EMULATOR IMMO

OPEL

ECM 1,2 -1,4 gasoline with two black plugs and processor Motorola HC11E20.
ECM 2,0 and 2,2 gasoline with memory eeprom 24c02

Thank you for purchasing our device.

Emulator immo to Opel cars replaces damaged immobilizer or the car key.

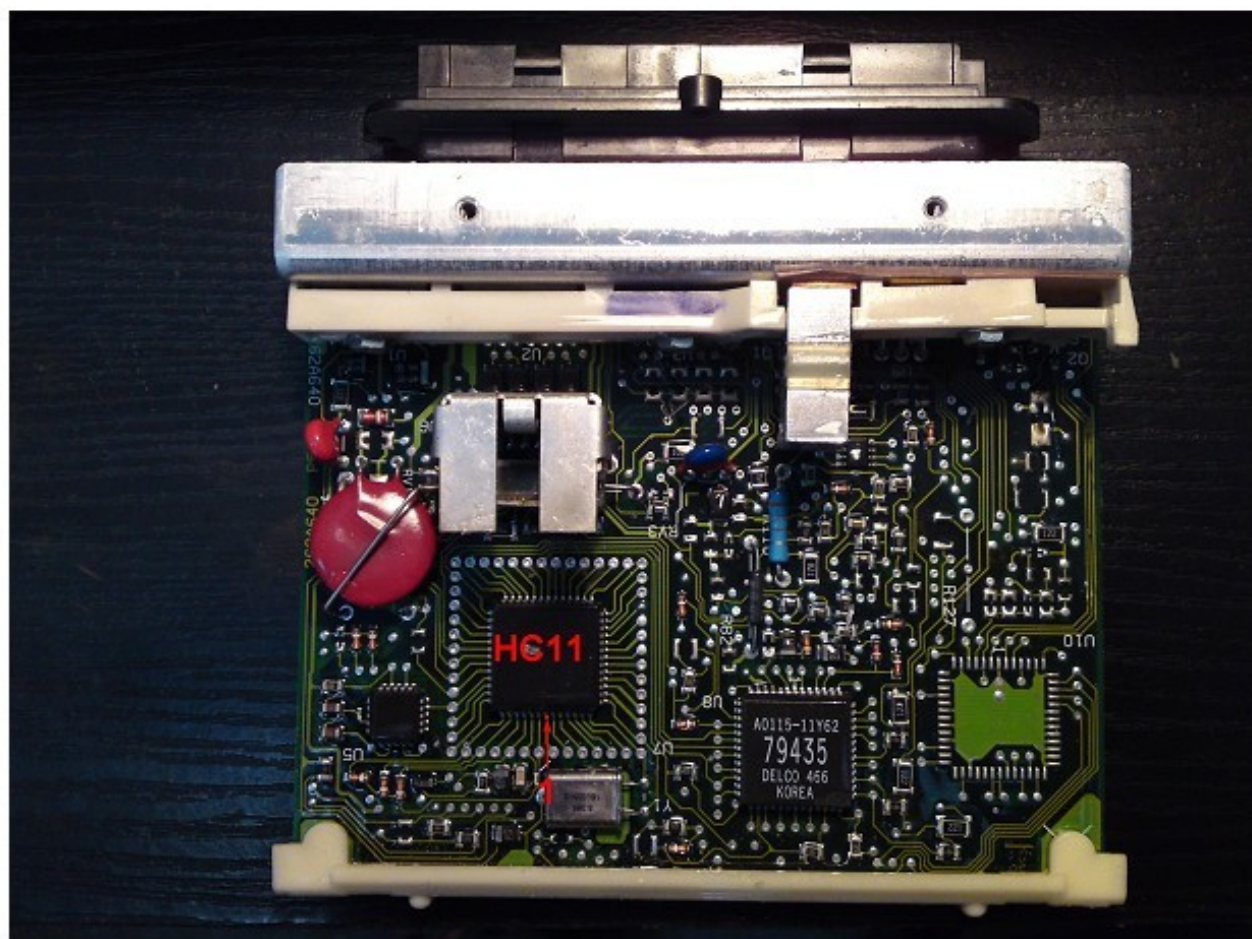It function after made changes in memory content of Engine Control Module ECM.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate. There is a possibility of using it as the additional security!
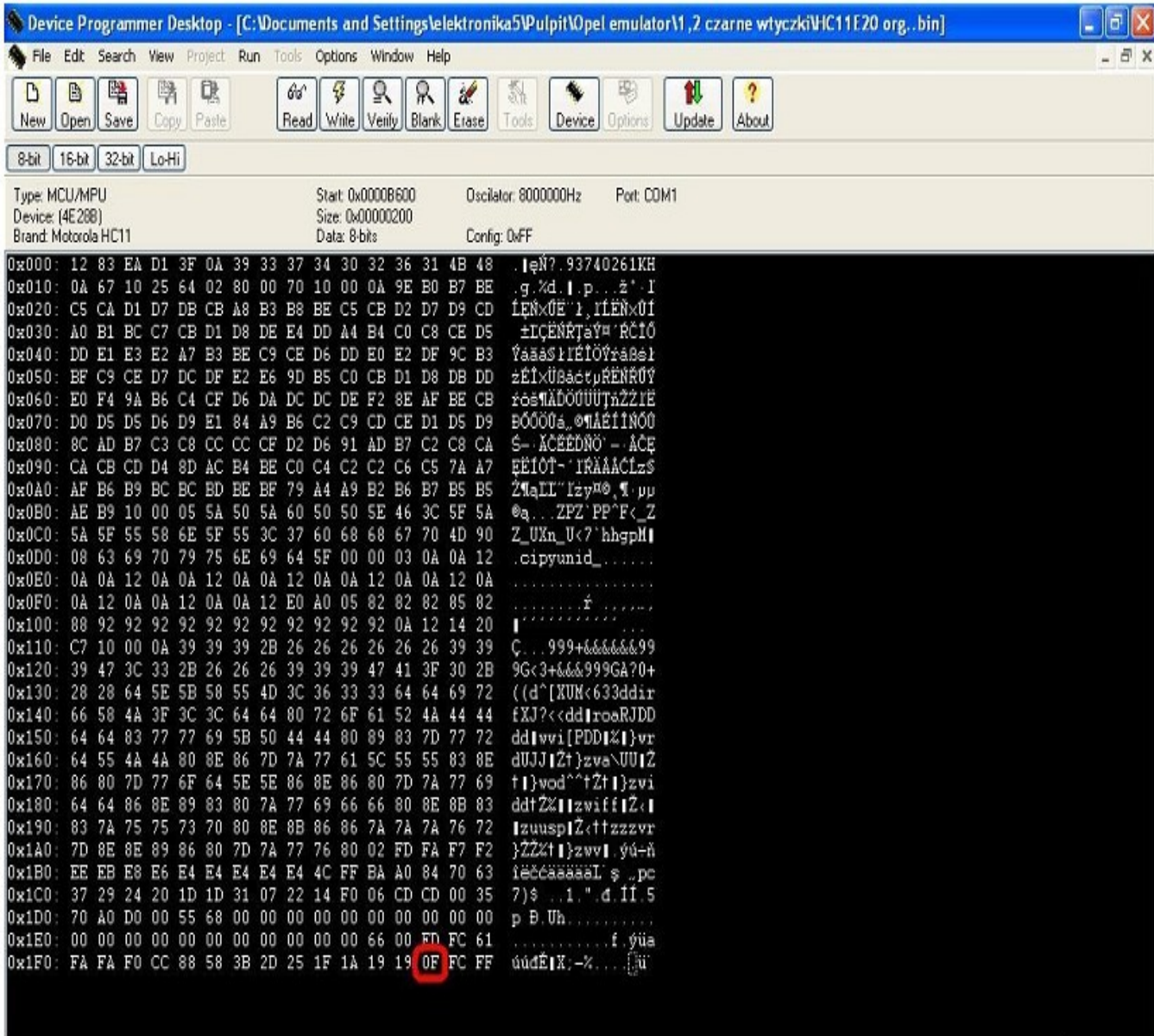
Two LEDs indicating:

green - power

red – transmission (will blink and turn off).

ECMs 1,2 -1,4 gasoline with two black plugs and processor Motorola HC11E20.

In ECM find processor Motorola HC11E20.

Type in 1FD value 0F

To use emulator type in eeprom of processor Motorola in address 1FD value 0F.

**Connecting emulator in place of a original
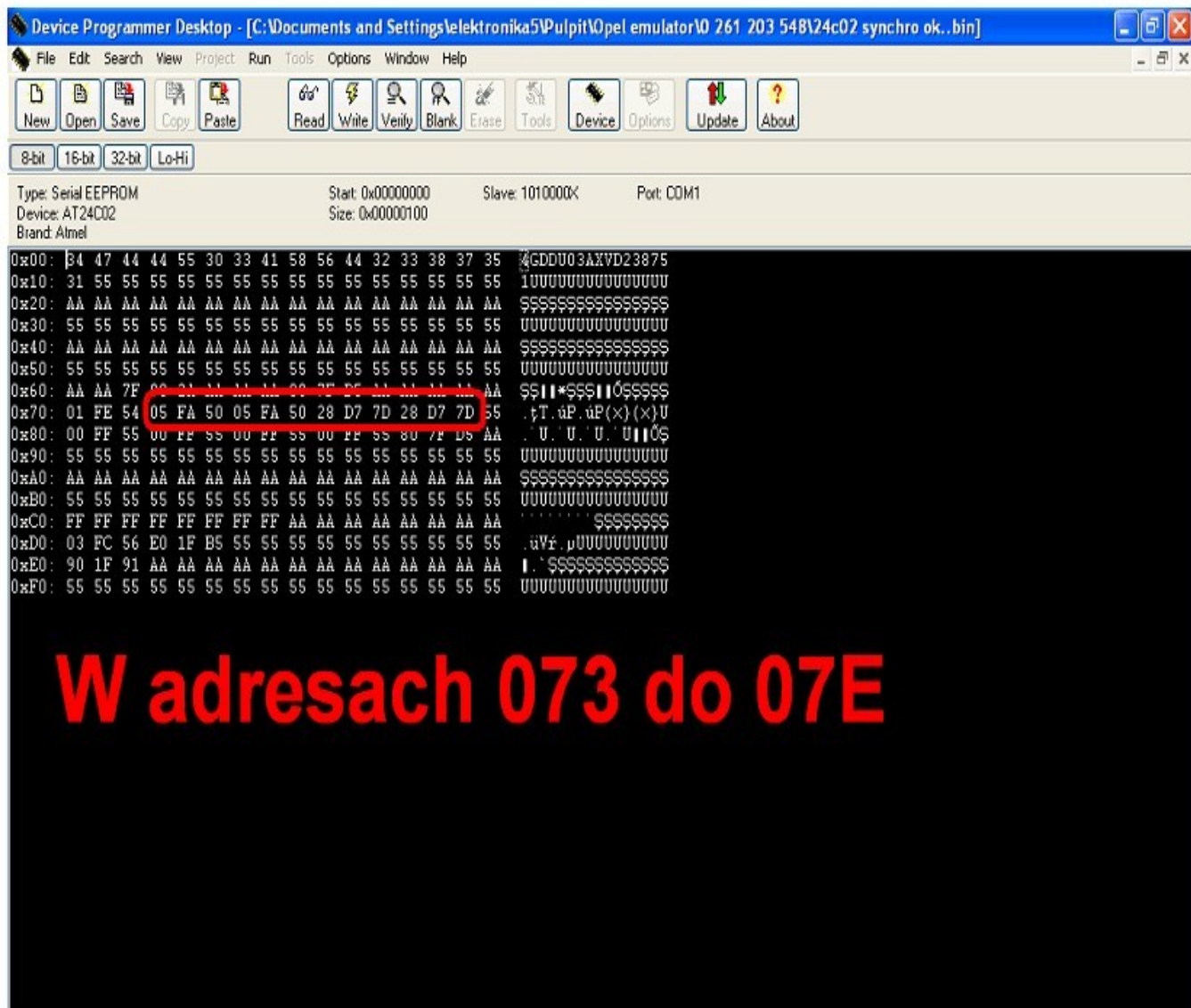immobilizer in the ignition switch.**

**Pin 4 - ground
Pin 5 – power ACC
Pin 7 – immo**

**Additionally connect in plug immo
pin 6 with 7
(involve troubles about speed signal).**
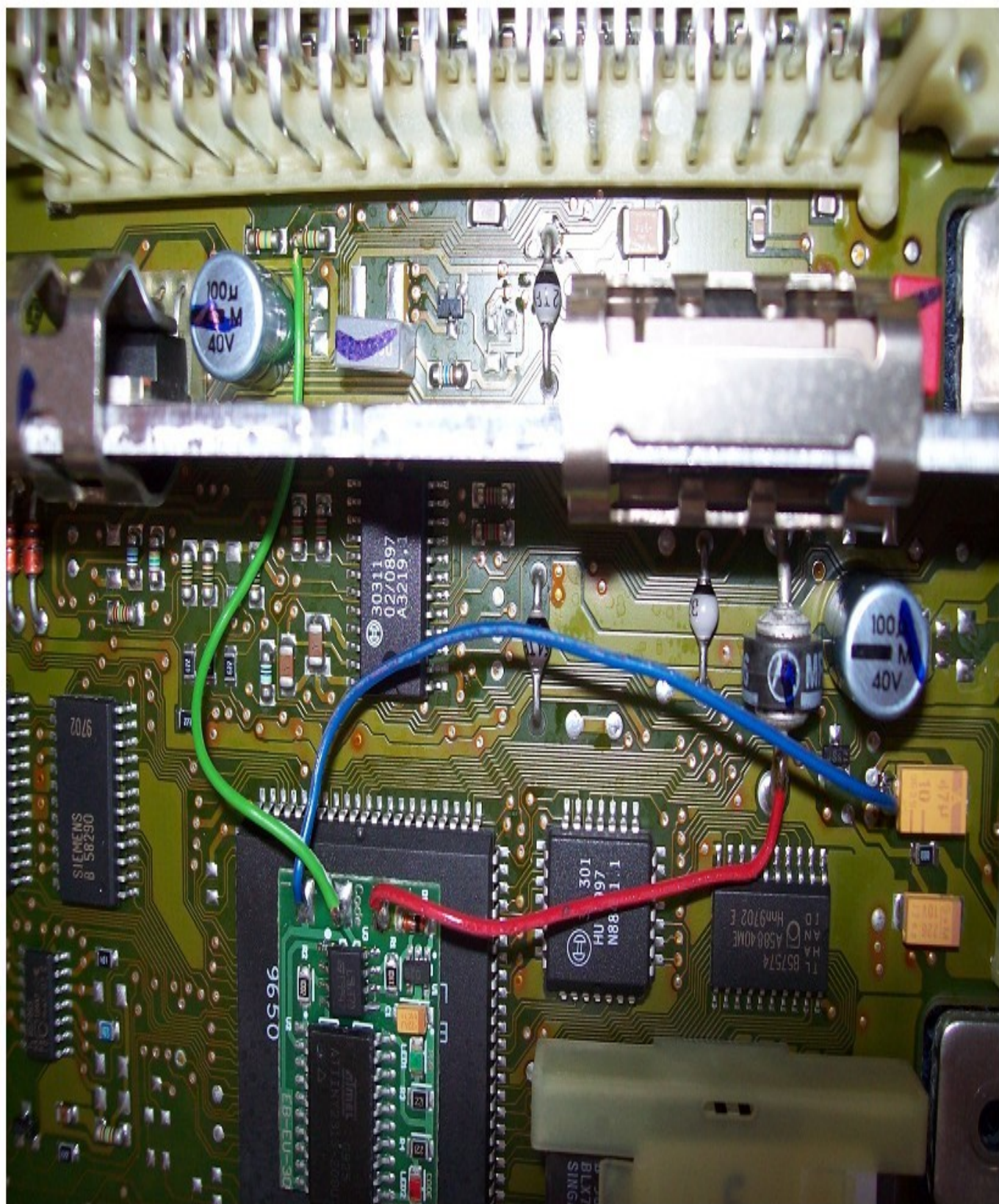
ECMs 2,0 and 2,2 gasoline with memory eeprom 24c02

Eeprom 24C02

In ECM find eeprom 24C02.

Device Programmer Desktop - [C:\Documents and Settings\elektronika5\Pulpit\Opel emulator\0 261 203 548\24c02 synchro ok..bin]

File Edit Search View Project Run Tools Options Window Help

New Open Save Copy Paste Read Write Verify Blank Erase Tools Device Options Update About

8-bit 16-bit 32-bit Lo-Hi

Type: Serial EEPROM
Device: AT24C02
Brand: Atmel

Start: 0x00000000
Size: 0x00000100

Slave: 1010000X

Port: COM1

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0x00: 34 47 44 44 55 30 33 41 58 56 44 32 33 38 37 35   4GDDU03AXVD23875
0x10: 31 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   1UUUUUUUUUUUUUUU
0x20: AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA   ŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞ
0x30: 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   UUUUUUUUUUUUUUUU
0x40: AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA   ŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞ
0x50: 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   UUUUUUUUUUUUUUUU
0x60: AA AA 7F 00 21 AA AA AA 00 7F D5 AA AA AA AA AA   ŞŞ∎∎*ŞŞŞ∎∎ÕŞŞŞŞ
0x70: 01 FE 54 05 FA 50 05 FA 50 28 D7 7D 28 D7 7D 55   .ţT.úP.úP(×}(×}U
0x80: 00 FF 55 00 FF 55 00 FF 55 80 7F D5 AA   . U. U. U.U∎∎ÕŞ
0x90: 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   UUUUUUUUUUUUUUUU
0xA0: AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA   ŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞŞ
0xB0: 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   UUUUUUUUUUUUUUUU
0xC0: FF FF FF FF FF FF FF FF AA AA AA AA AA AA AA AA   ´´´´´´´´ŞŞŞŞŞŞŞŞ
0xD0: 03 FC 56 E0 1F B5 55 55 55 55 55 55 55 55 55 55   .üVŕ.µUUUUUUUUUU
0xE0: 90 1F 91 AA AA AA AA AA AA AA AA AA AA AA AA AA   ∎.´ŞŞŞŞŞŞŞŞŞŞŞŞ
0xF0: 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55 55   UUUUUUUUUUUUUUUU
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W adresach 073 do 07E

To use emulator type in eeprom 24C02 from address 072 to address 07E value:
05 FA 50 05 FA 50 28 D7 7D 28 D7 7D

Connecting emulator in ECM:

Pin 2 - ground

Pin 37 – power ACC

Pin 9 – immo

Additionally disconnect immo and connect in plug immo pin 6 with 7 (involve troubles about speed signal).

Before connecting the driver, emulator must be precisely isolated by the isolation strap.