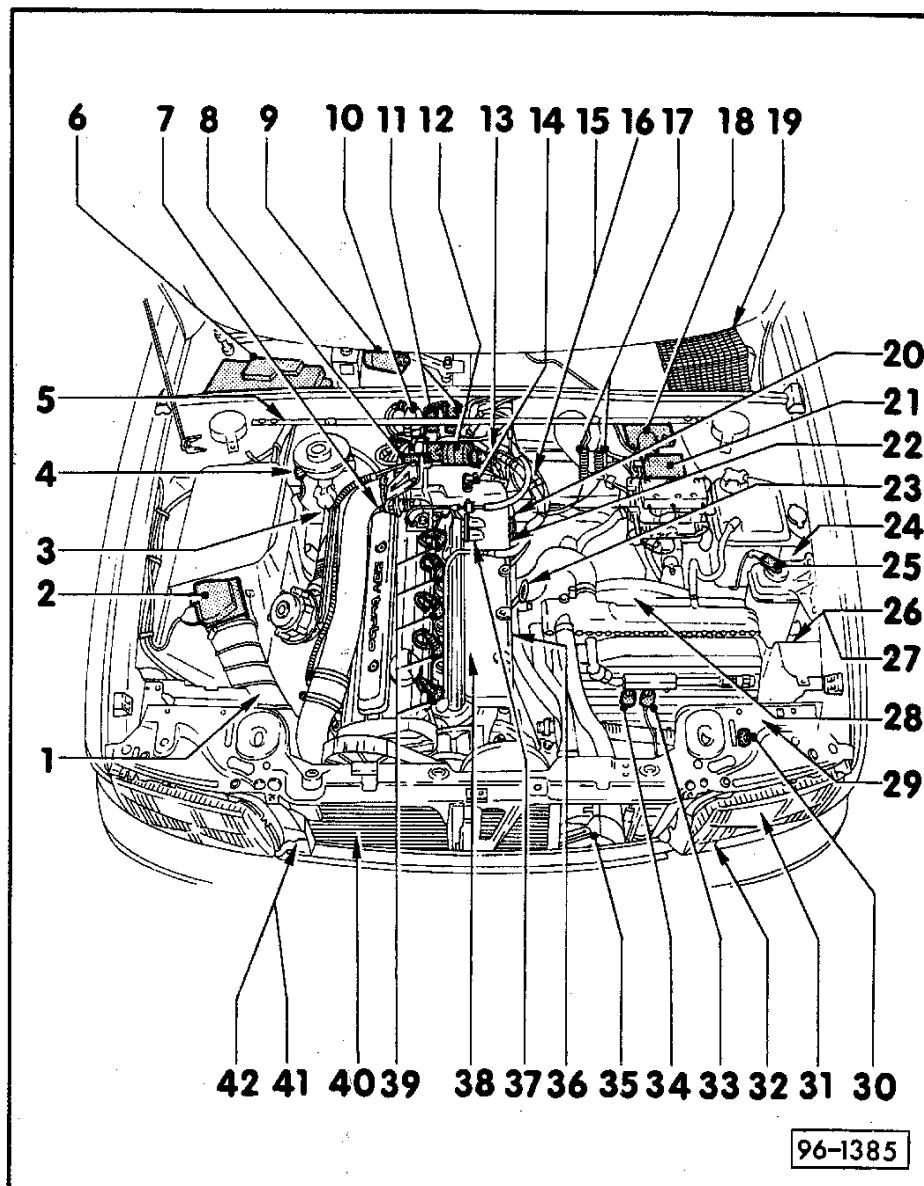


**Engine compartment, 5-cylinder, 20-valve turbo engine, Motronic**

- Engine code letters: 3 B
- 162 kW/220 bhp



| No.                                                                                                                                                                                                                                                                                          | Designation in current<br>flow diagram |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1 - Solenoid valve for boost pressure control<br>- see fig. 1, page 3/31                                                                                                                                                                                                                     | N 75                                   |
| 2 - Air mass meter                                                                                                                                                                                                                                                                           | G 70                                   |
| 3 - Starter                                                                                                                                                                                                                                                                                  | B                                      |
| 4 - Brake fluid level warning contact<br>- Hydraulic brake servo unit warning switch - see fig. 2, page 3/31                                                                                                                                                                                 | F 34<br>F 21                           |
| 5 - Connector for<br>• Lambda probe (G 39)<br>• Lambda probe heating (Z 19) - see fig. 3, page 3/31                                                                                                                                                                                          | -<br>-                                 |
| 6 - Relay plate with fuse holder                                                                                                                                                                                                                                                             | -                                      |
| 7 - Sender for coolant temperature<br>(for Motronic ignition and injection system)<br>- see fig. 4, page 3/31                                                                                                                                                                                | G 62                                   |
| 8 - Throttle valve potentiometer with idling switch<br>(located in one housing) - see fig. 5, page 3/32                                                                                                                                                                                      | G 69/F 60                              |
| 9 - Windscreen wiper motor                                                                                                                                                                                                                                                                   | V                                      |
| 10 - Connectors for<br>• Knock sensor I, front<br>(G 61 - brown connector)<br>• Knock sensor II, rear<br>(G 66 - green connector)<br>• Firing point sender<br>(G 4 - reference point sender, black connector)<br>• Engine speed sender<br>(G 28 - grey connector)<br>- see fig. 6, page 3/32 | -<br>-<br>-<br>-                       |
| 11 - Ignition coil and power end stage<br>(ignition transformer) - see fig. 7, page 3/32                                                                                                                                                                                                     | N 152                                  |
| 12 - Idle speed stabilization valve                                                                                                                                                                                                                                                          | N 71                                   |
| 13 - Activated charcoal filter system solenoid valve 1<br>- see fig. 8, page 3/32                                                                                                                                                                                                            | N 80                                   |
| 14 - Intake air temperature sender                                                                                                                                                                                                                                                           | G 42                                   |
| 15 - Switch for reversing lights - see fig. 9, page 3/33                                                                                                                                                                                                                                     | F 4                                    |
| 16 - Speedometer sender - see fig. 10, page 3/33                                                                                                                                                                                                                                             | G 22                                   |

| No.                                                                                                                                                                                   | Designation in current<br>flow diagram |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 17 - Connectors, engine wiring loom, right<br>- see fig. 11, page 3/33                                                                                                                | -                                      |
| 18 - Vacuum pump for cruise control                                                                                                                                                   | V 18                                   |
| 19 - Ambient temperature switch (only with manual air conditioner)<br>- Temperature sender - fresh air intake duct<br>(only with digital air conditioner)<br>- see fig. 12, page 3/33 | F 38<br>G 89                           |
| 20 - Ignition distributor/Hall sender                                                                                                                                                 | O/G 40                                 |
| 21 - Hydraulic unit for anti-lock brake system                                                                                                                                        | N 55                                   |
| 22 - Firing point sender<br>Engine speed sender - see fig. 13, page 3/34                                                                                                              | G 4<br>G 28                            |
| 23 - Electronic thermoswitch<br>- Thermoswitch for coolant pump/turbocharger<br>- see fig. 14, page 3/34                                                                              | F 76<br>F 98                           |
| 24 - Coolant shortage indicator switch                                                                                                                                                | F 66                                   |
| 25 - Hydraulic fluid warning contact                                                                                                                                                  | F 75                                   |
| 26 - Windscreen washer pump<br>- Windscreen washer pump with warning contact<br>for washer fluid (only with auto-check system)<br>- see fig. 15, page 3/34                            | V 5<br>V 5/F 77                        |
| 27 - Pump for headlight washer system - see fig. 15, page 3/34                                                                                                                        | V 11                                   |
| 28 - Radiator fan                                                                                                                                                                     | V 7                                    |
| 29 - Thermoswitch for radiator fan - see fig. 16, page 3/34                                                                                                                           | F 18/F 54                              |
| 30 - Contact switch for anti-theft alarm system/repeller system                                                                                                                       | F 120                                  |
| 31 - Horn/dual horn - see fig. 17, page 3/35                                                                                                                                          | H 1                                    |
| 32 - Ambient temperature sensor (only with ambient<br>temperature indicator or digital air conditioner)<br>- see fig. 18, page 3/35                                                   | G 17                                   |
| 33 - High pressure switch for magnetic clutch<br>(only with air conditioner)                                                                                                          | F 118                                  |

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| No.                                                      | Designation in current<br>flow diagram |
|----------------------------------------------------------|----------------------------------------|
| 34 - High pressure switch for air conditioner            | F 23                                   |
| 35 - Alternator with voltage regulator                   | C/C 1                                  |
| 36 - Oil pressure switch (1.8 bar), white                | F 1                                    |
| - Oil pressure switch (0.3 bar) with oil pressure sender | F 22/G 10                              |
| - see fig. 19, page 3/35                                 |                                        |
| 37 - Knock sensor II                                     | G 66                                   |
| - see fig. 20, page 3/35                                 |                                        |
| 38 - Knock sensor I                                      | G 61                                   |
| - see fig. 20, page 3/35                                 |                                        |
| 39 - Injectors                                           | N 30/N 31/N 32/N 33/N 83               |
| 40 - Oil temperature sender                              | G 8                                    |
| (only with additional instruments)                       |                                        |
| - see fig. 21, page 3/36                                 |                                        |
| 41 - Magnetic clutch for compressor/protective diode     | N 25/J 201                             |
| for magnetic clutch (only with air conditioner)          |                                        |
| - see fig. 22, page 3/36                                 |                                        |
| 42 - Speed sender - air conditioner compressor           | G 111                                  |
| (only with air conditioner)                              |                                        |
| - see fig. 23, page 3/36                                 |                                        |

**Note:**

With this engine version the battery -A- is located under the rear seat bench - also see "Fitting locations - right-hand drive vehicles", page 5/5.

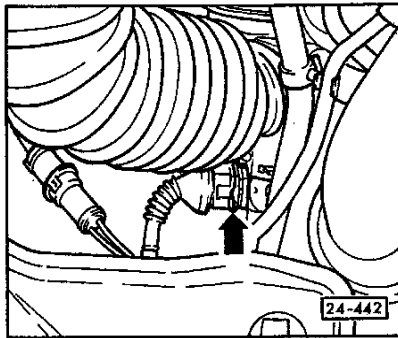


Fig. 1 - Solenoid valve for boost pressure control N 75

- on air hose in engine compartment, front left

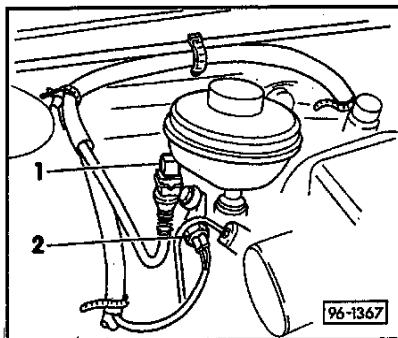


Fig. 2 - Brake fluid level warning contact F 34  
- Hydraulic brake servo unit warning switch F 21

- left, below brake fluid reservoir

1 - F 34

2 - F 21

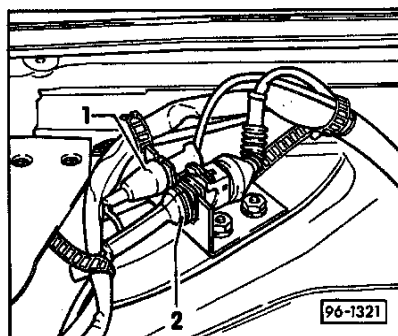


Fig. 3 - Connector for Lambda probe G 39  
- Connector for Lambda probe heating Z 19

- in engine compartment, rear left, next to suspension strut turret

1 - Connector G 39 (single)

2 - Connector Z 19 (2-pin)

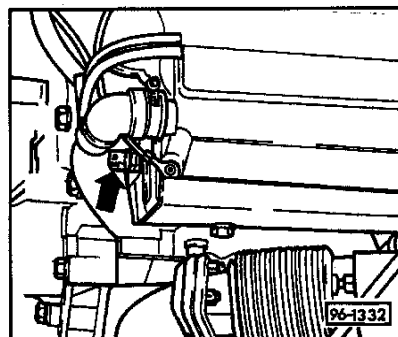


Fig. 4 - Sender for coolant temperature G 62  
(for Motronic ignition and injection system)

- on rear side of cylinder head

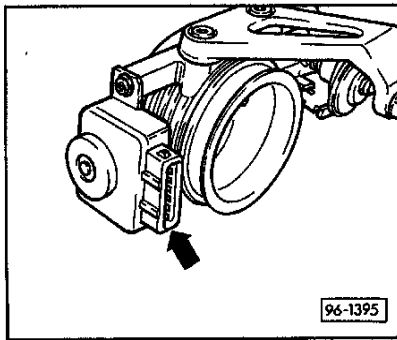


Fig. 5 - Throttle valve potentiometer G 69 with idling switch F 60

- on rear of throttle valve assembly

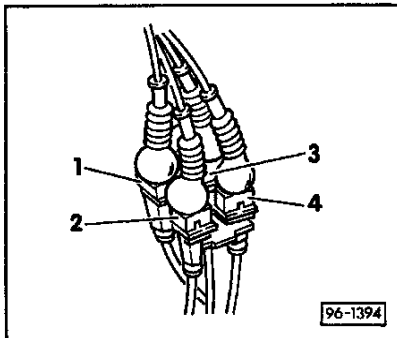


Fig. 6 - Connectors for

- |                                                                         |      |
|-------------------------------------------------------------------------|------|
| 1 - Knock sensor I, front<br>(brown connector)                          | G 61 |
| 2 - Knock sensor II, rear<br>(green connector)                          | G 66 |
| 3 - Firing point sender<br>(reference point sender, black<br>connector) | G 4  |
| 4 - Engine speed sender<br>(grey connector)                             | G 28 |

- on rear partition of engine compartment

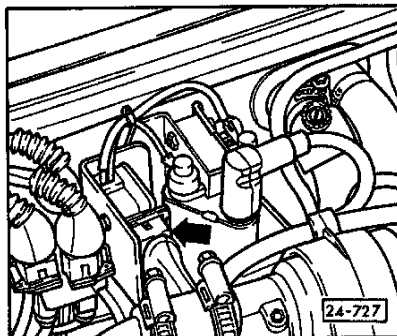


Fig. 7 - Ignition coil and power end stage (ignition transformer) N 152.

- on rear partition of engine compartment
- arrow points to power end stage

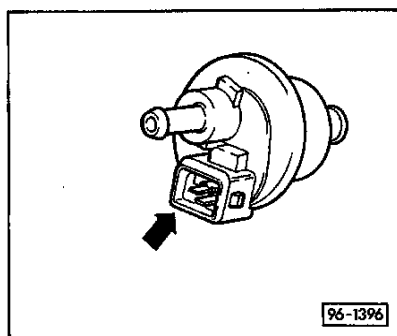


Fig. 8 - Activated charcoal filter system solenoid valve 1 N 80

- between intake manifold and rear partition of engine compartment

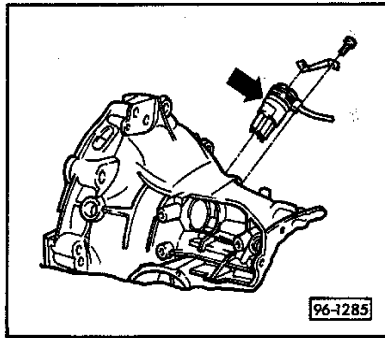


Fig. 9 - Switch for reversing lights F 4

- on top part of gearbox

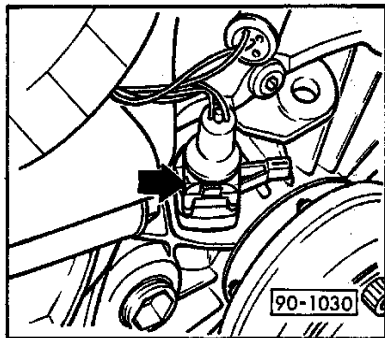


Fig. 10 - Speedometer sender G 22

- inserted in gearbox housing, left, next to left drive shaft flange
- for removal push down latch and turn to the right

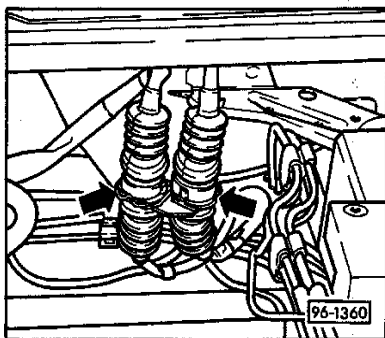


Fig. 11 - Connectors; engine wiring loom, right

- on rear partition of engine compartment, left

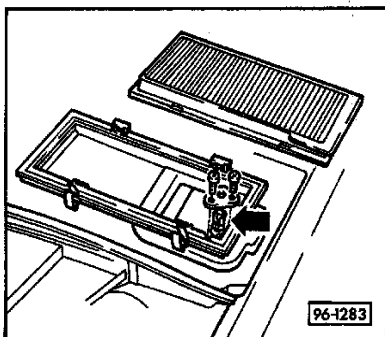


Fig. 12 - Ambient temperature switch F 38  
(only with manual air conditioner)  
- Temperature sensor - fresh air intake duct  
G 89 (only with digital air conditioner)

- in plenum chamber, left

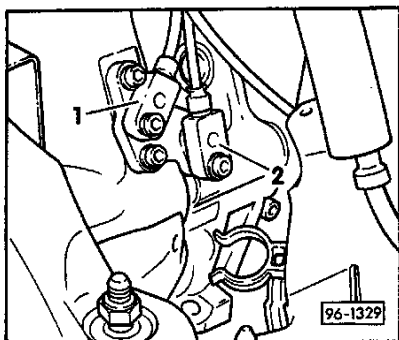


Fig. 13- Firing point sender G 4  
- Engine speed sender G 28

- near engine/gearbox joint, on cylinder block, lower left

1 - G 4

2 - G 28

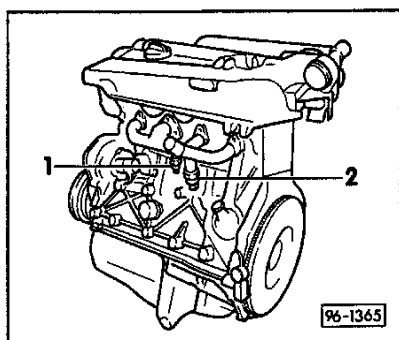


Fig. 14 - Electronic thermoswitch F 76  
- Thermoswitch for coolant pump F 98

- in coolant pipe on left side of engine, below intake manifold

1 - F 98

2 - F 76

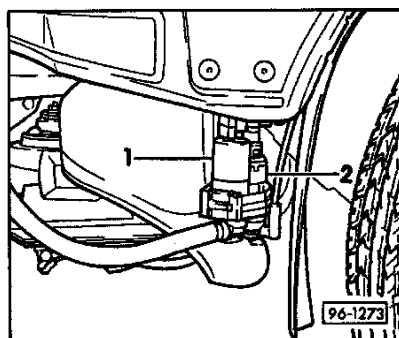


Fig. 15 - Windscreen washer pump V 5  
- Windscreen washer pump with warning contact for washer fluid V 5/F 77 (only with auto-check system)  
- Pump for headlight washer system V 11

- under left wheel arch liner, or under left section of bumper

1 - V 11

2 - V 5 or V 5/F 77

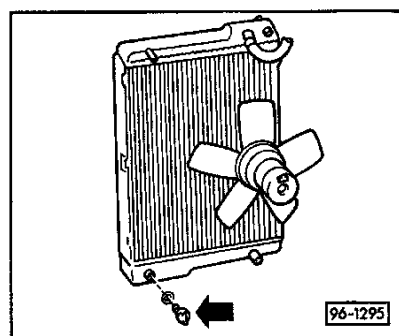


Fig. 16 - Thermoswitch for radiator fan F 18/F 54

- screwed into radiator from rear side, lower left

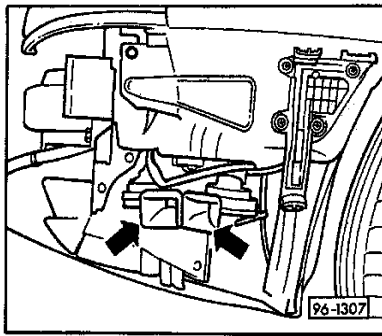


Fig. 17 - Horn/dual horn

- behind bumper, left, or above noise insulation for engine compartment

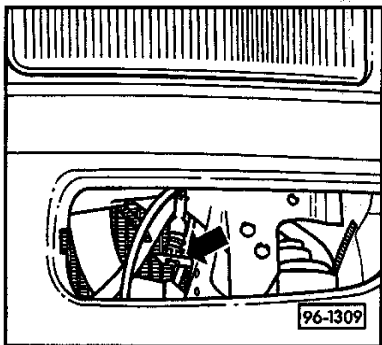


Fig. 18 - Ambient temperature sensor G 17  
(only with ambient temperature indicator or digital air conditioner)

- behind air duct grille in bumper, left

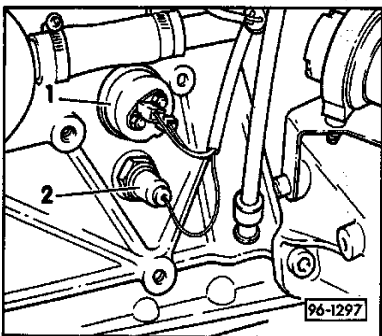


Fig. 19 - Oil pressure switch (0.3 bar) F 22  
with oil pressure sender G 10  
- Oil pressure switch (1.8 bar), white, F 1

- on oil filter holder

1 - F 22/G 10

2 - F 1

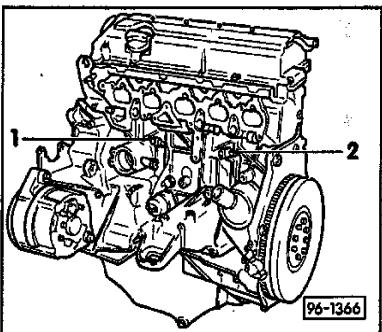


Fig. 20 - Knock sensor I - G 61  
- Knock sensor II - G 66

- on left side of cylinder block below intake manifold

1 - G 61

2 - G 66

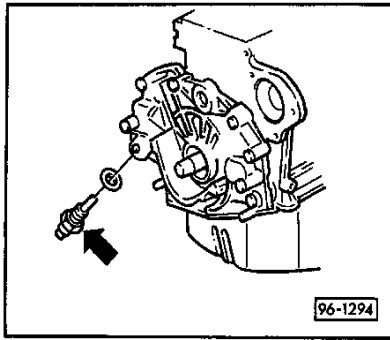


Fig. 21 - Oil temperature sender G 8

- Sender G 8 is screwed in instead of the screw plug for the oil pressure relief valve (on end face of engine, lower right)

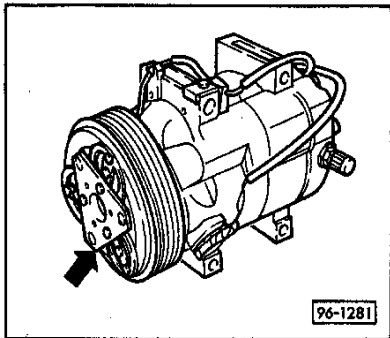


Fig. 22 - Magnetic clutch for compressor/  
protective diode for magnetic clutch (only  
with air conditioner) N 25/J 201

- on air conditioner compressor,  
on engine, lower right

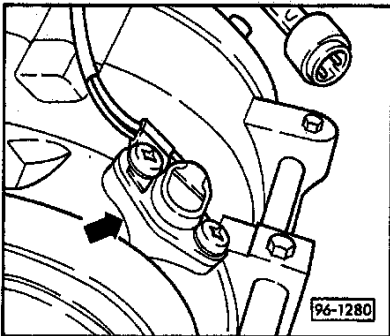


Fig. 23 - Speed sender - air conditioner  
compressor G 111 (only with air conditioner)

- on engine, lower right