



SBRINAMENTO LUNOTTO E SPECCHI RETROVISORI

150 - 500

REAR WINDOW AND DOOR MIRROR DEFROSTING - DESCRIPTION

In the case of poor visibility it is possible to activate the demisting of the rear screen and the door mirrors (if present).

The heating resistances for these components absorb a considerable amount of energy and are therefore controlled and deactivated after a certain period of operation; the defrosting is timed according to a logic managed by the Body Computer:

- excluded during starting (INT/A);
- by the on signal coming from the dedicated button located in the panel near the heating/climate control system controls;
- on versions with AUTOMATIC AIR CONDITIONING, by the on signal for the MAX-DEF button in the control panel.

Under these circumstances the resistances remain supplied for a maximum of 20 minutes, then the supply is cut off.

The supply is cut off in the following conditions:

- at the key off (key OFF or extracted);
- via the disengagement signal from the dedicated button;
- with the battery voltage below 11.5 V;
- after the first 10 minutes of operation if the engine speed is below 960 rpm.


During the first ten minutes of operation, defrosting is guaranteed irrespective of the engine speed.

With the defrosting on the LED in the control panel comes on.

The activation timer (20 minutes) is set again each time the button is operated.


In specifications with an AUTOMATIC AIR CONDITIONER, the climate control system control unit logic also intervenes with the "MAX-DEF" command in accordance with the logic described previously.

The "MAX-DEF" function lasts for 3 minutes starting from when the engine temperature exceeds a certain limit.

 The deactivation of the MAX-DEF control only causes the switching off of the heated rear windscreen if the command to switch it on came from the MAX-DEF button; if, on the other hand, the command was given via the heated rear windscreen button, it remains on.

The defrosting circuit for the rear windscreen and the exterior rear view mirrors (if present) is operated and protected by a relay switch and a fuse respectively located in the engine compartment junction unit; the defrosting circuit for the rear view mirrors also has another fuse located near the diagnostic socket. This circuit is controlled by the logic described above directly by the Body Computer.

On versions with AUTOMATIC AIR CONDITIONING, the control signal, on the other hand, reaches the Body Computer from the climate control system control unit via the B-CAN.

 On versions with a manually operated air conditioner and heater, the defrosting can only be activated using the dedicated button.

REAR SCREEN AND REAR VIEW MIRROR DEMISTING - FUNCTIONAL DESCRIPTION

The relay T19, located in the engine compartment junction unit B001, manages the switching on of the defrosting resistances for the heated rear windscreen P055 (connector A) and the driver's side P060 and passenger side P061 exterior rear view mirrors, from pin 70 of connector B, via the line protected by fuse F20 of B001.

The circuit for the defrosting resistances for the driver's P060 and passenger P061 exterior rear view mirrors is also protected by a dedicated external fuse B016.

Relay switch coil T19 receives an ignition-operated (15/54) power supply via the line protected by fuse F87 of B001.

On versions with a START&STOP device, relay switch coil T19 is supplied by the ignition-controlled line (INT) protected by fuse F51 of Body Computer M001 (pin 4 of connector C).

Relay switch T19 is energised by an earth signal (pin 71 of connector B of B001) from Body computer M001 (pin 6 of connector B).

This signal is sent according to the control logic described previously and if there is the heated rear window engagement control (earth signal), supplied by the switch in the auxiliary control panel H115 (pin 2 for versions available until 08/2014 or pin 1 for versions available since 09/2014) to pin 3 of connector D of M001.

For versions with START&STOP device, this signal is sent to pin 29 of connector D of Body computer M001. When defrosting is activated, this sends a positive signal (from pin 12 of connector D) to switch on the LED on the rear window activation button.

The driver side dashboard earth C015 provides the earth reference for the controls of the auxiliary control panel H115 (pin 1 for versions available until 08/2014 or pin 3 for versions available since 09/2014).

On versions with AUTOMATIC AIR CONDITIONING it is also possible to activate the engagement of the heated rear window (MAX-DEF function) from the climate control system control unit M070 (pins 10 and 9 of connector A, pins 39 and 40 for versions available starting from 09/2011) through the signal, sent on the B-CAN, to the Body Computer M001 (pins 57 and 58 of connector B).

See E1050 CAN CONNECTION LINES

With the defrosting switched on, the Body Computer M001 (pin 12 of connector D) sends a positive signal to turn on the LED in the heated rear window activation button (pin 3 of H115 for versions available until 08/2014; pin 5 of H115 for versions available since 09/2014).

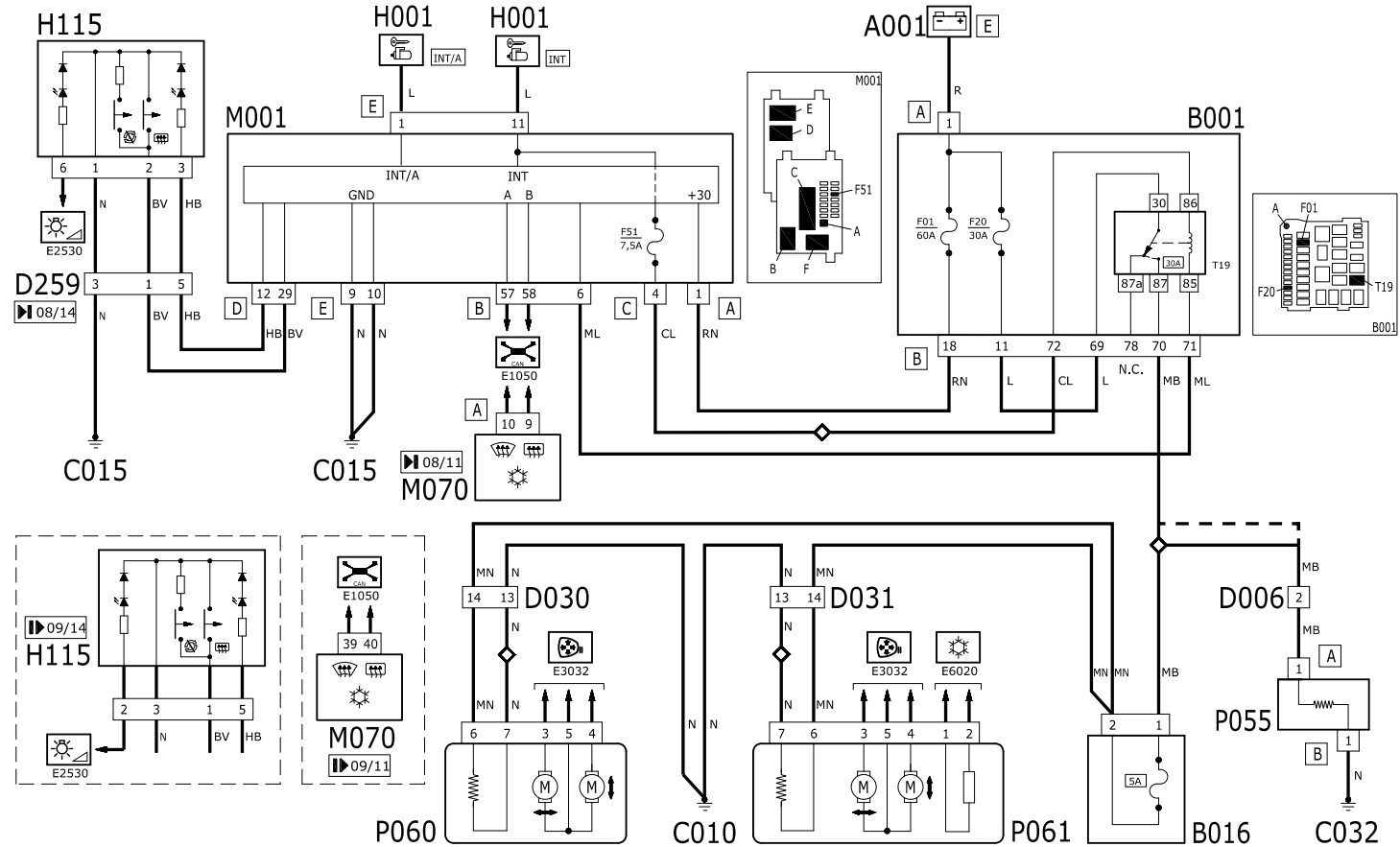
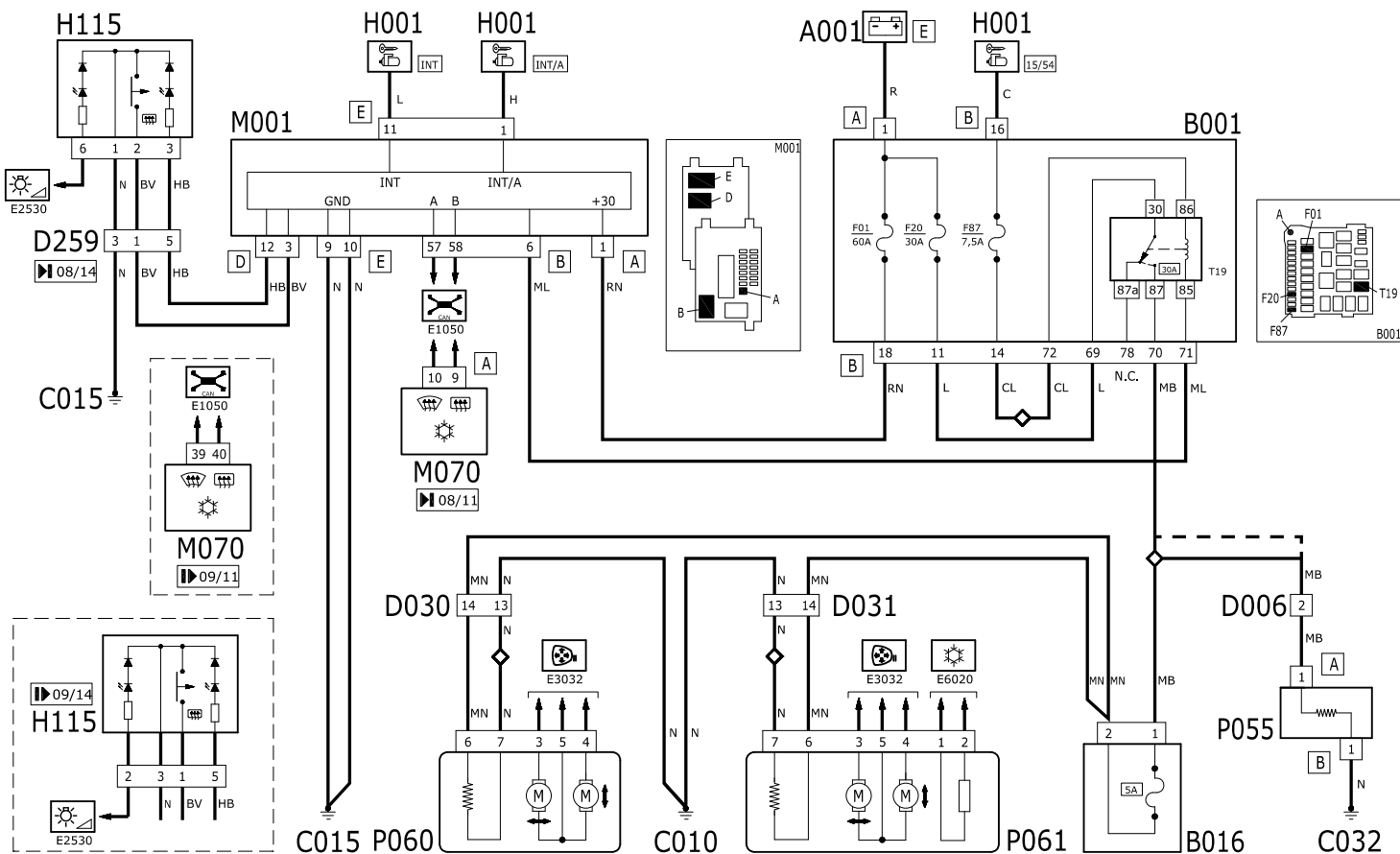
The Body Computer M001 receives a direct battery power supply (pin 1 of connector A) protected by fuse F01 of the engine compartment junction unit B001 (pin 18 of connector B); it also receives an ignition-operated power supply (INT) at pin 11 of connector E.

The Body Computer M001 receives an ignition-operated power supply (INT/A) at pin 1 of connector E which excludes the heated rear windscreen and rear view mirrors heating system during starting.

The Body Computer M001 is also connected to the driver's dashboard earth C015 via pins 9 and 10 of connector E.

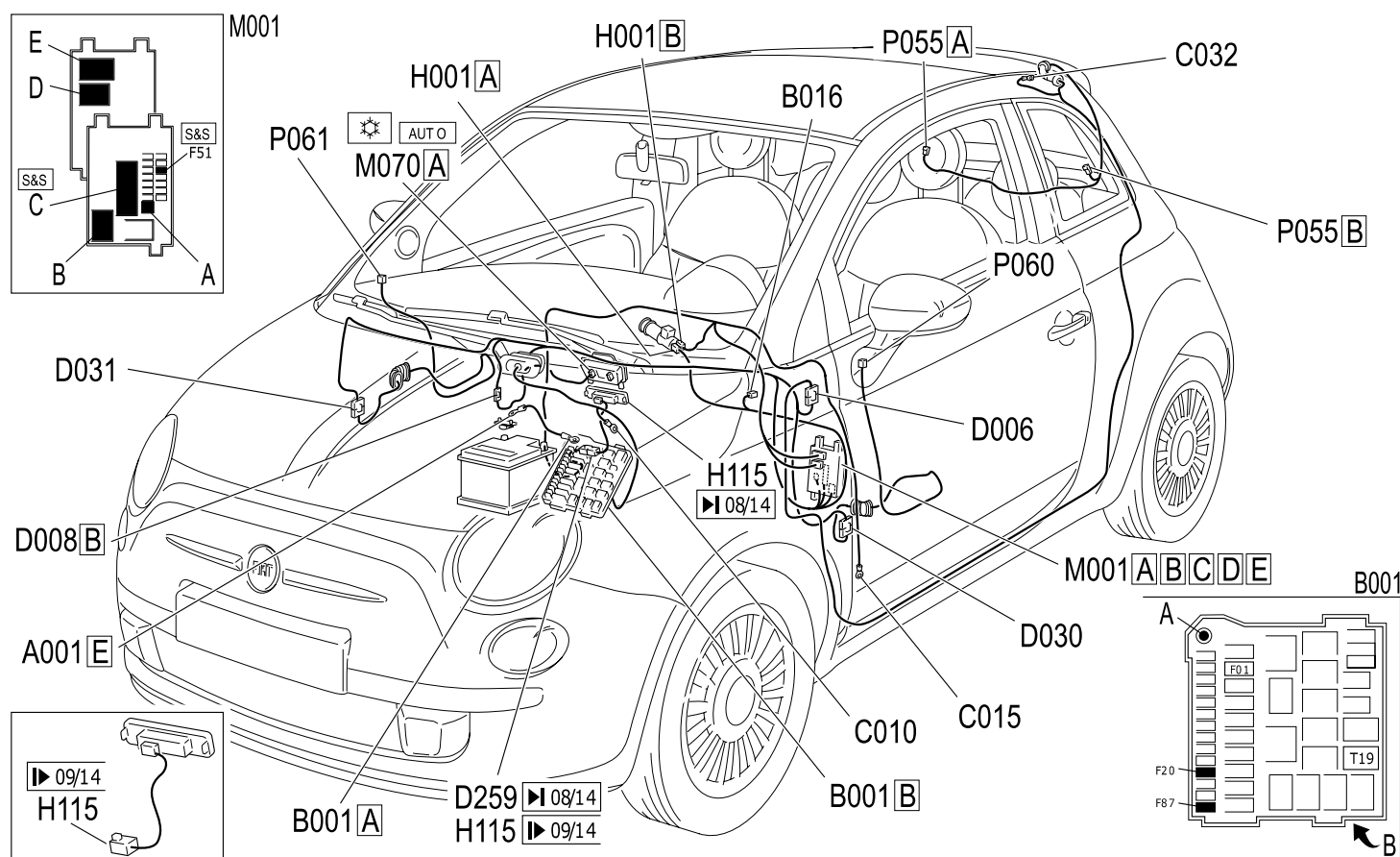
The resistors for mirror defrosting are connected to the left front earth C010, whilst the heated rear window P055 (connector B) is connected to the dedicated earth C032.

REAR SCREEN AND REAR VIEW MIRROR DEMISTING - WIRING DIAGRAM



Component code	Name	Reference to the Operation
A001	BATTERY	Op. 5530B10 BATTERY - R+R
B001	JUNCTION UNIT	Op. 5505A10 JUNCTION UNIT - R+R
B016	MIRROR DEMIST FUSE	-
C010	LEFT FRONT EARTH	-
C015	DASHBOARD EARTH, DRIVER'S SIDE	-
C032	REARSCREEN EARTH	-
D006	FRONT/REAR COUPLING	-
D008	FRONT/AIR CONDITIONING-HEATER COUPLING	-
D030	LEFT FRONT DOOR COUPLING	-
D031	RIGHT FRONT DOOR COUPLING	-
D259	INSTRUMENT PANEL BRIDGE COUPLING	-
H001	IGNITION SWITCH	Op. 5520A10 IGNITION SWITCH ASSEMBLY - R+R
H115	ADDITIONAL CONTROL PANEL	Op. 7040A56 SWITCH UNIT IN DASHBOARD - R.R.
M001	BODY COMPUTER	Op. 5505A32 BODY COMPUTER - R.R.
M070	CLIMATE CONTROL SYSTEM CONTROL UNIT	Op. 5040D18 AIR CONDITIONING CONTROL UNIT - R.R.
P055	HEATED REARSCREEN	Op. 7035B14 REAR WINDOW GLASS - R.R INCLUDES CLEANING HOUSING
P060	DRIVER'S DOOR MIRROR	Op. 7005R30 ELECTRICALLY CONTROLLED DOOR MIRROR (ONE) - R+R
P061	PASSENGER DOOR MIRROR	Op. 7005R30 ELECTRICALLY CONTROLLED DOOR MIRROR (ONE) - R+R

REAR WINDOW AND DOOR MIRROR DEFROSTING - COMPONENT LOCATION



Component code

Name

Reference to the Operation

A001	BATTERY	Op. 5530B10 BATTERY - R+R
B001	JUNCTION UNIT	Op. 5505A10 JUNCTION UNIT - R+R
B016	MIRROR DEMIST FUSE	-
C010	LEFT FRONT EARTH	-
C015	DASHBOARD EARTH, DRIVER'S SIDE	-
C032	REARSCREEN EARTH	-
D006	FRONT/REAR COUPLING	-
D008	FRONT/AIR CONDITIONING-HEATER COUPLING	-
D030	LEFT FRONT DOOR COUPLING	-
D031	RIGHT FRONT DOOR COUPLING	-
D259	INSTRUMENT PANEL BRIDGE COUPLING	-
H001	IGNITION SWITCH	Op. 5520A10 IGNITION SWITCH ASSEMBLY - R+R
H115	ADDITIONAL CONTROL PANEL	Op. 7040A56 SWITCH UNIT IN DASHBOARD - R.R.
M001	BODY COMPUTER	Op. 5505A32 BODY COMPUTER - R.R.
M070	CLIMATE CONTROL SYSTEM CONTROL UNIT	Op. 5040D18 AIR CONDITIONING CONTROL UNIT - R.R.
P055	HEATED REARSCREEN	Op. 7035B14 REAR WINDOW GLASS - R.R INCLUDES CLEANING HOUSING
P060	DRIVER'S DOOR MIRROR	Op. 7005R30 ELECTRICALLY CONTROLLED DOOR MIRROR (ONE) - R+R
P061	PASSENGER DOOR MIRROR	Op. 7005R30 ELECTRICALLY CONTROLLED DOOR MIRROR (ONE) - R+R