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TERGI/ LAVA CRISTALLO

191 - Giulietta

WINDSCREEN WASH/WIPE - DESCRIPTION

The windscreen wash/wipe system is activated by the lever located on the right of the steering wheel, with the following functions: there are five possible positions for the stalk to which the following functions correspond:

- windscreen wiper off (stationary);

- intermittent operation;

- continuous slow operation;

- continuous fast operation;

- "antipanic" temporary fast operation (unstable position, turning the lever upwards).

In the intermittent/automatic operation position three different positions can be selected by turning the ring nut:

- on the basic version the different intermittent speeds are engaged from the slowest to the fastest;

- on versions with a rain sensor, the different settings for the sensor are engaged: the activation of the rain sensor causes a windscreen wiper arm stroke as feedback to confirm that it has been engaged.

The frequency of the windscreen wiper strokes is automatically adjusted according to the amount of water on the windscreen detected by the sensor: the frequency varies continuously from nil (no stroke - windscreen dry) to wiping at the second continuous speed (heavy rain).

With the windscreen wipers operational, if reverse gear is engaged, the rearscreen wiper is automatically activated.

See E3021 REAR WINDOW WASH/WIPE

The windscreen washer function can be activated by pulling the lever toward the steering wheel: this activates the windscreen washer pump: keeping the lever pulled also switches on the windscreen wiper in accordance with a specific control logic: the windscreen wiper is activated at the first speed: when the windscreen washer control is no longer present, an additional stroke is carried out.

The windscreen wiper/washer circuit is protected by a dedicated fuse located in the Body Computer. The windscreen wiper and windscreen washer may be operated by a supply that is ignition-operated except during start-up (INT/A).

WINDSCREEN WASH/WIPE - FUNCTIONAL DESCRIPTION

There is a single (earth) signal sent by the steering column stalk H005 to the Body Computer M001 that manages all the windscreen wiper commands: from pin 7 of H005 to pin 58 of connector H of M001; the signal sent is coded via resistive dividers so that multiple information can be sent from the steering column stalk to the Body Computer via a single connection. Pin 10 of H005 receives the reference earth from pin 45 of connector H of M001.

Similarly, the windscreen washer controls are sent from pin 5 of H005 to pin 54 of connector H of M001.

The Body Computer M001 - connector A - receives a direct power supply from the battery through the line protected by maxi fuse F01 of the engine compartment junction unit B001.

The Body Computer M001 receives an ignition-operated power supply (INT) at pin 2 of connector G and ignition-operated power supply - start-up excluded (INT/A) at pin 9 of connector G.

Pin 11 of connector G of M001 provides the Body Computer with a reference earth.

According to the function selected, the Body Computer M001 sends the following control signals to the windscreen wiper motor N015:

- from pin 10 of connector C for fast operation;

- from pin 9 of connector C for slow and/or intermittent operation;

- pin 58 of connector D on the other hand, receives the earth signal coming from the motor end of travel cam which stops operation. The windscreen wiper motor N015 is then earthed.

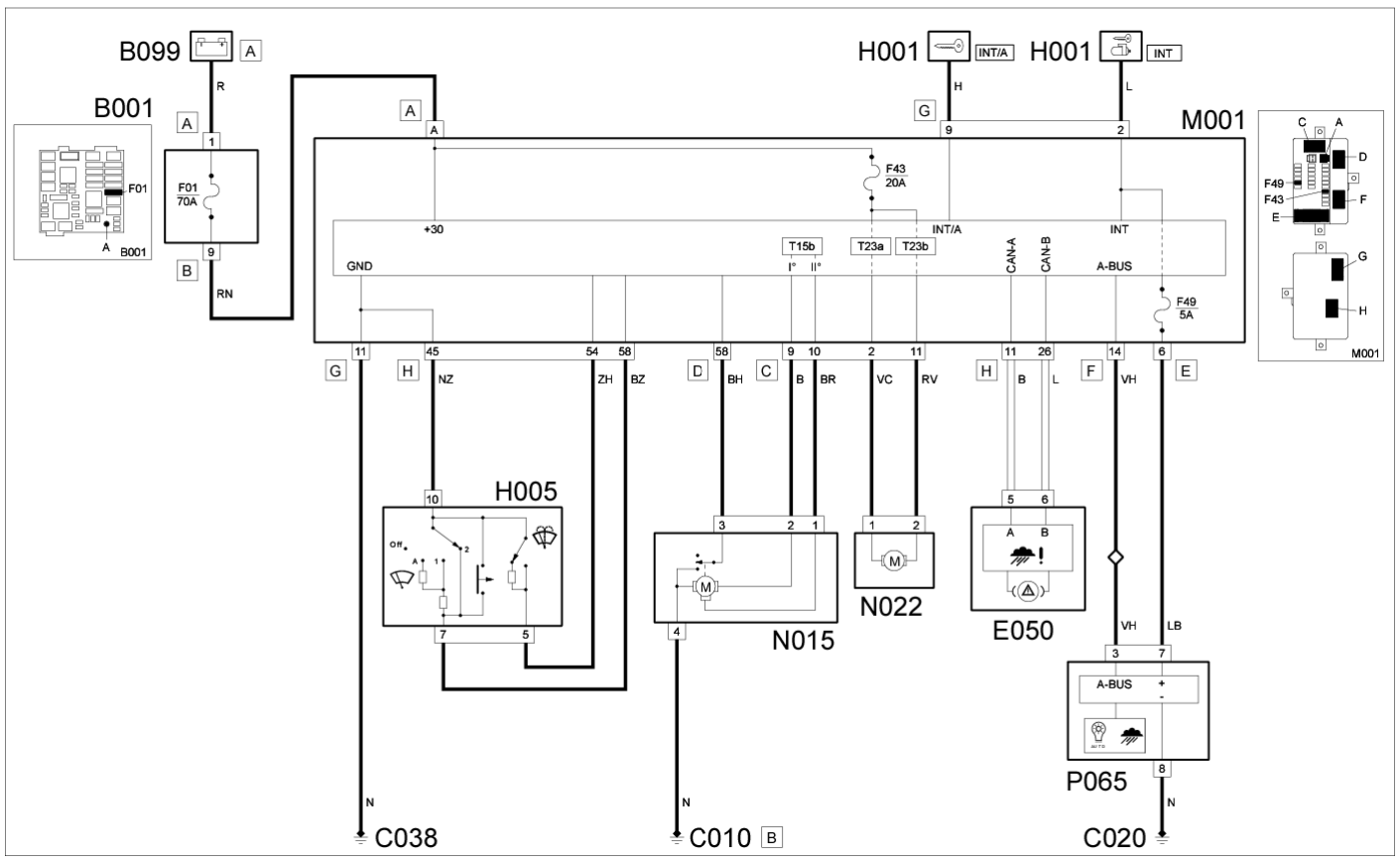
The Body Computer M001 sends two signals from pins 11 and 2 of connector C which activate the windscreen washer pump N022 which turns sending the detergent fluid to the front windscreen.

The pump supply lines are controlled by relay switch T23e and are protected by fuse F43 of control unit M001.

The rain sensor located on the rear view mirror P065 receives a power supply from the INT line protected by fuse F49 of M001 and sends the Body Computer the automatic activating signal via the A-BUS serial line at pin 14 of connector F of M001.

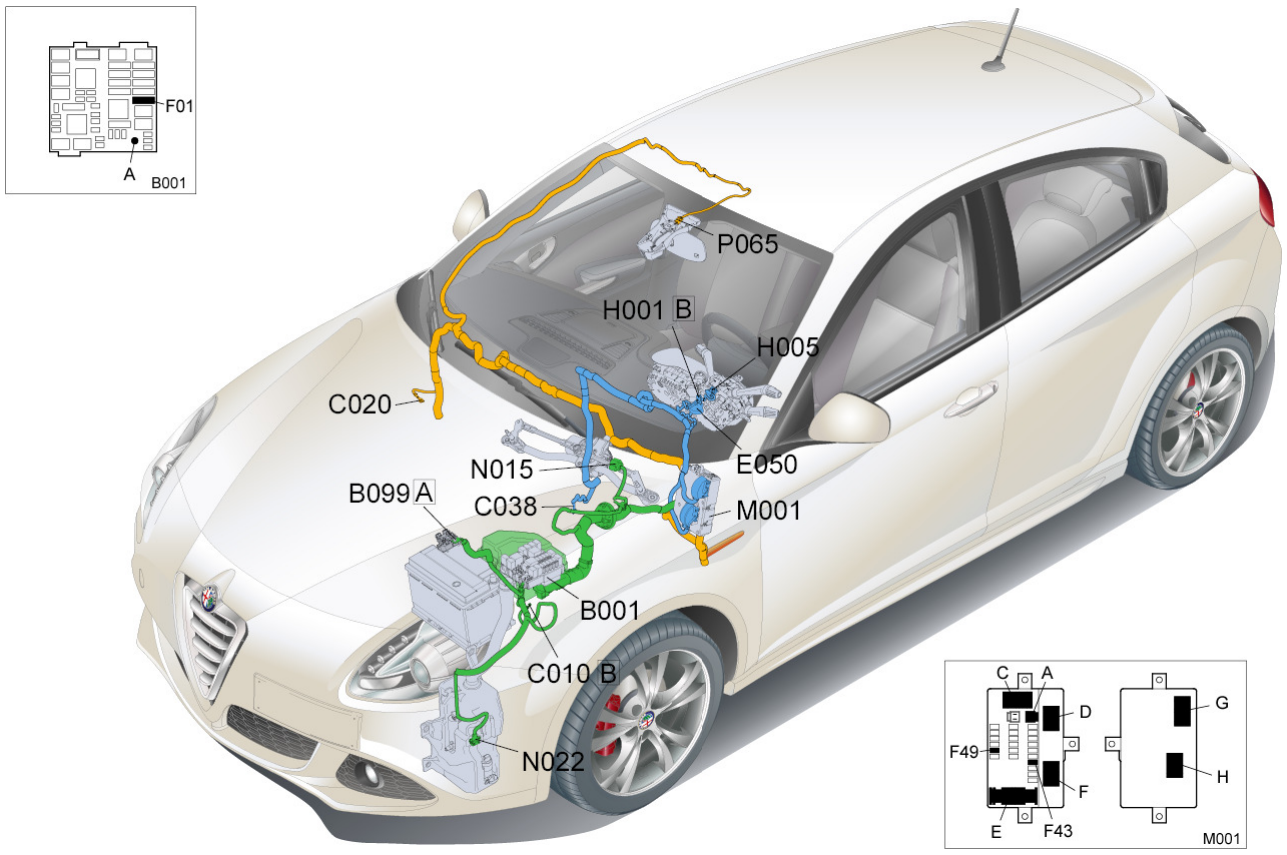
The Body Computer M001 is connected via the CAN line to the instrument panel E050 to manage the failure warning light and signalling if the rain sensor fails.

WINDSCREEN WASH/WIPE - 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
C010	LEFT FRONT EARTH	-
C020	PASSENGER SIDE DASHBOARD 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.
H005	STEERING COLUMN SWITCH UNIT	Op. 5550A10 STALK UNIT ASSEMBLY - R+R
M001	BODY COMPUTER	Op. 5505A35 MAIN BODY COMPUTER/JUNCTION UNIT - R.R.
N015	WINDSCREEN WIPER MOTOR	Op. 5050B38 FRONT WINDSCREEN WIPER ASSEMBLY - R.R. OR REPAIR
N022	WINDSCREEN/REARSCREEN WASHER ELECTRIC PUMP MOTOR	Op. 5050B22 FRONT AND REAR SCREEN WASHER PUMP - R+R
P065	ELECTRO-CHROMIC INTERIOR REAR VIEW MIRROR	Op. 7065C60 INTERIOR REAR VIEW MIRROR FOR VERSIONS WITH RAIN/DUSK SENSOR - R.R.

WINDSCREEN WASH/WIPE - COMPONENT LOCATION



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