



CODE

150 - 500

CODE - DESCRIPTION

To increase protection against theft attempts, an engine immobilizer system known as the FIAT CODE is used.

All the keys are equipped with an electronic transponder device that sends a coded signal to a special control unit (incorporated in the Body Computer): if the latter recognises the sent code, it allows engine to be started.

The code used in the dialogue through an aerial coaxial to the ignition switch varies each time the engine is started ("rolling code"): therefore the code cannot be reproduced even using electronic scanners.

The CODE control unit main function is recognising the key placed in the ignition switch: as a matter of fact, it contains the secret code used in the dialogue with the key transponder; the unit also memorises all the codes for enabled keys and the code used in the dialogue with the Powertrain Control Module.

When the key is turned to the ON position for the first time, if the key is correctly recognized this code is transferred to the Powertrain Control Module and remains inextricably linked to the Code unit and therefore to the Body Computer.

If the secret code in the reply is valid, the engine management control unit continues with the regular engine management activities, allowing the engine to be started.

If the transponder is not recognised, engine start-up is inhibited.

Operation of the CODE is guaranteed if any of the other Body Computer functions are not working correctly.

The function involves the display of the status through the "vehicle protection system - CODE failure" warning light in the instrument panel and connected via the CAN coming on.

For more details,

See descriptions 5580E ANTI-THEFT DEVICE

CODE - FUNCTIONAL DESCRIPTION

The Code unit contained in 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 is also connected to the driver's dashboard earth C015 via pins 9 and 10 of connector E.

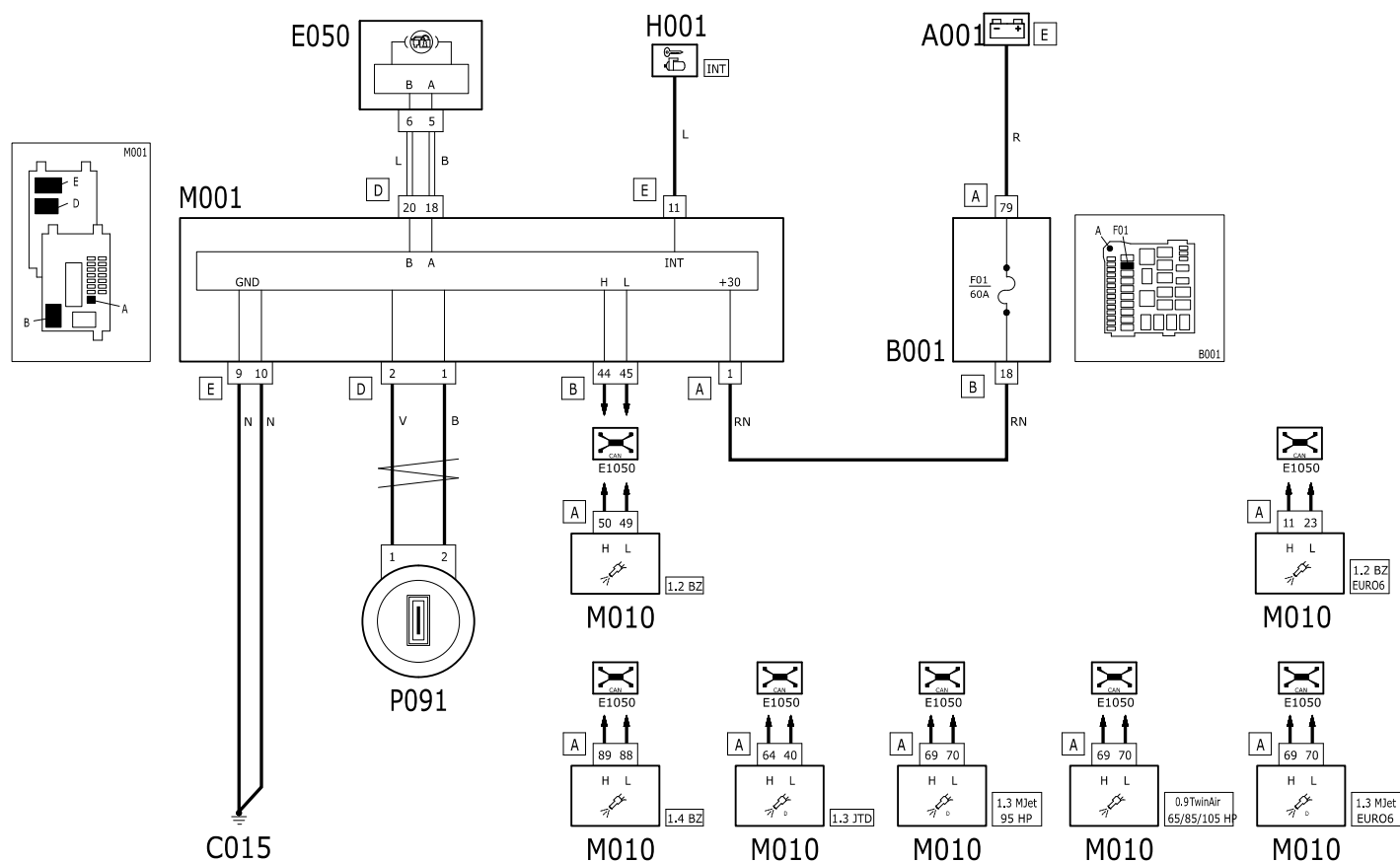
The CODE aerial P091 is connected to pins 1 (earth) and 2 (signal) of connector D of the Body Computer M001; the aerial is positioned coaxially on the ignition switch in order to detect the key being inserted and turned.

The key recognition dialogue and exchange of codes between the Body Computer M001 (pin 44 and 45 of connector B) and the engine control module M010 (pin 50 and 49 of connector A, for the 1.2 8v Euro 5 version; pin 11 and 23 of connector A, for the 1.2 8v Euro 6 version; pin 89 and 88 of connector A of M010, for the 1.4 16v version; pin 64 and 40 of connector A of M010, for the 1.3 MultiJet 75 HP version; pin 69 and 70 of connector A of M010, for the 1.3 MultiJet 95 HP version and for the 0.9 TwinAir versions; pin 30 and 31 of connector A of M010, for the 1.3 Multijet 95 HP Euro6 version) occurs through the C-CAN.

See E1050 CAN CONNECTION LINES

The Body Computer M001 is connected, via the B-CAN line, from pins 18 and 20 of connector D, to the instrument panel E050 (pins 5 and 6) to manage the "vehicle protection system - CODE failure" warning light.

CODE - WIRING DIAGRAM



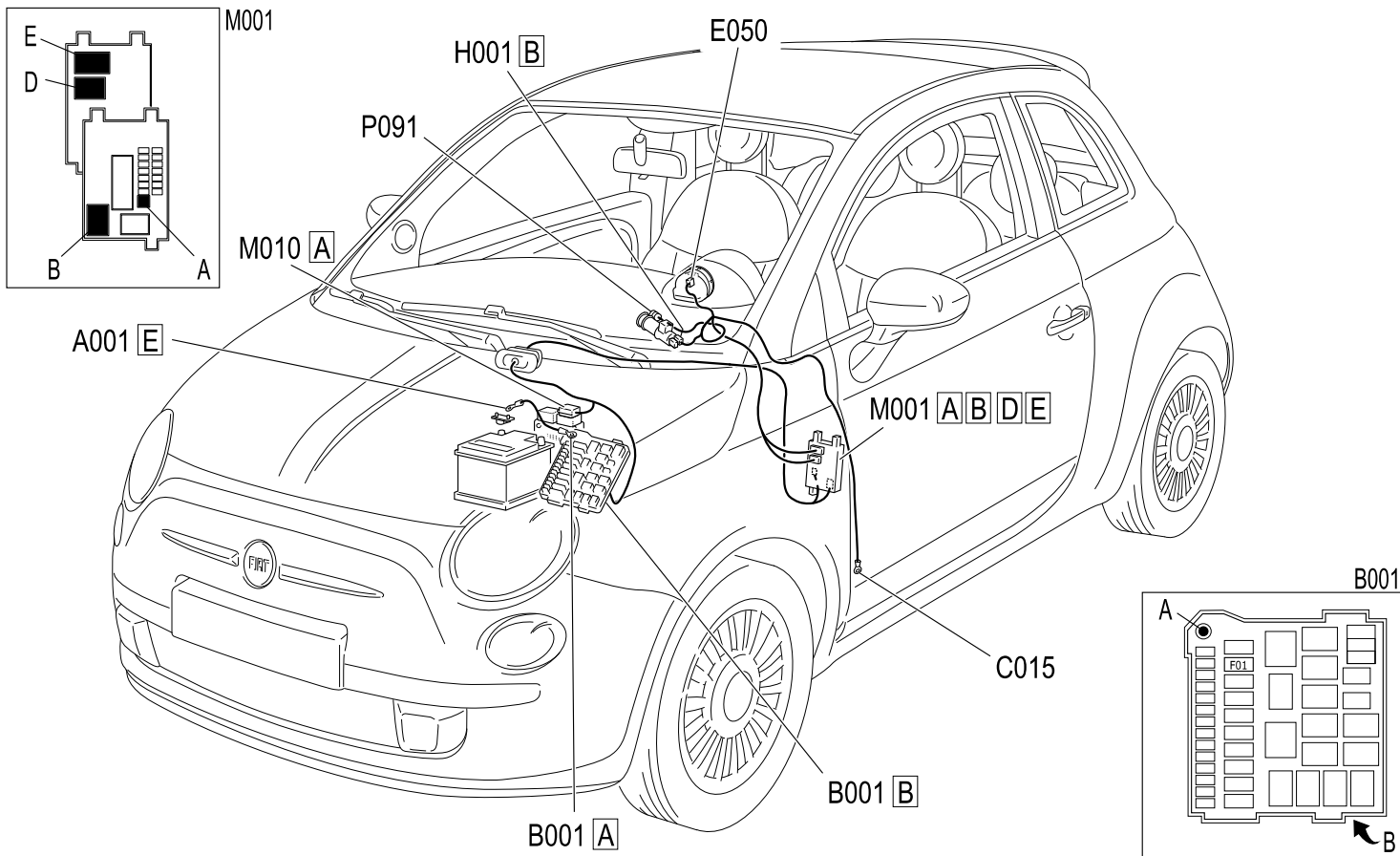
Component code Name

| | |
|------|--------------------------------|
| A001 | BATTERY |
| B001 | JUNCTION UNIT |
| C015 | DASHBOARD EARTH, DRIVER'S SIDE |
| E050 | INSTRUMENT PANEL |
| H001 | IGNITION SWITCH |
| M001 | BODY COMPUTER |
| M010 | ENGINE MANAGEMENT CONTROL UNIT |
| P091 | AERIAL FOR FIAT-CODE |

Reference to the Operation

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| Op. 5530B10 BATTERY - R+R |
| Op. 5505A10 JUNCTION UNIT - R+R |
| Op. 5560B10 CONTROL PANEL - R+R |
| Op. 5520A10 IGNITION SWITCH ASSEMBLY - R+R |
| Op. 5505A32 BODY COMPUTER - R.R |
| Op. 1056B82 INJECTION/IGNITION SYSTEM E.C.U. (ONE) - R + R |
| Op. 1060G80 DIESEL ELECTRONIC INJECTION CONTROL UNIT - R.R |
| Op. 5580E08 AERIAL FOR ELECTRONIC KEY (CODE) - R.R. |

CODE - 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 |
| C015 | DASHBOARD EARTH, DRIVER'S SIDE | - |
| E050 | INSTRUMENT PANEL | Op. 5560B10 CONTROL PANEL - R+R |
| H001 | IGNITION SWITCH | Op. 5520A10 IGNITION SWITCH ASSEMBLY - R+R |
| M001 | BODY COMPUTER | Op. 5505A32 BODY COMPUTER - R.R |
| M010 | ENGINE MANAGEMENT CONTROL UNIT | Op. 1056B82 INJECTION/IGNITION SYSTEM E.C.U. (ONE) - R + R |
| P091 | AERIAL FOR FIAT-CODE | Op. 1060G80 DIESEL ELECTRONIC INJECTION CONTROL UNIT - R.R Op. 5580E08 AERIAL FOR ELECTRONIC KEY (CODE) - R.R. |