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Abrites Diagnostics for Opel/ Vauxhall
User Manual

Version: 2.0

www.ABRITES.com

List of revisions			
Date	Chapter	Description	Revision
02.10.2015	ALL	Total revision	2.0

1. Introduction

“Abrites Diagnostics for Opel/Vauxhall” is a Windows PC based diagnostic software for Opel Vauxhall vehicles. With the help of this software you can perform complete diagnostic operations of all vehicles.

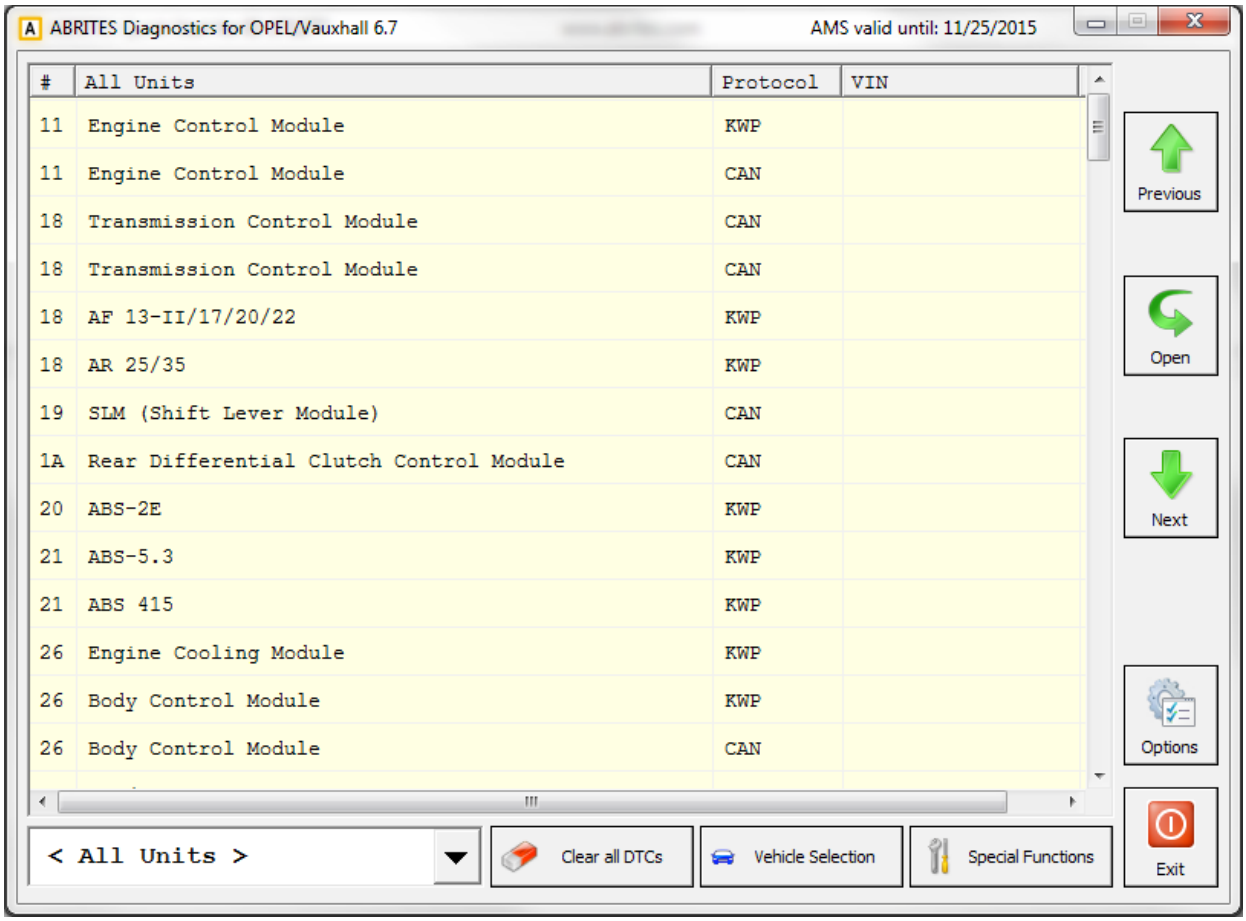
For proper operation of your diagnostic software you will need a corresponding interface for connection between your PC and vehicle named “AVDI”.

AVDI is an interface produced by Abrites Ltd. intended to act as an interface between the PC and the electronic control units.
AVDI should be used with ABRITES software produced by Abrites Ltd.

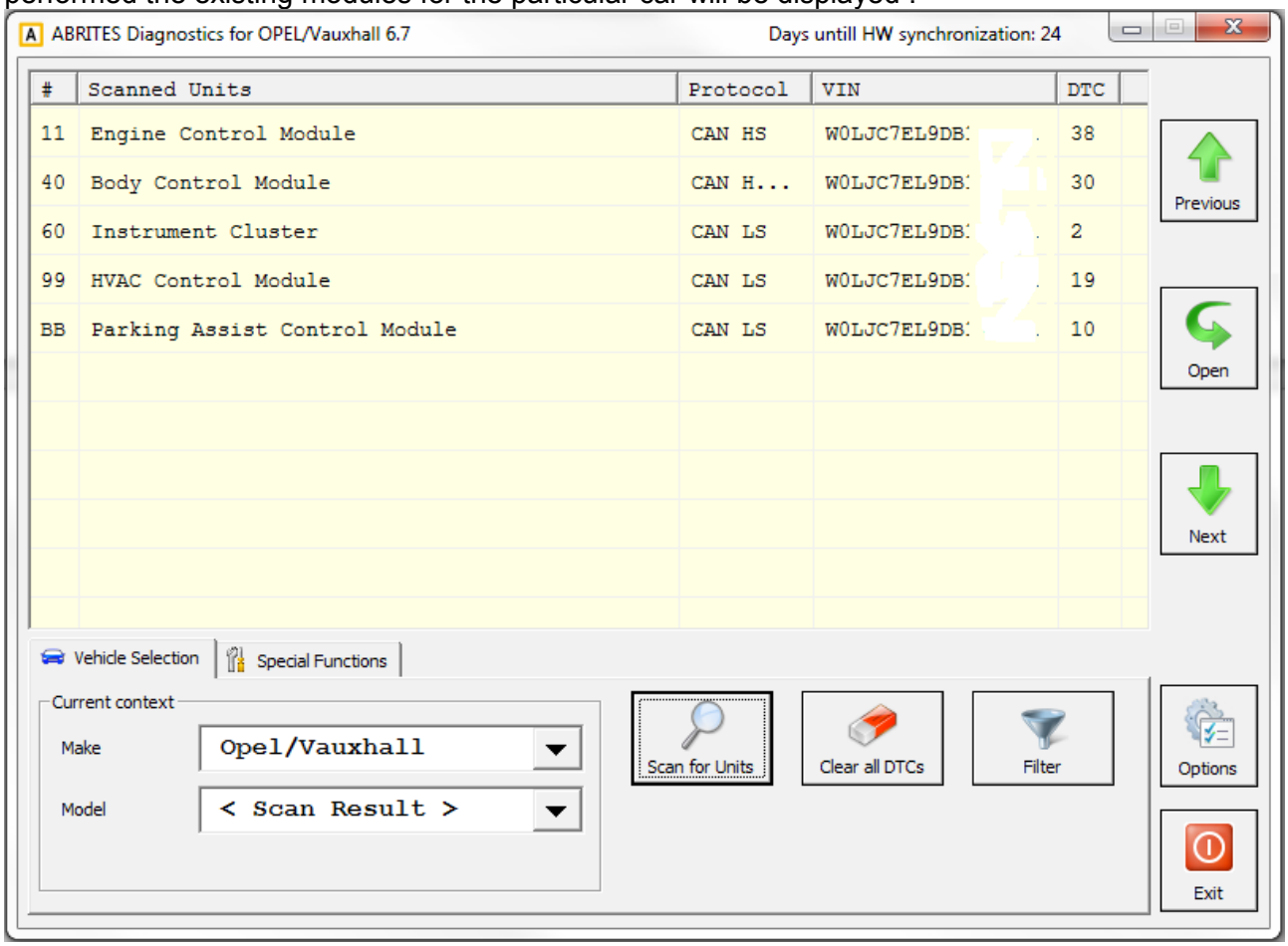
ABRITES is a trade mark of Abrites Ltd.

2. Using the Abrites diagnostics for Opel/ Vauxhall

The Abrites diagnostics for Opel Vauxhall is installed together with the rest of the Abrites diagnostic software applications as a part of the Abrites diagnostic suite provided to the user via e-mail. The user can start the software by clicking on the appropriate icon from the Abrites “Quick start” menu. Once the application is started the main software screen will open:



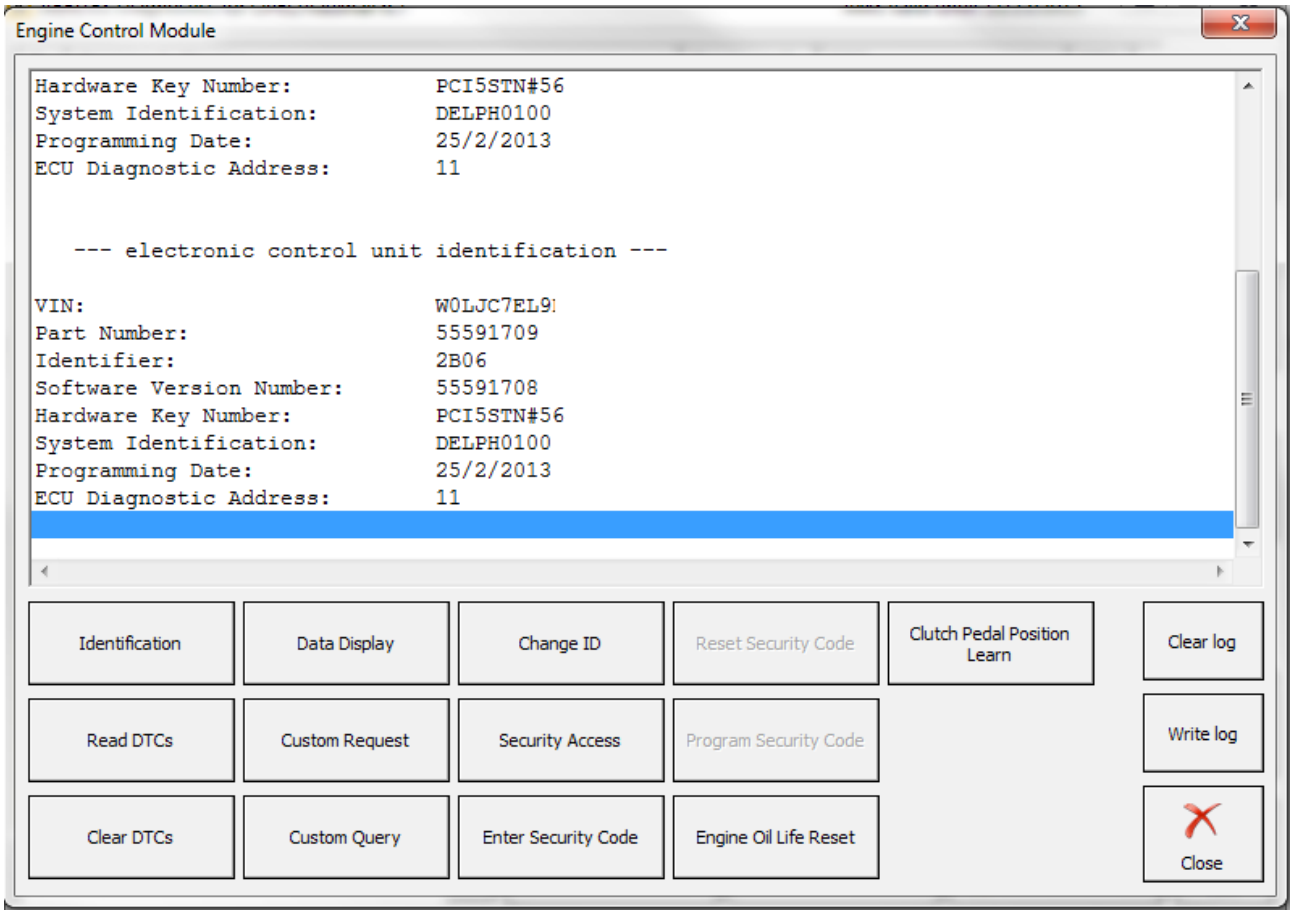
This is the main screen of the software and it shows all the navigation buttons as well as the ones for vehicle selection, scanning and general diagnostic trouble code (DTC) clearing.
Once the Diagnostics is connected to the vehicle and the scanning of the available modules is performed the existing modules for the particular car will be displayed :



This screen will display all the modules that are installed in the vehicle, as well as the protocols they use for communication, their VIN numbers and the number of diagnostic trouble codes (DTC) in each electronic module. The options here will allow you to clear all the diagnostic codes automatically for all units.

2.1 Module Identification

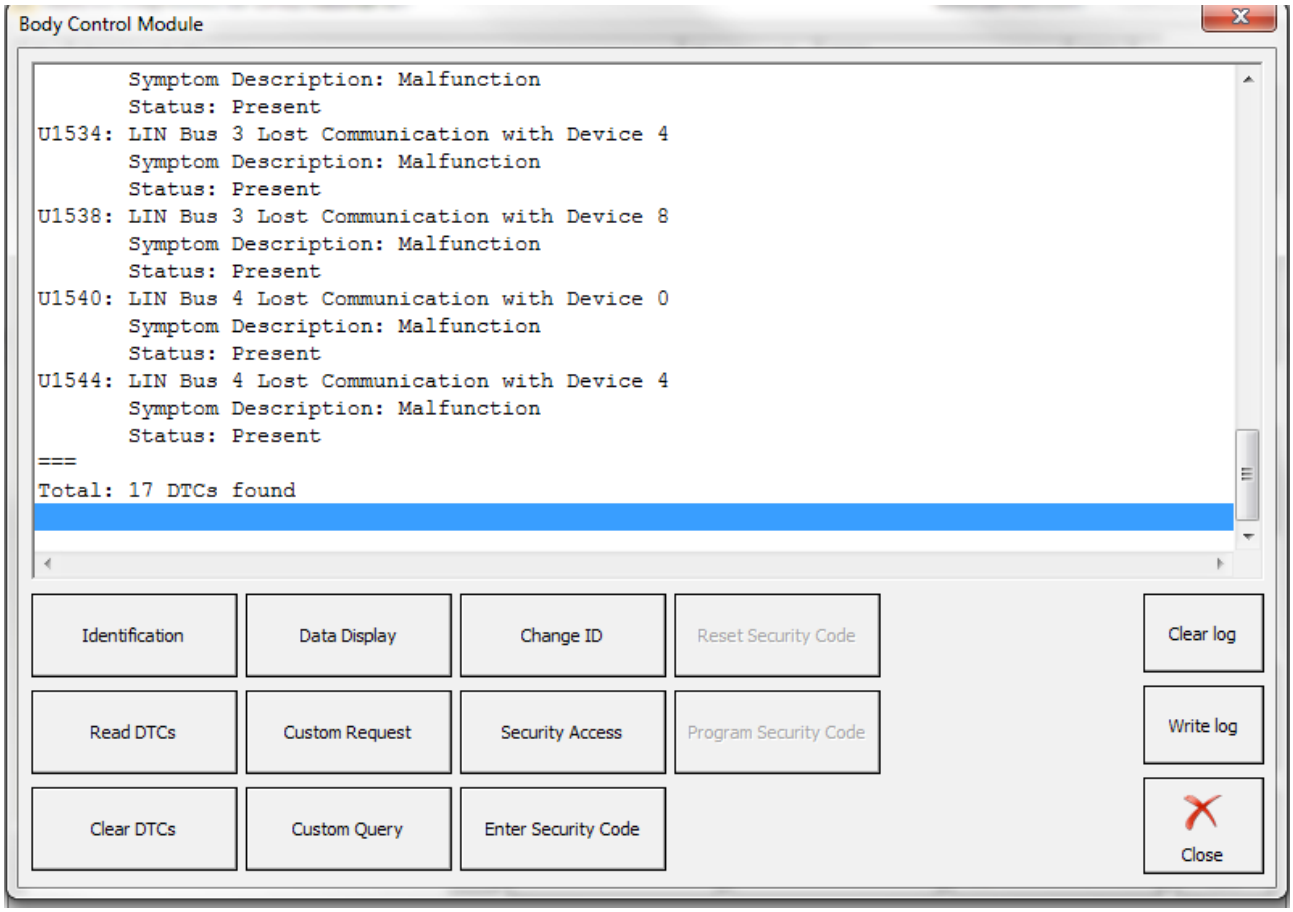
Once a single module is selected (using a double click from the diagnostic menu) the menu for this specific module is displayed:



The first option from the list of buttons is the identification option. This displays all the relevant data connected to the electronic module including: VIN, part number, ID, software version, date of programming, electronic unit manufacturer and other options.

2.2 Read and Clear Diagnostic Trouble Codes (DTCs)

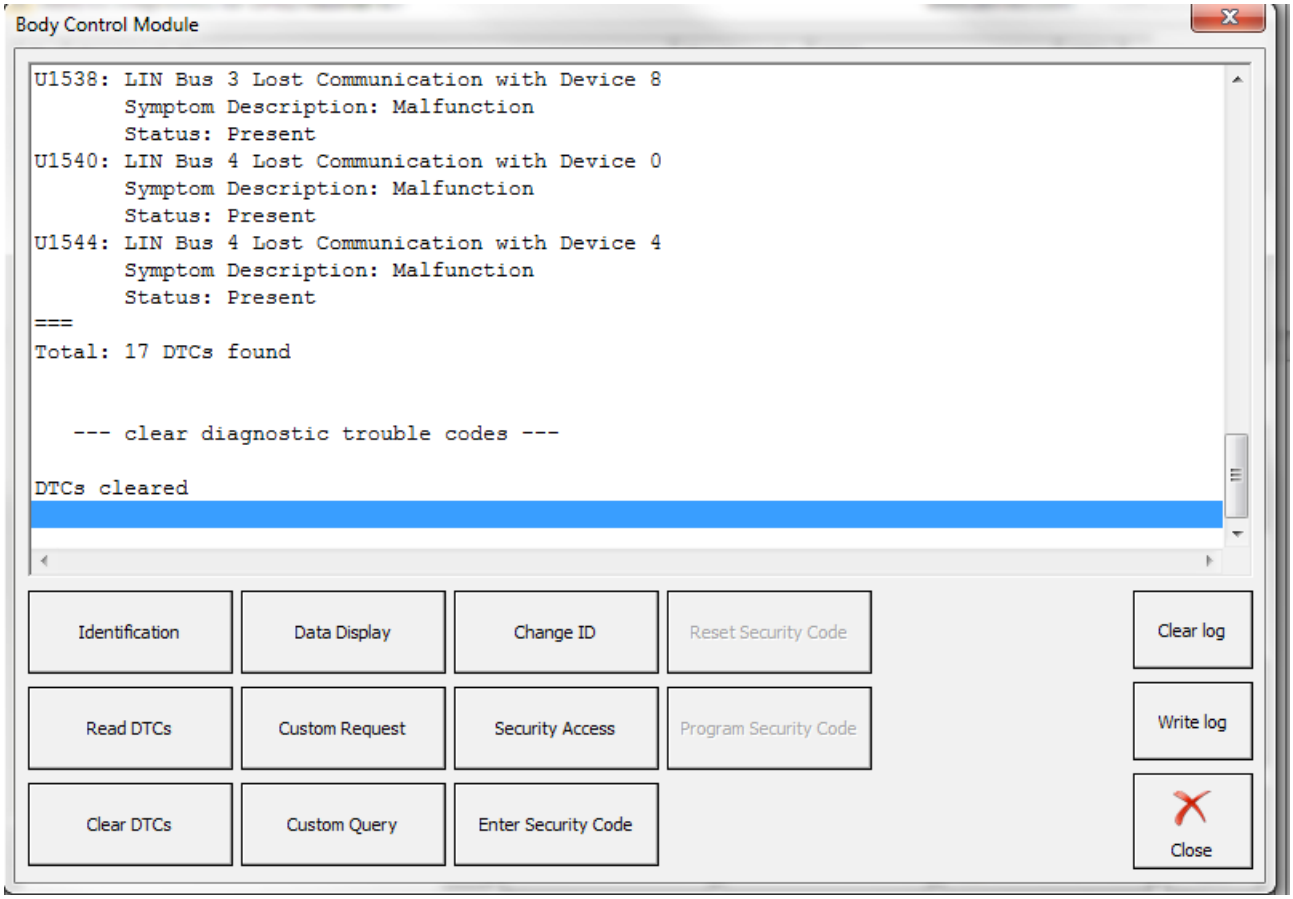
When selecting the Read DTC button the diagnostic trouble codes from the selected electronic control module are displayed in a list in order to be viewed and analyzed.



The software shows the trouble codes, their descriptions and their occurrence.

Given these details an analysis of the trouble codes can be made in order to determine the source of the issue.

When this analysis is performed the diagnostic trouble codes can be cleared.

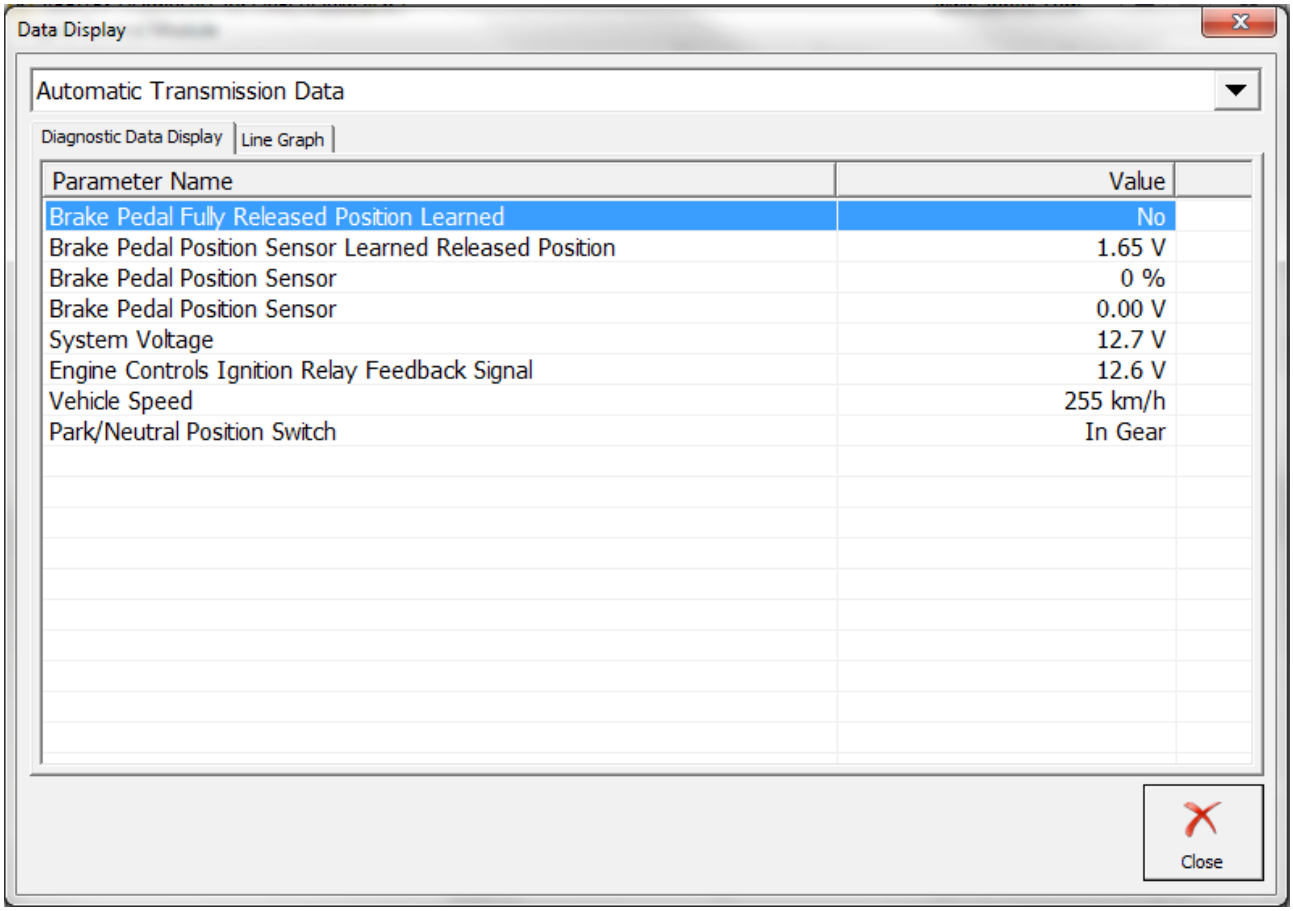


When selecting the “Clear DTCs” button you will be able to clear the diagnostic codes immediately.

If a DTC is not cleared upon second reading after clearing – the issue should be revised and repaired if needed.

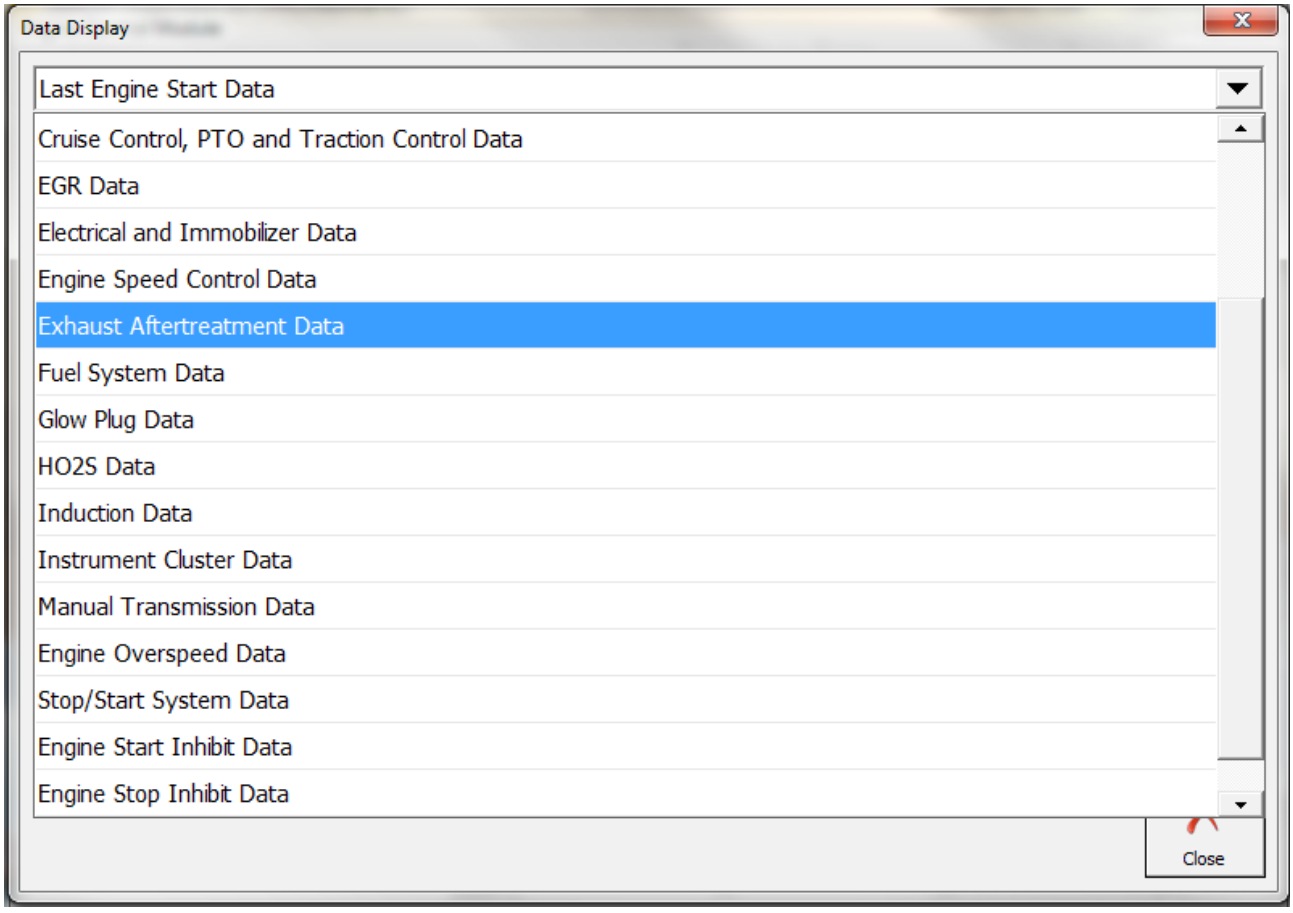
2.3 Live Data Display

Displaying live data from the electronic control modules in real time offers much needed assistance when analyzing the cause of an issue. It helps to determine co-relations between events for example if the there is a delay between pressing the accelerator pedal and the climbing of the RPM of the engine.



All the data is displayed in a table. The information provided by this function can be irreplaceable for determining the cause of a fault.

Additional options for the data display are also available. There is an option to test and view many details.

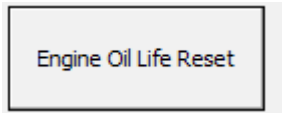


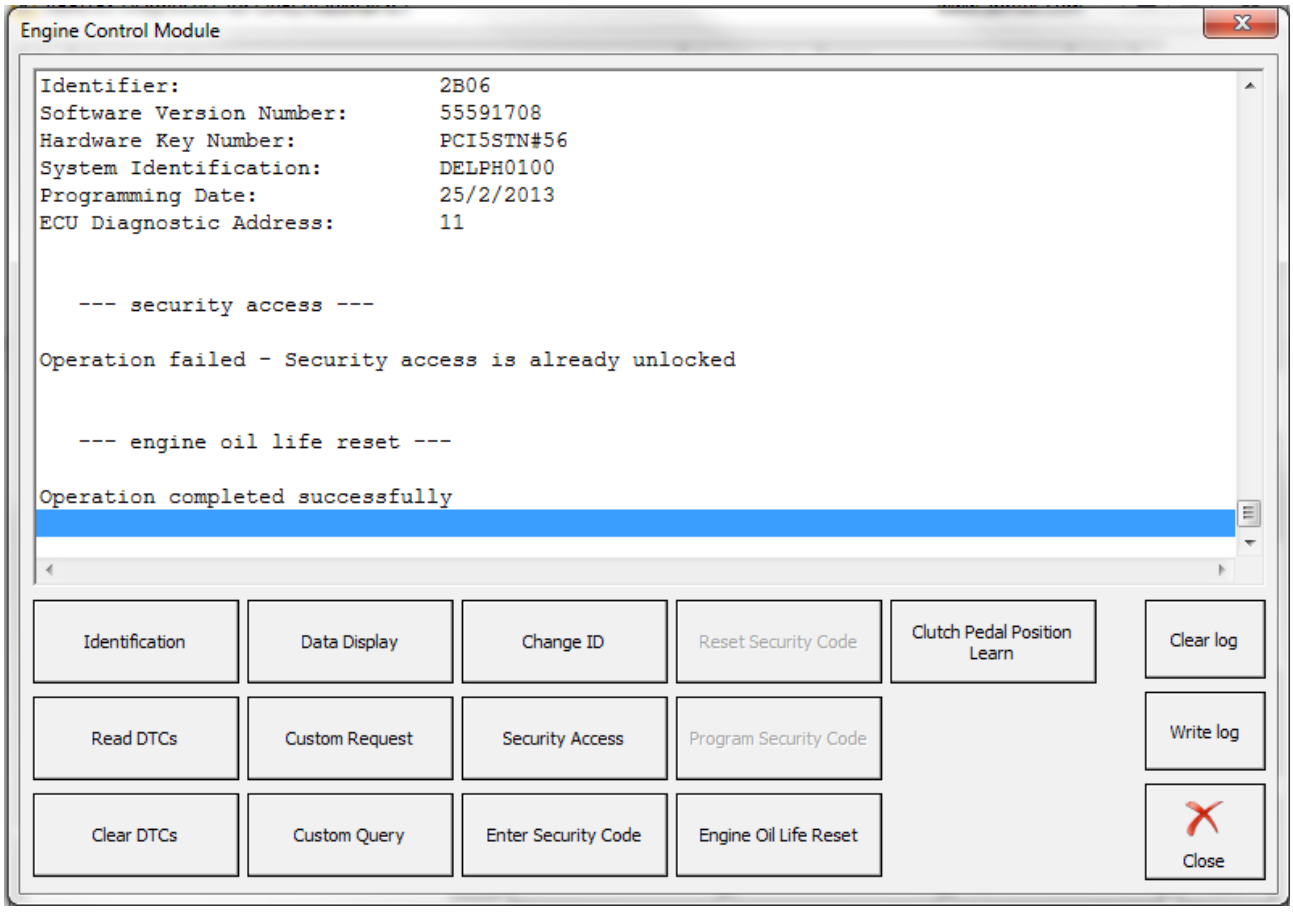
The option to activate and deactivate features is also available.

2.4 Engine Oil Change Reset

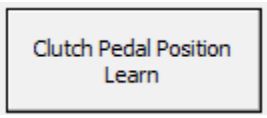
Once a workshop performs a maintenance on a vehicle, a part of which an oil change may be they need to be able to “tell” the vehicle's electronic modules that the maintenance has been performed.

Once the Engine oil reset button is pressed the software will reset the vehicle's counter thus telling the vehicle that it's oil has been changed.



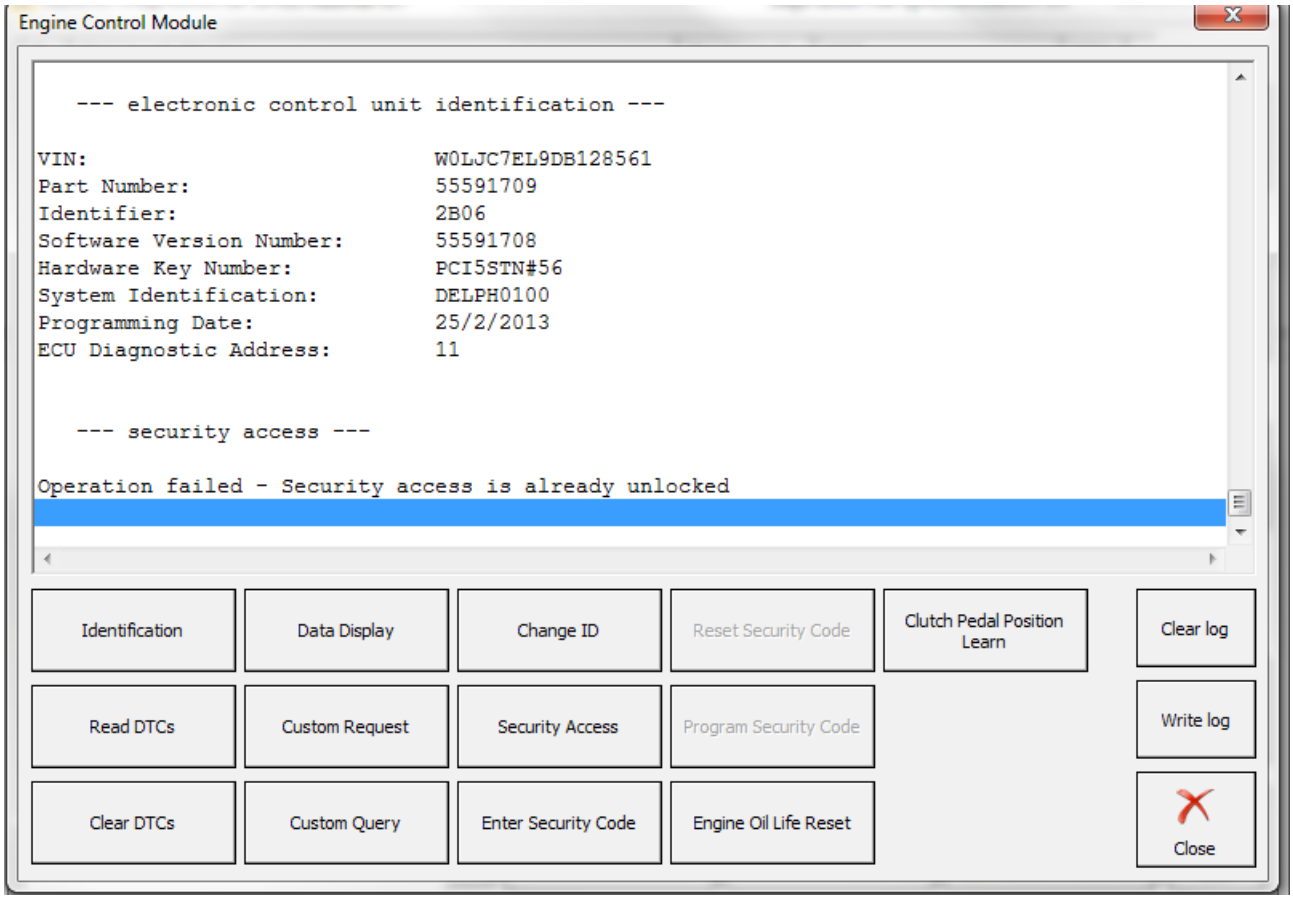


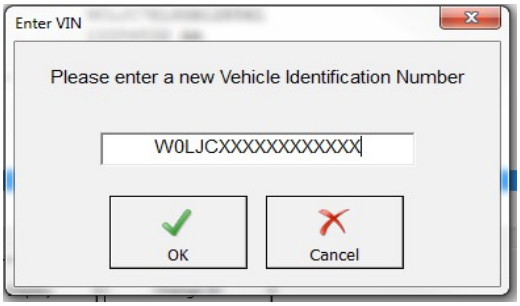
The “Clutch pedel position learn” button allows the clutch position to be learned by on board diagnostics (OBD):

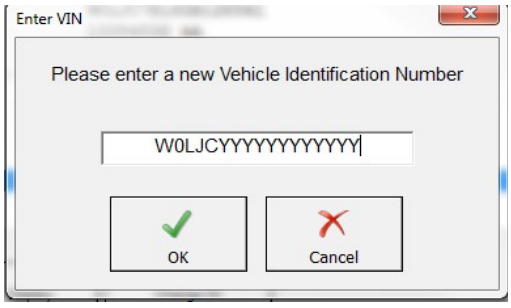


2.5 Security access and ID change

Every time a second hand module is adapted to a vehicle in order to adapt this unit you will need to use the security code of the vehicle and the module in order to replace it. Once this module is replaced you will also need to change the ID of the module in order to match the vehicle thus ensuring it's correct operation:

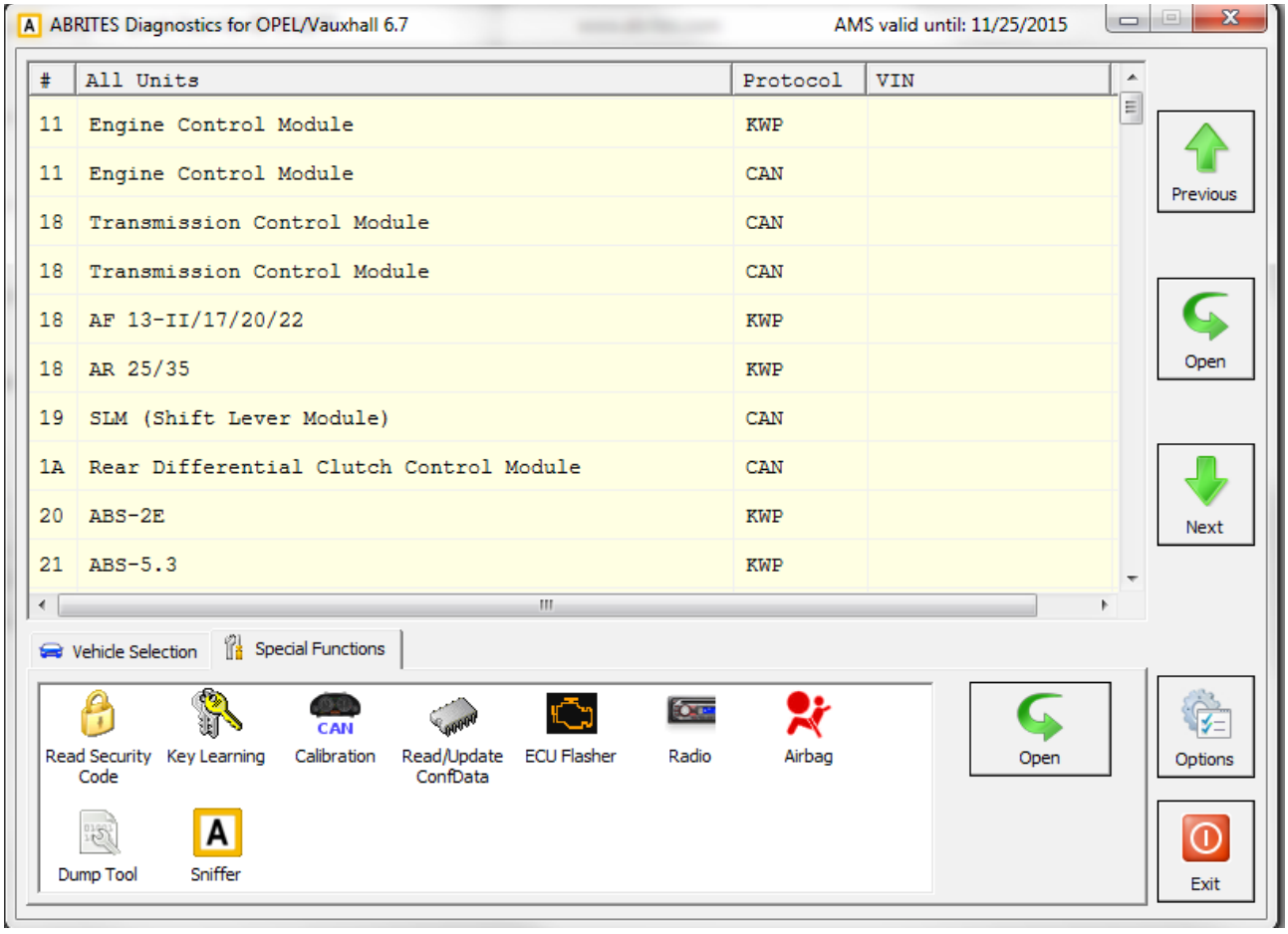






3. Special Functions

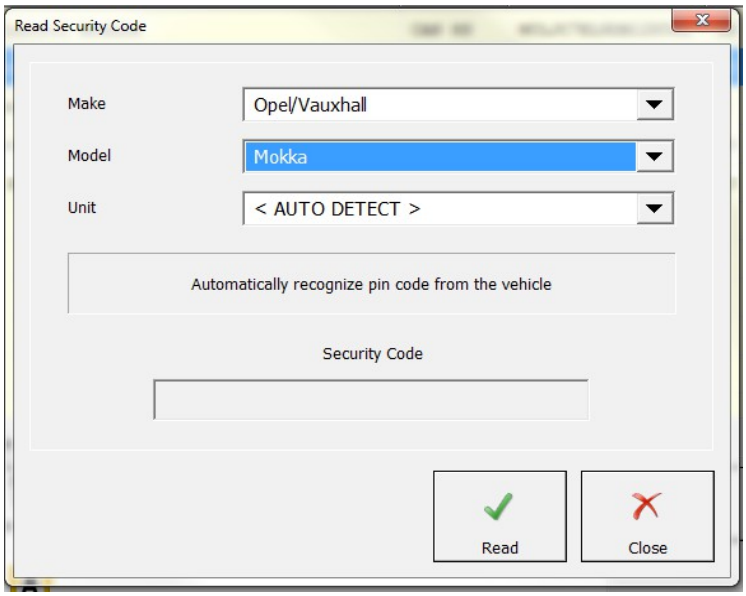
Special functions are designed to assist when performing advanced diagnostics on vehicles from the Opel and Vauxhall brands. These special functions include Engine control unit flash management, Pin code reading and key management and advanced module configuration of electronic modules.



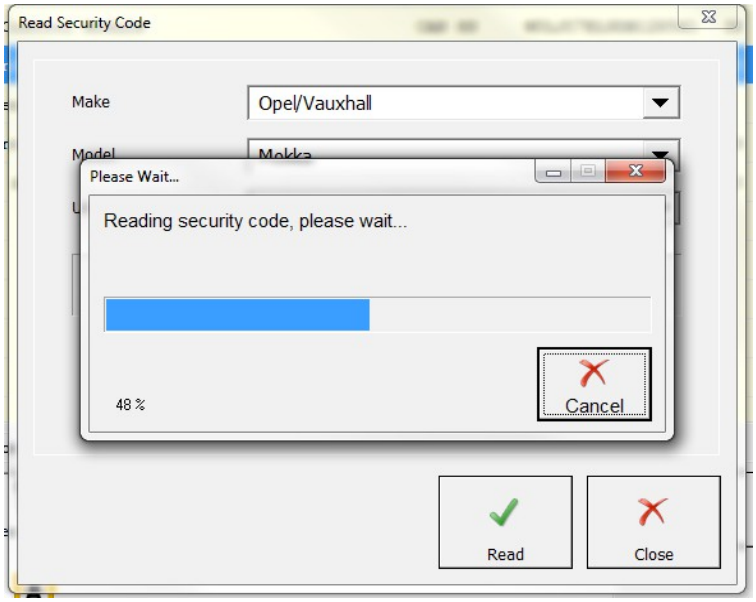
Special functions are opened from the appropriate tab of the main diagnostic screen of the Abrites diagnostics for Opel/Vauxhall. Each of the icons in this window represent a special function.

3.1 PIN Code Reading and Key Management

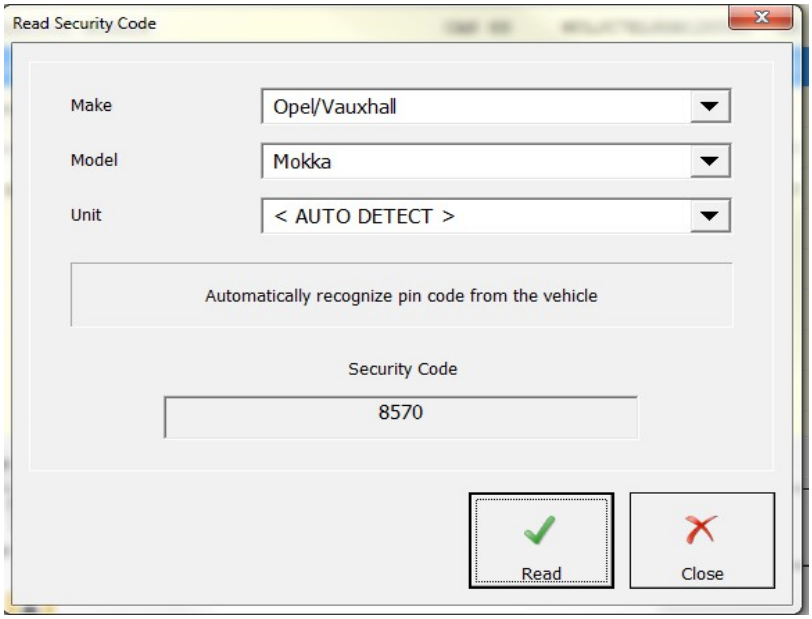
In order to perform key learning for Opel and Vauxhall vehicle the PIN code is needed. In order to learn keys the first step is to read the PIN code.



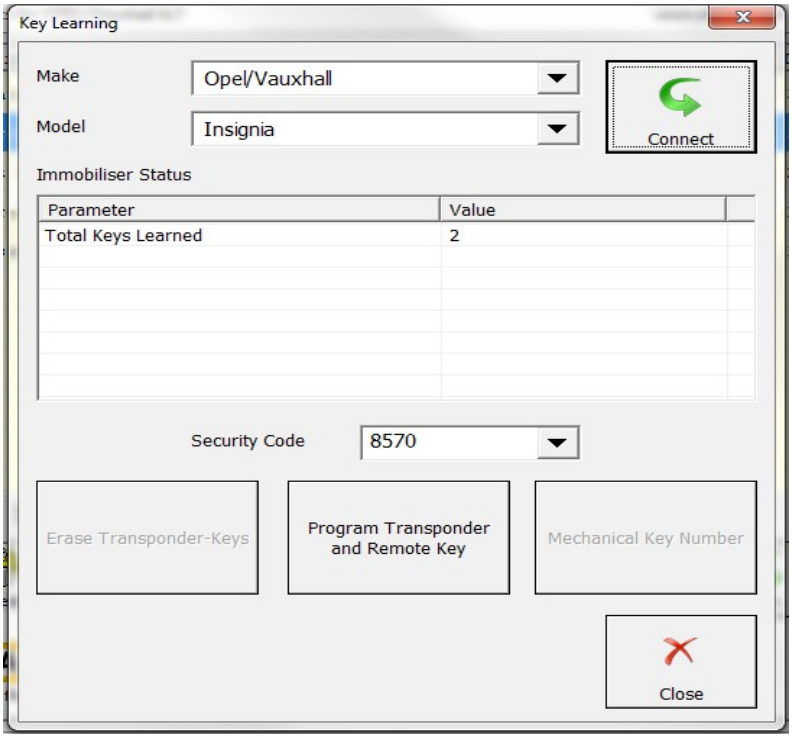
Once the function is selected the model should be selected and you need to press “Read”



The code is read by the software and when the reading is complete it is displayed:



After the code is read you can open the key learning screen you will have the PIN in the field:



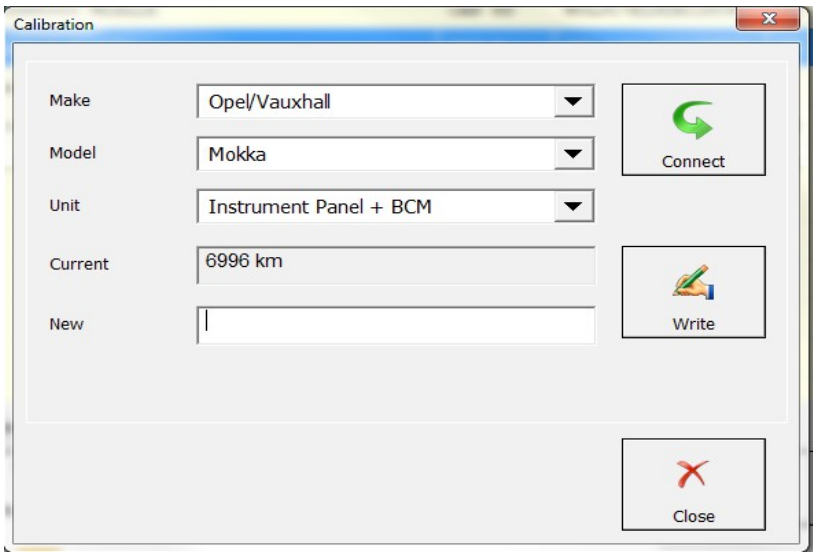
From this window keys can be learned to the vehicle via on board diagnostics (OBD).

3.2 Calibration

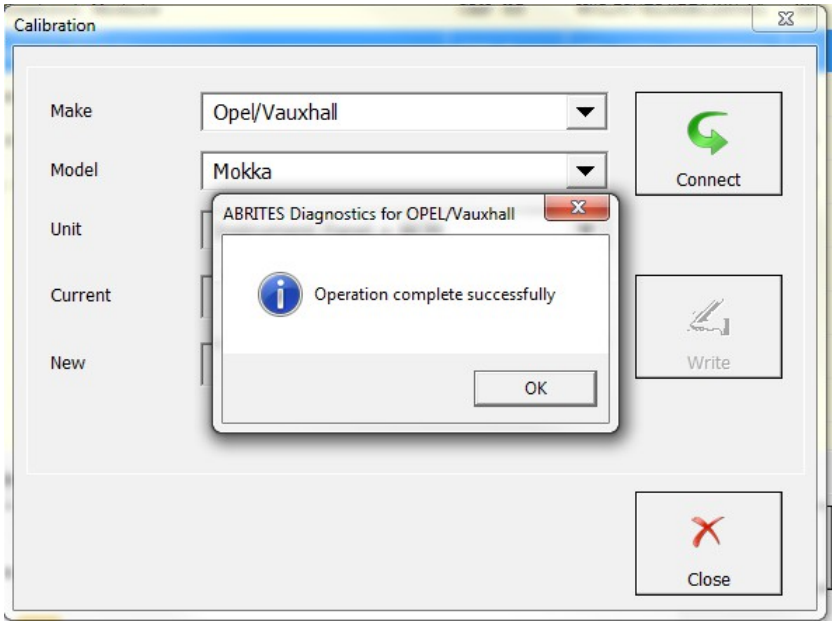
When replacing an electronic module within a vehicle be it a new module or a used one the calibration of this module is vital for the correct operation of this vehicle.

The first step is to connect to the vehicle, then select it and select the unit that is to be calibrated.

The current value will then be displayed.



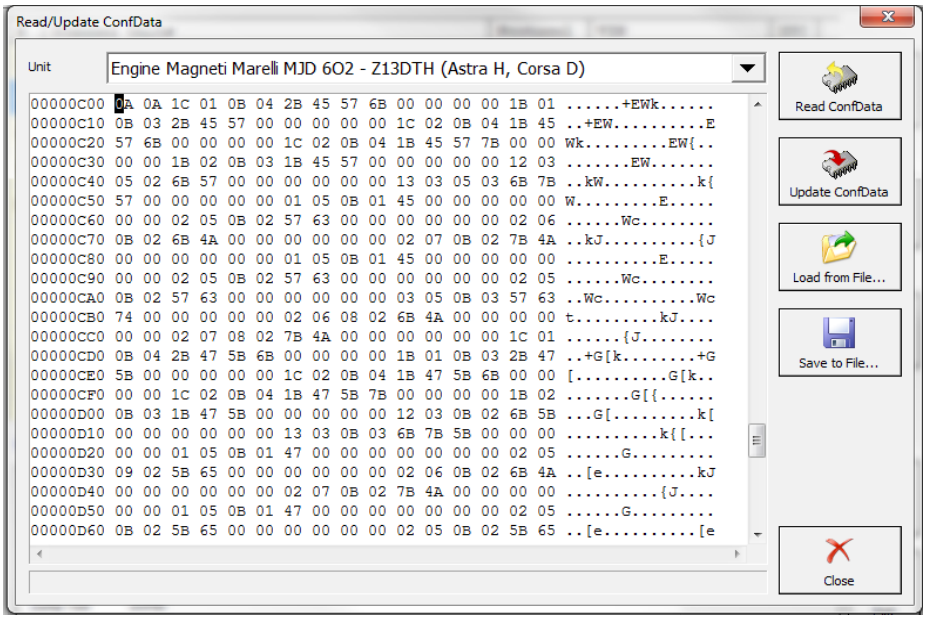
You will need to input the correct value and press “Write”.



The operation then completes successfully and the new value is updated.

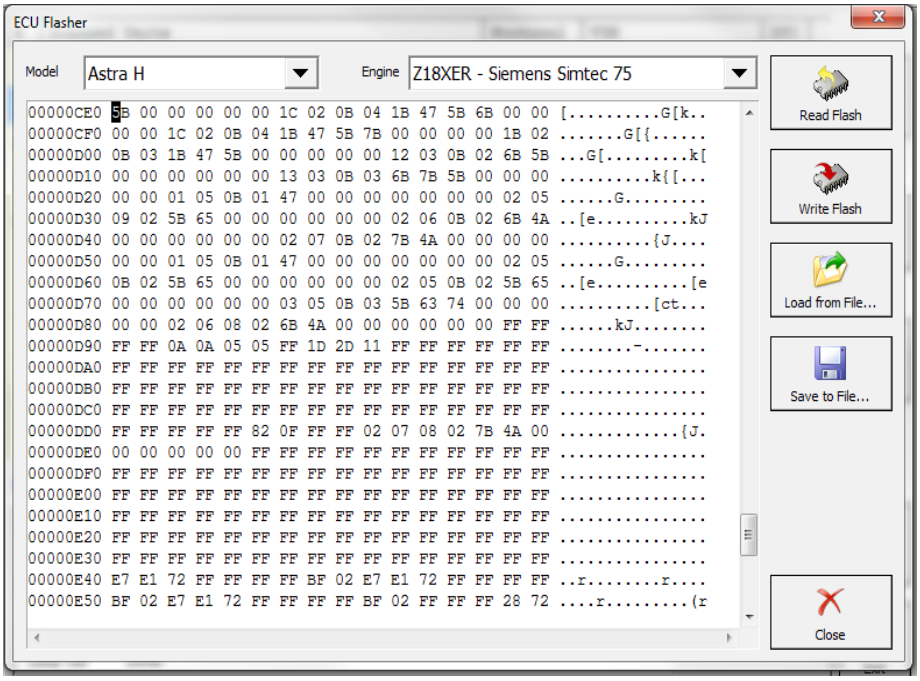
3.3 Reading and updating Configuration Data

This function allows the reading and updating of the Configuration data from the ECUs of Opel/ Vauxhall vehicles. It allows also the saving of data locally to a PC.



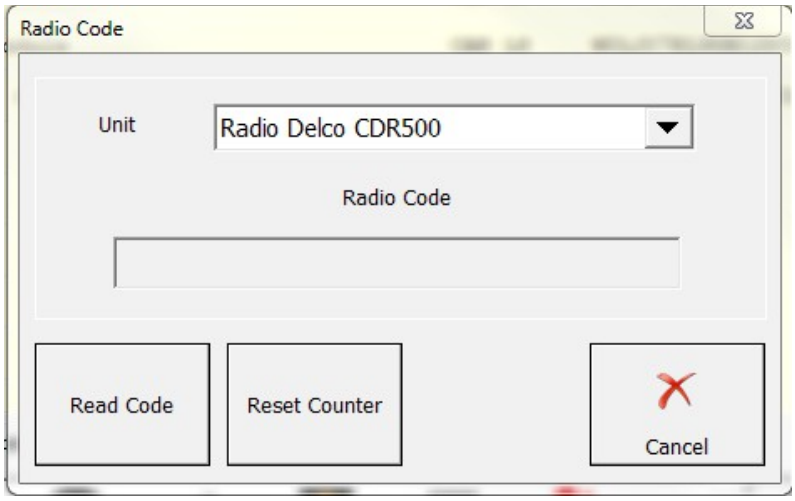
3.4 ECU Flasher

ECU flasher allows the reading, saving locally and updating of the flash data from the ECU



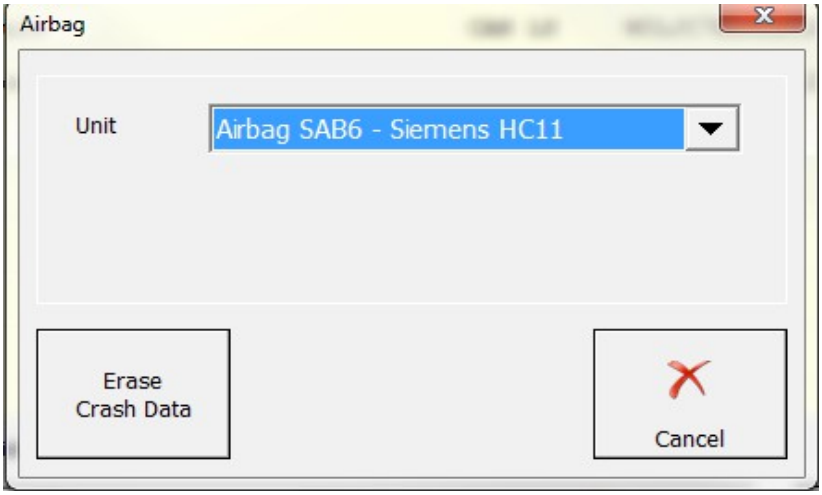
3.5 Radio Code

This is a function dedicated to reading out the radio codes of the radio (multimedia modules) from the vehicles in order to aid adaptation or, as often the case is, to retrieve the multimedia unit to operation after loss of power.



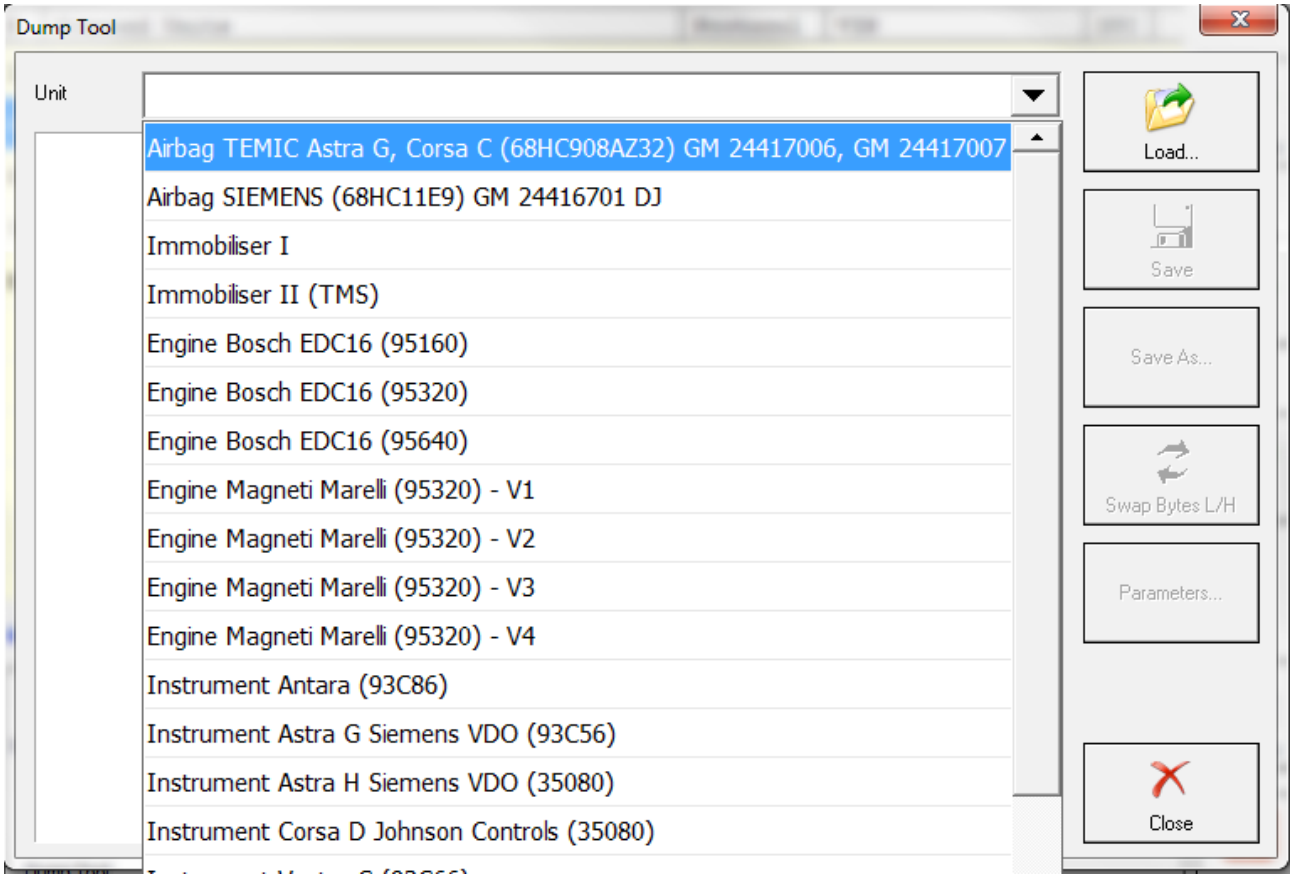
3.6 Airbag

Special function airbag is vital to workshops carrying out damage repairs as in case the vehicle has been repaired after an accident the crash data needs to be cleared. This procedure needs to be performed even after regular maintenance of the airbag module where the gas container is replaced.



3.7 Dump tool

Special function “Dump tool” will allow you to work with Configuration data dumps of different modules:



You will be able to load files read with a programmer, save them edit parameters on them etc.