

## 8.11 Communication logging

This chapter describes how you can call up the communication log of the diagnostic application. It also describes how you can save a communication log and delete a displayed log.

You can start and stop communication logging at any time. This chapter describes how to call up and start the function from the control unit overview.



When starting the diagnostic application, you must specify whether the communication protocol should be created with absolute or relative time stamps (see Section 6.1.3.3.2).

With relative time stamps, the time is displayed in relation to the start of communication logging.

Example:

1st entry: 15: 13: 58.921

2nd entry: +00: 00: 00: 610

With absolute time stamps, the same log is displayed in the following way:

1st entry: 15: 13: 58.921

2nd entry: 15: 13: 59: 531



Logging scope:

Requests and responses from and to control units are logged. The services are continuously recorded.

New requests and responses are appended to the bottom of the log.

Previously logged services are automatically moved up. The current request is therefore always visible at the bottom.

The height of the scroll bar on the right is continuously adjusted.



Sorting according to individual elements:




You have the option of sorting the services. To proceed with the sorting:

► See chapters 10.5.1 and 10.5.2

Due to the sorting, newly arriving requests and responses are displayed according to the selected sorting. This can lead to the fact that the display changes with every new data record that arrives.

For this reason, it is recommended to sort with communication logging stopped and leave it off when communication logging is in progress.

## 8.11.1 Action-specific buttons in this function group

Communication logging button			
	Label	Icon	description
F8	begin		This icon appears in the control bar of the communication log: Pressing the <F8> key starts the logging of the requests sent and the responses received.
F8	stop		This icon appears in the control bar of the communication log: Communication logging is stopped by pressing the <F8> key.
F6	log Extinguish		This icon appears in the control bar of the communication log: The currently displayed log is deleted by pressing the <F6> key.

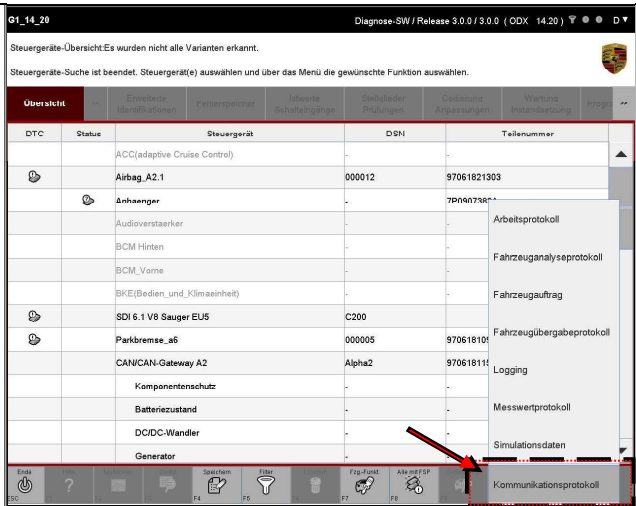
8.11.2 Calling up the communication log



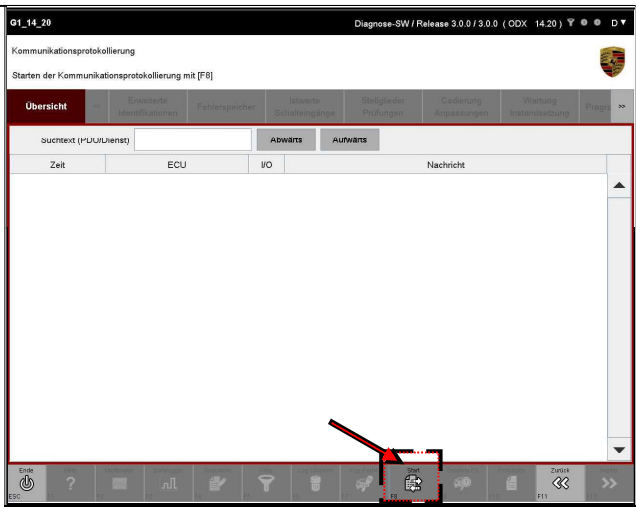
Communication logging can be started from any function group.

In the following example, the function is called from the control unit overview.

1. Press the <F10> key and select the entry in Button menu the entry Communication protocol.



2. The communication log screen appears.  
Press the <F8> key to start the communication log.



3. The communication between the installed control units and the diagnostic application is now also logged. You can use other functions of the diagnostic application as usual.

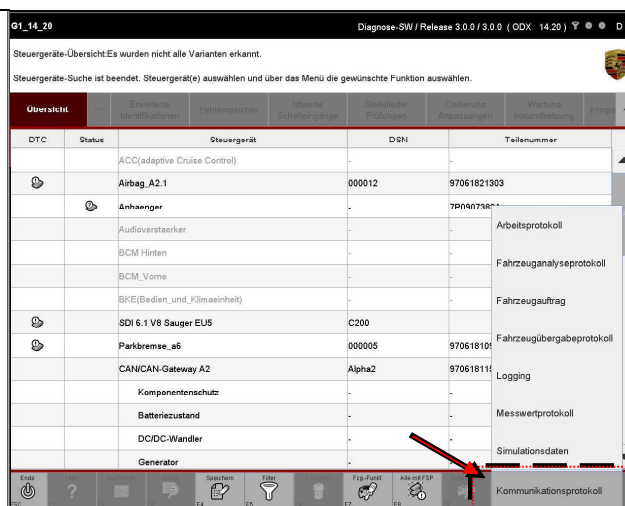
## 8.11.2 Calling up the communication log



Communication logging can be started from any function group.

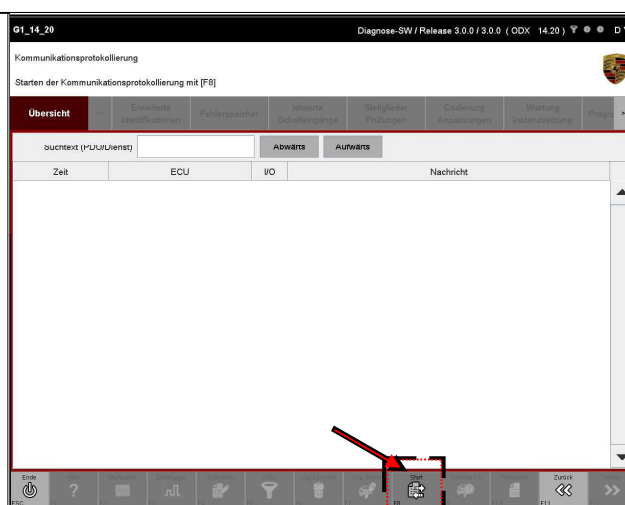
In the following example, the function is called from the control unit overview.

1. Press the <F10> key and select the entry in Button menu the entry Communication protocol.



2. The communication log screen appears.

Press the <F8> key to start the communication log.



3. The communication between the installed control units and the diagnostic application is now also logged. You can use other functions of the diagnostic application as usual.

### 8.11.3 Interruption of the live ticker behavior



What is the live ticker behavior?

Live ticker behavior is the constant appending of a new data element to the communication protocol. The currently attached element is in focus by default.

If you mark a line in the protocol while the protocol is running, for example to take a closer look at the entry, elements are still appended to the protocol, but the focus remains on the marked line. If the marking is discarded, the focus is shifted and the currently attached element is displayed again.



Precondition:

In order to be able to interrupt the live ticker behavior, communication logging must have been started beforehand:

► See chapter 8.11.2.

The live ticker behavior is initially active after the start of communication logging.



Note on selection:

You can mark an entry using a single selection. Multiple selection of entries is not possible.

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1. If you have exited the communication logging screen, access it by pressing the <F10> key and selecting the entry Communication logging.

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2. To be able to take a closer look at an entry while the log is running, select an entry (message) in the work area. You can use the scroll bar to scroll up or down and mark another entry.

The automatic scrolling is stopped for the duration of the selection. Current values are still appended at the end of the log.

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3. If you would like to reactivate the live ticker behavior, deselect it by clicking again in the corresponding line.

8.11.4 Stop communication logging

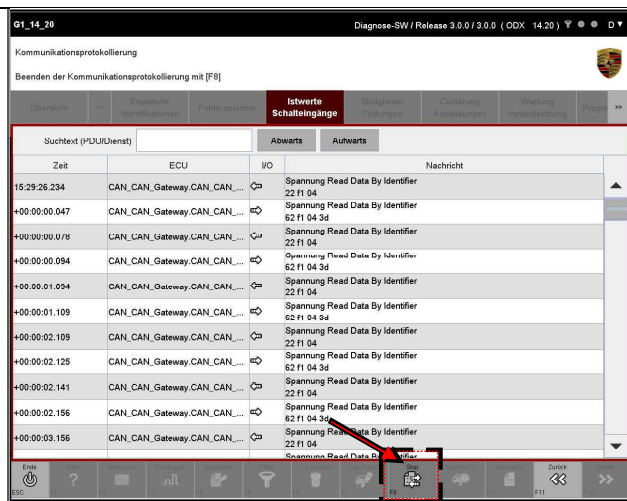


Precondition:

In order to be able to stop the communication logging, it must have been started beforehand:  
 ► See chapter 8.11.2.

1. If you have exited the communication log screen, go to it by pressing the <F10> key and selecting the entry Select communication logging.

2. Press the <F8> key to stop logging requests and responses.



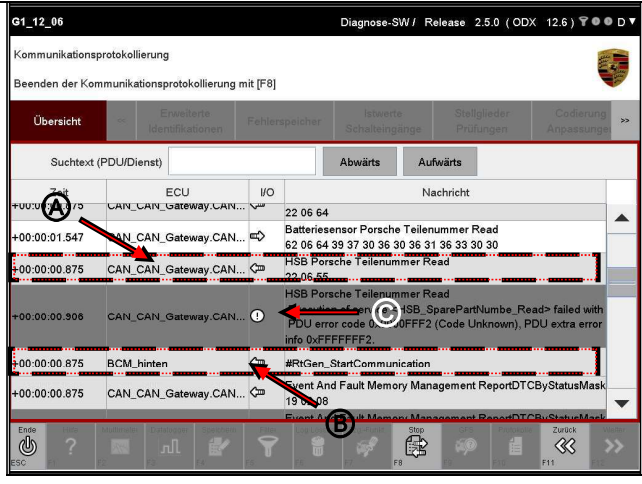
8.11.5 Elements of the communication protocol



The communication protocol uses visual aids in the form of icons to make the protocol easier to read. These are briefly explained below.

Display of the communication direction

1. Representation of a Requests.  
 The message (right) is sent to the control unit (left). this is indicated by the icon shows.  
 In addition, the corresponding line is highlighted in light gray (A).  
 Representation of a Response. The control unit (left) sends the response (right). This is going through the icon is displayed.  
 The corresponding line is also highlighted in white (B).  
 Should be failure occur in the control unit communication, this is indicated in the I / O column the icon displayed. An error occurred during communication with the control unit (left). The error message is displayed on the right.  
 In addition, the corresponding line is highlighted in dark gray (C).



8.11.6 Saving a communication log



Precondition:

In order to be able to save the communication log, it must have been created beforehand:

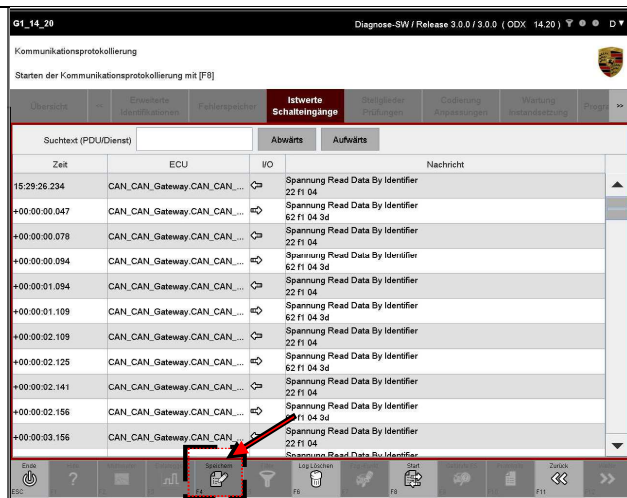
▶ See chapter 8.11.2.

In addition, communication logging must have been stopped:

▶ See chapter 8.11.3.

1. If you exited the communication log screen, enter it by pressing the <F10> key and stop the communication log.

2. Press the <F4> key.

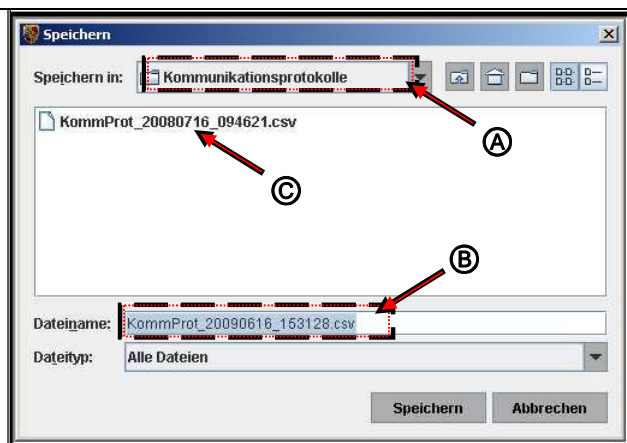


3. A pop-up window appears in which you have to enter the location (A) and the file name (B) under which the communication protocol is to be saved.

Is preselected ...:

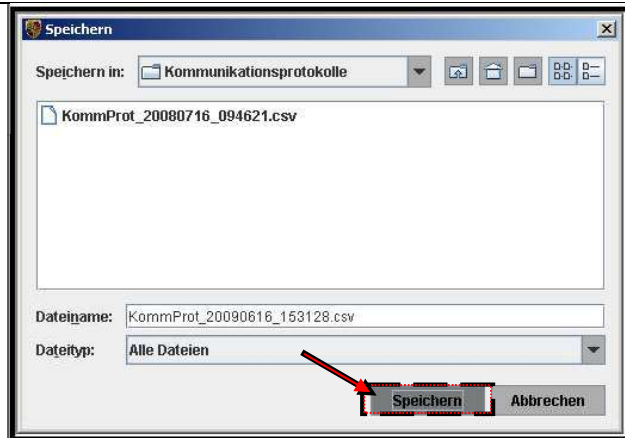
- \*. . . the folderCommunication logs
- \*. . . the file name (e.g. KommProt\_20090616\_153128.csv)

Already existing Communication protocols are displayed in the list in the window (C).





4. Confirm your entries by pressing the Save on computer-Press button.



Example of a communication protocol:

Token	Timestamp	ECU	service	PDU	TN
REQ00 02	17: 29: 38.015	DME_BDE_Siemens	# RtGen_StartCommunication		1
REQ00 02	??	BKE	# RtGen_StartCommunication		2
REQ00 02	??	BCM_front	# RtGen_StartCommunication		3rd
REQ00 02	??	CAN_CAN_Gateway	# RtGen_StartCommunication		4th
REQ00 02	??	BKE	Extended Session Diagnostic Session Control	10 03	6th
REQ00 02	??	DME_BDE_Siemens	Standard mode start	10 89	7th
RSP00 02	??	DME_BDE_Siemens	Standard mode start	50 89	7th
REQ00 02	??	ACC3	# RtGen_StartCommunication		8th
REQ00 02	??	BCM_front	Extended Session Diagnostic Session Control	10 03	9
REQ00 02	??	Airbag	# RtGen_StartCommunication		10
REQ00 02	??	CAN_CAN_Gateway	Extended Session Diagnostic Session Control	10 03	11
RSP00 02	??	CAN_CAN_Gateway	Extended Session Diagnostic Session Control	50 03 00 32 01 f4	11
REQ00 02	??	ACC3	Extended Session Diagnostic Session Control	10 03	12th

Token	Timestamp	ECU	service	PDU	TN
REQ00 02	??	Transmission control_PDKit	# RtGen_StartCommunication		13
REQ00 02	??	Airbag	Extended Session Diagnostic Session Control	10 03	14th
RSP00 02	??	Airbag	Extended Session Diagnostic Session Control	50 03 00 32 01 f4	14th
REQ00 02	??	Transmission control_PDKit	Standard mode start	10 89	15th
REQ00 02	??	BKE	# RtGen_StopCommunication		17th
REQ00 02	??	DME_BDE_Siemens	# RtGen_VariantIdentification AndSelection	1a 9f	19th
RSP00 02	??	DME_BDE_Siemens.SDI_6 _1_V8_Turbo_EU4	# RtGen_VariantIdentification AndSelection		19th
REQ00 02	??	Airbag	# RtGen_VariantIdentification AndSelection	22 f1 a2 22 f1 9e 22 f1 df	20th
RSP00 02	??	Airbag.Airbag_Airbag_A2_0	# RtGen_VariantIdentification AndSelection		20th
REQ00 02	??	CAN_CAN_Gateway	# RtGen_VariantIdentification AndSelection	22 f1 a2 22 f1 df	21
RSP00 02	??	CAN_CAN_Gateway	# RtGen_VariantIdentification AndSelection		21
REQ00 02	??	Transmission control_PDKit	# RtGen_StopCommunication		22nd

### 8.11.7 Clear the recorded communication log



**Precondition:**

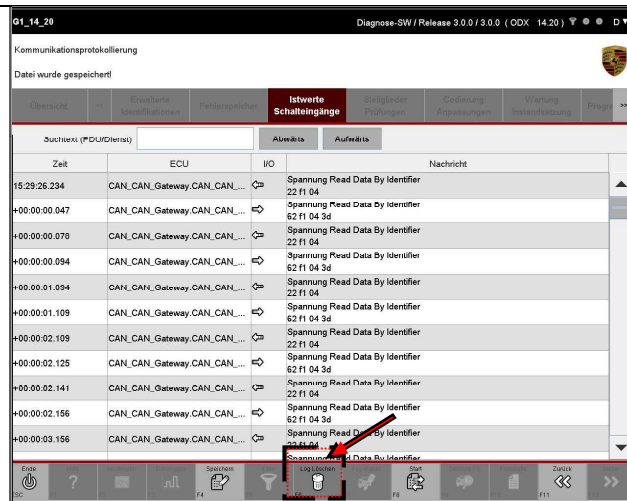
In order to be able to delete the communication log, it must have been created beforehand:

► See chapter 8.11.2.

1. If you have not already done so: Go to the communication log screen by pressing the <F10> key.

If a logging process is active, it does not have to be canceled.

2. Press the <F6> key to delete the current log displayed in the work area.



8.11.8 Search for a service within the log



You have the option in the column news search for a term in the protocol. It is not case sensitive. The search term session respectively, session so gives the same result.

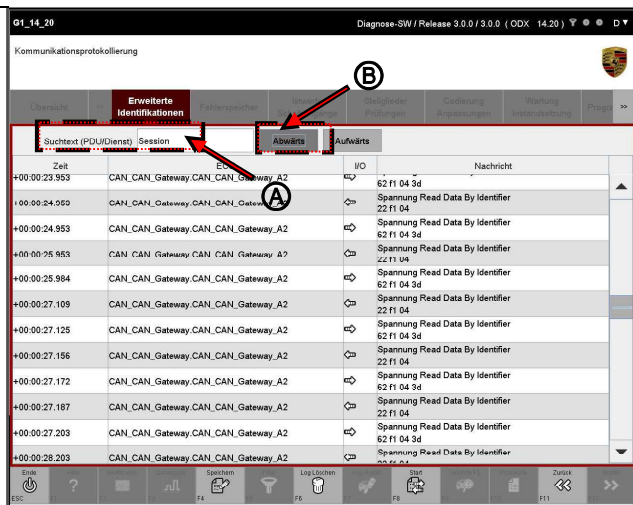
You also have the option of searching for partial words.

1. If you have not already done so: Go to the communication log screen by pressing the <F10> key.

2. Enter the desired search term in the search text field. In the example, the search term session entered (A).

Then enter the search direction in which the search term should be searched for.

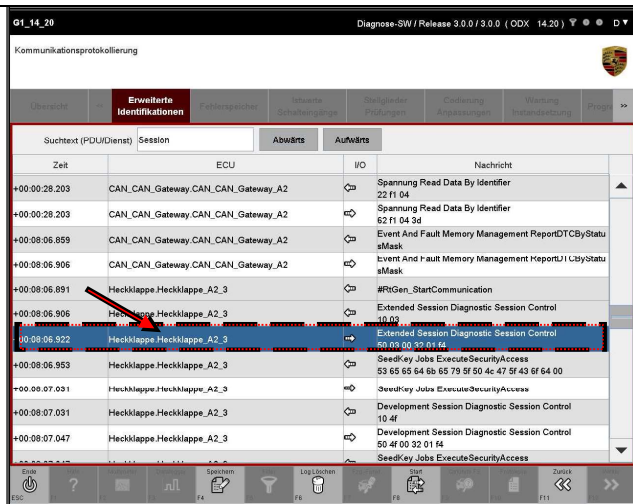
To do this, either press the Down- or UpwardButton.



3. Should be a service identifier over the requested search term it is marked in the displayed list.

By pressing the Down- or UpwardButtons, another search is carried out with the search text.

If another element is found that has the required search term, it will be displayed and marked.



## 8.11.9 Sort the communication protocol by I / O

**Column sorting:**

You have the option of sorting columns within the communication protocol. For information about the general behavior when sorting columns within the diagnostic application:

► See chapter 10.5

You have the option of sorting according to the following criteria

The element to be sorted by corresponds to the column label	How is it sorted?
Time	Sorted by larger or smaller time.
I / O	Sorts the communication direction and groups requests (I) and responses (O) of the services performed. Related control unit inquiries and ?? Answers merged, whereby the request is always displayed first and then the associated response.
ECU	Sorts alphabetically according to the corresponding name of the control unit.

## 8.12 Work logging

The information displayed on a screen can be saved in the so-called work log. The work log is created by pressing a button on the control bar and is successively expanded by pressing it again in other functions or function groups or when changing the content of the work area. This chapter describes how to create a work log ?? initially temporarily - can create.



Within the general report management you can display, print, finally save and delete a generated work log. For more information on general report management:

► See chapters 8.12.3, 8.12.4 and 8.12.5



Maximum size and behavior when creating the work log:

By default, the maximum file size for saving the work log is 1MB, which corresponds to a log of more than 100 pages.

If this size is exceeded, each further saving of the log must be explicitly confirmed with a yes / no question.

Special case vehicle analysis protocol (FAP):

If the size is exceeded, only a warning is displayed, but the log is saved automatically.

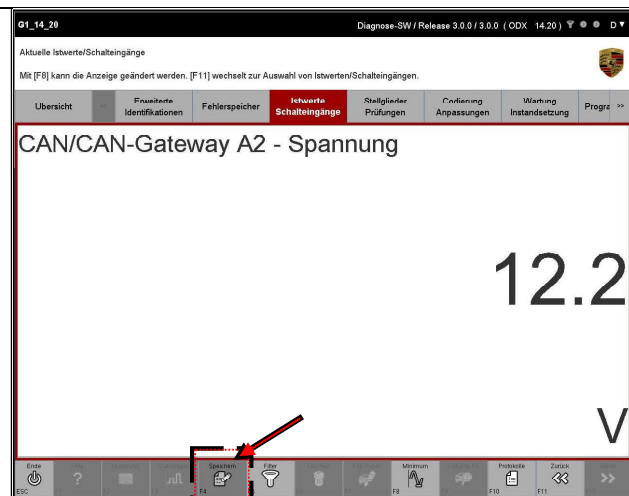
## 8.12.1 Work protocol: Creation of a temporary work protocol

1. Display the list of installed control units and select the desired control units:

► See chapter 8.1.

2. Select a function group or function.

3. Press the <F4> key to temporarily save the information currently displayed on the screen in a work log.



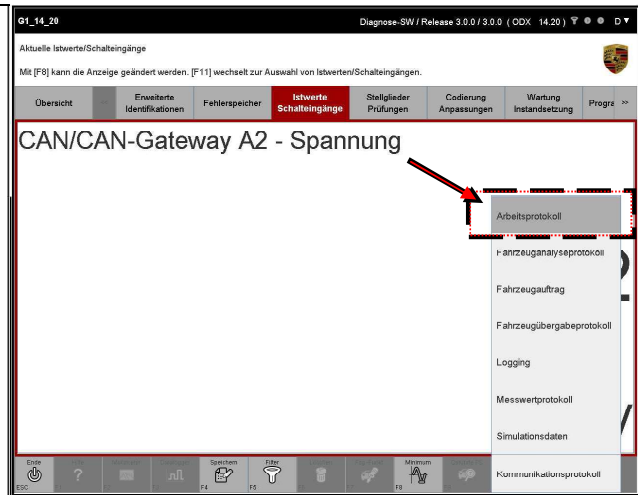
4. If you would like to save information in other screens as well, switch to the corresponding screen and press the <F4> key there again. The information recorded is then included in the same work log. The work log will be expanded to include the new content until it has been finalized / saved.

8.12.2 Work log: display the list of work logs

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.

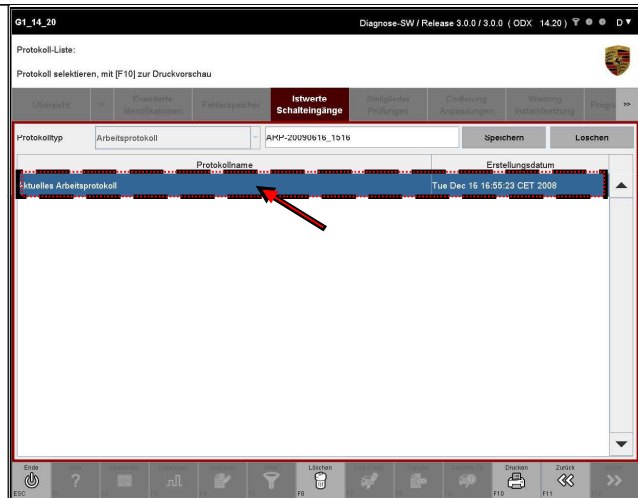
2. A key menu appears in which several entries are listed.

Select the protocol type Work log.



3. A list of all work logs is displayed.

The cached log always comes first.



8.12.3 Work Log: View and print a work log



In order to be able to print out a protocol, a suitable printer must be connected to the test device and configured accordingly.





8.12.4 Work log: save a work log

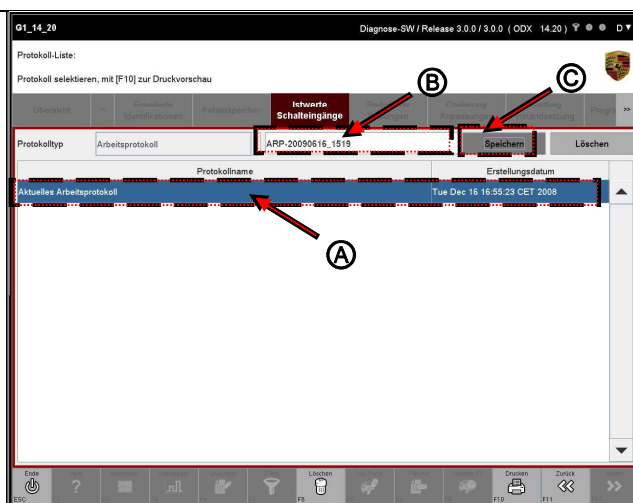


You have the option of saving the cached work log locally.

1. Display the list of work logs: See Chapter 8.12.2

2. Select the cached work log (A).

Enter the desired name under which the work log is to be saved (B) and press the Save on computer-Button (C).

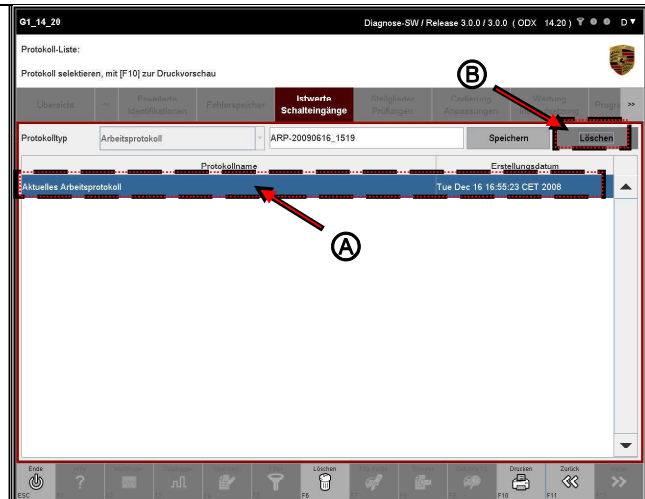


### 8.12.5 Work log: delete a work log

1. Display the list of work logs: See Chapter 8.12.2.

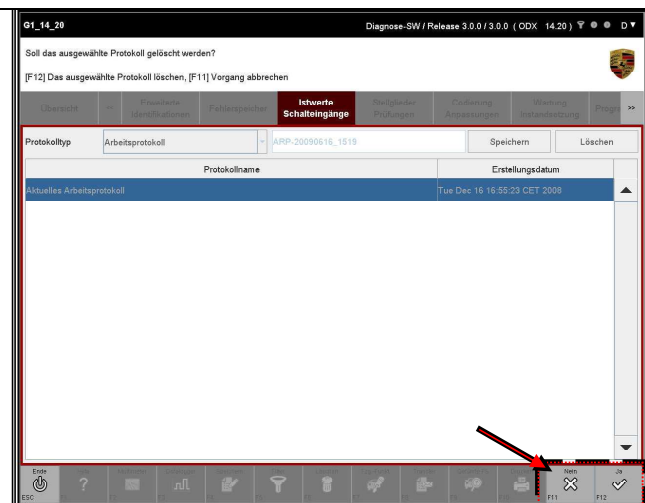


2. Highlight the required work protocols (A) and press the Extinguish-Button (B).



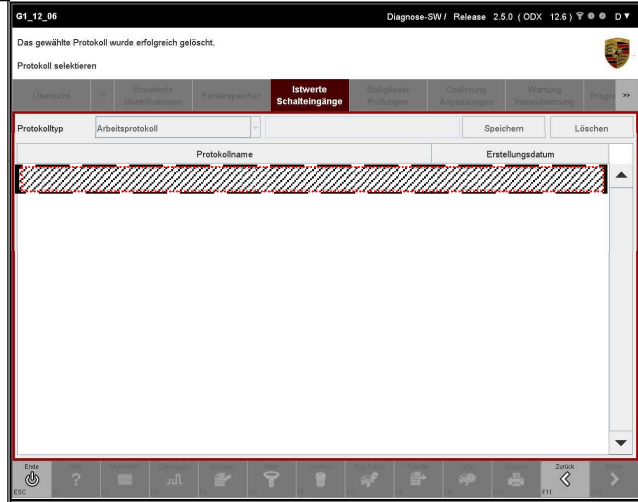
3. A selection appears in which you can delete the selected work protocols. You have the following options (B):

- Cancel the process with <F11>. You come back to the list of work logs.
- With <F12> you confirm that you have selected the Want to delete work logs.



Proceed further

4. If you have confirmed the query with <F12>, the selected log is deleted and the list of work logs is updated.



## 8.13 Logging

The task of logging is to support the first level support for the first analysis in the event of an error.

The diagnostic application supports two different forms of logging:

- Basic logging (default)
- extended logging

With extended logging, more extensive information is stored in the log files, which is required for a more detailed error analysis.

This chapter describes how you can activate and deactivate extended logging.

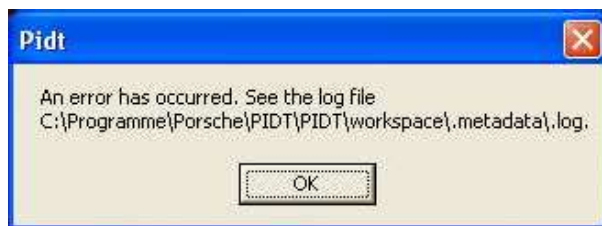
Log file creation in case of faulty setups:

Should the standard log directory (example: C:\Userdata\dsa\pidt\log) not exist when installing the diagnostic application? z. B. by unintentional deletion of the directory -, the installation program first tries to create this directory structure.

If this fails, the installation program tries to use the current path for logging the setup, i.e. logging into the directory in which the installation program is located. This ensures that the further course of the setup can be reproduced via the log files.



If the standard log directory cannot be created, an error message is generated when using the diagnostic application:



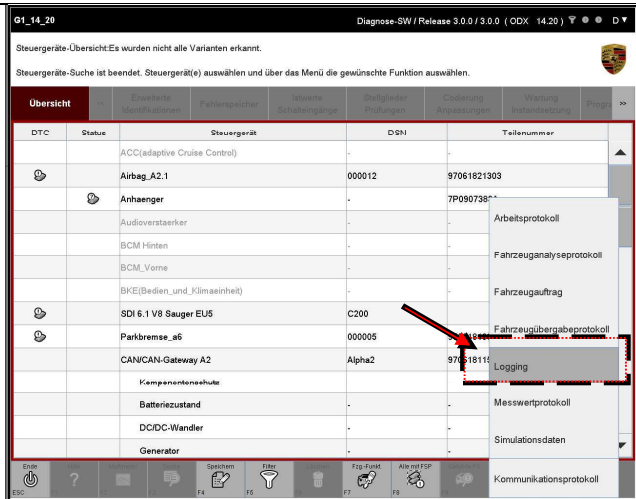
In this case, contact your system administrator.

8.13.1.1 Logging: Display of the log function

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.

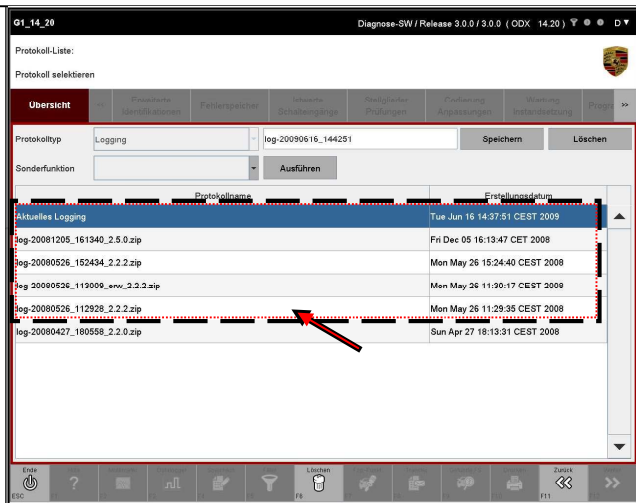
2. A key menu appears in which several entries are listed.

Select the entry Logging.



3. Information on the current logging is displayed.

By default, the Diagnostic application carried out with basic logging.



8.13.1.2 Logging: Switching the logging depth



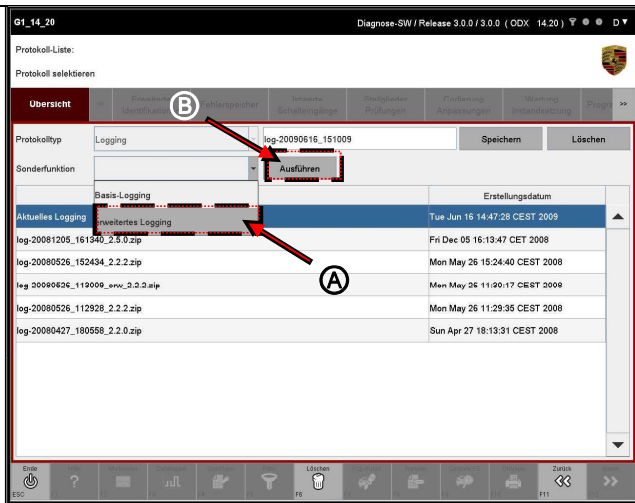
The changed logging method (i.e. "basic logging" or "extended logging") has an effect on logging from the point at which it is changed.

1. Call the function Logging on: See ► chapter 8.13.1.1.

2. Setting the method extended logging:
 

Select under in the drop-down menu Special functions the entry extended logging (A).

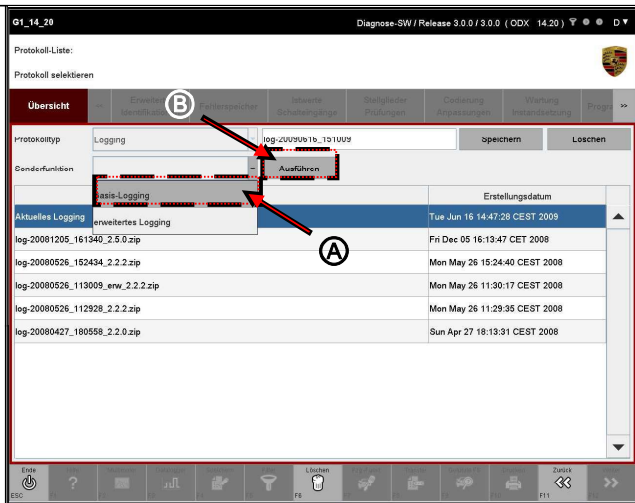
Then press the Carry out-Button (B).



3. Setting the method Basic logging:
 

Select under in the drop-down menu Special functions the entry Basic logging (A).

Then press the Carry out-Button (B).



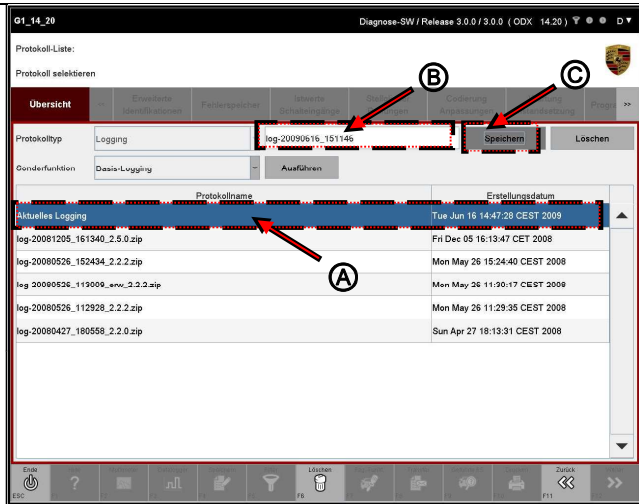
### 8.13.1.3 Logging: Saving the current logging

1. Call the function Logging on: See ► chapter 8.13.1.1.

2. Select the current logging (A).

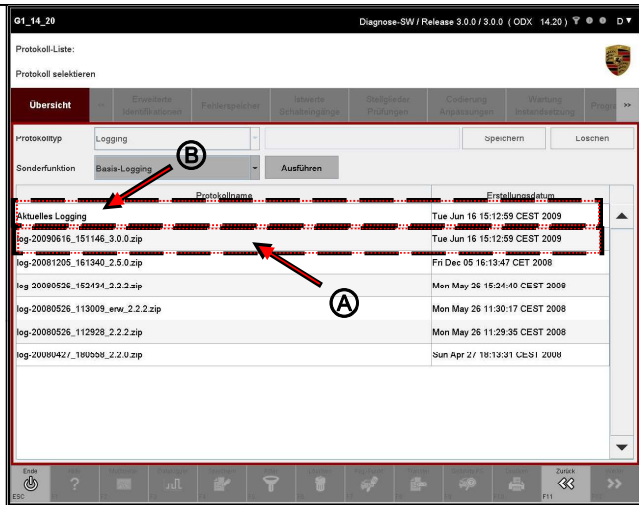
If necessary, change the name generated by the system (B).

To save the current logging under the name that has been changed, if necessary, press the Save on computer-Button (C).



3. The selected logging is zipped and taken over as an entry in the logging list (A).

A new logging is started immediately, over the previously saved logging as Current logging is displayed (B).



### 8.13.1.4 Logging: Deleting the ?? Current ?? Loggings



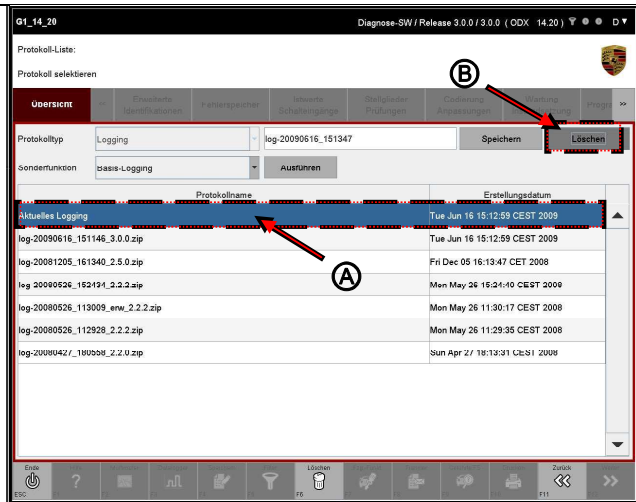
Within the function Logging you have the option to delete the current logging. After deleting the current logging, a new, current logging is created immediately. You can see this from the creation date of the current logging.

You cannot delete any saved logs.



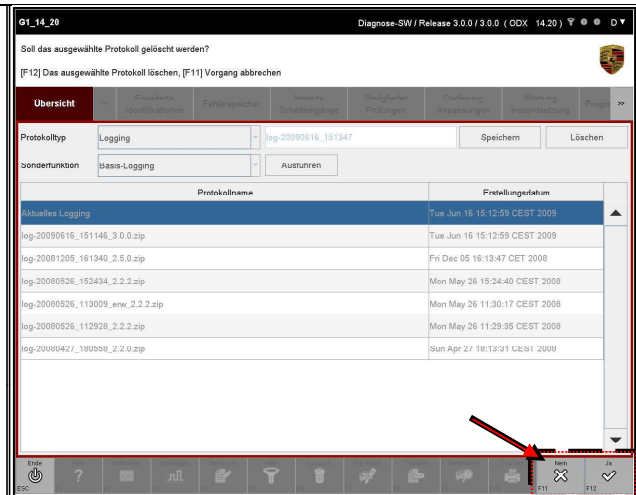
1. Call the function Logging on: See ► chapter 8.13.1.1.

2. Select the current logging (A) and then press the Extinguish-Button (B).



3. A selection appears in which you must confirm the deletion of the current logging. You have the following options (B):

- Cancel the process with <F11>. You come back to the list of loggings.
- With <F12> you confirm that you have the current logging want to delete.



4. If you have confirmed the selection by pressing the <F12> key with YES, the current logging will be deleted. A new logging is then started immediately. The log depth is based on the belowSpecial functions set logging method (basic logging or extended logging).

## 8.14 Create simulation data

You have the option of recording simulation data. These data are used to display the ECU communication within the basic application mode Simulation mode required (see chapter 5.1).

The simulation data is initially always recorded in a temporary file in the standard working directory. This temporary file is expanded if the recording is interrupted and then resumed. This also takes place after restarting the diagnostic application and subsequent simulation recording.

The temporary file can only be initialized by restarting the recording, stopping and then starting the simulation, saving or deleting.

This chapter describes how you can call up the function and how you can generate simulation data.



You can find out how to call up the application in simulation mode (replay mode) in Section 6.2.2.4.

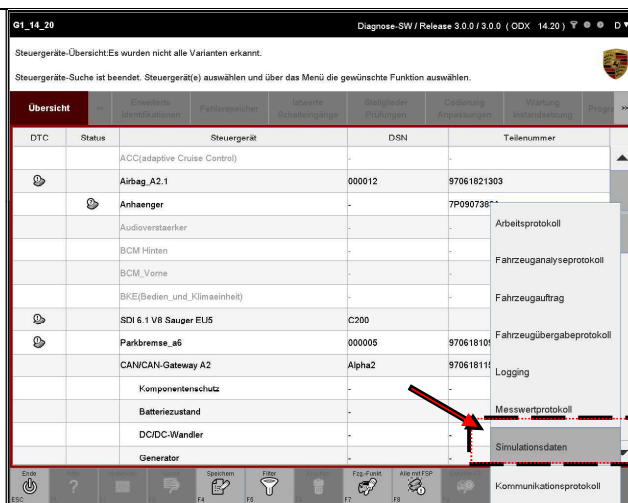
### 8.14.1.1 Display of the simulation data function

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.

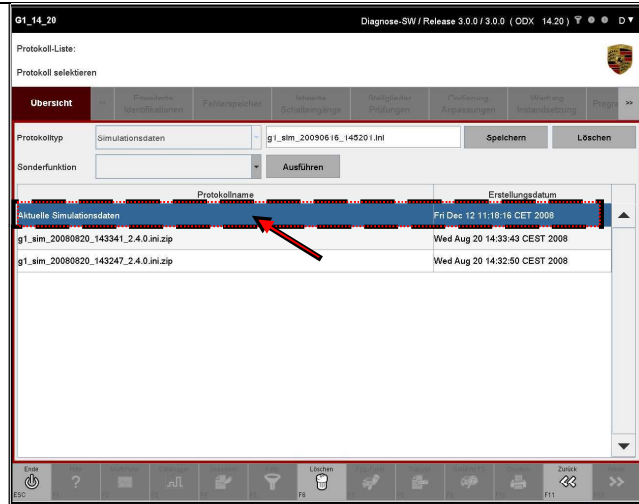
2. A key menu appears in which several entries are listed.

Select the entry Simulation data.



3. You will be shown a list of all the simulation data that have already been saved.

If no recording has taken place yet, the list is empty.

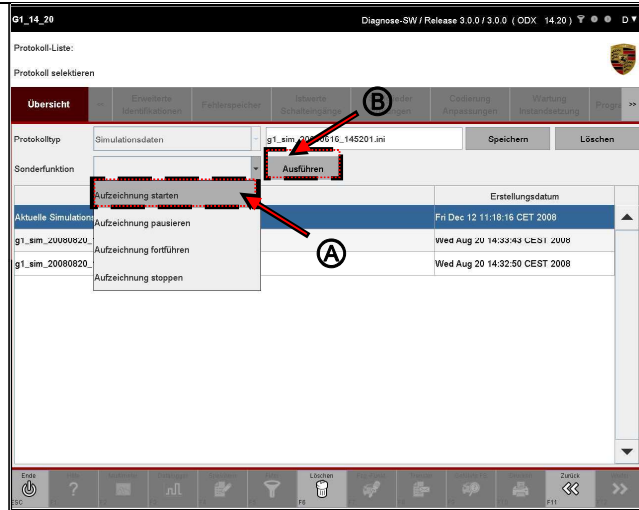


8.14.1.2 Start recording

1. Call the function Simulation data on: See chapter 8.14.1.1.

2. Select in the drop-down menu under Special functions the entry Start recording (A).

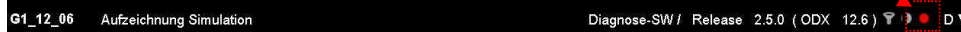
Then press the Carry out-Button (B).



3. From the start of the recording, the complete diagnostic communication is recorded in a temporary file.

4. To the function Simulation data To exit, press the <F11> key. Now carry out the actions with the control units whose control unit communication data you want to record.

Note: Display in the title line



As long as the recording is running, ...:

- ... on the left in the title line the text ?? recording simulation ?? displayed.
- ... an icon is displayed on the right in the title bar.

8.14.1.3 Pause recording

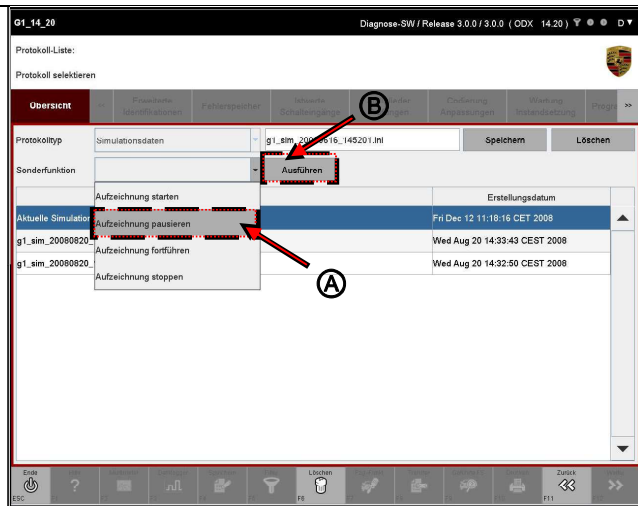
You can pause the simulation data recording. You use this function if you ...:

- ... want to carry out individual actions with control units without them should be recorded.
- ... do not lose the previously recorded data and if the Then want to append the newly added control unit data to the stored communication data.

In contrast to "stopping and then starting" is when? pausing and then continuing ?? the recording of the content of the file ?? Current simulation data ?? not deleted and expanded to include the newly added content.

1. Call the function Simulation data on: See chapter 8.14.1.1.

2. Select in the drop-down menu under Special functions the entry recording pause (A).  
Then press the Carry out-Button (B).



3. To the function Simulation data To exit, press the <F11> key. Now carry out the control unit actions that should not be recorded.

The recording can be restarted (= continued) at a later point in time (see Chapter 8.14.1.4).



Display in the title line:

It is also indicated that the simulation data recording is running. (For representation and icon, see note in Section 8.14.1.2).

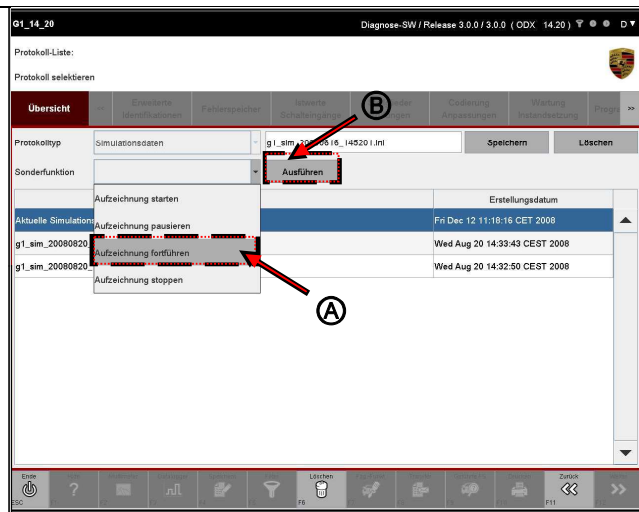
8.14.1.4 Continue recording

If the recording has been paused beforehand (see Chapter 8.14.1.3), you have the option of continuing the simulation data recording at any point in time. Proceed as follows:

1. Call the function Simulation data on: See chapter 8.14.1.1.

2. Select in the drop-down menu under Special functions the entry recording continue (A).

Then press the Carry out-Button (B).



3. From the point at which the recording is continued, the entire diagnostic communication is saved again in the temporary file created previously. All data recorded before the recording was paused is retained. The new data will be appended to the data already recorded.

4. To the function Simulation data To exit, press the <F11> key. Now carry out the actions with the control units whose control unit communication data you want to record.



Display in the title line:

It is also indicated that the simulation data recording is running. (For representation and icon, see note in Section 8.14.1.2).

## 8.14.1.5 Stop recording

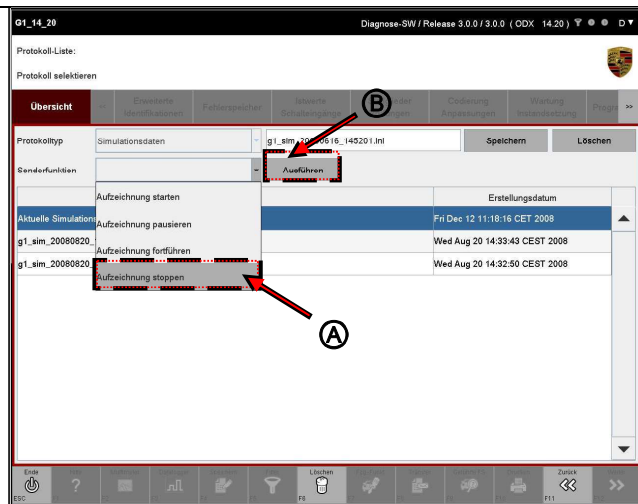
When the recording is stopped, the temporary file is marked as completed. If you start the recording again after stopping, the contents of the temporary file will be deleted and a new temporary file will be created.

If you want to add new recording data to the data of the temporary recording file, select the function instead Pause recording (see Chapter 8.14.1.3).

1. Call the function Simulation data on: See chapter 8.14.1.1.

2. Select in the drop-down menu under Special functions the entry Stop recording (A).

Then press the Carry out-Button (B).



### 8.14.1.6 Save simulation data

You have the option of saving the currently created simulation data and assigning a name to the simulation file.

1. Call the function Simulation data on: See chapter 8.14.1.1.

2. Stop the simulation data recording See chapter 8.14.1.5.

3. Select in the table of the The entryCurrent simulation data

(A).

Enter a name for the simulation file (B). The file name is suggested by the system and has the following form:

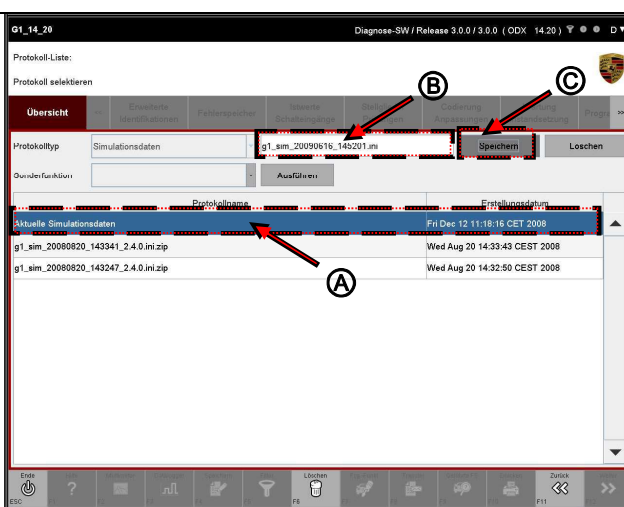
<Series> \_sim\_ <date> \_ <time> .ini

You can keep the suggested name as the file name or change this name (see also note).

Press the Save on computer-Button (C).

The file name of the zip file is expanded to include the software release designation (e.g. ?? 3.0.0 ??).

Example:  
g1\_sim\_20090616\_145201\_3.0.0.ini.zip







Note on file names:

Should you only have selected the <Series> as the file name ?? so if you z. B. the entry suggested by the system ?? g1\_sim\_20100510\_070101.ini ?? against the entry ?? g1.ini ?? replace - you will be asked to confirm that this selection is correct.

Background: The series abbreviation as the file name is the standard simulation file ?? default-simulation.ini ?? reserved in the series directory. By confirming the correctness of the file name, this standard simulation file is overwritten with the current simulation.

## 8.15 filter

This chapter describes how you can use the filter function of the diagnostic application. It describes in detail how you can create and delete filters, activate and deactivate filters, assign filter properties (edit filters) and reset filter properties.

When all the processes of the application relevant to the display have been completed (e.g. structure of the overview display completed, etc.), you can call up the filter function from the following function groups:

- 
- 
- 
- 
- 

For the following functional groups or functions you can no Filter properties are defined:

- 
- Ambient data (part of the fault memory function group)
- 
- 
-

Behavior of the filter function in the application:


► Filters are defined across ECUs and individually for the respective function group. That means:

The filter function gives you the option of creating your own filter for each function group. The filters created are not combined with one another; the field of view of a filter function is limited to the respective function group. The filter is based on previously selected elements that are assigned to the filter as properties in a selection screen.

► Filters for a specific list view can be newly created and applied independently of the currently active filter. That means:  
If another filter is activated for the same list view, the previously active filter is automatically deactivated.

► Different filters can be active at the same time for different function groups or list views. You can keep your own filter active for each function group or list view. However, these filters do not influence each other (see remark above). The common basis is only the number of control units in the selection.



► If a filter is active, this is indicated by the  - Icon in the title bar in the respective function group is displayed. Whether or not an icon is displayed depends on the function group. That means:

For example, if you switch from the **filtered overview** view to another function group in which no filter is active, the icon in the title bar is not displayed in the other function group.

The icon only shows that a filter is active or not in the relevant function group. Filters in other functional groups ?? this also includes the control unit overview or control unit list - which are active are not represented by an icon in the current view.

► Filters remain active until you have explicitly deactivated them or closed the diagnostic application. After restarting the diagnostic application, no filters are generally active.



Backup of the filter settings:

Filters are backed up beforehand when the PIDT software is reinstalled.

Restriction: In which levels, in which screens can filtering be carried out?

If the filter function is called, only the elements of the first or second level are filtered (see chapter 4). These are:

- Elements that are displayed after calling up the respective function group (e.g. actuators).
- Elements that are displayed by a subsequent further selection (e.g. a selection of actuators).



Function groups that have operating options in the third level (e.g. actual values / switching inputs) can only be filtered in the elements of the second level.

Example: In the actual values / switching inputs function group, you cannot, for example, filter for individual measured values that are displayed on the work screen of the function group and updated cyclically. You can only filter according to the elements of the overview screen of the function group, i.e. according to actual values / switching inputs.

If you are in the display of the measured values (working screen) and press the <F5> key to assign properties to a filter, you will not be shown the screen with the measured values from which you started, but the overview of the actual values / switching inputs, which you get when you call up the function group.

Note on the description in the chapter:




This chapter describes the filter function as an example: Based on the control unit overview, a filter is defined that filters three control units. Only these control units are then displayed.



How it works when filtering other elements, e.g. B. of extended identifications, actual values or switching inputs, actuators, etc. is however identical to the procedure described.

However, please note the note on the restriction of filtering above!

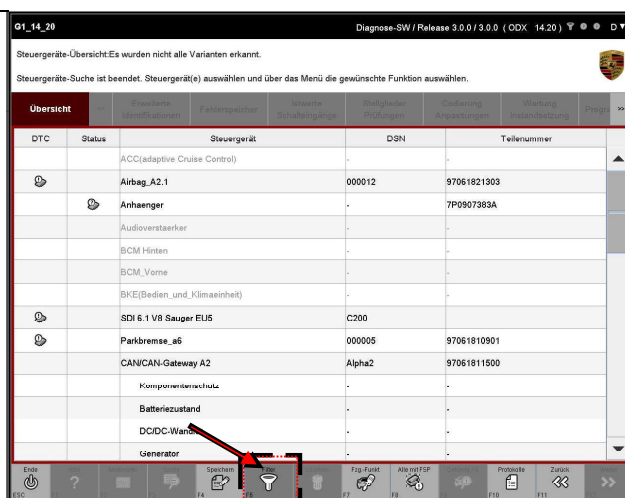
### 8.15.1 Action-specific buttons in this function group

filter			
button	Label	Icon	description
F8	To write		This icon appears in the control bar when the filter function is called up. Filter properties are assigned to a filter 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.

### 8.15.2 Calling the filter function

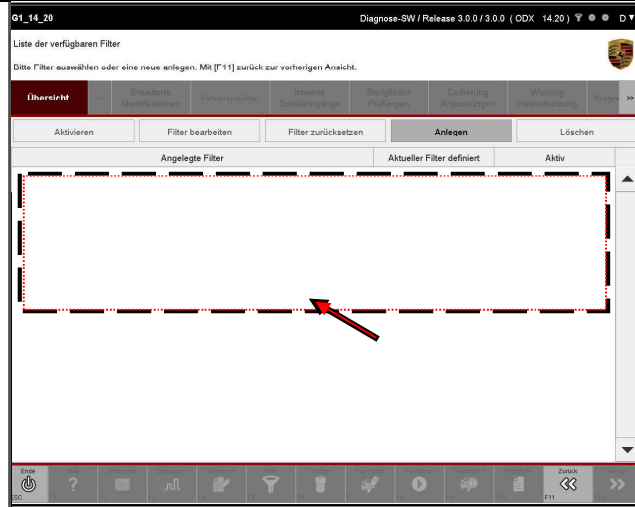
1. Call up one of the function groups from which you can start the filter function (see introductory notes).  
Let z. B. display the list of installed control units:  
▶ See chapter 8.1.

2. Then press the <F5> key.



3. You will be shown a list of the available filters.

If no filter has yet been defined, the list is empty.



### 8.15.3 Create filter

This chapter describes how to define filter properties. The definition of filter properties of a filter takes place in a screen in which you can mark or deselect several entries.

Note on filter behavior:

If you have several control units in the selection and you do not define a filter condition for all control units, the following behavior applies after activating the filter and returning to the function group:

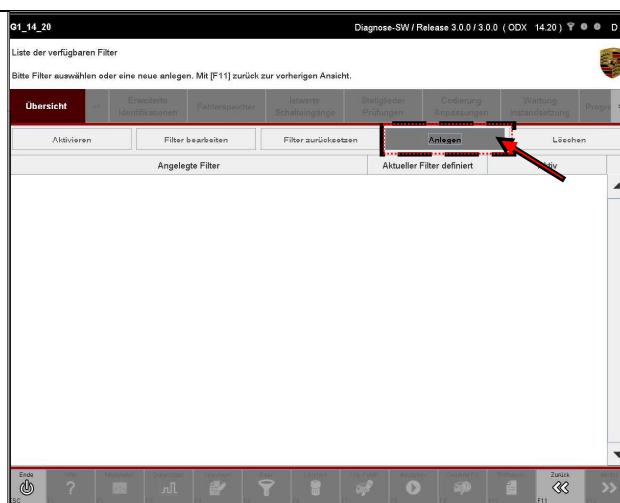


- For those control units for which filter conditions have been defined, only those elements are displayed that have been identified by the marking.
- Those control units for which no filter conditions have been defined are either not displayed or are marked accordingly, indicating that no entries have been made.

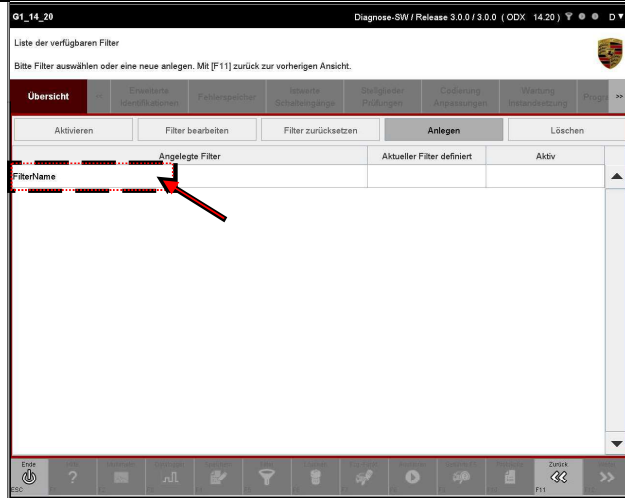
The filter is therefore a restrictive filter.

1. If not already done: Call up the filter function by pressing the <F5> key.

2. Press the Invest-Button.



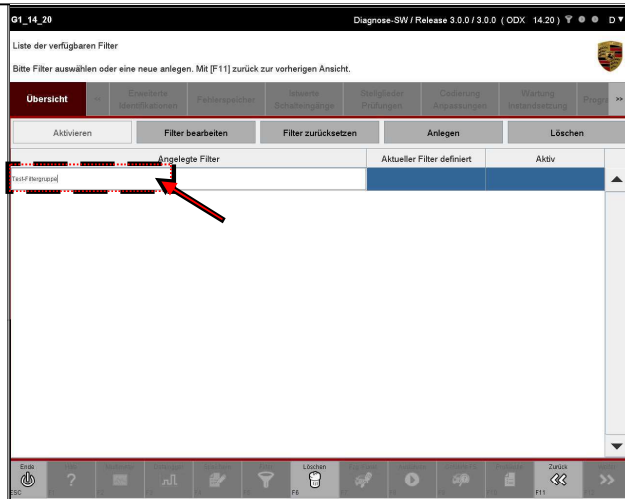
3. A new filter with a default name is created.



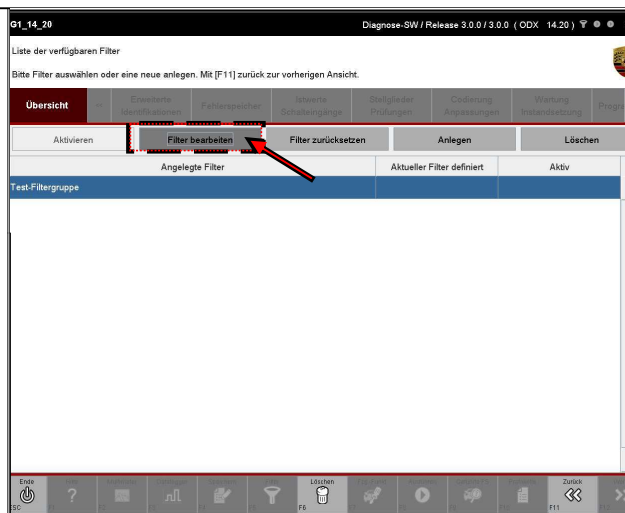
4. Now assign a suitable name to the filter.

To do this, click in the name field of the filter and enter the desired name.

In the example the nameTest filter group chosen.



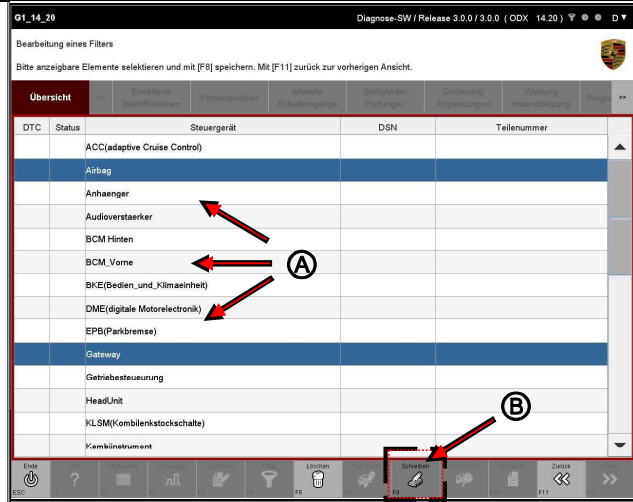
5. To assign the necessary properties to the filter - or to select those elements that should be filtered ?? press the Filter-edit-Button.



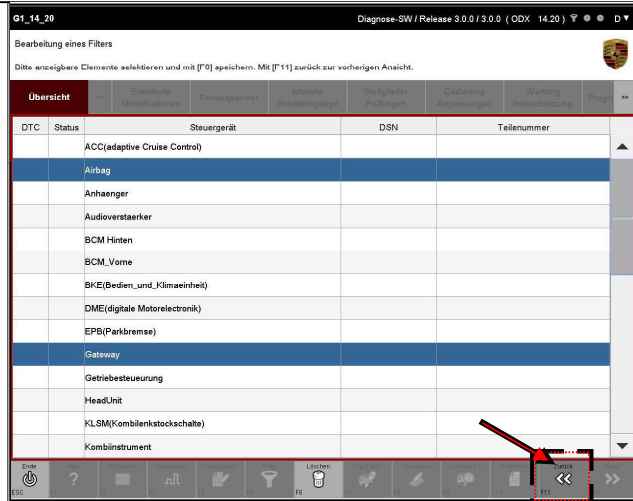


6. A selection screen appears in which you can define the filter properties. In this case, elements of the overview function group are displayed.

Select the elements that you want to filter (A). To save the selection, then press the <F8> (B) key.

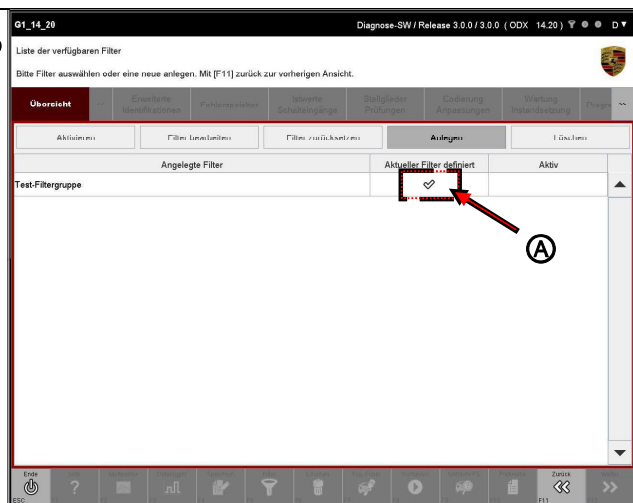


7. Then press the <F11> key to return to the list of available filters.



8. Properties have now been assigned to the filter through your selection.

This is in the column 'Aktueller Filter definiert' through a ? icon displayed.



8.15.4 Activate filter



Precondition:

In order to be able to activate a filter, it must have been created beforehand:

► See chapter 8.15.3.

Note on activating a filter:

By activating the filter, the properties that you have assigned to the filter are evaluated and the display of the elements is shown filtered according to the specifications.

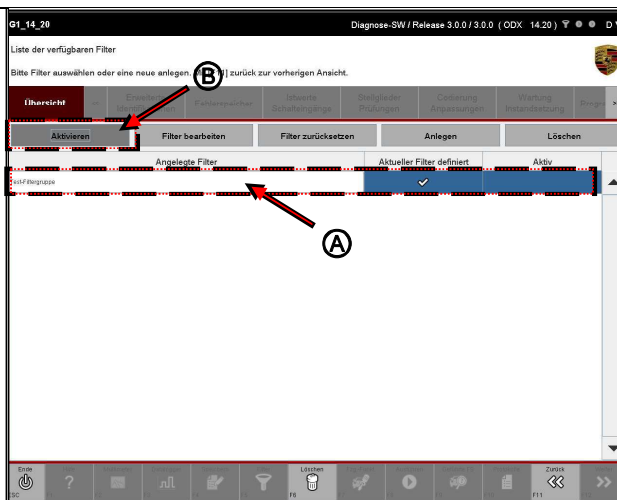


If no elements have been marked in the filter conditions beforehand (see Section 8.15.3), i.e. if no restriction has been defined, the filter cannot be activated.

If you activate a filter, all other filters in this function group or in the list view are deactivated.

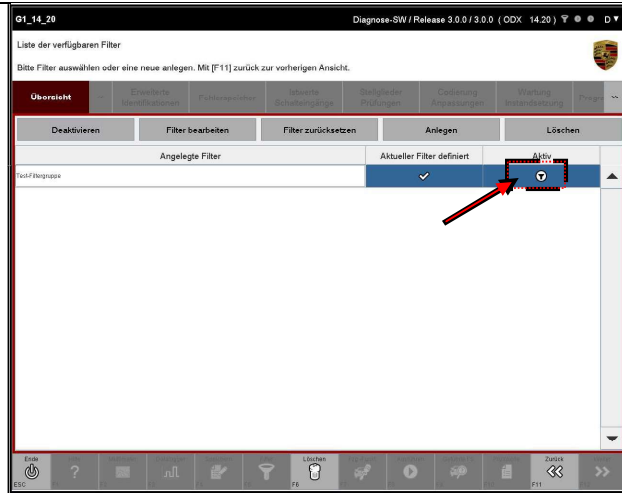
1. If not already done: Call up the filter function by pressing the <F5> key.

2. Select the desired filter (A) and press then the Activate-Button (B).



3. The current filter is now activated.

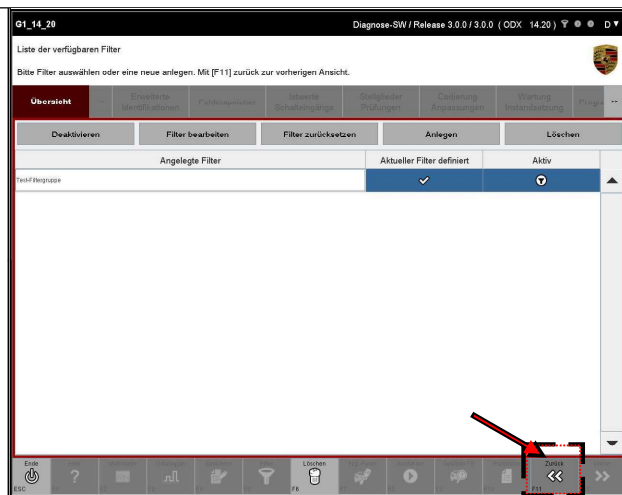
This is in the column active indicated by a ?? icon.



Result of the above example filtering

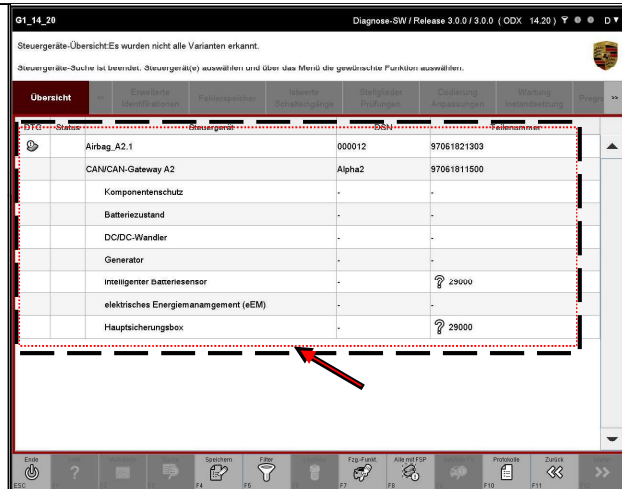
4. Press the <F11> key to return to the view from which you called the filter function.

In the example considered here, this was the control unit overview.



5. A filtered control unit overview is displayed.

Only the elements marked in the filter are displayed.



Display in the title line:



As long as the filter is active in the function group or list view, an icon is displayed on the right in the title bar.

### 8.15.5 Change filter



**Preconditions:**

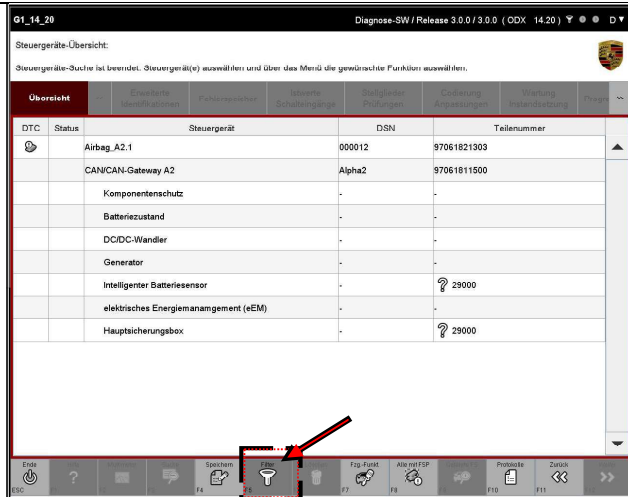
- A filter has already been activated:  
▶ See chapter 8.15.4
- More than one filter is defined in the list of possible filters.
- The filters are not empty and can therefore be activated.




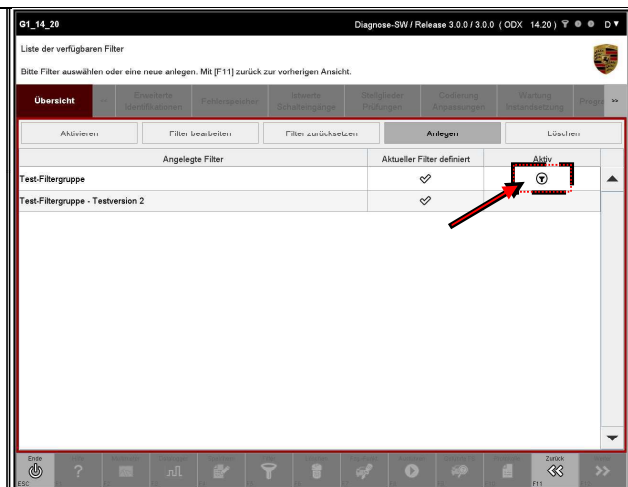
Note for example in this chapter: Two filters have been defined:

- Test filter group. Filters the control unit overview according to the control units Airbag and Gateway.
- Test filter group ?? Trial version 2. Filters the control unit overview according to the control units Combi steering stick module and PSM.

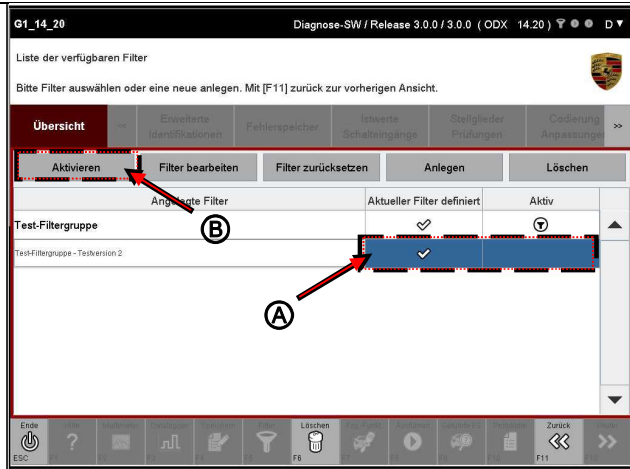
1. Initial situation:  
The control unit overview is created using the filter Test filter group filtered.  
  
Press the <F5> key to access the list of possible filters.



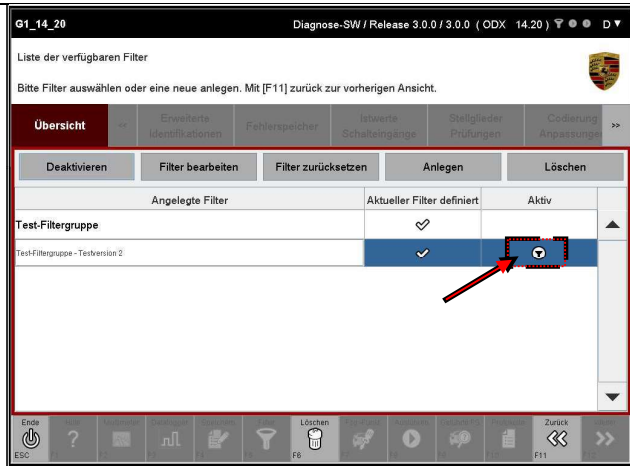
2. In the list of possible filters, the active filter is indicated by the  - Icon in the column active as shown.



3. Select another filter that is to apply to this function group (A).  
Activate the new filter by pressing Activate-Buttons (B).

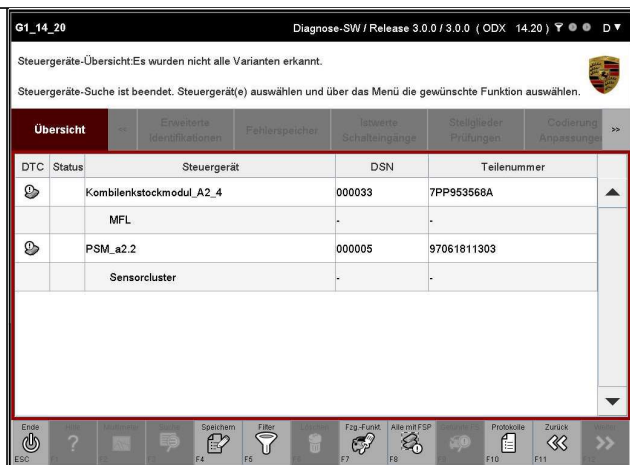


4. In the list of possible filters, the new / changed active filter is indicated by the ⊕ icon in the split active displayed.



Result of the above example filtering

5. When you return to the function group via <F11>, the new list view is set up.  
In this example, the control unit overview is now after the control units Combi steering stick module and PSM filtered.



### 8.15.6 Deactivate filter



Precondition:

In order to be able to deactivate a filter, it must have been created beforehand:

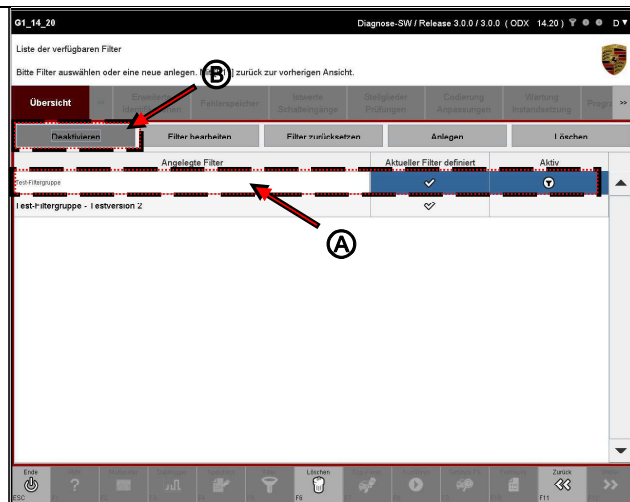
▶ See chapter 8.15.3.

In addition, the filter must have been activated:

▶ See chapter 8.15.4.

1. If not already done: Call up the filter function by pressing the <F5> key.

2. Select the desired active filter (A) and then press the Deactivate-Button (B).



Proceed further



Function groups extended identifications, actual values / switching inputs, actuators / tests and coding / adaptation:

To get an updated view of the filtered elements, press the <F11> key in the filter group list.

Note and special case

Function group overview:

- If you have carried out a control unit search without a preselection (see chapter 8.1.2), the view is updated normally, since all control units are available for filtering.
- If you have made a preselection in the control unit list by selecting individual control units and then starting a control unit search, only the control units selected in the preselection are displayed in the control unit overview.

This means that not all control units are displayed in the control unit overview, but only a part.

If you have now created and activated a filter in the control unit overview that is to display control units that are not included in this reduced control unit overview, an empty control unit overview is displayed.

In order to display the desired control units of the filter, you must first switch to the control unit list and carry out a control unit search again to update the control unit overview.



Example:

Assumption: You want the control unit Tailgate select. The filter ?? test filter group ?? filters for the control units Airbag and Gateway.

Precondition: Only the control units were previously in the control unit list Airbag, parking brake and Gateway selected and a control unit search carried out only for these. This means that the display of the control units in the control unit overview is limited to these control units.

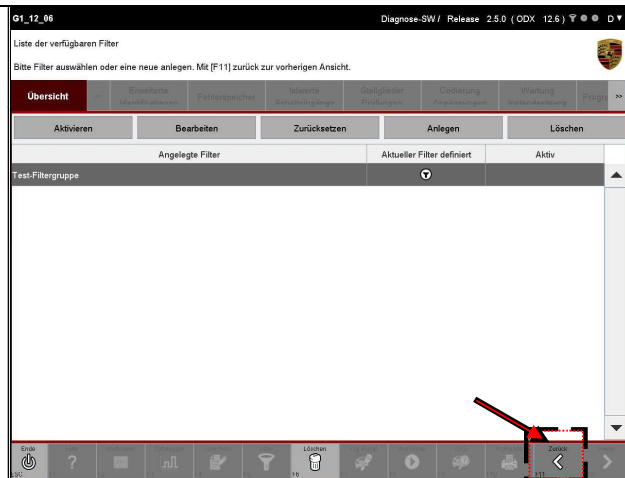
Activating the filter: After activating the filter, only the control units and subcomponents of the control units are displayed in the reduced control unit overview Airbag and Gateway displayed. You continue to work normally with these control units.

Problem: You deactivate the filter and want the control unit Tailgate select. However, only the control units are used Airbag, parking brake and Gateway because this is the restricted control unit overview that you have previously preselected in the control unit list.

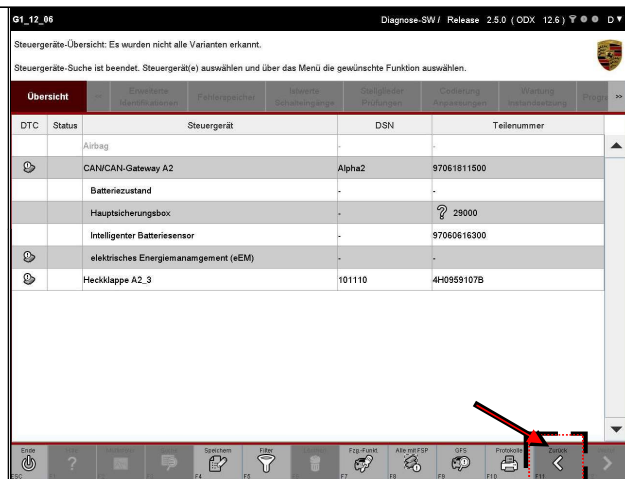
Solution: The control unit overview needs to be updated. The steps below explain how to do this.



3. To do this, first press the <F11> key in the filter list.



4. An incomplete control unit overview is displayed.  
Then press the <F11> key again to return to Control units list to come.



5. With <F12> you can now carry out a control unit search with the filtered control units as usual (for a more detailed representation, see Chapter 8) or, if at least one of the control units is selected, select one of the function groups.

8.15.7 Edit filter



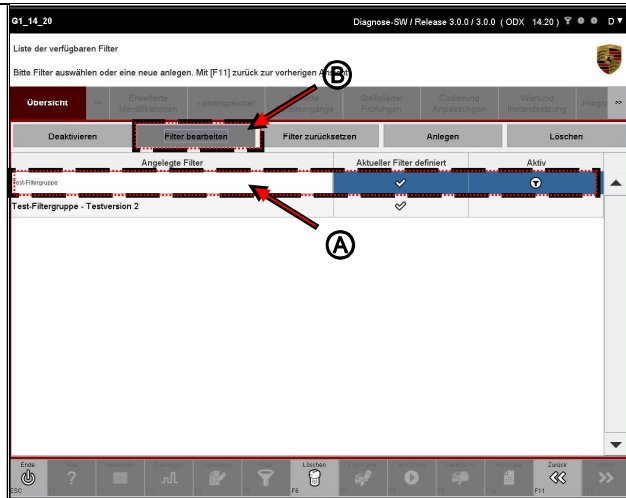
Precondition:

In order to be able to edit a filter, it must have been created beforehand:

► See chapter 8.15.3.

1. If not already done: Call up the filter function by pressing the <F5> key.

2. Select the desired filter group (A) and press the Filter-edit-Button (B).



3. The list appears with those selected for the filter group Entries.

