

MQB_VAG_System

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Getting Started

Used Keywords

UHDS -our product for Communication with cars

KeyMaker II - Our product - Interface for Read/Program Transponders and keys.

JTAG - our product for read/write MCU

Security Block - File contain all immo data . It is stored in Dashboard.

Security Block ECU - File contain immo data (CS,VIN,MAC, PW). It is stored in ECU.

CS-Key - File stored Immo data from Ignition Key . It is stored in Ignition Keys

S-Key - File contain crypto keys for decrypt/encrypt in EEprom. Stored in MCU

Learn ECU MQB

Learn ECU EDC17 MQB VDO Dashboard

We can learn used ECU to car with MQB VDO , Continental system.

Requirements:

- UHDS
- Keymaker (not always)
- License VW0042

Target - it is car where we will learn ECU

In short say for adapt ECU we need to have 3 CS and PW :

- CS ECU old - current CS stored in ECU which we want to learn
- CS ECU new - CS ECU of our car where we will learn ECU
- CS Dash - CS Dashboard (Immo) of our car where we will learn ECU.
- PW -power Class ECU which we want to learn.

If we have this data we can learn all kind of ECU in MQB system (EDC17,MED17,ME,Delphi ,Siemens etc).

Currently we can decode all data required for learn ECU only in EDC17.

I. Description read all required data for learn ECU to car :

1. Read Flash and EEprom from EDC17. You can use any tools which are support read EDC17. UHDS not give possibility to read it.

You have to use any tuning tools. This operation we do on bench. If old ECU is available you can read it too. In this case point 3. will

be possible to do without keymaker.

2. Read Security block from dashboard from target car.

3. Read CS-Key from key from target car. We need keymaker for read data from Key (or without keymaker if we have original ECU).

4. Read PW from ECU.

1. When we have already dumps eeprom and flash from ECU we can decode CS ECU.

. We start XCAN , and choose **'VW/Seat/Skoda MQB 2013'** or **'VW/Seat/Skoda MQB 06/2014...'** and we go to panel ECU Dump Tool.

In frame **'Import Immo Data From ECU'** we open Flash file and eeprom file from EDC17 and press **'Decode'** .

In frame **'Target (new) Immo Data ECU'** we see actual data from ECU. Don't worry if we don't have PW.

Press button **'Save Sec Block ECU'** and save file for example with name **'usedecu.SecEcu'**

2. In car we connect UHDS and switch ignition on with working Key. We select panel **"Main"** and we press **'Read Security Block'** and

save it for example with name **'mySecurityBlock.bin'**

3. Insert Key in Keymaker. On same panel **"Main"** press **'Read CS-Key'** and soft ask for choose security block - please

open security block read in point 2 in our example **'mySecurityBlock.bin'**

Keymaker read read CS-Key from key and save it to file -for example name **'mykey.cskey'**

Goto panel **'ECU Dump Tool'** and in frame **'Import Immo Data ECU from CS-Key'** please open file read in point 3

(in example **'mykey.cskey'**)

Now Press **'Decode'** and press **'Save Sec Block ECU'** for example with name **'mycar.SecEcu'**

Other solution (if we have old ECU from our car) is read security block ECU from dumps of ECU. In this case we do same as in point 1.

with difference we select flash and eeprom form original ECU and save file for example

with name **'mycar.SecEcu'** -**this solution not required use keymaker**

4. PW (power class) in ECU and in Dashboard must be the same. In dashboard there is possible to change PW to new.

Change PW in Dash is only required if in car was changed engine to other type and required is new kind of ECU with other power class.

Most situation engine in car stay old and we only replace damaged ECU - that change power class PW is not required.

ECU has constance PW and we can not change it. PW in ECU is stored in firmware (flash).

If we want to change PW we must reflash ECU to other soft.- this operation is not described in this manual.

We must be sure that PW in ECU is same as in our car. PW in ECU we can read with UHDS. This operation is only possible on bench.

Not possible to read PW by OBD.

We have to connect ECU with UHDS on bench. Select panel **'ECU'**. Press **'Open security block'** and we choose security block ECU which

was read in in point 1 in our example **'usedecu.SecEcu'**.

Press 'Read PW ECU'. If frame PW we see current PW of our ECU.

Now we should to check PW in ECU and in Immo (Dashboard) is same. On panel **'Advanced'** please press **'Open Security Block'**

which was read in point 2. in our example **'mySecurityBlock.bin'**

PW which we now see and PW which we read from ECU in point 4 should be the same. If not mean ECU is not designed for this engine.

If both PW are same we can learn now ECU to our car.

Now we have all what we need to learn ECU:

-mySecurityBlock.bin'
-'usedecu.SecEcu'
-'mycar.SecEcu'

II. Learn ECU to car :

Go to panel '**ECU**' .

1. In frame '**Source (old) Immo Data**' press '**Open Sec Block ECU**' choose file read in point 1. (in example '**usedecu.SecEcu**').
2. In frame '**Target (new) Immo Data**' press '**Import from Sec.BI**' choose file read in point 2. (in example '**mySecurityBlock.bin**').
3. In frame '**Target (new) Immo Data**' press '**Open Sec Block ECU**' choose file read in point 3. (in example '**mycar.SecEcu**').
4. Press Button '**Change Immo Data ECU**'.

Important !!! If we write in frame wrong PW not same as stored in ECU immo will be corrupted and car not start.

Additionally after that Read PW from ECU will be not possible.

'Change Immo Data ECU' we can do again with correct PW.

But read PW by CAN will be not possible and for fix it we have to write back eeprom to ECU.

Go to panel '**Immo5**'

5. Press '**Import Data from Sec BI**' choose file '**mySecurityBlock.bin**' and press button '**Login Dash**'.

That is all !!! :)

Learn ECU EDC17 MQB JCI 70F3426+95128 Dashboard

We can learn used ECU to car with MQB Johnson Control 70F3426+95128

Requirements:

-UHDS
-Keymaker (not always)
-Jtag (only when dash is JC but not always)
-License VW0041

-License VW0042

Target - it is car where we will learn ECU

In short say for adapt ECU we need to have 3 CS and PW :

- CS ECU old - current CS stored in ECU which we want to learn
- CS ECU new - CS ECU of our car where we will learn ECU
- CS Dash - CS Dashboard (Immo) of our car where we will learn ECU.
- PW - power Class ECU which we want to learn.

If we have this data we can learn all kind of ECU in MQB system (EDC17,MED17,ME,Delphi ,Siemens etc).

Currently we can decode all data required for learn ECU only in EDC17.

I. Description read all required data for learn ECU to car :

1. Read Flash and EEprom from EDC17. You can use any tools which are support read EDC17. UHDS not give possibility to read it.

You have to use any tuning tools. This operation we do on bench. If old ECU is available you can read it too. In this case point 3. will

be possible to do without keymaker.

2. Do points 1-5 from chapter '**Johnson Control MQB Change KM**'

3. Read CS-Key from key from target car. We need keymaker for read data from Key (or without keymaker if we have original ECU).

4. Read PW from ECU.

1. When we have already dumps eeprom and flash from ECU we can decode CS ECU.

. We start XCAN , and choose '**VW/Skoda Johnson MQB**'. We go to panel ECU Dump Tool.

In frame '**Import Immo Data From ECU**' we open Flash file and eeprom file from EDC17 and press '**Decode**' .

In frame '**Target (new) Immo Data ECU**' we see actual data from ECU. Don't worry if we don't have PW.

Press button '**Save Sec Block ECU**' and save file for example with name '**usedecu.SecEcu**'

2. In car we connect UHDS and switch ignition on with working Key. We select panel "**Main**" and we press '**Read Security Block**' and save it for example with name '**mySecurityBlock.bin**'

3. Insert Key in Keymaker. On same panel "**Main**" press '**Read CS-Key**' and soft ask for choose security block - open security block read in point 2 in our example '**mySecurityBlock.bin**'

Keymaker read read CS-Key from key and save it to file -for example name '**mykey.cskey**'

Goto panel '**ECU Dump Tool**' and in frame '**Import Immo Data ECU from CS-Key**' please open file read in point 3 (in example '**mykey.cskey**')

Now Press '**Decode**' and press '**Save Sec Block ECU**' for example with name '**mycar.SecEcu**'

Other solution (if we have old ECU from our car) is read security block ECU from dumps of ECU. In this case we do same as in point 1. with difference

we select flash and eeprom form original ECU and save file for example with name '**mycar.SecEcu**' - **this solution not required use keymaker**

4. PW (power class) in ECU and in Dashboard must be the same. In dashboard there is possible to change PW to new.

Change PW in Dash is only required if in car was changed engine to other type and required is new kind

of ECU with other power class.

Most situation engine in car stay old and we only replace damaged ECU - that change power class PW is not required.

ECU has constance PW and we can not change it. PW in ECU is stored in firmware (flash).

If we want to change PW we must reflash ECU to other soft.- this operation is not described in this manual.

We must be sure that PW in ECU is same as in our car. PW in ECU we can read with UHDS. This operation is only possible on bench.

Not possible to read PW by OBD.

We have to connect ECU with UHDS on bench. Select panel **'ECU'**. Press **'Open security block'** and we choose security block ECU which was read in in point 1 in our example **'usedecu.SecEcu'**.

Press 'Read PW ECU'. If frame PW we see current PW of our ECU.

Now we should to check PW in ECU and in Immo (Dashboard) is same. On panel **'Advanced'** please press **'Open Security Block'** which was read in point 2.

in our example **'mySecurityBlock.bin'**

PW which we now see and PW which we read from ECU in point 4 should be the same. If not mean ECU is not designed for this engine.

If both PW are same we can learn now ECU to our car.

Now we have all what we need to learn ECU:

-mySecurityBlock.bin'

-'usedecu.SecEcu'

-'mycar.SecEcu'

II. Learn ECU to car :

Go to panel **'ECU'** .

1. In frame **'Source (old) Immo Data'** press **'Open Sec Block ECU'** choose file read in point 1. (in example **'usedecu.SecEcu'**).

2. In frame **'Target (new) Immo Data'** press **'Import from Sec.BI'** choose file read in point 2. (in example **'mySecurityBlock.bin'**).

3. In frame **'Target (new) Immo Data'** press **'Open Sec Block ECU'** choose file read in point 3. (in example **'mycar.SecEcu'**).

4. Press Button **'Change Immo Data ECU'**.

Important !!! If we write in frame wrong PW not same as stored in ECU immo will be corrupted and car not start.

Additionally after that Read PW from ECU will be not possible.

'Change Immo Data ECU' we can do again with correct PW.

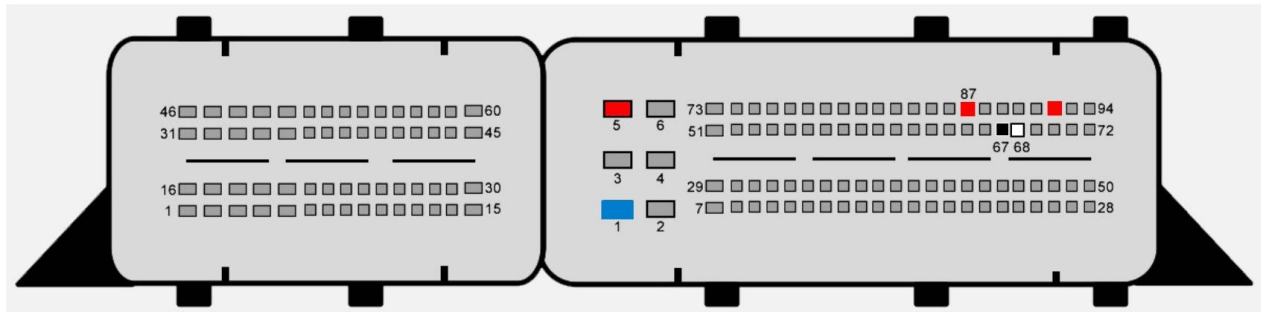
But read PW by CAN will be not possible and for fix it we have to write back eeprom to ECU.

Go to panel **'Immo5'**

5. Press **'Import Data from Sec BI'** choose file **'mySecurityBlock.bin'** and press button **'Login Dash'**.

That is all !!! :)

EDC17/MED17/PCR21 PinOut



Learn ECU PQ

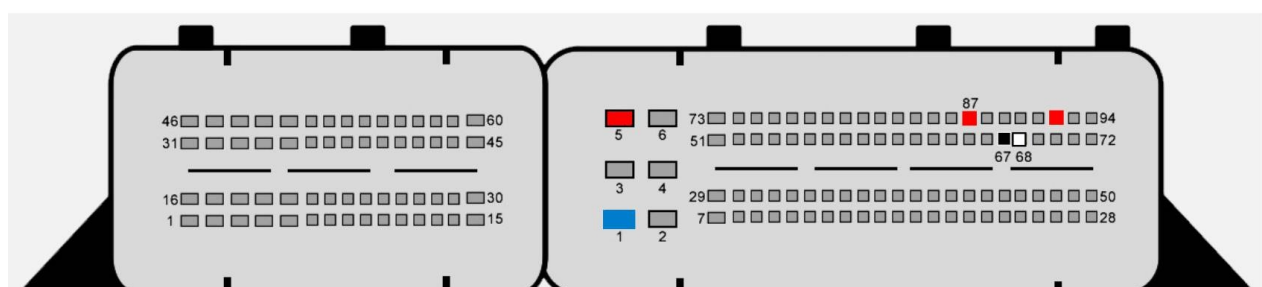
PCR2.1 Read CS+PIN from ECU

For Read CS+PIN from PCR2.1 You must follow steps:

If we are use soft first time we must use button '**Download From FTP**'. Now will be download all database ECU flash files for all know ECU PCR2.1 to our local directory.

1. Open ECU.
 2. Connect it as on pic.1 (Boot Mode).
 3. Select PCR2.1 from Menu next from panel 'Flasher' push Button '**Boot mode EEp**'
 4. Push Button '**Read EE**' -only if we need backup of orginal EEprom
 5. Push Button '**Unlock/Lock**' (only once !!!), if we use second time it Lock ECU again. In this case we must Push it again.
 6. Now we can disconnect boot mode connections and close ECU. And we are ready for next steps. Next steps we can do into car or on the bench.
 7. Push button 'Read ECU ID' and we search our 'Part No ECU' and 'SW' on the List
 8. Select form the list our ECU. if not available same SW then we can select another
 9. Push Button Prep. For Read Pass'
 10. Form panel 'OBD Change Data' use button 'Read Immo Data'
- Thats all :)

Pic1.



EDC17/MED17 UDS Read CS+PIN

There is to variants of read CS+PIN from EDC17/MED17 UDS with Immo4 system.

I. Read CS+PIN by dump Tool

Start XCAN choose EDC17 UDS. Go panel '**Read Immo Data**'. Open dumps Flash and eeprom from your ECU.

Now press decode and you will see all Immo Data from ECU.

For read flash and eeprom you have to use any tool which are support read flash files and eeprom.

Most on market tuning tools give this possibility . UHDS has not option for it.

II. Read CS+PIN by ECU Connector by CAN.

Connect EDC17/MED17 to UHDS as on picture in chapter '**EDC17/MED17/PCR21 PinOut**' and press button '**Read Data by CAN**'.

Learn used ECU to car required know CS+PIN from ECU which will be adapt and CS+PIN from car where we will

do this operation.

First we need to make change immo data.

1.Start XCAN

Learn ECU to car

To learn all kind on ECU with Immo4 we need to know:

-CS and PIN from ECU which we are want to learn to car. For PCR2.1 you have desription how to read it chapter

'PCR2.1 Read CS+PIN from ECU'

-CS and PIN from car (immo) . It we can read by select proper dashboard and use option read security block.

Next with security block editor we cal look our data

if we have it we can learn it to car.

we start XCAAn and choose EDC17 UDS or PCR2.1.

On panel OBD Change Data we have to fill all frames.

Frame '**Source (old) Immo Data**' we fill values which are stored in our ECU which we want to learn.

If we don.t know PW (power Class) we can write value '01' - it be automatically found later

Frame '**Target (new) Immo Data**' we fill with values from our car.

Immo ID is not important and we can fill it with '00000000000000'.

1. Press button '**Change Immo Data**'. If process success it show us PW our ECU and brand of ECU (for example VW ,skoda.seat audi)

2. Go To XCAN and select Immo4 UDS. Fill data in frame '**Source (old) Immo Data**' with data from you car

next press button '**Login**'

That is all -car should start.

If Immo still active mean something is wrong with data. Fist we have o check PW which was show in point

1. is same as we get in '**security block Editor**'.

If not mean we have ECU with wrong software. You have to use proper ECU and you have to reflash ECU to

proper software. PW are stored in flash and it is not possible to change by EEPROM data or by change immo data. If PW is OK we must check brand detected in point 1 is same as our car. If not, mean ECU is wrong for our ECU and we must change ECU to proper or reflash it proper software.

Key Learning MQB

System requirements

1. For learn key we need to have:
 - UHDS interface
 - Keymaker II
 - Jtag Interface (only for Johnson Control Dashboard)
 - License for UHDS for Learn Keys MQB (VW0041) , for Johnson Control additionally required license VW0040.
 - Original ignition key from car where we want to learn keys or CS-Key data file.
 - New blank MQB Key (Megamos AES)

KeyMaker II



UHDS Interface



Jtag Interface



VDO Learn Key

Description How to learn Key in cars with MQB VDO/Continental system.

Please run AllInOne UHDS soft. Press XCAN button and choose options VW/Seat/Skoda MQB 06/2013.... or VW/Seat/Skoda MQB 06/2014.... depend year of car.

Connect UHDS to car and switch ignition with original working Key.

On main panel we have all options what we need.

Method 1 with preparation new dealer Key(s)

1.Press Make dealer Key button. Soft ask us for choose how it has to take security block. We can choose ' **Read Security Block from Dashboard OBD** ' by OBD or load from file.

If we select Read Security Block from Dashboard we have to switch ignition on with original key and confirm. UHDS read security block from Dashboard.

If we choose '**Load Security Block from file**' we have to select proper security block file.

2. Now soft ask us how get CS-Key. We can choose option '**Read CS-Key Data from original Key**' -put original ignition key into Keymaker and confirm.

Keymaker will read CS-Key Data and prompt to save file.

If we already have CS-Key file we can choose option '**Load CS-Key from file**' and load CS_Key from file.

Now soft ask us for insert new blank key into Keymaker and confirm. Now new dealer key will be generated.

3. Now we can learn Key(s) in car. Press Learn Key button. Soft ask as for choose security block file and how many keys we want to learn.

(Warning !!! All learned keys will be erased and we have to learn again all required old and new keys).

After start procedure learn we have put in ignition every key one by one. On Dashboard display we see how many keys are learned and how many keys stay to learn.

Method 2 with already prepared dealer Key(s)

1. First we have read Security Block , switch ignition on with original key and press button Read Security Block and save file.

If we already have security block file we can skip this point.

2. Now we can learn Key(s) in car. Press Learn Key button. Soft ask as for choose security block file and how many keys we want to learn.

(Warning !!! All learned keys will be erased and we have to learn again all required old and new keys).

After start procedure we have put every ignition key one by one. On Dashboard display we see how many keys are learned and how many keys stay to learn.

Johnson Control Learn Key

Description How to learn Key in cars with MQB Johnson Control (70F3426+95128) system.

Please run AllInOne UHDS soft. Press XCAN button and choose options VW/Skoda Johnson Control MQB

On Main panel we have all options what we need.

Method 1 with preparation new dealer Key(s)

1. If we have already Security Block we can go to point 3.

2. Please read chapter "Johnson Control MQB Change KM " and do all points as described only skip point 6.

Now change panel for Advanced and press button "**Open EEprom and S-Key**". We have to open EEprom 95128 file and Skey file.

Next press button '**Save Security Block**'.

3. Press Make dealer Key button. Soft ask us for Security Block File. Next soft ask us how get CS-Key.

We can choose option '**Read CS-Key Data from original Key**' -put original ignition key into Keymaker and confirm.

Soft Read CS-Key data from Key and prompt for save CS-Key File or we can select option '**Load**

CS-Key from file' and choose

CS-Key file and confirm.

Now soft ask us for insert new blank key in Keymaker and confirm. Now new dealer key will be generated.

4. Now we can learn Key(s) in car. Press Learn Key button. Soft ask as for choose security block file and how many keys we want to learn.

(Warning !!! All learned keys will be erased and we have to learn again all required old and new keys).

After start procedure learn we have put in ignition every key one by one. On Dashboard display we see how many keys are learned and how many keys stay to learn.

Method 2 with already prepared dealer Key(s)

1. If we have already Security Block we can go to point 3.

2. Please read chapter "Johnson Control MQB Change KM " and do all points as described only skip point 6.

Now change panel for Advanced and press button "**Open EEprom and S-Key**". We have to open EEprom 95128 file and Skey file.

Next press button '**Save Security Block**'.

3. Now we can learn Key(s) in car. Press Learn Key button. Soft ask as for choose security block file and how many keys we want to learn.

(Warning !!! All learned keys will be erased and we have to learn again all required old and new keys).

After start procedure we have put every ignition key one by one. On Dashboard display we see how many keys are learned and how many keys stay to learn.

Change KM

Johnson Control MQB Change KM 70F3426+95128

Dashboard Skoda / VW 2013+ Johnson Controls (JCI) on 70F3426+95128.

(There is not supported with this option VDO, Continental , Visteon Dashboards)

This manual is for Dashboard Skoda/ VW 2013+ Jonson Control (JCI) on 70F3426+95128.

For Reset or change millage you have to do few steps.
Depend Dashboard version it can take 30min-1h.

Before first use soft when you press "Prepare Dash OBD" soft show message : You must download and install database !!! and show link for download it

Please Press this link download it and install. This files are required.

1. Please connect UHDS to PC and into car. We choose from XCan Menu VW / Skoda Jonson MQB and we have to "**Read Km**" and check that it is Jonson Control Version.

If dashboard is not JCI soft show You proper message.

2. Now we can Read EEprom OBD. Press "**Read EEprom OBD**" button. This function works without valid Ignition Key too..

3. Now we press button: **"Prepare DASH OBD"** - it take few seconds.

Please check result of this operation !!!

If software show operation was success then remove dashboard from the car and go to step 4. Dash will be OFF but don't worry.

If software show operation was failed and dash stay OFF you have to switch ignition OFF/On , if dash still OFF please disconnect battery for few second.

Now dash wake up and You can repeat this point again.

4. Desolder EEprom 95128 from dashboard and with EEprom programmer read it (don't solder it back to dashboard yet)

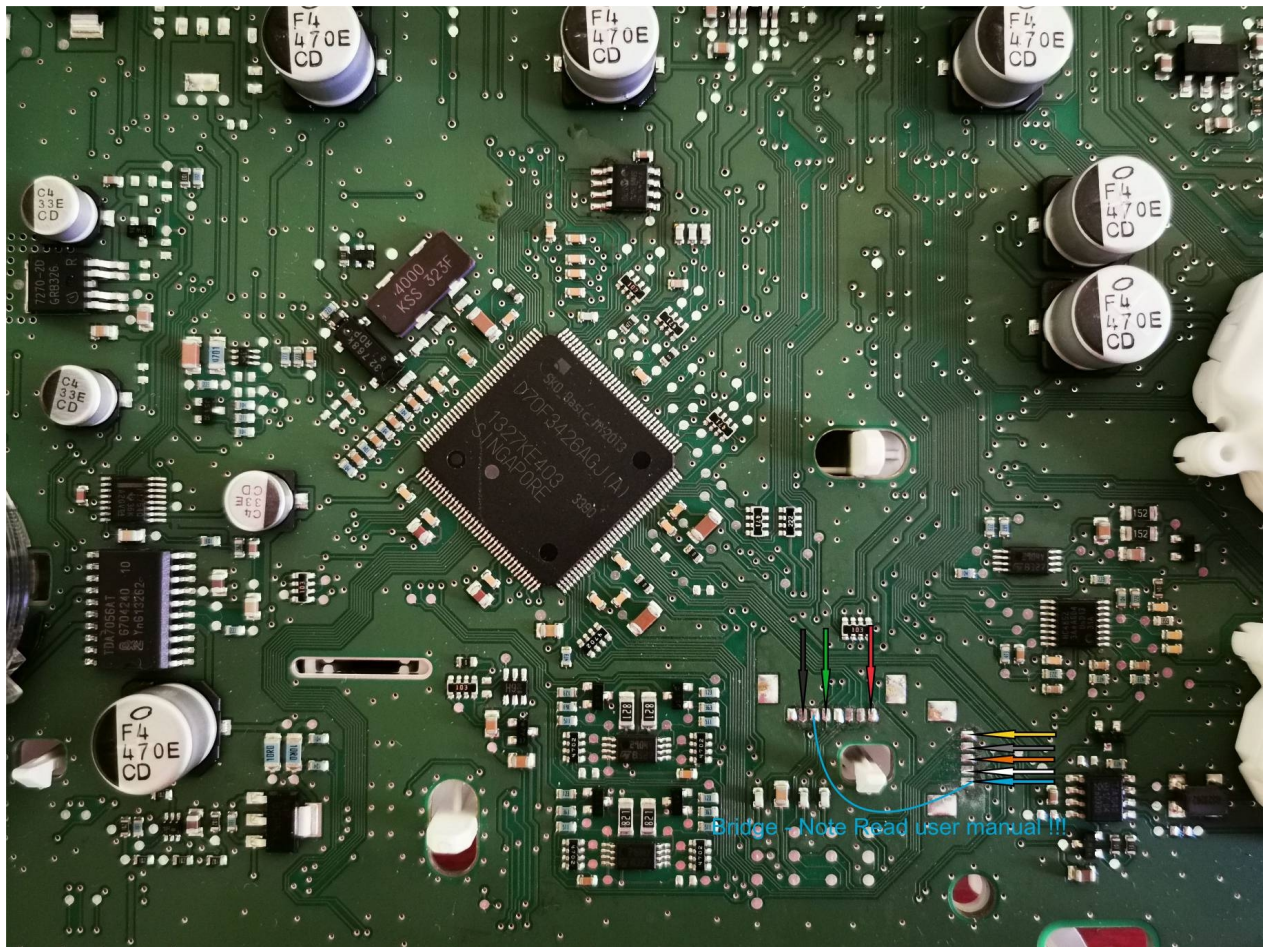
5. Please connect JTAG to PC and solder wires to board as on bellow picture.

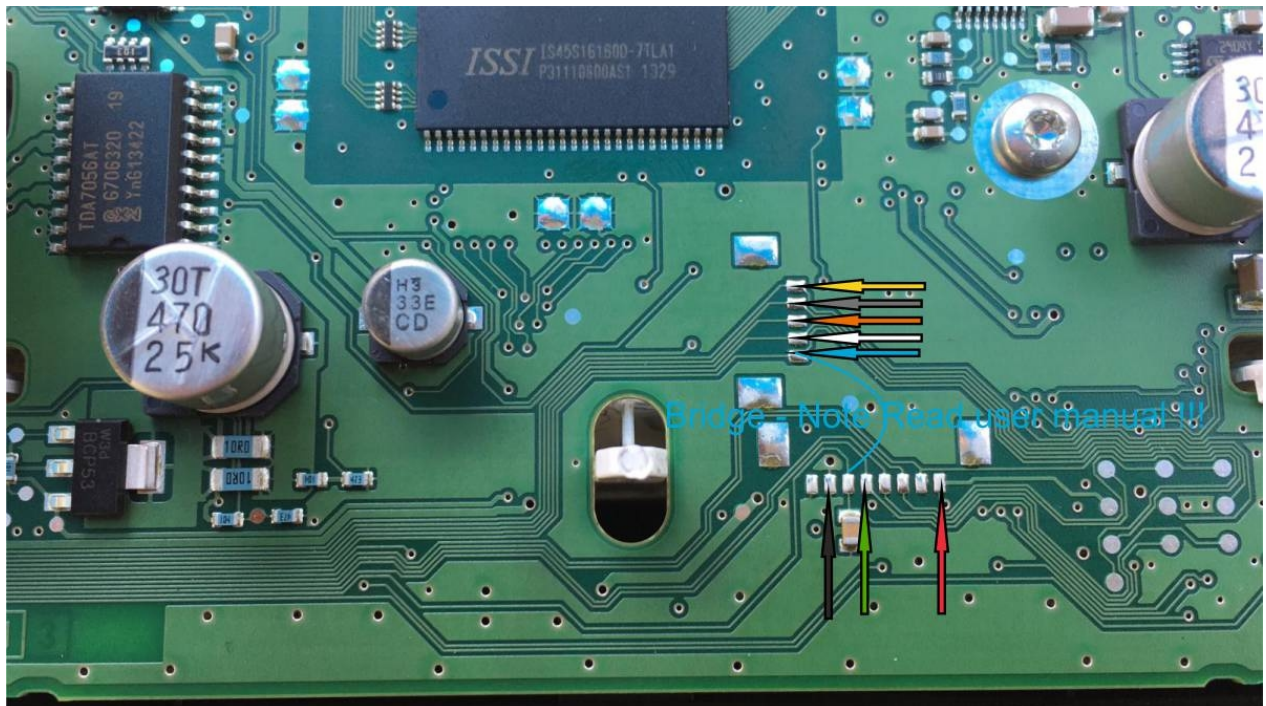
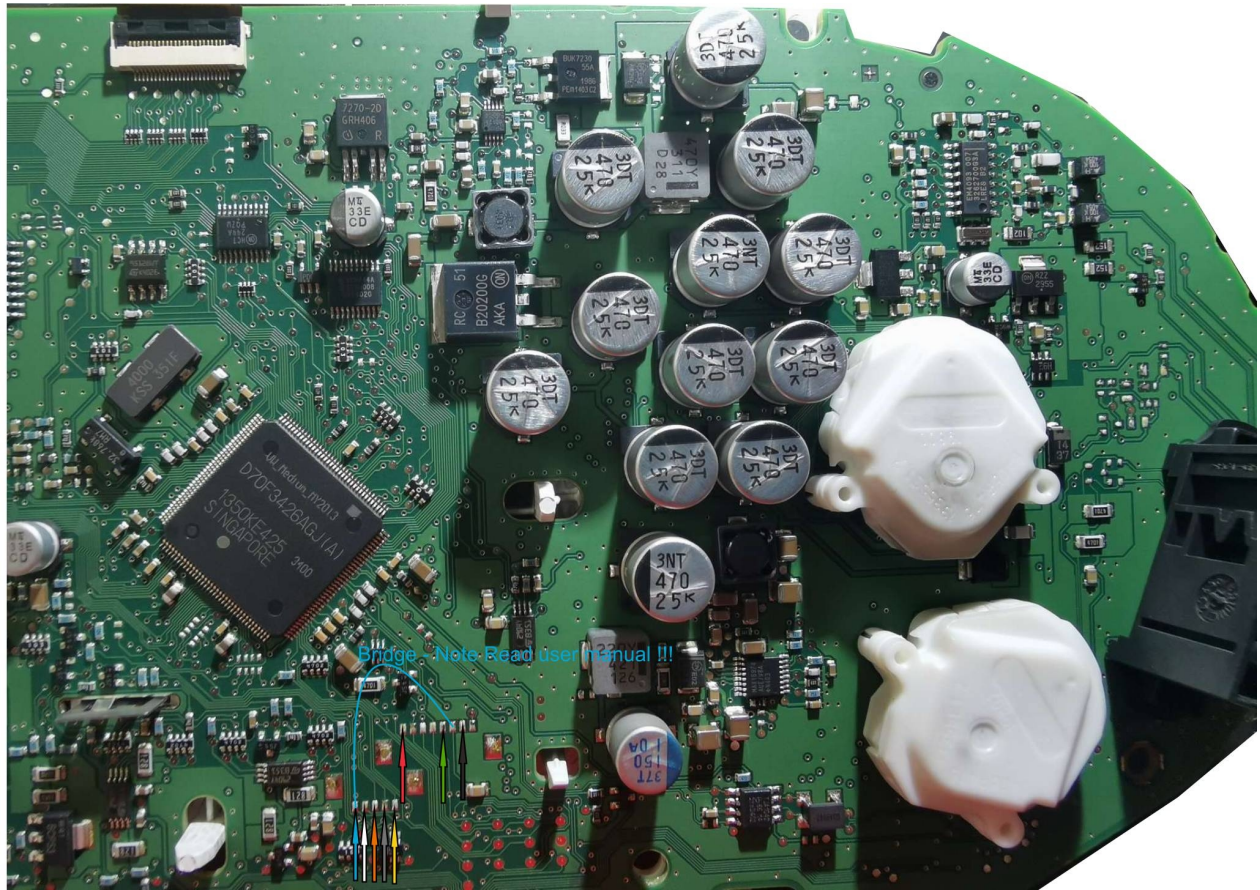
Will be good first read full Data backup by press **"Read Full BackUp by Jtag"**. it take about ~5 min.

Now we have to read security data (S-Key).

Important !!! When at read you get message check connection please desolder blue bridge.

There is to kind of board . You have to select proper connection :





We Press "**Read Skey by Jtag**". It take few seconds and we save file (skey.bin). It take about ~30 seconds

6. Connect UHDS to PC and press "**Prepare 95128**". Soft ask first for EEPROM 95128 bin file and next for Skey bin file.

Now it decode data and show actual Km and ask required KM. Please write new KM and save new bin EEPROM file.

With EEPROM programmer please write new bin file into 95128 EEPROM and solder back EEPROM into Dashboard.

Best solution is net new KM =0 and after you finish all steps you can use option "Write KM" and set required KM by OBD

7. Put dashboard back to Car , switch ignition ON . Dash stay be OFF but don't worry. With UHDS you have to reprogram Dashboard.

Press "**Flash Dashboard OBD**". This process can take about 20-40 min depend dash version.

Important!!! Checkbox name "**Advanced (select file for write flash)**" should be *unchecked* - in this case soft automatically

select flash file for you dashboard.

If it will be checked soft ask you about file and you must select file which be use for flashing dashboard ,

supported .ocd (our format files installed from database) and regular .odx Flash files.

8. If you in point 5 set KM=0 now You can set new KM OBD by press "**Write KM**"

That is All Dashboard wakeup and show new KM :)

Possible troubles

1. Problem -No File in database.

Solution: Please download last setup database files. If still no file available please remove dashboard open it and check is it

dashboard supported by theses option - mean on board you have MCU 70F3426 and EEPROM 95128.

If on board is other kind MCU or EEPROM mean these option not support this kind of dashboard.

Dashboards Visteon and dashboards on 70F3529 are not supported.

2. Problem: At Write flash we get error.

Solution: if at start procedure write flash we see (for example) :

```
Init Ok
Part No:
SW: 3390
HW:
```

HW or/and Part No. - is empty mean eeprom dump is corrupted or eeprom is not soldered on board correctly. Please check solder and check

dump of EEPROM. If we don't read properly eeprom before next we write eeprom, repair dash can be not possible to do.

BE SURE ALWAYS AT READ EEPROM THAT READ IS OK. USE ONLY GOOD PROGRAMMER FOR READ EEPROM

if EEPROM is ok then we should see (example):

Init Ok
 Part No: 5G1920741
 SW: 5297
 HW: EV_DashBoardJCIMQBAB

3. Problem: We can not connect wit dashboard , we get message 'Init Error' -mean no any connection dashboard <>UHDS. Check connection, cables.

VDO Continental MQB change KM

Change Km MQB VDO Continental dashboards VW/Seat/Skoda/Audi (not supported Virtual cockpits).

For dashboards VDO or Continental for Write Km we must have working ignition key for change km.
 Start XCAN and choose proper option VW/Seat/Skoda MQB 2013... or VW/Seat/Skoda MQB 06/2014...
 Now press button **'Write Km'**
 That is all

Johnson Control MQB Change KM 70F3529

For change km in Dashboard Jonson Control or Visteon with 70F3529 you must have unlocked dashboard.
 For unlock dash you can ask us. Dash must be send to us for unlock.
 Supported VW and Skoda brand.

Johnson Control MQB Change KM 70F3525

For change km in Dashboard Jonson Control or Visteon with 70F3525 you must have unlocked dashboard.
 For unlock dash you can ask us. Dash must be send to us for unlock.
 Supported VW and Skoda brand.

VW Virtual Dashboard (70F3525,70F3526)

For unlock dash you can ask us. Dash must be send to us for unlock.
 After unlock it is possible to set Km by OBD without any limitation.
 Only Supported VW Brand (skoda,seat,audi is not supported)

VW Beatie 06/2014... 70F3427+95320

Please look chapter "Skoda CityGo 70F2427"

VW Beatie ...06/2014 70F3427+95320

Write Km works normally OBD. After change km you have to disconnect battery in car for few second.

After connect again you will see new value on display.

If soft all steps pass ok bt km not changed mean dashboard is 06/2014+ and you have to use proper option.

Audi A4/A5/Q5 2007...2015

Change KM in Audi A4/A5/Q5 2007...2015 Dashboard

1.Change Km by OBD

Operation in most case can be done by OBD. We press button write KM and soft ask about start code value.

We should write 0 -mean we start from begin. This scan option can take to 1min -60min. Sometimes can be after some time

we ge message **"Transmission Problem Try again"**.

Please switch ignition off and next on and repeat write Km again but now not from code 0 but from code when before was interrupted. Finally we must wait till soft find the code (code is always 0..FFFF).

After success unlock dash if we need to change km in future we don't must wait because dash stay in unlock state.

Some cars after 2015 year are protected and no possible to unlock. Software say 'Can not find unlock code'.

In this case only one possible option is remove dashboard , read eeprom 95320 and do it by option

"A4/A5/Q5 by EEprom".

Warning !!! if dash has km higher as 655.000 it is no possible to change KM OBD. in this case please use option by dump

2.Change Km by EEprom

We have to options for do km by dump.

a. Change km by Skey (read By OBD) and dump of eeprom 95320 (read by programmer)

b. Change Km by dump of EEprom 95320 only (read by programmer)

a. Change Km by dump of EEprom 95320 only (read by programmer).

This opeartion is only one possible option for change km in dashboards where is not possible to unlock dashboard OBD

This option is easy , soft ask us dump of eeprom and new km. After that it calculate new dump of eeprom which we

have to write by programmer to eeprom.

b. Change km by Skey (read By OBD) and dump of eeprom 95320 (read by programmer).

If we try do km as in point 1 and was not possible to unlock dash - mean this option is not possible too.

When we choose this option first we need to read Skey OBD. Operation starts from unlock dashboard same as in point 1.

After soft find unlock code it read Skey and save to file.

Sometimes we can get message **"Key is Empty !!!! -Wrong Version Selected"** it mean it is no possible to change km by this option.

Skoda CityGo 70F3427

Skoda CityGo 70F3427 +95320

70F3427+95320



How to set new km:

- 1.Read MCU 70F3427 Flash (SPI Connection) by Jtag
- 2.Read 95320 EEprom (back side of board)
- 3.Start UHDS -> XCAN ->Skoda CityGo... 70F3427 + 95320
- 4.Select Flash File and eeprom file.
- 5.Press "Set new KM" Button and set new km value
- 6.Soft save new flash and eeprom file
7. Write By jtag 70F3427 Flash file and by eeprom programmer 95320 .
- 8.Tha is all

VW UP/City/Mi 9S12XHZ

For cars before ...06/2014 possible options works OBD:

Read KM
Write KM
Read EEprom
Write EEprom

For cars before 06/2014... possible options works OBD:

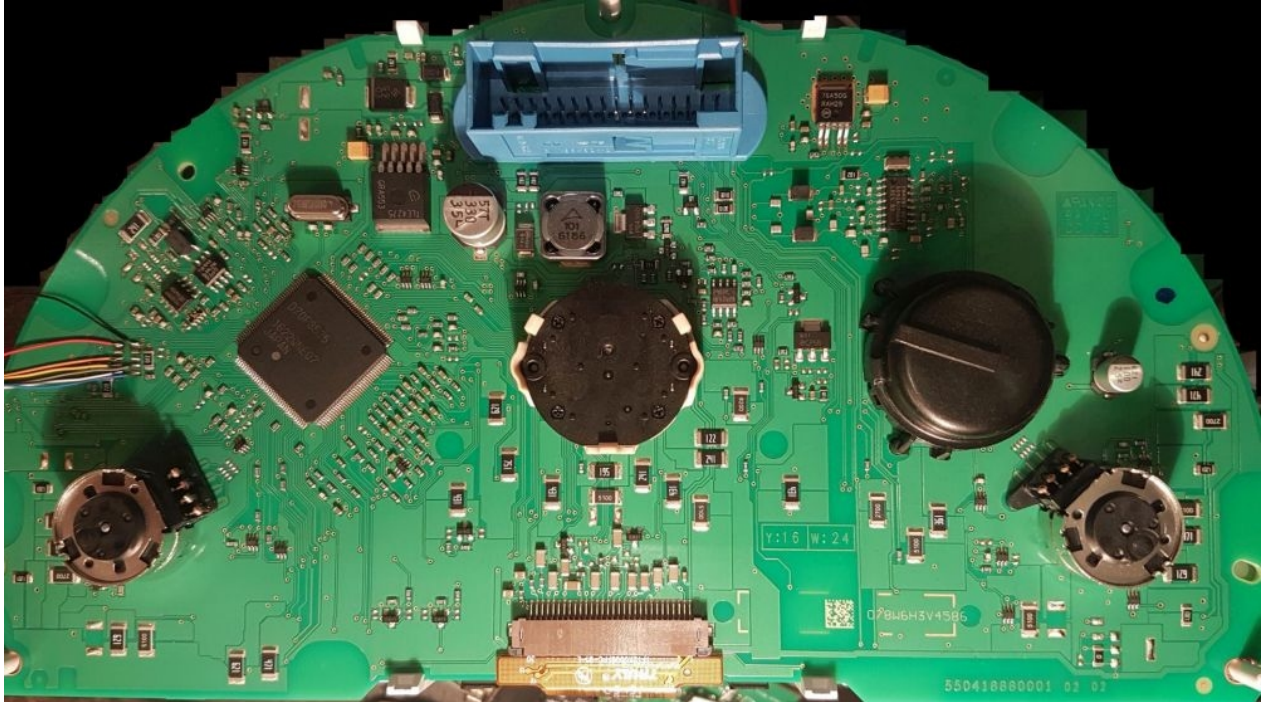
Read KM
Write KM
Read EEprom (only partially , without area of Component security and km)
Write EEprom (only partially , without area of Component security and km)

VW Up 70F3525/70F3526 2017...

For change Km you have to do remove dash and do few steps:

help: <https://youtu.be/ESYZwr5IY6I>

1. Read EEprom 95320 by programmer
2. Read Flash NEC 70F352x by programmer
3. Open Flash File
4. Open EEprom File
5. Press Button New KM
6. Save Mod EEprom File (soft ask for new km)
7. Save Mod Flash File
8. Write EEprom 95320 by programmer
9. Write Flash NEC 70F352x by programmer



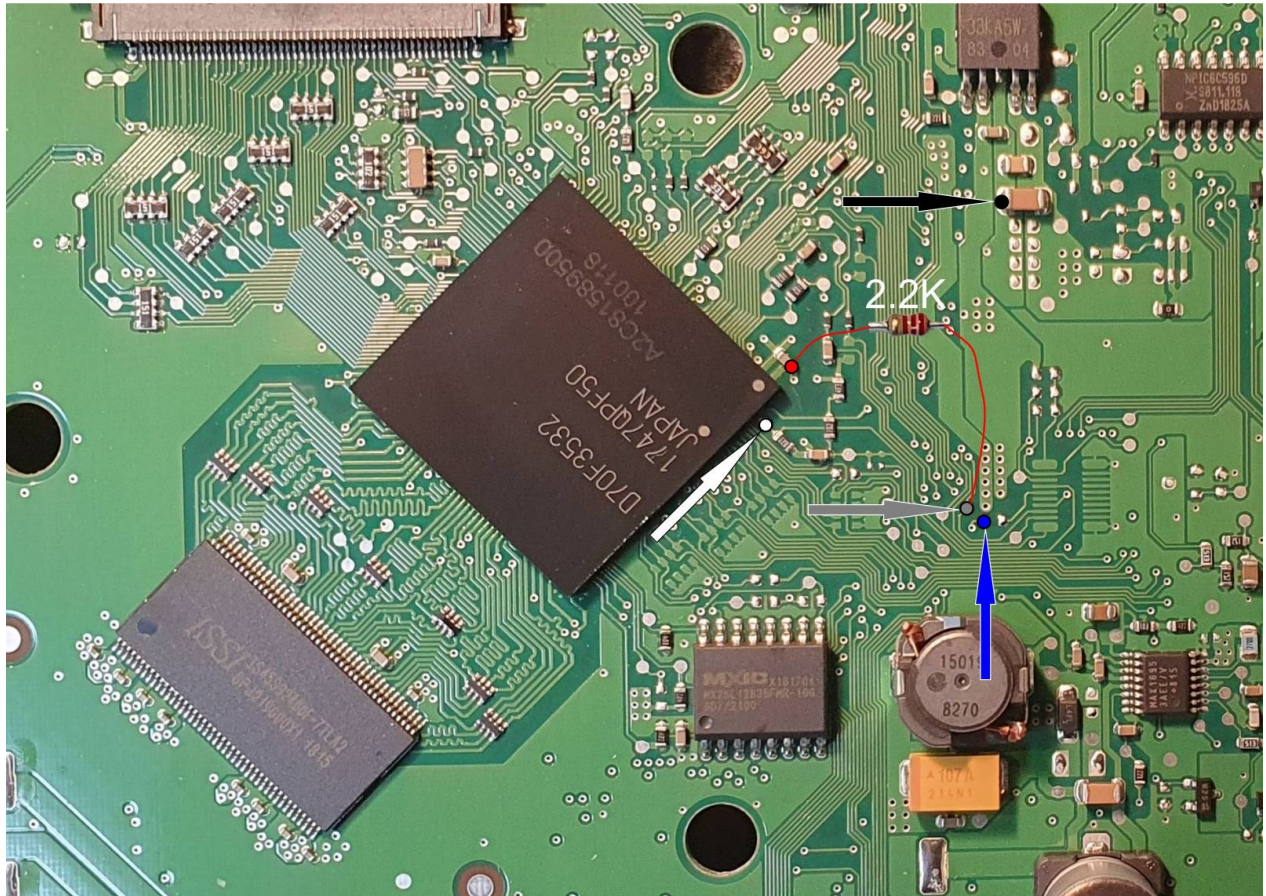
VW VDO 70F3532

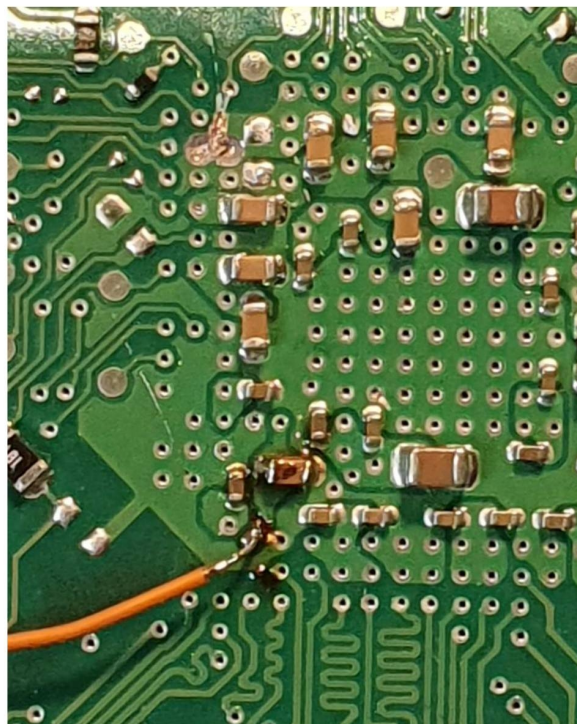
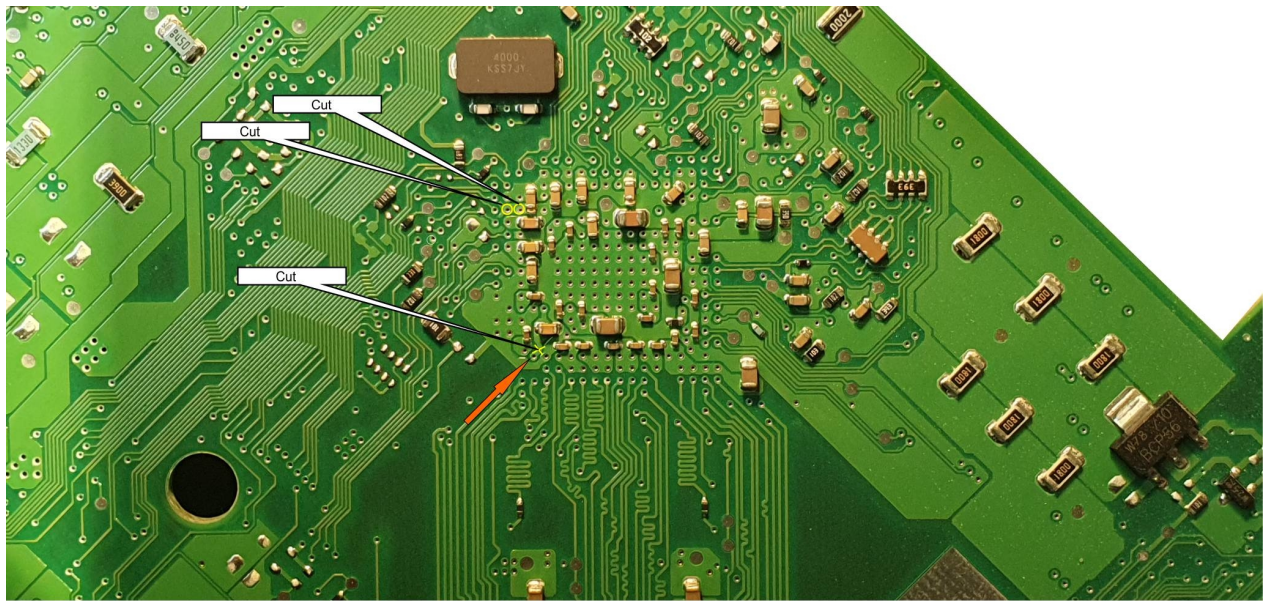
This Connection only for special use- normally it works OBD and dont need to open dash.

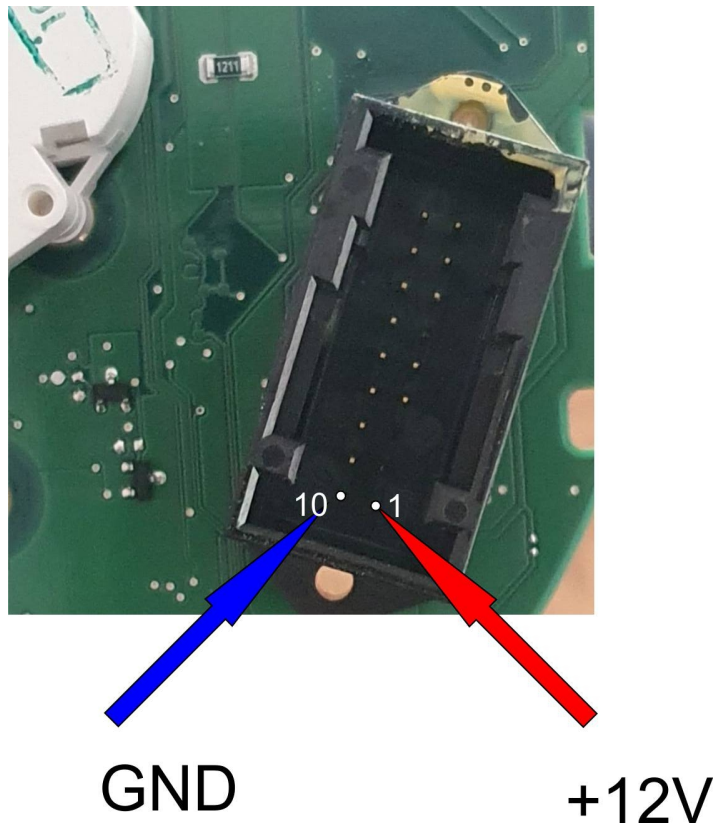
Connection give possibility read DataFlash and Flash .

It is some difficult connection then is recommended only for advanced users.

it required power dashboard from external 12V power supply.





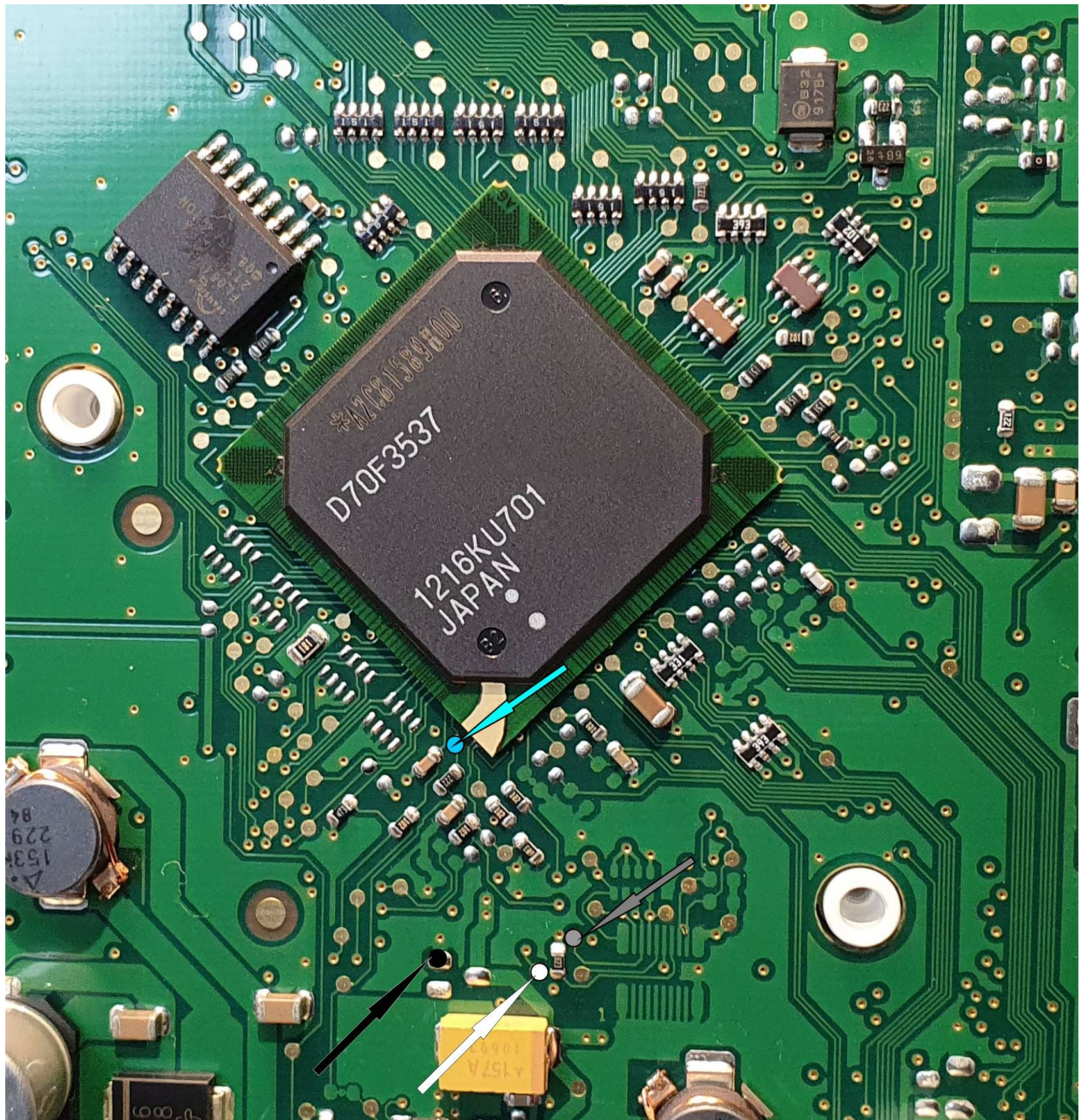


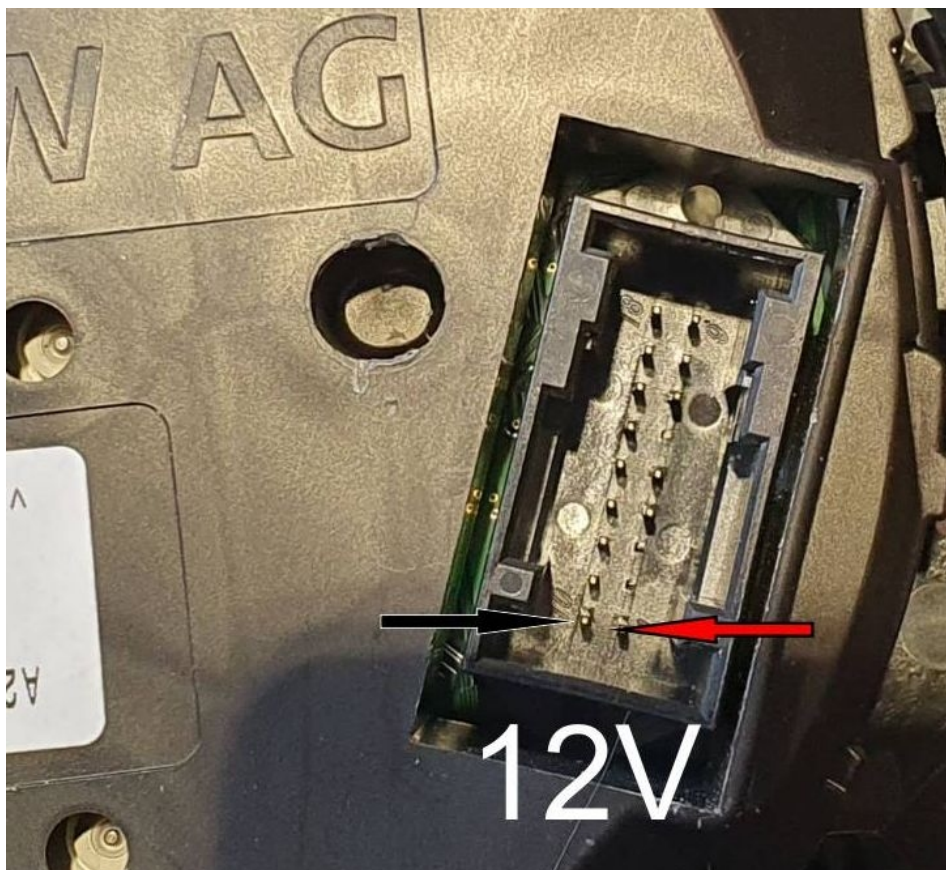
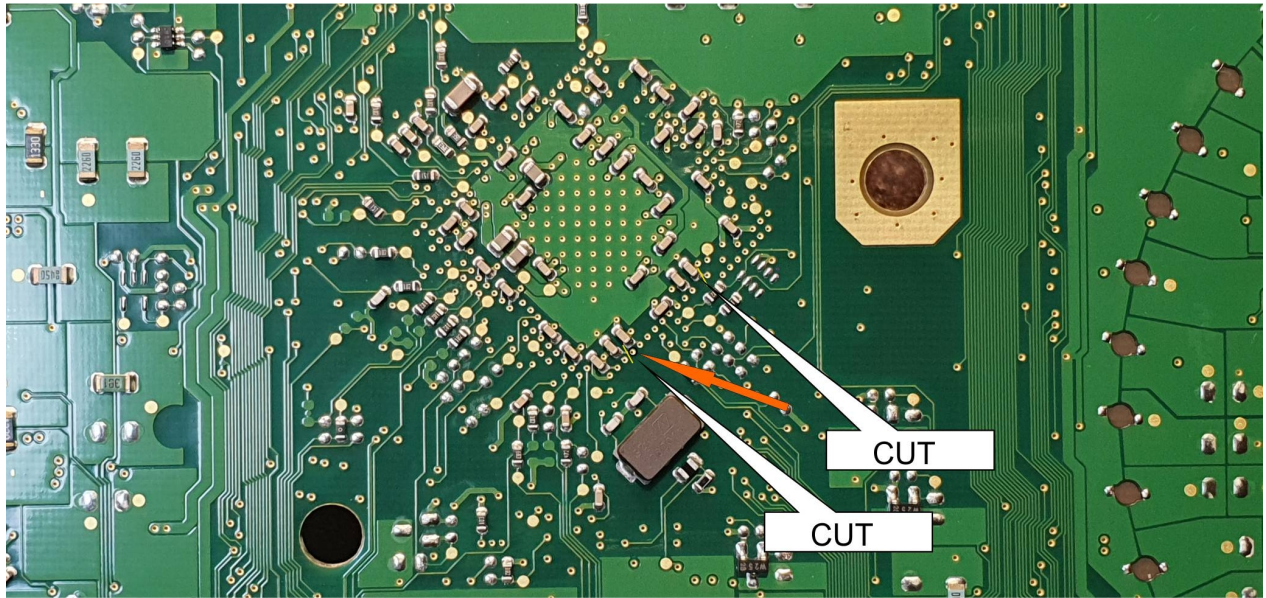
VW VDO 70F3537

This Connection only for special use- normally it works OBD and don;t need to open dash.

Connection give possibility read DataFlash and Flash .

it required power dashboard from external 12V power supply.





VW Golf 6 (Seat Ibiza) Magneti marelli

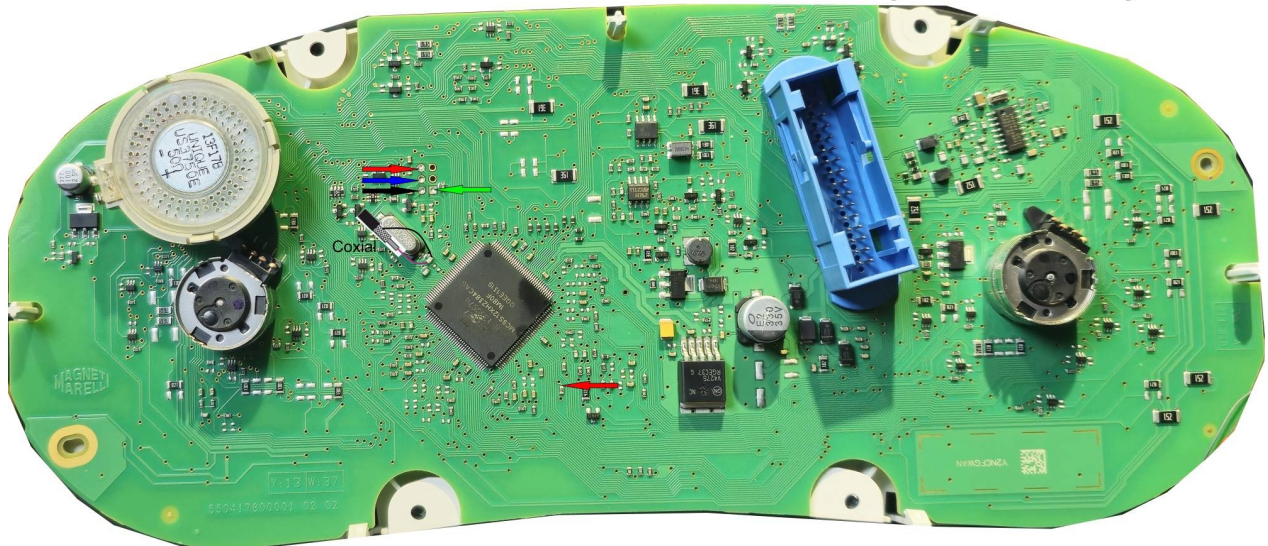
Golf 6 (Magneti Marelli)
Seat Ibiza (Magneti Marelli)

All operation works OBD till 06/2014

- Read EEprom
- Write EEprom
- Read KM
- Write KM
- Learn keys
- Decode immo data from read eeprom

After 06/2014 if not works OBD required use Jtag solder wires as on picture and read eeprom.
By press button New Km in frame Dump Tool you can set new Km

Seat Ibiza HC921XHZ384 (secured)



Change Km ECU

Change Km PCR2.1 Boot Mode

1. Open ECU.
2. Connect ECU in Boot mode it as on picture in chapter 'PCR2.1 Read CS+PIN from ECU' .
3. Select PCR2.1 from Menu next from panel 'Flasher' push Button '**Boot mode EEP**'
4. Read KM -we can check actual Value

5. Write KM
 6. Close ECU and put to the car
- That is all :)

Learn Key PQ Platform

VW UP 2017... 70F352x+95320

How to learn keys VW Up 2017... (70F352x +95320).

1. Remove dashboard from car , read MCU NEC 70F352x and eeprom 95320.
2. Start XCAN and select option 'VW UP 2017 NEC 70F35xx' and go to panel **'Learn Keys'**.
3. In Frame **'Source files from dashboard'** open flash file and eeprom file
4. Put new Blank Transponder into Keymaker II and press button **'Make Dealer Key'**
5. Put Dashboard back to car and Learn Keys by press button **'Learn Key'**. All keys will be erased and we must learn all required keys.

VW Up ...2014 , City Go ...2014, Seat Mi ...2014 (MC9S12XHZ384)

How to learn keys VW Up ...2014 , City Go ...2014, Seat Mi ...2014 (MC9S12XHZ384)

1. Start XCAN and select option VW Up/CityGo/MiI ...2014.
2. Press button **'Read EE'** and save file
2. Start XCAN and select option **'VW UP/City/Mi 2014...'** and go to panel **'Learn Keys'**.
3. In Frame **'Source files from dashboard'** open eeprom file .
4. Put new Blank Transponder into Keymaker II and press button **'Make Dealer Key'**
5. Now you learn keys by press button **'Learn Key'**. All keys will be erased and we must learn all required keys.

VW Up 2014... , City Go 2014..., Seat Mi 2014... (MC9S12XHZ384)

How to learn keys VW Up 2014... , City Go 2014..., Seat Mi 2014... (MC9S12XHZ384)

1. Remove dashboard from car , read MCU MC9S12XHZ384 EEprom. You can use Jtag . MCU is secured.
2. Start XCAN and select option **'VW UP/City/Mi 2014...'** and go to panel **'Learn Keys'**.
3. In Frame 'Source files from dashboard' open eeprom file .
4. Put new Blank Transponder into Keymaker II and press button **'Make Dealer Key'**
5. Put Dashboard back to car and Learn Keys by press button **'Learn Key'**. All keys will be erased and we must learn all required keys.

VW Polo , Amaro , Skoda Rapid , Fabia Johnsons Control Dashboard

How to learn Keys in car with Johnsons control Dashboard 2010...

VW Polo
 VW Amaro
 Skoda Fabia
 Skoda Rapid
 and all other cars with Johnson Control Dashboard Platform PQ.

1. Start XCAN , connect UHDS to PC and to car OBD choose option **'Polo/Fabia/Amarok Johnson'** , next press button **'Read Sec Block'** and save file.
2. Start XCAN and choose option **'Immo 4 UDS'** and connect Keymaker II to PC. In frame **'Target (new)**

Immo Data'

press button **'Import from Sec Block'** and choose file read in point 1.

Put new key(transponder in Keymaker II) and press button **'Make Dealer Key'**.

3. Connect UHDS to PC and to car OBD and press button **'Learn Key'** (OBD). Soft ask as how many keys we want to learn. All old keys will

be erased and now will be program all keys .

Please insert all keys to ignition one by one (old and new keys)

VW ,Audi , Seat , Skoda VDO NEC+24c32/24C64 Megamos48 Tranponder

How to learn Keys in car with VDO (Continental) NEC+24C32/24C64 Dashboard 2009...2018.

Platform PQ with transponder Megamos 48.

All kind of cars with this type dashboards.

Method 1 (Required KeyMaker II and UHDS)

1. Start XCAN , connect UHDS to PC and to car OBD choose proper option 'NEC+24c32 or NEC+24C64 or VW TFT',

Press button **'Read S-Key OBD'**. It works only if we have working key.

Warning !!!

If is lost all keys we have to prepare first eeprom

by programmer or start dashboard in service mode. It required remove dashboard from car and must be done on bench.

2. Press button **'Read Sec Block'** and save file.

2. Start XCAN and choose option **'Immo 4 UDS'** and connect Keymaker II to PC. In frame **'Target (new)**

Immo Data'

press button **'Import from Sec Block'** and choose file read in point 1.

Put new key(transponder in Keymaker II) and press button **'Make Dealer Key'**.

3. Connect UHDS to PC and to car OBD and press button **'Learn Key'** (OBD). Soft ask as how many keys we want to learn. All old keys will

be erased and now will be program all keys one by one (old and new keys).

Method 2 (only with UHDS)

1. Start XCAN , connect UHDS to PC and to car OBD choose proper option 'NEC+24c32 or NEC+24C64 or VW TFT',

Press button **'Read S-Key OBD'**. It works only if we have working key.

Warning !!!

If is lost all keys we have to prepare first eeprom

by programmer or start dashboard in service mode. It required remove dashboard from car and must be done on bench.

2. Press **'Learn Key'** button. Soft ask us erase old keys. We can decide to erase all old keys stored or not.

Next ask us how many keys we need to learn. Please insert all keys to ignition one by one

VW ,Audi , Seat , Skoda VDO NEC+24c32/24C64 Megamos AES Tranponder

How to learn Keys in car with VDO (Continental) NEC+24C32/24C64 Dashboard 2009...2018.

Platform PQ with transponder Megamos AES.

All kind of cars with this type dashboards.

Method 1 (Required KeyMaker II and UHDS)

1. Start XCAN , connect UHDS to PC and to car OBD choose proper option 'NEC+24c32 or NEC+24C64 or VW TFT',

Press button '**Read S-Key OBD**'. It works only if we have working key.

Warning !!!

If is lost all keys we have to prepare first eeprom

by programmer or start dashboard in service mode. It required remove dashboard from car and must be done on bench.

2. Put New Key with Megamos AES transponder into Keymaker II. Start '**Key Maker RX**'. keys Go to panel 'Keymaker' and select

VW->VW PQ AES Key Prepare.Press button Make It.

3. Close key maker Soft and start again same option as in point 1.

Press '**Learn Key**' button. Soft ask us erase old keys. We can decide to erase all old keys stored or not.

Next ask us how many keys we need to learn. Please insert all keys to ignition one by one.