Visteon_70F35xx

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Getting Started

Options available for Visteons /Jonson Control Dashboards:

1. Read KM OBD
2. Write KM OBD (dashboard must be first reset to 0 km)
3. Prepare Dashboard by Jtag (reset Km 0)

Please first check last update of jtag and UHDS software

For set new km we need first use Jtag for reset km to 0km

Start UHDS soft and select XCAN , next "VW/Skoda Johnson MQB 70F35xx"

Connect Jtag and UHDS to USB port in PC.
Connect Jtag to board of your dashboard use proper picture.

Press button "Prepare Flash" . It should take few minutes .
Jtag automatically make backup of flash and dataflash of MCU

After that you can connect dashboard to the car and set new required value.
You can set new KM only one time !!!. If in future you need to set again you need to prepare dashboard again.

System requirements

For change km Visteon Dashboard we need:

1. Jtag Tool
2. UHDS Tool
3. JG0043 (NEC V850E2 Sec) Jtag License
4. JG0022 (NEC V850E2 Sec) Jtag License
5. VW0045 (VW JC 70F35xx) UHDS License

Getting help

1. Please Connect UHDS and Jtag to your PC/Laptop USB ports.
2. Solder Jtag Wires as shown in the pictures. For some dash's you have 2 Methods and you can choose one of them which you prefer. The unlock purpose, its not important which method you choose.
3. Start UHDS software, next press button XCAN next select "VW/Skoda Johnson MQB 70F35xx"
4. Solder Jtag wires as per your picture (you can choose method 1 or method 2 depending which suits you)
5. Press button "Prepare Flash" and wait a few mins for it to finish the job.
6. Now your dash is prepared and will have 0 km. You can put speedo back into the car and set new KM by OBD. It can be done only one time. If you need do it again, then you must start the process from the beginning.

There are 3 kinds of supported boards.

Part numbers:

517920730
517920730A
517920731A

3G5920640
3G5920640A
3G0920740A
3G0920741A
3G0920741B
3G0920741C
3G0920751A
3G0920751B
3G0920940A
3G0920941A
3G0920951A

5E0920730B
5E0920730
5E0920731
5E0920731B
5E0920780B
5E0920780D
5E0920780E
5E0920780F
5E0920781B
5E0920781C
5E0920781D
5E0920781E
5E0920781F
5E0920930
5E0920930B
5E0920931B
5E0920980B
5E0920980E
5E0920981B
5E0920981E
5E0920981F

5G0920630A
5G0920640A

5G1920640A
5G1920641A
5G1920730
5G1920730A
5G1920731
5G1920731A
5G1920751A
5G1920751B
5G1920930
5G1920930A
5G1920931
5G1920931A

5G1920940A
5G1920941A
5G1920740A
5G1920740B
5G1920741A
5G1920741B

5GG920630

5TA920640
5TA920641
5TA920730
5TA920731
5TA920740
5TA920741
5TA920741A
5TA920741B
5TA920741C
5TA920750A
5TA920750B
5TA920751A
5TA920751B
5TA920930
5TA920931
5TA920940
5TA920941

and others on 70F3525 or 70F3529 MCU

Learn Keys

To Learn Key

Learn key Requirements:
1. Original Key from this Car
2. New Key which we want to learn
3. UHDS tool
4. KeyMaker II tool

Learn Key procedure:

1. Connect Jtag to PCB (solder all wires as per your picture) and press the button "Read Full Backup by Jtag"

2. Press button "Security Block Editor" and next press button "Open Full backup .xc1" and we load file read from first step.

3. Now we have decoded all immo data. We have to save it by pressing button "Save to .txt" for later use.

4. Now connect Keymaker II put the original key into the KeymakerII slot and press the button "Read CS-Key". Soft ask us CS - we put CS decoded by security block editor . Soft will read CS-Key and save it to file.

5. Put your new Key Into KeymakerII and Press the button "Make Dealer Key". First Software will ask CS

(we have it decoded from security block editor) next we have to choose how we want to give CS-Key.
There are 2 options, read from Original Key or load from file. We can select load from file and we select the file what we read in point 4.
Now the dealer Key is prepared

6. Connect UHDS to OBD in Car, replace dashboard into the car and press the button "Learn Key". from the "Main" tab.
Software will ask us CS and we have to put CS decoded from security block. If its a keyless system the key must be held at coil (on side of steering column). All keys are re-learned here and have to be learned in again (old and new keys) , one by one

if car has option Hands free and the hands free function does not work you can go on Panel "Kessy" and press button "login"

Learn Dashboard

To Learn Dashboard to the Car.

If we want to learn a used Visteon 70F35xx Dashboard to the car we must have:
- Original Dashboard (Visteon 70F35xx , VDO 70F35xx , Jonson Control 70F34xx , Virtual 70F35xx)
- New Visteon 70F35xx Dashboard which we want to learn to the car.
- KeyMaker II for CS-key from original Key

1. We have to use VCDS or other tool Read Coding from ABS. It could be needed later as some times the ABS coding string gets wiped when a speedo is removed.

2. We have to read Immo data from original Dashboard
Please select proper dashboard from UHDS menu and use manual for info on how to read Immo Data and CP protection.
We must have from original Dashboard:
-CS
-CP
-CP Key
-VIN
-PW (power Class)
-CNF (config)

3. We also read Immo data from donor Visteon 70F35xx Dashboard which we want to learn.
Connect Jtag as in pictures and Press the button "Read Full Backup by Jtag" and save.
Now Press the button "Security Block Editor" and load this file to decode all immo and CP data. We can save it to a txt file by pressing button "Save to .txt" file.

4. Connect keymaker II and put the original key in the slot. Press the button "Read CS-key" software will ask us the CS , we use CS decoded from the original dash from security block editor option. Now we can save CS-key to file.

5. Install the donor Visteon 70F35xx Dashboard into the car and goto panel "Immo5". We put VIN, CS,PW,CNF same as we decoded from original dashboard to frame "Target (new) Immo data Dashboard" .
In frame "Source (old) immo data" we put CS what we decoded from donor Visteon 70F35xx Dashboard.
Press Button "Change Immo Data". If all is successful then press button "Login dash".

6. Now we need to learn Keys. We press the button "Learn key" from the "Main" tab. software will ask us CS , we give CS what was decoded from original dashboard and we learn one by one all keys what was programmed to the original dash in car.

7. Learn all modules with immo to dash (depending on the car it can be ECU, TCU, ELV) . We go to panel ECU and press the button "Import from CSkey", we select the CS-Key read from the original Key (step 4)

and now we can press button "Login ECU".
We do the same for TCU and ELV if car has it "Login TCU" & "Login ELV"

Now the car is ready to start.

8 Now we have to learn component protection. Go to Panel "CP Dash" and we first fill frame "Component Protection Access key (CP key)". "Current Access key" -we put here data decoded from donor Visteon 70F35xx Dashboard
"New Access key " - write from original Visteon 70F35xx dash from the car. Now Press the button "Apply".

9. Now we fill the frame "Component Protection CP" . "Access Key" and "CP" field we put access key from original Dashboard. Now press the button "Apply".

10 That is all . If we lost the Coding string from ABS we have to use VCDS or other tool and write back original coding string to ABS (step 1).

If the car has the option Hands free and hands free is not working, you can goto Panel "Kessy" and press the button "login"

Read Immo Data CS and CP

This operation required to solder wires from Jtag
Connect Jtag as on pictures and Press button "Read Full Backup by Jtag"
Now Press button "Security Block Editor" and load this file for decode All immo and CP data. We can save it to txt file by press button "Save to .txt" file

Learn used ECU

For learning a donor ECU to the car we must have:

-CS from donor ECU
-CS , PW from original ECU (alternatively we can decode it from the original Dashboard and Key)

Learn a donor ECU to the car:

in XCAN we select the Dash type what we have and goto the "Main" panel.

1. Read Immo Data From Visteon 70F35xx Dashboard.
This operation requires us to solder wires from Jtag tool.
Connect Jtag as per pictures and Press the button "Read Full Backup by Jtag" and save to file.
Now Press the button "Security Block Editor" and load this file to decode All immo and CP data. We can save it to a text file by pressing button "Save to .txt" file

2. Connect keymakerII and put the original key in the slot. Press the button "Read CS-key" software will ask us CS , we use the CS decoded from the original dash by security block editor option (step 1). Now we save CS-key to file.

Back to XCAN we select our dashboard and go to panel "ECU"

3.Change Immo data (ECU) :
Required Immo Data from original ECU, we can decode from CS-key. Go to Panel "ECU" and press the button "Import from CS-Key". Software will show CS (ECU) -required later as Target CS

"Target (new) Immo data" we fill with data what we need to be in the car (meaning data what was originally in ECU in this car in the past), we can get it from point 3.
"Source (old) immo data" we put CS from donor ECU what we want to learn . You can decode CS by panel "ECU Dump Tool" (supporting some versions ECU)
Now press the button "Change immo data ECU". Now our ECU has new data stored.

4.Now we have to learn the MAC. We goto "immo5" panel and fill frame "Target (new) Immo data Dashboard" field "CS" with CS decoded by security block editor from the dashboard. Now we press the button "Login".
Car is ready to start

Note.
Please always remember CS in Dashboard, ECU, TCU, ELV are not same values. Every module in car has different CS
CS DASH you can extract only from dashboard
CS ECU,TCU,ELV you can extract from these modules (if possible) or decrypt from CS-Key.

We have to know PW (power class). Has to be the same in all modules. In dashboard and ELV we can change PW by change Immo Data. But in ECU or TCU, PW is stored in the Flash. That PW is depended what software/firmware is loaded to the ECU or TCU.

Learn used TCU

For learning a donor TCU to the car we must have:

-CS from donor TCU
-CS , PW from original TCU (alternatively we can decode it from the original Dashboard and Key)

Learn a donor TCU to the car:

in XCAN we select the Dash type what we have and goto the "Main" panel.

1. Read Immo Data From Visteon 70F35xx Dashboard.
This operation requires us to solder wires from Jtag tool.
Connect Jtag as per pictures and Press the button "Read Full Backup by Jtag" and save to file.
Now Press the button "Security Block Editor" and load this file to decode All immo and CP data. We can save it to a text file by pressing button "Save to .txt" file

2. Connect keymakerII and put the original key in the slot. Press the button "Read CS-key" software will ask us CS , we use the CS decoded from the original dash by security block editor option (step 1). Now we save CS-key to file.

Back to XCAN we select our dashboard and go to panel "TCU"

3.Change Immo data :
Required Immo Data for TCU we can decode it from CS-key. Go to Panel TCU and press button "Import from CS-Key". Software will show CS (TCU) -required later as Target CS

"Target (new) Immo data" we fill with data what we need to be in car (meaning data what was original in TCU in this car in the past), we can get it from point 3.
"Source (old) immo data" we put CS from donor TCU what we want to learn. If it is DQ 250 we can decode it by pressing button "Import from external eeprom"
Now press the button "Change immo data". Now our TCU has new data stored.

4.Now we have to learn the MAC. We goto "immo5" panel and fill frame "Target (new) Immo data Dashboard" field "CS" with CS decoded by security block editor from the dashboard. Now we press the button "Login".
Car is ready to start

For now we have the possibility to decode CS from dump from DQ250, in other TCU models you must know the CS already. -for now we have no option to decode it.

Note.
Please always remember CS in Dashboard, ECU, TCU, ELV are not same values. Every module in car has different CS
CS DASH you can extract only from dashboard
CS ECU,TCU,ELV you can extract from these modules (if possible) or decrypt from CS-Key.

We have to know PW (power class). Has to be the same in all modules. In dashboard and ELV we can change PW by change Immo Data. But in ECU or TCU, PW is stored in the Flash. That PW is depended what software/firmware is loaded to the ECU or TCU.

Learn Used ELV

For learning a donor ELV to the car we must have:

-CS from donor ELV
-CS , PW from original ELV (alternatively we can decode it from the original Dashboard and Key)

Learn a donor ELV to the car:

in XCAN we select the Dash type what we have and goto the "Main" panel.

1. Read Immo Data From Visteon 70F35xx Dashboard.
This operation requires us to solder wires from Jtag tool.
Connect Jtag as per pictures and Press the button "Read Full Backup by Jtag" and save to file.
Now Press the button "Security Block Editor" and load this file to decode All immo and CP data. We can save it to a text file by pressing button "Save to .txt" file

2. Connect keymakerII and put the original key in the slot. Press the button "Read CS-key" software will ask us CS , we use the CS decoded from the original dash by security block editor option (step 1). Now we save CS-key to file.

Back to XCAN we select our dashboard and go to panel "ELV"

3.Change Immo data (ELV) :
Required Immo Data from original ELV, we can decode from CS-key. Go to Panel "ELV" and press the button "Import from CS-Key". Software will show CS (EVL) -required later as Target CS

"Target (new) Immo data" we fill with data what we need to be in the car (meaning data what what was original in TCU in this car in past), we can get it from point 3.
"Source (old) immo data" we put CS from donor ELV what we want to learn . For now its not possible to read this MCU from the ELV. only one way to know CS from donor ELV is to have it with Dash and key and decode it it from CS -Key
Now press the button Change immo data. Now our ELV has new data stored.

4.Now we have to learn the MAC. We goto "immo5" panel and fill frame "Target (new) Immo data Dashboard" field "CS" with CS decoded by security block editor from the dashboard. Now we press the

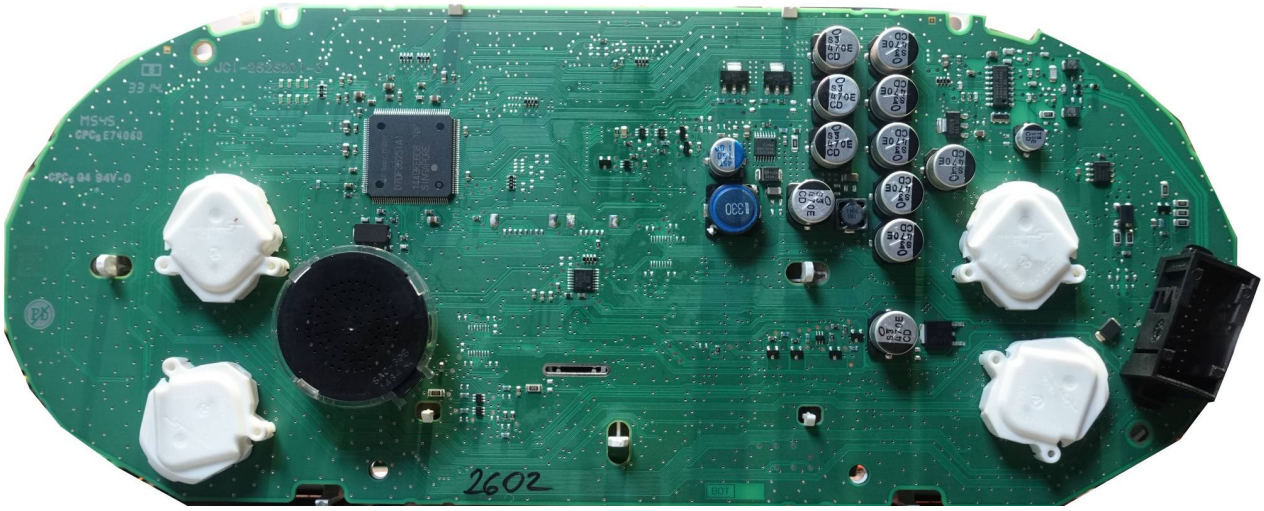
button "Login".
Car is ready to start

Note.
Please always remember CS in Dashboard, ECU, TCU, ELV are not same values. Every module in car has different CS
CS DASH you can extract only from dashboard
CS ECU,TCU,ELV you can extract from these modules (if possible) or decrypt from CS-Key.

We have to know PW (power class). Has to be the same in all modules. In dashboard and ELV we can change PW by change Immo Data. But in ECU or TCU, PW is stored in the Flash. That PW is depended what software/firmware is loaded to the ECU or TCU.

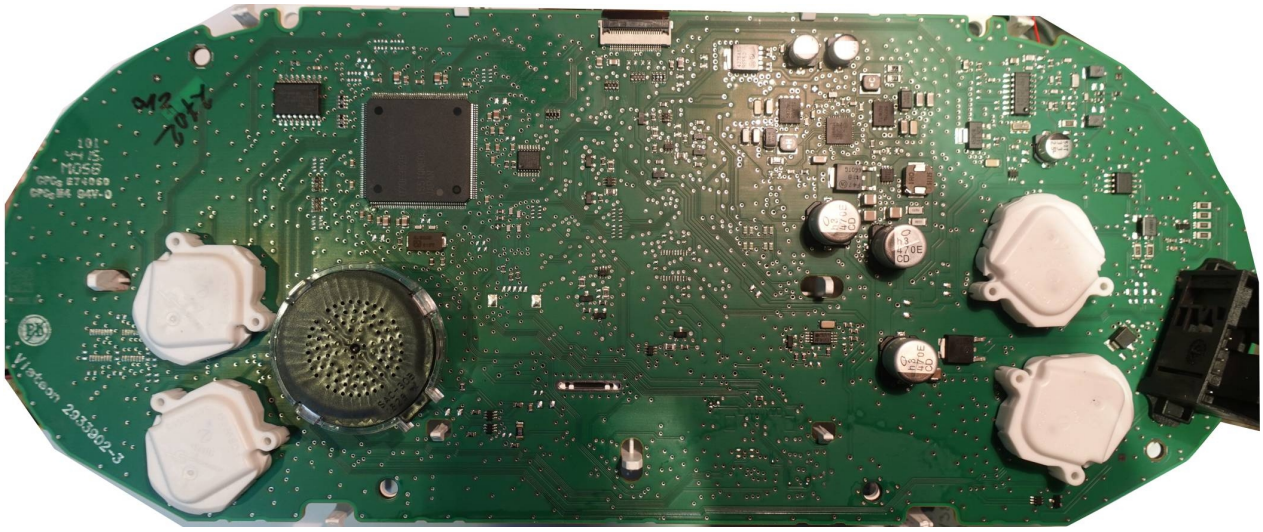
Visteon 70F3525 Connection

Visteon / Jonson Control 70F3525



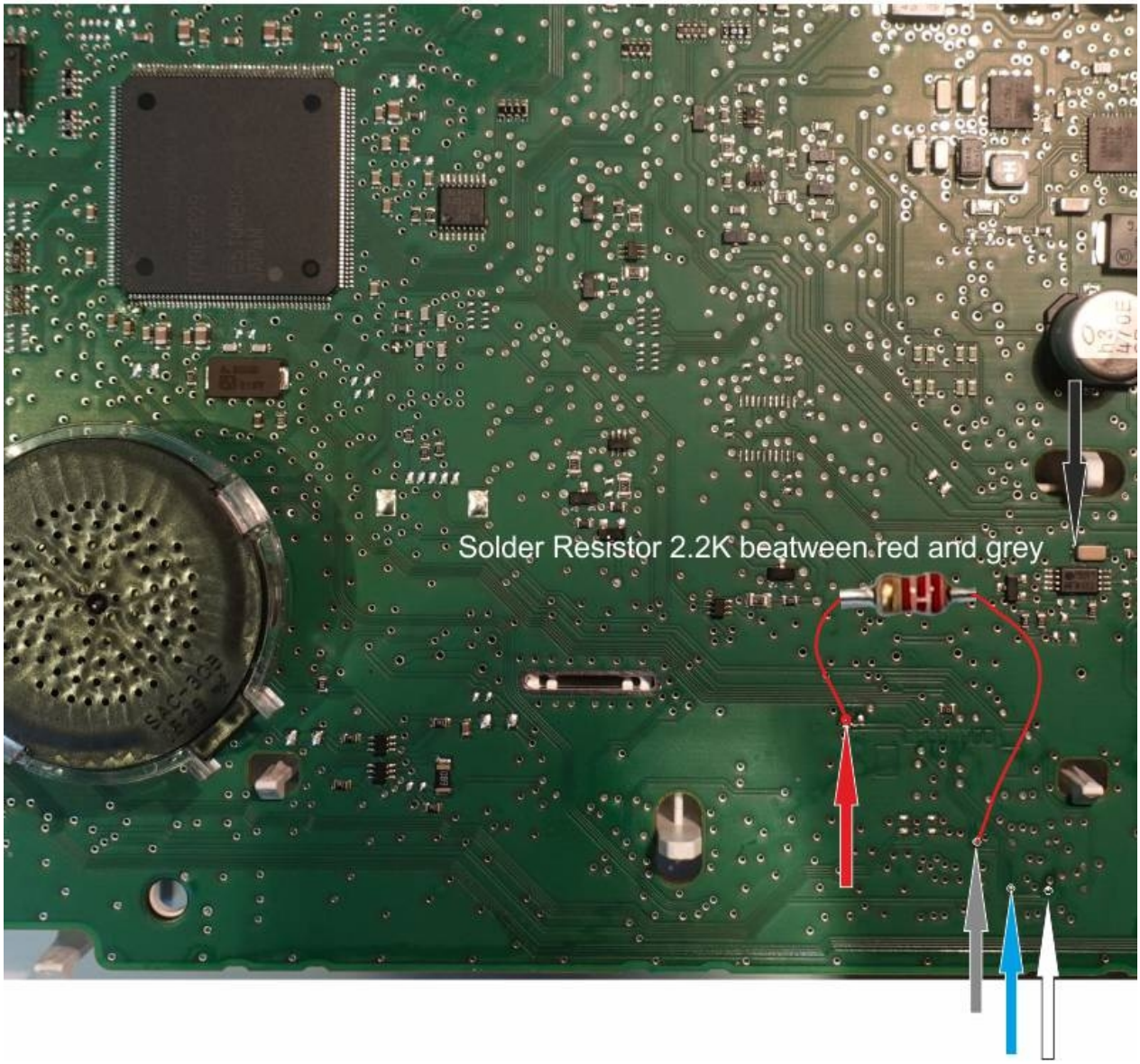
Visteon 70F3529 v1 (Method 1) Connection

Visteon / Jonson Control 70F3529 v1



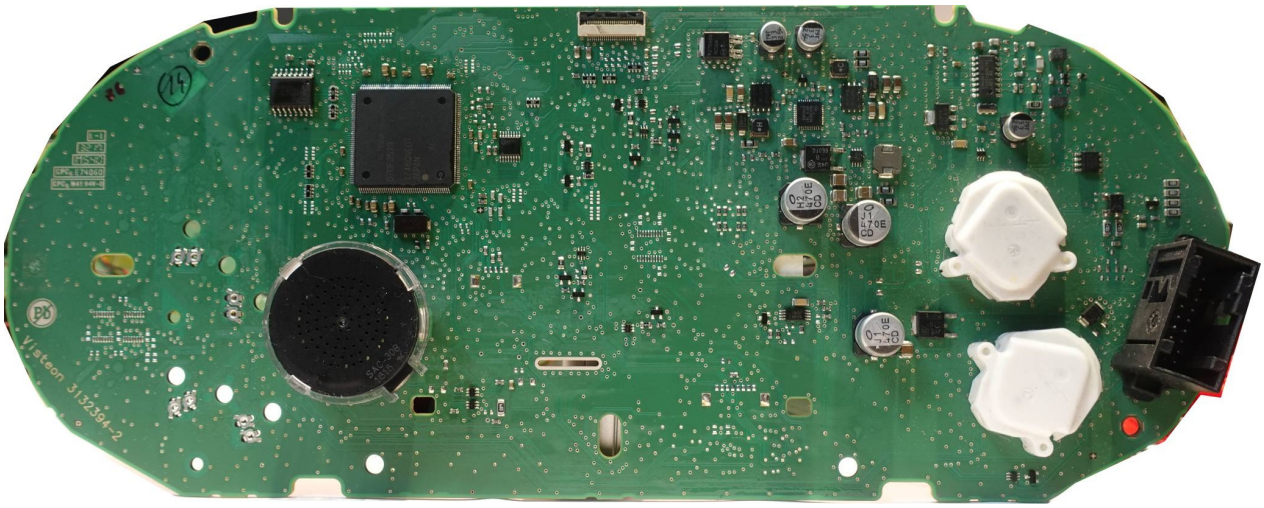
Visteon 70F3529 v1 (Method 2) Connection

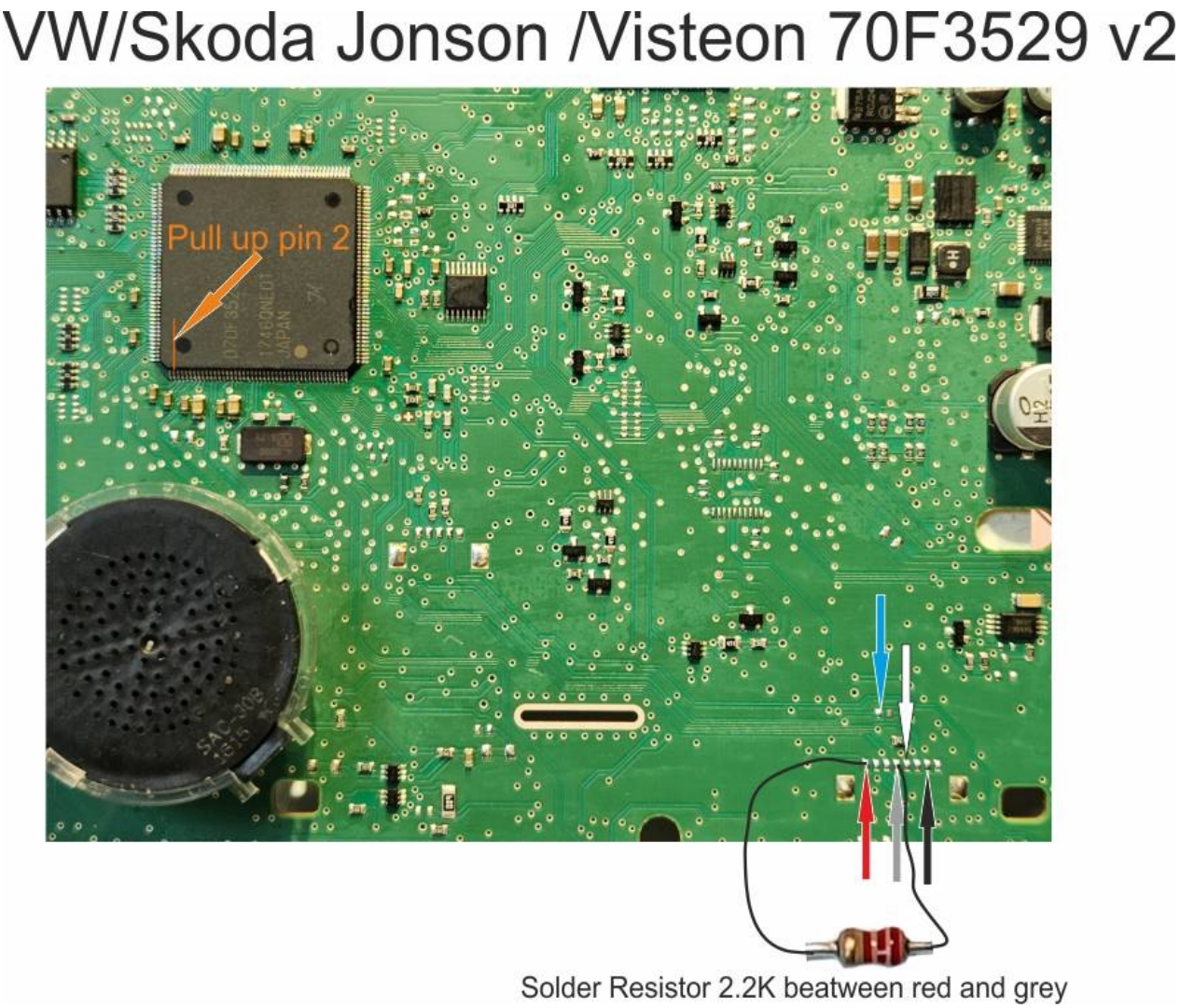
VW/Skoda Jonson /Visteon 70F3529 v1
Method 2 (without pull up PIN)



Visteon 70F3529 v2 (Method 1) Connection

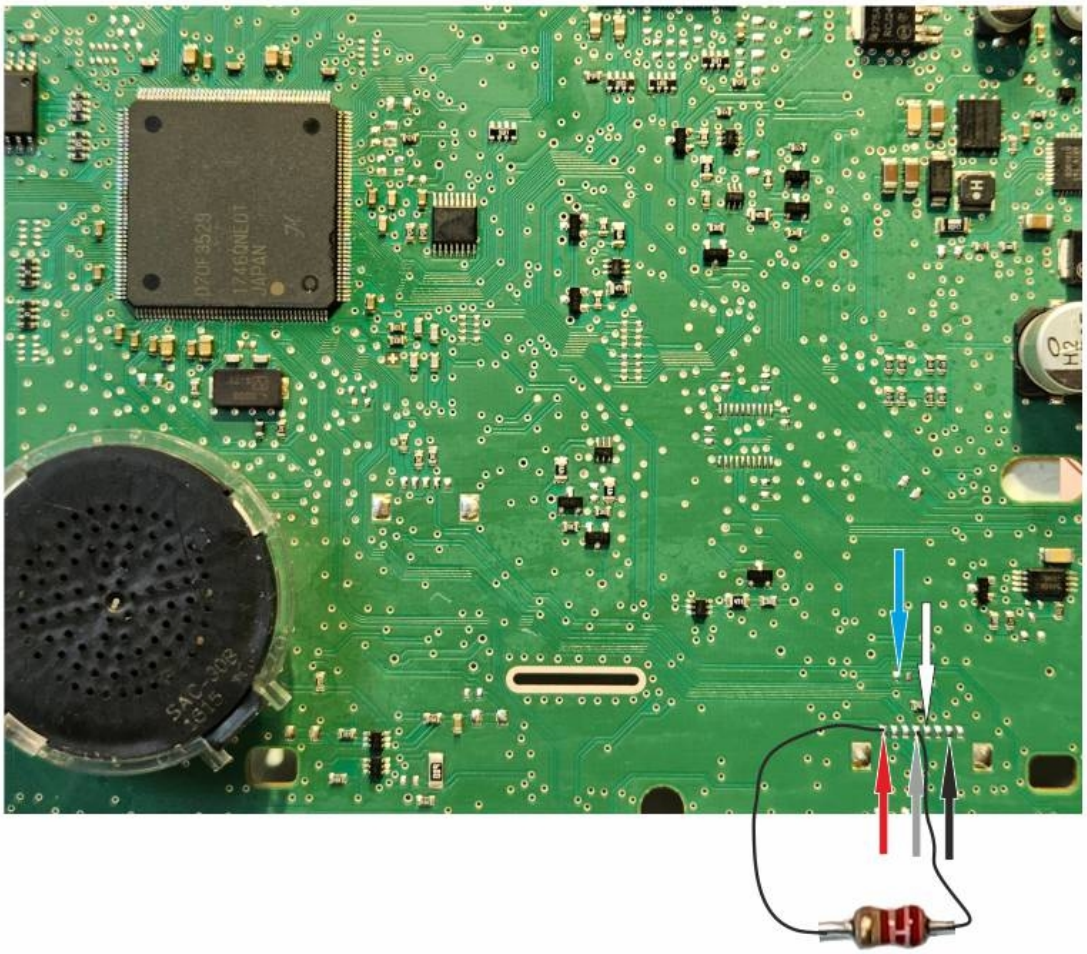
Visteon / Jonson Control 70F3529 v2





Visteon 70F3529 v2 (Method 2) Connection

VW/Skoda Jonson /Visteon 70F3529 v2 without lift Pin



Solder Resistor 2.2K beatween red and grey

Visteon 70F3532 Connection

VW/Skoda Jonson /Visteon 70F3532