



Achieve the impossible

Abrites Diagnostics for Porsche User Manual

Version: 3.1

www.ABRITES.com

List of Revisions					
Date	Chapter	Description	Revision		
17.10.2011		Release version of the document	1.0		
7.05.2010		1. Chapter 3.3 Standard diagnostic requests: "Coding", "Actual			
		values" - description of different interface for some units.	2.0		
		2. Chapter 3.3 Standard diagnostic requests: "Adaptations", "Input			
		signals", "Basic Settings", "Activations", "Security access", "Output			
		test" added.			
		3. Special function "Instrument Cluster CAN" reworked – (service			
		interval reset for Panamera and Cayenne 958 models, Read/Write			
		configuration data, Read mileage value for 911 997, Boxster 987			
		and Cayman models).			
21.05.2013			2.1'		
13.09.2013			2.2		

02.10.2013	Document update and revision for latest SW version	2.3'
1.08.2014	Document update and revision for latest SW version (function "All	2.4'
	keys lost" - 911 997, Boxster/Cayman 987)	

1.10.2015		Document update and revision for latest SW version Panamera key	2.5
		by dump added	
03.11.2015		Document update and revision for latest SW version Panamera	2.6
		970, 991, Boxter/ Cayman 981, Cayenne 92A, Macan 95B	
		keys by dump.	
17.09.2016		Document update and revision for latest SW version Chapter 3.4.7	2.7
		Guided functions.	
22.03.2017		Document update and revision for latest SW version. 3.3.4. Coding.	2.8
27.09.2017		Read Transponder/Immo data from a working key for 911 997,	2.9
		Boxster/Cayman 987	
30.11.2017	3.5	Added Component protection	3.0
30 11 2017	36	Added Imme V adaptation	3.0
	5.0		
20.01.2018	3.6	Added Special Function "Read/Update ConfigData"	3.1

1. INTRODUCTION

2. INSTALLATION

- 2.1. INSTALLING USB INTERFACE DRIVERS
- 2.2. INSTALLING "ABRITES DIAGNOSTICS FOR PORSCHE"

3. DIAGNOSTIC WITH "ABRITES DIAGNOSTICS FOR PORSCHE"

- 3.1. CONFIGURATION
- 3.1.1. Used protocols
- 3.1.2. Interface detection
- 3.1.3. K-Line baud rate settings
- 3.1.4. Timing parameters
- 3.1.5. K-Line PINs
- 3.1.6. CAN resistance
- 3.2. Scanning Units
- 3.3. Standard diagnostic requests
- 3.3.1. Extended Identification
- 3.3.2. Actual values
- 3.3.3. Coding
- 3.3.3.1 Coding- Settings
- 3.3.3.2 Coding- Automatic Coding
- 3.3.3.3 Coding- Manual Coding
- 3.3.3.4 Coding- Automatic Coding From File
- 3.3.4. Actuator Tests
- 3.3.5. Change ID
- 3.3.6. Read Diagnostic Trouble Codes 3.3.7.
- Clear Diagnostic Trouble Codes
- 3.3.8. Control Unit Replacement
 - **3.4.** Special Functions
- 3.4.1. Special functions with "Instrument Cluster CAN"
- 3.4.1.1. 911 997, Boxster 987 and Cayman
 - 3.4.1.1.1 "Reset service interval"
 - 3.4.1.1.2 "Oil level measurement"
 - 3.4.1.1.3 "Read/Write ConfData, Read mileage value, Reset cluster "
 - 3.4.1.1.4 "Events", "Erase event memory"
- 3.4.1.2. Panamera (2010-2012) and Cayenne (2011+)
 - 3.4.1.2.1 "Reset service interval"
 - 3.4.1.2.2 "Write maintenance interval"
 - 3.4.1.2.3 "Change maintenance interval"
- 3.4.2. Special functions with "Instrument Cluster K-Line"
- 3.4.3. Special functions with "Engine Control Unit"
- 3.4.4. Special function "Dump Tool"
- 3.4.5. Special function "Key learning"
 - 3.4.5.1. Teach keys GT2 996,GT3 996,911 996,Boxster 986,Carrera GT
 - 3.4.5.2. Teach remote control GT2 996,GT3 996,911 996,Boxster 986,Carrera GT
 - 3.4.5.3. Teach keys Cayenne (-2010)
 - 3.4.5.4. Program dealer key Cayenne (-2010)
 - 3.4.5.5. Teach keys 911 997, Boxster 987, Cayman
 - 3.4.5.6. Program dealer key 911 997, Boxster/Cayman 987
 - 3.4.5.7. "All keys lost" function for 911 997, Boxster/Cayman 987
 - 3.4.5.8. Read Transponder/Immo data from a working key for 911 997, Boxster/
 - Cayman 987 when adding a spare key.
 - 3.4.5.9. Teach key Panamera, Cayenne (2011+), Boxster 981, 911 991, Macan

3.4.6. Special function "Kessy/immobilizer functions"

- 3.4.6.1. Teach Kessy/immobilizer Cayenne (-2010)
- 3.4.6.2. Teach ELV Cayenne (-2010)
- 3.4.6.3. Teach control unit Boxster 987, 911 997, Cayman (-2010)
- 3.4.6.4. Teach electronic steering column lock Boxster 987, 911 997, Cayman (-2010)
- 3.4.6.5. Teach control unit Boxster 986, 911 996, Carrera GT
- 3.4.6.6. Activation state memory Boxster 986, 911 996, Carrera GT
- 3.4.6.7. Erase activation state memory Boxster 986, 911 996, Carrera GT
- 3.4.6.8. Events- Boxster 986, 911 996, Carrera GT
- 3.4.6.9. Erase Events memory Boxster 986, 911 996, Carrera GT
- 3.4.7. Special function "Guided functions"
- 3.4.7.1 Panamera 970, Cayenne 2011+, Boxster 981, 911 991, Macan Head lights start-up
- 3.5 Component protection
- 3.6 Immo V adaptation
- 3.7 Special Function "Read/Update ConfigData"

4. TROUBLESHOOTING

5. APPENDIX

- 5.1. Porsche Cayenne gasoline engines ECU wakeup fuses
- 5.2. Removing ESL Porsche 911 977, Boxster/Cayman 987
- 5.3. Porsche Panamera key Learning by dump

1.INTRODUCTION

"ABRITES Diagnostics for Porsche" is a Windows PC based diagnostic software for the Porsche vehicles. With this tool you're able to learn new keys to the car. The "ABRITES Diagnostics for Porsche" also provides basic diagnostic capabilities for Porsche vehicles.

2.INSTALLATION

2.1.Installing USB Interface drivers

The drivers are installed automatically when installing the software. In case of some problem with the drivers you might download latest drivers from www.ftdichip.com

2.2.Installing "ABRITES Diagnostics for Porsche"

The "ABRITES Diagnostics for Porsche" is contained into the installation package, so please run the setup program. It will create a program group in the start menu and optionally a desktop icon.

Now you are ready to start the "ABRITES Diagnostics for Porsche"

When starting the software, there is a splash screen appeared, where the connection with the hardware is examined. If no problem appear, then a message "Connection OK" should appear!

The main screen looks like this:

ABRI	TES Diagnostics for Porsche 5.1 www.abrit	us72.com			_ 🗆 🗙
-	Vehicle Selection				
Po	rsche Boxster 987 (2005-2010)			-	[
, [#]	Unit name	Protocol	DTC	Part num.	
01	Digital Engine Electronics(DME)				Previous
02	Tiptronic				
03	Porsche Stability Management(PSM)				
04	Porsche Access System(PAS)				
05	Porsche Supplement Impact Protection(POSIP)				Upen
06	Advanced Weight System(AWS)				
07	Air Conditioning				
08	Instrument Cluster	CAN: UDS		98764111620	Next
09	GATEWAY				
10	Vehicle Electronic System				
11	Steering Column Switch				
12	Seat Memory				
•					
Ĩ	Special Functions Broadcast		=	Options	×
Ses	sion closed.				Exit

ATTENTION:

Make sure you are running the "ABRITES Diagnostics for Porsche" from its folder. If you are using a shortcut to the "ABRITES Diagnostics for Porsche", please be sure that the "working folder" parameter is set to the folder where the executable is placed! If the "working folder" of the shortcut is not set the K-Line may function incorrectly.

3. DIAGNOSTIC WITH "ABRITES DIAGNOSTICS FOR PORSCHE"

The "ABRITES Diagnostics for Porsche" consists basically of three parts:

- Standard diagnostic functions like reading/clearing trouble codes, device identification,

coding, actual values, etc.

- Key-learning

- Special functions like reading login (PIN), reading EEPROM, etc.

All devices, which can be installed into the selected vehicle model are listed in the main screen of the "ABRITES Diagnostics for Porsche". If you want to connect to some device please double click on it. The "ABRITES Diagnostics for Porsche" will try to connect to the device using some of the following protocols:

-KWP2000 over TP2.0 with baud 5000KB/s (CAN)

-KWP2000 over TP1.6 with baud 5000KB/s (CAN)

-ISO protocol (CAN)

-KWP2000 over K-Line with fast init

-KWP2000 over K-Line with slow init.

You can choose which of these protocols to try when attempting to connect as described in the "Configuration" section.

3.1.Configuration

The "ABRITES Diagnostics for Porsche" can be configured by pressing the "Options" button from the main screen. The following dialog is displayed:

Used protocols for diag Logging K-Line: used Set Fast init K-Line baud fate ✓ CAN ISO TP ØBDII PINs parameters sequence: ✓ CAN TP UDS Ø Enable CAN log 3 25 ms Down 0 10472 \ 9600 Ø CAN TP 1.6 Ø Enable K-Line log 7 25 ms Up 0 9600 \ 10472 Ø CAN TP 2.0 Instant logging Antena factor CAN Bauitton CAN Bauitton
K-Line KW2000 (Slow Init) 5 Test 120 Ohm Apply

NOTE: changes regarding interface detection and timing parameters which you made in this dialog will be applied after restarting the application.

3.1.1.Used protocols

The meaning of the check-boxes is as follows:

• CAN ISO TP - when trying to connect to the device the Diagnostics will try to connect to it using "ISO protocol (CAN)".

- CAN UDS TP when trying to connect to the device the Diagnostics will try to connect to it using "UDS protocol (CAN)".
- CAN TP2.0 when trying to connect to the device the Diagnostics will try to connect to it using "KWP2000 over TP2.0 with baud 500KB/s".
- CAN TP1.6 when trying to connect to the device the Diagnostics will try to connect to it using "KWP2000 over TP1.6 with baud 500KB/s".
- K-Line KWP2000 (Fast Init) when trying to connect to the device the Diagnostics will try to connect to it using over K-Line with fast init.
- K-Line KWP2000 (Slow Init) when trying to connect to the device the Diagnostics will try to connect to it using over K-Line with slow init.
- K-Line KW1281 when trying to connect to the device the Diagnostics will try to connect to it using over K-Line with slow init.

NOTE: These check-boxes are used for configuring only the used protocols when trying to connect to the device in order to perform standard diagnostic requests, they are not applied when auto-scanning devices.

3.1.2.Interface detection

Normally the "ABRITES Diagnostics for Porsche" USB Interface is recognized automatically.

3.1.3.K-Line baud rate settings

When trying to connect to the device over K-Line the Diagnostics will try to connect to it using one baud rate and if it doesn't succeed it will switch to another baud rate and try again. There are two baud rate values currently used – 10427 and 9600. Using the "10472 \ 9600" and "9600 \ 10247" radio-buttons within the options dialog one can set the order in which these two baud rate values will be used.

If "10472 \ 9600" is selected, then first the Diagnostics will try to connect to the device over K-Line using baud rate 10472 and if it doesn't succeed, it will switch to 9600 and try again with it. If "9600 \ 10472" is selected, then first the Diagnostics will try to connect to the device using baud rate 9600 and if it doesn't succeed it will switch to 10472 and try again with it.

ATTENTION: Some device working on baud 9600 cannot be waked up if they are first tried on baud 10472, so if you cannot connect to device through the K-Line, try to change the options so first to try on 9600.

3.1.4. Timing parameters

The protocols running under K-Line require very precise byte timing. Since Windows is not a real-time operating system, these times are not always respected, so it is possible that the communication with some devices is unstable, or it is not possible to connect. In such cases you can try to change some of the times timing parameters from the "Advanced" button. The timing parameters have the following meaning:

-Wakeup echo delay – time after slow init between receiving "55 xx yy" and sending the inverted value of "yy" (according the K-Line wakeup procedure)

-Communication echo delay – time between reception of a byte under KWP1281 and sending it inverted back to the device

-Inter byte time - time between sending two bytes under KWP2000

-Time between messages – time delay between reception of response from device and sending new request to it.

3.1.5.K-Line PINs

Normally the K-Line is output on PIN7 of the OBDII connector. But some models (e.g. Porsche Cayenne 2004) the K-Line with some units might be on PIN3 or PIN15. For that reason there is a option on which PINs to try to connect to the units..

ATTENTION: If you check all PINs to be examined (i.e. PIN3, PIN7, PIN15) then when scanning for units the time will will be significantly increased. For that reason by default only PIN7 is selected.

3.1.6.CAN resistance

According the CAN specification there should be a resistance between CAN-Low and CAN-High. Normally the gateway has this resistance, but if you want to connect on some device on the table then you should use that resistance. For that reason there is a option what resistance to use – None, 75 Ohme, 100 Ohm, 120 Ohm, or 10 Kiloohme. By default 120 Ohm is used. Normally you should don't have any problems, but if some problem appear you can try to change the CAN resistance.

3.2.Scanning units

On the main screen of the "ABRITES Diagnostics for Porsche" the user is able to select a certain vehicle model configuration from the "Vehicle selection:" combo-box. A list of the devices which can be installed into this car type is displayed below.

For to connect to a certain device the user have to double-click on it or to select it and press "Open".

Pressing the "Scan all" button from the "Broadcast" panel will attempt to connect to each device currently displayed in the list. Depending on the configuration options only the selected protocols will be used when scanning for the devices.

For all devices, which the "ABRITES Diagnostics for Porsche" finds, a detailed information is displayed in the main screen. For each device the following information is shown:

-Unit name

- $\mathsf{Protocol}$ – using which $\mathsf{protocol}(\mathsf{CAN}$ ISO TP, CAN TP2.0 , etc) the diagnostic connection is established

-DTC - number of DTCs stored in the unit

Since clearing of the DTCs for all existing devices is one of the main diagnostic operations, and broadcast requests for clearing DTCs are not accepted from all units, there is a possibility to scan all devices and if connection to the device is possible, then its DTCs are

January 2018

cleared. This is made by pressing the "Clear all DTCs" button from the "Broadcast" panel. Once again, the protocols used to connect to the devices are specified in the configuration options.

3.3. Standard diagnostic requests

When double-clicking on the desired device in the main "ABRITES Diagnostics for Porsche" window, you connect to the device to proceed standard diagnostic requests. The following dialog is opened (example with Instrument cluster Porsche Boxster (987)):

Instrument Cluster						
I	CAN: UDS					
	Establishing diagnostic session with selected unit ==================================	∲ Up				
	System Name: Instrument cluster Diagnosis software number: 820A Porsche Part Number: 987-641-116-20 Diagnostic channel is open.	Clear log				
		Save log				
		Down				
	∑ Directions to	Custom				
	Extended Identification Actual Values Input signals Security Access	I · T·E·S e s <mark>ol</mark> utio∩s				
	Read DTCs Clear DTCs Actuator tests Coding	X Exit				

This dialog provides you the possibility to execute the following diagnostic functions:

3.3.1. Extended Identification

"Extended Identification" will provide you the device identification and VIN number if present.

strument Cluster					
			CAN: UDS		
======================================	unit extended identification			_ _ _	Lp Up Clear log Save log Down
Extended Identification Read DTCs	Actual Values	Actuator tests	Custom requests	A · B · R · I · T · E automotive solut	- S ions
Control Unit Replacement Clear DTCs	Coding	Change ID		7	<

3.3.2. Actual values

This dialog will provide you information for the actual values of some of the main characteristics of the corresponding electronic control module.

Here is an example for the actual values read for the Instrument Cluster of Boxster 987 (2005 – 2010).

Actual Values/Input Signals	_ _ X
Select category:	
-	•
1	
Parameter	Value
Supply voltage terminal 30	14.4 V
ParkAssist frequency	0 Hz
Resistor fuel level sensor	0.0 Ohm
Velocity	0 km/h
Photo transistor brightness	7.45 %
Time in instr. clus. when oil level measured	16777215 s
Oil temperature when measured	143.25 °C
Non-compensated oil level	0 mm
Oil IvI 1st comp. stage Zoil IvIKomp1	0
Oil IvI 1st comp. stage Zoil IvIKomp2	0
Oil IvI 1st comp. stage Zoil IvIKomp3	0
compensated displayed oil level	ff
Clutch early switch	actuated
Total distance	20432 km
Short distance	0.00 km
	×
	Exit

3.3.3.Coding

There are several coding functions available depending on vehicle model:

Coding – Settings

Coding – Automatic coding

Coding – Manual coding

Coding – Automatic coding from file

The "Automatic coding", "Manual coding" and Automatic coding from file" functions are only available for units communicating with UDS CAN TP.

3.3.3.1.Coding - Settings

This dialog will provide you information for the coding characteristics of the corresponding Electronic Control Module and also the opportunity to modify these characteristics.

Here is an example for the coding information of the vehicle model Boxster 987 (2005-2010) Porsche Access System (PAS) unit:

Coding You can code only one item at a time. Status: Reading Central looking system Cent		<u>×</u>
You can code only one item at a time. Status: Reading Central locking system Central locking system Comfort functions		h
Central locking system Central locking system Comfort functions		
Key I Key 2 Key 3 Keys 4 to 6		
Reaction time, key buttons 2 and 3	short (471 milliseconds)]
		h
		J
	Code	Exit
		Exit

In the example above, you can select from several coding option categories: "Central locking system", "Comfort functions", "Key 1", "Key 2", "Key 3", "Key 4 to 6".

When you select certain category the options belonging to this category are listed below. Here is an example with "Comfort functions" category selected:

RITES Diagnostics for Porsche 6.5 www.abrites	.com		
AS			
oding			
'ou can code only one item at a time. tatus: Reading			
Comfort functions			
Parameter		Unit	Value
/ehicle coding:Comfort via radio remote control			active
/ehicle coding:Comfort function window			active
/ehicle coding:Convertible top comfort function			not active
enicle coung.boor and window connort function			notactive
	Codo		Evit
	Code		EXIL
			L
			Exit
L'incodea.			Ex

You can modify only one item at a time.

Click on the desired item into column "Value" and you will be able ether to select from a list of possible values or to write down a certain input.

By pressing button "Code" the selected item value will be modified.

3.3.3.2.Coding – Automatic coding

Use this function when unit is not coded or coding is faulty (there is usually DTC indicating this). This function will calculate unit's default coding according to vehicle configuration read from vehicle and write it into the unit.

You can use "Coding – Settings" after that to change user specific settings.

After you select "Automatic coding" and press "Next" the program will read vehicle configuration, calculate unit's default coding (have in mind that you will need internet connection for that) and if everything is OK, guide you to the page where you can select to execute the coding or not by pressing "Next" or "Exit" ("Next" will do the coding).

ABRITES Diagnostics for Porsche 6.5	www.abrites.com	_ <u>_</u> ×
ABRITES Diagnostics for Porsche		
		1
Reading vehicle configuration		
	< Back Next >	Exit
1		
Corrected.		Exit
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	
ABRITES Diagnostics for Porsche 6.5 Days untill HW	/ synchronization: 29	

ABRITES Diagnostics for Porsche 6,5 Days untill HW synchronizat	tion: 29	
ABRITES Diagnostics for Porsche		
		ļ
		-
		1
		-
Ready.		
Press "Next" to perform coding.		
	< Back Next >	Fxit
Connector.		Exit

ABRITES Diagnostics for Porsche 6.5 Days untill HW synchronization: 29	
ABRITES Diagnostics for Porsche	
Automatic coding success.	Exit

3.3.3.Coding - Manual coding

Use this function when unit is not coded or coding is faulty (there is usually DTC indicating this). This function will calculate unit's default coding according to vehicle configuration set from user and write it into the unit.

You can use "Coding – Settings" after that to change user specific settings.

After you select "Manual coding" and press "Next" the program will give you the options to select vehicle configuration, calculate unit's default coding (have in mind that you will need internet connection for that) and if everything is OK, guide you to the page where you can select to execute the coding or not by pressing "Next" or "Exit" ("Next" will do the coding).

ATTENTION! Use "Manual coding" carefully. You have to be sure that you choose the correct vehicle configuration options otherwise the calculated coding might not be correct and brake the unit.

1.	2.	
ABRITES Diagnostics for Porsche 6.5 www.abrites.com	ABRITES Diagnostics for Porsche 6.5 Days	untill HW synchronization: 29
C ABRITES Diagnostics for Porsche	ABRITES Diagnostics for Porsche	
		L
Reading vehicle configuration	Getting unit coding data	
< Back Next > Exit		< Bask Next > Exit
www.	comocico.	
2	Λ	
3.	4.	
ABRITES Diagnostics for Porsche 6.5 www.abrites.com	ABRITES Diagnostics for Porsche 6.5 Days	untill HW synchronization: 29
ABRITES Diagnostics for Porsche	ABRITES Diagnostics for Porsche	
	Country code	Value
	Country code	
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS
	Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
	Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
	Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
Ready.	Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
Ready. Press "Next" to select coding.	Country code Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
Ready. Press "Next" to select coding.	Country code Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
Ready. Press "Next" to select coding.	Country code Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY
Ready. Press "Next" to select coding.	Country code	C99 - MISCELLANEOUS C00 - FEDERAL REPUBLIC OF GERMANY C02 - USA C05 - FRANCE C06 - ALGERIA, MOROCCO, TUNISIA, NEW CAL C07 - ITALY

Abrites Diagnostics for Porsche User Manual

6.

5.

Production code	Value	
Product keys	F73CA - PANAMERA TURBO	-
	F71CA - PANAMERA	
	F72CA - PANAMERA S	
	F73CA - PANAMERA TURBO	
	F74CA - 970 PANAMERA HYBRID	
4		•
elect Production Code.		
ress "Next" to proceed.		

BRITES Diagnostics for Porsche 6.5 Days untill HW synchronization: 29	
ABRITES Diagnostics for Porsche	
Option	Installed
521 - TILT SENSOR	YES 🔽
536 - ALARM SIREN	NO
537 - SEAT POS. CONTROL, LEFT (MEMORY)	YES
538 - SEAT POS. CONTROL, RIGHT (MEMORY)	YES
560 - ADVANCED AIRBAG	NO
605 - LED DAYTIME DRIVING LIGHTS	YES
630 - INTERIOR LIGHT PACKAGE	NO
719 - QATAR VEHICLE PANAMERA 4S	NO
862 - ROLLER BLIND, ELECTRIC AT REAR WINDOW	NO
867 - POWERLIFT FOR REAR LID (POWERLIFTGATE)	YES
899 - ISOFIX ON PASSENGER'S SIDE	NO
Select Installed Options.	
Press "Next" to proceed.	
	Next > Exit

7. 8. - 🗆 🗙 _ | | | × 💁 ABRITES Di _ 🗆 🗙 ABRITES Diag stics for P - 🗆 🗙 Group Value 176 - SPORTS EXHAUST SYSTEM 175 - PMSC - EXHAUST SYSTEM, CUP VEH EXHAUST SYSTEMS AEROKIT DOOR MIRROR ADJUSTMENT ANTI-THEFT PROTECTION 176 - SPORTS EXHAUST SYSTEM 177 - EXHAUST SYSTEM WITH FRONT SILENCER C 179 - EXHAUST SYSTEM SUPER SILENCER CUP VEH PARKING AID GARAGE DOOR OPENER TRANSMISSION REAR WINDOW WIPER 250 - PDK TRANSMISSION (DOUBLE CLUTCH) 425 - REAR WINDOW WIPER 276 - INTERIOR MIRROR, AUTO. ANTI-DAZZLE 864 - HEAT INSULATING GLASS (LAMINATED), PR. INTERIOR REAR-VIEW MIRROR WINDOW TYPE SLIDING ROOFS 652 - WITHOUT SLIDE/TILT ROOF 390 - ADAPTIVE SPORTS SEAT, LEFT (G1) 18-WAY FRONT SEATS, LEFT Select Installed Items. Ready. Press "Next" to perform coding. Press "Next" to proceed. Exit Next : Next > Exit



9.			
BRITES Diagnostics for Porsche 6.5			_ _ ×
🕾 ABRITES Diagnostics for Porsche			
Manual coding success.			
	er Back	Nexts	Evit
	< pauk	I vext >	
Contraction.			Exit

3.3.3.4.Coding – Automatic coding from file

After "Automatic coding" or "Manual coding" has been performed, each time the coding information before the coding is done is saved into a file into the log files directory so in case of wrong coding result the previous coding could be turned back into the unit by using this function.

After you select "Automatic coding from file" and press "Next" the program will read vehicle configuration, download unit's coding information (have in mind that you will need internet connection for that) and if everything is OK, guide you to the page where you can select the file which should be used for coding (file's name contain VIN number, unit name, date and time of creation). Pressing "Next" will show the page where you can select to execute the coding or not by pressing "Next" or "Exit" ("Next" will do the coding).

ABRITES Diagnostics for Porsche 6.5 www.abrites.com	×	ABRITES Diagnostics for Porsche 6.5 Days untill HW synchronization: 29	X
ABRITES Diagnostics for Porsche		ABRITES Diagnostics for Porsche	
	1		
	ļ		-
	1		
	J		
	1		
	J		-
Reading vehicle configuration		Getting unit coding data	
< Back	Next > Exit	< Berk.	Next > Exit
Tooirreeson	Exit		Exit
ABRITES Diagnostics for Porsche 6.5 www.abrites.com		ABRITES Diagnostics for Porsche 6.5 www.abrites.com	
	1		
	Ļ	Lookin: PORSCHE	×
		Name 🔺 🗸 🗸	Date I
		Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_06-09_15_18.x Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_06-09_23_30.x	6.3.20 6.3.20
		Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_06-09_24_43.x Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_21-12_28_17.x	6.3.20 21.3.2
		Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_21-12_30_21.x Coding_BCM_hinten_WP0AB2A71BL062756_2017_03_21-13_14_02.x	21.3.2 21.3.2
		File name: <u>Ing_BCM_hinten_WP0AB2A71BL062756_*xm</u> Open	
Ready		Please wait	
Press "Next" to select file.			
< 333.	Next >	S DOX 19	
	Exit		Exit
	ABRITES Diagnostics for Porsche		
	Coding success.		
		S 103/S Next > Exit	
Manual version: 3.1		<u> </u>	18
			10

Actuator tests

This function will provide you the opportunity to perform some test of certain unit's functionality.

When button "Actuator tests" is pressed a new dialog appears where are listed the categories of tests which can be performed.

Here is an example with "Instrument Cluster" of Porsche Boxster (987):

ABRITES Diagnostics for Porsche	ITES Diagnostics for Porsche 6.5	www.abrites.com			
set on-board computer values uudspeaker test uib test ink content ansf. of corr.val. to elsys. c. unit iop. of CAN control unit tank corr.val. dicator test	BRITES Diagnostics for Porsche				_ 🗆 ×
budspeaker test In test and contract In test ansf. of corr.val. to el.sys. c. unit In test dop. of CAN control unit tank corr.val. In test dicator test In test In test In test	Reset on-board computer values				
alb test ank content ansf. of corr.val. to el.sys. c. unit ansf. of corr.val. to el.sys. c. unit dicator test	oudspeaker test				
Ink content ansf. of corr.val. to el.sys. c. unit jop. of CAN control unit tank corr.val. dicator test dicator test	Bulb test				
ansf. of corr.val. to el.sys. c. unit top. of CAN control unit tank corr.val. dicator test	ank content				
top. of CAN control unit tank corr.val. dicator test	ransf. of corr.val. to el.svs. c. unit				
dicator test	dop. of CAN control unit tank corr.val.				
	dicator test				
< Back. Next > Exit					
< Back. Next > Exit					
< Back Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back Next > Ext					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back. Next > Exit					
< Back Next > Exit			<u></u>		
< Back Next > Exit					
< Back INext > Exit				NI-	5 .45
				Next >	EXIC

After "Loudspeaker test" is selected and "Next" button is pressed the following window appears:

ABRITES Diagnostics for Pors	che 6.5 w	ww.abrites.com		
ABRITES Diagnostics for	Porsche			
Loudspeaker test				
Γ	Execute		Stop	_
Parameter	Value	Unit		
No parameters				
Result	Value	Unit		
		105-2	1	
		< Back	Next >	Exit
				Exit

Press "Execute" to start the test.

BRITES Diagnostics for Por	sche 6.5 www.ab	prites.com	_ 🗆 🗙
🗢 ABRITES Diagnostics fo	r Porsche		
Loudspeaker test			
	Execute	Stop	
Parameter	Value	Unit	
No parameters			
•			
Result	Value	Unit	
Result	Function runni	ing	
		< Back Next > Exi	it
			Exit

Press "Stop" to stop the test.

3.3.5.Change ID

This function allows you to change the Vehicle Identification Number value of the selected unit. When you press button "Change ID" the following window appears:

Please enter a new Vel	nicle Identification Numb
WP0ZZZ98Z6U772070)

In the field is displayed VIN number read from Gateway unit (if connected to vehicle, otherwise the field will remain empty).

You can set there any VIN number you like.

Press "OK" to change VIN number of the selected unit.

Press "Cancel" to leave it unchanged.

If "OK" is pressed the result will be displayed in the main window:

trument Cluster						
				CAN: UDS		
tablishing diagnostic sess	ion with selected unit				-	
agnostic software No.:	======= electronic 820a	control unit identification ==				
rsche part number: 98 agnostic channel is open.	3764111620					Up
	===== Changing VIN =:					
Nichangodi	Changing The					🥏
n changear						Clear log
						Courter
						Save log
						Down
					*	
Diagnostic requests			[]			
Extended	Read DTCs	Actual Values	Actuator tests	Custom requests	automotive soluti	ons
Tochionoudori						
Control Libit	5552 CONTRACTOR					

3.3.6.Read Diagnostic Trouble Codes

"Read DTCs" read the diagnostic trouble codes currently stored into the device The total number of DTCs being set is also reported.

				JCAN: UDS	
TC Count: 2 22 - Communication driw - DTC: c122 - Fault symptom. - Fault symptom. - Fault symptom. - Battery voltage - CPU Joad: 23 007 - Gateway incorrect c - DTC: 8007 - Fault symptom. - DTC Fault Sym - Fault status: - Fault counter: - Fault counter:	ar's door control unit (comi no signal tom extended: Fault st resent 50 : 14.5 V % 30 ding Signal implausible tom extended: Fault st present 50	= Fault codes read ===== fort) ored			Lip Clear lo
- Battery voltage - CPU load: 21	: 14.5 V %				Save lo
- Gattery votage - GFU badi 21 Diagnostic requests	%				Save Ic Down
- GRU bad: 21 - GRU bad: 21 Diagnostic requests Extended Identification	Read DTCs	Actual Values	Actuator tests	Custom requests	Save Ic Down

3.3.7.Clear Diagnostic Trouble Codes

"Clear DTCs" button will clear all stored DTCs inside of the unit.

3.3.8.Control Unit Replacement

This function allows you to read unit's configuration data and then write it into another unit so that the new unit can be easily installed into the vehicle.

When button "Control Unit Replacement" is pressed the following window appears:

3.3.7.Clear Diagnostic Trouble Codes

"Clear DTCs" button will clear all stored DTCs inside of the unit.

3.3.8.Control Unit Replacement

This function allows you to read unit's configuration data and then write it into another unit so that the new unit can be easily installed into the vehicle.

When button "Control Unit Replacement" is pressed the following window appears:

BRITES Diagnostics for Porsche 6.5	www.abrites.com	
ABRITES Diagnostics for Porsche		
Read Data		
Write Data		
	< Back Nex	t >Exit
sol notico.		Exit

When you choose "Read data" and press "Next" the software will read the configuration data of the unit to which diagnostic session is established currently and save it to file into the log files directory.

ABRITES Diagnostics for Porsche 6.5 www.abrites.com	_ <u> </u>	ABRITES Diagnostics for Porsche 6.5	www.abrites.com	×
• ABRITES Diagnostics for Porsche		ABRITES Diagnostics for Porsche		×
	1			-
Deadline		D. I.		
Reading	ļ	Data read.		
	1			
	L			
< Bed. Next	:> Exit		< Back Next >	Exit
	Exit	Connecco.		Exit

When you choose "Write data" and press "Next" the software will read the configuration data from the saved file into the log files directory and writes it to the unit to which diagnostic session is established.

January 2018

Abrites Diagnostics for Porsche User Manual

ABRITES Diagnostics for Porsche 6.5 WWW.#HIRes.see	- ×	AthEXITES Disgnostics for Purseline 0.5 Days until File synchronications 20	_ t ×
	1		
Writing		Data written.	
	*		
Next	> Exit	NO411 NK	ext >Exit

3.4. Special Functions

Special functions are some specific for electronic control units application, which will allow you to learn keys, read security access codes, read/program unit's configuration data / flash content and so on.

Special functions are available from the main dialog of the application.

Ī	🖁 Special	Functions	T Broad	lcast 🏻 🖗	Options			
	Key Learning	Engine Control Unit	K-Line Instrument Cluster K-Line	CAN Instrument Cluster CAN	Kessy/Immo functions	Guided Functions	Dump tool	Dpen
Γ								

The appropriate special function is opened by selecting it in the list box and double-clicking on it, or by pressing the "Open" button.

3.4.1.Special functions with "Instrument Cluster CAN"

When this function is opened, the following dialog appears:

🍄 ABRITES Diagnostics for Porsche	
Select vehicle model:	Select function:
911 997 (2005-2010) Boxster/Cayman 987 (2005-2010) Panamera 970 (2010-2012) Cayenne (2011+) Macan 918 Spyder 911 991 Boxster/Cayman 981	Read/Update ConfData Read Mileage/Cluster Calibration Reset Reset service interval Oil level measurement Events Erase event memory
	< Back: Next > Exit

The user can select vehicle model from the "Select vehicle model" list.

The user can select certain function available for the selected vehicle model from the "Select function" list.

The following vehicle models can be selected for special function "Instrument cluster CAN":

911 997 (2005-2010) Boxster 987 (2005-2010) Panamera (2010-2012) Cayenne (2011+) Macan 918 Spyder 911 991 Boxster/Cayman 981



3.4.1.1. 911 997, Boxster 987 and Cayman

For vehicle models 911 997, Boxster 987 and Cayman the available functions are:

Read/Write ConfData Read mileage value Reset cluster Reset service interval Oil level measurement Events Erase event memory

3.4.1.1.1"Reset service interval"

When "Reset service interval" is selected, by pressing button "Next" the "Abrites Diagnostics for Porsche" connects to the instrument cluster and guides the user to select some specifics of the vehicle model after which resets the service interval.





Model year: "MY = 08" UOM for milage: "km" County: "Austria" Next to confirm selection. Back to return for new selection.	A Instrument Cluster CAN			_ 🗆 🗙
Country "Austria" Next to confirm selection. Back to return for new selection.	Model year: "MY = 08"			
Next to confirm selection. Back to return for new selection. Algeria Algeria Andorra Angola Aruba Argentina Armenia Aruba Australia Azerbaijan Bahamas Bahrain < Back	Country: "Austria"			
Abu Dhabi Algeria Andorra Angola Argentina Armenia Aruba Austria Austria Austria Austria Austria Austria Austria Austria Austria Bahmas Bahmas Bahrain Cack Net> Cack Net> Cack Net> Cack Net> Cack Net>	Next to confirm selection. Back to return for	new selectio	on.	
Abu Dhabi Algeria Andorra Angola Argentina Aruba Australia Azerbaijan Bahamas Bahrain C Back Next Ext I Intrument Cluster CM Service interval written. Press Next to continue.				
Abu Dhabi Algeria Andorra Angola Argentina Aruba Australia Australia Australia Bahamas Bahamas Bahamas Bahaman Continue Cack Next Ext Service interval written. Press Next to continue.				
Angela Angela Argentina Armenia Aruba Australia Australia Azerbaijan Bahamas Bahrain C Back Next> Ext Instrument Cluster CAN Service interval written. Press Next to continue.	Abu Dhabi Algeria			Ê
Angola Argentina Armenia Aruba Austria Azerbaijan Bahamas Bahrain (Back Next) Ext (Service interval written. Press Next to continue.	Andorra			
Argentina Armenia Australia Australia Azerbaijan Bahamas Bahrain < Back Next > Ext Instrument Cluster CAN Service interval written. Press Next to continue. Service interval written. Press Next to continue.	Angola			
Armenia Australia Australia Azerbaijan Bahamas Bahrain (Back Next) Ext Instrument Cluster CAU Service interval written. Press Next to continue.	Argentina			
Australia Azerbaijan Bahamas Bahrain (Back Next) Exit Service interval written. Press Next to continue.	Armenia			
Austria Azerbaijan Bahamas Bahrain (Back Next) Exit Instrument Cluster CAN Service interval written. Press Next to continue. (Back Next) Exit	Australia			
Azerbaijan Bahamas Bahrain	Austria			
Back Next> Exit Instrument Cluster CAI Service interval written. Press Next to continue.	Azerbaijan			
(Back Next) Exit	Bahamas			-
A Instrument Cluster CAN Service interval written. Press Next to continue.				
▲ Instrument Cluster CAN Service interval written. Press Next to continue.		< Back	Next>	Exit
Service interval written. Press Next to continue.				
Service interval written. Press Next to continue.	A Instrument Cluster CAN			<u> </u>
< Back Next> Exit	Service interval written. Press Next to contir	nue.		
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
< Back Next > Exit				
		< Back	Next >	Exit

3.4.1.1.2" Oil level measurement"

When function "Oil level measurement" is selected, by pressing button "Open" the "Abrites Diagnostics for Porsche" connects to the instrument cluster and after some specifics are clarified gives information about the oil level.



3.4.1.1.3 "Read/Write ConfData, Read mileage value, Reset cluster "

If functions "Read/Write ConfData, Read mileage value, Reset cluster " is selected when pressing button "Open", the "Abrites Diagnostics for Porsche" opens diagnostic session to the instrument cluster and the following dialog appears:

strument	clus	ter	CAN																
00000000 00000010 00000020 00000030 00000040 00000050 00000050	57 30 31 00 C4 21 88	50 09 36 18 04 02 13	30 09 32 14 01 8D C0	5A 13 30 00 34 01 02	5A FF 00 00 21 ED 00	5A FF 60 00 02 13 00	39 FF 82 00 8D FF 00	38 00 00 01 03 00	5A 00 00 88 00 21	36 39 00 13 00 02	55 38 00 00 C0 00 8D	37 37 00 00 02 00 01	37 36 05 00 21 88	32 34 26 00 00 02 13	30 31 33 00 00 8D C0	37 31 14 00 00 01 02	WP0ZZZ9826U77207 09876411 1620.`		Read ConfData
D00000000 D00000090 D000000A0 D000000B0 D000000C0 D00000C0	9F 03 C4 3C BC 01	00 FF 00 3F 25 78 49	E7 ED 0B 04 F0 5D	00 7F E5 28 FF B7 00	E7 05 00 3A 87 00	C7 78 00 01 39 00	DB 90 28 C4 6A 06 00	01 5B A2 01 42 00	10 03 05 34 1E 00 82	D7 00 05 80 A2 00 20	96 00 DB 5B 00 20	E7 00 FF 03 A2 00 00	FB 1E FF 00 58 00 00	FF 00 FF 08 1E 00 02	FF 23 58 00 F4	FF 00 FF 00 BD 00 01	x([.?.(4#. <\$j[.X.X. .x9.B. 		Save to file Load from file
000000E0 000000F0 00000100 00000110 00000120	06 FF 80 FD FF 80	27 FF FD 81 FF 05	00 80 01 FB FF 0B	0F 00 FB 03 FF 14	78 80 03 F6 FF 1C	64 00 F6 07 25 9D	64 80 07 EC B8 90	1B 00 EC 0F FB 8A	03 20 0F D8 A0 80	09 01 D8 1F 80 20	0A 00 1F B0 66 2C	1E 00 B0 3F 5B 4D	FF 00 3F 60 7C 6E	FF 05 60 7F AB 90	FF 8F 7E C0 A2 20	FF 02 C0 FE 9C E0	.'.xdd?`~. ?`~. \$f[,Mn.		Read
00000140 00000150 00000160 00000170 00000180	40 5A FF 25 B5	32 5C 26 B9	0A 5C 25 B4	FF 1E FF 03 E1	1E 3C FF 4F E6	00 05 25 54 E8	05 A4 5B 59 F6	1C 32 90 58 FD	87 0A C5 47 FF	3C 06 FB 7F FF	05 89 0F 83 FF	20 05 26 88 FF	08 0A 3D 88 FF	06 B1 54 7C FF	90 6B AD FF	90 FF 1C B1 FF	<pre>@< Z2<2. .\\\$[€=Tk. \$£\$.OTYXG .</pre>	•	Reset
Memory read	ding	com	plete	:d													Þ		X Exit

- Button "Read ConfData" reads cluster's configuration data.
- Button "Write ConfData" updates cluster's configuration data with the loaded into the hexadecimal window data.

- Press button "Load from file..." to load a binary file's data into the hexadecimal display.
- Press button "Save to file..." to save the content of the hexadecimal display to binary file.
- Button "Read" into the mileage section reads current mileage value.
- Button "Reset" performs diagnostic reset of the instrument cluster.

3.4.1.1.4"Events", "Erase event memory"

If functions "Events" or "Erase event memory" is selected when pressing button "Open", the "Abrites Diagnostics for Porsche" opens diagnostic session to the instrument cluster and the reads the event memory and display it. If "Erase event memory" is selected also a button "Erase" is available.

The following dialog appears:

A Instrument Cluster CAN Events	<u>_ </u>
EventDescriptionA003Oil pressureA005Check Engine (exhaust-related problem)A007PSM failureA008ABS failureA009Brake padA011Coolant levelA013AirbagA016Front lid open (while driving)A017Rear lid open (while driving)	Value not present not present not present present present present present not present not present not present not present not present
Erase	< Back Next > Exit

Use button "Erase" to erase the event memory.

3.4.1.2.Panamera (2010-2012) and Cayenne (2011+)

For vehicle model Panamera (2010-2012) and Cayenne (2011+) the available functions are:

- "Reset service interval (Oil Change)"
- "Reset service interval (Interim Service)"
- "Reset service interval (Main and Interim Service)"
- "Write maintenance interval"
- "Change maintenance interval"

For vehicle model Macan,918 Spyder, 911 991, Boxster/Cayman 918 the available functions are:

- "Reset service interval (Oil Change)"
- "Reset service interval (Interim Service)"
- "Reset service interval (Main and Interim Service)"

🕾 ABRITES Diagnostics for Porsche		_ 🗆 🗙
Select vehicle model:	Select function:	
911 997 (2005-2010) Boxster/Cayman 987 (2005-2010) Panamera 970 (2010-2012) Cayenne (2011+) Macan 918 Spyder 911 991 Boxster/Cayman 981	Read/Update ConfData Read Mileage/Cluster Calibration Reset Reset maintenance interval (Oil Change) Reset maintenance interval (Intermediate Reset maintenance interval (Main service) Write maintenance interval Change maintenance interval	service
	< Back Next > Exit	:

The wizard will guide you through the steps related to these functions.

3.4.1.2.1"Reset service interval"

If "Reset service interval (Oil Change)", "Reset service interval (Interim Service)" or "Reset service interval (Main and Interim Service)" is selected:

A Instrument Cluster CAN			
Current date:			
7.10.2013 r.			T
Please, enter current date			
	< Back	Next >	Exit

By pressing "Next" service interval is reset.

A Instrument Cluster CAN			
Operation completed with success.			
	< Back	Next >	Exit

3.4.1.2.2"Write maintenance interval"

If "Write maintenance interval" is selected:

First window requires the user to select the country where vehicle is maintained.



Next window requires the user to select the unit of measurement (UOM) for the mileage value.

A Instrument Cluster CAN			_ 🗆 ×
Select LIOM for the milage. Next to continue			
Select COM for the milage, Next to continue.			
lue.			
miles			
	< Back	Next >	Exit

Next window displays the current values of "mileage" and "date" of last "main", "intermediate" and "oil change" service performed.

A Instrument Cluster CAN	×
Main maintenance: Mileage at last service:	51 km
Date of last service:	51 km
Mileage at last service: Date of last service:	22. 2 .2011 r. 🗸
Oil change service: Mileage at last service:	20457 km
Date of last service:	12. 6 .2012 r. ↓

User can modify these values as desired.

Next window require the user to select the type of service for which the "Abrites diagnostics for Porsche" to write new mileage and date values into instrument cluster.

A Instrument Cluster CAN	
⊠ LIndate main maintenance interval	
The data internet distances internet	
Update intermediate maintenance interval	
T Hadda all shares and in	
Dodate oli change service	
< Back Next >	Exit

By pressing "Next" selected maintenance interval values are written into instrument cluster.

3.4.1.2.3 "Change maintenance interval"

If "Change maintenance interval" is selected:

First window displays the current set values of mileage and days between "main", "intermediate" and "oil change" service performed.

A Instrument Cluster CAN		<u>_ X</u>
Main maintenance:		
Service interval mileage:	60000 km	ı
Service interval days:	1460 da	iys
Intermediate maintenance:		
Service interval mileage:	30000 kn	n
Service interval days:	730 da	iys
Oil change service:	,	
Service interval mileage:	15000 kn	n
Service interval days:	365 da	ays
	< Back N	lext > Exit

User can modify these values as desired.

Next window require the user to select the type of service for which the "Abrites diagnostics for Porsche" to write new mileage and date values into instrument cluster.

A Instrument Cluster CAN	
☑ Update main maintenance interval	
Update intermediate maintenance interval	
Update oil change service	
< Back Next >	Exit

By pressing "Next" selected maintenance interval values are written into instrument cluster.



3.4.2. Special functions with "Instrument Cluster K-Line"

When this function is opened, the following dialog appears:

hoose IPC I	type:	-	Cay	enr	ne													-	¥	
0000000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
0000010	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Read	Load from file
0000020	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
0000030	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
0000040	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				1
0000050	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Write	Save to file
0000060	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			111100	0010 00110.
0000070	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
0800000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Ø	
0000090	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
0A00000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Reset ECU	Service
00000B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				
00000C0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Login 0	
00000D0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			- 1	
00000E0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			Mileage:	
00000F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00			micage.	
0000100	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••		0	
0000110	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••		1 i	
0000120	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			
0000130	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••		Read	
0000140	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			
0000150	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••		_	
0000160	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••	_	🔲 Skip neg. re	sponses
0000170	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			
0000180	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			
0000190	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			
00001A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00		∟		
<u>•</u>																	<u>•</u>			
																				X
	_			_				_			_		_			_		_		

The user is able to select through the following vehicle models:

- Cayenne
- 911 (996), GT2 (996), GT3(996), Boxter(986) 1998-07/2001 [C56]
- 911 (996), GT2 (996), GT3(996), Boxter(986) 08/2001-2005 [C86]

If vehicle model "Cayenne" is selected the following functions are available:

- Read ConfData - by pressing button "Read", the Diagnostics connects to the instrument cluster and reads cluster's configuration data. The read data is put into the hexadecimal display and can be saved to a file by pressing button "Save to file...".

 Write ConfData – the loaded into the hexadecimal display data is written to the instrument cluster.

 Reset ECU – by pressing button "Reset ECU" the Diagnostics connects to the instrument cluster and performs diagnostic reset of the control unit.

 Service – by pressing button "Service" the user can reset "Service interval display" or "Maintenance interval".


If function "Reset service interval display" is selected the Diagnostics connects to the instrument cluster and resets the service interval display.

If function "Maintenance interval" is selected the Diagnostics connects to the instrument cluster and after some details are specified (engine type, production year, mileage unit, country) the maintenance interval is reset.

 Read Mileage – by pressing button "Read" into the "Mileage" section the Diagnostics connects to the instrument cluster and reads current mileage value (in km).

Mileage:	٦
0	
Read	

If vehicle model "911 (996), GT2 (996), GT3(996), Boxter(986) - 1998-07/2001 [C56]" is selected the following functions are available:

- Read cluster's configuration data - by pressing button "Read", the Diagnostics

connects to the instrument cluster and reads cluster's configuration data. The read data is put into the hexadecimal display and can be saved to a file by pressing button "Save to file...". If the instrument cluster's security access code is found it is displayed into the edit filed next to the "Login" label. The mileage value is displayed into the edit field into the "Mileage" section.

 Write cluster's configuration data – the loaded into the hexadecimal display data is written to the instrument cluster.

 Reset ECU – by pressing button "Reset ECU" the Diagnostics connects to the instrument cluster and performs diagnostic reset of the control unit.

 Read Mileage – by pressing button "Read" into the "Mileage" section the Diagnostics connects to the instrument cluster and reads current mileage value (in km).

3.4.3. Special functions with "Engine Control Unit"

Engine Control Unit Choose ECU Type: ME7.1.1/7.5/7.8 wakeup pattern 01 -ECU Type help
 00000000
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 < . É É Read ConfData Read Flash
 00000040
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 <
 00000080
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 <
 000000E0
 0
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 00
 <t ad from file $\{ \mathbf{O} \}$ ECU data • Þ

When "Engine control unit" is opened the following dialog appears:

Special functions with ECU can be:

-Read of flash memory

-Read/Write ECU's configuration data

- -Read/Write ECU data
- -Change Immobilizer code in ECU

You need to clarify the type of Engine Control Unit in the car before proceeding!

You can choose ECU type – ME7.x (wakeup id 0x01), MED9.1, ME7.x(wakeup id 0x11), ME7.2, ME5.2, ME7.8 (9x6), ME7.8 (9x7)

Example is : Read ConfData of "Bosch ME7.8":

Engine Control	Unit																		×
Choose ECU Type:	Pr	osc	he 9)×7	Bo	sch	M	Ξ7.	8							~		CU Typ	e help
00000000 00 0000010 00 0000030 01 0000030 01 0000030 02 00000050 02 00000050 02 00000050 02 00000050 02 00000050 02 00000050 02 00000050 02 00000050 02 00000050 02 00000100 12 00000100 12 00000120 14 00000130 11 00000140 02	0 000 0 000 1 011 1 022 1 9 0 000 0 0000 0 000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 00	000 000 000 000 000 000 000 000	00 00 02 0D 50 37 00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 01 0E 5A 39 00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 FD 00 5A 38 00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 FF 00 5A 37 00 00 00 00 00 00 35 20 A1 97 00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 27 00 39 37 00 00 00 00 00 00 37 81 5C F6 A7 00 00 00 00	00 00 04 00 38 45 00 00 00 00 00 00 31 57 7E B9 00 00 00 00 00 00	00 00 EE 00 55 00 00 00 00 00 00 00 00 00 00 00	00 00 0F 00 34 34 00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 07 00 53 00 00 00 00 00 00 00 34 1B AA 00 A5 00 00 00 00 00 00	00 00 00 37 31 00 00 00 00 00 00 00 00 00 00 6B 00 00 00 00 00 00 00 00 00 00 00 00 00	00 FF 00 73 2B 72 F7 F6 F7 F6 F5 F4 F5 F4 56 DC 04 8B CA EC EB EA	00 FF FC FF FF FF FF FF FF FF FF FF FF FF		Re	ad ConfData	Read Firsts Write Firsts Load from file Save to file
00000170 00 00000180 00 00000190 00 000001A0 00		00	00 00 00	00	00	00	00	00	00	00 00 00	00 00 00	00 00 00	00	E9 E8 E7 E6	FF FF FF FF			ECU data	Change Programming/ Immobilizer code
Pata read.																<u> </u>		X Exit	

After ECU type is chosen the following functions are available:

3.4.3.1.Read ConfData

By pressing button "Read ConfData", the Diagnostics connects to the engine control unit and reads engine control unit's configuration data. The read data is put into the hexadecimal display and can be saved to a file by pressing button "Save to file...".

Before reading is started the Diagnostics will ask you to select whether to auto-detect engine control unit's configuration data start address and length or you can specify certain memory area to be read.

3.4.3.2.Write ConfData

The loaded into the hexadecimal display data is written to the ECU.

Before writing is started the Diagnostics will ask you to select whether to auto-detect engine control unit's configuration data start address and length or you can specify certain memory area to be written.

3.4.3.3.Read flash

By pressing button "Read flash", the Diagnostics connects to the engine control unit and reads flash data. The read data is put into the hexadecimal display and can be saved to a file by pressing button "Save to file...".

3.4.3.4.Write flash

The loaded into the hexadecimal display data (if flash was read and modified or flash data is loaded by pressing button "Load from file...") is written to the ECU.

Press button "Load from file..." to load a binary file's data into the hexadecimal display. Press button "Save to file..." to save the content of the hexadecimal display to binary file.

Read ECU data

By pressing button "ECU data" the "Abrites Diagnostics for Porsche" connects to the ECU and reads some

specific ECU's characteristics like "VIN", "Operating hours counter", "Total distance", etc.

The following window appears:

lame	Value	
verspeed events		
perating hours counter [h]	2775.6	
otal distance	20430	
ehicle Identification Number	WP0ZZZ98Z6U702292	
vpe ID DME control unit	0987EU400	
roduction key	52KA	
rder type	987310	
ountry code	8	
ngine type	9625	
ngine number	61604545	
ransmission type	G8720	
ransmission number	12143	
adio/PCM code	0000	
ody color/convertible top color	C9Z000	
iterior equipment	AM0	
otentiometer 1 voltage - lower limit	44.5	
otentiometer 2 voltage - lower limit	365.0	
etpoint, throttle plate angle from adaptior	ו 0000	
avigation system	0000	
umber of programming operations	1	

To read overspeed events information select "Overspeed events" row and press "Next"

🗢 ABRI	TES Diagnostics for Porsche				
Range	Number of ignitions at overspeed	Operating hours counter	read at overspeed [h]		1
1	400	1000.0			
2	800	2000.0			
3	1200	2100.0			
4	1400	2600.0			
5	1600	2855.0			
6	2000	3000.0			
-					
-					
-					
i					
			< Back	Novt S	Evit
			- Dock	INCAL /	LAIL

To change certain range, enter new values, select row and press "Next".

3.4.3.6.Change Immobilizer code in ECU

Old programming and immobilizer code Enter old programming and immobilizer code manually Load old programming and immobilizer code from dump Read old programming and immobilizer code from ECU Old programming Old immobilizer code: 000000000 000000000 0000000000 0000000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 000000000 0000000000 0000000000 0000000000 0000000000 0000000000 00000000000 00000000000 00000000000 00000000000 000000000000 000000000000 00000000000000000000 000000000000000000000000000000000000	ogramming and immobilizer o	ode		<u>×</u>					
 Enter old programming and immobilizer code manually Load old programming and immobilizer code from dump Read old programming and immobilizer code from ECU New programming and immobilizer code Program programming code New program programming code New programming New immobilizer Program both 	-Old programming and immobilize	r code							
 Load old programming and immobilizer code from dump Read old programming and immobilizer code from ECU New programming and immobilizer code Program programming code New programming New immobilizer 	Enter old programming and immobilizer code manually Old programming Old immobilizer code:								
Read old programming and immobilizer code from ECU New programming and immobilizer code Program programming code New programming code New immobilizer Program immobilizer code Option (00000000) Image: Code (000000) Image: Code (00000) Image: Code (00000) <td colspan="8">Load old programming and immobilizer code from dump 000000 000000 00000000 000000</td>	Load old programming and immobilizer code from dump 000000 000000 00000000 000000								
New programming and immobilizer code Program programming code New programming Program immobilizer code 000000 Program immobilizer code 0000000 Program both Load from dump	O Read old programming and immobilizer code from ECU								
New programming and immobilizer code O Program programming code New programming Program immobilizer code 000000 O Program immobilizer code 0000000 Image: Code 00000000 Image: Code 000000000 Image: Code 000000000 Image: Code 000000000000000000000000000000000000									
O Program programming code New programming New immobilizer O Program immobilizer code 000000 Immobilizer O Program both Load from dump	-New programming and immobilize	er code							
Program immobilizer code 000000 000000000 Dodd from dump	O Program programming code	New programming	New immobilizer						
Program both Load from dump	O Program immobilizer code	000000	000000000						
	O Program both	,	,	Load from dump					
2		2							
Program		Progra	m						
Load old programming and immobilizer code by choosing one of the three options:									
- find old programming and immobilizer code from ECU's dump	- enter old programming and immobilizer code manually - find old programming and immobilizer code from ECU's dump								
	- reading old programming and im	mobilizer code from ECU							
Follow the instructions.	Follow the instructions.			Exit					

Attention! When modifying a value please make sure you keep it's format the same as read i.e. do not delete measurement units (if any), do not delete spaces and so on.

HINTS when reading/writing flash memories of ECUs:

If you experience problems with reading ME7.x memory better remove fuse 11 and fuse 15 to prevent disturbing of communication from the instrument cluster and try again. When flashing the device please always read and save first the original flash! Please, stop all screen savers/power saving options and unused application during the flashing! Please do not do anything else on your PC while flashing. Please, take into account that the reading/writing of the flash will take a long time (especially when CAN connection is used) – as result the battery may become flat. HINTS when reading/writing ConfData memory of ECUs: If you experience problems with reading ME7.x ConfData better remove fuse 11 and fuse 15 to prevent disturbing of communication from the instrument cluster and try again.

3.4.4. Special function "Dump Tool"

Using this application you can calculate security access codes, calculate mileage and so on.



This application needs the configuration data dump from the corresponding unit.

After the dump is loaded some modification will be made and you need to store the dump as a new file, which you can program into the device.

3.4.5. Special function "Key learning"

After a procedure is selected, press button "Open" for to open the function.

🗠 ABRITES Diagnostics for Porsche		_ 🗆 🗙
Select vehicle model:	Select function:	
Panamera 970 (2010+) Cayenne 9PA(-2010) Porsche Cayenne 92A (2010+) 911 997 (2005-2010) Boxster/Cayman 987 (2005-2011) Boxster/Cayman 981 (2012+) Macan 95B (2014+) Carrera GT 980 (2002-2006) Porsche Carrera 991 (2011+) 911 996 (1998-2005) GT2 996 (2001-2005) GT3 996 (2000-2005) Boxster 986 (1997-2004)	Teach keys Help	
	< Back Next > Exit	t

3.4.5.1.Teach keys - GT2 996,GT3 996,911 996,Boxster 986,Carrera GT

When "Next" is pressed the following window appears:



When button "Start" is pressed the "Abrites Diagnostics for Porsche" connects to the "Alarm" module and reads the keys which are currently accepted from the car. There can be up to four keys learned at positions correspondingly 1,2,3 and 4.

ey learning				×
Current tran	sponder:	51		
Position	Data			
Position 1 Position 2	70ecfbd6 Not used		🍫	Start
Position 3 Position 4	Not used Not used	elect position at ey and press "Le	which you would lik arn"	ke to learn current
	<u> </u>			Stop
			Erase	
			Erase All	
<u> </u>				× 1
Vata read.				Exit

During reading the Diagnostics will ask you to specify the 3 bytes "Key learning code" of the alarm module. You will have the opportunity either to write down the code if it is available for you or to extract it by loading the alarm's configuration data dump.

Please, enter key learning	code			×
Key learning code:	000000 hex value	Load from dump	ОК	X Cancel

If you want to learn the key currently in the ignition lock, then you need to select a certain position (1 to 4) at which you like the key to be written. This is done by clicking over the corresponding position. By pressing button "Learn" the Diagnostics writes key's ID at the corresponding position into the alarm module. Key is learned.



For to erase all the learned keys, press button "Erase all". For to disconnect from the alarm module press button "Stop".

3.4.5.2. Teach remote control - GT2 996,GT3 996,911 996,Boxster 986,Carrera GT

By selecting "Teach remote control - GT2 996,GT3 996,911 996,Boxster 986,Carrera GT" the user can learn remote control for vehicle models GT2 996,GT3 996,911 996,Boxster 986 and Carrera GT. When "Open" is pressed the following window appears:

Remote cor	ntrol learning		×
Current rad	io key:		
Position	Data	\$	Start
		Learn	
			Stop
		Erase	
		Erase All	×
			Exit

When button "Start" is pressed the "Abrites Diagnostics for Porsche" connects to the "Alarm" module and reads the remote controls which are currently accepted from the car. There can be up to four remote controls learned at positions correspondingly 1,2,3 and 4.



During reading the Diagnostics will ask you to specify the 3 bytes "Key learning code" of the alarm module. You will have the opportunity either to write down the code if it is available for you or to extract it by loading the alarm's configuration data dump.



If you want to learn the remote control currently in the ignition lock, then you need to select a certain position (1 to 4) at which you like the remote control to be written. This is done by clicking over the corresponding position. By pressing button "Learn" the Diagnostics writes the remote control's ID at the corresponding position into the alarm module. During writing the Diagnostics will ask you to specify the 12 bytes transmitter code of the remote (you can find it written over it).

Please, enter transmitter ke	y number		×
Transmitter key number:	00000000000000000000000000000000000000	✓ OK	X Cancel

Remote control is learned.

For to erase a remote control at certain position, first select the position by clicking over it and then press button "Erase".

For to erase all the learned remote controls, press button "Erase all".

For to disconnect from the alarm module press button "Stop".

3.4.5.3. Teach keys – Cayenne (-2010)

By selecting function "Teach keys" for vehicle model Cayenne (-2010) the user can learn transponder key for vehicle model Porsche Cayenne.

When "Next" is pressed the following window appears requiring from user to input the 4 digit immobilizer (Login) code.

A Key Learning			
Input immobilizer code.			
0000			
Enter immobilizer code. Continue with Next			
	< Back	Next >	Exit

The immobilizer (Login) code can be read from ECU by OBDII (for Bosch Gasoline EUCs) or from configuration data dump of the Kessy module using special function "Dump tool".



Next screen requires the key count that will be taught (a number 1 to 4).

A Key Learning			_ _ X
Number of keys to be taught			
1			
Enter number of keys. Continue with Next			
	(Davis	Marks	
	< Back	Next >	Exit

By pressing "Next" key learning procedure begins.

3.4.5.4. Program dealer key – Cayenne (-2010)

For vehicles with HITAG2 key/transponder year model 2004-2007 you must use virgin transponder PCF7936 or virgin key.

If you use a Transponder - you need to switch it in Cipher ("Crypto") mode.

You can use your Key programmer HiTag2 programmer for that purpose if you have one. This is done by replacing 0x06 with 0x0E in the first byte of the configuration page (Configuration page is page 3 where page 0 is the transponder ID, and pages 1 and 2 are the secret key).

If this value is already 0x0E then the transponder is already in cipher mode.

For vehicles with HITAG2 key/transponder year model 2007+ you need to prepare the HITAG2 key/transponder for to use it.

This can be done using function "Program dealer key".

After this function is selected and "Next" button is pressed the following window appears:

Dealer key with Hitag2		×
Load component protection data from Kessy/ECU dump Program from Kessy/ECU dump		
Load dump	Program	Autodetect from ECU
O All 7 bytes of the component protection data (component security) are know		
Program transponder from 7 bytes		
Component protection bytes: 0 0 0 0 0 0 0 0	Program	
O Find the 7th byte of the component protection data		
Find 7th byte and program transponder		
Component protection bytes: 0 0 0 0 0 0	Program	Find 7th byte from working
Login: 0		Ney
		Exit

There are following possibilities:

- Making the key without disassembling the Kessy (completely by OBDII)

The "Autodetect from ECU" button will try automatically to read the component security bytes

from the ECU, and will select for you automatically whether you need to search for the $7_{\mbox{th}}$ byte

or not.

IMPORTANT: If you don't have a working key from the car, you will need to short the fuses as

described in the appendix to get communication with the ECU.

After the component security is read, if you've all 7 bytes, then you can program the key directly. If you have only the 6 bytes, you have to choose:

a) if you have working key from this car, you can put it into the programmer, and press the "Find 7_{th} byte from working key" - the 7_{th} byte will be found in several seconds;

NOTE: If you use the Tango programmer this function will not work, the function work only on Hitag2 or Abrites key programmer.

b) if you don't have a working key, you've to search manually for the 7th byte. The procedure takes approximately about 20-25 min, but can rise to 45min in the worst case. You've to connect the interface to the OBDII, and the programmer should be connected too. Then after pressing the "Program" button you will receive notification when to put the key into the ignition, and when to put it into the programmer.

IMPORTANT: You need only to put the key inside , please DO NOT ROTATE THE KEY. IMPORTANT: You may hold the programmer near the ignition lock so you can proceed faster when you remove the key. But please pay attention that the programmer is at least 15cm from the ignition lock so the reading of the key from the car is not disturbed.

NOTE: It is always better to use a plastic key or an empty transponder when you search for the 7th byte, at least when you prepare such keys for the first time. If by some reason the key becomes locked (e.g. battery goes down, computer is hang-up, etc.), you can find the encryption-key with the "Find 7th byte from working key" button, and then you can restore the key with the Hitag2 key tool.

2.2 Making the key by disassembling the Kessy or the ECU

You can load a dump of the Kessy or ECU using the "Load component protection from Kessy/ECU dump" radio-button. After pressing the "Load dump" button you've to select the respective dump file, after that the "Program" button will be active.

ler key with Hitag2		
Load component protection data from Kessy/ECU dump		
Program from Kessy/ECU dump]
Load dump	Program	Autodetect fro ECU
All 7 bytes of the component protection data (component security) are know		
Program transponder from 7 bytes		
Component protection bytes: 0 0 0 0 0 0 0	Program	
Find the 7th bute of the component protection data		
Find 746 buts and an annual transmission		
		Find 7th hut
Component protection bytes: 0 0 0 0 0	Program	from working
Login: 0		кеу
		Exit

NOTE: Please pay attention that in the ECU dump sometimes there are only 6 of the component security bytes. In this case you will need to search for the 7th byte.

NOTE: Please pay attention that if you have the Kessy dump, then you will have all the 7 bytes. But there are a lot of Kessy devices with different software versions, so it is possible that

the configuration data is incorrect decrypted, respectively the component security bytes will be wrong. In this case the key will not work and you will need to restore the key using the Hitag2 programmer.

2.3. Making the key in the case when the Autodetect button is not functioning It is possible that by some reason the Autodetect button is not functioning, e.g. missing license, you don't make the short with the fuses properly, ECU is missing or is broken, and so on.

If you've already read the component security bytes previously (e.g. by dissoldering the ECU EEPROM and decoding it by dump tool), then you can put the component security bytes manually

and proceed as described in step 2.1

After you have a key/transponder ready for learning you have to specify how many keys you would like to learn and the security access code of the kessy module into the "Key learning Porsche Cayenne" window. Press button "Learn" for to start the learning procedure.

3.4.5.5. Teach keys - 911 997, Boxster 987, Cayman

Function "Teach keys" function for vehicle models "911 997 (2005-2010)", "Boxster 987 (2005-2010)", "Cayman (2005-2010)" offers the opportunity to learn one to six keys to the vehicle.

First window requires the user to input the three bytes teach enable code of the PAS module:

A Key Learning			
Teach Enable Code			
00000			
Enter Teach Enable Code. Continue with Next			
	< Back	Next >	Exit

Next window requires the user to input the key count (a number 1 to 6) that will be taught:



Next window requires the user to input the 6 digit (3 bytes) transponder password:

A Key Learning			
Transponder password			
000000			
Enter transponder password. Continue with N	ext		
	< Back	Next >	Exit

Next window requires the user to input the 12 digit (6 bytes) transponder secret key:

A Key Learning	
Transponder Secret Key	
0000000000	
Enter Transponder Secret Key. Continue with Next.	
< Back Next >	Exit

By pressing "Next" button the procedure is started.

A Key Learning					<u>_ 0 ×</u>
	Please Wait			×	
	Learning procedure	in progress, plea	ase wait		
		Teach keys	×		
Enter Tra		Key No. 1 insert. Press "OK" when ready.			
		ОК			
	1		X c	ancel	
			< Back	Next >	Exit

3.4.5.6. Program dealer key on 911 997, Boxster/Cayman 987

If you don't have key ordered from a dealer for vehicle "911 997, Boxster/Cayman 987" you can prepare a virgin HITAG2 key/transponder.

Connect your Abrites programmer to the PC.

Open the "Key learning" special function. Select vehicle model "911 997" or "Boxster 987" or "Cayman 987".

Select the function "Program dealer key" and Press "Next".

A BRITES Diagnostics for Porsche		_ 🗆 🗙
Select vehicle model:	Select function:	
Cayenne (-2010) 911 997 (2005-2010) Boxster 987 (2005-2010) Cayman 987 (2005-2010) Carrera GT 980 (2002-2006) 911 996 (1998-2005) GT2 996 (2001-2005) GT3 996 (2000-2005) Boxster 986 (1997-2004)	Teach keys Program dealer key All keys lost	
	< Back Next > Ex	it

Next window requires to input the 6 digit (3 bytes) transponder password:

A ABRITES Diagnostics for Porsche	<u>_ X</u>
Immo Transponder Password	
00000	
Enter transponder password. Continue with Next	
< Back Next >	Exit

Next window requires the user to input the 12 digit (6 bytes) transponder secret key:



A ABRITES Diagnostics for Porsche		_ 🗆 🗙
Immo Transponder Secret Key		
, ,		
00000000000		
Enter Transponder Secret Key. Continue with Next.		
< Back	Next >	Exit

Put new HITAG key/transponder into Tag programmer.

By pressing "Next" button key/transponder will be written and ready to be learned.

3.4.5.7. "All keys lost" function for 911 997, Boxster/Cayman 987

You can learn keys to vehicle model 991 997, Boxster/Cayman 987 with no need to provide as input "teach enable code", "transponder password", "transponder secret key" using function "All keys lost".

A ABRITES Diagnostics for Porsche		×
Select vehicle model:	Select function:	
Cayenne (-2010) 911 997 (2005-2010) Boxster 987 (2005-2010) Cayman 987 (2005-2010) Carrera GT 980 (2002-2006) 911 996 (1998-2005) GT2 996 (2001-2005) GT3 996 (2000-2005) Boxster 986 (1997-2004)	Teach keys Program dealer key All keys lost	
	<back next=""> Exit</back>	

Please pay attention that after you execute this function all old/existing keys will no longer work.

For to use this function you need Tag programmer and ABPROG.

During the procedure you have to first disconnect from vehicle PAS module and ESL modules, desolder PAS module 24c08 ConfigData chip and ESL module 24c04 ConfigData chip, then solder them back and connect both modules to vehicle (**see Appendix 5.2 Removing ESL Porsche 911 997, Boxster/Cayman 987**).

The procedure consists of six steps. These steps have to be executed in the given order (1 to 6).

You can start from any step if the precedent are already executed (i.e. when you open the function in the Porsche commander you don't have to start from scratch if you have already successfully performed some of the steps before).

Step 1:

- Disconnect PAS module from vehicle, open it and desolder the 24c08 ConfigData chip.
- Connect ABPROG to AVDI.
- Connect the 24c08 chip to ABPROG.
- Press "Next" to execute the step.

Step 1:	Prepare PAS ConfigData with ABPROG	
Step 2:	 Prepare ESL ConfigData with ABPROG 	
Step 3:	 Update PAS by OBDII 	
Step 4:	 Update ESL by OBDII 	
Step 5:	 Prepare transponder(s) with TagProg 	
Step 6:	 Learn key(s) 	
Step 1:		
Open P/	AS module and desolder 24c08 ConfigData chip. 24c08 ConfigData chip over the ABPROG programmer	

Step 2:

- Disconnect ESL module from vehicle, open it and desolder the 24c04 ConfigData chip.
- Connect ABPROG to AVDI.
- Connect the 24c04 chip to ABPROG.
- Press "Next" to execute the step.

A ABRITES D	agnostics for Porsche			_ 🗆 ×
You h You c	ave to execute all steps from 1-6 in this an start from any step if the precedent	order. are already	executed.	
Step 2 Step 2 Step 4 Step 5 Step 6	 Prepare PAS ConfigData with ABP Prepare ESL ConfigData with ABP Update PAS by OBDII Update ESL by OBDII Prepare transponder(s) with TagF C Learn km/(c) 	ROG ROG Prog		
Step 2 Open Put th Conne Press	ESL module and desolder 24c04 Config ESL module and desolder 24c04 Config 24c04 ConfigData chip over the ABPR ct ABPROG programmer to AVDI. 'Next" to execute the step.	Data chip. OG prograi	mmer.	
		< Back	Next >	Exit

Step 3:

- Solder 24c08 chip to PAS module, close it and connect the module back to the vehicle.
- Solder 24c04 chip to ESL module, close it and connect the module back to the vehicle.
- Connect AVDI to vehicle's OBDII
- Press "Next" to execute the step.

Step 1:	 Prepare PAS ConfigData with ABPROG 	
Step 2:	Prepare ESL ConfigData with ABPROG	
Step 3:	Update PAS by OBDII	
Step 4:	 Update ESL by OBDII 	
Step 5:	 Prepare transponder(s) with TagProg 	
Step 6:	C Learn key(s)	
Step 3:- Solder ti Solder ti Connect Connect Press "N	ne 24c08 ConfigData chip to PAS module. ne 24c04 ConfigData chip to ESL module. PAS and ESL modules back to the vehicle. AVDI to vehicle's OBDII. ext" to execute the step.	

Step 4:

- Make sure Step 3 is executed.
- Press "Next" to execute the step.

A BRITES Diagnostics for Porsche	<u>_ ×</u>
You have to execute all steps from 1-6 in this order. You can start from any step if the precedent are already executed.	
Step 1: C Prepare PAS ConfigData with ABPROG Step 2: C Prepare ESL ConfigData with ABPROG Step 3: C Update PAS by OBDII	
Step 4: Update ESL by OBDII Step 5: Prepare transponder(s) with TagProg	
Step 4: Solder the 24c08 ConfigData chip to PAS module. Solder the 24c04 ConfigData chip to ESL module. Connect PAS and ESL modules back to the vehicle. Connect AVDI to vehicle's OBDII. Press "Next" to execute the step.	
< Back. Next >	Exit

Step 5:

- Connect Tag programmer to AVDI.
- Put new transponder chip to Tag programmer.
- Press "Next" to execute the step.

ABRITES Diag	nostics for Porsche			
You hav You can	e to execute all steps from 1-6 in this start from any step if the precedent	order. are already	executed.	
Step 1: Step 2: Step 3: Step 4:	 Prepare PAS ConfigData with ABP Prepare ESL ConfigData with ABP Update PAS by OBDII Update ESL by OBDII 	PROG PROG		
Step 5: Step 6:	 Prepare transponder(s) with Tagl Learn key(s) 	Prog		
Step 5: Connect Put new Press "N	TAG key programmer to AVDI. transponder chip into programmer. lext" to execute the step.			
		< Back	Next >	Exit

Step 6:

- Connect AVDI to vehicle's OBDII
- Press "Next" to execute the step.
- Follow the instructions.

ABRITES Diagn	nostics for Porsche	_ 🗆 ×
You have You can	e to execute all steps from 1-6 in this order. start from any step if the precedent are already executed.	
Step 1:	• Prepare PAS ConfigData with ABPROG	
Step 2:	 Prepare ESL ConfigData with ABPROG 	
Step 3:	 Update PAS by OBDII 	
Step 4:	 Update ESL by OBDII 	
Step 5:	 Prepare transponder(s) with TagProg 	
Step 6:	• Learn key(s)	
Step 6:		
Connoct	AV/DI to vehicle's OPDII	
Press "N	ext" to execute the step	
11035 11		
	< Borl Nevt S	Evit
	< DOUN. NEXT >	LAIL

3.4.5.8. Read Transponder/Immo data from a working key for 911 997, Boxster/ Cayman 987 when adding a spare key.

When you have a working key to the Porsche, you now can use the TA26 Extractor to read the data from the working key and add a spare one. You need to make sure to have a ProTag connected to the PC, internet connection and no more than 3 minutes time.

To do this, open the "Key Learning" special function and follow the on-screen instructions.

1. Select the vehicle model you're working on and click on "Read transponder data from working key".

2. Give Ignition ON with the original key

4. Put the TA26 into the programmer



3.Put the original key into the programmer

Contraction Image: Contracti

5. Give ignition ON 32 times together with working key and TA26



6.Put TA26 into the programmer

The ABRITES Diagnostics for Porsche			_ 🗆 X
Dut TADC into the suscence when succes "N			
Put TA26 into the programmer then press the	ext.		
	< Back	Next >	Exit

January 2018	Abrites Diagnostics for Porsche User Manual

7. Calculating...

8. Transponder data read successfully

ABRITES Diagnostics for Porsche		🗠 ABRITES Diagnostics for Porsche	
Calculating		Transponder data read successfuly.	
< Back Next > Ex	it	< Back Next > Exit	

Once the transponder data is extracted, it will remain cached on the computer. However, you need to proceed with preparing the new key as dealer and re-learning the original key together with learning the new key to the car, choosing the desired option. In this case, we need to select the 2nd option (Use transponder data read from working key):

🕾 Key Learning			
Enter transponder data manually			
□ Use transponder data read from working	key		
_	-		
	< Back	Next >	Exit

Note: Protag, active AMS, internet connection and preparing the keys as dealer is needed for making the procedure.

3.4.5.9.Teach key Panamera, Cayenne (2011+), Boxster 981, 911 991, Macan

First you need to read the immobilizer (BCM_Front) with a programmer. You need the DFlash (EEPROM) from this module.

Then you should load this dump in the software and put the new key into the programmer antenna, so the key is prepared as a dealer key.

Once the key is prepared as a dealer key with the programmer, you should give the number of keys, which you want to learn, i.e. the existing keys + the new key count - so all these keys should be available during the procedure. Keys, which are not present, will be deleted and will not work anymore, until they are relearned again. The software will attempt to connect to the car by OBDII

If you cannot connect to the car, make the lights ON/OFF several times, try to operate the windows, etc. (to wake up the car)

After connected to the car by OBDII, you will need to put each of the keys (i.e. any existing keys and the new key) into the ignition lock. You will see in the software indication when to put the next key, how many keys are actually learned, and how many keys have to be learned. Such information is displayed also on the dashboard.

When the procedure is completed the remote should work. To make the keyless working, make ignition ON with the plastic key (the dummy key) and press any remote control button.

3.4.6.Special function "Kessy/immobilizer functions"

When this function is opened, the following dialog appears:



A Kessy/Immobilizer functions		×
Select vehicle model:	Select function:	
Cayenne (-2010) 911 997 (2005-2010) Boxster 987 (2005-2010) Cayman 987 (2005-2010) Carrera GT 980 (2002-2006) 911 996 (1998-2005) Boxster 986 (1997-2004)	Teach Kessy/immobiliser Teach ELV	
	< Back Next > Exit	

3.4.6.1.Teach Kessy/immobilizer – Cayenne (-2010)

Function "Teach Kessy/immobilizer" for vehicle "Cayenne (-2010)" offers the opportunity to learn a new Kessy/immobilizer module to a vehicle.

The wizard will guide you through the following windows:

First window requires the user to input the model year of the new Kessy/immobilizer module:

A Kessy/Immobilizer functions			_ 🗆 🗙
Model year			
MJ08 or higher			
MJ06 or lower			
Please select model year, Next to continue			
	C Back	Nexts	
			LAR

Next window requires the user to input the vehicle type (left-hand or right-hand vehicle) of the new Kessy module:

A Kessy/Immobilizer functions	
Vehicle type	
LHD vehicle RHD vehicle	
, Specify vehicle type with the Next key.	
< Back Next >	Exit

Next window requires the user to put a new key into the ignition lock:



Kessy/Immobilizer functions	X
< Back. Next >	Exit

Next window requires the user to input the immobilizer (Login) code of the new Kessy module:

A Kessy/Immobilizer functions			<u>_ ×</u>
Input immobilizer code.			
0000			
Enter immobilizer code. Continue with Next			
	< Back	Next >	Exit

Next window requires the user to input the number of keys to be taught for the new Kessy/immobilizer module:

A Kessy/Immobilizer functions			
Number of keys to be taught			
1			
Enter number of keys. Continue with Next			
	< Back	Next >	Exit
Enter number of keys. Continue with Next	< Back	Next >	Exit

When "Next" is pressed new Kessy module is adapted to the vehicle.

Kessy/Immobilize	er functio	ons		
-				
Parameter	Unit	Value		
Coding		3-button - Kessy - Tiptronic - RoW/USA		
_				
Continue wit	h the	Next key		
		< Back	Next>	Exit

Next window requires the user to input coding configuration of the new Kessy module:

When "Next" is pressed the input coding is written to the new Kessy and all required keys are learned to the vehicle.

The "Teach Kessy/immobilizer" function is completed.

3.4.6.2.Teach ELV – Cayenne (-2010)

Function "Teach Kessy/immobilizer" for vehicle "Cayenne (-2010)" offers the opportunity to learn a new electronic steering column lock module to a vehicle.

First window requires the user to input the immobilizer (Login) code of the new Kessy module:

A Kessy/Immobilizer functions			
Input immobilizer code.			
0000			
Enter immobilizer code. Continue with Next			
	< Back	Next>	Exit

By pressing "Next" teaching procedure is started.

3.4.6.3.Teach control unit – Boxster 987, 911 997, Cayman (-2010)

Function "Teach control unit" for vehicles "Boxster 987, 911 997, Cayman (-2010)" offers the opportunity to learn a new PAS (immobilizer) module to a vehicle.

First window requires the user to input the teach enable code of the new Kessy module:

A Kessy/Immobilizer functions			
Teach Enable Code			
000000			
Enter Teach Enable Code, Continue with Next			
	< Back	Next >	Exit

Next window requires the user to input the Vehicle Identification Number:

A Kessy/Immobilizer functions			<u>_ ×</u>
VIN			
WP0000000000000			
Enter VIN. Continue with Next			
	< Back	Next >	Exit

First window requires the user to input the 5 bytes ELV secret key of the new Kessy module:

A Kessy/Immobilizer functions			
ELV Secret key (5 bytes hex)			
000000000			
Enter ELV Secret Key. Continue with Next			
	< Back	Next >	Exit

First window requires the user to input the immobilizer code of the new Kessy module:

A Kessy/Immobilizer functions			
Immobilizer code			
000000000			
1			
Enter immobilizer code. Continue with Next			
	< Back	Next >	Exit

First window requires the user to input the transponder password of the new Kessy module:

A Kessy/Immobilizer functions	
Immo Transpondor Password	
000000	
Enter transponder password. Continue with Next	
< Back Next > E	xit

First window requires the user to input the transponder secret key of the new Kessy module:

A Kessy/Immobilizer functions	
Immo Transponder Secret Key	
0000000000	
Enter Transponder Secret Key. Continue with Next.	
Contract	

When "Next" is pressed new Kessy module is adapted to vehicle and all required keys are learned to the vehicle.

3.4.6.4.Teach electronic steering column lock – Boxster 987, 911 997, Cayman (-2010)

Function "Teach electronic steering column lock" for vehicles "Boxster 987, 911 997, Cayman (-2010)" offers the opportunity to learn a new electronic steering column lock module to the vehicle.

First window requires the user to input the teach enable code of the new module:

A Kessy/Immobilizer functions	
Teach Enable Code	
000000	
000000	
Enter Teach Enchla Cada, Cantinua with Next	
Enter reach Enable Code. Continue with Next	
< Back Next >	Exit

By pressing "Next" teaching procedure is started.

3.4.6.5.Teach control unit – Boxster 986, 911 996, Carrera GT

Function "Teach control unit" for vehicles "Boxster 986, 911 996, Carrera GT" offers the opportunity to learn a new or used Alarm module to a vehicle.

The wizard will guide you through the following windows:

First window requires the user to input the 8 bytes immobilizer code of the Alarm module:

January

2018

A Kessy/Immobilizer functions			
Immobilizer code			
000000000000000			
Enter immobilizer code. Continue with Next			
	< Back	Next >	Exit

When "Next" is pressed Alarm module is adapted to vehicle.

If Alarm module is not new (i.e. is used) you can use the Dump tool special function "Porsche (9x6) - enable Alarm module immobilizer code programming [93C6x)" for to modify alarm's dump to be ready to be taught. After dump is modified, upload it to the alarm module and start "Teach control unit" function from beginning.

3.4.6.6.Activation state memory – Boxster 986, 911 996, Carrera GT

A Kessy/Immobilizer functions				<u>_ X</u>
	Activat	ion state memory		
	Event	Description	Value	
	1	Cabriolet roof	Activation: secured via radio	
	2	Cabriolet roof	Activation: secured via radio	
	3	Cabriolet roof	Activation: secured via radio	
	4	Cabriolet roof	Activation: secured via radio	
	5	Cabriolet roof	Activation: secured via radio	
	6	Cabriolet roof	Activation: secured via radio	
	7	Oddments tray	Activation: secured via radio	
	8	Oddments tray	Activation: secured via radio	
	9	Oddments tray	Activation: secured via radio	
	10	Locked contact, driver side	Activation: after battery connect.	
			< Back Next >	Exit

This function reads the activation state memory of the alarm module.
3.4.6.7. Erase activation state memory – Boxster 986, 911 996, Carrera GT

This function reads the activation state memory of the alarm module and gives the opportunity to delete it.

A	Kessy/Im Activat	imobilizer functions		_		
	Event 1 2 3 4 5 6 7 8 9 10	Description Cabriolet roof Cabriolet roof Cabriolet roof Cabriolet roof Cabriolet roof Oddments tray Oddments tray Oddments tray Locked contact, driver side	Value Activation: Activation: Activation: Activation: Activation: Activation: Activation: Activation: Activation: Activation:	secured via r secured via r	adio adio adio adio adio adio adio adio	
			Erase			
				< Back	Next >	Exit

3.4.6.8.Events- Boxster 986, 911 996, Carrera GT

This function reads the events memory of the alarm module.

A	Kessy/In	mobilizer functions		
	Events	i		
	Event	Description	Value	
	1	Alarm actuation by driver's door	Activation:	secure
	2	Alarm actuation by "locked" contact on passenger's side	Activation:	secure
	3	Alarm actuation by "locked" contact on driver's side	Activation:	secure
	4	Alarm actuated by expiry of entry delay		
	5	Alarm actuation by driver's door	Activation:	secure
	6	Alarm actuation by "locked" contact on passenger's side	Activation:	secure
	7	Alarm actuation by "locked" contact on driver's side	Activation:	after b
	8	Alarm actuation by "locked" contact on passenger's side	Activation:	secure
	9	Alarm actuation by "locked" contact on driver's side	Activation:	secure
	10	Alarm actuated by expiry of entry delay		
	•			F
		K Back Ne	ext >E	Exit

3.4.6.9.Erase Events memory – Boxster 986, 911 996, Carrera GT

This function reads the events memory of the alarm module and gives the opportunity to delete it.

P	Kessy/In	nmobilizer functions	
	Events	i	
	Event	Description	Value
	1	Alarm actuation by driver's door	Activation: secure
	2	Alarm actuation by "locked" contact on passenger's side	Activation: secure
	3	Alarm actuation by "locked" contact on driver's side	Activation: secure
	4	Alarm actuated by expiry of entry delay	
	5	Alarm actuation by driver's door	Activation: secure
	6	Alarm actuation by "locked" contact on passenger's side	Activation: secure
	7	Alarm actuation by "locked" contact on driver's side	Activation: after b
	8	Alarm actuation by "locked" contact on passenger's side	Activation: secure
	9	Alarm actuation by "locked" contact on driver's side	Activation: secure
	10	Alarm actuated by expiry of entry delay	
	•		
		Erase	
		< Baok Net	d > Exit

3.4.7. Special function "Guided functions"

The purpose of this function is to give the opportunity to do some specific vehicle maintenance procedures.

ABRITES Diagnostics for Porsche 6.3	www.abrites.com
A ABRITES Diagnostics for Porsche	
Select vehicle model:	Select unit:
Porsche 996 GT2 (2001-2005) Porsche 996 GT3 (2000-2005) Porsche Boxster 986 (1997-2004) Porsche Boxster/Cayman 987 (2005-2010) Porsche Boxster/Cayman 981 (2012+) Porsche Carrera GT 980 (2002-2006) Porsche 911 996 (1998-2005) Porsche 911 997 (2005-2010) Porsche 911 997 (2005-2010) Porsche 911 991 (2012+) Porsche Cayenne 9PA up to MY 2010 Porsche Cayenne 92A from MY 2011 Porsche Panamera 970 Porsche Macan Porsche 918 Spyder	DME PSM Alarm Airbag Instrument Cluster
	<pre></pre>

Select vehicle model, then select a unit and press "Next".

Next window will show you all the available functions for the selected unit.

For some vehicle models, before the list of functions is displayed the tester will examine and identify unit's type automatically by OBDII.

For example if vehicle model "Porsche Boxster 986 (1997-2004) is selected and unit "Alarm" the following list of functions will be displayed:

A Guided Functions				<u>_ X</u>
System check				
Input signals				
Interior contact				
Teach				
Activation state memory				
Erase activation state memory				
Events				
Erase event memory				
Modify coding				
	< Back	Next >	Exi	t

Note: Some of the functions require internet access.

Select the desired function, press "Next" and the procedure will be performed.

Here is an example with function "Short tests" for unit DME ME78 of Boxster 987:

A Guided Functions
Engine must be running. For the short test for oxygen sensor heating downstream of the catalytic converter, the ignition must have been off for at least 2 minutes so that the sensor can cool down slightly.
< Back Next > Exit

important: There must not be any faults st	tored!		
Knock control			
Vynamic test of ox. sen. in front of cat. c. (LSU)			
Sensor-exchange diagn. behind cat. conv.			
Oxygen sensor heater behind catalytic converter			
X Oxy. sensor readiness behind cat. converter			
🛿 02 Sensor Circuit Slow Response Sensor 2			
🛿 Oxygen sensor plausibility			
🛿 Basic mixture adaption			
🛿 Secondary-air system			
🛿 Cat. conv. efficiency			
🕱 Fuel evaporative valve			
🖁 Camshaft position actuator diagnosis			
	< Back	Next >	Exit

escription	Value	Unit
1 Thresholds		
└─¢ Engine speed (2200 rpm)	not OK	
₽ 🕢 No error flag		
A Knock sensor 1 circuit input intermittent bank 1 or single sensor	ОК	
- 🗘 Knock sensor 2 circuit low bank 2	ОК	
🖳 🕐 Cycle flag		
\Rightarrow Knock sensor 1 circuit input intermittent bank 1 or single sensor	not OK	T
➡ Knock sensor 2 circuit low bank 2	not OK	

Here is an example with function "Short tests" for unit DME SDI6 of Panamera:

A BRITES Diagnostics for Porsche			
Short tests/preconditions			
Please note preconditions! Continue	with Next. Back with E	Back.	
Description	Value		Unit
Temperature	28.50		۰C
PRECONDITIONS No faults stored in fault memory Engine running Engine (coolant) temperature 60 Engine oil temperature < 130 °C (2 Exhaust temperature downstream Ambient temperature > 10 °C (50 Transmission range P or N, or cluto Vehicle speed = 0 km/h (0 mph)	115 °C (140239 °F) 266 °F) of catalytic converter < °F) :h switch NOT actuated	800 °C (1,472 °F)	
	< Back	Next >	Exit

Knock control Sensor dynamics upstream of catalytic converter, bank 1 Sensor dynamics upstream of catalytic converter, bank 2 Oxygen-sensor heater behind catalytic converter, bank 1/2 Oxygen sensors interchanged upstream of catalytic converter	
Knock control Sensor dynamics upstream of catalytic converter, bank 1 Sensor dynamics upstream of catalytic converter, bank 2 Oxygen-sensor heater behind catalytic converter, bank 1/2 Oxygen sensors interchanged upstream of catalytic converter	
Sensor dynamics upstream of catalytic converter, bank 1 Sensor dynamics upstream of catalytic converter, bank 2 Oxygen-sensor heater behind catalytic converter, bank 1/2 Oxygen sensors interchanged upstream of catalytic converter	
Sensor dynamics upstream of catalytic converter, bank 2 Oxygen-sensor heater behind catalytic converter, bank 1/2 Oxygen sensors interchanged upstream of catalytic converter	
Oxygen-sensor heater behind catalytic converter, bank 1/2 Oxygen sensors interchanged upstream of catalytic converter	
Oxygen sensors interchanged upstream of catalytic converter	
Uxygen sensors interchanged downstream of catalytic converter	
Tank vent valve (TEV)	
Fuel supply part load	
Fuel supply idling	
Catalytic converter conversion, bank 1	
Catalytic converter conversion, bank 2	
Secondary air	
Intake camshaft	
Valve lift by bank	
Taak laak taat	

A ABRITES Diagnostics for Porsche		
Short tests \ Knock contro	bl	
Read information! Press I	Next for detail view. End short test with I	Back.
Description	Value	Unit
Short test status	running	
Short test running Please press the brake p	edal and accelera t or pedal at the same t	time
	< Ba &	Nex t> Exit

1/min % °C
% °C
°C

Panamera 970, Cayenne 2011+, Boxster 981, 911 991, Macan Head lights start-up

This function allows you to adapt new or used headlight units to the vehicle.

When headlight is selected (left or right) and "Next" is pressed the software will examine the vehicle's configuration and decide which steps are needed to be executed for to headlight units start-up. These steps might include: "reprogramming of the headlight control unit (left and/or right), "writing Vehicle Identification Number (read from vehicle) into the headlight control unit, automatic coding of the headlight control unit (default coding calculated on the basis of the vehicle configuration), Head Beam Adjustment calibration.

After vehicle configuration is read, the next window appears to inform the user about the preconditions which has to be met for the procedure to proceed normally.

ABRITES Diagnostics for Porsche 6.5 www.abrit	es.com		
🕾 ABRITES Diagnostics for Porsche			
Headlight start-up			h
Preconditions: Vehicle identification numbers match Vehicle on level surface Chassis "settled" Loading state "empty" Wheels in "straight ahead" position Engine "OFF"			
Press Next to continue, Back to go back.			
	< Back	Next >	Exit
Session closed.			Exit

Press "Next" to go to the page where steps to be performed are listed.

In some cases no action will be needed to start the headlights units.

In some cases there will be needed only Head Beam Adjustment calibration.

In some cases there will be needed coding, writing VIN and Head Beam Adjustment calibration.

In some cases there will be needed coding and writing VIN.

In some cases there will be needed to go through reprogramming, coding, writing VIN and Head Beam Adjustment calibration.

The sequence needs to be followed as given from up to bottom. Upper steps can be skipped if they have already been performed.

In the example below all reprogramming, coding, writing VIN and Head Beam Adjustment calibration are given.

January 2018

Abrites Diagnostics for Porsche User Manual

AB	BRITES Diagnostics for Porsche 6.5 www.abrites.com	_ 🗆 🗙
E	ABRITES Diagnostics for Porsche	_ 🗆 🗙
ſ	Headlight start-up	
	The procedure goes through the steps listed below. If some of them are already performed, please select and continue with the sequenti step.	al
	Programming of Left and Right headlights	
	© Writing VIN to Left and Right headlight, control units	
	• Automatic coding of Left and Right headlight control units	
	Press Next to continue, Back to go back.	
-	< Back Next > Exit	
1	Session closed.	Exit

Select a step and press "Next" to execute it.

The program will inform you for the progress of the execution.

ITES Diagnostics for Porsche 6.5 www.abrites.com	_ 🗆 X	ABRITES Diagnostics for Porsche 6.5 www.abrites.com	_ []
ABRITES Diagnostics for Porsche		ABRITES Diagnostics for Porsche	
leadlight start-up		Headlight start-up	
Programming of Left headlight		Programming of Left headlight - done. Programming of Right headlight	
ି Programming of Left and Right headlights ୦ Writing VIN to Left and Right headlight control units ୦ Automatic coding of Left and Right headlight control units ୦ HBA Calibration		 Programming of Left and Right headlights Writing VIN to Left and Right headlight control units Automatic coding of Left and Right headlight control units HBA Calibration 	
Vriting block 2		Writing block 2	
a Roll North		< Box. N	lext > Exit
meeted.	Exit	Connected.	Exit
Guided Functions		Guided Functions	
Headlight start-up	n	Headlight start-up	
Automatic coding of Left headlight - done. Automatic coding of Right headlight		Performing HBA calibration	
© Programming of Left and Right headlights		Programming of Left and Right headlights	ĥ
C Writing VIN to Left and Right headlight control units		C Writing VIN to Left and Right headlight control units	
Automatic coding of Left and Right headlight control units		C Automatic coding of Left and Right headlight control units	
C HBA Calibration		HBA Calibration	
Performing coding, please wait		Performing calibration, please wait	
<back next=""></back>	Exit	Komediad.	> Exit
Manual version: 3.1	EXIE	1	82

RITES Diagnostics for Porsche 6.5	www.abrites.com	×
Guided Functions		
Headlight start-up		
Ready		
incoury.		
		1
	< Badi, N	ext > Exit
onnected,		Exit

January 2018

3.5 Component protection

In some Porsche models there are modules which have the so called "Component Protection" security implemented.

Such modules placed in another vehicle activates the "component protection active" DTC and have restricted functionality.

Into Cayenne 9PA such modules are the Gateway (the master) and the Airbag (the slave).

This special function allows to remove the "component protection active" trouble code and allows the module to work with its full functionality as adapting the "slave" modules to the "master" module.

When the special function "Component protection" is started the system is examined and the state ("Virgin" or "Not virgin") of the modules with component protection is displayed.

In case the state of the module is "Virgin" it can be directly adapted using the ConfigData dump of the "master" Gateway read with programmer.

Or if the state is "Not Virgin" then the "slave" module must firstly be set to "Virgin" state (by OBDII) and then adapted using the ConfigData dump of the "master" Gateway.

Below you can find a couple of screenshots of the procedure:

1 Gateway and Airbag Status		2 Resetting the	Airbag to a virgin state	
ABRITES Diagnostics for Porsche	- 0	ABRITES Diagnostics for Porsche		- 🗆 X
Component prote	ection - Airbag		Component protection - Airbag	
Control unit Gateway Airbag	Status Not virgin Not virgin			
Reading vehicle status OK The procedure goes through the following steps: - reset the Airbag module to virgin state (by OBDII) - adapt the Airbag module to the vehicle (requires Gateway ConfigData dump read with programmer)		Disabling security OK Reading		
Press "Next" to reset Airbag to virgin state.		Reseting to virgin state		
	< Back Next > Exit		< Back Next :	Exit

3 The unit is now virgin

A BRITES Diagnostics for Porsche	-		×	ABRITES Diagnostics for Porsche		×
Component protection - Airbag Disabling security OK Reading OK Reseting to virgin state OK				Component protection - Airbag To learn the specified module to the vehicle, you need the EEPROM dump of t GATEWAY module from the car where you want to build the module. Press "Next" to load the dump or "Back" to exit.	ne	
Continue with "Next".						
< Back Next >		Exit		< Back Next >	Exi	t

4 To learn the unit, load the Gateway dump from the car

Manual version: 3.1

January 2018	Abrites Diagnostics for Porsche User Manual			
5 The unit is now ABRITES Diagnostics	successfully adapted to the car	<u>arena</u> i		×
	Component protection - Airbag			
Trying to set the OK	e component protection OK			
Module learned	to vehicle with SUCCESS			
Adapting to veh	icle			
	< Back Next >		Exit	

3.6 Immo V adaptation

Into the Porsche models Panamera, Cayenne 9PA, 911 991, Boxster 981, Macan, Spyder there are several modules part of the so called immo V system.

In all of these models these modules are "BCM Front", "BCM Rear", "ELV", "DME" and in Macan also the "Transmission" module.

If you take one of these modules from one vehicle and put it into another vehicle they will not function properly till they are "learned" to the vehicle (or to the master module "BCM Front").

For example new engine ECU will not start the car, new ELV will not unlock the steering, new BCM Rear will not perform it's functions and new BCM Front will stop all of these functions and more untill all the rest of the (slave) modules are adapted to it.

The "Immo V adaptation" special function allows you to exchange each of these modules in a vehicle, i.e. learn/adapt it to the master module BCM Front. That is why for all of the modules you have to provide the DFlash dump of the BCM Front module of the vehicle into which the module will be installed.

You need also the ConfigData dump of the new module or DFlash dump of the BCM Front module of the vehicle from which the module is taken (called donor vehicle).

BCM Unit adaptation:

1 Load the necessary dumps

2 Enter the VIN of the car

A Immo V adaptation	- 🗆 X	A Immo V adaptation	- 🗆 ×
BCM Front adaptation		BCM Front adaptat	ion
			Vehicle Identification Number:
			WP1ZZZ92ZBLA&
You need to read with a programmer the DFlash of both BCM Front modules - the one of the vehicle in which the module will be installed and the one that will be installed. Then you should load these dumps in the sequence prompted by the software. After that the new BCM Front will be adapted to the vehicle by OBDII.		You need to read with a programmer the DFlash of both BCM Front modules - the one of the vehicle in which the module wil be installed and the one that will be installed. Then you should load these dumps in the sequence prompted by the software. After that the new BCM Front will be adapted to the vehicle by OBDII. Checking immobilizer dumpOK Checking immobilizer dumpOK Reading vehicle identification numberOK	1
Please load DFlash dump of the BCM Front module of the vehicle in which the	module will be installed.	Please check displayed VIN and correct if necessary. Press "Ne	xt" to continue.
< Back Ni	ext > Exit	< Back	Next > Exit
3 Enter the number of keys to be learned (leave	"0" if there is	4 The procedure has successfully finis	shed

3 Enter the number of keys to be learned (leave "0" if there is no need to learn new keys)

A Immo V adaptation	- 🗆 X	ABRITES Diagnostics for Porsche	- 🗆 X		
A Immo V adaptation - - × BCM Front adaptation Load dump Vehicle Identification Number: Connecting to BCM FrontOK Vehicle Identification Number: Trying to set immobilizer dataOK WP1ZZZ92ZBLA::::::::::::::::::::::::::::::::::::		ABRITES Diagnostics for Porsche BCM Front adaptation Load dump Starting key learning procedureOK Waiting key 1 from 1 OK (ID: 96267A22) Learning key OK Finishing key-learning procedure OK Keys to learn: Inished with SUCCESS I			
Trying to set ECU dataOK Please check number of keys to learn and correc	ct if necessary. Press "Next" to continue.		<back next=""> Exit</back>		

ECU Adaptation:

1 You can choose one of the 3 options to make the adaptation

ABRITES Diagnostics for Porsche	- 1		×	A BRITES Diagnostics for Porsche		×
Engine Control Unit adaptation © Load immo data from ECU flash/ConfigData dumps		?		Engine Control Unit adaptation		
$^{\rm C}$ Load immo data from BCM Front dump of donor vehicle		?				
○ Clone ECU		?		You need to read with a programmer the DFlash of the BCM Front module of the vehicle in which the ECU will be installed. You also need to read the ECU ConfigData and flash data dumps (you can do this using Special function "Engine control unit" and "EDC17/MED17 Boot mode"). Then you should load these dumps in the sequence prompted by the software. After that the ECU will be adapted to the vehicle by OBDII.		
				Please load BCM Front dump of the vehicle in which the module will be installed.		
< Back Next >		Exit		< Back. Next >	Exit	

2 Loading the dump from the front BCM of the car

January 2018

Abrites Diagnostics for Porsche User Manual

3 Loading ECU flash dump	4 Loading ECU EEPROM dump				
ABRITES Diagnostics for Porsche – 🗆 🗙	ABRITES Diagnostics for Porsche				
Engine Control Unit adaptation	Engine Control Unit adaptation				
You need to read with a programmer the DFlash of the BCM Front module of the vehicle in which the ECU will be installed. You also need to read the ECU ConfigData and flash data dumps (you can do this using Special function "Engine control unit" and "EDC17/MED17 Boot mode"). Then you should load these dumps in the sequence prompted by the software. After that the ECU will be adapted to the vehicle by OBDII.Checking immobilizer dumpOK	You need to read with a programmer the DFlash of the BCM Front module of the vehicle in which the ECU will be installed. You also need to read the ECU ConfigData and flash data dumps (you can do this using Special function "Engine control unit" and "EDC17/MED17 Boot mode"). Then you should load these dumps in the sequence prompted by the software. After that the ECU will be adapted to the vehicle by OBDII.Checking immobilizer dumpOK Loading ECU flash dump OK				
Please load new ECU hash dump.	Please load new ECO EEPROM dump.				
< Back Next > Exit	< Back. Next > Exit				
	6 The procedure has successfully finished adapting the ECU				
ABRITES Diagnostics for Porsche	A ABRITES Diagnostics for Porsche – 🗆 🗙				
Engine Control Unit adaptation	Engine Control Unit adaptation				
Vehicle Identification Number: WP1ZZZ92ZBLACO2ct) You need to read with a programmer the DFlash of the BCM Front module of the vehicle in which the ECU will be installed. You also need to read the ECU ConfigData and flash data dumps (you can do this using Special function "Engine control unit" and "EDC17/MED17 Boot mode"). Then you should load these dumps in the sequence prompted by the software. After that the ECU will be adapted to the vehicle by OBDII.Checking immobilizer dumpOK Loading ECU flash dump OK	Connecting to BCM FrontOK Reading immobilizer dataOK Connecting to ECUOK Trying to set ECU dataOK Synchronizing with BCM FrontOK Finished with SUCCESS				
Please check displayed VIN and correct if necessary. Press "Next" to continue.					
< Back: Next > Exit	< Back Next > Exit				

ELV Adaptation:

1 You can choose one of the two options to make the adaptation

A ABRITES Diagnostics for Porsche	- 🗆 X	A ABRITES Diagnostics for Porsche	- C) ×
ELV adaptation	?	ELV adaptation		
		You need to read with a programmer the ConfigData of the ELV module. You also need to read the DFlash of the BCM Front module of the vehicle in which the ELV will be installed. Then you should load these dumps in the sequence prompted by the software. After that the ELV will be adapted to the vehicle by OBDII.		
		Please load BCM Front dump of the vehicle in which the module will be installed.		
<back next=""></back>	Exit	< Back Next >	E	xit

2 Load the dump from the Front BCM module of the car

January At

Abrites Diagnostics for Porsche User Manual

3 You can now load the ELV EEPROM dump	4 Make sure the VIN corresponds to the one of the car
ELV adaptation	ELV adaptation
You need to read with a programmer the ConfigData of the ELV module. You also need to read the DFlash of the BCM Front module of the vehicle in which the ELV will be installed. Then you should load these dumps in the sequence prompted by the software. After that the ELV will be adapted to the vehicle by OBDII. Checking immobilizer dumpOK	Vehicle Identification Number: WP1ZZZ92ZBLAGLEDE You need to read with a programmer the ConfigData of the ELV module. You also need to read the DFlash of the BCM Front module of the vehicle in which the ELV will be installed. Then you should load these dumps in the sequence prompted by the software. After that the ELV will be adapted to the vehicle by OBDII. Checking immobilizer dumpOK Loading ELV dump OK
Please load ELV dump.	Please check displayed VIN and correct if necessary. Press "Next" to continue.
5 The ELV is now successfully adapted ABRITES Diagnostics for Porsche	
Load dump Connecting to BCM FrontOK Reading immobilizer dataOK Trying to set ELV dataOK Synchronizing with BCM FrontOK Finished with SUCCESS	Vehicle Identification Number: WP1ZZZ92Z
	<back next=""> Exit</back>

3.7 Special Function "Read/Update ConfigData"

The Read/Update ConfigData function allows read/update by OBDII the ConfigData [95640] of "Airbag" unit for vehicle model "Cayenne 29A from MY 2011". Also supports clear crash data by OBDII of "Airbag" unit for vehicle model "Cayenne 29A from MY 2011" with ConfigData type [95640]:

ABRITES Dia	gno	stics	for	Pors	sche	7.1												www.abrit	es.co	om —	
Custom Me	emo	ry D	own	load	d/U	lplo	ad														×
Type: Cay	enn	e 9	2A)	Air	bag	[9	564	0]											•		
00000000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					Read
00000010	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000020	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000030	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					Write
00000040	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000050	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000060	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000070	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					1
08000000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				S	ave to file
00000090	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					- 7
000000A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
000000B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					ad from file
000000000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					dd from file
000000000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
000000E0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				Cle	ar Crash Data
000000F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000100	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00					
00000110	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			Connection	
00000120	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00				St. Address	0
00000130	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••				
00000140	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			Total Size	1000
00000150	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••				
00000160	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			Step	20
00000170	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••			· · ·	
00000180	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••				
00000190	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••				
000001A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••				
000001B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	•••••		~	_	
<																		>			X
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_					5.4
																					Exit
venicie mod	ei ca	anno	tbei	iaen	uneo	aut	omai	ucali	y. Pi	ease	sele	ct m	anua	any.							EXIT
																					· · · · · · · · · · · · · · · · · · ·

4.TROUBLESHOOTING

Below you can find a list of typical problems and how to solve them:

Problem: When starting the "ABRITES Diagnostics for Porsche" on the splash screen "**Interface NOT found**" is displayed

Solution:

-Please be sure that the USB interface drivers are installed properly. You can look at the device manager, the USB interface should appear as "USB Serial Port (COMxx)" where "xx" is the number of the port

-If the interface is recognized OK, then please try to unplug and plug it again into the USB slot and restart the "ABRITES Diagnostics for Porsche".

-If the interface is not recognized (the USB interface appear with yellow exclamation mark in the device manager), then you can try to solve the problem by uninstalling and reinstalling the USB interface drivers (see sections "Installing USB interface drivers" and "Uninstalling USB interface drivers").

-If there are some bluetooth device try to disable them

Problem: When starting the "ABRITES Diagnostics for Porsche" "Interface not calibrated" is displayed.

Solution:

Send all logs to a distributor

Problem: The device connects sometimes to the device under K-Line, and sometimes not. **Solution:**

Try to increase/decrease the "Wakeup echo delay" timing parameter.

Problem: The connection with the device under K-Line is unstable.

Solution:

Try to increase/decrease the "Inter byte time", "Time between messages" and "Communication echo delay" parameters.

Problem: It is not possible to connect to a device through the K-Line, since it is possible to connect to it with other diagnostic tools.

Solution: Try to change the baud sequence to 9600/10472 from the options dialog.

Problem: Some device cannot be read or unexpected behavior was found **Solution:** Send logs from the communication to a distributor with short description of the problem.

5.APPENDIX

5.1.Porsche Cayenne gasoline engines – ECU wakeup fuses

Porsche Cayenne – fusebox



5.2. Removing ESL Porsche 911 977, Boxster/Cayman 987



Insert the allen wrench and rotate it to the right (clockwise) in order to release the ESL module from the steering column.



5.3. PORSCHE KEY LEARNING BY DUMP

When learning keys to a Panamera 970, 991, Boxter/ Cayman 981, Cayenne 92A, Macan 95B vehicles the first thing that needs to be done is to ensure that the Front BCM is located and that the Dflash (EEPROM) from this module is read with a programmer. Once you read the Dflash (EEPROM) you need to save it locally on your computer in a folder so that you know where it is located.

Once you have done that the next step is to connect your AVDI to the vehicle and your TAG programmer or PROTAG to the AVDI.

Having completed this step you can continue.



You should take out the plastic key. When you are done you should end up with this:



Having completed this step the software can be started. Please select **key learning**.

A ABRITES Diagnostics for Porsche		- O X
Select vehicle model:	Select function:	
Panamera 970 (2010+)Cayenne 9PA(-2010)Porsche Cayenne 92A (2010+911 997 (2005-2010)Boxster 987 (2005-2011)Boxster 981 (2012+)Cayman 987 (2005-2010)Cayman 981 (2012+)Macan 95B (2014+)Carrera GT 980 (2002-2006)Porsche Carrera 991 (2011+)911 996 (1998-2005)GT2 996 (2001-2005)GT3 996 (2000-2005)Boxster 986 (1997-2004)	Teach keys Help	
	< Back Next >	Exit

When you open the key learning menu you can select Panamera 970 (2010+). This will open a menu with two options: **Teach keys** and **Help.** The help option will give you an overview of the steps you need to take. Please read them. When you are finished you can go to **Teach keys**.

The Abrites diagnostics for Porsche will ask for the dump you have saved in the beginning of the process.

A ABRITES Diagnostics for Porsche		
Load immobilizer dump		
	< Back Next > Exit	Ī

Click on the load dump button and select the dump you have saved. It is at this time that you should put the key in the TAG programmer or PROTAG. Otherwise you will see this message:



The process is automated and requires minimal input.

Once the key is detected in the programmer its preparation as a "Dealer key" begins.

When this is done you should select the number of keys you want to learn:

ABRITES Diagnostics for Persche			-	
Load immobilizer dump	Used. Used. Not used.	ID: D4E2A932 ID: 69FDA932 		
Checking immobilize Searching for progra Checking for key in Preparing dealer key	r Mot used Key count Select number learned: OK ok programmer. OK	f keys to be 2 Cancel K OK		
		< Back	Next >	Exit

The key learning starts. In case it does not – turn the light switch ON and OFF, lock and unlock the car, etc.:



Place one of the keys in the vehicle's key fob which you have previously prepared as per the instructions above and set the car to the "Ignition ON" position:





Repeat the same procedure for the second key.



The procedure will finish with success and the car will have two working keys. So will the remote controls. They sometimes require you to lock and unlock the vehicle several times.

In order for the key less function to work please reassemble the plastic key (reverse of disassembly) and turn it on while pressing the buttons for locking and unlocking on the remote controls.

NOTE:

This is the processor you need to read:

