

1 VAG Key learning device

The VAG key-learning device is dedicated to program keys for the vehicles equipped with the Immo III/Immo IV immobilizer and equipped with BOSCH EDC16/EDC17/MED9/MED17 engine control unit.

The key-learning device is equipped with a key programmer, which allows to pre-code the blank transponder MEGAMOS 48

The device has following modes of operation:

- program 1 to 4 keys to the car.

The device consist of three parts:

- OBDII dongle
- ABS cable
- Key-learning device

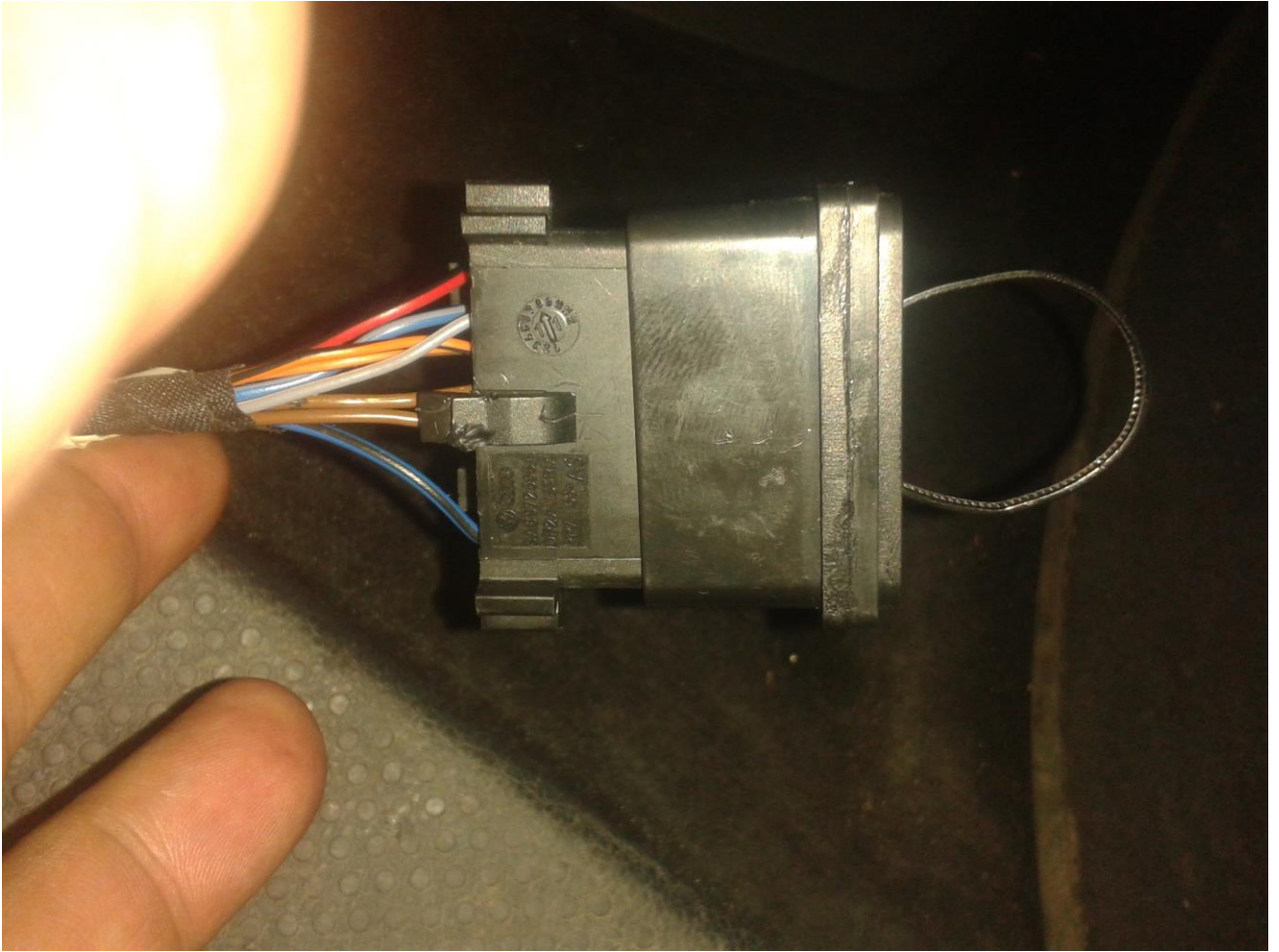
2 Key learning procedure

You should specify the number of keys you want to learn using the SW1, SW2, SW3 and SW4
In the table below you can find how the number of keys is specified:

	SW1	SW2	SW3	SW4
1 key	OFF	OFF	OFF	OFF
2 keys	OFF	ON	OFF	OFF
3 keys	OFF	OFF	ON	OFF
4 keys	OFF	ON	ON	ON
1key	OFF	OFF	OFF	OFF

The procedure is performed in following steps:

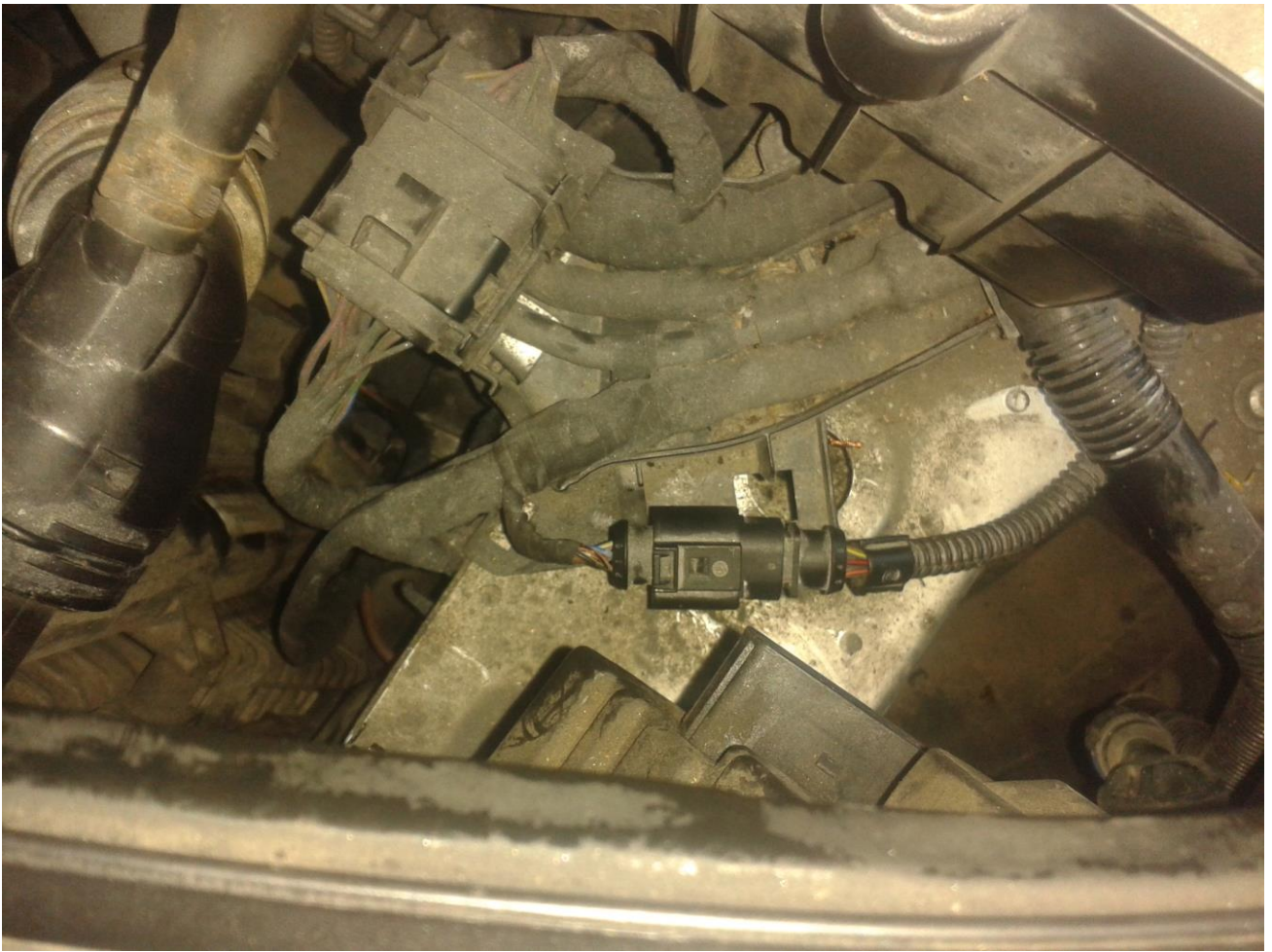
1. Specify the number of keys which will be learned
2. Connect the OBDII dongle



2. Connect the ABS cable









4. Connect the key-learning device to the ABS cable. A “beep” will indicate start of the work and it will blink fast in green. This means that the PIN/CS are being read.
5. After the device is finished, it indicates success with two fast beeps and the LED blink slowly in green.

6. Remove the ABS cable and the OBDII dongle
7. If the car is with mechanical ignition - put the new key on the ignition and make ignition ON. Put the ring of the antenna over the new key. New key should be with empty transponder. If the car is with electronic ignition hold the key in the ring of the antenna.
8. Put the key-learning device in the OBDII. It should start working by blinking fast in green/red which means that the transponder preparation and key-learning is in progress. Once again it will indicate end of work with two quick beeps and blinking slowly in green.

- if the car is with mechanical ignition and you learn just one key, the device should finish without any interaction of the customer.

- if the car is with mechanical ignition and you learn more than one key, you should look for indication on the dashboard that the keys are adjusted (for example "2/1" on the dashboard) In this case the first key which is in the ignition is learned automatically, for each next key you should make ignition ON.

- if the car is with electronic ignition (Passat B6/CC/B7) – Only for these cars it is necessary to wait 5 minutes before the keys can be learned. Put transponder In coil of device



-Put device in OBD connector, device start work, Green LED- ON, 1sec, one short beep, start blinking fast RED-GREEN LED. (key must be in antenna of device)

- Wait aprox 20-25 second, pull out key from device antenna, and put in ignition slot on ignition key position, and you see message on board



Pull key out for one step (position before ignition) and see message



-Now need wait 5 minutes

- If not see message immobilizer adjustment active, need put key again on ignition position, and pull out on first position.

- after 5 minutes you see again on board message immobilizer active, after 10 second device finish work,

Green LED blink slowly ON-OFF, and indicate with 2 short beeps.

- Pull out device from OBD
- Pull key out from slot, and put again on ignition position.
- You see on board message

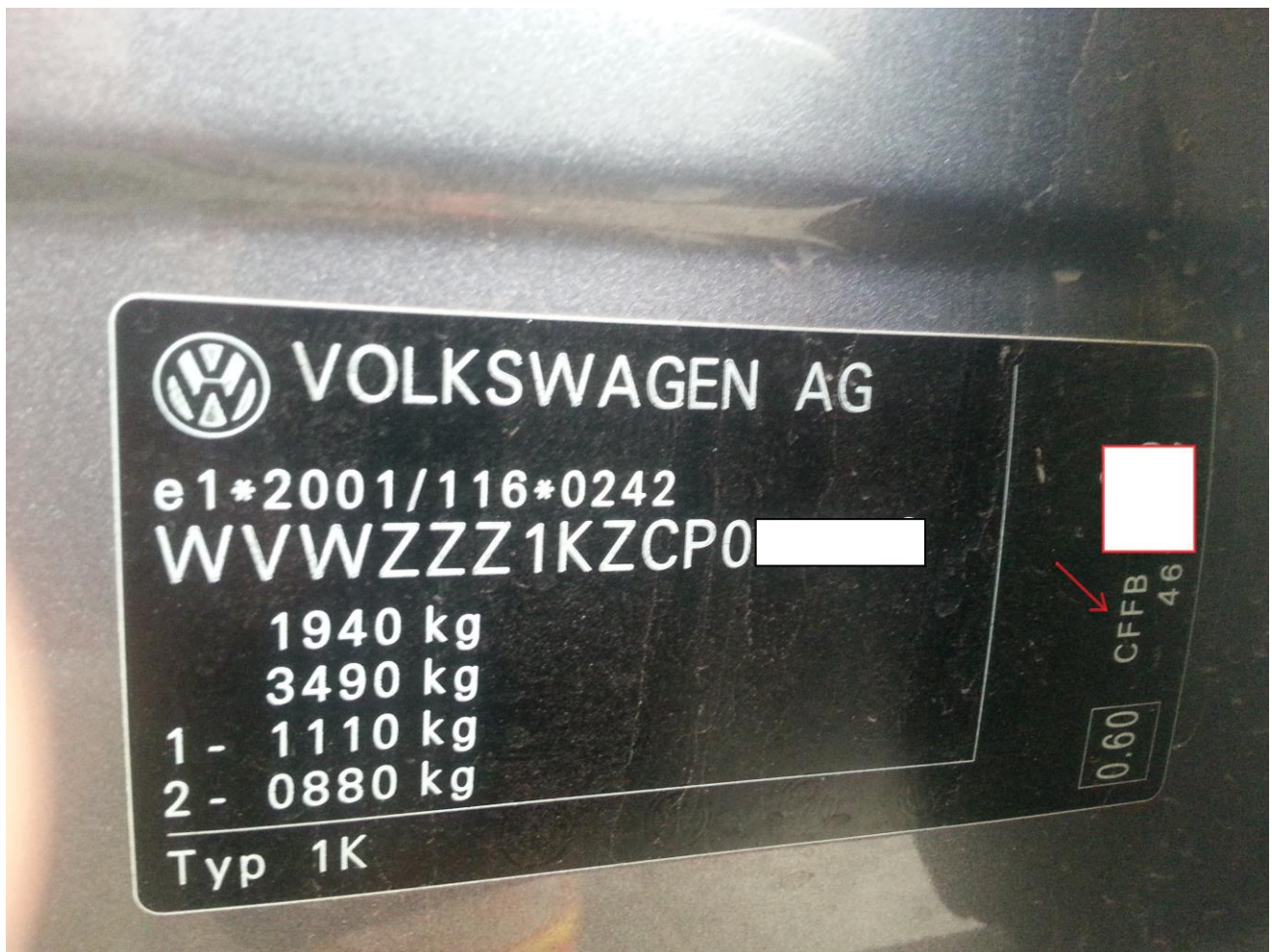


- Pull out key from slot, put again and start car

NOTE: All working keys will be erased and cannot be used anymore. So if you want simply to test the device, make a backup of the immo-data first.

NOTE: For many of the VAG cars the first part of the procedure may be skipped and you can proceed directly to step 7. Only if you don't have a success (you don't go to the point where the device blinks red/green) then proceed from step 1.

NOTE: Device NOT WORK on 2,0 TDI with Siemens ECU, BKD engine(some models passat B6 2006,2007). and 1,6TDI/ Siemens ECU, CAYB, CAYC engine
You can check which type of engine installed in car on identification sticker, when open driver door, placed on middle.



NOTE: Device not work on passat B6/B7 with KEYLESS GO systems (transponder ID 46)

3 Indications

Following indications shows the final result of the device:

- **Success indication:** After finished with success you can hear two short beeps and the LED is blinking slowly GREEN
- **Error indication:** In case of some error the LED is blinking RED fast. The buzzer make a long beep and then 1 to 5 short beeps indicating the error type as follows:
 - 1 short beep – no connection to engine control unit
 - 2 short beeps – PIN/CS of the ECU do not match to the PIN/CS of the immobilizer
 - 3 short beeps – Cannot pre-code the transponder. Either the transponder is not in the ring or it is locked. Transponders locked with this key-learning device can be re-used from it.
 - 4 short beeps – key-learning procedure is rejected from the immobilizer.
 - 5 short beeps – no connection to the immobilizer

NOTE: In some cases, when device connected via ABS cable to ECU, device start read data(green LED fast blink),sucefully extract data from ECU, but give one long and 5 short beeps (red LED blink), but device is ready to program key.

Disconnect device from ABS cable and put in OBD, start to work (red-green LED blink fast) and program key successful.

- **LED is blinking in green fast** – PIN/CS are read at the moment
- **LED is blinking in green/red fast** – transponder is pre-coded and key-adaptation is initiated in the immobilizer

4 Supported cars:

Immo III/Immo IV vehicles with EDC16/EDC17/MED9/MED17 and CAN TP2.0 or CAN UDS connection.

