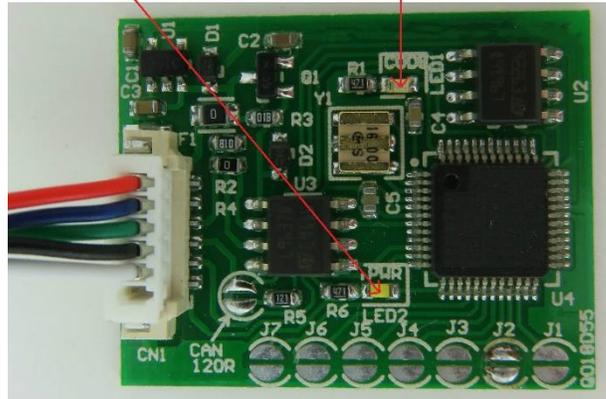


# Mercedes CR1 with CAN WSP Emulator

Red Cable: +12V      Blue Cable: GND  
Green Cable: CODE    Black Cable: CAN-H  
White Cable: CAN-L

LED-- Power

LED-- After adjusting,  
It lights up constantly,  
and blink every two seconds



In Universal Emulator,  
solder jumpers **J3 and J4**

## USE

Vito 2.2 Cdi  
5-socket ECU

A-class 1.7 Cdi  
5-socket ECU

EDC 1-socket ECU  
2.5TD 2.9TD 3.0TD  
with mechanical and electronic ignition switch

Bosch ECU with HC11E9

E-class Lucas 4-socket ECU  
with mechanical and electronic ignition switch

A-class VDO MSM ECU  
1.4 1.6 1.9 gasoline



In Mercedes Vito 2.2 Cdi, the starter does not turn, there is **START ERROR** on the instrument cluster

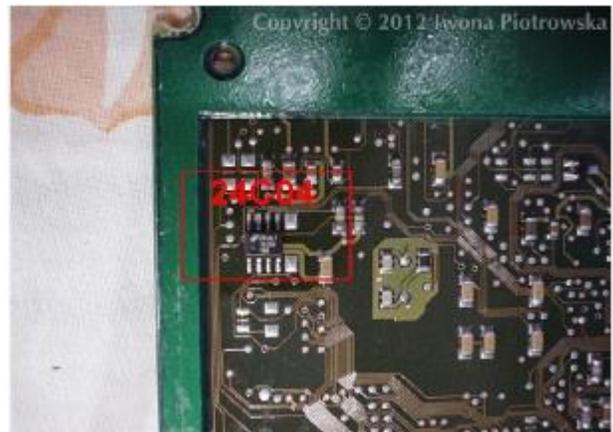
ECU is located on the passenger side



### Connecting emulator to ECU

ACC	2.13 pin
GND	1.04 1.05 1.06 pin
CAN-L	2.12 pin
CAN-H	2.11 pin

Find **24C04** memory

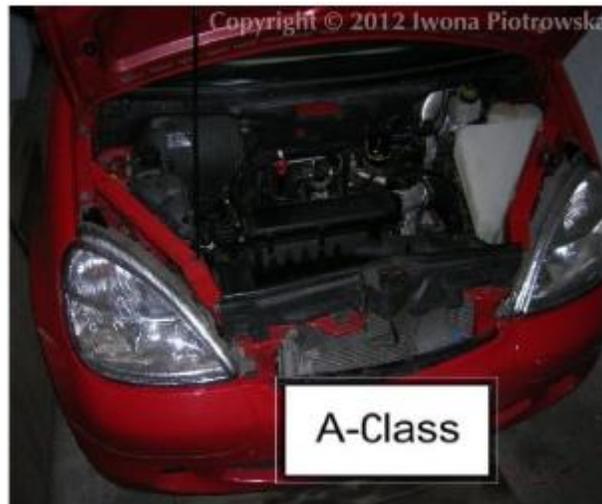


In address **1EE** to **1F9**, enter values **2A 4E 00 00 FF FF 00 9C D4 13 56 01**

### Disconnect CAN from WSP!!!

**A-class 1.7 Cdi**

**5-socket ECU**



In Mercedes A-class 1.7 Cdi, the starter does not turn,  
there is **START ERROR** on the instrument cluster

ECU is located under the bonnet on the left side behind the engine covered with plastic

### Connecting emulator to ECU

<b>ACC</b>	<b>2.13 pin</b>
<b>GND</b>	<b>1.04 1.05 1.06 pin</b>
<b>CAN-L</b>	<b>2.12 pin</b>
<b>CAN-H</b>	<b>2.11 pin</b>

Find **24C04** memory



In the address **1EE** to **1F9** enter values **2A 4E 00 00 FF FF 00 9C D4 13 56 01**

**Disconnect CAN from WSP!!!**

**EDC 1-socket ECU**

**2.5TD 2.9TD 3.0TD**

**with mechanical and electronic ignition switch**

C-class 2.5 TD

Sprinter 2.9 TD

E-class 3.0 TD



In early 1-socket ECU types, you need to find **24C02** memory marked as **B58** or **24C04** memory

In address **38** and **39** write **2A 4E** values and  
in address **3F** to **42** write **9C D4 13 56** values

### Connecting emulator to EDC 1-socket ECU

CAN H and CAN L from the choke.  
GND and power from diode.

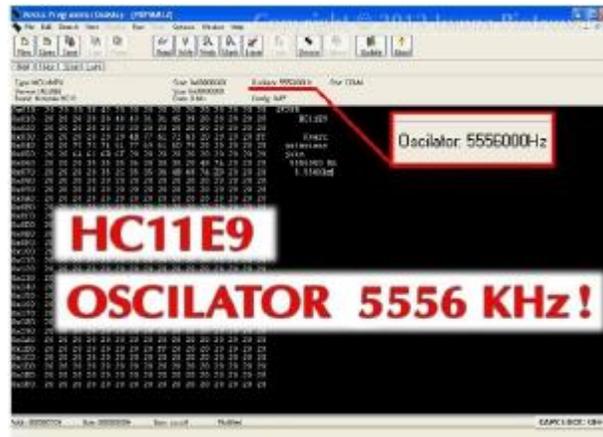


If there are problems to start the car, add ACC onto pin 13 of ECU  
(take it from second leg of diode). Then, cut off pin 13 from the ECU plug

**Disconnect CAN from WSP!!!**

## Bosch ECU with HC11E9

There is Motorola **4E28B HC11E9 52PLCC** in ECU



Before reading content, set oscillator at 5556000Hz!

### 1st CHANGE



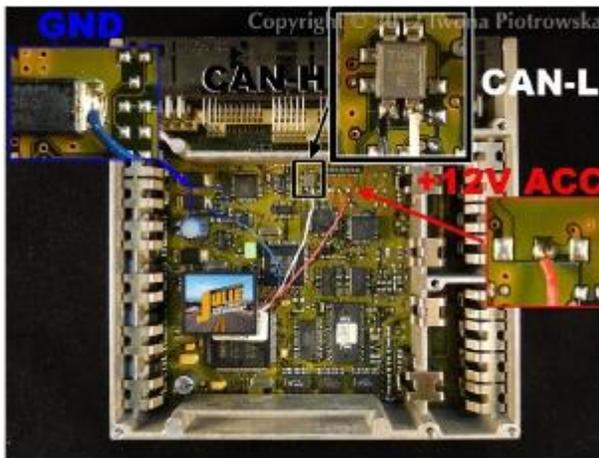
In addresses from **019** to **01E** (ETL 619 to 61E), write **FF** values

## 2nd CHANGE



In addresses from **029** to **02E** write **FF** values

## Connecting emulator to ECU



<b>+12V ACC</b>	<b>A2 pin</b>
<b>GND</b>	<b>A3 pin</b>
<b>CAN-L</b>	<b>D12 pin</b>
<b>CAN-H</b>	<b>D11 pin</b>

After connecting the emulator, you need to carry out personalization with **HHT** or **Star Diagnosis** diagnostic tools.

After starting the engine, you must run the car for 60 seconds for coding to be completed.

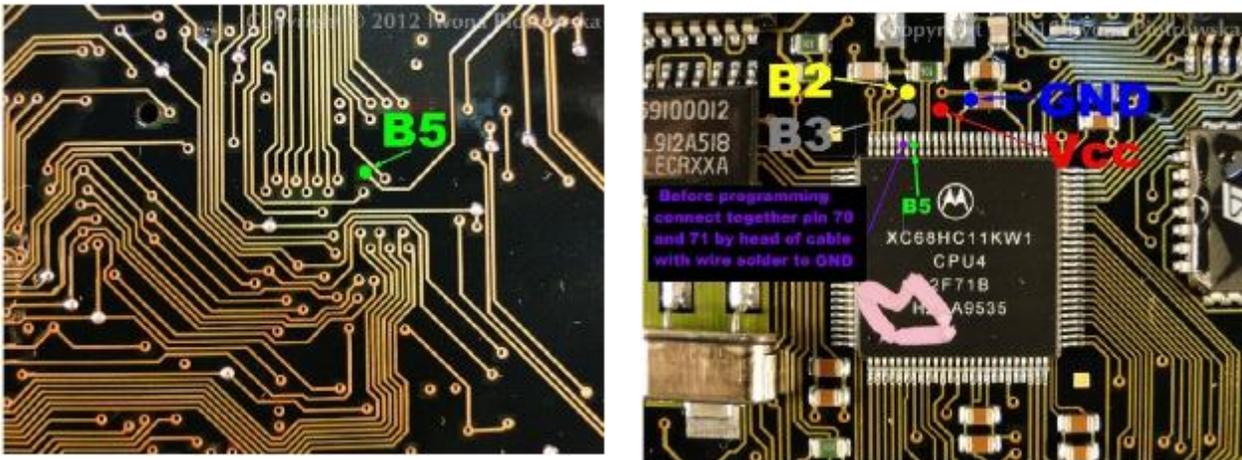
## E-class Lucas 4-socket ECU with mechanical and electronic ignition switch

Mercedes E-class 2.0 diesel 1996

Lucas A0195459432 ed013 sw25.96 fd30.96

ECU is located in the engine compartment on the passenger side

Motorola **HC11KW1** quartz **8MHz** – connection of **X-Prog** programmer to Motorola

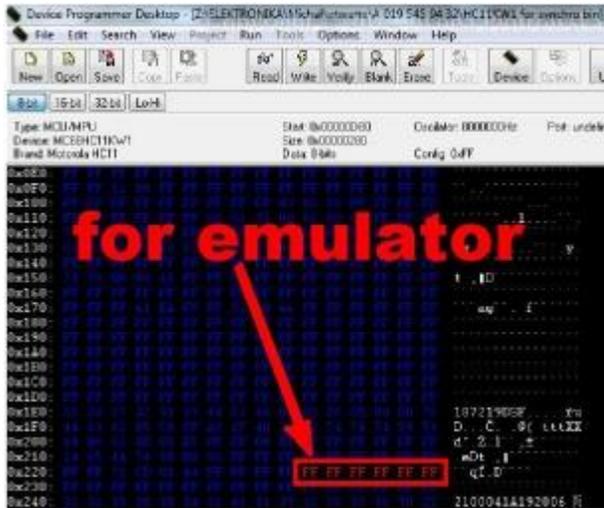


Before a getting connection to processor you have to connect pin 70 and 71 together with a needle.

Solder the wire to the needle that you then connect to GND.

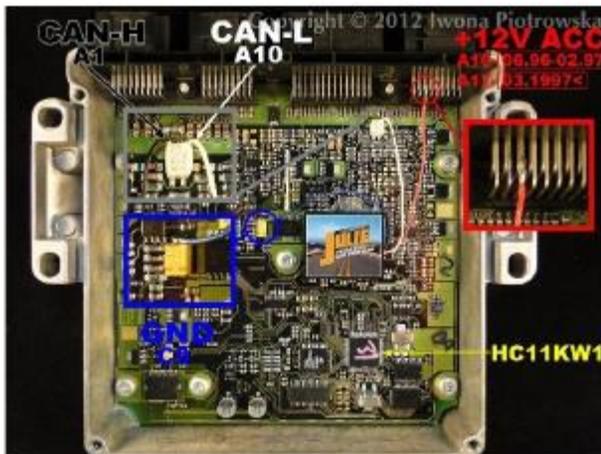
pin 63	VSS ground	GND
pin 64	VDD +5V	A3 pin
pin 69	reset	B5
pin 70	Mod B to GND	B4
pin 71	Mod A to GND	GND
pin 72	RXT	B3
pin 73	TXD	B2

### Change to **HC11KW1** processor



In address from **22A** to **22F** write **FF** value

### Connecting emulator to ECU



<b>+12V ACC</b>	<b>A16 pin</b>
<b>GND</b>	<b>C9 pin</b>
<b>CAN-L</b>	<b>A10 pin</b>
<b>CAN-H</b>	<b>A1 pin</b>

After connecting the emulator, you need to carry out personalization with **HHT** or **Star Diagnosis** diagnostic tools. After starting the engine, you must run the car for 60 seconds for coding to be completed.

**Disconnect CAN from WSP!!!**

## A-class VDO MSM ECU

1.4 1.6 1.9 gasoline



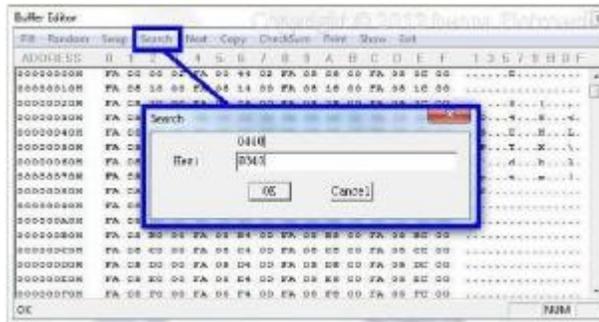
ECU is located on the air delivery pipe together with with Air Mass Flow Sensor



### Connecting emulator to ECU

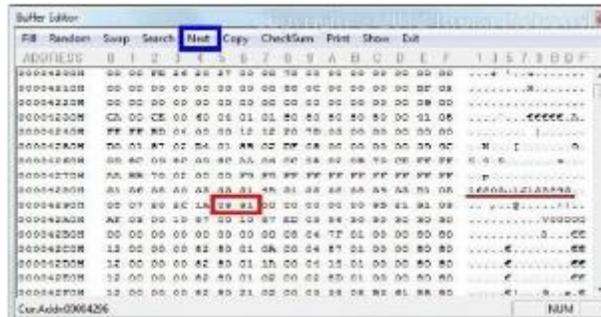
<b>+12V ACC</b>	<b>red</b>
<b>GND</b>	<b>blue</b>
<b>CAN-L</b>	<b>white</b>
<b>CAN-H</b>	<b>black</b>

To read and make changes to memory, use **Wellon** programmer



Once **29F200** (44pin) flash memory is read, write **03 40** (or **04 40**) value in search window

All **03 40** (or **04 40**) values which you will find under chassis number, change into **03 01** (or **04 31**)



After soldering, you carry out personalisation with the **Star Diagnosis**.

**Disconnect CAN from WSP!!!**

**Warning!!!**

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