A·B·R·I·T·E·S
automotive solutions

ABRITES DIAGNOSTICS FOR RENAULT/ DACIA ONLINE

User manual
version 33.0

Important notes

The Abrites software and hardware products are developed, designed and manufactured by Abrites Ltd. During the production process we comply to all safety and quality regulations and standards, aiming at highest production quality. The Abrites hardware and software products are designed to build a coherent ecosystem, which effectively solves a wide range of vehicle-related tasks, such as:

- Diagnostic scanning;
- Key programming;
- Module replacement,
- ECU programming;
- Configuration and coding.

Warranty

You, as a purchaser of Abrites hardware products, are entitled of a two-year warranty. If the hardware product you have purchased has been properly connected, and used according to its respective instructions, it should function correctly. In case the product does not function as expected, you are able to claim warranty within the stated terms. Abrites Ltd. is entitled to require evidence of the defect or malfunction, upon which the decision to repair or substitute the product shall be made.

There are certain conditions, upon which the warranty cannot be applied. The warranty shall not apply to damages and defects caused by natural disaster, misuse, improper use, unusual use, negligence, failure to observe the instructions for use issued by Abrites, modifications of the device, repair works performed by unauthorized persons. For example, when the damage of the hardware has occurred due to incompatible electricity supply, mechanical or water damage, as well as fire, flood or thunder storm, the warranty does not apply.

Each warranty claim is inspected individually by our team and the decision is based upon thorough case consideration.

Read the full hardware warranty terms on our website.

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- Abrites assumes no responsibility for any damage resulting from the use, misuse, or negligent use of the hardware or any software application.

Safety information

The Abrites products are to be used by trained and experienced users in diagnostics and reprogramming of vehicles and equipment. The user is assumed to have a good understanding of vehicle electronic systems, as well as potential hazards while working around vehicles. There are numerous safety situations that cannot be foreseen, thus we recommend that the user read and follow all safety messages in the available manual, on all equipment they use, including vehicle manuals, as well as internal shop documents and operating procedures.

Some important points:
Block all wheels of the vehicle when testing. Be cautious when working around electricity.

- Do not ignore the risk of shock from vehicle and building-level voltages.
- Do not smoke, or allow sparks/flame near any part of the vehicle fuel system or batteries.
- Always work in an adequately ventilated area, vehicle exhaust fumes should be directed towards the exit of the shop.
- Do not use this product where fuel, fuel vapours, or other combustibles could ignite.

In case any technical difficulties occur, please contact the
Abrites Support Team by email at support@abrites.com.

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List of revisions

Date	Chapter	Description	Revision
01.01.2021	ALL	Document created	1.0
10.10.2022	5	Mileage	1.1

1. Introduction

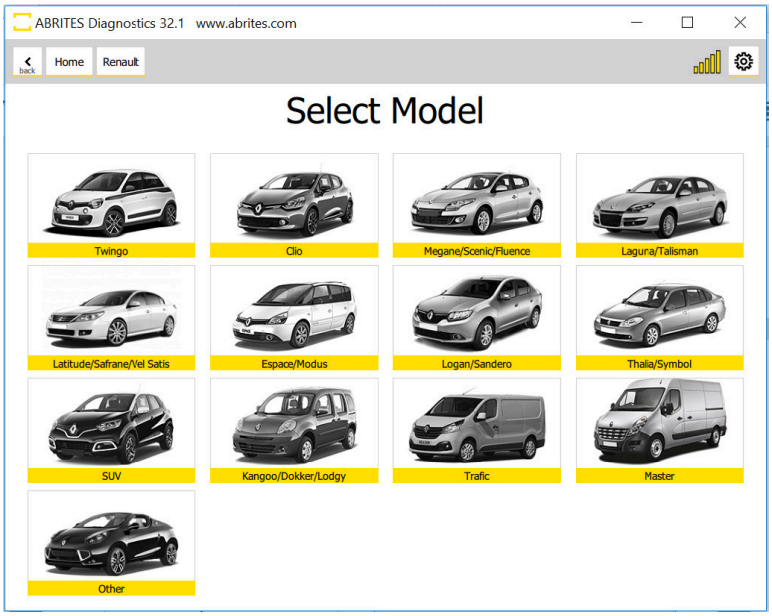
The Abrites diagnostics for Renault/ Dacia online is a Windows based online software developed by Abrites. It requires a minimum of 1024MB RAM, 64GB of free hard drive space and at least Windows 7 64bit Service Pack 1 or later version to operate. It can be used for diagnostics of Renault/ Dacia vehicles using OBD II. The supported vehicles are the ones produced after around the year 1999 up to present day. With its help you can perform basic diagnostics, monitor live data, read diagnostic trouble codes (DTCs), Clear DTCs, etc. With its help you will also be able to perform other tasksn the future you will be able to perform module adaptation and cluster calibration and key programming .

2. Using the Abrites diagostics for Renault/Dacia

The Abrites diagnostics for Renault/ Dacia is a Windows based online application and as such it requires the computer you have installed it on to be connected to the internet. We can suggest a connection to the internet via 3G/ 4G from a mobile device as well as a WI-FI network. Please ensure to have port 8443 allowed by your internet service provider in order to ensure the correct functionality of your Abrites diagnostics for Renault/ Dacia Online. Using the icon in the top right of your software screen you will be able to see the internet connectivity and signal strength and the settings icon (sprocket) will allow you to choose a language in which the software to operate:

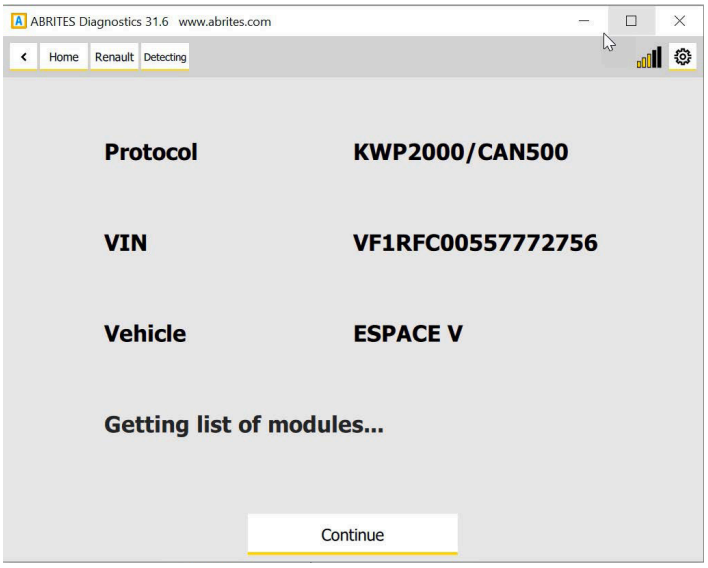
When you open the Abrites Quick Start you can select the Abrites diangostics for Renault/ Dacia Icon:

When you start the Abrites diagnostics for Renault/ Dacia Online you will be able to select the category of a vehicle you are working with. After that you can select the model you are working with.

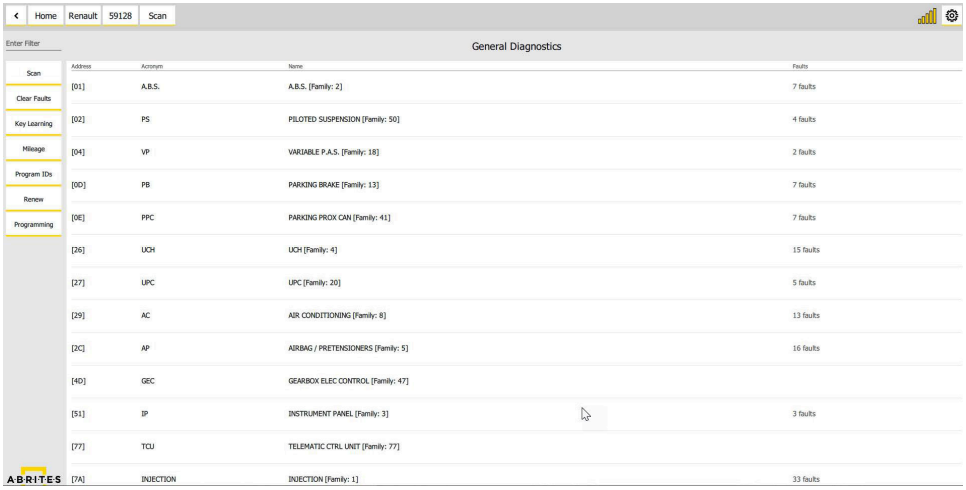


From this point on you will have all the details of the car you are working with.

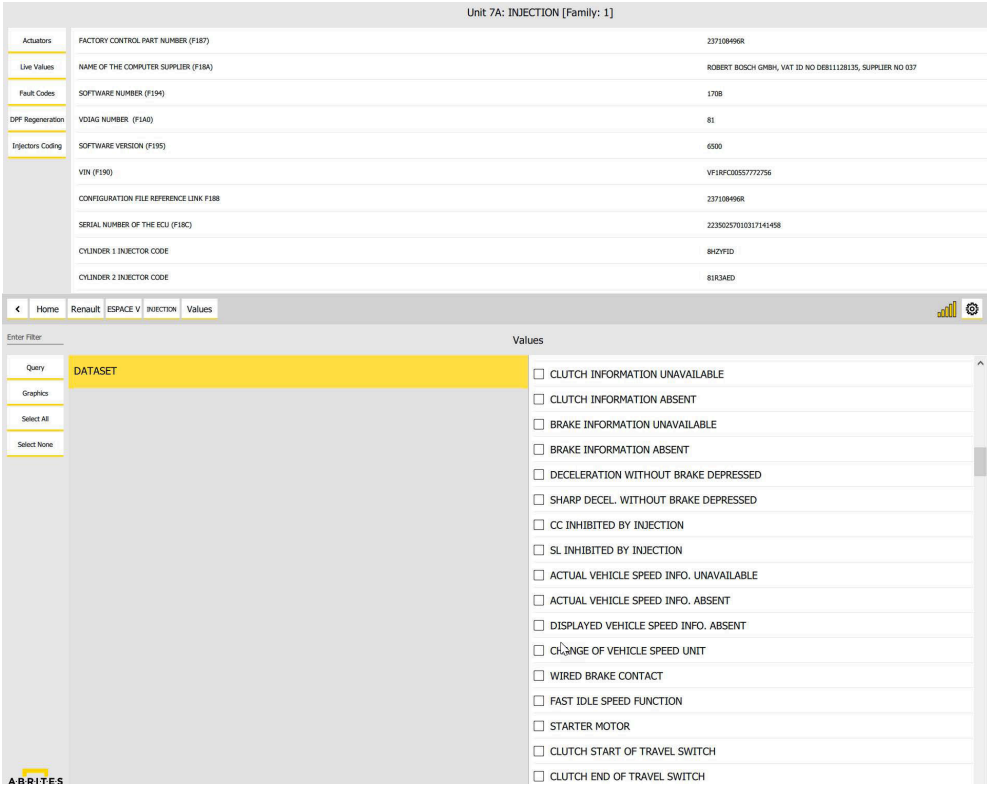
From here you will see the details of the car - the diagnostic protocols it uses, the VIN of the car, the model, and then the software will automatically go to the list of modules installed in this particular vehicle.



This is what the module list looks like:



After you see the list of modules you can enter each of them in order to do diagnostics: Read DTCs, view live data, perform actuator testing and so on. You can monitor live values in a graph form (with live graphics being displayed) or using the table view of the software to monitor as many parameters as you wish simultaneously:



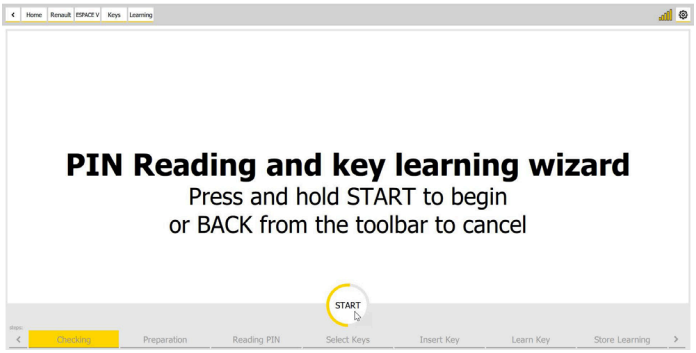
3. Special Functions

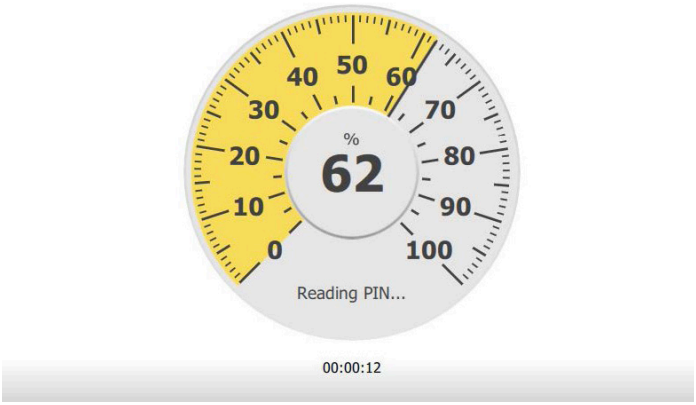
With the help of the Abrites diagnostics for Renault/ Dacia you can renew modules, program keys, exchange cluster calibrations and many others. Here is how to do that.

3.1. Key programming

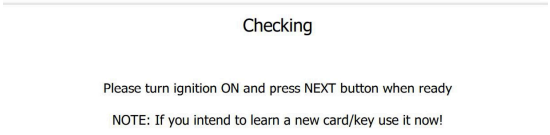
With the help of the Abrites diagnostics for Renault Dacia and the PROTAG programmer key programming is a breeze.

- First make sure to go to the key programming button and read the PIN CODE from the car:

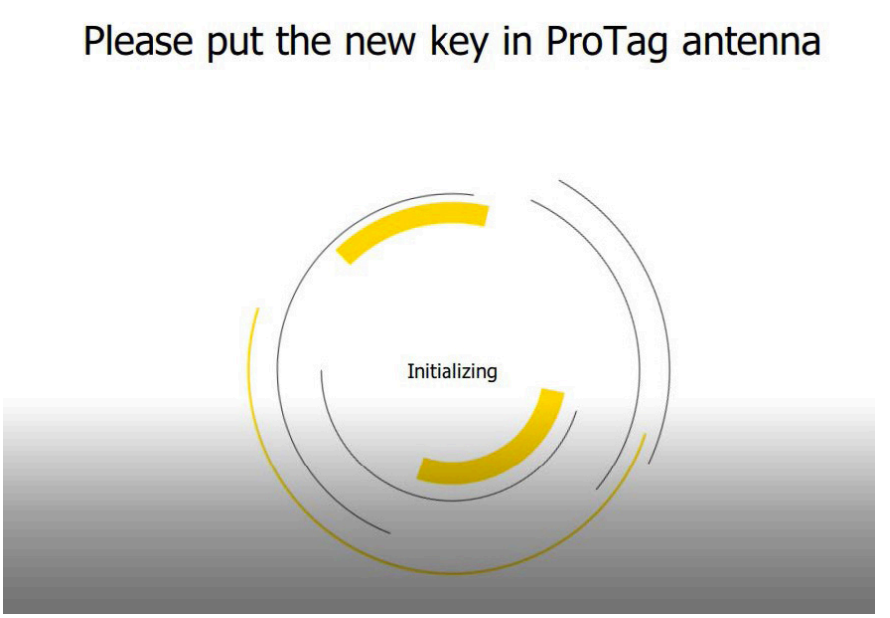


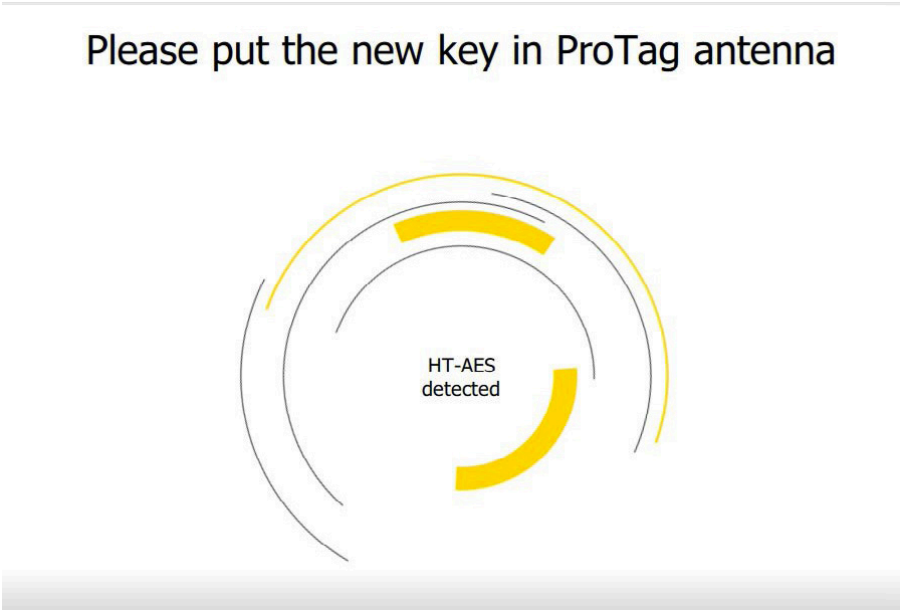


Make sure to save the pin once you read it, this is done using the right click and “COPY” function



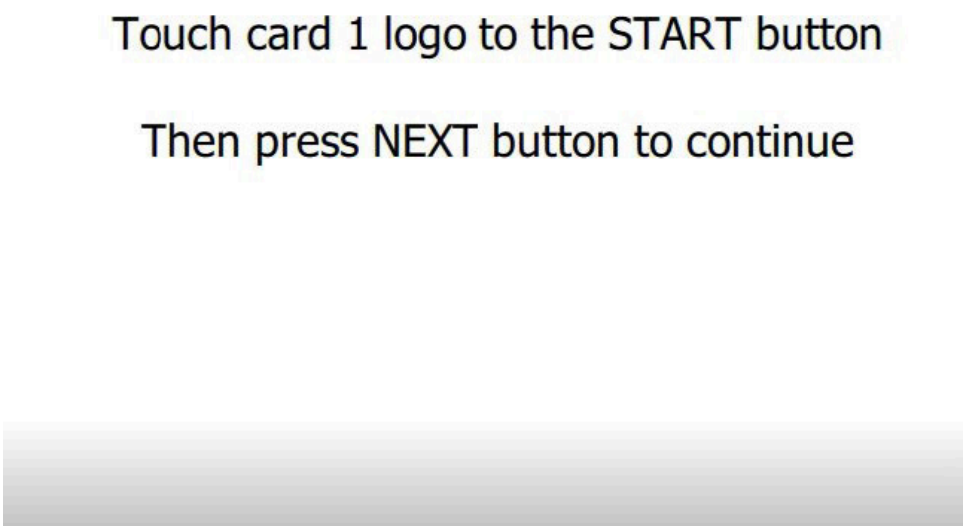
Make sure your Protag is connected in order to prepare a new card.





You will be able to detect the car and see the recognition of the transponder or key type in real time.

For vehicles with a card make sure to have the emblem on the key card facing the start/stop button.



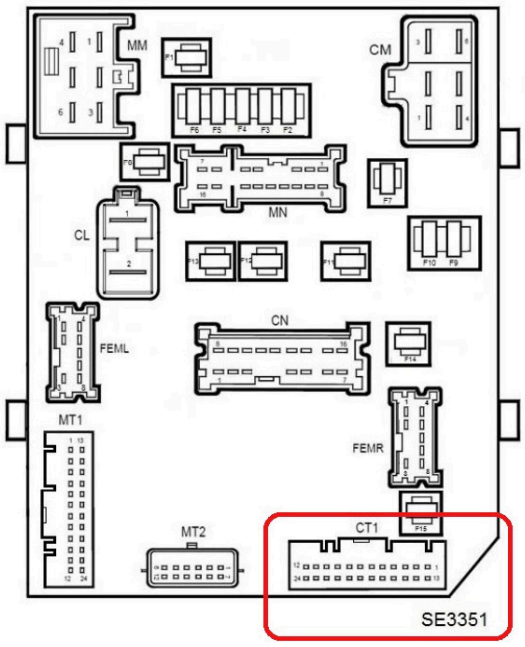
Repeat the process for the next card.

3.1.1 Clio V Key programming

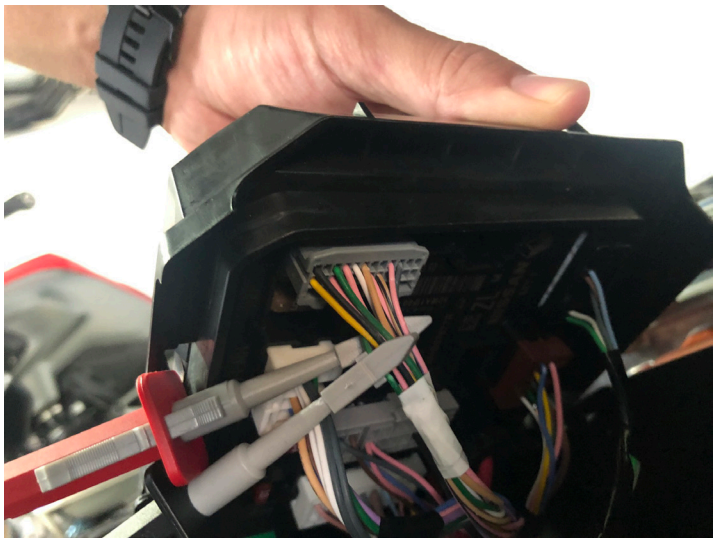
In the latest version of the Abrites diagnostics for Renault/Dacia we have added support for Renault Clio V, Renault Capture II and Renault New Zoe key programming (working key is required). The procedure is requiring a CB012 cable set(between the AVDI Interface and the CB101 OBDII cable) also in order to connect to the internal CAN-BUS system of the car.

We recommend a connection either to the Protection and Switching unit - UPC (1337) or to the Hands-free module under the glove box. Here are some photos and connection diagrams.

Protection and Switching unit - UPC (1337), connector CT1:

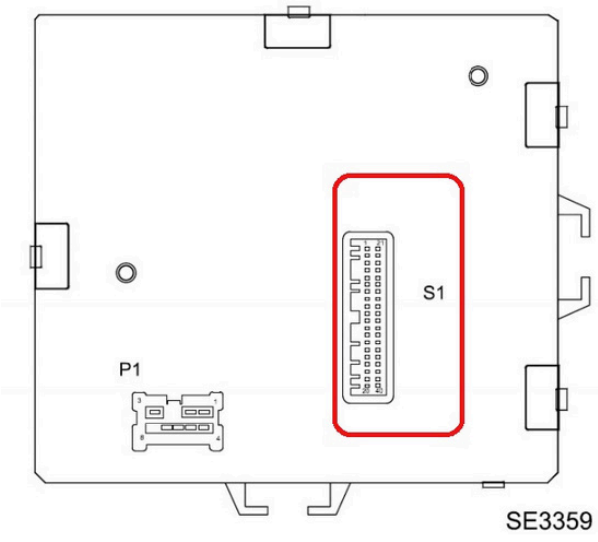


CAN H - pin 17 (white)
CAN L - pin 5 (green)



Hands-free access electric control unit (2003) on keyless version:

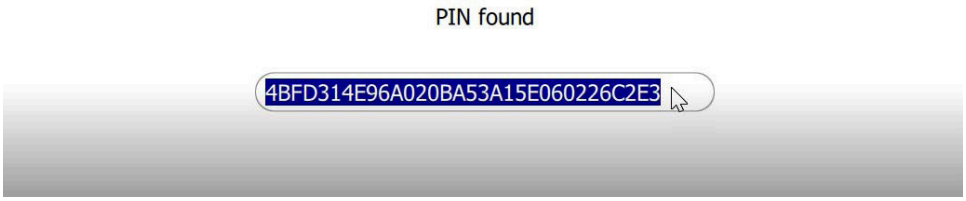
CAN H - pin 6
CAN L - pin 7



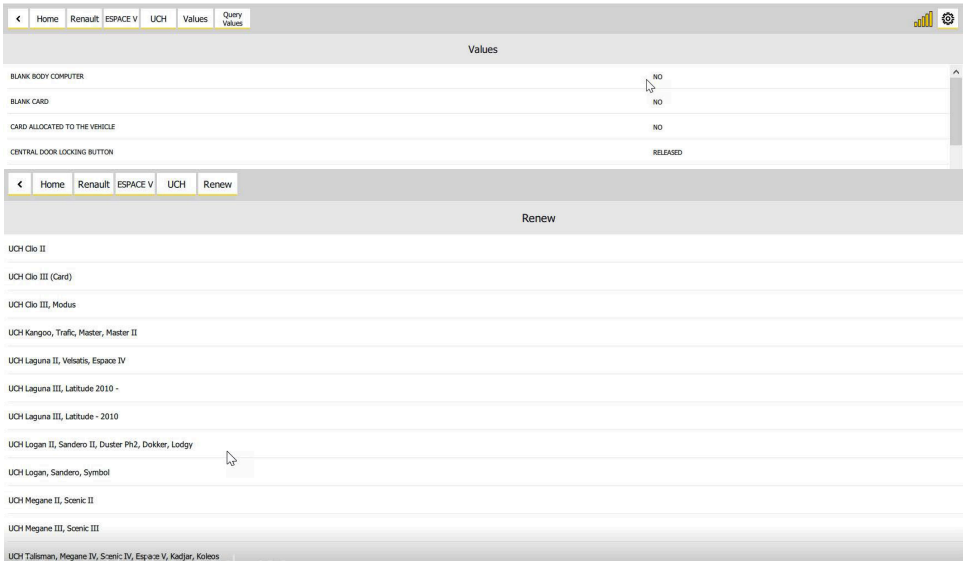
3.2. Renew - used for module replacement

Using Abrites diagnostics for Renault/ Dacia you can replace many modules. ECUs, UCH, ESLs, etc. Here is what you need to do, we will use the **UCH** for an example.

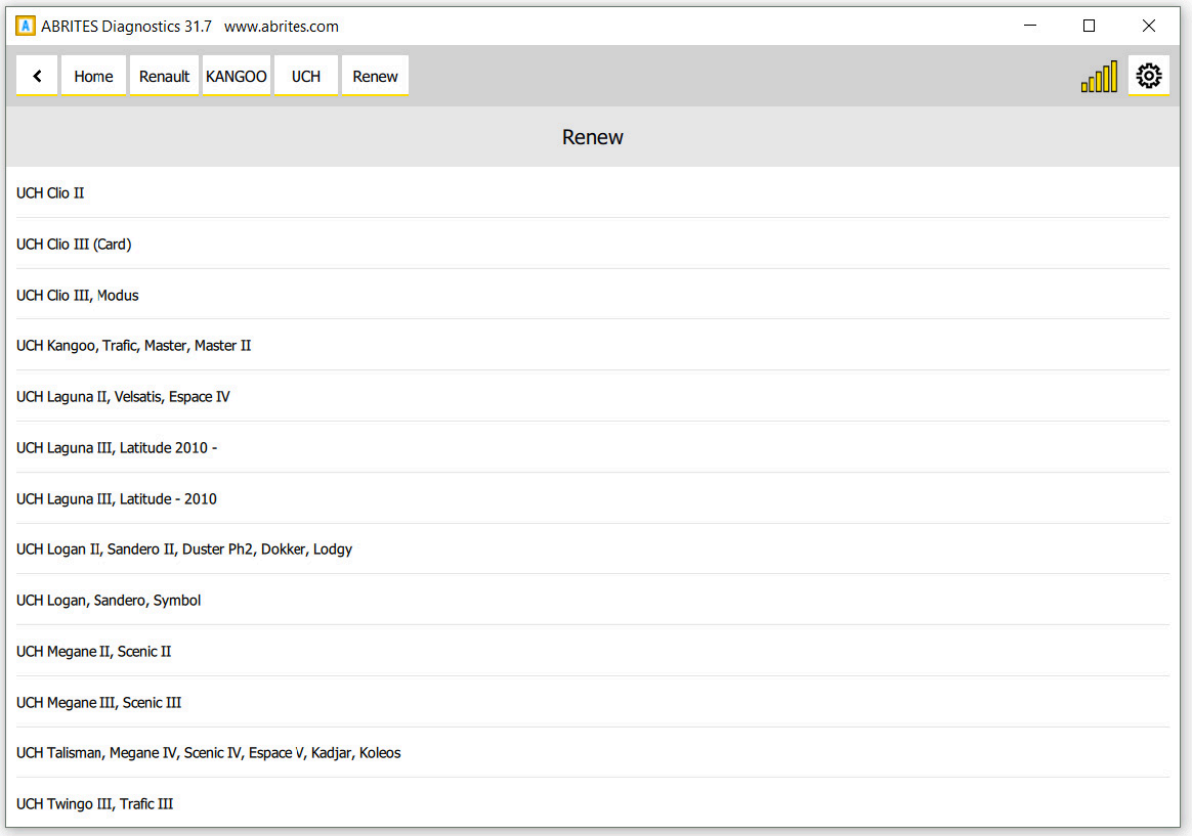
- Make sure you read the **PIN code** from the car and copy it as we have discussed above.

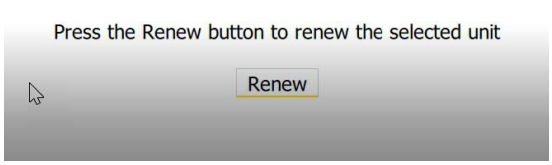


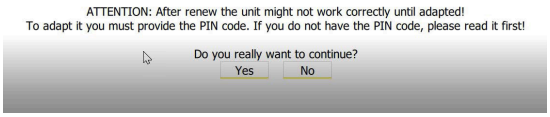
Go to "Live values and confirm that the module (in this case UCH) is virgin or not. If it is virgin - you can adapt it. If it is not virgin you can renew it. Blank body computer says NO, meaning that the UCH needs to be renewed:



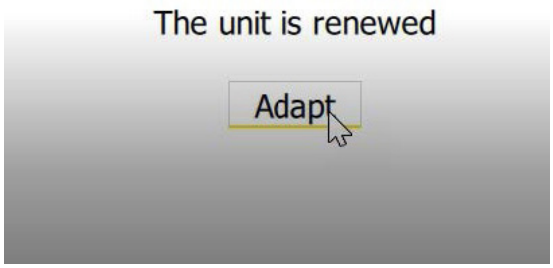
From the Renew menu we can select the UCH type and move forward:

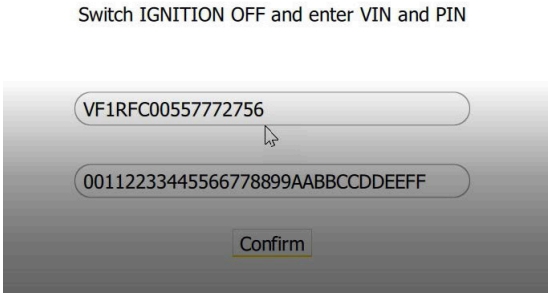






Make sure you have the PIN and VIN





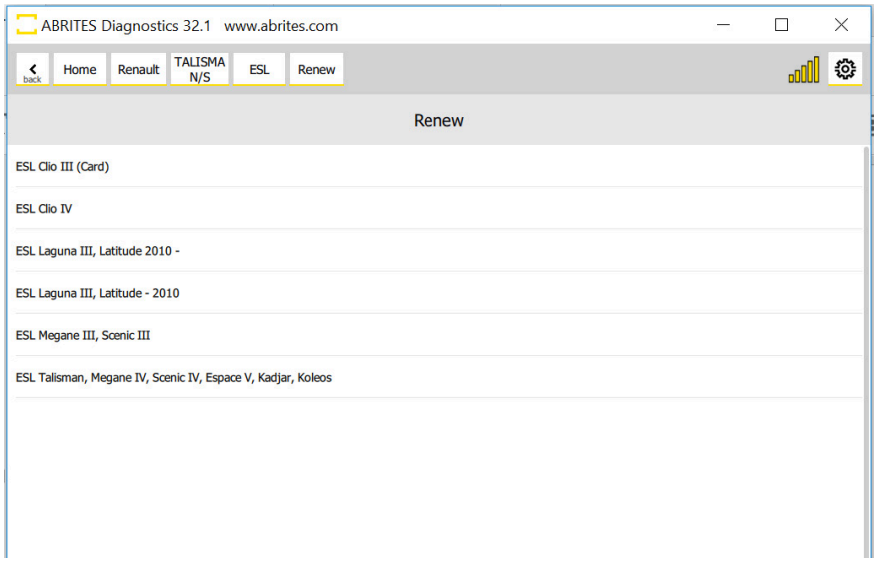
Once you confirm the needed values the UCH is adapted. **The procedure is the same for ECUs.**

ESL adaptation

The ESL adaptation procedure is done from the “Renew” special function.
It is not possible to renew the ESL via OBDII, you have to open it and erase the 24C04 EEPROM and then start the adaptation procedure.

- The models after 2008/2009 require the PIN code for the adaptation. Once the ESL’s EEPROM is erased you can select Renew > ESL > model > click “Adapt”.

Here is a list of the supported ESLs for adaptation:



You could always use our EM002 ESL plug&play emulator for Renault/Nissan instead. It supports all ESLs for all Renault/Nissan models.

The Abrites **EM002 emulator for Renault/Nissan** supports all ESL types (old 6 pins(Renault) , new 6 pins(Renault), 8 pins(Nissan).

OLD type ESL diagram(Renault):

Connection to old ESL :
1 - BLACK (-)
2 - RED(+)
3 - GREEN (CAN H)
4, 5 - NOT USED
6 - BLUE (CAN L)

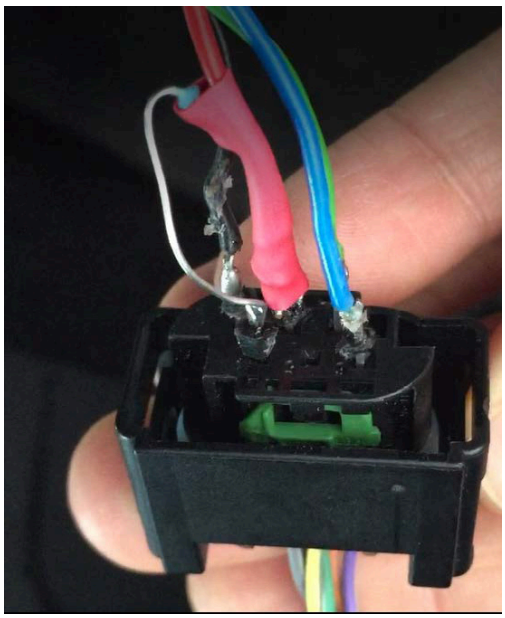
NEW type ESL diagram(Renault):

Connection to new ESL :
1 - BLACK (-)
2 - RED(+)
3 - GREEN (CAN H)
4 - Connect pin 4 of the ESL to pin 2 of the ESL through 100 Ohm resistor.
5 - NOT USED
6 - BLUE (CAN L)

8 pins ESL diagram(Nissan):

Connection to new ESL :
1 - BLACK (-)
2 - RED(+)
3 - GREEN (CAN H)
4, 5, 7 - NOT USED
6 - Connect pin 6 of the ESL to pin 2 of the ESL through 100 Ohm resistor.
8 - BLUE (CAN L)

Example new type ESL diagram(Renault):



*The white wire is used to update the emulator but at the moment there are no updates available.

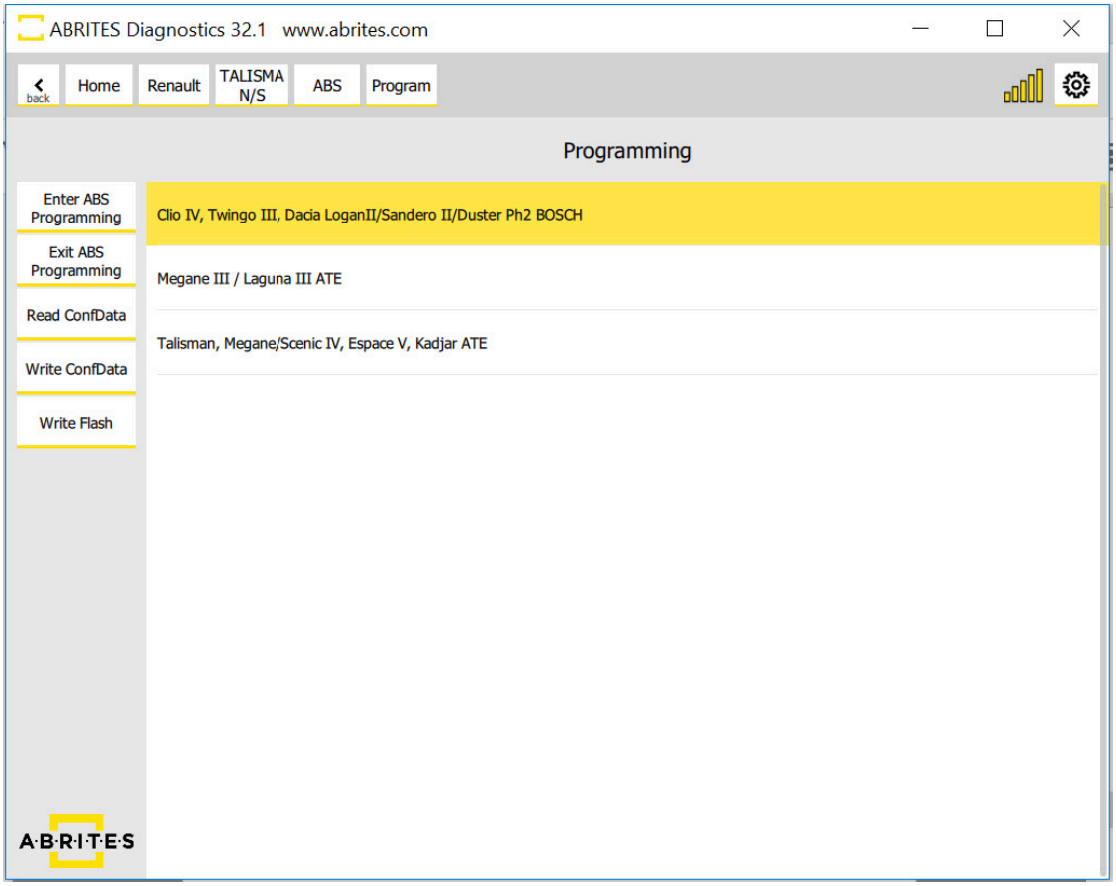
The Abrites **EM010 and EM011 emulators for Renault/Nissan** allow customers to simply remove the connector from the faulty ESL and plug it in to the emulator. Plug-and-play solution, no software required.

4. Programming

This special function allows you to read and write the the Flash and/or the ConfData of different modules such as ABS, Instrument panel, Hands Free unit, UCH.

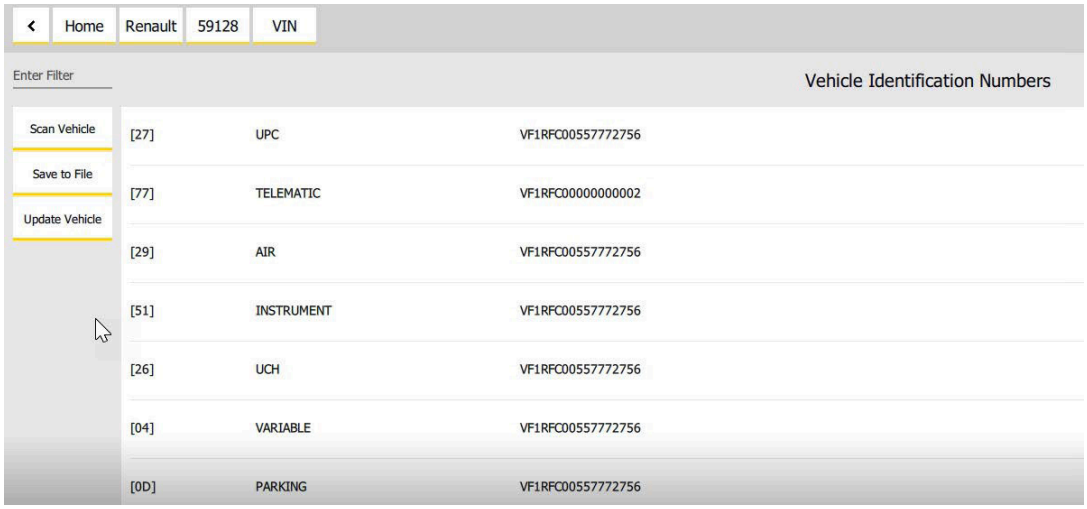
It is used for restoring modules and direct exchange of modules by transferring the EEPROM (and FLASH for Instrument panel for example) from the original unit to the other one.

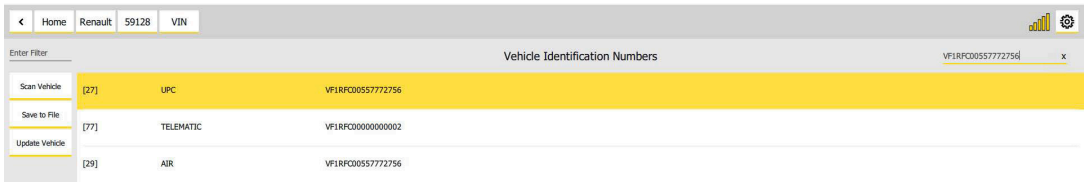
RESTORING OF UNITS: Whenever the software reads the UCH's flash for example a copy of the Flash is saved in the folder containing the log files of your Interface. Should the re-flashing procedure fail you can always use that file to restore the unit.



4.1. VIN exchange

In some cases you may need to update the VIN number in some modules. When you open the list of VINs you will be able to select the VIN and enter a new value to match to the car. Then simply save the changes and you are done.

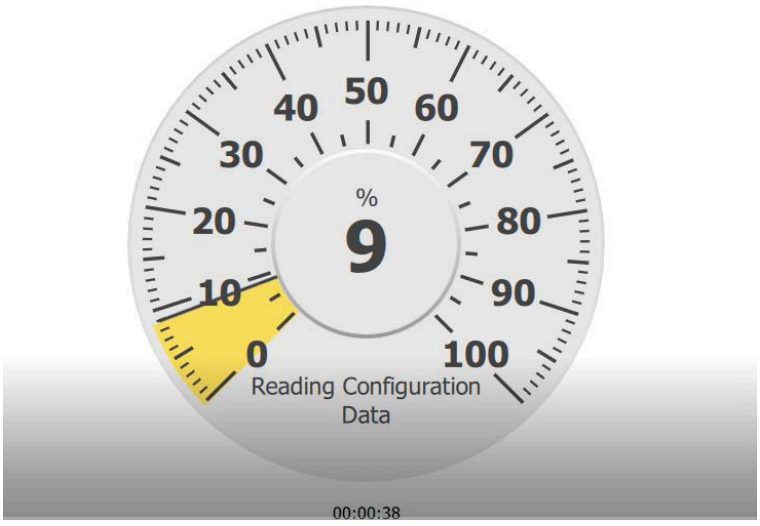




4.2. Other module exchange types. ABS etc.

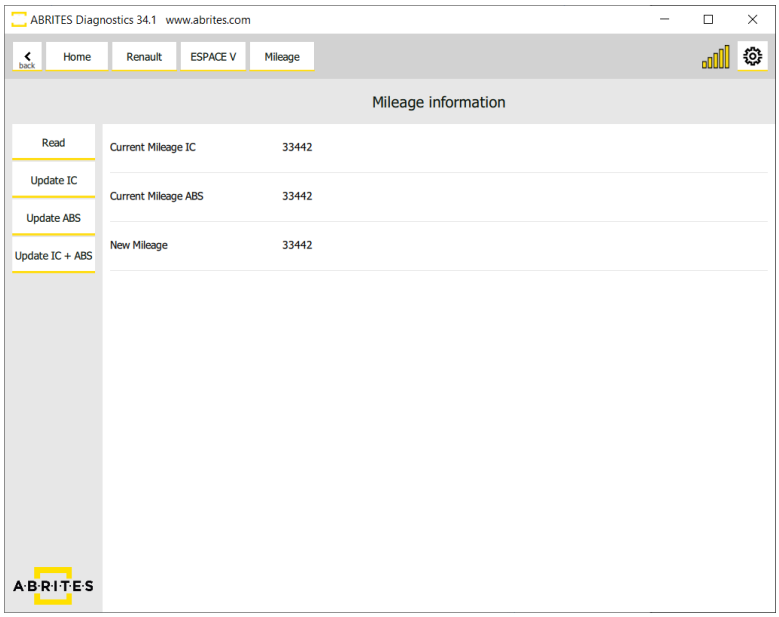
There is a different adaptation method for these modules. The procedures are mostly intuitive but you need to follow these guidelines:

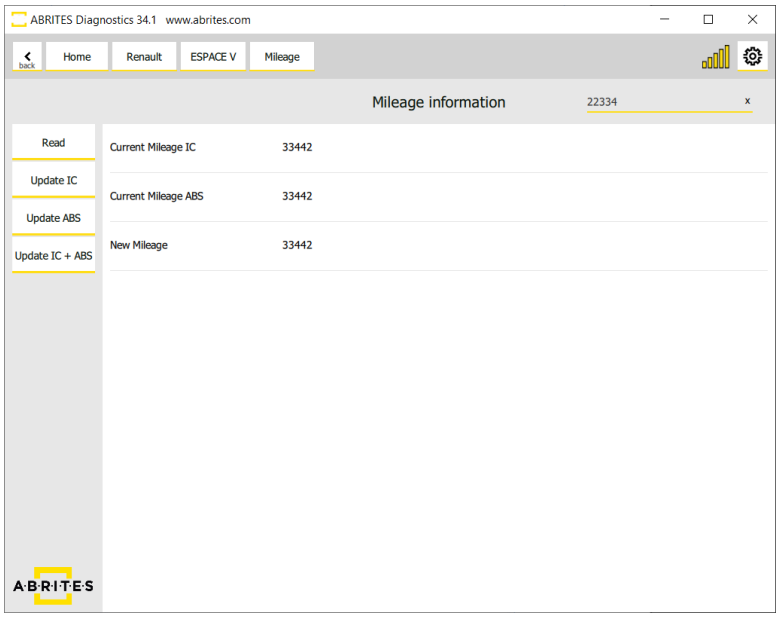
Select the ABS type, read the Conf Data (EEPROM), save it to a file and replace it to the donor ABS



5. “Mileage” Special Function

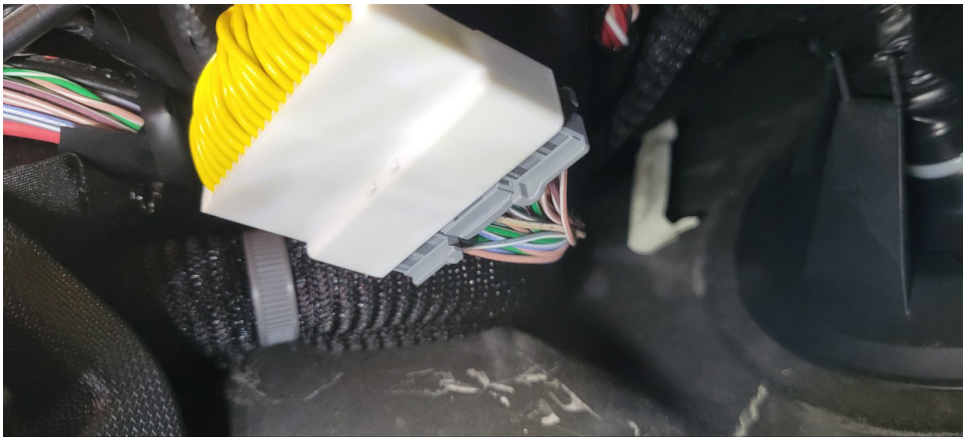
Renault software is very powerful tool for mileage calibration, dashboard replacement and ABS/ESC replacement. The software is very easy to use and user-friendly. Procedure is executed trough the “Mileage” special function and requires OBDII connection. Once the special function is open, you can read the mileage in the Instrument Cluster and the ABS module, and you can update the values in one of the units, or what is more usefull - in both modules simultaneously. When you click on the “New Mileage“ section, you will see a window at the top right corner appear, this is where you can type the new value, press enter and than press “update“.



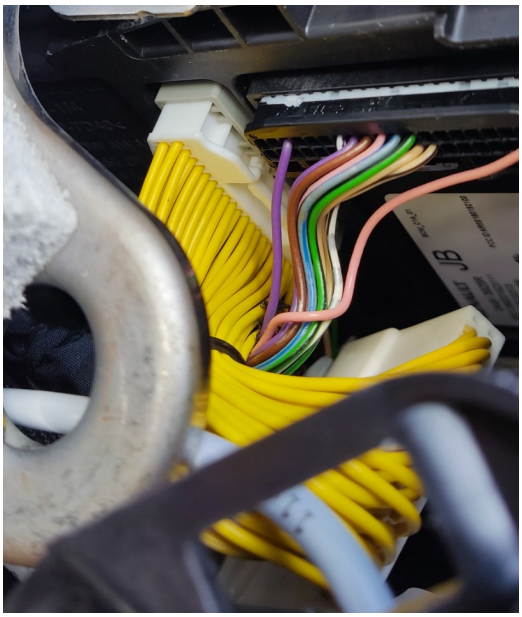


5.1 Clio V Mileage

Abrites software for Renault now supports mileage correction to Clio V and other models based on the same platform - Capture II and New Zoe. The procedure for these models requires OBDII connection, and direct connection to the BSI (UCH) unit using CB012 or CB021 (preferable) cable, and it is executed in the vehicle. The BSI (UCH) connector has to be removed, you can than connect the one side of the CB021 to this connector, and the other side of the CB021 to the BSI (UCH) socket. Pictures with connection examples from New Zoe, where the unit is located above the pedals can be seen below.



Below you may find picture with connections in Clio V, where the BSI (UCH) unit is located on the left hand side of the dashboard by the steering wheel.

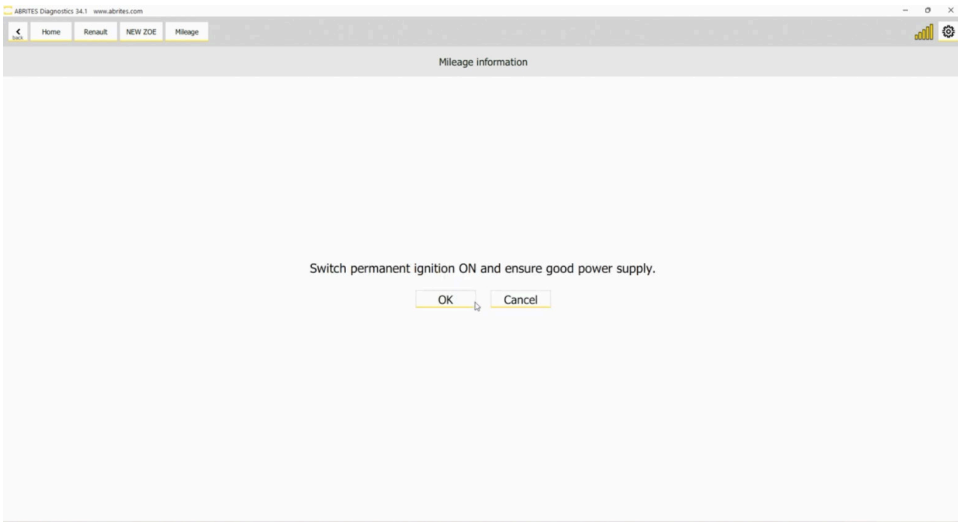


The only exception when you need to work by dump is when working with Analogue Cluster with mechanical dials

This platform of vehicles have 3 types of Instrument Clusters:

1. Analog dashboard - it is done by dump. You need to use ZN057 and the Abprog programmer.
2. Visteon Low Line - it is done via OBDII
3. High Line HD - it is done via OBDII, but the procedure re-flashes the unit.

- when doing the procedure to such a vehicle, you need to make sure you provide power supply to the vehicle. This procedure takes a few minuts longer.
- in this situation, the software would also suggest that you turn "permanent ignition on" - you could do that by switching the gears to N possition, and holding the start button for 5 seconds - see image below.



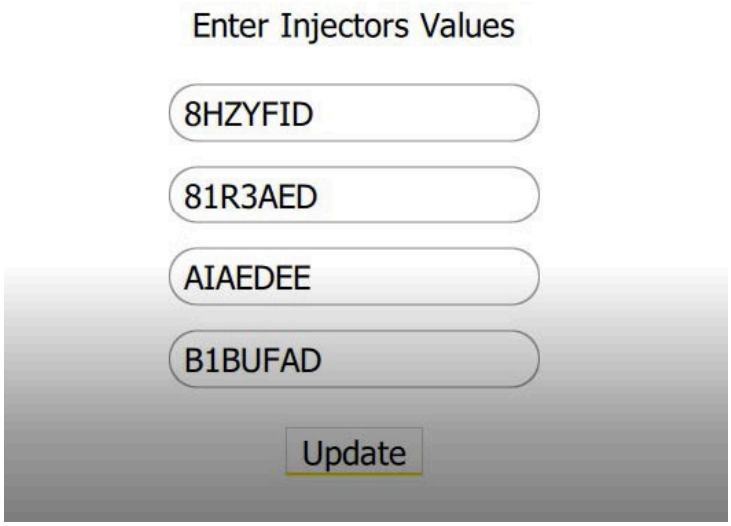
6. Other special functions

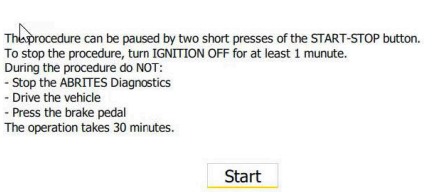
With the help of Abrites diagnostics for Renault/ Dacia you can perform many other functions. Here are just some of them:

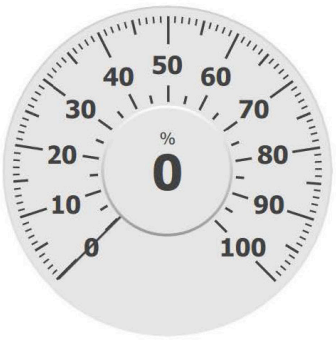
- DPF regeneration

Please make sure that the conditions are correct.

- Injector calibration







Airbag clear crash data via OBDII

The procedure is done from the “Renew” special function via OBDII followed by the “Clear crash” option. Here is a list of all supported units: