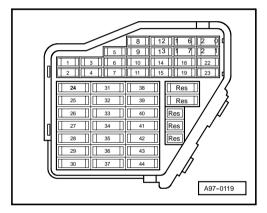
1.9 litre turbo-diesel engine (81 kW, 4-cylinder), engine codes AFN

Model year 1998

Fuse box

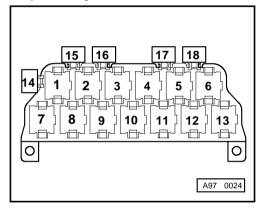


Fuse colours:

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

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

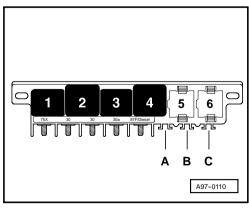
13-point relay carrier



Position of relays:

- Starter inhibitor and reversing light relay (J226)

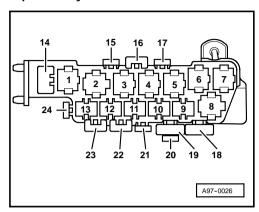
Micro-central electrics



Position of relays:

- Relay for glow plugs (J52)

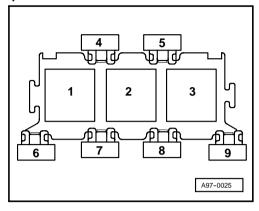
8-point relay carrier



Position of relays:

- Radiator fan run-on relay (J138)
- 3 Radiator fan relay (J26)
- 20 Radiator fan fuse (S42)
- 21 Radiator fan control unit fuse (S142)

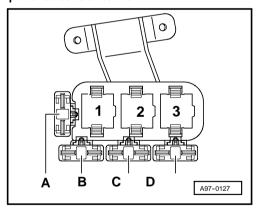
3-point relay carrier in electronics box, plenum chamber



Position of relays:

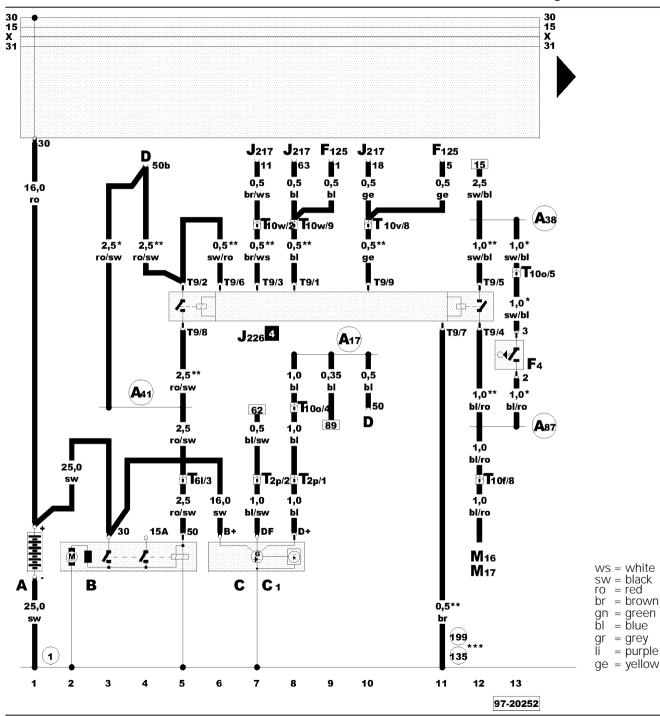
- Diesel direct injection system relay (J322)
- Engine control unit fuse (S102)
- 9 Fuse for glow plugs engine (S39)

Relay carrier, driver's side, behind dash panel at central carrier



Position of relays:

- 1 Low heat output relay (J359)
- High heat output relay (J360)
- c Additional heater fuse 2 (S143)
- D Additional heater fuse (S109)



Battery, starter, alternator, starter inhibitor and reversing light relay

A - Battery

B - Starter

C - Alternator

Voltage regulator

D - Ignition/starter switch

F4 - Reversing light switch

F125 - Multi-function switch

J217 - Automatic gearbox control unit

J226 - Starter inhibitor and reversing light relay

M16 - Reversing light bulb, left

M17 - Reversing light bulb, right

T2p - 2-pin connector, blue, in engine compartment, right

6- 6-pin connector, red, connector point, electronics box, plenum chamber

9 - 9-pin connector, brown, at starter inhibitor relay

T10f - 10-pin connector, brown, connector point, A pillar, left

T100 - 10-pin connector, brown, connector point, electronics box, plenum chamber

T10v - 10-pin connector, brown, connector point, A pillar, right

T10w - 10-pin connector, blue, connector point, A pillar, right

(1) - Earth strap, battery - body

earth connection -2-, in dash panel wiring harness

- Earth connection -3-, in dash panel wiring harness

17) - Connection (61), in dash panel wiring harness

A38) - Positive (+) connection -2- (15a), in dash panel wiring harness

(A41) - Positive (+) connection (50), in dash panel wiring harness

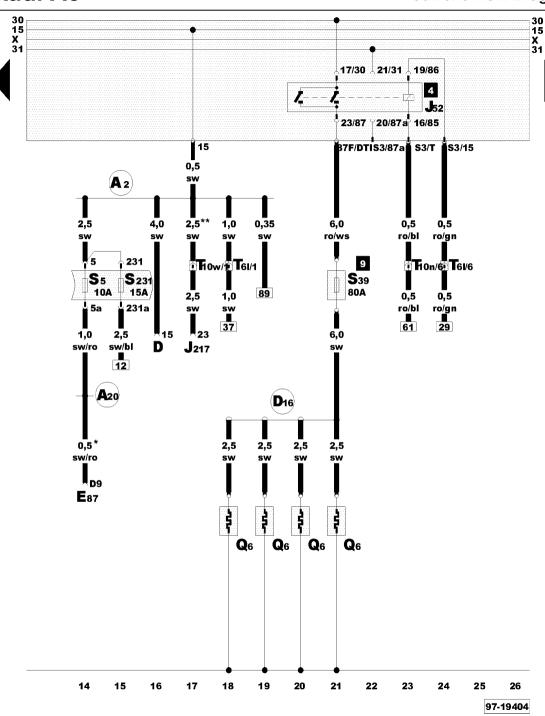
- Connection (RF (reversing light)), in dash p

Connection (RF (reversing light)), in dash panel wiring harness

- Models with manual gearbox

Models with automatic gearbox

Both possible



Glow plugs, relay for glow plugs

D - Ignition/starter switch

E87 - Control and display unit for air conditioner

52 - Glow plug relay

J217 - Automatic gearbox control unit

6 - Glow plugs (engine)

S5 - Fuse in fuse box

S39 - Fuse for glow plugs - engine

S231 - Fuse in fuse box

T6l - 6-pin connector, red, connector point, electronics box, plenum chamber

T10n - 10-pin connector, yellow, connector point, electronics box, plenum chamber

T10w - 10-pin connector, blue, connector point, A pillar, right



Positive (+) connection (15), in dash panel wiring harness



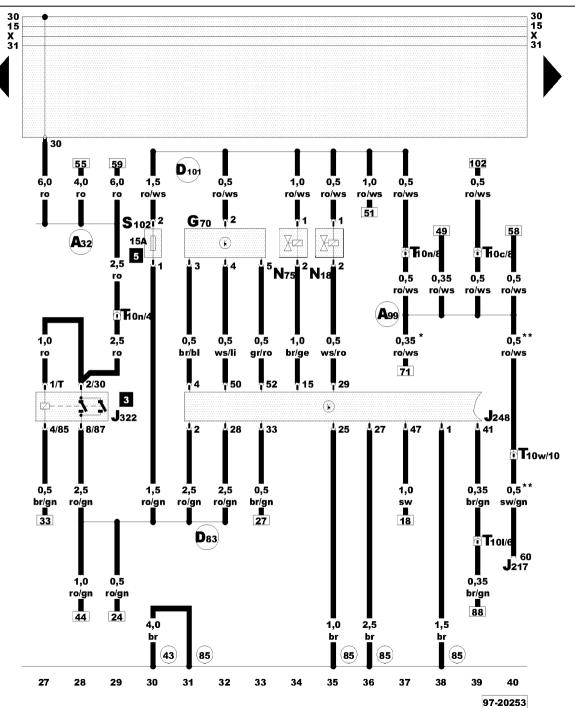
wiring harness
- Connection (glow plugs), in front right wiring harness

* - Models with air conditioner

Models with automatic gearbox

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

ws = white



Diesel direct injection system control unit, diesel direct injection system relay, fuse, valves

G70 - Air mass meter

85

ws = white sw = black

= brown

= green

= blue

greypurple

ge = yellow

ro = red

J217 - Automatic gearbox control unit

J248 - Diesel direct injection system control unit

J322 - Diesel direct injection system relay

N18 - Exhaust gas recirculation valve

N75 - Charge pressure control solenoid valve

S102 - Engine control unit fuse

T10c - 10-pin connector, grey, connector point, A pillar,

T10I - 10-pin connector, white, connector point, electronics box, plenum chamber

T10n - 10-pin connector, yellow, connector point, electronics box, plenum chamber

T10w - 10-pin connector, blue, connector point, A pillar, right

(43) - Earth point, lower part of right A-pillar

) - Earth connection -1-, in engine compartment wiring harness

P - Positive (+) connection (30), in dash panel wiring harness

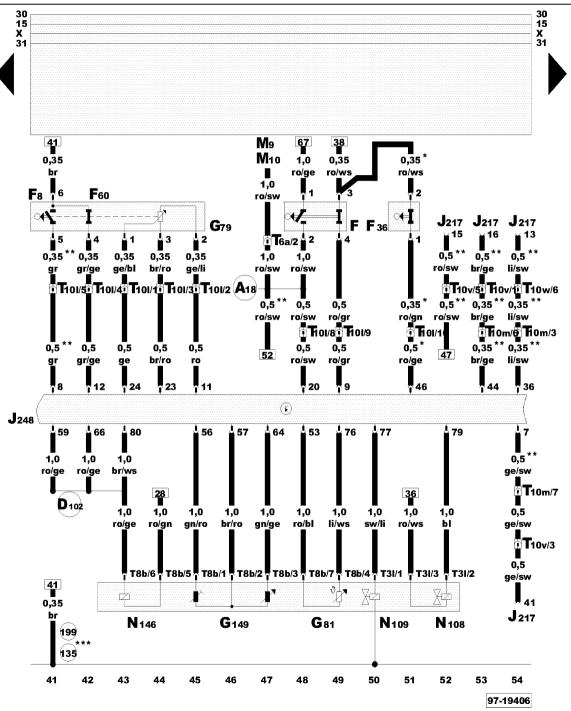
99) - Connection -1- (87), in dash panel wiring harness

 Connection (87), in engine compartment wiring harness

- Connection -1-, in engine compartment wiring harness

Models with manual gearbox and cruise control system

Models with automatic gearbox and cruise control system



Diesel direct injection system control unit, accelerator pedal position sender, brake light switch, clutch pedal switch, injection pump

F - Brake light switch

F8 - Kick-down switch

F36 - Clutch pedal switch

F60 - Idling switch

G79 - Accelerator pedal position sender

G81 - Fuel temperature sender

G149 - Modulating piston movement sender

J217 - Automatic gearbox control unit

J248 - Diesel direct injection system control unit

M9 - Brake light bulb, leftM10 - Brake light bulb, right

N108 - Commencement of injection valve

N109 - Fuel shut-off valve

N146 - Metering adjuster

T3I - 3-pin connector, black, on injection pump

T6a - 6-pin connector, blue, connector point, A pillar,

left

T8b - 8-pin connector, injection pump

T10l - 10-pin connector, white, connector point, electronics box, plenum chamber

T10m - 10-pin connector, blue, connector point, electronics box, plenum chamber

T10v - 10-pin connector, brown, connector point, A pillar, right

T10w - 10-pin connector, blue, connector point, A pillar, right

135 - Earth connection -2-, in dash panel wiring harness

) - Earth connection -3-, in dash panel wiring harness

- Connection (54), in dash panel wiring harness

- Connection -2-, in engine compartment wiring harness

- Models with manual gearbox

Models with automatic gearbox

Both possible

(199

(D102)

ws = white

sw = black

br = brown

= green

= blue

= grey

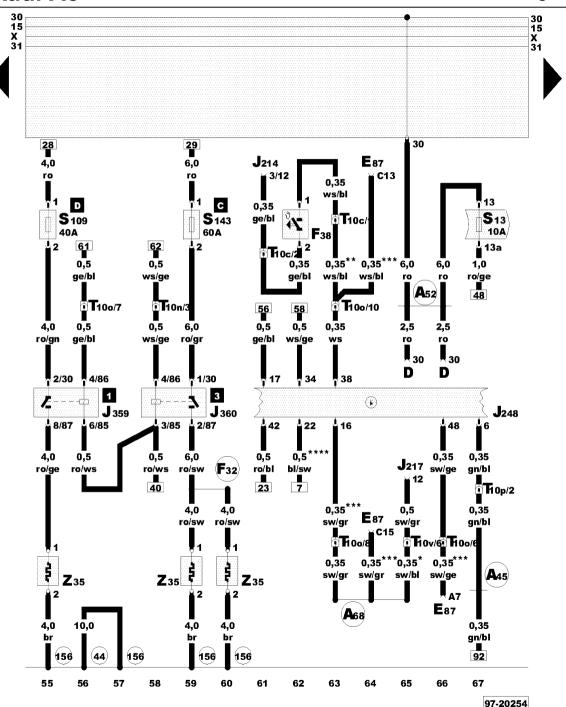
ge = yellow

= purple

ro = red

an

ĎΙ



Diesel direct injection system control unit, additional heater relay, fuses

D - Ignition/starter switch

E87 - Control and display unit for air conditioner

38 - Ambient temperature switch

J214 - Thermotronic control unit

J217 - Automatic gearbox control unit

J248 - Diesel direct injection system control unit

J359 - Low heat output relay

J360 - High heat output relay

S13 - Fuse in fuse box

109 - Additional heater fuse

S143 - Additional heater fuse 2

T10c - 10-pin connector, grey, connector point, A pillar, left

T10n - 10-pin connector, yellow, connector point, electronics box, plenum chamber

T100 - 10-pin connector, brown, connector point, electronics box, plenum chamber

T10p - 10-pin connector, black, connector point, electronics box, plenum chamber

T10v - 10-pin connector, brown, connector point, A pillar, right

Z35 - Additional heating heater element

44) - Earth point, lower part of left A-pillar

- Earth connection, in diesel direct injection wiring harness

- Connection (engine speed signal), in dash panel wiring harness

A52) - Positive (+) connection 2 (30), in dash panel wiring harness

(A68) - Connection (C15, air conditioner), in dash panel wiring harness
(F32) - Connection (additional heater), in diesel direct

) - Connection (additional heater), in diesel direct injection system wiring harness

Models with automatic gearbox

** - Models with Thermotronic

ws = white

sw = black

br

gn bl

ro = red

= brown

= green

= blue

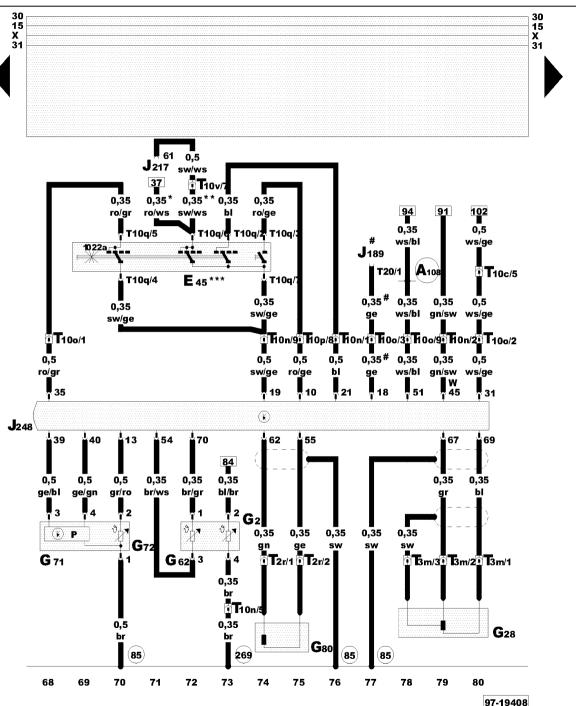
= grey

ge = yellow

= purple

- Models with air conditioner

**** - Models with 120 A alternator



Diesel direct injection system control unit, cruise control system switch, engine speed sender, coolant temperature, intake manifold pressure, intake manifold temperature and needle lift

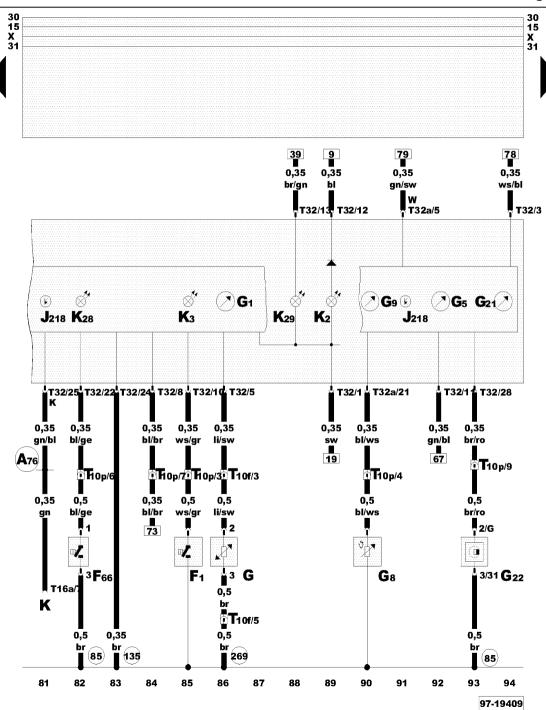
- E45 Cruise control system switch
 - Coolant temperature sender
- Engine speed sender
- G62 Coolant temperature sender
- G71 Intake manifold pressure sender
- G72 Intake manifold temperature sender
- G80 Needle lift sender
- J189 Auto-check system
- J217 Automatic gearbox control unit
- J248 Diesel direct injection system control unit
- T2r 2-pin connector, brown, in engine compartment, right
- T3m 3-pin connector, black, on engine speed sender
- T10c 10-pin connector, grey, connector point, A pillar, left
- T10n 10-pin connector, yellow, connector point, electronics box, plenum chamber
- T100 10-pin connector, brown, connector point, electronics box, plenum chamber
- T10p 10-pin connector, black, connector point, electronics box, plenum chamber
- T10g 10-pin connector, black, on cruise control system switch
- T10v 10-pin connector, brown, connector point, A pillar, right
- T20 - 20-pin connector, red/white, on dash panel insert
- 85 Earth connection -1-, in engine compartment wiring harness
- 269 Earth connection (sender earth) -1-, in dash panel wiring harness A108
 - Connection (speed signal), in dash panel wiring harness
- Models with manual gearbox
- Models with automatic gearbox
- Models with cruise control system
- Models with on-board computer

ws = white sw = black

ro = red

br

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Dash panel insert, warning lamps, speedometer sender, fuel gauge, oil temperature gauge, rev. counter

F1 - Oil pressure switch

F66 - Coolant shortage indicator switch

Fuel gauge sender

G1 - Fuel gauge

G5 - Rev. counter

G8 - Oil temperature sender

G9 - Oil temperature gauge

G21 - Speedometer

ws = white

sw = black

= brown = green

= blue

= grey

ge = yellow

= purple

ro = red

br

G22 - Speedometer sender (Hall sender, on gearbox)

J218 - Combi-processor in dash panel insert

K - Diagnosis connection

2 - Alternator warning lamp

K3 - Oil pressure warning lamp

Coolant temperature/coolant shortage warning lamp

K29 - Glow period warning lamp

T10f - 10-pin connector, brown, connector point, A pillar, left

T100 - 10-pin connector, brown, connector point, electronics box, plenum chamber

T10p - 10-pin connector, black, connector point, electronics box, plenum chamber

T16a - 16-pin connector, diagnosis connection

Γ32 - 32-pin connector, blue, on dash panel insert

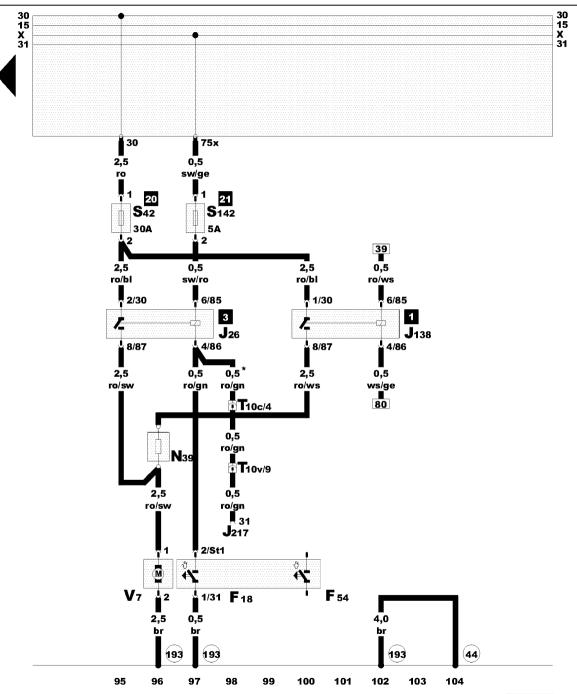
T32a - 32-pin connector, green, on dash panel insert

earth connection -1-, in engine compartment wiring harness

) - Earth connection -2-, in dash panel wiring harness

9) - Earth connection (sender earth) -1-, in dash panel wiring harness

- Connection (diagnosis wire K), in dash panel wiring harness



Engine cooling

Radiator fan thermo-switch

- Radiator fan thermo-switch

- Radiator fan relay

J138 - Radiator fan run-on relay

J217 - Automatic gearbox control unit

N39 - Radiator fan series resistor

S42 - Radiator fan single fuse

S142 - Radiator fan control unit fuse

T10c - 10-pin connector, grey, connector point, A pillar,

T10v - 10-pin connector, brown, connector point, A

pillar, right

V7 - Radiator fan

44

Earth point, lower part of left A-pillar



Earth connection -1-, in coolant fan wiring harness

- Models with automatic gearbox

sw = blackro = red = brown = green = blue = grey li = purple

ws = white

ge = yellow

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