

Handbook

VCP System - Professional Diagnostic Tool

for VW AG. Cars

Version: 1.4.2

For all VCP Diagnostic Interfaces:

VCP SYSTEM interface v2.0 New Generation (Hardware version v2.0)

VCP SYSTEM with a separate Dongle (Hardware version v1.0)

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Thank you very much

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1 Basic Installation of VCP SYSTEM and Driver Installation

1.1 Basic Installation

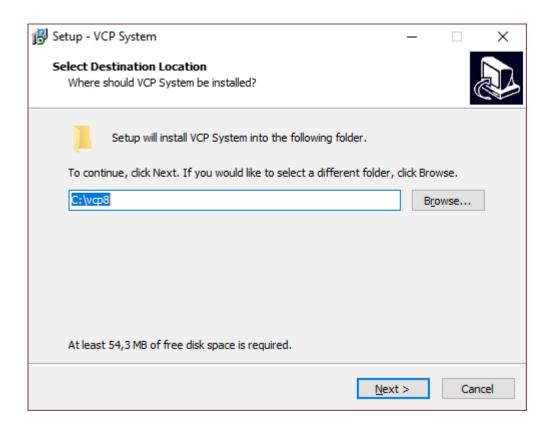
You can download the Setup data at:

http://www.vcpsystem.com/vcpsystem/install/vcpsetup_v7.zip

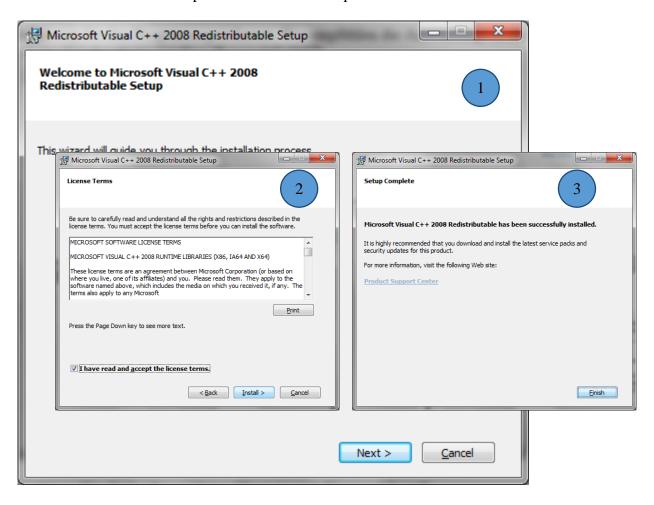
Extract the setup.exe file out of the downloaded ZIP archive.

Define the Application location.

We recommend to create the folder directly in the local drive: For example: C:\VCP8



Microsoft Visual C++ Confirm the Installation steps for Visual C++ Components

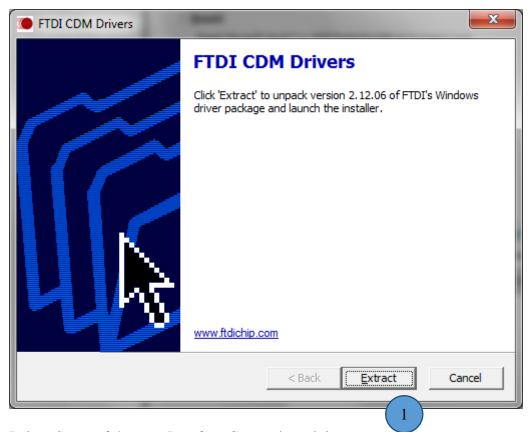


1.2 Driver Installation

The Driver Setup of the new Interface Generation v2.0 consists of 2 components:

VCP Interface Dongle, HID Global SmartCard Reader

Confirm every step of the Driver Setup procedure.

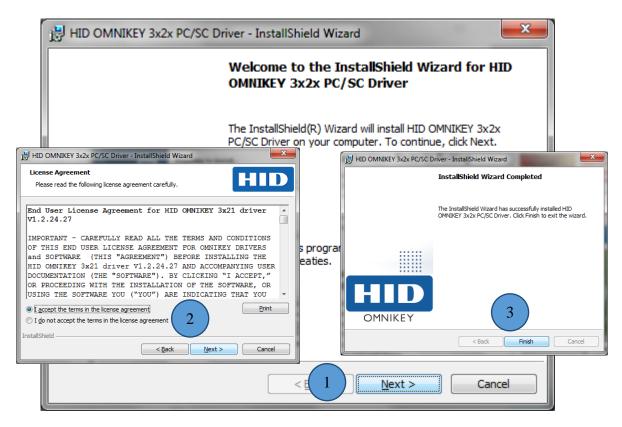


Driver Setup of the new Interface Generation v2.0 Confirm the following steps.



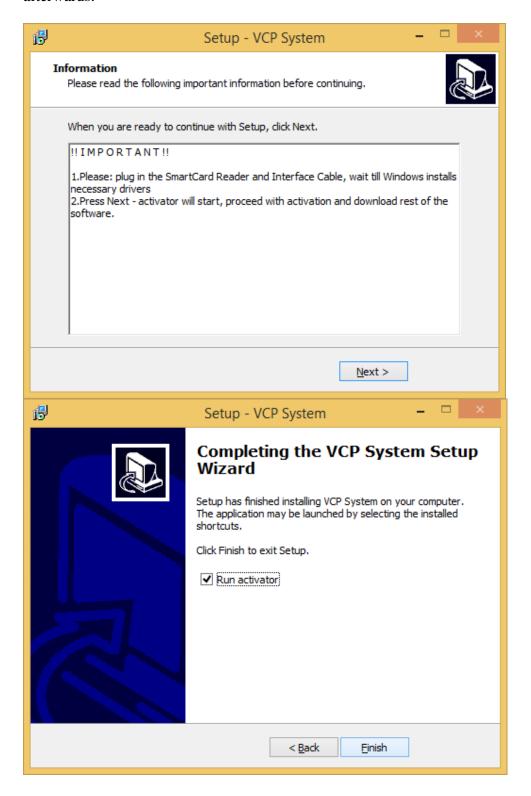
Driver Setup for the integrated HID SmartCard Reader

Confirm each step of the Driver Setup procedure for the integrated SmartCard Reader.



Basic Installation Successfully Completed

Press NEXT and then FINISH to close the dialogue box. The ACTIVATOR will open afterwards.



1.3 Device Driver Installation

In the Driver dialogue box you can monitor whether the installed drivers were correctly assigned (no driver will be assigned to the SmartCard; this will be first possible in Windows 8 (the Smart Card will also be correctly displayed)).



If you encounter any problems at this stage, we suggest to try and connect the Interface to a different USB port. The assignment of the driver may take up to 5 minutes depending on the hardware configuration.

You can now start using the new VCP Activator version v6.



2 Initial Configuration and Smart Card Activation via VCP Activator

2.1 About VCP ACTIVATOR

Basic Information about VCP ACTIVATOR

(VCP System – update program)

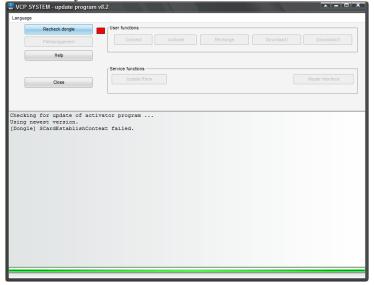
The Activator software is primarily used for the purpose of matching the Smart Card information (security authentication) and updating the program functions. (via Download I [Program parts] and Download II [Label files, ODX Database update etc.])

The application also has an integrated File Manager with which you can load all available (or active) ZDC files (including VIM ZDC files).

With the help of the Activator software one can also update the state of charge (Key-batch) of the smart card (Recharge), perform an interface Firmware Update (Update iFace) or initiate interface repairs (Repair interface)

[This should only be done as directed by Support].

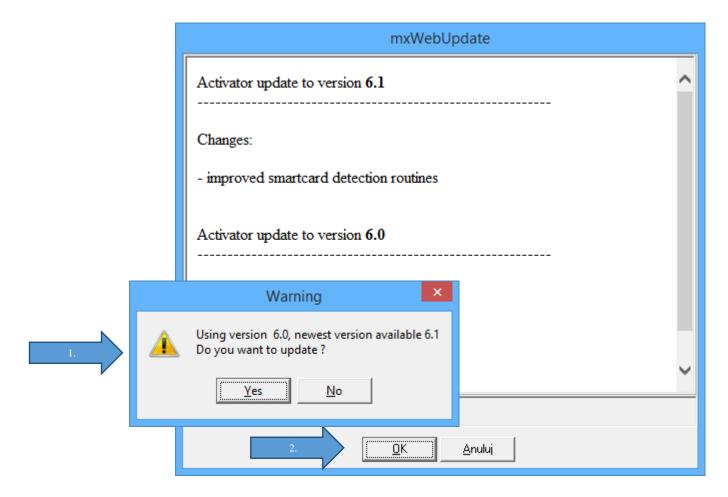
Further information about the Activator and the operation of the respective functions can be found in the further sections of this Handbook.



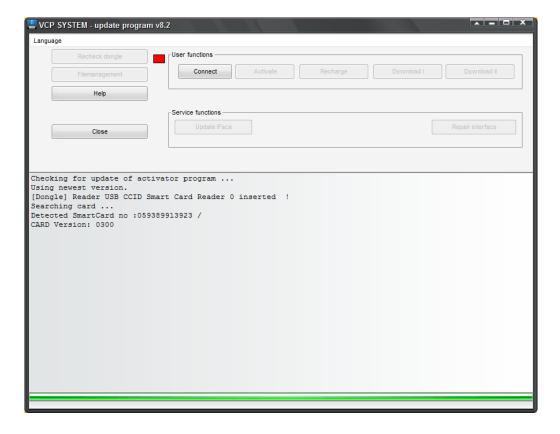
2.2 VCP ACTIVATOR Update

During the initial start-up VCP ACTIVATOR needs to be updated to the latest version. The relevant prompt will appear after the first connection and the update will be automatically carried out upon User's confirmation. See the information on the picture below

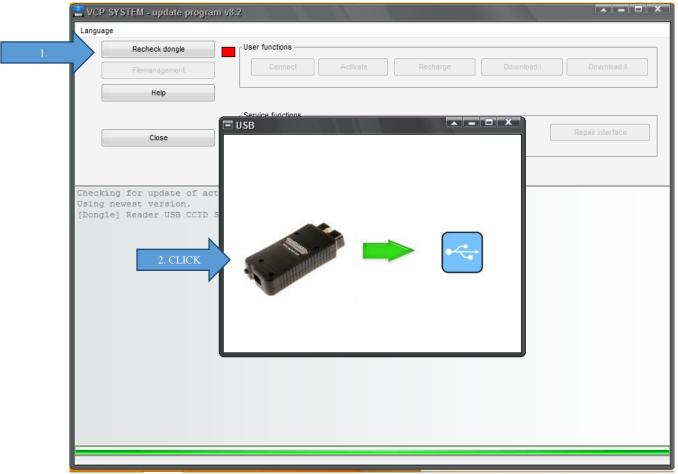
Program update to the latest version (1 & 2) of ACTIVATOR



Wait until the installation is completed and continue once the VCP ACTIVATOR restarts



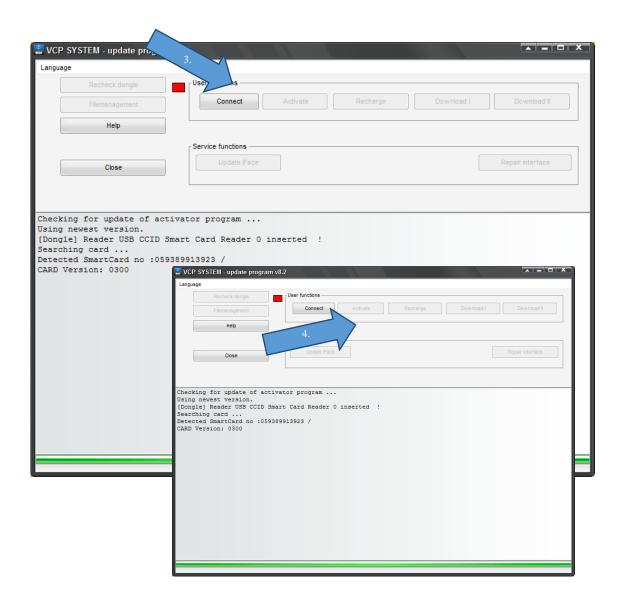
2.3 Activation of VCP and Program Parts Download



After a successful update of the VCP ACTIVATOR select (1) <u>Recheck dongle</u> and then in the pop-up window click "USB" (2)

After successful authentication of the Smart Card press Connect (3).

<u>Please take note:</u> When you launch the VCP ACTIVATOR for the first time you have to first activate your Smart Card by pressing Activate (4). After doing so it will no longer be possible to return the software, according to GTC, because it has been personalised and used to download the program. As a result, returning the activated software is not possible.



In the Log display (5) you can find the Registration no. and the Key charge status.

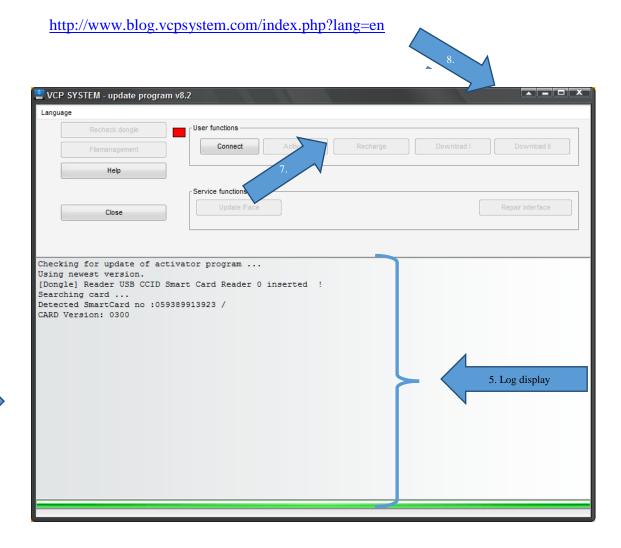
The Key charge status (%) (6) informs how many times more can the Application be launched until it is necessary to perform the next On-line Recharge (Smart card loading) (7).

Using the $\underline{\text{Download I}}$ and $\underline{\text{Download II}}$ buttons (8) you can download the additional program functions.

<u>Important info regarding updates:</u> As soon as an application update is available:

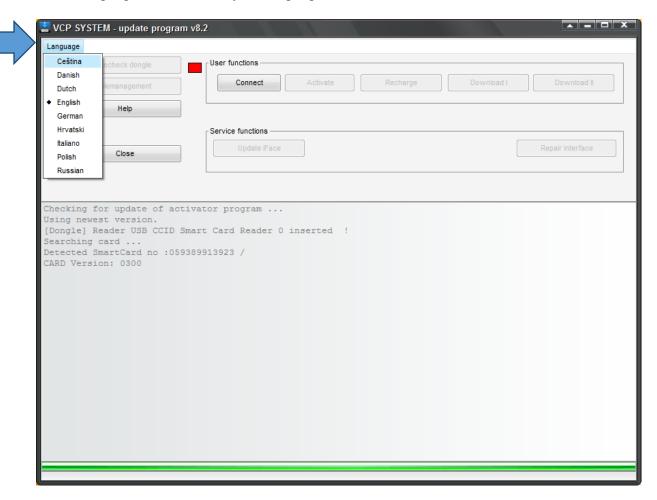
In the ACTIVATOR program, follow the steps described above to perform the necessary updates by means of <u>Download I</u> and <u>Download II</u>.

You can find the information about the latest updates on our website:



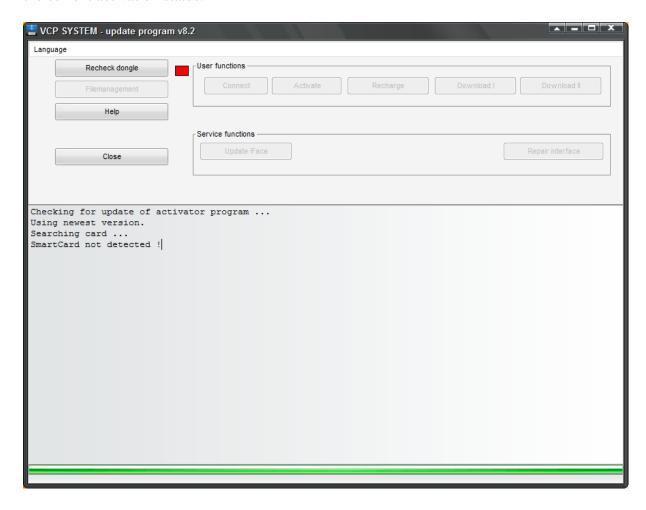
2.4 Language Settings in ACTIVATOR

Click Language (1) and select your language from the list.



2.5 Cannot connect with the server - not authorized to connect

If you receive the "not authorized to connect"message, this means that your Smart Card is not yet activated on the VCP SYSTEM Servers. Please contact support@vcp.pl to inquire about the current activation status.



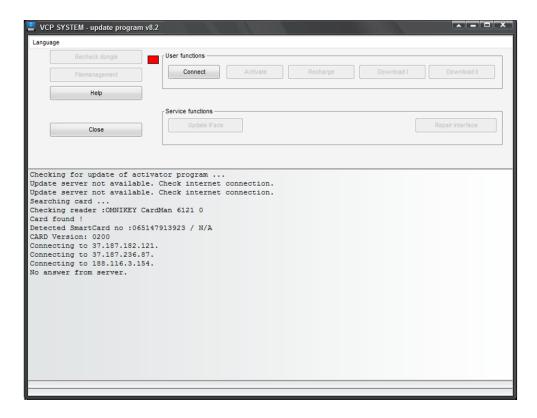
2.6 No connection to server – no connection / response from the server

There are 3 VCP SYSTEM servers available with which the Activator can communicate. If you cannot establish connection (as presented in the picture below), please check whether the necessary ports are unlocked for the installed software or whether the hardware firewalls do not prevent the connection:

• Port 4010 via TCP (SSL encrypted)

Communication established by the client (source), destination addresses (destination) are:

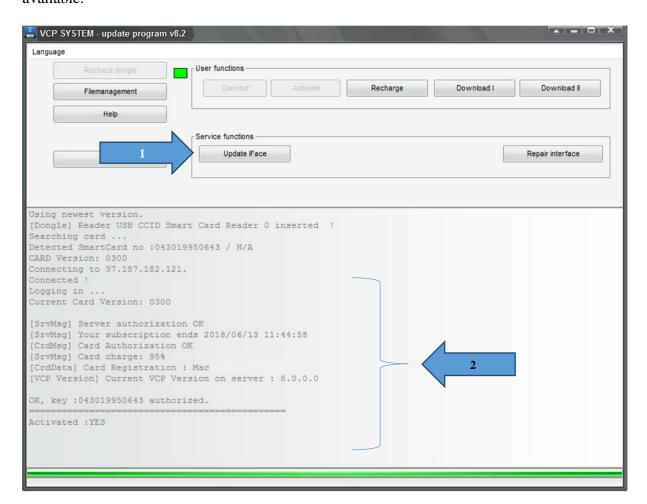
- VCP SYSTEM Auth / Download Server 1 188.116.3.154.
- VCP SYSTEM Auth / Download Server 2 37.187.236.87.
- VCP SYSTEM Auth / Download Server 3 37.187.182.121.



2.7 Update firmware version of the VCP Diagnostic Interface

Should in addition to Software-update a new version of firmware for the VCP Diagnostic Interface be available, you can update it as follows:

Launch the ACTIVATOR and connect on-line. Update the Interface (1). The necessary steps of the Update procedure will be carried out automatically (2). Once the update is completed, reconnect the Interface. The new version of firmware should be now available.



2.7.1 Upgrade to VCP System + K-Line Interface

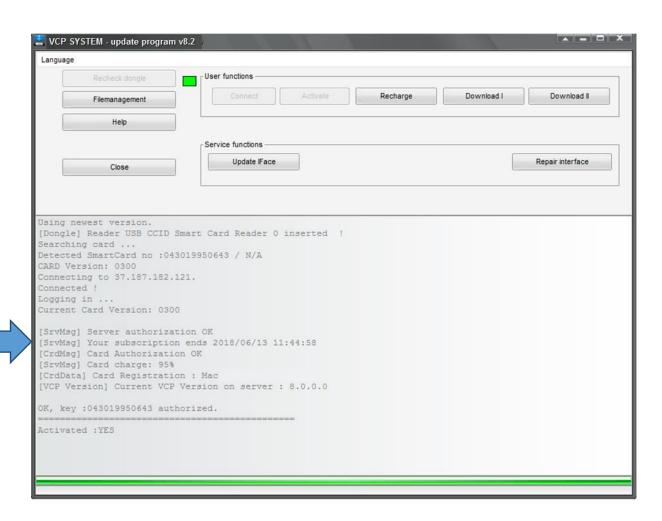
There are no fundamental differences in the Interface Hardware between VCP (only CAN / w./o. K-Line) and VCP + K-Line

In case you have decided to purchase the K-Line variant you have obtained it by means of upgrade (http://www.vcpsystem.com/index.php?k22,upgrade-k-line), after a successful activation of the Smart Card you can perform the necessary Firmware upgrades to the VCP + K-Line version via the ACTIVATOR, as described above.

2.8 Update renewal - Subscription Status

You can learn about the status (1) of your update renewal or subscription status via the ACTIVATOR after connecting with the server. Once your subscription has expired you can no longer use the Download function to update your software.

You can order an Update renewal in our on-line shop: http://www.vcpsystem.com/index.php?k20, subscription



3 Basic Information about this Software

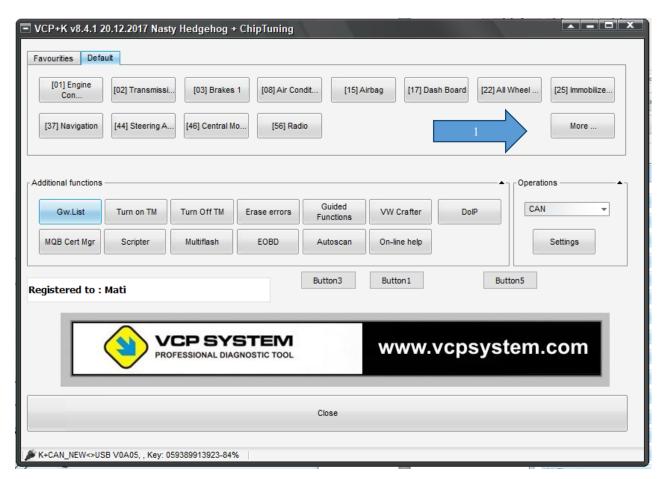
The basic functions of VCP Software are similar to the solutions used by our competitors. In the upper part of the Interface you can select the car's ECUs. More ECUs will be displayed/manually selectable after clicking More...

<u>Info:</u> Our competitors offer a decreased selection of all available ECUs of a connected car (in case a vehicle has CAN) in their software.

VCP does not perform any such preliminary tests and displays a full, not reduced list of available control devices in the latest version (4.0.2), therefore, all ECUs will be displayed but must be accessed manually.

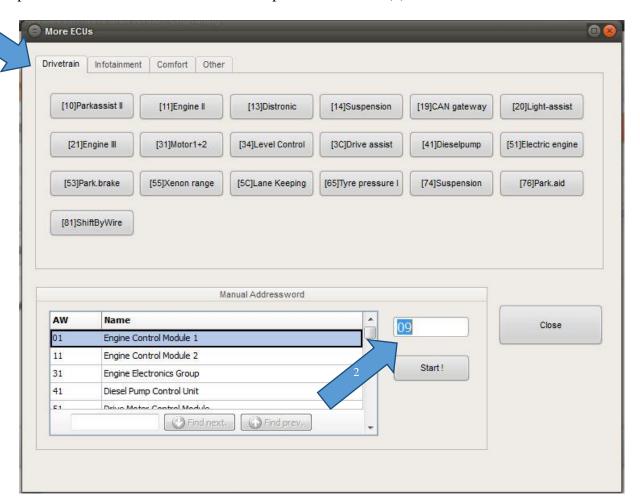
So, if a particular ECUs is not displayed in the main list, you have to access it manually via the More... (1) button. A functionality analogous to the ones used by the competitors is being currently tested and will be incorporated into one of the next release updates. Alternatively, provided if your car supports CAN, you can access via the Gateway-Assembly list all available ECUs in your vehicle, instead of having to manually check / select the ECUs.

If an ECU (e.g. STG 17 - Instruments or panel) is selected, you have to establish the connection in the Details page via the <u>Connect</u> button. Afterwards, all functions of the ECUs (coding, adaptation, fault memory, etc.) should become available.



3.1 ECUs Details page - more ECUs

You can switch between the four tabs to access the needed ECUs (1), or enter the number of a particular ECU in the field in the lower part of the screen (2).

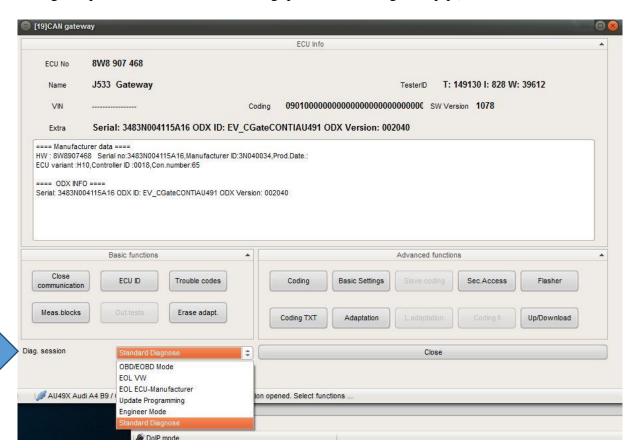


3.2 Diagnosis Sessions

In VCP you can choose from a number of available diagnostic sessions. Depending on the required adjustments / coding / flash operations different communication channels will be required

- OBD/EOBD mode a diagnostic session for a regular OBD2 coding mode (e.g. ELM327)
- EOL VW End Of Line diagnostic session for parameter upload (ZDC), necessary to carry out special encodings (e.g. ESP deactivation for Audi A6 / A7 4G). This diagnostic session also requires different adaptation channels
- EOL ECU Manufacturer similar diagnostic session as above, however, it uses the manufacturer-specific default settings (e.g. Conti). Certain settings are functional only here (e.g. MK60EC1 Conti Kommandos)
- Update programming diagnostic session for flash operations. Set automatically to Flasher / Multiflasher mode by VLC, cannot be used for any other diagnosis (coding, adaptation, parameter settings, etc.)

- Engineering mode –The Engineering Mode diagnostic session allows you full access to the respective ECU (however, logging in is still necessary) and all of its functions (e.g. EEPROM read/write, adaptation of the hidden adjustment channels, etc. p.p.)
- Standard diagnosis the Standard Diagnosis is used by default. It encompasses all common diagnostic activities (with the exception of the ones listed above), (e.g. coding, adaptation, measurement reading, parameter settings etc. p.p.)

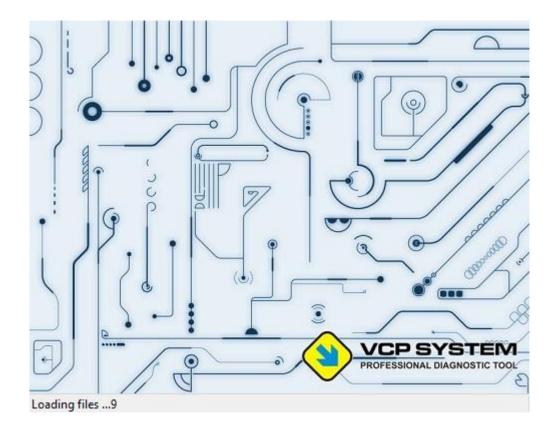


4 VCP Initial Configuration

After a successful <u>Download of Program Components</u> via the VCP ACTIVATOR you can launch VCP SYSTEM.

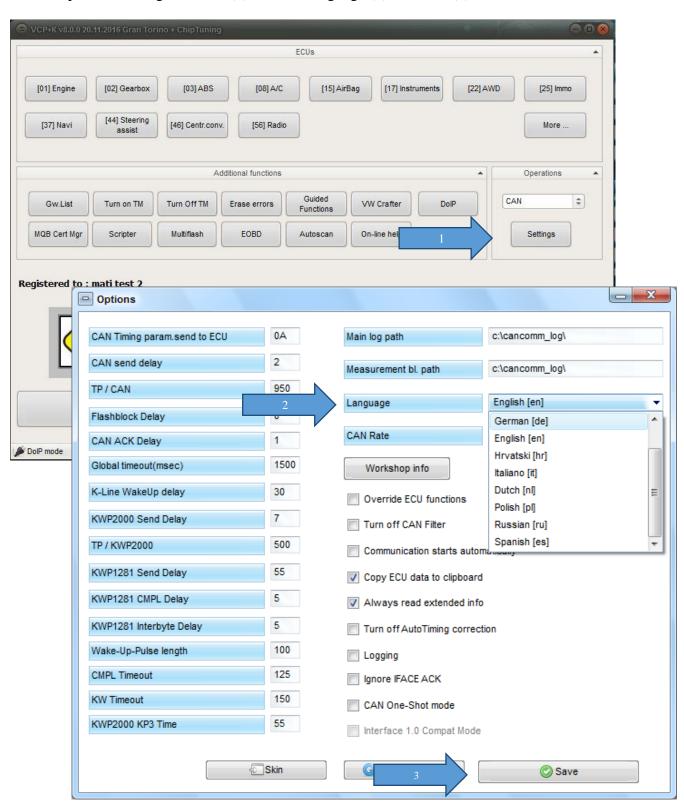
After closing the ACTIVATOR simply double-click the VCP SYSTEM icon on the desktop.





4.1 Language settings

Open the Settings window (1), select a language (2) and save (3).



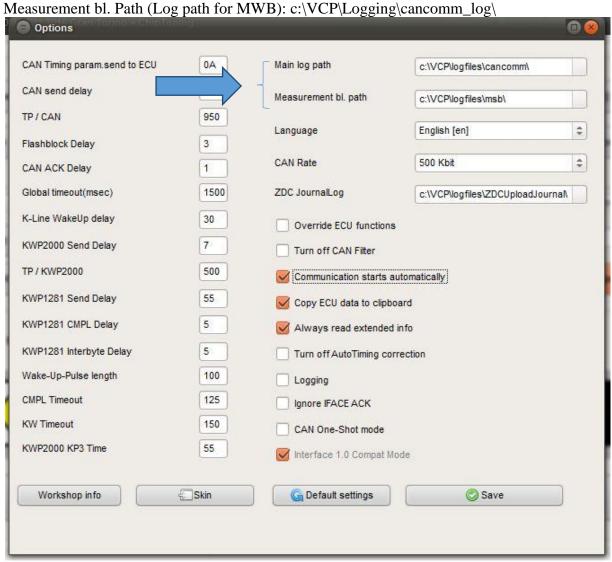
4.2 Select Log Path

In Settings you can enter the path for the Program log.

We suggest:

[Implemented by VCP in version 4.0.3 on our recommendation, therefore we will discuss this topic very briefly]

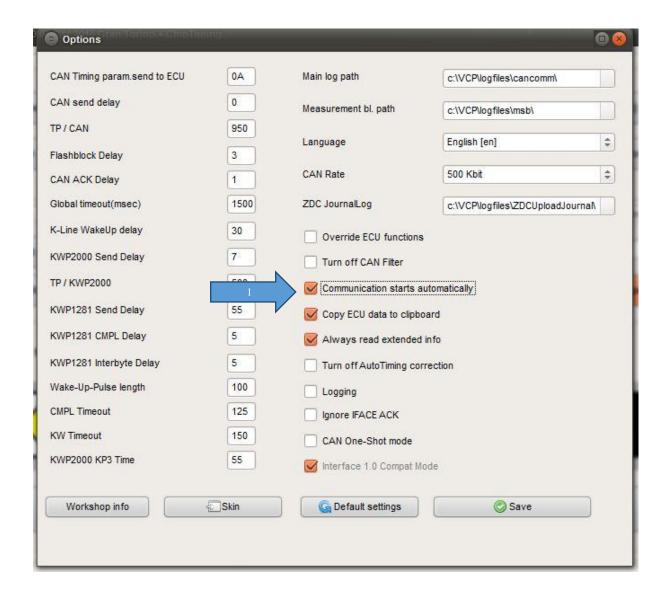
Main log path: c:\VCP\Logging\cancomm_log\



4.3 Automatic Communication Establishment for ECUs

Once the communication with the respective ECU is successfully established, select the Establish Communication Automatically setting (1) and save.

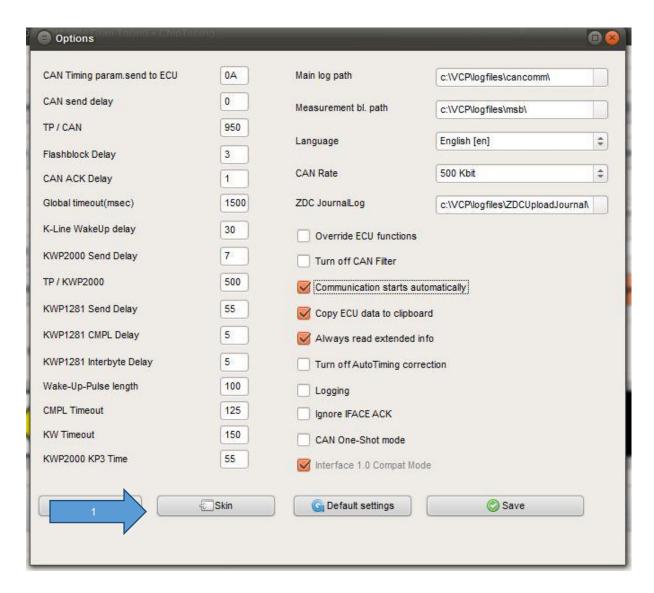
From now on you will not have to establish the connection manually every time you select this particular ECU. Instead, the program will establish the connection automatically.



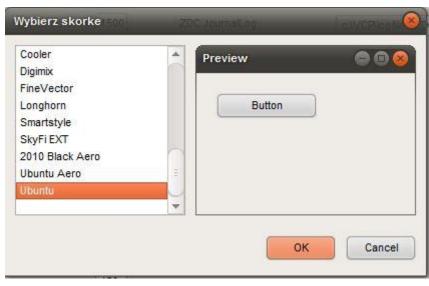
4.4 VCP Skin - Adjust the Interface

In the program options - Settings you can choose from various interface skins, that is, desired colour schemes for the VCP program interface.

Click Skin and choose a desired colour profile.



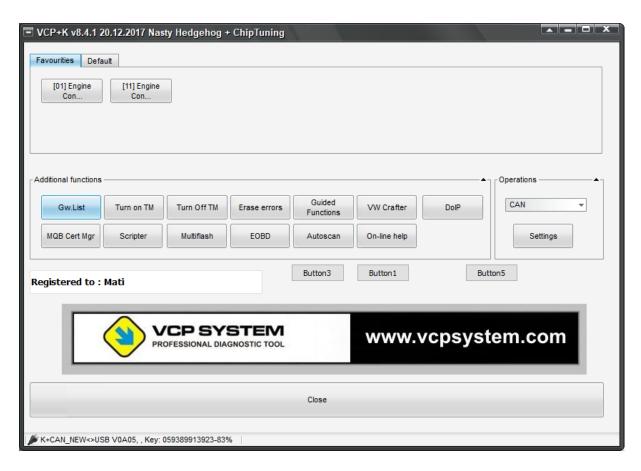
4.4.1 Skin Preview



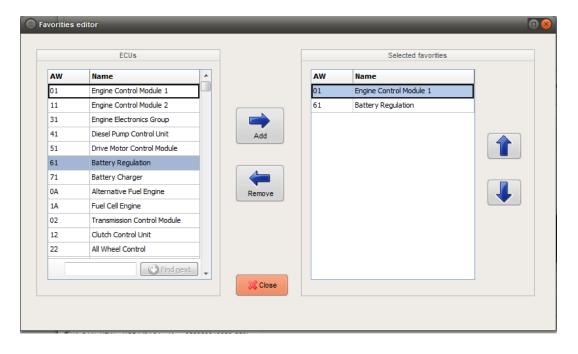
Windows 7

4.5 ECU favourites editor (v 8.0.3+)

You can customize the list of the ECUs you're frequently working with.

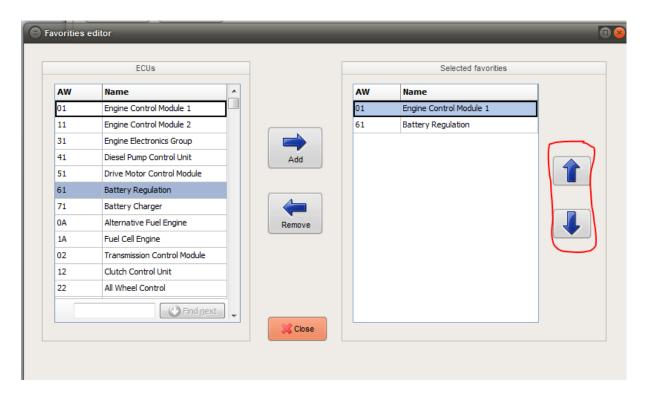


To edit the favourites list **right-click** on empty area of the ECU-favourites panel. New editor will pop-up



To add ECU to your favourites panel, select it (you can choose multiple ECUs by CTRL+click) and press "Add" button. The ECU will be added to list. Maximum you can assign 16 ECUs to your preferred list.

You can change the order of the ECUs on ECU list using "UP" and "DOWN" arrow buttons. Select the ECU and then press Up / Down to move it higher/lower on the list.



After restart, VCP will show Favourites panel instead of default. To revert to standard behaviour, clean up the ECU list on favourites editor by select the ECU followed by pressing "Remove" button

5 OCF – One Click Functions

The VCP SYSTEM software is provided with the

OCF functionality (One-click functions) which gives you the advantage of easy access to various functions, such as automatic coding / performing adjustment settings of ECU functions or upload ZDC parameter files using the data uploader.

5.1 OCF - ZDC-Container - Data Upload Assistant for Parameter Settings

By using the ZDC Container Upload you can upload the necessary parameter settings files (e.g. to enable VIM in all MQB models) into the respective ECUs. You can read below where to obtain these files (5.1.1) and how to upload them. (5.1.2)

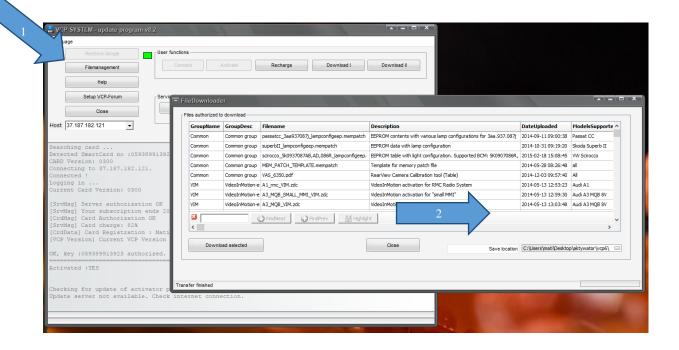
5.1.1 ZDC Container Files Management (File Management)

(Accessible via VCP ACTIVATOR)

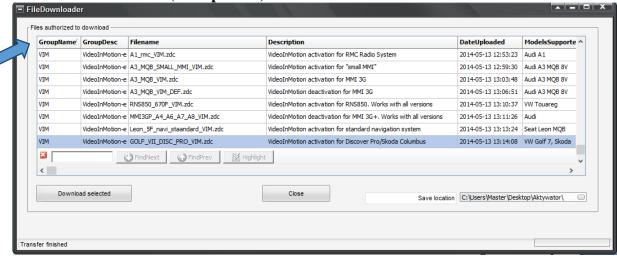
Using the File Manager you can view the current state of ZDC container files and, for example, load the required VIM files.

If you want to move the data to a different sub-folder, simply change Save location (2).

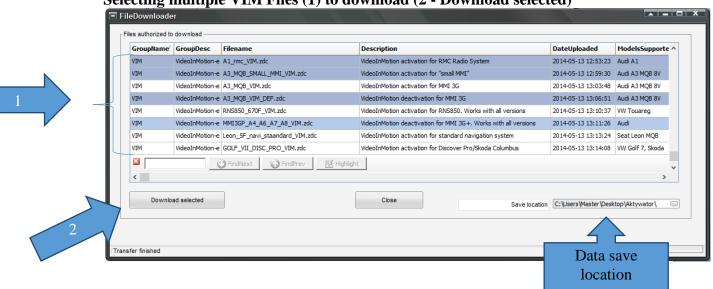
Please read the relevant instructions on the following pages



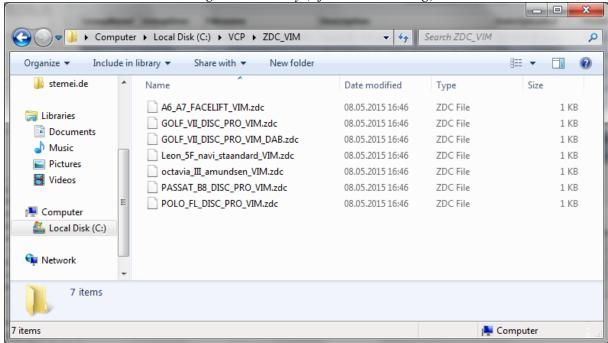
Sorted after VIM Files (GroupName)



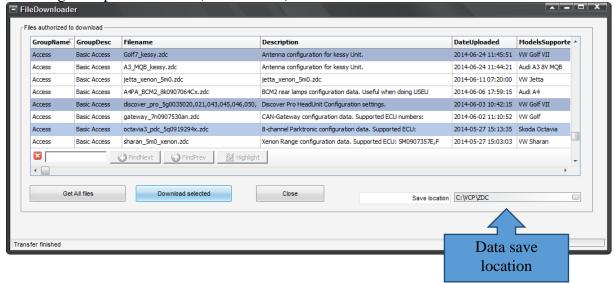
Selecting multiple VIM Files (1) to download (2 - Download selected)



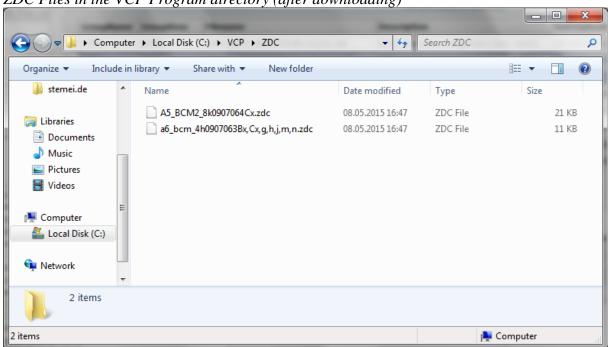
ZDC VIM Files in the VCP Program directory (after downloading)



Selecting multiple ZDC Files (CTRL+click)



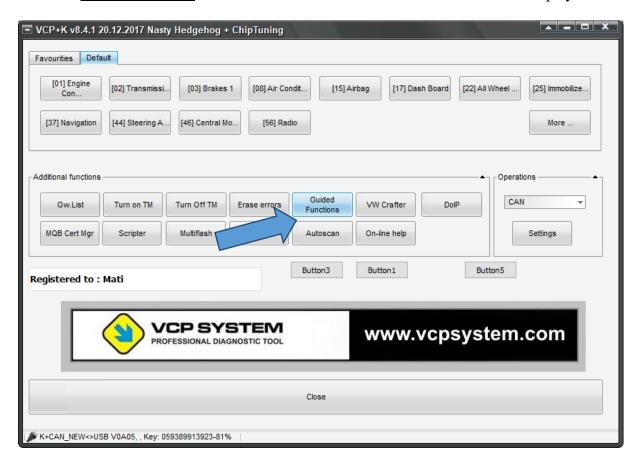
ZDC Files in the VCP Program directory (after downloading)



5.1.2 Practical example; VIM activation with ZDC Container File

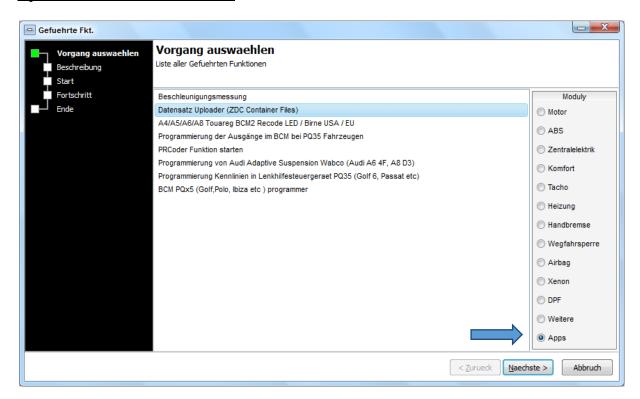
In this example we flash the 5F controller for Golf 7 in order to unlock the speed index of the installed Discover PRO.

Click the <u>Guided Functions</u> button in the Additional functions area of the main display.

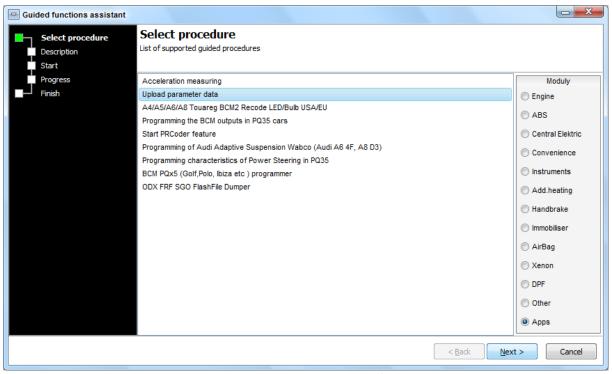


In the Guided functions assistant please select <u>Other</u>, mark one of the listed options and confirm with NEXT

Upload data from ZDC-Container

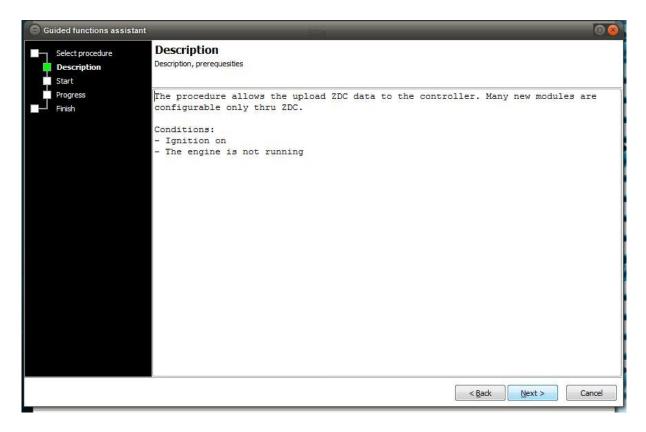


(Label / Descriptions when the language is set to **GERMAN**)

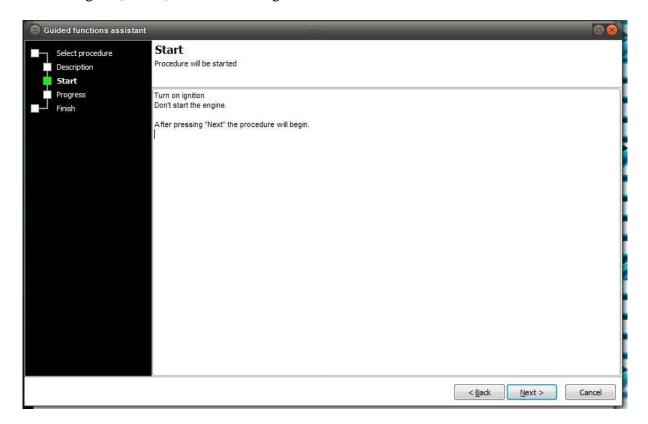


(Label / Descriptions when the language is set to **ENGLISH**)

As described in the requirements below: ignition of the car needs to be switched on, the motor must not be started. Confirm with NEXT.

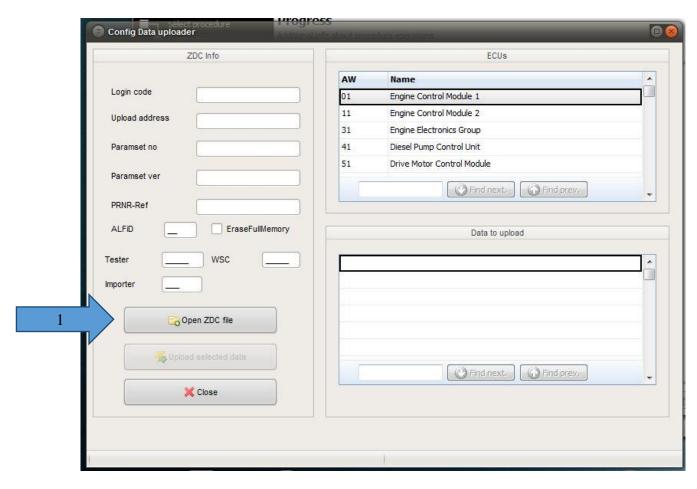


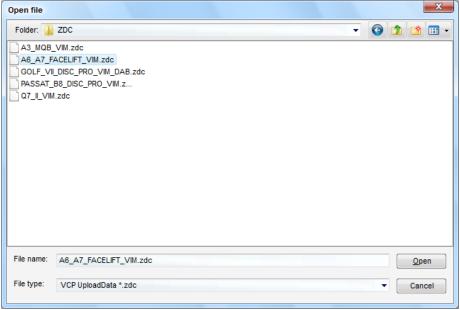
Confirm again (NEXT) on the following screen



In the Config Data Uploader: click the Open Data button (1) to select and open the desired data.

Please note that you select the correct/appropriate file for the particular ECU (eg. Navigation or radio for VIM) the correct/appropriate file. You can find more detailed descriptions of the ZDC Container Files at: support@vcp.pl

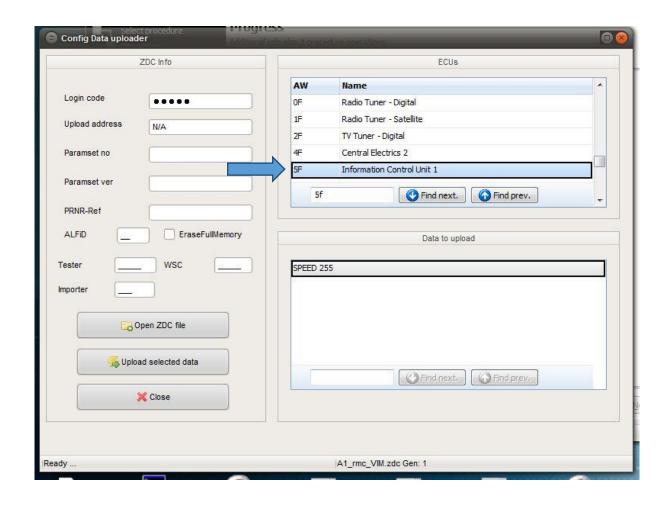




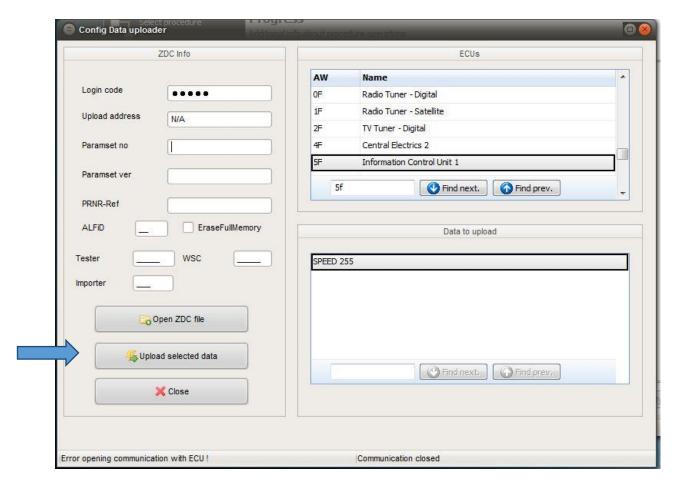
Next, select the appropriate ECU from the list:

For all MQB (Audi A3 8V, Seat Leon 5F, Golf 7, Skoda Octavia 5E, Audi TT 8S) and MLB models (Audi A6 4G Facelift, Audi A7 4G Facelift, Audi A8 4H Facelift, Audi Q7 II) you have to select STG 5F – Infotainment (Information Control Unit). For Audi A1 8X / Audi Q3 8U select STG 5F or STG56 (Radio) depending on the MMI version.

We advise you to check this in advance by connecting to the respective installed ECU and selecting the correct ZDC container file



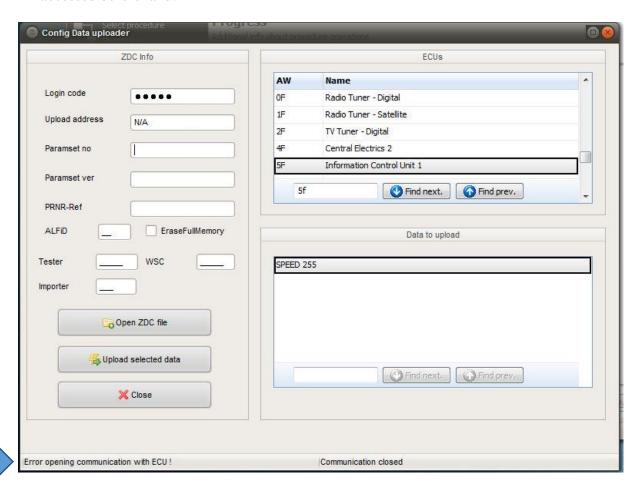
After selecting the appropriate ECU you can click the <u>Upload Selected Data</u> button to start the flash operation.



The status display area (lower left side of the window) will show a different message depending on whether the data was uploaded successfully an error has occurred.

In the example below a connection error has occurred (error opening communication with ECU) which indicates that the selected ECU cannot be reached.

Please repeat the process again, however, check the connector of the interface, the status of the ignition and whether the particular ECU (in this case STG 5F) can actually be accessed beforehand.



5.1.3 ZDC Container Files Configuration – Local Storage

In order to simplify the management of the ZDC container files, a script is used (which creates the following folders in the local program directory):

ZDC_VIM

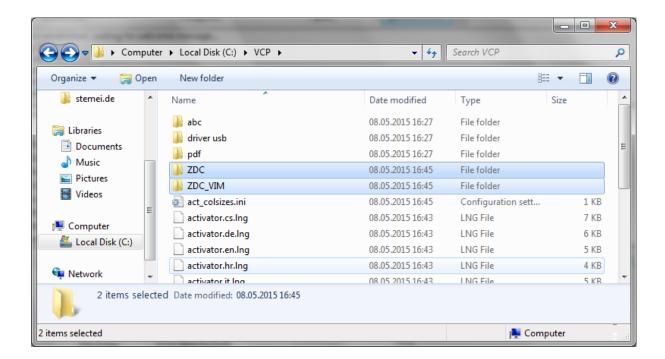
Thanks to this, the corresponding files are stored in the File Manager in the respective folder and in turn can be easily found during the upload for a particular ECU.



VCP_Ordnerstruktur_ZDC.bat



Note: When the scripts starts you have enter the relevant drive letter, for example: **C**), on which the VCP was installed. As a result, the above mentioned folders will be created. You can also do it manually without the script.



5.2 OCF – VIM Manager

VIM manager replaces the aforementioned possibility to carry out the video image activation via ZDC Container Files with an option to perform a direct configuration of the screen lock or other options (DAB Slideshow, SMS reading function etc. p.p.).

VIM Manager provides the user with an important advantage: the file-based management processes become a lot less complicated (File download via the File Manager, file upload via Config data uploader) and the configuration of the video image threshold can be performed faster.

5.2.1 VIM Manager – currently supported vehicles / Infotainment ECUs

- MMI 3GP (MMI Navigation PLUS)
 Audi A4 8K Facelift, Audi A5 8K Facelift, Audi Q5 8R Facelift, Audi A8 4H,
 Audi A6 4G, Audi A7 4G, VW Touareg II 7P Facelift
- MIB 1
 MQB: Audi A3 8V, Audi TT 8S, VW Golf 7, Seat Leon 5F, Skoda Octavia III 5E, Skoda Superb 3V, etc.
 (Note: Not all software versions are supported by MIB 1 devices, however, the appropriate ZDC files can be used as usual.)

• MIB 2

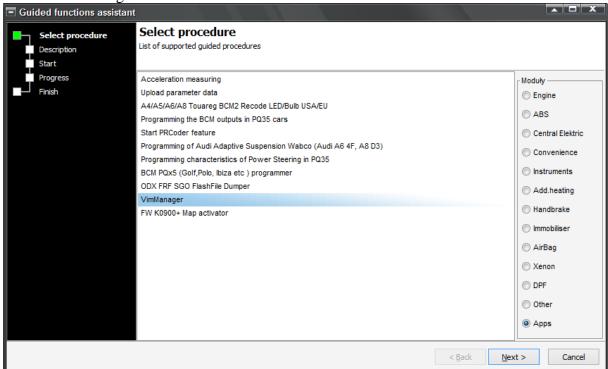
MQB: Audi A3 8V, Audi TT 8S, VW Golf 7, Seat Leon 5F, Skoda Octavia III 5E, Skoda Superb 3V, etc

MLB: Audi A6 4G Facelift, Audi A7 4G Facelift, Audi A8 4H Facelift MLB Evo Platform: Audi A4 8W, Audi Q7 4M, Audi A5 8S, etc.

• RMC Audi A1 8X, Audi Q3 8U, Audi A6 4G

5.2.2 VIM Manager – Procedures

Select VIM Manager in the Guided functions menu



Connect with ECU (1)

VIM Parameters

Name

Detect HeadUnit

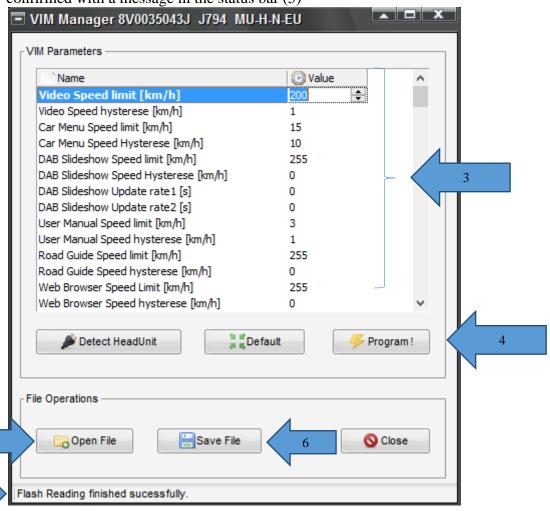
File Operations

File Operations

Close

If STG 5F is unavailable, the "Connection error" message will be displayed.

Enter the appropriate value (3) and save the settings (4). A successful setting of values will be confirmed with a message in the status bar (5)



Using the Save data (6) and Open data (7) buttons you can create (and save) templates for different ECUs (HW ID) or load the already existing templates.

5.2.2.1 Possible settings

7

5

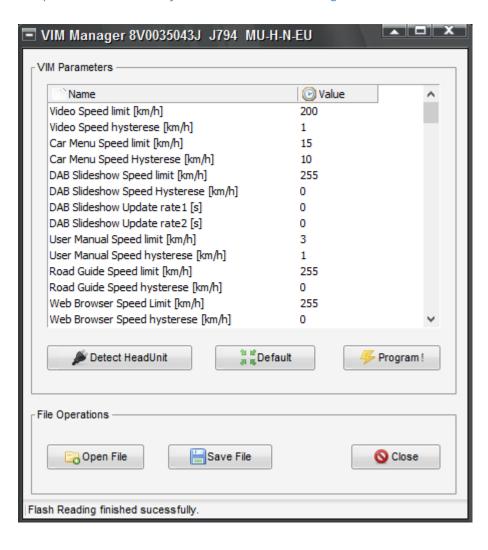
 Video cut-off threshold Standard value between 0 and 3 km/h

arbitrarily set as desired; Value range: 0-255

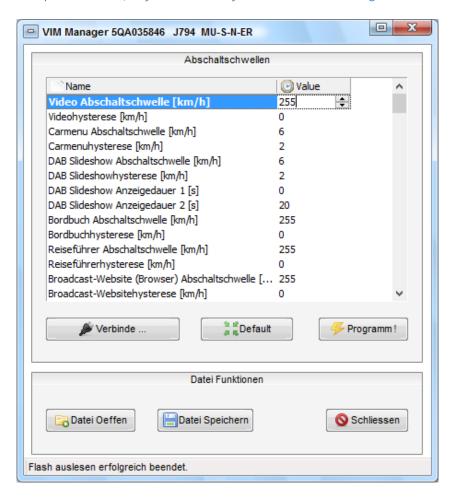
- Video hysteresis
- Car menu cut-off threshold
- Car menu hysteresis
- DAB Slideshow cut-off threshold
- DAB Slideshow hysteresis
- DAB Slideshow Display time 1
- DAB Slideshow Display time 2
- Log book cut-off threshold

- Log book hysteresis
- Travel guide cut-off threshold
- Travel guide hysteresis
- Broadcast-Website (Browser) cut-off threshold
- Broadcast-Website (Browser) hysteresis
- Destination input cut-off threshold
- Destination input hysteresis
- BT-bonding cut-off threshold
- BT-bonding hysteresis
- Messaging Text Editor cut-off threshold
- Messaging Text Editor hysteresis
- Radiotext / Tooltip cut-off threshold
- Radiotext / Tooltip hysteresis
- Radiotext / Tooltip display time

5.2.2.2 Sample standard values for Audi A3 8V MMI Navigation PLUS



5.2.2.3 Sample standard/adjusted values for Seat Leon 5F Navigation PLUS 6.5



5.3 OCF - WABCO Programmer

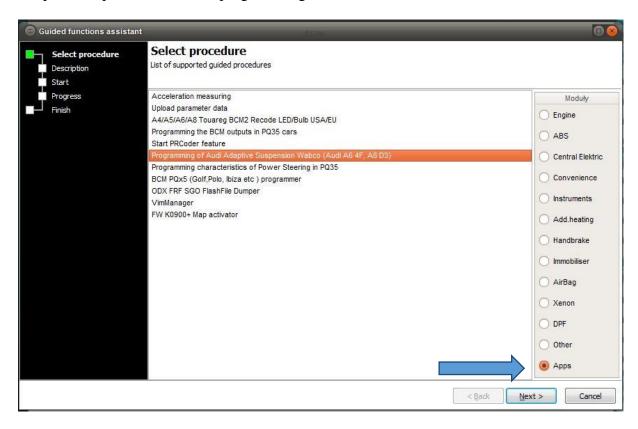
WABCO Programming Add-on is a configuration tool for Audi Adaptive Air Suspension (AAS). Adjustments in EEPROM enable extensive customization options. Among other things, you can set the chassis height directly as a numerical value (+ / -) without performing time-consuming complex settings. These settings are very flexible, allowing to adapt chassis settings to different driving speed, i.e. in which driving modes which chassis height is to be used (Sport, Normal, elevator).

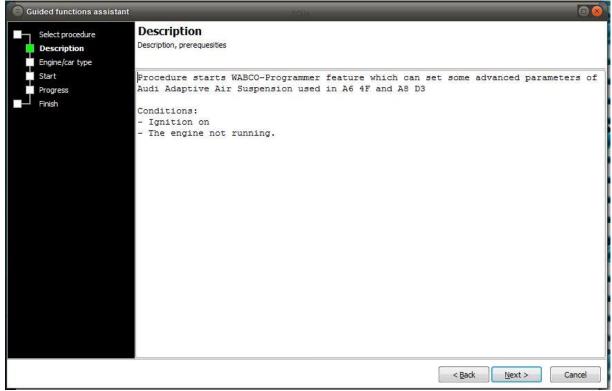
5.3.1 WABCO - currently supported vehicles

- Audi A6 C6 (WABCO Air Suspension controller)
- Audi A6 allroad C6 (WABCO)
- Audi Q7 7L (Continental)
- Audi A8 D3 (Contintental)

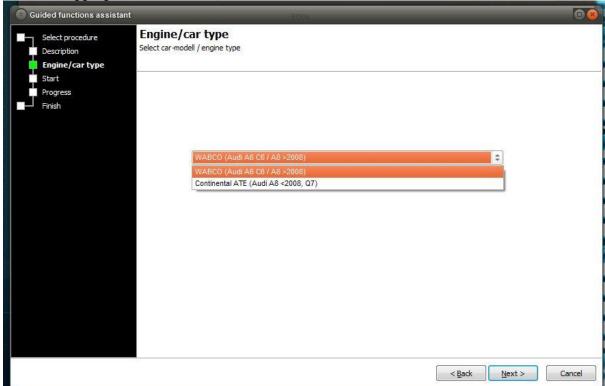
5.3.2 Launching the WABCO Programming Add-on

You can access WABCO Programming add-on via <u>Guided functions</u> – Others – Audi Adaptive Suspension WABCO programming





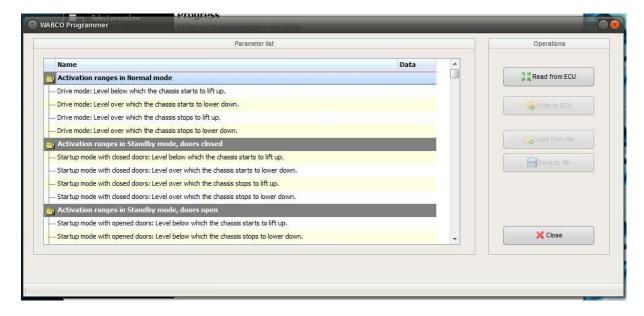
Select the appropriate vehicle model



5.3.3 WABCO – Configuration options

Using the WABCO Programming add-on you can set different configurations for different gears / speed. In order to do so, press the STG reading button, set the desired values and then press STG overwrite. The vehicle shall drive according to the set values.

You can also save this configuration (via Save as) for future use with other vehicles. You can access and load a saved configuration via Open File.

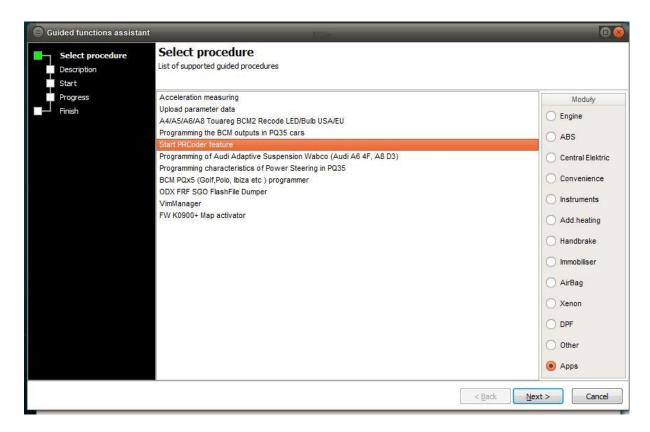


5.4 OCF – PRCoding

You can find the PRCoding feature in Others.

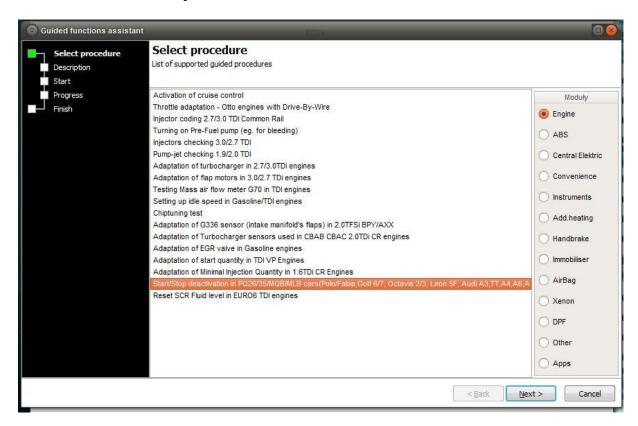
See manufacturer documentation for details: http://www.vcpsystem.com/vcpsystem/pdfs/prcoder.pdf

5.4.1 Procedure



5.5 OCF – Start/Stop deactivation

You can find the Start/Stop deactivation feature in Motor.



5.5.1 Start/Stop deactivation - supported vehicles

Below you can find the list of vehicles which can use the Start/Stop deactivation feature via OCF

MQB Platform (VW Golf 7, Skoda Octivia III 5E, Audi A3 8V, Audi TT 8S, Seat Leon 5F,

VW Touran II, VW Lamando, VW Passat B8, Skoda Superb III)

PQ35 Platform (Golf 6, Passat 3C) – Gateway 7N0

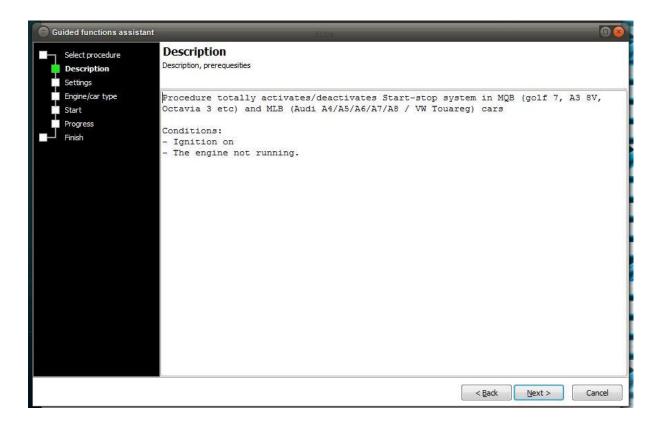
PQ26 Platform (VW Polo 6C, Skoda Fabia III, Seat Ibiza 6P)

MLB Platform (Audi A4 8K, Audi A5 8T, Audi Q5 8R, Audi A6 4G, Audi A7 4G, Audi A8 4H)

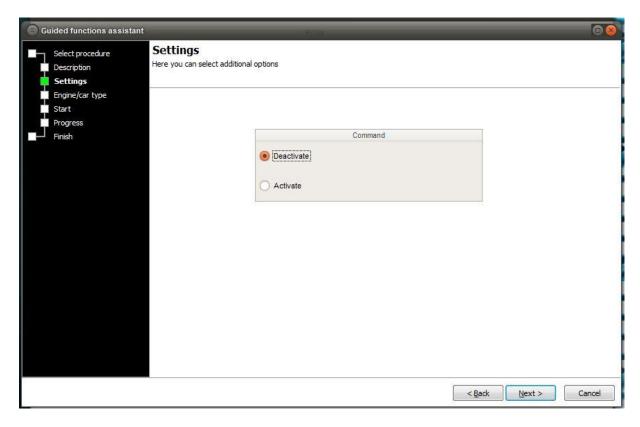
MLB Evo Platform (Audi A4 B9, Audi Q7 II) – in progress

5.5.2 Start/Stop deactivation - procedure

Respective program steps and requirements.



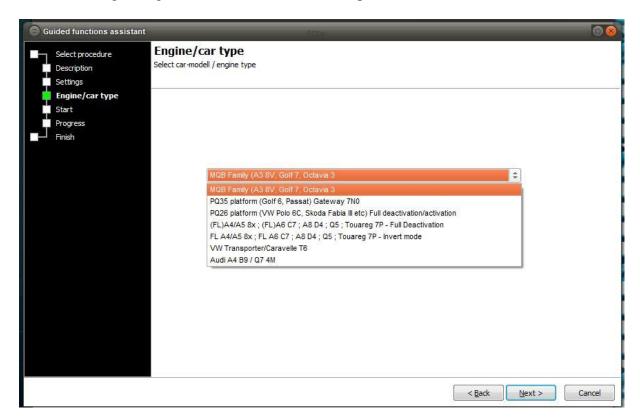
Activate or deactivate (choose one) the Start/Stop system.

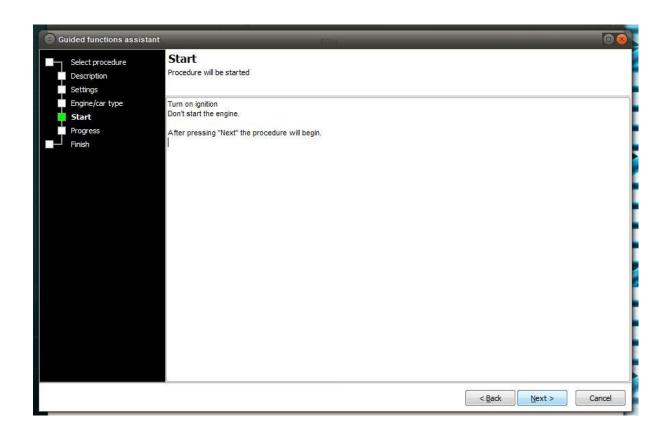


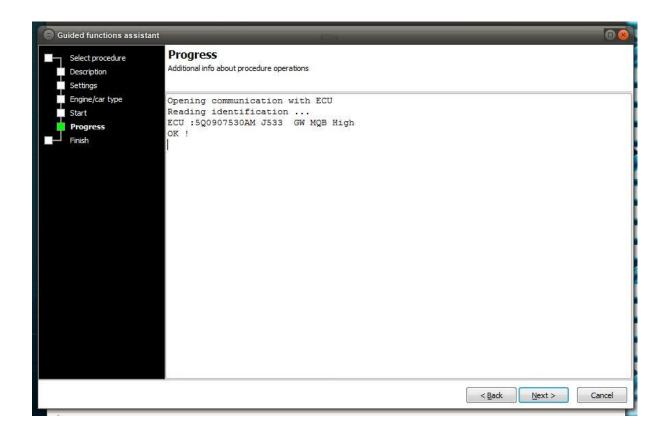
The configuration depends on the vehicle model:

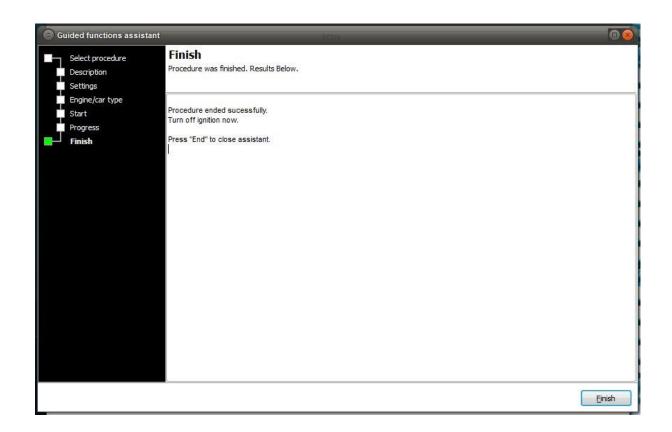
- MQB Platform (Audi A3 8V, VW Golf 7, Seat Leon 5F, Skoda Octavia III 5E, VW Passat B8, Audi TT 8S, etc.) deactivated
- PQ35 Platform (VW Golf 6, VW Passat 3C etc.) Gateway 7n0 deactivated
- PQ26 Platform (VW Polo 6C, Skoda Fabia III, Seat Ibiza 6P etc.) deactivated
- MLB Platform (Audi A4 8K Facelift und Vor-Facelift, Audi A5 8T FL&VFL, Audi Q5 8R FL&VFL, Audi A6 4G FL&VFL, Audi A7 4G FL&VFL, Audi A8 4H FL&VFL, VW Touareg II 7P etc.) deactivate
- MLB Platform (Audi A4 8K Facelift, Audi A5 8T FL, Audi Q5 8R FL, Audi A6 4G FL, Audi A7 4G FL, Audi A8 4H FL, VW Touareg II 7P etc.)
 Inversion mode

(Activate Last Mode of the Start/Stop switch, to turn on the saving function of the last setting. This function will be active until the setting is manually changed. Invert the LED signalling -> LED active when Start/Stop is activated.)









5.6 OCF – ESP deactivation

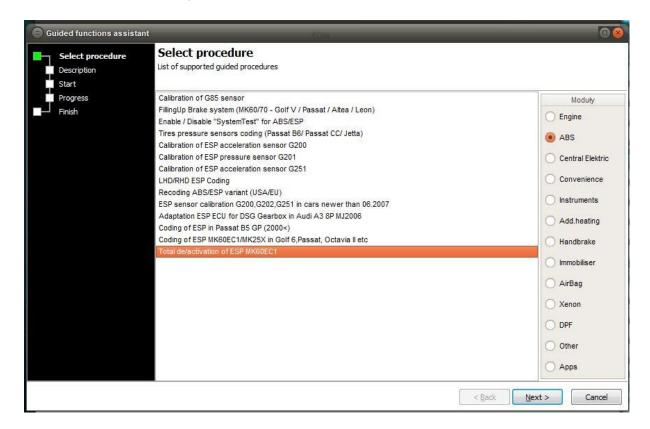
Description in progress

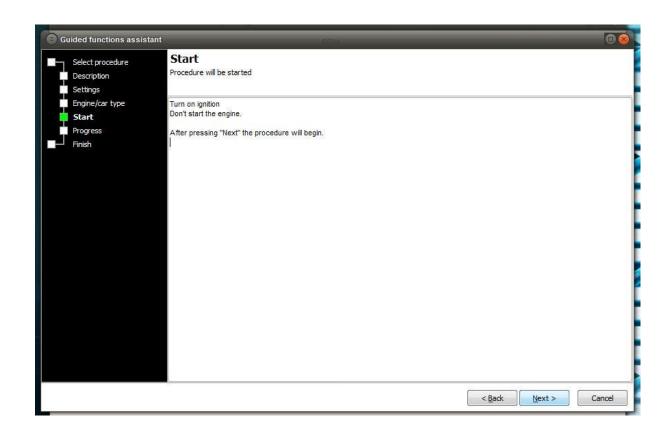
5.6.1 ESP deactivation - supported vehicles

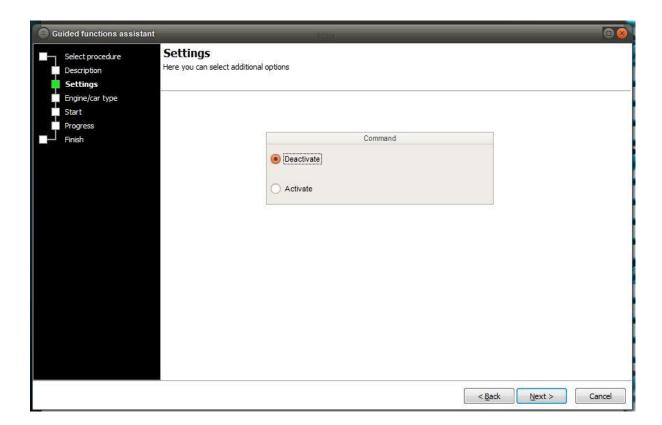
List in progress

5.6.2 ESP deactivation - procedure

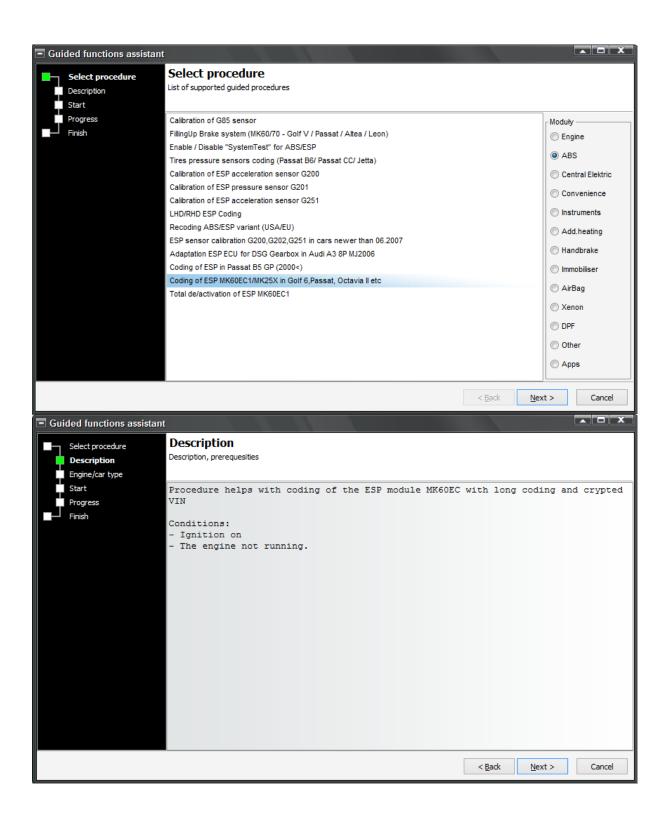
5.6.2.1 ESP deactivation for MK60EC1

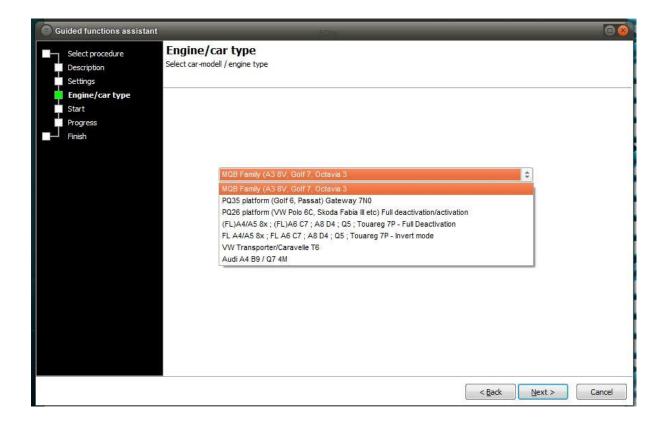






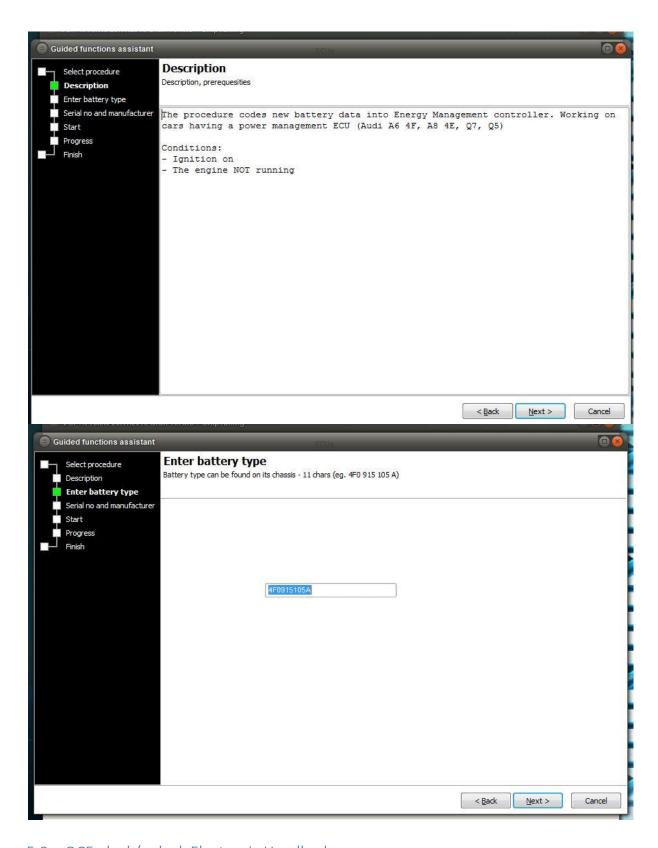
5.6.2.2 ESP deactivation forM60ECE1/MK25X in Golf 6, Passat, Octavia II etc.





5.7 OCF - Battery coding for battery manager

Description in progress Guided functions assistant Select procedure Select procedure List of supported guided procedures Description Start Enable / disable Nordic mode (Low beam as Daylight running lights) Moduly Finish Engine Disable APS-function of Front wisher Activating Coming-Home / Leaving home functions O ABS Setting up PWM value for front LED daylight running lights - Audi A6 2009 Activation of DRL using fog lights in BCM system Central Elektric Convenience Instruments Add.heating Handbrake (Immobiliser O AirBag Xenon O DPF Other O Apps < <u>B</u>ack Next >



5.8 OCF - lock/unlock Electronic Handbrake

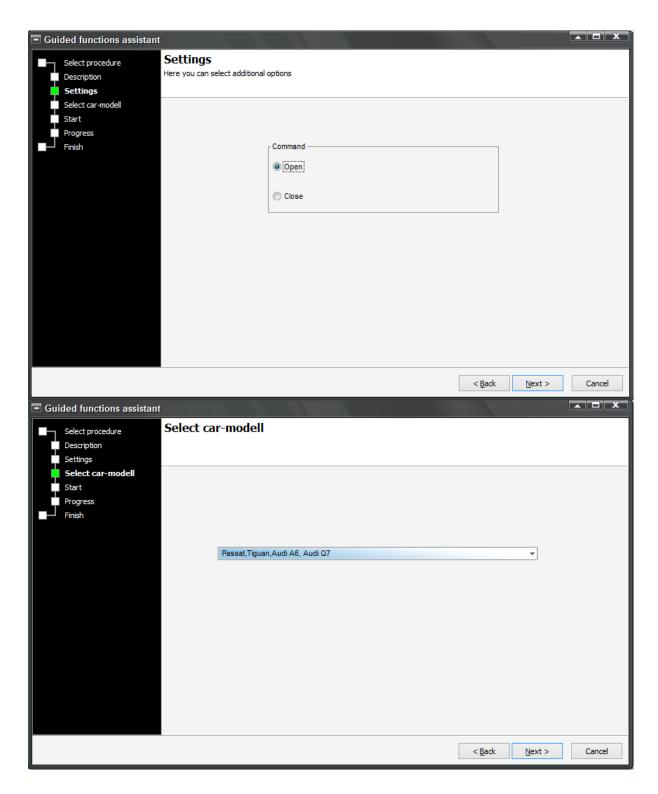
This function allows you to lock and unlock the electronic handbrake.

5.8.1 Supported vehicles

• All vehicles equipped with an electronic handbrake (STG53 – parking brake)

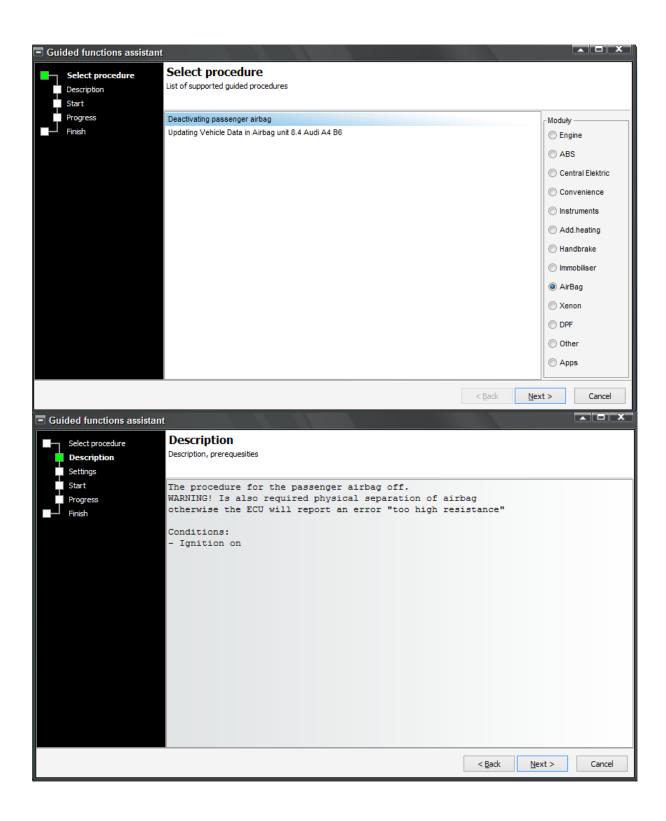
5.8.2 Procedure

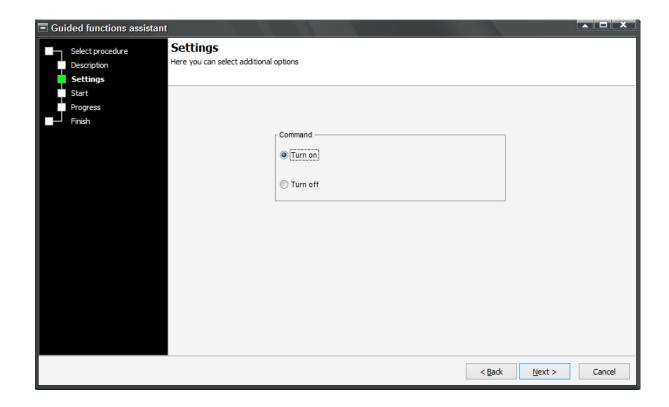




5.9 OCF – deactivate Passenger Air bag

Description in progress





5.10 OCF – Headlamp Beam Height Control

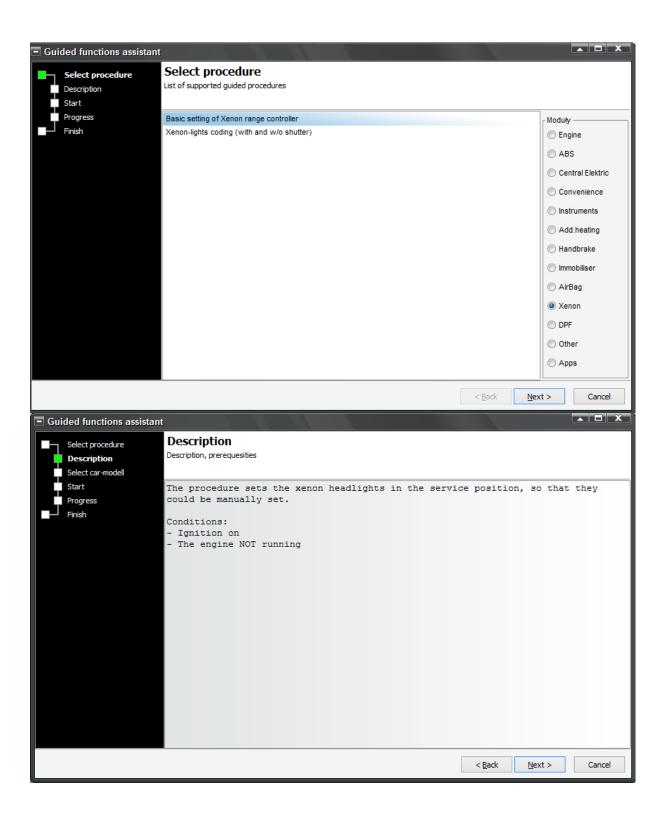
This function allows you to perform the basic settings of the headlamp beam height.

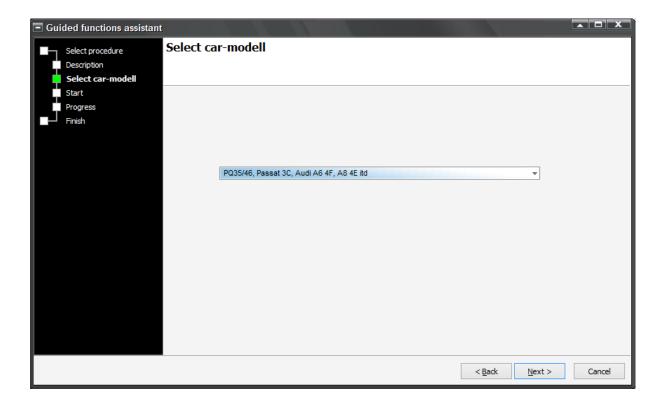
5.10.1 Supported vehicles

PQ35/46: Passat 3C, Audi A6 4F, Audi A8 4E K-Line: Passat 3B, Audi A4 4E, Audi A6 4B

CAN UDS: A6 C7 / A8 D4

5.10.2 Procedure



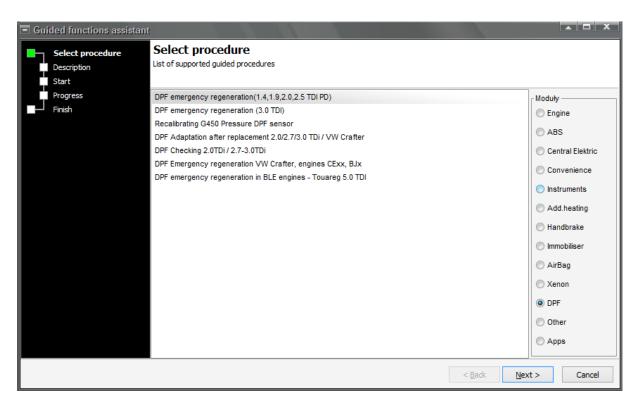


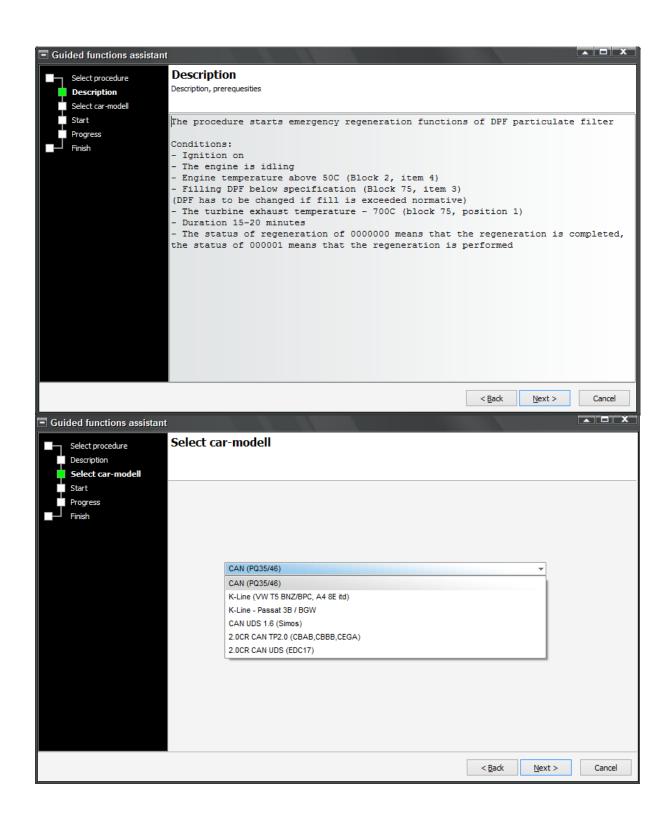
5.11 OCF – DPF Emergency Regeneration

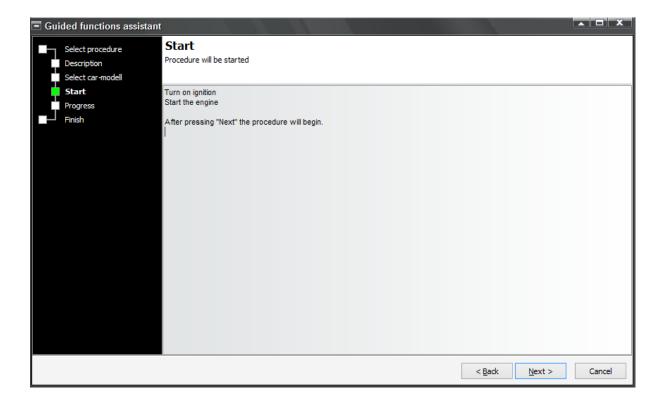
Description in progress

5.11.1 Supported vehicles

- PQ35/PQ45 CAN UDS
- VW T5 BNZ/BPC, Audi A4 8E K Line
- Passat 3B / BGW K Line
- 2.0 CR (CBAB, CBBB, CEGA) CAN TP 2.0
- 2.0 CR EDC17 CAN UDS

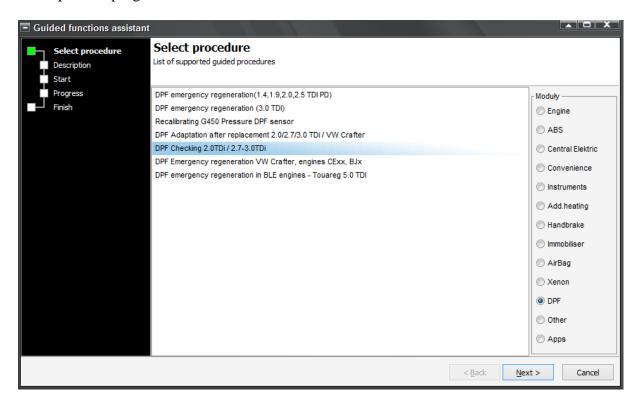


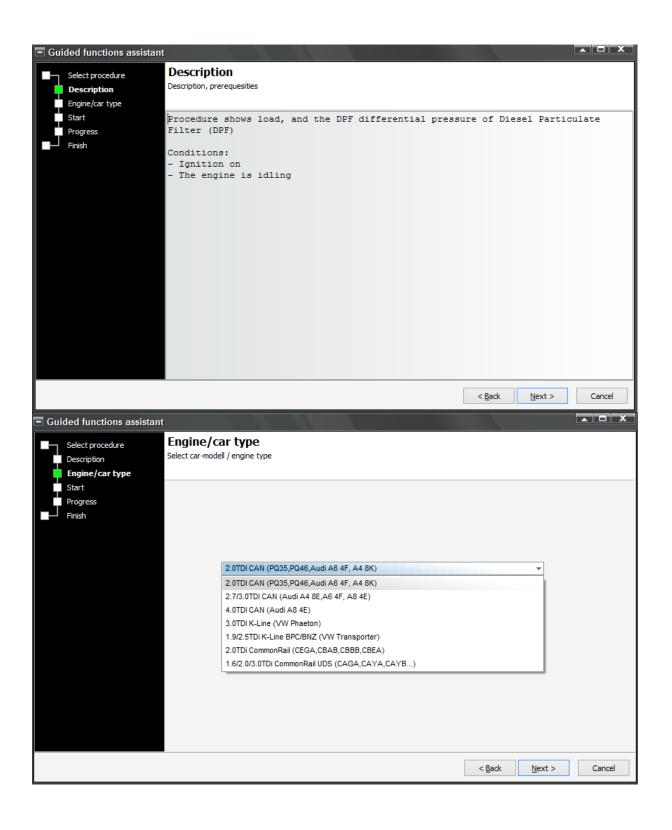


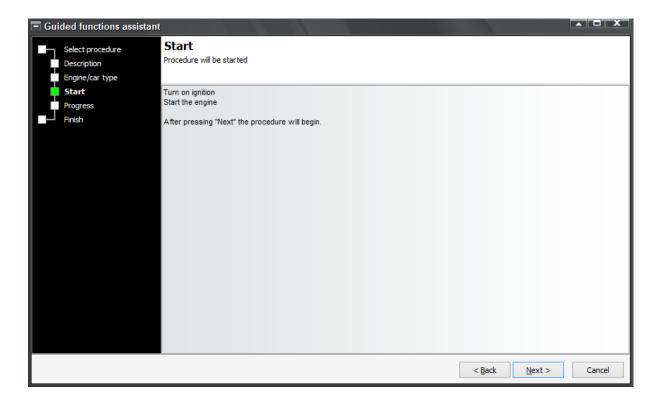


5.12 OCF – DPF Inspection 2.0 TDI / 2.7 – 3.0 TDI

Description in progress





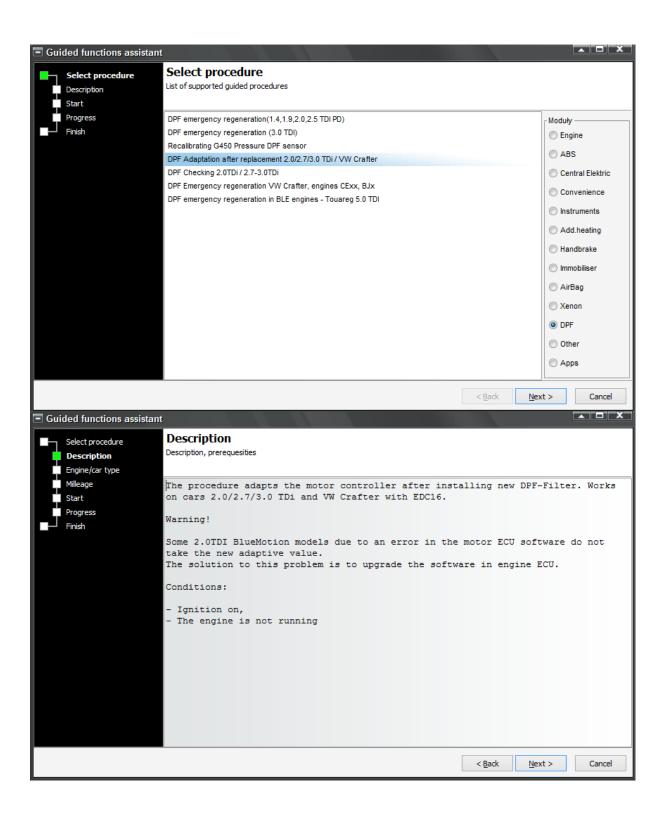


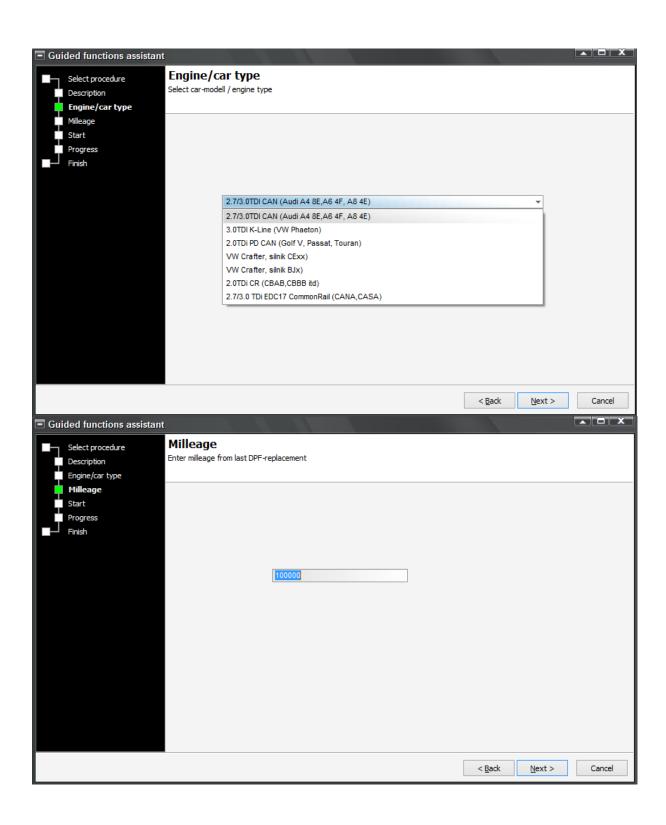
5.13 OCF – DPF Adjustments after replacement 2.0/2.7/3.0 TDI | Crafter

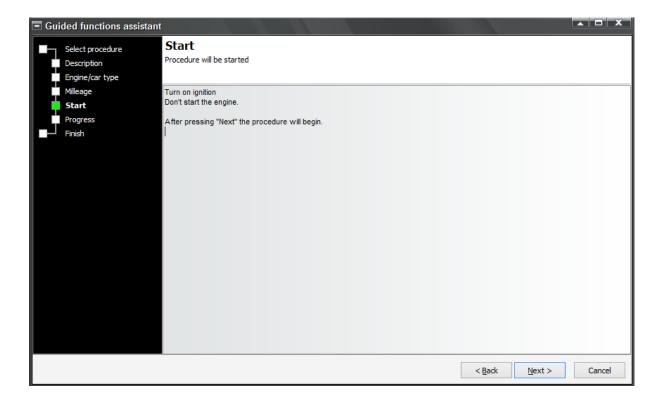
Description in progress

5.13.1 Supported vehicles / motors

- 2.7/3.0 TDI (Audi A4 8E, A6 4F, A8 4E)
- 3.0 TDI (VW Phaeton) K Line
- 2.0 TDI PD (Golf V, Passat, Touran) CAN
- VW Crafter, CExx motor
- VW Crafter, BJx motor
- 2.0 TDI CR (CBAB, CBBB etc.)
- 2.7/3.0 TDI EDC17 CommonRail (CANA, CASA)







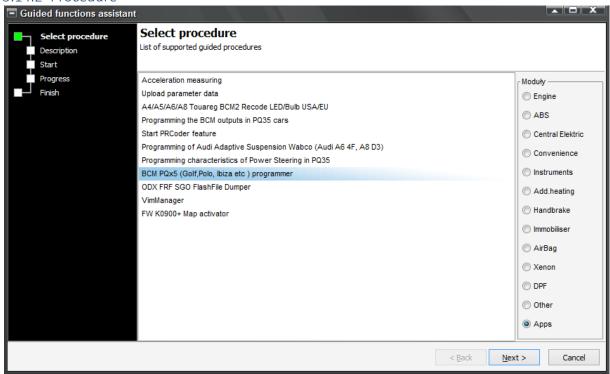
5.14 OCF – BCM PQx5 Programming (Golf, Polo, Ibiza etc.)

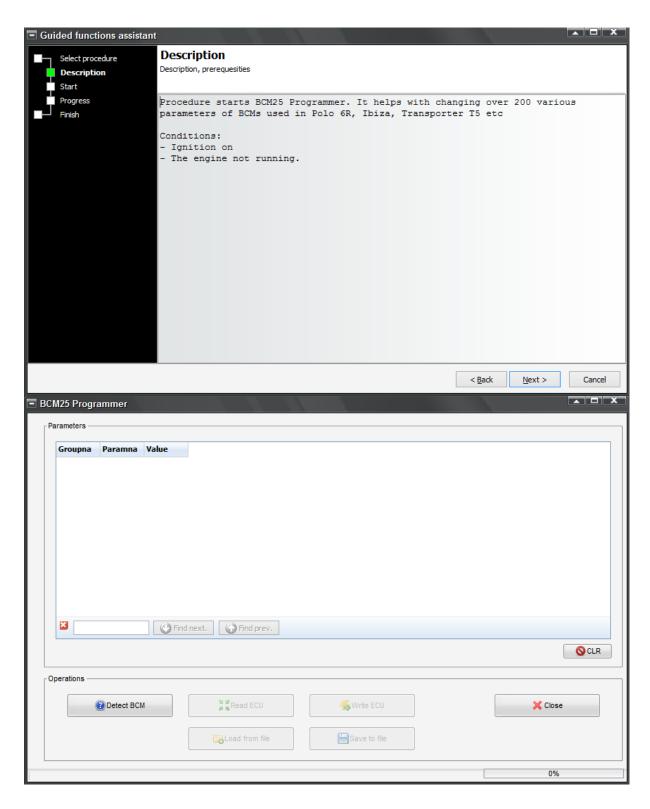
Description in progress

5.14.1 Supported vehicles

• PQx5 Platform vehicles (Golf, Polo, Ibiza etc.)

5.14.2 Procedure





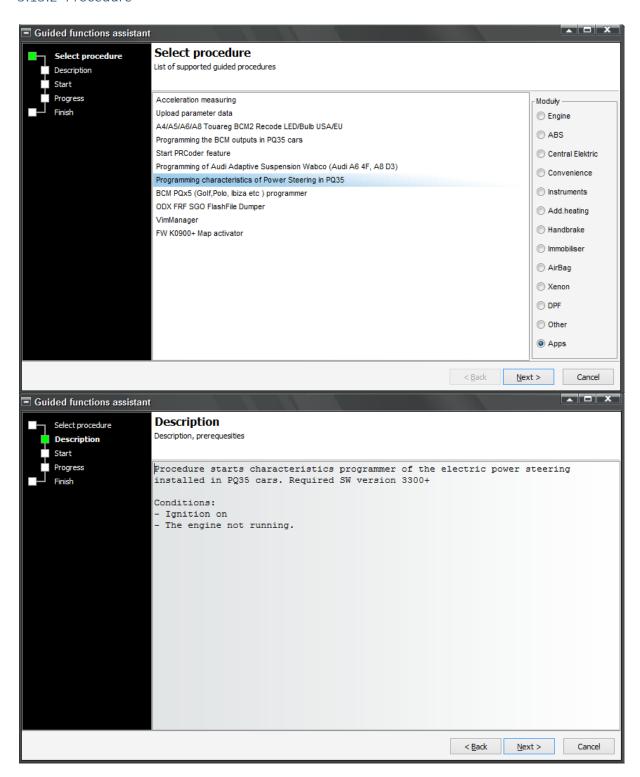
5.15 OCF – programming characteristics of the Power Assisted Steering control device (Golf 6, Passat,..)

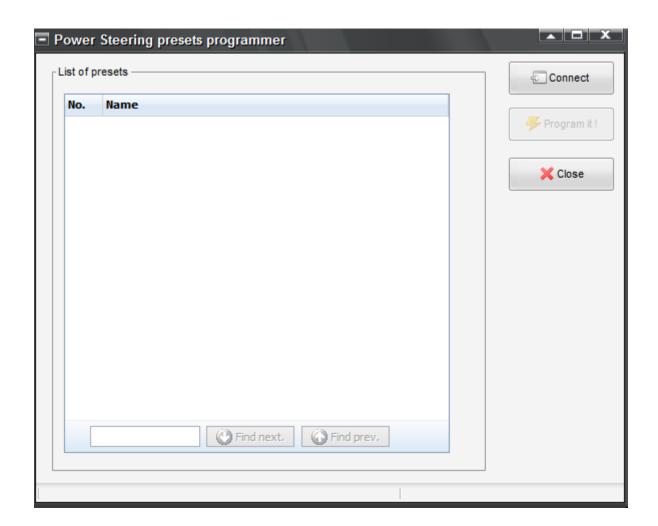
Description in progress

5.15.1 Supported vehicles

• PQ35 Platform vehicles (Golf 6, Passat, etc.)

5.15.2 Procedure





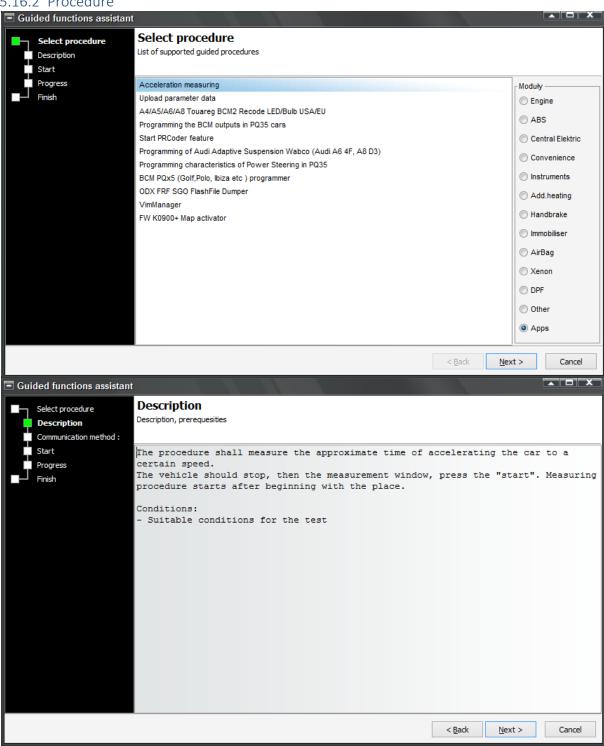
5.16 OCF – Acceleration Measurements

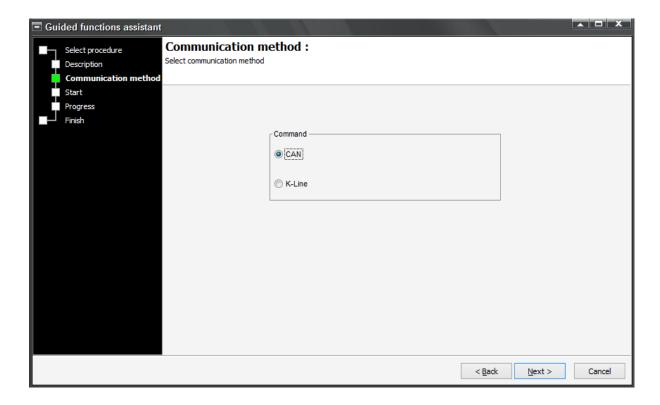
Description in progress

5.16.1 Supported vehicles

List in progress

5.16.2 Procedure





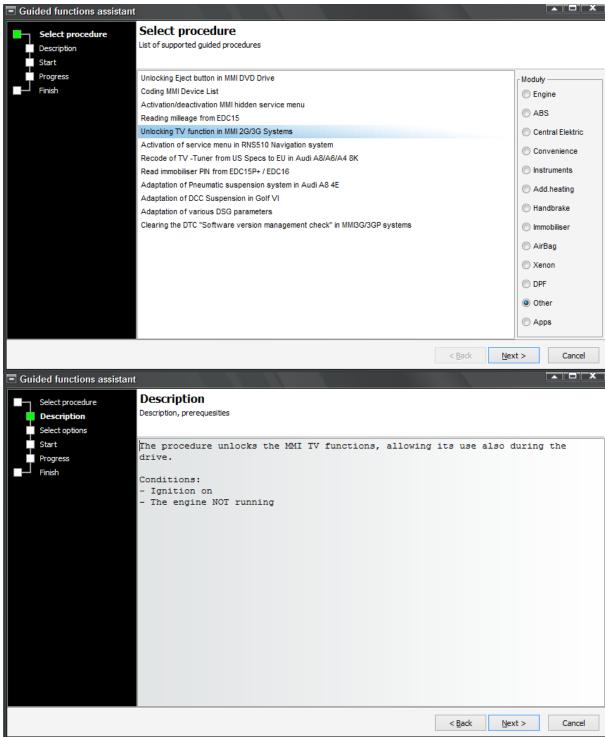
5.17 OCF – VIM / TV regional lockdown removal for MMI 2G/3G/3GP models.

Video image threshold activation (via Guided Functions) in all MMI 2G, 3G all 3GP variants

5.17.1 Supported vehicles

- All vehicles with MMI 2G/3G Navigation systems
 (Audi A4 8K, Audi A5 8T, Audi Q5 8R, Audi A6 4F, Audi A6 4G VFL, Audi A7 4G VFL, Audi A8 4E, Audi A8 4H, VW Touareg II 7P)
- Caution: do not use with facelift models: Audi A6 4G, Audi A7 4G, Audi A8 4H. For those models, please use the ZDC VIM Files (e.g. via VIM Manager).

5.17.2 Procedure

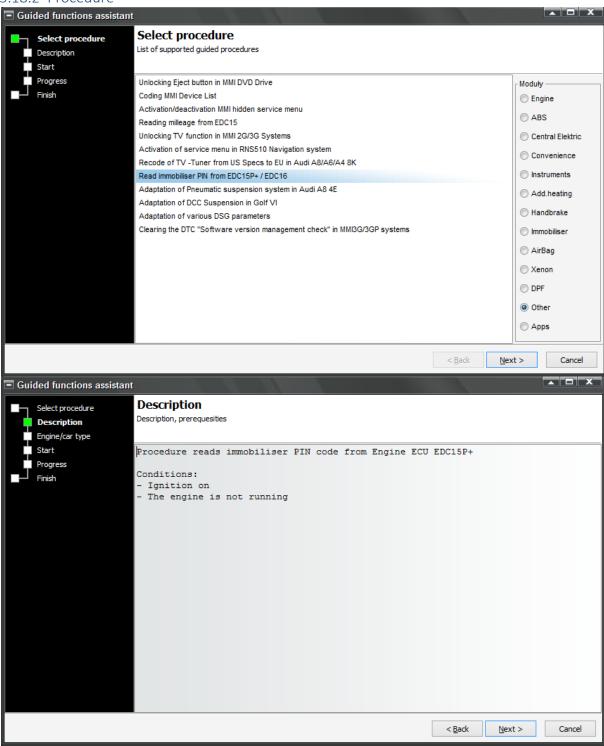


5.18 OCF – reading Immobilizer PIN EDC15P EDC16 Description in progress

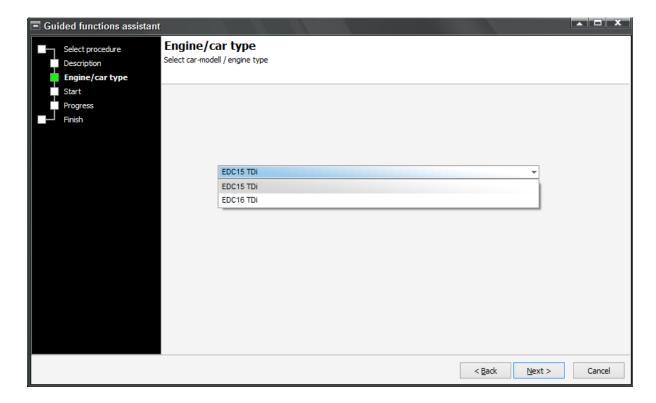
5.18.1 Supported vehicles

• Vehicles with EDC15P+ and EDC16 ECUs

5.18.2 Procedure



Choose the Engine Control Unit: EDC15 / EDC16 TDI



Flash boot loader is initiated

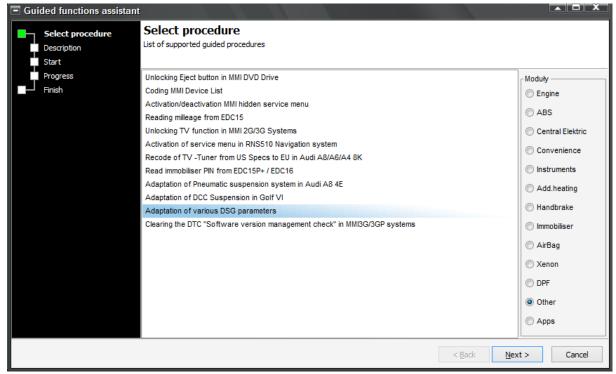
5.19 OCF – DSG Parameters adjustments

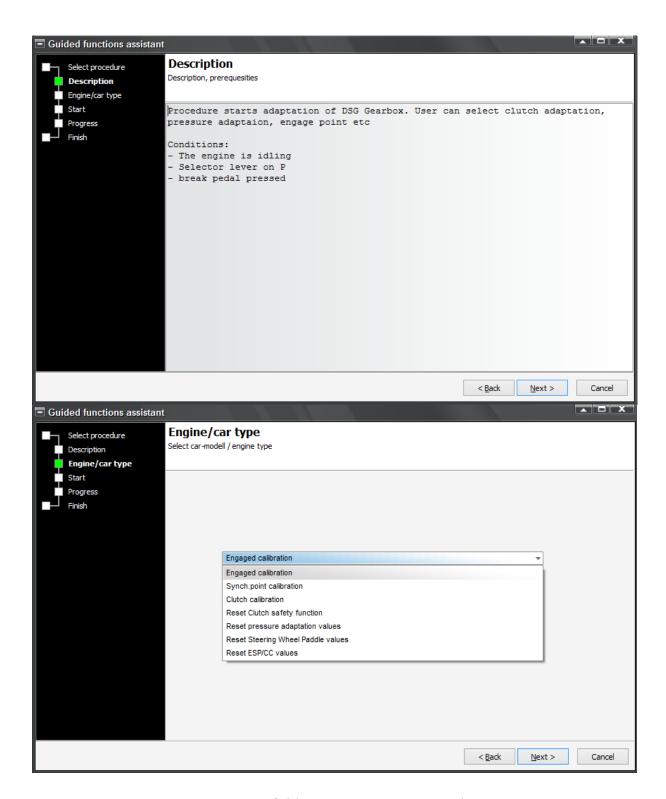
Description in progress

5.19.1 Supported vehicles

List in progress

5.19.2 Procedure





5.20 OCF – Activating wing mirror folding in UDS Door Control Units

5.20.1 Supported vehicles

VW Golf 65K

VW Jetta 1K

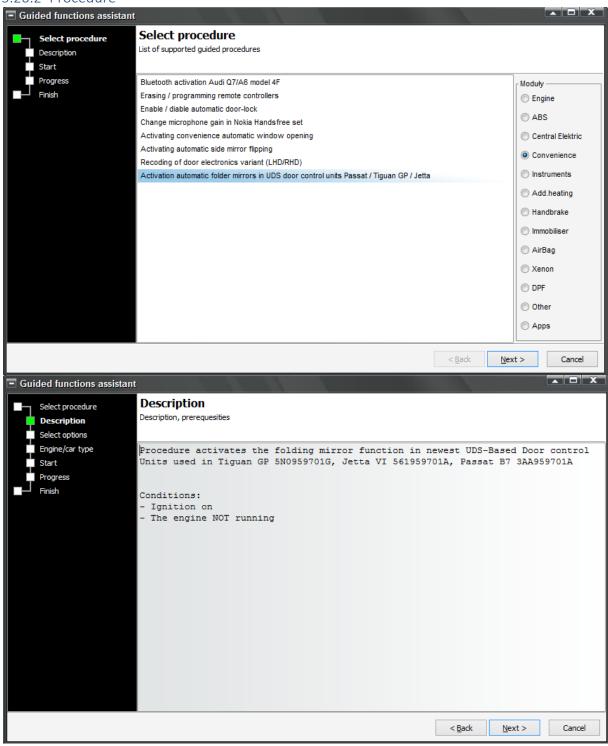
VW Tiguan 5N

VW Passat 3C

VW Scirocco 13

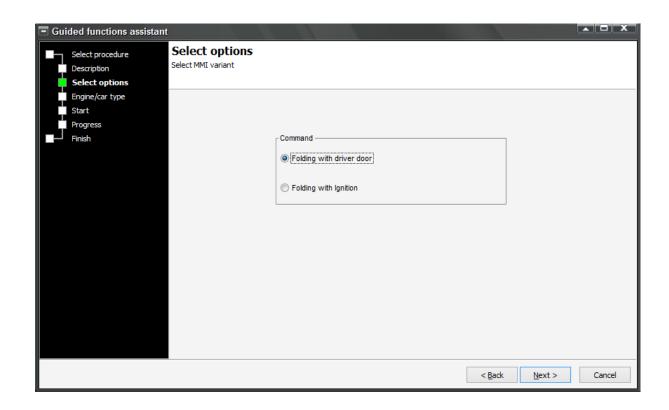
Skoda Superb 3T

5.20.2 Procedure



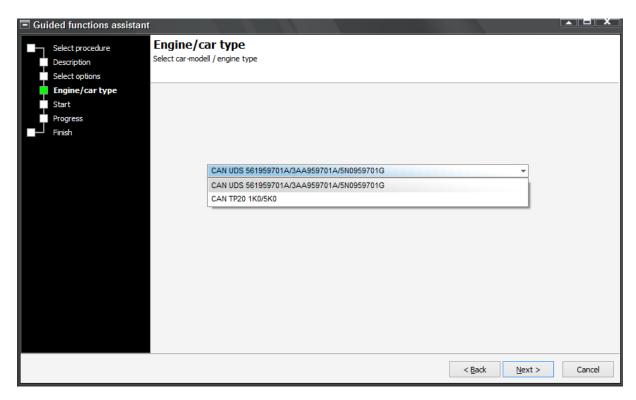
Choose one:

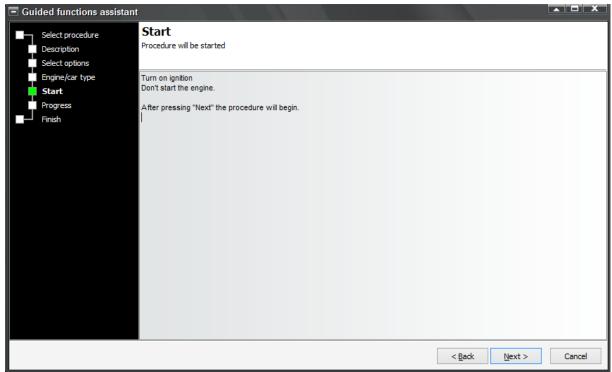
Folding with driver door Folding with Ignition

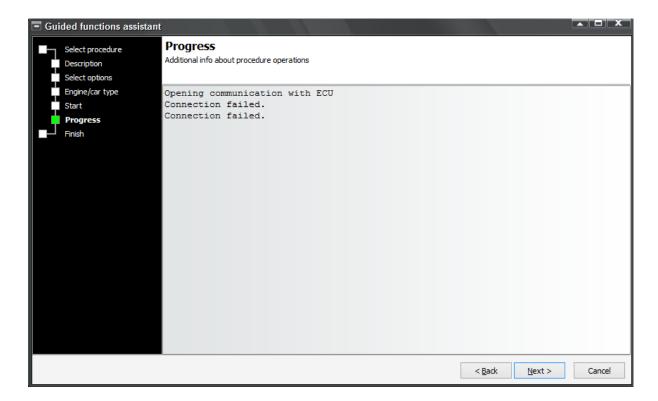


Make your choice depending on the installed Door Control Unit:

CAN UDS (561959701A, 3AA959701A, 5N0959701G) – Passat 3C, Tiguan 5N CAN TP20 (1K0/5K0) – Golf 6 5K, Jetta / Vento / Bora 1K, Golf 5 1K







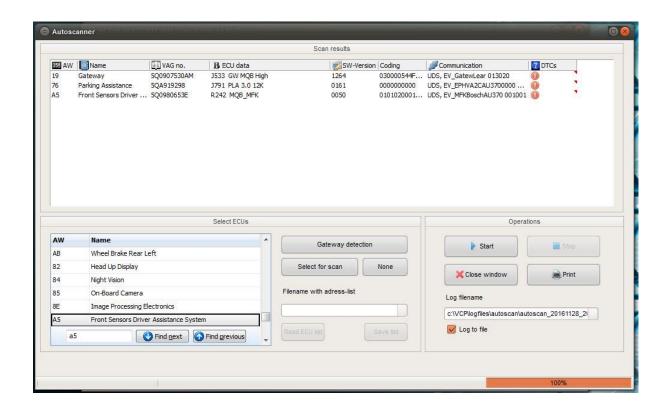
The procedure will start automatically and the respective ECUs will be configured. In case the selected ECUs are unavailable, please check the connection or select the appropriate ECUs once again (we suggest to run a STG42 and STG52 Auto Scan).

6 Auto-Scanner (Fault Memory Reading)

Auto-Scanner allows you to test any ECU installed in the vehicle.

All relevant data pertaining to the ECUs will be displayed in the table presented below:

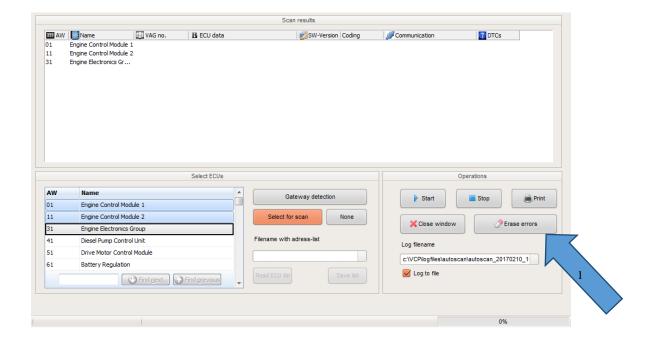
VAG No.	STG Data	SW Version	Coding	Communication	Error (Yes/No)
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New 5.5.4+: Automatic Gateway Recognition enables listing the ECUs available in the vehicle (via Gateway detection button): Fault memory is subsequently read and the relevant information regarding all ECUs (including coding information etc.) is displayed.

New 8.0.3+: You can erase the fault memory from Autoscanner, too. You have 2 options:

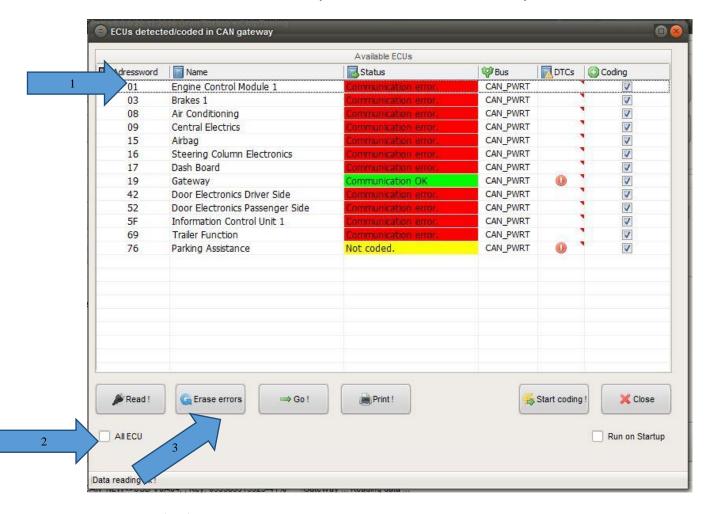
- Select ECUs you want to clear (CTRL+Click or SHIFT+Click to select a range) and left-click on "Erase errors" button to clear DTCs from selected ECUs only
- Right-Click on "Erase errors" button to clear DTCs from all ECUs on the list



7 Gateway – Part list

You can access the part list of the Gateway (in case of cars with CAN) directly via the VCP main screen -> Gateway.

You can access the necessary ECUs directly via the Gateway overview, view the ECUs fault status, add new ECUs to the Gateway (2) and clear the Fault Memory (3).



8 ECU Flasher

You can use the ECU Flasher (in VCP) to update the original ECUs. ECU Flasher can be accessed by opening the particular ECU and press the UP/Download button.

Once you finish selecting the necessary Flash files you can start the Flash/Update procedure.

8.1 Supported vehicles

List in progress

8.2 Supported File Types

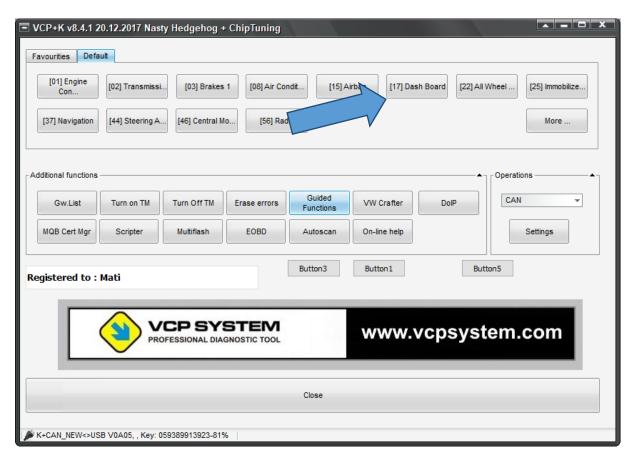
.sgo

.frf

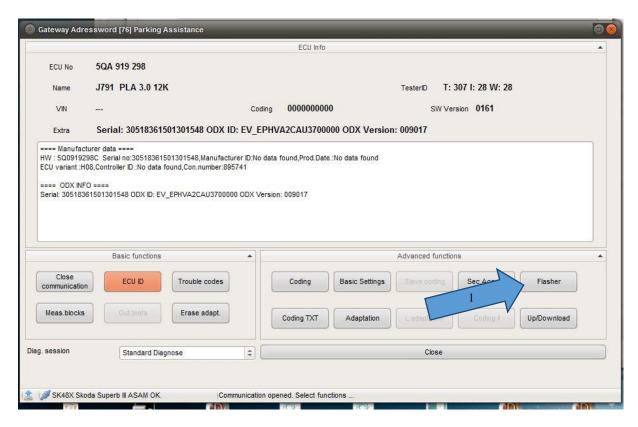
.bin (Additional flashing option is necessary to update certain Engine Control Units)

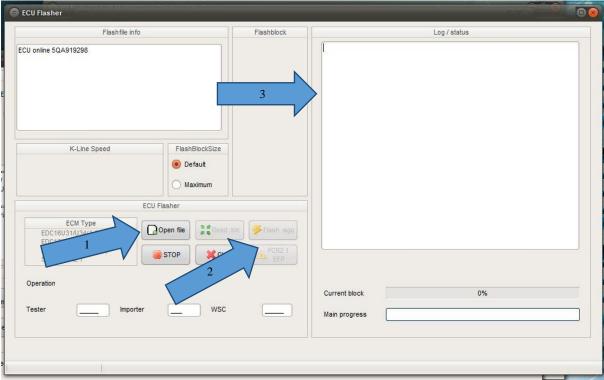
8.3 Procedure

Open the relevant ECU via the Main screen.



Press the Flasher (1) button in the Details page.





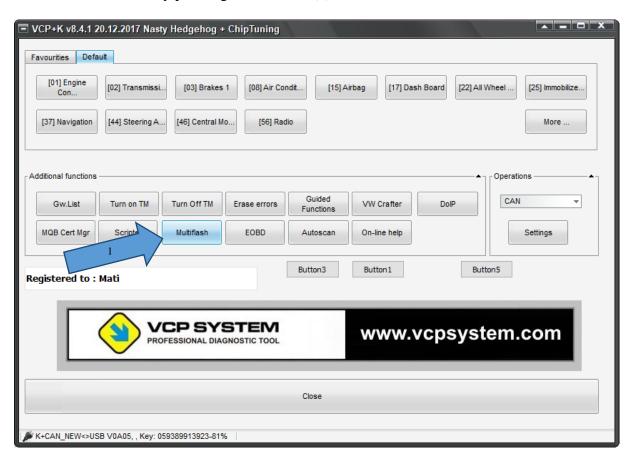
Open the appropriate Flash file via (1) and perform the update by pressing (2). In the Status display area (3) you view the Update progress.

9 Multiflasher

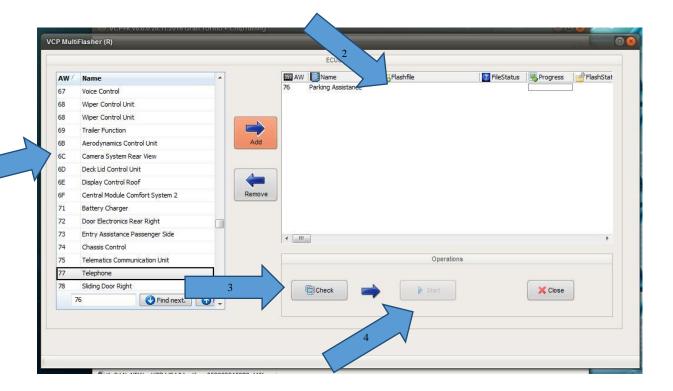
You can perform software updates for multiple ECUs simultaneously using the Multiflasher feature.

9.1 Procedure

Start the Multiflasher by pressing - Multiflash (1) in the Main screen.



Select the ECUs (1) and the appropriate Flash files (2), perform a test (3) and Start the flash operation.



10 EEPROM read/write

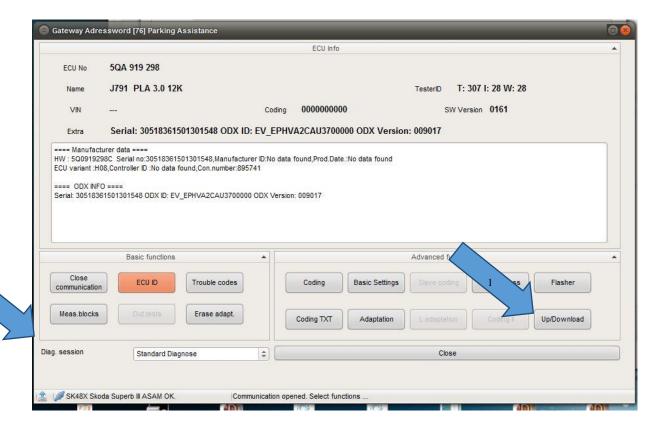
You can read and write anew/overwrite the EEPROM of the supported vehicles/ECUs using the VCP.

10.1 Supported vehicles

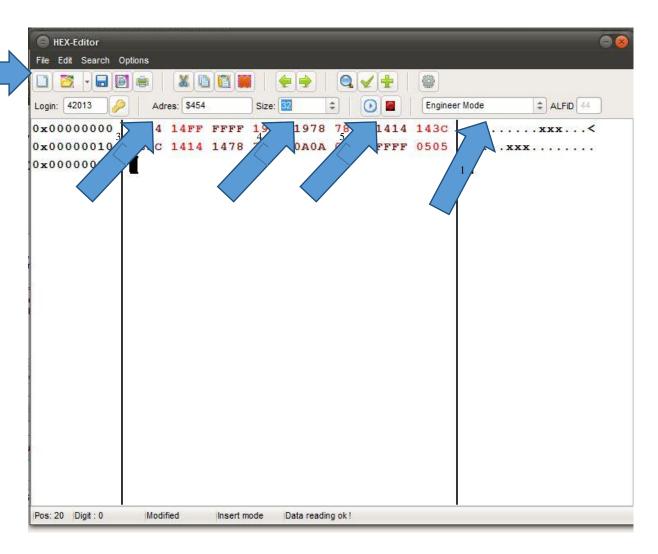
List in progress

10.2 Procedure

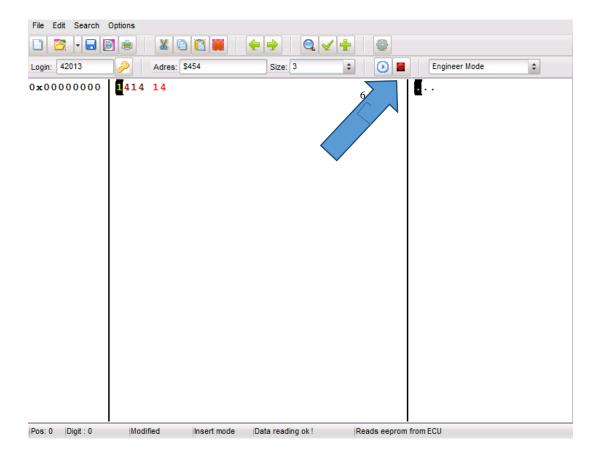
In the Details page of a particular ECU you can press UP/Download (1) to open the HEX Editor. Adjust the type of diagnostic session (2).



Required Diag. Session (1) for EEPROM read/write test (in case if this was set for the particular ECU beforehand). Record the necessary login data (2), define the address (3), set memory size (4), then read and load (5) the current information, as necessary.

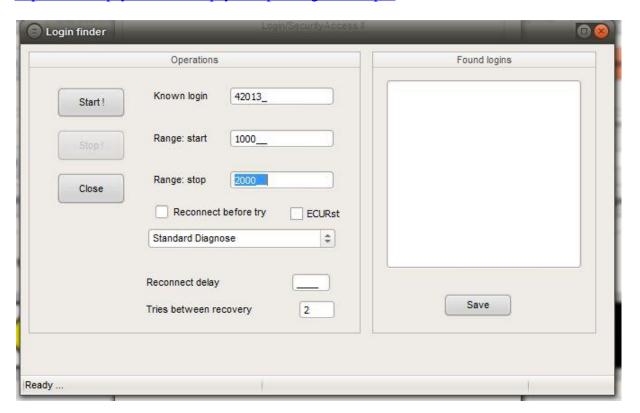


After a successful reading, perform the necessary adjustments and overwrite (6) the EEPROM.

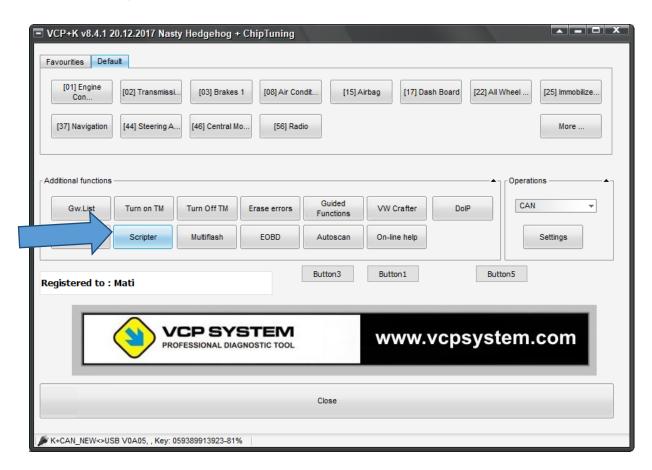


11 Login Finder

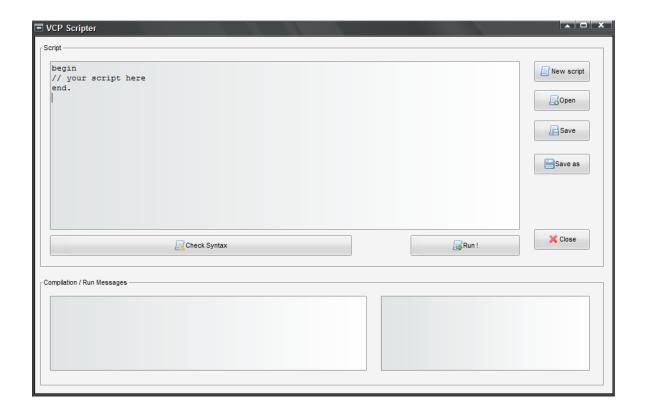
See manufacturer documentation for details: http://www.vcpsystem.com/vcpsystem/pdfs/loginfinder.pdf



12 VCP Scripter



Detailed "in action" description. Sample fles / codes on request. See manufacturer documentation for details: http://www.vcpsystem.com/vcpsystem/pdfs/vcp_scripter.pdf



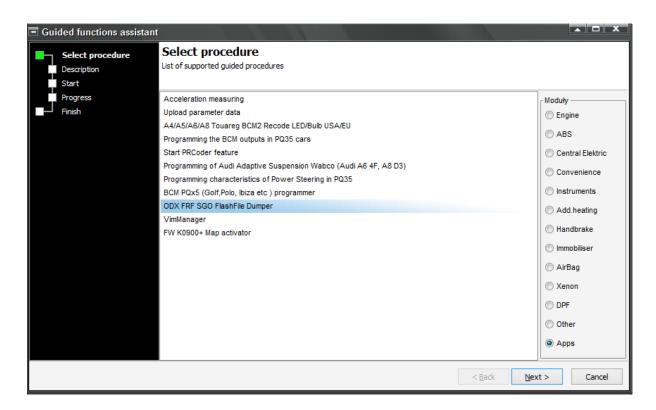
13 VCP Flash Dumper

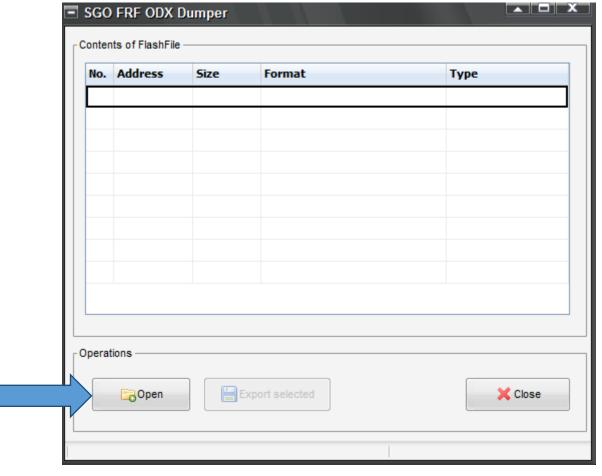
VCP Flash Dumper allows you to create a binary images of .odx, .frf or .sgo Flash files.

Caution!

The data format (unencrypted / encrypted or uncompressed / compressed) does not change, which means that an encrypted Flash file is also converted to an encrypted binary file.

You can launch this application via Guided Functions (OCF) - APPS - Flash Dumper.

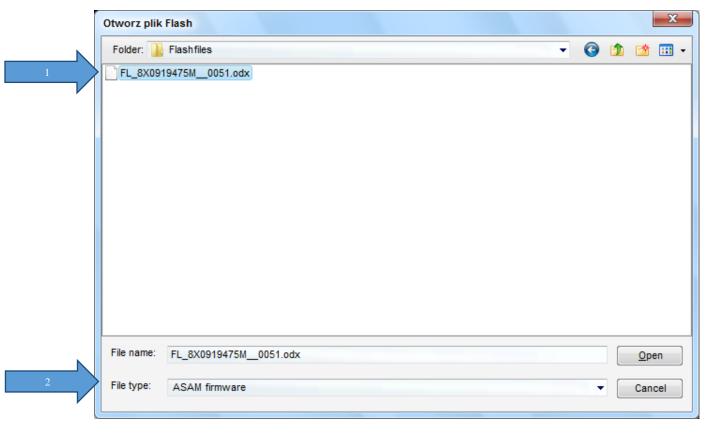




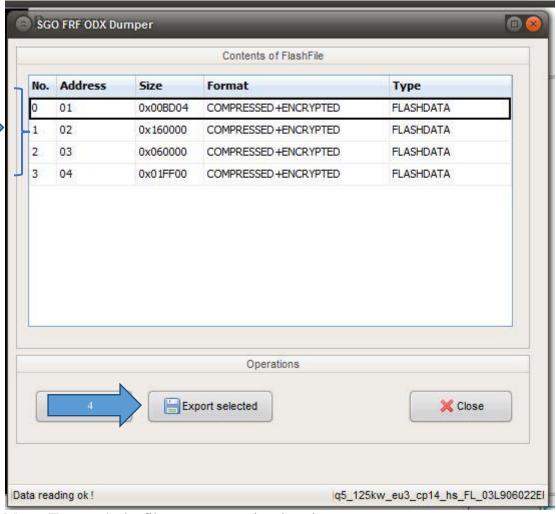
Select a Flash file (1).

Define file type (2) if necessary:

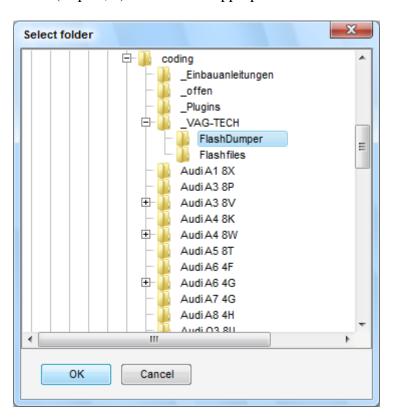
VCP Firmware, VAS Firmware, ASAM Firmware, ODIS Firmware



The contents of the selected Flash file will be displayed in a list (3).



Move (Export; 4) the file to an appropriate location.



It will be stored as a .BIN file and can be edited as necessary.

14 Sample coding

Below, you find examples of codes which will show you the basics of coding and the specific features of VCP.

14.1 Audi A3 8V or MQB Platform – Activating the visual display of the Parking Assist System.

Optische Darstellung der Einparkhilfe (APS - Audi Parking System) über das MMI aktivieren

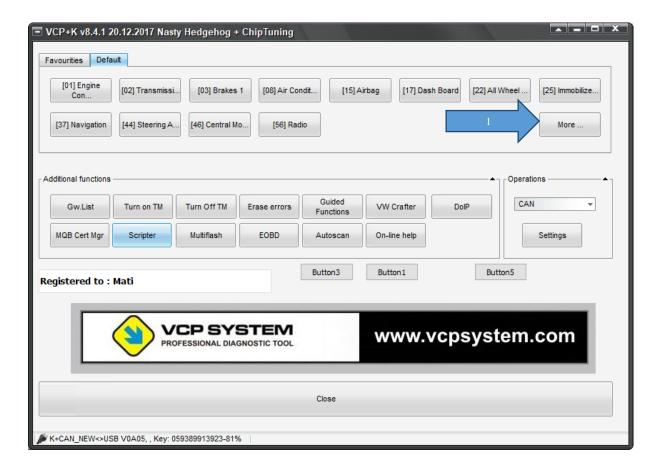
Im Steuergerät der Einparkhilfe haben Sie die Möglichkeit beim Audi A3 8V die optische Anzeige der Einparkhilfe über das MMI freizuschalten, auch wenn lediglich die 'kleine' Einparkhilfe für hinten verbaut ist.

Folgende Codierung ist anzuwenden:



14.1.1 ECU (STG) 10 – connecting the Parking Assist System

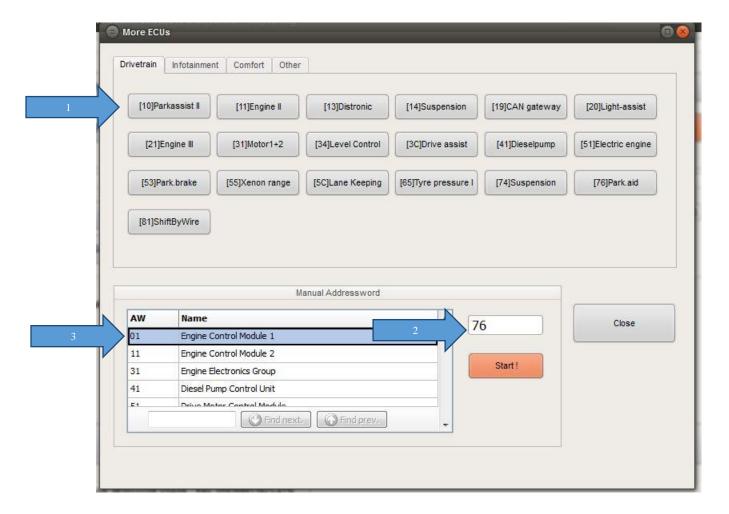
Launch the VCP and select More... (1) in the ECU Overview



14.1.1.1 STG 10 – open Parking Assist System ECU

You have 3 possibilities to access the desired ECU:

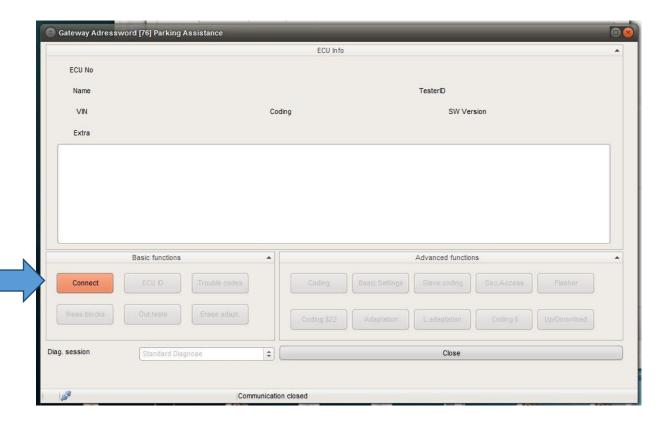
- via the buttons in the Overview (1)
- via manual selection by entering the particular ECU's number (2)
- via manual selection of the particular ECU from the list (3)



14.1.1.2 STG 10 – connect with Parking Assist System ECU

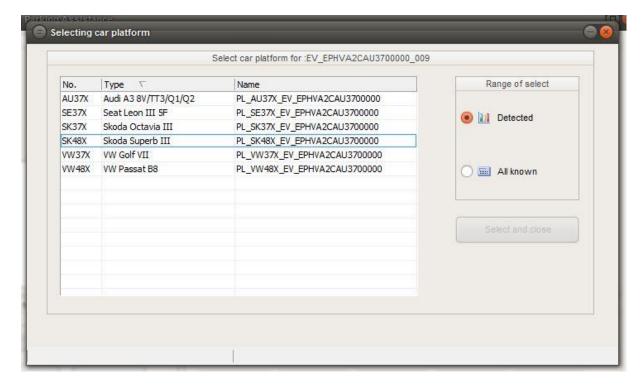
If you have used the manual selection, the ECU will connect automatically even if you later access this ECU, for example, via the Gateway or the fault memory.

If you have opened the ECU via the Overview area, you will have to once again click the Connect button (1). (unless the Automatic Connection function was activated in the Program Settings – see Chapter 4.3 Automatic Communication Establishment)



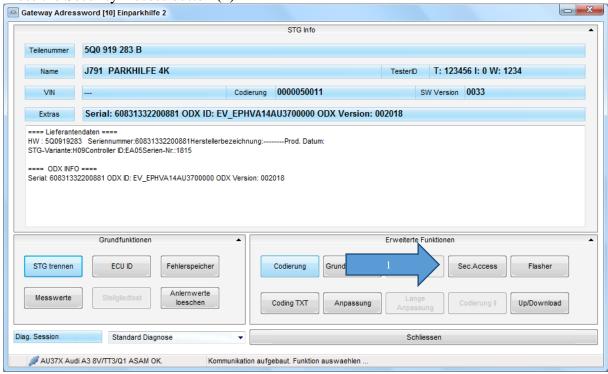
14.1.1.3 Vehicle Selection

Vehicle Selection is used to make correct assignments of the Label files.



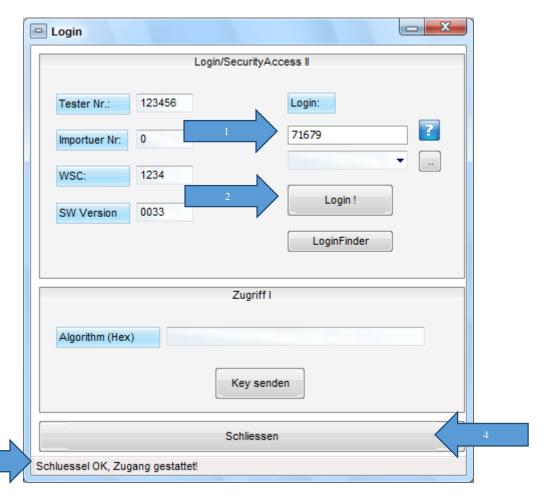
14.1.2 Security Access

Press the Security Access button (1)



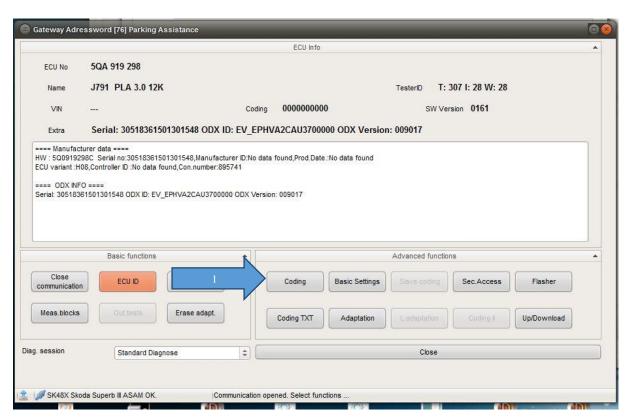
Enter the Access code (1) and log-in (2). After successfully logging in you will receive a confirmation message in the status bar (3). If the login is incorrect, or not fit for the particular ECU, you will also receive a relevant message in the status bar.

After successfully logging-in you can close the dialogue window (4).



14.1.3 Coding procedure

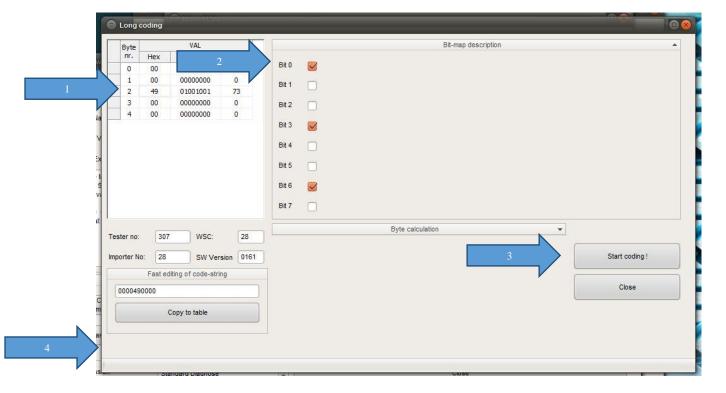
Access the Coding window (1)



Select a byte (1) tick the Bit 0 field (2) and press the Coding button (3). The Status bar (4) will indicate whether the Coding was successful, otherwise, a relevant error message will be displayed.

In our example the Access Code (described in the Secure Access section) was incorrect or not provided at all. If this happens, repeat the procedure.

If the control unit has been coded correctly the following message appears(5): ECU coded -> *STG ID*



The Coding was successfully completed.

14.2 Audi A3 8V or MQB Platform – Fuel consumption adjustments

Verbrauchsanzeige (FIS) anpassen

Im Kombiinstrumentsteuergerät haben Sie die Möglichkeit beim Audi A3 8V die Verbrauchsanzeige anzupassen. Sofern bei Ihnen der angezeigte Verbrauch im FIS abweicht (gegenüber Tankbeleg) können Sie hier in Prozentschritten eine Anpassung durchführen

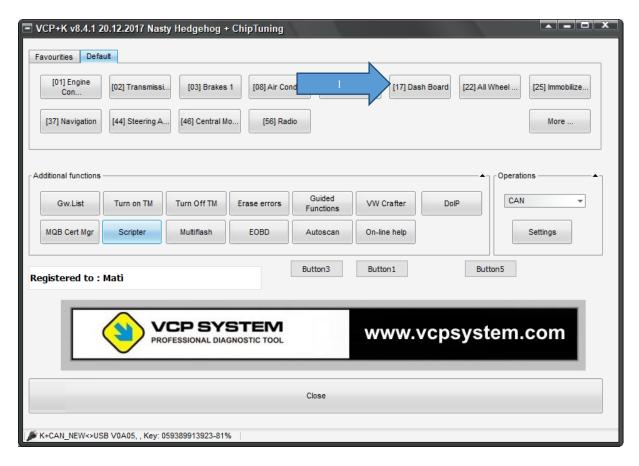
Folgende Codierung ist anzuwenden:

- 1. STG 17 (Kombiinstrument) auswählen
- 2. STG Anpassung -> Funktion 10
- 3. Anzeigekorrektur Verbräuche und Reichweite anpassen auswählen
- 4. Der Basiswert ist 100

nun könnt ihr das ganze in 1% Schritten einstellen, die jeweiligen Maximalwerte sind 85 (%) bzw. 115 (%).

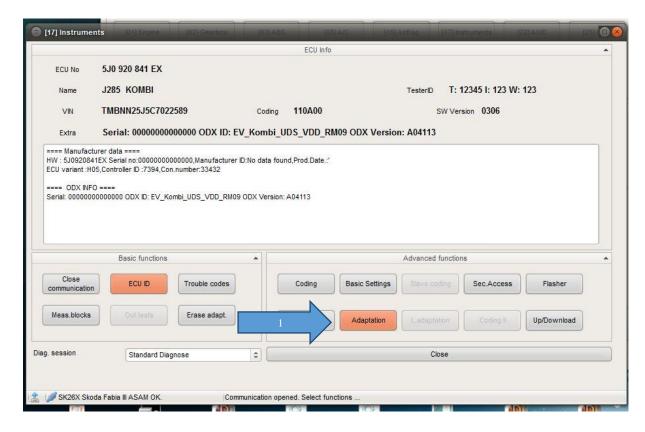
14.2.1 ECU (STG) 17 – connecting the switchboard

Select button no. 17 - Tacho (1) from the VCP Overview.



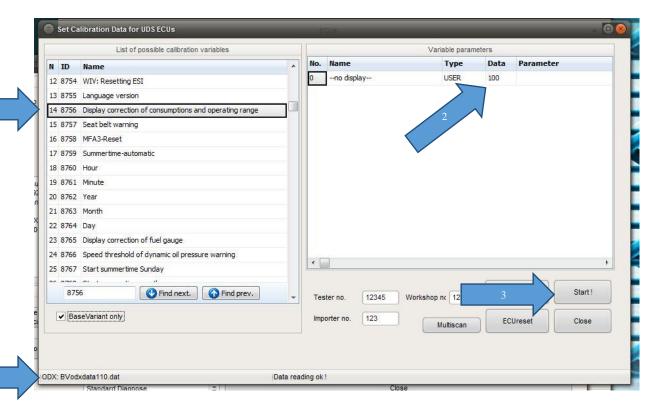
14.2.2 Perform the adjustments

Open the Adjustments window (1)



Select the appropriate entry from among the available Parameters (1) and adjust the value. In the example the default value of 100 was adjusted to 103 (fuel consumption).

The Status bar (4) will indicate whether a Parameter set was correctly read and whether any problems were encountered while entering new values.



15 Problems / Troubleshooting

15.1 Activator cannot start

If after upgrading from version 4.4 to 4.6(after initial installation) the Activator cannot launch anymore, please download the most up to date version of Activator from:

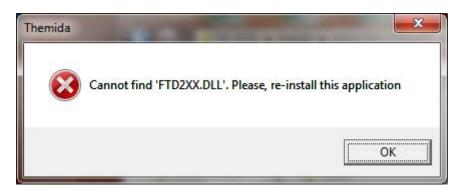
http://www.vcpsystem.com/vcpsystem/card/vcpactivator7.exe

Copy the file to your local VCP directory (C:\VCP) and replace the current existing file.

This should solve the problem, and you should be able to use the Activator version 4.6 without any issues.

15.2 Cannot find FTD2XX.DLL - encountered after initial installation [Generation v1.0]

If you have received this error message, please copy the appropriate ftd2xx.dll file(s) to your VCP program directory:



15.3 cannot find nn.dll please re-install – encountered after initial installation / configuration [v1.0 & v2.0]

You have not completed Download I and Download II (as described in section Initial Configuration), and as a result, some rudimentary boot files for VCP are not available yet and the program cannot be launched. You have to redo the steps described in: <u>2.3 Activation of VCP and Program Parts Download</u>

15.4 When launching VCP: Interface not found



Please make sure that the USB Interface is paired (in case of USB 2.0 devices the LED should be active). If this message continues to show-up connect the interface to a different USB port and wait until the driver is assigned.

If this problem continues, please contact our Support.

15.5 When launching VCP: Smart Card not found



Please make sure that the USB Smart Card reader (HID Dongle v1) or the VCP Interface (v2) is paired/connected with the integrated Smart Card. If this message continues to show-up connect the Dongle (or the Interface) to a different USB port and wait until the driver is assigned.

If this problem continues, please contact our Support.

Keep in mind: VCP Activator must not be launched, as it blocks the Smart Card.