

8.9.4 Automatic programming

The aim of the automatic programming is to determine the correct flash container (s) for the specific vehicle on the basis of the data from the vehicle order (if possible) without further selection by the user and to program one or more control units after confirmation by the user.



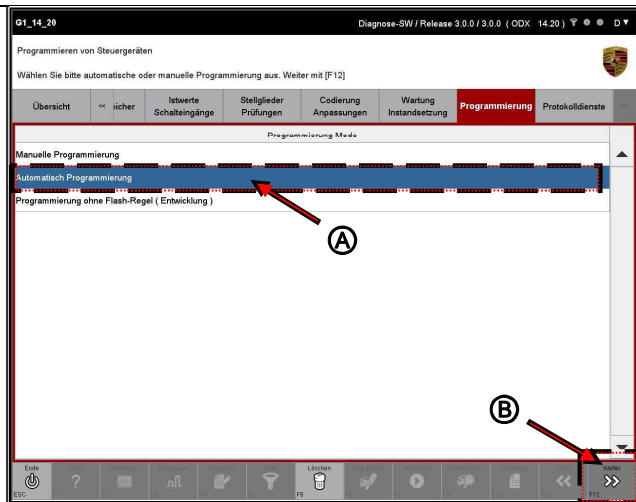
Note on the status:

The current status of the flash session is displayed in the Status column. The following statuses are possible:

- Not up-to-date: The software of the control unit is not up-to-date. The software to be written to the control unit is more up-to-date.
- Current: The software version of the control unit matches that of the flash session.
- Latest: The software version of the control unit is newer than the flash session to be written. Note that flashing the session in this case may lead to problems with the control units.

1. Display the list of possible programming types: See chapter 8.9.2.

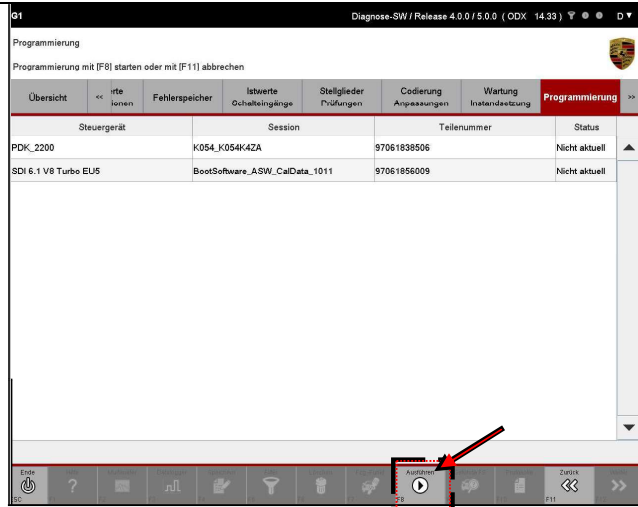
2. Select the type of programming Automatic Programming (A) and press the <F12> key (B).



3. It will give you all associated with this flash rule ECUs including their flash sessions are displayed (A).

To start programming, press the <F8> (B) key.

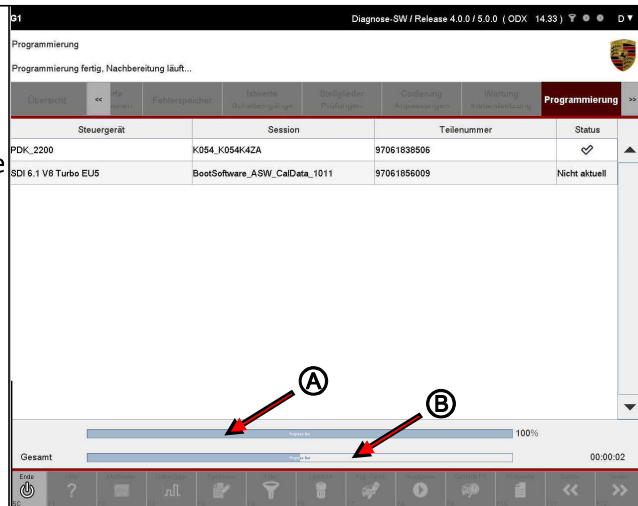
With <F11> you come back to the list of programming types.



4. Two progress bars inform you about the progress of the programming:

The upper progress bar shows the progress in processing a flash session (A).

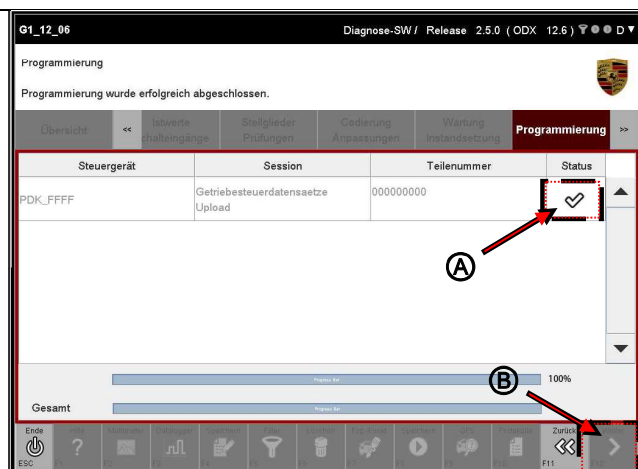
The lower bar symbolizes the overall progress of the programming (B).



After writing

5. If the programming was successful, after each control device in the column Status on ✓ icon displayed (A)

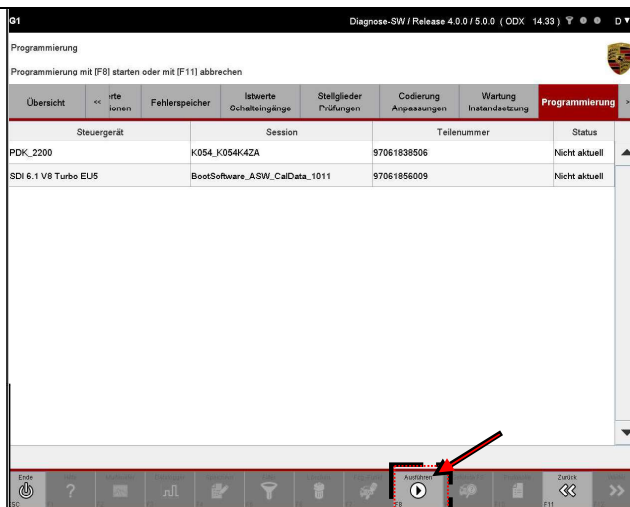
With <F12> you come back to the list of programming types (B).



3. It will give you all associated with this flash rule ECUs including their flash sessions are displayed (A).

To start programming, press the <F8> (B) key.

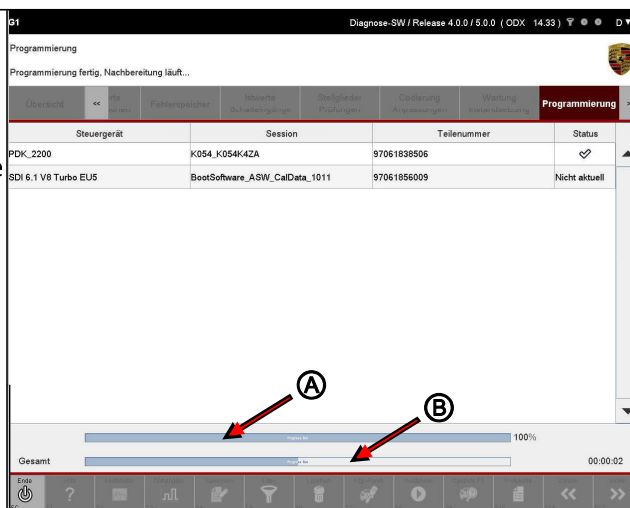
With <F11> you come back to the list of programming types.



4. Two progress bars inform you about the progress of the programming:

The upper progress bar shows the progress in processing a flash session (A).

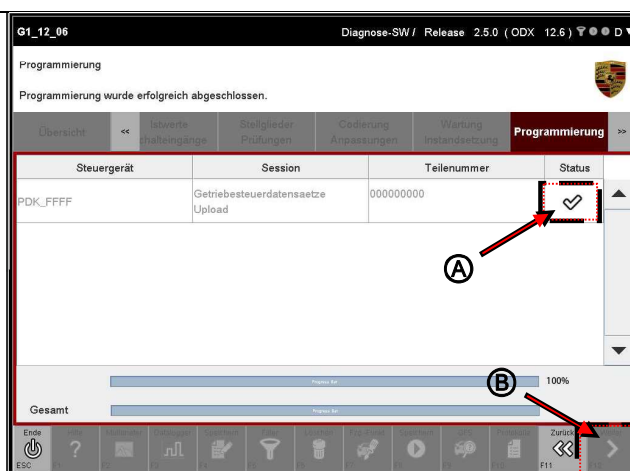
The lower bar symbolizes the overall progress of the programming (B).



After writing

5. If the programming was successful, after each control device in the column Status on ✓ icon displayed (A)

With <F12> you come back to the list of programming types (B).



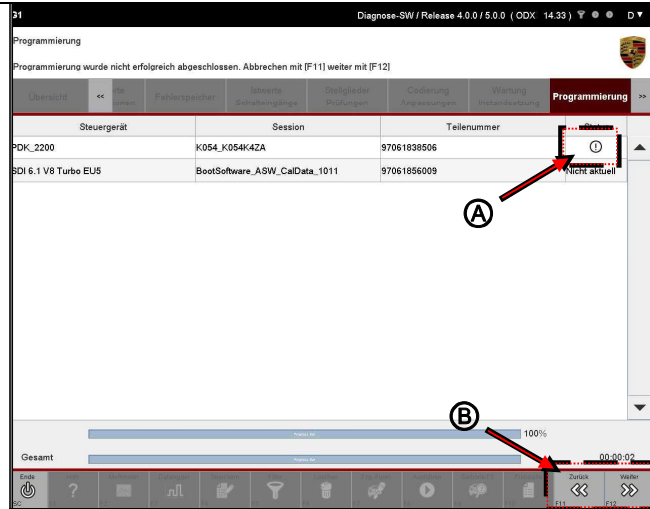
Programming error

6. Is an error while programming a control unit occurred, this is next to the unsuccessfully programmed Control unit indicated by an icon in the Status column (A).

If you still want to continue programming for the next control unit, you have to confirm this. They have following options (B).

* With <F11> you break the Process. You come back to the list of programming types.

* With <F12> you confirm that The programming want to continue. The next control unit is then programmed.

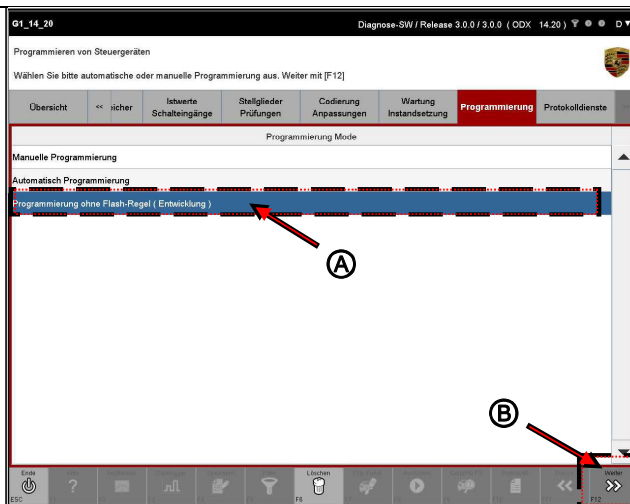


8.9.5 Programming without flash rule (development)

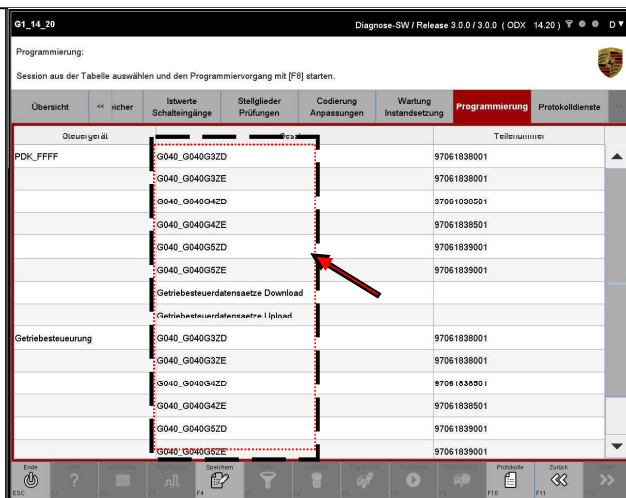
1. Display the list of possible programming types: See chapter 8.9.2.



2. Select the type of programming Programming without Flash rule (development) (A) and press the <F12> (B) key.



3. A list of the possible Flash jobs for the pro-gramming of a control unit is displayed.



If no flash session has been saved for the control unit in the selection, the list is empty. You can exit the programming function group by selecting one of the function groups.

Example: You can return to the control unit overview by selecting the overview function group.

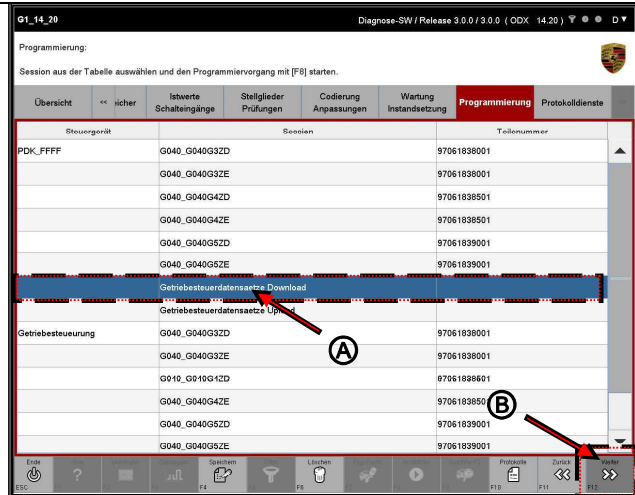


You can only select and program one flash session per run.

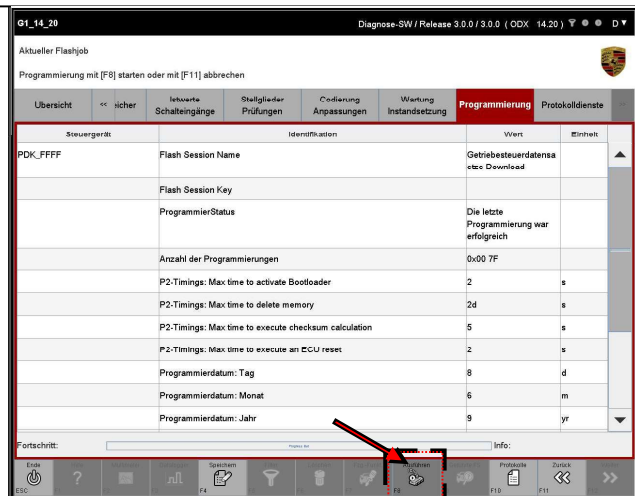
If you want to program several flash sessions, you have to repeat the following steps.

4. Select a flash job for programming the control unit by marking it (A).

To go to the programming work screen, press the <F12> (B) key.



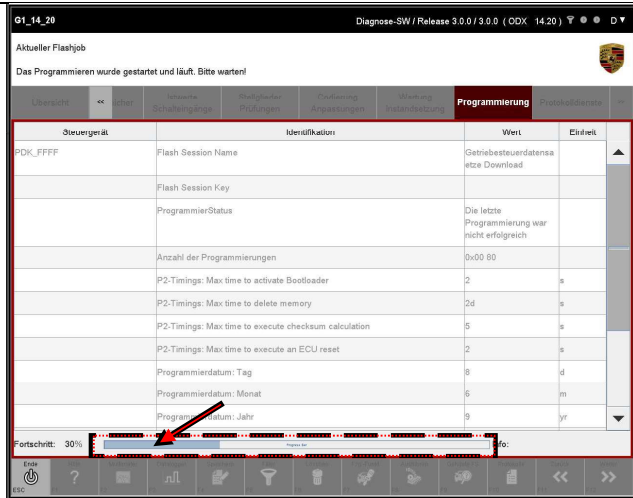
5. To start programming, press the <F8> key.



Please note when executing the Flash job that the progress bar is not always updated correctly. In particular, it does not indicate whether the flash process has been completed completely. This means that the progress bar can reach the 100% mark several times during the flash process.

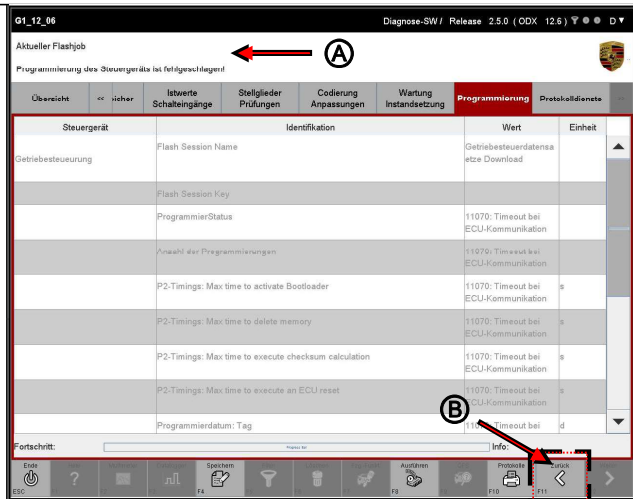
The end of the flash job (successful or not) is always displayed in the information area.

6. Progress of programming will be given to you by a Progress bar displayed.



7. The status of the programming (successful or unsuccessful) is displayed in the information area (A).

With <F11> you come back to the list of possible flash jobs for programming a control device (B).



8.10 Vehicle-wide functions (F7)

This chapter describes how you can call up the vehicle-wide functions of the diagnostic application. It also describes how you can use these functions.

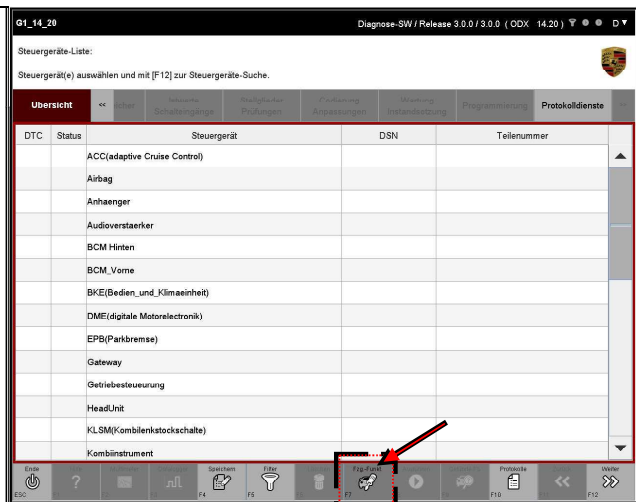
The diagnostic application guides you through the respective functions and provides assistance in processing the individual steps to be carried out.

8.10.1 Calling up the vehicle-wide functions

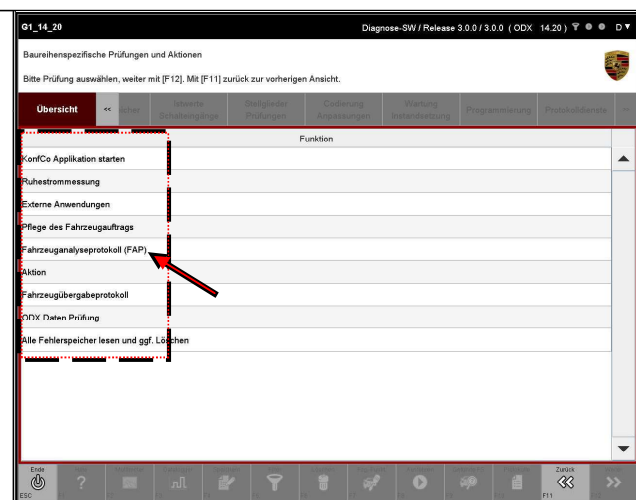


You can only call up the vehicle-wide functions from the control unit list or from the control unit overview. The function is deactivated in all other function groups.

1. Press the <F7> key.



2. The list of vehicle-wide functions is displayed.





8.10.2 Vehicle Analysis Protocol (FAP)




This chapter describes how you can generate, print out and, if necessary, send a vehicle analysis report. Two types of FAPs can be created:

- KD-FAP: customer service vehicle analysis protocol
- OBD-FAP

8.10.2.1 Action-specific buttons in this function group

button	Label	Icon	description
F8	transfer		The selected FAP is sent via FTP by pressing the <F8> key. Only FAPs with the file extensionXMLbe shipped.
F10	To press		Pressing the <F10> key calls up the application that you have defined for opening XML files. This can be a web browser, for example. If the displaying application has a print dialog, you can print out the FAP using this application.

8.10.2.2 Icons

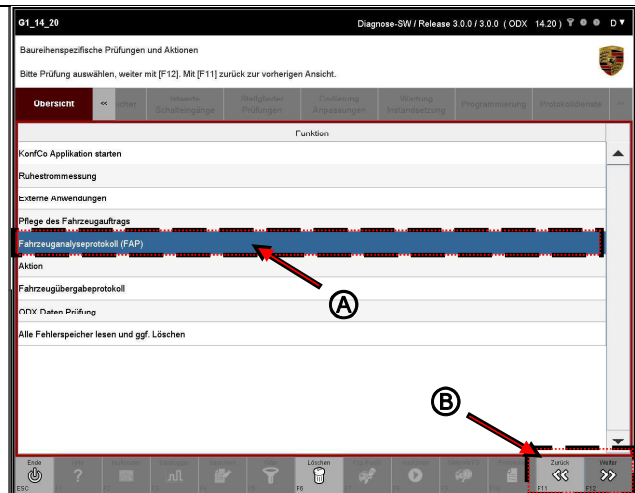
Status displays when reading out the data from the control units	
Icon	Description
	The icon appears in the congestion column and indicates that the corresponding control unit is currently being processed.
	The icon appears in the congestion column and indicates that the corresponding control unit has been processed.
	The icon appears in the congestion column and indicates that an error has occurred during processing for this control unit.

8.10.2.3 Calling up and starting the vehicle analysis protocol function

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions:
 ► See chapter 8.10.1.

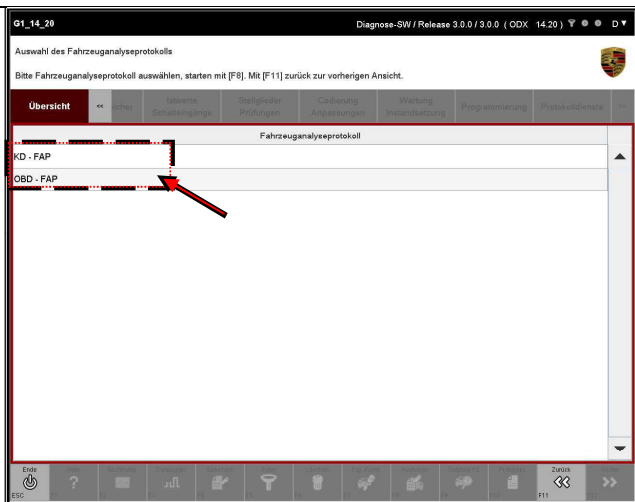
2. Select the entry Vehicle analysis protocol (A) and confirm the selection by pressing the <F12> key (B).

With <F11> you come back to the control unit overview or control unit list (B).



3. The possible FAP types that can be created are displayed in a list:

- KD-FAP
- OBD-FAP



8.10.2.4 Creating a KD-FAP



In one of the following steps you must enter or check the following information:

- Chassis number.

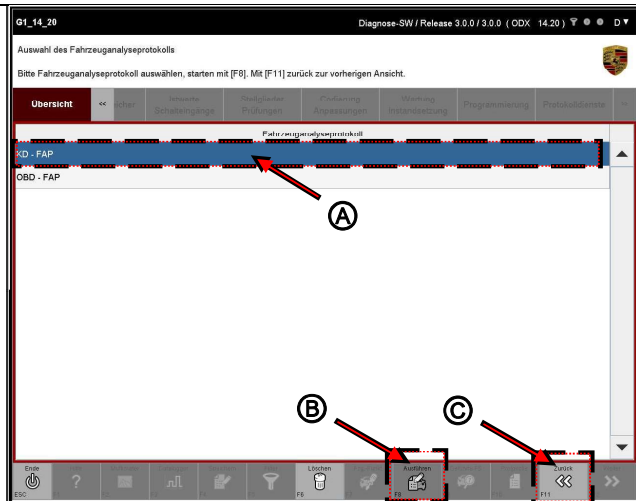
Have the required chassis number ready.

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions. Then select the entry vehicle analysis protocol:

► See chapter 8.10.2.3.

2. Select the entry KD-FAP (A) and confirm the selection by pressing the <F8> (B) key.

With <F11> you come back to the list of vehicle-wide functions (C).



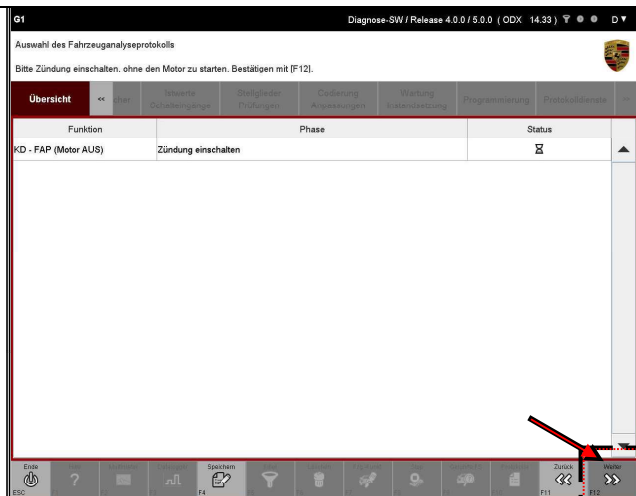
3. Pay attention to the notes in the information area and take actions if necessary.

4. Press the <F12> key.

With <F11> you come back to the list of FAP types.

Cancel the process with <F8>.

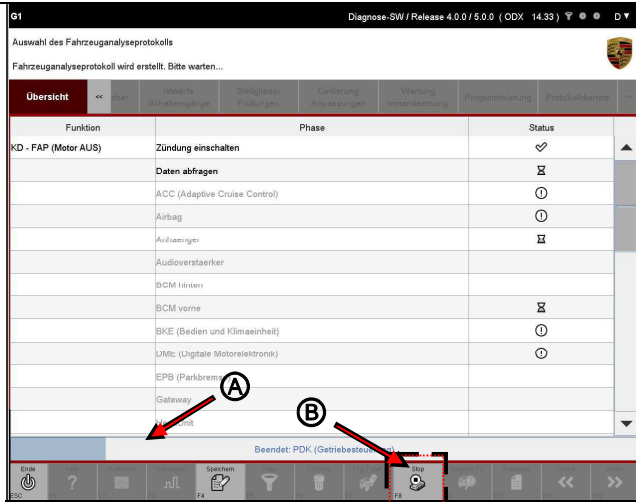
To then return to the list of FAP types, press the <F11> key.



5. The KD-FAP is created. The progress is shown to you by a progress bar at the bottom Area of the work area is displayed (A).

Cancel the process with <F8> (A).

To then return to the list of FAP types, press the <F11> key.



Note on representation:



- Control units to which communication is currently being established and whose data are read are indicated by an icon in the column status marked.
- Control units whose readout process has been successfully completed are indicated by an icon in the column status marked.
- Control units to which no communication could be established or for which a communication error has occurred are indicated with an icon in the column status marked.

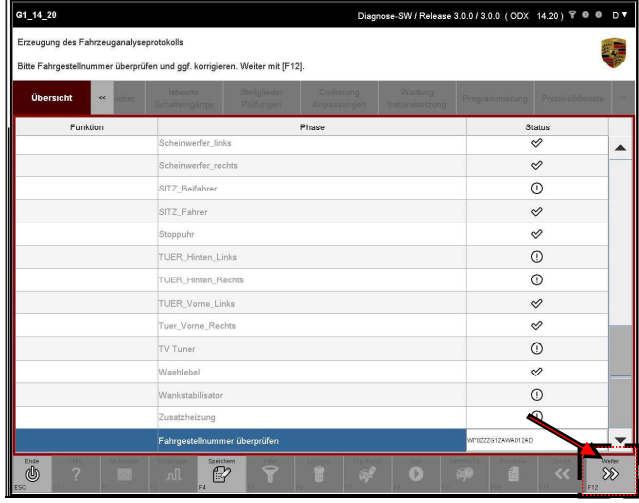
Entering or checking the chassis number



If all the necessary control unit data have been read out, you must check the chassis number or enter it manually or correct it.

Variant 1: Chassis number is correct

6. If the chassis number is correct, simply press the button <F12>.



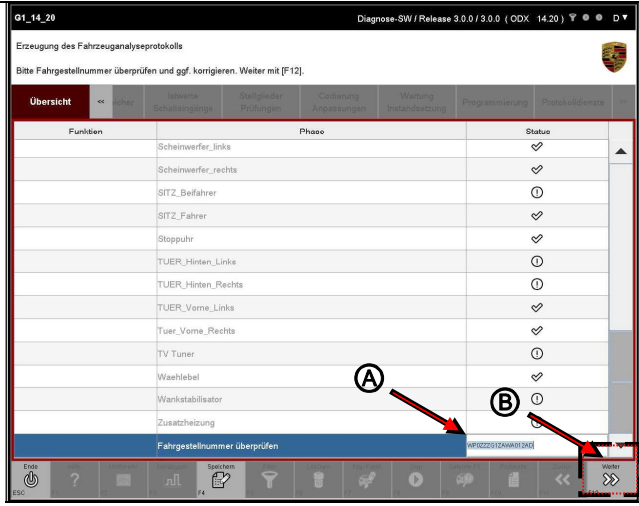
Variant 2: Correction or input of the chassis number

7. If the chassis number entered is incorrect or missing, it must be corrected or entered manually.

To do this, click in the field next to the entry Chassis number check.

Correct the entry or enter a number (A).

Confirm your entry by pressing the <F12> (B) key.

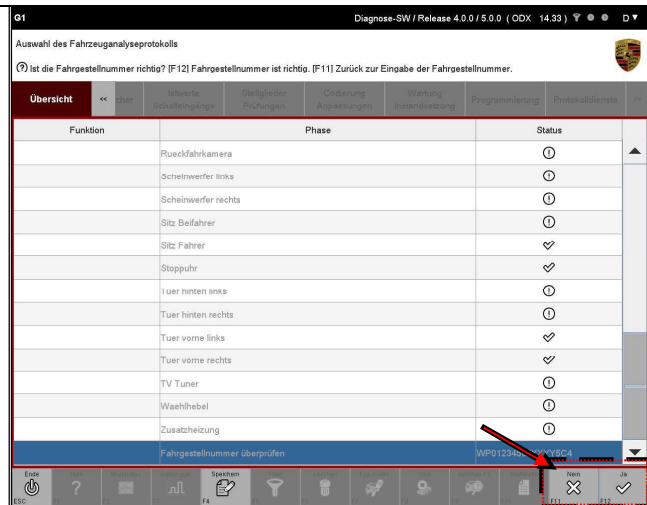


Proceed further

8. You will then be asked again to confirm that the chassis number is correct (A).

You have the following options (B):

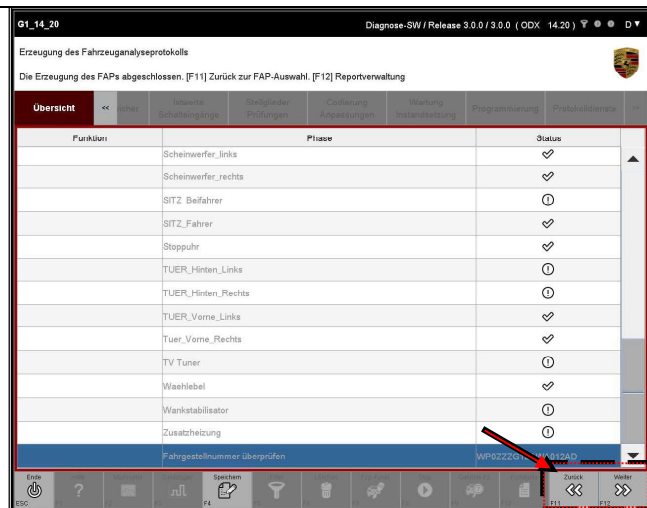
- Cancel the process with <F11>. You come back to the input mask and can correct the chassis number again. With <F12> you confirm that the displayed chassis number is correct.



9. If you have pressed the <F12> key and confirmed that the chassis number is correct, the FAP is written. she then come to another selection screen.

You have the following Choices:

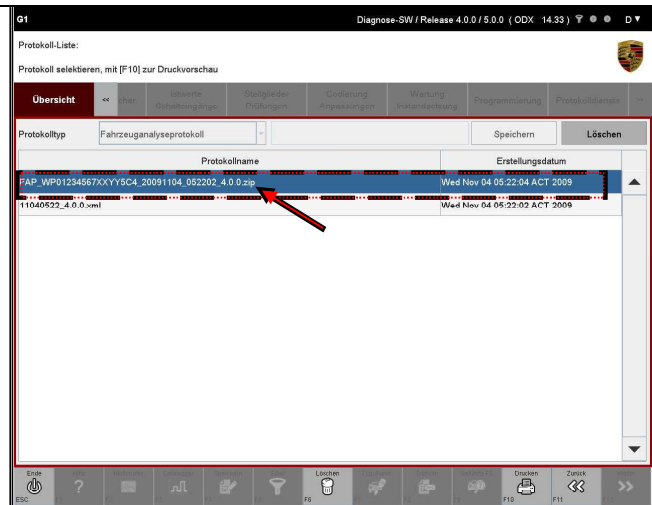
- With <F11> you come back to the list of FAP types. With <F12> you get to the general report management, in which you can view and print out the created FAP can.



10. If you have pressed the <F12> key, the general report management is called up in the type of protocol Vehicle analysis log is preselected.

All FAPs created so far are listed in the table of the work area.

The most recently created dispatch FAP is listed first, including the last KD FAP created.



Further note:

In addition to the option of calling up the list of vehicle analysis protocols at the end of the creation of the protocol, you can also call up the list from one of the function groups using the <F10> key. For a more detailed description of this type of call:

► See chapter 8.10.2.6

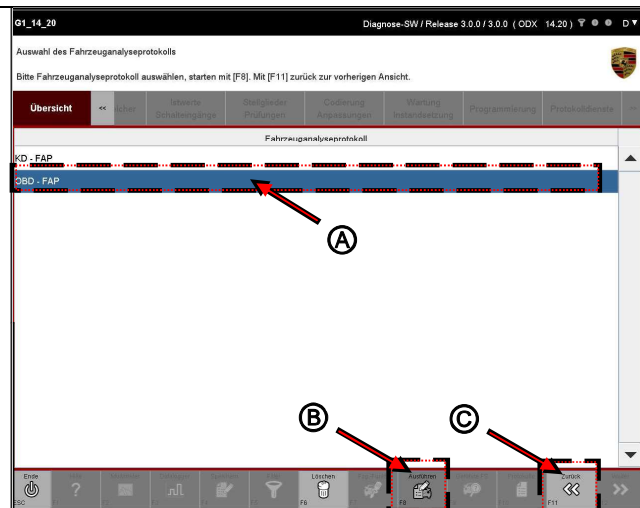
8.10.2.5 Creating an OBD FAP

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions. Then select the entry Vehicle analysis protocol:

► See chapter 8.10.2.3.

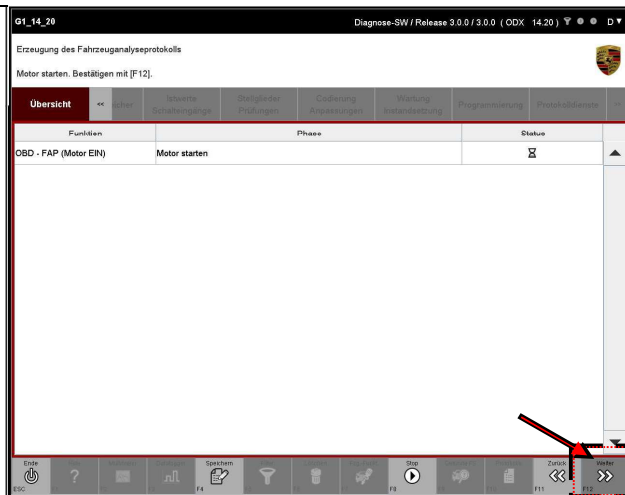
2. Select the entry in the list of vehicle analysis reports OBD-FAP (A) and confirm the selection by pressing the <F8> (B) key.

With <F11> you come back to the list of vehicle-wide functions (C).

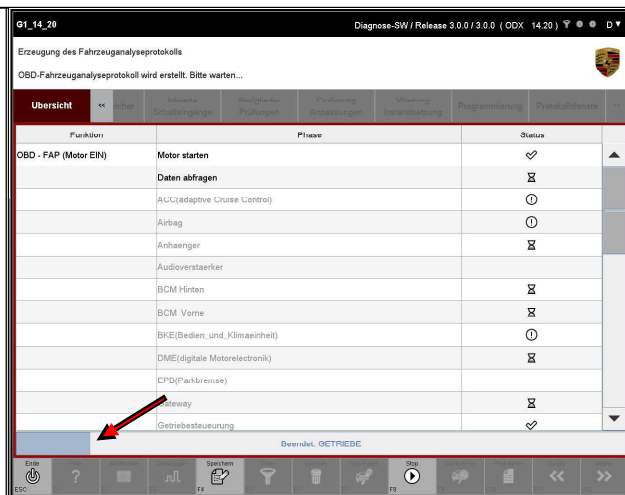


3. Pay attention to the notes in the information area.

4. Then press the <F12> key.



5. The OBD-FAP is created. The course will be given to you by a Progress bar is displayed in the lower area of the work area.



Note on representation:



- Control units to which communication is currently being established and whose data are read are indicated by an icon in the column status marked.
- Control units whose readout process has been successfully completed are indicated by an icon in the column status marked.
- Control units to which no communication could be established or for which a communication error has occurred are indicated with an icon in the column status marked.

6. Once all the data has been requested, you must check or enter the vehicle data as with the KD-FAP. For more information, see:
 ► See chapter 8.10.2.4, steps 6 to 10, pages 216 - 218.

8.10.2.6 FAP: Display the list of vehicle analysis logs

If you have not switched directly to the general report management after creating the vehicle analysis protocol, you still have the option of displaying the list of FAPs.



Both KD-FAP, OBD-FAP and dispatch FAP are displayed in the list of saved FAPs in E mode. The individual FAP types can be recognized by the prefix:

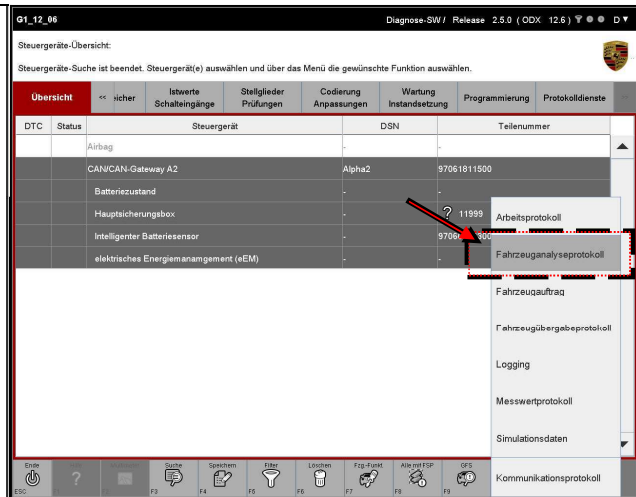
- The dispatch FAP has the form: MMDDhhmm.xml.
- The KD-FAP has the prefix FAP.
- The OBD-FAP has the prefix OBD_FAP.

1. Press the <F10> key.

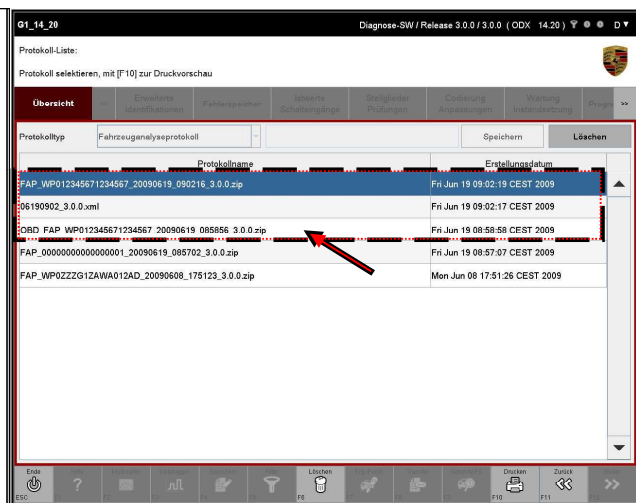
If the key cannot be selected, first navigate to one of the function groups (e.g. overview) and then press the <F10> key.

2. A key menu appears in which several entries are listed.

Select the protocol type Vehicle analysis log.



3. It will give you a list of all vehicle analysis logs displayed (for naming the FAPs, see note above).



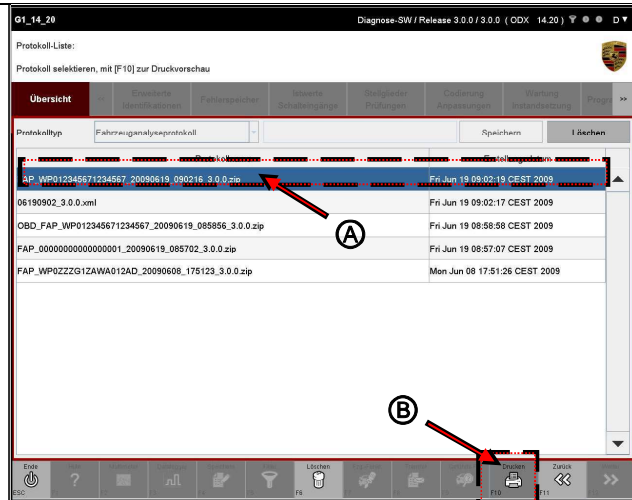
8.10.2.7 FAP: Print



The selected FAP is not printed out via the diagnostic application but via a display application. If this application has a print dialog and an appropriately configured printer is connected, you can print out the FAP via this application. If necessary, contact your system administrator to configure the file link and set up a printer.

1. Display the list of vehicle analysis protocols: See chapter 8.10.2.6

2. Select the FAP that you want to print out (A) and press the <F10> key (B).



3. The displaying application is called.

8.10.2.8 FAP: Sending a vehicle analysis protocol

In E mode, you have the option of sending a vehicle analysis protocol using the File Transfer Protocol (FTP). You will then be offered a special send button in the general report management.



Note on the designation of the sendable FAP

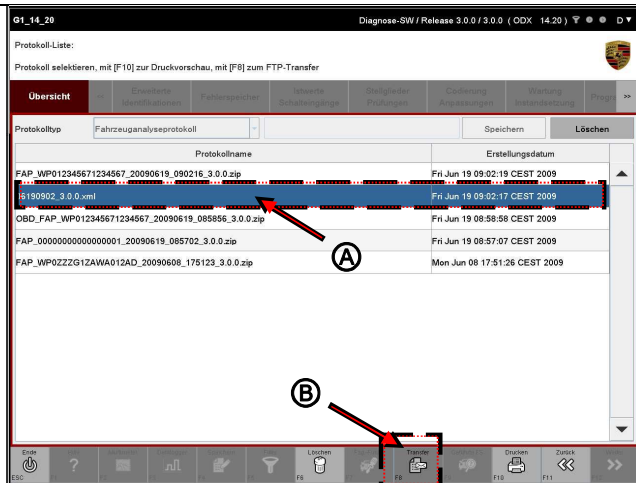
The <F8> key is only active if you have selected an FAP that has been saved in XML format.

Example: 06190902_3.0.0.xml

Zipped FAPs can be selected, printed (see Section 8.10.2.7) and deleted (see Section 8.10.2.9), but they cannot be sent.

1. Display the list of vehicle analysis protocols: See chapter 8.10.2.6

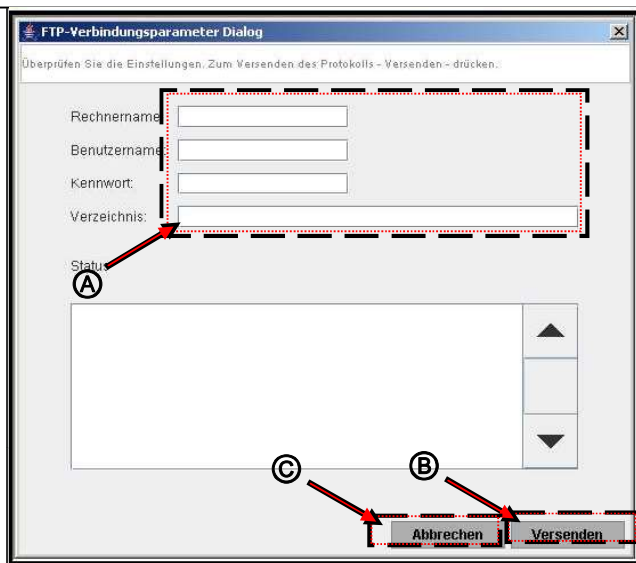
2. Select the protocol to be sent (A) and press the <F8> key (B).



3. A pop-up window appears in which you can now enter or correct the connection data (A).

Then press the To ship-Button (B).

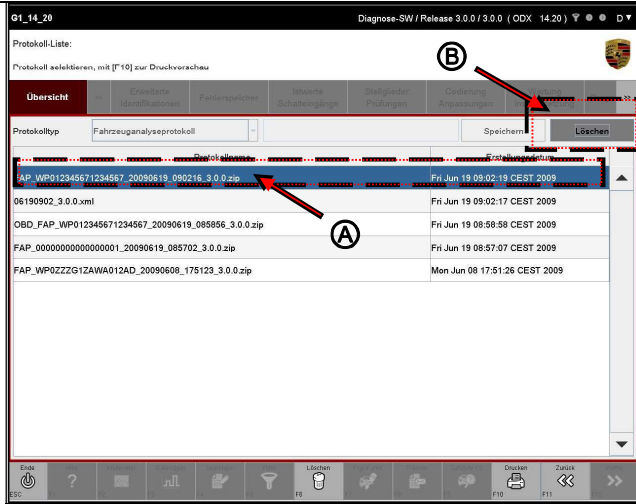
If you would like to return to the general report management without sending the log, press the instead Abort-Button (C).



8.10.2.9 FAP: Delete

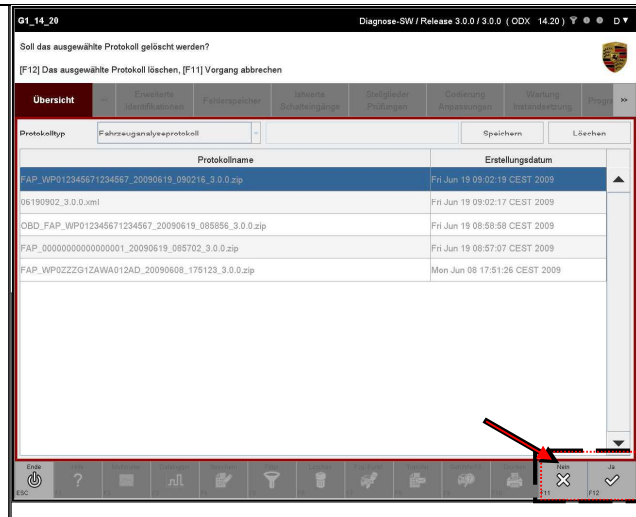
1. Display the list of vehicle analysis protocols: See chapter 8.10.2.6

2. Select the protocol to be deleted (A) and press the Extinguish-Button (B).



3. You have to confirm the deletion of the FAP. You have the following options:

- Press <F11> to cancel the process and return to the list of FAPs.
- Confirm the deletion of the FAP with <F12>.



8.10.3 Maintenance of the vehicle order

The vehicle order is maintained in several steps. The first step is to check the mandatory data that have been read from the vehicle and, if necessary, enter or adjust them. You then have to assign various equipment features in a further step. If you have changed at least one date / characteristic, you can then write the assigned data to the control unit.

In detail, the maintenance of the vehicle order consists of the successive assignment of the following values:

- 1.) Mandatory data
- 2.) Color and material
- 3.) X-number family
- 4.) X numbers
- 5.) M-number family
- 6.) M numbers
- 7.) Z-number family
- 8.) Z numbers
- 9.) PR numbers



Note on the availability of the individual input masks:

Depending on the data availability (control file, for an explanation, see note on functionality) or the vehicle model (or control unit), individual steps may be omitted.

For example,

- the assignment of PR numbers is only necessary or possible for the Cayenne model type.
- the assignment of M numbers and PR numbers for a model is excluded at the same time.



Note on how it works:

The listing of the individual features is done by comparing the read control unit data with a control file. The control file assigns a unique number to the characteristics.



Unknown features:

If no number is stored for a feature read from the control unit, this is marked as an unknown feature.

If this unknown characteristic is deselected and the vehicle order is then written to the control unit, this characteristic is no longer displayed when the vehicle order is read again.

If the feature is retained, it will continue to be displayed as an unknown feature.

If the control file is adapted to the effect that there is a textual equivalent of this feature, when this feature is read out from the control device, this very equivalent for this feature is displayed on the corresponding screen.



Number groups and their meaning:X:





Exclusive

M: Additional equipment

Z: Tequipment

PR: Additional equipment at VW (and model type Cayenne)

8.10.3.1 Action-specific buttons in this function group

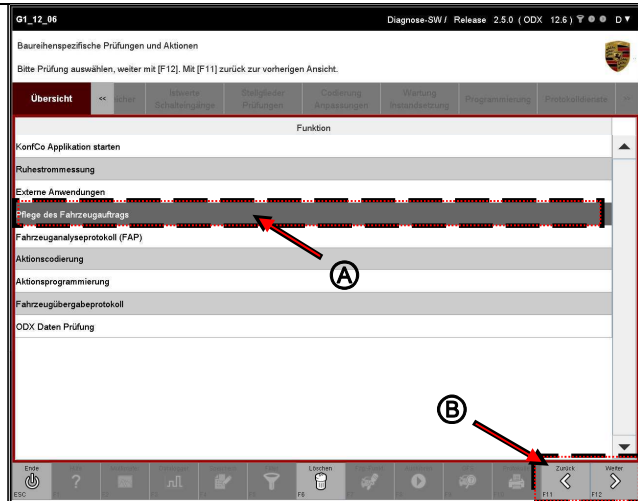
When assigning the features button			
	Label	Icon	description
F8	To write		By pressing the <F8> key, you first temporarily save the equipment features.
After summarizing the assigned features button			
	Label	Icon	description
F8	To write		The vehicle order is written to the control unit by pressing the <F8> key.
Decision question			
button	Label	Icon	description
F11	no		By pressing the <F11> key, you cancel an action with a query. The <F11> key shown only occurs in combination with the <F12> key shown in the next line.
F12	Yes		Confirm an action with a query by pressing the <F12> key. The <F12> key shown only occurs in combination with the <F11> key shown in the previous line.

8.10.3.2 Vehicle order

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions:
 ► See chapter 8.10.1.

2. Select the entry in the list of vehicle-wide functions
 Maintaining the Vehicle order (A) and confirm the selection by pressing the <F12> (B) key.

With <F11> you come back to the control unit overview or control unit list (B).



↓ Next next page

Mandatory data: vehicle description


**Note on screen content:**

First, the mandatory data is read out from the gateway and engine control unit, compared and displayed on the next screen. The following data is displayed:

- ▶ Order type
- ▶ Product key
- ▶ Chassis number
- ▶ Transmission type
- ▶ country code
- ▶ Engine number
- ▶ Engine type
- ▶ Serial number gearbox
- ▶ Installation instructions
- ▶ Model year

All values can be changed and can be temporarily saved with <F8> (Save). No data is written to the control unit.

**Note: Changeability**

If the data in both control units (gateway and engine control unit) are inconsistent, this is indicated by  icon in the column Changed marked for the corresponding date. You can change this data, but you do not have to. When the data is finally written to the control unit, a comparison is always made and the data is consistent.

If the gateway control unit supplies an invalid value for the mandatory data, the text ?? invalid value ?? in the corresponding cell of the columnvalue displayed.

Entries marked as ?? invalid value ?? you must assign a valid value before you can write the vehicle order (see also the next note: invalid values).



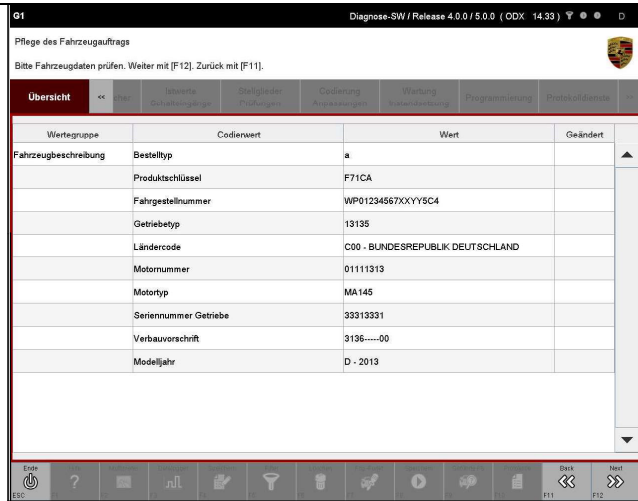
Note: Invalid values

If there is at least one invalid value for an entry, the <F8> key, with which you can temporarily save the changes to the values in the work screen, is not offered. However, you still have the option of switching to the next screen with <F12> and thus successively displaying the other equipment features.

A final writing of the data after assigning the equipment features is not possible due to the invalid data on the entry screen in which you have to enter or check the mandatory data. You will then be informed of this by a corresponding note in the information area.

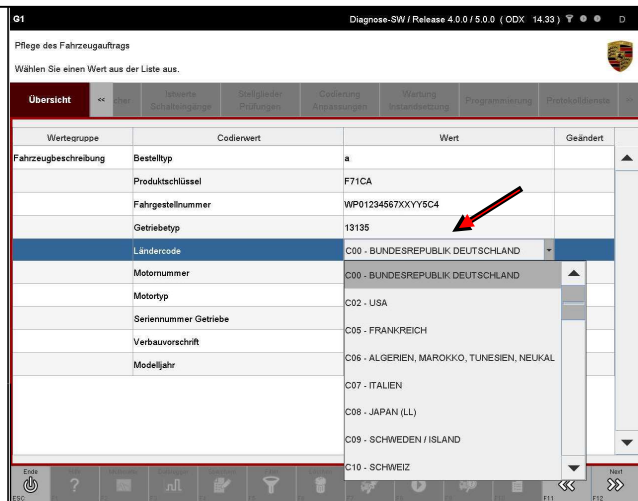
3. The vehicle data is read out from the vehicle and displayed.

Inconsistent data is shown with an icon in the column Changed marked.



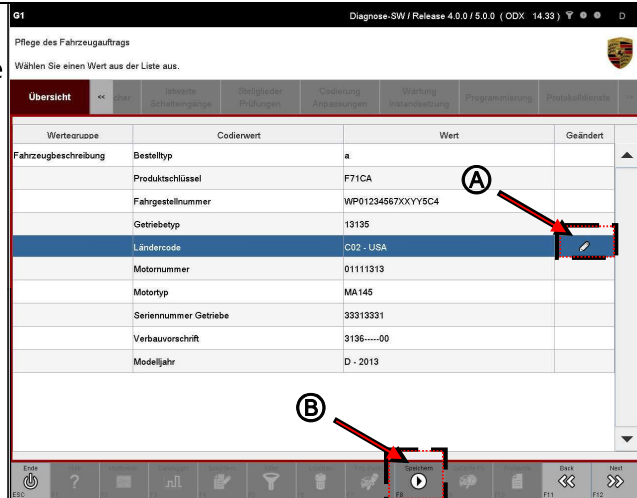
4. You can change the data manually. To do this, click in the corresponding field in the column value and enter the relevant data.

Depending on the type and specification, the change can also be made via a drop-down menu (see figure).



5. If you have changed an entry, this is indicated by the icon next to the changed entry in the column **Geändert** (A).

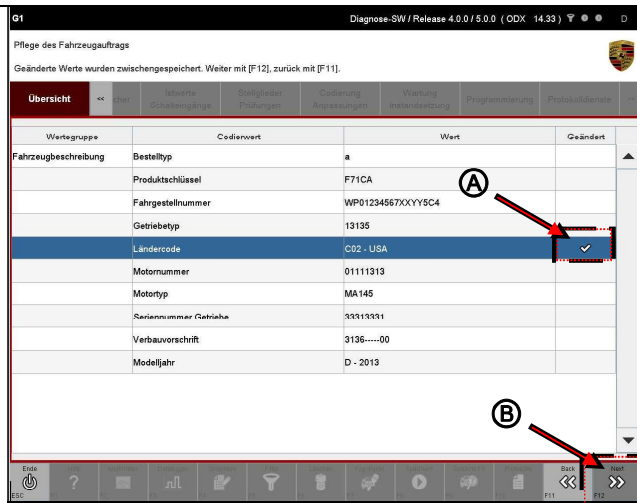
To temporarily save the change, press the **<F8>** (B) key.



6. Changed and temporarily saved data are saved with marked with an icon. Inconsistent data are also marked with this icon, as they will be deleted during a subsequent write can be changed (A).

Press the **<F12>** (B) key.

With **<F11>** you come back to the list of vehicle-wide functions.

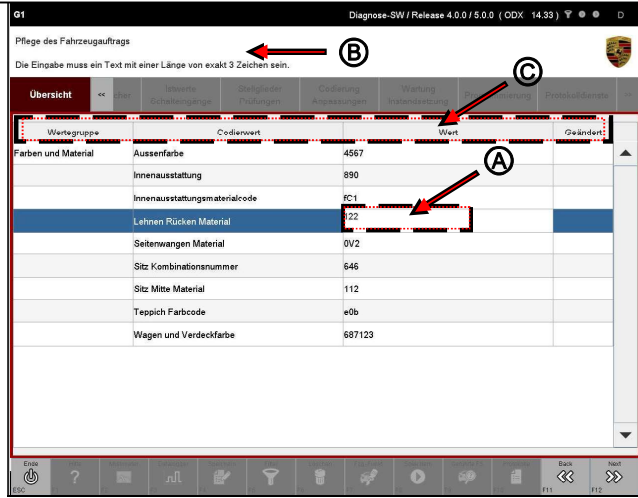


Color and material

7. Click in the corresponding field in the column value and enter the relevant data (A).

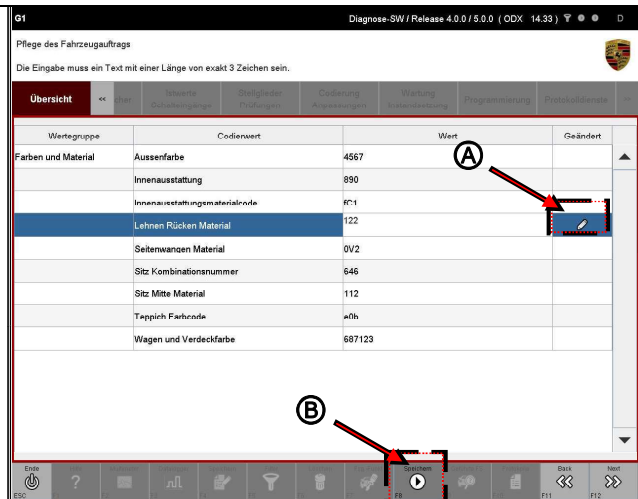
In the information area there is corresponding assistance for the entry (B).

For a better overview you can, if necessary, use a Perform column sorting (C) (general description of column sorting, see chapter 10.5).



8. If you have changed an entry, this is indicated by the icon next to the changed entry in the column Changed displayed (A).

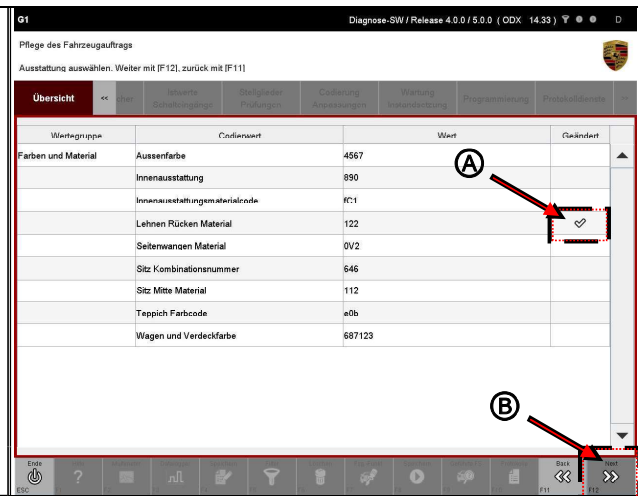
To temporarily save the change, press the <F8> (B) key.



9. Changed and temporarily saved data are saved with marked with an icon. Inconsistent data are also marked with this icon, as they will be deleted during a subsequent write can be changed (A).

Press the <F12> (B) key.

With <F11> you come back to the vehicle description.



X-numbers: X-number family

Note on screen content:

In the next screen, the features of the value group ?? X-Numbers ?? displayed in the form of a group / family affiliation. Features that have no family affiliation? rather represent special X-numbers - will be assigned in the next step.

A characteristic is made up of three entries:



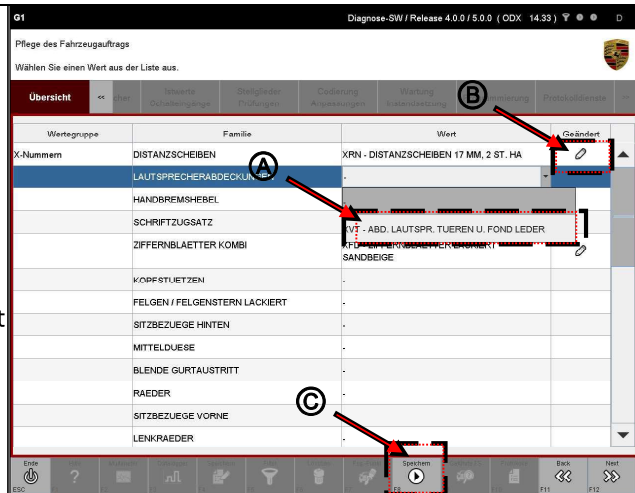
- X-number family (e.g. Spacers, speaker covers etc.) in the column Family.
- Name of the feature (e.g. XRN - spacers 17 MM, 2pcs. HA)in the column Value.
- Presence of the feature in the vehicle order in the columnBuilt in. If a feature is set, this is symbolized by an icon; if the feature is not set, the cell is empty.

For a better overview you can, if necessary, carry out a column sorting (general description of the column sorting, see chapter 10.5).

10. To mark a characteristic as available, click in the corresponding cell in the column value and select the feature from a drop-down menu (A). If you choose the empty entry, the characteristic will not assigned.

The change of a characteristic is first shown in the column Changed marked with an icon (B).

To temporarily save the equipment list of the X-number family, press the <F8> key (C).



11. Press the <F12> key.

With <F11> you come back to the list of colors and materials.


X numbers: Special X numbers

Note on screen content:

The equipment features of the value group ?? X-Numbers ?? displayed. In contrast to the previous step, a feature is assigned in this step by directly selecting and deselecting individual X numbers.




A characteristic is made up of two entries:

- X number (e.g. X51, X70 etc.) in the column Coding value.
- Presence of the feature in the vehicle order in the column Built in. If a feature is set, this is indicated by an icon  symbolizes, if the feature is not set, the cell is empty.

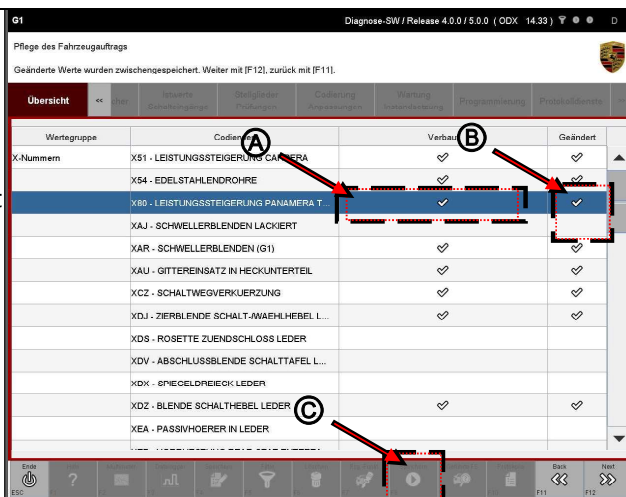
In addition, the Changed column shows whether the status (installed / not installed) of a feature has been changed.

For a better overview you can, if necessary, carry out a column sorting (general description of the column sorting, see chapter 10.5)

12. To mark a characteristic as available, click in the corresponding cell in the column Built in (A).

The change of a characteristic is first shown in the column Changed marked with an icon  (B).

To temporarily save the equipment list of the X numbers, press the <F8> (C) key.



13. Press the <F12> key.

With <F11> you come back to the previous screen.

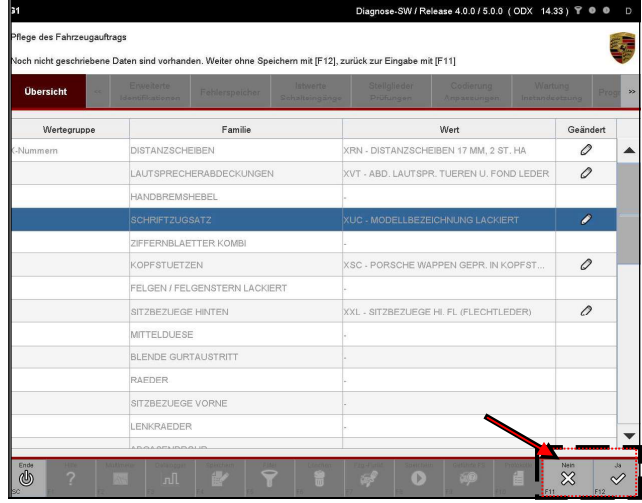
14. If necessary, repeat the respective steps for

- * M-number family
- * M numbers
- * Z-number family
- * Z numbers
- * PR numbers

Notice and query

15. If you pressed the <F12> key when assigning the equipment features without temporarily saving the changed data using <F8>, a query appears that you must answer before taking the next step. You have the following options:

- * <F11>: You come to the input and you can then save it temporarily with F8.
- * <F12>: You discard the changes to the equipment features and go to the next screen.



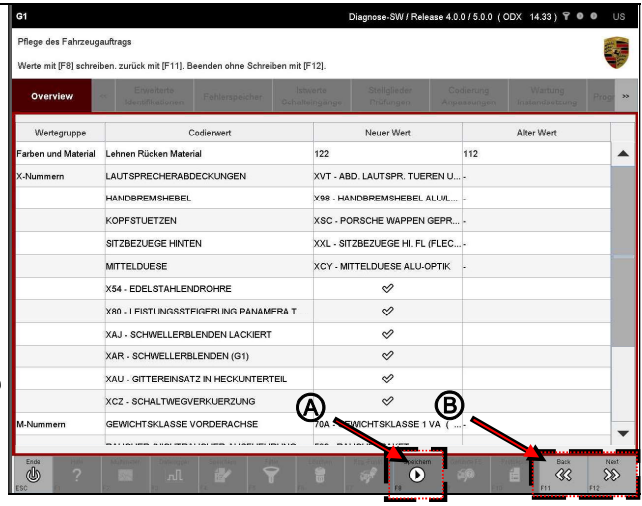
summary of results



Note on screen content:
In the next screen, all set equipment features ?? i.e. all features that are provided with an icon - of all value groups (X-Numbers, M numbers, Z numbers, including the family groups and the PR numbers) are displayed in an overview screen.

16. You have the following options:

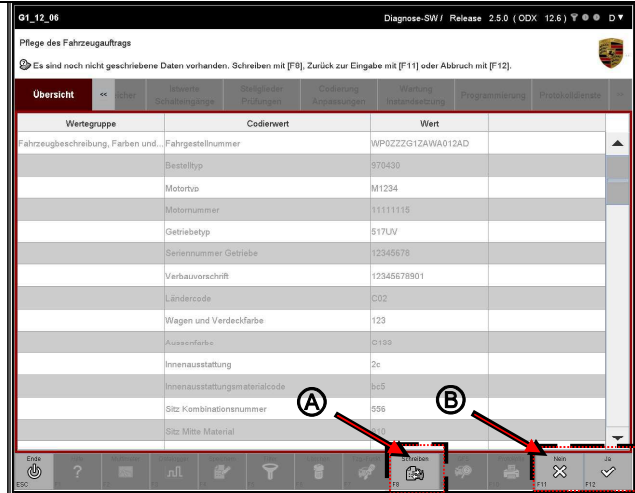
- Press <F8> to transfer the vehicle order to the Vehicle to write (A). Press the <F11> key to jump back to the previous list of the corresponding value group (B).
- Press the <F12> key to end the maintenance of the Leave the vehicle order and go to the list of Jump back vehicle-wide functions (B).



Special case: Leave the vehicle order with the <F12> key

17. If you have pressed the <F12> key, you will be informed that data that has not yet been written is available. You have the following Choices:

- Cancel the process with <F11>. You come to the summary of the Results back (B).
- With <F12> you confirm that you are maintaining the Want to leave the vehicle order. You come to the list of vehicle distances Functions back (B).
- Write the vehicle order into the with <F8> Control unit (A).



Further procedure: Branch to the report management

18. With <F12> you then come to the general report management.

With <F11> you come back to the list of vehicle-wide functions.

8.10.4 Vehicle handover protocol

You have the option of creating a vehicle handover protocol (FÜP) within the vehicle-wide functions. When the vehicle is handed over, all control units are activated from transport mode and checked for error entries. In addition, some basic settings are coded in the vehicle. This process runs automatically.

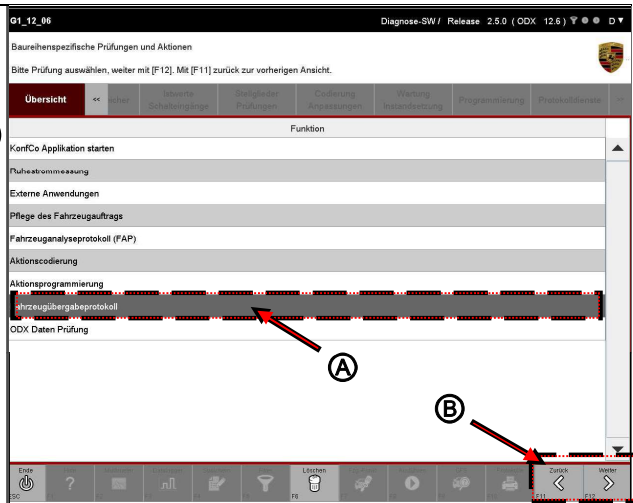
This chapter describes how you can create a vehicle handover report.

8.10.4.1 Create the vehicle handover report

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions:
 ► See chapter 8.10.1.

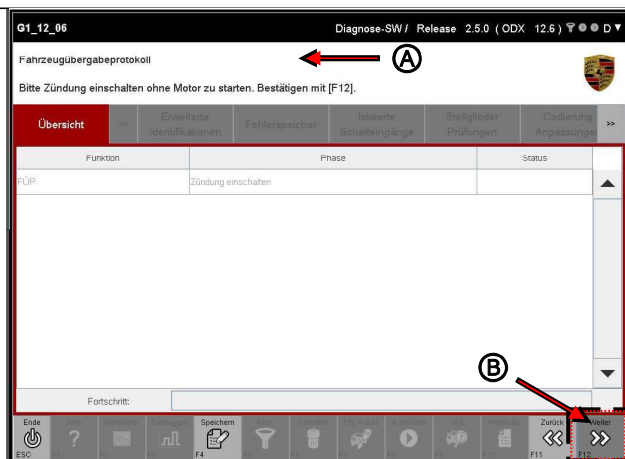
2. Select the entry in the list of vehicle-wide functions Vehicle handover protocol (A) and confirm the selection by pressing the <F12> (B) key.

With <F11> you come back to the control unit overview or control unit list (B).



3. Observe the notes in the information area and take the appropriate action (A).

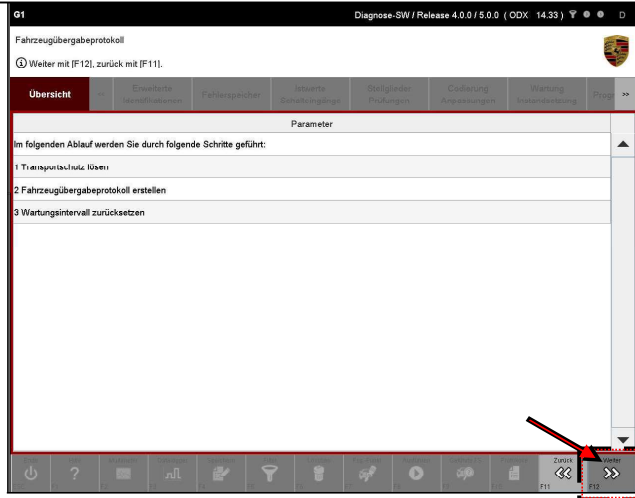
Confirm your action by pressing <F12> (B).



Hints

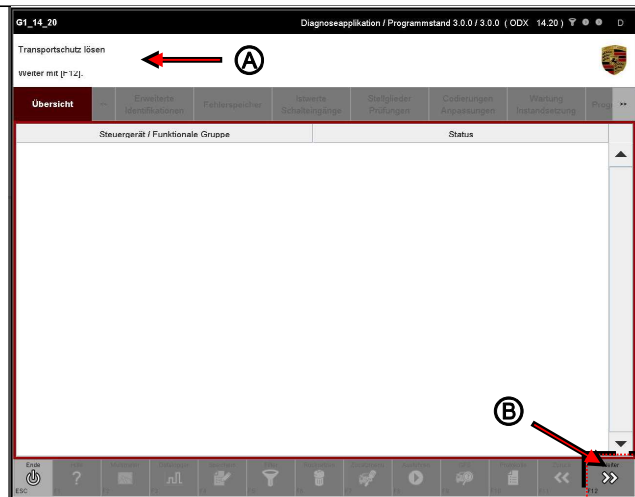
4. Confirm the message with <F12>.

With <F11> you come to the previous screen.



5. Note the next note in the information area (A)

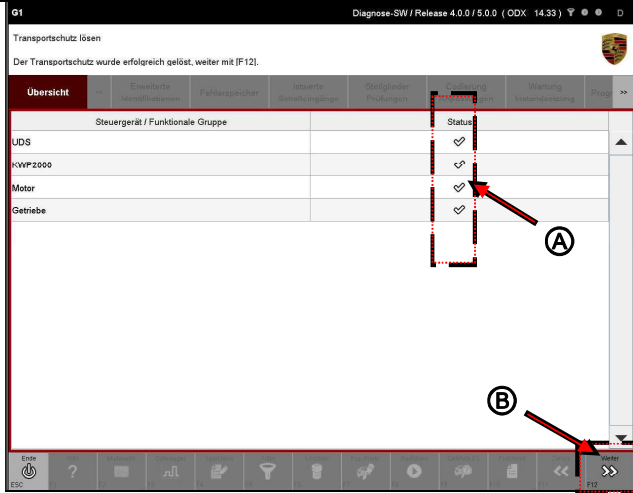
Confirm the message by pressing <F12> (B).



Proceed further

6. In the following, services to various control units and functional groups (UDS, KWP2000). The result of the actions is displayed in the Status field (A).

- If the service has been carried out successfully, this is indicated by an icon.
- If the execution of the service was not successful, this is indicated by an icon displayed. In this case there is an additional corresponding note in the information area.

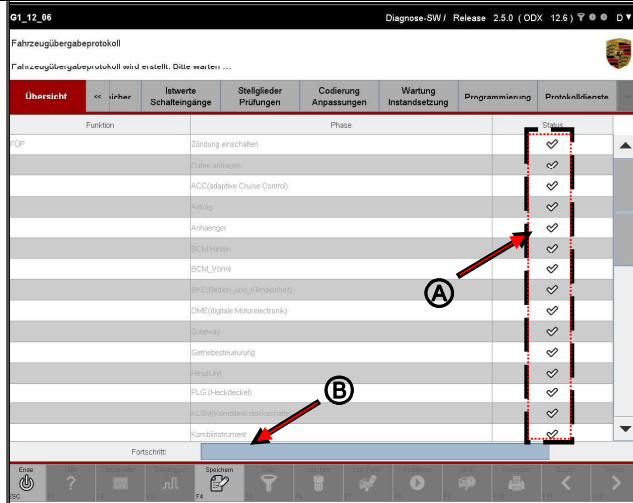


If all actions have been carried out successfully, press the <F12> (B) key.

7. The required data is read out from the control units and written.

It is checked whether each control unit can be addressed (A).

A progress bar informs you about the progress of the FÜP creation. The maximum of the bar is calculated from the number of STGs to be treated plus the before and after preparation step determined. The bar can therefore be used in the Processing in length ?? jump ?? and does not visualize the actual progress (B).





Note on representation:

- Control units to which communication is currently being established and whose data are read are indicated by an icon in the column status marked.
- Control units whose readout process has been successfully completed are indicated by an icon in the column status marked.
- Control units with which no communication could be established or for which a communication error has occurred are displayed with an icon in the column status marked.

New car query

8. A query screen then appears in which it is determined whether it is a new vehicle.

You have the following options:

- With <F8> you confirm that it is a new vehicle (A, continue with step 9)
- With <12> you specify that it is an end-of-life vehicle (B, continue with step 13)



Option: Yes, it is a new vehicle



Note on the process:

If it is a new vehicle, the following additional steps are necessary, in which some information about the new vehicle and the work carried out on the new vehicle is requested and saved.

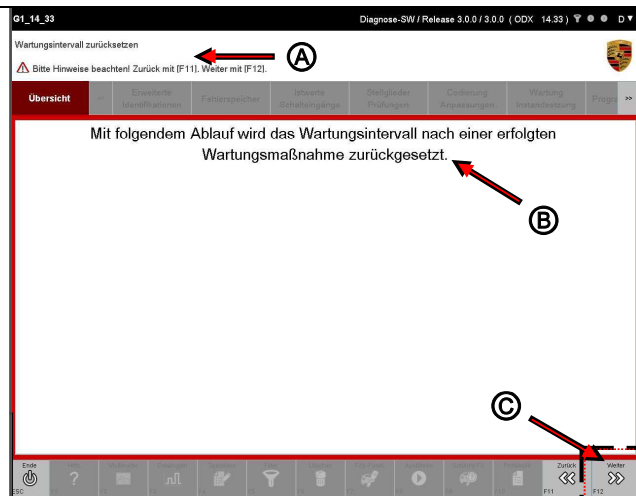
If it is an end-of-life vehicle, steps 9 to 12 are skipped and the process continues with step 13.

9. If you have confirmed the selection with <F8>, another screen appears.

Note the information in the information area (A) and in the work area (B).

Confirm the message with <F12> (C)

With <F11> you come back to the new vehicle query.



↓ Next next page

10. Once you have confirmed the message, you must determine which work is to be carried out on the new vehicle were carried out (A). You have the following options:

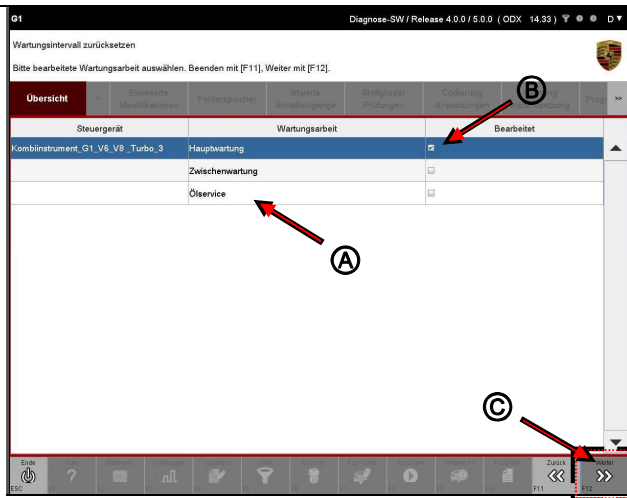
- Major maintenance
- Interim maintenance
- Oil service

Your selection will reset the corresponding maintenance interval.

Click in the column **Processed** Check the appropriate box listed next to the activity you performed on the vehicle (B).

Note: Clicking the box again deselects the feature.

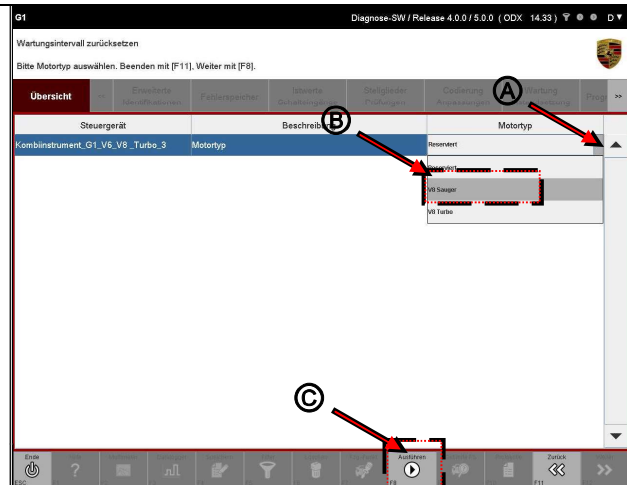
Confirm your entry by pressing the <F12> (C) key.



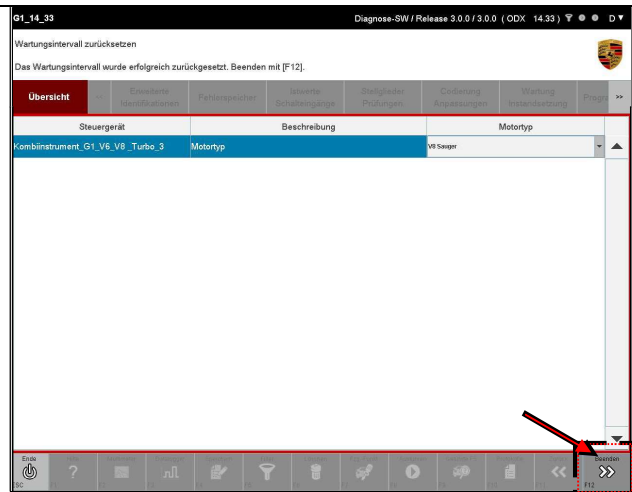
11. Next you need to determine the type of engine the new vehicle has.

Click in the field **Engine type** (A) and in the drop-down menu that opens, select the engine type that is installed in the vehicle (B).

To reset the maintenance interval, save the selection with <F8> (C).



12. Confirm your entry with <F12>.



Proceed further



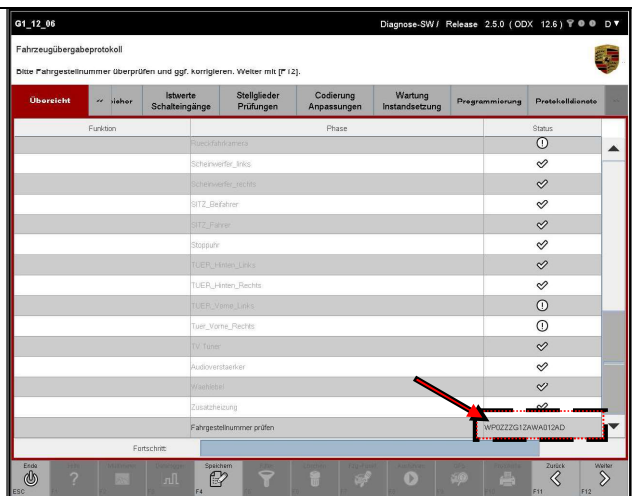
Note on the further process:
The further steps apply to both a new and an old vehicle.

13. Once all the data has been requested, you must enter the chassis check number.

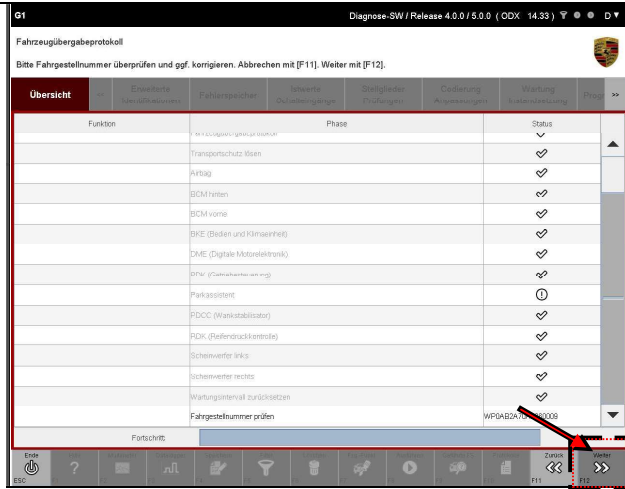
First scroll down to the entry in the list Chassis number.

If the number is incorrect, you will need to correct it.

To do this, click in the field status and change the entry.

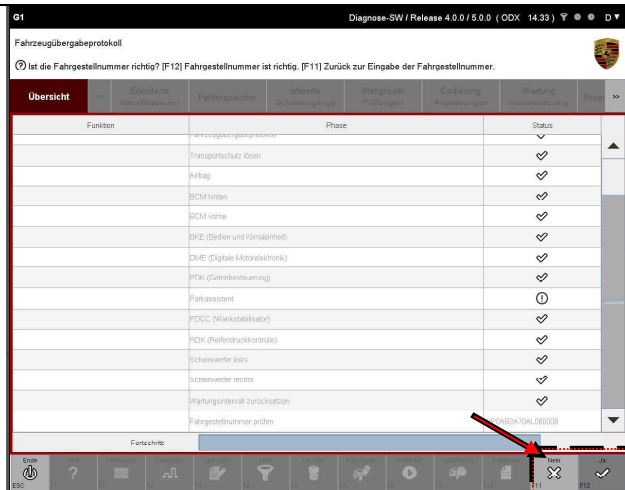


14. After you have checked or corrected the chassis number, press the <F12> key.



15. You then have to confirm the correctness of the chassis number again. You have the following choice-options:

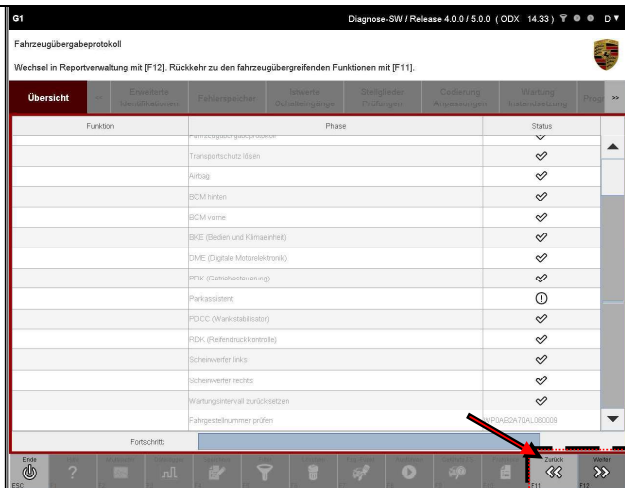
- With <F11> you come back to the input of the chassis number.
- Confirm the correctness with <F12>.



16. If you have confirmed the correctness of the chassis number with <F12>, you will come to another selection screen.

You have the following options:

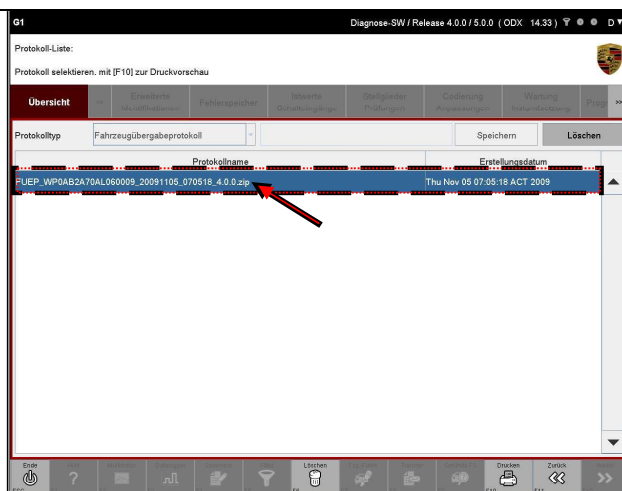
- With <F11> you come back to the list of vehicle-wide functions.
- With <F12> you get to the general report management, in which you can view and print out the FÜP can.



17. If you have pressed the <F12> key, the general report management is called up in which the protocol type Vehicle analysis log is preselected.

All FÜPs created so far are listed in the table of the work area.

The most recently created FÜP is listed first.



Further note:



In addition to the option of calling up the list of vehicle handover protocols at the end of the creation of the protocol, you can also call up the list from one of the function groups using the <F10> key. For a more detailed description of this type of call:

► See chapter 8.10.4.2

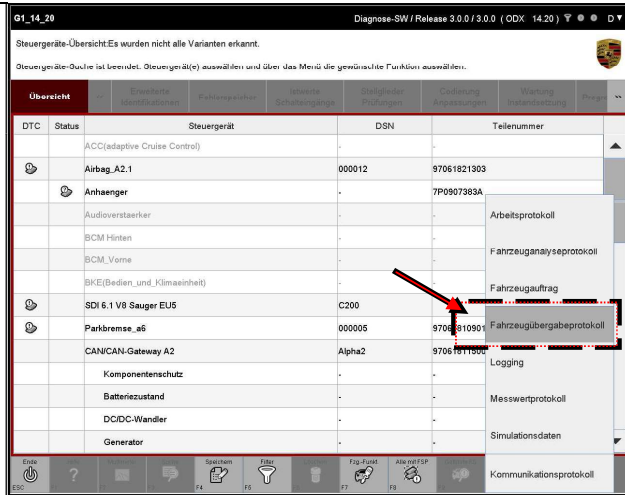
8.10.4.2 Vehicle handover protocol: Display of the list of FÜPs

If you have not switched directly to the general report management after creating the vehicle handover protocol, you still have the option of displaying the list of FÜPs.

1. Press the <F10> key.

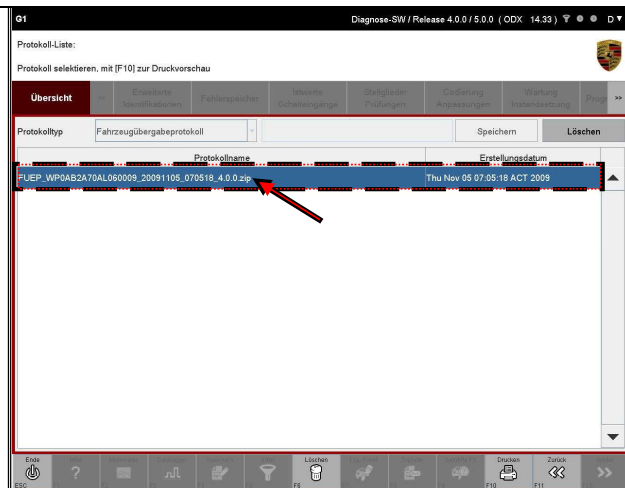
If the key cannot be selected, first navigate to one of the function groups (e.g. overview) and then press the <F10> key.

2. Select the protocol type in the key menu Vehicle handover protocol.



3. All FÜPs created so far are listed in the table of the work area.

The most recently created FÜP is listed first.



8.10.4.3 Vehicle handover report: Print



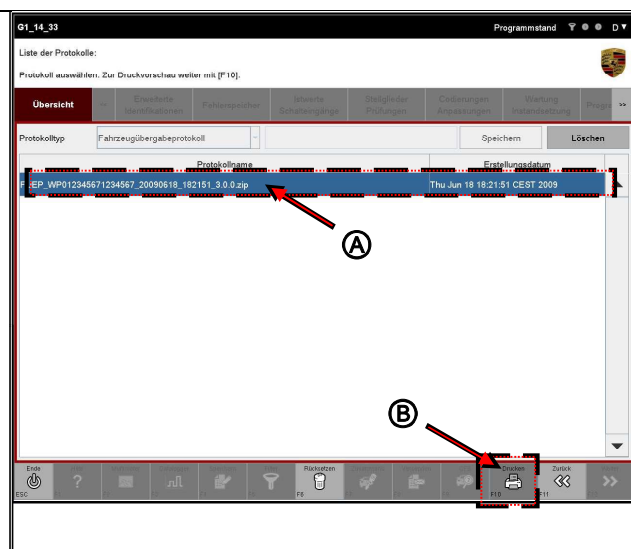
The selected FÜP is not printed out via the diagnostic application but via a display application. If this application has a print dialog and an appropriately configured printer is connected, you can print out the FÜP via this application. If necessary, contact your system administrator to configure the file link and set up a printer.

1. Display the list of vehicle handover protocols: See chapter 8.10.4.2

2. Select the FÜP that you want to print out (A) and press the <F10> key (B).

Cancel the selection with <F6>.

With <F11> you come back to the calling screen.



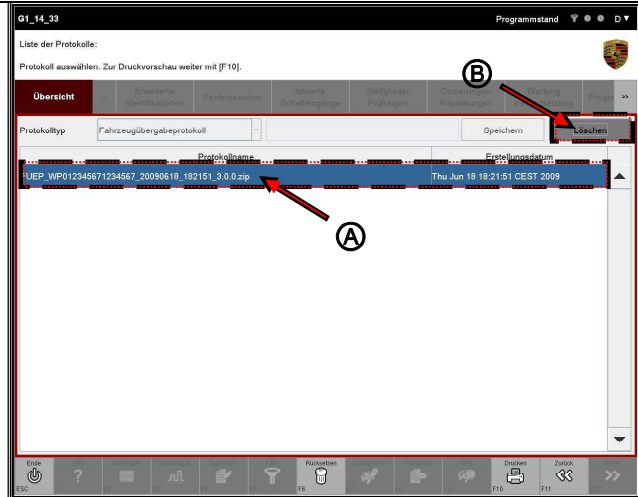
3. The displaying application is called.

8.10.4.4 Vehicle handover report: delete

1. Display the list of vehicle handover protocols: See chapter 8.10.4.2

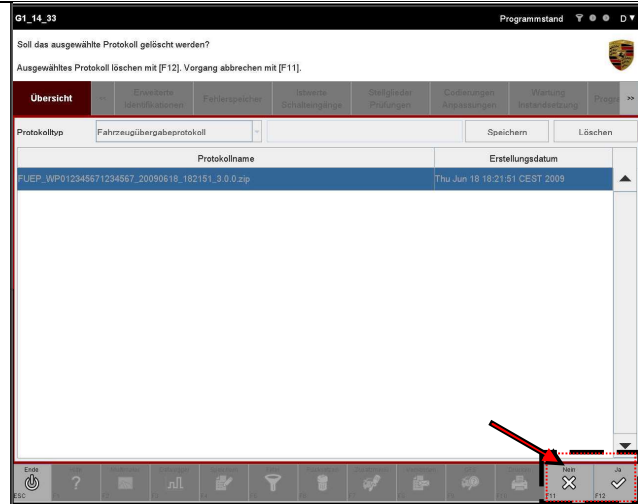


2. Select the protocol to be deleted (A) and press the Extinguish-Button (B).



3. You have to confirm the deletion of the FÜP. You have the following options:

- With <F11> you abort the process and come back to the list of FÜPs.
- Confirm the deletion of the FÜP with <F12>.



8.10.5 Action coding and programming (action)

The coding and / or programming of one or more control units using action coding differs from conventional coding (see section 8.6) or programming (see section 8.9) in that you only have to enter an action number. The coding or programming process then runs automatically.



Necessary data:

You must enter the following information in one of the following steps:

- ▶ Action number

You should therefore have the information you need to hand.



Note on input:

Entering the promotion number is case sensitive. This means that the input is not case-sensitive.

Example:

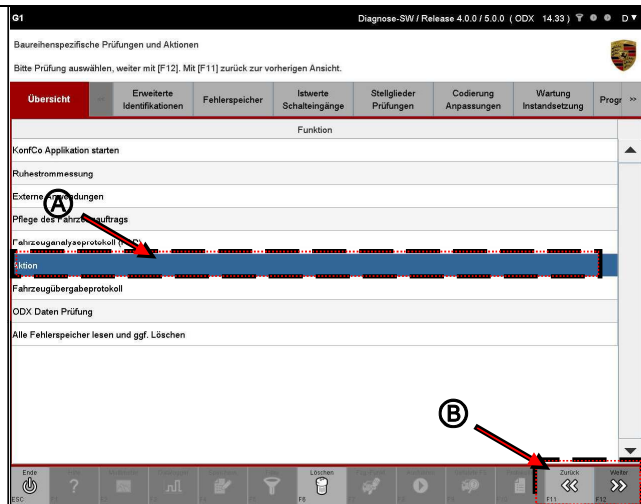
Entering W123 or w123 leads to the same result.

1. Display the list of installed control units and press the <F7> key to call up the vehicle-wide functions:

- ▶ See chapter 8.10.1.

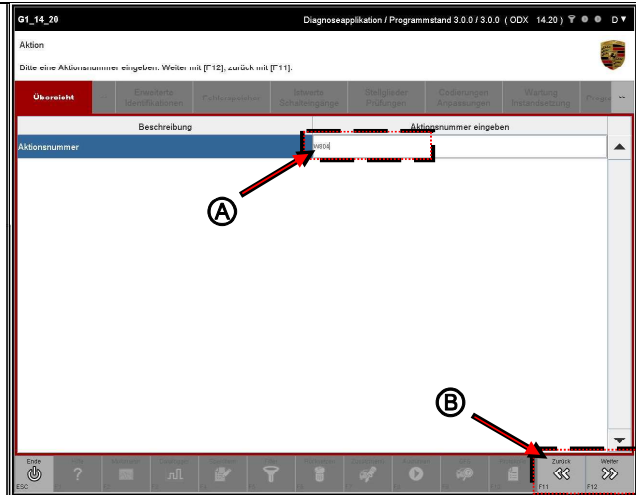
2. Select the entry in the list of vehicle-wide functions Action (A) and confirm the selection by pressing the <F12> (B) key.

With <F11> you come back to the control unit overview or control unit list (B).



3. Enter the action number and press the <F12> key

With <F11> you come back to the list of vehicle-wide functions.



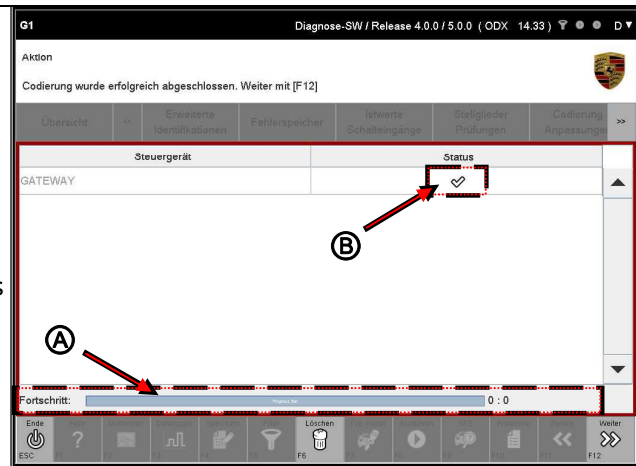
4. In the next step, the coding or programming the control unit.

A progress bar in the lower area of the screen informs you about the status of the coding. If necessary, the elapsed time is displayed to the right of the status bar (A).

Successful coding is ensured by the ?? Icon displayed (B).

If the coding was unsuccessful, this is indicated by the ?? Icon displayed. ⚠

Press the <F12> key to return to the list of vehicle-wide functions or select one of the function group keys.



8.10.6 Integration of external applications

In addition to calling up processes that have already been defined, you have the option of calling up your own applications and starting them from within the PIDT application.

8.10.6.1 Generating the configuration file

The applications to be started are read from an XML file:

XML file name: externalApplications.xml PIDT
 Directory:
 Folder name Workspace

This file is editable. You can define any number of external applications in it. The external applications are called application guided. Application-Entry is structured as follows:

```
<application>
  <id> ID </id>
  <display-name-oid> - identifier </display-name-oid>
  <display name> - identifier </display-name>
  <type> - file type </type>
  <launcher> - file </launcher>
  <parameters> - parameter </parameters>
  <disable-pidt> - Boolean </disable-pidt>
</application>
```

The individual elements have the following meaning:

XML tag	meaning
<id>	Unique ID designation of the application entry within the XML file
<display-name-oid>	Display name as internationalizable string resource (and due to missing configuration application as non-internationalizable text); must be identical to <display-name> if not defined.
<display name>	Display name as normal character string
<type>	Program type (JAR, EXE, Batch) Path to the
<launcher>	application
<parameters>	Call parameters (fixed, placeholders are not replaced)

<disable-pidt> Flag whether PIDT function groups should be deactivated;
 possible values: 1 (TRUE), 0 (FALSE);
 the PIDT application is hidden at 1 until the called application has been terminated.

Example:

```
<application>
  <id> SetSystemDateAndTime </id>
  <display-name-oid> Change date and time ... </display-name-oid>
  <display name> Change date and time ... EXE </display-name>
  <type> </type>
  <launcher> rundll32.exe </launcher>
  <parameters> shell32.dll, Control_RunDLL
  timedate.cpl </parameters>
  <disable-pidt> 1 </disable-pidt>
</application>
```

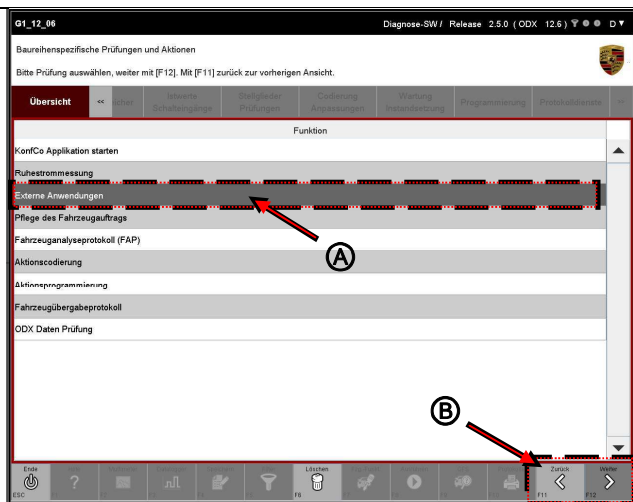
8.10.6.2 Calling the external application

1. Display the list of installed control units: See chapter 8.1.

2. Press the <F7> key.

3. Select the entry External applications (A) and press the <F12> key (B).

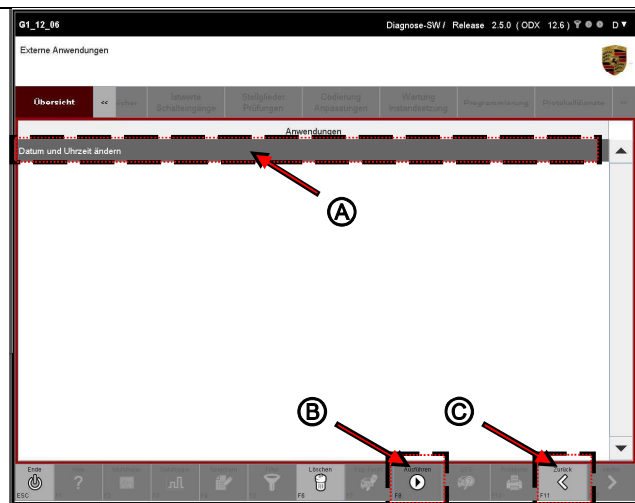
With <F1> you come back to the control unit overview or control unit list (B).



4. Select the relevant application from the list displayed (A).

Start the application by pressing the <F8> (B) key.

With <F11> you come back to the list of vehicle-wide functions (C).



5. The external application is started. The diagnostic application is hidden for the duration of the use of the external application. The diagnostic application only becomes visible again when the external application has been terminated.



Would you like to go back to ...:

- ... List of vehicle-wide functions, press the button once <F11>.
- ... Control unit overview, press the <F11> key twice