

# Julie - Universal Car Emulator Programs:

Program	Use
Mercedes CR1 with CAN WSP	<ul> <li>Vito 2.2 Cdi 5-socket ECU</li> <li>A-class 1.7 Cdi 5-socket ECU</li> <li>EDC 1-socket ECU GO TO VIDEO</li> <li>Bosch ME1.0 ECU GO TO VIDEO</li> <li>Bosch ME2.0 ECU with HC11E9 GO TO VIDEO</li> <li>E-class Lucas 4-socket ECU</li> <li>A-class VDO MSM ECU 1.4 1.6 1.9 gasoline</li> </ul>

### Wiring colour codes



# The LED behavior

- no jumpers - diagnostic mode - it flashes every second

- adjusting to the ECU - flashing 0,1 sec

- after adjusting it lights constantly and blinks every other second



# **Mercedes CR1 with CAN WSP**



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 GO TO VIDEO with mechanical and electronic ignition switch

GO TO VIDEO **Bosch ME1.0 ECU with HC11E9** 

Bosch ME2.0 ECU with HC11E9 GO TO VIDEO

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

> A-class VDO MSM ECU 1.4 1.6 1.9 gasoline



# When the emulator is connected, disconnect CAN from original immo!

A-class VDO MSM ECU 1.4 1.6 1.9 gasoline



Vito 2.2 CDi 5-socket ECU





Vito 2.2 CDi 5-socket ECU



In Mercedes Vito 2.2 Cdi, the starter does not turn, there is a START ERROR on the dashboard.

ECU is located on the passenger side





# **Connecting emulator to ECU**

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





### 

In addresses 1EE to 1F9, write values 2A 4E 00 00 FF FF 00 9C D4 13 56 01

# **Disconnect CAN from WSP!!!**



Back to Main Page 🖍

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 dashboard

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

# Connecting emulator to ECUACC2.13 pinGND1.041.05CAN-L2.12 pinCAN-H2.11 pin







from 1EE to 1F9 write values 2A 4E 00 00 FF FF 00 9C D4 13 56 01

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 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 ME1.0 ECU with HC11E9 processor



# There is a Motorola E28B HC11E9 processor in the ECU





File Options H	Help	Ca	opyright © Carl	Labimmo Iwona Piotro	wsk
	ME1 RE	Versio	n codi	ng	
	Cod i	ng num	ber	002001095	3
	Codi	ng uni	t numb	er 003763	3
	Chas	sis nu	mber: 2100	721A229710	וו
	Tran new	sfer c contro	oding I modu	to le?	
-	YES	<u>v w</u> w.ca	113101111	NO	

1. Read the coding number using Star Diagnosis tool



# www.carlabimmo.com

2. Read the content of **Motorola E28B = HC11E9** (marked in the picture) using X-Prog programmer

Set the oscillator to 5556 KHz!

and write **FF FF FF FF FF FF FF** values in addresses from **016** to **01B** 

3. Connect Julie Emulator to the ECU



After connecting the emulator to the ECU, you need to carry out personalization with HHT or Star Diagnosis diagnostics tools. Then, start the engine, and let the car run for 60 seconds for the coding to complete.

EXAMPLE OF PERSONALISATION

**Disconnect CAN from WSP!!!** 



# www.carlabimmo.com

# Bosch ME2.0 ECU with HC11E9

There is a Motorola 4E28B HC11E9 52PLCC processor in the ECU

After connecting the emulator to the ECU, you need to carry out personalization with HHT or Star Diagnosis diagnostics tools. Then, start the engine, and let the car run for 60 seconds for the coding to complete.

EXAMPLE OF PERSONALISATION

**Disconnect CAN from WSP!!!** 

If the car sometimes doesn't start after the personalisation (the LED on the emulator blinks fast), cut +12V from the ECU and connect it to +12V ACC (ignition)



Click on the thumbnail to watch the video





Before reading the content of the memory, set the oscillator to 5556000Hz!





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

2<sup>nd</sup> CHANGE



In addresses from 029 to 02E write FF values

# Connecting the emulator to the ECU



12



# www.carlabimmo.com

Back to Main Page 🖍

# 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's side

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

EXAMPLE OF PERSONALISATION

**Disconnect CAN from WSP!!!** 



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







Before making a 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 values

# **Connecting emulator to ECU**





Back to Main Page 🖍

# A-class VDO MSM ECU 1.4 1.6 1.9 gasoline

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

EXAMPLE OF PERSONALISATION

**Disconnect CAN from WSP!!!** 





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



# **Connecting emulator to ECU**



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

You can buy our products and obtain technical support from our distributor. Find a distributor near you by clicking on the link: <u>www.carlabimmo.com/our-partners</u>

15



### Back to Main Page 🖍

Buffer Edi	itor		-		10																				12
Fill Ra	ndom	Swa	p	Searc	h	Next	Co	py	Che	eckSi	m	Prin	t S	how	Đ	at									
ADDRE	SS	0	1	2	1	4	5	6	7	8	9	A	B	С	D	E	F		1 3	5	7	9	8 D	F	
000000	OOH	FA	00	00	02	FA	00	44	02	FA	08	08	0.0	FA	0.5	oc	00			D					
000000	108	EA.	08	10	00	T.	08	14	00	FA	08	18	00	FA	08	10	00	1							
000000	20H	FA	0.5	20	00	F3	2	24	0.0	FA	05	28	0.0	FR	05	20	00	-				- (			-
000000	SOH	FA	05	Sea	arch			(hele	AF	-	-	100				-	X	- 18	٥.	4	• •	. 8		۰.	
000000	40H	FA	05	$\sim$	1	-	-		i ol	-	-	-	11-	111		-	-	1	9.	E	• •	. H		L .	
000000	SOH	FA	0.5					Uga	rol.	24				115		-	2		۶.	T		.x	'	1.	
000000	60H	FA	05		He	x:		034	10										• •	d		.b		1.	
000000	70H	FA	05							NAL W				1					e - 1			. ×	1.12	i -	
000000	BOH	FA	05					1	OK			Ca	ince	1					2.						
000000	HOR	FA	05							-		1		-											
000000	AOH	FA	05		_	_	_	-	_		$\geq$		_	_	_		-								
000000	BOH	FA	0.5	80	00	FA	08	84	00	FA	05	BS	00	FA	05	BC	00								
000000	COH	FA	0.5	co	00	FA	08	C4	00	FA	08	CS	00	FA	08	cc	00	-							
000000	DOH	FA	0.5	DO	00	FA	05	D4	00	FA	05	DS	00	FA	0.5	DC	00	5 24							
000000	EOH	FA	05	EO	00	FA	DS	E4	00	FA	os	ES	00	FA	05	EC	00								
000000	FOH	FA	05	FO	00	FA	DS	F4	00	FA	05	FS	00	FA	05	FC	00								-
OK																						1	NUM	Ī	

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 31 (or 04 31)

Buffer	Editor																						
Fill Random		Swap		Search		Next	Сору		Che	eckSi	ım	Prin	rt S	how	Б	ät							_
ADD	RESS	0	1	2	3	4	5	6	7	8	9	A	В	С	D	E	F	13	5	79	BL	) F	
0000	4200H	00	00	FE	26	20	27	00	00	75	00	00	00	00	00	00	00		1.	. ц.			
0000	4210H	00	00	00	00	00	00	00	00	58	oc	00	00	00	00	BF	02			х.			Ē
0000	4220H	00	00	00	00	00	00	0.0	00	00	00	0.0	00	00	00	09	00						-
0000	4230H	CA	00	CE	00	60	0.4	01	01	80	80	80	80	80	00	41	05	1	• • • •	. ee	eee.	А.	
0000	42408	FF	FF	BD	04	00	00	12	12	20	70	03	00	00	00	00	00					-	
0000	4250H	DO	01	57	02	D4	01	58	02	DF	05	00	00	00	00	29	90	W .	E			9.	
0000	4260H	39	SC	39	sc	39	80	AA	04	oc	95	02	OB	73	CE	FF	FF	9.9.	9			-	
0000	4270H	AA	BB	70	02	00	00	F9	F9	FF	FF	FF	FF	FF	FF	FF	FF	p.				-	
0000	4280H	31	86	38	30	33	33	31	4A	31	35	38	38	39	33	В1	05	1680	3::14	115	8893	22	
0000	4290H	08	07	20	20	14	03	31	00	00	00	00	00	38	21	91	03						
0000	42AOH	AF	03	00	10	87	00	10	87	ED	03	56	30	30	30	30	30				vood	00	
0000	42BOH	00	00	00	00	00	00	00	00	05	04	75	01	00	00	80	80				0	€€	
0000	42COH	12	00	00	00	82	80	01	OA	00	04	87	01	00	00	80	80		.e.			€€	
0000	AZDON	12	00	00	00	82	80	01	18	00	04	19	01	00	00	80	80		.e.			εe	
0000	AZEON	12	00	00	00	82	80	01	02	00	02	SD	01	00	00	80	80		.e.			ee	
0000	42FOH	12	00	00	00	82	80	21	02	00	03	39	08	83	61	85	80		.e!		9	.e	
Cur.A	ddr:000042	96																			NUN	1	



# Warning!!!

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



### All rights reserved. Unauthorized copying, hiring, lending, public performance will be punished!

We state that we are the only authentic authors of this manual. We possess copyright of this publication. Any trials of unauthorized copying, hiring, quoting prohibited!!! Both service and advertisement constitute copyright and they are the subject to the protection in accordance with the Act from 4th Feb. 1994 on Copyright and Related Laws (Statute Book no. 24 position 93) and protection on the basis of the Act from 8th June 1993 on combating an unfair competition (Statute Book no. 47 position 211)

www.carlabimmo.com

Last updated 07.08.2018