

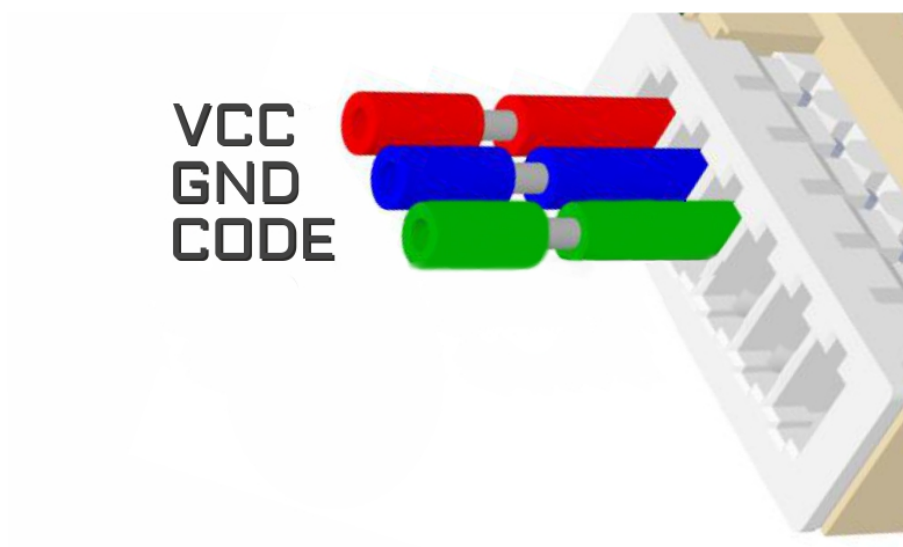
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Program	Use
<p>Opel</p>	<ul style="list-style-type: none"> • ECUs with immobiliser on HC05 processor • 1.2 and 1.4 gasoline 2-socket (black) ECU with Motorola HC11E20 processor • 2.0 2.2 and 2.5 gasoline with 24C02 eeprom memory

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Wiring colour codes



The LED behavior

diagnostic mode - it flashes every second

adjusting to the ECU – flashing 0,1 sec

after adjusting it lights constantly and blinks every other second

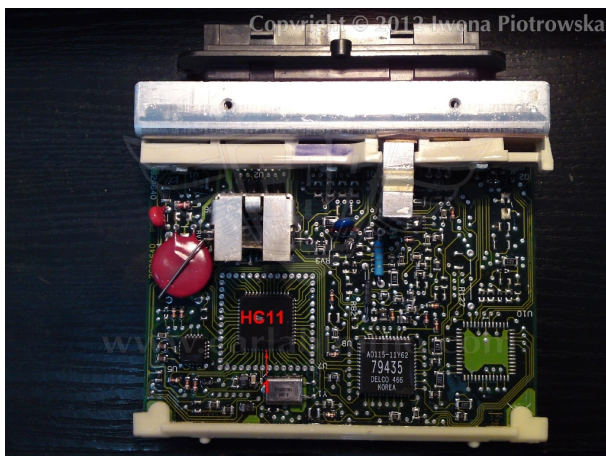
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Opel

USE

ECUs with immobiliser on HC05 processor
1.2 and 1.4 gasoline 2-socket (black) ECU with Motorola HC11E20 processor
2.0 2.2 and 2.5 gasoline with 24C02 eeprom memory

1.2 and 1.4 gasoline 2-socket (black) ECU with Motorola HC11E20 processor



Find Motorola **HC11E20** processor

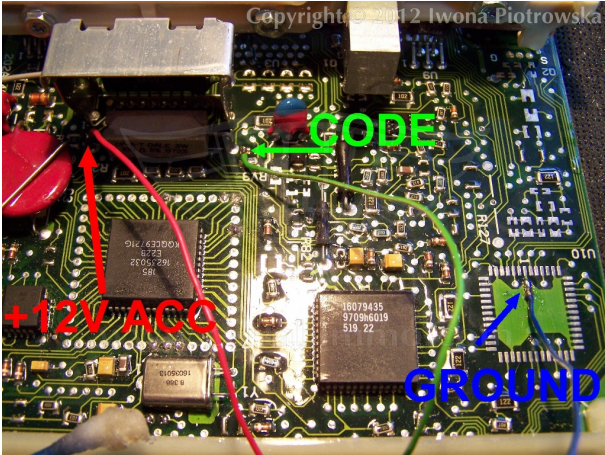
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0x000 12 83 EA D1 3F 0A 39 33 37 34 30 32 36 00 00 00 00
0x010 0A F7 18 3E E4 02 86 00 70 10 00 0A 3C 88 84 2E
0x020 C5 CA D1 D7 86 0B 83 88 8E C5 C9 09 D9 D3 CD 15 80 0E 1 11EB-01
0x030 A0 B1 BC C7 CB D1 D6 D6 EA DD A4 B4 C0 C8 CE D5 11CDB8709 RCT0
0x040 00 E1 E3 E7 83 C9 E3 86 00 C0 DF 9C B3 7A86115107A884
0x050 BF C9 CE D7 DC DF E2 E4 8D 85 C0 CB D1 D8 DB DD #E108act0#ENERTV
0x060 D1 F4 0A B6 14 F8 0A 3C 8E 7E AF 8E C0 00A80001172215
0x070 D0 D5 D6 D9 E1 84 A9 B6 C2 C9 CD CE D1 D5 D9 00000A #A511T800
0x080 0C AD B7 C3 8C 8C 8E 82 86 81 AD 89 C2 C9 CA 8A 1E8180 - #E
0x090 CA CB CD D4 8D AC B4 BE C0 C4 C2 C2 C6 C5 7A A7 #E107-1BAACL2E
0x0A0 AF 86 89 CC 80 8E 8F 79 A4 89 82 83 87 85 86 #A4411200A # 00
0x0B0 AE B9 10 00 05 EA 50 5A 40 80 80 8E 8E 8C 8F 8A 0A_2E2 PPT#_#Z
0x0C0 0A 5F 58 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E 5E
0x0D0 08 63 69 70 78 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E 7E
0x0E0 0A 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A
0x0F0 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A 0A 12 0A
0x100 88 92 92 92 92 92 92 92 92 92 92 92 92 92 92 92 92 92 92
0x110 C7 10 00 0A 79 79 8B 86 87 86 85 86 85 86 85 86 85 86 85 86
0x120 39 47 3C 33 2B 26 26 26 39 39 39 47 41 3F 30 2B 9C 3A6A599CA70+
0x130 38 28 44 3E 38 55 4D 3C 36 33 33 44 49 72 1C 1200A 030641E
0x140 66 59 4A 3F 3C 3C 64 64 80 92 8F 61 52 4A 44 44 4379<dd1#ccR1DD
0x150 64 63 77 67 69 50 44 44 80 83 80 70 72 61001120B10#
0x160 64 55 4A 4A 60 8E 86 7D 7A 77 61 8C 85 85 83 8E 6D3J1211200A012
0x170 86 60 70 7F 84 8E 8E 8E 80 7D 7A 77 69 69 69 69 69 69 69 69 69
0x180 64 64 8E 8E 89 83 80 7A 77 69 69 69 69 80 83 8d1211200A0121
0x190 83 7A 7E 7E 79 70 80 8E 8B 86 86 7A 7A 7A 7E 7E 1xuuu1211200A012
0x1A0 70 8E 89 86 80 7A 77 76 80 82 83 8A 87 82 7272111200A012
0x1B0 8E 8B 8B 84 E4 E4 E4 E4 E4 4C FF 8A A0 84 70 63 1cccaaaal_p_pc
0x1C0 17 79 74 10 10 10 07 02 14 06 03 00 00 05 71E 11111111111111111111
0x1D0 70 AD 00 00 55 68 00 00 00 00 00 00 00 00 00 00 p_B_0h...
0x1E0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0x1F0 FA FA F0 CC 88 58 3B 2D 25 1F 1A 19 19 0F PC FF udd81211200A012
    
```

In address 1FD write 0F values

In address 1FD write 0F value

See all emulators

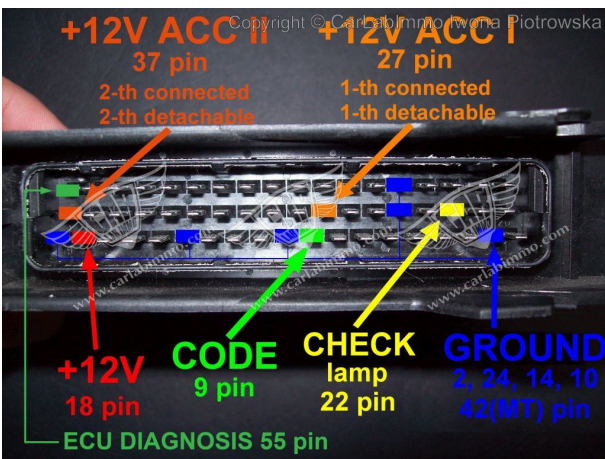


Connecting emulator to ECU

- +12V ACC** red
- GND** blue
- Immo** green

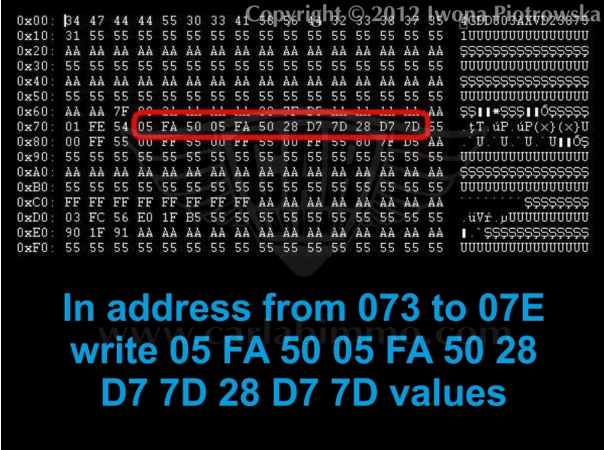
Disconnect immo and connect pin 6 with 7 in the wiring of immo plug to eliminate troubles with speed signal

2.0 2.2 and 2.5 gasoline with 24C02 eeprom memory

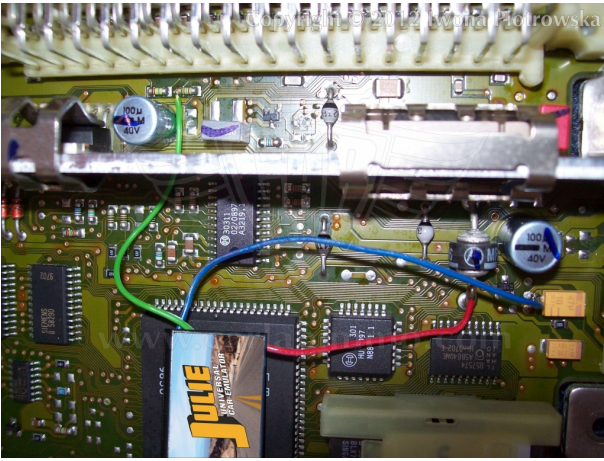


Find **24C02** eeprom memory

See all emulators



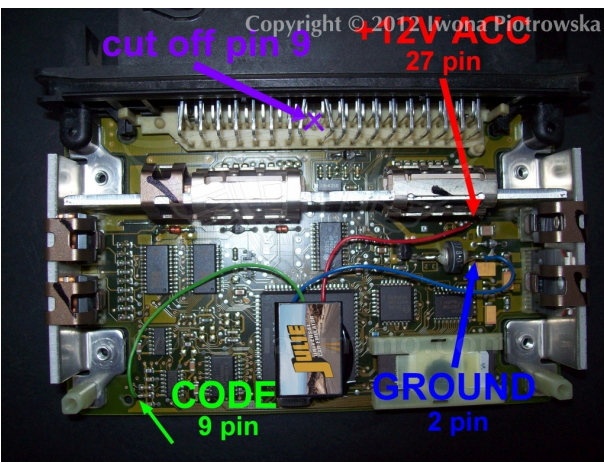
In addresses from **073** to **07E** write **05 FA 50 05 FA 50 28 D7 7D 28 D7 7D** values



Connecting emulator to ECU (2.0 2.2 gasoline)

- +12V ACC 37 pin**
- GND 2 pin**
- Immo 9 pin**

Disconnect immo and connect pin 6 with 7 in the wiring of immo plug to eliminate troubles with speed signal



Connecting emulator to ECU (2.5 gasoline)

- +12V ACC 27 pin**
- GND 2 pin**
- Immo 9 pin**

Disconnect immo and connect pin 6 with 7 in the wiring of immo plug to eliminate troubles with speed signal

[See all emulators](#)

Warning!!!

Due to possible construction changes of cars, check signals with multimeter in the ECU plug.



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