How to reset AEC302C / AEC400

Programming hints

Immo Tools.lt

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1. Introduction

Manufacturer of **AEC302C** / **AEC400** CDI controllers didn't left possibility to access internal MCU memory by K-Line that's why these CDI systems are not supported by **Advanced Scooter Workshop**. Therefore it is really possible to reset them if you have any **MOTOROLA MC68HC05E6** programmer (**XPROG / XPROG-m**, **UPA**, **CARPROG**, **ELNEC**, etc.).
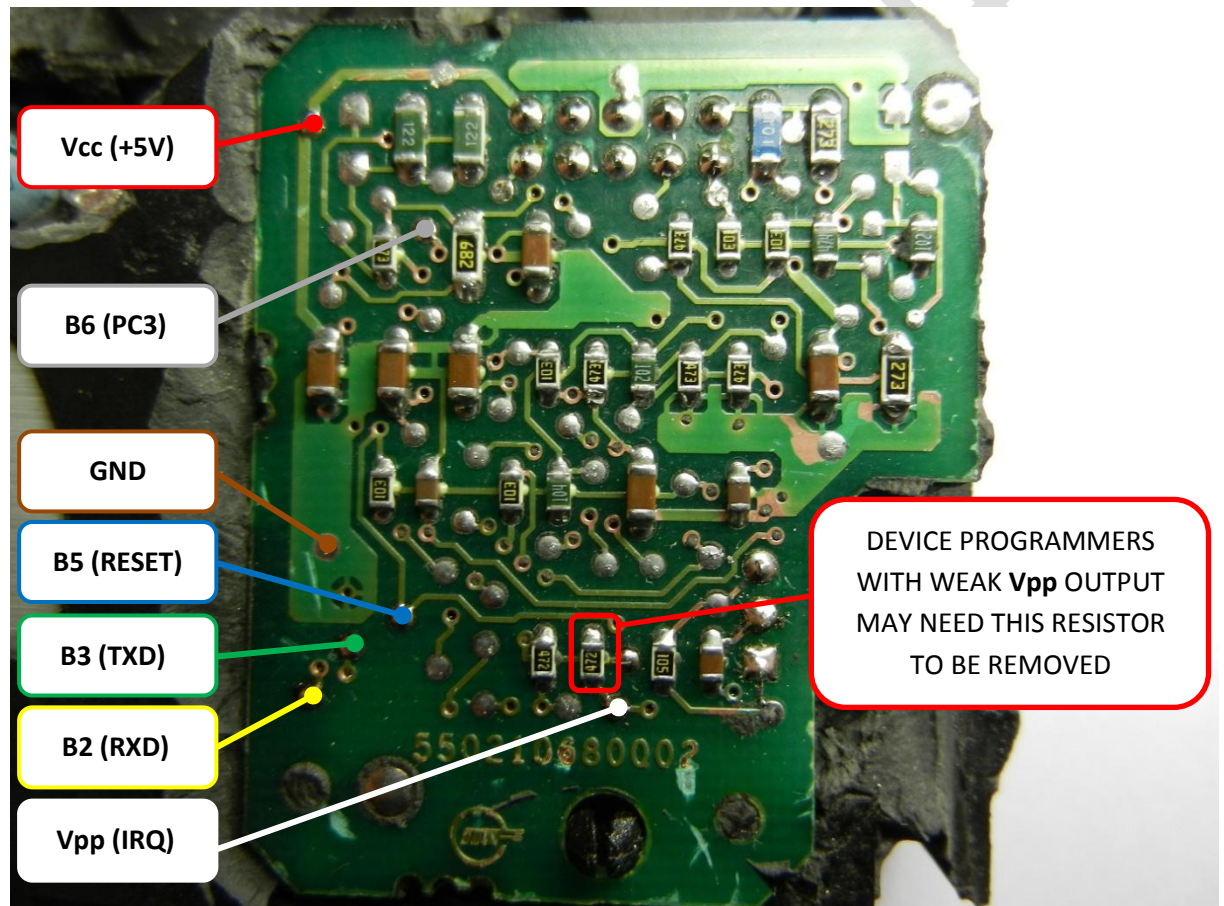
2. Opening the plastic casing

Make a cut around plastic casing to gain access to the printed circuit board (PCB). Don't cut too deep – you can damage electrolytic capacitors near the edges of plastic casing!

Clean the PCB from epoxy sealant. It is significantly easier to clean if sealant is heated using hot air station or other source of hot air (fan, etc.) – it becomes crumbly and comes out without excessive effort.

3. How to connect MCU programmer

NOTE. Wire colors in the picture, corresponds to **CARPROG** cable **A10**. Signal symbols B2, B3, B5, B6, Vcc, Vpp – to **XPROG** / **XPROG-m** programmer.

4. MCU settings for programmer

MCU type:	MC68HC05E6
Mask set:	0F82B
EEPROM start:	0x0100 (hex)
EEPROM size:	0xA0 (160 bytes)
Osc. Frequency:	4 MHz

5. How to reset CDI controller to NEW

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0123456789ABCDEF
00000000	5D	01	3B	00	96	5D	01	3B	00	96	5D	01	3B	00	96	00	].;..].;..].;...
00000010	BE	02	00	BB	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000020	33	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	3...............
00000030	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000040	55	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	U...............
00000050	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000060	AA	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000070	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000080	CC	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....
00000090	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	....

Change data at marked position from **00** to **01**. This way you will change CDI controller state to **NEVER PROGRAMMED**. CDI controller is ready now to store new code on the first time ignition is switched to ON with a master key.

NOTE. Ignition must be switched on with valid **MASTER** key that belongs to immobilizer controller **IMM003** / **IMM006**.