wiring loom behind dash panel
- A21 - Positive connection (86s), in wiring loom behind dash panel
- A27 - Connection (vehicle speed signal), in wiring loom behind dash panel
- A46 - Positive connection (30 - from radio), in wiring loom behind dash panel
- A76 - Connection (K diagnosis wire), in wiring loom behind dash panel on left

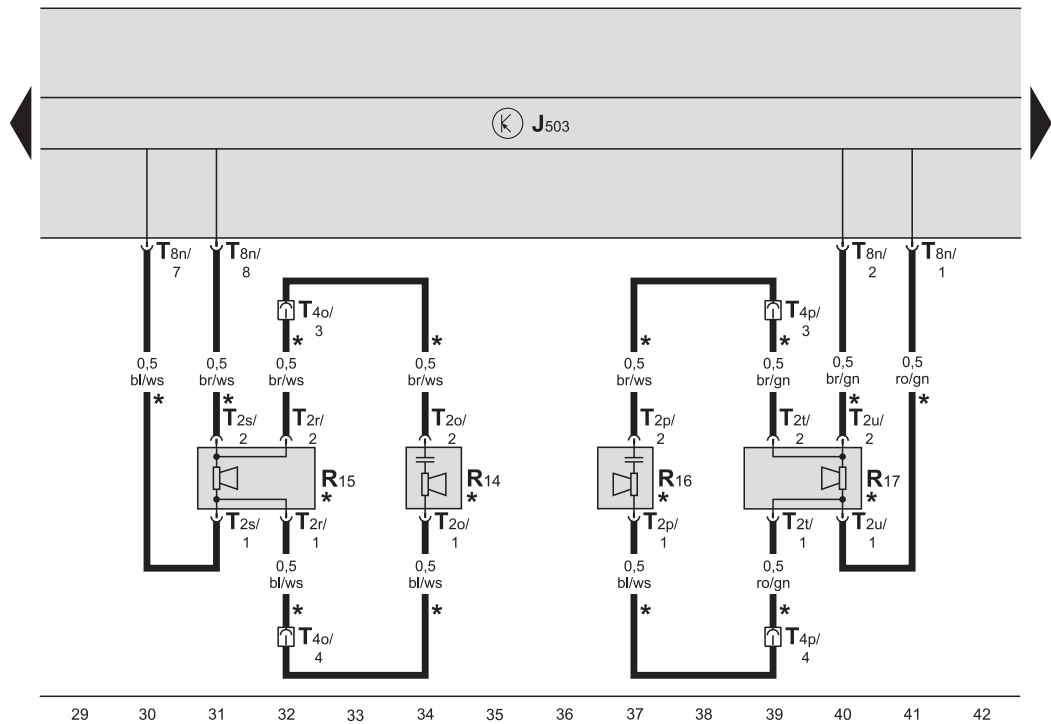
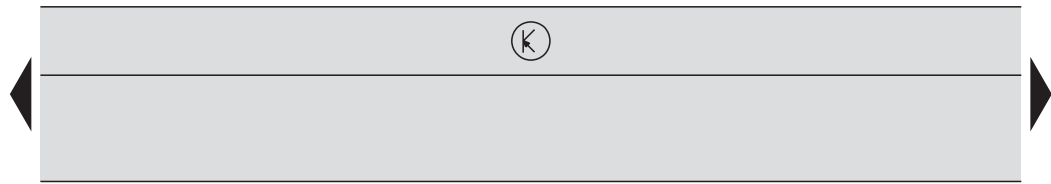
- === - applies only to models with CD changer
- - applies only to models with mobile phone preinstallation 2-Cullmann

Navigation system control unit, front speakers



- J503 - Navigation system control unit
- R20 - Treble loudspeaker, front left
- R21 - Bass loudspeaker, front left
- R22 - Treble loudspeaker, front right
- R23 - Bass loudspeaker, front right
- T2m - 2-pin connector, at front left treble loudspeaker
- T2n - 2-pin connector, at front right treble loudspeaker
- T4m - 4-pin connector, at left A pillar (black)
- T4n - 4-pin connector, at right A pillar (black)
- T4u - 4-pin connector, at left front woofer
- T4v - 4-pin connector, at right front woofer
- T8n - 8-pin connector, at navigation system control unit (brown)

Navigation system control unit, rear speakers

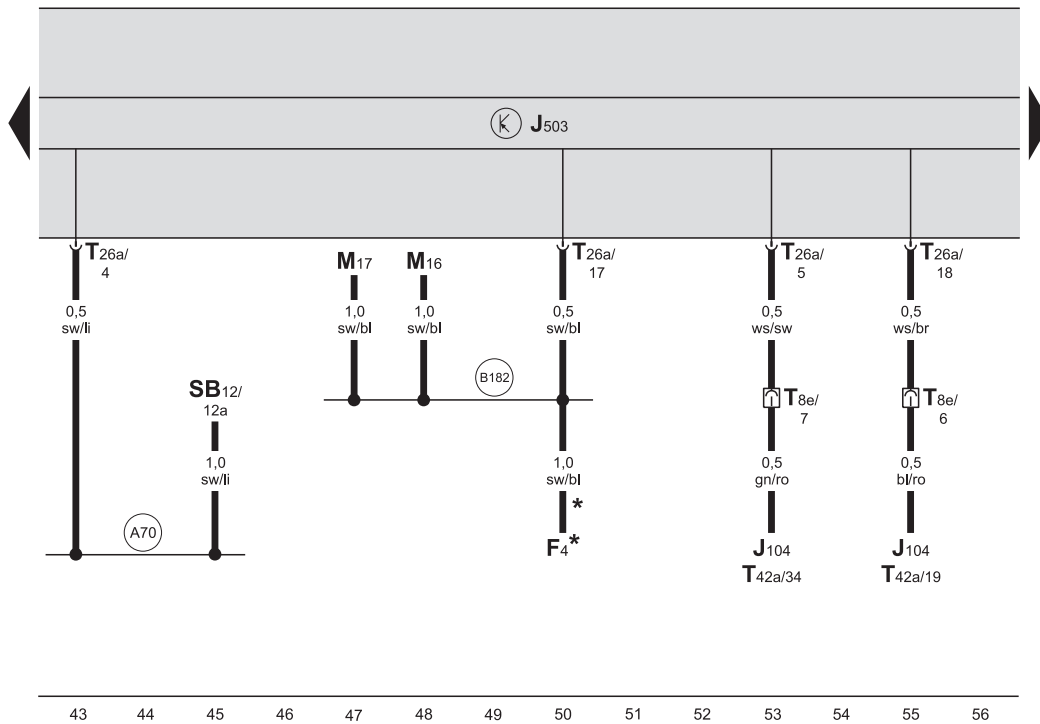
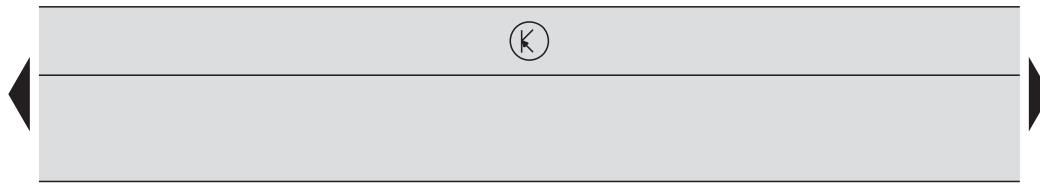


- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- J503 - Navigation system control unit
- R14 - Treble loudspeaker, rear left
- R15 - Bass loudspeaker, rear left
- R16 - Treble loudspeaker, rear right
- R17 - Bass loudspeaker, rear right
- T2o - 2-pin connector, at rear left treble loudspeaker
- T2p - 2-pin connector, at rear right treble loudspeaker
- T2r - 2-pin connector, at rear left bass loudspeaker
- T2s - 2-pin connector, at rear left bass loudspeaker
- T2t - 2-pin connector, at rear right bass loudspeaker
- T2u - 2-pin connector, at rear right bass loudspeaker
- T4o - 4-pin connector, at left B pillar (black)
- T4p - 4-pin connector, at right B pillar (black)
- T8n - 8-pin connector, at navigation system control unit (brown)

* - Applies only to models with 8 speakers

Navigation system control unit

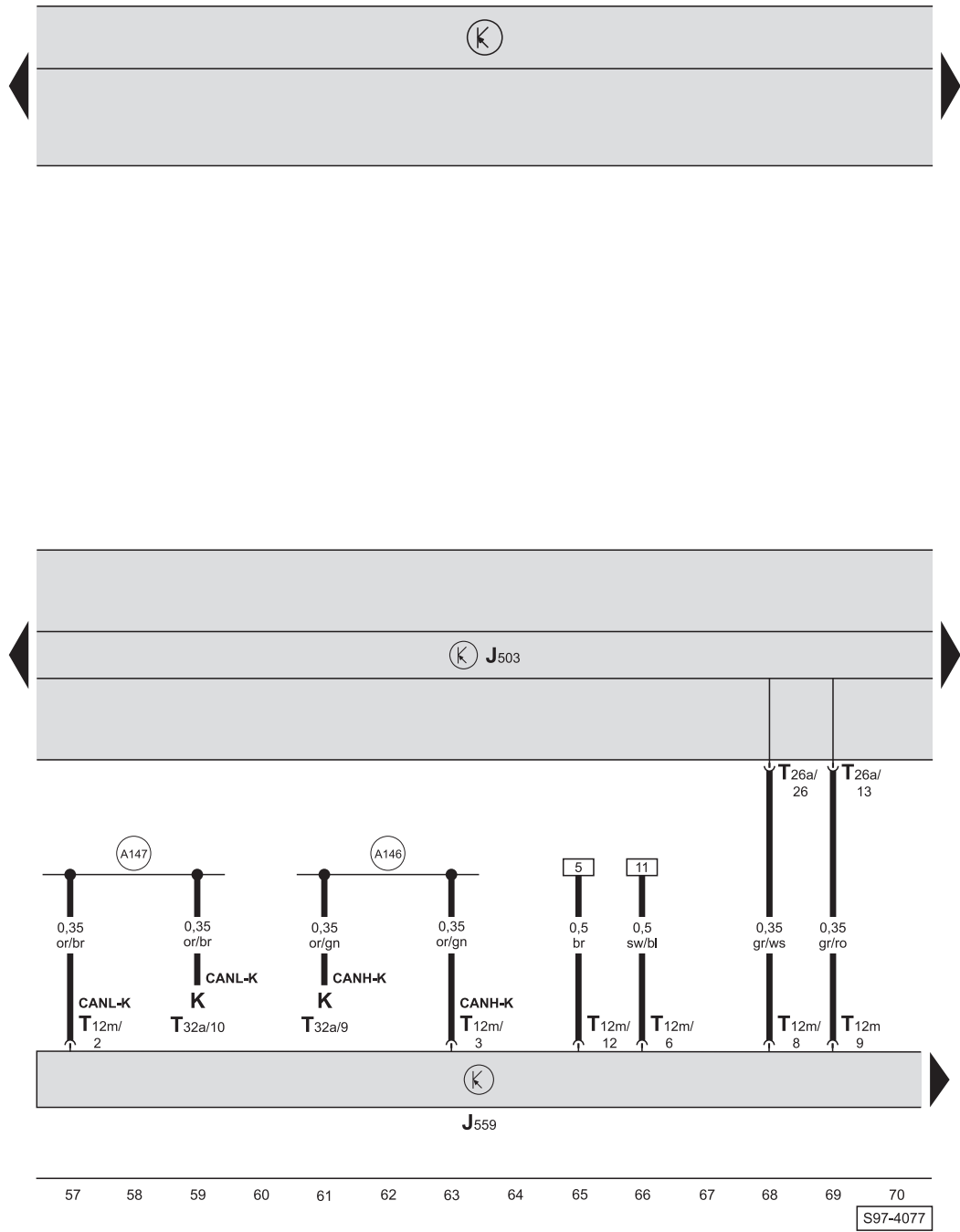


ws = white
 sw = black
 ro = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 ge = yellow
 or = orange

- F4 - Reversing light switch
- J104 - ABS/ABS with EDL and TCS/ESP control unit
- J503 - Navigation system control unit
- M16 - Reversing light bulb left
- M17 - Reversing light bulb right
- SB12 - Fuse, in fuse holder
- T8e - Plug connection, 8-pin, at left of bulkhead (orange)
- T26a - 26-pin connector, at navigation system control unit
- T42a - Connector, 42-pin, at ABS/ABS with EDL and TCS/ESP control unit

- (A70) - Positive connection (15a), in wiring loom behind dash panel
- (B182) - Connection (RF), in interior wiring loom
- * - Does not apply to models with automatic gearbox

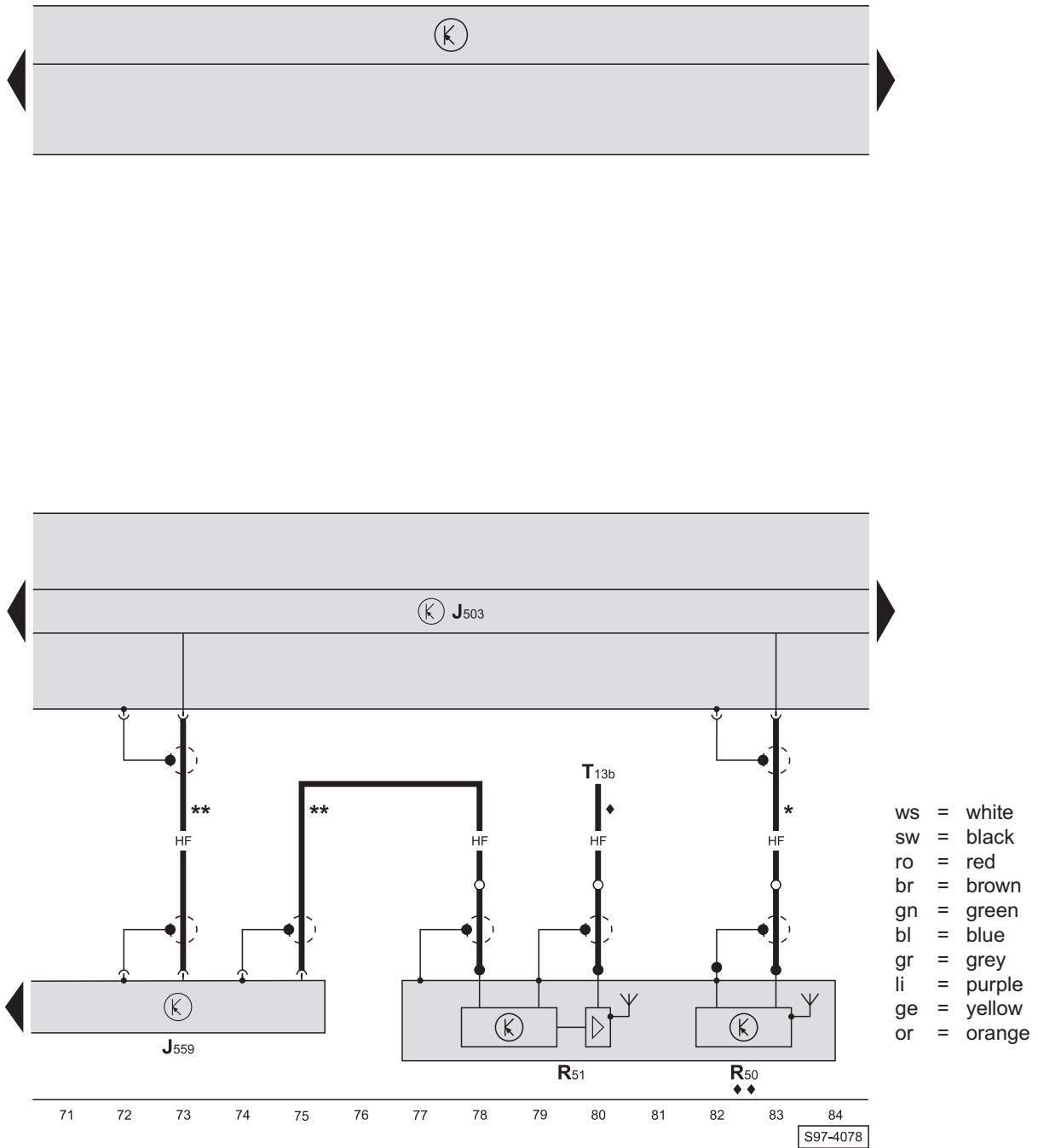
Navigation system control unit, Traffic information control unit



- J503 - Navigation system control unit
- J559 - Control unit for traffic information radio, behind the dashboard
- K - Dash panel insert
- T12m - 12-pin connetor, at traffic information control unit
- T26a - 26-pin connector, at navigation system control unit
- T32a - 32-pin connector, at dash panel insert

- A146 - Connection (CAN-H, convenience), in wiring loom behind dash panel
- A147 - Connection (CAN-L, convenience), in wiring loom behind dash panel

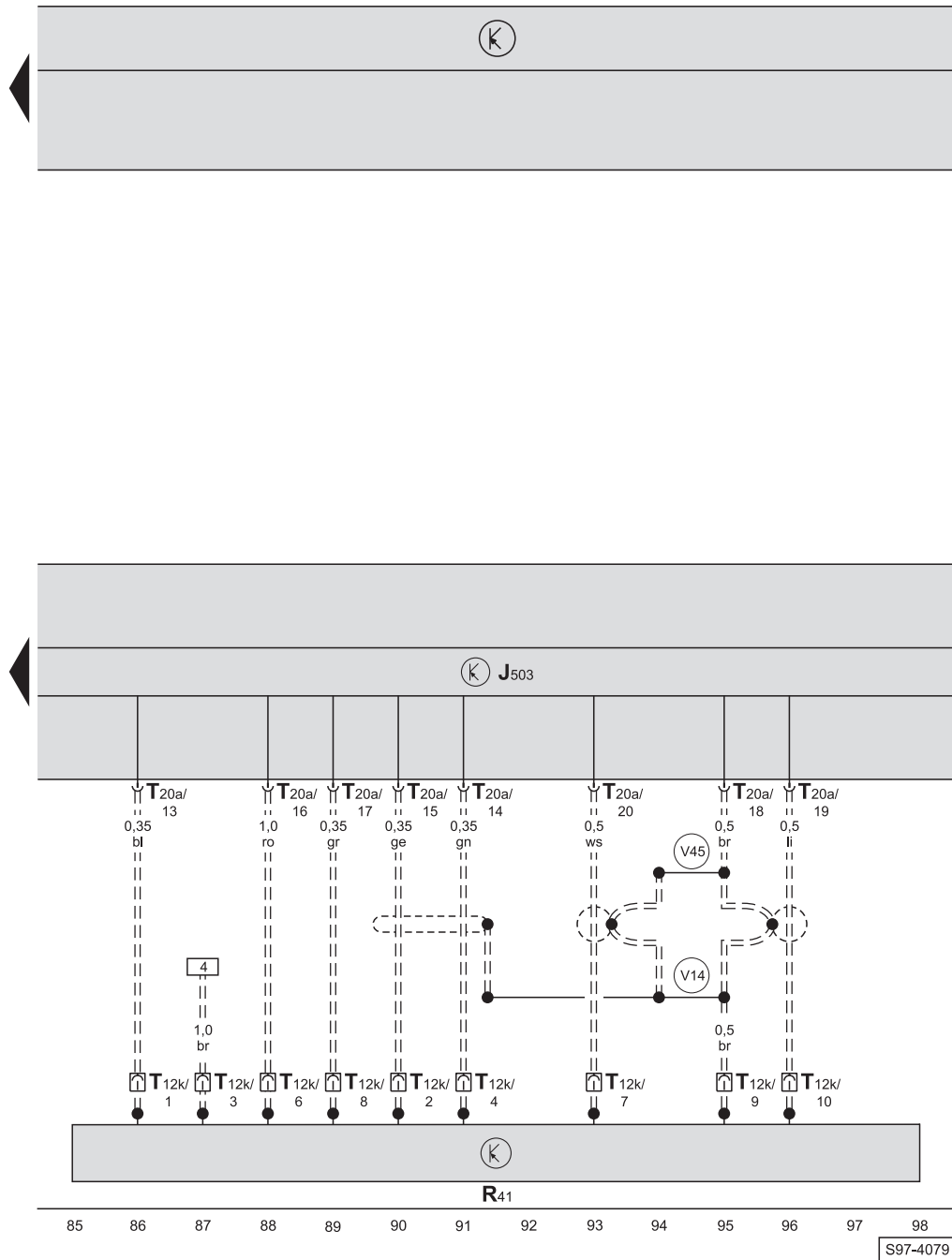
Navigation system control unit, traffic information control unit, aerial



- J503 - Navigation system control unit
- J559 - Control unit for traffic information radio, behind the dashboard
- R50 - Navigation aerial (GPS)
- R51 - Radio/telephone aerial
- T13b - 13-pin connector, for telephone

- * - Navigation system aerial cable
- ** - Radio aerial cable
- ◆ - Mobile phone aerial cable
- ◆◆ - on Notchback models R50 is behind dash panel

Navigation system control unit, CD changer



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

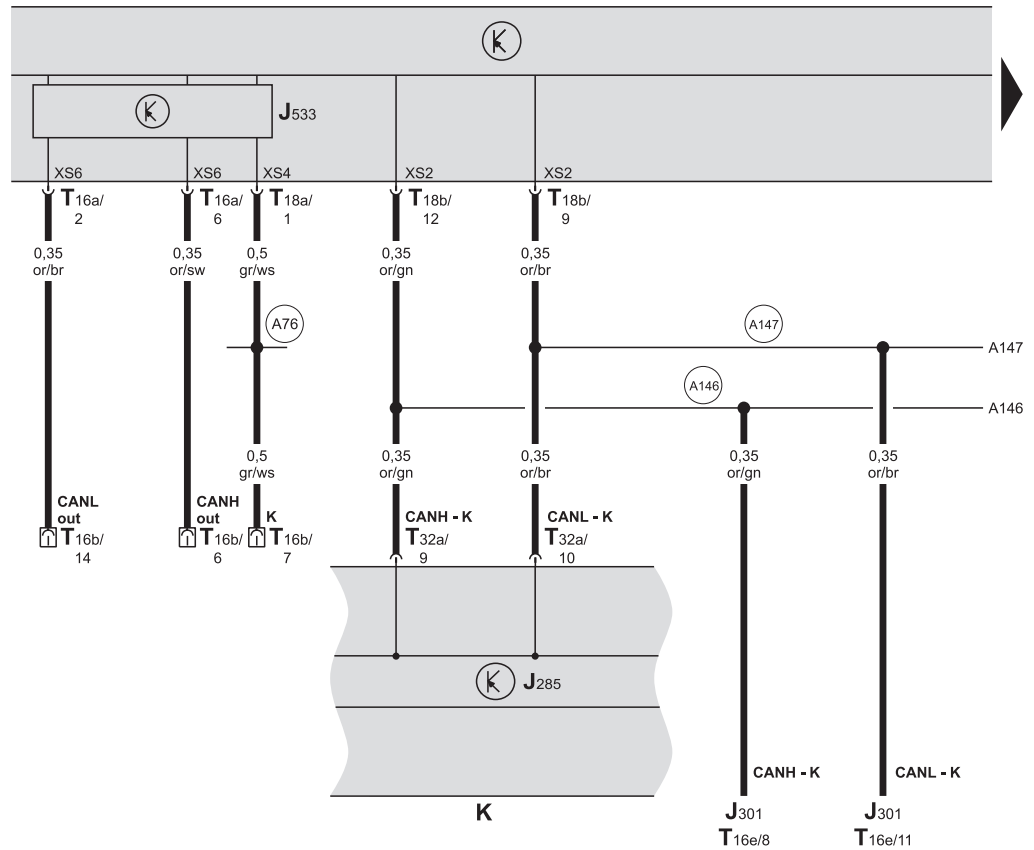
- J503 - Navigation system control unit
- R41 - CD changer
- T12k - 12-pin connector, at CD changer
- T20a - 20-pin connector, at navigation system control unit

- (V14) - Connection (screening), in CD changer wiring loom
- (V45) - Connection -2- (screening), in CD changer wiring harness

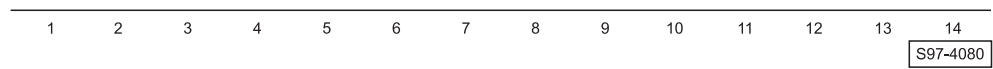
=== - applies only to models with CD changer

CAN-Bus Networking - Convenience, from August 2003

Dash panel insert, Control unit in dash panel insert, Data bus diagnostic interface, Connector for diagnostic connection, Connection for air conditioning system control unit



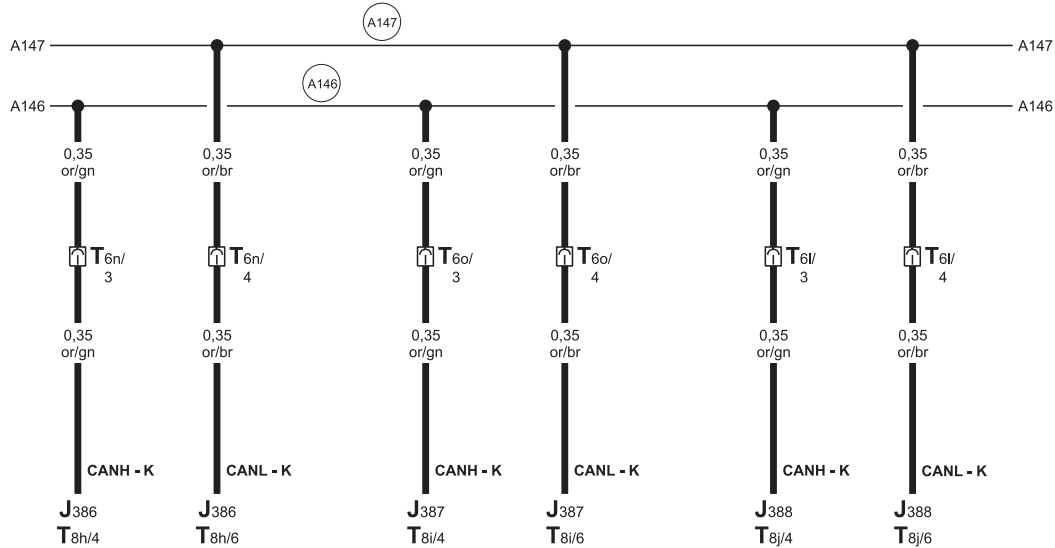
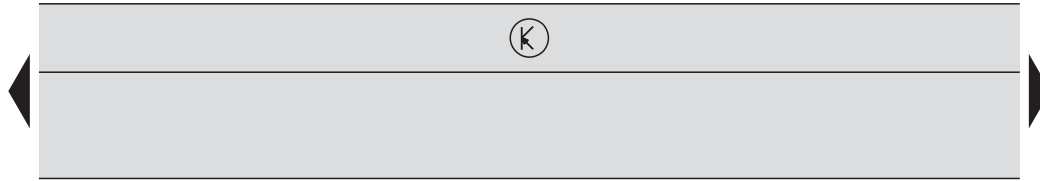
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange



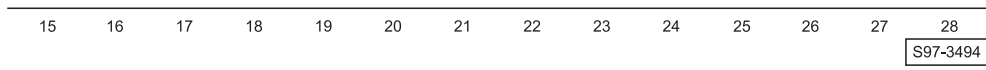
- J285 - Control unit in dash panel insert
- J301 - AC control unit
- J533 - Databus diagnostic interface
- K - Dash panel insert
- T16a - 16-pin connector, at electrical system control unit (black)
- T16b - 16-pin connector, in glove box on driver's side (diagnosis connection)
- T16e - 16-pin connector, at AC control unit
- T18a - 18-pin connector, at electrical system control unit (brown)
- T18b - 18-pin connector, at electrical system control unit (black)
- T32a - 32-pin connector, at dash panel insert

- (A76) - Connection (K diagnosis wire), in wiring loom behind dash panel on left
- (A146) - Connection (CAN-H, convenience), in wiring loom behind dash panel
- (A147) - Connection (CAN-L, convenience), in wiring loom behind dash panel

Connection for: Driver door control unit, Front passenger door control unit, Rear left door control unit



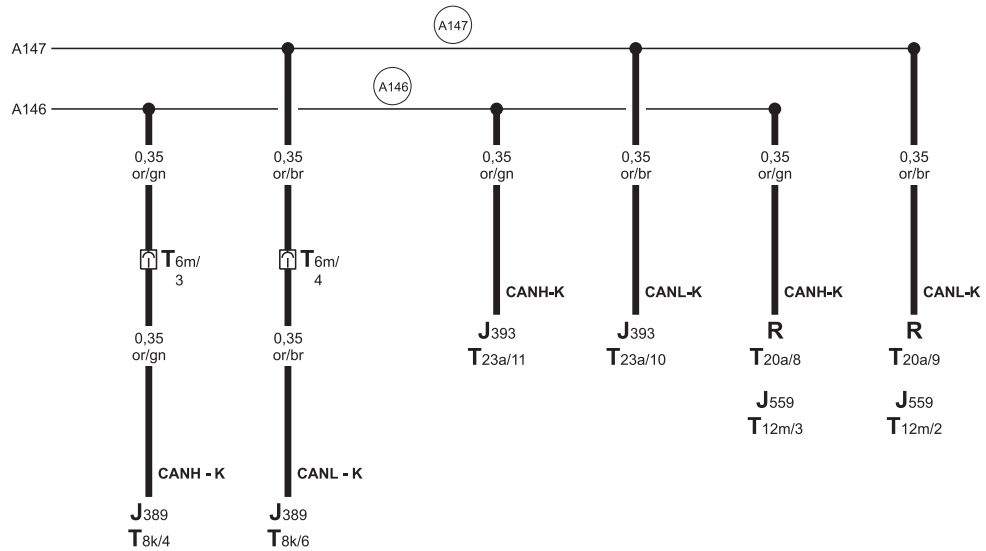
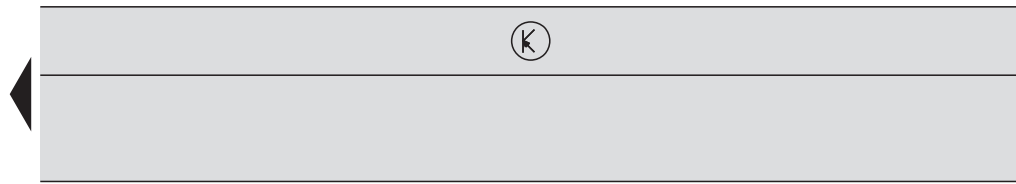
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange



- J386 - Door control unit, driver's side
- J387 - Door control unit, passenger's side
- J388 - Door control unit, rear left
- T6l - 6-pin connector, at left B pillar (blue)
- T6n - Connector, 6-pin, at left A-pillar (blue)
- T6o - 6-pin connector, at right A pillar (blue)
- T8h - Connector, 8-pin, at door control unit, driver side
- T8i - Connector, 8-pin, at door control unit, front passenger side
- T8j - Connector, 8-pin, at rear left door control unit

- (A146) - Connection (CAN-H, convenience), in wiring loom behind dash panel
- (A147) - Connection (CAN-L, convenience), in wiring loom behind dash panel

Connection for: Rear right door control unit, Convenience system central control unit, Radio, Traffic information control unit



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

29 30 31 32 33 34 35 36 37 38 39 40 41 42

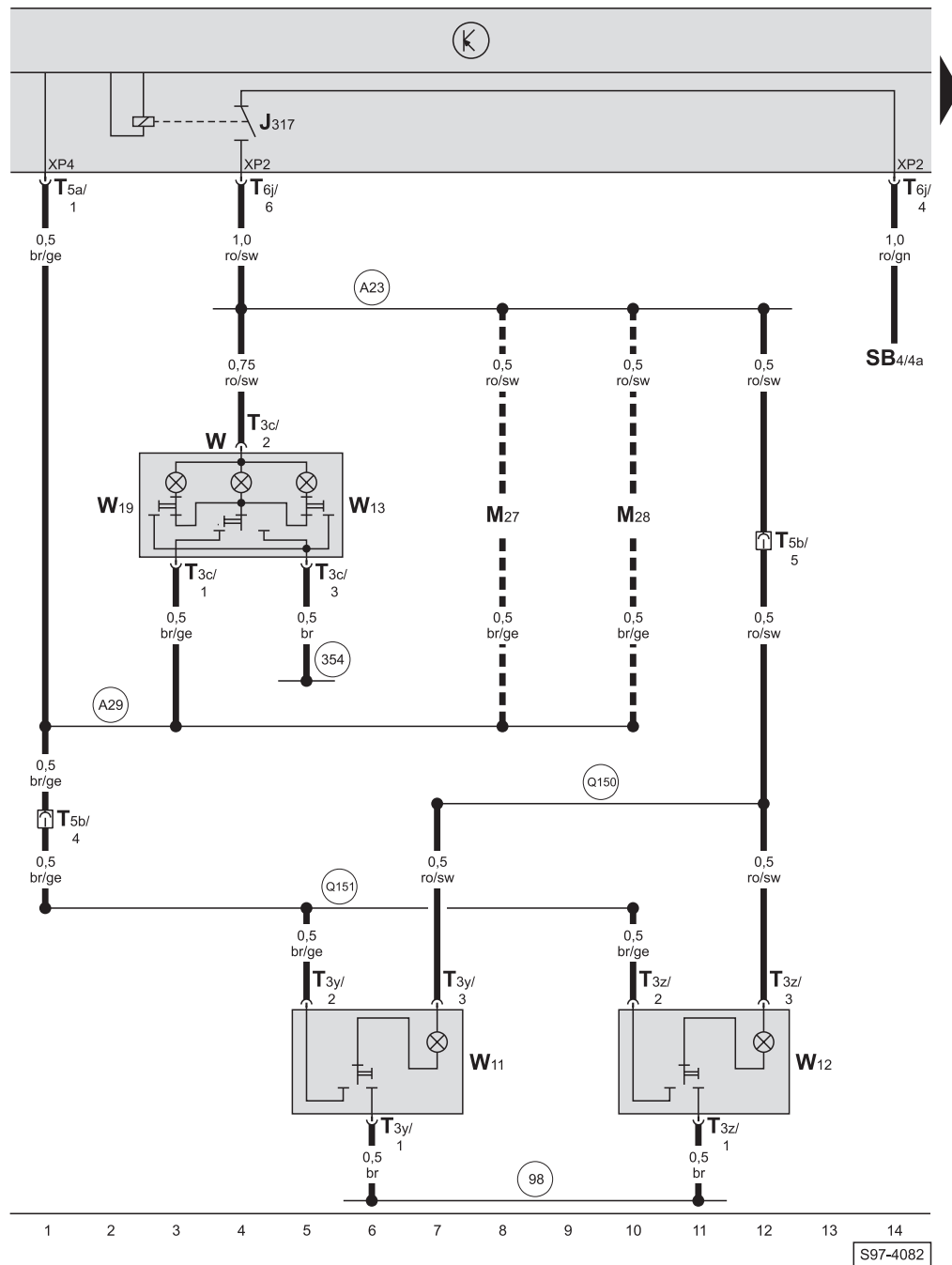
S97-4081

- J389 - Door control unit, rear right
- J393 - Convenience electrics central control unit
- J559 - Control unit for traffic information radio, behind the dashboard
- R - Radio
- T6m - 6-pin connector, at right B pillar (blue)
- T8k - Connector, 8-pin, at rear right door control unit
- T12m - 12-pin connector, at traffic information control unit
- T20a - 20-pin connector, at radio
- T23a - 23-pin connector, at convenience electrics central control unit

- (A146) - Connection (CAN-H, convenience), in wiring loom behind dash panel
- (A147) - Connection (CAN-L, convenience), in wiring loom behind dash panel

Rear reading lights, from August 2003

Rear reading lights (does not apply to Notchback models)



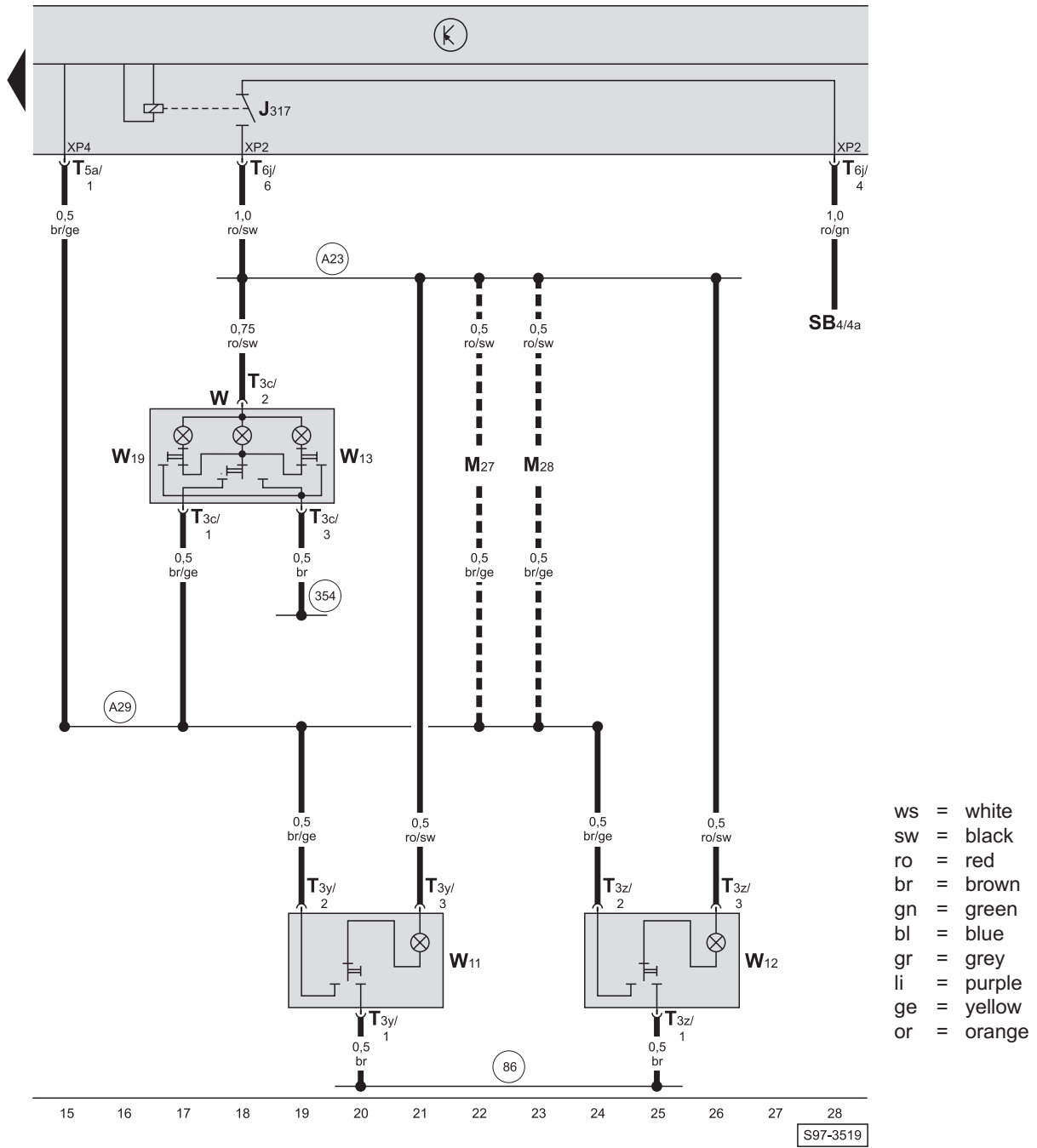
- ws = white
- sw = black
- ro = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- ge = yellow
- or = orange

- (98) - Earth connection, in engine compartment wiring harness
- (354) - Earth connection, in wiring harness behind dash panel
- (A23) - Positive connection (30al), in wiring loom behind dash panel
- (A29) - Connection (interior light 31), in wiring loom behind dash panel
- (Q150) - Connection (30al), in boot lid/tailgate wiring loom
- (Q151) - Connection (interior light 31), in boot lid/tailgate wiring loom

■■■ - Applies only to models with door warning lights

- J317 - Terminal 30 voltage supply relay
- M27 - Left door warning light
- M28 - Right door warning light
- SB4 - Fuse, in fuse holder
- T3c - 3-pin connector, at front interior light bulb
- T3y - Plug connection, 3-pin, at left rear reading light
- T3z - Plug connection, 3-pin, at right rear reading light
- T5a - 5-pin connector, at electrical system control unit (black)
- T5b - 5-pin connector, at left C pillar (brown)
- T6j - 6-pin connector, at electrical system control unit (brown)
- W - Interior light, front
- W11 - Reading light, rear left
- W12 - Reading light, rear right
- W13 - Front passenger's reading light
- W19 - Driver-side reading light

Rear reading lights (applies only to Notchback models)

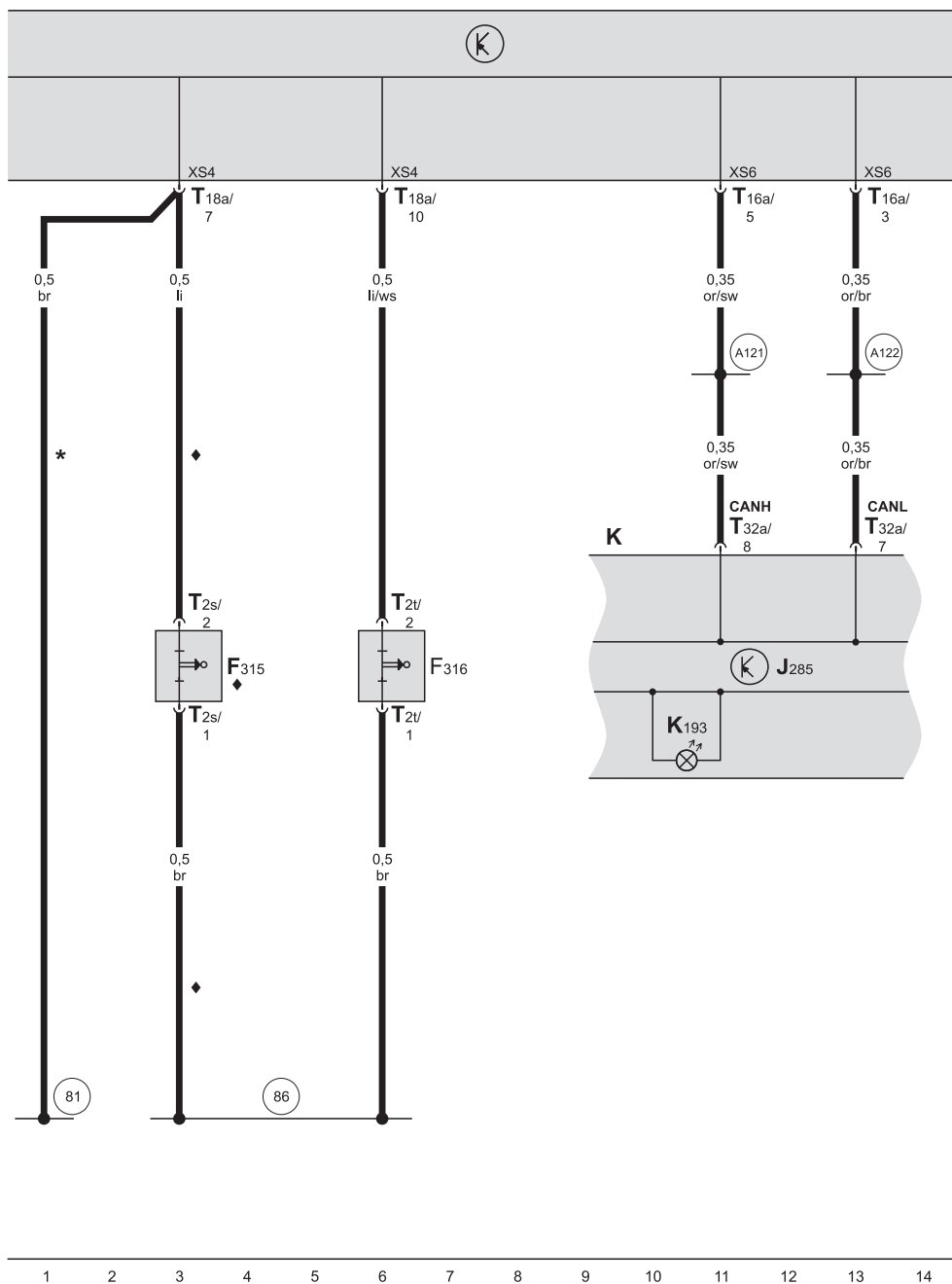


- J317 - Terminal 30 voltage supply relay
- M27 - Left door warning light
- M28 - Right door warning light
- SB4 - Fuse, in fuse holder
- T3c - 3-pin connector, at front interior light bulb
- T3y - Plug connection, 3-pin, at left rear reading light
- T3z - Plug connection, 3-pin, at right rear reading light
- T5a - 5-pin connector, at electrical system control unit (black)
- T6j - 6-pin connector, at electrical system control unit (brown)
- W - Interior light, front
- W11 - Reading light, rear left
- W12 - Reading light, rear right
- W13 - Front passenger's reading light
- W19 - Driver-side reading light

- 86 - Earth connection -1-, in rear interior wiring loom
- 354 - Earth connection, in wiring harness behind dash panel
- A23 - Positive connection (30a1), in wiring loom behind dash panel
- A29 - Connection (interior light 31), in wiring loom behind dash panel
- - Applies only to models with door warning lights

Inspection of the rear seat backrest lock, as of August 2003

Backrest contact switch, Dash panel insert



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

- F315 - Left backrest contact switch
- F316 - Right backrest contact switch
- J285 - Control unit in dash panel insert
- K - Dash panel insert
- K193 - Rear seat backrest lock warning lamp
- T2s - 2-pin connector, at left backrest contact switch
- T2t - 2-pin connector, at right backrest contact switch
- T16a - 16-pin connector, at electrical system control unit (black)
- T18a - 18-pin connector, at electrical system control unit (brown)
- T32a - 32-pin connector, at dash panel insert

- 81 - Earth connection, in wiring harness behind dash panel
- 86 - Earth connection -1-, in rear interior wiring loom
- A121 - Connection (CAN-H), in wiring loom behind dash panel on
- A122 - Connection (CAN-L), in wiring loom behind dash panel
- * - not valid for vehicles with separated backrest
- ◆ - not valid for vehicles without separated backrest

S97-4083

Battery discharges itself

Test requirements:

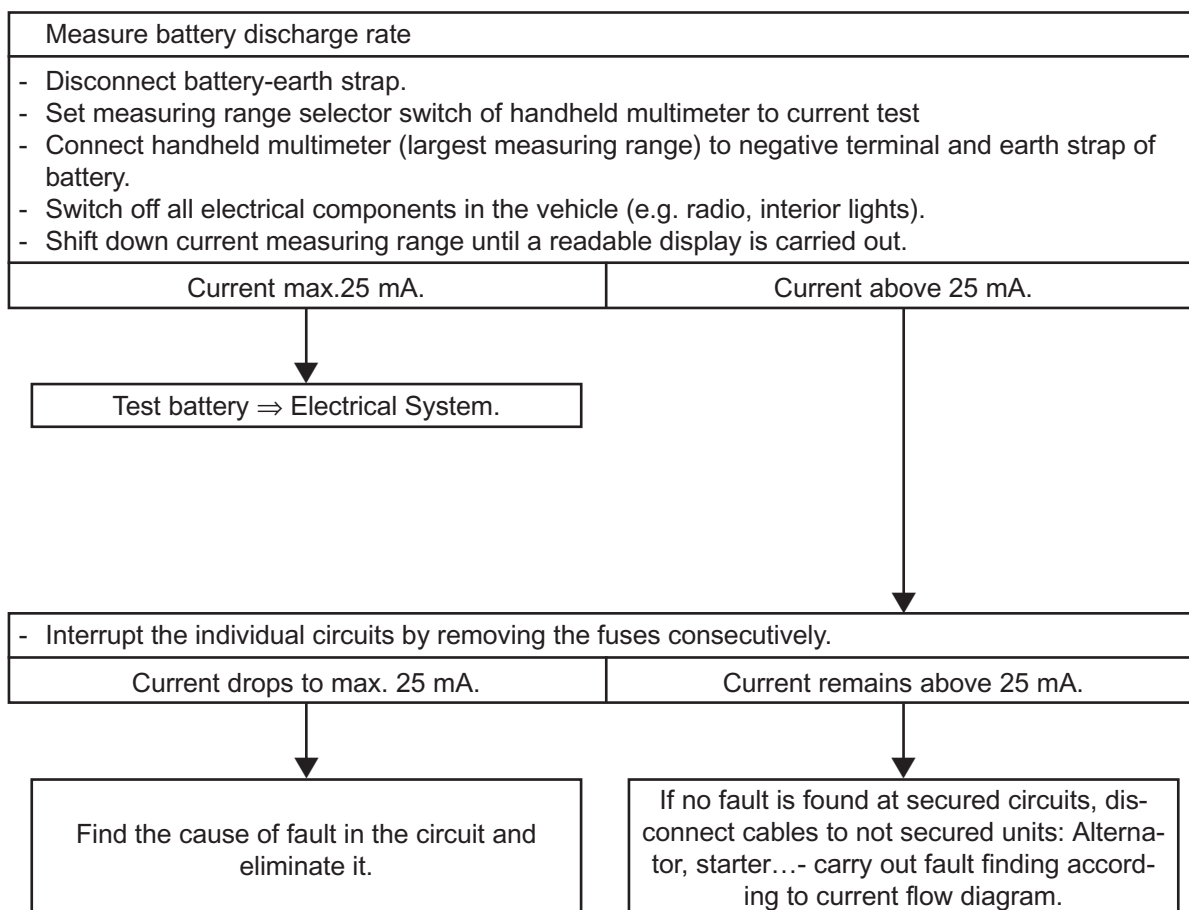
- ◆ Battery O. K.
- ◆ Interior lights and all systems are switched off

Possible causes of fault are:

- ◆ Corroded or contaminated contacts
- ◆ Chafed cables
- ◆ Internal closing in the units

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g V.A.G 1594 A
- ◆ Valid current flow diagram



End of fault finding program

Starter cannot rotate

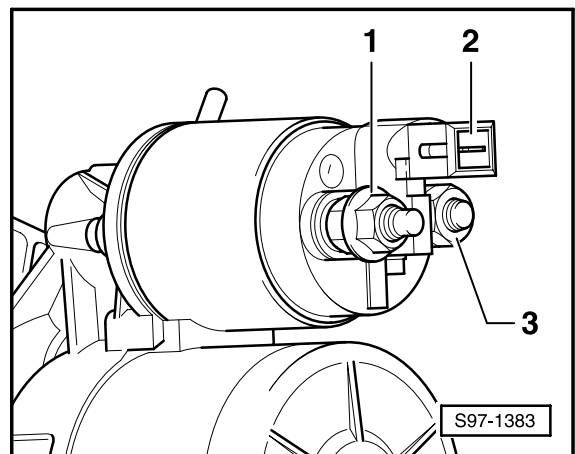
Test requirements:

- ◆ Battery O. K.
- ◆ Cable connections at solenoid switch and earth strap between battery/body as well as between body/gearbox must be tight and must not be oxidized.

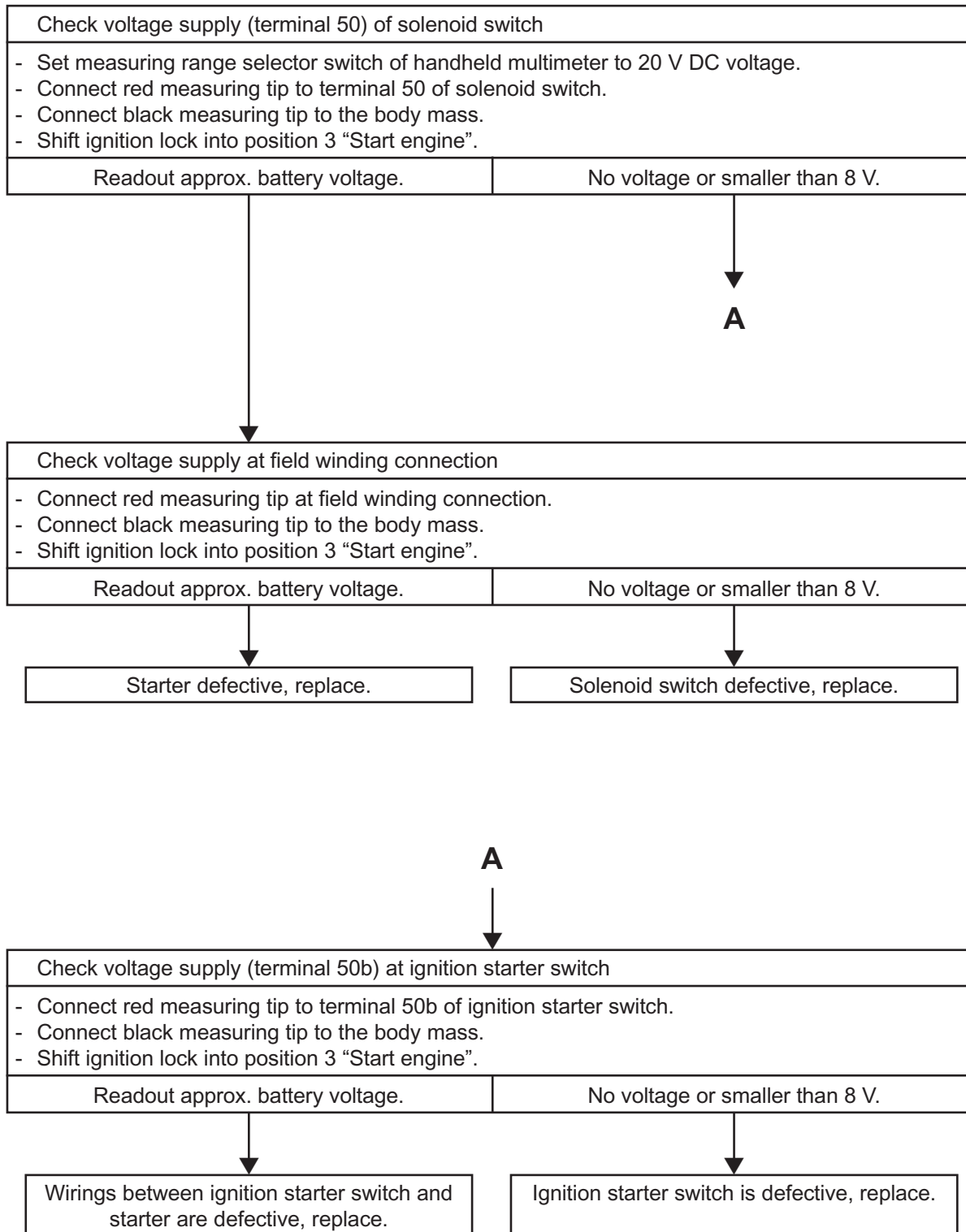
For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g V.A.G 1594 A
- ◆ Valid current flow diagram

- 1 - Terminal 30, from battery
- 2 - Terminal 50, from ignition starter switch
- 3 - Connection for field winding



Continued on next page!



End of fault finding program

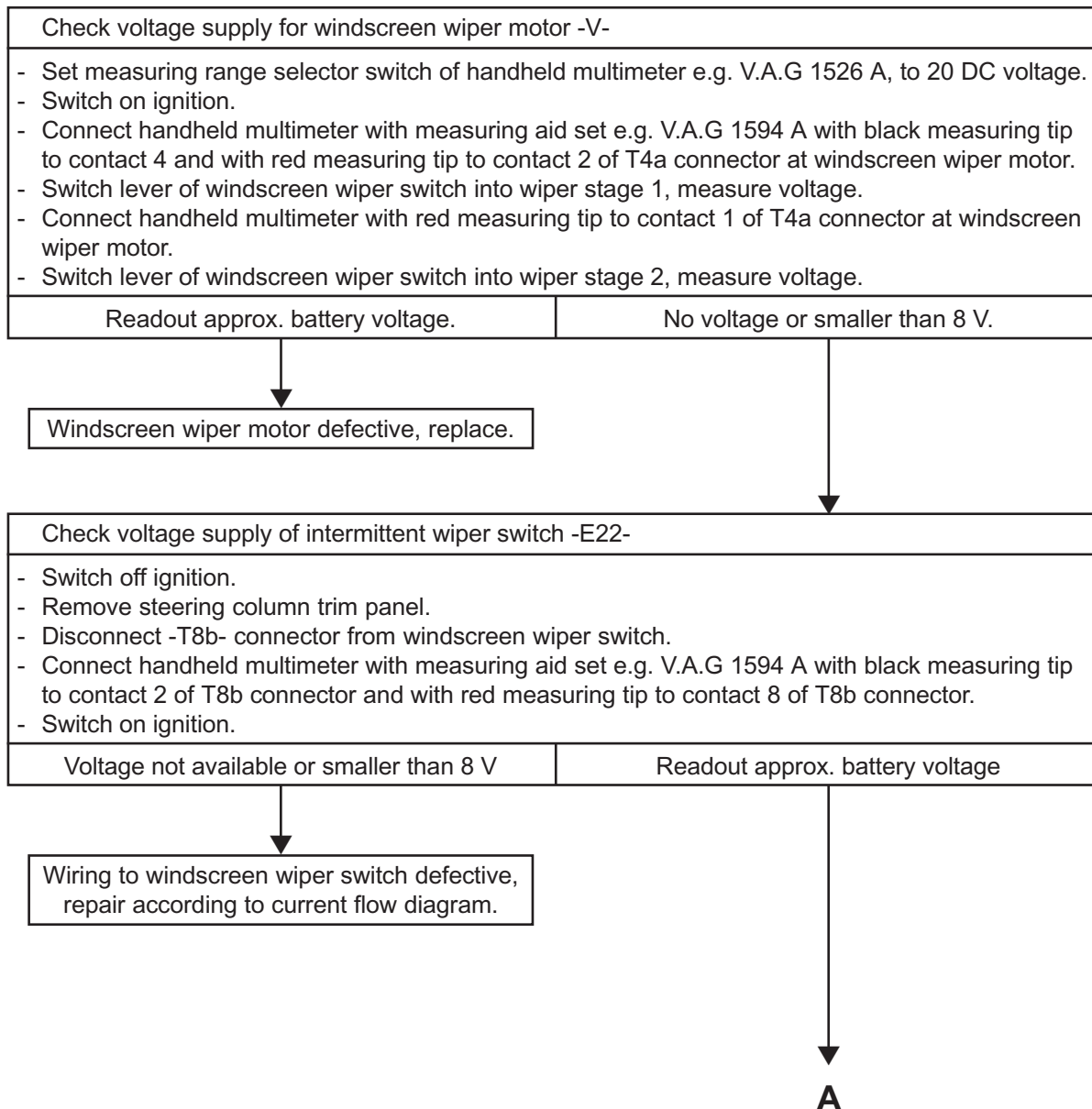
Windshield wiper system faulty

Test requirements:

- ◆ Fuse SB 15 (10 A) and SB 41 (20 A) O.K.
- ◆ Battery voltage O.K.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



A



Check intermittent wiper switch -E22-	
<ul style="list-style-type: none"> - Switch off ignition. - Place -T8b- connector on windscreen wiper switch. - Switch lever of windscreen wiper switch into wiper stage 1. - Connect red measuring tip to contact 1/53 of T8b connector. - Switch on ignition. 	
Voltage not available or smaller than 8 V	Readout approx. battery voltage



Windscreen wiper switch defective, replace.



<ul style="list-style-type: none"> - Switch lever of windscreen wiper switch into wiper stage 2. - Connect red measuring tip to contact 6/53b of T8b connector. 	
Voltage not available or smaller than 8 V	Readout approx. battery voltage



Windscreen wiper switch defective, replace.



Check the castor of the windscreen -V- wiper motor	
<ul style="list-style-type: none"> - Switch off ignition. - Set measuring range selector switch of handheld multimeter e.g. V.A.G 1526 A, electrical continuity test - Put the windscreen wiper in end position by briefly actuating the windscreen wiper switch - Lever of windscreen wiper switch in position "switch off". - Connect red measuring tip to contact 3/31b of T4a connector. - Connect black measuring tip to contact 4/31 of T4a connector. 	
No continuity.	Continuity.



Windscreen wiper motor -V- defective, replace.



Wiring from windscreen wiper motor to onboard supply control unit defective, repair according to current flow diagram.

END

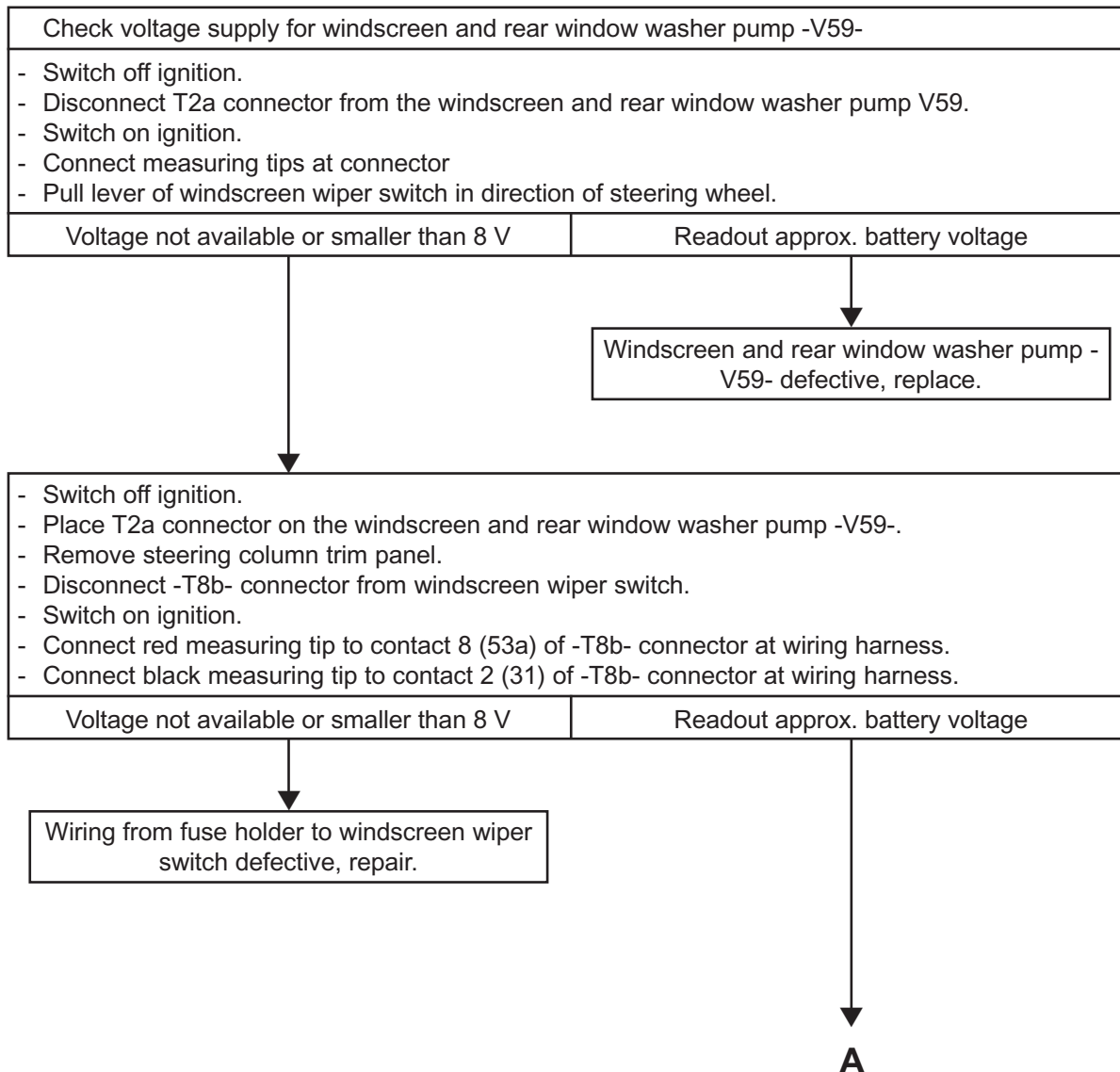
Windscreen washer system defective

Test requirements:

- ◆ Fuse SB 15 (10 A) O.K.
- ◆ Battery voltage O.K.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



A



Check windscreen washing function	
<ul style="list-style-type: none"> - Switch off ignition. - Connect -T8b- connector at windscreen wiper switch. - Switch on ignition. - Connect red measuring tip to contact 4 (53c) of -T8b- connector of windscreen wiper motor. - Connect black measuring tip to contact 5 (HW) of -T8b- connector of windscreen wiper switch. - Pull lever of windscreen wiper switch in direction of steering wheel. 	
Voltage not available or smaller than 8 V	Readout approx. battery voltage



Windscreen wiper switch defective, replace.



Check rear window washing function	
<ul style="list-style-type: none"> - Switch off ignition. - Connect red measuring tip to contact 4 (53c) of -T8b- connector of windscreen wiper motor. - Connect black measuring tip to contact 5 (HW) of -T8b- connector of windscreen wiper switch. - Switch on ignition. - Push lever of windscreen wiper switch into 2nd position away from steering wheel and hold. 	
Voltage not available or smaller than 8 V	Readout approx. battery voltage



Windscreen wiper switch defective, replace.



Wirings from T8b/4 and T8b/5 to windscreen and rear window washer pump defective, repair.

END

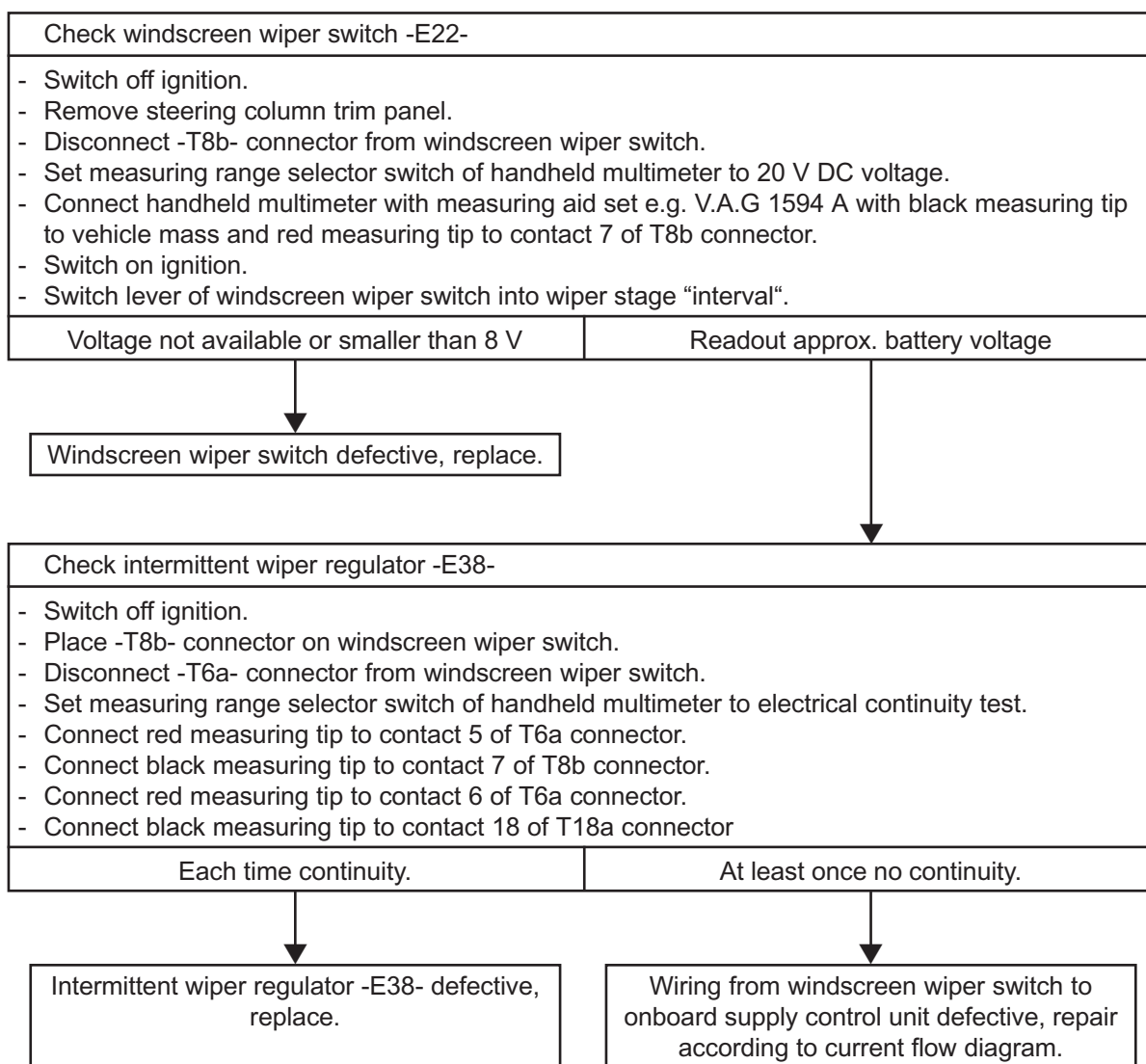
Intermittent wiper defective

Test requirements:

- ◆ Check voltage supply of windscreen wiper motor -V- and windscreen wiper switch -E22- according to fault finding program No. 3.
- ◆ The engine hood must be closed on vehicles fitted with alarm system.
- ◆ Battery voltage O.K.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



END

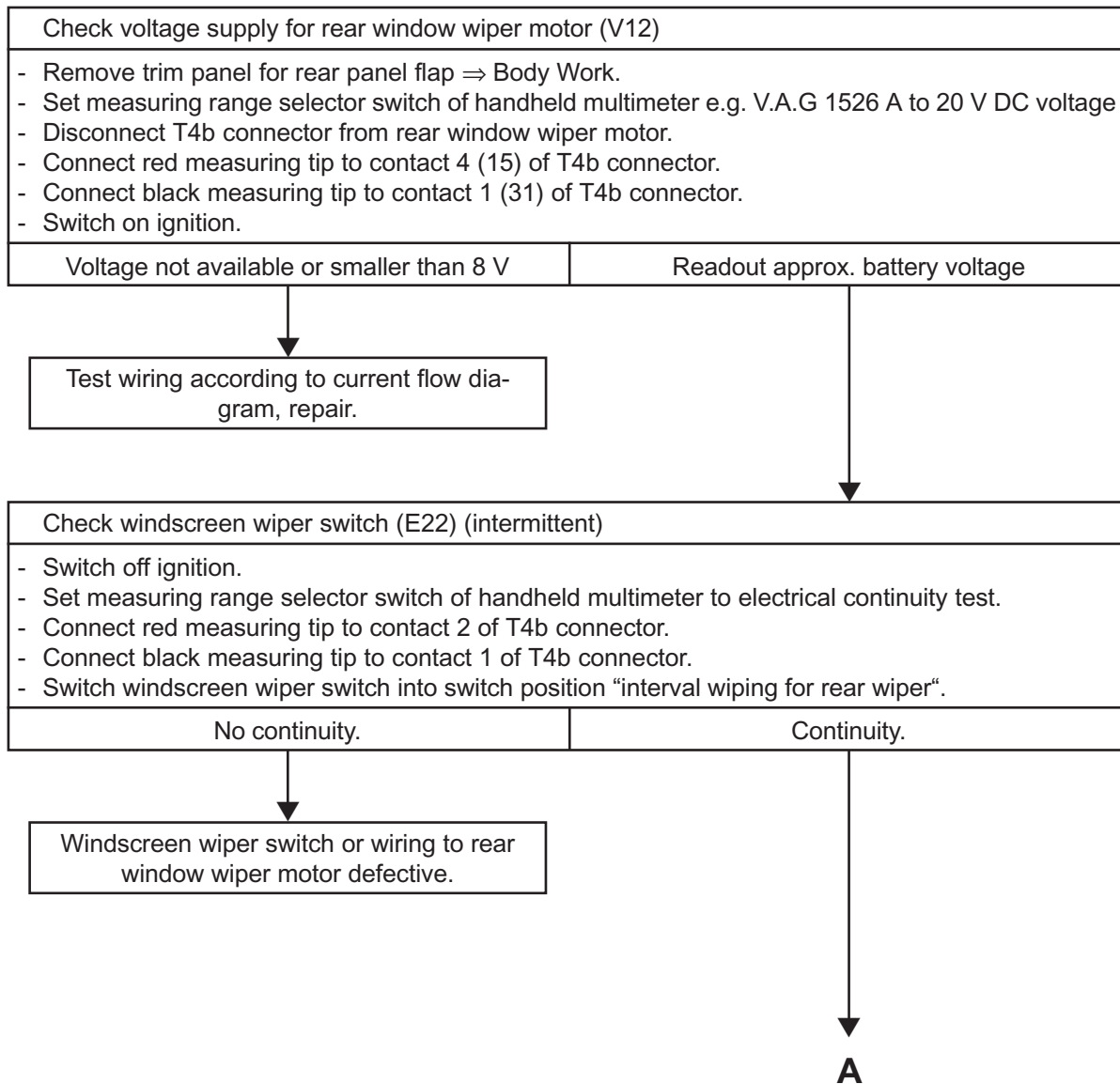
Check rear window wiper

Test requirements:

- ◆ Check voltage supply for windscreen wiper switch -E22- according to fault finding program No. 3.
- ◆ Fuses SB 15 (10 A), SB 32 (10 A) and SB 41 (20 A) O. K.

For fault finding the following is required:

- ◆ Handheld multimeter V.A.G 1526
- ◆ Measuring aid set V.A.G 1594 A
- ◆ Valid current flow diagram



A

Check windscreen wiper switch (E22) (wipe-wash mode)	
<ul style="list-style-type: none">- Set measuring range selector switch of handheld multimeter e.g. V.A.G 1526 A to 20 V DC voltage- Connect red measuring tip to contact 3 of T4b connector.- Connect black measuring tip to contact 1 of T4b connector.- Switch on ignition.- Press windscreen wiper switch into switch position "wipe-wash mode for rear wiper" and hold.	
Voltage not available or smaller than 8 V	Readout approx. battery voltage



Intermittent wiper switch (E22) defective or wiring to rear window wiper motor defective.



Rear window wiper motor -V12- defective, replace.

END

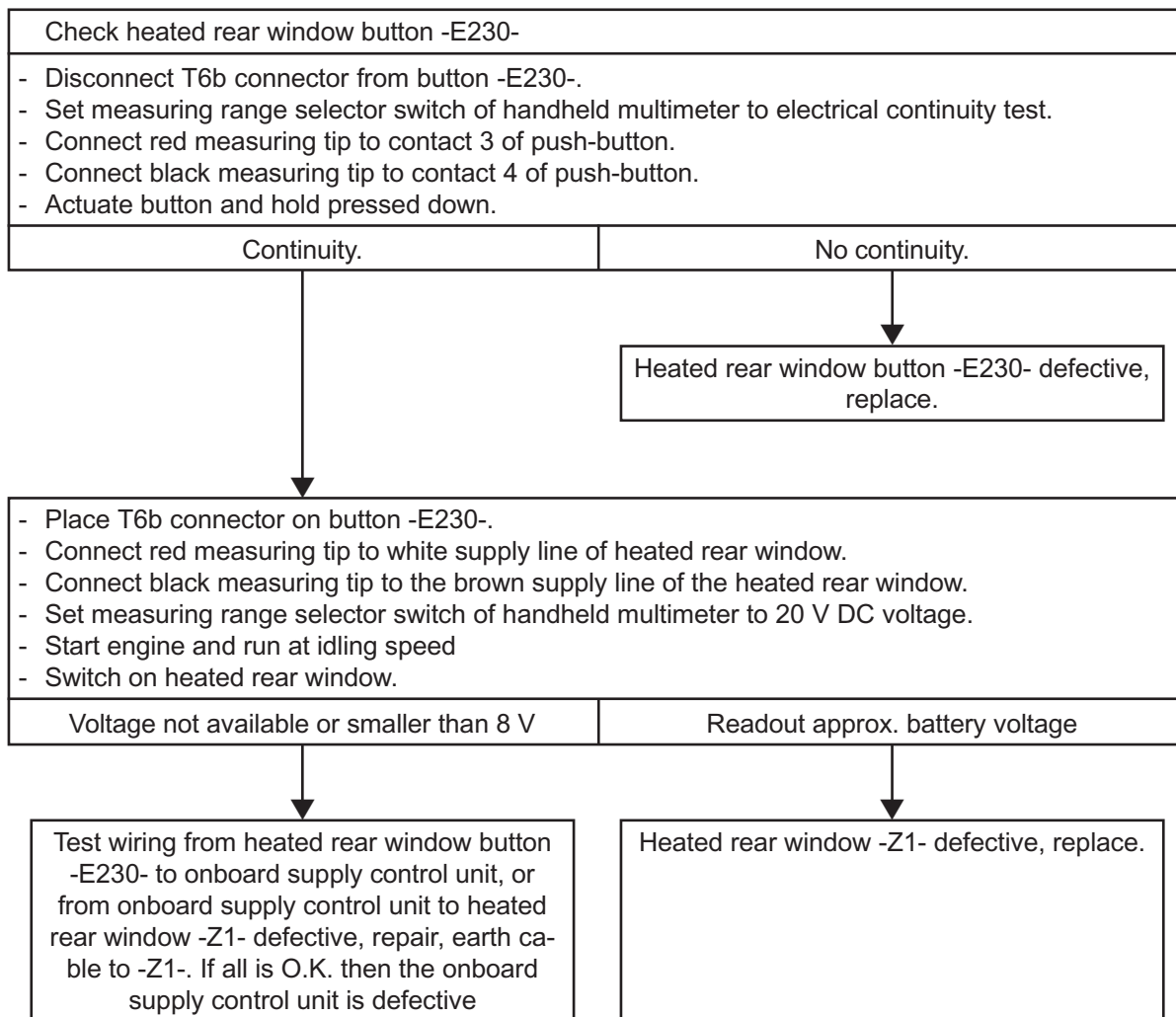
Heated rear window without function

Test requirements:

- ◆ Fuse SB 39 (20 A) O.K.
- ◆ Battery voltage O.K.
- ◆ No other electrical component such as auxiliary heater element or seat heating is switched on.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



END

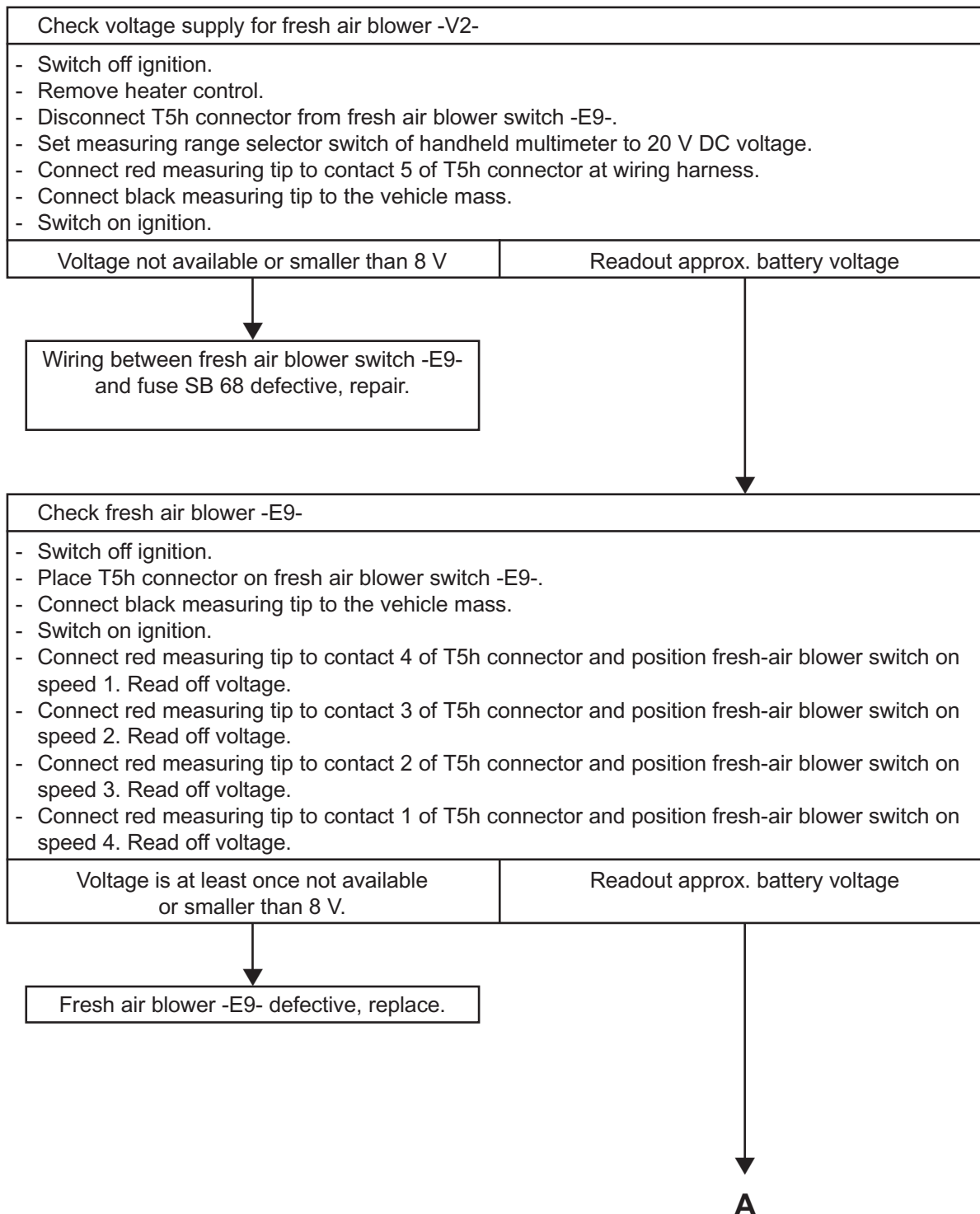
Check fresh air blower

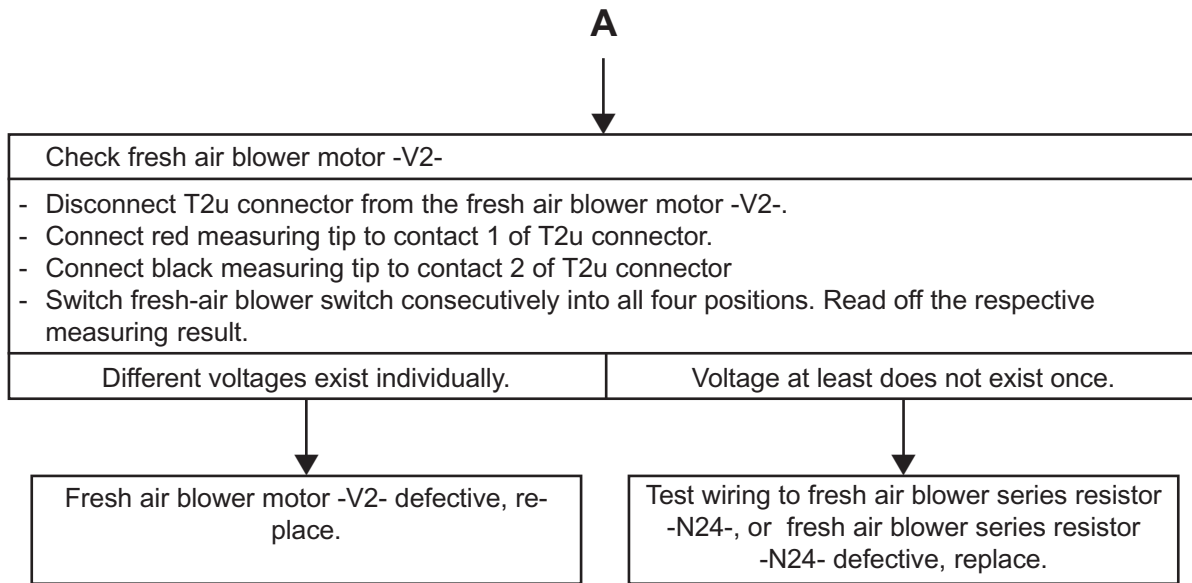
Test requirements:

- ◆ Fuse SB 68 (25 A) O.K.
- ◆ Battery voltage O.K.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram





END

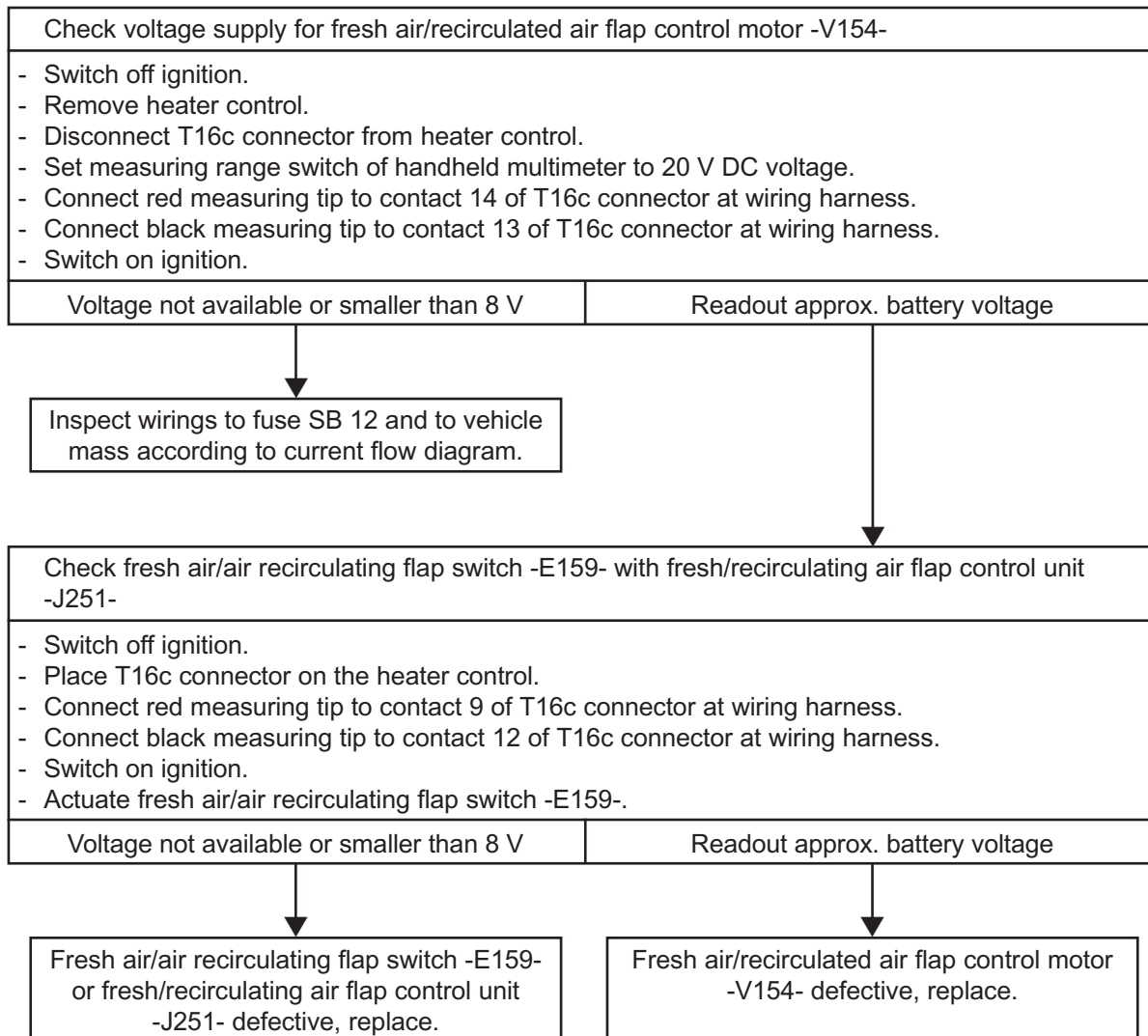
Check fresh air/recirculated air flap control motor

Test requirements:

- ◆ Fuse SB 12 (5 A) O.K.
- ◆ Battery voltage O.K.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



END

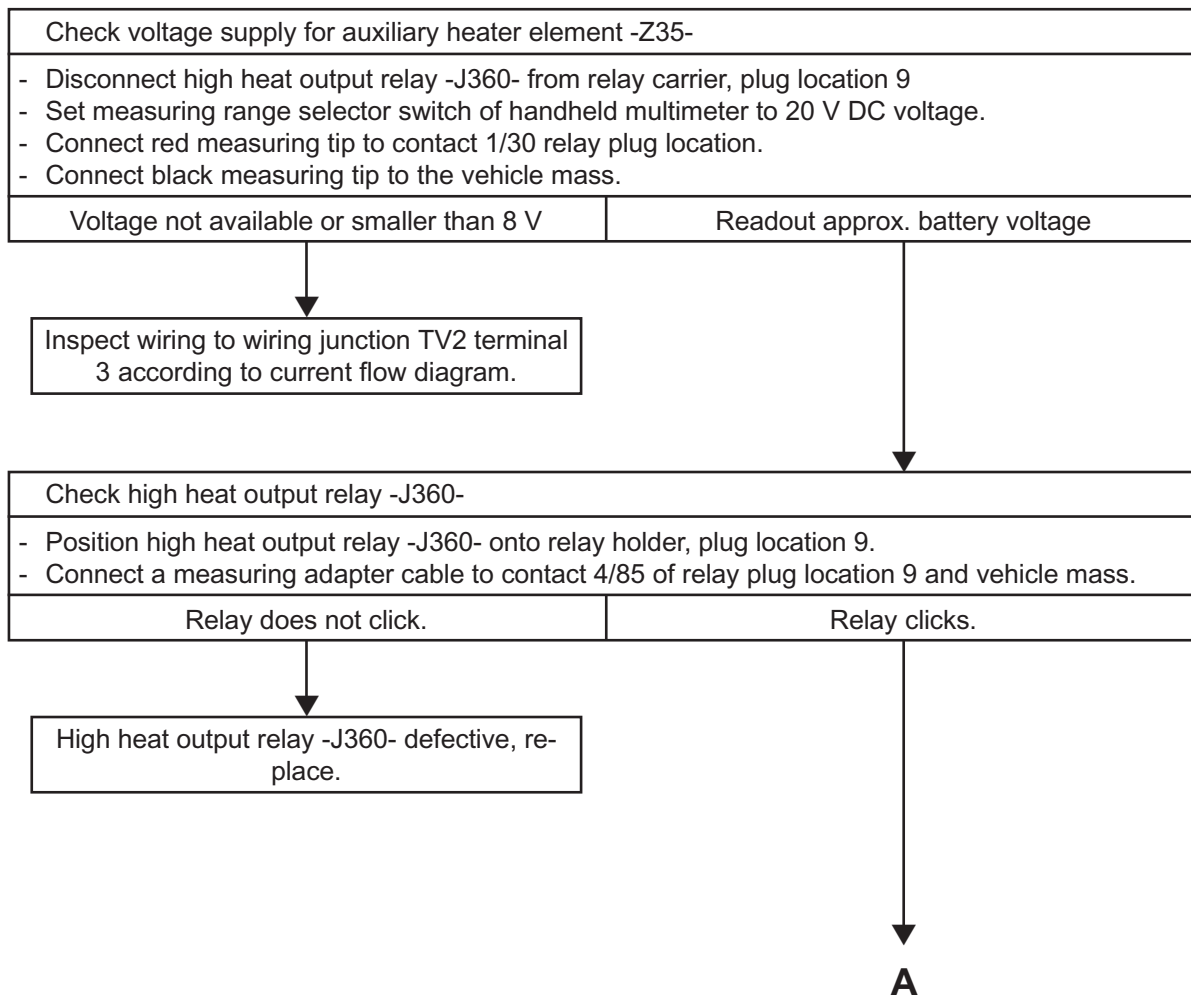
Check auxiliary heater element (PTC) -Z35-

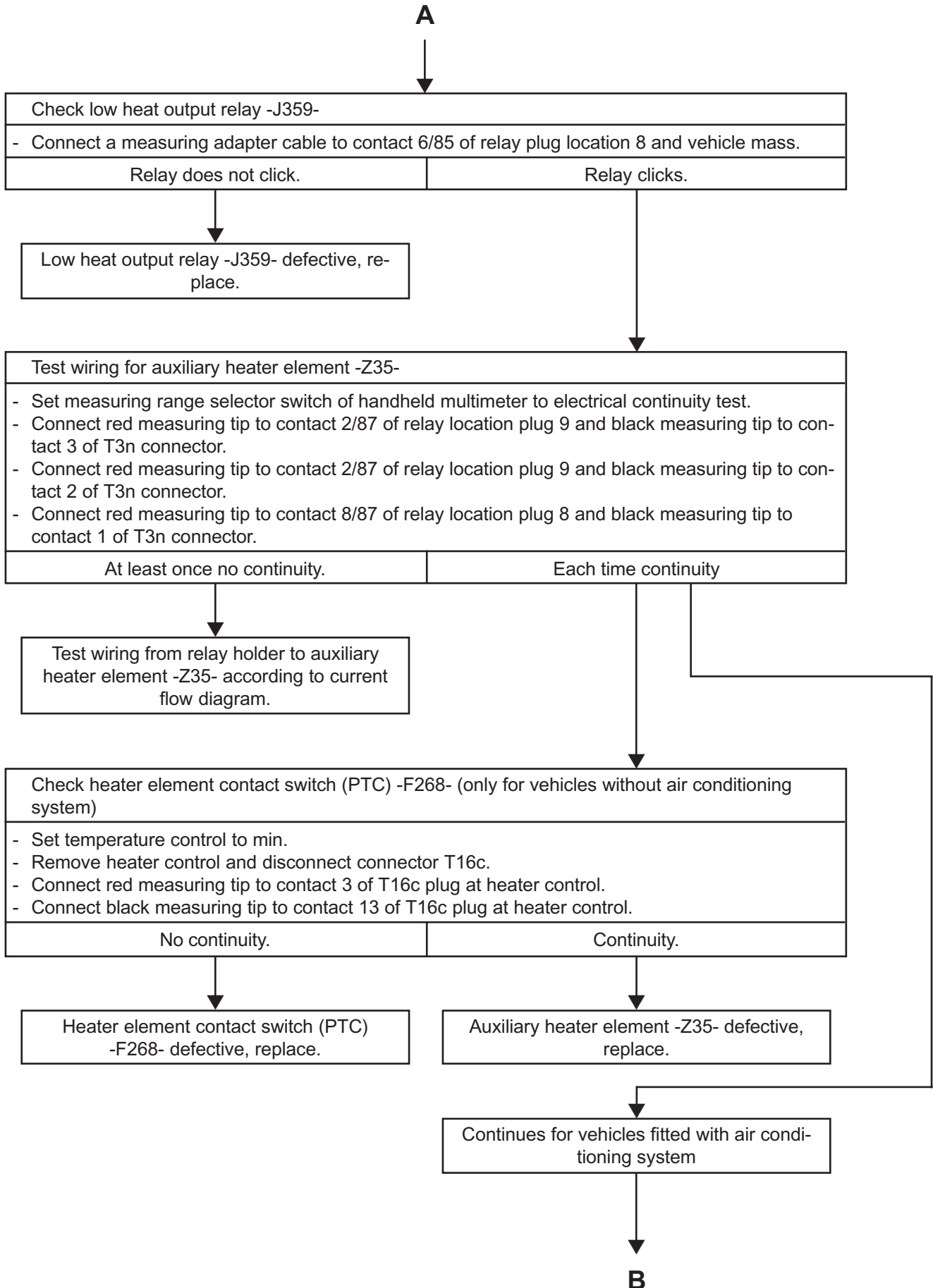
Test requirements:

- ◆ Fuses S276, S277, S278 (40 A) O.K.
- ◆ Battery voltage O.K.
- ◆ All electrical components such as heated rear window, light or seat heating are switched off
- ◆ Coolant temperature below 70 °C
- ◆ Temperature control to max.

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram





B



Check temperature selection rotary knob potentiometer -G267- (only for vehicles fitted with air conditioning system)	
<ul style="list-style-type: none"> - Set temperature control to max. - Initiate self-diagnosis for air conditioning system, read measured value block, heating element for PTC. - Heating element for PTC must be switched on. 	
Readout in Display: off.	Readout in display: on.



Air conditioning system control unit -J301-
defective, replace.



Auxiliary heater element -Z35- defective,
replace or engine control unit defective, re-
place.

END

Electrically adjustable and heated exterior mirror (without power windows)

Test requirements:

- ◆ Battery O. K.
- ◆ Fuses SB 11 and SB 38 O.K.
- ◆ Remove mirror adjustment switch
- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A

Note:

If the specified values are not achieved, eliminate line interruption according to current flow diagram or replace mirror.

Test step	Tested is	Test conditions	Specified value	Fault finding
1	Current supply at switch	Ignition on - red measuring tip to -T10f- switch plug, contact 5 - black measuring tip to -T10f- switch plug, contact 3	approx. 12 V	Line interruption
2	Switch functions for left mirror	- Left switch position Ignition on		
	- to the top	- red measuring tip to -T10f-, contact 2 - black measuring tip to -T10f-, contact 10	approx. 12 V	Switch defective
	- to the bottom	- red measuring tip to -T10f-, contact 10 - black measuring tip to -T10f-, contact 2	approx. 12 V	Switch defective
	- to the left	- red measuring tip to -T10f-, contact 10 - black measuring tip to -T10f-, contact 7	approx. 12 V	Switch defective
	- to the right	- red measuring tip to -T10f-, contact 7 - black measuring tip to -T10f-, contact 10	approx. 12 V	Switch defective

Test step	Tested is	Test conditions	Specified value	Fault finding
3	Switch functions for right mirror	<ul style="list-style-type: none"> - Right switch position Ignition on 		
	- to the top	<ul style="list-style-type: none"> - red measuring tip to -T10f-, contact 2 - black measuring tip to -T10f-, contact 6 	approx. 12 V	Switch defective
	- to the bottom	<ul style="list-style-type: none"> - red measuring tip to -T10f-, contact 6 - black measuring tip to -T10f-, contact 2 	approx. 12 V	Switch defective
	- to the left	<ul style="list-style-type: none"> - red measuring tip to -T10f-, contact 9 - black measuring tip to -T10f-, contact 6 	approx. 12 V	Switch defective
	- to the right	<ul style="list-style-type: none"> - red measuring tip to -T10f-, contact 6 - black measuring tip to -T10f-, contact 9 	approx. 12 V	Switch defective
4	Current supply for mirror heating	<ul style="list-style-type: none"> - Ignition on - Mirror adjustment switch in position "heated" - Remove mirror glass - disconnect both plugs - connect red terminal to a connection cable - connect black terminal to the other connection cable 	approx. 12 V	<ul style="list-style-type: none"> - Mirror adjustment switch defective - Line interruption of mirror heating defective
5	Mirror heating (in cold condition)	<ul style="list-style-type: none"> - Set measuring range selector switch of handheld multimeter to resistance measurement - Mirror glass removed - connect red terminal to a connection cable - connect black terminal to the other connection plug at the mirror glass 	3 - 6 Ω	Mirror heating defective, replace mirror glass

Test electrical sliding roof

Test requirements:

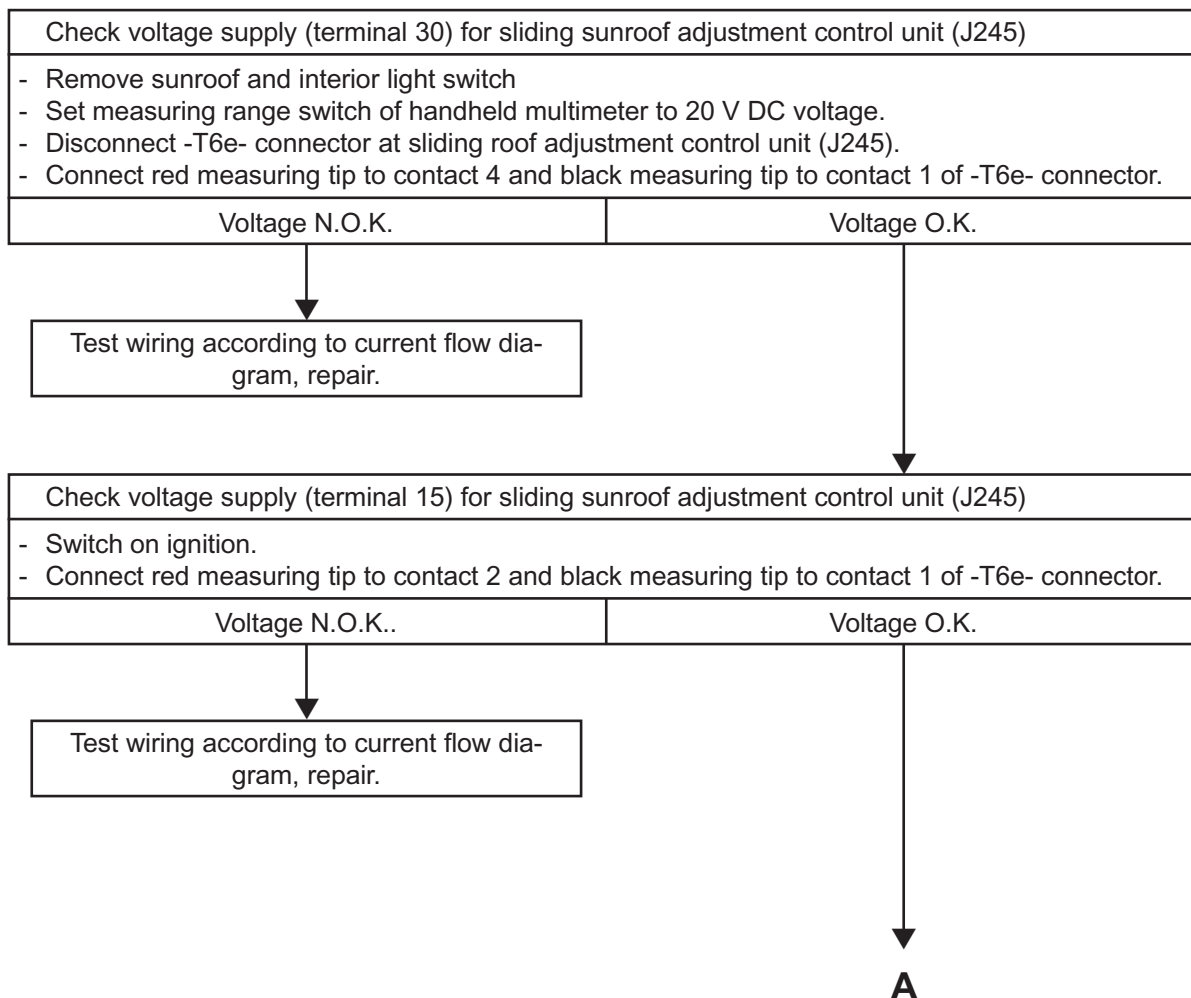
- ◆ Battery voltage O.K.
- ◆ Fuses SB 62 O.K.!
- ◆ Electrical sliding roof mechanically O.K.

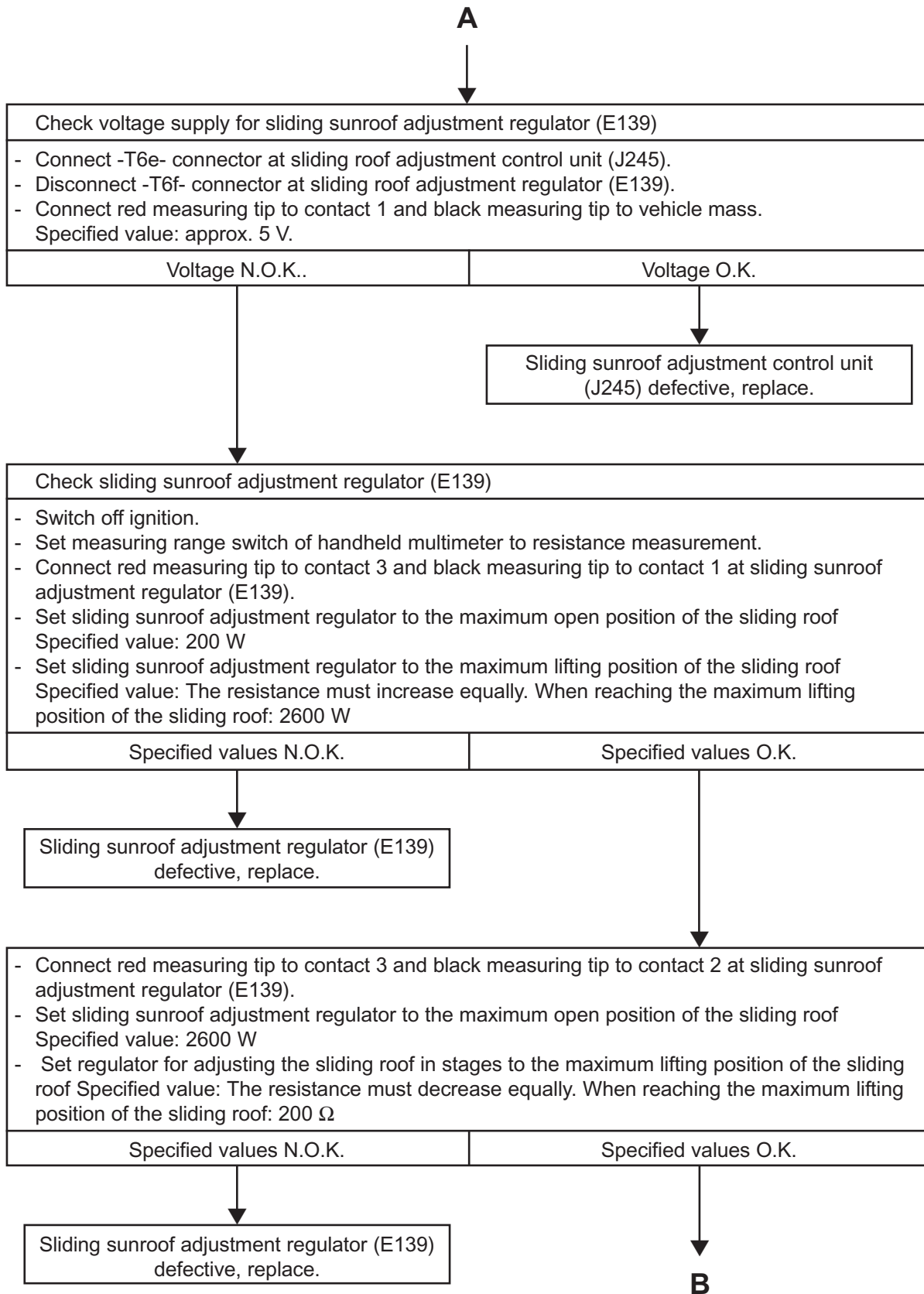
For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram

Note:

The sliding sunroof adjustment control unit (J245) and the motor for the sliding roof (V1) are combined in one component and cannot be replaced individually.





B



Test wiring in sliding sunroof adjustment regulator (E139)	
<ul style="list-style-type: none"> - Set measuring range switch of handheld multimeter to electrical continuity test. - Connect red measuring tip to contact 6 and black measuring tip to contact 2 at sliding sunroof adjustment regulator (E139). 	
Signal does not sound.	Signal sounds.



Sliding sunroof adjustment regulator (E139)
defective, replace.



Sliding sunroof adjustment control unit
(J245) defective, replace.

END

Check seat heating

Test requirements:

- ◆ Fuse SB63 (15 A) O.K.

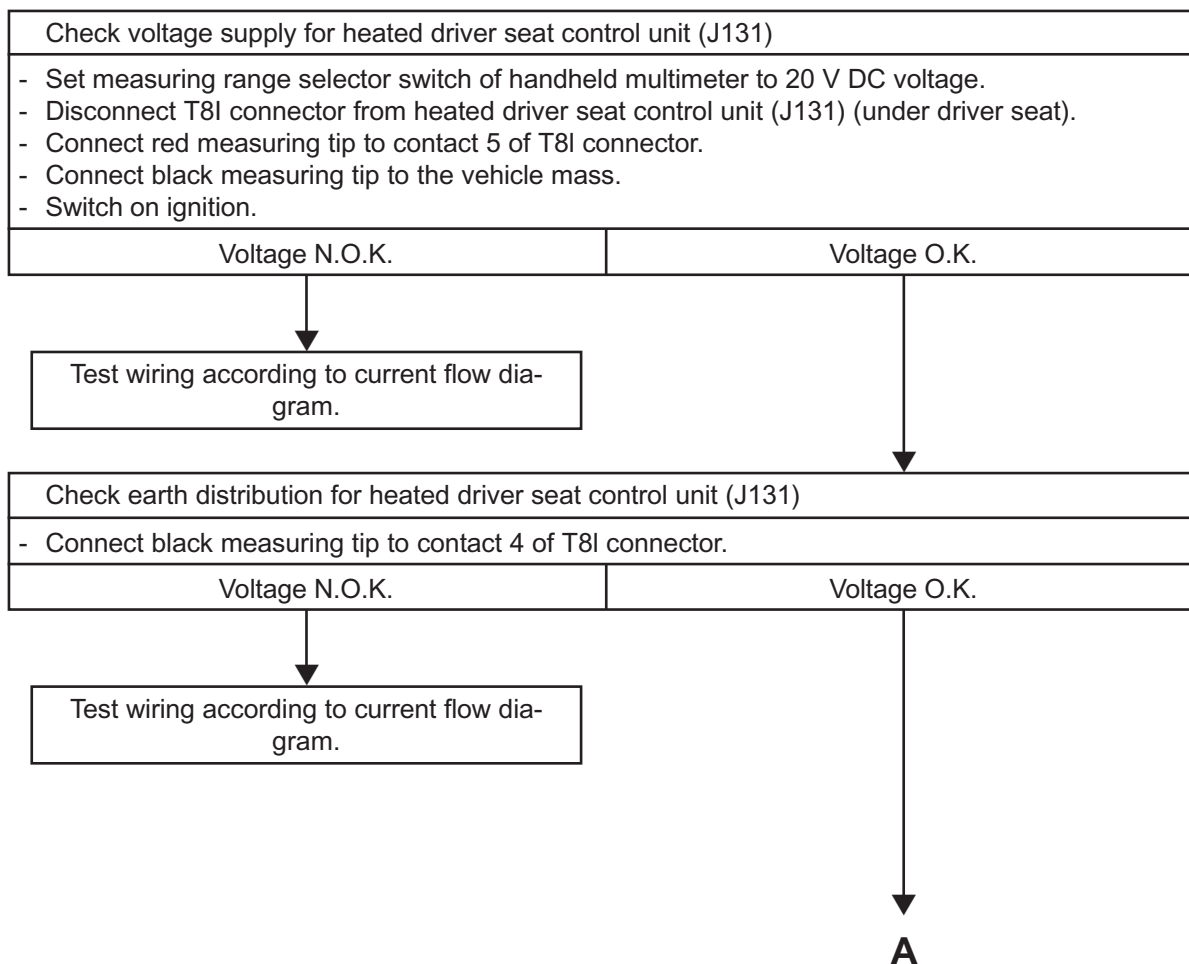
For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram

Note:

The following fault finding program describes the fault finding for the driver side. In case of defective front passenger seat heating proceed analogously.

Left seat heating without or with defective function



A



Check voltage supply for left electrical seat heating regulator (E94)	
<ul style="list-style-type: none"> - Switch off ignition. - Place T8I connector on heated driver seat control unit (J131) - Remove electrical seat heating regulator ⇒ Electrical System. - Disconnect T6h connector from electrical seat heating regulator. - Connect red measuring tip to contact 6 of T6h connector. - Connect black measuring tip to the vehicle mass. - Switch on ignition. 	
Voltage N.O.K.	Voltage O.K.



Test wiring according to current flow diagram, repair.



Check earth distribution for left electrical seat heating regulator (E94)	
<ul style="list-style-type: none"> - Connect black measuring tip to contact 4 of T6h connector. 	
Voltage N.O.K.	Voltage O.K.



Test wiring according to current flow diagram, repair.



Check left electrical seat heating regulator (E94)	
<ul style="list-style-type: none"> - Connect electrical seat heating regulator to T6h connector. - Connect red measuring tip to contact 5 of T6h connector. - Carry out voltage tests according to the table: 	
Left seat heating regulator in switch position:	Measuring results:
Lowest heat output	Readout approx. battery voltage
Full heat output	Readout approx. 9 V
Seat heating off	Readout no voltage
Measuring results N.O.K.	Measuring results O.K.



Left electrical seat heating regulator (E94) defective, replace.



B

B

Test wiring for the illumination of the left electrical seat heating regulator (E94).	
<ul style="list-style-type: none"> - Connect red measuring tip to contact 3 of T6h connector. - Switch on light, set dimmer of instrument panel illumination to bright. 	
Readout approx. battery voltage.	Voltage N.O.K.

If there was nevertheless a problem with the function of the lighting in the regulator, then left seat heating regulator (E94) is defective, replace

Test wirings according to current flow diagram.

Test wiring from left electrical seat heating regulator (E94) to heated driver seat control unit	
<ul style="list-style-type: none"> - Switch off ignition. - Disconnect T8l connector from heated driver seat control unit (J131), - Disconnect T6h connector from electrical seat heating regulator. - Set measuring range selector switch of handheld multimeter to electrical continuity test. - Connect red measuring tip to contact 5 of T6h connector. - Connect black measuring tip to contact 6 of T8l connector. 	
Signal does not sound.	Signal sounds.

Inspect wirings according to current flow diagram.

Check heater element of left seat surface (Z6)	
<ul style="list-style-type: none"> - T2e connector, disconnect under driver seat - Set measuring range selector switch of handheld multimeter to resistance measurement - Connect red measuring tip to contact 7 of T8l connector. - Connect black measuring tip to contact 2 of T2e connector. - Specified value approx. 1.2 Ω. 	
Specified value is not achieved.	Specified value is achieved.

Heater element of left seat surface (Z6) defective, replace.

C

C

Test driver seat backrest heating element (Z7)	
<ul style="list-style-type: none"> - Connect red measuring tip to contact 2 of T2e connector. - Connect black measuring tip to contact 1 of T2e connector. - Specified value approx. 1.2 Ω. 	
Specified value is not achieved.	Specified value is achieved.

Driver seat backrest heating element (Z7) faulty, replace.

Test wiring of heater elements to vehicle mass	
<ul style="list-style-type: none"> - Set measuring range selector switch of handheld multimeter to electrical continuity test. - Connect red measuring tip to contact 1 of T2e connector. - Connect black measuring tip to the vehicle mass. 	
Signal does not sound.	Signal sounds.

Inspect wirings according to current flow diagram.

Check temperature sensor (G59) of left seat heating	
<ul style="list-style-type: none"> - Set measuring range selector switch of handheld multimeter to resistance measurement - Connect red measuring tip to contact 4 of T8l connector. - Connect black measuring tip to contact 2 of T6g connector. - Specified value approx. 10 kΩ at 20 °C interior temperature. 	
Specified value is not achieved.	Specified value is achieved.

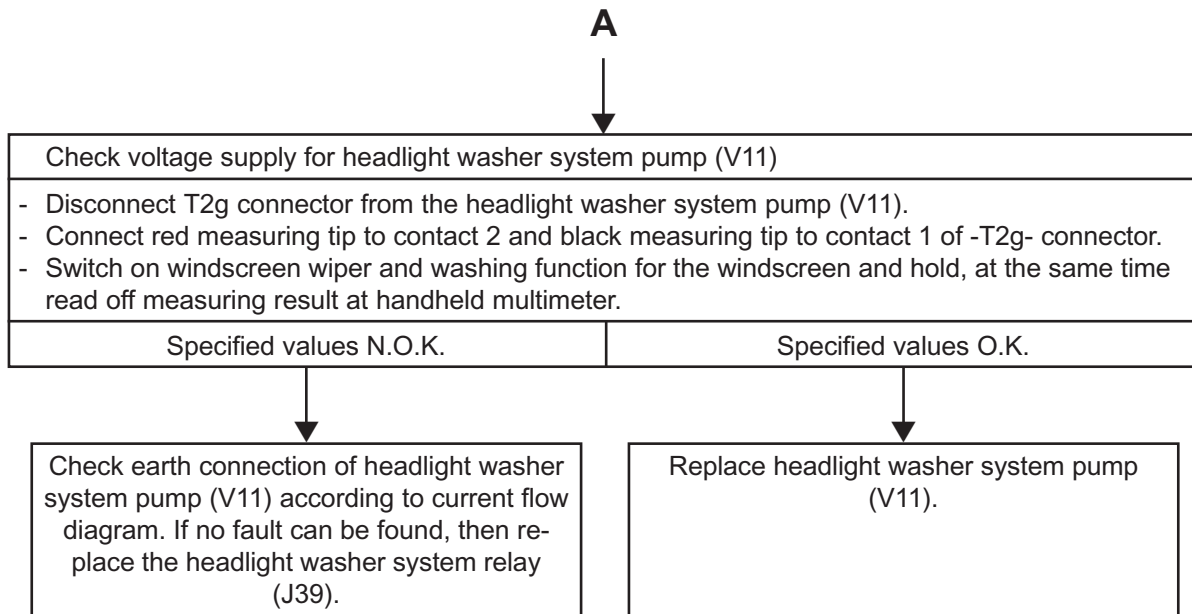
Temperature sensor (G59) of left seat heating defective, replace together with heater element of left seat surface (Z6).

Test wiring from temperature sensor (G59) of left seat heating to vehicle mass.	
<ul style="list-style-type: none"> - Set measuring range selector switch of handheld multimeter to electrical continuity test. - Connect red measuring tip to contact 4 of T8l connector. - Connect black measuring tip to the vehicle mass. 	
Signal does not sound.	Signal sounds.

Inspect wirings according to current flow diagram.

Heated driver seat defective, replace.

END



END

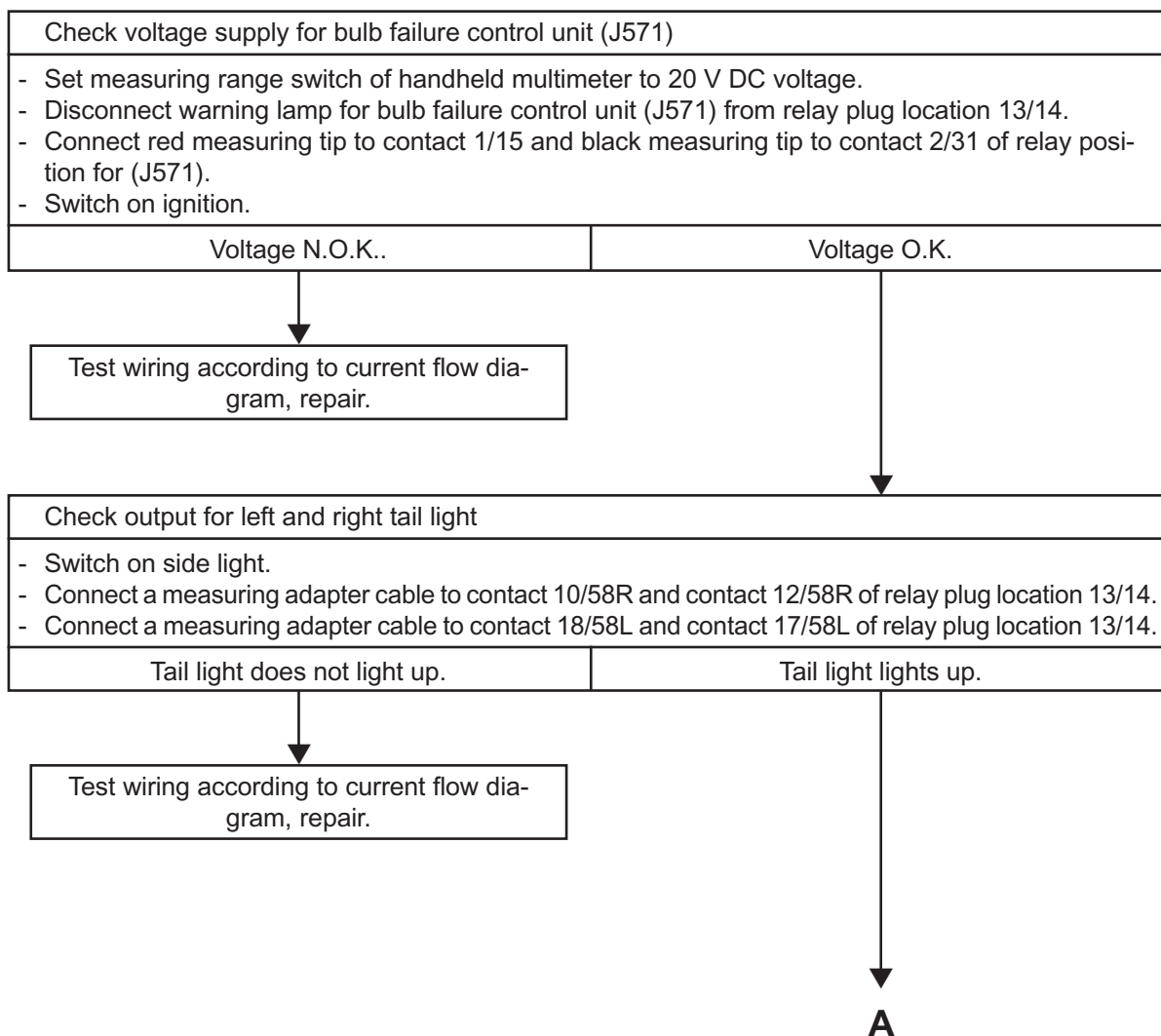
Check warning concerning bulb failure

Test requirements:

- ◆ Battery voltage O.K.
- ◆ Fuses according to Current Flow Diagram O.K.!
- ◆ Light bulbs for main beam, tail light and brake light O.K.!

For fault finding the following is required:

- ◆ Handheld multimeter, e.g. V.A.G 1526 A
- ◆ Measuring aid set, e.g. V.A.G 1594 A
- ◆ Valid current flow diagram



A



Check output for left and right dipped beam	
<ul style="list-style-type: none"> - Switch on ignition. - Switch on dipped beam. - Connect a measuring adapter cable to contact 14/56bR and contact 15/56bR of relay plug location 13/14. - Connect a measuring adapter cable to contact 11/56bL and contact 13/56bL of relay plug location 13/14. 	
Dipped beam does not light up.	Dipped beam lights up.



Test wiring according to current flow diagram, repair.



Check output for left and right brake light	
<ul style="list-style-type: none"> - Switch off ignition. - Actuate the brake pedal. - Connect a measuring adapter cable to contact 5/54 and consecutively to contact 8/54L and 4/54R of relay plug location 13/14. 	
Brake light does not light up.	Brake light lights up.



Test wiring according to current flow diagram, repair.



Check output for high mounted brake light	
<ul style="list-style-type: none"> - Actuate the brake pedal. - Connect a measuring adapter cable to contact 7/54 and contact 16/54H of relay plug location 13/14. 	
High mounted brake light does not light up.	High mounted brake light lights up.

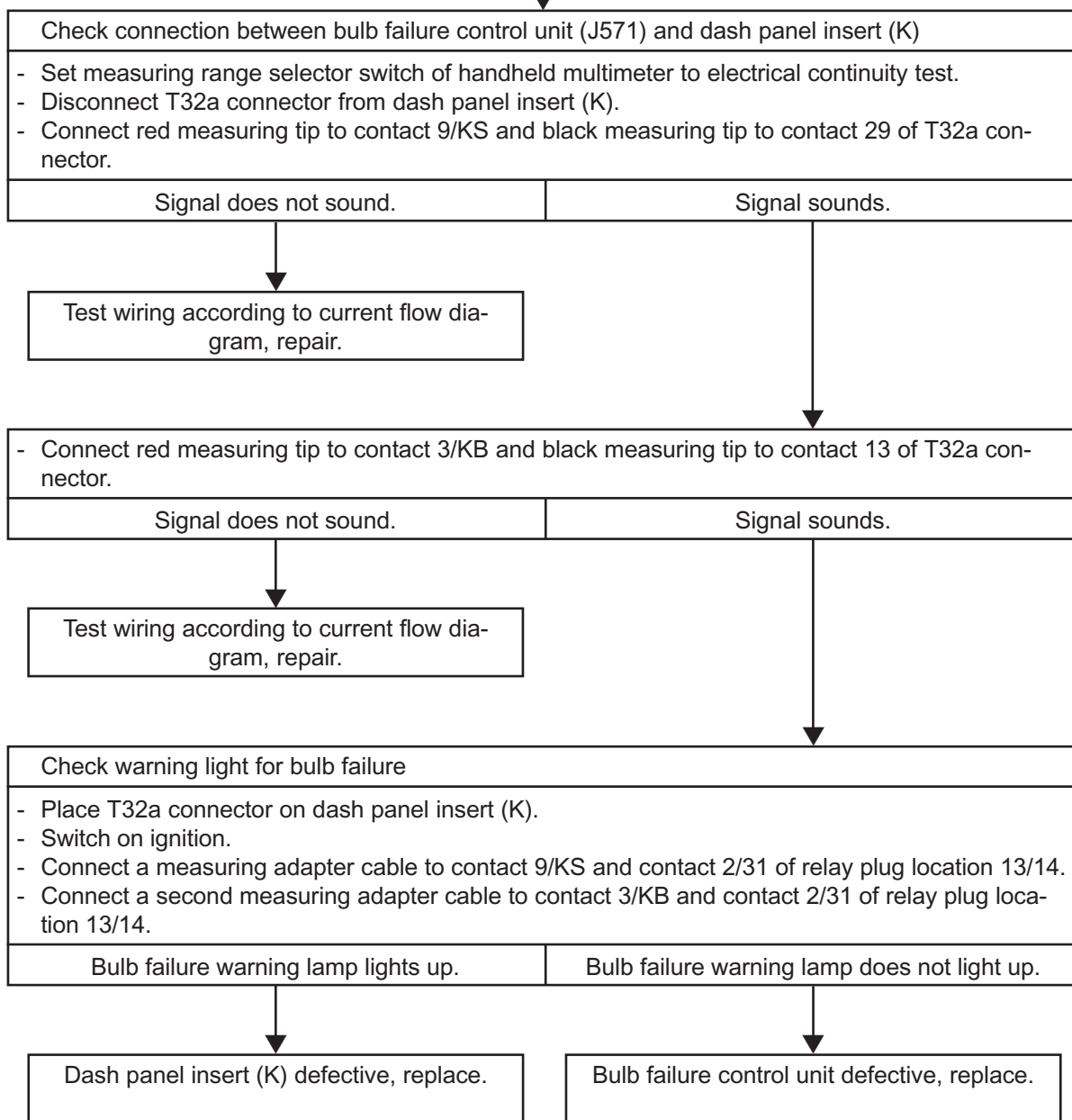


Test wiring according to current flow diagram, repair.



B

B



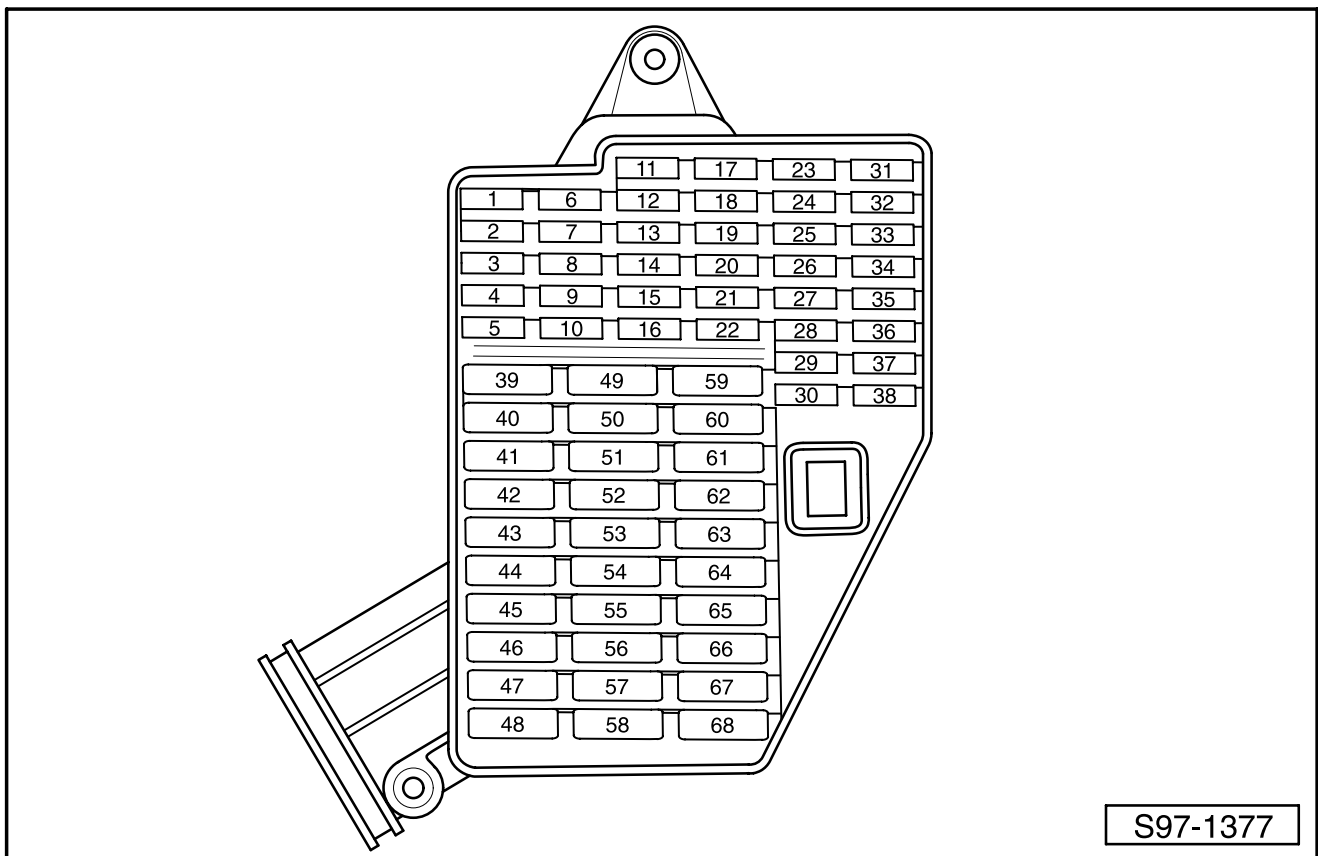
END

Fuse Holder, Fuse holder on battery, Relay holder, Additional fuse holder

Contents overview

- Fuse holder 08.02 ► 07.03 1/2
- Fuse holder 08.03 ► 1/4
- Fuse holder on battery 08.02 ► 07.03 1/6
- Fuse holder on battery 08.03 ► 1/7
- Relay holder 08.02 ► 07.03 1/8
- Relay holder 08.03 ► 1/9
- Additional fuse holder 08.02 ► 10.02 1/10
- Additional fuse holder 11.02 ► 1/10

Fuse holder - Fuse assignment 08.02 ► 07.03



The fuse protection for the unlisted optional equipment is listed in the corresponding current flow diagram.

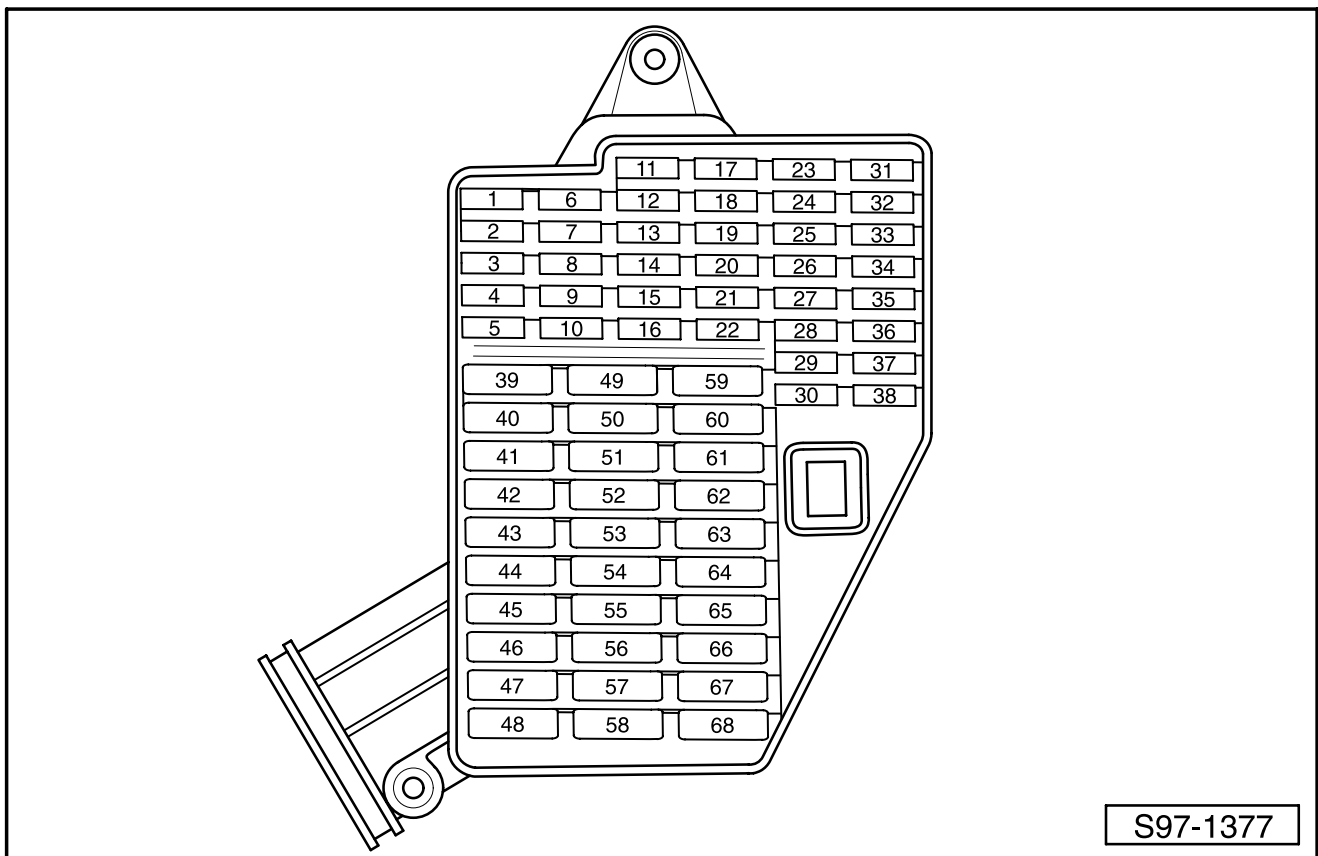
1 - Dash panel insert, ESP	5 A	13 - Reversing lights	10 A
2 - Brake lights	10 A	14 - Engine control unit	10 A
3 - Voltage supply diagnosis, Air conditioning system	5 A	15 - Wiper and washer system	10 A
4 - Interior light, Glove box light, Luggage compartment light	10 A	16 - Dash panel insert	5 A
5 - Door warning lamp (up to 10.02)	5 A	17 - Engine control unit	5 A
- Not assigned (as of 11.02)		- Engine control unit for 1.2/40 kW, 1.2/47 kW	15 A
6 - Headlight range control	5 A	18 - Telephone	5 A
7 - Engine electronics, Power assisted steering	5 A	19 - Automatic gearbox	10 A
8 - not assigned		20 - Bulb failure warning lamp	5 A
9 - Lambda probe	10 A	21 - Heated washer nozzles	5 A
10 - S contact (86s)	5 A	22 - not assigned	
11 - Heated and adjustable exterior mirrors	5 A	23 - Right main beam	10 A
12 - Fresh and recirculated air flap, Air conditioning system, Navigation system, Telephone, Gas discharge lamps	5 A	24 - Engine electronics	10 A

25 - ABS/TCS control unit	5 A	47 - not assigned	
- ABS/ESP control unit	10 A		
26 - not assigned		48 - Engine control unit	30 A
27 - not assigned		49 - Central locking	15 A
28 - Brake pedal switch, Clutch pedal switch, Engine electronics	5 A	50 - Right main beam / right gas discharge lamp, right headlight range control	15 A
29 - Engine control unit	5 A	51 - Socket in luggage compartment	15 A
30 - Left main beam, main beam warning lamp	10 A	52 - Petrol engine - ignition system	15 A
31 - Rear lid central locking	10 A	53 - Power windows	25 A
32 - Rear window wiper	10 A	54 - Left main beam / left gas discharge lamp, left headlight range control	15 A
33 - Right parking light	5 A	55 - not assigned	
34 - Left side light	5 A	56 - Engine control unit	20 A
35 - Petrol engine - injection valves	10 A	57 - Trailer coupling	25 A
36 - Number plate light	5 A	58 - Power windows	25 A
37 - Rear fog light, rear fog light warning lamp	7,5 A	59 - not assigned	
38 - Heated and adjustable exterior mirror	5 A	60 - Anti-theft alarm system	15 A
39 - Rear window heater	20 A	61 - Fuel pump	15 A
40 - Horn	20 A	62 - Sliding roof	25 A
41 - Windscreen wiper	20 A	63 - Seat heatings	15 A
42 - Socket	15 A	64 - Headlight washer system	20 A
43 - Onboard supply control unit, Selectorlever lock	20 A	65 - Fog light	15 A
44 - Flashing lights	15 A	66 - Power windows	25 A
45 - Radio, Navigation system	20 A	67 - not assigned	
46 - Power windows	25 A	68 - Fresh air blower	25 A

Fuse colours

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

Fuse holder - Fuse assignment 08.03 ►



The fuse protection for the unlisted optional equipment is listed in the corresponding current flow diagram.

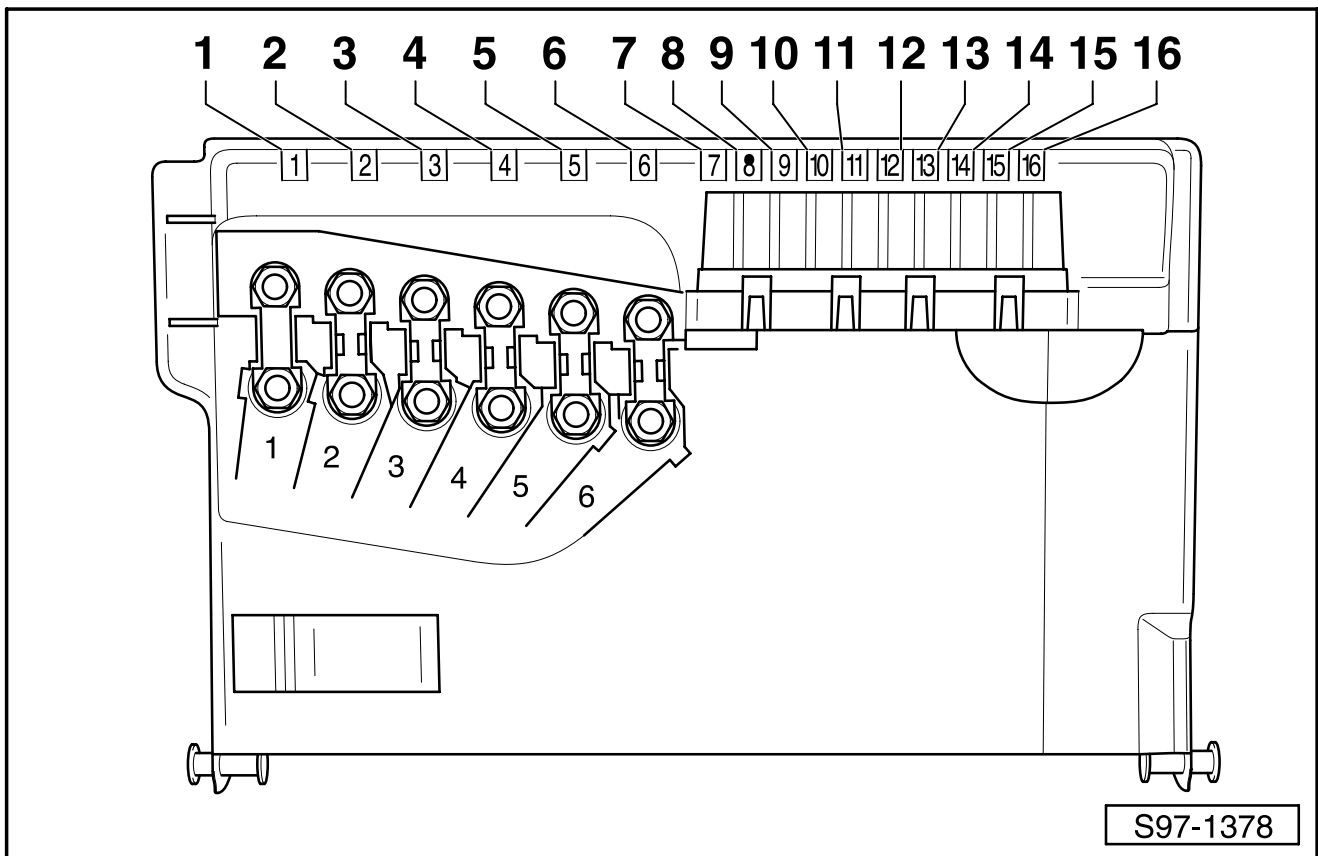
1 - Dash panel insert, ESP	5 A	13 - Reversing lights	10 A
2 - Brake lights	10 A	14 - Engine control unit	10 A
3 - Voltage supply diagnosis, Air conditioning system	5 A	15 - Wiper and washer system	10 A
4 - Interior light, Glove box light, Luggage compartment light	10 A	16 - Dash panel insert	5 A
5 - not assigned		17 - Engine control unit	5 A
		- Engine control unit for 1.2/40 kW, 1.2/47 kW	15 A
6 - Headlight range control	5 A	18 - Telephone	5 A
7 - Engine electronics, Power assisted steering	5 A	19 - Automatic gearbox	10 A
8 - not assigned		20 - Bulb failure warning lamp	5 A
9 - Lambda probe	10 A	21 - Heated washer nozzles	5 A
10 - S contact (86s)	5 A	22 - not assigned	
11 - Heated and adjustable exterior mirrors	5 A	23 - Right main beam	10 A
12 - Fresh and recirculated air flap, Air conditioning system, Navigation system, Telephone, Gas discharge lamps	5 A	24 - Engine electronics	10 A

25 - ABS/TCS control unit	5 A	47 - not assigned	
- ABS/ESP control unit	10 A		
26 - not assigned		48 - Engine control unit	30 A
27 - not assigned		49 - Central locking	15 A
28 - Brake pedal switch, Clutch pedal switch, Engine electronics	5 A	50 - Right main beam / right gas discharge lamp, right headlight range control	15 A
29 - Engine control unit	5 A	51 - Socket in luggage compartment	15 A
30 - Left main beam, main beam warning lamp	10 A	52 - Petrol engine - ignition system	15 A
31 - Rear lid central locking	10 A	53 - Power windows	25 A
32 - Rear window wiper	10 A	54 - Left main beam / left gas discharge lamp, left headlight range control	15 A
33 - Right parking light	5 A	55 - not assigned	
34 - Left side light	5 A	56 - Engine control unit	20 A
35 - Petrol engine - injection valves	10 A	57 - Trailer coupling	25 A
36 - Number plate light	5 A	58 - Power windows	25 A
37 - Rear fog light, rear fog light warning lamp	7,5 A	59 - not assigned	
38 - Heated and adjustable exterior mirror	5 A	60 - Anti-theft alarm system	15 A
39 - Rear window heater	20 A	61 - Fuel pump	15 A
40 - Horn	20 A	62 - Sliding roof	25 A
41 - Windscreen wiper	20 A	63 - Seat heatings	15 A
42 - Socket	15 A	64 - Headlight washer system	20 A
43 - Onboard supply control unit, Selectorlever lock	20 A	65 - Fog light	15 A
44 - Flashing lights	15 A	66 - Power windows	25 A
45 - Radio, Navigation system	20 A	67 - not assigned	
46 - Power windows	25 A	68 - Fresh air blower	25 A

Fuse colours

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

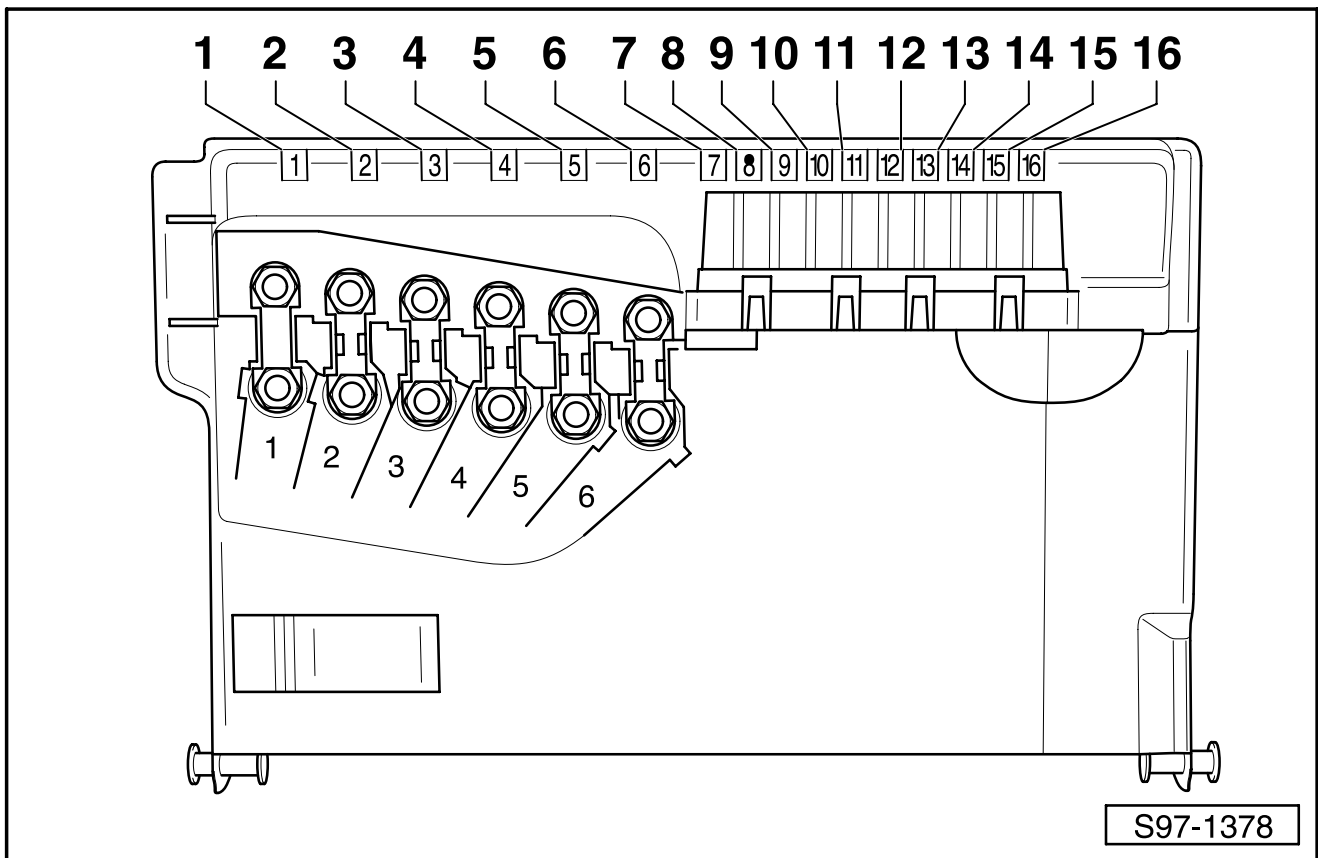
Fuse holder on battery 08.02 ► 07.03



Fuse assignment in fuse holder on battery

1 - Alternator	175 A	9 - not assigned	
2 - Interior compartment	110 A	10 - Onboard supply control unit	5 A
3 - Power assisted steering	50 A	11 - Air conditioning system	5 A
4 - Glow plugs / secondary air pump	40 A	12 - not assigned	
5 - Radiator fan	40 A	13 - Automatic gearbox	5 A
6 - ABS/TCS/ESP	40 A	14 - Wiper motor switch-over relay (up to 04.03)	20 A
7 - ABS/TCS/ESP	25 A	15 - not assigned	
8 - Radiator fan	30 A	16 - not assigned	

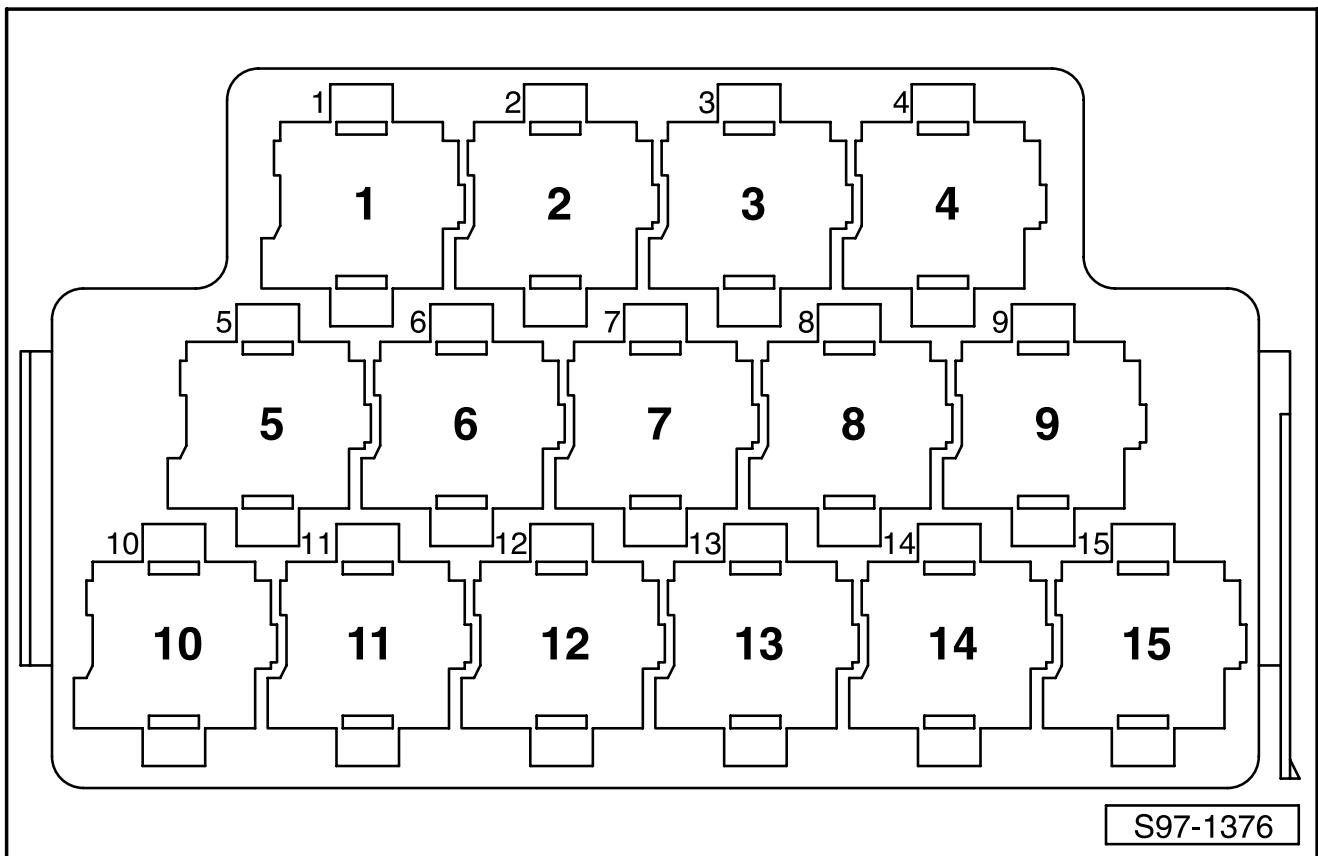
Fuse holder on battery 08.03 ➤



Fuse assignment in fuse holder on battery

1 - Alternator	175 A	9 - not assigned	
2 - Interior compartment	110 A	10 - Onboard supply control unit	5 A
3 - Power assisted steering	50 A	11 - Air conditioning system	5 A
4 - Glow plugs / secondary air pump	40 A	12 - not assigned	
5 - Radiator fan	40 A	13 - Automatic gearbox	5 A
6 - ABS/TCS/ESP	40 A	14 - not assigned	
7 - ABS/TCS/ESP	25 A	15 - not assigned	
8 - Radiator fan	30 A	16 - not assigned	

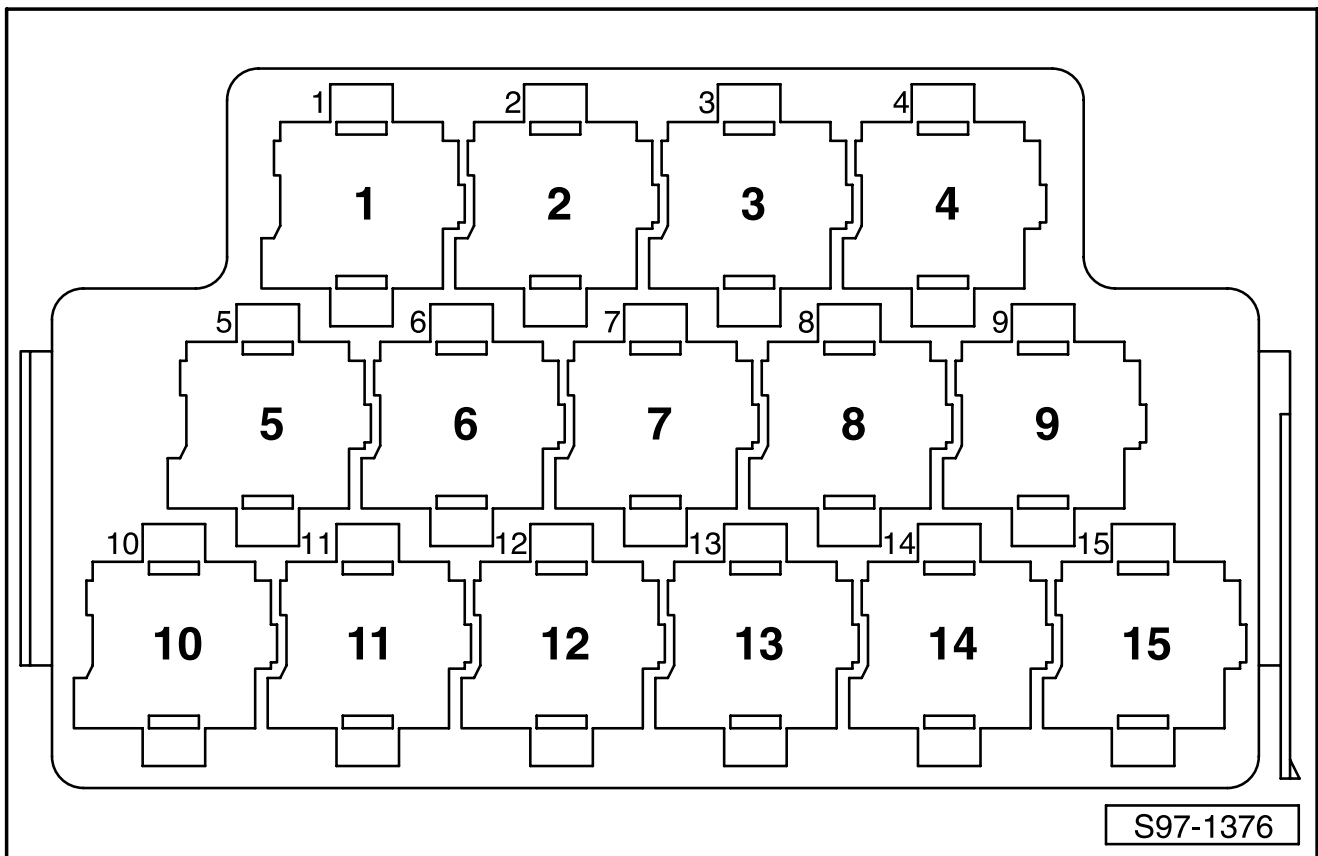
Relay holder 08.02 ► 07.03



Relay position assignment on relay holder

- 1** - Secondary air pump relay
- 2** - Motronic power supply relay
- 3** - Glow plug relay
- 4** - Fuel pump relay
- 5** - Door warning light relay (up to 10.02)
- Not assigned (as of 11.02)
- 6** - Headlight washer system relay
- 7** - Starter lockout relay
- 8** - Low heating capacity relay
- 9** - High heating capacity relay
- Fuel feed relay
- 10** - not assigned (up to 10.02)
- Additional fuse holder for heating element for additional heater (PTC) (as of 11.02)
- 11** - X contact relief relay
- 12** - Power supply relay for the Simos control unit (only for 1.2/40 kW, 1.2/47 kW)
- 13** - Bulb failure control unit
- 14** - Bulb failure control unit
- 15** - Diesel direct injection system relay

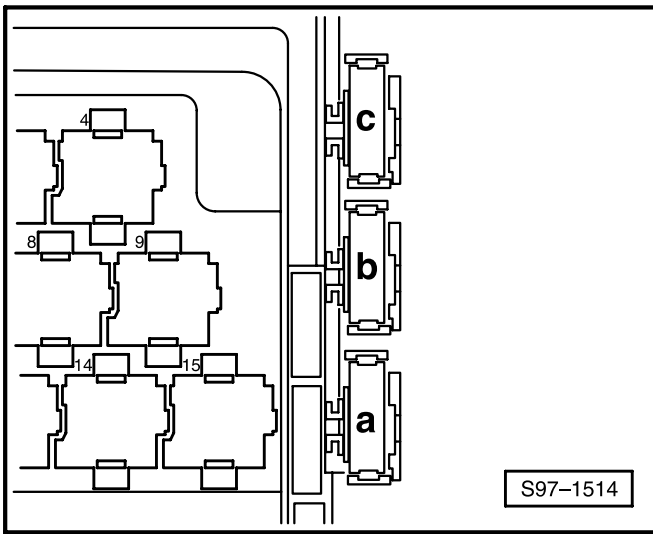
Relay holder 08.03 ►



Relay position assignment on relay holder

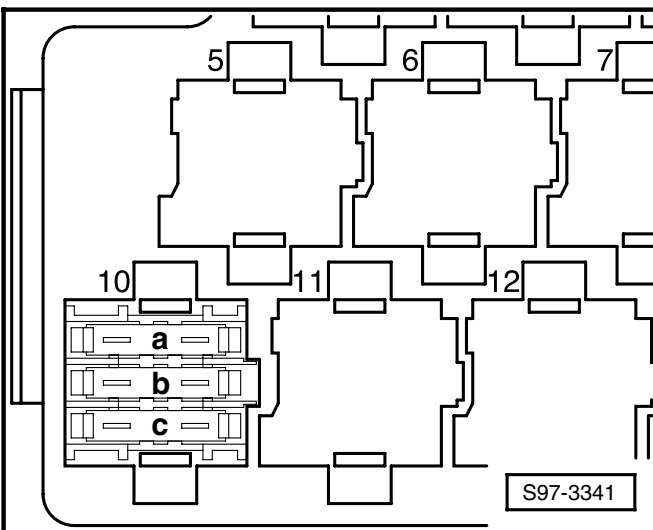
- 1** - Secondary air pump relay
- 2** - Motronic power supply relay
- 3** - Glow plug relay
- 4** - Fuel pump relay
- 5** - not assigned
- 6** - Headlight washer system relay
- 7** - Starter lockout relay
- 8** - Low heating capacity relay
- 9** - High heating capacity relay
 - Fuel feed relay
- 10** - Auxiliary relay holder for heating element for auxiliary heater (PTC)
- 11** - X contact relief relay
- 12** - Power supply relay for the Simos control unit (only for 1.2/40 kW, 1.2/47 kW)
- 13** - Bulb failure control unit
- 14** - Bulb failure control unit
- 15** - Diesel direct injection system relay

Additional fuse holder 08.02 ► 10.02



- a - S276 Heating element fuse -1-
- b - S277 Heating element fuse -2-
- c - S278 Heating element fuse -3-

Additional fuse holder 11.02 ►



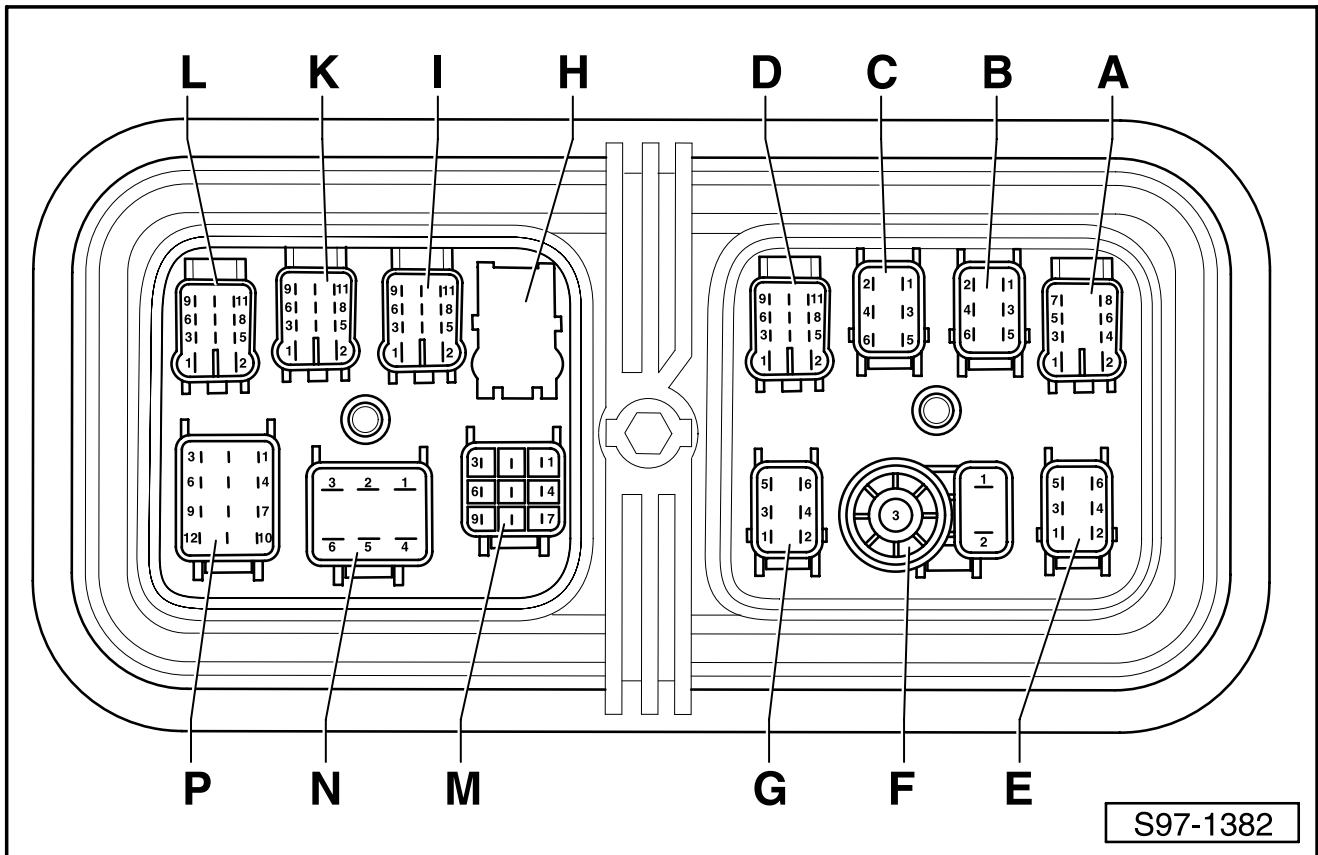
- a - S276 Heating element fuse -1-
- b - S277 Heating element fuse -2-
- c - S278 Heating element fuse -3-

Multipin plug connections

Contents overview

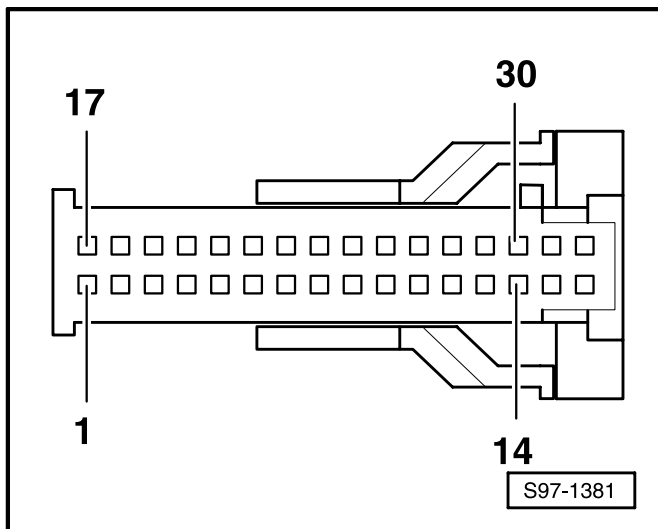
- Connector location and contact assignment of multipin connector on the left firewall	2/2
- Contact assignment of multipin connector at dash panel insert	2/3
- Contact assignment of multipin connector for Diagnostic connection	2/6
- Contact assignment of multipin connector at Ignition/starter switch	2/6
- Connector location and contact assignment of multipin connector at onboard supply unit	2/7
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- Contact assignment of multipin connector at engine control units	2/11
- Plug contact assignment of central locking lock unit	2/12
- Plug contact assignment of convenience system central control unit J393	2/13
- Plug contact assignment of ABS / ABS with EDL and TCS / ESP control unit	2/15
- Plug contact assignment of airbag control unit	2/16
- Plug contact assignment of front left door control unit	2/17
- Plug contact assignment of front right door control unit	2/19
- Plug contact assignment of rear door control unit	2/21
- Plug contact assignment of power steering control unit	2/22
- Plug contact assignment of sliding sunroof adjustment control unit	2/24
- Plug contact assignment of sliding sunroof adjustment regulator	2/24

Connector location and contact assignment of multipin connector on the left firewall



A -	T8e	8-pin connector (orange)
B -	T6n	6-pin connector (blue)
C -	T6r	6-pin connector (brown)
D -	T11a	11-pin connector (white)
E -	T6v	6-pin connector (green)
F -	T3a	3-pin connector (grey)
G -	T6p	6-pin connector (red)
H -		Not assigned
I -	T11c	11-pin connector (blue)
K -	T11b	11-pin connector (red)
L -	T11d	11-pin connector (brown)
M -	T9a	9-pin connector (yellow)
N -	T6w	6-pin connector (grey)
P -	T12a	12-pin connector (white)

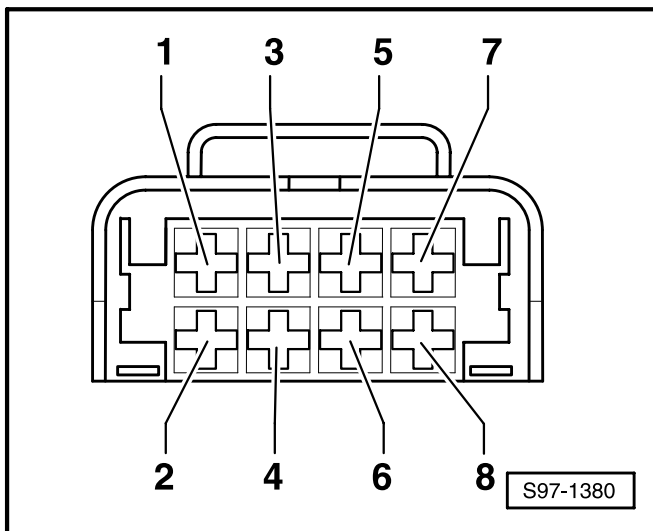
Contact assignment of multipin connector at dash panel insert



- 1 - T32a/1 Immobilizer reading coil
- 2 - T32a/2 Main beam warning lamp
- 3 - T32a/3 Dipped beam warning lamp
- 4 - T32a/4 Oil level/oil temperature sender
- 5 - T32a/5 Speed signal - output
- 6 - T32a/6 Speed signal - input
- 7 - T32a/7 CAN L (engine)
- 8 - T32a/8 CAN H (engine)
- 9 - T32a/9 CAN H (comfort)
- 10 - T32a/10 CAN L (comfort)
- 11 - T32a/11 Multifunction display
- 12 - T32a/12 Multifunction display

- 13 - T32a/13 Warning concerning failure of a brake light
- 14 - T32a/14 not assigned
- 15 - T32a/15 Fuel gauge sender
- 16 - T32a/16 Coolant shortage indicator sender
- 17 - T32a/17 Immobilizer reading coil
- 18 - T32a/18 Rear fog light warning lamp
- 19 - T32a/19 Fog light warning lamp
- 20 - T32a/20 Seat belt warning system warning lamp
- 21 - T32a/21 Handbrake warning switch
- 22 - T32a/22 Brake fluid level warning contact
- 23 - T32a/23 Oil pressure switch
- 24 - T32a/24 wake up (wake up cable)
- 25 - T32a/25 not assigned
- 26 - T32a/26 not assigned
- 27 - T32a/27 Multifunction display
- 28 - T32a/28 not assigned
- 29 - T32a/29 Headlight bulb failure warning lamp
- 30 - T32a/30 Washer fluid level sender
- 31 - T32a/31 Ambient temperature sensor
- 32 - T32a/32 Terminal 31 for output sender

Contact assignment of multipin connector at dash panel insert



- 1 - T8c/1 Brake pad/lining warning lamp
- 2 - T8c/2 not assigned
- 3 - T8c/3 not assigned
- 4 - T8c/4 Right parking light
- 5 - T8c/5 Terminal 15 - input
- 6 - T8c/6 Left parking light
- 7 - T8c/7 Terminal 30 - input
- 8 - T8c/8 Terminal 31 - input

Warning lamp control in dash panel insert

Warning lamp	Signal source
Main beam warning lamp (K1)	T32a/2
Alternator warning lamp (K2)	CAN bus (Onboard supply control unit)
Oil pressure warning lamp (K3)	T32a/23
Brake fluid level warning lamp (K7)	T32a/22, CAN bus (ABS control unit)
Handbrake warning lamp (K7)	T32a/21
Rear fog light warning lamp (K13)	T32a/18
Fog light warning lamp (K17)	T32a/19
Trailer operation warning lamp (K18)	CAN bus (Onboard supply control unit)
Seat belt warning system warning lamp (K19)	T32a/20, CAN bus (Airbag control unit)
Coolant temperature warning lamp (K28)	CAN bus (Engine control unit)
Coolant shortage warning lamp (K28)	T32a/16
Glow period warning lamp (K29)	CAN bus (Engine control unit)
Brake pad/lining warning lamp (K32)	T8c/1
Oil level warning lamp (K38)	T32a/4
ABS warning lamp (K47)	CAN bus (ABS control unit)

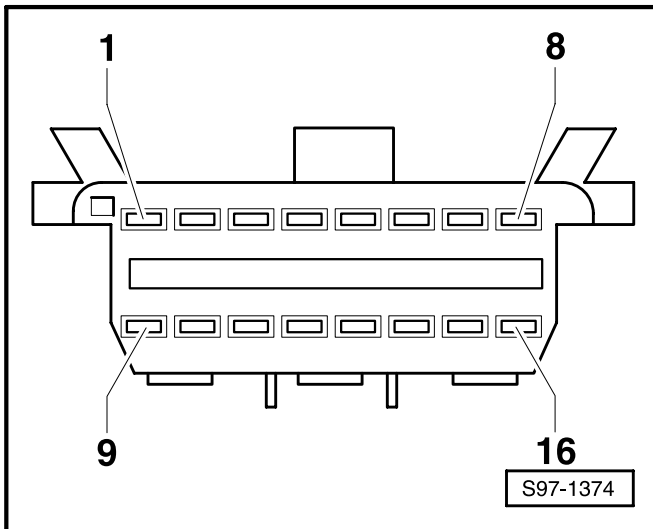
Warning lamp control in dash panel insert

Warning lamp	Signal source
Dipped beam warning lamp (K60)	T32a/3
Left turn signal warning lamp (K65)	CAN bus (Onboard supply control unit)
Airbag warning lamp (K75)	CAN bus (Airbag control unit)
Exhaust emissions warning lamp (K83)	CAN bus (engine control unit)
TCS warning lamp (K86)/ESP warning lamp (K155)	CAN bus (ABS/TCS/ESP control unit)
Power steering warning lamp (K92)	CAN bus (Onboard supply control unit)
Right turn signal warning lamp (K94)	CAN bus (Onboard supply control unit)
Reserve fuel warning lamp (K105)	T32a/15
Washer fluid low warning lamp (K106)	T32a/30
Immobilizer warning lamp (K117)	Immobilizer control unit
Electronic power control fault lamp (K132)	CAN bus (engine control unit)
Door open warning lamp (K166)	CAN bus (Onboard supply control unit)
Rear lid open warning lamp (K116)	CAN bus(Onboard supply control unit)
Bulb failure warning lamp (K170)	T32a/13, 29
Rear seat backrest lock warning lamp (K193)	CAN bus (Onboard supply control unit)

Read out control in dash panel insert

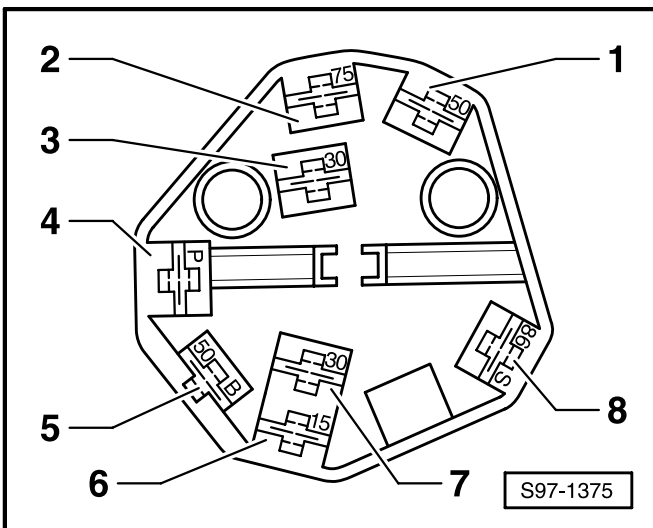
Read out	Signal source
Fuel gauge (G1)	T32a/15
Coolant temperature gauge (G3)	CAN bus (Engine control unit)
Rev. Counter (G5)	CAN bus (engine control unit)
Speedometer (G21)	T32a/6
Buzzer/gong (H3)	Control unit in dash panel insert
Digital clock (Y2)	Control unit in dash panel insert
Odometer display (Y4)	Control unit in dash panel insert
Multifunction display (J119)	T32a/11, 12, 27, 31, CAN bus (Engine control unit), control unit in dash panel insert
Selector lever position indicator (Y6)	CAN bus (control unit for automatic gearbox)

Contact assignment of multipin connector for diagnostic connection



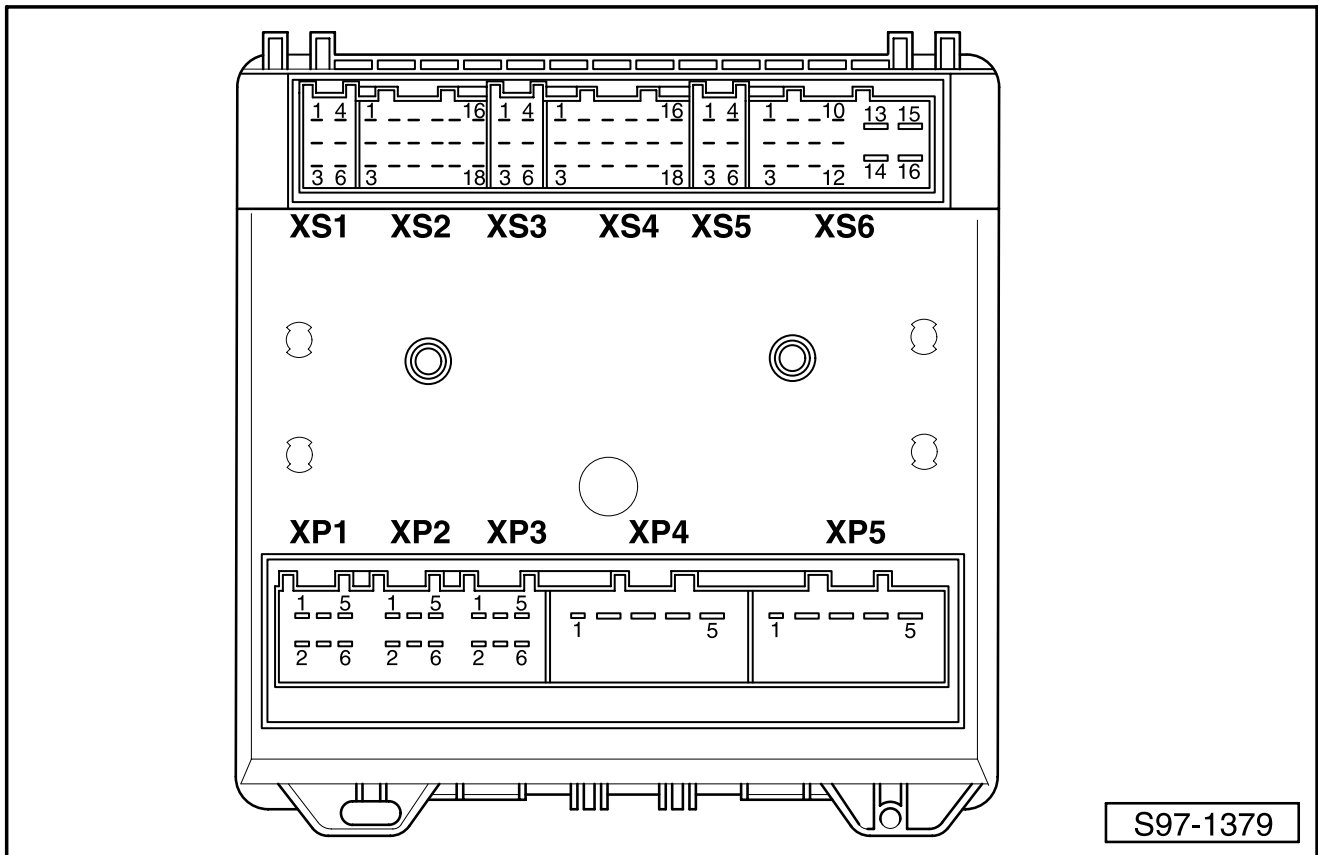
- 4 - T16b/4 Terminal 31
- 5 - T16b/5 Terminal 31
- 6 - T16b/6 CAN H (engine, switched on)
- 7 - T16b/7 K- diagnostic cable
- 14 - T16b/14 CAN L (engine, switched on)
- 16 - T16b/16 Terminal 30

Contact assignment of multipin connector at ignition/starter switch



- 1 - T8a/50
- 2 - T8a/75
- 3 - T8a/30
- 4 - T8a/P
- 5 - T8a/50b
- 6 - T8a/15
- 7 - T8a/30
- 8 - T8a/86s

Connector location and contact assignment of multipin connector at onboard supply



S97-1379

- XS1 - T6c 6-pin connector (black)
- XS2 - T18b 18-pin connector (black)
- XS3 - T6y 6-pin connector (brown)
- XS4 - T18a 18-pin connector (brown)
- XS5 - T6k 6-pin connector (red)
- XS6 - T16a 16-pin connector (black)

- XP1 - T6o 6-pin connector (black)
- XP2 - T6j 6-pin connector (brown)
- XP3 - T6x 6-pin connector (red)
- XP4 - T5a 5-pin connector (black)
- XP5 - T5c 5-pin connector (brown)

Signal description on onboard supply control unit

Connector		Signal
XS1	T6c/1	Input of light switch (for headlight washer system)
	T6c/2	Input of regulator for lighting - switches and instruments (58b)
	T6c/3	Output of warning lamp + hazard warning light button illumination
	T6c/4	Input of heated rear window button (31)
	T6c/5	Output for heated rear window warning lamp
	T6c/6	Input of hazard warning light button (31)
XS2	T18b/1	Output for selector level lock
	T18b/2	Output (release) for sliding sunroof adjustment control unit (15)
	T18b/3	Output (block) for heated driver seat control unit
	T18b/4	
	T18b/5	
	T18b/6	
	T18b/7	
	T18b/8	
	T18b/9	CAN-L, comfort
	T18b/10	Output (block) for heated driver seat control unit
	T18b/11	
	T18b/12	CAN-H, comfort
	T18b/13	Input of multi-function switch for automatic gearbox (31)
	T18b/14	Output for headlight washer system relay
	T18b/15	
	T18b/16	
	T18b/17	Output for start interlock relay
	T18b/18	
XS3	T6Y/1	
	T6Y/2	Input of CCS switch (Off)
	T6Y/3	Input of CCS switch (On/Off)
	T6Y/4	
	T6Y/5	Input of CCS switch (support/accelerate)
	T6Y/6	Input of CCS switch (set)

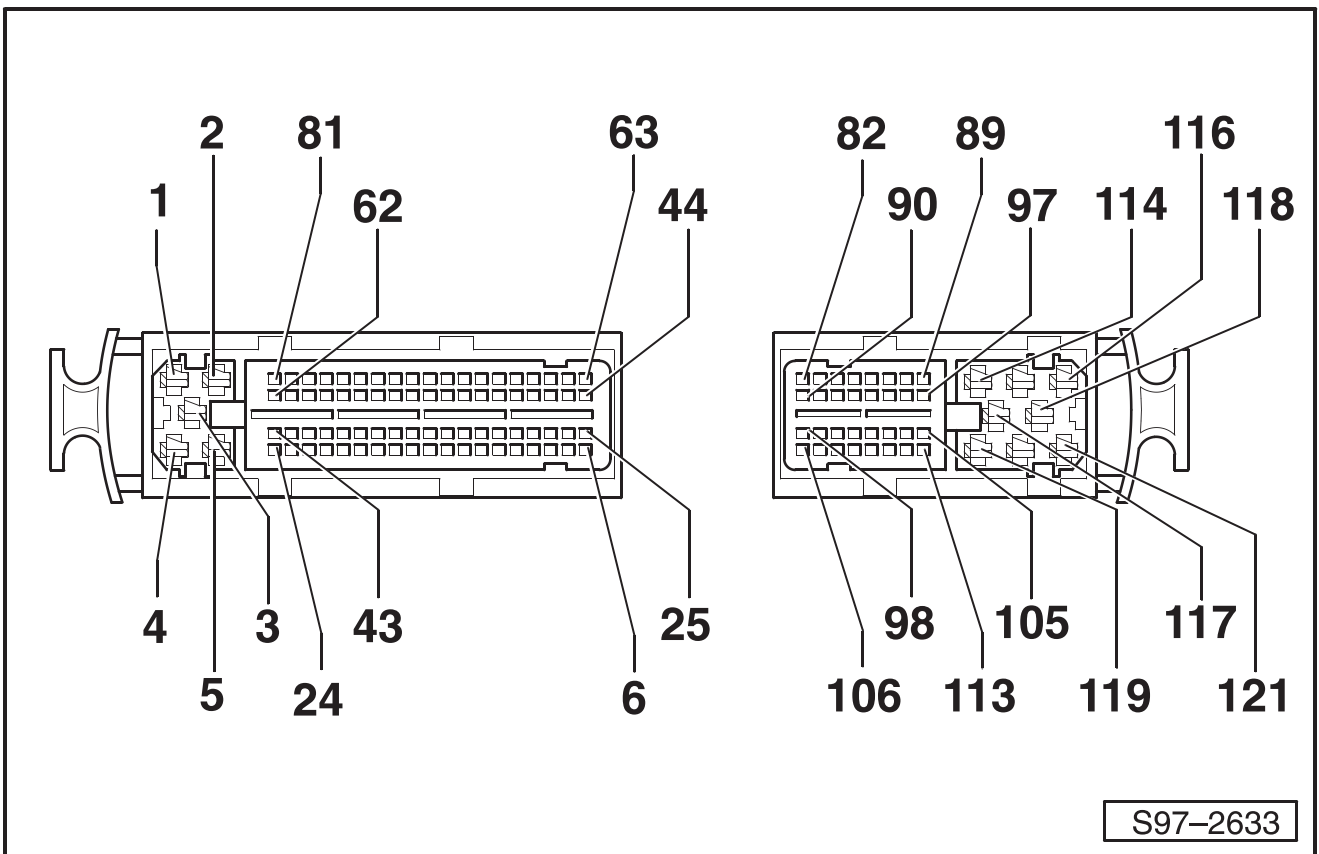
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Connector		Signal
XS4	T18a/1	K-cable
	T18a/2	Input of ignition starter switch (86s)
	T18a/3	Input of rear right door contact switch (31)
	T18a/4	Input of front right door contact switch (31)
	T18a/5	Input of fuse in fuse holder on battery (30 analogous)
	T18a/6	Input of front left door contact switch (31)
	T18a/7	Input of left backrest contact switch (31)
	T18a/8	Input (31 analogous)
	T18a/9	Input of alternator (D+)
	T18a/10	Input of right backrest contact switch (31)
	T18a/11	Input of ignition starter switch (75)
	T18a/12	Input of ignition starter switch (15)
	T18a/13	Input of rear left door contact switch (31)
	T18a/14	Input of ignition starter switch (50)
	T18a/15	Input of windscreen wiper switch, output for rear window wiper
	T18a/16	Input of castor contact of windscreen wiper motor
	T18a/17	Input of actuating the horn (31)
	T18a/18	Input of regulator for the windscreen wiper interval switching
XS5	T6k/1	
	T6k/2	
	T6k/3	Input of central locking switch, in rear lid lock (31)
	T6k/4	Input of central luggage compartment illumination switch, in rear lid lock
	T6k/5	
	T6k/6	Input of rear lid handle release button (31)
XS6	T16a/1	
	T16a/2	CAN-L, switched
	T16a/3	CAN-L
	T16a/4	
	T16a/5	CAN-L
	T16a/6	CAN-H, switched
	T16a/7	Input of windscreen wiper switch (1st stage)
	T16a/8	Input of windscreen wiper switch (2nd stage)
	T16a/9	Output for fuel feed relay (31)
	T16a/10	Input of turn signal switch (left turn signal) (31)

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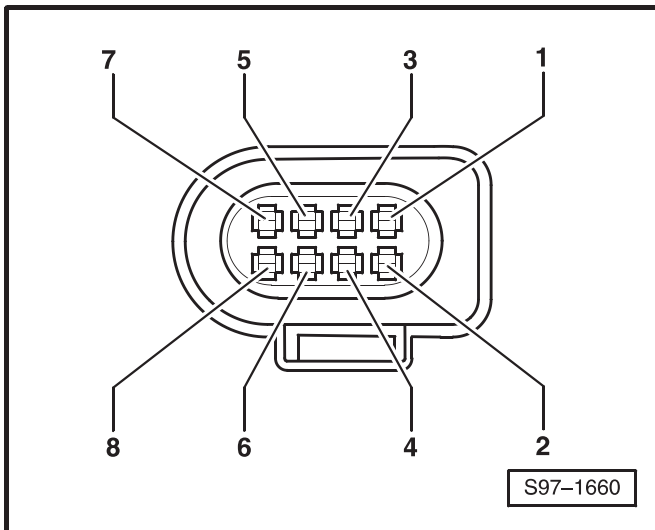
Connector		Signal
XS6	T16a/11	Output for dash panel insert (Wake up)
	T16a/12	Input of turn signal switch (right turn signal) (31)
	T16a/13	Input of engine hood contact switch (31)
	T16a/14	Output for right turn signal
	T16a/15	Input of fuse 44a (30)
	T16a/16	Output for left turn signal
XP1	T6o/1	Input of fuse 13a (15) (only for vehicles fitted with automatic gearbox)
	T6o/2	Input of reversing light switch (not valid for vehicles with automatic gearbox), Output for reversing light switch (only for vehicles with automatic gearbox)
	T6o/3	
	T6o/4	
	T6o/5	Output for rear lid central locking motor
	T6o/6	Input of fuse 31a (30)
XP2	T6j/1	Input of fuse 43a (30)
	T6j/2	
	T6j/3	
	T6j/4	Input of fuse 4a (30)
	T6j/5	
	T6j/6	Output for interior light, luggage compartment light, glove box light (30al)
XP3	T6x/1	Input of exterior mirror heating button
	T6x/2	Output for left heated exterior mirror
	T6x/3	
	T6x/4	Output for right heated exterior mirror
	T6x/5	
	T6x/6	Input of fuse 38a (30)
XP4	T5a/1	Output for front interior light (31)
	T5a/2	Input (31)
	T5a/3	Input of fuse 41a (30)
	T5a/4	Output for windscreen wiper motor (1st stage)
	T5a/5	Output for windscreen wiper motor (2nd stage)
XP5	T5c/1	Input of windscreen wiper motor (31) (brake application)
	T5c/2	Output for horn
	T5c/3	Input of fuse 40a (30)
	T5c/4	Output for heated rear window
	T5c/5	Input of fuse 39a (30)

Contact assignment of multipin connector on the engine control units



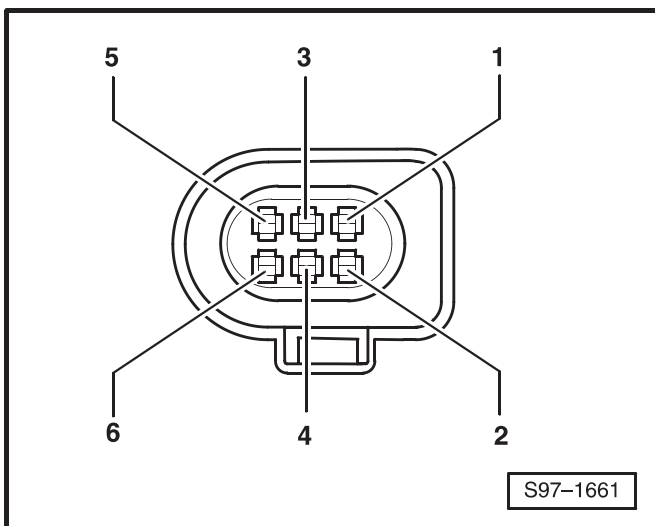
Note: Refer to the appropriate current flow diagram for the exact contact assignment.

Plug contact assignment of central locking lock unit, driver side T8f and front passenger side T8g



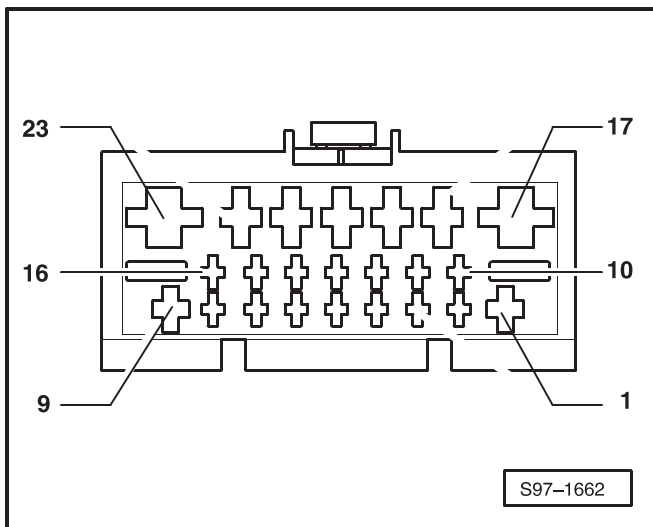
- | | | |
|-----|----------------------|--|
| 1 - | T8f/1
or
T8g/1 | Central locking motor |
| 2 - | T8f/2
or
T8g/2 | Central locking motor |
| 3 - | T8f/3
or
T8g/3 | free |
| 4 - | T8f/4
or
T8g/4 | Close (without resistance),
open (above resistance 180 Ω) |
| 5 - | T8f/5
or
T8g/5 | Feedback for -closed-
(without resistance), feedback
for -closed with Safe- (with
resistance 180 Ω) |
| 6 - | T8f/6
or
T8g/6 | free |
| 7 - | T8f/7
or
T8g/7 | Earth |
| 8 - | T8f/8
or
T8g/8 | Door contact switch earth |

Plug contact assignment of central locking lock unit, rear left T6c and rear right T6d



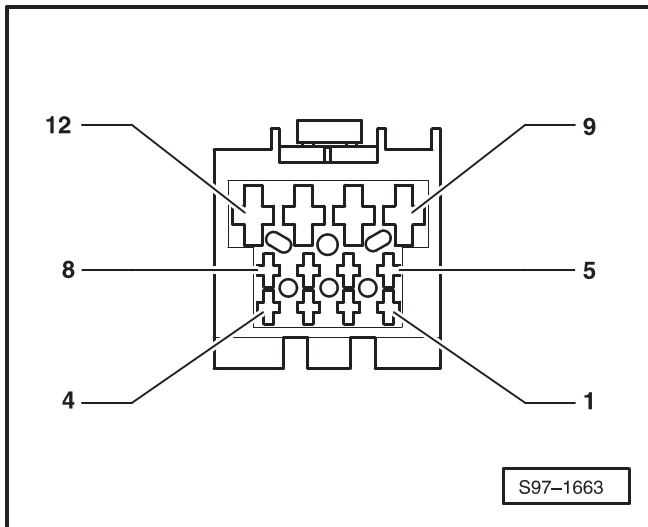
- | | | |
|-----|----------------------|---|
| 1 - | T6c/1
or
T6d/1 | Central locking motor |
| 2 - | T6c/2
or
T6d/2 | Central locking motor |
| 3 - | T6c/3
or
T6d/3 | Feedback for -closed-
(without resistance), feedback
for -closed with Safe- (with
resistance 180 Ω), |
| 4 - | T6c/4
or
T6d/4 | free |
| 5 - | T6c/5
or
T6d/5 | Earth |
| 6 - | T6c/6
or
T6d/6 | Door contact switch earth |

23-pin plug contact assignment of convenience system central control unit J393,



- 1 - T23a/1 Driver side central locking motor
- 2 - T23a/2 Feedback for -closed- (without resistance), feedback for -closed with Safe- (with resistance 180 Ω), front passenger side
- 3 - T23a/3 Door warning light relay (only for vehicles with door warning lights) (up to 10.02)
- 4 - T23a/4 Central locking warning lamp in driver door
- 5 - T23a/5 Close (without resistance), open (above resistance 180 Ω), front passenger side
- 6 - T23a/6 Close (without resistance), open (above resistance 180 Ω), driver side
- 9 - T23a/9 Feedback for -closed- (without resistance), feedback for -closed with Safe- (with resistance 180 Ω), driver side
- 10 - T23a/10 Data bus CAN-Low, comfort
- 11 - T23a/11 Data bus CAN-High, comfort
- 12 - T23a/12 Sliding sunroof adjustment control unit (actuation)
- 13 - T23a/13 K-diagnostic cable connection
- 17 - T23a/17 Earth
- 19 - T23a/19 Front passenger side central locking motor
- 21 - T23a/21 Front passenger side central locking motor
- 22 - T23a/22 Driver side central locking motor
- 23 - T23a/23 Positive connection 30a, via fuse SB 49

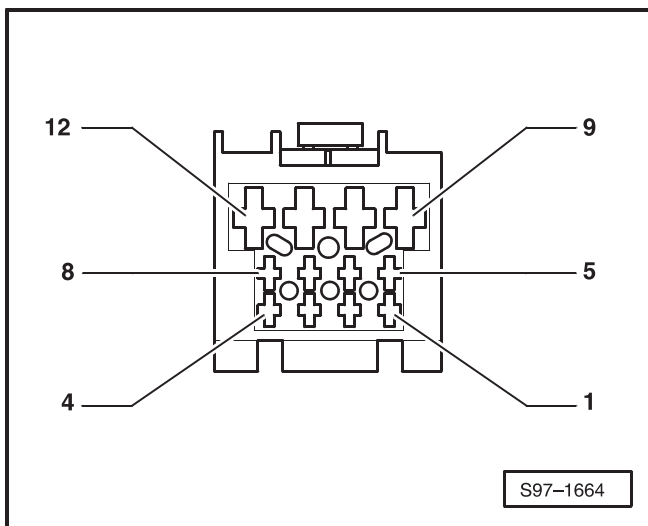
12-pin plug contact assignment of convenience system central control unit J393, (black)



- 1 - T12c/1 Feedback for -closed- (without resistance), feedback for -closed with Safe- (with resistance 180 Ω), rear right
- 3 - T12c/3 Feedback for -closed- (without resistance), feedback for -closed with Safe- (with resistance 180 Ω), rear left
- 9 - T12c/9 Rear right central locking motor
- 10 - T12c/10 Rear left central locking motor
- 11 - T12c/11 Rear right central locking motor
- 12 - T12c/12 Rear left central locking motor

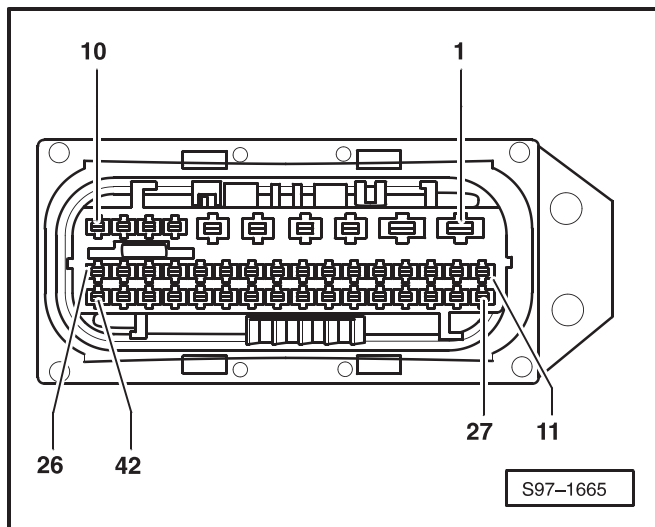
12-pin plug contact assignment of convenience system central control unit J393, only for vehicles fitted with central locking remote control or with anti-theft alarm system (brown)

On vehicles fitted with anti-theft alarm system no plug is placed on.



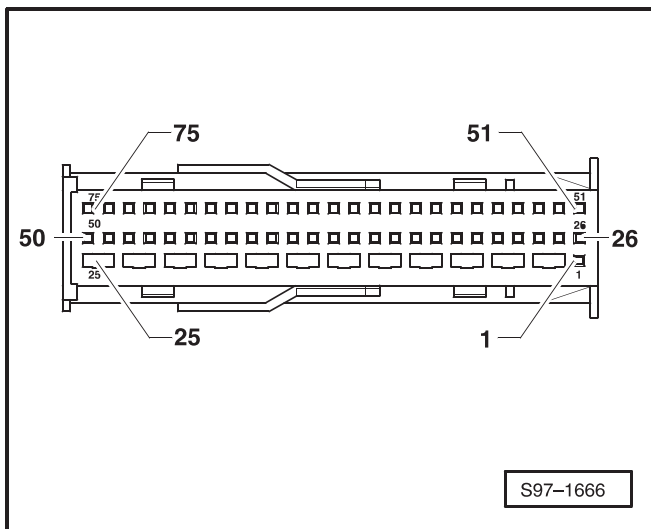
- 1 - T12i/1 Interior monitoring sensor
- 2 - T12i/2 Interior monitoring sensor
- 6 - T12i/6 Alarm horn
- 8 - T12i/8 Interior monitoring sensor
- 10 - T12i/10 Positive connection 30a, via fuse SB 60
- 11 - T12i/11 T6v/4 connector, on left firewall

Plug contact assignment of ABS/ABS with EDL and TCS/ESP control unit



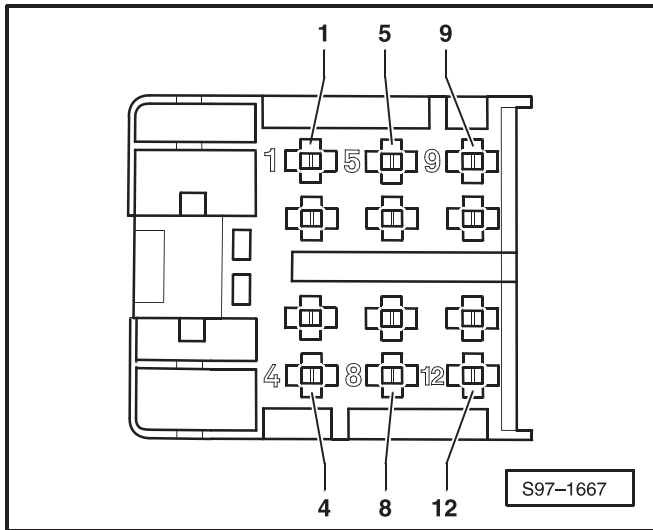
- | | | | |
|--------------|--|--------------|---|
| 1 - T42a/1 | Earth | 14 - T42a/14 | Rear left speed sensor |
| 2 - T42a/2 | Positive connection 30, via fuse S178 | 15 - T42a/15 | Front right speed sensor |
| 5 - T42a/5 | Earth | 16 - T42a/16 | Front right speed sensor |
| 6 - T42a/6 | Positive connection 30, via fuse S179 | 19 - T42a/19 | Signal for navigation system control unit |
| 8 - T42a/8 | Lateral acceleration and yaw rate sender | 21 - T42a/21 | Lateral acceleration and yaw rate sender, steering angle sender |
| 9 - T42a/9 | Lateral acceleration and yaw rate sender | 23 - T42a/23 | Positive connection 15a, via fuse SB 25 |
| 10 - T42a/10 | Lateral acceleration and yaw rate sender | 24 - T42a/24 | Data bus CAN-High |
| 12 - T42a/12 | Front left speed sensor | 25 - T42a/25 | Sender -1- for brake pressure |
| 13 - T42a/13 | Rear left speed sensor | 26 - T42a/26 | Sender -1- for brake pressure |
| | | 27 - T42a/27 | ASR / ESP switch |
| | | 28 - T42a/28 | Front left speed sensor |
| | | 30 - T42a/30 | Rear right speed sensor |
| | | 31 - T42a/31 | Rear right speed sensor |
| | | 32 - T42a/32 | Brake light switch |
| | | 34 - T42a/34 | Signal for navigation system control unit |
| | | 37 - T42a/37 | Brake pedal switch |
| | | 38 - T42a/38 | Handbrake warning switch |
| | | 39 - T42a/39 | Lateral acceleration and yaw rate sender, steering angle sender |
| | | 40 - T42a/40 | Data bus CAN-Low |
| | | 41 - T42a/41 | Lateral acceleration and yaw rate sender |
| | | 42 - T42a/42 | Sender -1- for brake pressure |

Plug contact assignment of airbag control unit



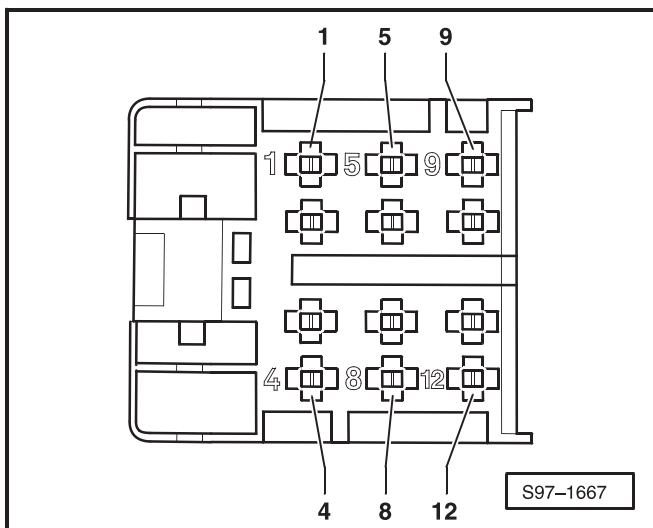
- 26 - T75a/26 Positive connection 15
- 27 - T75a/27 Side airbag igniter, front passenger side
- 28 - T75a/28 Side airbag igniter, front passenger side
- 29 - T75a/29 Side airbag igniter, driver side
- 30 - T75a/30 Side airbag igniter, driver side
- 31 - T75a/31 Airbag igniter, front passenger side
- 32 - T75a/32 Airbag igniter, front passenger side
- 33 - T75a/33 Airbag igniter, driver side, via coil connector in steering wheel
- 34 - T75a/34 Airbag igniter, driver side, via coil connector in steering wheel
- 41 - T75a/41 Belt tensioner igniter, driver side
- 42 - T75a/42 Belt tensioner igniter, driver side
- 43 - T75a/43 Belt tensioner igniter, front passenger side
- 44 - T75a/44 Belt tensioner igniter, front passenger side
- 51 - T75a/51 Earth
- 56 - T75a/56 Front passenger side airbag deactivated warning lamp
- 60 - T75a/60 Front passenger side airbag deactivation key switch
- 70 - T75a/70 Side airbag crash sensor, driver side
- 71 - T75a/71 Side airbag crash sensor, front passenger side
- 74 - T75a/74 Data bus CAN-High
- 75 - T75a/75 Data bus CAN-Low

12-pin plug contact assignment of front left door control unit, black plug

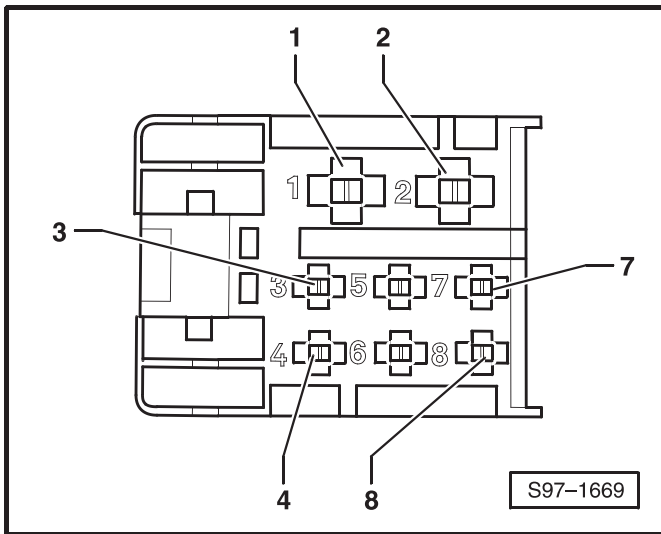


- 1 - T12d/1 Front left window regulator switch
- 2 - T12d/2 Illumination for central switch for window regulator
- 3 - T12d/3 Front left window regulator switch, driver
- 4 - T12d/4 Illumination - mirror adjustment switch
- 5 - T12d/5 Driver side interior locking switch
- 6 - T12d/6 Rear window regulator isolation switch
- 7 - T12d/7 Rear right window regulator switch, driver
- 8 - T12d/8 Rear left window regulator switch, driver
- 9 - T12d/9 Earth
- 10 - T12d/10 Mirror adjustment switch
- 11 - T12d/11 Exterior mirror heating button
- 12 - T12d/12 Mirror adjustment change-over switch (left, right)

12-pin plug contact assignments of front left door control unit, brown plug



- 1 - T12e/1 Driver side mirror adjustment motor
- 5 - T12e/5 Driver side mirror adjustment motor
- 6 - T12e/6 Driver side mirror adjustment motor
- 8 - T12e/8 Driver side heated exterior mirror
- 10 - T12e/10 Driver side heated exterior mirror

8-pin plug contact assignment of front left door control unit

- 1 - T8h/1 Positive connection 30a, via fuse SB 58
- 2 - T8h/2 Earth
- 4 - T8h/4 Data bus CAN-High, comfort
- 5 - T8h/5 Onboard supply control unit
- 6 - T8h/6 Data bus CAN-Low, comfort