



ADDITIONAL HEATER

Stilo

ADDITIONAL HEATER - Description

The climate control via the heater unit is insufficient when the engine is cold, especially in Diesel engines which are slow to warm up.

These engines may optionally be fitted with a supplementary heater system. This remains active from the moment when the engine is turned on until a certain temperature is reached.

The system consists of an additional heater, located in the heater unit: the device contains three resistances (PTC).

The operation of the resistances is controlled by a specific control unit - connected via the CAN network to the car's other nodes - which drives only one, or two or three, thus providing progressive heating.

This control logic depends on:

- the temperature of the engine coolant;
- the electrical power available (in effect, the battery voltage is checked)
- the engine speed (which should be above a pre-set value).

The supply of one, two or three resistances is controlled by two relays located on the heater unit:

- 1. Level: activated by the first relay;
- 2. Level: activated by the second relay;
- 3. Level: activated by both relays.

This supply is interrupted in the case of overtemperatures, via a specific safety switch.

Also, when the heater is on, the switching on of the fan is controlled E6020 AIR CONDITIONING .

For more details 5040 AIR CONDITIONING CASING AND COMPONENTS .

The supply line is protected by a specific maxifuse and a bridge fuse.

ADDITIONAL HEATER - Functional description

The relay J36 controls the engagement of the first additional heater coil

The relay is supplied from the fuse B38 .

The relay J37 controls the engagement of the other two additional heater coils.

The supply for relay arrives from the line for maxifuse PTC2, located on the battery, connector B99 .

the ignition (INT/A) protected by fuse F49 of the junction unit under the dashboard B2.

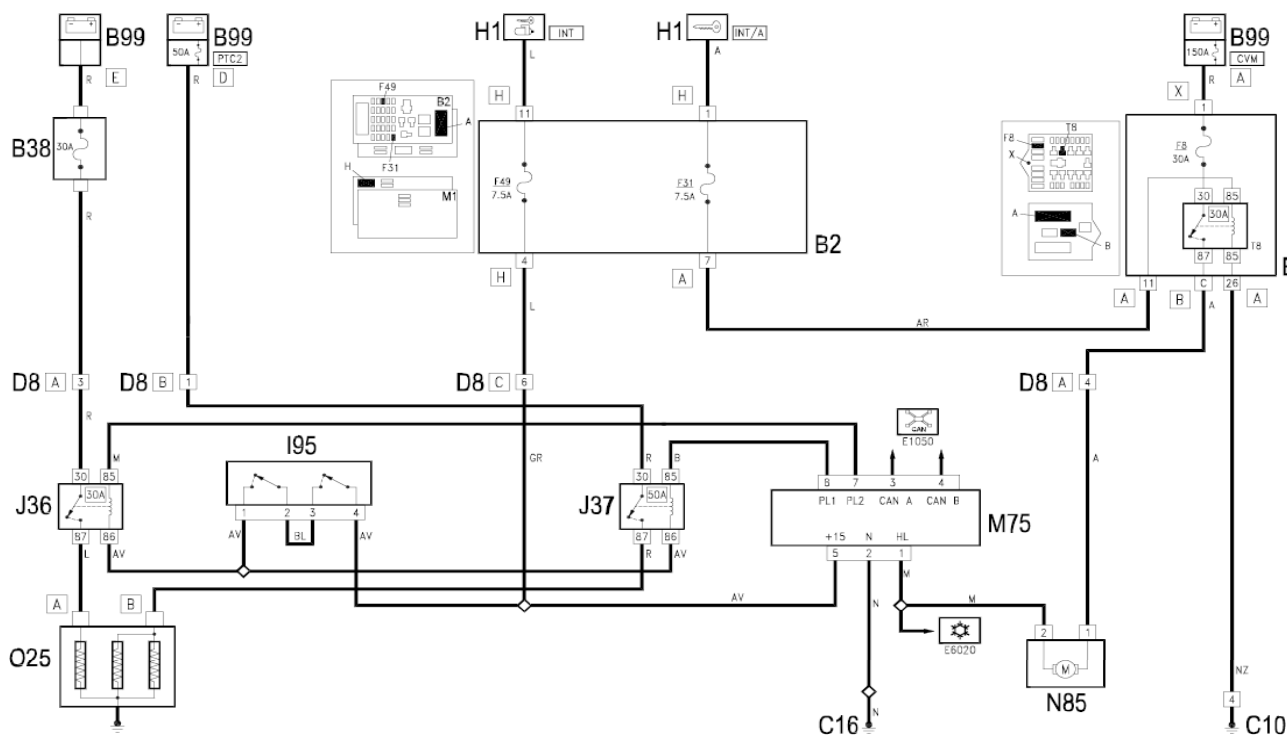
This supply is cut off in the case of overheating, via the safety switch I95 .

Control unit M75 controls device operation: it is supplied by an ignition-operated line (INT) protected by fuse F49 of underfacia control unit B2, and connected via the CAN line to Body Computer M1 and the other network nodes.

The climate control unit M75 sends the enabling signal for engaging the first resistance O25A to excite relay J36 and a signal to activate the two coils O25B at relay J36.

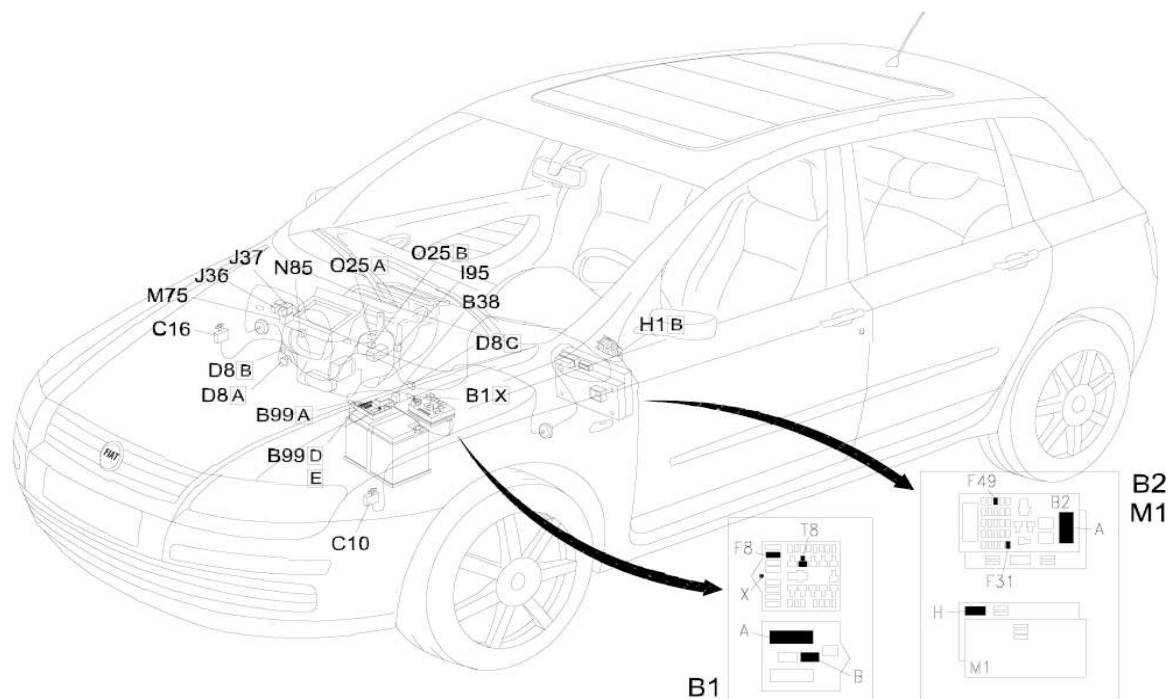
Another dedicated signal controls activation of the first speed of air fan N85 , supplied by ignition-operated line (INT/A) of relay T8 and dedicated fuse F8 of engine bay control unit B1 - it is operated at the first speed in any case if the supplementary heating device is on. E6020 AIR CONDITIONING .

ADDITIONAL HEATER - Wiring diagram



| Component code | Name | Assembly reference |
|----------------|---|--------------------|
| B1 | Engine compartment junction unit | 5505A |
| B2 | Junction unit under dashboard | 5505A |
| B38 | Additional heater fuse | - |
| B99 | Maxifuse box on battery | 5530B |
| C10 | Front left earth | - |
| C16 | Air conditioning earth | - |
| D8 | Front coupling / air conditioner - with heating | - |
| D8 | Front/air conditioning - heater coupling | - |
| H1 | Ignition switch | 5520A |
| I95 | Additional heater safety switch | - |
| J36 | Additional heater relay | - |
| J37 | Additional heater relay - 2 | - |
| J37 | Additional heater relay - 2 | - |
| K79 | Air temperature sensor (additional heater)(| - |
| K79 | Air temperature sensor (additional heater)(| - |
| M70 | Climate control system control unit | 5040D |
| M74 | Additional heater remote control receiver | - |
| M75 | Additional heater control unit | - |
| M75 | Additional heater control unit | 5040D |
| N85 | Passenger compartment ventilation fan | 5040C |
| O25 | Additional heater resistor | - |

ADDITIONAL HEATER - Location of components



| Component code | Name | Assembly reference |
|----------------|---|--------------------|
| B1 | Engine compartment junction unit | 5505A |
| B2 | Junction unit under dashboard | 5505A |
| B38 | Additional heater fuse | - |
| B99 | Maxifuse box on battery | 5530B |
| C10 | Front left earth | - |
| C16 | Air conditioning earth | - |
| D8 | Front coupling / air conditioner - with heating | - |
| D8 | Front/air conditioning - heater coupling | - |
| H1 | Ignition switch | 5520A |
| I95 | Additional heater safety switch | - |
| J36 | Additional heater relay | - |
| J37 | Additional heater relay - 2 | - |
| J37 | Additional heater relay - 2 | - |
| K79 | Air temperature sensor (additional heater)(| - |
| K79 | Air temperature sensor (additional heater)(| - |
| M70 | Climate control system control unit | 5040D |
| M74 | Additional heater remote control receiver | - |
| M75 | Additional heater control unit | - |
| M75 | Additional heater control unit | 5040D |
| N85 | Passenger compartment ventilation fan | 5040C |
| O25 | Additional heater resistor | - |