



PREDISPOSIZIONE RIMORCHIO

290/295 - Ducato FL 2014

SETUP FOR TRAILER - DESCRIPTION

The tow hook kit consists of an electronic control unit to reproduce the lights on the trailer and an electrical connection setup with the relevant mechanical hook.

The mechanical towing device should be fastened to the body by specialised personnel according to any additional and/or integrative information supplied by the Manufacturer of the device.

The towing device must meet current regulations with reference to Directive 94/20/EEC and subsequent amendments.



In general, the mechanical device used must match the towable weight of the vehicle on which it is to be installed.

For the electrical connection, a standard connector is used which is generally placed on a special bracket fastened to the towing device, and a special trailer control unit is installed on the front right part of the vehicle.

The electronic control unit automatically operates the trailer exterior lights (brake lights, direction indicators, side lights, reversing light and rear fog light); the trailer is physically connected to the mechanical hook and is electrically connected to the vehicle through the standard socket.

Rear parking sensor operation is automatically disabled when the electric cable plug of the trailer is fitted into the vehicle tow hook standard socket.



If you wish to leave the tow hook fitted when there is no trailer, it is advisable to go to a Fiat Dealership to have the system updated because the tow hook could be detected as an obstacle by the central sensors of the parking assistance system.

A trailer connection fault or a trailer light fault is indicated by the "general failure" warning light switching on the instrument panel through the CAN connection between trailer control unit and Body Computer.

On versions equipped with instrument panel with reconfigurable multifunction display, a dedicated icon and messages appear on the display to indicate a trailer light fault.

SETUP FOR TRAILER - FUNCTIONAL DESCRIPTION

The trailer control unit M181 receives a power supply, at pin 3 of connector A, from the ignition-operated line (INT) protected by fuse F49 of the Body Computer M001 (pin 5 of connector E). It is connected (from pin 5 of connector A) to the cab earth C100 for the required reference.

The direct battery power supply is provided to pin 1 of connector A of M181 through the line protected by fuse F65 of the additional fuse box module B046 (pin 1 of connector A), and at the same time to pin 2 of connector A of M181 through the line protected by fuse F66 of B046 (pin 2 of connector A).

Both fuses are protected upstream through a line protected by specific fuse "PowerVAL" (CAL5) (F70 for Natural Power versions) of the fuse box on the battery B099 (B connector).

The discrete signals relating to the direction indicator activation are sent from Body Computer M001 (pins 18 and 19 of connector F) to trailer control unit M181 (pins 9 and 10 of connector A).

E2020 DIRECTION INDICATORS / HAZARD WARNING LIGHTS

In the same way the signals relating to the brake light activation are sent from pins 32 and 2 of connector F of M001 to pins 11 and 12 of connector A of M181.

E2021 BRAKE LIGHTS

Trailer control unit M181 is connected (pins 8 and 7 of connector A) via CAN-B with the Body Computer M001 (pins 12 and 11 of connector F) to receive the information about: rear lights, vehicle speed and ignition key status management.

On the other hand, it sends the information about the trailer light bulb diagnosis to forward them via CAN-B to the instrument panel E050 to manage the dedicated warning light, icon and messages.

All the signals relating to the rear light management are sent from the control unit M181 (connector B) to the standard connector D073 for the effective connection; specifically the following connections are present:

- from pin 3 connector B of M181 to pin 4 connector B of D073, for the left side lights;
- from pin 1 connector B of M181 to pin 6 connector B of D073, for the right side lights;
- from pin 5 connector B of M181 to pin 1 connector B of D073, for the left side direction indicators;
- from pin 4 connector B of M181 to pin 3 connector B of D073, for the right side direction indicators;
- from pin 6 connector B of M181 to pin 5 connector B of D073, for the brake lights;
- from pin 7 connector B of M181 to pin 7 connector B of D073, for the reversing light;
- from pin 2 connector B of M181 to pin 2 connector B of D073, for the rear fog light.

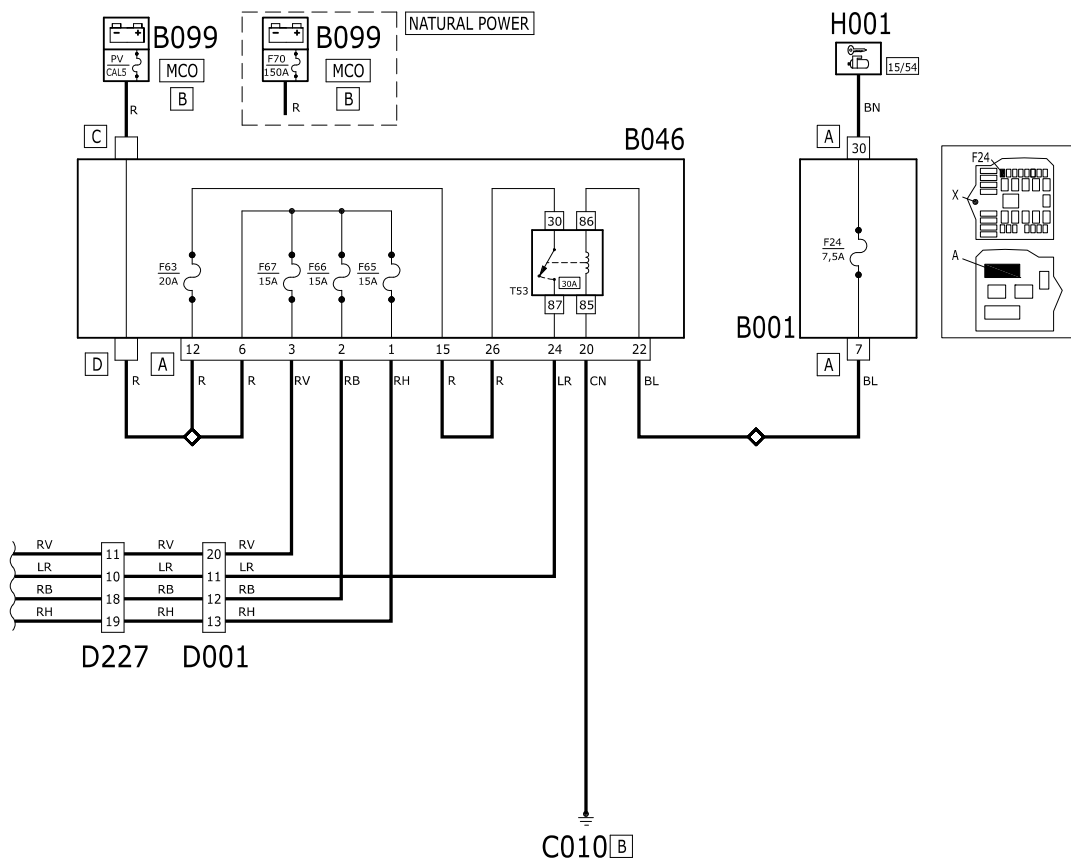
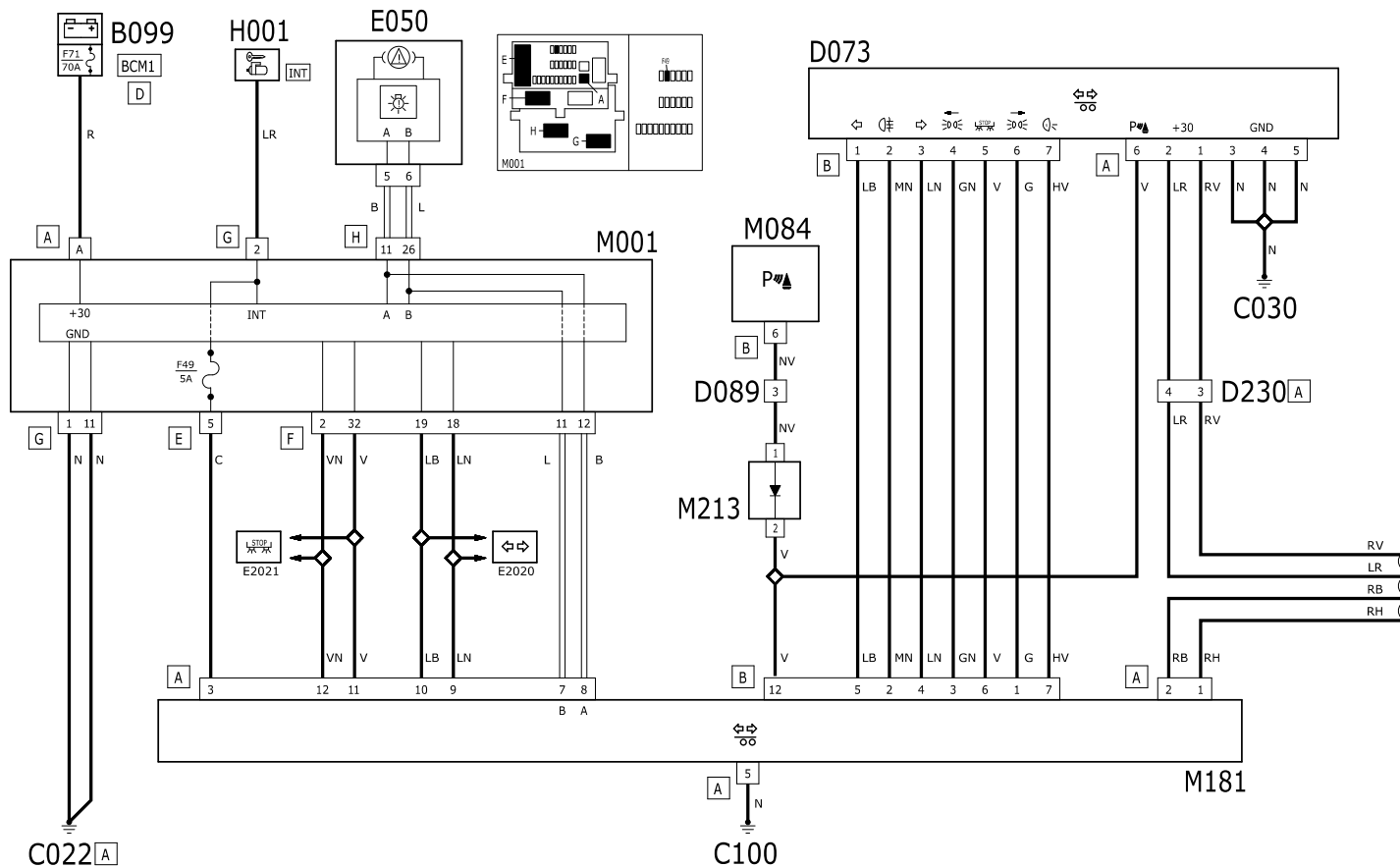
Connector A of standard connector D073 provides the supply signals, in particular:

- pin 1 of connector A receives a direct battery power supply through the line protected by fuse F67 of the additional fuse box module B046 (pin 3 of connector A);
- pin 2 of connector A receives a direct battery power supply through the line protected by relay switch T53 of B046 (activated by the signal 15/54 of the ignition switch) protected upstream by fuse F63 of the additional fuse box module;
- pins 3, 4 and 5 of connector A receive the earth references through a connection with the rear left earth C030.

Both fuses (F67 e F63) are protected upstream through a line protected by specific fuse "PowerVAL" (CAL5) (F70 for Natural Power versions) of the fuse box on the battery B099 (B connector).

Pin 6 of connector A of standard connector D073 sends the (earth) signal to inhibit the parking assistance device in order to prevent signals if the trailer is present.

SETUP FOR TRAILER - WIRING DIAGRAM



SETUP FOR TRAILER - COMPONENT LOCATION

