

www.obdtester.com/psacom



Copyright © 2004 – 2019 SECONS Ltd, <u>http://www.secons.com/</u> All rights reserved. Version 2019-11-13





SECONS Ltd. is not connected with PSA Peugeot Citroën S.A. in any way.

SECONS Ltd. is not liable for damages caused by using of PSA-COM software.

Please read carefully this user manual before using the PSA-COM software.

Before using the software please read license agreement.

CE

Table of Contents

1	Introduction.	4
	1.1 Key features	4
	1.2 <u>Software updates</u>	4
	1.3 Early release	5
2	PSA-COM software and driver installation.	6
	2.1 Microsoft Windows operating System.	6
	2.2 Microsoft Windows 8 driver installation.	7
	2.3 Interface busy issue [Microsoft Windows]	8
	2.4 <u>GNU/Linux System</u>	8
3	Diagnostic connectors used in Peugeot/Citroën vehicles	.11
	3.1 <u>OBD-II VAN vehicles</u>	.11
	3.2 <u>OBD-II CAN vehicles</u>	.11
	3.3 <u>Communication protocols</u>	.11
	3.4 <u>PSA-specific 30-pin connector</u>	.12
4	Preparation to diagnose.	.12
5	PSA-COM main menu	.13
	5.1 <u>Select Control Unit</u>	.13
	5.2 <u>Auto-scan</u>	.14
	5.3 <u>Special Diagnostics</u>	.14
	5.4 <u>OBD-II Connector Location</u>	.14
	5.5 <u>Settings</u>	.15
	5.6 <u>About</u>	.16
6	Diagnostic functions	.17
	6.1 <u>Unrecognized Control Unit</u>	.18
	6.2 <u>Control Unit Identification</u>	.19
	6.3 <u>Read fault code memory</u>	.20
	6.4 <u>Clear Fault Codes</u>	.20
	6.5 <u>Fault code history</u>	.21
	6.6 <u>Freeze Frame</u>	.21
	6.7 Measured values	.25
	6.7.1 <u>Graph display</u>	.25
	6.7.2 <u>Display 3x3</u>	.25
	6.7.3 <u>Display list</u>	.25
	6.7.4 Save to log	.26
	6.8 <u>Actuators activation</u>	.27
	6.9 Coding and programming functions	.28
	6.10 ECU Configuration	.29
7	Reporting bugs and improvement requests	.30
	7.1 <u>How to create Debug Log</u>	.30
	7.2 How to create ecu Snapshot	.31
8	Known issues	.32
9	Planned improvements	.32



1 Introduction

Thank you for purchasing the PSA-COM diagnostic interface and software. PSA-COM is professional tool for diagnostics of Peugeot / Citroën vehicles. Please read carefully this User Manual before using the product.

We hope you'll find our products useful. In case you have any questions, problems or feedback please contact as at <u>support@secons.com</u>. We're here to help!

1.1 Key features

- Fully multiplexed all-in-one smart USB2.0 interface
- Automatic ECU recognition
- Automatic vehicle scan
- ECU Identification
- Fault code (DTC) reading
- Fault code clearing
- Measured values / live data
- Live data recording
- Diagnostic protocol printing
- Actuator tests
- Configuration

Please note that Peugeot Boxer/Bipper and Citroën Jumper/Nemo are not supported by this application, because they are based on Fiat platform. Please use FiCOM to diagnose these vehicles. Peugeot 4007 and Citroën C-Crosser (based on Mitsubishi platform) is not supported as well. On the other hand, this program can be used to diagnose Fiat Scudo/Ulysse, Lancia Zeta/Phedra.

List of supported cars and control units including diagnosis capability is available at <u>http://www.obdtester.com/psacom-eculist</u>

1.2 Software updates

Updates of purchased software version are available for free download at <u>www.obdtester.com/downloads</u>. User name = serial number of PSA-COM diagnostic interface. Password leave blank. The serial number can be found on a silver label of the interface or in settings of PSA-COM after performing "Test interface". We recommend you to install updated version at least once a month, because updates provide support for new ECUs and fix various issues.

We recommend you to update firmware in diagnostic interface by clicking on *Settings* \rightarrow *Upgrade firmware* every time you update the software. Interface must be connected during upgrading the firmware.



1.3 Early release

PSA-COM is ready to meet all requirements even of the most demanding customers. The product is capable of performing advanced diagnosis of hundreds of Peugeot / Citroën control units and remains still intuitive and easy to use.

Despite the fact of a long-term development, the software may still contain some bugs or missing functions. We started to offer the PSA-COM as early release due to high demand from customers. However, our work on the product continues without slowing.

Based on feedback from our testers and customers around the world, we continue to improve the software, expand its features, vehicle coverage and fix all software bugs. We fulfill tasks from our development list in the shortest possible period.

Your feedback is very important to us. We want to hear your requests for improvement or bug fixes. Based on your feedback, we expect to release software updates frequently. For the most effective communication with our technical support, please see the following chapter:



2 PSA-COM software and driver installation

2.1 Microsoft Windows operating System

- 1. Insert PSA-COM installation CD to your CD-ROM drive
- 2. Run installation file PSAComSetup.exe
- 3. Choose language for the installer

Installer	Language	
1 B	taller	
	English	~
	OK Can	cel

4. Choose your destination folder for the PSA-COM and click on *Install* button and after successful installation click on *Close* button.

🛱 SECONS PSACom - Peugeot Diagnostic Tool Setup: Installation Folder 🛛 📃 🗖 🔀						
	Setup will install SECONS PSACom - Peugeot Diagnostic Tool in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.					
	Destination Folder					
	C:\Program Files\PSACom Browse					
	Space required: 4.2MB					
	Space available: 69.8GB					
A.A.	Cancel Nullsoft Install System v2,46 Install					

PSA-COM drivers are automatically updated during the PSA-COM installation. When prompted to install "unsigned" drivers, click on *Install this driver software anyway* (Microsoft® Windows® 7) or *Continue Anyway* (Microsoft® Windows® XP).



Microsoft® Windows® will automatically install drivers when you plug-in the PSA-COM to USB port. Driver installation isn't required for operation on GNU/Linux system.



2.2 Microsoft Windows 8 driver installation

In case of problem with installing drivers on Windows 8, please follow these steps:

- 1. Press Windows Key + R
- 2. In the window that appears, type: "shutdown.exe /r / o / f / t 00"
- 3. Press "OK" button
- 4. The System will restart to a "Choose an option" screen
- 5. Select "Troubleshoot" from "Choose an option" screen
- 6. Select "Advanced options" from "Troubleshoot" screen
- 7. Select "Windows Startup Settings" from "Advanced options" screen
- 8. Click on "Restart" button
- 9. System will restart to "Advanced Boot Options" screen

10. Select "Disable Driver Signature Enforcement" (press number on keyboard for option shown on screen)

11. Once the system starts, install the diagnostic interface drivers as you would on Windows 7



Windows Vista & 7 required signed all .sys files (we use usbser.sys shipped by Microsoft with valid digital signature). Final version of Windows 8 requires also signed .inf file (which is not in our case). The above procedure helps to override unsigned .inf file. Once driver is installed, the program will work properly.





2.3 Interface busy issue [Microsoft Windows]

In case you receive error "Interface busy" while testing your interface, please make sure:

- 1. You're not running any modem, mobile phone, or printer monitoring application that blocks "COM ports" from being used by other applications.
- 2. You're not running Hella Gutmann software on the same PC. Process called "GMPortal.exe" prevents SECONS diagnostic applications from properly accessing the diagnostic interface. You may temporarily resolve this problem by running "Windows Task Manager", right-clicking on GMPortal.exe process in "Processes" tab and selecting "End process".
- 3. Software modem drivers do not block COM ports.
- **4.** You have selected correct COM port (use "Device manager" button to find port number under "Ports (COM & LPT)" group.

2.4 GNU/Linux System

Our diagnostic application are tested to work under Linux. The applications can be run under Linux, BSD or Apple OS/X on Intel x86 using Wine environment. The installer and applications perform fully automated installation under these operating system.

Important information:

- Only Ubuntu distribution 19.10 or later is supported using this guide, however other distributions that meet our requirements may work. For more information see www.ubuntu.org
- The diagnostic application runs under Wine which must be installed on the system. For more information see <u>www.WineHQ.org</u>
- Bluetooth connection is NOT supported natively on Linux (however with some effort you might be able to get it running, just instead of /dev/ttyACMx device use /dev/rfcommx.
- It is highly recommended to try the diagnostic application first under Microsoft Windows operating system to get familiar with it.

Installation procedure:

1. Wine 4.0 or later on an x86 system is required. You can install Wine on Ubuntu using "sudo apt install wine"). You can verify Wine version by running "wine –version" from terminal. If you are running 64-bit system you must have 32bit libraries installed (which is usually done automatically when installing Wine from repositories). Other Debian-derived distributions use similar commands.





- 2. Add users who need to access the diagnostic interface to the 'dialout' group. Type "sudo usermod -a -G dialout username" (replace 'username' with you username, in the screenshot we have used 'test' user)
- 3. Log off from Xwindow session and login again.
- **4.** Install the diagnostic applications (either using correct file manager association or from terminal, e.g. "wine ~/Downloads/PoCOMsetup.exe"). After the installation you should see the diagnostic application icon on the desktop and in start menu.
- 5. Now you need to figure out assignments between emulated "COMx" ports and respective Unix devices. For this we have created diagnostic script called "findcom", which you can run in terminal using comand "sh ~/.wine/drive_c/Program\ Files\ \ (x86\)/APPNAME/findcom.sh" (replace APPNAME with actual diagnostic application name, such as BimCOM, PoCOM, FCOM, TruckTester, etc.)



6. When you know COM port used in Wine (in the screenshots com33), configure the diagnostic application and test the interface





- 7. Save settings and you should be ready to go.
- 8. Optional. To override Wine's default device mapping, run wine regedit and create string entries in HKEY_LOCAL_MACHINE\Software\Wine\Ports where the entry name is the Windows device name and the entry value is the path to the Unix device. To make COM1 the first USB-attached serial port, create an entry with the name COM1 and the value /dev/ttyACM0. After editing the registry, shut down Wine with wineserver -k and the next time Wine runs a program, your changes will take effect.



3 Diagnostic connectors used in Peugeot/Citroën vehicles

Location of OBD-II and manufacturer-specific (OBD-I) connectors is available in DLC location database available from the PSA-COM main menu.

3.1 OBD-II VAN vehicles

Standard OBD2 connector is used usually since 1996 models to approx. 2006 (all vehicles using PSA VAN-BUS).

-	1	9	ISO9141 K Line
-	2	10	-
ISO9141 K Line	3	11	ISO9141 K Line
Ground (GND)	4	12	ISO9141 K Line
Signal ground (GND)	5	13	ISO9141 K Line
	6	14	
ISO9141 K Line	7	15	ISO9141 L-Line
ISO9141 K Line	8	16	Battery voltage



3.2 OBD-II CAN vehicles

Used mostly on 2006 and newer vehicles with CAN-BUS.

	1	9	
	2	10	
CAN-H Diag	3	11	
Ground (GND)	4	12	
Signal ground (GND)	5	13	
CAN-H Powertrain	6	14	CAN-L powertrain
ISO9141 K Line	7	15	ISO9141 L-Line
CAN-L Diag	8	16	Battery voltage



For some specific tasks related to CAN-BUS diagnostics or PIN code retrieval you need to use SECONS PSA InjCAN adapter, which can be purchased from <u>www.obdtester.com/obd2_adapters</u>.

3.3 Communication protocols

PSA-COM supports following communication protocols:

| ISO15765 | PSA2000 | Bosch KW71 | PSA2 | UDS |



3.4 PSA-specific 30-pin connector

This connector us used on older vehicles up to 1998.

	1	2	3
А	Terminal 30	Terminal 15	Ground (Chassis)
В	Ground of TDC-pickup (Diesel)	Shielding of TDC-pickup	Power for TDC-pickup or speed signal
С	K-Line Engine control	L-Line Engine control	Blink code output
D	GMV 1 test	GMV 2 test	Speed monitoring relay
E	K-LINE ABS/ASR	K-LINE Level control	K-LINE Power steering
F	K-LINE HVAC	K-LINE Seat adjustment	K-LINE Airbag
G	K-LINE Gear control	K-LINE Rear axle (steerable)	K-LINE Differential lock
Η	K-LINE Speed control	K-LINE On-board computer	K-LINE Central locking system
Ι	K-LINE Rear-view mirror & memory	K-LINE Anti-theft ECU	K-LINE Drive-away protection
J	-	-	-



4 Preparation to diagnose

Before starting diagnosis, make sure that car ignition is turned ON. Connect your PSA-COM diagnostic interface to PC / laptop via USB. Interface test in settings of PSA-COM must pass successfully (more information in chapter <u>Settings</u>). Connect your PSA-COM diagnostic interface to OBD-II connector in the vehicle. You can find the OBD-II connector using PSA-COM <u>OBD-II</u> <u>Connector Location</u> image database.

5 PSA-COM main menu

PSA-COM user manual

PSA-COM main menu is divided into two parts \rightarrow Vehicle diagnostics and Miscellaneous functions. Descriptions of single functions are given below.

PSACOM - Diagnost	tic program for Peugeot-Citroen	- 1 💌
PSACOM	Main menu	
Main menu	Vehide Diagnostics	PSACOM 0.1.5419 Copyright (c) 2005-2013 SECONS s.r.o. Licensed material. All rights reserved. www.secons.com, www.obdtester.com/psacom
SECONS	Miscellaneous functions Settings About Exit	

5.1 Select Control Unit

Using this function you can connect to a specific control unit you wish to diagnose. Before is connection to control unit (or performing auto-scan) possible, correct selection of vehicle model and diagnostic system type (VAN or CAN) is required for proper diagnostic functions. If connection to control units is not possible at all, please verify if VAN or CAN system is correctly selected.

All control units present in tested vehicle can be detected by Auto-scan function.

PSACOM - Diagnostic program for Peuge PSACOM PSACOM Model select	st-Ctroen 👘 🕞 🕼	PSACOM - Diagnostic program for Paugest-Citoen PSACOM Pougeot 1007 2006-2008 CAN (A08) Control Unit Selection	0 🛋
Model selection Main menu Wan menu With Citroen With Citr	C C15 1984-2005 Ag C C2 2003-2006 VAN C C2 2005- CAN C C2 China C C3 2002-2005 VAN (A8) C C3 2005- CAN (A31) C C3 2010- (A51) C C3 Aircross (A158) C C3 Picasso CAN (A58) C C3 Piuriel 2003-2005 VAN C C3 Piuriel 2005- CAN C C4 (FC2) C C4 (FC2) C C2 2005- CAN C C4 (FC2) C C4 (FC2) C C2 2005- CAN C C4 (FC2) C C4 (Control Unit Model selection Nam menu Water Main Water Main	
SECONS <	k Last selection Go >>	SECONS << Go Back	Go >>



Incorrect model selection may result in wrong or incomplete live data, improper function of actuator tests and coding functions, possibly resulting in damaged car components.



PSA-COM user manual

5.2 Auto-scan

This function scans for all known ECUs in selected vehicle, and shows the list of ECUs present in vehicle along with number of present or stored fault codes (DTCs).

It is necessary to select exact vehicle type before starting the auto-scan.

Con Becult	Auto-Scan Results		_			
o-Scan Results	Control Unit	DTC Coun	ŧ.,			
n menu 🐼 Display 0						
	S AIRBAG - SAC_GONFLABLE	0				
	🗇 Autoradio	0				
	S BMF - BSI *** G9					
	S Heater					
	Section - Denso CLIM_REGULEE	1				
	SCOMBINE - Magneti-Marelli COMBINE Expert/Partner/Jump	oy (0				
	S CPL - CDPL	0				
	Sever steering	0				
	Second module	0				
	INI - Delphi DCM3 5 (RHO)	0				

5.3 Special Diagnostics

You can find here menu of special diagnostic functions.

Read immobilizer pin is upcoming function. <u>PSA</u><u>Inj-CAN adapter</u> will be necessary for use this function.

Emergency start-up procedure is used when vehicle will not start (doesn't have immobilizer). PIN code is needed for this function.

High-Speed CAN BUS Analysis functions is described in our manual "CAN-BUS analysis

PSACOM - Diagnost	c program for Peugeot-Citaeen PSACOM Model selection	
Model selection Main menu	Read immobilizer pin 250kbps Read immobilizer pin 500kbps Emergency start-up procedure 250kbps Emergency start-up procedure 500kbps High-Speed CAN BUS Analysis 250kbps High-Speed CAN BUS Analysis 500kbps	
SECONS	<< Go Back	G0 >>

information" available at <u>obdtester.com/downloads</u>. <u>PSA Inj-CAN adapter</u> is necessary for use this function. More information about our adapters can be found at <u>www.obdtester.com/obd2_adapters</u>

5.4 OBD-II Connector Location

Using this database you can check a location of OBD-II connector in the vehicle. The database is constantly updated.

🚟 PSACOM - Diagnos	stic program for Peugeot-Citroen		R PSACOM - Diagnos	stic program for Peugeot-Citroen	- • •
PSACOM	Data Link Connector Location Find DLC		PSACOM	Citroen Jumper 2006-2011 DLC Image	
Find DLC Main menu	Choose a car from this tree to view OBD-II connector location		DLC Image Find DLC	This picture shows location of CBD-11 connector in the selected vehicle	
	Citroen		Mainment		
	✓ Defining0 2007				
	✓ C3 2003 ✓ C4 2006				
	✓ C8 2004				
	✓ Jumper 2006-2011				
	√ Xsara 2000				
	Fiat				
	a Peugeot			www.OBDTester.com	
SECONS	Go Back Show I	mage	SECONS	Go Back	





5.5 Settings

All functions in settings are described below.



SECONS

Language

Choose language of PSA-COM user interface in the drop down menu.

Units type

You can choose metric or imperial unit system for measured values.

Interface port selection

Refresh - this button refreshes COM port selection drop down list. Correct COM port number should be already chosen after connecting diagnostic interface via USB to PC and clicking on *Refresh* button. If not, choose correct COM port number from the list. It is needed in order to perform successful interface test.

Test interface – before each use of program, please test proper function of your connected interface by clicking this button. After successful test, you can see a serial number of your interface displayed below the COM port field, then firmware version and information about active licenses.

Activate license – this button is used for activating new license/s to use the program or special functions. Internet connection is required. Standard license is already activated for all interfaces before purchase.

PSA-COM user manual



Upgrade firmware – use this button to upgrade firmware in your diagnostic interface every time after installing the latest software version (available at <u>www.obdtester.com/downloads</u>). Do not disconnect your interface during upgrading the firmware.

Device Manager – is used to finding out correct COM port number, or to reinstall drivers. Your device appears as "ELM-USB Interface (COMx)" under "Ports (COM & LPT)".

Bluetooth Manager – is a preparation to upcoming bluetooth feature. The button is currently inactive.

Protocol settings

You can set various timings for each communication protocol. This is advanced feature used for example when problems occur with connection to control unit caused by slower ECU response and the like.

Restore Defaults – this button restores all modified timings of all protocols to default values.

Changing protocol settings is not required before normal use of the program. You will be asked to make changes by our tech. support when solving your issue at <u>support@secons.com</u> if necessary.

Debug functions

By clicking on **Save Debug** button, you can capture the latest data from elapsed communication between control unit and program into one file. Providing this file is required only by our technical support. Based on these data, we are able to monitor the whole process of performed operation and its correctness.



Use of debug function is important for successful resolution of any program failure or verifying its causes. For more information on how to proceed, please read the following chapter <u>#7.Reporting bugs and improvement requests</u>.

5.6 About

After clicking on "About" button, you can read a license agreement or check application version.

6 Diagnostic functions

After connecting to chosen control unit, the following diagnostic menu is displayed. The diagnostic menu is divided into three parts. *Basic functions, Advance functions* and *Expert functions*.

🛤 PSACOM - Diagnostic program for Peugeot-Citroen						
PSACOM INJ - Siemens SID804 (8HX,8HZ) Control Unit Diagnostics						
Control Unit Diagnostics Control Unit Selection Model selection	Control Unit Identification Peugeot	1007 2005-2006 VAN (A08),	PSA2000,			
Main menu -Basic functions Control Unit Identification		Advanced functions Measured Values	ECU Programming/Coding			
	Clear Fault Codes		Flash programming			
SECONS		Go Back, Close session				

If control unit was identified uniquely, diagnostic menu will be available immediately, otherwise it is necessary to select control unit variant as described in next chapter <u>Unrecognized Control Unit</u>

Please note that flash programming is in development and is available for selected beta testers only.

Some control units display different messages during diagnostics, or activate different components or reduce their functionality. For example, display will show "Diagnosis session in progress"



6.1 Unrecognized Control Unit

In a case PSA-COM cannot automatically recognize ECU variant for installed ECU, the following screen is displayed and user must select correct ECU variant.

You can get more information about ECU by clicking on *Show ECU Identification* button.



It is important to choose correct ECU variant for proper diagnostics functionality.

Read PSACOM - Diagnost	tic program for Peugeot-Citroen 💿 💌
PSA(COM	Injection Control Unit (Engine ECU) Unrecognized Control Unit
Unrecognized Control Unit Control Unit Selection Model selection Main menu	This control unit is not fully supported by this program.You can either use generic ECU mode by clicking on "Use Generic Access" button, or select correct control unit from the list below. Please not brut you can DAMGC the control unit addro driber parts if you select incorrect ECU and perform actuator tests or programming/coding functions. Generic access mode is safe.
	Save ECU Information Stow ECU Identification Image: Source Decision Control of Contro
SECONS	Vie generic access >> Vie selected ECU >>

- In some cases it is not possible to uniquely recognize control unit. For example some Bosch ABS 8.x and ESP 8.x control units have same identification data and cannot be recognized automatically.
- If you make a mistake in identification, do not perform any of coding or programming functions: incorrect usage may damage ECU or vehicle components.

Function "*Save ECU Information*" make possible to save all development information about ECU to hard disc. In case that:

- the installed ECU is not available in the listing
- or you are not sure which control unit to choose
- or you wish to get the ECU automatically properly identified in next PSA-COM version
- or you just want to help us to improve PSA-COM

We will be more than happy to add support for any unsupported or unrecognized control units to next PSA-COM version. We are usually able to do this within one or two working days based on so called "ECU snapshot file(s)":

In "Unrecognized ECU" window or "Control Unit Identification" window click on "Save ECU Information" button and save the file(s). Please send the generated file(s) to <u>support@secons.com</u>.

Please read also chapter 7. Reporting bugs and improvement requests .



6.2 Control Unit Identification

Works only on selected ECUs, mainly engine control modules. Other control units usually do not support identification functions.

This function can display only identification data accessed by ECU, for example:

- Manufacturer
- Hardware part number
- Software part number
- Calibration (software) identification

Please note that many vehicles do not have programmed VIN code or other data (such as programming date/etc).

PSACOM - Diagnostic program for Peugeot-Citroen

PSACOM	INJ - Siemens SID804 (8HX Control Unit Identification	(,8HZ)		
Control Unit Identification Control Unit Diagnostics Control Unit Selection Model selection Main menu	Supplier code ECU Name Diagnostic version Manufacturer Modification suffix Plan Protocol Bus PIN ECU Type		21317 Siemens SID8 34 5345 4535 0855734534 PSA2000 K7 INJ	804 (8HX,8HZ
SECONS	<< Go Back	Save ECU Information	Copy Values	Print Values

You can print identification by clicking on *Print Values* button or you can copy it to clipboard by clicking *Copy Values*.

Save ECU Information button is used to save "ECU snapshot" of tested control unit, as mentioned in chapter "<u>#6.1.Unrecognized Control Unit</u>" or "<u>#7.Reporting bugs and improvement requests</u>".



6.3 Read fault code memory

This function allows you to read and display diagnostic trouble codes saved in control unit memory.

PSACOM - Diagnost	tic program for Peugeot-Citroen
PSA(COM	INJ - Siemens SID804 (8HX,8HZ) Fault Code Memory
Fault Code Memory Control Unit Diagnostics Control Unit Selection Model selection Main menu	P0301 ^{Cylinder 1: Misfire Detected} ^{o1} P0102 ^{Mass or Volume Air Flow (MAF) Circuit: Low Input ^{o1} P0304 ^{Cylinder 4: Misfire Detected} ^{o1} P0101 ^{Mass or Volume Air Flow (MAF) Circuit: Range/Performance Problem ^{o1}}}
	Functions Summary Re-read fault codes Clear Fault Codes Freeze Frame Stored DTCs: Pending DTCs: Copy Codes to Clipboard Print fault codes History 0 4 Present DTCs: DTC History: 0 0
SECONS	<< Go Back

Note: Not all ECUs support fault code reading. In case Fault code memory reading is not available, error message is displayed. Use live data or actuator tests to diagnose ECU problems in such case.

6.4 Clear Fault Codes

This function clears fault code stored in ECU memory.

Fault codes might appear again or under some conditions isn't possible to clear fault codes at all. It's possible that in the presence of some faults control unit doesn't allow to clear fault codes or fault is in no time written back to memory.

It is recommended to read memory by clicking on Re-read fault codes button again.

 \bigcirc

Please note that number of clearing fault codes may be limited for some control unit types.



6.5 Fault code history

Some control units (engine especially) have a history of clearing fault codes. In such case you can see a list where each clearing is recorded.

6.6 Freeze Frame

Freeze Frame (also known as Snapshot or Environment data) function display selected measured values as present at occurrence of selected diagnostic fault code (DTC). This function is available from fault codes window.

Please note that PSA-COM is not capable of decoding freeze frames on all ECUs. In such case raw hex dump is displayed. In order to improve this function, please report such ECUs to <u>support@secons.com</u> - provide us with ECU identification data, listing from fault code + ECU snapshot (this file can be saved in Control Unit Identification by clicking on "Save ECU Information button").

PSACOM - Diagnost	ic program for Peugeot-Citroen		
PSACOM	INJ - Siemens SID804 (8HX,8HZ) Freeze Frame		
Freeze Frame			
Fault Code Memory	Additional heating input 1	Active	
Control Unit	Additional heating input 2	Active	
Control Unit	Air conditioning request	Inactive	
Selection	Battery voltage	4.407000	=
Model selection	Clutch	Active	
Main menu	Coolant temperature	64.000000	
	Cruise control safety switch	notPresentInactive	
	Engine load	32.000000	
	Engine speed	2112.000000	
	Engine status	82	
	EOBD air flow measured	169.490005	
	EOBD coolant temperature	-4.000000	
	FORD diesel pressure	955 599976	-
	· · · · · · · · · · · · · · · · · · ·		
SECONS	<< Go Back	Copy Values Prir	nt Values



6.7 Measured values

After disconnecting the battery or turning ignition on, some measured values show threshold values (typically 255, 25.5, 65535, 6553.5, etc.). This is normal. The control unit will start to correctly interpret the sensor data after a while.

Some control units are not equipped with all sensors: in this case, some sensors may show a "threshold" values as in the previous case.

6.7.1 **Graph display**

This function displays two measured values (also known as live data or sensor values) simultaneously. Measured parameters can be chosen from selectors at the top of the window.

Buttons + and - allow to accelerate or decelerate speed of graph.



6.7.2 **Display 3x3**

For measuring 9 value simultaneously, click on 3x3 View button.



- • ×

Display list 6.7.3

То measure all available values simultaneously, click on List view button.

Please note values means slower refresh rate.

Measured Values -			
Control Linit	Air flow setting	376.050 mg/impulse	-
Diagnostics	Air temperature	-23.000 deg. C	
Control Unit	Air temperature after turbo	Not Available	
election	Atmospheric pressure	260.000 mbar	
lodel selection	Battery voltage	5.300 V	
lain menu	Camshaft/crankshaft synchronisation	NO	
	Coded engine immobiliser programming status	FF	
	Control unit condition	ECU is not locked	
	Coolant temperature	29.000 deg. C	
	Cooling circuit pressure	8.384 bars	
	Corrected air temperature	-40.000 deg. C	
	Corrected coolant temperature	-40.000 deg. C	
	Cylinder injector 1 flow correction	28.080 %	
	Cylinder injector 2 flow correction	14.040 %	
	Cylinder injector 3 flow correction	65.520 %	

🚟 PSACOM - Diagn

stic program for Peugeot-Citroer

TN1 Ciamone CTD004 (PUV PU7)



6.7.4 Save to log

Measured values can be saved/logged to a file by clicking on *Start logging* button. The log file is standard csv file and it is compatible with VagScope or can be imported to Microsoft Excel or OpenOffice Calc.

<u>,</u>)

6.8 Actuators activation

This function can activate actuators and perform some actuators actions.

Some actuator tests will be performed automatically till the end (in this case the Stop button is gray).

Actuator tests may end up with an error when the control unit indicates the failure.

If some actuator tests fail, some control units may subsequently reject any additional actuator tests. In such case you must disconnect from the control unit and then reconnect.

PSACOM - Diagnost	tic program for Peugeot-Citroen	×
PSACOM	INJ - Siemens SID804 (8HX,8HZ) Actuators Tests	
Actuators Tests		_
Control Unit Diagnostics	Additional heating systems 1 _2	
Control Unit Selection	💈 😽 EGR solenoid valve	
Model selection	Fan assembly high speed	
Main menu	😽 Fuel flow regulator	
	😼 Fuel pressure regulator	
	Please select actuator from the list	
	Run Test	
	<< Go Back	
SECONS		

Make sure you understand consequences of activating ECU components. Also make sure that activation conditions (engine idle, engine running, etc.) are met. Always consult all tests with car repair handbook.



6.9 Coding and programming functions

🔛 PSACOM - Diagnost	ic program for Peugeot-Citroen	- • •
PSA(COM	Body systems integration (BSI) - BSI 1007 CAN (2) ECU Programming/Coding	
ECU Programmin	Cogin	
Control Unit Diagnostics	ChangePIN	
Control Unit Selection		
Model selection		
Main menu		
	<< Go Back	Go >>

More information about programming functions is available at <u>www.obdtester.com/downloads</u>. Please note that this function is currently under development.



6.10 ECU Configuration

This function is only in read-only mode yet. Future free update will allow also configuration changing.

RACOM - Diagnostic program for Peugeot-Citroen - 0 -INJ - Bosch EDC16C3 (9HY) PSA COM Control Unit Configuration **Control Unit** Configuration ABS ABS present (with or wit Control Unit Additional heating 69.000000 Diagnostics Control Unit Air conditioning pressure sensor 20.000000 Selection Alternator class 20.000000 Model selection automatic gear box 1.000000 Main menu Built-in Systems Interface (BSI) 1.000000 Clutch sensor Present Controlled Engine Start and Stop Present Cruise control (RVV) Present Cruise control (RVV2) Missing 69.000000 Engine cooling system 27 00000 Load Print Edit Save Copy SECONS << Go Back Undo Changes Save to ECU



7 Reporting bugs and improvement requests

Our customers can take advantage of our full technical support for free. In case you have any difficulties with using PSA-COM, do not hesitate to contact us directly at <u>support@secons.com</u> or through your distributor.

Please read carefully this chapter in order to provide us with all information so as we can resolve your problem quickly.

Note:

Before sending support request for failing operation, please make sure you have met all conditions required for the operation (e.g. you are entering correct data, correct engine temperature for DPF regeneration, correct number of keys for engine start, etc).

In case of communication issues we recommend to check diagnostic plug connection and retry procedure at least once, connection problems may result in erratic communication issues.

In case you encounter to failure of any program functions (e.g. fault codes reading/clearing, coding functions, actuator tests, connecting to ECU ...), or you're missing some function or some function does not work sufficiently, please prepare the following data in your email before sending your request to our technical support:

- 1. Detailed description of failure or your improvement request
- 2. Vehicle description VIN code, model, manufacture year, engine type
- **3.** Attach **Debug Log** (in case that required function doesn't work properly). This file captures data from the latest communication between program and ECU, so we can detect failure causes.
- 4. Attach Snapshot of tested ECU this file contains important information about tested control unit In all cases please attach snapshot of INJ (engine) + BSI (body computer).



7.1 How to create **Debug Log**

It is necessary to perform operation that is not working correctly first. Once failure occurs, go back directly to settings in main menu (do not close the program). Click on "Save Debug" button. Name and save the file into well known directory in your computer.

Enable "Debug mode" check box only at our special request.



This function is used to tell program enable special functions in diagnostics interface and to log more data than required for normal operation.





7.2 How to create ecu Snapshot

After connection to related control unit, click on "Control Unit Identification". In the following window click on "Save ECU Information" button. Choose a directory to save the file and confirm. Saving may take a few minutes.

PSACOM - Diagnost	iic program for Peugeot-Citroen INJ - Siemens SID804 (8H Control Unit Identification		×
Control Unit Identification Control Unit Diagnotics Control Unit Selection Model selection Main menu	Supplier code ECU Name Diagnostic version Manufacturer Modification suffix Plan Protocol Bus PIN ECU Type	21317 Siemens SID804 (8HX,8HZ 34 4535 0855734534 PSA2000 K7 INJ	
SECONS	<< Go Back	Save ECU Information Copy Values Print Values	

Please send all support requests along with required data attached to <u>support@secons.com</u>. Your case will be assigned with unique ticket number in order to communicate efficiently with you.

Also feel free to contact us with any suggestions for improvements in the software on the same email address. Your feedback is greatly appreciated. PSA-COM user manual



www.obdtester.com/psacom

8 Known issues

- Freeze frame functionality is not guaranteed on all ECUs
- Communication problem with Peugeot 806 1998 EDC15C2 control unit
- Magneti-Marelli IAW 8P protocol

9 Planned improvements

The following improvements of user interface are planned for next release:

- Font size change option
- Screenshot to PDF or PNG
- Connection to online services