Fenix
automotive
diagnostic
t o o l s

FENIX K. Skowroński spółka jawna
fenix@sterowniki.co
www.sterowniki.co
www.autoemulator.com

Diagnostic device

Immobilizer Emulator

i6- Immobilizer Emulator Fiat group with CAN

Update 27.04.2022

CE RoHS

i6- Immobilizer Emulator Fiat group with CAN

1. Product description:
   This device emulate an immobilizer data stream to the ecu. It is meant to be used as diagnostic device during car repairs in car workshops.

   In order to properly work of emulator, there is need to modify eprom and flash memory for some kinds of controllers.

2. Supported controllers

   Described in the manual:

   - Magneti Marelli IAW 5NF, IAW 5SF3, IAW 5SF8, IAW 9GF, MJD 6F3 type 1, 2, MJD 8F2
   - Bosch EDC15C7, ME 17.3.0
   - Visteon DCU102

   Others, additionally supported by the Fenix IBP application:
   - Bosch: EDC16C8, EDC16C34, EDC16C39, EDC17C49,EDC17C69, EDC17CP52, ME 7.3.1, ME 7.3.4, MED 7.6.1, ME 7.9.10
     Magneti Marelli: IAW 5SF4, IAW 7GF, MJD 8F2, MJD 9DF, 8GMC, 8GMF, 8GSW,

3. Wire marks in emulator

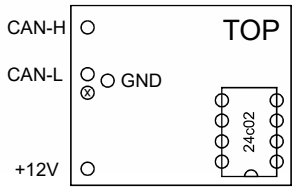
Red	Red	+12V ACC
Blue	Blue	GND
Black	Black	CAN-H
White	White	CAN-L

4. LED diodes colours in emulator

Green		Emulator power supply
Red		Emulator has been fitted to ECU

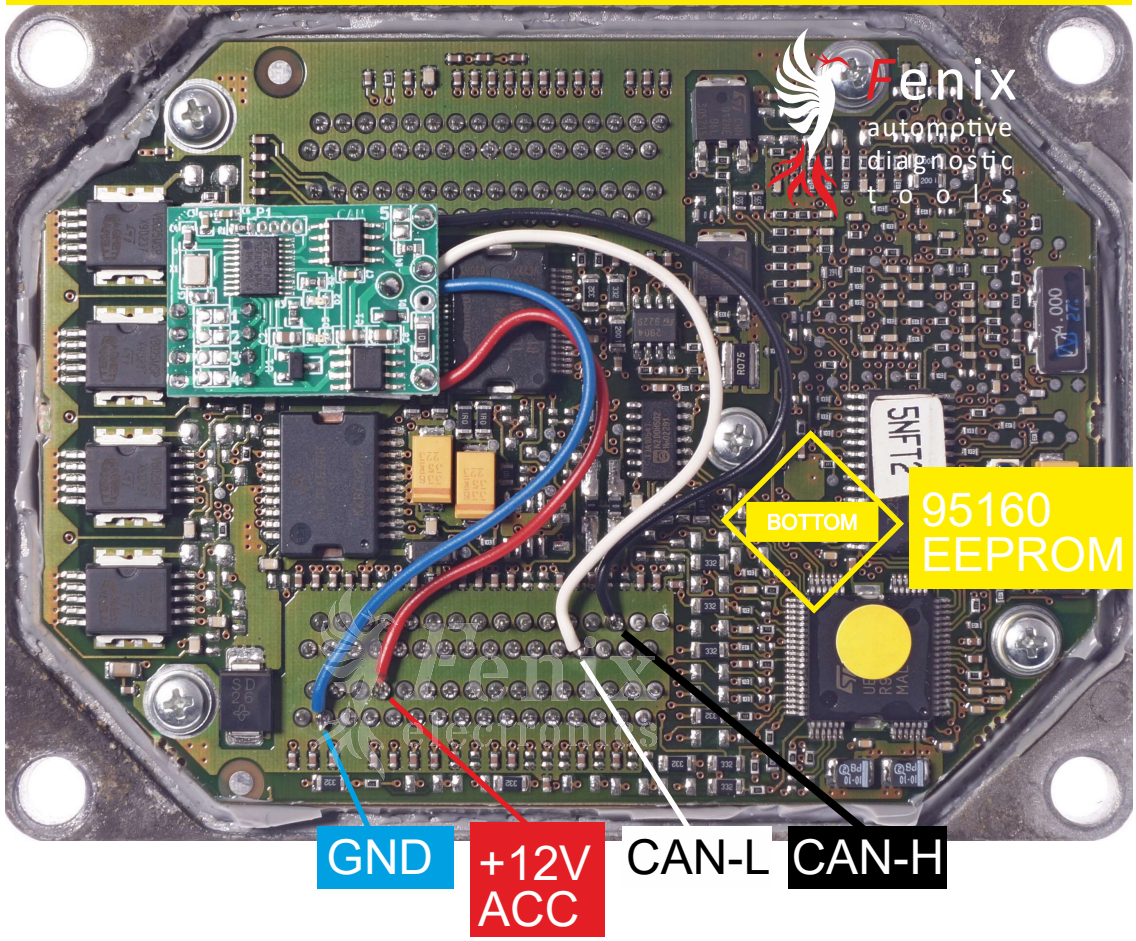
5. Connecting emulator to the controller:

· Read ECU controller memory, save batch to file
· Generate new batch file based on batch read from ECU – use Fenix IBP application
· Load new batch file generated by application to 24c02 eeprom memory in emulator
· Solder memory with new batch loaded to emulator



· Assembly emulator in ECU controller
· Disconnect the immo loop from the ignition switch.

Fiat - Alfa Romeo - Lancia, immo IAW 5NF

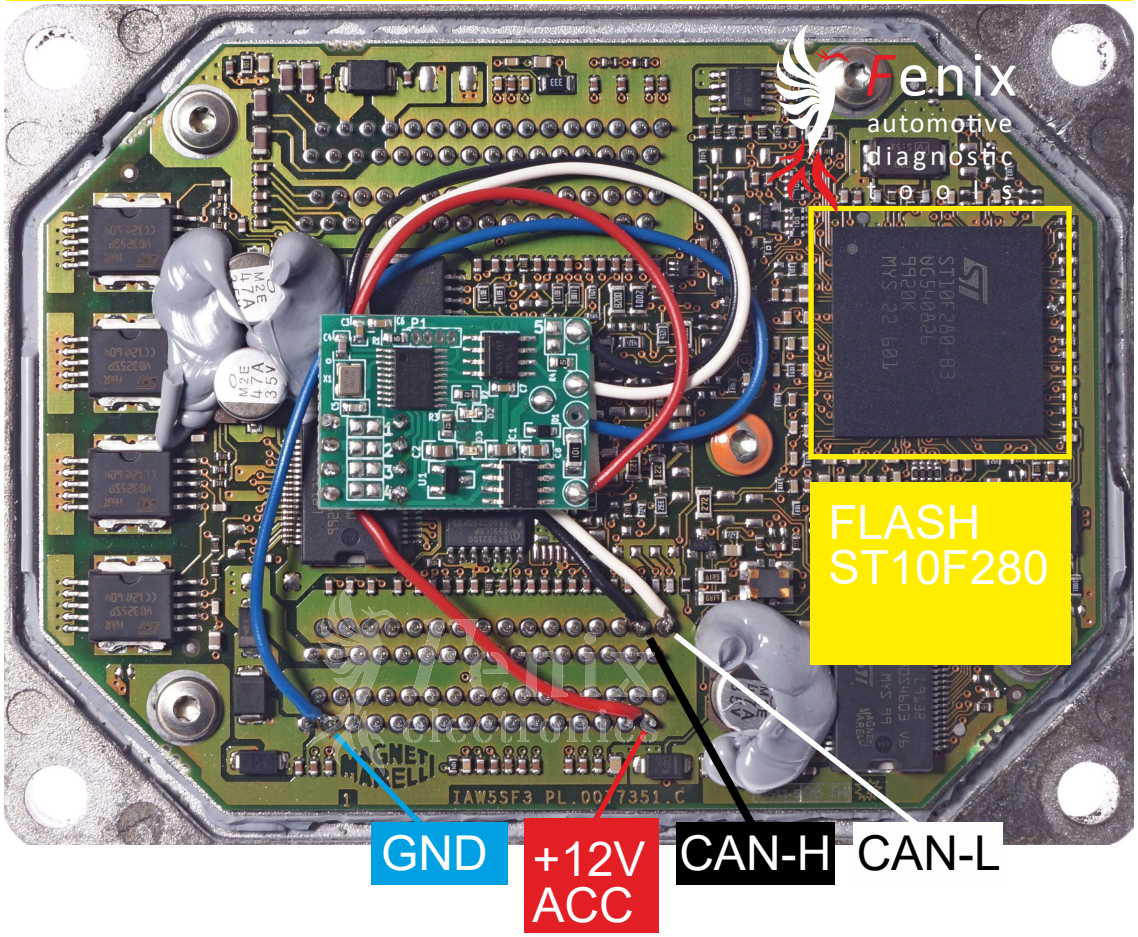


+12V	29	2	GND	15	2	CAN-H	51	2	CAN-L	36	2

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo IAW 5SF3

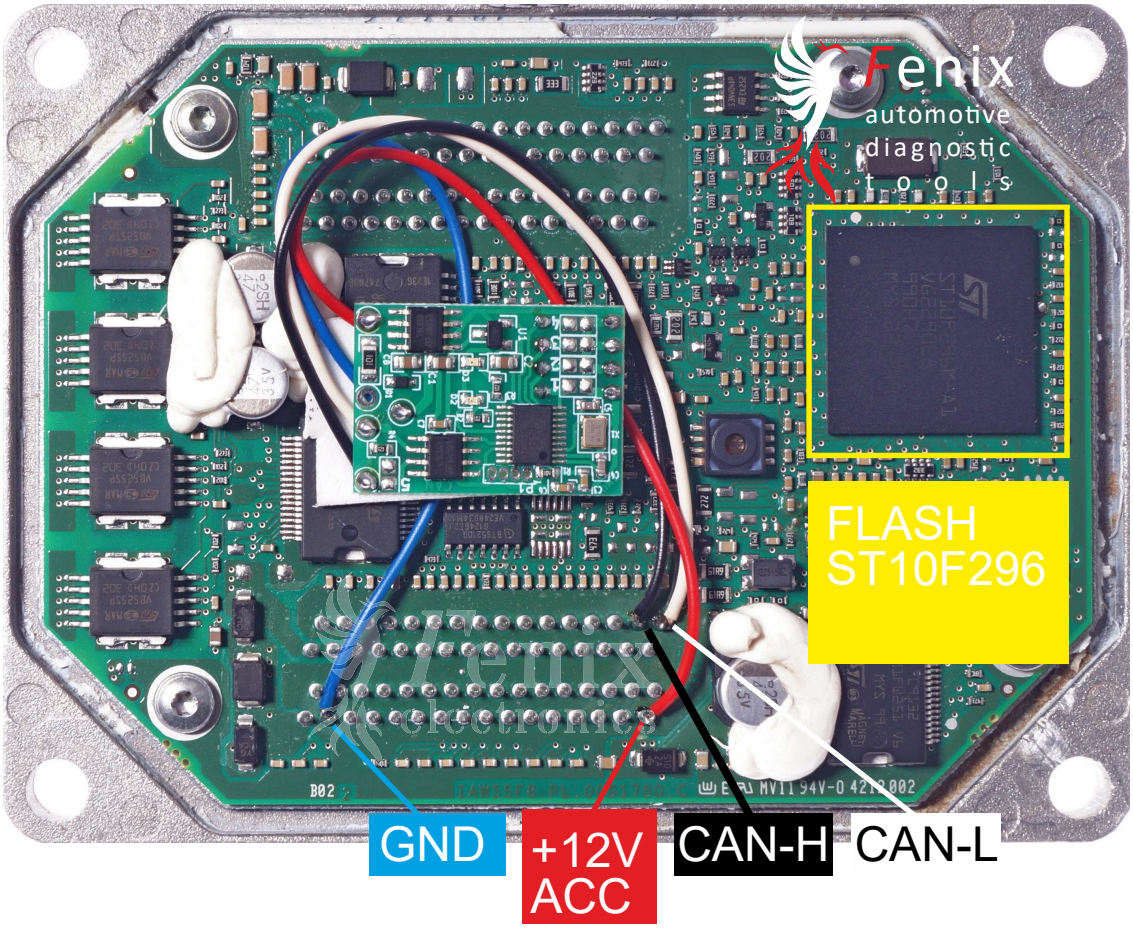


+12V	1	1	GND	15	1	CAN-H	50	1	CAN-L	49	1

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo IAW 5SF8

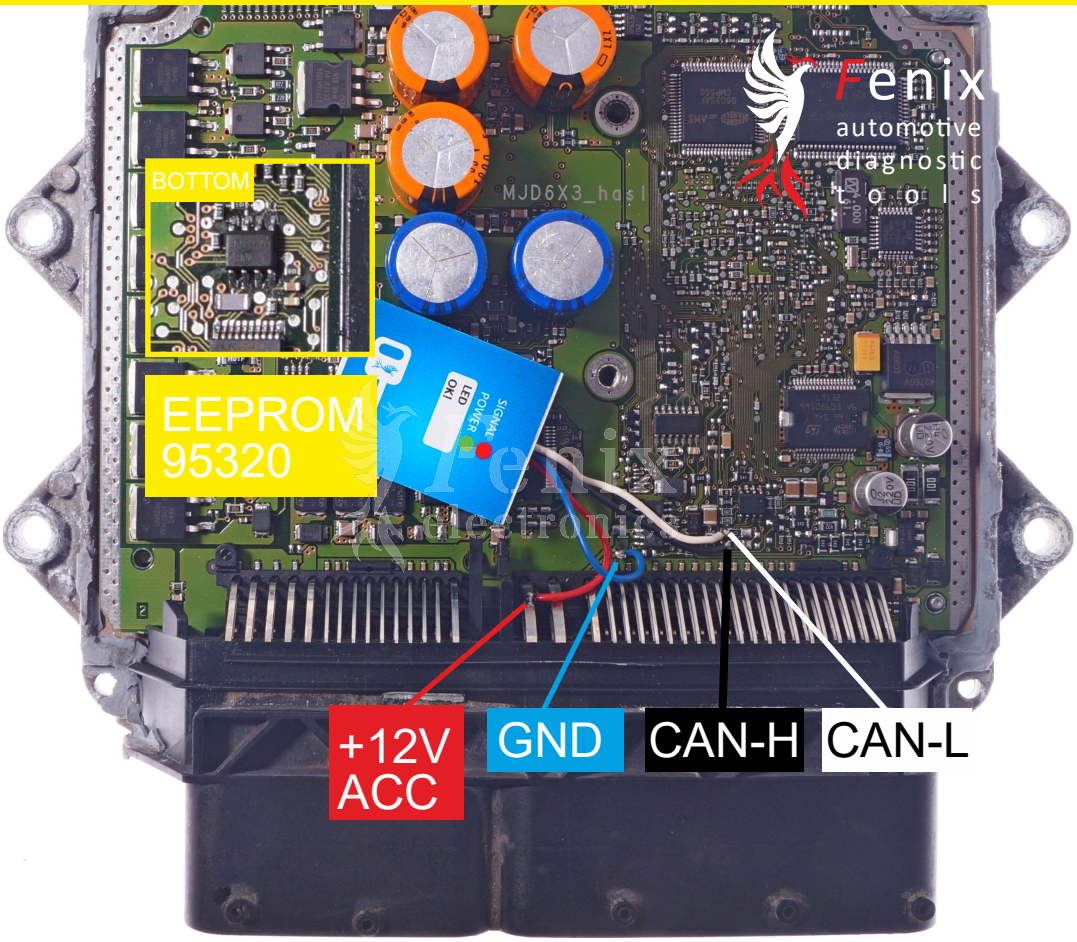


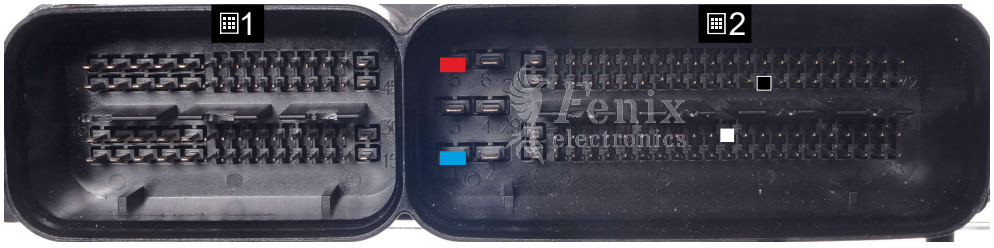
+12V	1	1	GND	15	1	CAN-H	50	1	CAN-L	49	1

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo MJD 6F3 : type 1



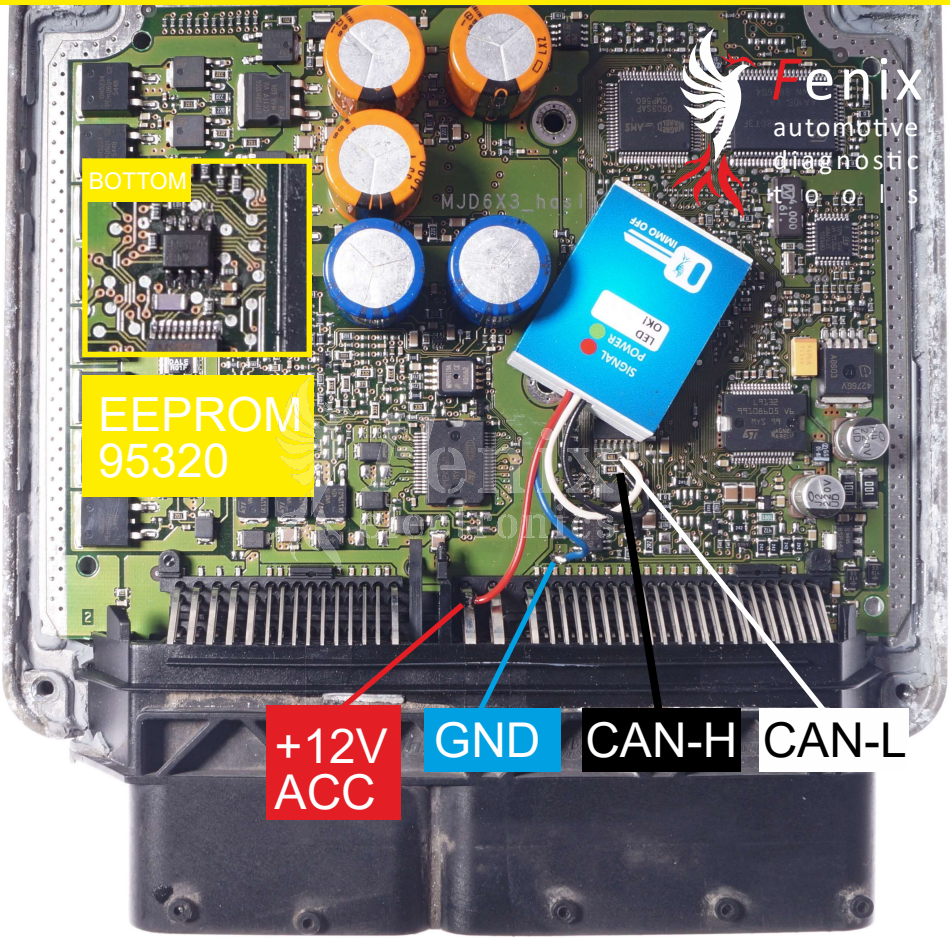


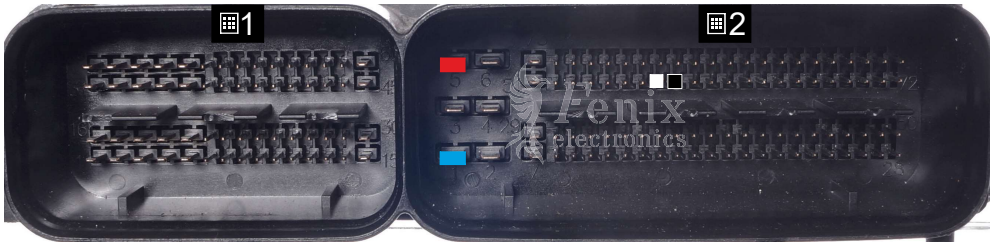
+12V	5	2	GND	1	2	CAN-H	64	2	CAN-L	40	2

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo MJD 6F3 : type 2



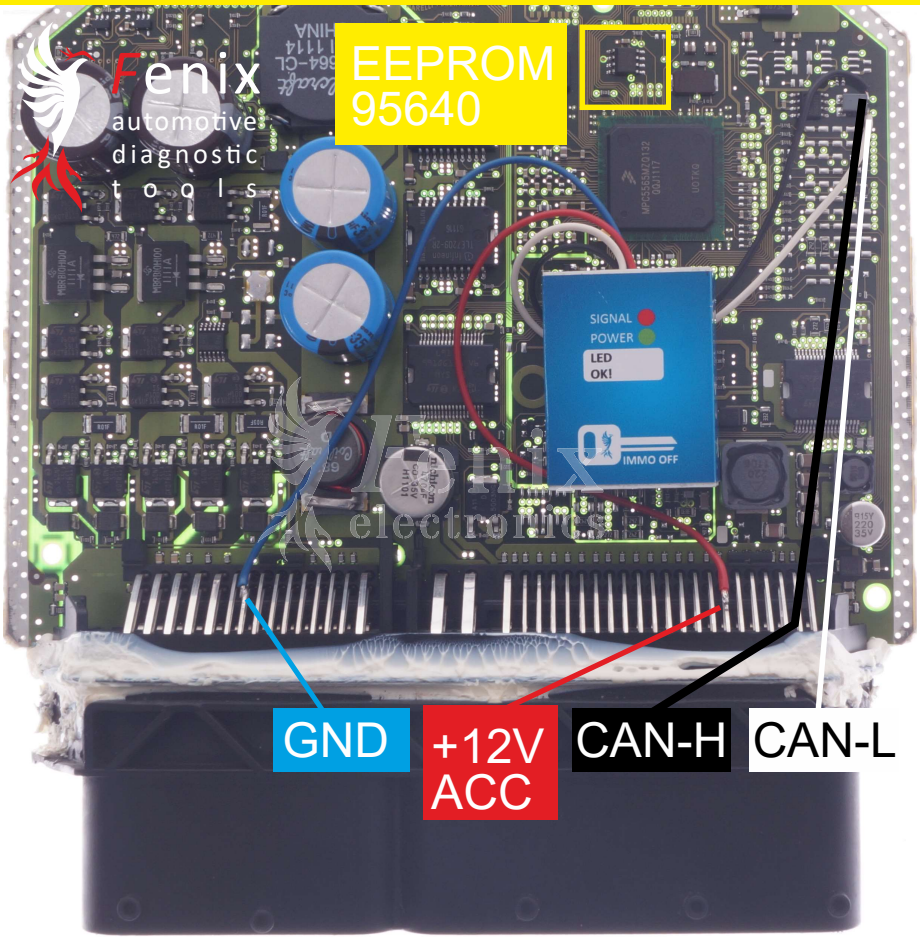


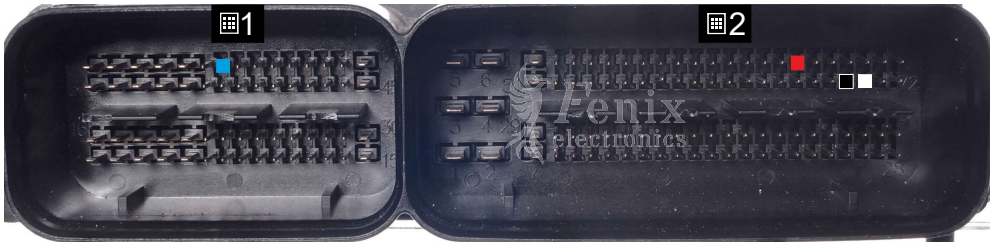
+12V	5	2	GND	1	2	CAN-H	59	2	CAN-L	58	2

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo MJD 8F2





+12V	88	2	GND	52	1	CAN-H	69	2	CAN-L	70	2

Make changes to the ECU memory using the Fenix_IBP application

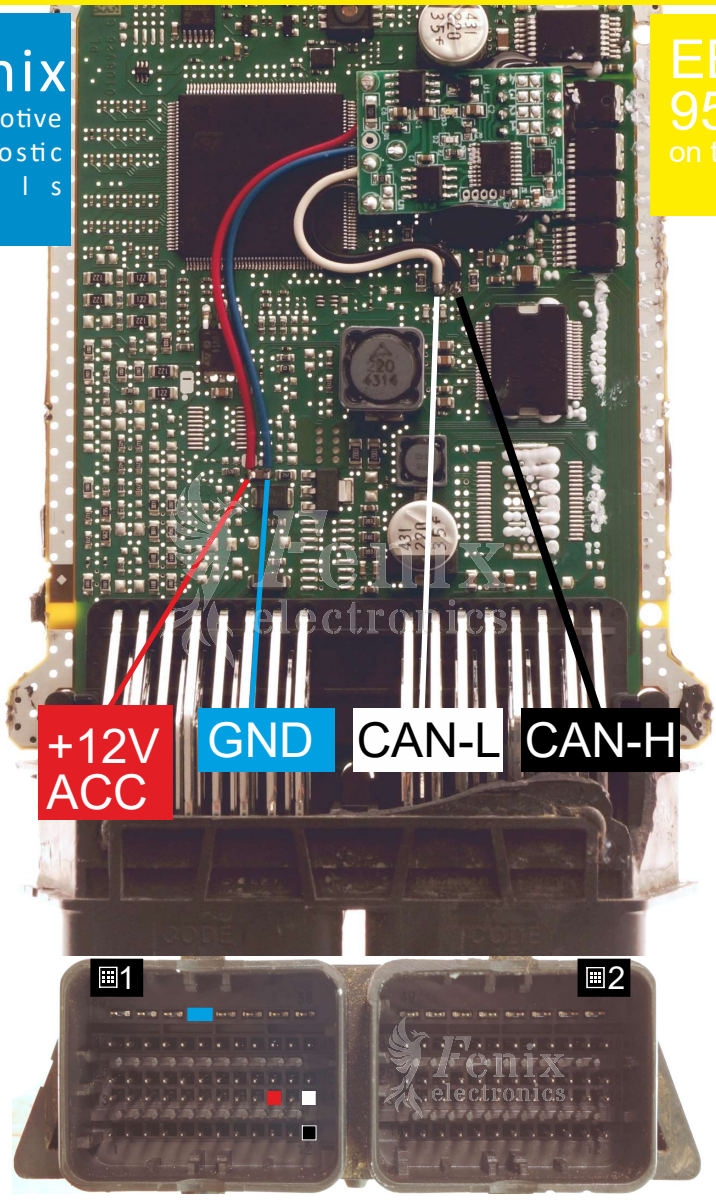
Proceed as described in point 5 of the manual.

i6- Immobilizer Emulator Fiat group with CAN

Fiat - Alfa Romeo - Lancia, immo IAW 9GF

Fenix automotive diagnostic tools

EEPROM 95640 on the bottom layer

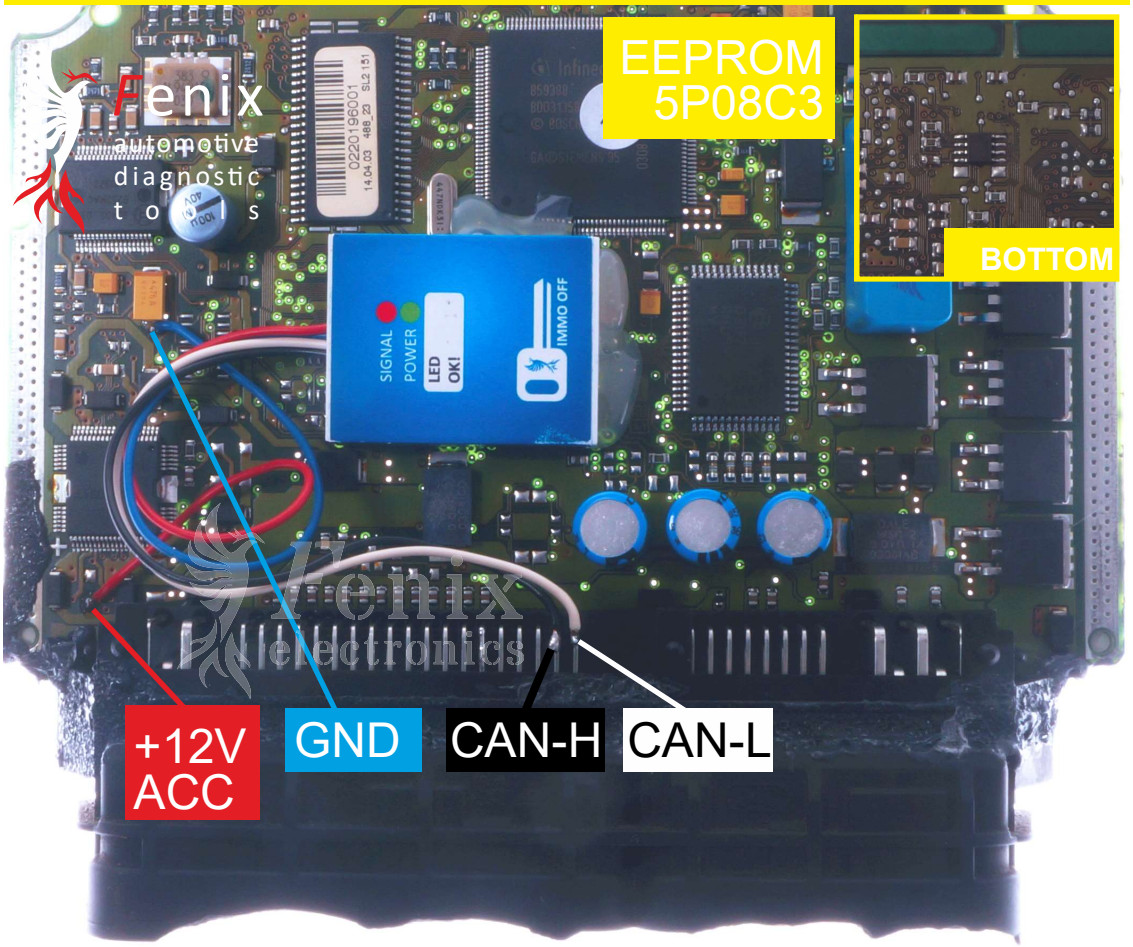


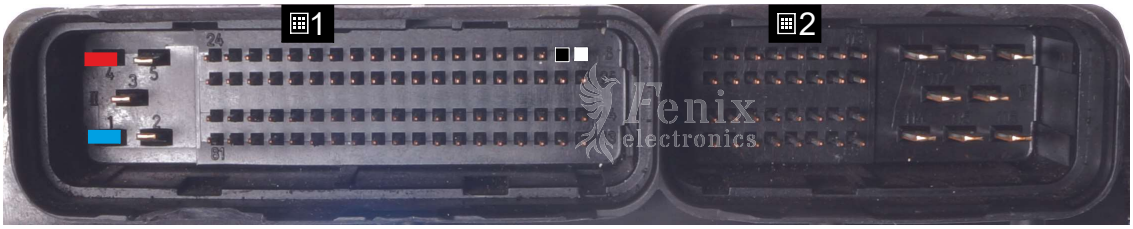
+12V	15	1	GND	52	1	CAN-H	12	1	CAN-L	13	1

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo Bosch EDC15C7





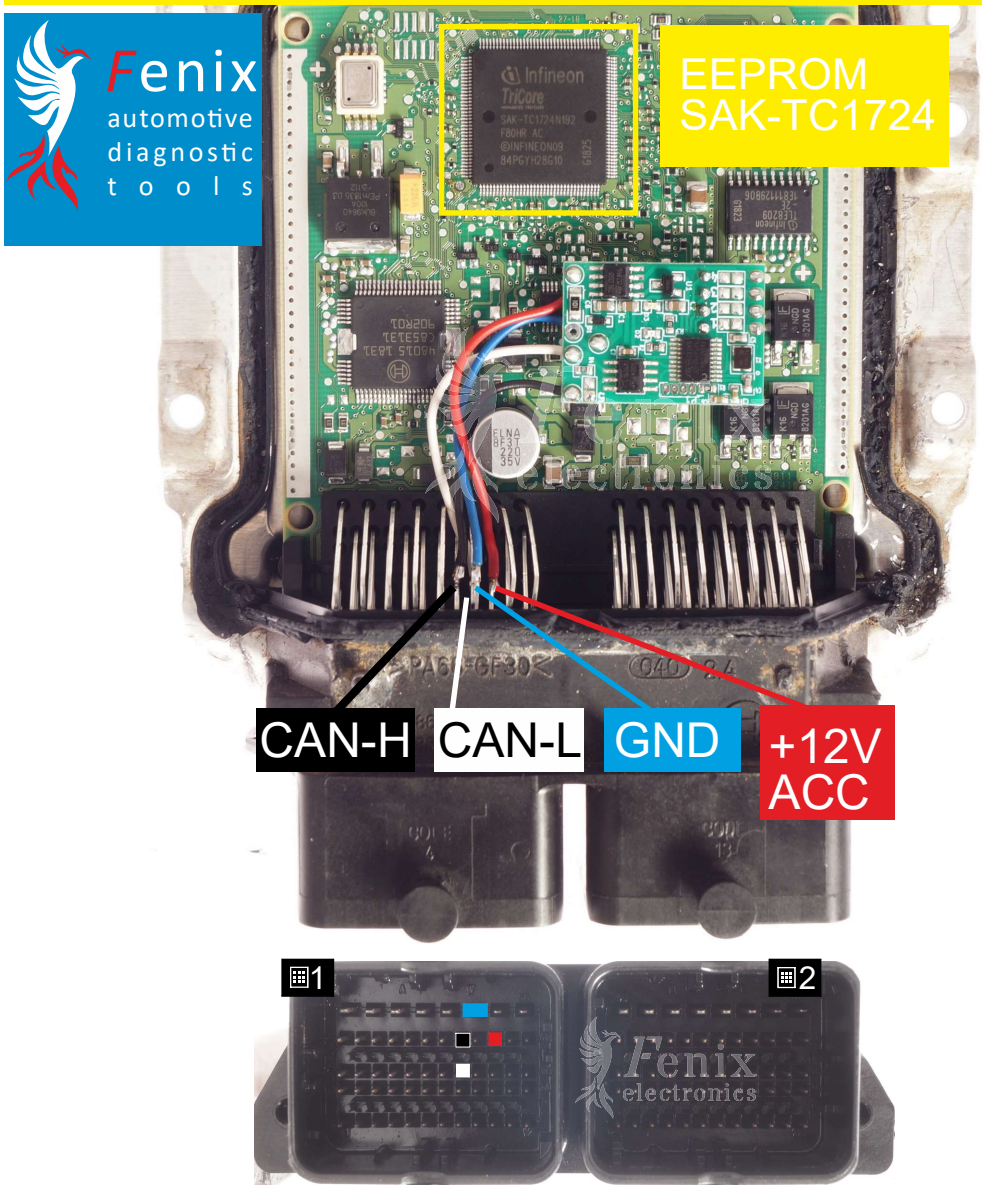
+12V	▪4	1	GND	▪1	1	CAN-H	▪7	1	CAN-L	▪6	1

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

i6- Immobilizer Emulator Fiat group with CAN

Fiat - Alfa Romeo - Lancia, immo Bosch ME 17.3.0

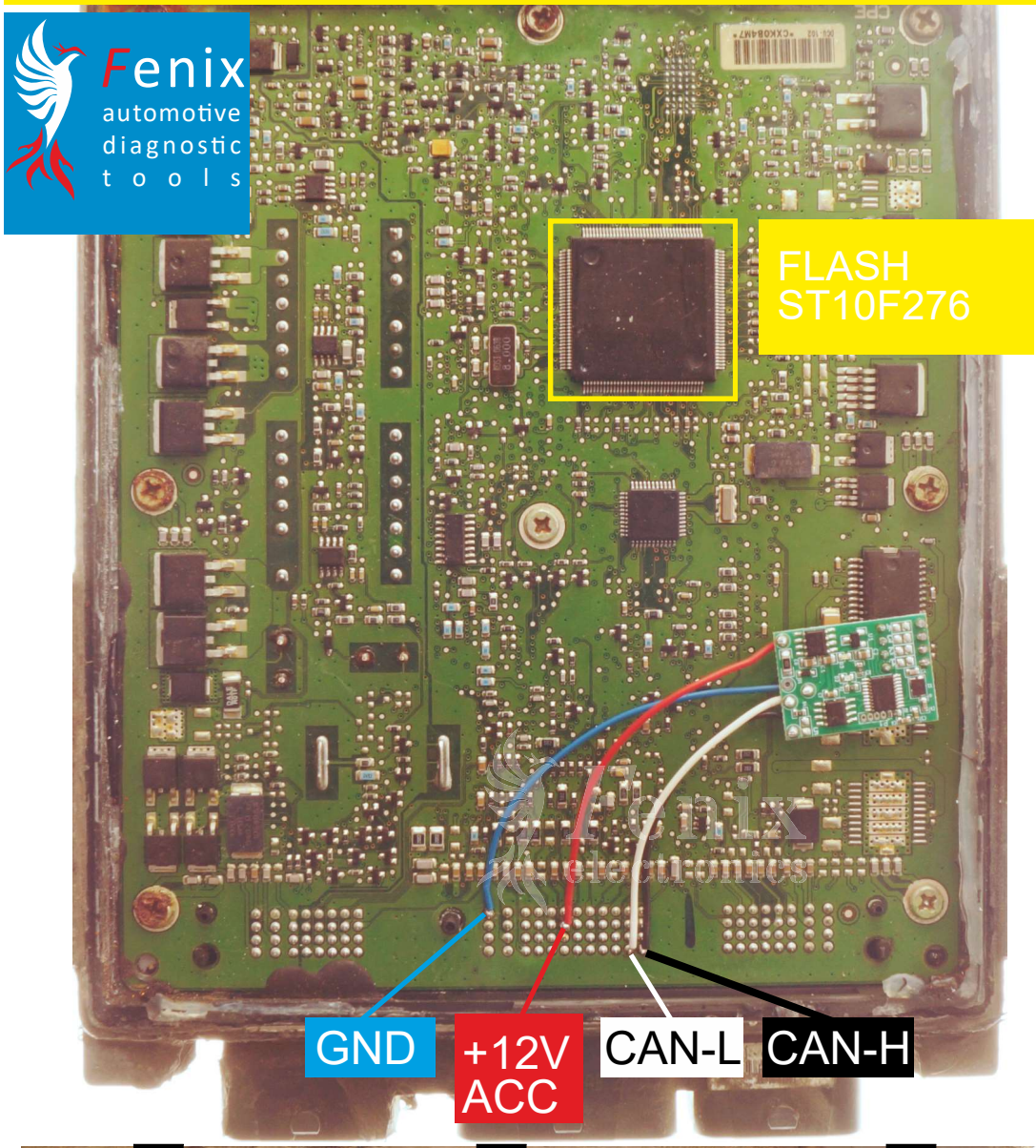


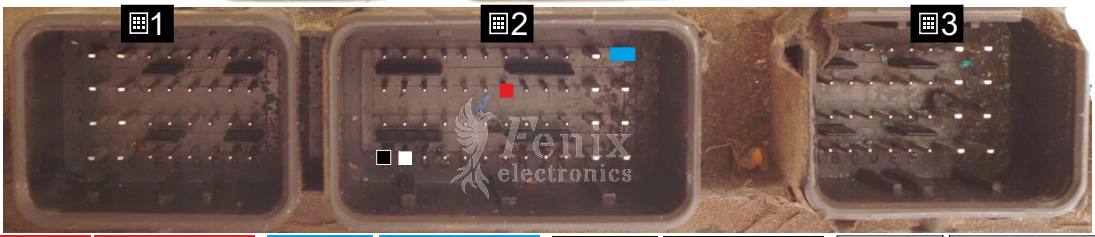
+12V	46	1	GND	54	1	CAN-H	44	1	CAN-L	32	1

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.

Fiat - Alfa Romeo - Lancia, immo Visteon DCU102





+12V	2G 2	GND	1M 2	CAN-H	4A 2	CAN-L	4B 2

Make changes to the ECU memory using the Fenix_IBP application

Proceed as described in point 5 of the manual.