



RAFFREDDAMENTO MOTORE

250/251 - Ducato

ENGINE COOLING - DESCRIPTION

The engine control unit consists of two fans operated by the engine management unit in accordance with parameters supplied by the engine coolant sensor.

The activation of the fans is operated by two dedicated relays, located in the engine compartment junction unit.

The supply lines for the fans are protected by two dedicated fuses also located in the engine compartment junction unit.

ENGINE COOLING - FUNCTIONAL DESCRIPTION

The power supplies for the engine fans N011 and N012 are operated by relays T07 and T06 respectively located in the engine compartment junction unit B001 along the lines protected by fuses F07 and F06 respectively also located in the engine compartment junction unit.

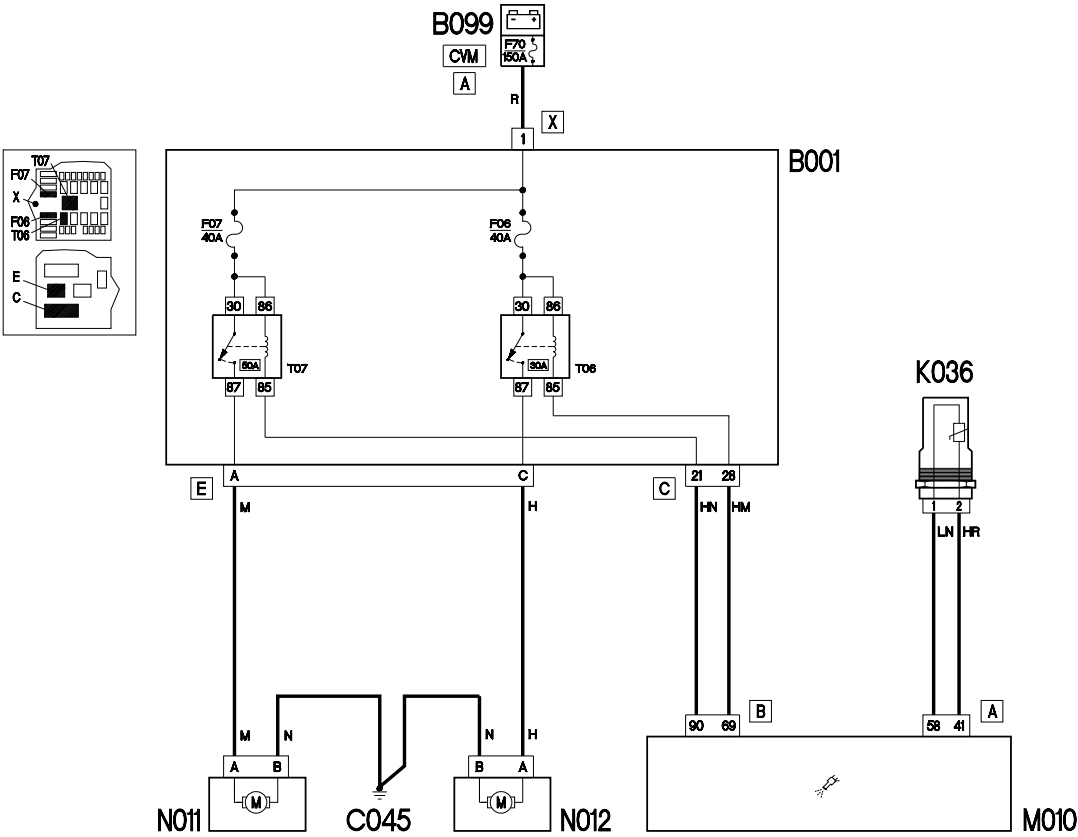
On the basis of the data supplied by the engine coolant temperature sensor K036 to pins 58 (signal) and 41 (reference earth) of connector A, the engine management control unit M010 energizes the relay coils, by means of a negative signal, closing the circuits and thereby supplying the fans.

More specifically:

- from pin 90 of connector B, the engine management control unit M010 controls the energizing of the coil for relay T07 (low speed) through the connection with pin 21 of connector C of the engine compartment junction unit B001, thereby activating fan N011;
- from pin 69 of connector B, the engine management control unit M010 controls the energizing of the coil for relay T06 (high speed) through the connection with pin 28 of connector C of the engine compartment junction unit B001, thereby activating fan N012.

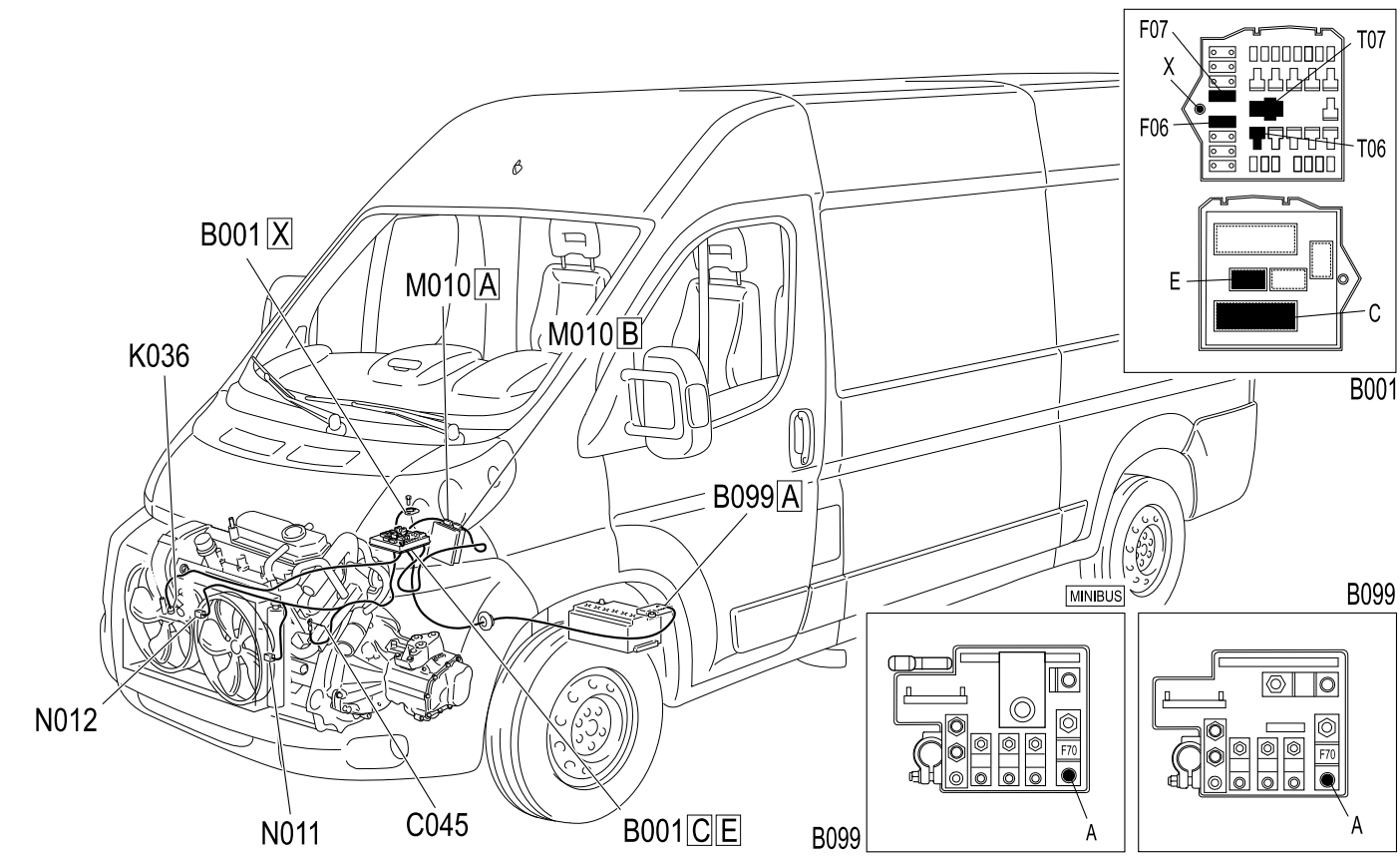
Both fans are connected to the fan earth C045.

ENGINE COOLING - WIRING DIAGRAM



Component code	Description	Reference to the assembly
B001	JUNCTION UNIT	Op. 5505A MULTI-FUNCTION COMPONENTS
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B BATTERY AND LEADS
C045	FAN EARTH	-
K036	ENGINE COOLANT TEMPERATURE SENSOR/SENDER UNIT	Op. 1080C EXHAUST GAS RECIRCULATION (E.G.R.)
M010	ENGINE MANAGEMENT CONTROL UNIT	Op. 1060G DIESEL INJECTION PRESSURE PUMP ELECTRONIC CONTROL
N011	FAN MOTOR	Op. 1088E COOLANT TEMPERATURE CONTROL DEVICES
N012	ENGINE FAN MOTOR - 2	Op. 1088E COOLANT TEMPERATURE CONTROL DEVICES

ENGINE COOLING - COMPONENT LOCATION



Component code	Description	Reference to the assembly
B001	JUNCTION UNIT	Op. 5505A MULTI-FUNCTION COMPONENTS
B099	MAXI FUSE BOX ON BATTERY	Op. 5530B BATTERY AND LEADS
C045	FAN EARTH	-
K036	ENGINE COOLANT TEMPERATURE SENSOR/SENDER UNIT	Op. 1080C EXHAUST GAS RECIRCULATION (E.G.R.)
M010	ENGINE MANAGEMENT CONTROL UNIT	Op. 1060G DIESEL INJECTION PRESSURE PUMP ELECTRONIC CONTROL
N011	FAN MOTOR	Op. 1088E COOLANT TEMPERATURE CONTROL DEVICES
N012	ENGINE FAN MOTOR - 2	Op. 1088E COOLANT TEMPERATURE CONTROL DEVICES