

SPECIFICATIONS

General characteristics

The 1.8 DI Turbo engine features a direct injection fuel supply system with a high pressure pump.

The engine control system is managed by a single Bosch Motronic MED 17.3.1. control unit with motorised throttle which controls both the ignition and the sequential, timed injection.

Depending on the signals received from the many sensors, the control unit manages the injectors connected to it, handling the following systems:

- fuel supply
- high pressure fuel pump
- air supply and supercharging
- accelerator pedal
- engine cooling
- exhaust with catalytic converter and two oxygen sensors
- fuel vapour recirculation
- ignition.

The control unit manages the operation of the high pressure fuel pump by controlling an electric flow regulator on the pump and an associated pressure sensor on the rail.

The throttle body is also controlled electronically by the control unit.

The throttle opening is calculated according to a specific logic called "torque control"; the mechanical connection between the accelerator pedal and the throttle body is thereby eliminated. The control unit can also manage:

- the actual quantity of fuel required at any time
- the most suitable fuel supply pressure for each cycle
- the fuel injection starting point
- the Waste Gate solenoid valve
- the phase transformers.

System main functions

- self-learning
- system self-adaptation
- CODE recognition (Immobilizer)
- cold starting control
- air/fuel ratio control using oxygen sensors
- supercharging control
- detonation control
- mixture enrichment control during acceleration
- fuel cut-off during deceleration
- fuel vapour recovery
- maximum rpm control
- fuel pump control
- connection with the climate control system
- cylinder position recognition
- control of optimum injection time
- ignition advance adjustment
- idle speed management
- fan control
- connection with ABS/ASR control unit
- phase transformer management.

Injection system

The system injects fuel directly into the cylinder.

The main advantages are:

- improved fuel evaporation
- increased engine volumetric output

since heat is taken from the intake air rather than from the intake duct walls.

Thanks to direct injection, fuel consumption is reduced by 20% compared to traditional injection with a resulting decrease in CO2 emissions.

The injection system should therefore comply with the following requirements:

- the metering (air/fuel ratio) must be kept as close as possible to stoichiometric value to ensure maximum catalytic converter conversion capacity (max. efficiency)
- the homogeneity of the mixture, consisting of petrol distributed throughout the air as finely and uniformly as possible.

Information that the control unit processes to control optimum metering is received by electrical signals emitted by:

- air flow meter and air temperature sensor, for the exact quantity of air taken in
- rpm sensor
- accelerator pedal with built-in potentiometer
- engine coolant temperature sensor
- oxygen sensor.

- alters the throttle position
- manages the Waste Gate solenoid valve.

Fuel cut-off during deceleration

The control unit with:

- detection of idling status
- rpm exceeding the threshold value

deactivates fuel injection on the basis of:

- rpm
- engine temperature
- vehicle speed.

Before reaching idling condition, the rpm descent rate is assessed.

If this exceeds a certain level, fuel injection is partially re-activated on the basis of a logic that ensures that engine rpm drops smoothly to idling level.

Once idling speed has been reached, normal functions are resumed.

Fuel vapour recovery

The (pollutant) fuel vapours, collected in an active charcoal filter (canister), are sent to the intake ducts to be burnt.

This takes place by means of a solenoid valve regulated by the control unit which alternates phases in which it is open (canister scavenging stage) with phases in which it is closed (carburation learning stage).

The opening duty-cycle for the solenoid valve is regulated by the control unit in order to eliminate the fuel vapours without altering the engine carburation.

Control of the maximum revs

According to the rpm level reached by the engine, the control unit:

- above 6800 rpm, cuts off the fuel supply to the injectors (rpm can peak at 7000 rpm for no longer than 5 seconds)
- below 6600 rpm, injector operation is resumed.

Fuel pump control

The control unit:

- supplies the fuel pump when the key is on MAR-ON (for 5 seconds) or on AVV
- interrupts the supply to the pump when the key is on STOP
- interrupts the supply to the pump if it receives notification of a collision from the CAN network.

Connection with the climate control system

The compressor takes power from the engine when the climate control system is activated.

In idling conditions, the control unit adapts the air flow rate to the new power requirements while maintaining optimum driveability.

The control unit manages the exclusion of the compressor:

- above 6300 rpm
- above a set engine coolant temperature threshold (117°C)
- upon start-up.

Recognition of cylinder position

During each engine revolution, the control unit detects which cylinder is in the combustion phase:

- it controls the injection and ignition sequence for the cylinder in a sequential, timed fashion.

Control of optimum injection time

The injection starting angle (in relation to TDC) varies from - 50° to + 10° to allow a homogenized mixture.

In idling conditions, the injection starting angle is about - 45°.

Idle speed management

The control unit detects idling status when the accelerator pedal is released.

The control unit controls the idle speed depending on the users connected and the brake pedal signals, adjusting:

- the motorised throttle
- the injection time.

Fan control

The control unit engages the fans depending on the coolant temperature:

- 1st speed with temperature of 90°C
- 2nd speed with temperature of 105°C

If the air conditioning system is switched on, the control unit engages the fan 1st speed.

Phase transformer management



The "manettino" dial is a lever which always remains in the middle position. The configuration selected is recognized by the corresponding LED being lit up or the display in the control panel as illustrated below:

Dynamic display



All weather display



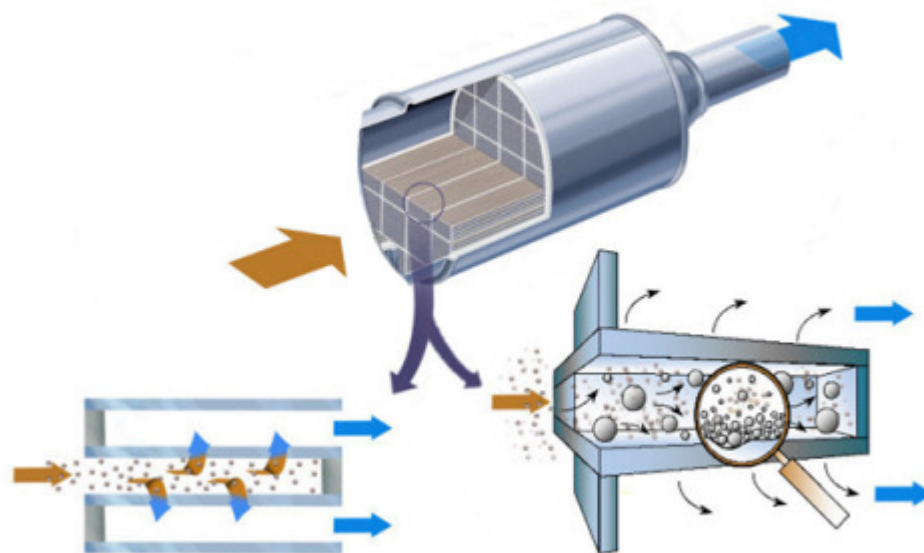
Normal display

No symbol is shown in the display for this configuration.
To turn the dynamic mode on, move the lever forwards (corresponding to the letter "D"), stay in this position for half a second until the LED lights up or the words "Dynamic on" appear in the control panel.



DPF SYSTEM (DIESEL PARTICULATE FILTER)

This is a mechanical filter that "traps" the carbon particles (particulate) and the engine oil ashes in the exhaust gases in diesel engines. The action of the DPF makes it possible to keep carbon particle levels down by around 90% in line with the Euro 5 regulation.



The operation of the DPF system is managed by the engine control unit by means of suitable strategies.

In addition to the actual filter the DPF system comprises an exhaust gas temperature sensor and a differential pressure sensor.

The differential pressure sensor measures the pressure of the exhaust gases upstream and downstream of the filter, by means of special pipes, signalling the gradual accumulation of particulate to the control unit.

The particulate accumulation process and the relative increase in the pressure of the exhaust gases inside the filter depends on the engine load, the weight of the vehicle and the engine capacity and power.

Therefore the particulate needs to be removed on a regular basis, regenerating the filter following a procedure that makes use of multiple fuel injections to increase the temperature of the exhaust gases (about 600 °C) and burn the particulate. The regeneration procedure is controlled by the injection control unit which acts: on fuel metering (up to 5 fuel injections in the same engine cycle per cylinder) and on air control (E.G.R. and turbo pressure).

The regeneration phase takes place over a few minutes and does not affect the continuity of the torque supplied by the engine in terms of normal operation.

When the driving profile does not permit automatic regeneration, after several failed attempts, the injection control unit activates a "particle filter blocked" warning light in the control panel.

It is therefore advisable to keep the vehicle running until the "particle filter blocked" warning light goes out.

If the "particle filter blocked" warning light remains on, it is vital to carry out the forced regeneration using the diagnostic equipment Examiner.

If the condition of the particulate filter deteriorates (the accumulation threshold of 250% is exceeded) as well as the "particle filter blocked" warning light, the EOBD warning light will also come on and it is therefore vital to carry out the forced regeneration using Examiner.

It is possible during the regeneration stage that some of the particulate will pollute the engine oil and therefore it must be changed in advance of the programmed interval.

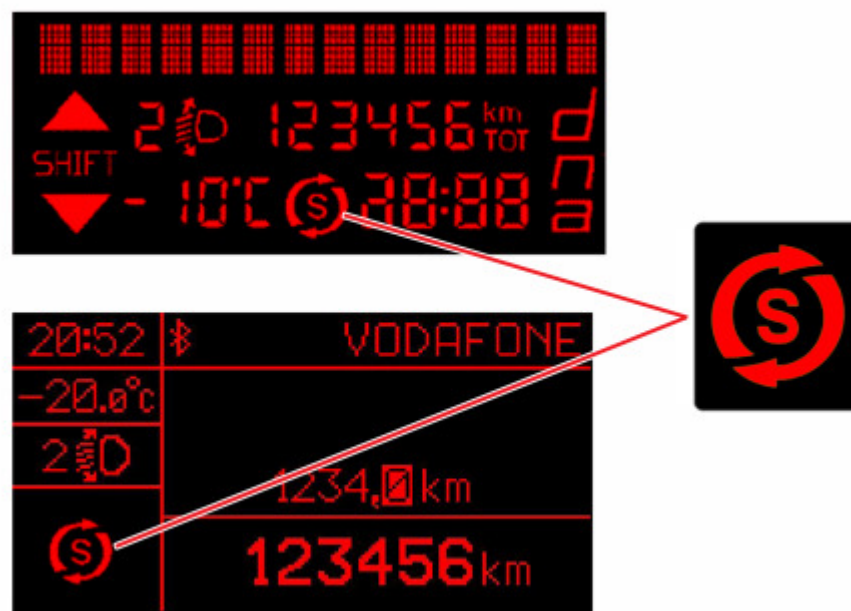
This is signalled by the "minimum engine oil pressure" warning light flashing.

This signalling is controlled by the injection control unit depending on the:

- number of regenerations
- kilometres travelled
- number of engine starting cycles
- number of cold starts
- average value of engine oil temperature
- etc.



After changing the engine oil earlier than planned, connect the Examiner to reset the Service function.



Engine restarting mode

The engine is automatically restarted when the clutch is depressed.

When the gearbox is not in neutral (caused by the forced engagement of a gear whilst the engine is stopped), the clutch should be fully depressed, whilst if the gearbox is in neutral restarting takes place with the clutch not yet fully depressed in order to facilitate quick starting. In practice driving behaviour does not change: once the driver has decided to set off, they will press the clutch to re-engage gear: at this point the engine will already have been restarted and the vehicle will be ready to set off again.

- version with tct transmission

The system operates every time the car is started.

Engine stopping mode

With the vehicle almost at a standstill (speed lower than 3 km/h for more than 0.5 seconds and accelerator pedal released), the engine stops if the following manoeuvres are carried out:

- gear lever is in a position other than R
- brake pedal pressed.

 The engine can only be stopped automatically after a speed of about 10 km/h is reached, to prevent the engine from being repeatedly stopped when driving at walking pace.

The engine stopping is signalled by the dedicated warning light on the instrument panel.

 In the event of stops uphill, the engine switching off is disabled to activate the "HILL HOLDER" function, that works only with running engine.

Engine restarting mode

The engine is restarted automatically when:

- The brake pedal is released and the lever is not in N or P;
- the lever is shifted to an unstable position, +, - or R;
- the lever is moved from D to the left in sequential mode or vice versa;
- the levers + or - on the steering wheel are operated;

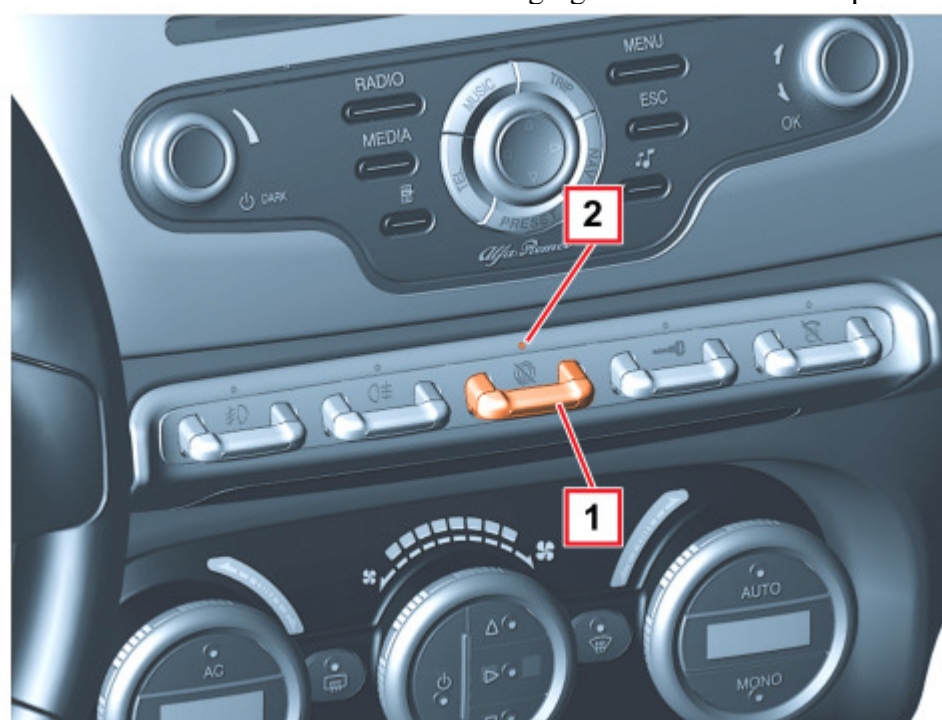
The display shows the passage:

- D, N, D: if the engine was switched off with lever in position D (automatic mode)
- 1, N, 1: if the engine was switched off with lever in sequential mode.

Manual activation and deactivation

The device can be manually activated/deactivated using the button between the controls on the side of the dashboard.

When the system is deactivated, the LED on the button and the relevant warning light on the instrument panel switch on.



List of controls on the steering wheel functions

Button	Short press (less than 1 second)	Long press (more than 1 second)
1	- Activation of Blue&Me Main Menu - Confirmation of menu option selected - Accept incoming phone call - Change from one telephone conversation to another in second call mode (call notification) - Selection of message displayed	- Refuse incoming phone call - Ending of phone call in progress
2	- Deactivation of voice recognition - Interruption of voice message - Interruption of SMS message reading - Exit from Blue&Me Main Menu - Exit from a sub menu and return to the previous menu option - Exit from the current selection with storing - Deactivation/reactivation of the microphone during a phone conversation - Resetting the volume of the call tone for the incoming phone call - Activation/Deactivation of multimedia player pause function	
3	- Activation of the voice recognition - Interruption of the voice message in order to give a new voice command	Repetition of the last voice message given by the system
4	- Adjustment of audio volume for Blue&Me functions: hands-free, SMS reader, multimedia player, voice announcements	
5	- Scrolling through Blue&Me menu items - Selection of multimedia player tracks - Scrolling through SMS messages in the list	
6	- Confirmation of menu option selected during manual interaction - Transfer of the telephone conversation in progress from the hands-free system to the mobile phone and vice versa - Audio source selection (Radio, CD, CD Changer, Multimedia Player) - Selection of SMS message displayed	

For many functions, the controls on the steering wheel 6 and 1 are interchangeable and the preferred button can be selected.
For both operating modes for the controls on the steering wheel (short or long press), the function is activated when the button is released.

Connection with bluetooth telephone

The system is connected to a mobile phone with a Bluetooth interface and hands-free profile.
The first connection between the mobile and the device (pairing procedure) is password-controlled; the user connects by keying the password into their mobile in the Bluetooth connection menu.
It is possible to memorise up to 5 users who are connected automatically at subsequent keys on without manual intervention on behalf of the user.
In each case, only one mobile phone can be connected to the control unit via Bluetooth.
The operation of the control unit is linked to the availability of the user's mobile phone for Bluetooth hands-free profiles, in particular:
- the Bluetooth system comes on independently at the Key on and starts the search for Bluetooth (mobile) devices to connect with immediately.
- the equipment switches off independently at the Key off releasing any Bluetooth connection that may be active: there is a delay of 30 seconds (provisional figure) to suppress accidental switching off of the engine (in traffic, at traffic lights, etc.).
- if a phonecall is in progress, the conversation is kept activated (except for the display in the control panel) even after the car is switched off; the control unit and the radio finally switch off at the end of the conversation.

List of compatible mobile phones

The current hands-free system with Bluetooth technology is compatible with all mobile phones that support Bluetooth 1.1 and a 1.0 hands-free profile (refer to the Bluetooth connection specifications in the mobile phone user manual).
As a result of the different possible software versions available on the market for different models of mobile phone, some additional functions (e.g.: second call management, call transfer from hands-free system to mobile phone and vice versa, etc.) may not correspond exactly to the description in the mobile phone user manual.
In any case, the possibility of having a hands-free conversation is not compromised.

 The ALFA ROMEO official website (www.alfaromeo.com), TECH section, contains an up to date list of mobile phones that are compatible with the Blue&Me system.
We wish to point out that because of the different possible software versions available on the market for the different models of mobile phones,

"first warning cycle": signalling via warning light

The "seat belts" warning light signals that the seat belt is not fastened (driver's or passenger side) coming on constantly from the Key ON.

"warning cycle": indication via warning light and buzzer

The warning light starts to flash and the buzzer sounds continuously for 6 secs and then intermittently for 90 secs if one of the following conditions is verified:

- Time elapsed 50 secs and vehicle speed above 10 km/h
- Vehicle speed above 20 km/h
- Distance travelled more than 400 m

If the seat belts are fastened during the cycle, the warning cycle is automatically interrupted and is only repeated if the seat belt not fastened condition is detected once again. The cycle is also interrupted when reverse gear is engaged (the warning light only remains on constantly) and is only repeated when the seat belt not fastened condition is detected once again and the vehicle speed exceeds 10 km/h.

Warning cycle exclusion mode

The driver can temporarily deactivate the warning cycle (the warning is activated again if there is a Key-OFF of more than 1 minute) by fastening the front seat belt(s) before the Key ON, holding it (them) for at least 20 secs with the key ON and undoing it (them) within 1 minute of the key-on.

The user can deactivate the warning cycle permanently only with the aid of the Technical Service dept.

The deactivation procedure must be carried out using a diagnostic instrument (Examiner) in communication with the instrument panel.

 No one can deactivate the signal produced by the warning light in the dashboard. This is always present (fixed light) if the seat belt is unfastened.

Warning cycle reactivation method

The driver can reactivate the warning cycle (if it is permanently deactivated) through intervention from the Aftersales Service Department or through a special item in the set up menu. This item disappears once the warning cycle is reactivated.

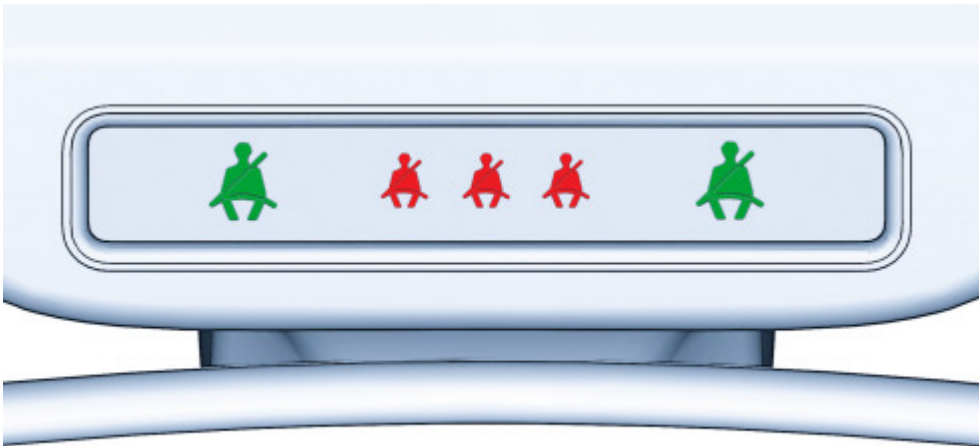
Seat belt reminder, front and rear seats

A reminder is present in some versions over the internal rear view mirror to inform all passengers, by means of a visual and acoustic indication, including the rear seat passengers, to fasten their seat belts.

The two side warning lights are associated to the front seats, while the three central warning lights are associated to the seat passengers.

The red and green warning lights work as follows:

- off if the seat belts are fastened at key-on;
- red if the front seat belts are not fastened;
- red blinking (rear seat only) if the front seat belts are not fastened;
- green if the seat belts are fastened.



The first four warning lights will be red and the last will be green when only the driver is present and all seat belts are not fastened.

The three middle warning lights will blink for approximately 30 seconds and then light up fixed.

The behaviour of the front and rear seat warning lights is differentiated:

Driver:

If the driver is the only occupant, when 20 km/h is exceeded or when travelling at a speed from 10 to 20 km/h for longer than 5 seconds, an acoustic reminder sequence will be started (front seats) consisting of a tone for 6 seconds followed by a 90 second beep. The warning light will blink.

Once the cycle is complete, the warning lights stay on with a fixed light until the car is turned off.

The acoustic reminder will be interrupted immediately when the driver's seat belts are fastened and the warning light will turn green.

The reminder cycle (acoustic and visual) will be repeated as described above if the seat belt is unfastened while travelling.

Passenger:

A similar solution applies for the front passenger, with the difference that the warning light turns green and the signal is interrupted also when the passenger leaves the car.

If both front seat belts are unfastened while the vehicle is travelling a few seconds apart, the acoustic indication will refer to the most recent event and the two warning lights will proceed with the visual indication independently.

Rear seats:

The reminder cycle is run only when any seat belt is unfastened. In this condition, the warning light referred to the seat belt which has been unfastened will start blinking for approximately 30 seconds.

An acoustic signal will also sound.

The visual indication will end independently for each warning light if several seat belts are unfastened.

All seat belts will stay on if at least one of the front seats is occupied and the seat belt is unfastened.

 All warning lights will go out (30 seconds after fastening the last belt) if both front seats are occupied, regardless of the rear belt state.

All the warning lights will come on when at least one belt changes from fastened to unfastened status or vice versa. All warning lights will stay off if all seat belts are already fastened when the engine is started.

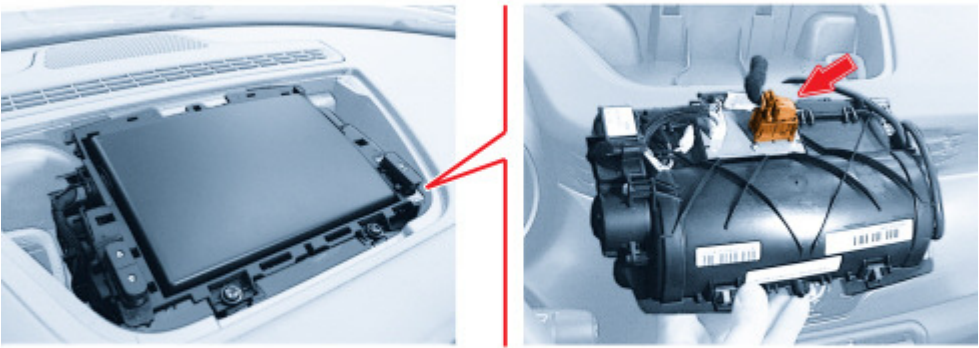
4	Aux R signal (MP right) from Bluetooth control unit
5	Outside display backlighting control PWM signal
6	Video signal (CVBS signal) from outside TV camera (N.C.)
7	D- signal (USB differential data signal) from USB port (N.C.)
8	Power supply (USB device power supply) for USB port (N.C.)
9	Signal from hands-free microphone (N.C.)
10	Aux L signal (MP left) from Bluetooth control unit
11	Aux GND reference earth (MP GND) from Bluetooth control unit
12	Reference earth (CVBS gnd) for video signal from outside TV camera (N.C.)

Connector C

PIN	SIGNAL
1	Connection to the display
2	Connection to the display

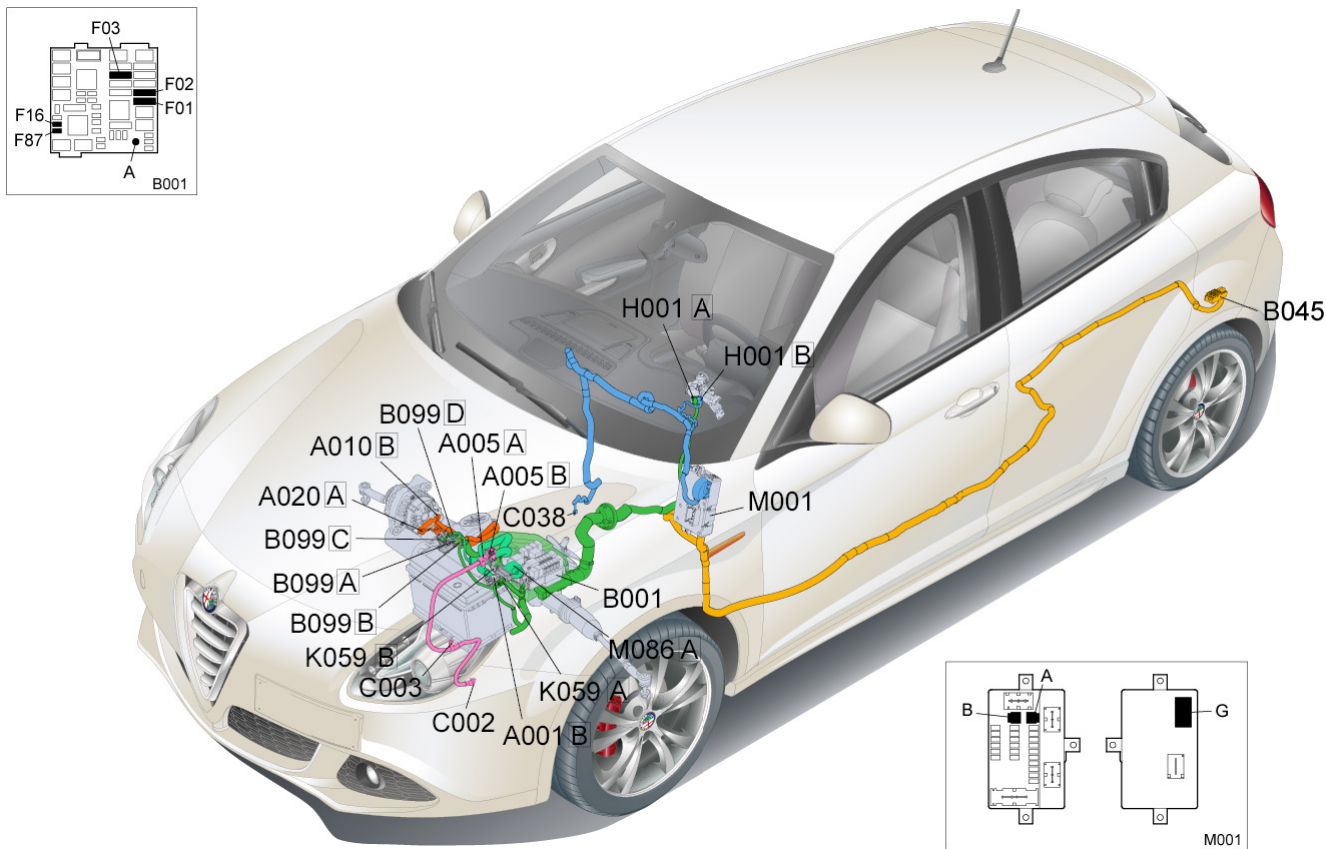
Connector D: (grey) FM1 aerial on roof coaxial cable
Connector E: (brown) coax FM2 aerial ("phase diversity") on rear window
Connector F: (blue) GPS aerial on roof coaxial cable
for more information on aerials,
[See descriptions 5570 ACCESSORIES](#)
Connector G: multipolar cable for display connection

Motorised display



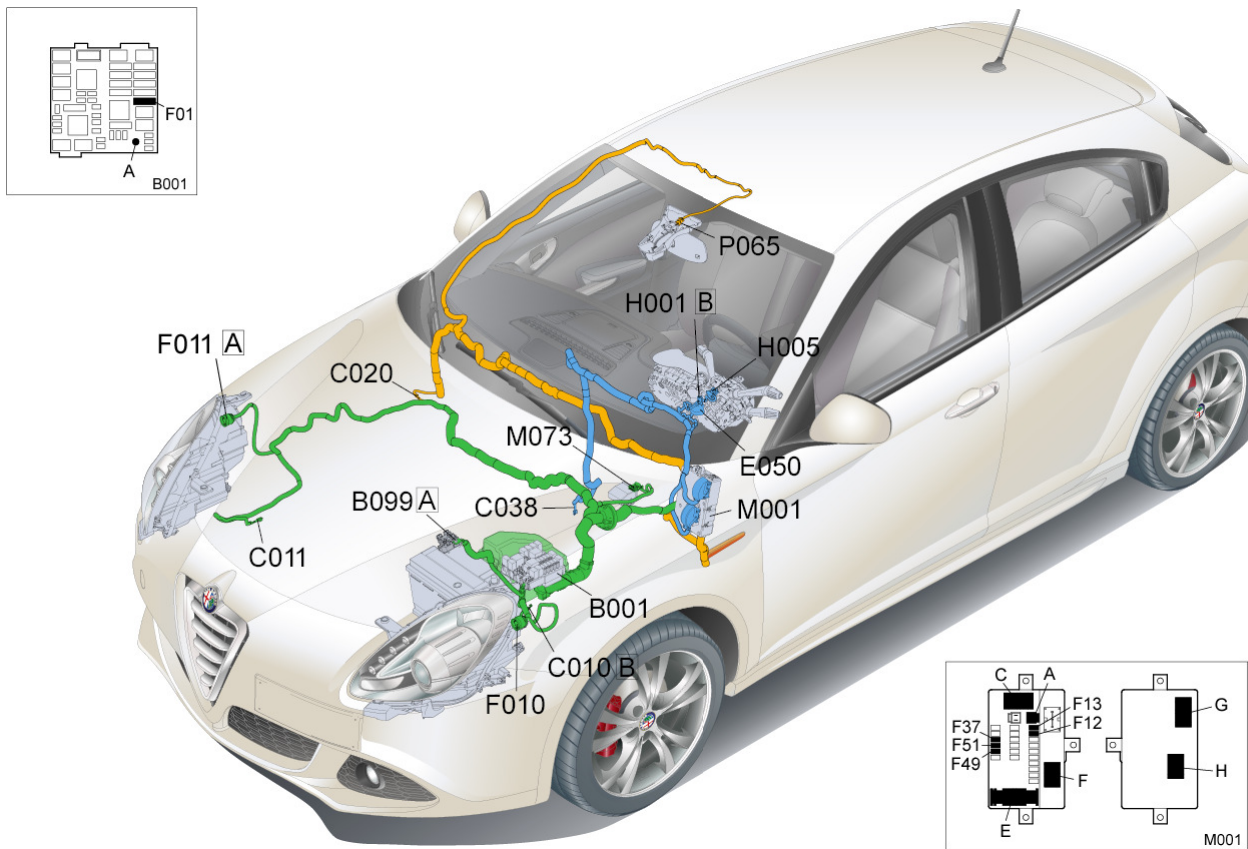
PIN	SIGNAL
1	Display power supply
2	NC
3	+30 for display
4	Display control
5	NC

POWER SUPPLY SYSTEM - COMPONENT LOCATION



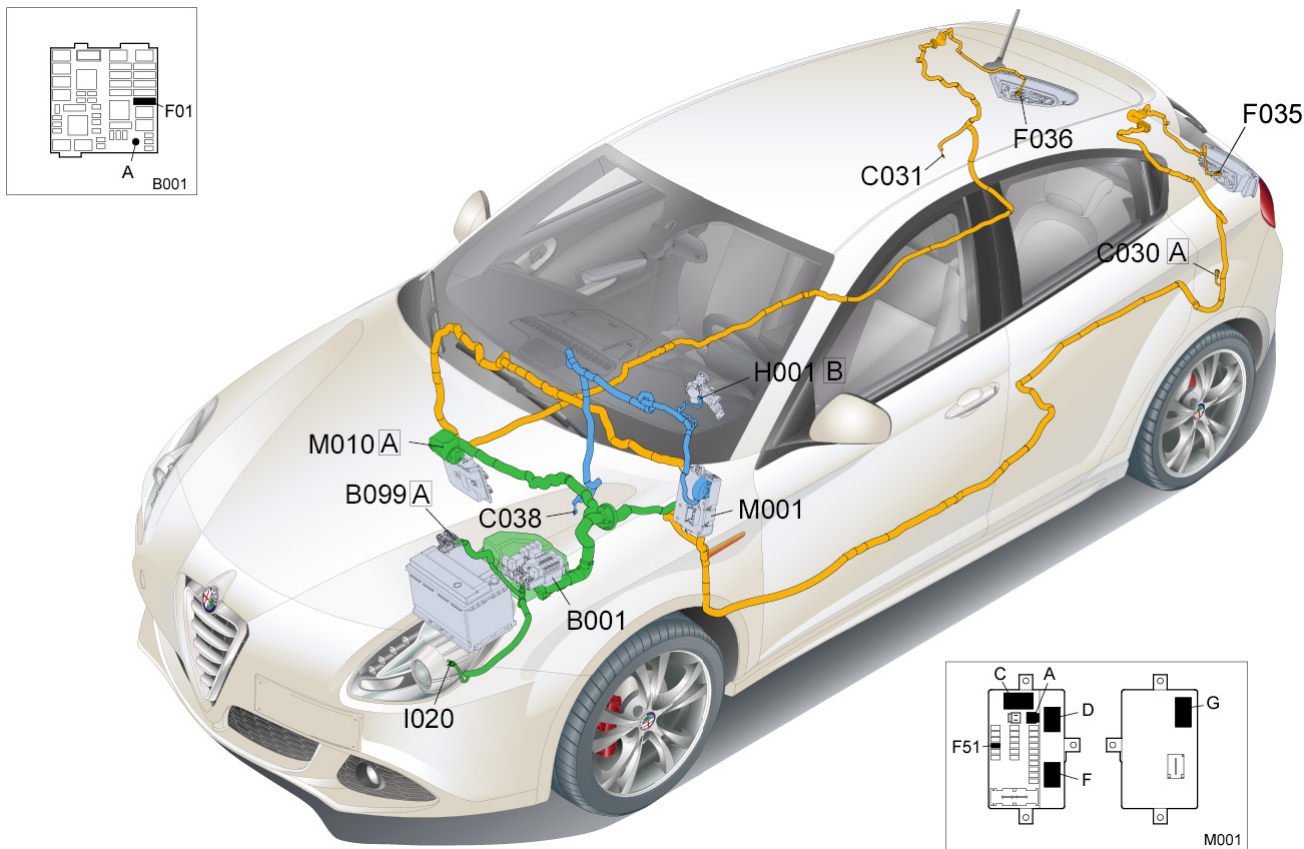
Component Code	Description	Reference to the operation
A001	BATTERY	Op. 5530B10 BATTERY - R+R
A005	Contact board	Op. 5530B22 BATTERY EARTH LEAD - R+R
A010	ALTERNATOR	Op. 5530A10 ALTERNATOR - R.R.
A020	STARTER MOTOR	Op. 5520B10 STARTER MOTOR - R.R.
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B045	LUGGAGE COMPARTMENT JUNCTION UNIT	Op. 5505A14 SUPPLEMENTARY JUNCTION BOX IN LUGGAGE COMPARTMENT - R.R
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C002	BATTERY EARTH ON ENGINE	Op. 5530B22 BATTERY EARTH LEAD - R+R
C003	BATTERY EARTH ON BODYSHELL	Op. 5530B22 BATTERY EARTH LEAD - R+R
C038	EARTH ON CENTRE TUNNEL	-
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
K059	battery charge status sensor	Op. 5520D01 BATTERY STATUS MONITORING SENSOR - R.R.
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
M086	ELECTRIC STEERING CONTROL UNIT	Op. 4110D50 WIRING HARNESS OF STEERING ELECTRIC CONTROL SYSTEM - R.R.

DIPPED BEAM HEADLIGHTS - COMPONENT LOCATION



Component Code	Description	Reference to the operation
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C010	LEFT FRONT EARTH	-
C011	RIGHT FRONT EARTH	-
C020	PASSENGER SIDE DASHBOARD EARTH	-
C038	EARTH ON CENTRE TUNNEL	-
E050	INSTRUMENT PANEL	Op. 5560B10 CONTROL PANEL - R+R
F010	LEFT HEADLIGHT	Op. 5540B07 LEFT FRONT HEADLAMP - R.R.
F011	RIGHT HEADLIGHT	Op. 5540B08 RIGHT FRONT HEADLAMP - R.R.
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
H005	STEERING COLUMN SWITCH UNIT	Op. 5550A10 STALK UNIT ASSEMBLY - R+R
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
M073	HEADLAMP ALIGNMENT CONTROL UNIT	Op. 5540C50 CONTROL UNIT FOR CORRECTING/ALIGNING GAS DISCHARGE LIGHTING UNIT - R R
P065	ELECTRO-CHROMIC INTERIOR REAR VIEW MIRROR	Op. 7065C60 INTERIOR REAR VIEW MIRROR FOR VERSIONS WITH RAIN/DUSK SENSOR - R.R.

REVERSING LIGHTS - LOCATION OF COMPONENTS



- B001

JUNCTION UNIT
- B099

MAXI FUSE BOX ON BATTERY
- C030

LEFT REAR EARTH
- C031

RIGHT REAR EARTH
- C038

EARTH ON CENTRE TUNNEL
- H001

IGNITION SWITCH
- I020

REVERSING LIGHTS SWITCH
- F035

LEFT REAR LIGHT CLUSTER (MOVING SECTION ON BOOT)
- F036

RIGHT REAR LIGHT CLUSTER (MOVING SECTION ON BOOT LID)
- M001

BODY COMPUTER
- M010

ENGINE MANAGEMENT CONTROL UNIT

- Op. 5505A28

CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
- Op. 5530B40

SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
-
-
-
- Op. 5520A18

IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
- Op. 5550D22

REVERSING LIGHT SWITCH - R+R
- Op. 5540A68

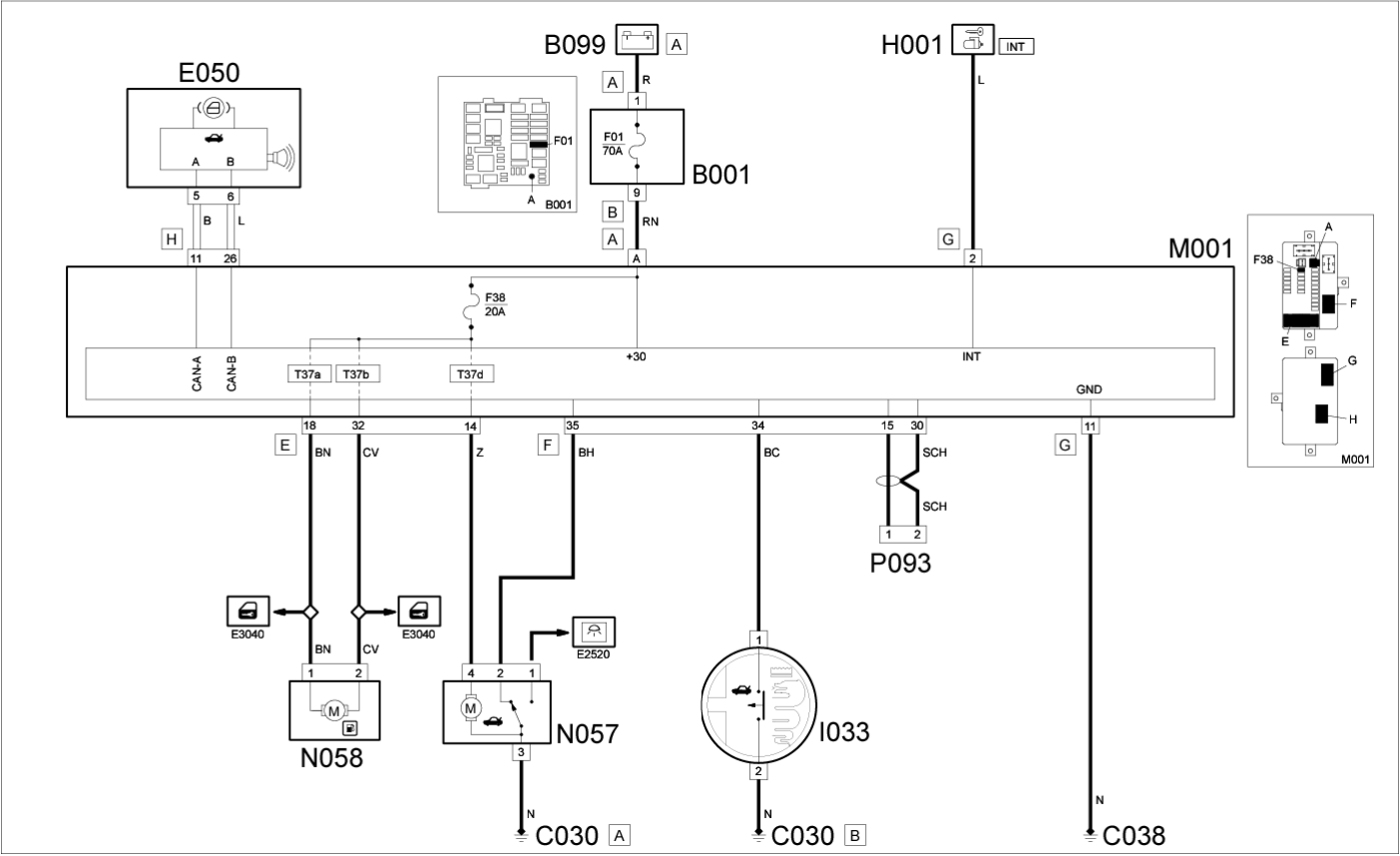
INTERIOR REAR LIGHT (ONE), LEFT OR RIGHT - R.R.
- Op. 5540A68

INTERIOR REAR LIGHT (ONE), LEFT OR RIGHT - R.R.
- Op. 5505A35

MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
- Op. 1056B82

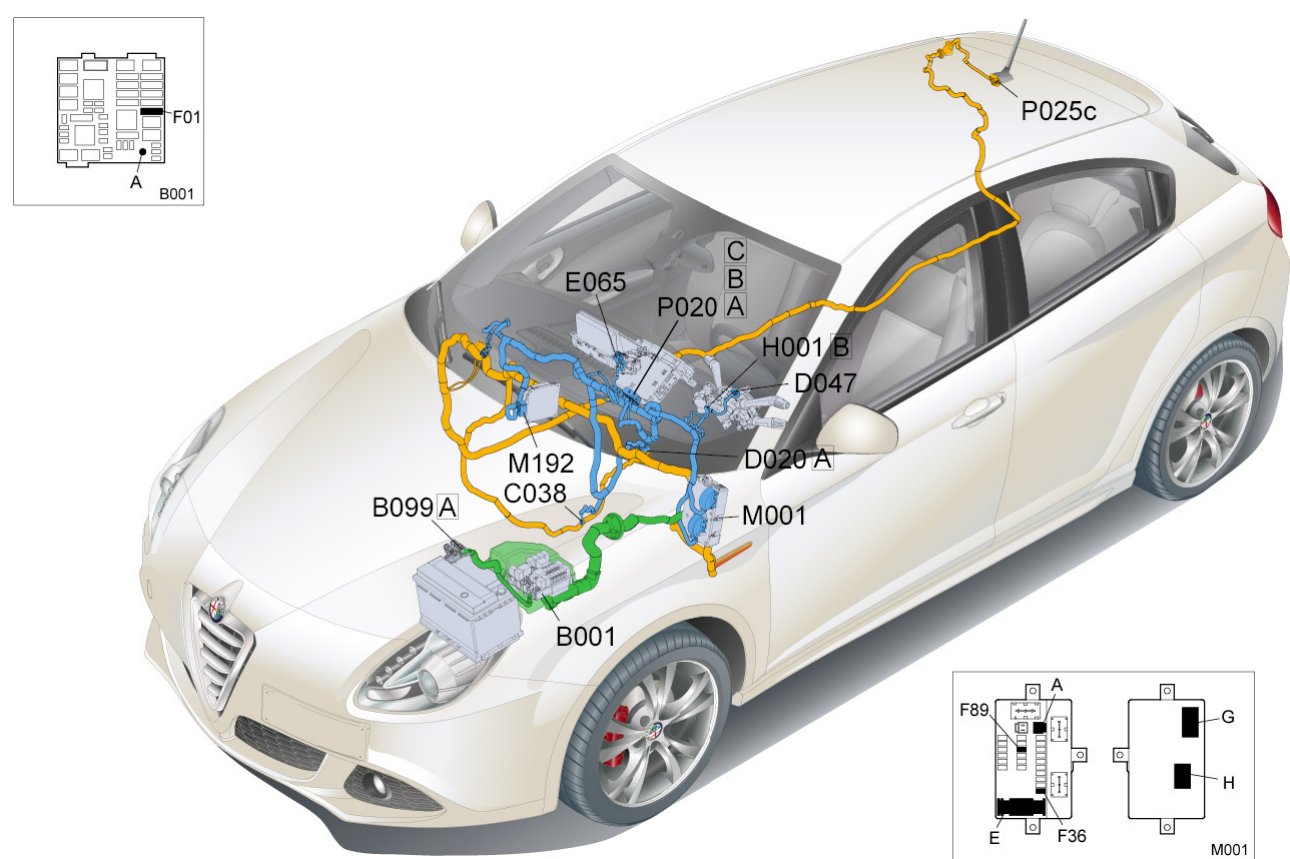
INJECTION/IGNITION SYSTEM E.C.U. (ONE) - R + R

BOOT AND FUEL FLAP OPENING - WIRING DIAGRAM



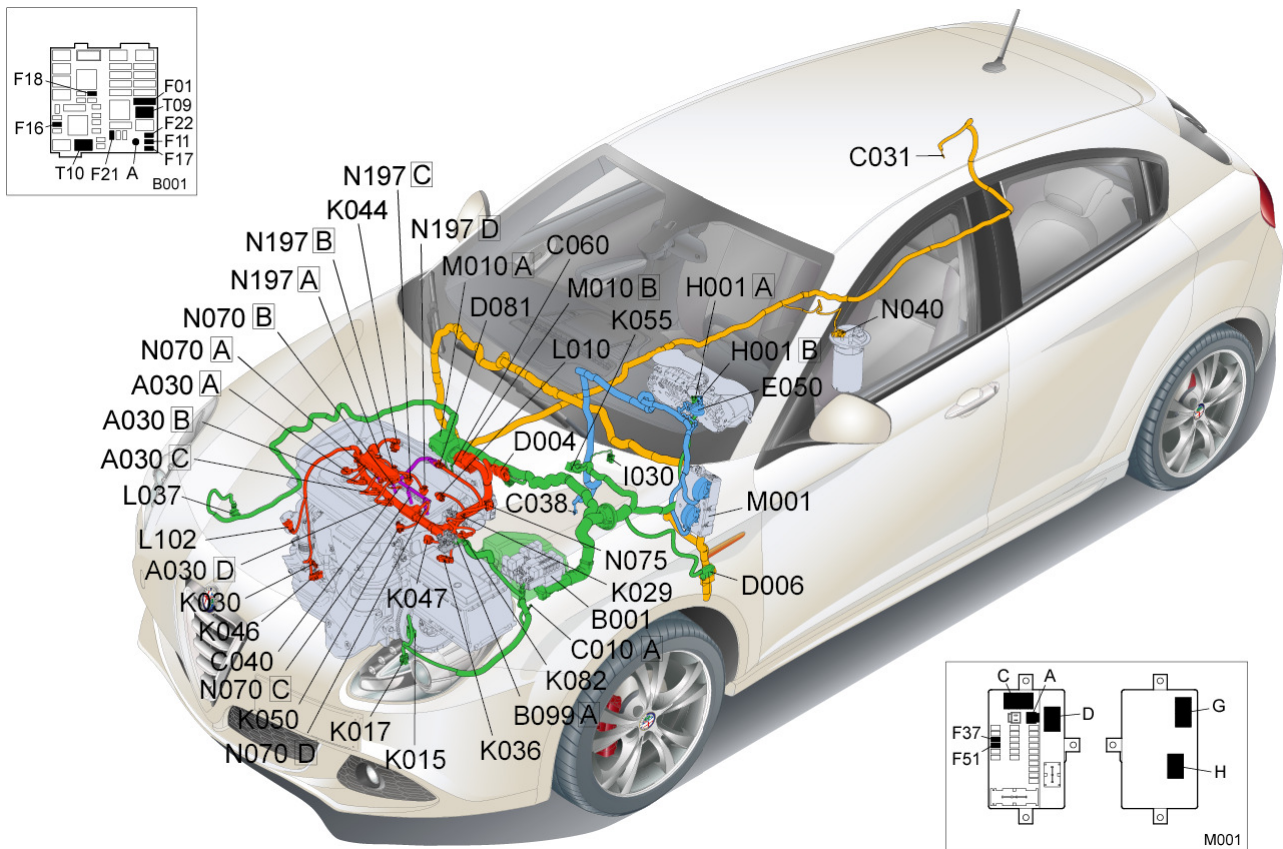
Component Code	Description	Reference to the operation
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C030	LEFT REAR EARTH	-
C038	EARTH ON CENTRE TUNNEL	-
E050	INSTRUMENT PANEL	Op. 5560B10 CONTROL PANEL - R+R
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
I033	SWITCH ON BOOT OUTER HANDLE	Op. 7015B48 TAILGATE OPENING CONTROL - R.R.
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
N057	BOOT LOCK GEARED MOTOR	Op. 7015B10 SINGLE TAILGATE LOCK - R+R OR REPAIR WITH PANEL/PROTECTION REMOVED
N058	FUEL FILLER FLAP LOCK GEARED MOTOR	Op. 7025C40 FUEL FILLER FLAP CONTROL MOTOR - R+R AND CHECK LOCK SUPPLY LINE
P093	AERIAL FOR ALARM AND CENTRAL LOCKING RECEIVER	-

NAVIGATOR - COMPONENT LOCATION



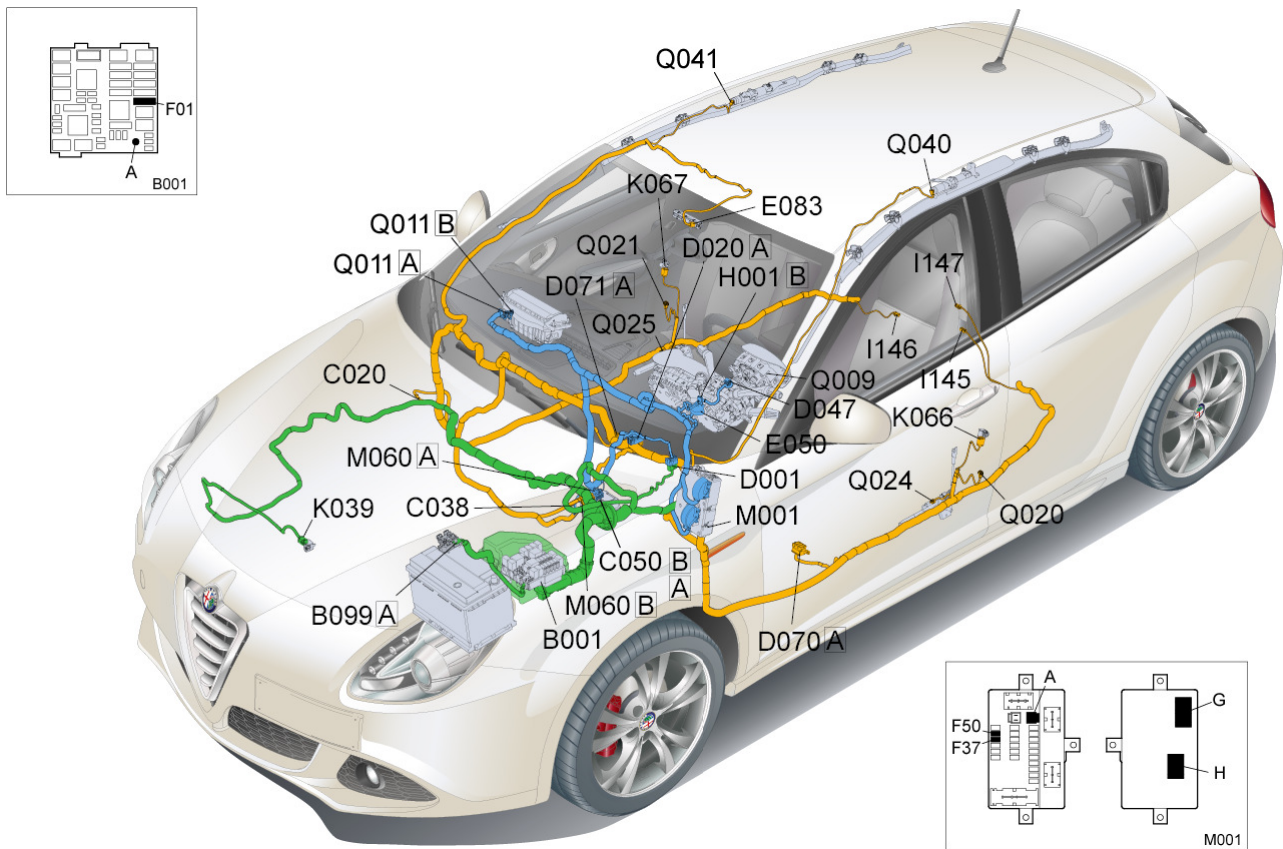
Component Code	Name	Reference to the operation
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C038	EARTH ON CENTRE TUNNEL	-
D020	DASHBOARD/REAR COUPLING	-
D047	CLOCK SPRING COUPLING	Op. 5550A10 STALK UNIT ASSEMBLY - R+R
E065	NAVIGATION SYSTEM DISPLAY	Op. 5580M25 RADIO NAVIGATOR DISPLAY - R.R.
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
M192	ALARM CONTROL UNIT	Op. 5520D03 VOLTAGE STABILIZER - R.R.
P020	CAR RADIO	Op. 5580M24 RADIO NAVIGATOR - R.R.
P025	AERIAL POWER SUPPLY	Op. 5570T27 AERIAL SUPPORT - R.R

ELECTRONIC MANAGEMENT OF PETROL ENGINES - COMPONENT LOCATION



Component Code	Description	Reference to the operation
A030	IGNITION COIL	Op. 5510C14 IGNITION COIL/S - R.R.
A030	IGNITION COIL	Op. 5590B11 IGNITION COIL CONNECTOR - R.R.
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C010	LEFT FRONT EARTH	-
C031	RIGHT REAR EARTH	-
C038	EARTH ON CENTRE TUNNEL	-
C040	EARTH ON ENGINE	-
C060	INJECTION CONTROL UNIT EARTH	-
D004	FRONT/ENGINE COUPLING	-
D006	FRONT/REAR COUPLING	-
D081	INJECTOR JUNCTION	-
E050	INSTRUMENT PANEL	Op. 5560B10 CONTROL PANEL - R+R
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
I030	BRAKE PEDAL SWITCH	Op. 5550D10 BRAKE LIGHT SWITCH - R+R
K015	LAMBDA SENSOR ON PRE-CATALYZER	Op. 1080B94 FRONT LAMBDA SENSOR TO WITH CATALYTIC CONVERTER - R.R
K017	LAMBDA SENSOR ON CATALYZER	Op. 1080B95 REAR LAMBDA SENSOR TO CATALYTIC CONVERTER - R.R
K029	ENGINE OIL TEMPERATURE SENSOR	Op. 1036F21 UNIAIR MODULE OIL TEMPERATURE SENSOR - R.R.
K029	ENGINE OIL TEMPERATURE SENSOR	Op. 5590B42 ENGINE OIL TEMPERATURE SENSOR CONNECTOR - R.R.
K030	ENGINE OIL PRESSURE SENSOR (SWITCH)	Op. 1084A42 ENGINE OIL PRESSURE WARNING LIGHT SWITCH - R.R.
K030	ENGINE OIL PRESSURE SENSOR (SWITCH)	Op. 5590B01 OIL PRESSURE SENSOR CONNECTOR - R.R.
K036	ENGINE COOLANT TEMPERATURE SENSOR/SENDER UNIT	Op. 1056B50 ENGINE COOLANT TEMPERATURE SENSOR - R + R
K036	ENGINE COOLANT TEMPERATURE SENSOR/SENDER UNIT	Op. 5590B02 ENGINE COOLANT TEMPERATURE SENSOR/SENDER UNIT CONNECTOR - R.R.
K044	AIR TEMPERATURE/PRESSURE SENSOR	Op. 1056B54 INTAKE AIR PRESSURE/TEMPERATURE SENSOR - R.R.
K044	AIR TEMPERATURE/PRESSURE SENSOR	Op. 5590B03 AIR TEMPERATURE/PRESSURE SENSOR CONNECTOR - R.R.
K046	RPM SENSOR	Op. 5510C26 ENGINE RPM SENSOR - R+R
K046	RPM SENSOR	Op. 5590B04 RPM SENSOR CONNECTOR - R.R.
K047	TIMING SENSOR	Op. 1056B51 CAM ANGLE SENSOR - R.R.
K047	TIMING SENSOR	Op. 5590B05 PHASE SENSOR CONNECTOR - R.R.
K050	DETONATION SENSOR	Op. 5510C42 DETONATION SENSOR (ONE) - R.R.
K050	DETONATION SENSOR	Op. 5590B18 KNOCK SENSOR CONNECTOR - R.R.
K055	ACCELERATOR PEDAL POTENTIOMETER	Op. 1068A20 ACCELERATOR PEDAL WITH BUILT-IN POTENTIOMETER - R.R
K082	SUPERCHARGING SENSOR	Op. 1056B44 AIR PRESSURE SENSOR - R + R
K082	SUPERCHARGING SENSOR	Op. 5590B06 SUPERCHARGING SENSOR CONNECTOR - R.R.
L010	FUEL VAPOUR RECOVERY SOLENOID VALVE	Op. 1080E28 PIPE FROM ACTIVE CHARCOAL FILTER TO SOLENOID - R.R.
L010	FUEL VAPOUR RECOVERY SOLENOID VALVE	Op. 5590B23 FUEL VAPOUR RECOVERY SOLENOID VALVE CONNECTOR - R.R.
L037	WASTE GATE SOLENOID VALVE	Op. 1064B38 WASTE GATE SUPERCHARGING PRESSURE ADJUSTMENT SOLENOID VALVE - R.R.
L102	TURBOCHARGER BY-PASS SOLENOID VALVE	Op. 1048B58 TURBOCHARGER AIR BY-PASS VALVE - R.R.
L102	TURBOCHARGER BY-PASS SOLENOID VALVE	Op. 5590B26 TURBOCHARGER BY-PASS SOLENOID VALVE CONNECTOR - R.R.
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
M010	ENGINE MANAGEMENT CONTROL UNIT	Op. 1056B82 INJECTION/IGNITION SYSTEM E.C.U. (ONE) - R + R
N040	FUEL PUMP AND LEVEL GAUGE	Op. 1040A70 SUBMERGED PUMP ASSEMBLY COMPLETE WITH LEVEL GAUGE CONTROL - R + R
N070	INJECTOR	Op. 1056B70 INJECTOR (ONE) - R + R WITH FUEL MANIFOLD PIPE REMOVED - INCLUDES SEAL REPLACEMENT
N070	INJECTOR	Op. 5590B09 INJECTOR CONNECTOR - R.R.
N075	INTEGRATED THROTTLE BODY ACTUATOR	Op. 1056B14 THROTTLE BODY - R + R
N075	INTEGRATED THROTTLE BODY ACTUATOR	Op. 5590B10 INTEGRATED THROTTLE BODY ACTUATOR CONNECTOR - R.R.
N197	MULTIAIR ACTUATOR	Op. 1036F20 UNIAIR MODULE - R.R.

AIR BAG - COMPONENT LOCATION



Component Code	Description	Reference to the operation
B001	JUNCTION UNIT	Op. 5505A28 CONTAINER FOR ADDITIONAL JUNCTION UNIT IN ENGINE COMPARTMENT - R.R.
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B40 SUPPLY BOX ON BATTERY (LINK BATTERY AND FUSE BOX) - R R
C020	PASSENGER SIDE DASHBOARD EARTH	-
C038	EARTH ON CENTRE TUNNEL	-
C050	AIR BAG SYSTEM EARTH	-
D001	FRONT/DASHBOARD COUPLING	-
D020	DASHBOARD/REAR COUPLING	-
D047	CLOCK SPRING COUPLING	Op. 5550A10 STALK UNIT ASSEMBLY - R+R
D070	DRIVER'S SEAT COUPLING	-
D071	PASSENGER SEAT COUPLING	-
E050	INSTRUMENT PANEL	Op. 5560B10 CONTROL PANEL - R+R
E083	DISPLAY FOR FASTENED SEAT WARNING	Op. 7065A33 DISPLAY FOR UNFASTENED SEAT BELT - R. R.
H001	IGNITION SWITCH	Op. 5520A18 IGNITION SWITCH CONTACT CARRIER LOCK BARREL - R.R.
I046	DRIVER'S SEAT BELT SWITCH	Op. 7065A14 ANCHORAGE ROD FOR , (ONE), FRONT SEAT BELT LEFT OR RIGHT - R.R.
I047	PASSENGER SEAT BELT SWITCH	Op. 7065A14 ANCHORAGE ROD FOR , (ONE), FRONT SEAT BELT LEFT OR RIGHT - R.R.
I145	LEFT REAR SEAT BELT WARNING LIGHT SWITCH	Op. 7065B21 LEFT REAR SEAT BELT MOUNTING ROD - R.R.
I146	RIGHT REAR SEAT BELT WARNING LIGHT SWITCH	Op. 7065B22 CENTRE SEAT BELT ANCHORAGE LINK - R+R
I147	MIDDLE REAR SEAT BELT WARNING LIGHT SWITCH	Op. 7065B23 RIGHT REAR SEAT BELT MOUNTING ROD - R.R.
K039	FRONT AIR BAG SENSOR	Op. 5580C10 DECELERATION SENSOR FOR AIR BAG (ONE), L/H OR R/H - R+R
K065	PASSENGER PRESENCE SENSOR	Op. 7065A34 PASSENGER PRESENCE SENSOR ON FRONT SEAT FOR INDICATING SEATBELT UNFASTENED R R
K066	SIDE BAG SENSOR, DRIVER'S SIDE	Op. 5580C40 SIDE BAG SENSOR (ONE), LH OR RH - R.R.
K067	SIDE BAG SENSOR, PASSENGER SIDE	Op. 5580C40 SIDE BAG SENSOR (ONE), LH OR RH - R.R.
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
M060	AIR BAG CONTROL UNIT	Op. 5580C14 AIR BAG ECU - R+R
Q009	DRIVER'S AIR BAG	Op. 5580C18 AIR BAG MODULE - R+R
Q011	AIR BAG IN DASHBOARD (PASSENGER SIDE)	Op. 5580C22 AIR BAG MODULE - PASSENGER SIDE - R.R
Q020	DRIVER'S FRONT SEAT BELT PRETENSIONER	Op. 7065A12 FRONT SEAT BELT (ONE), LEFT OR RIGHT, WITH PRETENSIONER ON REEL - R.R.
Q021	PASSENGER SIDE FRONT SEAT BELT PRETENSIONER	Op. 7065A12 FRONT SEAT BELT (ONE), LEFT OR RIGHT, WITH PRETENSIONER ON REEL - R.R.
Q024	DRIVER'S AIR BAG	Op. 7065A13 PRETENSIONER FOR LUMBAR BRANCH OF ONE SEAT BELT, LEFT OR RIGHT - R.R.
Q025	PASSENGER SIDE FRONT SEAT BELT MOUNTING PRETENSIONER	Op. 7065A13 PRETENSIONER FOR LUMBAR BRANCH OF ONE SEAT BELT, LEFT OR RIGHT - R.R.
Q030	DRIVER'S SIDE BAG	Op. 5580C44 FRONT SIDE BAG MODULE (ONE) LH OR RH - R.R
Q031	PASSENGER SIDE BAG	Op. 5580C44 FRONT SIDE BAG MODULE (ONE) LH OR RH - R.R
Q040	DRIVER'S HEAD BAG	Op. 5580C52 WINDOW BAG MODULE (ONE) LH OR RH - R.R WITH INTERFERING PARTS REMOVED
Q041	PASSENGER HEAD BAG	Op. 5580C52 WINDOW BAG MODULE (ONE) LH OR RH - R.R WITH INTERFERING PARTS REMOVED