



PIDT PORSCHE Interactive Diagnostic Tester

Operating Manual

Sales mode v14.0.0

PAG_Diagnoseapplikation_V-Modus_v14_0_0_ BD_D340324 Print date: 12/1/2014 11:11:00 AM

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1 Foreword

1.1 About this manual

This manual describes how to operate the diagnostic application of the Porsche Interactive Diagnostic Tester (PIDT) for Sales mode (V-mode). It is intended for operating personnel at the testing station.

The menu guidance and operating concept details shown in this operating manual are examples. The actual displays depend on the parameters set using the PTTD (Porsche Terminology and Text Database) and may differ from the examples shown.

1.2 References to other documentation

Instructions for installing and setting up the diagnostic software can be found in the Installation Guide.

1.3 Terms and conditions of use

PAG authorized workshops:



The program is the property of Porsche AG. Unauthorized duplication or forwarding of the program or any part thereof is prohibited and punishable by law and can result in claims for damages.

The software may only be used for Porsche vehicles or components.

Independent workshops:



The program is the property of Porsche AG. Unauthorized duplication or forwarding of the program or any part thereof is prohibited and punishable by law and can result in claims for damages.

This operating manual contains all user-specific information about the Porsche Interactive Diagnostic Tester (PIDT) for Sales mode. Please note however that only the functions of the drive and exhaust gasrelevant systems (see section 9) are available to you.

1.4 Syntax used

Monospaced text	Commands, command additions, parameter entries, screen displays
Italics	Names of directories, files, equipment, programs
Function group	Function group button to be pressed, e.g. Overview.
<button></button>	Button or key combination to be pressed, e.g. <f1>.</f1>
"Text"	Text to be entered

1.5 Pictograms



This pictogram is used to refer to related points that have a significant influence on the smooth operation of the system.



Information:

This pictogram is used to refer to important related information. It provides additional information over and above that contained in the instructions.

2 General safety notes

2.1 Intended use

Diagnostic application:



The diagnostic application is used for communicating with control units. It is used as a sales tester and as a tool during development and allows the operator to find, identify, code and program control units, read the event memory, execute services directly via PDU input, run complex processes, change drive links and execute routines.



Content:

This document provides an overview of how to operate the diagnostic application. The functions and menus on the user interface are described in detail.



Target group:

It is intended for diagnostic software users.

3 Basic components

3.1 Graphical user interface

The diagnostic application has a graphical user interface. Its various elements are shown in Figure 1. The function or meaning of each element on this interface is explained in Table 1.



Figure 1: Elements of the graphical user interface (GUI) of the diagnostic application

Element	Descrip	tion						
① Title bar	Parantera	Simulation mode	Program version VG2-14,300,14,1	07.21		¥\$6	us▼	
	1	2	3	4a	4b	4c	5	
				I	1			
	Sequence	e of the information displ	ayed in the title bar (fro	om le	ft to r	right):		
	1. The Pan If the A io	ODX project name or vel amera). ODX data was modified con in front of the project	nicle type used is displa following installation, th name.	yed f nis is	irst (e	e.g. ated	by a	
	 2. The application mode in text form is displayed directly to the right of the project name. The following application modes can be displayed: No display in standard mode or Display mode or Simulation mode Note: Display mode and Simulation mode can never be active at the same time. 							
	 The version number (release info) of the diagnostic application is displayed to the immediate right. 							
	4. Thre	e status icons are then d	isplayed (from left to rig	ht):				
	4a) Filter active/inactive. If a filter is active, If no filter is active	this is indicated by a , the icon is grayed out	ico	n.			
	4b) Background processing If the data logger If the data logger	(data logger) active/ina is active, this is indicate is not active, the icon is	active ed by s gray	a. a⊙ ved o	icon. ut.		
	4c) Simulation started/stopp If simulation was If simulation data by a $igodoldsymbol{eq}$ icon. If simulation is sto	ped/recording. started, this is indicated is being recorded, this opped, the icon is graye	l by a is ind d out	i 🕑 ic licate	con. d		
	5. The lang whic	language selection icon i uage is displayed as a lar h shows the various lang	s displayed at the far rig nguage code, followed b uages that are available	ght: T by a t e for :	he cu riang selec	urrent le ico tion.	t in,	
② Info area	The Info The cont applicati Informat are displ	e area contains tips for us tent of the Info area depe on. ive text as well as warning ayed here.	ing the elements displa ands on the current stat gs alerting you about ar	yed ii us of ny op	n the the c eratir	scree liagne	en. ostic rors	

Element	Description				
③ Menu bar	The available function groups of the current diagnostic application are displayed on the menu bar . The function groups are also the possible actions that can be selected. The activated function group is highlighted. The following function groups are available:				
	1. Overview				
	2. Extended identifications				
	3. Fault memory				
	4. Actual values/input signals				
	5. Drive links/checks				
	6. Codings/adaptations				
	7. Maintenance/repairs				
	8. Programming				
	The function groups are shown in this manual with a box around the respective function group name.				
④ Work area	The content of the individual screens is shown in the work area . This information is displayed either as text (e.g. in the form of a list) or graphically (e.g. in the form of an illustration). The content that is displayed depends on the selected action and the current status of the diagnostic application. The current work area is highlighted by a colored box all around it, just like the current function group in the menu bar.				
⑤ Control bar	The control bar shows the actions that can be carried out, based on the possible courses of action within the current context. The possible actions that can be carried out are displayed as icons and depend on the current status of the diagnostic application. However, some of the possible actions that can be carried out are standard actions that are relevant for all screens.				
	The buttons or keys on the control bar are shown in this manual using greater than/less than signs (<>).				
	Example: The F1 button is indicated by the character combination <f1>.</f1>				
© Scroll bar	You can use the scroll bar to scroll if the available display area on the screen is not large enough to show all the data to be displayed.				

Table 1: Description of the elements of the user interface

3.2 Function groups

A number of function groups are available on the menu bar (see also Figure 1 and Table 1). The function of each function group is described briefly here. A detailed description of how to use each function group can be found in section 8.

Overview as Extended Fault memory Actual values Drive links Codings Maintenance Programming		Overview	85	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Codings adaptations	Maintenance repairs	Programming
---	--	----------	----	-----------------------------	--------------	--------------------------------	-----------------------	------------------------	------------------------	-------------

Figure 2: Function groups on the menu ba
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Function group	Description
Overview	When you select the Overview function group, the result of the last control unit search is displayed in a table.
Extended identifications	When you select the Extended identifications function group, the extended identifications of previously selected control units are displayed.
Fault memory	You can use the Fault memory function group to display the fault memory entries and the environmental data of the relevant fault memory for a selection of control units. You can also delete all or individual fault memory entries for the control units here.
Actual values/ input signals	In the Actual values/input signals function group, you can display the actual values and input signals of control units.
Drive links/ checks	In the Drive links/checks function group, you can change parameters for drive links or run test routines. The results of this change are also logged and displayed.
Codings/ adaptations	In the Codings/adaptations function group, you can read the coding of control units and change it if you have the required user rights.
Maintenance/ repairs	In the Maintenance/repairs function group, you can execute processes that are needed for commissioning certain control units and functions.
Programming	In the Programming function group, you can program a control unit using flash jobs. The Programming function group is available only if you were granted suitable user rights.

Table 2: Description of the function groups

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3.3 Control bar

The control bar displays various actions that you can carry out, depending on the currently displayed screen content. These actions are displayed as icons. If an action can be selected, the icon is light gray in color. You can then execute the desired action by pressing the button. If an action cannot be selected, the icon is shown in dark shades of gray and you cannot press the button. A distinction is made between generally valid icons and action-specific icons. Action-specific icons are displayed in the control bar instead of the generally valid icons for some functions.

3.3.1 Control bar: Generally valid icons

The function of the generally valid icons is described in Table 3. These icons identify actions that can be carried out for all function groups.

Button	Label	lcon	Description
ESC	End	ക	The application is ended by pressing the <esc> button. A system query makes sure that you do not want to exit the application unintentionally. The query appears in a pop-up window over the work area. When you exit the application, you are returned to the point from which you started the application.</esc>
F1	Help	ş	Pressing the <f1> button displays context-sensitive help for the currently selected element. The help text is displayed in a pop-up window. The <f1> button is only active for some elements at present.</f1></f1>
F2	Multimeter	<u>AR</u>	Pressing the <f2> button sets up a connection to analog measuring equipment. The analog measuring equipment application is started and takes priority over the diagnostic application during its runtime.</f2>
F3	Data logger	M	Pressing the <f3> button starts the data logger of the diagnostic application. This function continuously reads measured values from a selected control unit and displays these in a time-over-values diagram. The values are displayed in the work area of the application.</f3>
F4	Save	P	Pressing the <f4> button allows you to save a communication log or working log.</f4>

Button	Label	lcon	Description	
F5	Filter	T	Pressing the <f5> button opens a menu in which you can define and apply your own search filters. For example, you can restrict the number and type of elements displayed (measured values, identifications, routines, drive links, etc.).</f5>	
F6	Delete		Pressing the <f6> button deletes the current selection of elements listed in the work area. Previously selected elements are no longer selected after pressing the <f6> button.</f6></f6>	
			control bar are deactivated again.	
F7	Additional menu	Ţ	Pressing the <f7> button displays a list of general vehicle functions, e.g. closed-circuit current measurement.</f7>	
F8	Execute	\odot	Pressing the <f8> button executes a context-sensitive action. For a more detailed list of the possible actions, see section 3.3.2.</f8>	
F9	Fault finding	Ð	Pressing the <f9> button starts Guided Fault Finding (GFF).</f9>	
F10	Logs		 Pressing the <f10> button displays a selection window over the button. The following selection options are available:</f10> Log types Communication log: When you select the Communication log option, the communication log overview screen is displayed. The requests sent and the responses received from the control units since logging was started are displayed in a list here. 	
F11	Back	33	Pressing the <f11> button brings you back to the previous screen.</f11>	
F12	Next	88	Pressing the <f12> button brings you to the next screen.</f12>	

Table 3: Generally valid icons

3.3.2 Control bar: Action-specific icons

If an action, which is not sufficiently described by one of the generally valid icons, can be carried out in a function group, an action-specific icon is displayed. You can then carry out the action in the usual way by pressing the corresponding button.

The specific buttons for the respective function groups are described at the start of the corresponding sections.

3.4 System messages

The diagnostic application informs you about possible operations, queries decision-relevant actions and issues warnings in abnormal situations or if you are about to carry out an action that could pose a safety risk for the control unit.

3.4.1 Message texts

Helpful texts and tips are generally displayed in the Info area of the screen. Instructions and short informative messages to help you use the diagnostic application are displayed here.

3.4.2 Icons

Messages or warnings can also appear as icons. The function and meaning of the icons are summarized in Table 4.

Status displays	
Icon	Description
•	 This icon appears in the work area of various functions and function groups: Extended identifications: The icon indicates a write error and appears in the Changed column. Codings/adaptations: The icon indicates a write error and appears in the Changed column. Maintenance/repairs: The icon indicates an unacceptable value for a start condition and appears in the Status column. General vehicle functions: The icon indicates that a fault has occurred during control unit communication or that the control unit could not be addressed. Communication log: The icon indicates that a fault has occurred during control unit communication or that the control unit could not be addressed.
Ø	 This icon appears in the work area of various functions and function groups: <u>Codings/adaptations</u> <u>Extended identifications</u> General vehicle functions (e.g. Maintenance of vehicle data) The icon indicates that the user has changed a value by entering his own value. The icon appears in the Changed column in the work area of the screen.

Status displays					
lcon	Description				
♪	 This icon appears in the work area of various functions and function groups: Codings/adaptations Extended identifications General vehicle functions (e.g. Maintenance of vehicle data) The icon indicates that a value that was entered does not meet the required specifications (e.g. format, length, etc.). The icon appears in the Changed column in the work area of the screen. 				
Ø	 This icon appears in the work area of various functions and function groups: Extended identifications: The icon indicates that an identification has been written successfully. Codings/adaptations: The icon indicates that coding has been written successfully. Fault memory: The icon indicates an active fault memory entry. General vehicle functions (e.g. Maintenance of vehicle data). 				
Ø	This icon appears in the work area in the Overview function group: The icon indicates that no variant has been found for a control unit during the control unit search. For this reason, the system displays the basic variant.				
٩	This icon appears in the work area in the Overview function group: The icon indicates that a fault memory entry exists for the relevant control unit.				
٩	This icon appears in the work area in the Overview function group: The icon indicates that the control unit in question is not programmed.				
٩	This icon appears in the work area in the Overview function group: The icon indicates that the control unit is a flash-programmable LIN slave.				

Status displays				
lcon	Description			
¢11	This icon appears in the work area of the communication logging function. The icon indicates that the listed entry is a system request to a control unit.			
س ک	This icon appears in the work area of the communication logging function. The icon indicates that the listed entry is a control unit response to the system.			

Table 4: System messages

Language version					
lcon	con Description				
\bigtriangledown	This icon appears in the title bar of the working window of the diagnostic application.				
	When you click on this icon, a drop-down menu appears in which you can select the desired language version.				
	The currently set language is grayed out and cannot be selected.				

Table 5: Language version

4 Hierarchical display structure



Figure 3: Function groups on the menu bar

The menu structure of the diagnostic application is hierarchical and has three levels. This is shown schematically in Figure 3. The individual processes are described in detail in sections 4.1ff and 8.

Level 1: The first level allows users to start using the diagnostic application. This level is displayed in the form of a control unit overview containing a list of all the control units of the ODX project.

Level 2: The second level contains the overview screens of the respective function groups.

Level 3: The third level generally shows the details and possible actions for the elements that were selected in the overview screens on the second level.

The following sub-sections show the possible interaction paths that you can select as a user of the diagnostic application. The navigation buttons $\langle F11 \rangle$ and $\langle F12 \rangle$ can be used to navigate within a branch of the menu tree.

You can also switch to a screen on the second level from any other screen using the function groups on the menu bar. This is indicated by a wide gray arrow on the screen.

The individual navigation branches are described in more detail below.



4.1 Control unit list, control unit overview

Figure 4: Screen navigation in the control unit list/control unit overview

When you start the application, the control units of the ODX project are displayed in the control unit list (**A**). A control unit search is started by pressing the <F12> button (**B**). The control units that could be addressed during the search are then highlighted in the control unit overview (**C**). Control units that could not be addressed are grayed out. When you press the <F11> button (**D**) in the control unit overview, you return to the control unit list.

When you select at least one control unit in the control unit list or control unit overview, you can select a function group from the menu bar (E).

Pressing <F7> (\mathbf{F}) on the control bar gives you selection-independent access to general vehicle functions.

4.2 Extended identifications



Figure 5: Screen navigation for Extended identifications

If you have selected at least one control unit in another function group (**A**), you can display the identifications for the selected control unit by selecting the $\boxed{\text{Extended identifications}}$ function group (**B**).

You can write identifications there (C).

You can also call up a different function group by pressing a function group button on the menu bar (\mathbf{D}) .

4.3 Fault memory



Figure 6: Screen navigation for Fault memory

If you have selected at least one control unit in another function group (**A**), you can display an overview of the fault memory entries (**B**) by selecting the Fault memory function group. You can select an entry there and then press the <F12> button (**C**) to display the environmental data (**D**) for a fault memory.

When you press the $\langle F11 \rangle$ button (**E**) in the environmental data screen, you return to the fault memory entries screen (**B**).

You can delete fault memories (F) and switch to a different function group by selecting a function group button on the menu bar (G).





Figure 7: Screen navigation for Actual values/input signals including data logger

If you have selected at least one control unit in another function group (**A**), you can display an overview of the actual values or input signals (**B**) by selecting the <u>Actual values/input</u> signals function group.

If you have selected at least one actual value/input signal, you can press the <F12> button (C) here to display a detailed view of the respective actual values and input signals (D). When you press the <F11> button (E) in the Actual values/input signals detailed view, you return to the list of actual values/input signals (B).

In the working screen of the <u>Actual values/input signals</u> function group, you can press <F3> (**F**) to call up the data logger (**H**) after you have selected at least one value.

When you press the $\langle F11 \rangle$ button (**G**) in the data logger, you return to the Actual values/input signals working screen (**D**).

You can also call up a different function group by selecting one of the function group buttons on the menu bar (I).

4.5 Drive links/checks



Figure 8: Screen navigation for Drive links/checks

If you have selected at least one control unit in another function group (A), you can display an overview of the available drive links and routines (B) by selecting the Drive links/checks function group.

If you have selected at least one drive link, you can press the <F12> button (**C**) to display a detailed view - the working screen for the function group - in which you can change the parameters of a drive link.

When you press the $\langle F11 \rangle$ button (**E**) in the detailed view, you return to the overview of the drive links and routines (**B**).

In the detailed view (**D**), you can press the $\langle F5 \rangle$ button (**F**) to display another selection screen in which you can add new measured variables to the result area of the detailed view (**I**).

When you press the <F12> button (H) in this selection screen, you accept the selected

values and return to the detailed view.

When you press the $\langle F11 \rangle$ button (G) in this selection screen, you reject the selected values and return to the detailed view.

You can also call up a different function group by selecting one of the function group buttons on the menu bar (\mathbf{J}) .





Figure 9: Screen navigation for Codings/adaptations

If you have selected at least one control unit in another function group (**A**), you can display the list of coding modes (**B**) by selecting the Codings/adaptations function group. The various working screens are displayed when you select a coding mode:

- If you have selected the coding mode Customer-specific settings (C) and confirmed your selection by pressing <F12> (H), you can now set and write coding values (I). Pressing <F11> (G) brings you back to the list of coding modes.
- If you have selected the coding mode Manual coding (D) and confirmed your selection by pressing <F12> (K), you must enter the vehicle data in the next screen that appears (L). Pressing <F11> (J) brings you back from there to the list of coding modes.
 When you have entered the vehicle data, press <F12> (N) to display a number of screens in which you must assign the relevant equipment features (Z, e.g. color and materials, X, M, Z, PR numbers). When you press the <F11> button (M) in this screen, you return to the vehicle data input screen or to the previous screen. When you have finished assigning the equipment features, press <F12> (O) to start the coding process (R).
- If you have selected one of the automatic coding modes (Automatic coding or Restore factory settings/codes) and confirmed your selection by pressing <F12> (T), the coding process starts immediately (R).

You can also call up a different function group by selecting one of the function group buttons on the menu bar (\mathbf{U}) .



4.7 Maintenance/repairs



If you have selected at least one control unit in another function group (**A**), you can display the list of control unit-specific processes (**B**) by selecting the <u>Maintenance/repairs</u> function group.

When you have selected a process in the list of control unit-specific processes, you can press the <F12> button (C) to display a detailed view (D) containing information that guides you through the respective process.

Pressing the $\langle F11 \rangle$ button (**E**) in the detailed view brings you back to the list of control unitspecific processes (**B**).

You can also call up a different function group by selecting one of the function group buttons on the menu bar (\mathbf{F}) .

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4.8 Programming



Figure 11: Screen navigation for Programming

If you have selected at least one control unit in another function group (**A**), you can display the list of programming modes (**B**) by selecting the Programming function group. The various working screens are displayed when you select a programming mode:

- If you have selected Manual programming (D) and confirmed your selection by pressing <F12> (K), you must enter the vehicle data in the next screen (L). Pressing <F11> (J) brings you back from there to the list of programming modes. When you have entered the vehicle data, press <F12> (N) to display a number of screens in which you must assign equipment features (X, M, Z, PR numbers). When you press the <F11> button (M) in these screens, you return to the vehicle data input screen or to the previous screen. When you have assigned all equipment features, press <F12> (O) to display the programming screen (R).
- If you have selected Automatic programming (E) and confirmed your selection by pressing <F12> (T), the programming screen (R) appears.

You can also call up a different function group by selecting one of the function group buttons on the menu bar (\mathbf{U}) .

Special procedures after programming:

If control unit programming was not successful, you can press <F11> (X) to return to the overview of programming modes. If programming was successful, the <F11> button is deactivated and you must press one of the function buttons in order to use other functions of the diagnostic application.

5 Application modes

Before the individual setting options are described in section 6, this section first provides an overview of the different application modes and display parameters.

Three basic application modes are available in which you can run the diagnostic application. These are:

• Standard mode:

In this mode, communication with the vehicle takes place over a connected VCI (Vehicle Communication Interface). The control units, values, parameters and responses to requests displayed in the diagnostic application are based on communication with the control units installed in the vehicle. All values and responses are read directly from the vehicle on request, i.e. during runtime.

When should I select this mode?

You should select this mode if you want to test a real vehicle or implement software settings on the vehicle.

• Simulation mode:

In this mode, control unit communication is simulated using previously recorded data. The limiting factor here is the database of recorded control unit communication, since only previously recorded control unit responses are reproduced. It is not possible to generate control unit responses that are not included in the previously recorded simulation data!

If you perform the same steps in simulation mode as you did when recording the data, you will get the same responses you received when recording the data. The simulation data is therefore a representation of a real control unit for these steps you performed.

When should I select this mode?

You should select this mode if you need simulation data instead of control unit communication during runtime. This is necessary, for example, if you want to test the diagnostic application using updated ODX data.

If no VCI is detected when starting the application, simulation mode is available as a fallback mode.

• Display mode:

There is no communication with the vehicle over a VCI in this mode. Unlike simulation mode, no previously recorded control unit responses are displayed. Instead, the menus, sub-structures and labels are displayed in accordance with the ODX data input model. The following restrictions therefore apply:

- All fault memories are displayed in the Fault memory function group.
- Default values are displayed instead of real actual values in the <u>Actual</u> values/input signals function group.



- In function groups for which service requests can be sent by entering data, no control unit response is displayed in the response field.

When should I select this mode?

You should select this mode if you would like to view different data input for different control unit variants.



For information on activating the relevant application mode using the control application:

► See section 6.3.2.

6 Control application

The control application allows you to influence the behavior of the diagnostic application. In the control application, the possible setting options are shown in a graphical user interface. You can make changes here simply by clicking on the required options.

All settings, except for the version information, can be saved. The diagnostic application is then started using the settings configured in the control application.



Permanently storing settings:

If you have changed and saved the settings, the diagnostic application will be run using these settings from this point on.



The settings configured in the control application will not be deleted or changed during setup or re-installation.

This section first describes how to launch the control application. It then describes the various elements of the control application and how to configure settings in the control application.

6.1 Starting the control application

Start the control application from the basic system. For information on how to use the PORSCHE basic system, please refer to the relevant documentation.

6.2 Elements of the control application

The graphical user interface of the control application is similar to that of the diagnostic application.

• -• F	PIDT checking application	n					700	US 🔻
	Please adapt values for the individual characteristics.							
	Press [F8] to save and [ESC] to end application.							1
	/ersion information	Mode	Logging	Vie Des	ew ign	FTP	Paths	>>
	S	etting				Value		
_ _	PIDT			14.0.2				
	Kernel		2.2.40					
ł	PDU-API							
			1 1		1	1 1	4	•
_	esc (J) 2		8				Baik	>>>

Figure 12: Elements of the graphical user interface (GUI) of the control application

Element	Description				
① Title bar	The title bar shows you that you are in the control application. The drop-down menu for language selection is available on the right-hand side, just like in the diagnostic application.				
② Info area	The information area displays information on operation and the various setting options.				
Element	Description				
----------------------	--				
③ Menu bar	Unlike the menu bar in the diagnostic application, this menu bar does not display function groups (see section 3.2), but shows categories of setting options instead.				
	The following categories are available:				
	1. Version information				
	2. Mode				
	3. Logging				
	4. View/Design				
	5. FTP				
	6. Paths				
	7. Miscellaneous				
④ Work area	You can implement the required settings in the work area. The elements are listed in a table. Example: The first column contains the permitted displayable setting options. In the second column, you can enter values or change settings using a drop-down menu, provided these can be changed. You cannot change the values displayed for the version information.				
⑤ Control bar	The following buttons are active on the control bar:				
	 <esc> (ESC): Exits the control application.</esc> 				
	 <f8> (Save): If values can be changed, any changes made to the settings can be saved using this button.</f8> 				

6.3 Categories

6.3.1 Version information

The Version information category displays information about the most important installed components of the diagnostic application. These values cannot be edited or changed.

The following data is displayed:

- Version number of the currently installed diagnostic application
- Version number of the MCD kernel used
- Version number of the PDU API
- Version numbers of the installed model lines and processes.
- Start the control application.
 ► See section 6.1
- The content of the Version information category is displayed by default when you start the control application.

If you have already selected a different category, select the Version information category on the menu bar.

Se		1	Gengi	1999	1 Suis
	etting			Value	
PIDT		1	14.0.2		
Kernel		2	2.2.40		
PDU-API		-			
DUAN					

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6.3.2 Mode

You can set the basic application modes (Type of display) in the Mode category.

6.3.2.1 Calling up the Mode category



For an overview of the individual modes and their meaning: ► See section 5.

- Start the control application.
 ► See section 6.1
- 2. Select the Mode category on the menu bar by clicking on the category.



6.3.2.2 Type of display

You can set the basic application mode using this parameter. For further information on the basic application mode: See section 5.

If you have saved the corresponding setting, the diagnostic application will be started with this default setting from this point on.



Restriction for simulation mode:

If you want to start the diagnostic application in simulation mode, a simulation file must already have been created in the diagnostic application.



Default setting:

Type of display: ► Standard mode.

Start the control application and select the Mode category on the menu bar:
 ▶ See section 6.3.2.1

- IDT checking application 900 2. Click in the Value field (A) next to lease edapt values for the individual characteristics. the entry Type of display and Press [F8] to save and [ESCI to end application select the required entry in the Mode drop-down menu that opens by Setting Value clicking once (B). Standard mode ype of display The following modes are available: isolay mode tandard mode Standard mode • ation Display mode B Application is used without VCI Simulation mode P 3
- 3. Press the <F8> button to save the setting.

6.3.3 Logging

You can implement settings for the communication log and user log in the Logging category.

6.3.3.1 Calling up the Logging category

- Start the control application.
 ► See section 6.1
- 2. Select the Logging category on the menu bar by clicking on the category.

Please adapt values for the individual characteristics. Press [F8] to save and [ESC] to end application. Version information Mode Logging View Design FTP Paths Setting User log detail-level setting 1	PIDT checking application	1				Yee U
Version information Mode Logging View FTP Paths Setting Value Value	Please adapt values for the Press [F8] to save and [ES4	individual charact	teristics. on.			
Setting Value User log detail-level setting 1	Version information	Møde	Logging	View Design	FTP	Patha
User log detail-level setting 1	S	etting			Value	
	Jser log detail-leve	l setting	1			
	段			57*¢		5.0

6.3.3.2 User log detail-level setting

This setting allows you to change the log level of the user log. The basic log level is defined when the diagnostic application is installed. It is not possible to select a lower setting in the control application than was preset during installation.

The log level defines the scope of data that is recorded during user logging. A higher level corresponds to a larger scope.

You can set the log level in the control application. The log levels 1=normal or 2=full are normally available.

If the log level 0=off was set during installation, no entry is displayed in the control application. In other words, if the level defined during installation means that no user log is to be created, it is not possible to activate the logging function via the control application.

If you have saved the corresponding setting, the diagnostic application will be started with this default setting from this point on.



Availability:

This option is only available if the user log was activated during installation.

Start the control application and select the Logging category on the menu bar:
 ► See section 6.3.3.1



3. Press the <F8> button to save the setting.

6.3.4 View/Design

You can define settings that affect the "look" of the application in the View/Design category.

6.3.4.1 Calling up the View/Design category

- Start the control application.
 ► See section 6.1
- 2. Select the View/Design category on the menu bar by clicking on the category.

	PIDT checking application					700	Us▼
	Please adapt values for the indr	vidual characte	eristics.				
,	Press [F8] to save and [ESC] to	end applicatio	n.				V
	 Version information 	Mode	Logging	Viev Desig	, FT	P Path	g >>
	Setti	ng			Valu	<u> </u>	
	Colour view in data log	ıger diagra	im 1	black		•	
	Colour view in data log	ıger diagra	m 2	blue			
	Colour view in data log	ıger diagra	im 3	light red			
	Colour view in data log	ıger diagra	ım 4	green			
							•
		л 🖉	?	8 af		F 0 F 1	F12

6.3.4.2 Color view in the data logger

This setting allows you to change the color of the curves that are displayed in the data logger of the diagnostic application. For further information on the data logger: See section 8.4.4. You can display up to four curves in a diagram in the data logger. You can define a color for each of the four curves that can be displayed in a diagram so that they are easier to identify.

If you have saved the corresponding setting, the diagnostic application will be started with this default setting from this point on.

Default settings:



Color view in data logger diagram 1: ► Black Color view in data logger diagram 2: ► Blue Color view in data logger diagram 3: ► Light Red Color view in data logger diagram 4: ► Green

Start the control application and select the View/Design category on the menu bar:
 ► See section 6.3.4



- 3. Repeat this step for the following entries: Color view in data logger diagram 2 Color view in data logger diagram 3 Color view in data logger diagram 4
- 4. Press the <F8> button to save the setting.

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6.3.5 Miscellaneous

Settings that cannot be assigned to the other categories are summarized in the Miscellaneous category.

6.3.5.1 Calling up the Miscellaneous category

- Start the control application.
 ► See section 6.1
- Select the <u>Miscellaneous</u> category on the menu bar by clicking on the category.

~	Mode	Logging	Design	FTP	Paths	Miscellaneou
		Setting			Value	
Displ	ay of units	S		EU		

6.3.5.2 Display of units

This setting allows you to change the units that are displayed by selecting a units family in the diagnostic application.

Example:

If you want to display "km/h" values as "mph", change the display of units to US. The values are then converted accordingly.

This setting can be changed irrespective of the selected language, which you can set using the \square icon (see section 10.9).

If you have saved the corresponding setting, the diagnostic application will be started with this default setting from this point on.



Default setting:

Display of units: ► EU

- Call up the Miscellaneous category.
 ► See section 6.3.5.1
- Click in the Value field (A) next to the entry Display of units and select the required entry in the drop-down menu by clicking once (B). The following options are available:
 - EU
 - US
 - UK



3. Press the <F8> button to save the setting.

7 Starting the diagnostic application

Selecting the basic application mode and defining other settings

 First select the required basic application mode (Standard mode, Display mode, Simulation mode) as well as all other default settings using the control application.
 ► See section 6

Selecting the model line

You must then select a valid model line. This is selected in the PORSCHE basic system before starting the diagnostic application.



After starting the basic system, you can select the required vehicle model lines under the Diagnostics menu item. The diagnostic application is then started with the data for the selected model line.

For information on how to use the PORSCHE basic system, please refer to the relevant documentation.

The following steps describe the basic procedure.

2. Start the basic system. The general user interface appears in which you can configure basic settings.



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- 3. Select the required model line under the Diagnostics menu item. The Cayenne model line was и стачка selected here as an example. Caserre. Fish how Mr 2011 194 ap to M1 20 0 HEASURING BOUIPMENT Macan NFORHST CK P.314 KT. DATA ADMINISTRATION 0 fea reski licen look Vaid y of impirit Instelled rolense: Pirael excepty Network connector: 8 (014 Dr. hg. hr. F. Porsche AG 70 Days 14 300 Time: Dote: 12:12 7 Aug 20:4 US Englishi 🔍 💌 🛹 Alle De Ves
- 4. Once you have selected the model line, the application is started with the data relating to this model line.

Possible error message:

If you have selected a model line/ODX project that includes data relating to several vehicle models, an error message will appear and the diagnostic application start-up process will be cancelled. If this happens, contact your system administrator.

8 Operation

General operation of the diagnostic application is described below. Each sub-section covers one function group of the diagnostic application. The various sections describe how to use the individual function groups and which actions you can perform within a function group.

Note on Display mode:

A description of the special procedure for the Display mode can be found in section 8.1.6. Restrictions apply to this mode that affect the operation as described in section 8. These are listed in a table and must be taken into consideration when using the application.



Note on operation:

Section 9 describes how to adapt the interface to suit your needs and the restrictions/differences that apply when using the application if groupings are displayed.

8.1 Control unit list/Control unit overview

This section describes how to display the control units installed in the vehicle in a control unit overview using a control unit search.

The basis for this is an existing ODX project in which the control unit-specific data is stored. The system must check whether a control unit from the project is installed in the vehicle and which variant it is.

In response to a user action, the diagnostic application first carries out a control unit search. The list of all or selected control units and their status is then displayed in the control unit overview.

8.1.1 Control unit variants and alternative installation

Basic variant, control unit variant:

Control unit variants are designed, maintained and installed in the vehicle as a variation of a basic variant and are displayed as such in the diagnostic application. The basic variant is therefore the "archetype" of a control unit, which - as the smallest common unit - contains the functions that are common to all control unit variants belonging to this basic variant.

In other words:



Control unit variants are simply variations of this basic variant, are functionally subordinate to it and differ from this basic variant in terms of size and scope. But they have the same basic functions as the basic variant.

When carrying out a vehicle-wide search for control units, variants are detected automatically and the control unit variant installed in the vehicle is detected and displayed. If a variant could not be determined, the basic variant is displayed, i.e. the variant that offers the standard functions at the very least.

Basic variant and control unit variant display: ► See section 8.1.3

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Alternative installation of control units:

Alternative installation of control units refers to the installation of control unit variants that are different even on the basic variant level. Example: Headlight control units that control headlights, which can be designed as normal Halogen headlights, headlights with range adjustment or as LED headlights, are installed in one model line.

All the control units are basically headlight control units, but the type of control unit is so different that totally different control units are used. This is done by using an alternative installation of the control unit in the vehicle. The TYPE of control unit is "headlight control unit", but the control unit can actually belong to different basic variants of this type. In addition to headlights, even engine control units will most probably belong to this set of control units in the future. Of course, alternatively installed control units can have their own variants.



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Installation methods and detection in the diagnostic application:

It may happen that several control units are installed as an alternative installation in the vehicle, not just one (see also the table above). The illustration below shows this using the headlight control system. In this example, the headlights can be activated by 1, 2 or 3 control units, depending on the vehicle.

The diagnostic application automatically detects whether several control units are installed instead of the standard control unit.

For further information, refer to the special case described for the vehicle-wide search:

► See section 8.1.5, page 62

Alternative installation methods



Figure 13: Example of alternative installation

8.1.2 Action-specific buttons for this function group

Control u	nit overview	1	
Button	Label	lcon	Description
F8	All with FML	S	Pressing the <f8> button selects all control units that have a fault memory entry.</f8>

8.1.3 Icons

Column	lcon	Description
Status	6	This icon indicates that no variant was found for the control unit. Data stored for the basic variant is displayed for these control units.
Status	Ð	 This icon indicates that the control unit is not programmed. In this case, there are only a few function groups available to you for this control unit and some even have a reduced number of functions: Limited functionality in Extended identifications function group Limited functionality in Maintenance/repairs function group Programming All other functions are deactivated.
		 What should you do in this case? ▶ We suggest that you first program the unprogrammed control unit using the programming mode Automatic programming in the Programming function group (see section 8.8.4) in order to create a valid control unit variant. When programming is completed successfully, all the functions of the diagnostic application will be available again for this control unit.
Status	6	 This icon indicates that the control unit is a flash-programmable LIN slave. In this case, only the following function groups are available to you for this control unit: Extended identifications Programming All other functions are deactivated.
DTC	٩	This icon indicates that the control unit has a fault memory entry. Other possible actions for fault memory entries: ► See section 8.3



8.1.4 Battery voltage display using an icon



Restriction:

This method is only available in DLS 3 or later versions. The voltage check is not supported in DLS 2.

Why is the battery voltage displayed?

Faults can occur during vehicle diagnosis if the vehicle electrical system voltage is too low.



To eliminate this as a possible fault source...

▶ after the diagnostic application is started and

▶ at the very latest, when creating the control unit list

the vehicle electrical system voltage as well as the active diagnosis is read out and monitored cyclically.

The application evaluates the measured vehicle electrical system voltage and displays the result of this evaluation in the form of an icon on the title bar.

Display using an icon:

The icon indicates how the measured vehicle electrical system voltage can be rated in relation to default values.



The default values are:

► Min: 13.0 V

Max: 16.8 V

The icon display is updated by default every 30 seconds.

The following icons can be displayed:

lcon	Description
+	The vehicle electrical system voltage could not be measured.
∕-+	The measured vehicle electrical system voltage is OK.
! -+	The measured vehicle electrical system voltage is not OK and is not within the range defined by the default values (Min and Max).

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Warning message display:

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If the vehicle electrical system voltage is not within the defined limits, a warning message is displayed, which you must acknowledge in order to continue using the application. The vehicle electrical system voltage is measured every second while the warning message is displayed.

What can I do when a warning message is displayed?

We recommend that you take further steps. You then have the following options:

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► You can connect a charger (if the vehicle electrical system voltage is too low) or you can adjust the charging current of a charger that is already connected (if the vehicle electrical system voltage is too high) so that the measured voltage is then within the permitted range. The warning message disappears automatically and you can continue to work normally.

► You can simply confirm the message without carrying out either of the suggested steps. You can continue to use the diagnostic application normally. In this case, however, there is no guarantee that the results of the diagnosis will be valid given that the measured vehicle electrical system voltage is not within the defined range.



8.1.5 Process with vehicle communication

1. As soon as the application has started successfully, the list of control units for the respective ODX project is displayed in a control unit list.





You can select control units in two different ways:

Option 1: Select a number of control units

2. Select the required control units by highlighting them.

If you want to deselect a selected control unit, click again in the corresponding line.

Ji uni	13											
	Panan	nera	Simulation	mode		Program	n version V	G2-14.3	00.14.07.21		700	US V
its by	Contro	ol unit s	election:									
cted	Select	rerview	unit(s) and	continue to contr Extended identifications	rol unit search Fault m	with (F12 emory]. Actual vai input sigr	lues Tals	Drive lir check	nks Is	Coding adaptation	ns >>
	DTC	Status		Control	unit		DSN	1	Pars	che part r	umber	
			Airbag									
			Gateway									
			DME (DFI)			-						
			Transmissi	on control								
			Selector le	ver								
			Rear-differ	ential lock								
			High-voltag	je battery								
			High-voltaç	je power electror	nics							
			High-voltag	je charger								•
	End U	?	Vultmeter	Fret askert St		Delete	Add. menu	Diversite D	Fault 1 rd no	Logs	Brick	Sec.



_		Panan	nera	Simulation	mode	Program	n version VG2-14.	300.14.07.21	700 US7
3.	You can cancel the complete selection by pressing the <f6></f6>	Contro	ol unit se t control	election: unit(s) and	continue to control i	unit search with [F12	2].		Ş
	button.	01	verview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding **
		DTC	Status		Control uni	it	DSN	Porsche part	number
				Airbag					
				Gateway					_
				DME (DFI)					
				Transmissi	on control				
				Selector le	/er				-
				High-wolter	ential lock				
				High-volta:	e power electronics				
				High-voltag	e charger				
		End	Hat: ?	ielu timolor	Fritaneri Swa	Fite Leiter	ed menu Eccess	Fourtinding Logo	Easy Nort
4.	Then press the <f12> button.</f12>	Contro Select	ncara olunite tcontrol	Simulation election: unit(s) and	mode continue to control (Program	n version VG2-14. 2].	300.14.07.21	700 US'
		01	verview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding ,
		DTC	Status		Control uni	it	DSN	Porsche part	number
				Airbag					A
				Gateway					
				DME (DFI)					
				Transmissi	on control				
				Selector le	191				_
				Rear-diffen	ential lock				
				High-voltag	e battery				
				High-volter	e power electronics le charger			4	
		End	Helt	Kutimalar	Frid orient Save	Fibe- Deleta	And menu Ecoura	Foutfinding Loop	Euro Marcel
		Ċ	?		8	78	<i>6</i>	CP 🖞	~~ >>

Option 2: Select all control units

5. If you want to carry out a control unit search for <u>all</u> control units, press the <F12> button without selecting a control unit.

> The system then checks which control units or selected control units of the project can be addressed.

Panam	iera	Simulation mode Program	version VG2-14.3	300.14.07.21	TOO UST
Contro	d unit s	election:			3
Select	control	unit(s) and continue to control unit search with [F12].		-
Ō٧	erview	Extended identifications	Actual values input signals	Drive links checks	Coding
DTC	Status	Control unit	DSN	Porsche part	number
		Airbag			
		Gateway			
		DME (DFI)			
		Transmission control			
		Selector lever			
		Rear-differential lock			
		High-voltage battery			
		High-voltage power electronics			
		High-voltage charger		•	•
	P1	Hutmater Frances Save File Constant	And menu Electro	Fourising Logo	Each Next

Query as to whether you want to create a vehicle analysis log (VAL)

6. If the diagnostic application was previously restarted, a query as to whether you want to create a vehicle analysis log (VAL) may be displayed initially. You can select one of the following options:

* <F12> Yes: A VAL is created first.

* <F11> No: You carry out a control unit search without creating a VAL.

Note 1: Always read the information displayed in the information area! Note 2: You can create the VAL at a later time See section 8.9.2

Assumption: For the purpose of this description, we will assume that you do not want to create a VAL and have confirmed this by pressing <F11>.

Control unit search

7. The system now checks which control units or selected control units of the project can be addressed.

Optional display of a warning message



When you leave the control unit list or re-connect to the VCI, the previously selected model line (\blacktriangleright see section 7) is compared with the type of vehicle connected.

If the result of this check is negative (i.e. the connected vehicle is not a vehicle from the selected model line) or if the connected vehicle could not be identified, a warning message is displayed.

Example of an optional message (A).

Read the message and acknowledge it by pressing <F12> (B).



Optional display of a message

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Display of campaigns:

After the control unit search, a message may be displayed, depending on the data stored for the vehicle to be tested/serviced. This informs you about other campaigns or provides you with more detailed information for the current vehicle.

- VG2-14.300.14.07.21 TOO UST 9. Example of an optional message ortant: Campaign information is available for the vehicle (A). ee Information. Continue with [F12] A Overview Read the message and nformation: acknowledge it by pressing <F12> (B). Campaigns are stored for this vehicle in the PIWIS nformation system. Please check the following VIN: WP0ZZZ97ZAL040037 ®
- Program version VG2-14.300.14.07.21 700 10. If the vehicle data is inconsistent, ortent: Error in vehicle deta you are prompted to run the ntinue with [F12]. "Maintenance of vehicle data" Overview process and check the information he vehicle data that was read out from the vehicle is incorrect. lease run the "Maintenance of vehicle data" procedure and check data (A). Read the message and Ø acknowledge it by pressing <F12> (B). B

Display of search results



The list of addressable control units is then displayed in the control unit overview. Depending on which selection variant you have selected, the display format will be similar to that shown in Step 11 or Step 12.



 Display with previous selection (variant 1):

> Control units, which were previously selected in the control unit list and which can be addressed, are already preselected in the control unit overview.

Ove	rview	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DIC 8	Status	Control un	<u> </u>	DSN	Porsche part	number
۶	Airbag	(A2.1)		000012	97061821305	
	Gatewa	iy (A2)		Alpha2	97061811505	
	P	wer distributor				
	Ba	ttery sensor			97060616303	
	Rear-d	fferential lock		-		

12. Display without previous selection (variant 2):

All addressable control units are displayed. The control units are not highlighted.

Contro	l unit se	earch has be	een completed. Sel	ect control unit(s) an	d select the require	d function via the men	u. 🖣
٥v	erview	~	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DTC	Status		Control un	it	DSN	Porsche part r	umber
٨		Airbag (A2.	1)		000012	97061821305	
		Gateway (A	(2)		Alpha2	97061811505	
		Power	distributor		-		
		Battery	y sensor			97060616303	
٨		DME V8 na	turally aspirated en	igine EU5	C201	97061856212	
		PDK (Porse	he Double Clutch)		3D 00	97061838525	
٩		Selector lev	/er		01 00	97061832000	
		Rear-differe	ential lock			-	
		High-voltag	e battery		004009	7P0915182B	

Note on display

 If it was not possible to establish communication with a control unit, this will be indicated by dashes after the control unit name in the list (A). These control units are grayed out and cannot be selected.

Control unit subcomponents (socalled ECU subcomponents) are shown indented below the respective control unit (B). You can work with these subcomponents in the same way as regular control units (see also additional information below). Subcomponents that are not installed are grayed out and cannot be selected.

Panam	iera	Simulation mode Program	n version VG2-14.	300.14.07.21	us 🔻
Contro Contro	l unit o l unit s	verview:Not all versions have been detected. sarch has been completed. Select control unit(s) an	d select the require	d function via the menu.	E,
٥v	erview	Extended Fault memory	Actual values input signals	Drive links Coding checks adaptation:	*
DTC	Status	Control unit	DSN	Porsche part number	
۵		Airbag (A2.1)	000012	97061821305	۸
		Gateway (A2)	Alpha2	97061811505	_
		Power distributor	-	-	
		Battery sensor	-	97060616303	
۵		DME V6 naturally aspirated engine EU5	C201	97061856212	
		PDK (Parsche Double Clutch)	30 DD	97061838525	
۵		Selector lever	01 00	97061832000	
		Rear-differential lock	-		
		High-voltage battery	004009	7P0915182B	•
End Allo	H:U	Hutmater Second Save File Device	And menu Allwith Pr	4. Fourtinding Logo Back	Ned

Display of subcomponents:

If a higher-level control unit has subcomponents and you select the higherlevel control unit and then switch to a different function group or function, all subcomponents are implicitly selected as well.

However, if you select a subcomponent or several subcomponents and then switch to another function group or function, any further action you take will be performed only for this selection.

Example:

You select the control unit Gateway and switch to another function group. In addition to the main control unit Gateway, the following subcomponents will also be displayed in this function group:

```
Battery condition,
Main fuse box,
Intelligent battery sensor,
Electric energy management (eEM)
```

However, if you have only selected the subcomponent Intelligent battery sensor and then switch to another function group, only this element will be available for further action in this function group.

Alternative installation:

If the control unit you have selected in the control unit list was installed using an alternative installation, the name of the alternative installation will be displayed.

If several control units were installed in the vehicle instead of one control unit variant (i.e. both control unit_2 and control unit_3 are installed instead of control unit_1), several control unit variants will be displayed.

1

This affects how control units are displayed within the diagnostic application.

Example:

If the control unit you select in the control unit list has an alternative installation that includes several control units and if you call up the Fault memory function group directly without carrying out a control unit search, not just one control unit, but several will be displayed although only one control unit was previously selected.

This is perfectly normal behavior.

\downarrow Next, see next page

Next steps

14. Now select the control units for which you would like further information from the list.

If you want to deselect a selected control unit, click again in the corresponding line (A).

You can cancel the complete selection by pressing the <F6> button (B).

Contro	l unit o	verview:No	t all versions have b	een detected.			1
Contro	l unit se	earch has b	een completed. Sel	ect control unit(s) ar	nd select the require	d function via the me	mu.
Qv	erview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DTC	Status		Control un	it	DSN	Porsche par	t number
\$		Airbag (A2	.1)		000012	97061821305	
		Gateway ij	A2)		Alpha2	97061811505	
		Powe	r distributor				
		Batter	ry sensor			97060616303	
۵		DME V8 n	aturally aspirated en	igine EU5	C201	97061856212	
		PDK (Pors	che Double Clutch)		30 DD	97061838525	
۵		Selector le	ver		01 00	97061832000	
		Rear-differ	ential lock		-	-	
		High-voltag	ge battery	$\mathbf{}$	004009	7P0915162B	

Note on the selectability of function groups

Selectability of function groups:



- All function groups are available for selection if you have selected at least one control unit or one subcomponent.
- No function group can be selected if you have not explicitly selected a control unit or subcomponent.

Information on the selectability of all control units with fault memories

15. If you want to select all control units that have a fault memory entry, press the <F8> button.

•		Extended	Actual values	Drive links Codin	g
00	erview	identifications	emory input signals	checks adaptati	ons
DTC	Status	Control unit	DSN	Porsche part number	
٩		Airbag (A2.1)	000012	97061821305	
		Gateway (A2)	Alpha2	97061811505	-
		Power distributor	-		
		Battery sensor		97060616303	
٨		DME V8 naturally aspirated engine EU5	C201	97061856212	
		PDK (Porsche Double Clutch)	SD 00	97061838525	
\$		Selector lever	01 00	97061832000	
		Rear-differential lock		-	
		High-voltage battery	004009	7P0915 02B	-

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8.1.6 Process without vehicle communication (special procedure for Display mode)

If diagnosis is performed in Display mode, there is no communication with the vehicle via a VCI. The variant detection process that normally takes place during the control unit search is omitted as there is no vehicle communication.

If you still want to access the data for the relevant control unit variant, you must select this variant in the control unit list. Proceed as follows.

Option 1: Selecting a number of control units

		Panam	iera [Display mo	de		Pro	gram ve	ersion V	G2-14.3	0.14.07.21		700	US 🕈
1.	Click in the Control unit	Contro	l unit sele	ection:										
	column (A) for the respective	Select	control u	nit(s) and o	antinue ta	contral ur	nit search with	[F12].						
	unit variant for each control unit	Ōv	erview		Extend identificat	ed tions	Fault memor	^y	Actual val	lues nals	Drive lir check	nka Is	Coding adaptatio	ns »»
	using a drop-down menu (B).	DTC	Status		Co	ntrol unit			DSN	1	Porec	che part n	number	
			A	lirbag				×						
	To display the basic variant for the		4	iirbag										_
	respective control unit, select the		A	irbag (A2.1	0		_	_						_
	first/top entry in the drop-down		-	irbag (A2.	9)	(B	_						
	menu.		A	irbag (A2.9))			-						
	You can cancel the complete		А	irbag not p	rogrammed	d								
	rou can cancel the complete		s	ielector lev	ər									
	button		R	ear-differe	ntial lock									•
	button.	U.	?	Malimeter Malimeter		2	The S		Add manu	finende D	actions I		• • • • • • • • • • • • • • • • • • •	Nect SSS

2.	Then	press	the	<f12></f12>	button.	
----	------	-------	-----	-------------	---------	--

Panan	nera	Display mo	de	Program	version VG2-1	4.300.14.07.21	¥00 US▼
Contro	ol unit s	election:					
Select	control	unit(s) and	cantinue ta contral i	unit search with [F12	2].		
٥v	erview	-	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding ->> adaptations
DTC	Status		Control uni	it	DSN	Porsche par	t num ber
		Airbag					▲
		Gateway					
		DME (DFI)					
		DME V6 D	esel				
		DME V6 TR	SI Hybrid				
		Transmissi	on control				
		Transmissi	on control				
		Selector le	/er				
		Rear-differ	ential lock				\
	?	Materian F2		B P	Add menu C		Cost Meet



 All selected control unit variants or control unit basic variants are displayed.

	nera	Disple	ay mod	8			Program	version VG2	2-14.300	.14.07.21		¥00	US
Contro	ol unit o ol unit s	verviec earch l	v:Not a nas bee	ll version in compl	is have bi eted. Sek	een detecte ect control u	d. init(s) and	I select the rea	quired fu	nction via	the mer	nu.	
Οv	erview	,		Exter	nded ations	Fault me	mory	Actual valu input signa	es Ils	Drive lin check	nks (s	Codir adaptat	ions
DTC	Status			c	ontrol uni	t		DSN		Pars	che part	number	
	8	Airbag		_									1

Option 2: Selecting all control units Panamera Display mode Program version VG2-14.300.14.07.21 700 UST 4. If you want to display the basic Control unit selection: variant for all control units, do not Select control unit(s) and continue to control unit search with [F12]. select a control unit. Overview ... Then press the <F12> button. DTC Statua DSN Porsche part number Control unit Airbag . Gateway DME (DFI) DME V6 Diesel DME V6 TFSI Hybrid Transmission control Transmission control Selector lever Rear-differential lock ē ക്ര Ì Σ 700 US 1 namera Display mode Program version VG2-14.300.14.07.21 5. The control unit basic variants are Control unit overview:Not all versions have been detected. displayed. Control unit search has been completed. Select control unit(s) and select the required function via the menu. Overview Control unit DSN DTC Status Porsche part number 🕗 Airbag ٨ 🕒 Gateway

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Power distributor

Battery sens

Generato

DME (DFI)

DME V6 Diesel

DME V6 TFSI Hybrid

S Transmission control

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6. The functions described in section 8.2 ff are then available, with the following restrictions:

Restrictions:

No control unit communication is established because there is no VCI connected. The following restrictions will therefore apply when using the application:



- All fault memories are displayed in the Fault memory function group. Since each control unit has a fault memory entry, all control units are selected in the control unit overview by pressing the <F8> button.
- Default values are displayed instead of real actual values in the Actual values/input signals function group.
- In function groups for which requests can be sent by entering data, no control unit response is displayed in the response field.

8.2 Extended identifications

You can display further identifications for a control unit or several control units in the Extended identifications function group. This section describes how to display the extended identifications and change the values of the extended identifications.

8.2.1 Action-specific buttons

Extended	xtended identifications					
Button	Label	lcon	Description			
F8	Write	A	The identifications for selected control units can be written by pressing the <f8> button.</f8>			

8.2.2 Display of extended identifications

Display the list of installed control units and select the desired control units:
 See section 8.1

0	Coloct the	Panamera Simulation n	lode	Program	version VG2	14.300.14.07.21		700 L	IS 7
۷.	Select the	Extended identifications:						104	
		Change and save identifica	tions with [F8].						P
	group.	Overview 🛛 🐇	Extended Identifications	Fault memory	Actual values input signals	a Drive links checks	a	Coding deptations	*
	The extended identifications for	Control unit		Identification		Value	Unit	Changed	
	the selected control units are	Rear lid	Vehicle identifice	tion number		WP0ZZZ97ZAL 040037			•
	displayed in a list.		Diagnosis softwa	are number (DSN)		101130			
			Software version			X606			
			Hardware part n	umber		4H0959107D			
			Porsche part nur	nber		4H0959107D			
			Hardware versio	n		ноэ			
									▼
		End Hote Multimator	Data logger FR F4	File FI	Apid menu V	the Fourtholms Lo		«	82.0 >>

8.2.3 Changing and writing the extended identifications

- Display the extended identifications.
 ► See section 8.2.2.
- If you want to change the values of the identifications, first enter the new value of the relevant identification in the Value field (A).

Tips for entering values are provided in the Info area (B).

If you have changed a value, this is indicated by the \bigcirc icon in the "Changed" column (C).

Overview		Extended identifications	Fault memory	Actual values input signals	Drive links checks		Coding adaptations
Control	unit		Identification		Value	Unit	Changed
Rear lid		Vehicle identific	ation number	V Q	/P0ZZZ97ZAL 40038		0
		Diagnosis softw	are number (DSN)	7	1130		
		Software version	n	×	606		
		Hardware part n	umber	(A) ₄	HD959107D)	
		Porsche part nu	mber	4	H0959107D		
		Hardware versio	n	H	09		

Note and tip

 If the value you have entered is not correct because the format of the value is wrong, for example, this is indicated by the ⁽²⁾ icon in the Changed column and the original value will be entered in the Value field again.

Overview	Extended Identifications Fault memory	Actual values input signals	s Drive links checks	Coding adaptations
Control unit	Identification		Value	Unit Changed
Rearlid	Vehicle identification number		WP0ZZZ97ZAL 040037	>
	Diagnosis software number (DSN)		101130	
	Software version		X606	
	Hardware part number		4H0959107D	
	Porsche part number		4H0959107D	
	Hardware version		H09	



Restoring the original value:

If you want to cancel your entry, you can do this in two different ways:



- Enter the original value of the identification in the Value field again. The \mathcal{O} icon next to the Value field remains in this case.
- Select the Overview function group, select the desired control unit again and then select the Extended identifications function group to display the list of extended identifications again. All changes you have made to the values will then be rejected.

Next steps

 Once you have changed the values of the identifications, press the <F8> button to write the changed values.

•



After writing

5. If a value for an identification was not written successfully, this is indicated by the ① icon in the Changed (A) column.

> If it is not possible to read the full message text in the information area due to lack of space, you can display it by clicking on Details (B).



Details of error description:

In some cases, e.g. if the texts are too long, the values are only checked when the identifications are written. Information about why the data could not be written is displayed after the display of the permitted input value in the information area.

The information area is updated only after you change the selection of the identification value indicated by an error icon.



Example: If an identification value with an error is already selected, the error description is not displayed immediately. The reason for the error is only displayed in the Info area after you have deselected this line (e.g. by selecting a different entry) and then select it again.

Some values of the extended identifications are not written in the current status of the control unit display even though no problems are indicated. The reason for this is that the control unit has responded positively to a value request, but has not written the value. This may be due to a flash memory problem in the control unit, for example.

There are also identifications for which the value is defined by the runtime system. This is the case for some dates, for example. The date can be changed, but a different value (e.g. the current date) is written.

8.3 Fault memory

This section describes how to display the fault memories of a number of control units. It also describes how to delete individual fault memory contents of a control unit and how to display the environmental data for a fault memory entry or several fault memory entries.

8.3.1 Action-specific buttons

Fault memory			
Button	Label	lcon	Description
F8	Delete FML	O	This button is displayed if fault memory entries are present and you have not selected any entry in the working screen of the function group. All fault memory entries are deleted by pressing the <f8> button. The system then prompts the user to confirm the action.</f8>
F8	Delete FML	S	This button is displayed if fault memory entries are present and you have selected at least one entry in the working screen of the function group. A previously selected fault memory is deleted by pressing the <f8> button. The system then prompts the user to confirm the action.</f8>
Decision question			
Button	Label	lcon	Description
F11	No	\bigotimes	Press the <f11> button to cancel an action that requires confirmation (e.g. if you decide not to delete a fault memory as originally specified). The <f11> button shown here is only displayed in combination</f11></f11>
			with the form of the <f12> button shown in the next line.</f12>
F12	Yes	Ś	Press the <f12> button to confirm an action that requires confirmation (e.g. you want to delete a fault memory). The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>
8.3.2 Icons

Display of a fault	t memory entry
Icon	Description
	There is <u>no</u> icon to indicate the following faults:
	Priority 1: A fault is present that has significant influence on vehicle availability. As a result, the vehicle can no longer be driven.
	Priority 2: A fault is present that requires an immediate workshop visit.
	Priority 3: A fault is present that does not require an immediate workshop visit, but can instead be combined with a service appointment.
	Priority 4: A fault is present that results in recommendation for action before starting to drive. Vehicle availability may be restricted.
	Priority 5: A fault is present that does not affect vehicle availability or a fault is present that has no relevance for system repairs for the After Sales Service. The fault is indicated in order to assist you during fault correction or during fault analysis in the After Sales Service.
í	Task: Display for information purposes: This icon indicates faults caused by wear. Priority 6: A fault is present that affects the wear condition of the vehicle or individual components and is therefore relevant for the After Sales Service.
í	Task: This icon indicates general information. Priority 7: This information affects the comfort function, but does not affect vehicle availability and is not relevant for system repairs in the After Sales Service.
ĺ	Task: This icon indicates general information. Priority 8: General information.

8.3.3 Unknown fault codes

If a fault memory entry for which no data is stored in ODX is set in the control unit, this will still be displayed by the diagnostic application and is identified as an "unknown fault code".

8.3.4 Displaying the fault memory

Options for displaying the fault memory:

You can display the fault memory in a number of different ways.

If you want to display <u>all</u> control units with fault memory entries, proceed as follows:

► In the control unit list or control unit overview:

- Press the <F7> button (icon). This calls up the screen containing general vehicle functions (F7).
- In the list of general vehicle functions (F7), select the entry Read all fault memories and erase if required.
- ► In the control unit overview:
 - Press the <F8> button (& icon). This selects all control units with fault memory entries.
 - Call up the Fault memory function group.

If you only want to display the fault memory entry of <u>individual</u> control units, proceed as follows.

- Switch to the control unit overview.
- Select the desired control units. Control units that have a fault memory entry are indicated by a ⁽²⁾ icon in the DTC column.
- Call up the Fault memory function group.

This option is described below.

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- Display the list of installed control units and select the desired control units:
 ► See section 8.1.
- 2. Select the Fault memory function group on the menu bar. A list of fault memories for the control unit will be displayed.

The severity or priority of the fault is indicated by different traffic light symbols (A, see section 8.3.2).

If a fault memory is active, this is indicated by the icon.

If a fault memory entry is present but inactive, this is indicated by the icon.

Clear ALL or selected warr	ing-ever	nt entries w	ith [F8].				
Overview 🔗	Exter identific	ided ations	Fault m	iemory	Actual values input signals	Drive links checks	Coding adaptation:
Control unit		Fault code	active		Dea	acription	
Airbag (A2.1)		004F07	9	Cading, in	nplausible		
	0	:1209D	٩	Che k gal	teway control unit fau	lt memory content	
		00020	٩	Driver airt	ag stage 1, coding		
		9220	٩	Passenge	r airbystage 1, cod	ling	
DME V8 naturally aspirated engine EU5		492	ക്	50502: Fø	ault memory entry no	t documented. (Bel	ow limit)
		1532	Y	OFF time	fault (Limit value exc	eeded)	
Selector lever	1	10447	9	Check gal	teway control unit fau	ult memory content	(Invalid signal)
Instrument cluster (A2.5)	١	12006	۶	No comm	unication with POSIF	triggering unit	
		12000	6	No comm	unication with PDCC	control unit	



Note:

The fault memory list is updated cyclically. This means that individual fault memories can change the activity status.

8.3.5 Displaying environmental data

Select the Fault memory function group and display the fault memory content:
 ► See section 8.3.4.

2. Select the relevant fault code for which you want to display the environmental data (A).

If you want to deselect a selected fault code, click again in the corresponding line. You can cancel the complete selection by pressing the <F6> button.



Then press the <F12> button (B).

3. The environmental data for the fault memory entry is then displayed.



4. Pressing the <F11> button brings you back to the fault memory list.

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8.3.6 Deleting fault memory entries

Different ways of deleting fault memory entries:



- Delete all fault memories: If fault memory entries are present and you have not selected an entry, you can press the <F8> button to delete <u>all</u> fault memory entries.
- Delete individual fault memories: If fault memory entries are present and if you have selected at least one entry, the label and function of the <F8> button changes. You now have the option of deleting only the selected entries.

Restrictions:

Individual fault memory entries are only deleted if data is stored for the corresponding service. In other words:

- If fault memory entries are selected for control unit variants for which data is stored for the corresponding service, each individual fault memory together with the specified service is deleted when you press the <F8> button and then click Yes in response to the confirmation prompt that appears.
- If only fault memory entries are selected for control unit variants for which this service is not available and if the delete process is confirmed by pressing the <F8> button, a corresponding confirmation dialog appears and no service for deleting fault memories is executed.
- If fault memory entries are selected for control unit variants for which this service is available only for one control unit and if the delete process is confirmed by pressing the <F8> button, a corresponding confirmation dialog appears. If this is confirmed, the service for deleting individual fault memories is only executed for the control unit that has this service.

- Select the Fault memory function group and display the fault memory content:
 ► See section 8.3.4.
- 2. To delete an entry, first select the corresponding fault code.

If you want to deselect a selected fault code, click again in the corresponding line.

You can cancel the complete selection by pressing the <F6> button.

If you want to delete all fault memory entries for the displayed control units, do not select a fault code.

Overview <	Exte identifie	nded cations	Fault n	nemory	Actual values input signals	Drive links checks	Coding adaptation
Control unit		Fault cod	e active		De	scription	
A/C compressor	1	U111300	\$	Function	restriction due to AK	-	
Bose amplifier		800A	۵	Microphor	ne (interrect signal)		
Adaptive cruise control (ACC3 A3)	1	D00007	\$	Function I	ock active		
		C12000	۵	Communi	cation with CAN saf	ety	
		C·12002	۵	No comm	unication with engin	e control unit	
	1	C12007	\$	Communi	cation with PSM cor	ntrol unit	
	١	C1201F	۵	No comm	unication with gatew	vay control unit	
			6 .				

3. Then press the <F8> button.

Panamera Si	nulation	mode			Progra	m version VG2-14	4.300.14.07.21	700 U
Fault memory en Clear ALL or sele	try: ected wa	rning-ever	nt entries wit	h [F8].				
Overview		Exter identific	nded ations	Fault n	emory	Actual values input signals	Drive links checks	Coding adaptations
Control u	ınit		Fault code	active		C	Description	
A/C compressor	1	U111300		Function	restriction due to A			
Bose amplifier			600A	٩	Micropha	ne (Incorrect signa	0	
Adaptive cruise control (ACC3_A3)		٩	D00007	\$	Function	ock active		
			C12000	9	Communi	ication with CAN s	afety	
			C12002	۹	No comm	unication with eng	ine control unit	
		1	C12007		Communi	ication with PSM c	ontrol unit	
		1	C1201F	\$	No comm	unication with gate	way control unit	
		1	C12096	9	Check ins	an ent cluster fai	ult memory content	
			DODDDD	B	ACC cont	rol unit fun th	ion	
	Multimolor	Data logge Al	540 F4	*	FE		RML Cutting Logo	Baby N S F 1 F 2

- A query appears prompting you to confirm the deletion of the selected fault memory entries (A). You can select one of the following options (B):
 - Press <F11> to cancel the process. You return to the list of fault codes.
 - Press <F12> to confirm that you want to delete the fault code.



 If you want to delete the fault code, confirm the query by pressing the <F12> button. The selected fault memory is then

cleared. Fault memory entries that could not be deleted are listed in the Info area.



After deleting fault codes



After you have deleted the fault code, an updated list of fault codes is displayed automatically (see next screenshot).

Please note:

If the conditions for displaying a fault still exist, the fault may be displayed again after deleting it due to the fact that the fault memory is read out cyclically.

6. Updated list of fault memories.



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<u>`-</u>		-54

If an error occurs while deleting a fault memory, the application will inform you about this in the information area.

8.4 Actual values/input signals

This section describes how to display the actual values and input signals of control units. It describes how to change the display form of the displayed values (current value, minimum, maximum). It also describes how to display the measured values graphically using the data logger.

8.4.1 Action-specific buttons for this function group

Actual va	Actual values/input signals/data logger						
Button	Label	lcon	Description				
F3	Data logger	M	Pressing the <f3> button calls up the data logger screen.</f3>				
F3	Print	÷	Pressing the <f3> button prints the data logger diagrams.</f3>				
F8	Start	Ŵ	Pressing the <f8> button starts the data logger's data logging function.</f8>				
F8	Stop	Ņ	Pressing the <f8> button stops the data logger's data logging function.</f8>				
F8	Value	A	Pressing the <f8> button changes the value display to the current actual value.</f8>				
F8	Minimum	A	Pressing the <f8> button changes the value display to the current minimum value.</f8>				
F8	Maximum	$\overline{\mathbb{A}}$	Pressing the <f8> button changes the value display to the current maximum value.</f8>				

8.4.2 Displaying measured values

Display the list of installed control units and select the desired control units:
 ► See section 8.1.





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What does "Minimum" or "Maximum" mean in this case?

The following relationship applies based on the physically supplied values of the respective addressed control unit:

- Minimum is either the smallest lexical value (in a character string), the smallest number (for a number) or FALSE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- Maximum is either the largest lexical value (in a character string), the largest number (for a number) or TRUE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- The value is the current lexical value (in a character string), the current number (for a number) or TRUE or FALSE (for Boolean values).

Value updates:

The value display for the elements "Value", "Minimum" and "Maximum" is updated cyclically every 250 milliseconds.

Depending on the selected display mode, the heading for the Value column also changes to Value, Minimum or Maximum.



8.4.3 Different display modes (display of 1, 2, 3, 4 and more values)



Depending on the number of parameters to be displayed, the display automatically changes to an enlarged display mode.

The following figures show how the display changes.





8.4.4 Data logger

The graphical view of the data logger is an additional view containing only numbers (see section 8.4.3) for measured values in the <u>Actual values/input signals</u> function group. The data logger can display several measured values in one or more measured curves at the same time. The display mode is selected when starting the data logger. Detailed values can be read off at the cursor position using a marking cursor (marker). The time and value axes are scaled automatically. They can also be scaled manually. Measured values logged by the data logger can be saved and displayed again graphically at a later time using the log option Measured value log.

This section describes how to display measured data for input signals using a data logger. It also describes how to change the display mode for measured values, thereby changing the viewing area. This section also describes how to save the data logged by the data logger in a measured value log.

8.4.4.1 Calling up the data logger and starting data logging

Maximum number of measured curves:

The following conditions apply for the maximum number of measured curves that can be displayed depending on the display mode:

- All measured values in one diagram: 4 curves
- Between individual diagrams: 8 curves, with 4 curves displayed at the same time on one page.
- Two adjacent diagrams: 8 curves, with 4 curves displayed at the same time on one page.

Note on color display:



If you have selected the display mode All measured values in one diagram, each measured curve will be displayed in a different color in order to differentiate between the measured values. You can assign a specific color to each curve in the control application:

Select the <u>Actual values/input signals</u> function group on the menu bar and select the measured variables you would like to display graphically:
 ▶ See sections 8.4.2 and 8.4.3.

[►] See section 6.3.4.2

2. The working screen then shows the parameters for which you have selected measured values. Now select the parameters that you want to display graphically (A).

> Press the <F3> button (B). A selection window appears above the <F3> button in which you can select the type of diagram display. The following options are available:

- All measured values in one diagram
- Between individual diagrams
- Two adjacent diagrams

The option Two adjacent diagrams was selected in the example shown.

 Press the <F8> button to start the data logger's logging function.

Program version VG2-14.300.14.07.21 Simulation mode 700 US1 rrent actual values/input signals witch displays by pressing [F8]. Switch to actual values/input signals selection by pressing [F11]. Drive links Extended Coding adaptations Fault memory Overview identifications checks rt sign (A) All measured values in one diagram **B**76 V Between individual diagrams 1 ě 85 wo adiacent diagram:

Overview	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Codin; adaptatio
10			••		
480		i			
MESSME					
STAN AUG					
ÿ a		1	ġ -		
40					
0.	Fix 7 x 3 x Zait in Sekunden	18	0 H 1 H	2 s 1 s Zeit in Sekunder	4.8

4. The data for the selected parameters is now read out of the control units and displayed graphically. If the right edge of the diagram is reached when inserting a measured value, the graph is shifted to the left by a certain percentage of the visible screen width. If the value "Infinity" is measured, this is not displayed in the data logger and is saved as ZERO in the measured value log.



Note on axis labeling/units:

- The X-axis label is always the time. The time values are the seconds since the start of measurement.
- The Y-axis label depends on the selected measured variable.

Display on the title bar:



 Panamera
 Simulation mode
 Program version
 VG2-14.300.14.07.21

 The () icon is displayed at the right on the title bar for as long as data logging is running in the data logger.



You now have the following options:

Option 1: Exit the data logger while data logging is running

You can exit the data logger while data logging is running in order to perform actions in other function groups. The <F3> button is active and has the label Data logger. To call up the data logger again from another function group, press the <F3> button (Data logger). Read the information about adding new measured values for measured value logging in the data logger:

► See section 8.4.4.2

Option 2: Stop data logging

6. You can stop measured value logging in the data logger:
▶ See section 8.4.4.3

8.4.4.2 Adding new measured values for measured value logging

If you exit the data logger while measured value logging is running, the <F3> button (Data logger) will be active.

If you want to add new measured values for measured value logging, the following restrictions apply:

If the selection is not changed:

If you have not changed the measured value selection, i.e.

- if you have not selected any additional measured values for measured value logging or
- i
- if you have not deselected any existing measured values

and you call up the data logger again by pressing the <F3> button, the data logger that is currently running will be displayed again.

If the selection is changed:

If, on the other hand, you have changed the selection, i.e. by

- adding new measured values to the current selection
- selecting a different set of measured values for a different actual value

and you call up the data logger again by pressing the <F3> button, measured value logging for the old data logger will be stopped and discarded. Instead, a new data logger with the new measured values for the current selection will be displayed.

You must start measured value logging explicitly again by pressing <F8> (Start).

For information on starting data logging in the data logger:

► See section 8.4.4.1

8.4.4.3 Stopping data logging

There is a possibility that measured value logging will be stopped as a result of an action performed within another function group, e.g. in the Programming function group.

You can tell that the data logger has stopped by the fact that ...



- ... measured value logging is not running •
- ... the START/STOP button <F8> shows START. ٠

The next steps describe the situation in which the data logger's measured value logging function is running and has not already been stopped automatically as a result of an action performed within another function group.

1. Call up the data logger in the usual way: ► See section 8.4.4.1

Or:

If you have previously exited the data logger while measured value logging was running and did not change the selection, press <F3> (Data logger). See also the information in section 8.4.4.2.

Program version VG2-14.300.14.07.21 900 UST Simulation mode nore Press the <F8> button to stop Data logger actual values/input signals measured value logging. art and stop data logging for the selected values by pressing [F8]. Drive links checks Coding adaptations Fault memory identification 188 5 181 s Zeit in Sek 18' s Zeit in Sekunden

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2.

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8.4.4.4 Possible actions/lcons

Various options are available for changing how the diagrams are displayed. You can call up these options by pressing the relevant button:

lcon	Description
÷	Set marker (see section 8.4.4.5). Setting the marker in the diagram marks the x- and y-intercepts of the measured curve and displays the values of the curve at the marked point.
(je	Delete marker (see section 8.4.4.6).
ជ ជ ៥ ២	Auto-scaling: The display area of the coordinate system is adapted to the value range of the curve.
÷	Scaling the x- or y-axis: The display area of the coordinate system is enlarged.
	Scaling the x- or y-axis: The display area of the coordinate system is reduced.
04	Horizontal scrolling: The display area jumps to the value x=0.
٩	Horizontal scrolling: The display area scrolls to the left.
বব	Horizontal scrolling: The display area scrolls quickly to the left.
00	Horizontal scrolling: Stop scrolling.
D	Horizontal scrolling: The display area scrolls to the right.
DD	Horizontal scrolling: The display area scrolls quickly to the right.

Icon	Description
⊳0	Horizontal scrolling: The display area jumps to the last recorded value.
	Scroll through chart: Scroll forward in a diagram.
	Scroll through chart: Scroll back in a diagram.

Table 6: Data logger functions

8.4.4.5 Setting a marker



You can set a marker and use this to display the x and y values of a point on the curve.

If you have selected a display mode that allows you to display several diagrams, when you set the marker in one diagram, this will automatically be applied at the same point (x-intercept) in all other diagrams.

Program version VG2-14.300.14.07.21 anamera Simulation mode 700 US7 1. Click on the marker button Data logger actual values/input signals (represented by the $\frac{1}{2}$ icon). Start and stop data logging for the selected values by pressing [F8]. Drive links checks Coding adaptations Extended identifications Overview Fault memory s Zeitin Sekunden 4 Brek K P Ŵ

2. Then mark a point on the curve (the x-intercept is decisive here).

A marker can only be set in the visible x-intercept (i.e. inside the recorded curve).

	HP.	una s	Simulatio	n mode			Program	n version	VGZ-14.3	\$00.14.07.2	1	100	00.
D S	ata	logger a	otual value o data logg	es/input sig jing for the	inals selected v	values by p	ressing [F	8].					
	4	Overview	~	Exte identif	ended ications	Fault n	nemory	Actual v input si	alues gnais	Drive li checi	nks ks	Coding adaptatio	ns >>
Г	- 22					7100	_		-			1	
	90.							_					
Ē	70												
tand	00												
020	ы												
10.00													
Eade	40.					Í	`						
NY:	20.												
AB/	20					- 1							
9	10												
						10 53.0	e.						
	-10-	5 S		10	8		118		12.8		1	18	
							Zet in t	iekunden					
	•	e (9	Zoomto Y-ao	-	M	Horizontal sc] []		ÞI	Zeam to 3	- 2009	Scral through	
(ES:	b	Hap ?	Vuline:		- S7/1 FN	Filter	D M MA	Adds, menu	5321 	Fault findin; Sp F0	Logs FID	F11	>>

namera Simulation mode Program version VG2-14.300.14.07.21 700 US7 3. The x and y values of the ata logger actual values/input signals intersection point between the Start and stop data logging for the selected values by pressing [F8]. marker axis and the recorded Extended identifications Drive links Coding Overview curve are shown as a numerical Eault n checks adaptati value on the marker. The x value (time) is shown on the time axis at the bottom, while the y value is shown at the top. 0 P Brek R

Moving the marker



You can use the scroll buttons to move the marker horizontally. You have the following navigation options:

\bigtriangledown	Marker is moved to the left (-x).
Δ	Marker is moved to the right (+x).

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Setting and moving the marker in several diagrams:



Next steps

5. To exit the marker function, press the marker button (represented by the ¹/₁ icon) again. The marker remains visible in the measured curve. You can then use the data logger in the usual way.

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8.4.4.6 Deleting a marker



You can delete a set marker again - including all copies of the marker in other diagrams. Proceed as follows.

Call up the data logger and press the marker button:
 ► See previous section 8.4.4.5

 Press the Delete marker button (represented by the Delete icon).

All set markers are deleted.

Oveniew	Extended	Fault memory	Actual values	Drive links	Coding	
	identifications	- date more starting	input signals	checks	adaptations	
00		(77 01)				
70			_			
- m						
50						
40						
30						
20						
10						
a						
19		(87:1.0 ms)				
8.6	8 8	10 8	11.8	1	26	

8.4.4.7 Saving measured values temporarily

You can save the measured values logged by the data logger temporarily for subsequent evaluation.



Precondition:

If measured value logging is running, it must be stopped before saving data temporarily. Only then will the relevant Save button be activated.

Note on saving data:

If you want to store the temporarily saved measured value log permanently on the PC/Tester, you must save it using a defined name in the log type Measured value log of the General Report Management function:



► See section 8.4.4.8

Note on view:

You can call up stored and temporarily saved measured value logs again by selecting the log type Measured value log in the General Report Management function. The logs are then displayed in the data logger:

► See section 8.4.4.9

- Call up the data logger and start measured value display by pressing the <F8> button:
 ▶ See section 8.4.4.1.
- 2. To save the results of the current measured value logging temporarily, press the <F4> button.



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8.4.4.8 Saving the current measured value log permanently

You can save the temporarily stored measured value log permanently (see section 8.4.4.7) in the General Report Management function. The measured value log is zipped when you save it.

- Press the <F10> button. If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.
- Simulation mode Program version VG2-14.300.14.07.21 700 US7 2. A button menu appears in which Current actual values/input signals several entries are listed. witch displays by pressing [F8]. Switch to actual values/input signals selection by pressing [F11]. Extended Drive links Coding adaptations Fault memory Overvi Select the log type Measured identification out sian: checks value log. Working log Vehicle analysis log Vehicle order Vehicle handover Logging Measured value loc 8 J.Al Simulation data Program version VG2-14.300.14.07.21 TOO UST anamera Simulation mode The list of measured value logs is 3. List of logs displayed. The current or most \bigcirc Select log, go to print preview with [F10], go to transfer with [F8] B recently created measured value log is shown at the top. og ty DL-20140812_1734 Measured value ... Delete Select the current measured value Creation date Log nam log, for example, by clicking in the red value lo /12/14 5:84:21 PM corresponding line. If the current DL-20140812 1735 14.0.2.zip 8/12/14 5:34:08 PM measured value log is already DL-20140812 1734 14.0.2 zip 8/12/14 5:33:46 PM selected, this step is not necessary DL-20140812_1733_14.0.2.zip 9/12/14 5:33:15 PM (A). DL-20140612 1782 14.0.2.zip 8/12/14 5:32:40 PM Enter a name. A name is already suggested in the name field. You can use a different name (B). S.C. ß To save the temporarily stored

measured value log under the name you have chosen, press the

Save button (C).

8.4.4.9 Calling up and displaying stored measured value logs

In the General Report Management function, you can call up measured value logs that were created using the data logger in the <u>Actual values/input signals</u> function group (see section 8.4).

Reduced function:

When displaying the stored measured value data, the data logger is used purely as a display unit. It is not possible to start logging new measured values from within the measured value data display. The <F8> button is therefore grayed out.

To log a new measured value curve:

► See section 8.4.4.1

Other possible actions:

You can return to the General Report Management function by pressing <F11>.

You can also jump directly to one of the other function groups using the menu bar. The data for the control units that are currently in the selection is then displayed.

You can print the measured value log by pressing <F3>: ► See section 8.4.4.11

 Press the <F10> button.
 If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.

2. A button menu appears in which several entries are listed. Select the log type Measured value log.



- Program version VG2-14.300.14.07.21 TOO UST mera Simulation mode 3. Select a measured value log from ist of logs: the list (A) and then press the elect log, go to print preview with [F10], go to transfer with [F8] <F10> button (B). Overview og type Measured value ... Save Delete Log name Creation date B/12/14 5:34:21 PM DL-20140812_1735_14.0.2 zip 8/12/14 5:34:08 PM 8/12/14 5:33:46 PM DL-20140812_1733_14.0.2 zip 8/12/14 5:33:15 PM DL-20140612 1732 14.0.2 zip B/12/14 5:32:40 PM B 8 C **%**
- 4. The measured value curve(s) will be displayed in a function-reduced data logger (see introductory note for this section).

In the logged data, you can now ...

- ... use the scroll and marking functions of the data logger or
- ... print the log by pressing <F3> (further information can be found in section 8.4.4.11).

8.4.4.10 Copying a measured value log to a USB data storage medium

You can copy a measured value log to a USB data storage medium. A special Transfer button is displayed for this purpose in the General Report Management function.

- Display the list of measured value logs:
 ▶See section 8.4.4.9
- Select the log you want to transfer (A) and press the <F8> button (B).



3. Copy the measured value log to a USB data storage medium using the File management function of the basic software.

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8.4.4.11 Printing diagrams

Note on the print dialog:



The diagram is printed immediately on the default printer set in the operating system.

Information on the print format:

The format of the printout is DIN A4 landscape.

The number of diagrams displayed on the screen determines how many diagrams will be printed on each page, i.e.:

- If you have selected the display mode All measured values in one diagram, only one printout will be created.
- If you have selected a display mode in which measured values are logged in several diagrams, the number of diagrams printed on one page will correspond to the number of diagrams shown on each screen page. The diagrams that are currently displayed on the screen are always printed. If you want to print diagrams that are shown on a different screen page, you must first scroll to this page ([△] or [▽]) before pressing the Print button.

Only the diagram (consisting of the marker - if set -, axis labels, units and the measured curve) is printed.

Precondition:

You can ...:



- ... print the current measured value log directly. Measured value logging must have been stopped beforehand (see section 8.4.4.3). Only then is the Print button activated.
- ... retrieve a temporarily saved or stored measured value log using the General Report Management function and then display (see section 8.4.4.9) and print it on the data logger interface.



	Descention FO builton to avoid the	Panamera	Simulation	n mode		Progra	m version	VG2-14.30	10.14.07.2	1	700	US V
1.	diagrams.	Data logger Start and str	actual value op data loggi	s/input signals	cted values by	y pressing (F	⁼a].					
		Overvier	w **	Extended identificatio	f Fault	t memory	Actua input	l values signals	Drive I chec	inks ks	Codi adaptat	ng »» ions
		жи 30 30 30 30 30 30 30 30 30 30		/ / / Zer in Set inter	1 K	CLANKO DEPONENTIAL R		đx	y Zeit n	N N Nekkitzer		
		*	82 82	4 -	N	Horizontal s		D0	2com to:	Canis	Scrolithro	igh chart
			E Multerad R2		2		Add me		taul Indra D In		Exe Consecutive FIC	Nect SS F"2

8.5 Drive links/checks

This section describes how to display the drive links of a number of control units. It also describes how to change the parameters of these drive links and how to run test routines for individual control units.

8.5.1 Action-specific buttons for this function group

Drive link	s/checks		
Button	Label	lcon	Description
F5	Measured values		Pressing the <f5> button allows you to select measured values in an additional screen. These values are then also displayed in the result area of the drive links/routines.</f5>
F6	Back	O	Pressing the <f6> button returns control over a selected drive link to the corresponding control unit. The parameter of the drive link is then determined by the control unit.</f6>
F7	Stop		Pressing the <f7> button stops the current routine. Pressing the <f7> button again starts the routine again.</f7></f7>
F8	Start		Pressing the <f8> button starts a previously selected test routine.</f8>
F8	Execute		Pressing the <f8> button sets a previously selected drive link.</f8>
F8	Stop		Pressing the <f8> button stops a previously selected test routine.</f8>
F9	Reset	O	Pressing the <f9> button resets the current values to a default value.</f9>

8.5.2 Displaying drive links/checks

- Display the list of installed control units and select the desired control units:
 See section 8.1.
- 2. Select the Drive links/checks function group on the menu bar. A list of the drive links for the contro units is displayed.

Overview 🔗	Extended identifications	Actual values input signals	Drive links checks	Coding adaptatio
Control unit		Drive links/checks		
Gateway (A2)	Idle speed increase			
	Shutoff stage/transport mode			
	Generator setpoint voltage			
Power distributor	Relay terminal 30f actuation			
	Relay terminal 30sd actuation			
Battery sensor	No entries set.			

8.5.3 Changing parameters/calling up test routines

- Display the list of drive links and routines:
 ▶ See section 8.5.2.
- 2. In the list, highlight the drive link whose value you want to change or for which you want to call up a test routine (A).

If you want to deselect a selected drive link, click again in the corresponding line.

You can cancel the complete selection by pressing the <F6> button (B).

Overview	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
Control unit			Drive links/checks		
Gateway (A2)	Idle speed incre	889			
	Shutoff stage/tr	ansport mode			
	Generator setp	oint voltage			
Power distributor	Relay terminal 3	30f actuation	Ø		
	Relay terminal 3	30sd actuation			
Battery sensor	No entries set.				
			6		

3. Then press the <F12> button.



4. The available editable values or test routines for the selected drive link are displayed in the upper part of the current screen.

Note:

The status of the executed routine may already be displayed in the result area when the working screen is called up. Likewise, measured values that have already been defined may also be displayed in the result area.

Panamera	Simulation	mode	Progra	m version VC	52-14.3	00.14.07.21	700	US 7
Drive link Ide Please enter	e speed incre all values. T	ease of Gateway (A hen execute the dri	2) selected. ve link by pressing [F8].				i,
Overview	v «	Extended identifications	Fault memory	Actual value input sign	ues als	Drive links checks	Coding adaptation	>>
		Paramete	18			Value	Unit	
Activation tim	ie				20		5	
Idle speed in	crease				Stag	je 3		•
		Results			-	Value	Unit	
								-
								•
	F2	ала на селото вола П.П. С.	Measware Bark		Exer At	Fill Fill	Brick:	>>

Option 1: Changing the parameter using a drop-down menu

5. If the test routine has certain fixed configurable values, you can select the desired value from a menu by clicking in the relevant Value field.

Drive link Idle sp	eed incr alue fro	mote ease of Gateway (A m the list.	Progra 2) selected.	m version VG2	14.300.14.07.21	Yeo	
Overview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptation	8
		Paramete	rs		Value	Unit	
Activation time					20	5	
ldie speed increa	80			Stage 3	-	-	
		Results			No LLA	Unit	
					Level 1		
					Level 2		
					Stage J		
							-
Erd Hall	Elutimata	TEHLINGTON Sare	Mencarab Bark	Filand Er	core Hindi La	p Eac.	-

6. The value is then transferred into the Value field of the test routine.

		Extended	101 22	Actual values	Drive links	Coding	i
Overview		identifications	Fault memory	input signals	checks	adaptations	\$
		Paramete	rs		Value	Unit	
ctivation time				20)	5	
dle speed increa	80			SI	age 3		
		Results			Value	Unit	

Option 2: Changing the parameter by entering a value manually

7. If the value does not have certain fixed configurable values, you can change the value by entering a parameter manually.

To do this, click in the Value field of the test routine and enter the desired value.

Parameters Value Unit
20 s
Stage 3
Results Value Unit
Resulta Value Unit



Note:

If a drive link does not have any parameters, the Value field cannot be selected.

Next steps

8. Press the <F8> button to start the test routine or to set the parameter value.

Press the <F8> button again to stop the process.

Note:

It may happen that the routine has already been started when you call it up. In this case, of course, there is no need to start the routine. Furthermore, the routine can sometimes stop by itself. In this case, there is no need to stop the routine.

It is important, therefore, to check the status of the test routine. To do this, check the label on the $\langle F8 \rangle$ button as this varies according to the status.

 The result of the action is shown in the lower part of the current screen.



Overview	-	Extended identifications	Fault memory	Actual value input signals		Drive links checks	Co adap	ding
		Paramete	ra			Value	Ļ	Init
Activation time					20		5	
Idle speed increa	se	/			Stag	je 3		
		Results				Value	L.	Init
Service result no	valid				2	Service result not v	alid	
8.5.4 Setting drive links



The procedure for entering values for drive links and test routines is basically the same. The only difference is that different buttons on the control bar are activated for drive links.

- 1. Enter the relevant values for the respective parameters. For information on the various options for entering values, see section 8.5.3.
- 2. Set the drive link by pressing the <F8> button. The action-specific buttons are only activated after you have set the drive link.
- 3. The additional possible actions are displayed on the control bar.

The following additional buttons are available:



۲IJ

When you press the <F7>button, the current

When you press the <F6> button, control over the drive link is returned to the control unit.

Overview	**	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptation
		Paramete	Value	Unit		
Activation time					20	8
Idle speed incres	88				Stage 3	
		Results			Value	Unit

position of the drive link is saved.

button, the drive link is reset to a default value.

4. The result of setting the drive link is displayed in the lower part of the screen. The information in the information area also tells you which action (Stop, Reset, Back, Execute) the current result value relates to.





Note:

The <F8> button also remains active so that you can set the drive link again if you have changed an input parameter.

8.5.5 KWP2000LP functionality



If the selected drive link has a KWP2000LP communication protocol, the test sequence is performed in a different way in the Drive links/checks function group:

After you have selected a drive link and started the test routine by pressing the <F8> button, you can call up the next function for this drive link by pressing <F12> and work through the test sequence successively.

8.5.6 Combined display of actual values and drive links/checks



You can extend the result display in the Drive links/checks working screen. In addition to the results of the drive link test or executed routine, you can also display measured values of individual measured variables, which were stored for the corresponding drive link, in the result area.

To do this, the additional measured values to be displayed must first be selected in an actual values screen with reduced functions.

1. Press <F5> (Measured values) in the working screen.



The following selection screen looks identical to the Actual values/input signals screen, but with a few restrictions:

- It is not possible to call up a different function group.
- The functionality of the <u>Actual values/input signals</u> function group is limited to the selection and deselection of measured variables.

2. A list of all measured variables for the control units previously selected in the control unit list or control unit overview is displayed. Individual measured variables are already highlighted for the drive link/routine that was previously selected in the Drive links/checks function group.

Now click on the measured variables whose measured values you also want to display.

Panamera Simulation	mode Program version VG2-14.300.14.07.21 ♀● O US ▼						
Actual values/input signal	ls:						
Select values. Return to t	he previous view by clicking [F11].						
Overview «	Extended Fault memory Actual values Orive links Coding adaptations						
Control unit	Actual values/input signals						
Gateway (A2)	Battery ageing, charge-related (%)						
	Battery ageing, output-related (%)						
	SPECIFIED battery internal resistance						
	Battery internal resistance normalized						
	Battery charge condition						
	Extraction charge						
	Open-circuit voltage						
	Capacity						
	Battery manufacturer						
End Hold Wullmater							



The preselection cannot be deleted. However, you can add further measured variables to this preselection as required.

 Then press the <F12> button to accept the selection and return to the Drive links/checks screen.

> If you do not want to accept the selection, press the <F11> button. This also takes you back to the Drive links/checks screen, but no further measured values are displayed. Any selections you have made are discarded.

Panamera 🖇	Simulation	mode	Program	n version VG2-14	.300.14.07.21	700 U:	s۲			
Actual values/in	iput signal	5:				#				
Select values. F	Return to t	ne previous view by	y clicking [F11].				2			
Overview	~	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations	>>			
Control	unit		Acti	ual values/input sig	nals					
Gateway (A2)		Battery ageing,	charge-related (%)				•			
		Battery ageing,	output-related (%)							
		SPECIFIED batt	tery internal resistant	:e			_			
		Battery internal	Battery internal resistance normalized							
		Battery charge o	Battery charge condition							
		Extraction charg	je							
		Open-circuit vol	tage							
		Capacity								
		Battery manufac	cturer				Ŧ			
		Drislegger Save		Add. menu Execut	E Failt1ndin; Logs	Brek CC Des	80 8			

The current selection is stored in a user-specific filter when you confirm this by pressing <F12>. This filter is retained even when you exit the diagnostic application or re-install the application. If you call up the same control unit again at a later time, the last selections you made will be displayed in the selection screen again, depending on which control units were selected in the control unit list and control unit overview.

If you have selected fewer or different control units in the control unit overview, either fewer or different selections will be displayed.

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8.6 Codings/adaptations

This section describes how to write coding values. Essentially, you can choose between manual and automatic coding. For this reason, this section first describes how to select and activate a coding mode. Depending on which coding mode you select, you can then perform coding automatically or first set individual coding values manually and then write them.

Important note:

The control unit variant can be changed by flashing and coding. As a result, a different control unit name than the one displayed previously may be displayed after flashing and coding.



Example:

Let's suppose you code the airbag control unit in the basic variant "Airbag" and when you code this control unit, it becomes control unit variant "Airbag_A2". As a result, the control unit will be managed as Airbag_A2 following flashing and no longer as Airbag. The name is changed without carrying out a new control unit search.

8.6.1 Action-specific buttons for this function group

Codings/a	Codings/adaptations								
Button	Label	lcon	Description						
F8	Write	AND	Pressing the <f8> button writes a coding value.</f8>						
F8	Save	lacksquare	Pressing the <f8> button saves assigned coding values temporarily at first. The respective feature is written permanently in the last step. The procedure described here applies to all coding modes except for Manual coding without MCR rules (Development).</f8>						

8.6.2 Displaying coding modes

- Display the list of installed control units and select the desired control units:
 See section 8.1.
- 2. Select the Codings/adaptations function group on the menu bar. A list of the possible coding modes is displayed.

	** dentifications	Fault memory	Actual values input signals	Drive links checks	adaptations
		Coding	mode		
Customer-specif	ic settings				
Aanual coding					
Automatic coding	g				
Restore factory :	settings/codes (or new-p	art coding)			

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8.6.3 Customer-specific settings



Note:

In the Customer-specific settings coding mode, you must set and code the individual coding values yourself as no MC rules (machine-readable coding rules) are evaluated

- Display the list of coding modes:
 ► See section 8.6.2.
- Select the coding mode Customer-specific settings (A) and press <F12> (B) to confirm your selection.



 You now have the option of selecting individual or all coding values (A). Confirm your selection by pressing <F12> (B).



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All coding values of the control unit were selected for the display and description below. For this purpose, all elements in the list were selected and the selection was confirmed by pressing <F12>.



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	<u>_</u>	
0		-14

You can change the coding value in two different ways, depending on the coding mode:

↓ Next page

Option 1: Changing the coding value using a drop-down menu

5. If the coding value can be changed and if the selected coding has several fixed coding values, these will be listed in a selection menu.

Click in the Value field for the coding (A).

Select the coding value that you want to write from among the values listed in the drop-down menu that appears (B).

Coding/adaptation	s:						
Please select a va Overview	ce d	entifications	Fault memory	Actual values input signals	Drive links checks	Ca adaj	oding ptations
Control un	it		Coding valu	Value	Unit	Changed	
Instrument cluster		Acoustic spe	Acoustic speed warning (Gulf States)				
		Acoustic bel	t warning (not in US	3A or Canada)	Active		
		Display spec	Jisplay special summer tire selection				
		TPM setpoin designation:	t pressure pairs: W Sommerreifen	/heel set	Active		•Ø
		TPM setpoin Setpoint pre	nt pressure pairs: Su ssure at front axle (ummer tires: Noa comfort)	2.5	bar	
		TPM setpoin Setpoint pre	nt pressure pairs: Su ssure at rear axle (p	ummer tires: part load/comfort)	2.5	bar	
		TPM setpoin Setpoint pre	it pressure pairs: Su ssure at front axle (ummertires: (part load/Vrnax)	2.5	bar	

 If you change the value, this will be indicated by the *indicated* by the *i*

	Panamera Simulation mode			node	P	ogram version	VG2-14.300.14.07.21		700	us 🔻
¢	Coding/adapta	ations							1400	
	Please select	a valu	e from	the list.						1
	Overview	Overview « Extend dentifica			Faultmemory	Actual valu input signa	es Drive links Is checks	Coding adaptations		**
	Control unit				Coding value			Unit	Changed	
	Instrument clu	ster		Acoustic speed warning (Gulf States)			not active		<u></u>	•
				Acoustic bel	Acoustic belt warning (not in USA or Canada)				0	
	Displ				splay special summer tire selection					
				TPM setpoir designation:	TPM setpoint pressure pairs: Wheel set designation: Sommerreifen					
				TPM setpoin Setpoint pre	TPM setpoint pressure pairs: Summer tires: Setpoint pressure at front axle (part load/comfort)			bar		
				TPM setpoin Setpoint pre	TPM setpoint pressure pairs: Summer tires: Setpoint pressure at rear axle (part load/comfort)			bar		
				TPM setpoir Setpoint pre	TPM setpoint pressure pairs: Summer tires: Setpoint pressure at front axle (part load/Vmax)			bar		•
		M	dinatar Alti						F###	20ect

Option 2: Changing the coding value by entering a value manually

 If the coding value can be changed, but cannot be selected in a drop-down menu, you can change it by clicking in the Value field for the coding and entering the desired coding value manually (A).

Tips for entering values are provided in the Info area (B).



 If you change the value, this will be indicated by the *icon* in the Changed column.

Panamera Simu	ulation me	ode	Pre	ogram version	VG2-14.300.14.07.21		700	US 🔻
Coding/adaptations	s:						1 mil	
Please enter a floa	ting point	number.						Ø
Overview	<∝ E den	tended.	Fault memory	Actual value input signal	s Drive links s checks	Co adap	ding tations	
Control uni	it	Coding value			Value	Unit	Changed	
Instrument cluster		Acoustic speed warning (Gulf States)			not active			
		Acoustic belt warning (not in USA or Canada)			Inactive		0	
	Display special summer tire selection			Yes				
		TPM setpoint pressure pairs: Wheel set designation: Sommerreifen			Slick soft			
		TPM setpoir Setpoint pre	nt pressure pairs: Su ssure at front axle (3.0 t)	bar	0		
		TPM setpoir Setpoint pre	nt pressure pairs: Su ssure at rear axie (p	2.5 t)	bar			
		TPM setpoir Setpoint pre	nt pressure pairs: Su ssure at front axle (2.5	bar		-	
tat int h	Christer		isan the t		inte Saltmang		Earth Carlos	Nect >>>

Note and tip

9. If the value you have entered is not correct because the format of the value is wrong, for example, this will be indicated by the icon in the Changed column and the original value will be entered again.

Coding/adaptation	ons:						
Please enter a fl	oating p	oint number. Im	portant: Format of th	e last entry was inc	orrect.		
Overview	<<	Extended dentifications	Fault memory	Actual values input signals	Drive links checks	Cr adap	oding otations
Control unit			Coding valu	Value	Unit	Change	
strument cluster		Acoustic sp	Acoustic speed warning (Gulf States)				
		Acoustic be	Acoustic belt warning (not in USA or Canada) Display special summer tire selection				0
		Display spe					
		TPM setpoi designation	nt pressure pairs: W : Sommerreifen	t pressure pairs: Wheel set Sommerreiten : pressure pairs: Summer tires: :sure at front axle (part load/comfort)			
		TPM setpoi Setpoint pre	nt pressure pairs: Su essure at front axle (bar	۵
		TPM setpoi Setpoint pro	nt pressure pairs: Su assure at rear axie (p	ummer tires: part load/comfort)	2.5	bar	
		TPM setpoir Setpoint pre	nt pressure pairs: Su essure at front axie (umm er tires: part load/Vm a∞)	2.5	bar	

Restoring the original value:

If you want to cancel your entry, you can do this in two different ways:

- Enter the original coding value in the Value field again. The *O* icon next to the Value field disappears.
- Select a different function group, e.g. Overview, and then activate the Codings/adaptations function group again. All changes you have made to the values will be rejected.



Special case: Codings without read service

Note:

If coding does not have a read service, a message to this effect will be displayed in the information area. In this case, the coding values will be taken only from the ODX data and will not be read from the vehicle. These coding values may be assigned default values.

If you have entered missing coding values or changed existing coding values, these values will be written to the control unit in a coding process.



However, these values cannot be read out of the control unit again and compared with the entered data in the usual way in order to check the coding process (check whether the write operation was successful/unsuccessful) because the read service for reading data out of the control unit is not available (see also Info block: "Checking that the data that was written is correct" below).

The procedure in this case differs from the standard operating concept in the following respects before the coding button is activated on the control bar:

- Coding that does not have a default value must be assigned a coding value. To do this, proceed as described above (Option 1, Option 2)
- Coding that already has a default value can be changed, but does not have to be.

Next steps									
10 Dress the EQ button to write the	Panamera Sim	ulation m	ode	Pro	ogram version VG;	2-14.300.14.07.21		700 I	us 🔻
changed coding value	Coding/adaptations:						8		
onanged boaing value.	Please select a value from the list.								
	Overview	<∝ E der	xtended ntifications	Fault memory	Actual values input signals	Drive links checks	Co adap	ding tations	**
	Control unit			Coding value		Value	Unit	Changed	
	Instrument cluster		Acoustic speed warning (Gulf States)			not active			
			Acoustic be	It warning (not in US	A or Canada)	Inactive		0	
			Display special summer tire selection			Yes			
			TPM setpoi designation	int pressure pairs: Wi Sommerreifen	heel set	Slick soft			
			TPM setpoi Setpoint pre	int pressure pairs: Su essure at front axle (p	immer tires: part load/comfort)	3.0	bar	0	
			TPM setpoi Setpoint pre	int pressure pairs: Su essure at rear axle (p	mmer tires: art load/comfort)	2.5	bar		
			TPM setpoi Setpoint pre	int pressure paire: Su essure at front axle (p	mm tires: part load	2.5	bar		-
	U ?	1.11***** 255	nl f			arte sectores G (19		•** ()	>>>

After writing

 If the new value has been written successfully, this is indicated by the ♥ icon.



12. If a coding value was not written successfully, this is indicated by the ① icon in the Changed column.

Try to write the value again if necessary or call up the Help function.

If it is not possible to read the full message text in the Info area due to lack of space, you can display it by clicking on Details.

Panamera	Simulatio	Simulation mode Program version VG2-14.300.14.07.21					O UST
Coding/adap	otations: rs occurred	while writing,					
Overview	N «	Extended dentifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptatic	ns **
Con	trol unit		Coding valu	-	Value	Unit Cha	inged
Reversing ca	amera	Japan navig	ation preparation		Standard (not Japan) without trailer hitch		^
Rear lid		Acoustic wa	ming signal		100	ms (D
							•
EM -C	p vulme					Logs Brek	>>

Details of error description:

In some cases, e.g. if the texts are too long, the values are only checked when writing the coding. Information about why the data could not be written is displayed after the display of the permitted input value in the Info area.

The Info area is updated only after you change the selection of the coding indicated by an error icon.

Example: If coding with an error is already selected, the error description is not displayed immediately. The reason for the error is only displayed in the Info area after you have deselected this line and then select it again.

Some coding values are not written in the current status of the control unit display even though no problems are indicated. The reason for this is that the control unit has responded positively to a value request, but has not written the value. This may be due to a flash memory problem in the control unit, for example.

The value is defined by the runtime system. This is the case for some dates, for example. The date can be changed, but the value you enter is replaced by the runtime system when writing data.

Checking that the data that was written is correct:

Two different types of checks are performed:

• Read service available:

If a control unit has a read service, the data that was written is read out again after the write operation and is compared with the data to be written. If the control unit acknowledged the write operation with a positive response, and if the data is correct, the write operation for the coding is deemed successful. In all other cases, a corresponding error message is displayed.

• Read service not available:

If the control unit does not have a read service (see also note on "Special case: Codings without read service" above), the application merely checks that the control unit acknowledges the write operation with a positive response. If it does, the write operation for the coding is deemed successful.

The data that was written cannot be checked because there is no read service available.

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8.6.4 Manual coding

In the Manual coding coding mode, the required data that will be written to the control unit is determined using a selection of equipment features. You must also enter certain vehicle data manually beforehand. The data to be written is then written automatically to the control unit following confirmation.

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

- ► Product code
- ► Country code

► Model year

Always have the necessary information ready.

Number groups and their meaning:



X: Exclusive

M: Additional equipment

Z: Tequipment

PR: Additional VW equipment (and model type Cayenne)

- Display the list of coding modes:
 ► See section 8.6.2.
- Select the coding mode Manual coding (A) and press the <F12> button (B) to confirm your selection.







You must then assign the relevant equipment features for the control units listed in the selection.

Depending on the availability of data and the control unit variant, the features are assigned in two screens displayed one after the other.

Proceed as follows:

i

Assigning equipment features that do not belong to a specific family

Note on screen content:

The equipment features that are valid for this control unit in the value group are displayed in the next screen. A feature is assigned directly by selecting and deselecting individual coding values.

A feature is made up of two entries:

- The coding number and designation in the Coding value column.
- Indication of the presence of the feature in the vehicle data in the Installed column. If a feature is set, this is indicated by the 𝒞 icon and if the feature is not set, the line will be blank.

In addition, the ${\tt Changed}$ column indicates whether the status (Installed/Not installed) of a feature has been changed.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

5. To identify a feature as present, click in the corresponding cell of the Installed column (A).

If you change a feature, this will initially be indicated in the Changed column by the \mathscr{O} icon (B).

Comment: Data is not yet written to the control unit in this step.

If you want to make further changes to your selection, click again in the corresponding field.



6. Press the <F12> button.

Pressing <F11> brings you back to the screen for entering vehicle data.

Assigning equipment features that belong to a specific family

Note on screen content:

The equipment features of the value groups are displayed in the form of a grouping/family.

The individual value groups (X, M, Z, PR numbers) are shown one under the other.

A feature is made up of three entries:

- i
- Family designation (e.g. steering variant, headlights, etc.) in the Family column.
- Designation of the feature (e.g. 601 BIXENON) in the Value column.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

 To identify a feature as present, click in the corresponding cell of the Value column and select the feature in a drop-down menu (A). If you select the blank entry, the feature will not be assigned.

If you change a feature, this will initially be indicated in the Installed column by the Ø icon (B).

Note: Data is not written to the control unit in this step.

If you want to make further changes to your selection, click again in the corresponding field.

Overview	**	Extended sentifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations	
Value group	,		Family		Value	Changed	Γ
M numbers	bers DRIVE TYPES		338 - REAR DF	338 - REAR DRIVE			
		CRUISE CONTR	ROL SYSTEM	456 - ADAPTIV			
		MAIN HEADLIGH	HTS	603 - BI-XENO	N + DYNAMIC CORN		
		STEERING VAR	NANTS	099 - RIGHT-H	AND DRIVE VERSIO	N - T 0	
		START/STOP		-			
		STOTEMINECO		098 - LEFT-HA	ND DRIVE VERSION		
				*			

8. Press the <F12> button.

<F11> brings you back to the previous screen.

VG2-14.300.14.07.21 US 1 9. Coding starts. Control unit coding Coding in progress. Please wait A progress bar at the bottom of ** the screen informs you about the status of coding. The elapsed time Control unit Status 0 teway (A2) is displayed on the right of the status bar where appropriate. The elapsed time is displayed on the right of the status bar where appropriate. 00:00:03 C 63



Next steps

11. After coding, you can change to a different function group using the menu bar or press the <F12> button to return to the list of coding modes.

8.6.5 Automatic coding

Unlike manual coding, you cannot set any features or coding values yourself in the coding mode Automatic coding. The data to be coded is determined automatically. Coding then starts automatically. All the necessary vehicle data (product code, country code, model year) is read out of the vehicle beforehand.

Different behavior of the application and fallback solution:

If the data required for automatic coding (vehicle order, chassis number) cannot be read out of the vehicle, you will be offered an alternative fallback solution in which you must enter the necessary data manually. This is similar to the coding mode Manual coding (for a more detailed description, see section 8.6.4).



You must enter the following data as required:

► Chassis number

► The features required in order to determine the rule file that applies to the control unit (see Note on Manual coding)

The application provides instructions in this case.

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Note on customer-specific coding values:

Customer-specific coding values - e.g. the requested activation of the "acoustic speed warning" - are not overwritten in this coding mode.



Note on coding with MCR and ZDC:

Before automatic coding starts, a logic system decides whether coding should be performed using MCR (MCR = machine-readable coding rules) or ZDC (ZDC = target data containers - from the German "Ziel-Daten-Container".

- Display the list of coding modes:
 ► See section 8.6.2.
- 2. Select the coding mode Automatic coding and press the <F12> button to confirm your selection.



Note on complex action sequences:



If a complex action sequence was stored for the control unit contained in the selection, this will be carried out and the operation involves the steps described in section 8.9.5.

Once this control unit has been coded, automatic coding continues as described below (see next pages).

↓ Next page

Coding step: MCR

3. Coding starts.

A progress bar in the lower section of the screen informs you about the status of coding.

The elapsed time is displayed on the right of the status bar where appropriate.

The status of coding is indicated by icons:

C: The control unit is currently being coded

C: The control unit was coded successfully

: An error occurred during coding

Panamera	Simulation	n mode		Program versio	n VG2-14.3	00.14.07.21		70 0	US 🔻		
Control unit	coding										
🛛 Coding in	ı progress. F	Please wait			V						
Overvieu	. *	Extended dentifications	Fault memor	y Actual va	ilues nale	Drive links checks	a	Coding Japtations			
		Control unit				Status					
Airbag (A2.1)					Ø					
Gateway (A2)				0						
DME V8 nat	rally aspira	ted engine EU5			0						
PDK (Porsch	e Double C	lutch)									
High-voltage	battery										
High-voltage	power elect	tronics									
Steering whe	el electronic	c s									
Stopwatch		-							-		
Progress			riting codes: co <mark>n</mark>	trol unit 3 of 18		[D:01:02]		
ын () ()	Matimat	ar Casalogae nl	2	Datata -dz. m		Faitmarg	Lope	~	5.00C		

4. If a read error occurs, there is a possibility that customer-specific codes may be overwritten when the process continues.

In this case, a warning is displayed (A) and you have the following options (B):

- Press <F11> to cancel automatic coding for all control units in order to save the customer-specific codes first if necessary.
- Press <F12> to continue the process.



After coding: MCR

_		Panamera Sir	nulation mode	P	rogram version VG2	-14.300.14.07.21	₹00	US V	
5.	If control unit coding was	Control unit coding							
	displayed in the Status column	Coding was not o	completed successful	ly. Press [F12] to end	ıd.			Ø	
	or each element.	Overview	e Extended	Fault memory	Actual values input signals	Drive links checks	Coding adaptations	55	
			Cantrol unit		Status				
	However, if an error occurred	Airbag (A2.1)			0 0 0 0 0				
	during control unit coding, this will	Gateway (A2)							
	be indicated by the $igcup$ icon in the	DME V8 naturally	r aspirated engine EU	5					
	Status column next to the control	PDK (Porsche Do	ouble Clutch)						
	unit for which coding was	High-voltage batt	ery						
	unsuccessful.	High-voltage pow	er electronics			\$			
		Steering wheel el	ectronics			8			
	Press the <f12> button.</f12>	Stopwatch				0			
		PCM				8		-	
		En: Helt	Multimener Disks laggest		Delete Adds.msn. Ex	neule FailtIndin; .		5. SS	

After coding: MCR

6. After coding, you can change to a different function group using the menu bar or press the <F12> button to return to the list of coding modes.



8.6.6 Restoring factory settings/codes



What does this do?

If you have selected this coding mode, the customer-specific codes for the control units contained in the selection will be reset to a default value.

The coding mode Restore factory settings/codes (or new-part coding) is essentially used in the same way as the coding mode Automatic coding (exception: See Note on operation).

Different data is written to the control unit in both modes.

For further information on content and operation:

► See section 8.6.5.

Note on operation:

Possible differences in the operation of the coding mode Automatic coding:



The process can be different for both coding modes and the coding mode Restore factory settings/codes (or new-part coding) can involve a number of steps - so-called linked sequences.

The individual steps are usually performed automatically and do not require any user input. If an error occurs, however, you may have to answer a decision question by pressing a button. (Possible responses: Cancel or Next).

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8.7 Maintenance/repairs

This section describes how to perform processes that are required for commissioning certain control units and functions.

You can call up control unit-specific processes in the Maintenance/repairs function group. Control unit-specific processes are processes that cannot be implemented generically from the ODX data. They are guided processes that are tailored for a specific control unit.

The actual processes are only described as examples in this section since the diagnostic application guides you through each process by displaying information in the form of message texts.

8.7.1 Calling up the function group

- Display the list of installed control units and select the desired control units:
 ► See section 8.1.
- 2. Select the Maintenance/repairs function group.
- 3. A list of the processes that are available for the selected control units is displayed.

If there is no specific process for the selected control unit, no processes will be displayed in the list.



8.7.2 Example: Control unit replacement

In the Maintenance/repairs function group, the Control unit replacement function is available for all control units. When you select this function, all relevant codes and information for control unit replacement are first read and stored in a file. The data stored in this file can then be written again to a new control unit. This allows you to write the coding values at a later time.



Note on replacement:

The control unit to be replaced must be replaced by a control unit of the same ECU variant since coding values that are vehicle-specific may have to be copied in some cases.

Control u	init replacen	nent	
Button	Label	lcon	Description
F8	Read	Ø	Pressing the <f8> button reads the relevant data for the control unit to be replaced.</f8>
F8	Write	Ø	Pressing the <f8> button writes the previously read and temporarily stored data for the old control unit into the new control unit.</f8>

8.7.2.1 Action-specific buttons for this function group

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8.7.2.2

Calling up the Control unit replacement function



The gateway control unit was used for the following steps and sub-sections.

- Select the Maintenance/repairs function group.
 ► See section 8.7.1
- Select the Control unit replacement function (A) for the relevant control unit in the Function column and press the <F12> button (B).



8.7.2.3 Control unit replacement: Read data

- Call up the Control unit replacement function.
 ► See section 8.7.2.2
- Select the Read data mode (A) and press the <F12> button (B).



 The Control unit replacement working screen is displayed. Press the <F8> button (A) to start reading out data.

> <F11> brings you back to the list of control unit replacement modes (B).

-Please read the following note.



Note on canceling the read-out process:

If you have started the read-out process and want to cancel it, press the <F8> button (is icon) after the process has started.



As a result, the data for this control unit is not saved temporarily to a file for a subsequent or later write process.

If you want to write relevant data for control unit replacement to the new control unit at a later stage, you must execute the read operation again.

4. The relevant data for the control unit is read out. A progress bar indicates the status of the read-out process (A).

If the data read-out process was successful, this is indicated by the \Im icon in the work area (B).

Once the read-out process is complete, press the <F12> button (C). This brings you back to the list of modes for the Control unit replacement function.

Control unit repla	ocement ontinue with [F12]. Ca	ncel with [F11]				
Overview	« Tauk memory	Actual values input signals	Drive links checks	Coding adaptations	Maintenance repairs	
Control L	unit	Phase			Stationer	
Gateway (A2)	Read out	data			S.	
	Check ch	assis number		WP22297ZA	1.040037	
			Œ	9		
		®	Œ		۵.	
Progress		8	(Ir

Behavior of the application in the event of cancellation or errors during the write process



If you have cancelled the read-out process or if an error occurred, the $\hfill O$ icon is displayed in the Status column.

Then press the <F11> button to go to the list of modes for the ${\tt Control}$ unit replacement function.

8.7.2.4 Control unit replacement: Write data

i

You must have read out the relevant data for the control unit in question:

► See section 8.7.2.3

Precondition:

Note on writing data:

Only basic data is written if there is no valid file containing control unit data or if the chassis numbers that were read out do not match. VIN-B and the production number are then assigned default values.



If the control unit to be replaced is a VIN master (i.e. a control unit from which the VIN is read out), a VIN check is also performed. This results in the following write behavior:

- The vehicle identification numbers match: Only the basic data is written to the control unit.
- The vehicle identification numbers do **not** match: It is assumed in this case that the control unit in question is a new control unit that does not yet have a VIN. The complete coding is therefore written.
- Call up the Control unit replacement function.
 ► See section 8.7.2.2
- Select the Write data mode (A) and press the <F12> button (B).



 The Control unit replacement working screen is displayed. Press the <F8> button to start writing data.

Press <F1> to display further information.

<F11> brings you back to the list of control unit replacement modes.

Please read the following note.



Warning on cancellation of the write process:

If you have started the write process and want to cancel it, press the $\langle F8 \rangle$ button (icon) after the write process has started.

Cancellation of the write operation means that the data records stored using the Read data mode will not be completely written.

This will result in an incompletely flashed control unit. This control unit must be completely flashed in order to continue using it.

To flash the control unit completely, ...

- ... repeat the process or
- ... program the control unit manually (Extended identifications or Codings/adaptations function group).
- 4. The relevant data for the control unit is written. A progress bar indicates the status of the write process (A).

If the data was written successfully, this is indicated by the ♥ icon in the work area (B)

Press the <F12> button (C) as soon as the write process is complete. This brings you back to the list of modes for the Control unit replacement function.





Behavior of the application in the event of cancellation or errors during the write process

The following write errors can occur:

• Non-writeable codings due to read errors



- The write process was stopped prematurely by pressing <F8> (Stop)
- Only basic data was written

In these cases, the 0 icon is displayed in the Status column. Then press the <F11> button (B) to go to the list of modes for the <code>Control unit replacement function</code>.

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8.8 Programming

This section describes how to program a control unit. It first describes how to select and activate a programming mode. Depending on which programming mode you select, the control unit is then programmed either automatically or manually. The procedure for programming a control unit is therefore similar to the procedure for coding a control unit in the <u>Codings/adaptations</u> function group (see section 8.6).

Important note:

The ECU variant can be changed by flashing and coding. As a result, a different control unit name than the one displayed previously may be displayed after flashing and coding.



Example:

Let's suppose you program the airbag control unit in the basic variant "Airbag" and when you program this control unit, it becomes control unit variant "Airbag_A2". As a result, the control unit will be managed as Airbag_A2 following flashing and no longer as Airbag. The name is changed without carrying out a new control unit search.

8.8.1 Action-specific buttons for this function group

Entering	vehicle data		
Button	Label	lcon	Description
F8	Save	lacksquare	Pressing the <f8> button saves assigned equipment features temporarily.</f8>
Program	ning		
Button	Label	lcon	Description
F8	Save	e a constantino de la constant	Pressing the <f8> button programs a selected control unit using a flash job.</f8>



8.8.2 Displaying the programming modes



Note on availability:

If a data record containing flash rules was not stored for the selected control unit, not all programming modes will be available for selection.

 Display the list of installed control units and select a control unit: See section 8.1.

The PDCC control unit was selected in the following example.

~	Coloct the Drogromming function	Panamera			Prog	am version VG2-1	14.300.14.07.21	700	Us▼	
۷.	group on the monu bar	Control unit programming								
	group on the menu bai.	Select programm	ing. C	ontinue with [F12]						
	A list of the possible programming	Overview	**	tctual values nput signals	Drive links checks	Coding adaptations	Maintenance repairs	Programming	- 14	
	modes is displayed.	Programming mode								
		Manual program	ning						-	
		Automatic progra	mming							
						•				
									-	
			Vulme F2				Exercise Provide Frankrights The Provide Fra		*	

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8.8.3 Manual programming

If a data record containing flash rules was stored for the control unit, the option Manual programming will be available. The manual programming operation is divided into two parts:

- 1. Determination of a valid flash rule
- 2. Programming the control unit

1. Determination of a valid flash rule

What happens?

In the following steps, you must first enter certain data and then select or deselect various equipment features. This data is used to determine whether a valid flash rule exists in the data record stored for the control unit. If there is no valid flash rule, you cannot program the control unit and the programming process is aborted.

Required data:

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

i

- Product codeCountry code
- ► Model year
- ► Chassis number

Always have the necessary information ready.

Number groups and their meaning:

X: Exclusive

M: Additional equipment

Z: Tequipment

PR: Additional VW equipment (and model type Cayenne)

- Display the list of possible programming modes:
 ► See section 8.8.2.
- 2. Select the programming mode Manual programming (A) and press the <F12> button (B).



3. You must first enter the vehicle data.

To do this, click in the corresponding input field in the Value column and enter the value or select it in a drop-down menu (A).

If you want to cancel manual programming, press the <F11> button. You then return to the list of programming modes (B).


4. When you have entered all the values, confirm your entries by pressing <F12>.

If you want to cancel manual programming, press the <F11> button. You then return to the list of programming modes.

	Simulatio	n mode	Pn	ogram version VG2	-14:300.14.07.21	700	ι
^o rogramming ^o lease select	a value fr	om the list.					
Overview	**	ketual values Input signals	Drive links checks	Coding adaptations	Maintenance repairs	Programming	
Value gr	oup	Co	ding value		Value	Changed	T
		Product code		F71CA - PAN	AMERA		
		Product code		F71CA - PAN	AMERA		
		Product code		F71CA - PANJ	AMERA		

In the next screen, you must assign the relevant equipment features for the control units contained in the selection.



Depending on the availability of data and the control unit variant, the features are assigned in two screens displayed one after the other.

Proceed as follows.

Assigning equipment features that do not belong to a specific family

Note on screen content:

The possible equipment features for this control unit in the value group are displayed in the next screen. A feature is assigned directly by selecting and deselecting individual values.

A feature is made up of two entries:

- The coding number and designation in the Coding value column.
- Indication of the presence of the feature in the vehicle data in the Installed column. If a feature is set, this is indicated by the 𝒞 icon and if the feature is not set, the line will be blank.

In addition, the Changed column indicates whether the status (Installed/Not Installed) of a feature has been changed.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

5. To set a feature, click in the corresponding cell of the Installed column (A).

If you change a feature, this will initially be indicated in the Changed column by the 🖉 icon (B).

Note: Data is not yet written to the control unit in this step.

If you want to make further changes to your selection, click again in the corresponding field.



6. Press the <F12> button.

<F11> brings you back to the previous screen.

Assigning equipment features that belong to a specific family

Note on screen content:

The equipment features of the value groups are displayed in the form of a grouping/family.

The individual value groups (X, M, Z, PR numbers) are shown one under the other.

A feature is made up of three entries:

- i
- Family designation (e.g. steering variant, headlights, etc.) in the Family column.
- Designation of the feature (e.g. 601 BIXENON) in the Value column.
- Marking of the value to be coded in the Changed column. If a feature is set, this is indicated by the 𝒝 icon and if the feature is not set, the line will be blank.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

 To identify a feature as present, click in the corresponding cell of the Value column and select the feature in a drop-down menu (A). If you select the blank entry, the feature will not be assigned.

If you change a feature, this will initially be indicated in the Installed column by the \mathcal{O} icon (B).

Note: Data is not written to the control unit in this step.

If you want to make further changes to your selection, click again in the corresponding field.



8. Press the <F12> button.

<F11> brings you back to the previous screen.

Exception: No suitable rules were found.



If no valid flash rules were found based on the entered data and selected features, programming is aborted at this point. The following screen is then displayed:

9. Pressing <F11> brings you back to the list of programming modes.



2. Programming the control unit

Note on screen content:

If a valid flash rule was found, the next screen will display all control units together with their available data containers, which are needed for executing this flash rule.

It is possible that other control units will also be displayed in the work area in addition to the control units contained in the selection, i.e. the control units you selected beforehand. These control units must then also be flashed in order to ensure a consistent data status.

The programmable data containers are listed in the Session column.

When the screen is called up, the control unit software version is checked automatically. The software version of the control unit software is compared with the software version of the data container listed in the work area. The result of this check is shown in the Status column.



The following cases are distinguished during the version check:

- Not current: The control unit software is not up-to-date. The software contained in the data container is more up-to-date than the control unit software.
- Current: The software versions programmed in the control unit and in the data container are identical.
- More recent: The control unit software version is more recent than the version that was stored in the data container.

Please note:

It is not possible to flash only a selection of data containers. All data containers listed in the work area are always flashed since there may be dependencies between the software versions of different control units.



After writing

- - Pressing <F12> brings you back to the list of programming modes (B).



111 700

Status

38

Program

Porsche part number

Error while programming several control units:

of programming modes (B).

Program version VG2-14.300.14.07.21 991 Simulation mode 13. If an error occurred while gramming programming a control unit, this is rogramming has not been completed successfully. Press [F11] to cancel. indicated by the O icon in the Status column next to the 2 unsuccessfully programmed Control unit Data record control unit. 2710_73_FullAFS_Session adlight (PDLS) (Left/central adlight) nester audio amplifier (ASK) You cannot continue programming. Cancel the operation by pressing <F11>. You then return to the list

6



8.8.4 Automatic programming

The objective of automatic programming is to determine the correct flash container(s) for the specific vehicle based on the vehicle data without any further selection by the user (where possible) and to program one or more control units following confirmation by the user.

Different behavior of the application and fallback solution:

If the data required for automatic programming (vehicle order, chassis number) cannot be read out of the vehicle, you will be offered an alternative fallback solution in which you must enter the necessary data manually. This is similar to the programming mode Manual programming (for a more detailed description, see section 8.8.3).



You must enter the following data as required:

► Chassis number

► The features required in order to determine the rule file that applies to the control unit (see Note on Manual programming)

The application provides instructions in this case.

- Display the list of possible programming modes:
 ▶ See section 8.8.2.
- Select the programming mode Automatic programming (A) and press the <F12> button (B).



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Note on complex action sequences:



If a complex action sequence was stored for the control unit contained in the selection using an asi file, this will be carried out and the operation involves the steps described in section 8.9.5.

Once this control unit has been programmed, automatic programming continues as described below (see next pages).

3. All control units for this flash rule, including their flash sessions, are displayed.

> Press the <F8> button to start programming.

Pressing <F11> brings you back to the list of programming modes.



Two progress bars show the 4. current programming status:

> The top progress bar shows the progress while executing a flash session (A).

> The bottom progress bar shows the overall progress of the programming operation (B).

991 Simulation	node			Pro	gram versio	n VG2-1	4.300.14.07.21	00 7 0 0	US
Programming Programming rur	nning								
Overview	**	input signa	es la	Drive links.	Codi adapte	ng tions	Maintenance repairs	Programming	8
Cont	rol unit			Data record			Target status	Status	
Headlight (PDLS neadlight)) (Left/c	entral	2710_73	_FullAFS_Sessi	on	9916183	2117	O	-
Burmester audio	amplifie	er (ASK)				9916455	5241		
				A		ß			
				<u> </u>	-	U.			
Overall			<i>—</i>	_			100	%: 00:00	:07

Aft	er writing	
5.	If programming was successful, the ♥ icon (A) is displayed behind each control unit in the Status column. Pressing <f12> brings you back to the list of programming modes (B).</f12>	Normality Dispositic application Vergenmine Vergenmine Maintenance Vision Programming Programming has been completed successfully. Commune with (1-12). Vision Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision Vision Programming has been completed successfully. Commune with (1-12). Vision Programming has been completed successfully. Commune with (1-12). Vision
Er	ror during programming	
6.	If an error occurred while programming a control unit, this is indicated by the ① icon (A) in the Status column next to the unsuccessfully programmed control unit. You cannot continue programming. Cancel the operation by pressing <f11>. You then return to the list of programming modes (B).</f11>	Program version VG2-14.500.14.07.21 Image: Control of the second

8.9 General vehicle functions (F7)

This section describes how to call up the general vehicle functions of the diagnostic application. It also describes how to use these functions.

The diagnostic application guides you through the various functions and provides tips for working through the steps to be carried out.

8.9.1 Calling up the general vehicle functions



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



8.9.2 Vehicle analysis log (VAL)

This section describes how to create, print and if necessary, send a vehicle analysis log. Two different types of VAL can be created:

- Serv. VAL: Customer service vehicle analysis log
- OBD VAL

8.9.2.1	Action-specific buttons for this function group
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Button	Label	lcon	Description
F8	Transfer		Pressing the <f8> button copies the selected VAL to a USB data storage medium.</f8>
F10	Print	÷	Pressing the <f10> button calls up the application that you defined for opening XML files. This can be a web browser, for example. If the application used for displaying the files has a print dialog, you can print the VAL using this application.</f10>

8.9.2.2 Icons

Status displays	when reading data out of the control units
lcon	Description
M	This icon appears in the Status column and indicates that the corresponding control unit is currently being processed.
8	This icon appears in the Status column and indicates that the corresponding control unit has been processed.
()	This icon appears in the Status column and indicates that an error occurred while processing this control unit.

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8.9.2.3 Calling up and starting the Vehicle analysis log function

- 1. Display the list of installed control units and press the <F7> button to call up the general vehicle functions: ► See section 8.9.1.
- Program version VG2-14.300.14.07.21 700 US▼ anamera Simulation mode 2. Select the entry Vehicle analysis Model-series-specific checks and campaigns log (A) and press the <F12> button Please select a check. Continue with [F12], back with [F11]. (B) to confirm your selection. Overview Pressing <F11> brings you back to Function the control unit overview or control asurement of closed-circuit current intenance of vehicle data unit list (B). Vehicle analysis log (VAL) Campaign ${}^{\textcircled{}}$ Vehicle handover Read all fault memories and erase if required Set transport protection Clear OBD fault memory (not PDK) B ligh-voltage system Ĥ C R Program version VG2-14.300.14.07.21 Panamera Simulation mode 700 UST The possible VAL types that can 3. Selection of the vehicle analysis log be created are displayed in a list: Please select vehicle analysis log. Press [F8] to execute, [F11] to go back. Overview Serv. VAL OBD VAL Vehicle analysis log

erv. VAL

OBD VAL

C

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Spece.



8.9.2.4 VAL: Creating a Service VAL



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

► Chassis number.

Always have the required chassis number ready.

Display the list of installed control units and press the <F7> button to call up the general vehicle functions. Then select the entry Vehicle analysis log:
 ▶ See section 8.9.2.3.



3. Read the instructions in the information area and perform any actions that are required.



5. The Service VAL is created. A progress bar (A) at the bottom of the work area shows the current status of the process.

Press <F8> to cancel the process (B).

To return to the list of VAL types, press the <F11> button.

Panamera Simulati	on mode Program v	version VG2-14.	300.14.07.21	700 L
Selection of the vehicle	analysis log			
Creating vehicle analy	is log. Please wait			
Overview	Extended Fault memory	Actual values input signals	Drive links checks	Coding adaptations
Function	Phase		Status	
Serv. VAL (engine off)	Switch on ignition.		\$	
	Extract data		×	-
	Right headlight		×	
	Airbag		\$	
	Gateway			
	DME (DFI)		ø	
	Transmist		Ξ	
	Sector lever B		ø	_
	Ended: Adaptive cruise co	intro (ACC3_A3)		i
		9	authota; tags	1641.b No.

Note on display:

• Control units to which communication is currently being established and whose data is being read are indicated by the Ξ icon in the Status column.



- Control units for which the read-out process was completed successfully are indicated by the $rac{1}{2}$ icon in the <code>Status</code> column.
- Control units to which communication could not be established or for which a communication error occurred are indicated by the 0 icon in the <code>Status</code> column.

Entering or checking the chassis number



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

Option 1: Chassis number is correct

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

election of the vehi	cle analysis log s number and correct if necessary. Press	IF12I to continue.		
Overview	Extended Fault memory	Actual values input signals	Drive links checks	Coding adaptations
Function	Phase		Status	
	Passenger-side seat memory		0	
	Driver's door		0	
	Passenger's door		0	
	Rear left door		0	
	Rear right door		0	
	Rearlid		\$	
	Trailer hitch		0	
	AUXILIARY HEATER		ø	
	Check chassis number		WP0ZZZ97ZCL0200	

Option 2: Correcting or entering the chassis number

7. If the chassis number that was entered is not correct or if the chassis number is missing, it must be corrected or entered manually.

To do this, click in the field next to the entry Check chassis number.

Correct the entry or enter a chassis number (A).

Note: After you have entered the chassis number, a format check is performed during which the letters in the chassis number are automatically changed to uppercase letters.

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

Panamera Simula	ation mode	Program	n version	VG2-14.	300.14.07.21	TOO US
Selection of the vehic	cle analysis log					4
Please check chassis	s number and correct i	fnecessary. Press (F1	2 to contin	ue.		-
Overview	Extended identifications	Fault memory	Actual v input sig	alues gnais	Drive links checks	Coding adaptations
Function		Phase			Status	
	Passenger-side sea	it memory			0	
	Driver's door				0	
	Passenger's door				0	
	Rear left door				0	
	Rear right door				0	
	Rear lid		_		\$	
	Trailer hitch		Ø		0	
	AUXILIARY HEATE	R			💊 (B)	
	Check chassis num	ber			WP0ZZZ97ZCL0200	
			Add, menu	500 C	Failt1rdin; Logs	

Next steps

8. You are then prompted again to confirm that the chassis number is correct (A).

You have the following options (B):

- Press <F11> to cancel the process. You return to the input screen and can correct the chassis number again.
- Press <F12> to confirm that the displayed chassis number is correct.

election of the vehicl) is the chassis num	e analysis log ber correct? Confirm with [F12]. Reti	urn to input with (F11).		
Overview	Extended Fault mem	ory Actual values	Drive links checks	Coding adaptation
Function	Phase		Status	
	Passenger-side seat memory		0	
	Driver's door		0	
	Passenger's door		0	
	Rear left door		0	
	Rear right door		0	
	Rear lid		\$	
	Trailer hitch	A	0	
	AUXILIARY HEATER	Ŭ N	(B) ⊘	
	Check chassis number		WP01239728 12001	1

- Once you have confirmed that the chassis number is correct, you are prompted to select a log type. Select the type of log you want to create from the displayed list:
 - Before repair
 - During repair
 - After repair
 - Miscellaneous

Confirm your selection by pressing <F12>.



10. The VAL is written as soon as you confirm. Another selection screen then appears.

You have the following options:

- Press <F11> to return to the list of VAL types.
- Press <F12> to go to General Report Management, where you can view and print the created VAL.

Panamera Simi	lation mode	Progra	am version	VG2-14.	300.14.07.21	¥⊜o Us▼
Selection of the vel Creation of the VA	nicle analysis log . is complete. [F11]	Back to VAL selection. [F	12] Report	managen	nent	5
Overview	< Extende identification	f Fault memory	Actual input s	values lignals	Drive links checks	Coding adaptations
Function		Phase			Status	
	Passenger-side	e seat memory			0	
	Driver's door				0	
	Passenger's do	opr			0	
	Rear left door				0	
	Rear right door				0	
	Rear lid				ø	
	Trailer hitch				0	
	AUXILIARY HE	ATER			\$	
	Check chassis	number		1	WP0ZZZ972C 02001	-
En: Halo A			Add men	9	Fact fielding Logs	Back Neat



 When you press the <F12> button, the General Report Management screen appears in which the log type Vehicle analysis log is preselected.

All previously created VALs are listed in the table shown in the work area.

The most recently created Send VAL is shown at the top, while the most recently created Service VAL is listed below this.

Overview	-	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptation
Log type	Vehic	le analysis 🔻			Save	Delete
1					Anteline	data
		Log na	me		Creation	dare
FAP WP0ZZZ97	ZCL020	Log na 011 20140807 16	me 3335_44.0.2.zip	0	8/7/14 4:33:35 PM	date
AP_WP0ZZZ97	ZCL020	Log na 011_20140807_16	me 3335 44.0.2.zip	····	8/7/14 4:33:35 PM	date
AP_WP0ZZZ97	7ZCL020	Log na 011_20140807_16	me 9935_14.0.2.zip	0 (111111 1 <mark>(1111111</mark>	8/7/14 4:33:35 PM	uate
FAP_WP0ZZZ97	ZCL020	Log na 011_20140807_16	me 3335_44.0.2.zip		Creation 8/7/14 4:33:35 PM	date
FAP_WP0ZZZ97	7ZCL020	Log nai	me 3335_44.0.2.zip	••••••••••••••••••••••••••••••••••••••	8/7/14 4:33:35 PM	
AP_WP0ZZZ97	7ZCL020	Log na	me 33335 44.0.2.zip	9	8/7/14 4:33:35 PM	
FAP_WP0ZZZ97	7ZCL020	Log na	me 3335 14.0.2.zip	9 (111111) 	8/7/14 4:33:35 PM	
FAP_WP0ZZZ97	7ZCL020	Log na	me 33395 44.0.2.zip		8/7/14 4:33:35 PM	
PAP_WP02Z297	7ZCL020	Log na	me 9395 44.0.2.zip		8/7/14 4:33:35 PM	date
AP_WP02Z297	ZCL020	Log nai	me 3335 44.0.2.zip		8/7/14 4:33:35 PM	
FAP_WP0ZZ297	7ZCL020	Log nai	me 93935 - 44.0.2.zip		8/7/14 4:33:35 PM	
AP_WP0ZZ297	7ZCL020	Log nai	me 3335 44.0.2.zip		6/7/14 4:33:35 PM	

Further information:

In addition to calling up the list of vehicle analysis logs after you have created the log, you can also call up the list from one of the function groups by pressing the <F10> button. For a more detailed description of calling up the list in this way:

► See section 8.9.2.6

8.9.2.5 VAL: Creating an OBD VAL

Display the list of installed control units and press the <F7> button to call up the general vehicle functions. Then select the entry Vehicle analysis log:
 ▶See section 8.9.2.3.



- 3. Read the instructions in the information area and perform any actions that are required.
- 4. Then press the <F12> button.





5. The OBD VAL is created. A progress bar at the bottom of the work area shows the current status of the process.

reating OBD vehicle	analysis log. Please wait		_
Overview			Coding adaptations
Function	Phase	Status	
BD VAL (engine an)	Start engine	\$	
	Extract data.	×	
	DME (DFI)	\$	
	Transmission control	\$	
	High-voltage battery	\$	
	High-voltage power electronics	X	
	High-voltage charger		
	/		

Note on display:

- Control units to which communication is currently being established and whose data is being read are indicated by the Ξ icon in the <code>Status</code> column.
- Control units for which the read-out process was completed successfully are indicated by the $rac{1}{2}$ icon in the <code>Status</code> column.
- Control units to which communication could not be established or for which a communication error occurred are indicated by the ① icon in the <code>Status column</code>.
- 6. When you have been prompted to enter all necessary data, you must check or enter the vehicle data in the same way as for the Service VAL. For more information on this:
 ▶ See section 8.9.2.4, steps 6 to 11, page 160 162.



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8.9.2.6 VAL: Displaying the list of vehicle analysis logs

Even if you do not switch directly to General Report Management after creating the vehicle analysis log, you can still display the list of VALs.



Both Service VALs and OBD VALs are displayed in the list of saved VALs. The individual VAL types can be identified by the prefix:

- The Service VAL has the prefix FAP.
- The OBD VAL has the prefix OBD_FAP.

1. Press the <F10> button.

If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.



 A list of all vehicle analysis logs is displayed (for information on the naming convention for VALs, see Note above).



8.9.2.7 VAL: Printing



The selected VAL is not printed by the diagnostic application but by the application used to display the vehicle analysis logs. If this application has a print dialog and if a correctly configured printer is connected, you can print the VAL using this application.

For information on how to configure the file link and set up a printer, contact your system administrator if necessary.

- Display the list of vehicle analysis logs:
 ▶ See section 8.9.2.6
- Select the VAL you want to print (A) and press the <F10> button (B).

List of logs:					
Select log, ga ta	print preview with [F10], ga b	o transfer with [F8]			
Overview	ee Extended identifications	Fault memory	Actual values input signals	Drive links checks	Codin adaptati
Log type	Vehicle analysis 👻			Save	Delete
	Log nam	1e		Creation	date
OBD_FAP_WP0	ZZZ97ZCL040013_2014080	8_105728_14.0.2.zip		8/8/14 10:57:28 AM	
OBD_FAP_WP0	ZZZ97ZAL040037_2014060	8 105037 14.0.2.zin		8/9/14 10-50-97 AM	
				orarita totadiar Ani	
FAP_WP0ZZZ9	7ZCL020011_20140608_103	353_14.0.2		8/8/14 10:33:55 AM	······
FAP_WP0ZZZ93 FAP_WP0ZZZ93	7ZCL020011_20140608_103 7ZCL040013_20140608_102	353_14.0.2 956_14.0.2.zip	<u>م</u>	8/8/14 10:33:55 AM 8/8/14 10:29:57 AM	
FAP_WP0ZZZ91 FAP_WP0ZZZ91 FAP_WP0ZZZ91	7ZCL020011_20140808_103 7ZCL040013_20140808_102 7ZAL040037_20140808_102	353_14.0.2. 956_14.0.2.zip 548_14.0.2.zip	Ð	8/8/14 10:33:55 AM 8/8/14 10:29:57 AM 8/8/14 10:25:49 AM	
FAP_WP0ZZZ91 FAP_WP0ZZZ91 FAP_WP0ZZZ91 FAP_WP0ZZZ91	7ZCL020011_20140606_103 7ZCL040013_20140606_102 7ZALD40037 20140806 102 7ZCL020011_20140806_102	353_14.0.2 956_14.0.2.zip 548_14.0.2.zip 136_14.0.2.zip	9 9	8/8/14 10:33:55 AM 8/8/14 10:29:57 AM 8/8/14 10:25:49 AM 8/8/14 10:21:37 AM	*
FAP_WP0ZZZ9 FAP_WP0ZZZ9 FAP_WP0ZZZ9 FAP_WP0ZZZ9 FAP_WP0ZZZ9	7ZCL020011_20140608_103 7ZCL040013_20140608_102 7ZALD40037_20140808_102 7ZCL020011_20140608_102 7ZCL020011_20140608_101	353_14.0.2.zip 956_14.0.2.zip 548_14.0.2.zip 136_14.0.2.zip 606_14.0.2.zip		8/8/14 10:33:55 AM 8/8/14 10:29:57 AM 8/8/14 10:25:49 AM 8/8/14 10:21:37 AM 8/8/14 10:21:37 AM	
FAP_WP0ZZZ9: FAP_WP0ZZZ9: FAP_WP0ZZZ9: FAP_WP0ZZZ9: FAP_WP0ZZZ9: FAP_WP0ZZZ9:	7ZCL020011_20140608_103 7ZCL040013_20140608_102 7ZAL040037_20140308_102 7ZCL020011_20140608_102 7ZCL040013_20140608_101 7ZAL040037_20140807_170	353_14.0.2.2ip 956_14.0.2.zip 548_14.0.2.zip 136_14.0.2.zip 606_14.0.2.zip 638_14.0.2.zip	®	8/8/14 10:33:55 AM 8/8/14 10:29:57 AM 8/8/14 10:25:49 AM 8/8/14 10:21:37 AM 8/8/14 10:16:07 AM 8/8/14 10:16:07 AM	

3. This starts the application used to display VALs.

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8.9.2.8 VAL: Example

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Note:

The VAL in this example was opened in a browser.



8.9.2.9 VAL: Copying to a USB data storage medium

You can copy a vehicle analysis log to a USB data storage medium. A special Transfer button is displayed for this purpose in the General Report Management function.

- Display the list of vehicle analysis logs:
 ▶ See section 8.9.2.6
- Select the log you want to transfer (A) and press the <F8> button (B).

2.2	princ premein wich (* 10), go t	o clarister wich [Po]			
Overview	Extended identifications				
Log type	Vehicle analysis 👻			Save	Delete
	Log nam	10		Creatio	n date
OBD FAP WP0	ZZZ97ZCL040013_2014080	8 1 28 14.0.2.zi	P	8/8/14 10:57:28 Af	И
OBD_FAP_WP0	ZZZ97ZAL040037_2014080	8_105037_149.2.zi	P	8/6/14 10:50:37 Af	vi
FAP_WP0ZZZ97	ZCL020011_20140808_103	353_14.0.2.zip	A	9/6/14 10:33:55 Af	ท .
FAP_WP0ZZZ97	ZCL040013_20140808_102	966_14.0.2.zip	Ŭ	8/6/14 10:29:57 Af	vi
FAP_WPDZZZ97	ZAL040037_20140608_102	54B_14.0.2.zip		8/6/14 10:25:49 AM	и
FAP_WP0ZZZ97	ZCL020011_20140808_102	136_14.0.2 zip		8/8/14 10:21:37 Al	vi
FAP_WP0ZZZ97	ZCL040013_20140808_101	606_14.0.2 z	<	8/8/14 10:16:07 Af	ท

3. Copy the vehicle analysis log to a USB data storage medium using the File management function of the basic software.

8.9.2.10 VAL: Deleting

- Display the list of vehicle analysis logs:
 ▶ See section 8.9.2.6
- Select the log you want to delete

 (A) and press the Delete button
 (B).



- 3. You must confirm deletion of the VAL. You have the following options:
 - Press <F11> to cancel the process and return to the list of VALs.
 - Press <F12> to confirm deletion of the VAL.

Panamera	Simulatio	n mode	Program	n version	VG2-14	.300.14.07.21	700	US 🔻
Delete select	ted log?							
() [F12] Dele	ete the sele	ected log, [F11] Canc	el process					Ø
Overview	"	Extended identifications	Fault memory	Actual v input si	alues gnals	Drive links checks	s Coding adaptation	35 15
Log type	Veh	nicle analysis 👻				Save	Delete	
		Log nar	me			Crea	stion date	
OBD_FAP_V	VP0ZZZ972	ZCL040013_2014080	08_105728_14.0.2.zij	,		8/8/14 10:57:28	AM	
OBD_FAP_V	VP0ZZZ972	ZAL040037_2014080	08_105037_14.0.2.zip	1		8/8/14 10:50:37	AM	
FAP_WP0Z2	ZZ97ZCL02	0011_20140808_103	3353_14.0.2.zip			8/8/14 10:33:55	AM	
FAP_WP0Z2	Z97ZCL04	0013_20140808_10	2956_14.0.2.zip			8/8/14 10:29:57	AM	
FAP_WP0ZZ	ZZ97ZALD4	0037_20140808_102	2548_14.0.2.zip			8/8/14 10:25:49	AM	
FAP_WP0Z2	ZZ97ZCL02	0011_20140808_10	2136_14.0.2.zip			8/8/14 10:21:37	AM	
FAP_WP0Z2	Z97ZCL04	0013_20140608_10	1606_14.0.2.zip			8/8/14 10:16:07	AM	
FAP WP0ZZ	ZZ97ZALD4	0037 20140807 170	1638 14.0.2.zip			8/7/14 5:06:39 F		•
							- ×	Š.

8.9.3 Maintenance of vehicle data

The vehicle data is maintained in several steps. In a first step, you must check the mandatory data that was read from the vehicle and enter or change it as required. You must then assign various equipment features in a further step. If you have changed at least one data entry/feature, you can then write the assigned data to the control unit.

Maintenance of vehicle data essentially involves the successive assignment of the following values:

- 1.) Mandatory data
- 2.) Colors and materials
- 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 screens:

Depending on the availability of data (control file, for an explanation, see Note on functionality) or vehicle model (or control unit), some steps can be omitted.



For example:

- The assignment of PR numbers is only necessary or possible for the model type Cayenne.
- M numbers and PR numbers must not be assigned to one model at the same time.

Note of The list

Note on functionality:

The list of individual features is created by comparing the control unit data that was read with a control file. The control file assigns a unique number to the features.



Unknown features:

If no number is stored for a feature that was read out of the control unit, this is



identified as an unknown feature.

If this unknown feature is deselected and the vehicle data is then written to the control unit, this feature will no longer be displayed when the vehicle data is read again.

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

Number groups and their meaning:

X: Exclusive

M: Additional equipment

Z: Tequipment

PR: Additional VW equipment (and model type Cayenne)



After sun	nmarizing the	e assigned	equipment features
Button	Label	lcon	Description
F8	Write	lacksquare	Pressing the <f8> button writes the vehicle data to the control unit.</f8>
After writ	ing the assig	gned equip	ment features
Button	Label	lcon	Description
F8	Transfer		Pressing the <f8> button copies the selected log to a USB data storage medium.</f8>
Decision	question		
Button	Label	lcon	Description
F11	No	\mathfrak{X}	Pressing the <f11> button cancels an action that requires confirmation. The <f11> button shown here is only displayed in combination with the form of the <f12> button shown in the next line.</f12></f11></f11>
F12	Yes	\checkmark	Pressing the <f12> button confirms an action that requires confirmation. The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>

8.9.3.1 Action-specific buttons for this function group

8.9.3.2 Tequipment

For vehicles as of model line G1, you can carry out upgrade actions using an activation code. For example, you can purchase a Power Kit and program this in the vehicle using the diagnostic application.

What has to be done and which prerequisites apply?



A specific activation code must first be requested from Porsche AG via the PPN for the feature to be upgraded.

Then have the activation code you received for the Tequipment upgrade on the vehicle ready. This must be entered in the "Maintenance of vehicle data" function in the diagnostic application (see next sub-section).

8.9.3.3 Vehicle data

Display the list of installed control units and press the <F7> button to call up the general vehicle functions:

► See section 8.9.1.

2. Select the entry Maintenance of vehicle data (A) in the list of general vehicle functions and press the <F12> button (B) to confirm your selection.

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

Panamera Sin	ulation mode		Progra	m version V	G2-14.30	0.14.07.21	70 0	∪s
Model-series-spe	cific checks and c	ampaigns						
Please select a cl	heck. Continue wi	th [F12], bao	ck with [F11].					
Overview	< External E	nded cations	Fault memory	Actual va input sign	lues nals	Drive links checks	Codin adaptati	g iona
			Function					
Measurement of c	losed-circuit curre	ent						٦.
Maintenance of ve	shicle data							
Vehicle analysis k	og (VAL)							
Campaign			•	A				-
Vehicle handover				0				Т
Read all fault men	nories and erase i	f required						
Set transport prote	ection							
Clear OBD fault m	emory (not PDK)					െ		
diah uahaan sust								
ngir tanugu ayan			Color		S. and Jac			_
allo o	Automater Data lagge		- C				- 00	Ne of

3. If the vehicle data is inconsistent, you will be prompted to check and change the details on the following pages (A).

> Read the message and acknowledge it by pressing <F12> (B).



Mandatory data: Vehicle description

Note on screen content:

The mandatory data is first read out of the gateway and engine control units, compared and then displayed in the next screen. The following data is displayed:

- ► Order type
- ► Vehicle identification number



- Transmission type
- ► Country code
- ► Model year
- ► Engine number
- ► Engine type
- ► Product code
- ► Transmission serial number
- ► Installation specification

Note: Changeability



If the data in the two control units (gateway control unit and engine control unit) is inconsistent, this is indicated by the icon in the Changed column for the corresponding data entry. You can change this data, but you do not have to. When the data is finally written to the control unit, it is corrected as required, thereby ensuring consistency of the data.

4. The vehicle data is read out of the vehicle and displayed. Inconsistent data is indicated by the licon in the Changed column.



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00 - FEDERAL REPUBLIC OF GERMANY . 5. You can change the data ance of vehicle data CD2 - USA manually. To do this, click in the Please select a value from the list C05 - FRANCE corresponding field in the Value Overview CD5 - ALGERIA, MOROCCO, TUNISIA, NEW CAL column and enter the relevant C07 - ITALY data. Value group Coding value ehicle description Order type CDB - JAPAN (LHD) Vehicle identification number C09 - SWEDEN/ICELAND Transmission type Depending on the type and default C1D - SWITZERLAND setting, the change can also be Model year B - 2011 made by selecting data from a Engine number 00000000 drop-down menu (see illustration). Engine type MA1 Product code F72CA - PANAMERA S -Ea: -

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<u>6</u>

SS

 When you change an entry, this is indicated by the *icon* next to the changed entry in the Changed column (A).

Changed and temporarily saved data will be indicated by the icon (only if you jump back to this selection dialog from a later step). Inconsistent data is also indicated by this icon since it will be changed when the data is finally written (A).

Press the <F12> button (B).

Pressing <F11> brings you back to the list of general vehicle functions.

	Panamera Simulati	ion mode	Progra	m version VG2-14.	300.14.07.21	700	US 7
e B	Maintenance of vehicle The input may be max	e data . 3 characters long.					Ţ
	Overview	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptatio	**
	Value group	Coding	value	3	/alue	Changed	
	Colours and materials	Exterior colour		0000	~		
		Carpet colour code		000	۵,		
		Interior equipment		000		<u> </u>	
		Interior equipment ma	iterial code	122		0	İ.
		Combination number	for seat	000			
		Side of seat material		000			
		Seat material at centr	e	000	0		
		Backrest material		000	B,		-
		w		000 00			
		an 🖌			Fourfacting Land	E&:	55
0							
	1						

Colors and materials

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

Relevant tips for entering data appear in the information area (B). For a better overview, you can sort the columns if necessary (C) (for a general description of how to sort columns, see section 10.6).

	Panamera Simulati	on mode Program	n version VG2-14.300.14.07.21	TOO UST
	Maintenance of vehicle	data		
	The input may be max.	3 characters long.	🔶 🔴 👝	V
	Overview	Extended Fault memory	Actual values Drive links C input signals city is	Coding ** adaptations
	Value group	Coding value	Value	Changed
	Colours and materials	Exterior colour	0000	
.+		Carpet colour code	000 A	
ι ο		Interior equipment	000	
а		Interior equipment material code	000	
		Combination number for seat	000	
		Side of seat material	000	
		Seat material at centre	000	
		Backrest material	DDD	-
		11-61-1	AAA AA	•
		The same same same same same same same sam	And menu Sare Fault finding Loops	Brok Aett

 When you change an entry, this is indicated by the *icon* next to the changed entry in the Changed column (A).

> Changed and temporarily saved data will be indicated by the ∞ icon (only if you jump back to this selection dialog from a later step). Inconsistent data is also indicated by this icon since it will be changed when the data is finally written (A).

Press the <F12> button (B).

<F11> brings you back to the vehicle description.

Overview	identifications Pault memor	Y input signals checks	adaptations
Value group	Coding value	Value	Changed
Colours and materials	Exterior colour	0000	
	Carpet colour code	••• A	
	Interior equipment	000	
	Interior equipment material code	122	1
	Combination number for seat	000	
	Side of seat material	000	
	Seat material at centre	000	
	Backrest material		
	Makinia and come to making	000.00	
En: H.H.	ener Bettalloging Since Dra Dra Dra Dan Die 🜮 🖓	and a second s	3)(k 1
	Fil [4 [2] [0]	52 PR 10 112	111

X numbers: X number family

Note on screen content:

In the next screen, the equipment features of the value group "X numbers" are displayed in the form of a grouping/family. Equipment features that do not belong to any family - i.e. represent special X numbers - will be assigned in the next step.

A feature is made up of three entries:

- X number family (e.g. wheel spacers, loudspeaker covers, etc.) in the Family column.
- Designation of the feature (e.g. XRN 17 MM wheel spacers, 2 EA. RA) in the Value column.
- Indication of the presence of the feature in the vehicle data in the Installed column. If a feature is set, this is indicated by the 𝒞 icon and if the feature is not set, the line will be blank.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

 To identify a feature as present, click in the corresponding cell of the Value column and select the feature in a drop-down menu (A). If you select the blank entry, the feature will not be assigned.

If you change a feature, this will initially be indicated in the Changed column by the 🖉 icon (B).

Overview	Extended Fault memory	Actual values Dinks Codin
	identifications	input signals Dicks adaptati
Value group	Family	Value Change
X numbers	INTERIOR LIGHT COVER	XXJ - INTERIOR LIGHT COVER, ALC
	EXHAUST SYSTEMS	
	EXHAUST TAILPIPE	· •
	BELT OUTLET TRIM	XLR - SPORTS TAILPIPES, PANAMERA
	DEFROSTER TRIMS	
	DECORATIVE INLAYS	XLS - SPORTS TAILPIPES 987
	WHEEL SPACERS	XLT - SPORTS TAILPIPES 997

10. Press the $\langle F12 \rangle$ button.

<F11> brings you 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" are displayed in the next screen. Unlike the previous step, a feature is assigned in this step by selecting and deselecting individual X numbers directly.

A feature is made up of two entries:



- X number (e.g. X51, X70, etc.) in the Coding value column.
- Indication of the presence of the feature in the vehicle data in the Installed column. If a feature is set, this is indicated by the ∞ icon and if the feature is not set, the line will be blank.

In addition, the Changed column indicates whether the status (Installed/Not installed) of a feature has been changed.

For a better overview, you can sort the columns if necessary (for a general description of how to sort columns, see section 10.6).

 To identify a feature as present, click in the corresponding cell of the Installed column (A).

If you change a feature, this will initially be indicated in the Changed column by the O icon (B).

Panamera	Simulatio	on mode	Program	n version VG2-1	4.300.14.07.21	¥00	US
Maintenance o	f vehicle	data				1	1
The process w	as cance	alled.					Ţ
Overview	- 65	Extended identifications	Faultmemory	Actual values input signals	Drive links	Coding adaptation	15
Value gro	oup	Codin	_{g value} 🛛		Installed	Changed	
Knumbers		X51 - POWER KIT, (CARRERA		<u></u>		-
		X54 - STAINLESS S	TEEL TAILPIPES		~	0	
		X80 - PANAMERA T	URBO POWER KIT				
		XAU - GRILL INSER	T IN REAR APRON		~	0	
		XCZ - SHORT SHIF	TER				
		XDJ - DECORATIVE GEAR/SELECTOR I PAINTED	EVER TRIM,				
		XDS - IGNITION LO	CK SURROUND,				
End Hop	Vulme	Cata logger Save	The Develo	And mens	e Fallefiniting Logi	Brok C	Nor SS

↓ Next page

Special function Tequipment



Retrofitting the vehicle:

Some features require a special activation code. A corresponding message tells you what you must do.

12. Enter the activation code in the screen (A, see Detailed view) and confirm your entry by pressing <OK> (B, see Detailed view). How to get the activation code:
▶ See section 8.9.3.2

To temporarily save the equipment list of the X numbers, including the special function Tequipment, press the <F8> button (C).

01610161		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
Value gro	up	Codin	g value	Ins	stalled	Changed
	An activati 1. Procedu You can re 2. Procedu Pleasa reu	requires. ion code is required to set 1 ure in the case of retroffilin equest the activation code fi ure in the case of repairs: quest the activation code vi-	he option PANAMERA TURBO gr com your Importer regional o a the PPN.	POWER HIT. fice; procedure in accordanc	e mith TEO installation/com	version instructions.
	×	CZ - SHORT SHIFT	CK TER	Cancel		

Detailed view dialog:
Enabling required.
An activation code is required to set the option PANAMERA TURBO POWER KIT. 1. Procedure in the case of retrofitting: You can request the activation code from your importer/regional office; procedure in accordance with TEQ installation/conversion instructions. 2. Procedure in the case of repairs: Please request the activation code via the PPN. B
Next steps:

13. Press the <F12> button.

<F11> brings you back to the previous screen.

- 14. Repeat the steps as required for
 - * M number family
 - * M numbers
 - * Z number family
 - * Z numbers
 - * PR numbers
Summary of results

Note on screen content:



All equipment features that have been set - i.e. all features with a $\overset{\circ}{\checkmark}$ icon - of all value groups (X numbers, M numbers, Z numbers, including the family groups and PR numbers) are displayed in an overview screen in the next screen.

- 15. You have the following options:
 - Press <F8> to write the vehicle data to the vehicle (A).
 - Press <F11> to return to the previous list for the corresponding value group (B).
 - Press <F12> to exit the Maintenance of vehicle data function and return to the list of general vehicle functions (B).

Panamera 3	Simulation mode	Pr	rogram	version VG2-14.3	00.14.07.21	٢	'@0 Us▼
Maintenance o	f vehicle data						
Write values wi	ith [F8], back with [F11]. End v	vithout writing v	vith (F	12 .			
Overview	* Extended identifications	Fault memo	bry	Actual values input signals	Drive link checks	ks C ada	loding »
Value group	Coding value	,		New value		Old value	
M numbers	001 - CARRERA CUP			\$			
	004 - RS VERSION			Ø			
	013 - SPECIAL MODEL BL	ACK EDITION		ø			
	EXHAUST TAILPIPE		178 -	DUAL TAILPIPES, B	BL		
	STORAGE		424 -	CD STORAGE TRA	ι γ .		
	Airbag		4UQ -	ADVANCED DRIVI	E		
X numbers	INTERIOR LIGHT COVER		xxJ-	INTERIOR LIGHT O	:o		
	EXHAUST SYSTEMS	Q	₽:	SPORTS EXHAUS	₿		_
			VI O				•
Esc c	Hullmater Eastern Same	FIC: F5 = 5	De etc	Earch Barry Barr	abtining App a r		k N1+1 \$} 545

Special case: Exiting the vehicle data with <F12>

- If you press the <F12> button, you will be informed that there is still some data that has not yet been written. You have the following options:
 - Press <F11> to cancel the process. You return to the summary of results.
 - Press <F12> to confirm that you want to exit the Maintenance of vehicle data function. You return to the list of general vehicle functions.

Maintenance of	imulation mode	Prog	am version VG2-14.3	00.14.07.21	700 US
As yet unwritter Overview	e data available. Press [F12] t Extended identifications	Fault memory	saving, [F11] to go bac Actual values input signals	k to input screen. Drive links checks	Coding adaptations
Value group	Coding value		New value	Old	value
M numbers	001 - CARRERA CUP		\$		
	005 - RACE VERSION		8		
	013 - SPECIAL MODEL BL	ACK EDITION	8		
	STORAGE	42	4 - CD STORAGE TRA	γ	_
	Airbag	40	Q - ADVANCED DRIVE		
X numbers	INTERIOR LIGHT COVER	00	J - INTERIOR LIGHT C	o	
	EXHAUST SYSTEMS	XL	F - SPORTS EXHAUST	r	
	EXHAUST TAILPIPE	×L	R - SPORTS TAILPIPE	s	
		101	~?		

Program version VG2-14.300.14.07.21

700 US7

Special case: Repaired vehicle data

17. If your vehicle data was inconsistent at the beginning, the system made corrections during the process, even if you did not make any changes to the vehicle data. anamera

Simulation mod

As a result, you are now prompted to save your data. You have the following options:

- Press <F11> to cancel the process. You return to the last processing screen (B).
- Press <F12> to confirm that you want to exit the Maintenance of vehicle data function. As soon as you confirm this again, you return to the list of general vehicle functions (B).
- Press <F8> to save the vehicle data (A).

Special case: No changes to the vehicle data

- If you have not made any changes to the vehicle data, you will be informed that you can save the vehicle data by pressing <F4>. You have the following options:
 - Press <F11> to cancel the process. You return to the summary of results (B).
 - Press <F12> to confirm that you want to exit the Maintenance of vehicle data function. You return to the list of general vehicle functions (B).
 - Press <F4> to save the vehicle data (A).



Panathera Simulation mode Program version VG2-14.300.14.07.21 PO UST Maintenance of vehicle data. Image: Simulation mode Image: Simulation mode Image: Simulation mode Image: Simulation mode Overview Extended Rauthmemory Actual values Drive limits Coding Value group Coding value New value Old value Image: Simulation mode No changes were made. Image: Simulation Image: Simulation mode Image: Simulation mode

Next steps: Switching to Report management

19. Pressing <F12> then brings you to the General Report Management function.

Pressing <F11> brings you back to the list of general vehicle functions.

8.9.4 Vehicle handover log

You can create a vehicle handover log within the general vehicle functions. During vehicle handover, all control units are activated from transport mode and checked for fault entries. A number of basic settings in the vehicle are also coded. This process runs automatically.

This section describes how to create, print and delete a vehicle handover log.

8.9.4.1 Creating a vehicle handover log

 Display the list of installed control units and press the <F7> button to call up the general vehicle functions:
 ▶ See section 8.9.1.



Instructions:

- 4. Confirm the instruction by pressing <F12>.
 - <F11> brings you back to the previous screen.



5. Read the next instruction in the information area (A)



Next steps

- 6. Service requests are then sent to various control units and functional groups (UDS, KWP2000). The result of the actions is displayed in the Status field (A).
 - If the service was performed successfully, this is indicated by a ^{SS} icon.
 - If the service was not performed successfully, this is indicated by a ① icon. In this case, a corresponding message is also displayed in the information area.

When all actions have been performed successfully, press the <F12> button (B).

- Paramera
 Program version
 VG2-14.300.14.07.21
 V ●
 US

 Remove bransport protection
 Image: Second s
- The required data is read out of the control units and written. A check is also performed to determine whether each control unit can be addressed (A).

A progress bar shows the current status of the vehicle handover log creation process. The number of control units to be processed plus the pre- and post-processing steps determine the maximum value on the bar. The length of the bar can therefore "jump" during processing and does not show the actual progress (B).





Note on display:

- Control units to which communication is currently being established and whose data is being read are indicated by the Ξ icon in the <code>Status</code> column.
- Control units for which the read-out process was completed successfully are indicated by the $\stackrel{\checkmark}{>}$ icon in the Status column.
- Control units to which communication could not be established or for which a communication error occurred are indicated by the ① icon in the Status column.

New vehicle query

- 8. A query screen then appears asking you whether the vehicle is a new vehicle.
 - You have the following options:
 Press <F8> to confirm that the vehicle is a new vehicle (A).
 - Press <F7> to indicate that the vehicle is an old vehicle (B)



Next steps

i

Note on subsequent procedure:

The next steps apply both for a new vehicle and an old vehicle.

9. When you have entered all the required data as prompted, you must check the chassis number.

First scroll to the entry Check chassis number in the list. If the number is not correct, you must correct it.

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

Overview	*	ectual valu						
Fax	ction				Htase		Status	
			editio	alinvitument class?			ø	
			Reache	tdua			Ø	-
			Bearing	iht door			Ø	
			Driverts	dagr			Ø	
			Passer	gerfs door			Ø	1
			TV-tane				Ø	
			Esterna	(amplifier		<u> </u>	\$	
			Selecto	r lever			Ø	
			Chebic	thessignumper.		WEG	2229723L070400	

 When you have checked or corrected the chassis number, press the <F12> button.

Overview							
Fireff	n.		F	havo	Statu:	s.	
		Additional	nstrument – clock		ø		-
		Hoar of t	her		0		_
		Fearnight	quo.		0		
		Drivers d	.u		0		
		Fassence	r's door		0		
		"Viturer			ø		
		Estemalia	mp16er-		ø		
		Selector Is	ver		ø		
		Check chu	essis number.		WF0222972CL0	10010	-

- 11. You must then confirm again that the chassis number is correct. You have the following options:
 - Press <F11> to return to the screen for entering the chassis number.
 - Press <F12> to confirm that the chassis number is correct.

Panamera Simulatio	in mode	Progra	m version VG2-14.	300.14.07.21	700	US V
Vehicle handover	er correct? Confirm w	ith [F12]. Return to	input with [F11].			Ş
Overview	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptatio	i »
Tonetion	Additional i	nstrument – plock	Tase		Stotus &	
	Rear let de	er.			0	
	Rearinght:	for			0	-
	Driver's do	u			()	
	Passenger	's cicer			0	
	TV tunar				~	
	External an	rplifer			\$	
	Sectorie	rer			~	
	Maintenan	simava			0	-
Progress		1997 - 1997 -				
Erd -os Hutma	ter Casa la jacr Sara	Filter Level	Anii maru Evecute	Foultrining Lo		ves V

12. Once you have confirmed that the chassis number is correct by pressing <F12>, another selection screen appears.

You have the following options:

- Press <F11> to return to the list of general vehicle functions.
- Press <F12> to go to General Report Management, where you can view and print the created vehicle handover log.

Overview						e ions
Tenzion	P	Attos	F	ese	Status	
		Rear Into	CCI		Ō	-
		Rearright	door		0	
		Driver's d	.cr		0	
		Passenge	r's cicèr		0	
		TS tuner			ø	
		External a	n piñer		Ś	
		Sisterar le	wer		8	-
		Maintenan	șe îmerva,		0	

13. When you press <F12>, the General Report Management screen appears in which the log type Vehicle handover is preselected.

> All previously created vehicle handover logs are listed in the table shown in the work area.

The most recently created vehicle handover log is at the top of the list.



Further information:



In addition to calling up the list of vehicle handover logs after you have created the log, you can also call up the list from one of the function groups by pressing the <F10> button. For a more detailed description of calling up the list in this way:

► See section 8.9.4.2

8.9.4.2 Vehicle handover log: Displaying the list of vehicle handover logs

Even if you do not switch directly to General Report Management after creating the vehicle handover log, you can still display the list of vehicle handover logs.

- Press the <F10> button. If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.
- 2. Select the log type Vehicle handover in the button menu.



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namera Simulation mode Program version VG2-14.300.14.07.21 TOO US All previously created vehicle 3. ist of logs: handover logs are listed in the elect log, go to print preview with [F10], go to transfer with [F8] table shown in the work area. Overview The most recently created vehicle og type Vehicle handover Save Delete handover log is at the top of the Log nam Creation date list. FUEP_WP0ZZZ97ZCL020011_20140808_1511+ 3/8/14 3:11:16 PM 8 P 8

8.9.4.3 Vehicle handover log: Printing



The selected vehicle handover log is not printed by the diagnostic application but by the application used to display the vehicle handover logs. If this application has a print dialog and if a correctly configured printer is connected, you can print the vehicle handover log using this application. For information on how to configure the file link and set up a printer, contact your system administrator if necessary.

- Display the list of vehicle handover logs:
 ▶ See section 8.9.4.2
- Select the vehicle handover log you want to print (A) and press the <F10> button (B).

Pressing <F6> cancels the selection.

<F11> brings you back to the screen from which you called up the function.



3. This starts the application used to display vehicle handover logs.

8.9.4.4 Vehicle handover log: Copying to a USB data storage medium

You can copy a vehicle handover log to a USB data storage medium. A special Transfer button is displayed for this purpose on the General Report Management screen.

- Display the list of vehicle handover logs:
 ▶See section 8.9.4.2
- Select the log you want to transfer (A) and press the <F8> button (B).



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3. Copy the vehicle handover log to a USB data storage medium using the File management function of the basic software.

8.9.4.5 Vehicle handover log: Deleting

- Display the list of vehicle handover logs:
 ▶ See section 8.9.4.2
- Program version VG2-14.300.14.07.21 Panamera Simulation mode TOO UST 2. Select the log you want to delete List of loos: (A) and press the Delete button B Select log, go to print preview with [F10], go to transfer with [F8] (B). Overview Vehicle handover Log type Save Log name Creation date UEP_WP0ZZZ97ZCL020011_20140808_1511 W8/14 3:11:16 PM Ø P 8 700 US7 Program version VG2-14.300.14.07.21 Panamera Simulation mode 3. You must confirm deletion of the Delete selected log? vehicle handover log. You have the (] [F12] Delete the selected log, [F11] Cancel process following options: Overview • Press <F11> to cancel the process and return to the list of Log type Vehicle handover Save Delete vehicle handover logs. Log name Creation date Press <F12> to confirm • deletion of the vehicle handover log.

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8.9.5 Campaign: Campaign coding and programming

Coding of a control unit by means of campaign coding differs from conventional coding (see section 8.6) in that you simply have to enter a campaign number. If the campaign number is valid – i.e. a valid flash rule exists for this campaign – the coding and programming process is performed automatically.



Sequence and scope of a campaign:

Several campaigns (in the form of several "steps") may be stored in one flash rule. If this is the case, the rule will be processed in several steps.

User interaction is therefore described only as an example in this section.



What types of steps are there?

The following individual steps can occur and can be processed within a campaign:

- Programming step: Programming by means of rule flashing (based on one flash rule file per step)
- Coding step: Coding by means of MCR coding
- Delay step: Wait loop with a preconfigured waiting time.
- Ignition step: Ignition detection can be activated or deactivated beforehand for the subsequent campaign sequence in this step.
- Display step: Display of general information between individual steps and in an overview screen at the end of a completed campaign.
- External voltage detection step: The current battery voltage is read out and compared with configurable limit values.
- Clear all fault memories step: The fault memories of all control units are deleted.
- Sequence/PXML step: More complex sequence with its own GUI and user guidance. Please read the instructions and follow the user guidance provided for each sequence.
- Control unit documentation: Documentation of control unit values in the C&P log.



Difference compared with functions in the Maintenance/repairs function group:

Campaigns with several steps are simply a series of individual programming and coding steps. Unlike the variant used in the <u>Maintenance/repairs</u> function group, campaigns do not normally have any specific and elaborate user guidance and do not include an option for reading data from the vehicle and interpreting it (exception: steps with complete sequences or PXML integration).

Campaigns are therefore a type of large macro used to automate flash processes and in which individual programming and coding functions complete with wait loops can be processed successively.



Required data:

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

► Campaign number

Always have the necessary information ready.

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	1	
<u>ال</u>	_	

Note on entering the campaign number:

The campaign number is not case-sensitive. This means that there is no differentiation between uppercase and lowercase when entering the number.

Example:

The entry W123 or w123 will produce the same result.

- Display the list of installed control units and press the <F7> button to call up the general vehicle functions:
 ▶ See section 8.9.1.
- Select the entry Campaign (A) in the list of general vehicle functions and confirm your selection by pressing the <F12> button (B).

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

Panamera	Simulation r	node	Progra	m version VG2-14.3	300.14.07.21	900 US
Model-serie	s-specific chec	cks and campaign	8			
Please sele	t a check. Co	ntinue with [F12],	back with [F11].			1
Overvie	₩ «	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
			Function			
Measuremen	nt of closed-cir	cuit current				
Maintelac	of vehicle dat	ta				
Vehicle anal	ysis log (191)					
Campaign						
Vehicle hand	lover					
Read all faul	t memories an	d erase if required	4			
D - 1 1						
Set transpor	protection				-	
Clear OBD E	ault memory (r	not PDK)			B	
olean obb i					\sim	
High-voltage	system					
High-voltage	system	In concession of the second	6.11	Processing in second		

3. Enter the campaign number and press the <F12> button

Note: Pressing <F11> brings you back to the list of general vehicle functions.



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Tip



No user interaction required in some cases:

There will be no need for any user interaction - e.g. pressing the <F12> button to move on - in some cases since the diagnostic application moves on automatically to the next step. Example: Fault handling or display step (see information below).

This is normal behavior.

Various contents



Note:

The following steps are merely examples. User guidance is campaign number-specific.

To give you an idea of how much time is still required for a campaign, the number of the current step and the total number of steps to be performed are displayed in the information area.

4. Example: Coding step.

> Note: Control unit coding will be repeated several times in succession as required (Retry function) if an error occurs during the coding process. The number of retries was defined beforehand in a rule file. Wait times can be configured between the retries. This is normal behavior.

If the application was also configured in such a way that the alternative installation (see section 8.1.1) is to be evaluated and if an alternative family is available, the step will be performed for every control unit in the family.



5. Example: Programming step

> Note: Control unit programming will be repeated several times in succession as required (Retry function) if an error occurs during the flash process. The number of retries was defined beforehand in a rule file. Wait times can be configured between the retries. This is normal behavior.

If the application was also configured in such a way that the alternative installation (see section 8.1.1) is to be evaluated and if an alternative family is available, the step will be performed for every control unit in the family.





Behavior if there is no suitable programming rule:



If a suitable programming rule could not be found in the rule file, the programming step will be regarded as having failed. A decision question, which you must answer (possible answers: Next or Cancel), will appear in this case. This will be displayed again in the concluding result.

Behavior if problems arise during programming:



If control unit programming fails, the application will generally automatically try - several times if necessary - to program the control unit again.

If this fails, please contact Support.



~		Panamera Sim	ulation	mode	Program	n version VG2-14.	300.14.07.21	700	US 🔻
8.	Example:	Sequence A3B6T	: Step 5	/9					
	Clear all fault memories step.	Clearing fault mer	nories. (F11] cancels the en	tire campaign.				V
		Overview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptatio) ons
		All fault memories	will be c	leared. 17 of 52 co	ntrol units still to be j	processed.			
						Add marini			





Canceling an active campaign with <F11>

 Confirm cancellation of the campaign.
 <F11> brings you back to the campaign step.
 <F12> cancels the campaign.



Concluding screen

11. An overview screen is displayed at the end of a completed campaign or series of campaign steps.

Successful coding is indicated by the \mathscr{D} icon (A).

If coding was not successful, this is indicated by the $\textcircled{\sc 0}$ icon.

Press the <F12> button (B) to return to the list of general vehicle functions or select one of the function group buttons.



8.10 Working log

The information displayed on a screen can be saved in a so-called working log. The working log is created by pressing a button on the control bar and additional information is added successively by pressing the button again in other functions or function groups or if the content of the work area changes. This section describes how to create a working log - as a temporary working log initially.



In General Report Management, you can display, print, permanently save and delete a working log you have created. For further information on General Report Management:

► See section 8.10.3, 8.10.4 and 8.10.6.

Maximum size and behavior when creating the working log:

The maximum file size for saving the working log is generally 1 MB, which corresponds to a log of more than 100 pages.



If this size is exceeded, every subsequent save operation for the log must be explicitly confirmed by answering a Yes/No question.

Special case - Vehicle analysis log (VAL):

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

8.10.1 Working log: Creating a temporary working log

- Display the list of installed control units and select the desired control units:
 See section 8.1.
- 2. Select a function group or function.
- Program version VG2-14.300.14.07.21 anamera Simulation mode TOO UST 3. Press the <F4> button to Current actual values/input signals temporarily save the information itch displays by pressing [F8]. Switch to actual values/input signals selection by pressing [F11]. that is currently displayed on the Extended identifications Actual values Drive links checks Coding adaptatio Overview Fault memory screen in a working log. Input signals ateway (A2) - Battery voltage 12.276 V ateway (A2) - Counter voltage threshold 1 0 min Eac+ ß
- 4. If you also want to save information displayed in other screens, switch to the corresponding screen and press the <F4> button there. The recorded information is then copied to the same working log. The working log is updated with new information until it is finally closed/saved.

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8.10.2 Working log: Displaying the list of working logs

 Press the <F10> button. If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.



8.10.3 Working log: Displaying and printing a working log



In order to print a log, a suitable printer must be connected to the Tester and configured accordingly.

Display the list of working logs:
 ▶ See section 8.10.2



4. To print the log, press the Print button, indicated by the 🖨 icon.

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8.10.4 Working log: Saving a working log



You can save the temporarily stored working log locally.

- Display the list of working logs:
 ▶ See section 8.10.2
- 2. Select the temporarily stored working log (A).

Enter the name you want to use to save the working log (B) and press the Save button (C).

Log type	Working log	- ARP-20140811_1259	Save	Delete
	Lo	gname	Crea	ation date
Current working	log	A	8/11/14 12:58:0	94 PM
ARP-20140606	_1250_14.0.2 zip		8/6/14 12:50:14	PM
ARI20140606	1230_14.0.2.21p	A	0/0/14 12:30:14	
		•		

8.10.5 Working log: Copying to a USB data storage medium

You can copy a working log to a USB data storage medium. A special Transfer button is displayed for this purpose on the General Report Management screen.

- Display the list of working logs:
 ▶ See section 8.9.4.2
- Select the log you want to transfer (A) and press <F8> (B).



3. Copy the working log to a USB data storage medium using the File management function of the basic software.

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8.10.6 Working log: Deleting a working log

- Display the list of working logs:
 ▶ See section 8.10.2
- 2. Select the working logs you want to delete (A) and press the Delete button (B).



- 3. A query appears prompting you to confirm the deletion of the selected working logs. You have the following options (B):
 - Press <F11> to cancel the process. You return to the list of working logs.
 - Press <F12> to confirm that you want to delete the selected working logs.

Panamera	Simulation n	node	Program	n version V	G2-14.3	00.14.07.21	700	Us▼
Delete select	ted lag? lete the select	ed log, [F11] Can	cel process					V
Overview	u ~	Extended identifications	Fault memory	Actual va input sig	alues nais	Drive links checks	Coding adaptation	**
Log type	Worki	ng log 🗸 👻	ARP-20140611_1306		Si	ave	Delete	
		Log na	um e			Creation	siate	
Current work								
ARP-201408	806_1250_14.0	0.2.zip			8/	6/14 12:50:14 PM		
								•
EM ?	Silitanite)	Data Magari лl		and second			×	~B \$

Next steps

 If you confirmed the query by pressing <F12>, the selected log is deleted and the list of working logs is updated.

Select log.		Determined		Schuel veinee	Drive Heles	Cadara
				input signals		
Log type	Work	ing log		3	ave	Delete
		Log nar	ne		Creation	date
ARP-20140605	1 <u>250 1</u> 4	Log nar .0.2 zip	ne	E	Creation /6/14 12:50:14 PM	date
ARP-20140605	1250 14	Log nar .0. <u>2 zip</u>	ne		Creation (6/14 12:50:14 PM	date
ARP.20140606	1250_14	Log nar .0. <u>2.zip</u>	ne ////////////////////////////////////		Creation	date
ARP.20140606	1 <u>250 1</u> 4	Log nar	ne ////////////////////////////////////		Creation (6/14.12:50:14 PM	date
ARP-20140605	1250 14	Log nar	ne ////////////////////////////////////		Creation (6/14-12-50:14 PM	date
ARP-20140605	1 <u>250 1</u> 4	Log nar	ne 		Creation 15/14 12:50:14 PM	date
ARP-20140605	1250 14	Log nar	ne []][]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]		Creation	date
ARP-20140606	1 <u>250 1</u> 4	Log nar	ne		Creation	date
ARP-20140E05	1250_14	Log nar	ne		Creation	date

8.10.7 Working log: Stored information

	🔮 PIDT						- D	
	Workin Press	ng log [F10] and [F11] to scroll through	n. Press	[F3] to print	i.		
Header		1						
			log	Print date Time 1508300 38	11.082014 132522			
Function		Germany		Version	14.0.2			Creation date
group						_		
		Fault Statu	it overview is: Cantral unit	2014-08-11 DSN	Part number	-		
		memai WARN WARN	Headlights (Right headlight) Arbag (A2.1) Gatoway (A2)	000008 000012 Alpha2	97061814301 97061821305 97061811505			
			Gateway (A2) - Power distributor Gateway (A2) - Battery sensor	3. Same	97060616303			
		WARN	DME V8 naturally aspirated engine EU5 PDK (Porsche Double Clutch)	C201 30 00	97061885212 97061838525			
		WARN	Sdector lever Rear-differential lock	01.00	97061832000			Additional
			High-voltage battery High-voltage power electronics	004009 014006	7P09151828 7P5907080A			information
		WARN	High-voltage charger Instrument cluster	000010	97064111401			(For details
		WARN	Steering wheel electronics Steering wheel electronics - Multifunction	000033	991618413			
		WARN	Lane Change Assist Stopwatch	000006	97064130102			see
		WARN	PCM PCM - FM/AMtuner PCM - Navigatonisatelite radio PCM - Telephone	70.00	97064217201	-		table below)
		WARN	Air conditioner (4 zone Climatronic A27) Air conditioner (4 zone Climatronic A27) - Rear ope mitro control unit	000008	9706535119)			
		WARN	A/C compressor TV/hing	503001 50.00	7P0820803/3 7PP9/9148			
		WARN	Bose amplifier Adaptive on inconstral (ACC3, A3)	70 00	97064545007			
		WARN	Revening camera Front camera	0101	97061873302			
		WARN	Park Assist	100002	97061818304			
		Michael	Tire Pressure Monitoring (A23)	000004	97061810300			
		WARN	PDCC (A2.2) Floct is name degline (A2.1)	00005	970618 15507 970618 10703 7804231559		-	
		WARN	PSM (A2.4)	000007	97061811313			
	_	5	1					
	End		Printing .	First pa	ge Prev. page	Next page	Last page	
	(1)	50%	• 🖶	N		\triangleright	DO	
	ESC		F3	F9	F10	F11	F12	
					Page 1 o	12		
	L				1 (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1			2



Additional information:

The information that is written to the working log from the various procedures is listed in the table below.

	Procedure	Control unit variant	DSN	Part number	Fault memory	Environmental data	Actual values	Routine	Coding that	Coding to be written	Flash session	Flash job result	PDU
Control unit list	Х	Х											
Control unit overview	х	х	х	х	х								
Fault memory	Х	Х			Х								
Environmental data	х	х				х							
Measured values	Х	Х					Х						
Routines	Х	Х						Х					
Coding	Х	Х							Х	Х			
Programming	Х	Х									Х	Х	
VAL	Х												
Vehicle handover log	х												
Control unit replacement	х												
Installation specifications check	x												
OBD Scan Tool	Х												

Note and restriction (1):

• Only the presence of fault memory entries is stored in the control unit overview.



- In the Fault memory function group, only the fault memories found during the last cyclical read operation are saved in the working log.
- During the cyclical reading of result values (drive links, routines), only the values determined during the last read operation are saved in the working log.

Note and restriction (2):

• In the Codings/adaptations function group, coding that was read can be saved in the working log before changing the coding by pressing the Working log button; coding that was read and coding to be written can be saved in the working log after changing the coding values, but <u>before</u> writing the values by pressing the Working log button.

The latter case also applies if the fault occurred during the write operation in that the control unit did not actually report a fault, but did not transfer the coding.

As a matter of principle, the coding that was written cannot be saved in the working log because it must be read out and is therefore the coding that was read (after a write operation).

• Error messages for virtual coding values can also be displayed in the working log.



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8.11 Logging

The purpose of logging is to provide first-level support for initial analysis in the event of a fault.

Extended logging saves more comprehensive information in the log files, which are required for more detailed fault analysis.

Creating a log file when the setup is wrong:

If the default log directory (example: C:\Userdata\dsa\pidt\log) does not exist when you are installing the diagnostic application (e.g. if the directory was deleted unintentionally), 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. for logging into the directory containing the installation program. This ensures that the subsequent setup procedure can be reproduced using the log files.

If it is not possible to create the default log directory, an error message is displayed when you use the diagnostic application:

Pidt 🗙
An error has occurred. See the log file C:\Programme\Porsche\PIDT\PIDT\workspace\.metadata\.log.
(OK]

If this happens, contact your system administrator.

Program version VG2-14.300.14.07.21

DSN

Pors

Working log

Vehicle order

Logging

Ð

14.07.21

11/26/13 1:55:26 PM

11/26/13 1:53:58 PM

8

Vehicle handover

Measured value log

Simulation data

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TOO UST

Delete

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Vehicle analysis log

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8.11.1 Logging: Displaying the Log function

Press the <F10> button. 1. If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.

anamera Simulation mode

Airbag Gateway

DME (DFI)

Transmission control Selector lever

Rear-differential lock

Select control unit(s) and continue to control unit search with [F12].

Control unit

Control unit selection:

Overview DTC Status

2. A button menu appears in which several entries are listed. Select the entry Logging.

			High-voltage	e battery						
			High-voltage	e power e	electronics					
			High-voltage	e charger						
	En:	нці ?	vutmeter	13 COL 10	14	Filter	Dukista Po	Adil mon		
	Panar	mera	Simulation	mode			Program	n version	VG2-14.	300
the current logging	List of Selec	f logs: t protoc	ol, go to FTP	transfer	with [F8]					
				Exte	nded	-		Actual	values	

current logging	List of logs: Select protocol, ge	o to FT	P transfer with [F8]		
	Overview	-	Extended identifications	Faultmemory	Actual values input signals	Drive links checks
	Log type	Logs	ging 👻	\L040037-20140813_	123200	Save
	Special function	erwa	eiterte Protok 🔻	Execute		
			Log n	ame		Creation da
	Current logging					B/13/14 11:42:14 AM
	WP0ZZZ97ZEL07	0023-2	20131126_135746	_13.0.5.zip		11/26/13 1:57:48 PM
	WP0ZZZ97ZEL07	0023-2	20131126_135727	_13.0.5.zip		11/26/13 1:57:28 PM
	WP0ZZZ97ZEL07	0023-1	20131126_135551	_13.0.5.zip		11/26/13 1:55:52 PM

P0ZZZ97ZEL070023-20131126_135524_13.0.5.zip

0ZZZ97ZEL070023-20131126 135357 13.0.5.zip

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3.

Information on is displayed.

11/26/13 1:55:26 PM

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8.11.2 Logging: Saving the current logging

Call up the Logging function:
 ► See section 8.11.1.

2.	Select the current logging (A).	Panamera Simulation mode Program version VG2 List of logs:	14.300.14.07.21 ₹●● US ▼
	Change the name generated by the system as required (B).	Select protocol, go to FTP transfer with [F6] Overview Schemics and Schemics Log type Logging Llc42037-20140613_123200	Save Delets
	To save the current logging under a new name, press the Save button (C).	Special function erweiterte Protok* Execute Log aprile Log aprile Current locoine WP02Z297ZEL070023-20131126_135726_13.0.5.zip WP02Z297ZEL070023-20131126_135651_13.0.5.zip WP02Z297ZEL070023-20131126_136551_13.0.5.zip WP02Z297ZEL070023-20131126_136551_13.0.5.zip WP02Z297ZEL070023-20131126_136551_13.0.5.zip WP02Z297ZEL070023-20131126_1365524_13.0.5.zip WP02Z297ZEL070023-20131126_1365524_13.0.5.zip WP02Z297ZEL070023-20131126_1365524_13.0.5.zip WP02Z297ZEL070023-20131126_136597_13.0.5.zip	Creation date 9/13/14 11/42:14 AM 11/26/13 1:67:48 PM 11/26/13 1:67:28 PM 11/26/13 1:65:52 PM
3.	The selected logging is zipped and is displayed as an entry in the list of logs (A). A new logging is started immediately and this is displayed as the Current logging (B).	Panamera Simulation mode Program version VC2- List of logs:	Ones Into Coding ** Save Delete ** 013/14 12:38:04 PM ** 013/14 12:38:04 PM ** 11/26/13 1:57:48 PM **
		WP02727972FL 070023-20131126 136551 13.0.5 zin	11/26(13.1-55-52.PM

VP0ZZZ97ZEL070023-20131126_135524_13.0.5.zip

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Display the list of logs:
 ► See section 8.9.2.6

8.11.3 Logging: Copying to a USB data storage medium

You can copy a logging to a USB data storage medium. A special Transfer button is displayed for this purpose on the General Report Management screen.

- Program version VG2-14.300.14.07.21 700 US7 Simulation 2. Select the log you want to transfer List of logs (A) and press the <F8> button (B). Select protocol, go to FTP transfer with [F8] Overvie Save og type Delete Logging erweiterte Protok... 🔻 Execute necial function Creation date Log nai 8/13/14 12:38:04 PM 3/13/14 12:38:04 PM 0ZZZ97ZEL070023-20131126_135746_13.0.5.zip 11/26/13 1:57:48 PM P0ZZZ97ZEL070023-20131126_136727_13.0.5.zip ${}$ 11/26/13 1:57:28 PM 0ZZZ97ZEL070023-20131125_135551_13.0.5.zip 11/26/13 1:55:52 PM B P0ZZZ97ZEL070023-20131126_135524_13.0.5.zip 11/26/13 1:55:26 PM 8 c
- 3. Copy the logging to a USB data storage medium using the File management function of the basic software.

8.11.4 Logging: Deleting the 'current' logging



You can delete the current logging in the Logging function. After you delete 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 loggings.

Call up the Logging function:
 ► See section 8.11.1.

- ion VG2-14.300.14.07.21 2. Select the current logging (A) and List of logs: then press the Delete button (B). B Select protocol, go to FTP transfer with [FB Overview L040037-20140813_124125 og type Logging enweiterte Protok... 🔻 ial fo Execute P0ZZZ97ZAL040087-20140813 123801 14.0.2.zit 8/13/14 12:38:04 PM P0ZZZ97ZEL070023-20131126_135746_13.0.5.zip 11/26/13 1:57:48 PM A 0ZZZ97ZEL070023-20131126_135727_13.0.5.zip 11/26/13 1:67:28 PM 0ZZZ97ZEL070023-20131126_135551_13.0.5.zip 11/26/13 1:55:52 PM 11/26/13 1:55:26 PM 0ZZZ97ZEL070023-20131126 135524 13.0.5.zip •** ••• 8 P ഷ 32-14.300.14.07.21 A guery appears prompting you to 3. Delete selected log? confirm the deletion of the current [] [F12] Delete the selected log, [F11] Cancel process log. You have the following options Overview (B): .og type Save Delete Logging • Press <F11> to cancel the Execute pecial function enweiterte Protok. process. You return to the list Log name Creation date of logs. Press <F12> to confirm that ZZ97ZAL04DD37-20140813 123801 14.0.2.zip 8/13/14 12:38:04 PM .070023-20131126_135746_13.0.5.zip you want to delete the current 11/26/13 1:57:48 PN 7ZEL070023-20131126_135727_13.0.5.zip 11/26/13 1:57:28 PM logging. ZZZ97ZEL070028-20131126 135551 13.0.5.zir 11/26/13 55:52 Ph 97ZEL070023-20131126_135524_13.0.5.zip G
- 4. When you confirm the query by pressing <F12> (Yes), the current logging is deleted. A new logging is then started immediately.

8.12 Displaying the Simulation data function

Press the <F10> button. If the button cannot be selected, first switch to one of the function groups (e.g. Overview) and then press <F10>.

2. A button menu appears in which several entries are listed. Select the entry Simulation data.

Ov	Overview kotual values Drive links port signals checks							
DTC	Status		Contro	l unit	DSN	Pors	W-12-1-	
		Airbag					working log	4
		Gateway					Vehicle analysis log	
		DME (DF	1)					
		Transmis	sion control				Vehicle order	
		Selector I	ever			_	Mahiala kasadawas	
		Rear-diffe	erential lock				venicie nandover	
		High-volta	age battery				Logging	
		High-volta	age power electro	nics				
		High-volta	age charger				Measured value log	-

 A list of all simulation data logs that have already been saved is displayed.
 If no simulation data has been logged, the list will be empty.


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8.13 Filter

This section describes how to use the Filter function of the diagnostic application. In particular, it describes how to create and delete filters, how to activate and deactivate filters, how to assign filter properties (Process filter) and how to reset filter properties.

When all display-relevant processes of the application have been completed (e.g. the overview display setup is complete, etc.), you can call up the Filter function from the following function groups:

- Overview
- Extended identifications
- Actual values/input signals
- Drive links/checks
- Codings/adaptations

Filter properties **<u>cannot</u>** be defined for the following function groups or functions:

- Fault memory
- Environmental data (part of the Fault memory function group)
- Log services
- Programming
- Maintenance/repairs

Behavior of the Filter function in the application:

► Filters are defined generally for all control units and individually for each function group. In other words:

The Filter function allows you to create a separate filter for each function group. The filters that are created are not combined with each other and the viewing area of a Filter function is restricted to the respective function group. Filters are applied based on previously selected elements that are assigned to the filter as properties in a selection screen.

► New filters for a specific list view can be created and applied independently of the currently active filter. In other words:

If a different 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. For example, you can keep a separate filter active for each function group or list view. However, these filters do not affect each other (see comment above). The only thing they have in common is the number of control units in the selection.

▶ If a filter is active, this will be indicated by the \overline{v} icon in the title bar in the respective function group. Whether an icon is displayed or not depends on the function group. In other words:

If you switch from the filtered Overview to a different function group in which no filter is active, for example, the icon in the title bar will not be displayed in the other function group.

The icon only indicates that a filter is active or not active in the function group in question. Filters that are active in other function groups – including the control unit overview or control unit list – will not be indicated by an icon in the current view.

► Filters remain active until you explicitly deactivate them or exit the diagnostic application. No filters are active after you restart the diagnostic application.



Taking the alternative installation into consideration:

The alternative installation is taken into consideration when applying filters for the control unit search.

Example: Filter entry DME also filters according to DME_HYBRRID



Saving filter settings:

Filters are saved beforehand when the diagnostic application is re-installed.



Restriction: On which levels and in which screens can filters be applied?

When the Filter function is called up, filtering takes place only for the elements on the first and second levels (see section 4). These are:

- Elements that are displayed when the respective function group is called up (e.g. drive links).
- Elements that are displayed as a result of a subsequent further selection (e.g. selection of drive links).

Function groups that have operating options on the third level (e.g. Actual values/input signals) can only be filtered in the elements of the second level.

<u>Example</u>: In the <u>Actual values/input signals</u> function group, for example, you cannot filter according to individual measured values that are displayed on the working screen of the function group and are updated cyclically. You can only filter according to the elements of the overview screen of the function group, i.e. according to actual values/input signals.

If you are in the measured values display (working screen) and press the <F5> button to assign properties to a filter, the display will not show the screen with the measured values from which you started, but the overview of actual values/input signals that is displayed when you call up the function group.

Note on description in this section:

The Filter function is described using an example in this section: Starting from the control unit overview, a filter is defined that filters three control units. Only these control units are then displayed.

Filtering for other elements, e.g. extended identifications, actual values or input signals, drive links, etc., is identical to the procedure described here.

For more information, however, please see note on restriction during filtering above!





Filter			
Button	Label	lcon	Description
F8	Write	A	This icon appears in the title bar when you call up the Filter function. Pressing the <f8> button assigns filter properties to a filter.</f8>
Decision	question		
Button	Label	lcon	Description
F11	No	\otimes	Pressing the <f11> button cancels an action that requires confirmation. The <f11> button shown here is only displayed in combination with the form of the <f12> button shown in the next line.</f12></f11></f11>
F12	Yes	\Diamond	Pressing the <f12> button confirms an action that requires confirmation. The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>

8.13.1 Action-specific buttons for this function group

8.13.2 Calling up the Filter function

 Call up one of the function groups from which you can start the Filter function (see introductory note).
 Display the list of installed control units, for example:
 ▶ See section 8.1.



Program version VG2-14.300.14.07.21 700 US▼ Simulation mode iamera 3. A list of the available filters is ist of available filters displayed. Please select filter or create a new filter. Back with [F11]. If a filter is not yet defined, the list Overview will be empty. Create Activate Change filter Reset filter Delete Created Filters Content defined active diatk C

8.13.3 Creating a filter

This section describes how to define filter properties. The filter properties of a filter are defined in a screen in which you can select or deselect several entries.

Note on filter behavior:

If you have selected several control units and do not define a filter condition for all control units, the following behavior applies after you activate the filter and return to the function group:

- Only the elements that were highlighted are displayed for the control units for which filter conditions were defined.
- The control units for which no filter conditions were defined are either not displayed or are highlighted to indicate that no entries are set.

The filter is therefore a restrictive filter.

- 1. If you have not already done so: Call up the Filter function by pressing the <F5> button.
- 2. Press the Create button.



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 A selection screen appears in which you can define the filter properties. Elements of the Overview function group are displayed in this case.

> Select the elements you want to filter (A). Then press the <F8> button to

save the selection.

Editing Please	g a filter e select	displayable	e elements. Save wi	th [F8], back with [F1	1].		
Ov	erview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DTC	Status		Control un	it	DSN	Porsche part	number
		Airbag					A
		Gateway	T				
		DME (DFI))				
		Transmiss	ion control 🗲				
		Selector le	ver 🖌				
		Rear-diffe	rential lock				
		High-volta	ge battery				
		High-volta	ge power electronics	3		ß)
		High-volta	ge charger				•
End U			r Datsiegger Sare			Dittinin: Loos	Brok Sector

Sin

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

٥v	erview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DTC	Status		Control un	it	DSN	Porsche par	number
		Airbag					
		Gateway					
		DME (DFI))				
		Transmiss	ion control				
		Selector le	wer				
		Rear-differ	rential lock				
		High-volta	ge battery				
		High-volta	ge power electronics	:			
		High-volta	de charger				

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

This is indicated by the ♥ icon in the Content defined column.



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8.13.4 Activating a filter



Precondition:

To activate a filter, it must first have been created: ► See section 8.13.3.

Note on activating a filter:

When you activate the filter, the properties you assigned to the filter are evaluated and the display of elements is shown filtered according to the default settings.



If no elements were selected beforehand (see section 8.13.3) in the filter conditions, i.e. if no restriction was defined, the filter <u>cannot</u> be activated.

When you activate a filter, all other filters for this function group or list view will be deactivated.

- 1. If you have not already done so: Call up the Filter function by pressing the <F5> button.
- Select the desired filter (A) and then press the Activate button (B).



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Delete

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3. The current filter is now activated. This is indicated by the ♀ icon in the active column.
Paramera Simulation mode
Program version VG2-14 300,14.07.21
List of available filters
Please select filter or create a new filter. Back with [F11].
Overview a Beneficie or Created Inters
Create Inters
Create filter Create
Create filter Create
Create filter Create
Create filter Create

als

Result of the filter applied in the example above Program version VG2-14.300.14.07.21 700 USV namera Simulat 4. Press the <F11> button to return to ist of available filters the screen from which you called Please select filter or create a new filter. Back with [F11]. up the Filter function. Overview This was the control unit overview in this example. Deactivate Change filter Reset filter Create Delete Created filters Content defined active estater pro. p 9 ~ Program version VG2-14.300.14.07.21 TOO UST Sin 5. A filtered control unit overview is displayed. Control unit search has been completed. Select control unit's) and select the required function via the menu. Overview Only the elements selected in the

DTC Status

Airbag (A2.1)

Gateway (A2)

Power distributor Battery sensor

9

Control uni

8

2

E.

09

DSN

000012

Alpha2

Porache part number

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97061821305 97061811505

97060616303

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filter are displayed.



Panamera Simulation mode

Program version VG2-14.300.14.07.21

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As long as the filter is active in the function group or list view, the \overline{v} icon will be displayed on the right in the title bar.



8.13.5 Changing the filter

Preconditions:



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- A filter was already activated:
 See section 8.13.4
- More than one filter is defined in the list of possible filters.
- The filters are not empty and can therefore be activated.

Note on the example in this section:

Two filters were defined:

- Test filter group. Filters the control unit overview according to the control units Airbag and Gateway.
- Test filter group test version 2. Filters the control unit overview according to the control units Instrument cluster and PSM.







And A

VG2-14.300.14.07.21 UST 3. Select a different filter, which you ist of available filters want to use for this function group lease select filter or create a new filter. Back with [F11]. (A). Overview Activate the new filter by pressing the Activate button (B). Activate Change filter Crea Dele d filters Content defined B est filter group ller group - leal version 3 (A)

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 In the list of possible filters, the new/changed active filter is indicated by the ^{SC} icon in the active column.

Deactivate Change filter Reset filter Create Create Create Create	Delete	Create						
Created filters Content defined ac			r i	Deactivate Change filter Reset fi				
	:tive	defined	Content		Created Filters			
Test filter group		,	¢	Test filter group				
Textribe g cup - xestransion 2 🗸 🖌 🗸	2	· L	~			stivarsion 2	Testrike gloup testivorsi	
Test filter group 🔗	1		9 9	Test filter group				

Result of the filter applied in the example above

 When you return to the function group by pressing <F11>, the new list view is populated.

In this example, the control unit overview is now filtered according to the control units Instrument cluster and PSM.

Φ¥	erview					adaptations
DTC	Status	Control un	it	DSN	Porsche par	rt number
9	Instrum	ent cluster		000013	97064111401	
٩	PSM (A2.4)			000007	97061811313	
	Co	mbination sensor			99760614505	



8.13.6 Deactivating a filter



Precondition:

To deactivate a filter, it must first have been created: ► See section 8.13.3. The filter must also have been activated: ► See section 8.13.4.

- 1. If you have not already done so: Call up the Filter function by pressing the <F5> button.
- Select the desired active filter (A) and then press the deactivate button (B).



Next steps



Function groups Extended identifications, Actual values/input signals, Drive links/checks and Codings/adaptations:

To display an updated view of the filtered elements, press the <F11> button in the list of filter groups.

Note and special case

Overview function group:

- If you carry out a control unit search without preselection (see section 8.1), the view is updated normally because all control units are available for filtering.
- If you preselect elements in the control unit list by selecting individual control units and then initiate a control unit search, only the control units selected in the preselection are displayed in the control unit overview.

As a result, not all control units are displayed in the control unit overview, just some of them.

If you now create and activate a filter in the control unit overview for displaying control units that are not shown in this reduced control unit overview, an empty control unit overview is displayed.

To display the desired control units based on the filter, you must first switch to the control unit list and then perform another control unit search in order to update the control unit overview.

Example:

<u>Assumption:</u> You want to select the Rear lid control unit. The filter "Test filter group" filters according to the control units Airbag and Gateway.

<u>Precondition:</u> In the control unit list, only the control units Airbag, Parking brake and Gateway were selected beforehand and a control unit search was performed only for these. The control units displayed in the control unit overview are therefore limited to these control units.

<u>Activating the filter:</u> After you activate the filter, only the control units and subcomponents of the control units <code>Airbag</code> and <code>Gateway</code> are displayed from the reduced control unit overview. You continue working as normal with these control units.

<u>Problem:</u> You deactivate the filter and want to select the rear lid control unit. However, only the control units Airbag, Parking brake and Gateway are displayed because this is the restricted control unit overview, which you preselected previously in the control unit list.

<u>Solution:</u> The control unit overview must be updated. The following steps explain how to do this.



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5. By pressing <F12>, you can now perform a control unit search with the filtered control units in the usual way (for a more detailed description, see 8) or, if at least one of the control units is selected, you can select one of the function groups.

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8.13.7 Processing a filter



Precondition:

To process a filter, it must first have been created: ► See section 8.13.3.

1. If you have not already done so: Call up the Filter function by pressing the <F5> button.

2. Select the desired filter group (A) and press the Process filter button (B).



3. The list of entries selected for the filter group appears.



Program on VG2-14.300.14.07.21 700 US7 4. Change the selection (A). In this litino a filter example, the Gateway control unit lease select displayable elements. Save with [F8], back with [F11]. was deselected and the Parking Overview brake, ParkAssist and DTC Status Transmission control **units** Control unit DSN Porsche part number were selected. Gateway DME (DFI) Save the changed selection by Transmission co pressing the <F8> button (B). Selector lever Rear-differential lock High-voltage battery High-voltage power electronics B High-voltage charge -Brok K 83 Program version VG2-14.300.14.07.21 700 US7 Simulation mod Then press the <F11> button to 5. litino a filter return to the list of available filter ase select displayable elements. Save with [F8], back with [F11]. groups. Overview

DTC Status

Gateway DME (DFI) Transmission control Selector lever Rear-differential lock High-voltage battery High-voltage power electronics High-voltage charger

Next steps



Function groups Extended identifications, Actual values/input signals, Drive links/checks and Codings/adaptations:

Control unit

DSN

Porsche part number

To display an updated view of the filtered elements, press the <F11> button in the list of filter groups.

Note and special case

Overview function group:

- If you carried out a control unit search without preselection (see section 8.1), the view is updated normally because all control units are available for filtering.
- If you preselect elements in the control unit list by selecting individual control units and then initiate a control unit search, only the control units selected in the preselection are displayed in the control unit overview.

As a result, not all control units are displayed in the control unit overview, just some of them.

If you now create and activate a filter in the control unit overview for displaying control units that are not shown in this reduced control unit overview, an empty control unit overview is displayed.

To display the desired control units based on the filter, you must first switch to the control unit list and then perform another control unit search in order to update the control unit overview.

Example:

<u>Assumption:</u> You want to select the Rear lid control unit. The filter "Test filter group" filters according to the control units Airbag and Gateway.

<u>Precondition:</u> In the control unit list, only the control units Airbag, Parking brake and Gateway were selected beforehand and a control unit search was performed only for these. The control units displayed in the control unit overview are therefore limited to these control units.

<u>Activating the filter:</u> After you activate the filter, only the control units and subcomponents of the control units <code>Airbag</code> and <code>Gateway</code> are displayed from the reduced control unit overview. You continue working as normal with these control units.

<u>Problem:</u> You deactivate the filter and want to select the rear lid control unit. However, only the control units Airbag, Parking brake and Gateway are displayed because this is the restricted control unit overview, which you preselected previously in the control unit list.

<u>Solution:</u> The control unit overview must be updated. The following steps explain how to do this.

- Program version VG2-14.300.14.07.21 Simulati TOO UST 6. First press the <F11> button in the st of available filters filter group list. lease select filter or create a new filter. Back with [F11]. Overview Reset filter Activate Change filter Create Delete Created filters Content defined active est filter group 0 0 0 est filter group - test version 2 \ll Program version VG2-14.300.14.07.21 700 UST Panamera Simulation mod 7. An incomplete control unit Control unit overview: overview is displayed. Control unit search has been completed. Select control unit(s) and select the required function via the menu. Overview Then press the <F11> button again DTC Status Control unit DSN Porsche part number to display the control unit list. 0 Airbag (A2.1) 97061821305 000012 * 9 Parking brake (A7) appood 97051810907 The control unit list is updated and now includes the newly added control unit names, which were selected previously in the filter. P S C
- 8. By pressing <F12>, you can now perform a control unit search with the filtered control units in the usual way (for a more detailed description, see 8) or, if at least one of the control units is selected, you can select one of the function groups.

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8.13.8 Resetting a filter

If you want to assign new selection properties to a filter without changing the name or deleting the filter, you can do this by resetting the filter. The filter is "empty" after you reset it, i.e. it no longer contains elements to be displayed later.

Note on filter behavior:

► There may be filter conditions for this filter that are defined for control units that ...



- ... are not displayed in the current control unit selection or
- ... that are not contained in the current control unit variant.

If you still want to reset the filter conditions and also reset the filter condition of the control units that are not displayed in the selection, you must then confirm this explicitly. <u>All</u> filter conditions are then reset.

► When you reset a filter, it will also be deactivated since it is empty.



Precondition:

To reset a filter, it must first have been created: ► See section 8.13.3.

1. If you have not already done so: Call up the Filter function by pressing the <F5> button.





- Program version VG2-14.300.14.07.21 700 US7 Sin 3. No properties are now assigned to ist of available filters the filter (no icon displayed in the lease select filter or create a new filter. Back with [F11]. Content defined **column**) (A). Overvie The filter is also deactivated (no Reset filter Activate Change filter Create Delete icon displayed in the active Created filters tent defined column) (B). es interiorna 0 Test filter group - test version 2 B (A)P alls
- You can now assign new properties to the filter in the usual way.
 ▶ See section 8.13.3.

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8.13.9 Deleting a filter

If you want to not only delete the filter properties (reset the filter) but also delete the complete filter (filter properties and name), select the Delete option.

Note on deleting filter properties:

If the filter contains conditions for control units that are not included in the selection, you must confirm deletion explicitly. The complete filter is deleted following confirmation.



Precondition:

To delete a filter, it must first have been created: \blacktriangleright See section 8.13.3.

1. If you have not already done so: Call up the Filter function by pressing the <F5> button.



- You must now confirm deletion of the filter. You have the following options:
 - Press <F11> to cancel the process. You return to the list of filters.
 - Press <F12> to confirm that you want to delete the filter.

Panamera	Simulation	mode	Progra	m version	VG2-14:	300.14.07.21	700 US		
List of availa	ble filters elected filter.	Cancel process by	pressing [F11].						
Overvie	w	Extended Identifications	Fault memory	Actual	l values signals	Drive links checks	Codinj adaptatis	**	
Deac	tivate	Change filter	Reset f	ilter		Create	Delete		
		Created filters			Content	defined	active		
ne der prop	we the prop					~			
Test filter gro	up - test ver	sion 2			¢	>			
								•	
En:		Deteragee Deve nl 24		ada men		Es FLD	R N	2 \$	

Special procedure

- If filter properties are defined for control units that are not included in the current selection, you must explicitly confirm deletion once again. You have the following options:
 - Press <F11> to cancel the process. You return to the list of filters.
 - Press <F12> to confirm that you want to delete the filter.



After deletion

5. After you delete a filter, the filter is deleted from the list of saved filters (A).

Pressing <F11> brings you back to the screen from which you called up the Filter function (B).



8.14 Guided Fault Finding (GFF, <F9>)

You can call up Guided Fault Finding from within the diagnostic application. Guided Fault Finding is not part of the diagnostic application and is therefore not described here. You will find further information on the operating principle and user interaction options for this function in the corresponding documentation for Guided Fault Finding.



Guided Fault Finding can only be called up from the control unit overview.



2. As soon as you exit the function, the diagnostic application is displayed in the active window again.

8.15 Measuring equipment (Multimeter, <F2>)

You can call up the measuring equipment application from within the diagnostic application. The measuring equipment application is not part of the diagnostic application and is therefore not described here.

You will find further information on the operating principle and user interaction options for this function in the corresponding documentation for the measuring equipment software.

4	Brood the (EQ) button	Panam	iera	Simulation mode Program	n version VG2-14.	300.14.07.21	US 🔻
١.	Fless life <f2> bullon.</f2>	Contro	l unit o	verview:			
	The measuring equipment	Contro	l unit se	earch has been completed. Select control unit(s) and	d select the require	d function via the menu.	V
	application starts and is displayed	Ov	erview	Extended Fault memory	Actual values input signals	Drive links Coding checks adaptatic	715 *
	in the active window.	DTC	Status	Control unit	DSN	Porsche part number	
		٩		Airbag (A2.1)	000012	97061821305	
				Gateway (A2)	Alpha2	97061811505	
				Power distributor	-		
				Battery sensor		97060616303	
		۵		DME V8 naturally aspirated engine EU5	C201	97061856212	
				PDK (Porsche Double Clutch)	30 00	97061838525	
		٩		Selector lever	D'I 00	97061832000	
				Rear-differential lock			
				High-voltage batter	004009	7P0915182B	-
			-eip ?	RANGE REAL STREET FILTER	Addu menu Al with PA	L Fourinding Logs Back	NE:d >> 2

2. As soon as you exit the function, the diagnostic application is displayed in the active window again.

9 OBD Scan Tool

If you started the diagnostic application using the transfer parameter <code>-project OBD</code> (or by pressing a button with this functionality, if available), it will be started as the OBD Scan Tool. Please note that you cannot use the OBD Scan Tool in display mode.

Unlike the diagnostic application, the OBD Scan Tool is not vehicle manufacturer-specific. The services that are used are standardized. The purpose of the OBD Scan Tool is to display only the drive and exhaust gas-relevant elements.

If you need a broader range of functions, use the diagnostic application in one of the basic application modes (see section 8).

The next sub-sections describe how to call up the individual function groups of the Tool and how to navigate within a screen in order to display the required information.

9.1 Glossary

CARB	California Air Resources Board
CIN	Calibration Identification Number
CVN	Calibration Verification Number
DTC	Diagnostic Trouble Code (fault memory/event memory)
EGR	Exhaust Gas Recirculation
ISO 15031	Definition of communication and the command set for On-Board Diagnostics (OBD)
MID	Measurement ID/Monitoring ID
MIL	Malfunction Indication Lamp
MODE	Diagnostic Test Mode – also referred to as "Task" in ISO 15031-4
OBD	On-Board Diagnostics
PID	Parameter ID
SCN	Software Calibration Number
TID	Test ID
VIN	Vehicle Identification Number (chassis number and vehicle identification number)

9.2 Function groups of the OBD Scan Tool

The following function groups are available:

Function group	Description
Overview	The Overview function group displays the list of available systems (engine, transmission), i.e. the elements of the loaded OBD project. The function group corresponds to the control unit list or control unit overview of the diagnostic application in one of the basic application modes.
On-board Diagnosis Overview	When you select the On-board Diagnosis/Overview function group, basic information about the individual function groups is displayed in an overview.
Actual values	The <u>Actual values</u> function group displays the list of available actual values and actual values that are supported by the system.
Environment values	The Environment values function group displays the list of available environment values and environment values that are supported by the system.
Fault memory Read	All fault memory entries for the selected system are read and displayed in the Fault memory/Read function group.
Test values of sporadically monitored systems	The Test values of sporadically monitored systems function group displays the list of available and supported operating conditions/actual values for the selected system.
Pending fault	The Pending fault function group displays the list of current faults (pending faults).
Vehicle information	The Vehicle information function group displays general vehicle information from the exhaust gas-relevant control units.
Permanent fault memory	The Permanent fault memory function group displays the list of permanent fault memory entries.

Table 7: Description of the function groups of the OBD Scan Tool

9.3 Overview

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What happens?

When you start the OBD Scan Tool, the overview screen is displayed first. For the next steps, a relevant system must be selected for which you can then retrieve further information using the function groups.

The available systems are determined from the VIT of the OBD project. Based on the control unit search used in the diagnostic application, a system search is performed after you have started the Tool and selected a system and the result is displayed in the work area.

- VG2-14.300.14.07.21 700 US7 1. Select the desired system (A) and ontrol unit selection: press the <F12> button (B). Select system(s) and go to system search with [F12] Note: If you want to perform a system search for all systems, System Element Status simply press the <F12> button IC1 (high-voltage without preselecting a system. MC2 (high-voltage (A)CM (engine) A system search is then started. SCM (brake system) CM (high-yoltage B CCM (tran nis**sion**) Ü
- 2. When the system search is complete, the elements that were found are displayed in the work area.

Select the desired systems and elements and then select one of the function groups.



9.4 On-board Diagnosis/Overview

Select the desired systems and elements:
 ▶See section 9.3



9.5 Actual values



What is displayed?

Current data for the exhaust gas-relevant systems is displayed. This includes analog and digital inputs and outputs as well as system information. The displayed values are current values, not default or substitute values.

9.5.1 Action-specific buttons for this function group

OBD Sca	OBD Scan Tool: Actual values						
Button	Label	lcon	Description				
F8	Value	A.	Pressing the <f8> button changes the value display to the current actual value.</f8>				
F8	Minimum	₽	Pressing the <f8> button changes the value display to the current minimum value.</f8>				
F8	Maximum	₽	Pressing the <f8> button changes the value display to the current maximum value.</f8>				

rsion VG2-14.300.14.07.21

9.5.2 **Displaying measured values**

1. Select the desired systems and elements: ► See section 9.3

BD Simu

2. Select the Actual values function group.

> The available actual values for the system are displayed in the overview screen.

Select the desired actual values (A) and press the <F12> button (B).



3. The individual actual values and their measured values are displayed in the working screen.

> Pressing the <F8> button allows you to choose one of the following display modes for the actual value:

BD Simulation mo	10.14.07.21		700	us▼					
ktueller Wert							Luo		
he display can be	chan	ged with [F8]. [F11]	changes to selection	of values.					P
Overview	~	On-board Diagnosis Overview	Actual values	Environm values	ent	Fault memo Read	ny	Test values s monit. syste	p »
System		A	ctual values		Value		Unit		
ECM igh-voltage attery)	(PID \$01) Monitor status - Number of emission-related 0 DTCs							•	
	(PID Stat	\$01) Monitor status us	- Malfunction Indica	ntor Lamp	off				
	(PID Misf	\$01) Supported Co ire Monitoring Supp	ntinuous Tests and - orted	Status -	no				
	(PID Fue	\$01) Supported Co System Monitoring	ntinuous Tests and Supported	Status -	no				
	(PID Con	\$01) Supported Co oprehensive Compo	ntinuous Tests and nent Monitoring Sup	Stats ported	yes	-			•
ем нас м (b) ?				And ment	Min.m	ianna: SP		Shirk CCC	****

Minimum This option displays the minimum value of the values that were read out.

This option displays the currently read actual value.

Value



Maximum This option displays the maximum value of the values that were read out.

What does "Minimum" or "Maximum" mean in this case?

The following relationship applies based on the physically supplied values of the respective addressed control unit/system:



- Minimum is either the smallest lexical value (in a character string), the smallest number (for a number) or FALSE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- Maximum is either the largest lexical value (in a character string), the largest number (for a number) or TRUE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- The value is the current lexical value (in a character string), the current number (for a number) or TRUE or FALSE (for Boolean values).

9.6 Environment values



What is an environment value?

Environment values are the elements that provide information about the conditions under which a fault memory entry was stored. They are similar to the environmental data in the diagnostic application (see section 8.3.5).

9.6.1 Action-specific buttons for this function group

OBD Sca	OBD Scan Tool: Environment values						
Button	Label	lcon	Description				
F8	Value	A ⊳	Pressing the <f8> button changes the value display to the current actual value.</f8>				
F8	Minimum	A	Pressing the <f8> button changes the value display to the current minimum value.</f8>				
F8	Maximum		Pressing the <f8> button changes the value display to the current maximum value.</f8>				

9.6.2 Displaying environment values

- Select the desired systems and elements:
 ► See section 9.3
- 2. Select the Environment values function group.

The available environment values for the system are displayed in the overview screen.

Select the desired environment values (A) and press the <F12> button (B).





3. The current environment values are displayed in the working screen.

Pressing the <F8> button allows you to choose one of the following display modes for the environment value:

 Value This option displays the current value that was read out.

• Minimum This option displays the minimum value of the values that were read out.

 Maximum This option displays the maximum value of the values that were read out.



What does "Minimum" or "Maximum" mean in this case?

The following relationship applies based on the physically supplied values of the respective addressed control unit/system:

- Minimum is either the smallest lexical value (in a character string), the smallest number (for a number) or FALSE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- Maximum is either the largest lexical value (in a character string), the largest number (for a number) or TRUE (for Boolean values). The validity range and reference variable is the duration of the initiated measurement.
- The value is the current lexical value (in a character string), the current number (for a number) or TRUE or FALSE (for Boolean values).



9.7 Fault memory/Read



Function description:

This function group displays all fault memory entries for drive or exhaust gasrelevant systems that were confirmed and were thus declared as genuine faults. Unlike permanent faults, these fault memory entries are not stored in the non-volatile memory.

9.7.1 Action-specific buttons for this function group

OBD Scan Tool: Read fault memory									
Button	Label	lcon	Description						
F8	Delete FML		Pressing the <f8> button deletes <u>all</u> fault memories.</f8>						
Decision question									
Button	Label	lcon	Description						
F11	No	\bigotimes	Pressing <f11> cancels an action that requires confirmation (e.g. if you decide not to delete a fault memory as originally specified). The <f11> button shown here is only displayed in combination with the form of the <f12> button shown in the next line.</f12></f11></f11>						
F12	Yes	\Diamond	Pressing <f12> confirms an action that requires confirmation (e.g. you want to delete a fault memory). The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>						

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9.7.2 Displaying the fault memory

- Select the desired systems and elements:
 ▶See section 9.3
- 2. Call up the Fault memory/Read function group.

The fault memory entries for the system are displayed.

If there are no fault memory entries, a message to this effect will appear in the Description column for the system.

Overview		On-bo Diagn Overs	osis view	Actual values	Environment values	Fault memory Read	Test values sp monit. system	-
System	SAE code Description							
BECM (high-voltage	P0056		HO2S Heater Control Circuit Bank 2 Sensor 2					
oattery)								
battery)								
battery)								
battery)								

9.7.3 Deleting the fault memory

- Display all fault memories:
 ▶ See section 9.7.2
- 2. Press the <F8> button.

A query appears prompting you to confirm that you want to delete all fault memory entries. You have the following options:

- Press <F11> to cancel the process. You return to the list of fault memory entries.
- Press <F12> to confirm that you want to delete all fault memory entries.
9.8 Test values of sporadically monitored systems



Which test values are displayed?

Values from on-board diagnostic systems, which either continuously monitor (e.g. misfire monitoring) or sporadically read out (e.g. catalytic converter system) special components/systems, are displayed within this function.

- Select the desired systems and elements:
 ▶ See section 9.3
- Select the Test values of sporadically monitored systems function group.

Select the elements for which you want to retrieve further information (A) and press the <F12> button (B).



3. The information is displayed in the work area.

Back with	[F11].					_			
Overv	rienor	~	Environment values	Fault memory Read	Test values : monit. syste	spor. ems	Pending fault	V info	ehicle Similation
System		_	Operati	ng conditions		Min:	Test value	Max	Unit
BECM (high-vol tage battery)	(OBDMID S06) Oxygen Sensor Monitor Bank 2 - Sensor 2 Read OBDMID Data (1)					0.0	660.63	660.63	mV
	(OBDMID \$06) Oxygen Sensor Monitor Bank 2 - Sensor 2 Read OBDMID Data (2)					660.63	660.63	1129.964	mV
	(OBDMID \$05) Oxygen Sensor Monitor Bank 2 - Sensor 1 Read OBDMID Data (1)					0.249656	0.737124	1.99881 75	
	(OBDM OBDMI	ID SO	5) Oxygen Senso a (2)	r Monitor Bank 2 - 3	Sensor 1 Read	-0.0589 565	-0.0023 79	0.05895 65	

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9.9 Pending faults

What are pending faults?

Pending faults are faults that were discovered during the current or last completed driving cycle and relate to drive and exhaust gas-relevant systems.

The display of this type of faults is intended to make it easier for you to find currently occurring problems after you have carried out repairs, deleted diagnostic information and then carried out one single driving cycle. If a test fails during this driving cycle, the corresponding fault entry is generated and displayed.

Please note:

The test result does not necessarily indicate a faulty component in the vehicle. If the fault is still present after an additional driving cycle, this fault memory entry is set and you can then read it out using the Fault memory/Read function group (see section 9.7). This is then an indication that the component is faulty.

9.9.1 Action-specific buttons for this function group

OBD Sca	OBD Scan Tool: Pending fault							
Button	Label	lcon	Description					
F8	Delete FML	O	Pressing the <f8> button deletes ALL fault memories.</f8>					
Decision	Decision question							
Button	Label	lcon	Description					
F11	No	8	Pressing <f11> cancels an action that requires confirmation (e.g. if you decide not to delete a fault memory as originally specified). The <f11> button shown here is only displayed in combination with the form of the <f12> button shown in the next line.</f12></f11></f11>					
F12	Yes		Pressing <f12> confirms an action that requires confirmation (e.g. you want to delete a fault memory). The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>					

9.9.2 Displaying pending faults

- Select the desired systems and elements:
 ▶See section 9.3
- 2. Select the Pending fault function group.

The pending faults for the system are displayed.

If there are no fault memory entries, a message to this effect will appear in the Description column for the system.

Overview	**	ault memory Read	v Test values spor. monit. systems	Pending fault	Vehicle information	Permanent fault memory	
System	;	SAE code		Descri	ption		
BECM (high-voltage battery)	PODS	6	HO2S Heater Control Ci	ircuit Bank 2 Sens	ar 2		1
	P253	9	Low Pressure Fuel Syst	em Sensor Circuit			

9.9.3 Deleting all pending faults

- Display all pending faults:
 ► See section 9.9.2
- 2. Press the <F8> button.

A query appears prompting you to confirm that you want to delete all pending faults. You have the following options:

- Press <F11> to cancel the process. You return to the list of all pending faults.
- Press <F12> to confirm that you want to delete all pending faults.

9.10 Vehicle information



What is displayed?

Vehicle-specific data, e.g. the vehicle identification number (VIN) and calibration IDs, is displayed.

- Select the desired systems and elements:
 ▶See section 9.3
- on VG2-14.300.14.07.21 TOO UST DBD Simulation mode Program ve 2. Select the Vehicle information ehicle information: function group. Please select values and press [F12] to read the selected values. ee ^tault memory Test values spor. Read monit. systems Pending fault Permanent Fault memory Overview Select the elements for which you want to retrieve further information Syst Vehicle informat (A) and press the <F12> button (InfoType \$06) Calib n Verification Numbers Read InfoType Data h-voltage (B). A (InfoType \$04) Calibration Identification Read InfoType Data (InfoType \$0A) ECU/Module Acronym and Text Name Read InfoType D (InfoType \$02) Vehicle Identification Number Read InfoType Data B Ö P 8 Ê 2-14.300.14.07.21 3. The information is displayed in the ehicle information work area. ack with [F11]. ult mem Read Pending fault Permanent fault memor Overvi iit. sys System Vehicle information Value ЕСМ InfoType \$06) Calibration Verification Numbers 74d760bc nigh-volt attery) 7P0182 0600 EA nfoType \$04) Calibration Identification nfoType \$0A) ECU Acronym весм nfoType \$0A) Delimiter (InfoType \$DA) ECU Name B+EnergyCtrl nfoType \$D2) Vehicle Identific WPDZZZ97ZCL 040027

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9.11 Permanent fault memory

What is displayed?



The permanent fault memory contains a collection of entries that were confirmed as faults. The fault entries are stored in the non-volatile memory until such a time as the monitor for the respective entry decides that the fault is no longer present.

The purpose of the permanent fault memory is to ensure that a vehicle inspection cannot be passed simply by deleting the DTCs (fault memory entries) and then disconnecting the vehicle from the vehicle battery.

9.11.1 Action-specific buttons for this function group

Actual va	Actual values/input signals/data logger								
Button	Label	lcon	Description						
F8	Delete FML		Pressing the <f8> button deletes ALL fault memories.</f8>						
Decision	Decision question								
Button	Label	lcon	Description						
F11	No	\mathfrak{X}	Pressing <f11> cancels an action that requires confirmation (e.g. if you decide not to delete a fault memory as originally specified). The <f11> button shown here is only displayed in combination with the form of the <f12> button shown in the next line.</f12></f11></f11>						
F12	Yes	Ø	Pressing <f12> confirms an action that requires confirmation (e.g. you want to delete a fault memory). The <f12> button shown here is only displayed in combination with the form of the <f11> button shown in the previous line.</f11></f12></f12>						

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9.11.2 Displaying the permanent fault memory

- Select the desired systems and elements:
 ▶See section 9.3
- 2. Select the Permanent fault memory function group.

The permanent fault memory entries for the system are displayed.

If there are no fault memory entries, a message to this effect will appear in the Description column for the system.

Overview	ec	ault memory Read	Test values spor. monit. systems	Pending fault	Vehicle information	Permanent fault memory
System		SAE code		Descri	ption	-
BECM high-voltage sattery)	No fault momory entries set.					

9.11.3 Deleting the permanent fault memory

- Display all permanent fault memory entries:
 ▶See section 9.11.2
- 2. Press the <F8> button.

A query appears prompting you to confirm that you want to delete all permanent fault memory entries. You have the following options:

- Press <F11> to cancel the process. You return to the permanent fault memory list.
- Press <F12> to confirm that you want to delete all permanent fault memory entries.

10 Special features of the interface

10.1 Displaying groupings

Diagnostic elements can be displayed both directly and as groupings in the diagnostic application. If groupings were defined beforehand, the application works differently to the steps described in section 8 in that the relevant element cannot be clicked and selected directly, but the corresponding group must be selected first. The following examples explain how this works.

1st grouping level	2nd grouping level		3rd grouping leve	. 	
Group_Miscellaneous>	▶ Group_	Miscellaneous	Element 1	F12	Parameter 1
Group_InstallationList>	Group_	_Body>	Element 2	F12	Parameter 2
			Element 3	F12	Parameter 3
			Element 4	F12	Parameter 4
			Element 5	F12	Parameter 5
		F12			
	Group_	Transmission>	Element 6	F12	Parameter 6
			Element 7	F12	Parameter 7

Example 1: Selection of several groups

If you have selected several groups and some of these contain sub-groups, the individual elements are not displayed until the selection does not contain any more sub-groups. For the case shown in the example, this means the following: If you select both *Group_Miscellaneous* and *Group_InstallationList*, elements of the 2nd grouping level *Group_Miscellaneous* will not be displayed because *Group_InstallationList* still contains further sub-groups (*Group_Body* and *Group_Transmission*).

If you select all groups in the 2nd grouping level (i.e. *Group_Miscellaneous*, *Group_Body* and *Group_Transmission*) and press <F12>, all elements will then be displayed. Since there are no further groupings, the elements of *Group_Miscellaneous* are then also displayed.

The parameters are displayed after you have made your selection and pressed <F12>.

Example 2: The group ALL

1st grouping level	2nd grouping level	3rd grouping level	
ALL> F12	►Element 1		
	Element 2		
	Element 3		
	Element 4		
	Element 5		
Group_AB			

If groupings exist, you can display all elements of the group *ALL* by selecting this group and pressing <F12>. These are generally all elements of the respective function group.

However, the following restrictions apply for the group ALL:

- The content of the group ALL is generated generically for the respective operating mode. The behavior in the respective operating modes can therefore be different for the group.
- If the group ALL exists and if there are also other groups, the operating behavior shown in example 2 applies.
- If the group ALL does not exist and if there are also other groups, the operating behavior shown in example 1 applies.

Note: As a rule, the elements of group ALL are displayed in the sequence that was defined in the grouping tool (PTTD).

1st grouping level	2nd arouping level	3rd arouping level	
F12	Fiz	F12	Paramotor 1
E10	510	Field	
Group_InstallationList>	►Group_Body>	Element 2	Parameter 2
		Element 3	Parameter 3
		Element 4	Parameter 4
		Element 5	Parameter 5
	Group_Transmission>	F12	Parameter 6
		Element 7	Parameter 7
Group_AB> F12	Group_AB>	Element 1	► Parameter 1
		Element 4	Parameter 4
		Element 7	Parameter 8

Example 3: Elements that are present in several groups

By copying elements to individual groups, it is possible that elements in the 3rd grouping level - or lower, depending on the number of grouping levels - may be displayed several times (see *Group_AB*).

If these elements are all selected, all parameters will also be displayed several times in the next screen.

10.2 Views

10.2.1 What types of views are there?

Prerequisite for displaying the Functional view:



In order to display the Functional view, a corresponding PTTD attribute set must be assigned and installed accordingly. The attribute set must include groupings of *function-oriented groups* (for an explanation of the term "*function-oriented group*": see below) so that these can be displayed within the diagnostic application.

If either there is no corresponding PTTD attribute set installed or if there are no *function-oriented groups* defined in this attribute set, the related button for calling up this view will be grayed out and cannot be selected or no groups will be displayed in the work area.

If the relevant prerequisites are met, you can switch between two types of displays:

- Display using the normal "control unit view". In this case, data is grouped and assigned according to control unit relationship. Sub-components are displayed indented below the respective control unit (see also description in section 8.1). Control units can also be displayed in groups if a corresponding attribute set was assigned by the PTTD (see section 10.1).
- Display using *function-oriented groups*. In *function-oriented groups*, diagnostic services of control units are grouped together to form a virtual control unit. ¹. The display based on *function-oriented groups* is referred to as a Functional view. You can then carry out diagnostics in the usual way using the virtual control units.

10.2.2 Control unit view

This is the normal view that is selected when you start the diagnostic application. For further information on the display and operating behavior, see the illustrations and explanations in section 8.

¹ Example: Elements of the BCM_front and BCM_rear control units are grouped together in a functionoriented group "Interior lighting".

10.3 Displaying string resources

Depending on the installation and configuration of the diagnostic application, you can call up further information on the text assignments and translations of individual sections of text. There may be two options available for doing this.

- 1.) Display the text blocks using a prefix, where "V" stands for V-Text and "O" stands for O-Text.
- 2.) Display the text information using the mouse-over effect: If this feature is enabled, a context box will be displayed in the diagnostic application after a configurable time when you move the mouse over part of the text. The following information is listed in the context box:
 - ODX text ID
 - O-Text

As soon as you move the mouse over a different part of the text, another context box containing relevant content is displayed. When you press the left mouse button - to make a selection, for example -, the context box disappears.

Display using a prefix			Display using the mouse-over effect			
V: Control unit selection:			identifications V: Fault memory	input signal		
V: Select control L	init(s) and continue to control unit sear	St	V: Control unit	V: DSN		
	Mr. Tradeur de d	V:	Airbag			
V: Overview	<pre></pre>	V:	Gateway			
V: D V: St	V: Control unit	V:	DME (DFI O-Text: Gateway	976003089329		
		V:	Transmission control	-		
V: A	.irbag	V :	Selector lever			
V: 0	Sateway	V:				
		V: High-voltage battery				

10.4 Behavior of the menu bar

Depending on the action that is currently being performed, the menu bar can be deactivated in order to prevent an unintentional switch to a different function group.

Example: The menu bar is deactivated when writing coding. It is not activated again until the coding process is complete.

10.5 Search for diagnostic elements

You can search for services and parameters in the ODX files of the control units. The <F3> button is available for this purpose in the control unit overview after you have selected at least one control unit.

You can enter a search term in the vehicle-wide search screen. The search is then performed for the control units listed in the selection.

This section describes how to call up the vehicle-wide search and search for diagnostic elements.

Note on calling up the vehicle-wide search:



You can only call up the Vehicle-wide search function from the control unit overview, not from the control unit list or from other function groups or working screens for other functions. You must have at least one control unit in the selection.

Note on the search area:

The search area includes a number of function groups.

You can search for services and parameters within the following function groups:

- Extended identifications
- Actual values/input signals
- Drive links/checks
- Codings (only in the coding mode Customer-specific settings here)

1

You cannot search for individual ODX elements in the Maintenance/Repairs search area, but you can perform a search for the functions displayed in the check list:

You **<u>cannot</u>** perform a search for elements of the following function groups and functions:

- Fault memory
- Programming
- Log services
- General vehicle functions (<F7>)

- Display the list of installed control units and go to the control unit overview:
 ► See section 8.1.
- Select the desired control units containing ODX data in which you want to perform the search (A) and press the <F3> button (B).

Panam	nera	Simulation	mode	Progr	am version VG2-14	1.300.14.07.21	700 (
Contro	ol unit o	verview:Not	t all versions have t	been detected.			
Contro	el unit se	aarch has b	een completed. Se	lect control unit(s) a	nd select the requir	ed function via the me	enu.
٥v	erview	~	Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations
DTC	Status		Control ur	nit	DSN	Porsche par	t number
٩		Airbag (A2	.1)		000012	97061821305	
		Gateway ()	A2)		Alpha2	97061811505	
		Power	r distributor				
		Batter	ry sensor	· ·	A	97060616303	
٨		DME V8 na	aturally aspirated e	ngine EU5	C201	97061856212	
		PDK (Pors	che Double Clutch))	30 00	97061838525	
9		Selector le	ver		D-1 00	97061832DDD	
		Rear-differ	ential lock	ß			
		High-voltag	ge battery 🖌		004009	7P0915162B	

Note on entering the search term:

You can use the following placeholders when entering search terms:

- *: The asterisk is a placeholder for any number of characters.
- ?: The question mark is a placeholder for a single character.
- 3. The vehicle-wide search screen appears.

i

Enter a search term (A), select the desired search area (B) and press the Start button (C).

A progress bar (D) shows the current status of the search.



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Note on the selection of entries in the results list:

You can only select one element.

4. Select the desired entry (A) and press the <F12> button (B).



Note on the display in the respective function group:

Depending on the function group in which the element was found, the following will be displayed.

- Extended identifications: The working screen of the function group is displayed. <u>All</u> elements of the control units in the selection are displayed in the working screen. The elements that were selected in the vehicle-wide search are already highlighted. You can execute diagnostic services directly in the working screen.
- All other function groups that can be searched using the vehicle-wide search:

The **overview screen** of the respective function group is displayed. All elements of the control units in the selection are displayed in the overview screen. The elements that were selected in the vehicle-wide search are preselected, i.e. highlighted. With the elements preselected, you can press <F12> (Next) to move on to the working screen of the function group and execute diagnostic services there.



Note on behavior if there are groupings in the function group that is then selected:

After you select one or more elements of a function group and confirm your selection by pressing <F12>, the screen for the first grouping level is displayed. The groupings containing the elements that were selected in the vehicle-wide search are already highlighted (for information on displaying groupings, see also section 10.1).

Note on other possible actions for the selected function group:



1

You can switch to a different function group by selecting one of the function group buttons on the menu bar. The elements belonging to the control units selected in the control unit overview are then displayed in the function group that is then called up - irrespective of the elements that were selected in the vehicle-wide search.

10.6 Changing column sorting

10.6.1 Sortable content

Note:



It is not possible to change the column sorting in all columns and in all grids. The following list shows what can be sorted in which function groups.

The next two sections describe how to sort columns.

Function group	Screen	Sortable columns	Non-sortable columns
Control unit list		Control unit	DTC, Status, DSN, Part number
Control unit overview		DTC, Status, Control unit, DSN, Part number	
Extended identifications		Control unit, Identification	Value, Unit, Changed
Fault memory		Control unit, Priority, Fault code, Active, Description	
Fault memory	Environmental data	Control unit, Priority, Fault code, active, Description	
Actual values/input signals	Start screen	Control unit, Measured value	
Actual values/input signals	Value display	Control unit, Name,	Type, Value, Unit
Drive links/checks	Start screen	Control unit, Drive links/tests	
Drive links/checks	Execution		Parameters, Value, Unit
Drive links/checks	Adding measured values	Control unit, Measured value	
Codings/adaptations	Start screen		Coding mode
Codings/adaptations -> Customer-specific settings	Selection	Control unit, Coding value	
Codings/adaptations -> Coding of binary data	Configuration record selection		Control unit, Configuration record, Data record
Codings/adaptations -> Coding of binary data	Data file selection		Data record, Data file, Configuration record, Value in file
Codings/adaptations -> Customer-specific settings	Setting and coding coding values	Control unit, Coding value	Value, Unit, Changed
Codings/adaptations -> Manual (Manual coding with MCR)	Entering vehicle data		Coding value, Value
Codings/adaptations -> Manual (Manual coding with MCR)	Setting equipment features		Control unit, Test step, Status

Function group	Screen	Sortable columns	Non-sortable columns
Codings/adaptations -> Manual (Manual coding with MCR): Check vehicle data	Checking vehicle data		Control unit, Coding value, Value
Codings/adaptations -> Manual (Manual coding with MCR)	Coding	Control unit, Session, Part number, Status	
Codings/adaptations -> Automatic (Automatic coding with MCR)	Checking vehicle data		Control unit, Coding value, Value
Codings/adaptations -> Automatic (Automatic coding with MCR)	Coding	Control unit, Session, Part number, Status	
Codings/adaptations -> Restore factory settings/codes	Checking vehicle data		Control unit, Coding value, Value
Codings/adaptations -> Restore factory settings/codes	Coding	Control unit, Session, Part number, Status	
Maintenance/repairs:	Start screen	Control unit, Function	
Maintenance/repairs: -> Control unit replacement	Mode selection - Read/Write		Mode
Maintenance/repairs: -> Control unit replacement: Read data	Read-out screen	Control unit, Phase, Status	
Maintenance/repairs: -> Control unit replacement: Write data	Write screen	Control unit, Phase, Status	
Maintenance/repairs: BR-specific processes (e.g. Grind in, Calibrate, Check basic setting of EPB, Change battery, etc.)			All
Programming	Start screen		Programming mode
Programming -> Manual programming	Entering vehicle data		Description, Value
Programming -> Manual programming	Changing values		Control unit, Test step, Status
Programming -> Manual programming	Programming		Control unit, Session, Part number, Status
Programming -> Automatic programming	Programming	Control unit, Session, Part number, Status	
Programming -> Programming without flash rules	Session selection	Control unit, Session, Part number,	
Programming: -> Programming without flash rules	Session details	Control unit, Identification, Value, Unit	
Log services		Name, Request	

Function group	Screen	Sortable columns	Non-sortable columns
General vehicle functions -> External applications			Applications
General vehicle functions -> Maintenance of vehicle data			Value group, Coding value, Value, Changed
General vehicle functions -> Vehicle analysis log (VAL)	Selection of VAL type		Vehicle analysis log
General vehicle functions -> Vehicle analysis log (VAL)	Creating the VAL (Serv. and OBD VAL)		Function, Phase, Status
General vehicle functions -> Campaign (campaign coding)	Entering campaign number		Description, Campaign number entry
General vehicle functions -> Campaign (campaign coding)	Checking vehicle data		Control unit, Coding value, Value
General vehicle functions -> Campaign (campaign coding)	Programming		Control unit, Session, Part number, Status
General vehicle functions -> Vehicle handover log	Information screen		Function, Phase, Status
General vehicle functions -> Vehicle handover log	Read-out screen		Function, Phase, Status
General vehicle functions -> Vehicle handover log	Maintenance interval		Control unit, Maintenance work, Complete
General vehicle functions -> ODX data check	Data check screen		Control unit, Check, Test, Status, Results
General vehicle functions -> Read all fault memories and erase if required	Fault memory display	Control unit, Priority, Fault code, active, Description	
Filter	List of available filters	Created filters, Content defined, active	
Filter	Processing a filter in the Control unit overview/control unit list function group	DTC, Status, Control unit, DSN, Part number	
Filter	Processing a filter in the Actual values/input signals function group	Control unit, Description	
Filter	Processing a filter in the Drive links/checks function group	Control unit, Description	
Vehicle-wide search	Search screen		Control unit, Name, Unit, Function group

10.6.2 Simple sorting



You can change the sort direction of the displayed data. As you may already be familiar with from Office programs, you can do this by clicking in the respective table header.

Column sorting is described here using the control unit overview as an example.

4	Continent according to control write	Panam	iera	Simulation mode Program	n version VG2-14.	300.14.07.21 TOO	US 🔻
Ι.	with a fault memory entry.	Contro Contro	l unit o I unit s	verview:Not all versions have been detected. earch has been completed. Select control unit(s) an	d select the require	d function via the menu.	
	To do this, click in the column	٥v	erviev	Extended Fault memory	Actual values input signals	Drive links Coding checks adaptation	118 **
	header until the arrow is pointing	ртс 🦻	Status	Control unit	DSN	Porsche part number	
	in the desired sort direction			Airbag (A2.1)	000012	97061821305	
		\$		DME VB naturally aspirated engine EU5	C201	97051856212	
		۵		Selector lever	01 00	97061832000	
		٩	9	Instrument cluster	000010	97064111401	
	\frown	۵		Steering wheel electronics	000033	991618413	
		٩		Stopwatch	000006	97064130102	
	DIC -	۵		PCM	70 00	97064217201	
		٩		Air conditioner (4-zone Climatronic A2.7)	800000		
		۵		A/C compressor	803001	7P0820803G	•
	\sim		H111 ?	Mulmathr Same File Control	Abd intenu Aliwith Pr	AL Fourisinding Logo Back Egg Fill Fill	NCC

10.6.3 Canceling sorting



If you want to cancel sorting again, simply click in the column header for as long as required until the arrow indicating the sort direction disappears. The elements in the work area are then displayed unsorted again.

10.6.4 Nested sorting

You have the option of combining two sort directions. To do this, proceed as follows:



- First pre-sort the entries in a column. The elements displayed in this column are then sorted in the usual way according to this first sort criterion (see examples above).
- Then sort according to a second criterion by clicking in the second column header. The elements in the pre-sorted display are then sorted again.

Example: Sorting control units with fault memory entries according to part number

	—	Panam	era	Simulation mode Progra	m version VG2-14.	300.14.07.21	∪s▼			
1.	First sort according to control units	Control unit overview:Not all versions have been detected.								
	that have a fault memory entry.	Contro	l unit s	search has been completed. Select control unit(s) a	Id select the required	d function via the menu.				
	To do this, click in the header of	٥v	erviev	Extended Fault memory	Actual values input signals	Drive links Coding checks adaptation	**			
	the DTC column	ртс 🗉	Status	s Control unit	DSN	Porsche part number				
		٨		Airbag (A2.1)	000012	97061821305				
	The cort direction that was not for	٢		DME V8 naturally aspirated engine EU5	C201	97061856212				
	the first criterion is indicated by a	٩		Selector lever	D'I 00	97061832000				
	the first children is indicated by a	٩	۵	Instrument cluster	000010	97064111401				
	large triangle.	٨		Steering wheel electronics	000033	991618413				
		٩		Stopwatch	000006	97064130102				
		٩		РСМ	70 00	97064217201				
		٨		Air conditioner (4-zone Climatronic A2.7)	800000					
		٢		A/C compressor	S03001	7P0820803G	•			
			-«» ?	F2 F4 F6	Add. menu All with Ev	Fourthinding Logs Brock Fo FID Fit Fit	>>> >>>			

2. Then sort according to part number.

To do this, click in the header of the Porsche part number column.

The sort direction that was set for the second criterion is indicated by a small triangle.

Panam	era	Simulation mode Progr	am version VG2-14	.300.14.07.21 TO US							
Control Control	Control unit overview:Not all versions have been detected.										
016	erview	Extended Fault memory	Actual values input signals	Drive links Coding checks adaptations							
DTC⊽	Status	Control unit	DSN	Porsche part number ∸							
٩		Air conditioner (4-zone Climatronic A2.7)	000006								
9		Rear lid	101130	4H0959107D							
٩		A/C compressor	S03001	7P0820803G							
٩		Front-end electronics (G1 Max VR12)	005013	7PP907064Q							
٨		Rear-end electronics (G1 VR12)	000013	7PP907279E							
٩		Adaptive cruise control (ACC3_A3)	000003	97060506504							
9		PDCC (A2.2)	000005	97061810703							
٩		Parking brake (A7)	000006	97061810907							
۵		PSM (A2.4)	000007	97061811313							
Ena U	?	Malinater	- dt.manu Alwithf	M. Faultinging Logs Birth Torr							

10.7 Moving the dividing line



In screens that are divided into two sections, you can move the dividing line between two sections of the work area. This is described here using the Drive links/checks function group as an example.

- Program version VG2-14.300.14.07.21 700 US7 anamera Simulation mode 1. Move the cursor over the dividing unction Control unit reset of Air conditioner (4-zone Climatronic A2.7) selected. line, press the left mouse button Start function with (F8) and keep it pressed. Actual value Drive link Extended dentifications Cod Overview Fault memory input signals If you are using a touchscreen, Value Unit Parameters No parameter can be set touch the touchscreen at the dividing line. Value Unit Result D B Add
- Then drag the dividing line in the desired direction. Keep the left mouse button pressed or keep your finger on the touchscreen while dragging the line.

Overview	identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptation:
	Paramete	18		Value	Unit
No parameter can	De set				
		-			
	Results			Value	Unit
		I			

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3. When you have reached the desired position, release the left mouse button or remove your finger from the touchscreen.

Panamera	Simulation	mode	Progra	m version VG2-14.3	300.14.07.21	700 L	JS 🔻
Function Con Start function	trol unit res with [F8].	et of Air conditioner	(4-zone Climatronic	A2.7) selected.			Ę
Overview		Extended identifications	Fault memory	Actual values input signals	Drive links checks	Coding adaptations	
		Paramete	irs		Value	Unit	
No parame	ter can be :	set					-
							-
		Results	▲		Value	Unit	
							-
Erd Hold	Elutionalia	Entertained Saco	Manavali	Size	Paultining Lto:	Eac.	Pager 1
(b) ?	80	al 😰	A.			aa	55

10.8 Creating screenshots

In addition to copying the contents of the work area, you can also copy the complete image of the application (graphics, text, table structure, shading, frames, etc.) by creating a screenshot.



Make sure that the diagnostic application is displayed on top and is running in the active window.

Option 1

 Press the key combination <ALT> + <Print Screen> on your keyboard. The screenshot created in this way can be integrated as an image in an application (e.g. Microsoft WORD).

Option 2

2. Pressing the key combination <CTRL> + <P> also allows you to save a screenshot to your hard drive. The screenshot is saved to the workspace directory of the diagnostic application.

10.9 Language version

You can select other language versions in order to use the software with an interface in the desired language. The language can be changed in two different ways:

- 1. Using the Porsche basic system, which transfers the language version to the diagnostic application by means of a transfer parameter and sets this language version automatically when the application is started.
- 2. While the application is running: In this case, you can change the language version with just a few clicks using an icon in the title bar of the display window.

The procedure for changing the language version using the icon while the application is running is described below.



Please note: Time required for changing the language version

It can take up to 20 seconds for all texts to be changed to the desired target language.

Please note: Language mix in the display



In some cases, no displayable text may have been defined for the selected language version. In this case, the text is automatically displayed in a "default language" or if there is no default language defined, the developer text is displayed. If the developer text is not even defined, a number - the text ID - is displayed.

1. Find the following icon in the top right corner of the title bar:

Click on it using the left mouse button.

If you are using a touchscreen, touch the required position on the touchscreen.

Contro	unit o ol unit o	simulation motes verview:Not all versions have be earch has been completed. Sele-	en detected. ct control unit(s) an	n version visiz-14. d select the require	d function via the men		
Ov	erview	K Extended	Fault memory	Actual values input signals	Drive links checks	Coding adaptations	**
DTC	Status	Control unit		DSN	Porsche part r	number	
٨		Airbag (A2.1)		000012	97061821305		
		Gateway (A2)	97061811505	-			
		Power distributor		-			
		Battery sensor			97060616303		
٨		DME V8 naturally aspirated eng	ine EU5	C201 97061956212			
		PDK (Porsche Double Clutch)		30 00	97061838525		
٩		Selector lever		01 00 97061832000			
		Rear-differential lock		-	-		
		High-voltage battery		004009	7P0915182B		Ŧ
	Heip ?	Vulimeter Security F2		Addumenta Allwith Po	/L Foultifinding Logs	Brok CC F11	>

 A drop-down menu appears in which you can set the desired language. The various languages are displayed in a list.

Click on the relevant language version.

The drop-down menu disappears and the language is set.

Panamera Simulation mode Program version VG2-14.SDD.14.D7.21											1	F Françai	s		
Control unit overview:Not all versions have been detected.												PT Portug	juês		
Control unit search has been completed. Select control unit(s) and select the required function via th												RC 中文			
Overview - Extended Fault memory Actual values Drive links											Italiano				
_				IDENDIC	ations			input si	ynais	Check		E Españo	I		
DTC	Status			C	antrol unil	:		DS	SN	Pors	chi	NL Neder	lands		
\$		Airbag	irbag (A2.1) DDDD12 97D6162130					DS	GB Englis	h					
		Gatev	Sateway (A2)							970618115	*	· ㅁ + 큸			
		F	awer	distributor							1	J日本語			
		E	Battery sensor				- 97D6D6163D		DS	D Deutscl	n				
9		DME	V8 nar	8 naturally aspirated engine EU5				C201 9705185521		12	RUS Русский				
		PDK (Porse	he Double	Clutch)			30 00 9706-18385		25	US Englis	h			
٩		Selec	tor lev	er				D'1 00		970616320	DD				
		Rear-	differe	ntial lock				-		-					
		High-1	voltag	e battery				DD4DD9		7PD915182	в		-		
E.4	2	м.	н Ас	Secreth	**: 2	Fhx	Delete P	Adi.min.	i i i i i i i i i i i i i i i i i i i	E Foulincing	L (:gp Ea∷. - ≪≪	· en:		



Canceling language selection:

To exit the drop-down menu without setting a new language version, simply click in an empty section of the work area.

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10.10 Context-sensitive help

You can display information about elements in the work area. The <F1> (Help) button is available on the control bar for this purpose.



Selectability:

In order to call up the Help function, you must have selected only one element. The <F1> button is not active if you have selected more than one element.

1. Select an element (A) and press the <F1> (Help) button (B).

anam	era	Simulation mode Program	n version VG2-14.	300.14.07.21 ₹●● US ▼
Contra	l unit o	erview:Not all versions have been detected.		
Contro	l unit se	arch has been completed. Select control unit(s) an	d select the require	d function via the menu.
٥v	erview	Extended Fault memory	Actual values input signals	Drive links Coding >> checks adaptations
DTC	Status	Control unit	DSN	Porsche part number
۵		Airbag (A2.1)	000012	97061821305
		Gateway (A2)	Alpha2	97061811505
	${igodol}$	Power distributor	-	•
		Barery sensor		97060616303
۶		DME V8 naturally aspirated engine EU5	C201	97061856212
		PDK (Porsche Double Clutch)	SD 00	97061838525
٩		Selector lever	01 00	97061832000
		Rear-differenti	-	-
		High-volinge battery	004009	7P0915182B
	?		Addumenu Allwith Po	Foutfording Logs Brok see

Note on display:

If you click on an element that is marked with a ? icon and a fault code and then press the <F1> button, a button menu appears first. This button menu has two entries:

- Help. Click on the Help entry if you want to call up help text for the selected control unit.
- Error message.

Click on the Error message entry if you would like to see a detailed error message.

If there is only a fault code shown in the column, a detailed error message will be displayed when you click on <F1>.

If there is no fault code in the column, information text for the relevant control unit appears when you click on <F1>.



2.	The available information is displayed in a pop-up window.	Context-sensitive help DME V8 naturally aspirated engine EU5				
	displayed in a pop-up window. To close the window and return to the working screen again, press the OK button.	SDI 6.1 with V8 naturally aspirated engine EU5 data record				
		OK				

10.11 Information area and Details button

Instructions are given and messages and operating tips are displayed in the information area. If text is too long for the available space, this is indicated by a Details button. Press this button to read all the information text.

Details button:

1

Example of text that is too long (see screenshot).

Press the Details button to read the complete information text (A). A dialog box then appears in which the full text is displayed.

Then press the Exit button (B) to return to the diagnostics area.

Panamera	Simulation	mode			Program version	VG2-14.3	00.14.07.21	1	DO US▼	
Fault memory entry: 50500: The following fault memory entries could not be deleted: 0BBE,C11007,C1209D,C13212,C1209D,C1209D,000020,000220,004F07,C1209D,000010,000012,0									Is	
Overrieu		Evter	ded		Actual	values	Drive links	Ca	oding	
Overview		🨻 Complete	message text.				X	adap	otations	
Contr	rol unit	50500: TI 0BBE,C1	ne following 1007,C120	fault me 9D,C132	emory entries could i 212,C1209D,C1209E	not be delet 0,000020,00	ted: 00220,004F			
Airbag (A2.1)		07,C1209D,000010,000012,000018,000033,C1209D,C12000,C12002,C 12007,C1201F,C12096,D00000,D00007,0492,P1532,U0447,C1209D,C								
		12006,C1	200A,C120	0C,C12	00D,C1200E,C1201	3,C12014,C	C1209D,C12	ent		
		09D,800A	19 008223	00C,C1: 008227	209D,C1209D,00820 008231 008239 008	243.008207,0 243.00825/	008211,008			
		215,0002 8259.008	267.00827	1.008450	0.U111300.C1200C	C1209D.00	000E.00001			
		1,C1208A	,C1209D,0	02087,0	0208A,C12019,C12	027,C1208	0,C120A1			
DME V8 natur aspirated engi	rally ine EU5			۳ ۲	<u></u>			(Below limit)		
Selector lever		í	U0447	٩	Check gateway con	trol unit fau	lt memory con	itent (Invalid s	ignal)	
High-voltage k	battery	2			2					
	*	-			0					
End Help	Multimeter	Data logger III F3	Save F4	Filter	Delete Add. ment	F8	Fault finding F9 F10	Logs Back	F12	