



INSTRUMENT PANEL

166

INSTRUMENT PANEL - Description

The instrument panel includes the rev counter, speedometer with total mileage and trip recorders, water temperature gauge, fuel level gauge, a set of warning lights, a check panel reset button and a trip recorder reset button.

Versions with automatic transmission also have another display which shows the selected driving mode (Auto or Sport) and gear.

The rev counter and speedometer show different danger sections and full-scale values depending on the various engines or versions of the car.

The instrument panel functions when the ignition is on (MAR).

In the 'night' position (side lights on), the brightness can be adjusted by a control on the dashboard.

For further details, see DESCRIPTION AND OPERATION - 5560.

This diagram shows operation of instruments and warning lights not described in other functions:

- electronic speedometer;
- milometer and trip counter
- electronic rev counter;
- fuel gauge, with reserve warning light;
- engine coolant temperature gauge, with overheating warning light
- insufficient brake fluid level / handbrake warning light (plus EBD)
- Low engine oil level warning light
- minimum engine oil pressure warning light
- Brake pad wear warning light
- Seat belt warning light
- water in fuel warning light (2.4 JTD 6M version only)

The other warning lights are described and illustrated in the wiring diagrams dealing with the components to which they refer:

- side lights, lights failure (check) (see E2010 - SIDE LIGHTS / NO. PLATE LIGHTS)
- main beam headlamps (see E2012 - MAIN BEAM HEADLAMPS)
- dipped headlamps (see E2011 - DIPPED HEADLAMPS)
- left and right direction indicators, trailer lights (see E2020 - DIRECTION INDICATORS / HAZARD WARNING LIGHTS)
- door and boot check (see E2510 COURTESY LIGHTS and E2520 LUGGAGE COMPARTMENT LIGHT)
- alternator (see E5010 - STARTING AND RECHARGING)
- injection system failure (see E5030 - PETROL ENGINES ELECTRONIC MANAGEMENT) or (see E5050 - DIESEL ENGINES ELECTRONIC MANAGEMENT)
- heater plugs (see E5050 DIESEL ENGINES ELECTRONIC MANAGEMENT)
- CODE failure (see E7010 - code)
- ABS failure, EBD failure (see E7020 - ABS)
- ASR/TCS activation/failure (see E7021 - ASR/TCS)
- Air Bag failure (see E7030 - AIR BAG)
- passenger Air Bag disablement (see E7030 - AIR BAG)
- Cruise Control function (see E5060 CRUISE CONTROL)
- gear selector indicator (see E8110 AUTOMATIC TRANSMISSION)
- automatic transmission failure (see E8110 AUTOMATIC TRANSMISSION)

INSTRUMENT PANEL - Functional description

The instrument panel E50 is supplied directly by the battery at pin 14 connector A from the MAXIFUSE CENTR line B5 and from fuse F18 of B1 .

The instrument panel E50 receives a second supply controlled by the ignition (INT/A) at pin 15 of connector A via fuse F1 of junction unit B1 ; pin 16 of connector A is earthed.

Pin 13 of connector A receives ignition signal (AVV) from ignition H1: this signal - together with the rpm signal described later - are used to process 'engine running' information.

The electronic speedometer receives a speedometer signal from ABS control unit M50 - pin 22 - at pin 2 of connector B of E50 .

The speedometer signal is sent out again to the engine management control unit M10 for the 2.4 JTD version, to the climate control system control unit M70, the navigator control unit M90 and the radio P20, to pins 5, 6,7, and 8 of connector B, respectively.

A boot opening enablement signal is sent from pin 9 of connector B when the speedometer signal is less than 2 km/h. (see E3045 BOOT OPENING).

The internal software also controls the milometer and trip meter.

The electronic rev counter receives an rpm signal from engine management unit M10 at pin 4 of connector B of E50 .

For the JTD version, the control unit M10 sends the above signal from pin 35 connector A, whilst for all other versions, the signal is sent from pin 47 connector A.

The handbrake switch I40 is connected to pin 12 connector A of control unit M45 (electronic check device); the signal is sent, via pin 11 connector B, to pin 10 connector C to intermittently light up the handbrake applied warning light.

The brake fluid sensor K25 sends an earth signal to pin 10 of connector C to constantly light up the warning light but with an insufficient brake fluid level function.

This warning light is also lit up by pin 21 of control unit M50 via pin 19 of connector C.

Back window heater element enablement is sent from pin 20 of connector B if engine rpm exceeds 1000 rpm. (see E3030 rearscreen and rear view mirror demisting warning light).



The low brake fluid level and handbrake warning light also comes on upon a command from the ABS control unit, together with the 'ABS failure' warning light to indicate a fault in the EBD braking system. (see E7020 ABS).

The brake pad wear warning light is controlled by a signal sent to pin 12 of connector C of E50 from one of two sensors K20 or K21 .

The insufficient engine oil level warning light, pins 18 and 19 connector B of E50 , is connected to the sensor K32 (engine oil level).

The wiring differs according to the engine type.

The sensor is connected to module E50 via the front/engine coupling D4 pin 7 and 6 and the front/dashboard coupling D1 pins 9 and 3.

The temperature gauge receives the signal at pin 15 connector C E50 from the temperature sensor K36 via the engine compartment/engine pre-wiring coupling D4 pin 3 and the dashboard/engine coupling D23 pin 9.

A second maximum temperature signal is received from engine management unit M10 pin 19 at pin 10 of connector B of E50 and causes the warning light to come on via the indicator.

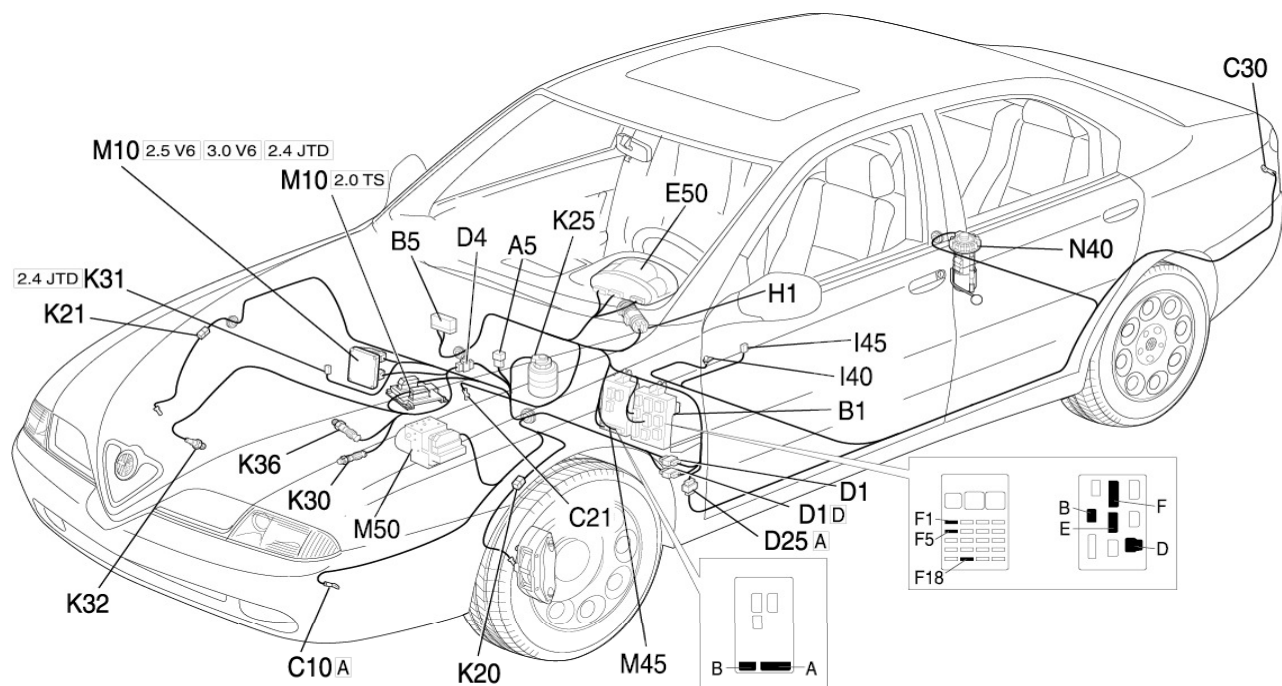
For the diesel version [2.4 JTD 6M] there is a water in the fuel warning light in the instrument panel E50 .

This is activated via pin 4 connector A of E50 by the water in the diesel filter sensor K31 .

This sensor is supplied at pin 2 by the INT/A line via fuse F5 of B1 whilst it is connected to earth C10 via pin 3.

The instrument panel is equipped with a self-diagnostic function. This data may be read by connecting the panel to connector R10 - pin 9: this receives signals from pin 1 of connector C of E50 via the tester line (see E8010 DIAGNOSTIC MULTIPLE CONNECTOR).

INSTRUMENT PANEL - Location of components



Component code	Name	Assembly reference
A5	Terminal board	-
B1	Junction unit	-
B1	Junction unit	5505A
B1	Junction unit	5505A
B2	Junction unit	-
B2	Junction unit	5505A
B5	MAXI FUSE box	-
B99	Battery fuses junction unit (CBA)	5530B
C10	Front left earth	-
C21	Dashboard earth on Air Bag bracket	-
C21	Passenger side dashboard earth	-
C30	Rear left earth	-
C31	Rear right earth	-
D1	Dashboard-i.e coupling.	-
D1	Front-dashboard coupling	-
D4	Engine front connection	-
D4	Front-engine prewiring coupling	-
D5	ABS plus ANTISPIN coupling	-
D5	ABS plus antispin connection	-
D7	Recharging front connection	-
D19	Dashboard / battery coupling	-
D20	Dashboard-rear coupling	-
D23	Dashboard-i.e coupling.	-
D25	Dashboard-left rear coupling	-
D25	Dashboard-rear coupling left	-
E50	Instrument panel	-
E50	Instrument panel	5560B
H1	Ignition switch	5520A
I40	Handbrake "on" switch	5550D
I45	Seat belts warning light switch	7065A
K20	Left brake pad wear sensor (switch)	3310A
K21	Right brake pad wear sensor (switch)	3310A
K25	Brake fluid level sensor (switch)	3330C
K30	Insufficient engine oil pressure (switch) sensor	-
K30	Insufficient engine oil pressure (switch) sensor	1084A
K31	Water in diesel filter sensor	1084A
K31	Water in diesel sensor	-

K32	Engine oil level sensor	-
K32	Engine oil level sensor	1084A
K36	Engine coolant temperature sensor-sender unit	-
K36	Engine coolant temperature sensor-sender unit	1088E
M10	Engine management control unit	-
M10	Engine management control unit	1056B
M45	Electronic Check device	5560C
M50	ABS control unit	3340A
N40	Fuel pump and sender unit	-
N40	Fuel pump and sender unit	5540B

B5	MAXI FUSE box	-
B99	Battery fuses junction unit (CBA)	5530B
C10	Front left earth	-
C21	Dashboard earth on Air Bag bracket	-
C21	Passenger side dashboard earth	-
C30	Rear left earth	-
C31	Rear right earth	-
D1	Dashboard-i.e coupling.	-
D1	Front-dashboard coupling	-
D4	Engine front connection	-
D4	Front-engine prewiring coupling	-
D5	ABS plus ANTISPIN coupling	-
D5	ABS plus antispin connection	-
D7	Recharging front connection	-
D19	Dashboard / battery coupling	-
D20	Dashboard-rear coupling	-
D23	Dashboard-i.e coupling.	-
D25	Dashboard-left rear coupling	-
D25	Dashboard-rear coupling left	-
E50	Instrument panel	-
E50	Instrument panel	5560B
H1	Ignition switch	5520A
I40	Handbrake "on" switch	5550D
I45	Seat belts warning light switch	7065A
K20	Left brake pad wear sensor (switch)	3310A
K21	Right brake pad wear sensor (switch)	3310A
K25	Brake fluid level sensor (switch)	3330C
K30	Insufficient engine oil pressure (switch) sensor	-
K30	Insufficient engine oil pressure (switch) sensor	1084A
K31	Water in diesel filter sensor	1084A
K31	Water in diesel sensor	-
K32	Engine oil level sensor	-
K32	Engine oil level sensor	1084A
K36	Engine coolant temperature sensor-sender unit	-
K36	Engine coolant temperature sensor-sender unit	1088E
M10	Engine management control unit	-
M10	Engine management control unit	1056B
M45	Electronic Check device	5560C
M50	ABS control unit	3340A
N40	Fuel pump and sender unit	-
N40	Fuel pump and sender unit	5540B