

EATON ADVANTAGE AUTOMATED CLUTCH CALIBRATION TOOL

User's Manual

Cojali S.L.

12/2/2020

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I. Initial installation

Latest software versions will be also available at the following web site:

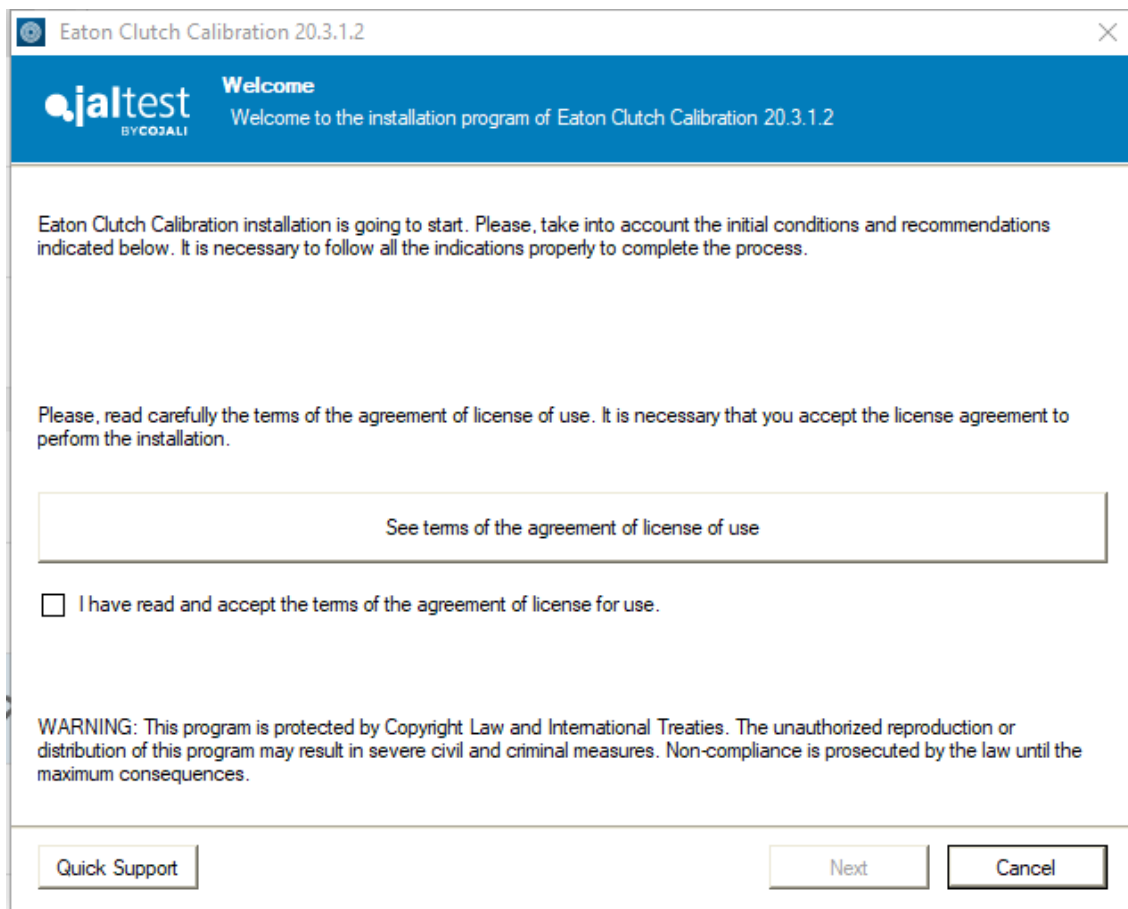
<https://www.jaltest.com/oemsolutions/eaton-advantage-automated-clutch-calibration-tool/>

The package will be downloaded as a zip file. It will be necessary to extract the files and launch the executable. Note: Administrator rights are needed.

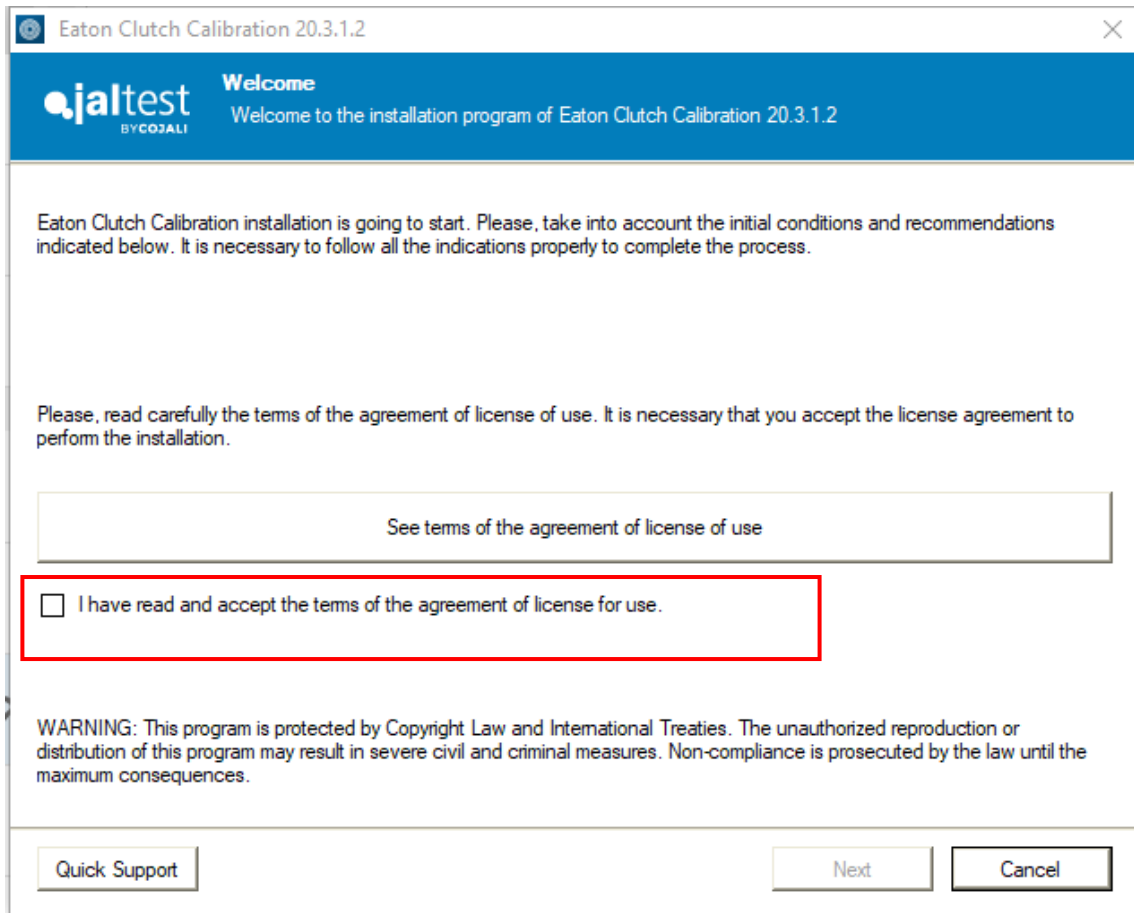
Name	Date modified	Type	Size
20_3_1_2_EatonClutchCalibration.zip	10/21/2020 11:10 AM	Compressed (zipp...	1,812,184 KB

Name	Date modified	Type	Size
20_3_1_2_EatonClutchCalibration_F1F	10/6/2020 7:18 PM	File	111,063 KB
20_3_1_2_EatonClutchCalibration_F2F	10/6/2020 7:18 PM	File	111,448 KB
20_3_1_2_EatonClutchCalibration_Install.exe	10/19/2020 9:53 AM	Application	643,950 KB
20_3_1_2_EatonClutchCalibration_Ref	10/14/2020 7:53 PM	File	943,345 KB
20_3_1_2_EatonClutchCalibration_S1F	10/14/2020 5:22 PM	File	1,145 KB
20_3_1_2_EatonClutchCalibration_S2F	10/14/2020 5:22 PM	File	1,401 KB

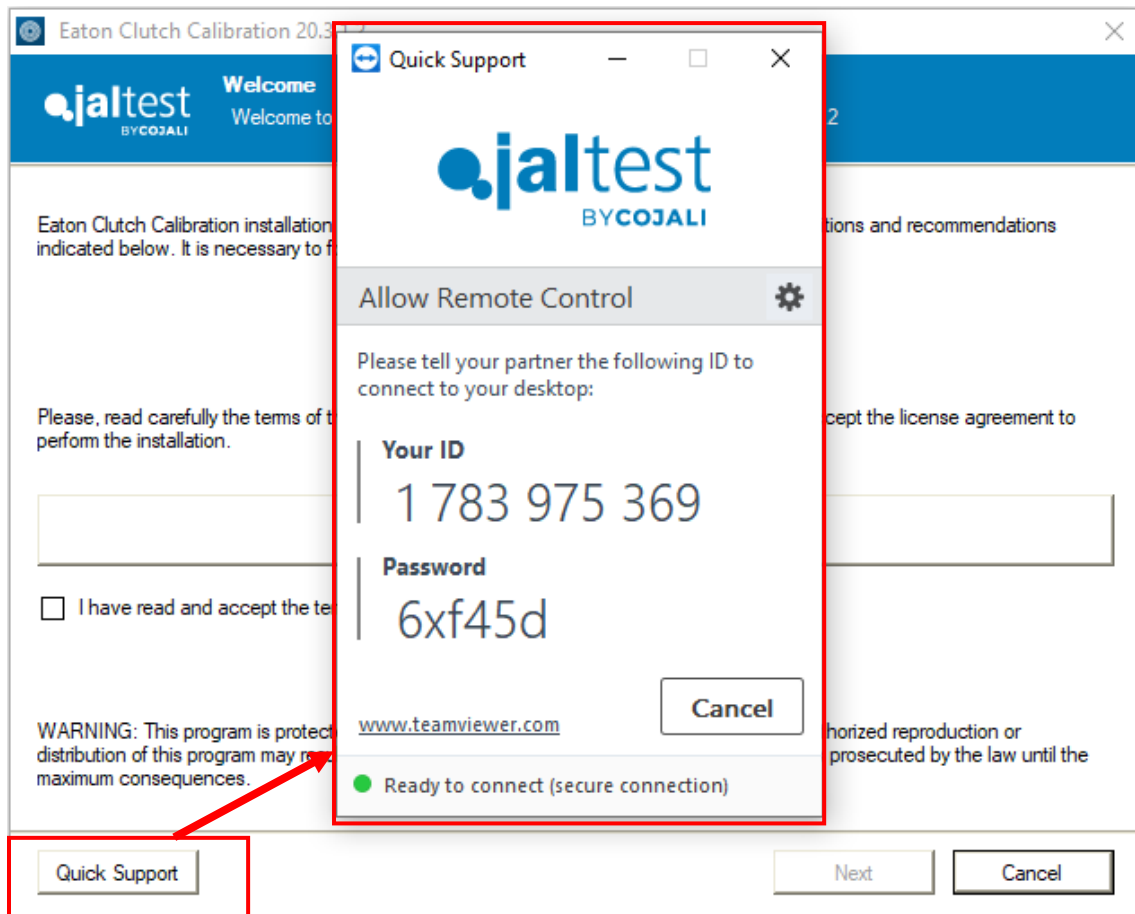
Open the executable (.exe) file.



Select the checkbox indicated below and click “Next”.

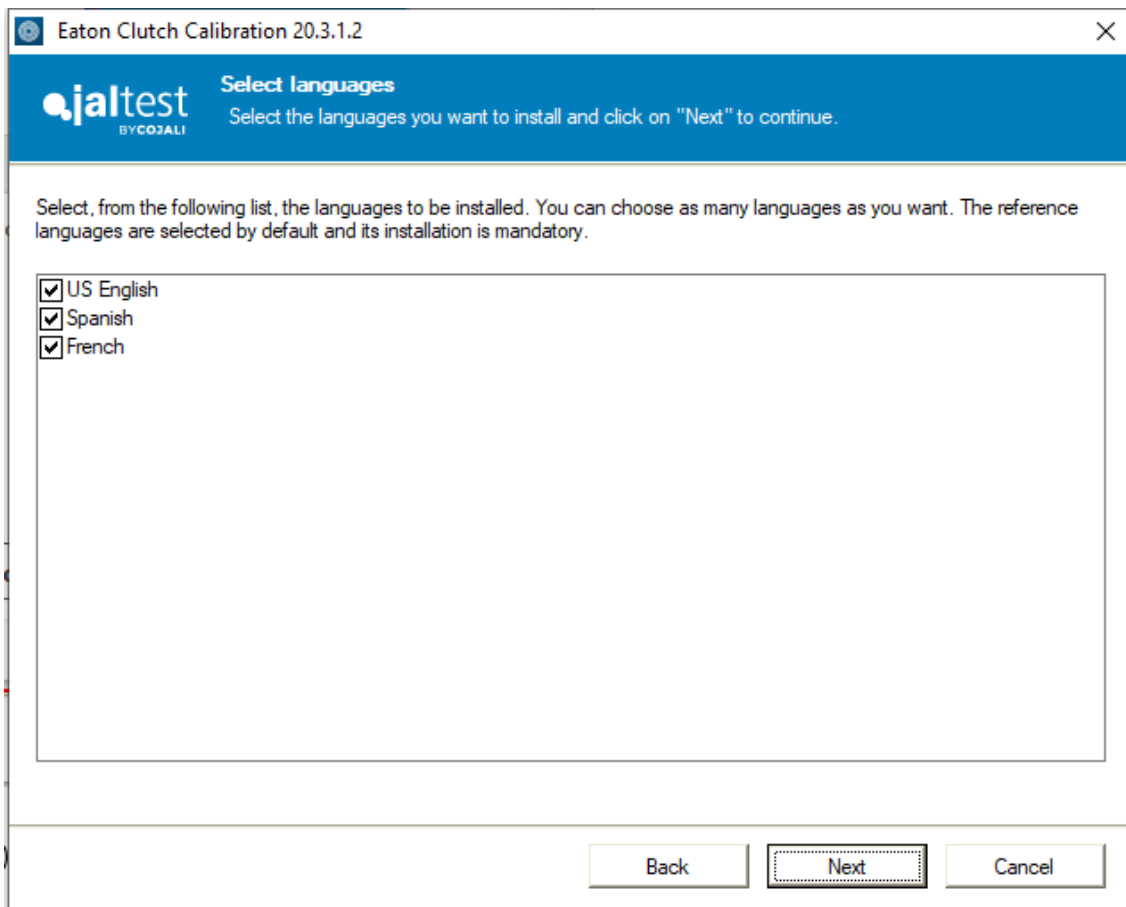


In case of need for assistance, click on “Quick Support” to request a Customer Support remote connection.



Select the languages you want to include. By default, US English, Spanish and French will be installed.

Click on "Next" to continue.

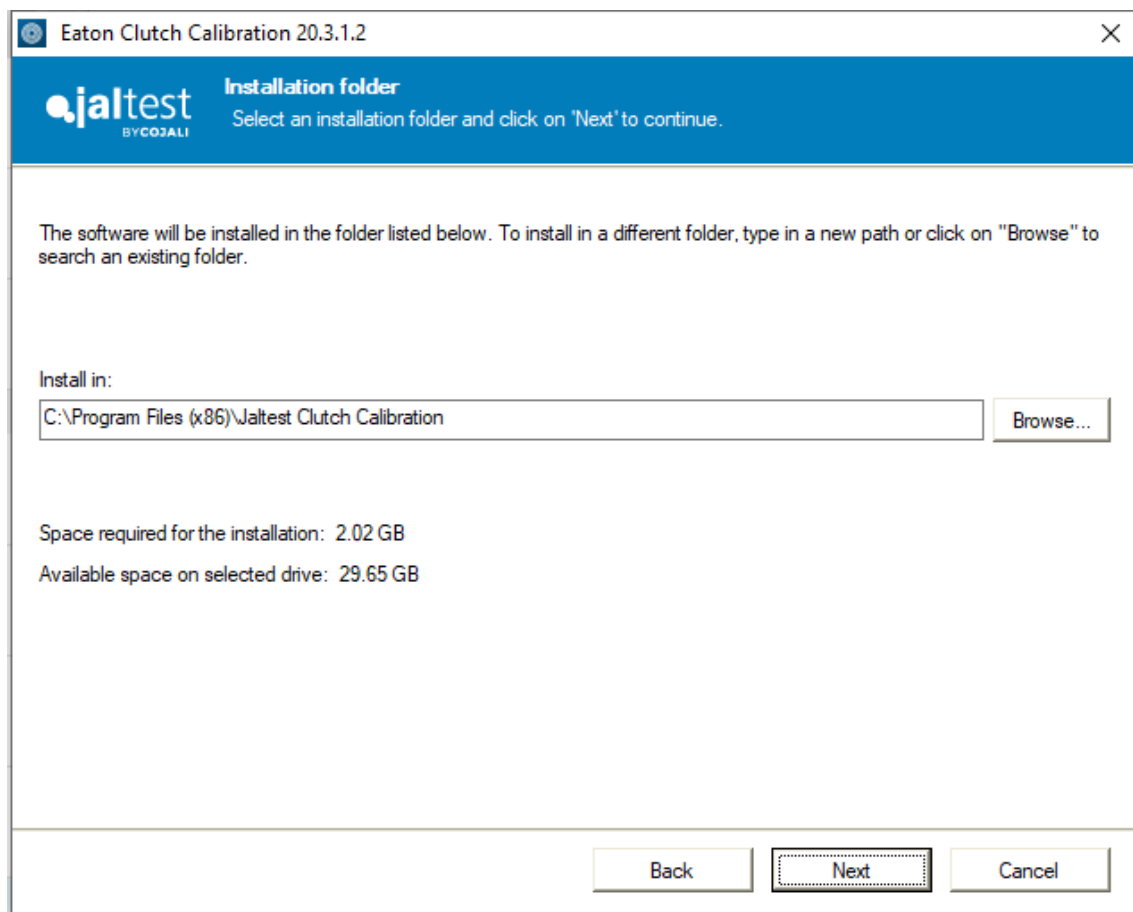


The setup indicates the disk space required for the installation. You will be notified in case there is not enough space.

By default, the software will be installed in the next folder. Just confirm by clicking "Next".

Keep this installation folder. APPCenter from Eaton Service Ranger will use that path by default.

Installation will not create shortcut icons on the desktop. The software will not appear in the start menu either.



For the next step, it is recommended to have an internet connection to complete the license activation and make sure the PC requirements are met.

In case a proxy is installed in the company organization, it can be configured at this point. That only happens in companies with very restrictive policies regarding internet (e.g., Army, Navy...). In those cases, the computer does not really have direct internet connection, it connects to a third computer to access the internet. That configuration must be managed by the IT Department of the company.

Do not confuse this with firewall restrictions.

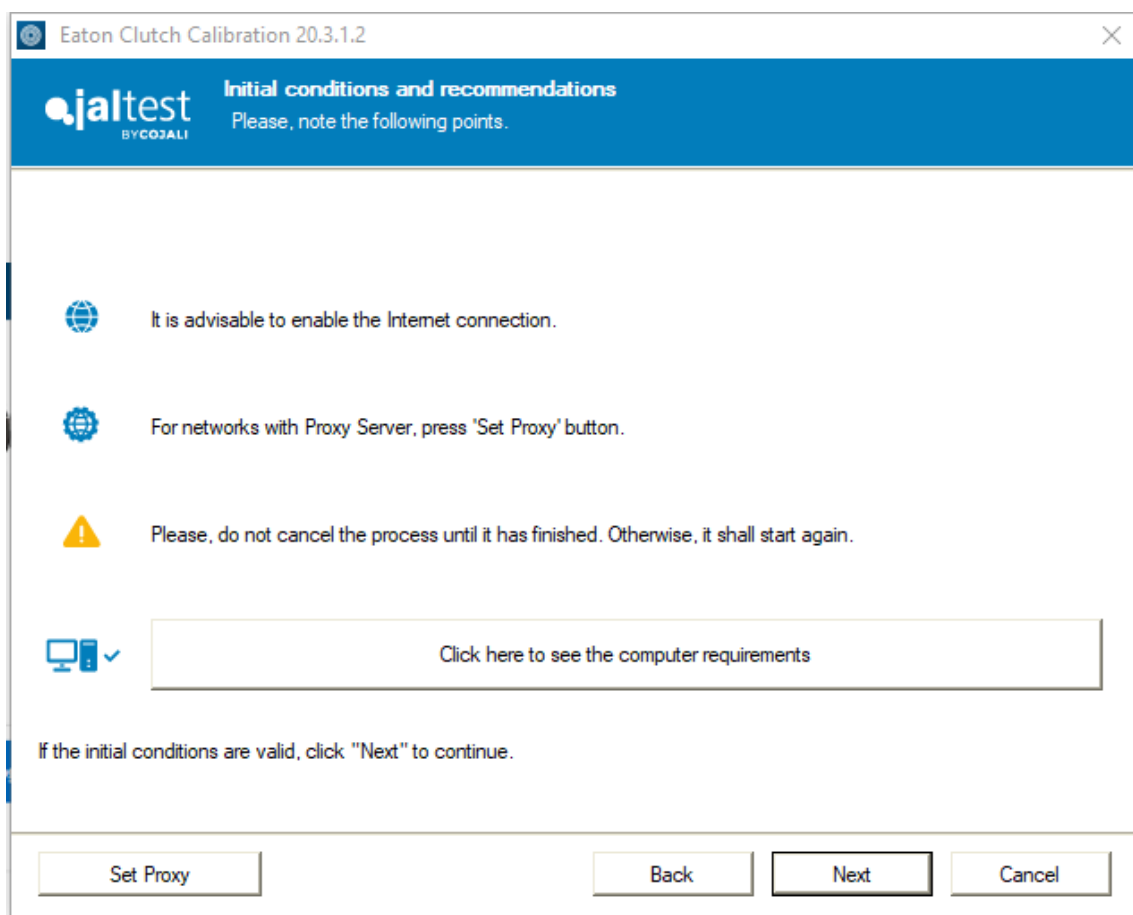
The IP address and port used by the software, for license requests and software downloads, are:

***.jaltest.com: 443

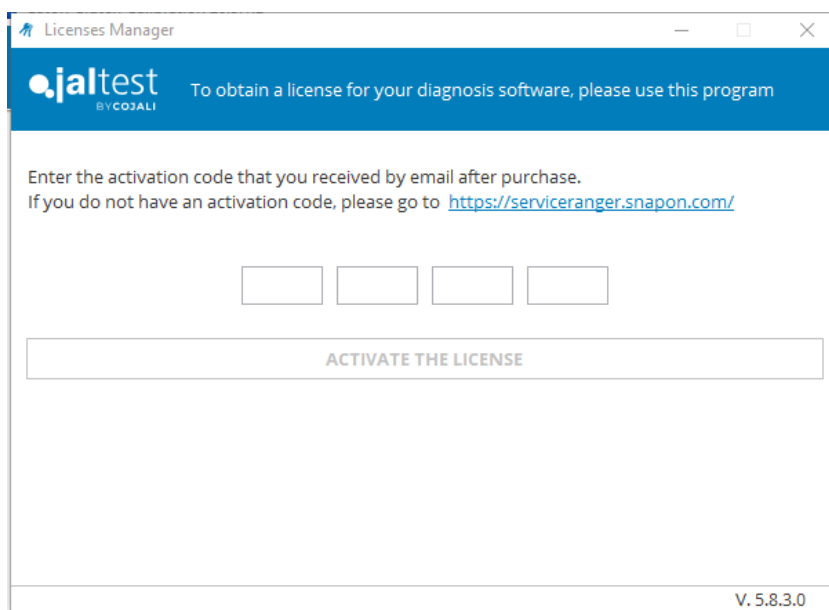
176.28.117.83:21

By default, most of the firewall configuration will admit these accesses without additional changes.

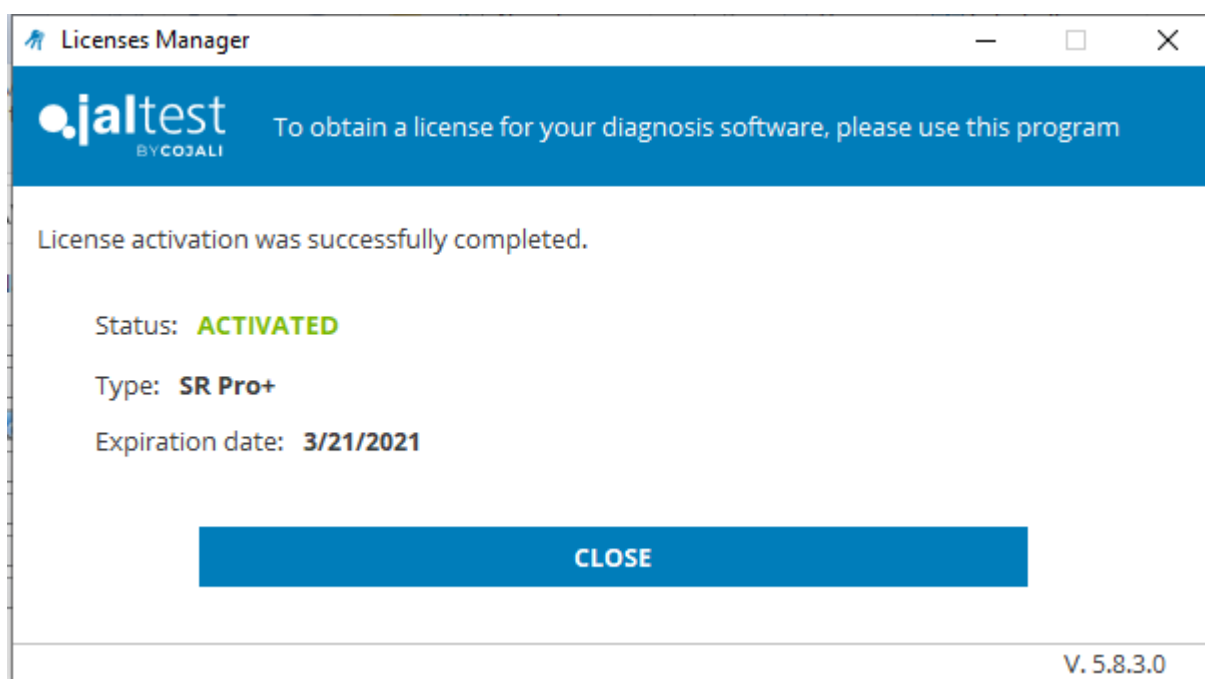
Click on "Next" to continue.

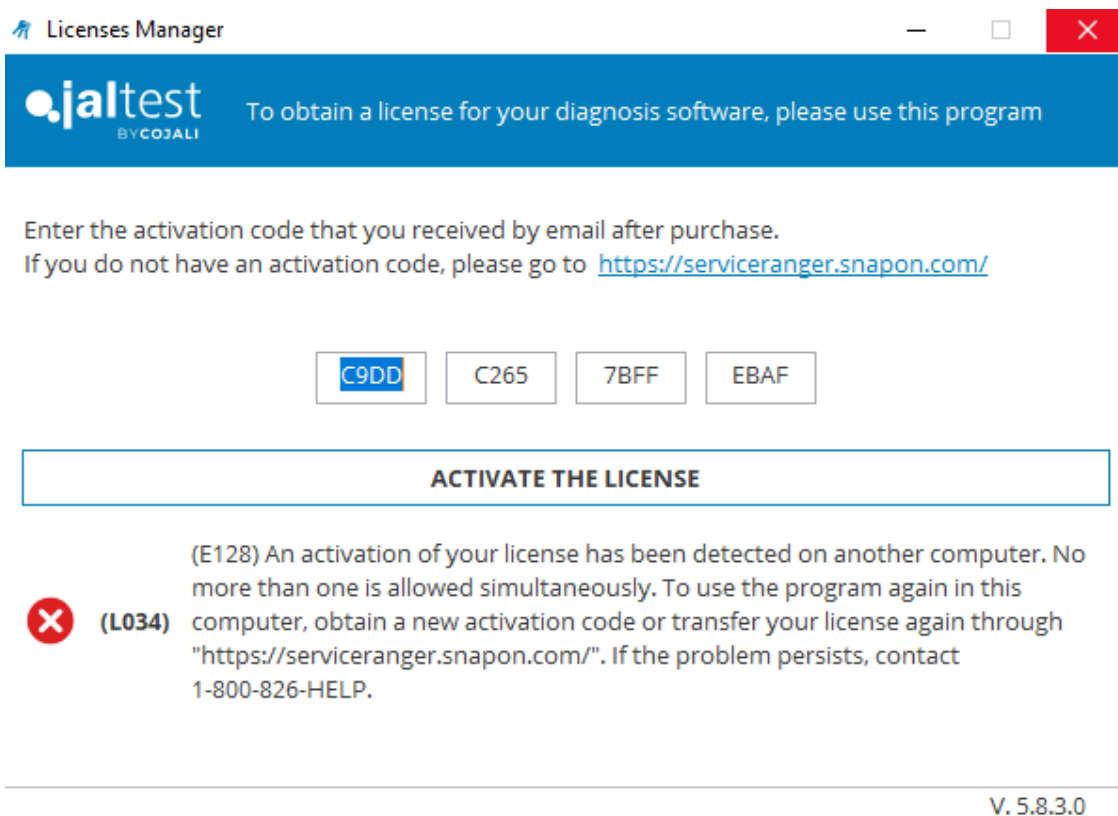
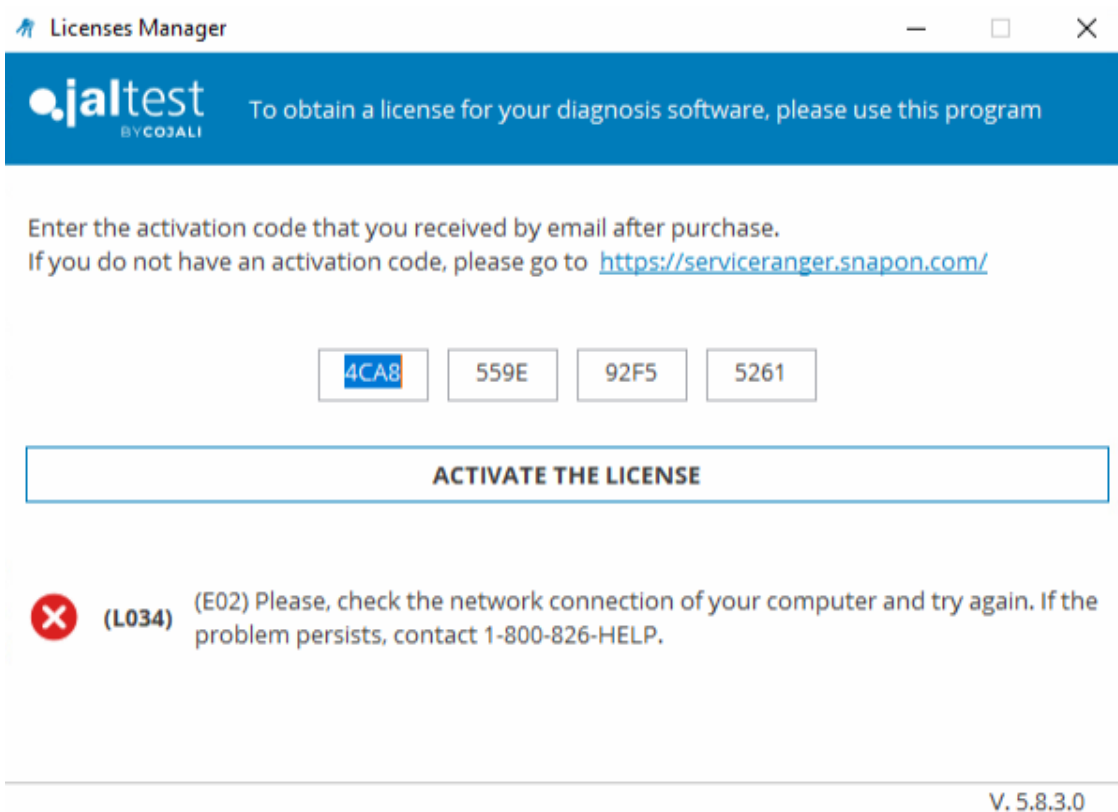


An Activation Code is required. Additionally, the setup will redirect you to Eaton's website to purchase a license in case the user has not previously purchased it.

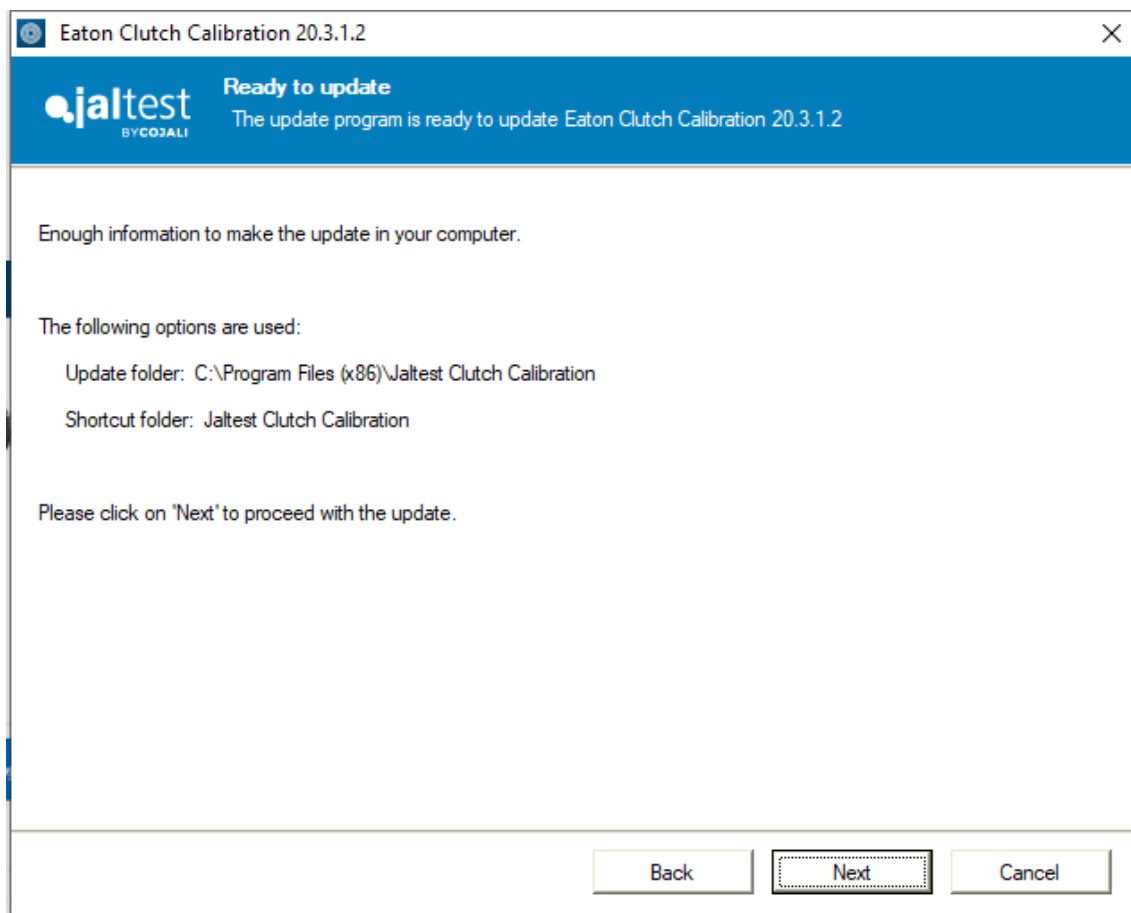


The Activation Code is confirmed and license is activated. In case of the process is not completed, an error message will appear to troubleshoot the issue. See second and third image below.

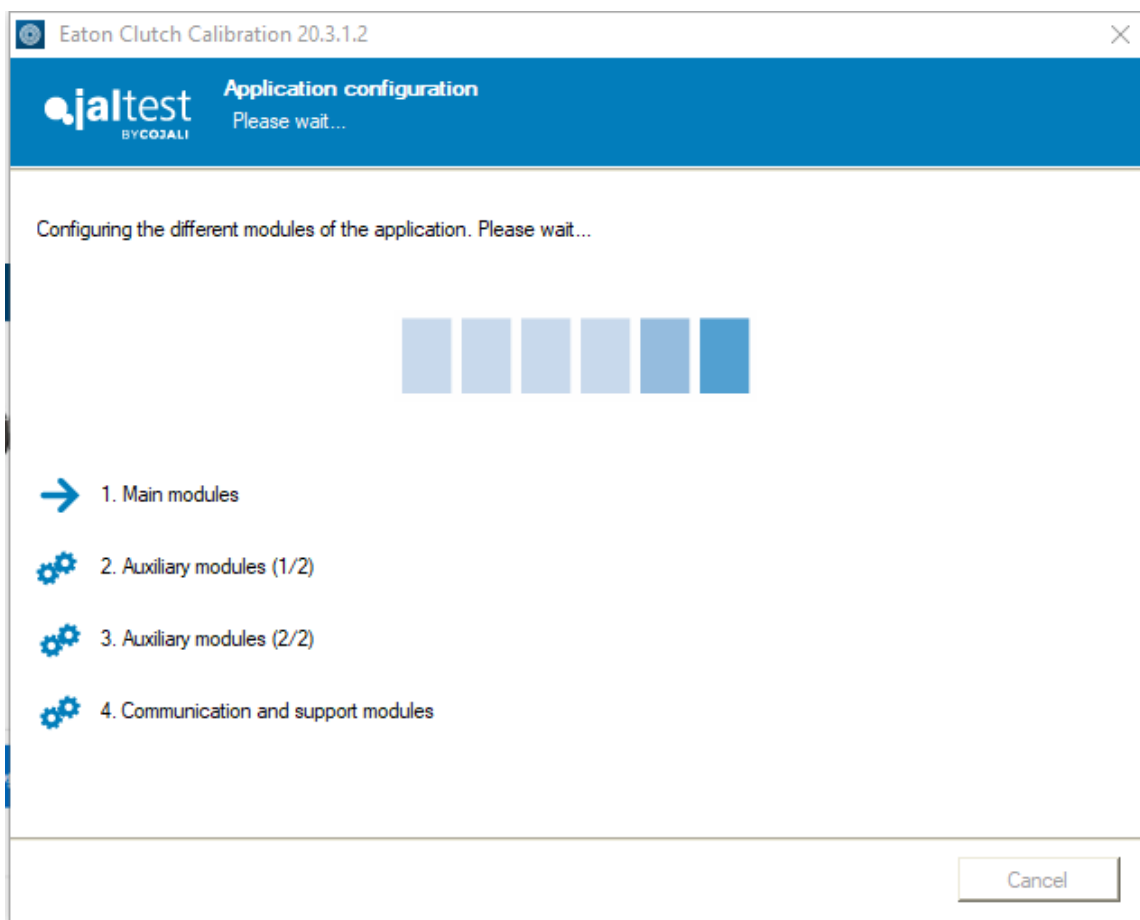




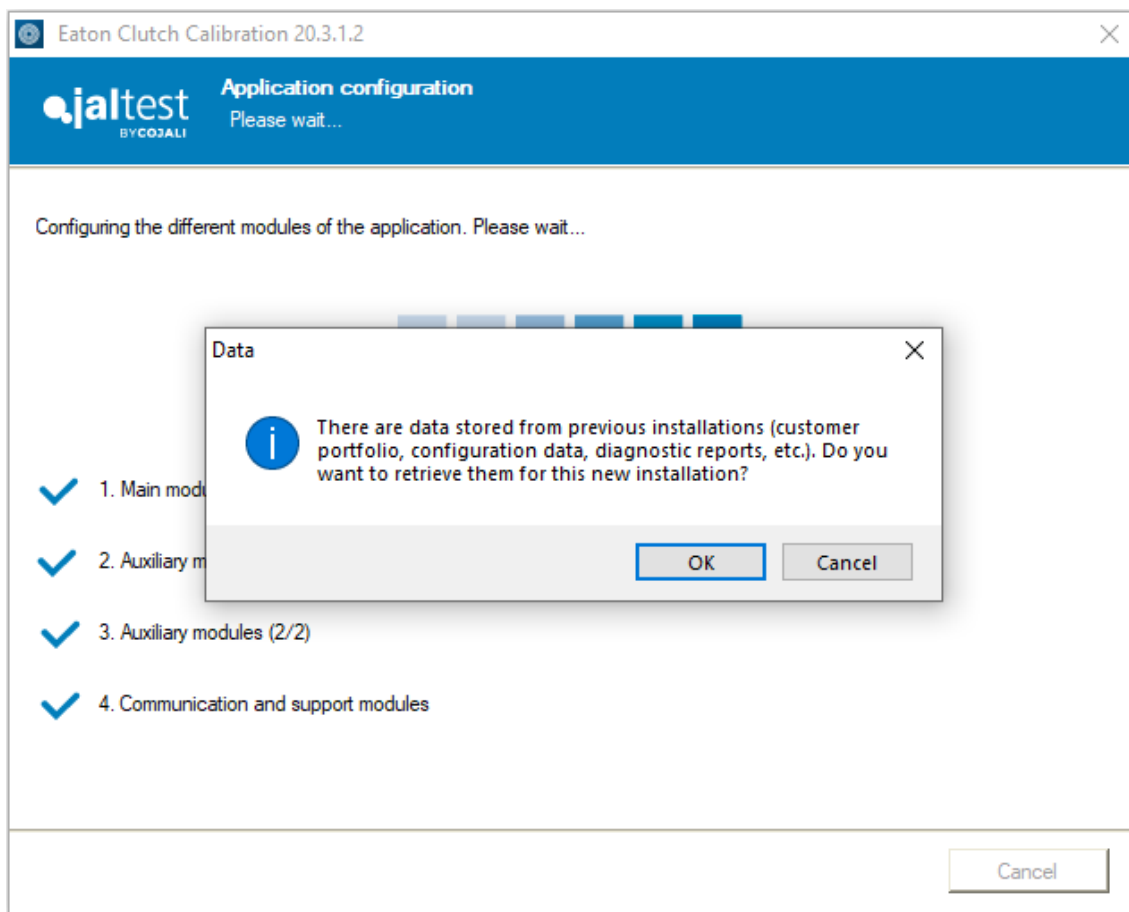
Click "Next" to start the deployment of the files.



Some automatic operations will be executed during the installation of the files. This should take less than five (5) minutes to complete.



In case a previous installation is detected, a popup message will appear offering to back-up the information.



“Product improvement” helps us to receive anonymous data which can be used to improve the product and user experience.

It is possible to uncheck the box, in case you do not wish to send the information. This can be modified at any point in time from the software, once installed. See the second picture below (option available in “Preferences” menu > “Configuration” section).

The screenshot shows a software window titled "Eaton Clutch Calibration 20.3.1.2". Inside, there is a blue header bar with the "jaltest BY COJALI" logo and the text "Product improvement Help us to improve the product." Below this, a paragraph explains that Jaltest can obtain data about program use and connection to send to the software manufacturer for product improvement. A link "See the terms and conditions of the privacy policy" is provided. A checkbox is checked, indicating acceptance of data submission. A "Next" button is at the bottom right.

Eaton Clutch Calibration 20.3.1.2

jaltest BY COJALI **Product improvement**
Help us to improve the product.

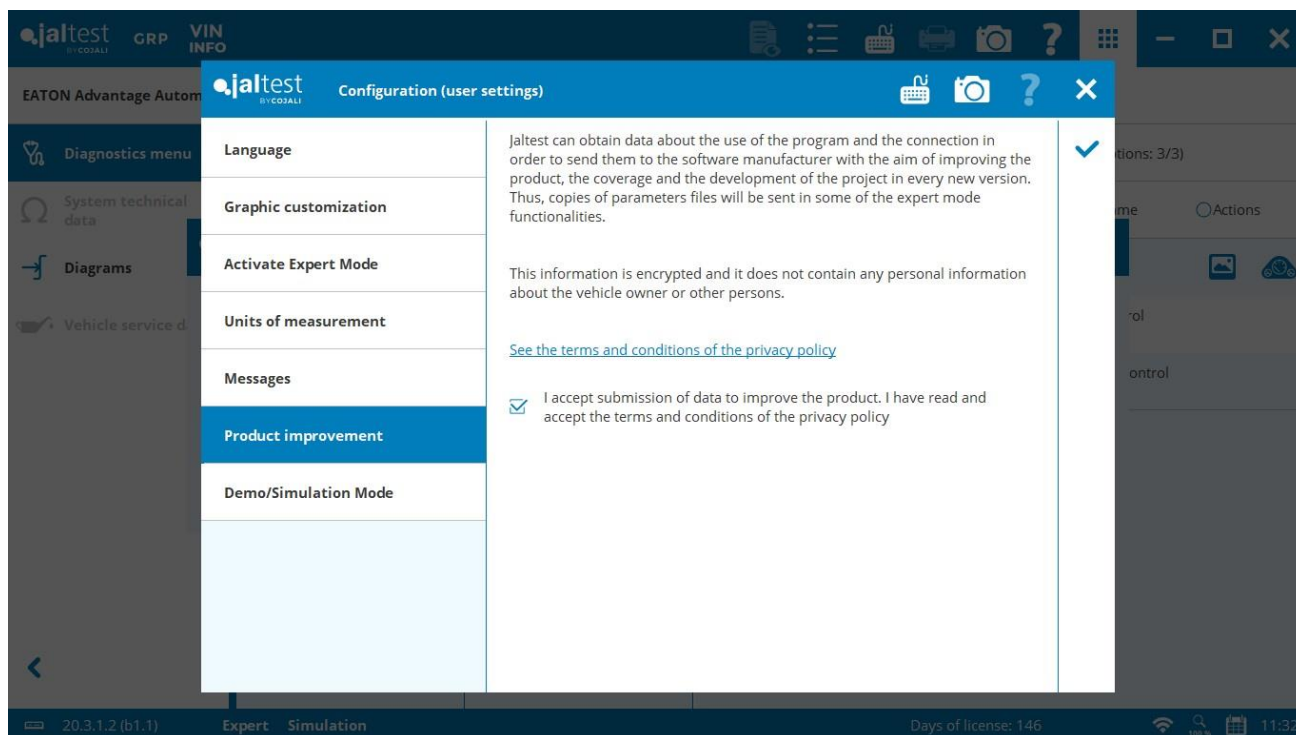
Jaltest can obtain data about the use of the program and the connection in order to send them to the software manufacturer with the aim of improving the product, the coverage and the development of the project in every new version. Thus, copies of parameters files will be sent in some of the expert mode functionalities.

This information is encrypted and it does not contain any personal information about the vehicle owner or other persons.

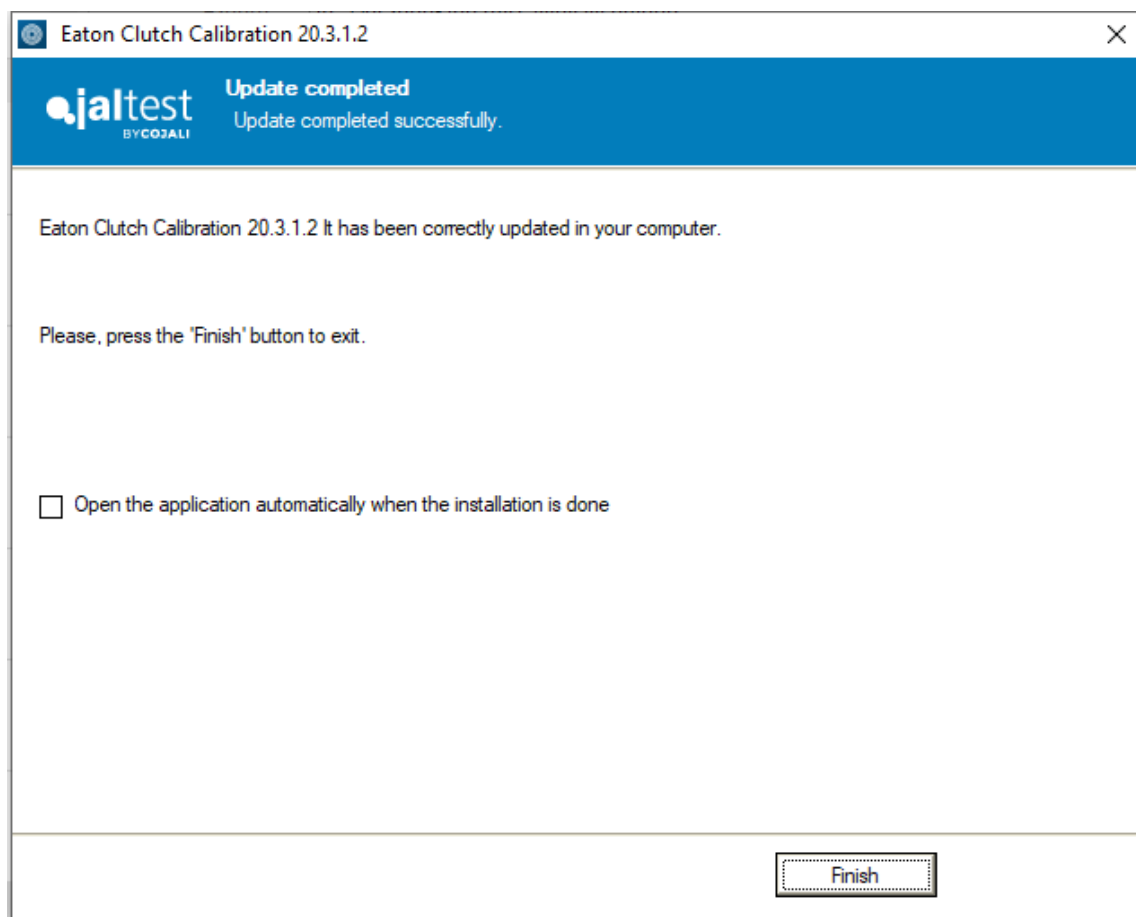
[See the terms and conditions of the privacy policy](#)

☒ I accept submission of data to improve the product. I have read and accept the terms and conditions of the privacy policy

Next



When the installation process is completed, this window will appear. Check the box and the software will open.



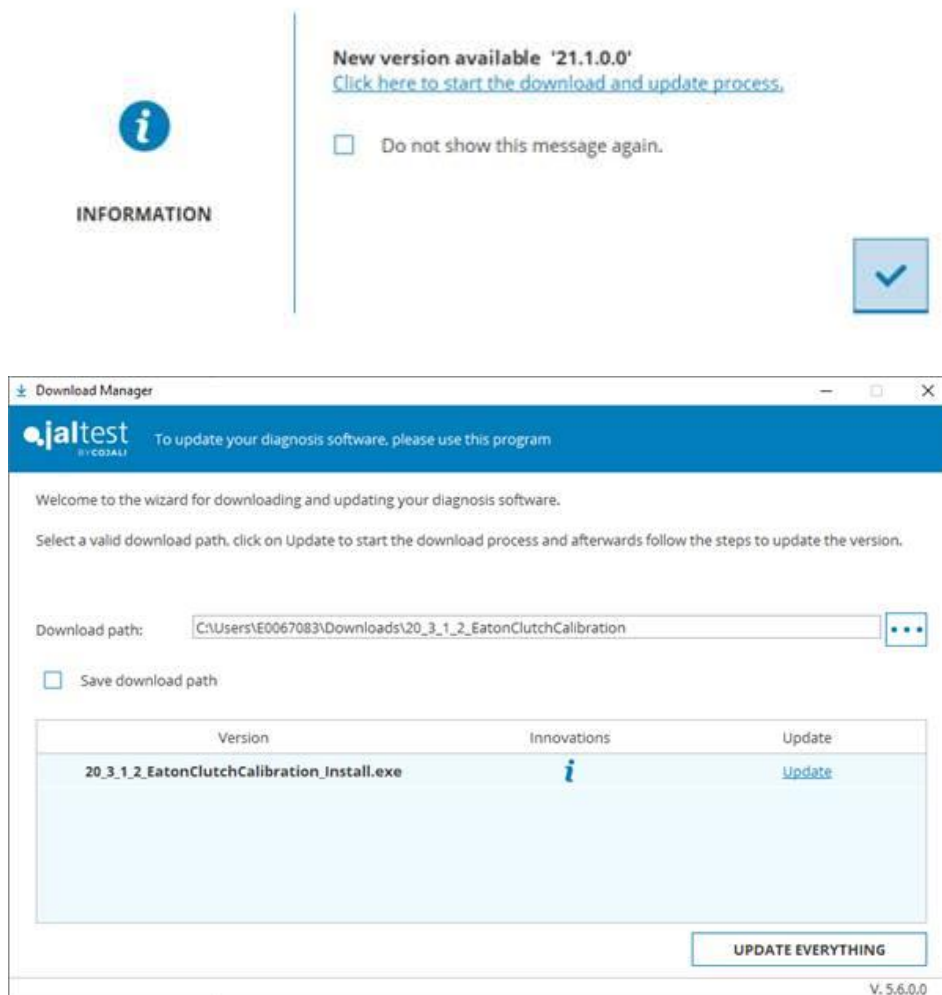
2. Updates

There will be a minimum of one (1) version per year, but probably the frequency of updates will be every four (4) months to update any of the software variants released by the manufacturers to the market. New functions and improvement may be added.

Latest version will be available at the next locations:

- 1) *Eaton Advantage Automated Clutch Calibration* will notify if a new version is available. By clicking on the hyperlink provided, a “Download Manager” (DM) will serve as a guide for the download process. Once downloaded, the DM will offer to install the new version.


This is the recommended option by Cojali.









- 2) Latest version will be also available at:

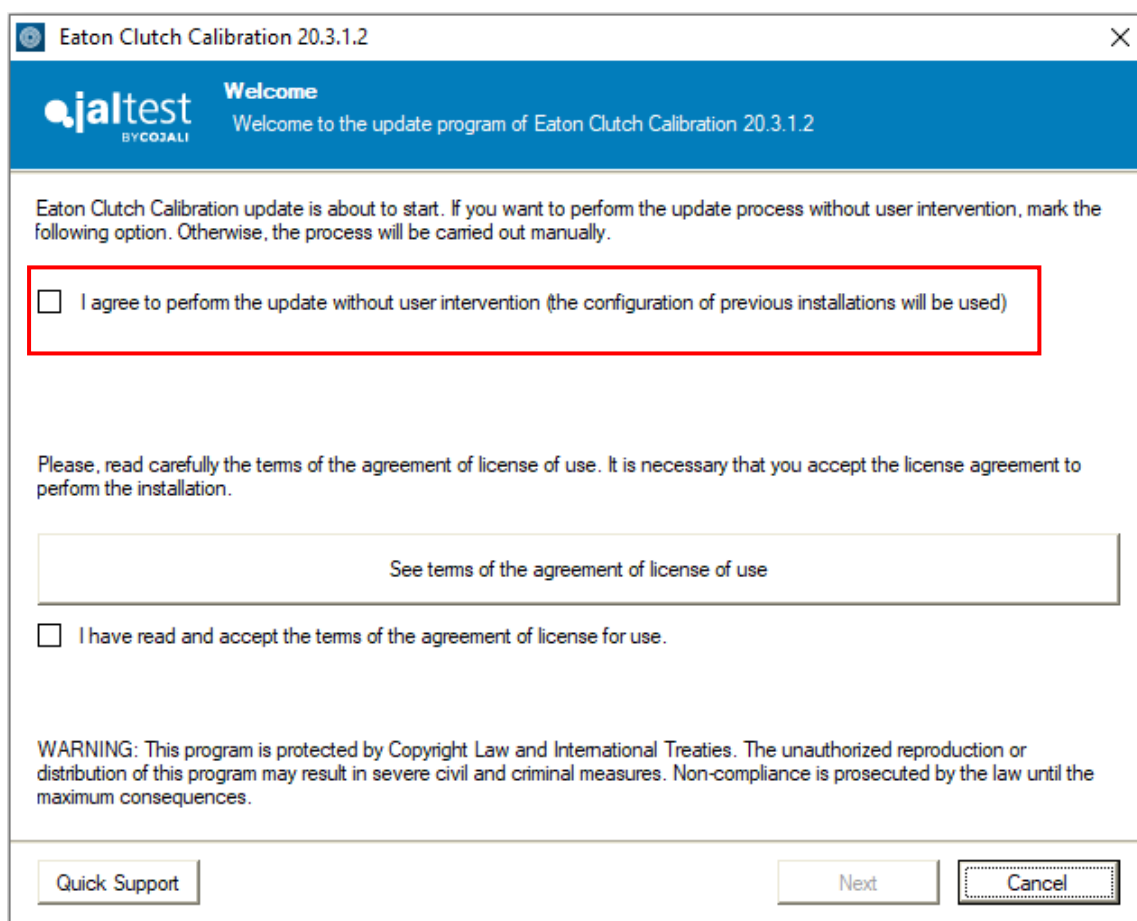
<https://www.jaltest.com/oemsolutions/eaton-advantage-automated-clutch-calibration-tool/>

The package will be downloaded as a zip file. It will be necessary to extract the files and launch the executable file.

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 20_3_1_2_EatonClutchCalibration_Ref	10/14/2020 7:53 PM	File	943,345 KB
 20_3_1_2_EatonClutchCalibration_S1F	10/14/2020 5:22 PM	File	1,145 KB
 20_3_1_2_EatonClutchCalibration_S2F	10/14/2020 5:22 PM	File	1,401 KB

Once the installation process has started, the following window will appear (for both options):



Eaton Clutch Calibration 20.3.1.2

jaltest BY COJALI **Welcome**
Welcome to the update program of Eaton Clutch Calibration 20.3.1.2

Eaton Clutch Calibration update is about to start. If you want to perform the update process without user intervention, mark the following option. Otherwise, the process will be carried out manually.

☐ I agree to perform the update without user intervention (the configuration of previous installations will be used)

Please, read carefully the terms of the agreement of license of use. It is necessary that you accept the license agreement to perform the installation.

[See terms of the agreement of license of use](#)

☐ I have read and accept the terms of the agreement of license for use.

WARNING: This program is protected by Copyright Law and International Treaties. The unauthorized reproduction or distribution of this program may result in severe civil and criminal measures. Non-compliance is prosecuted by the law until the maximum consequences.

[Quick Support](#) [Next](#) [Cancel](#)

It is highly recommended to check the first option. After that, it is necessary to confirm that an active internet connection is available to check the status of the license during the process and accept the terms of the License Agreement. Click "Next" to continue.

Eaton Clutch Calibration 20.3.1.2

jaltest BY COJALI **Welcome**
Welcome to the update program of Eaton Clutch Calibration 20.3.1.2

Eaton Clutch Calibration update is about to start. If you want to perform the update process without user intervention, mark the following option. Otherwise, the process will be carried out manually.

☒ I agree to perform the update without user intervention (the configuration of previous installations will be used)

☒ I confirm that the internet connection of the computer is working properly.

Please, read carefully the terms of the agreement of license of use. It is necessary that you accept the license agreement to perform the installation.

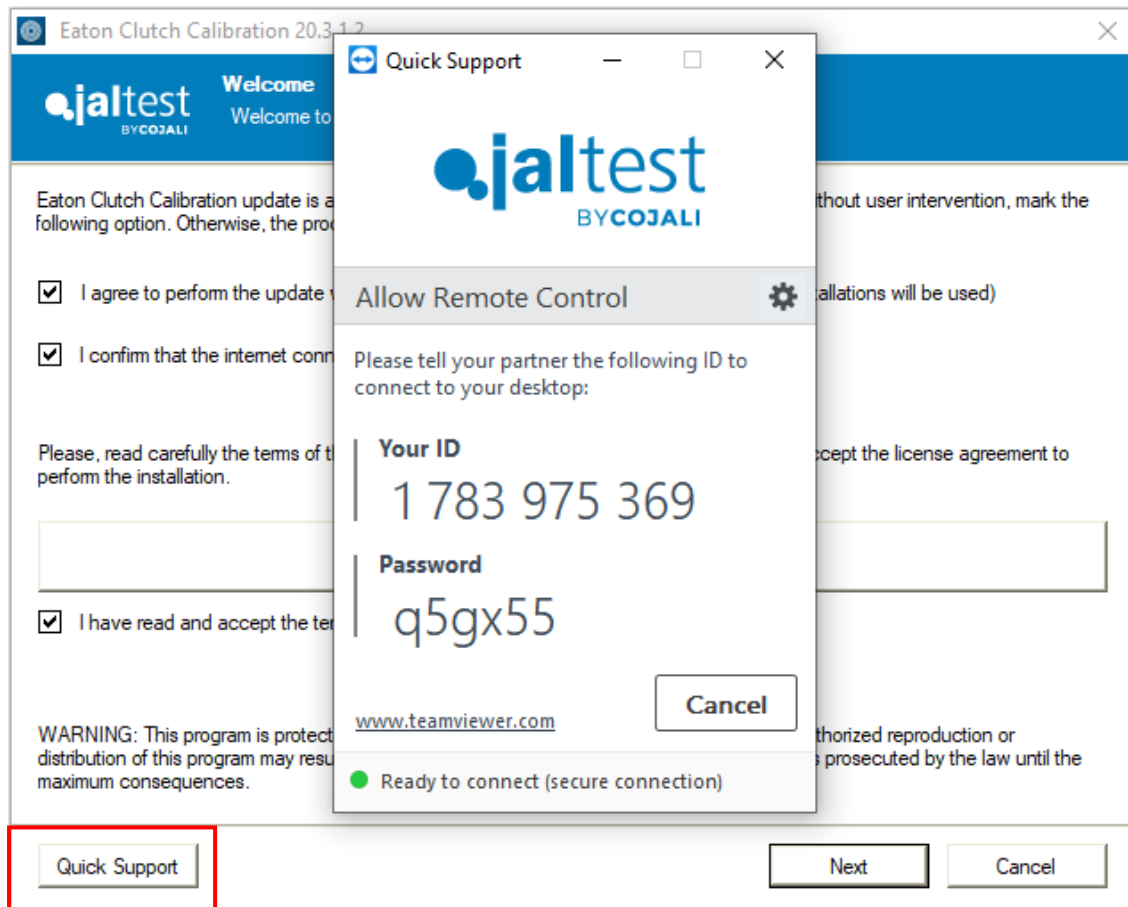
[See terms of the agreement of license of use](#)

☒ I have read and accept the terms of the agreement of license for use.

WARNING: This program is protected by Copyright Law and International Treaties. The unauthorized reproduction or distribution of this program may result in severe civil and criminal measures. Non-compliance is prosecuted by the law until the maximum consequences.

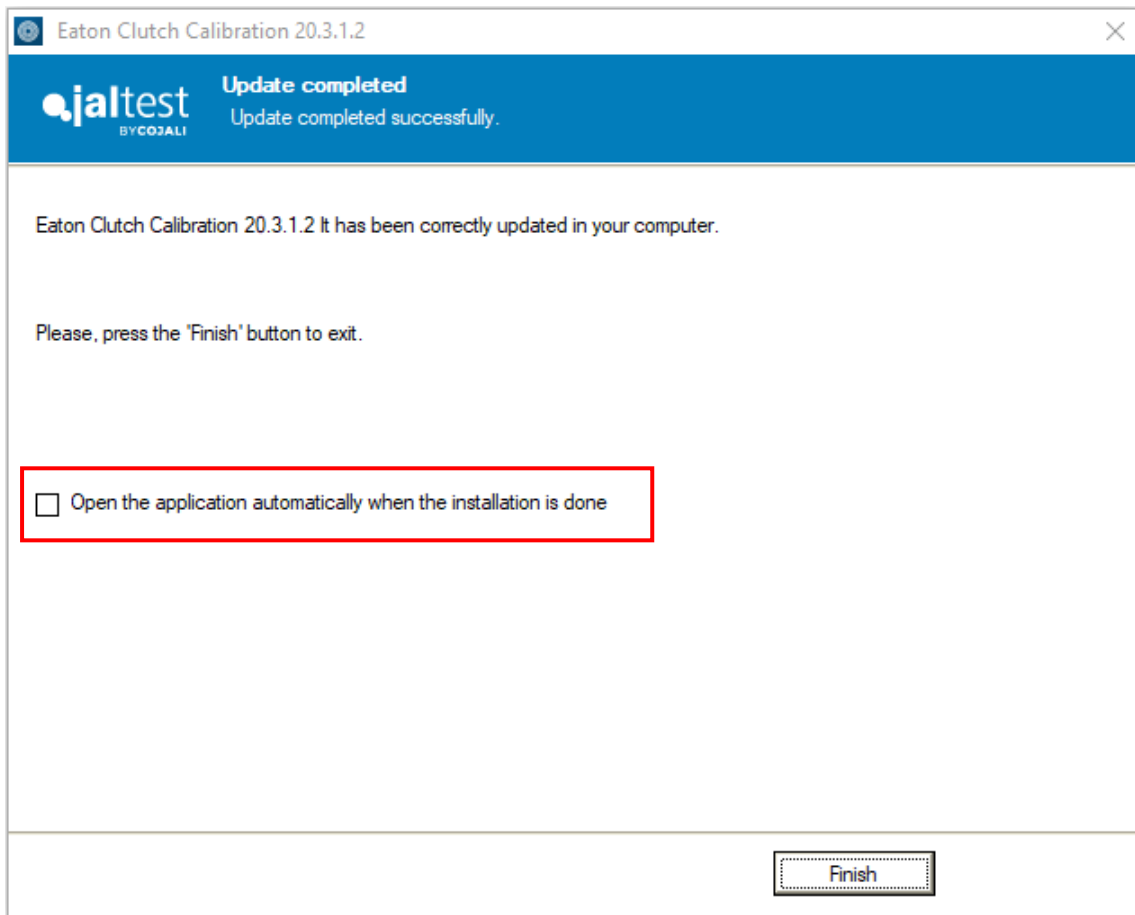
[Quick Support](#) [Next](#) [Cancel](#)

In case of need for assistance, click on “Quick Support” to request a Customer Support remote connection.

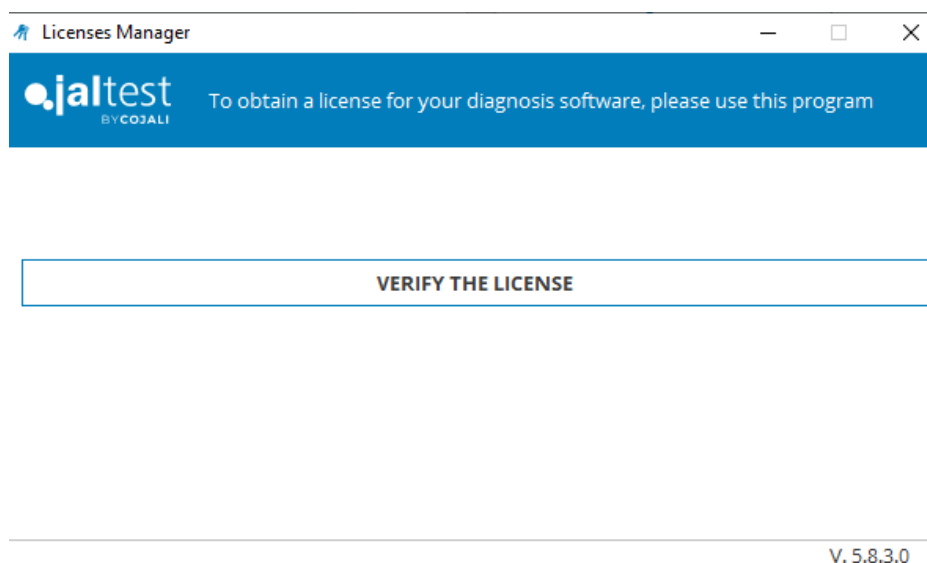


The process will take less than five (5) minutes. Time will vary depending on the PC configuration and performance.

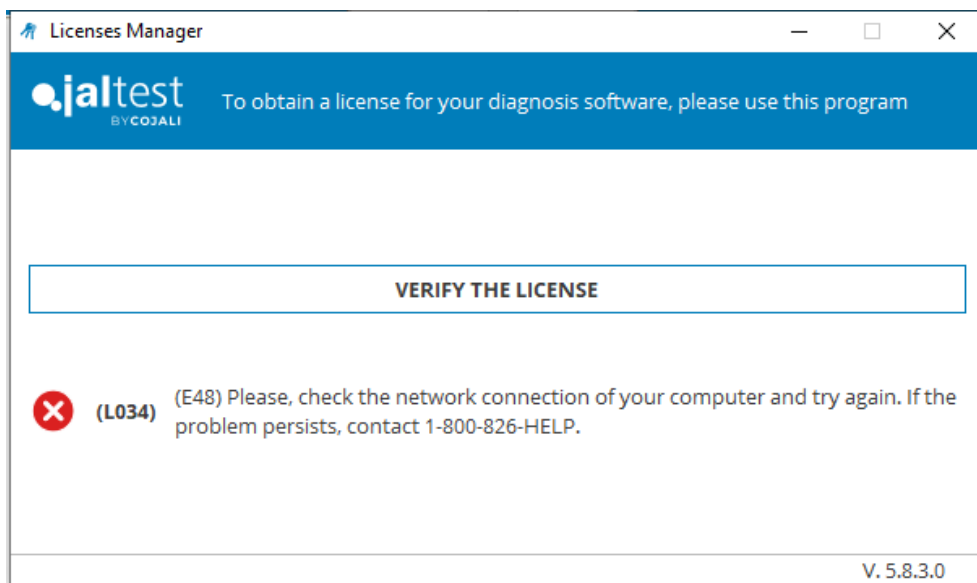
If desired, it is possible to select to launch the application automatically after the installation is done.



In case the license cannot be validated during the unattended installation, the following window message will appear to verify the license status.



Internet connection is required (this will be indicated by the software in case there is an issue).



3. Instructions of use

Eaton Advantage Automated Clutch Calibration will welcome you with the following launcher screen. The software launch will take approximately less than one (1) minute.



The next window you will see is the “System selection” menu. You will need to manually identify the transmission system you wish to connect to:

Detroit Diesel DT12

Volvo I-Shift V2 / Mack mDrive (Up to 2012)

Volvo I-Shift V3 / Mack mDrive HD (From 2013)

Note: All three (3) systems use different communication protocols so there is no chance to establish a communication with a different transmission control unit.

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu		System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL	<input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Q"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission	<input checked="" type="checkbox"/>	<p>Detroit Diesel DT12, Transmission management system <input type="button" value="Image"/> <input type="button" value="Connect"/></p> <p>Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit</p> <p>Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit</p>
Vehicle service data				



20.3.1.2 (0.3) Expert Simulation Days of license: 151 100% 11:44

The next step requires selecting the system. Once selected, all system-related information will be displayed, including the “Connect” button.

jaltest by COJALI GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool > Detroit Diesel DT12, Transmission management system

Connect

Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL <input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Q"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission <input checked="" type="checkbox"/>	Detroit Diesel DT12, Transmission management system  
Vehicle service data			Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit
			Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit



20.3.1.2 (0.3) Expert Simulation Days of license: 151 100% 11:49

Additional icons may appear in the system line:

- An identification picture.
- Virtual instrument icon to open the System Display option.

jaltest by COJALI GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL <input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Q"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission <input checked="" type="checkbox"/>	Detroit Diesel DT12, Transmission management system  
Vehicle service data			Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit
			Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit

20.3.1.2 (0.3) Expert Simulation Days of license: 151 100% 11:44

If desired, this panel window can be hidden by clicking on the arrow icon.

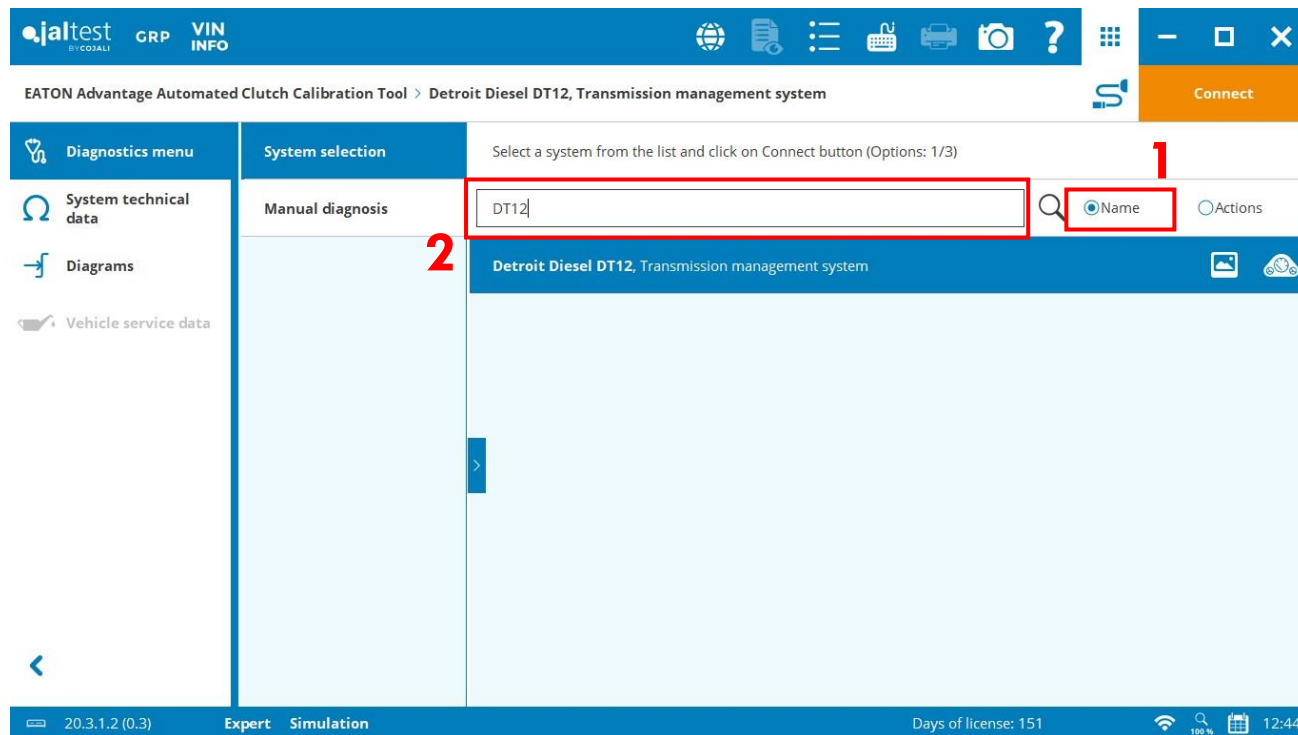
The screenshot shows the EATON Advantage Automated Clutch Calibration Tool interface. A red box highlights the 'Types' column in the 'System selection' table, which contains 'ALL' and 'Transmission' with checkboxes. The interface includes a top bar with 'jaltest', 'GRP', and 'VIN INFO' logos, and a left sidebar with 'Diagnostics menu', 'System technical data', 'Diagrams', and 'Vehicle service data'.

Same icon will restore its previous visualization.

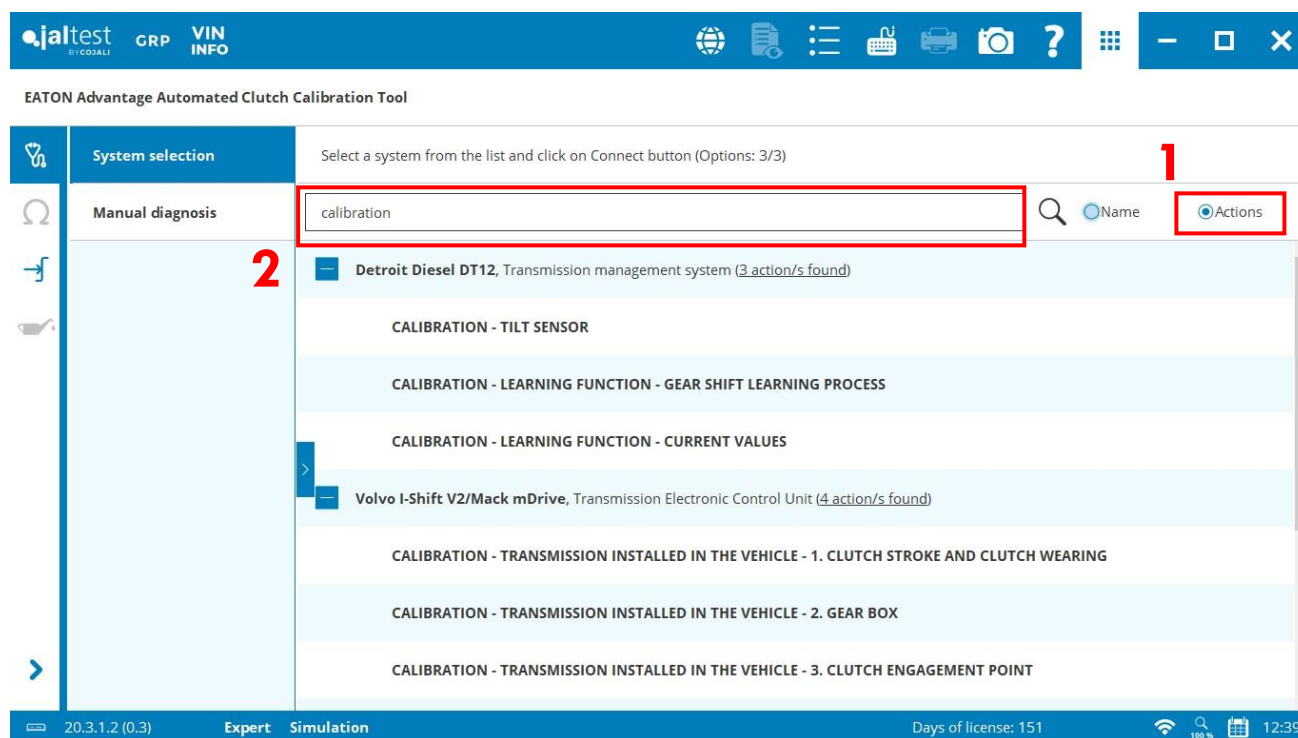
The screenshot shows the EATON Advantage Automated Clutch Calibration Tool interface. The 'Types' column in the 'System selection' table is no longer highlighted, and the 'Transmission' checkbox is now checked. The interface includes a top bar with 'jaltest', 'GRP', and 'VIN INFO' logos, and a left sidebar with 'Diagnostics menu', 'System technical data', 'Diagrams', and 'Vehicle service data'.

A Search function is available in the “System selection” menu:

- Search by Name



- Search by Actions



Technical information: System Technical Data, Diagrams and Vehicle Service Data.

Icons in grey mean that information is not available, on the current version, or that it does not apply.

This information helps technicians to access components' specifications, their locations and how they are connected to the electronic control units. Please, click on the different buttons to consult further details.

The screenshot shows the jAltest software interface. The top bar includes the jAltest logo, GRP, VIN INFO, and various icons. The main header reads "EATON Advantage Automated Clutch Calibration Tool > Detroit Diesel DT12, Transmission management system". On the left, a "Diagnostics menu" is highlighted with a red box, containing options for "System technical data", "Diagrams", and "Vehicle service data". The main area is divided into "System selection" and "Types". Under "System selection", "Manual diagnosis" is selected. Under "Types", "ALL" and "Transmission" are listed with checkboxes. The right panel shows a search bar and a list of systems, including "Detroit Diesel DT12, Transmission management system", "Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit", and "Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit". A "Connect" button is visible in the top right corner.

The technical information column can reduce its size:

This screenshot shows the same jAltest interface as the previous one, but with the "Diagnostics menu" column resized. A red box highlights a "Reduce size" button with a left-pointing arrow at the bottom of the menu. The "See Info" button in the top right corner is also visible. The rest of the interface, including the system selection and types columns, remains the same.

“Manual diagnosis” menu: This feature allows the search by a fault code in case there is a need to remote assist someone on the road.

Click on “Manual diagnosis”, select your system and then click on “See info”.

Follow the instruction given in the technical procedure and enter the fault code number. A magnifying glass tool is available.

Freightliner. Manual diagnosis

The visualization of the blinking sequence is only possible after the ignition is on and the vehicle stopped.

- **Option 1**
Only active faults will be displayed, that is, faults that are active.

1. Turn on the ignition key. Make sure the parking brake is applied.
2. Press the button "MODE/RESET" repeatedly until the message "DIAG" is displayed.

Fault code description and related technical information will be displayed.

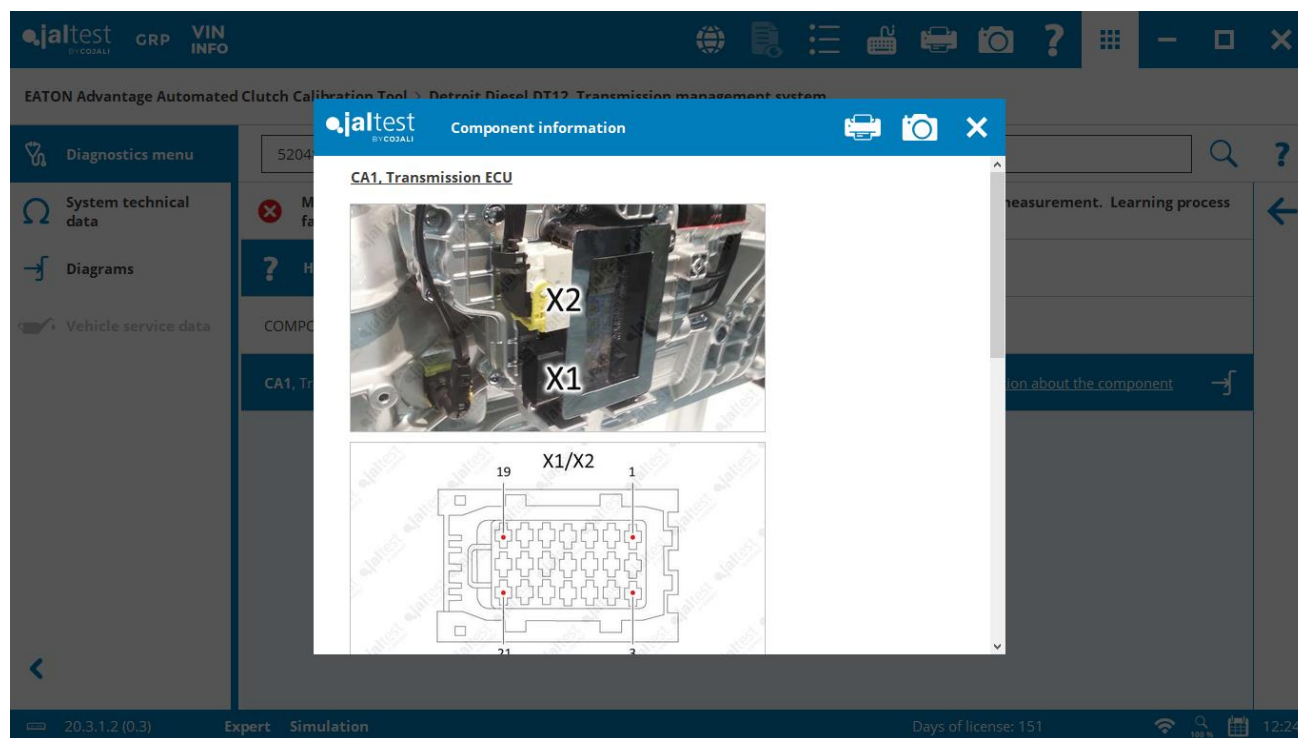
MANUAL DIAGNOSIS CODE 520486-13. (FAULT CODE: SPN: 520486 FMI: 13). Fault in the tilt sensor measurement. Learning process fault.

Help and components of the fault

COMPONENTS RELATED TO THE FAULT

CA1, Transmission ECU [See information about the component](#)

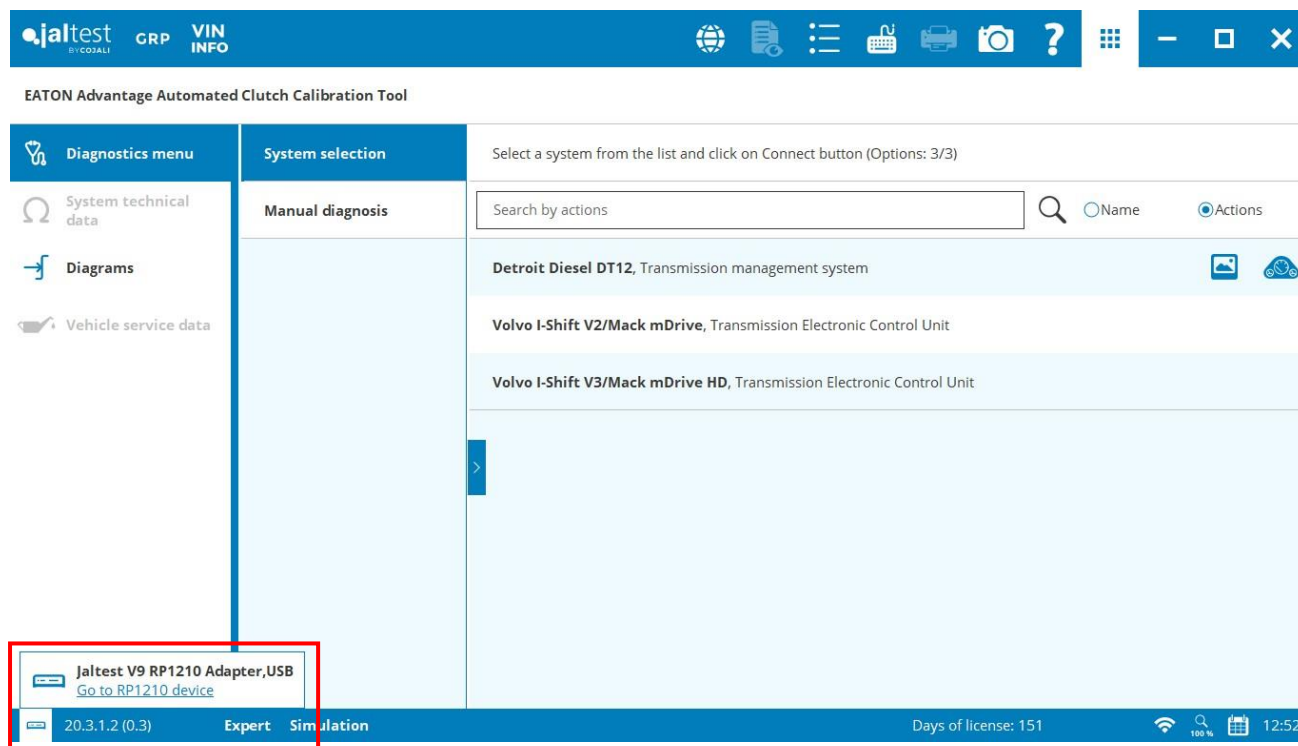
The next picture provides an example when clicking on “See information about the component”.



Explanation of the icons displayed at the bottom:

Device icon

A light will flash when communication is established between the RP1210 device and the ECU. This icon is also used to know what an RP1210 vendor and the communication channel (USB or Wireless) is configured. Additionally, a hyperlink appears in case of changing to a different RP1210 vendor.



Version installed

Typical structure: 20.3.1.2 (Year. Third version, of that year. Internal coding. Internal coding). Additional numbers will appear in case the version is a beta.

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu

- System technical data
- Diagrams
- Vehicle service data

System selection

Select a system from the list and click on Connect button (Options: 3/3)

Manual diagnosis

Search by actions

☐ Name
 ☒ Actions

Detroit Diesel DT12, Transmission management system
 Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit
 Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit

20.3.1.2 (0.3) Expert Simulation Days of license: 151 100% 12:55

Expert/Simulation modes

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu

- System technical data
- Diagrams
- Vehicle service data

System selection

Types

Select a system from the list and click on Connect button (Options: 3/3)

Manual diagnosis

ALL ☒

Transmission ☒

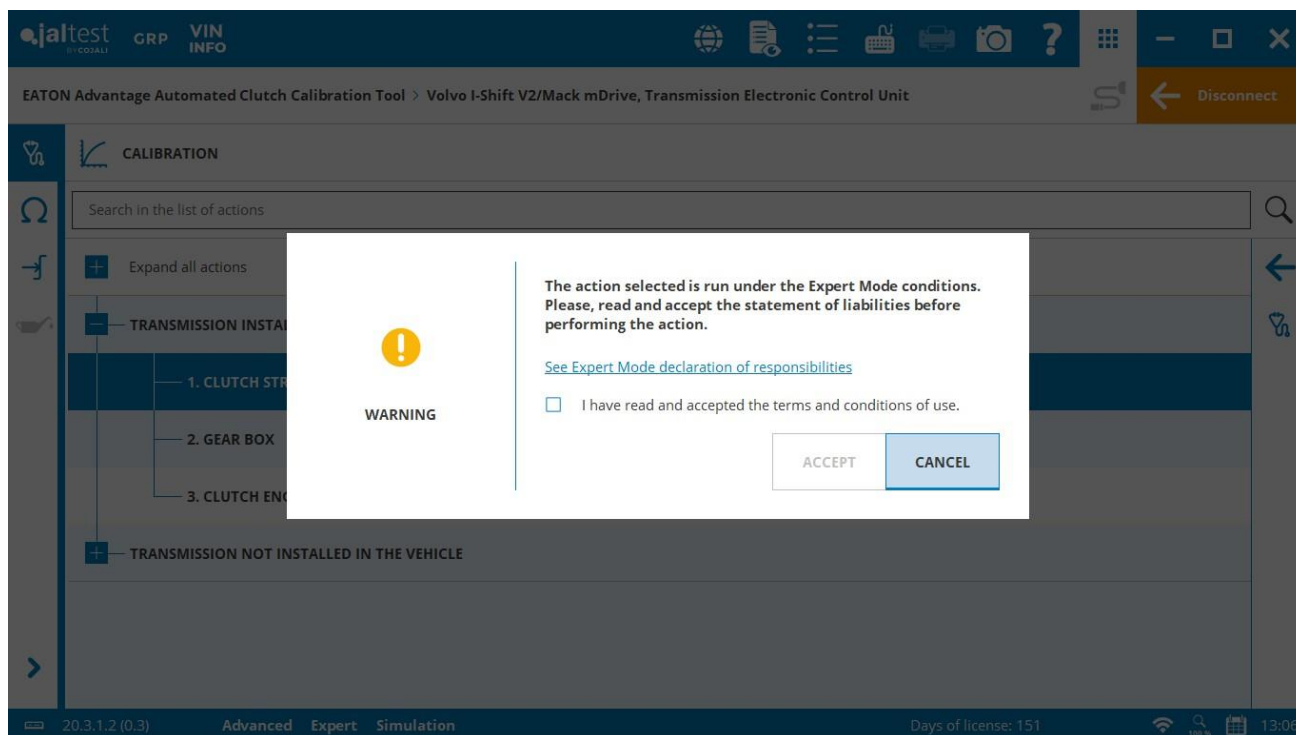
Search by system name

☒ Name
 ☐ Actions

Detroit Diesel DT12, Transmission management system
 Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit
 Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit

20.3.1.2 Expert Simulation Days of license: 109 100% 09:33

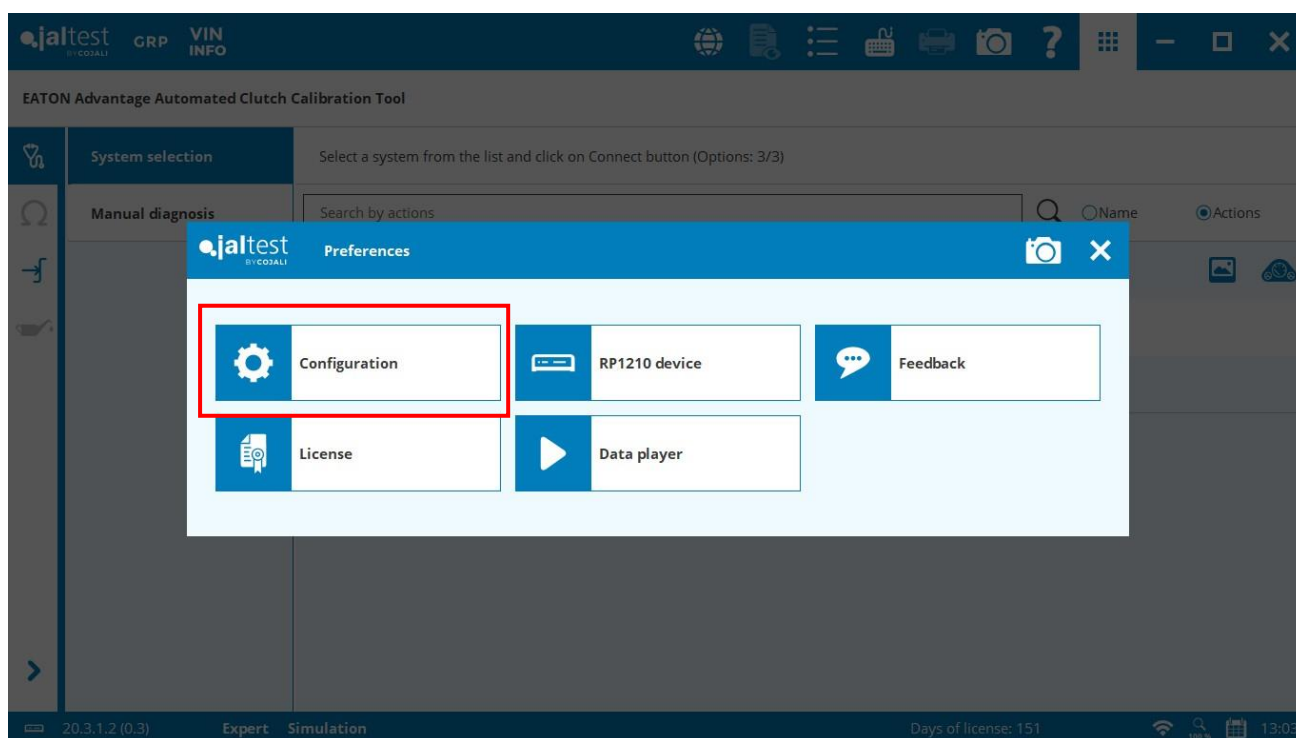
“Expert Mode” will always be displayed by default, meaning that the “Expert Mode” is always enabled. Actions which modify the ECU memory or require advanced knowledge will warn that the action is under “Expert Mode”.



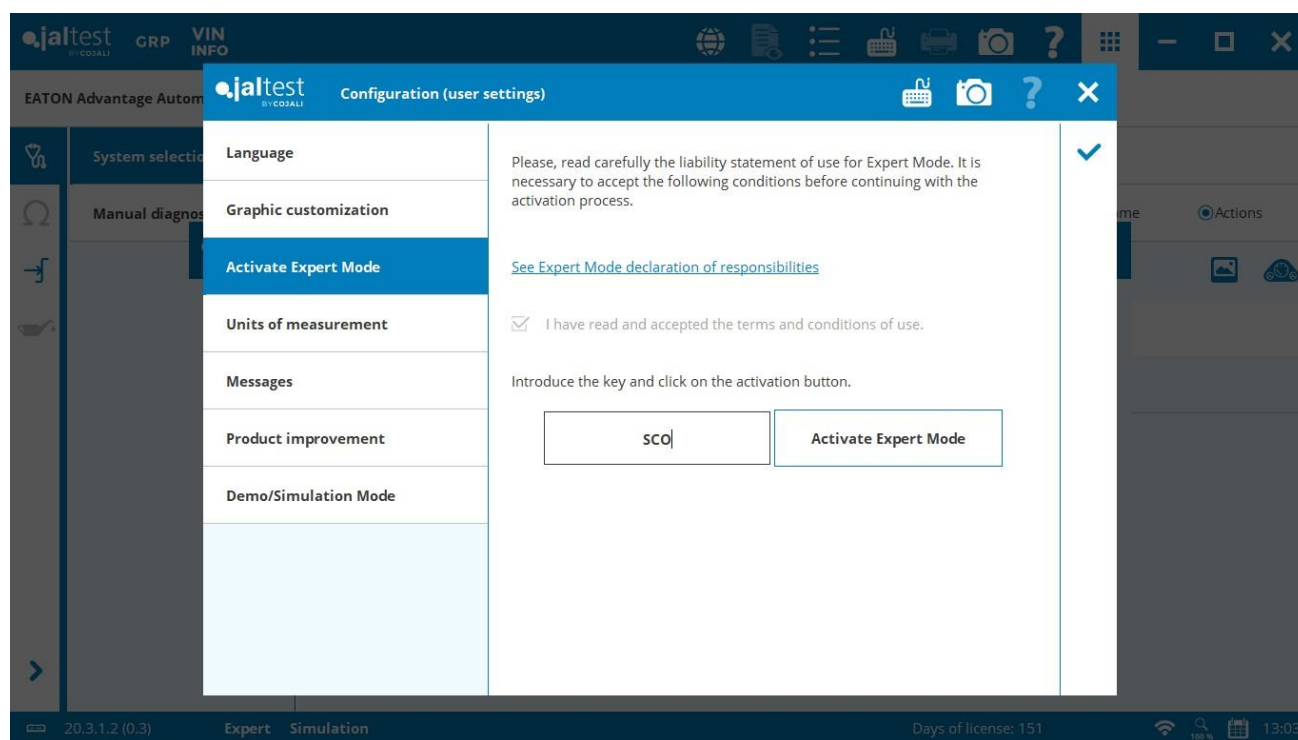
“Simulation Mode” is only available for Cojali, Eaton employees and its distributors. This mode allows you to connect to the systems without having a physical connection to any truck and device. Note: Do not perform diagnostics on a system if “Simulation Mode” is active.

The sequence to enable this mode is to enter SCO and the code given for your equipment.

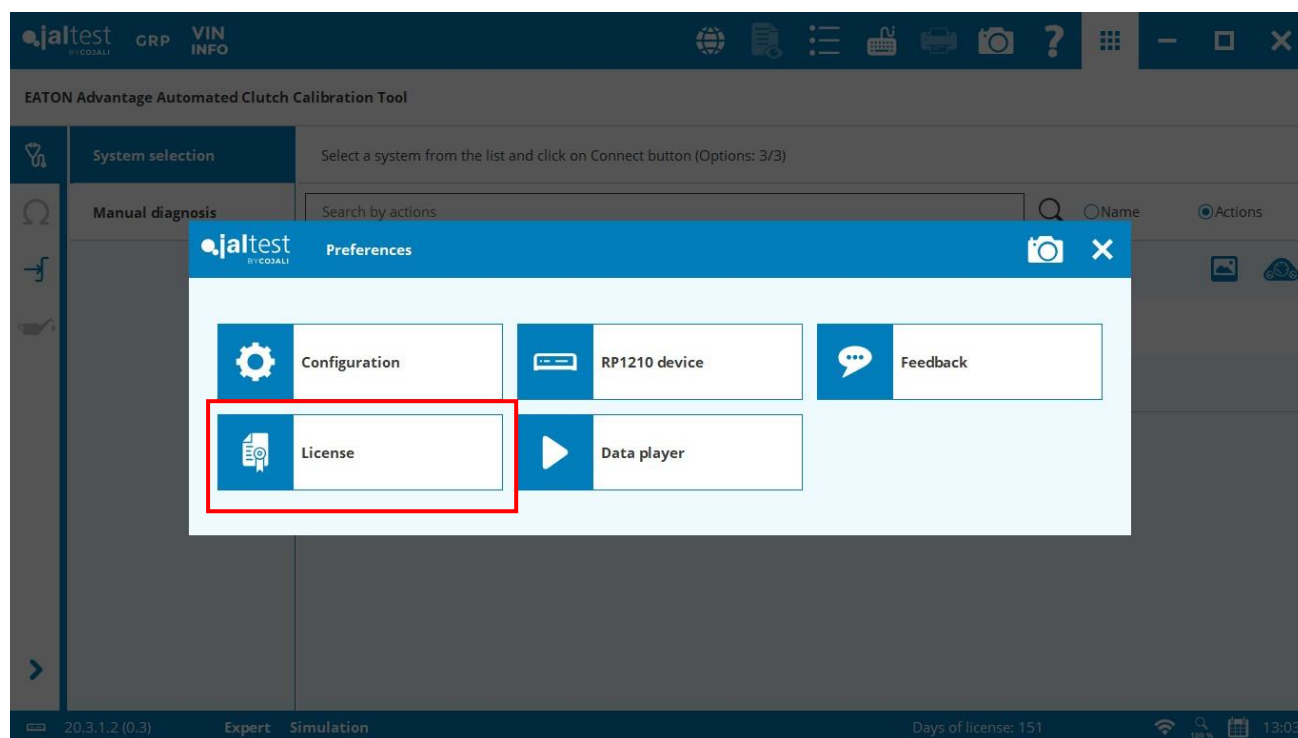
To enable it, go to “Preferences” menu and select “Configuration” section.

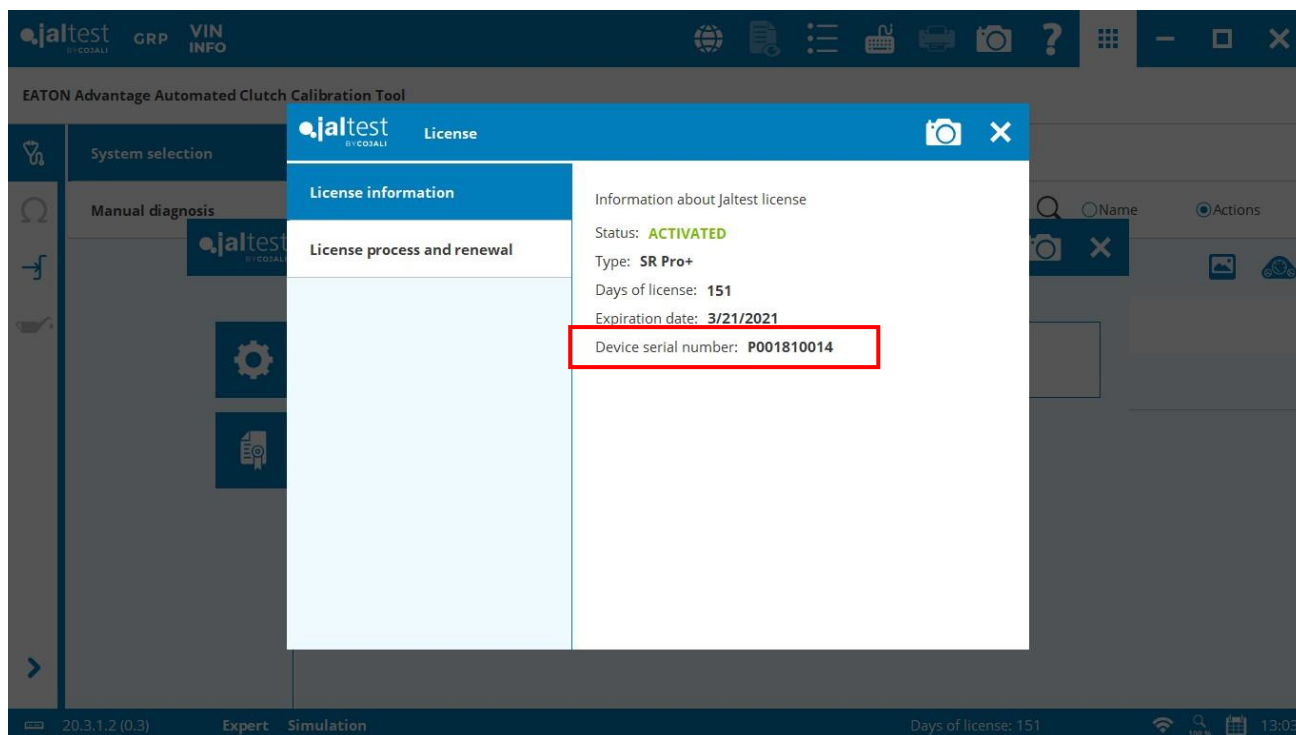


In the “Activate Expert Mode” tab, enter SCO and then your simulation code.

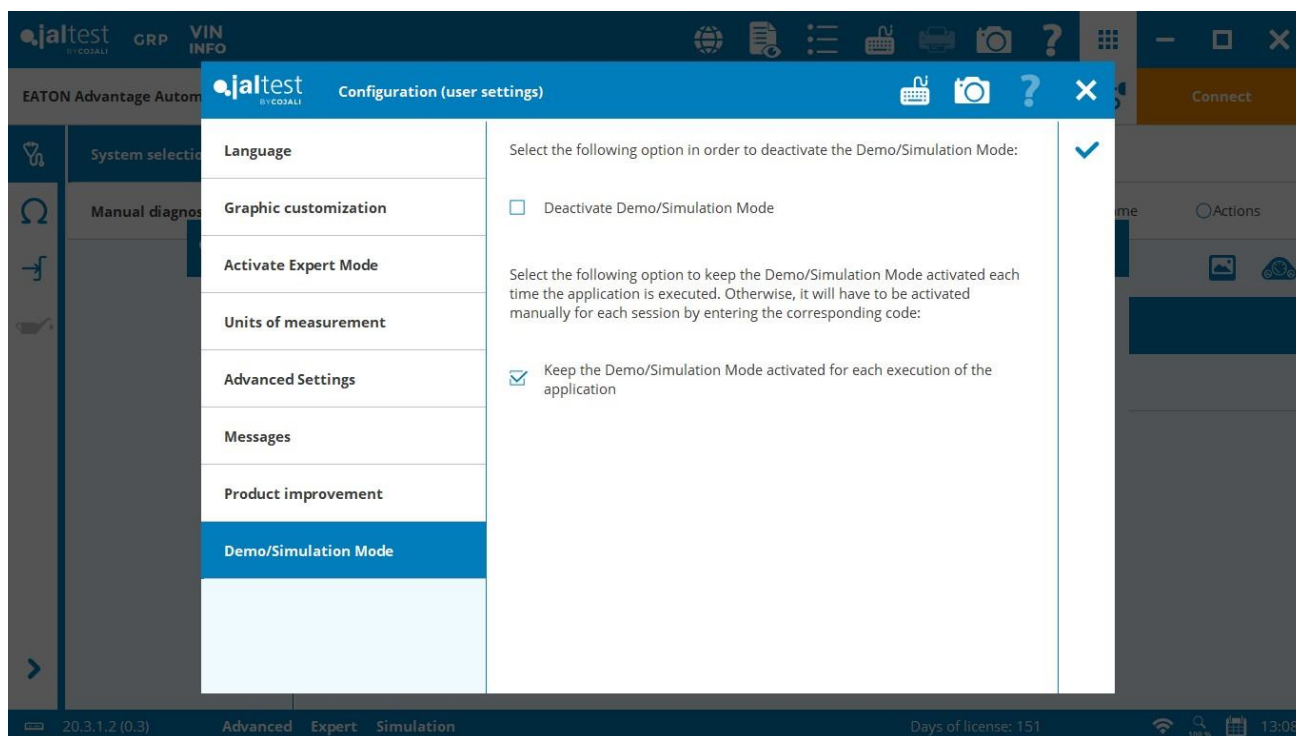


The simulation code varies for each installation. Serial number must be supplied to generate this code. This information can be obtained in the “License” section from the “Preferences” menu.



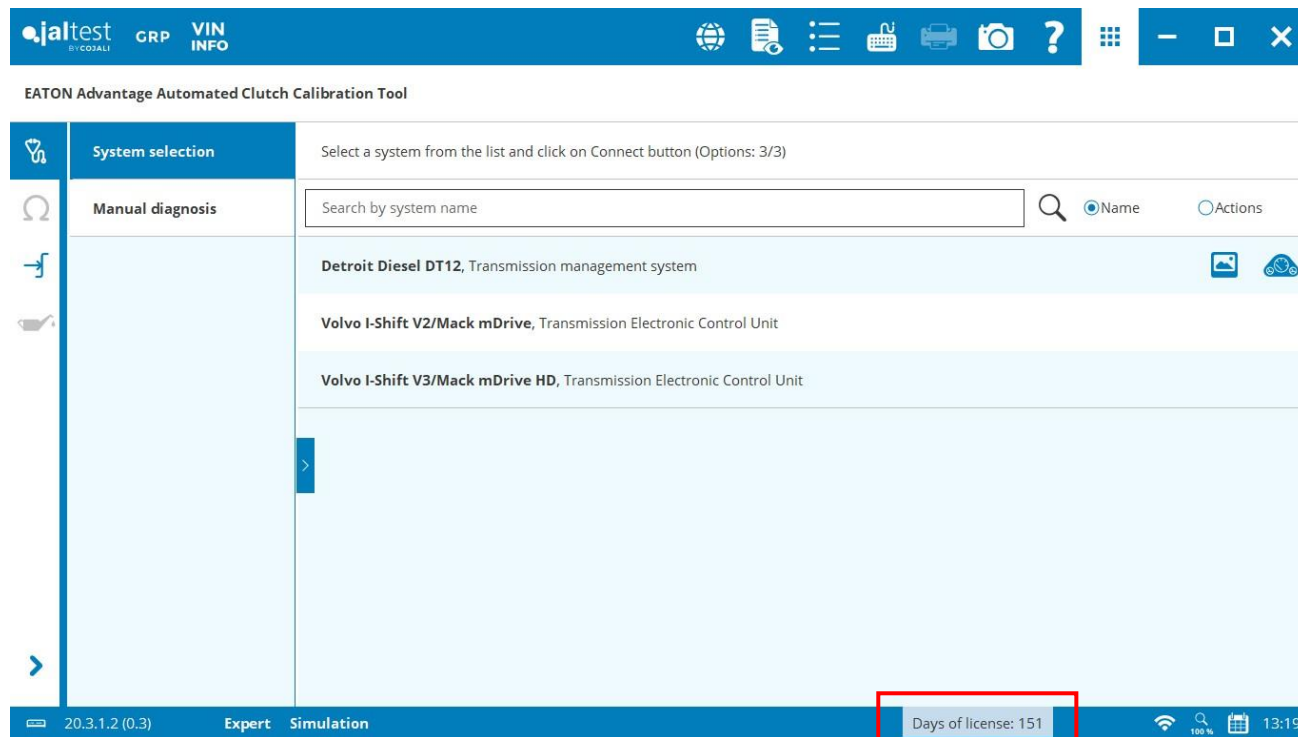


“Simulation Mode” can be kept active for following diagnostics sessions. Also, there is an option to disable this mode.

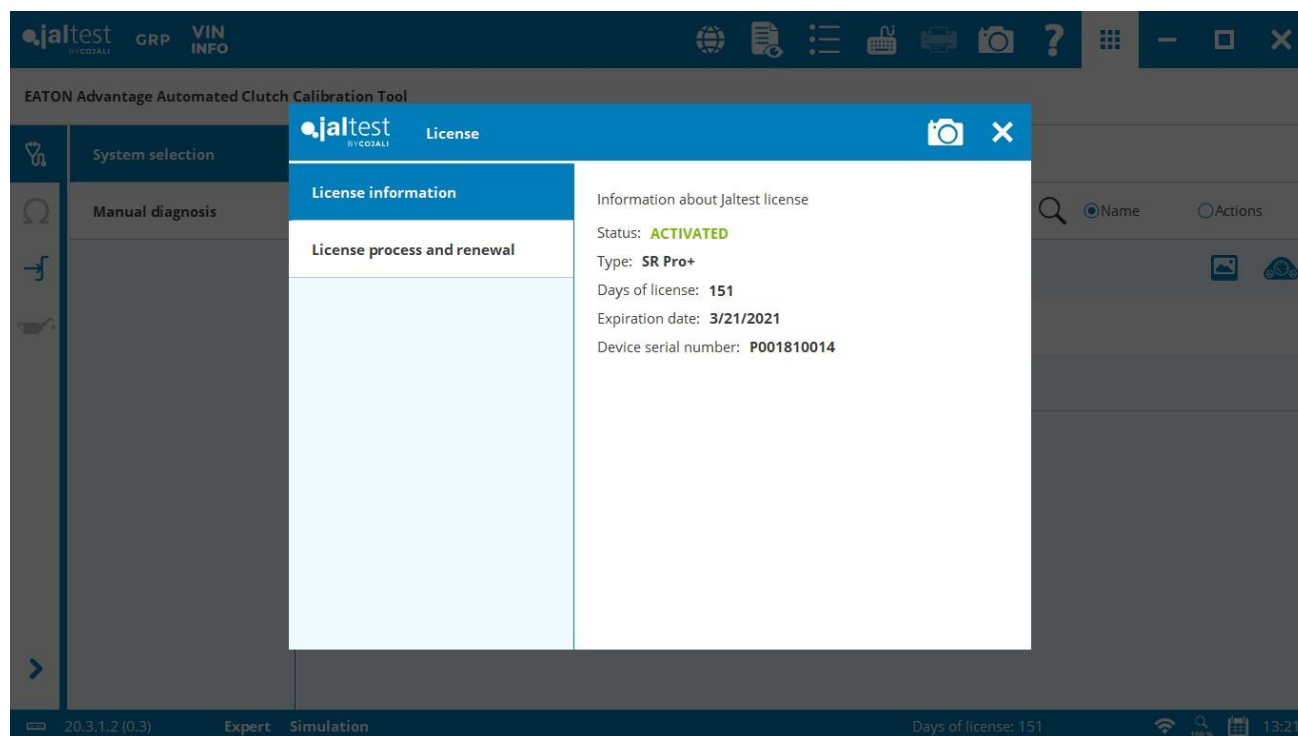


Days of license remaining

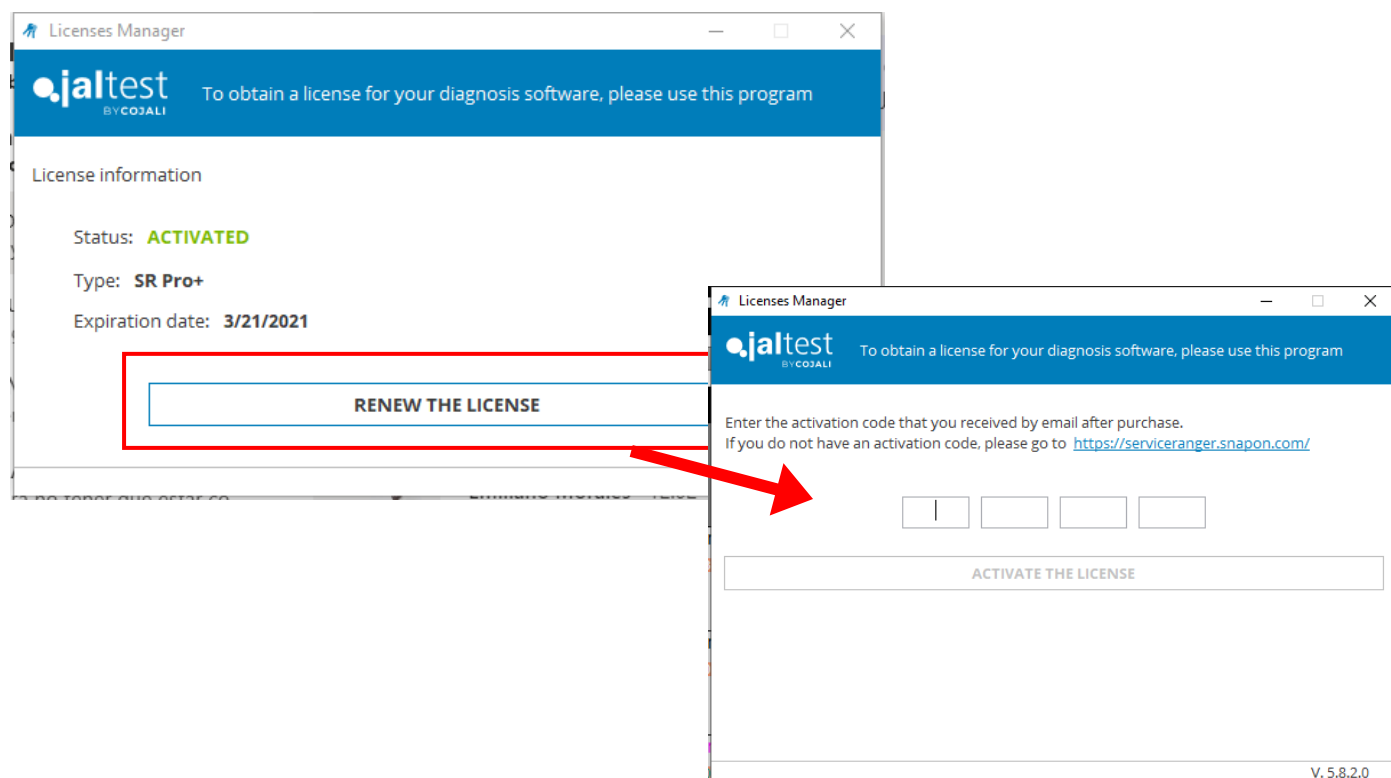
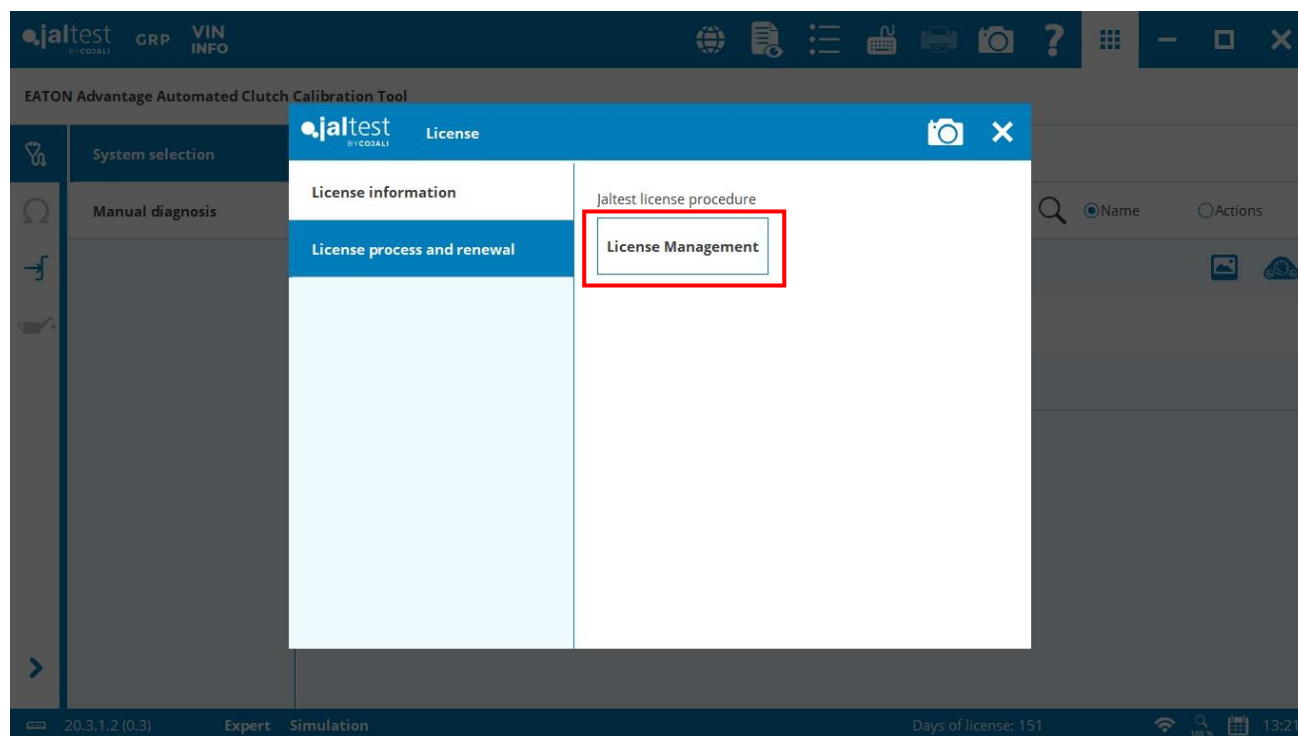
In addition to this number, a grace period of thirty (30) days is available.



For further details, it is possible to click on the link to access a window with additional information about the license serial number, expiration date and the status of the license.



From this window, a second tab is displayed from which it is possible to manage and enter a new activation code. This is an alternative way in case of purchasing a renewal before the current license expires and the expiration date would not have been updated, normal case because the license status is checked regularly through automatic processes such as registration (every 6 months as maximum) process and every time an update is done as well.



Furthermore, if the license is expired, this previous window will be the first window shown.

Internet connection icon

Internet connection is detected.

The screenshot shows the EATON Advantage Automated Clutch Calibration Tool interface. The top bar includes the 'jaltest' logo, 'GRP', and 'VIN INFO'. The main menu on the left has 'Diagnostics menu', 'System technical data', 'Diagrams', and 'Vehicle service data'. The 'System selection' section shows 'Manual diagnosis' and 'Transmission' types. The 'Types' column lists 'ALL' and 'Transmission'. The 'Select a system from the list and click on Connect button (Options: 3/3)' section shows a search bar and a list of systems: 'Detroit Diesel DT12, Transmission management system', 'Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit', and 'Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit'. The bottom status bar shows '20.3.1.2 (0.3)', 'Expert', 'Simulation', 'Days of license: 151', and a red box highlighting the internet connection icon (a Wi-Fi symbol) next to the system clock showing '13:36'.

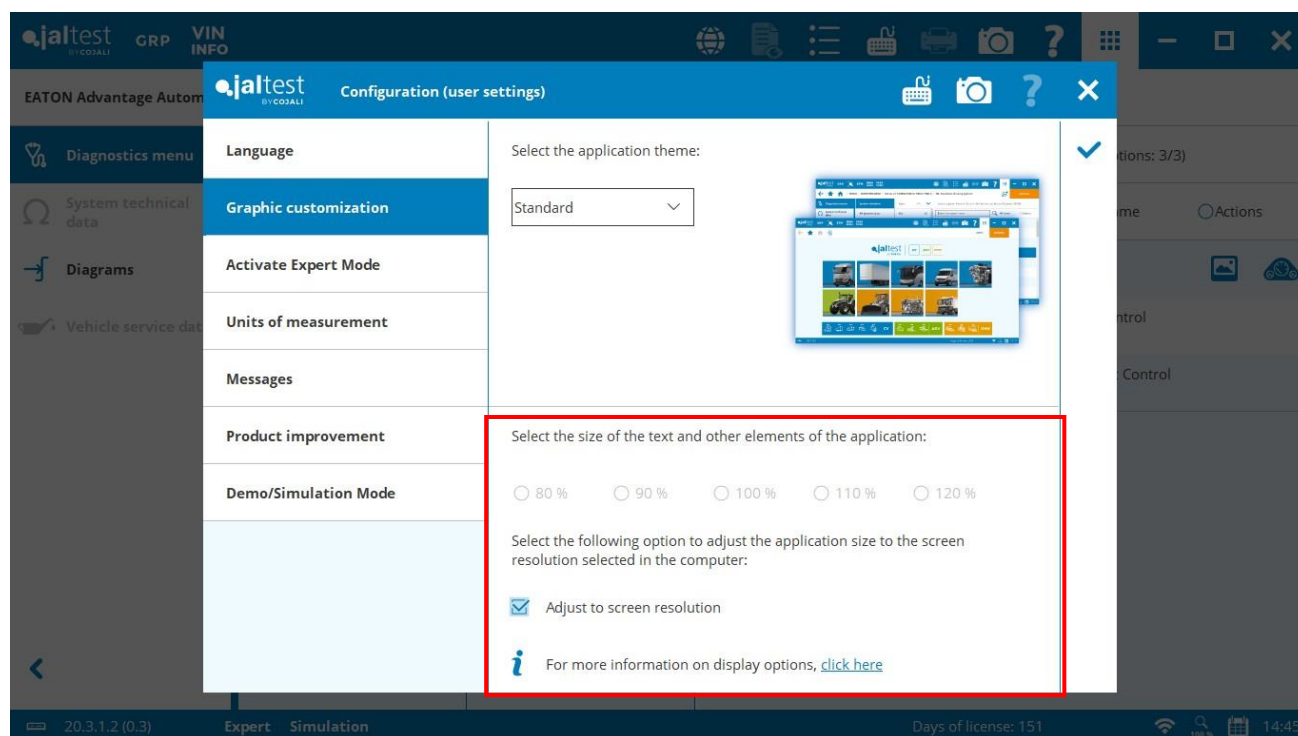
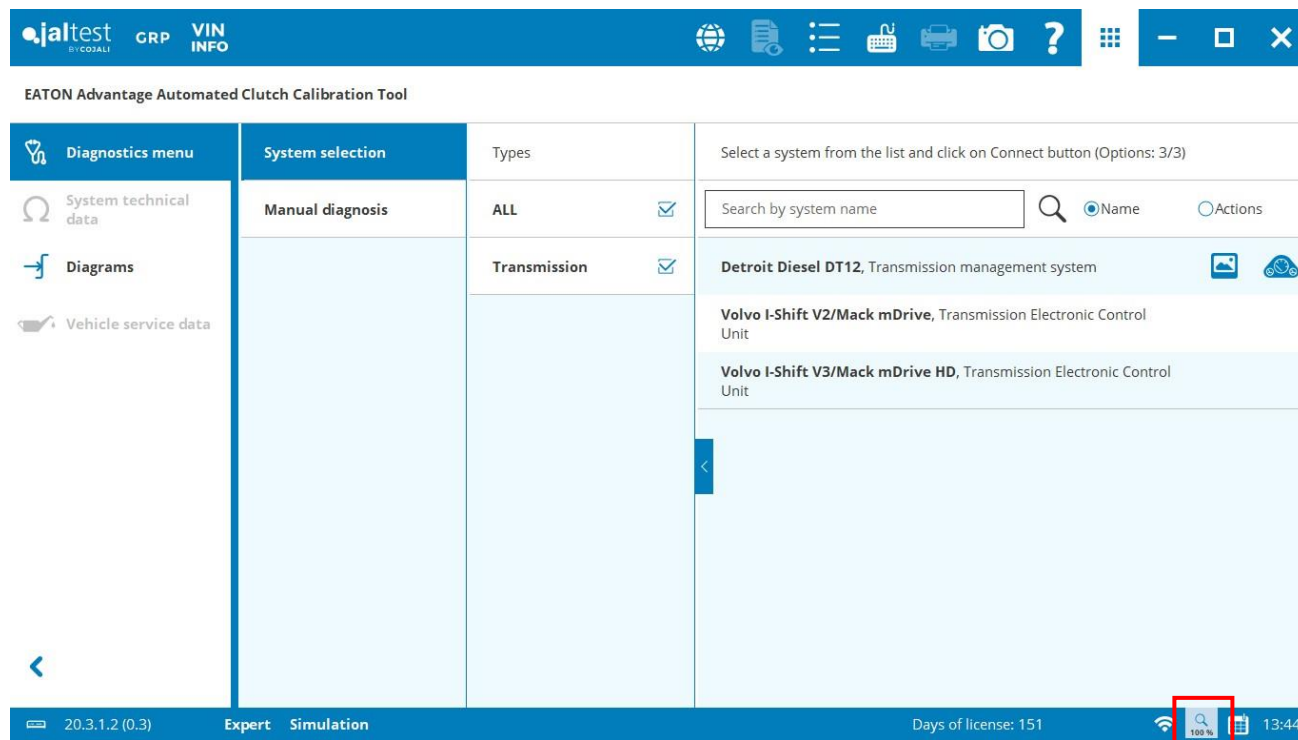
Internet connection is not detected. Internet connection is required to the diagnostics functions.

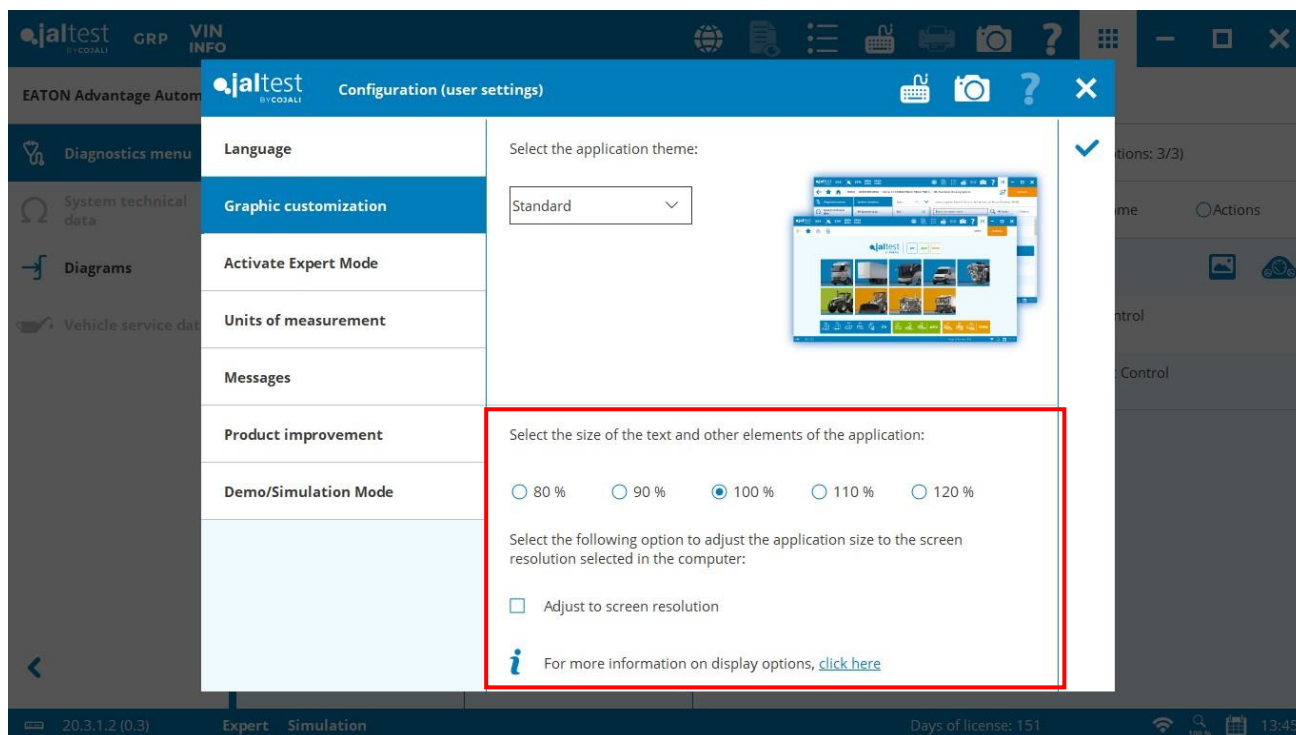
This screenshot is identical to the one above, showing the same EATON Advantage Automated Clutch Calibration Tool interface. The top bar, main menu, system selection section, and status bar are all the same. The red box in the bottom right corner highlights the internet connection icon (a Wi-Fi symbol) next to the system clock showing '13:37'.

Graphic customization

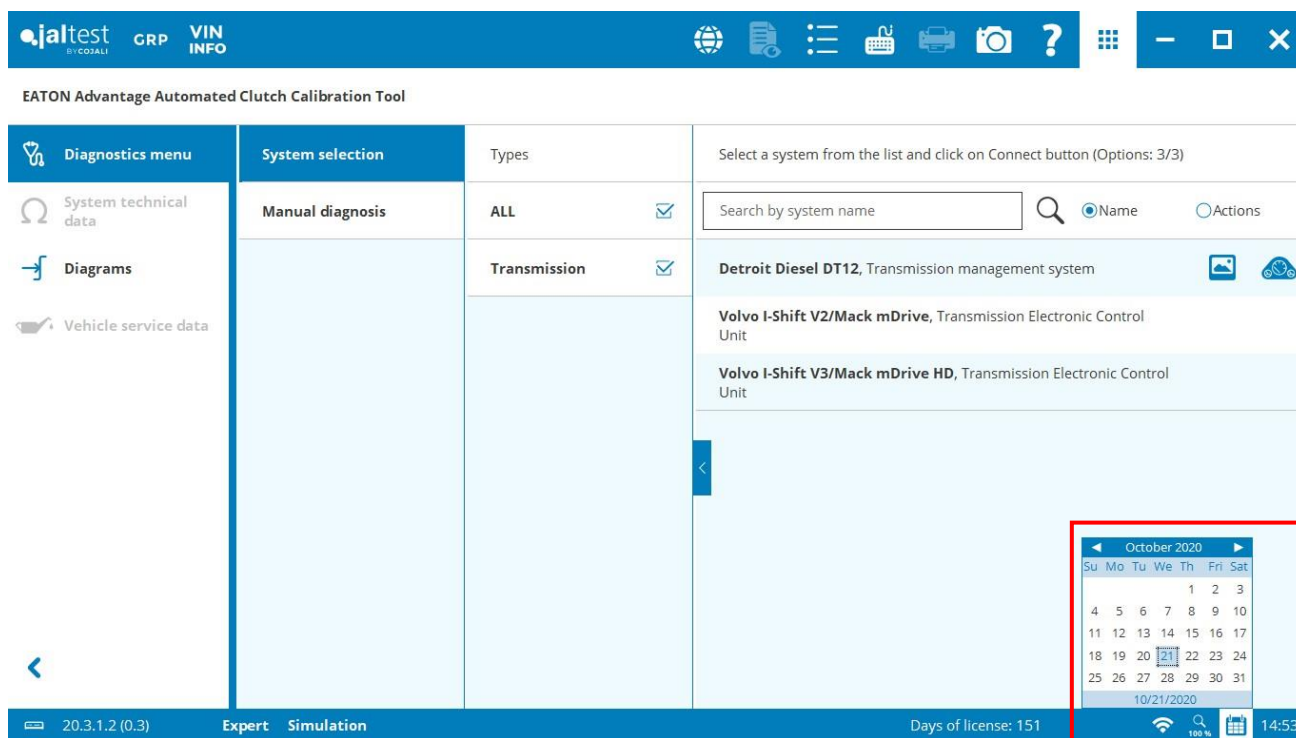
Size of the text and other elements of the application can be modified. By default, it is recommended to use “Adjust to screen resolution”.

Special attention to the note in case external screen or projector is connected.





Calendar and Clock



Explanation of the icons displayed at the top:

GRP

jaltest by cojali **GRP** **VIN INFO**

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL <input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Search"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission <input checked="" type="checkbox"/>	Detroit Diesel DT12 , Transmission management system <input type="button" value="Image"/> <input type="button" value="Connect"/> Volvo I-Shift V2/Mack mDrive , Transmission Electronic Control Unit Volvo I-Shift V3/Mack mDrive HD , Transmission Electronic Control Unit
Vehicle service data			

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 100% 09:51

GRP

Customer list
Vehicle list
Reports
Start window

jaltest
GRP

Welcome to GRP (Garage Resource Planning)

GRP (Garage Resource Planning) is the workshop management program that allows you to organize and manage its activity. The management of customers and vehicles, as well as the management of all the reports generated by Jaltest or its modules, are functionalities included in the GRP.

Those functions disabled are only available in GRP Enterprise mode. For further information, please contact your distributor.

20.3.1.2 (b1.0) Days of license: 150 100% 13:52

Left side

Customer list

Vehicle list

Reports

Start window

Top side

Preferences

[Previously explained.](#)

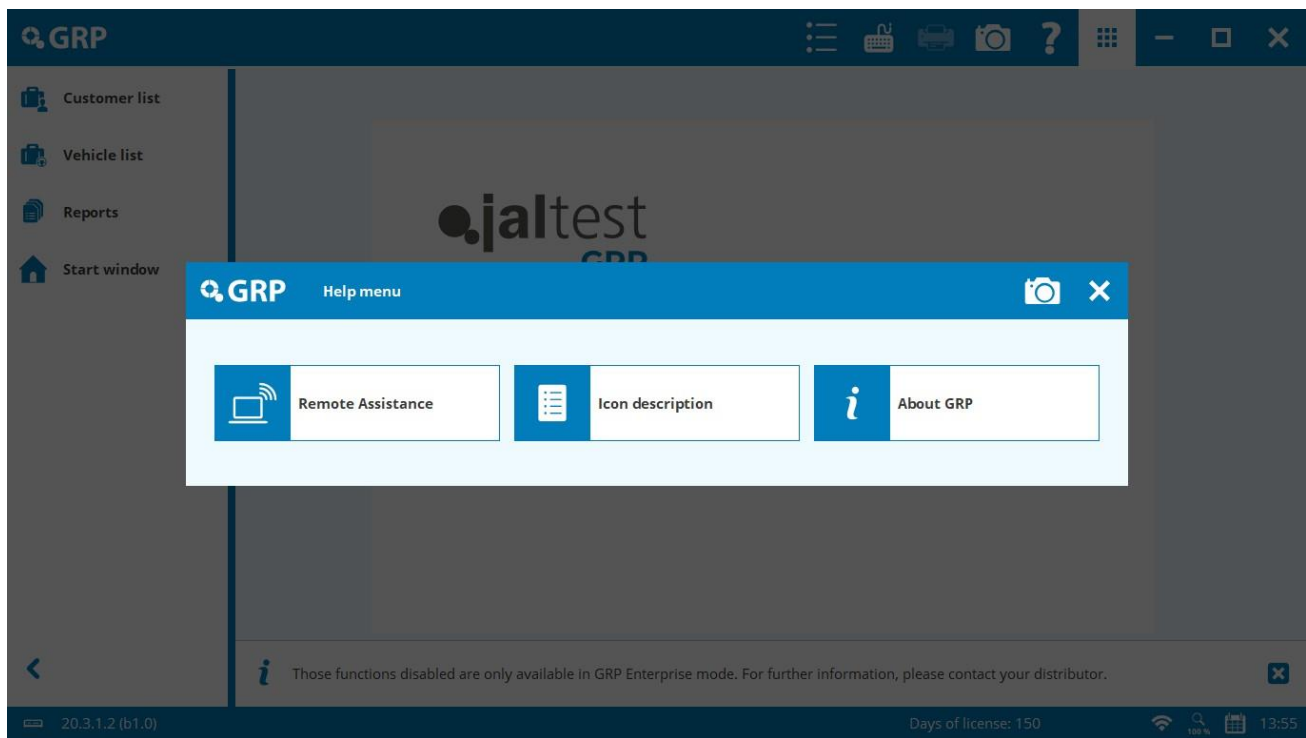
Virtual keyboard

[It will be explained in the next pages.](#)

Screenshot

[It will be explained in the next pages.](#)

Help



Remote Assistance

[It will be explained in the next pages.](#)

Icon description

[It will be explained in the next pages.](#)

About GRP

Show/Hide icon

VIN INFO

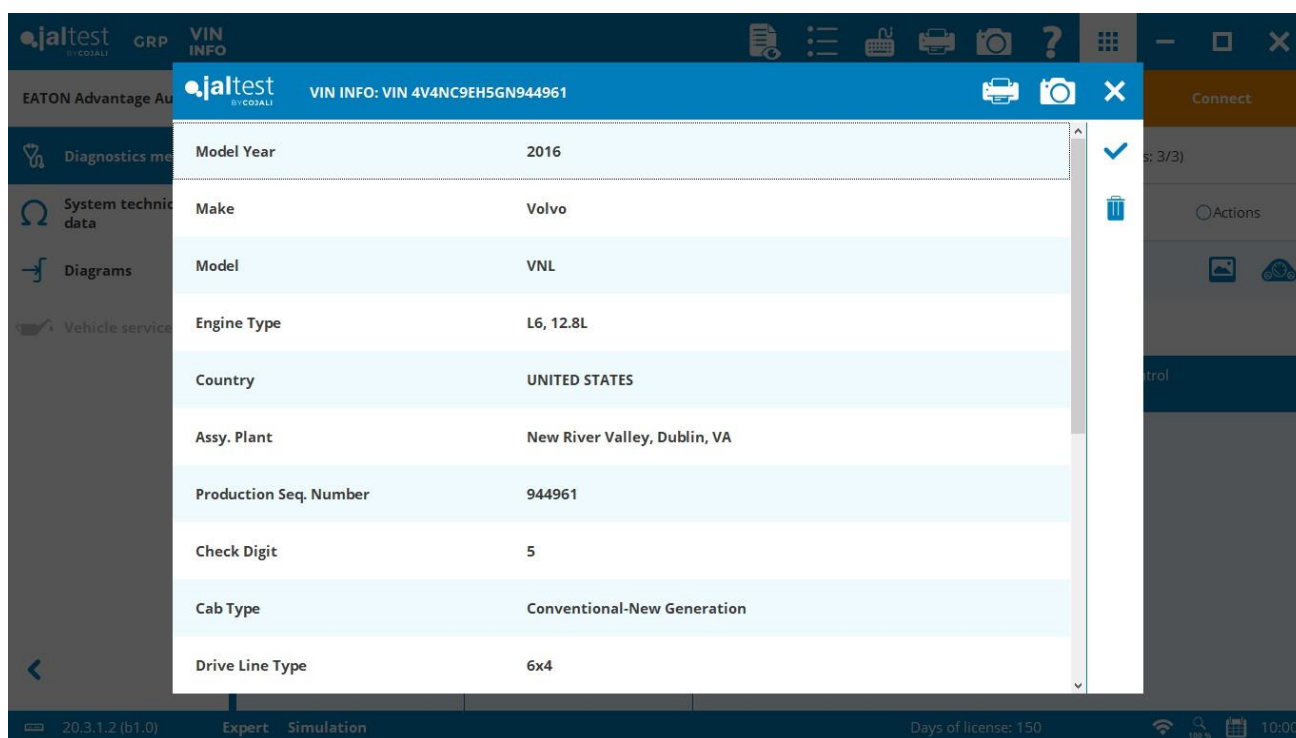
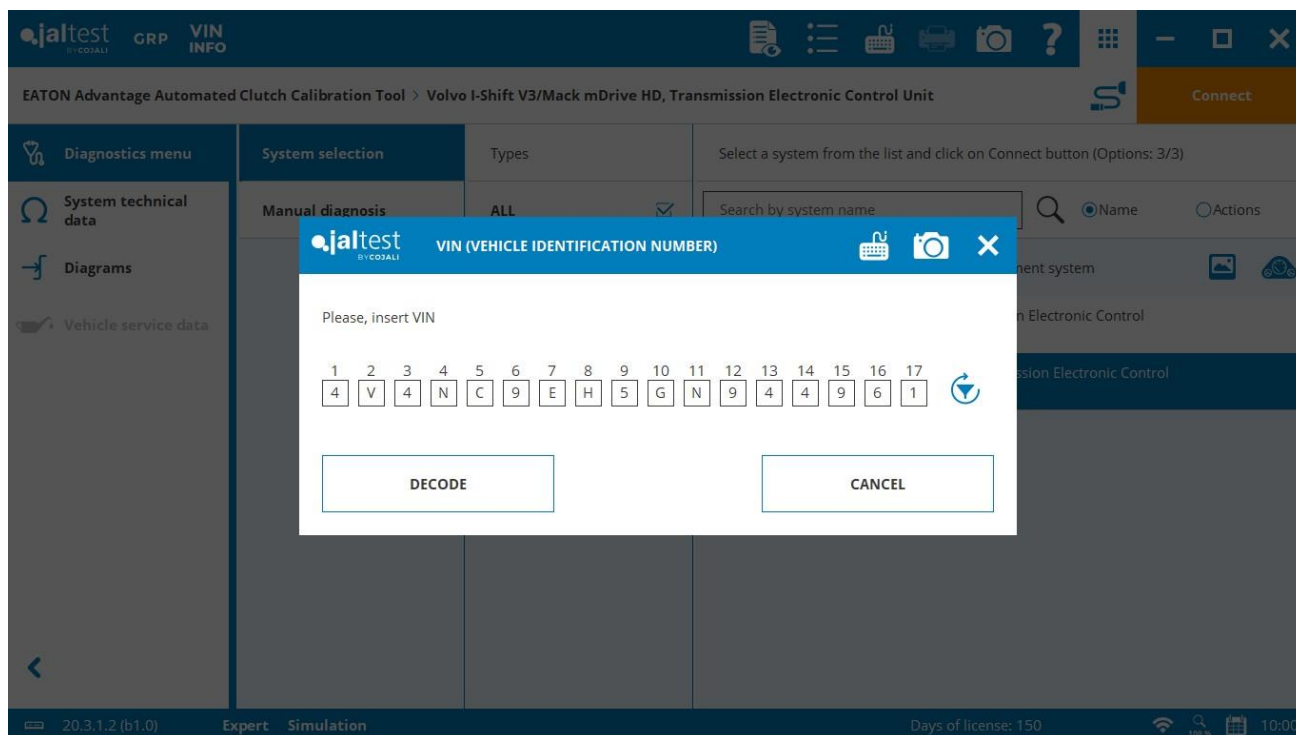
jAltest by COJALI GRP **VIN INFO**

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL <input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Q"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission <input checked="" type="checkbox"/>	<div>Detroit Diesel DT12, Transmission management system <input type="button" value="Image"/> <input type="button" value="Cloud"/></div> <div>Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit</div> <div>Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit</div>
Vehicle service data			

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 100% 09:51

Enter all seventeen (17) digits of the VIN number. In case the ECU offers this information in its memory, the VIN number will be automatically pulled-out and decoded.



GRP

VIN INFO

Diagnostic report preview

Connect

Diagnostics menu

System technical data

Diagrams

Vehicle service data

System selection

Manual diagnosis

Types

ALL

Transmission

Select a system from the list and click on Connect button (Options: 3/3)

Search by system name

Name

Actions

Detroit Diesel DT12, Transmission management system

Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit

Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit

20.3.1.2 (b1.0)

Expert Simulation

Days of license: 150

100%

10:00

Preferences

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	
System technical data	Manual diagnosis	ALL	<input checked="" type="checkbox"/>
Diagrams		Transmission	<input checked="" type="checkbox"/>
Vehicle service data			

Select a system from the list and click on Connect button (Options: 3/3)

Search by system name ☒ Name ☐ Actions

- Detroit Diesel DT12**, Transmission management system
- Volvo I-Shift V2/Mack mDrive**, Transmission Electronic Control Unit
- Volvo I-Shift V3/Mack mDrive HD**, Transmission Electronic Control Unit

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 10:02

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	
System technical data	Manual diagnosis	ALL	<input checked="" type="checkbox"/>
Diagrams			
Vehicle service data			

Select a system from the list and click on Connect button (Options: 3/3)

Search by system name ☒ Name ☐ Actions

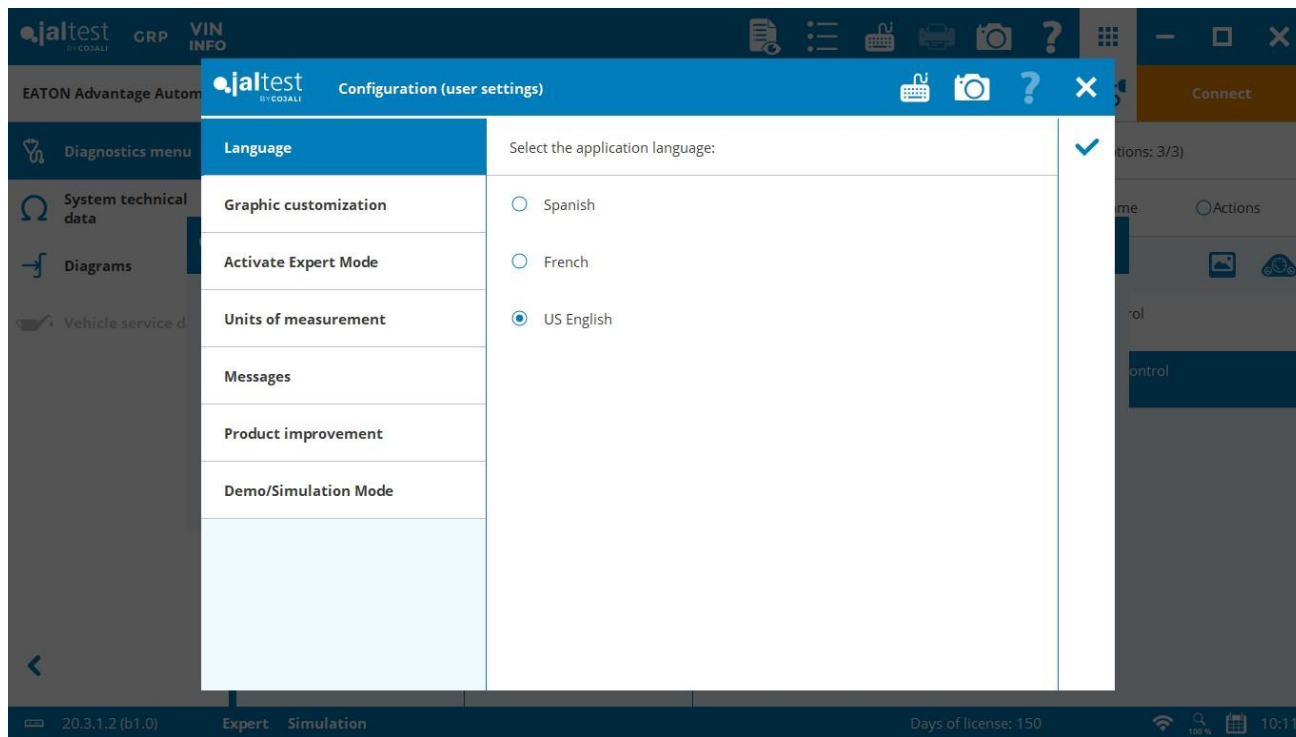
jaltest Preferences

- Configuration
- RP1210 device
- Feedback
- License
- Data player

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 09:51

Configuration

Language



Graphic customization

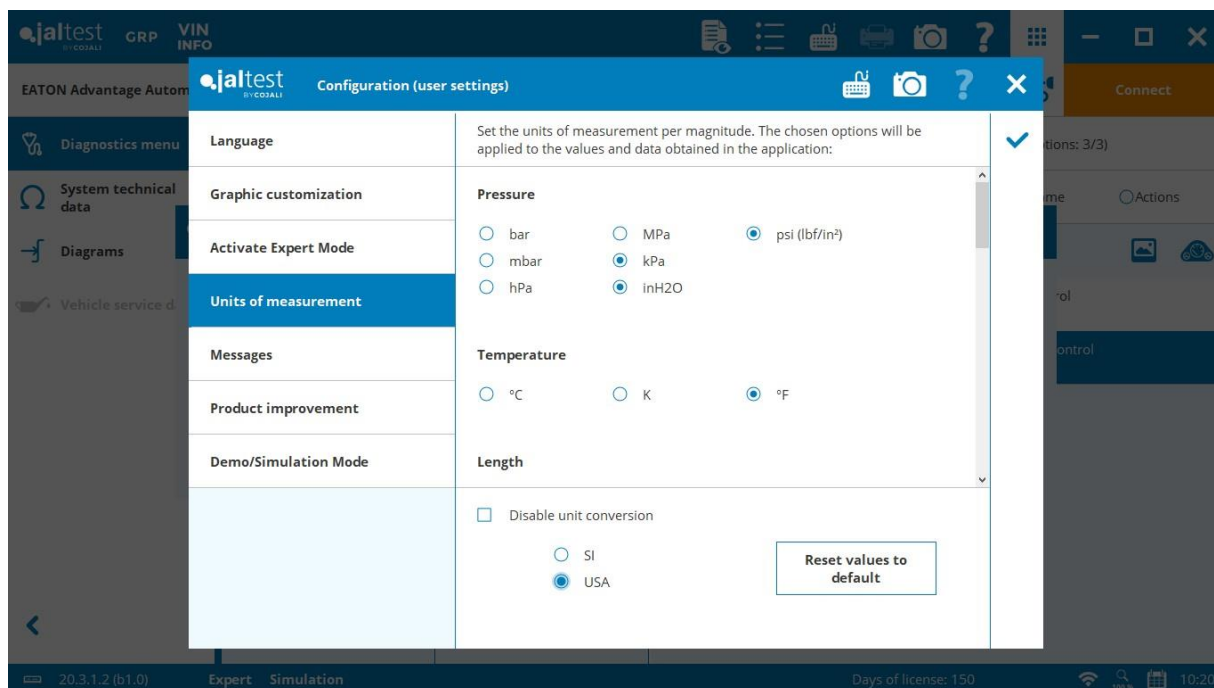
[Explained previously.](#)

Activate Expert Mode

[Explained previously.](#)

Units of measurement

By default, the measurements used are US units, but this can be customized. Especially useful for Canadian market.



Messages

Some messages with the option of “do not show or ask again...” will be displayed during the use of the software. This can be restored with this option.

Product improvement

[Explained previously.](#)

Simulation Mode

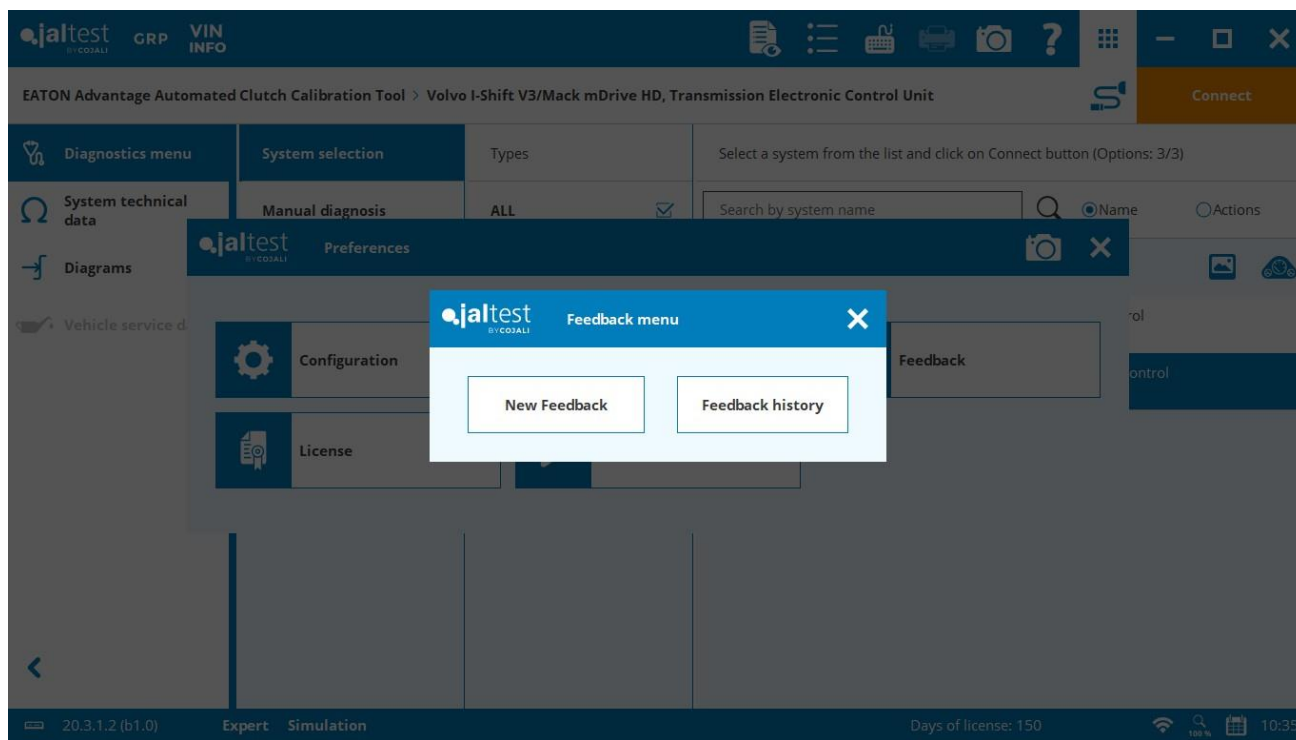
[Explained previously.](#)

RP1210 device

[Explained previously.](#)

Feedback

The software allows for sending suggestions, errors or questions directly to Cojali Engineering. This is very useful when an issue occurs because the software attaches a Log from the vehicle's data bus.



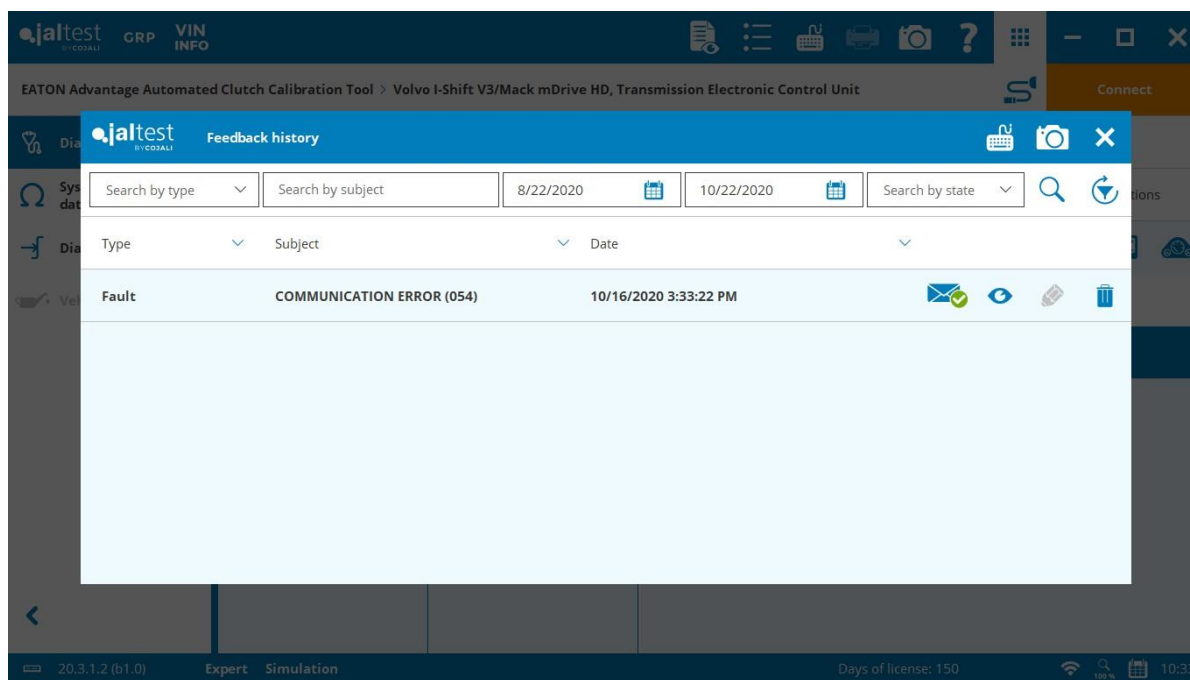
New Feedback

The screenshot shows the 'New Feedback' form in the jaltest software. The form is titled 'Feedback' and includes the following fields and sections:

- Code:** 1810014-221020103326
- *Type:** A dropdown menu.
- Subject:** A text input field.
- *Description:** A large text area for describing the issue.
- Sender:** A section with a blue header containing:
 - Vehicle:** A text input field.
 - Program and System:** A text input field.
 - Annexes:** A section with a blue header containing:
 - Send:** A text input field.
- Company data:** A section with a blue header containing:
 - Name:** A text input field.
 - Tax ID / GST:** A text input field.
 - Address:** A text input field.
 - Phone number:** A text input field.
 - Contact details:** A section with a blue header containing:
 - Name:** A text input field.
 - Phone number:** A text input field.
 - E-Mail:** A text input field.
- *Mandatory field:** A note at the bottom of the form.

The background interface is the same as the previous screenshot, showing the 'Feedback menu' dialog box over the main software interface.

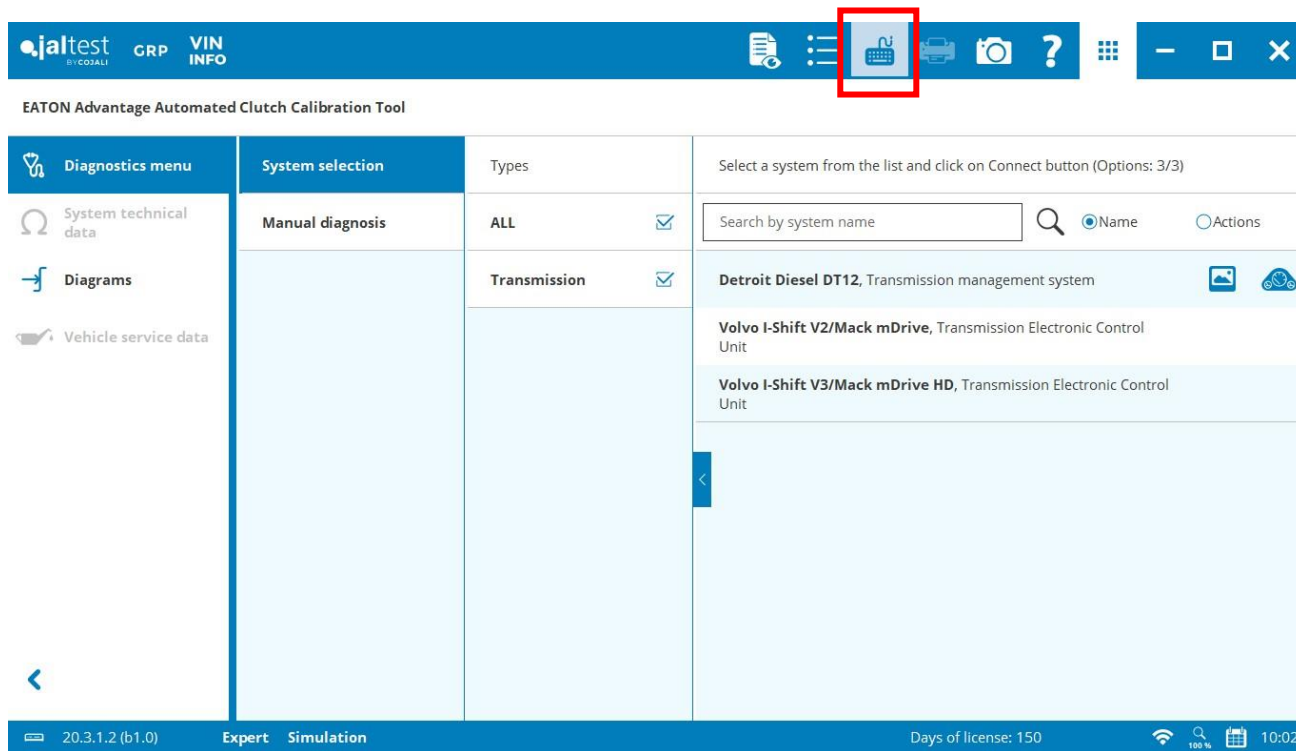
Feedback history



License

[Explained previously.](#)

Virtual keyboard



jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool

Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options: 3/3)
System technical data	Manual diagnosis	ALL <input checked="" type="checkbox"/>	Search by system name <input type="text"/> <input type="button" value="Search"/> <input checked="" type="radio"/> Name <input type="radio"/> Actions
Diagrams		Transmission <input checked="" type="checkbox"/>	Detroit Diesel DT12, Transmission management system <input type="button" value="Image"/> <input type="button" value="Connect"/>
Vehicle service data			Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit

On-Screen Keyboard

Esc Tab Bloq May Mayús Fn Ctrl Alt AltGr Ctrl < > Inicio Re Pág Nav Fin Av Pág Subir Insertar Pausa Bajar Impr Pant Bloq Despl Acoplar Opciones Ayuda Atenuar

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 100% 09:52

Screenshot

jaltest GRP VIN INFO

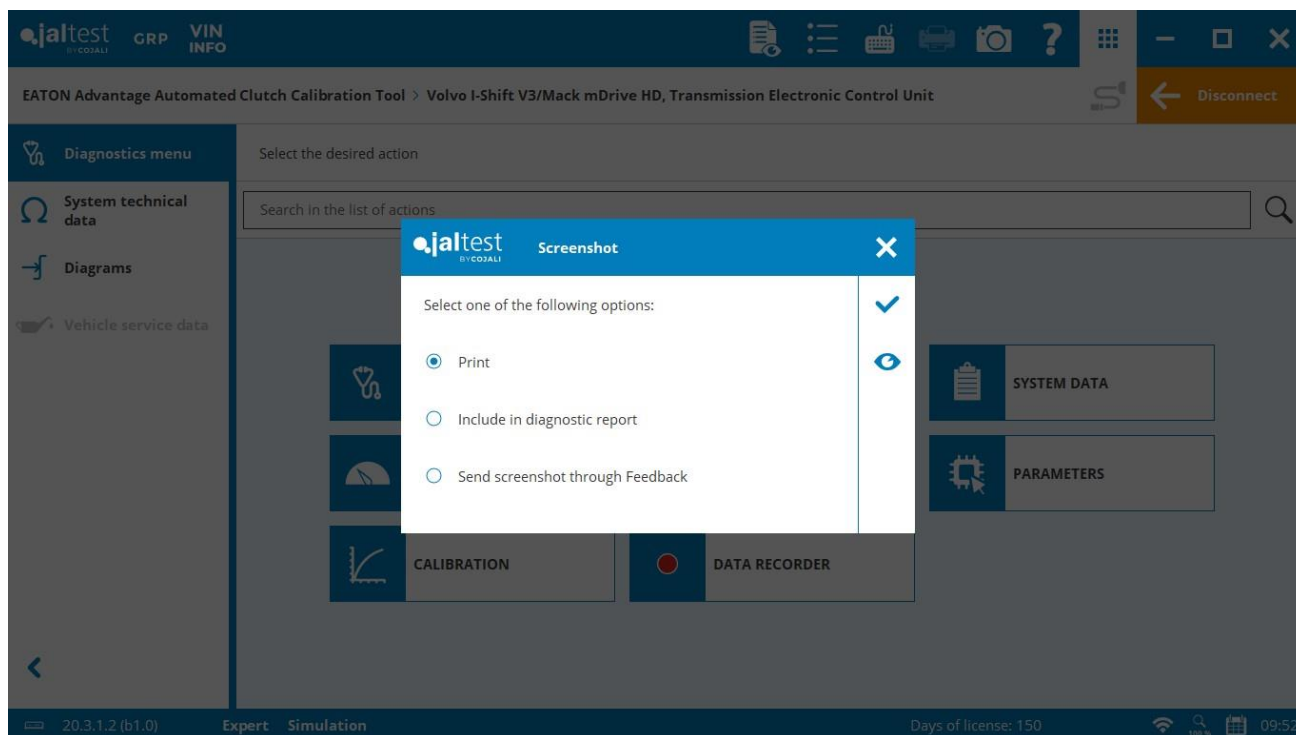
EATON Advantage Automated Clutch Calibration Tool > Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit

Disconnect

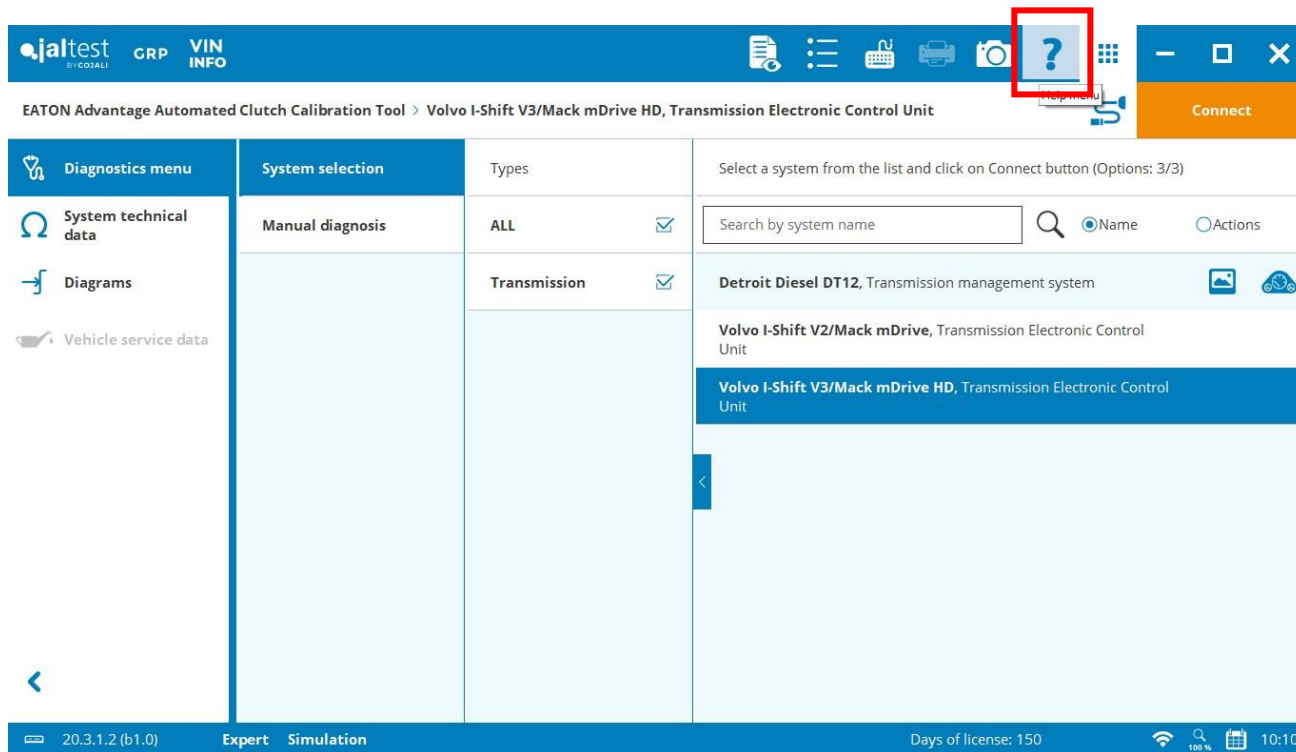
Diagnostics menu	Select the desired action
System technical data	Search in the list of actions <input type="text"/> <input type="button" value="Search"/>
Diagrams	
Vehicle service data	

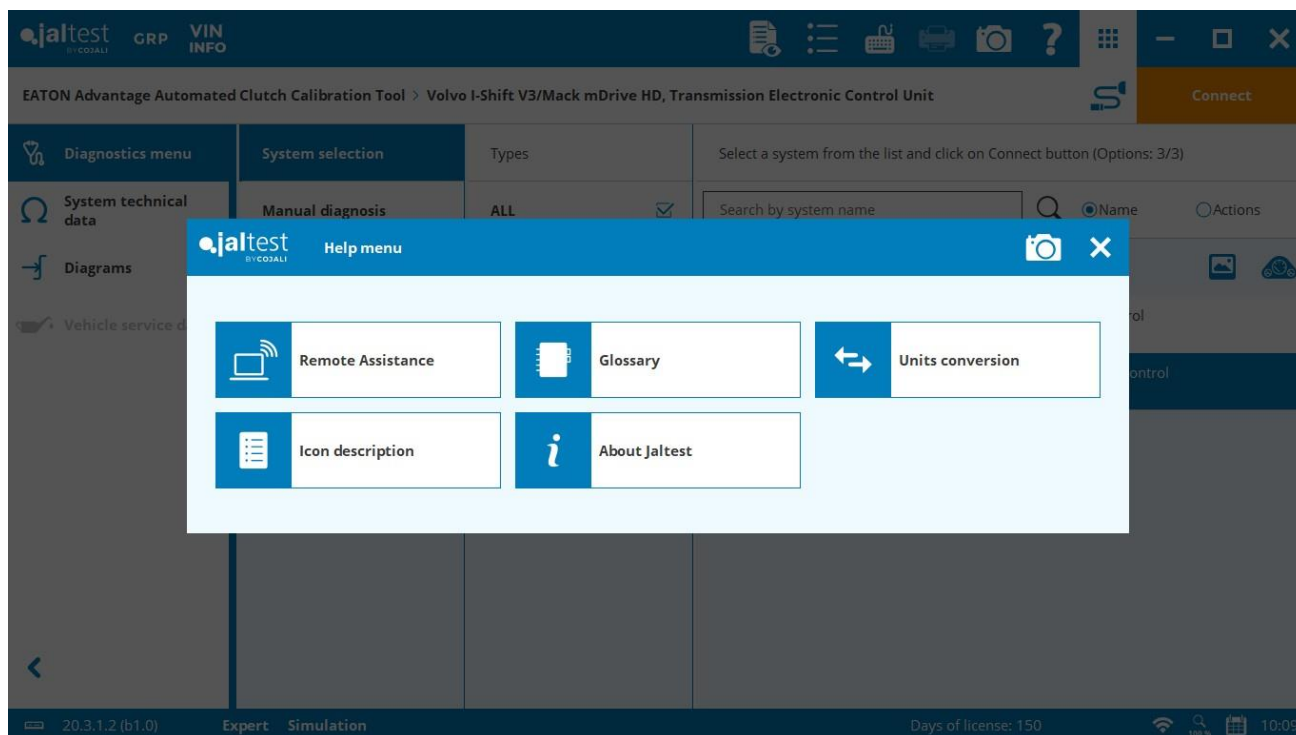
<input type="button" value="Stethoscope"/> READ FAULT CODES	<input type="button" value="Trash"/> CLEAR FAULT CODES	<input type="button" value="Clipboard"/> SYSTEM DATA
<input type="button" value="Sun"/> MONITORING	<input type="button" value="List"/> SYSTEM CHECKS	<input type="button" value="Gear"/> PARAMETERS
<input type="button" value="Graph"/> CALIBRATION	<input type="button" value="Red Dot"/> DATA RECORDER	

20.3.1.2 (b1.0) Expert Simulation Days of license: 150 100% 10:03

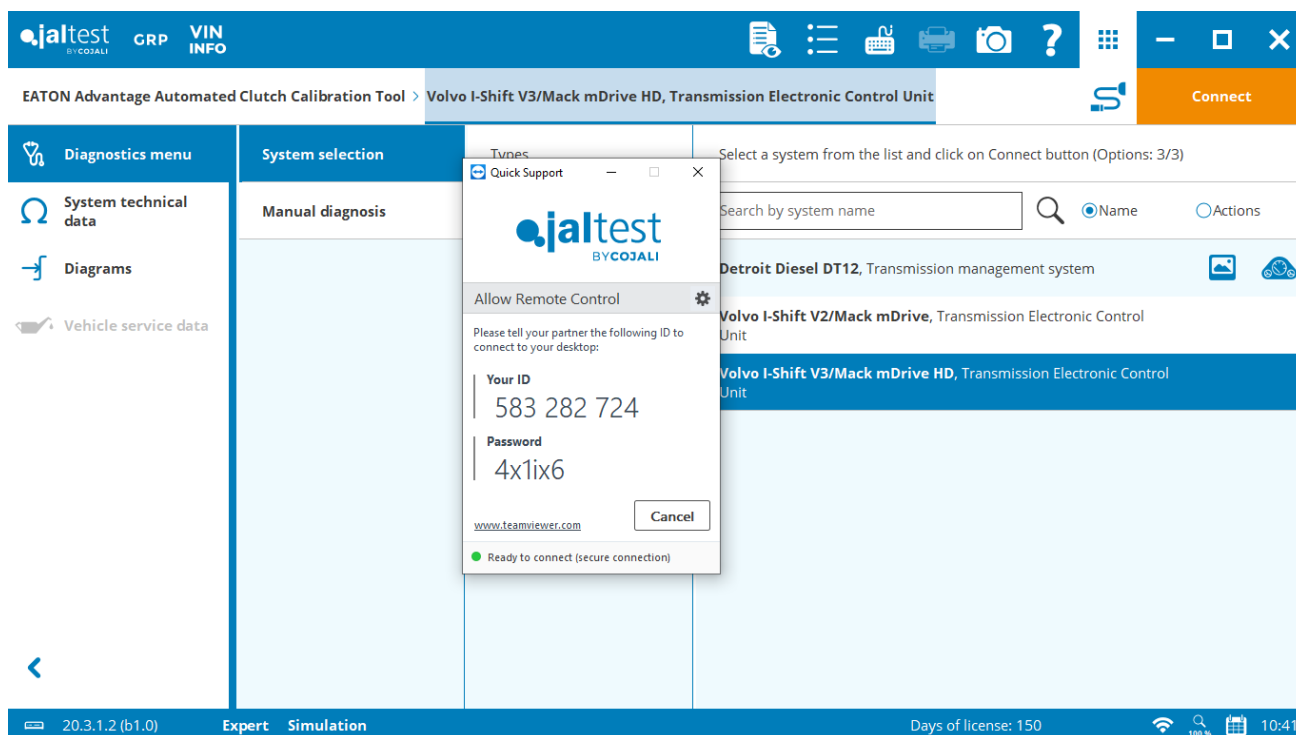


Help





Remote Assistance



Glossary

The screenshot shows the jalttest application interface with the 'Glossary' window open. The window has a search bar at the top and a table below. The table has columns for 'Acronyms', 'Description', and 'Info'. The table lists various automotive terms and their descriptions.

Acronyms	Description	Info
24N (-)	24N TRAILER CONNECTOR	i
24S (-)	24S TRAILER CONNECTOR	i
2WD / TWD (Two Wheel Drive)	2WD (2 WHEEL DRIVE)	
2WS (Two Wheel Steering)	2WD (2 WHEEL DRIVE)	
4EAT (4-speed Electronic Automatic Transmission)	AUTOMATIC TRANSMISSION (4-SPEED)	
4W ETC (4 Wheel Electronic Transmission Control)	4WD ELECTRONICS - TRANSMISSION ELECTRONIC CONTROL UNIT	
4WD (Four Wheel Drive)	4WD ELECTRONICS	
4WS (Four-Wheel Steering)	FOUR-WHEEL STEERING	

Units conversion

The screenshot shows the jalttest application interface with the 'Units conversion' window open. The window prompts the user to select a magnitude and convert values between different measurement units. The example shows a conversion from 1 mile to 1.609344 kilometers.

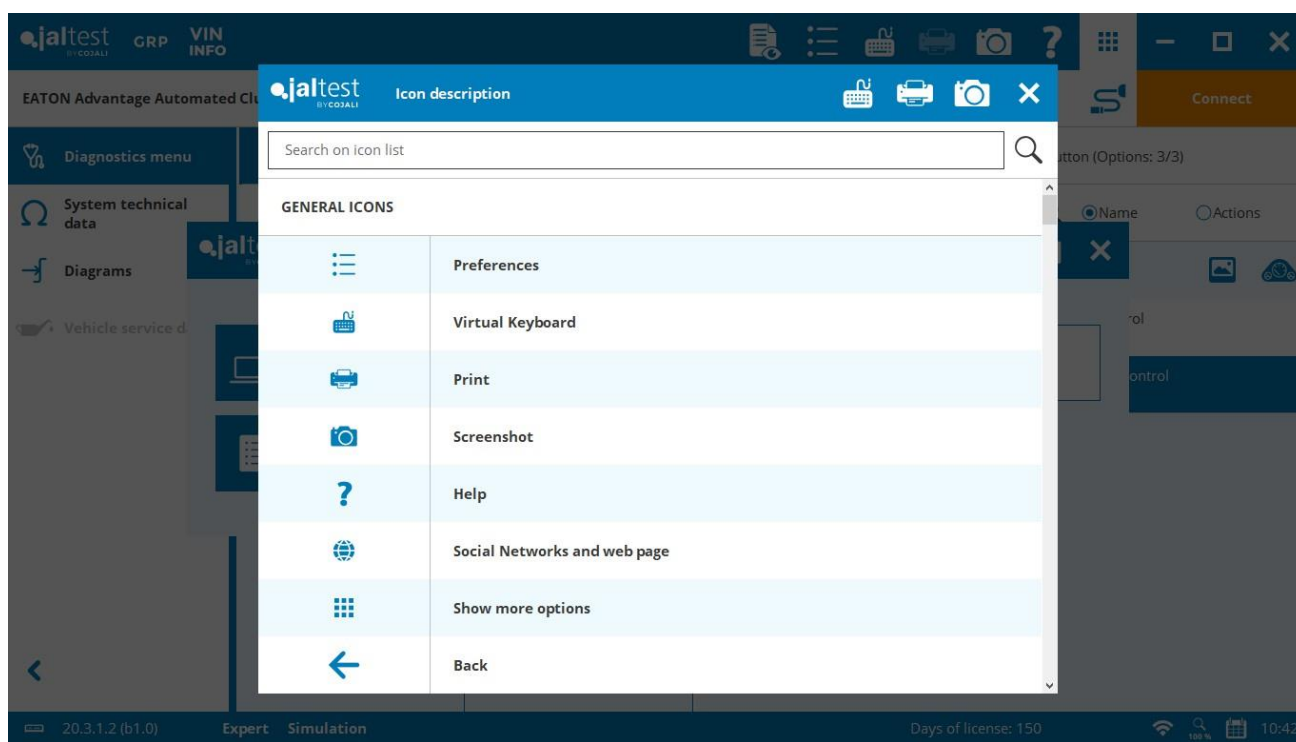
Select the magnitude and convert the values between different measurements units.

Magnitude: Length

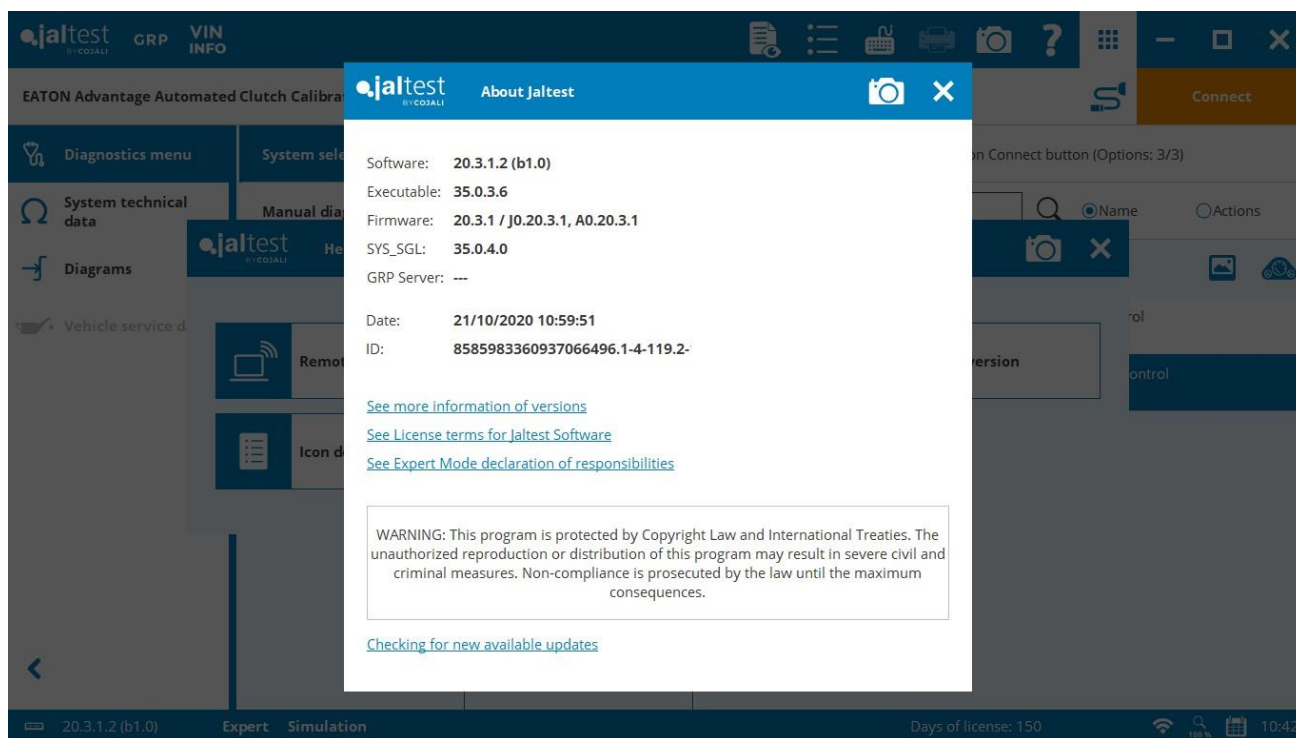
Value: 1 | mi

Result: 1.609344 | km

Icon description



About Jaltest



Hide/Show options button

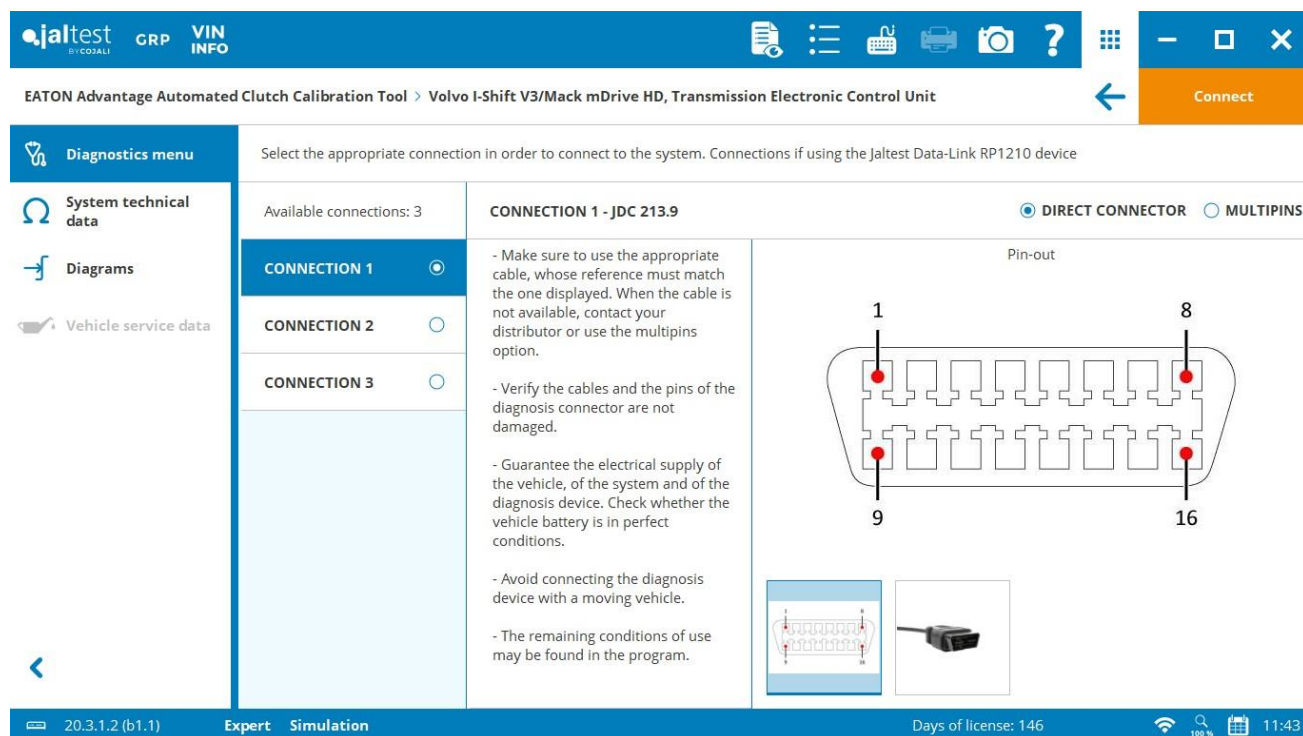
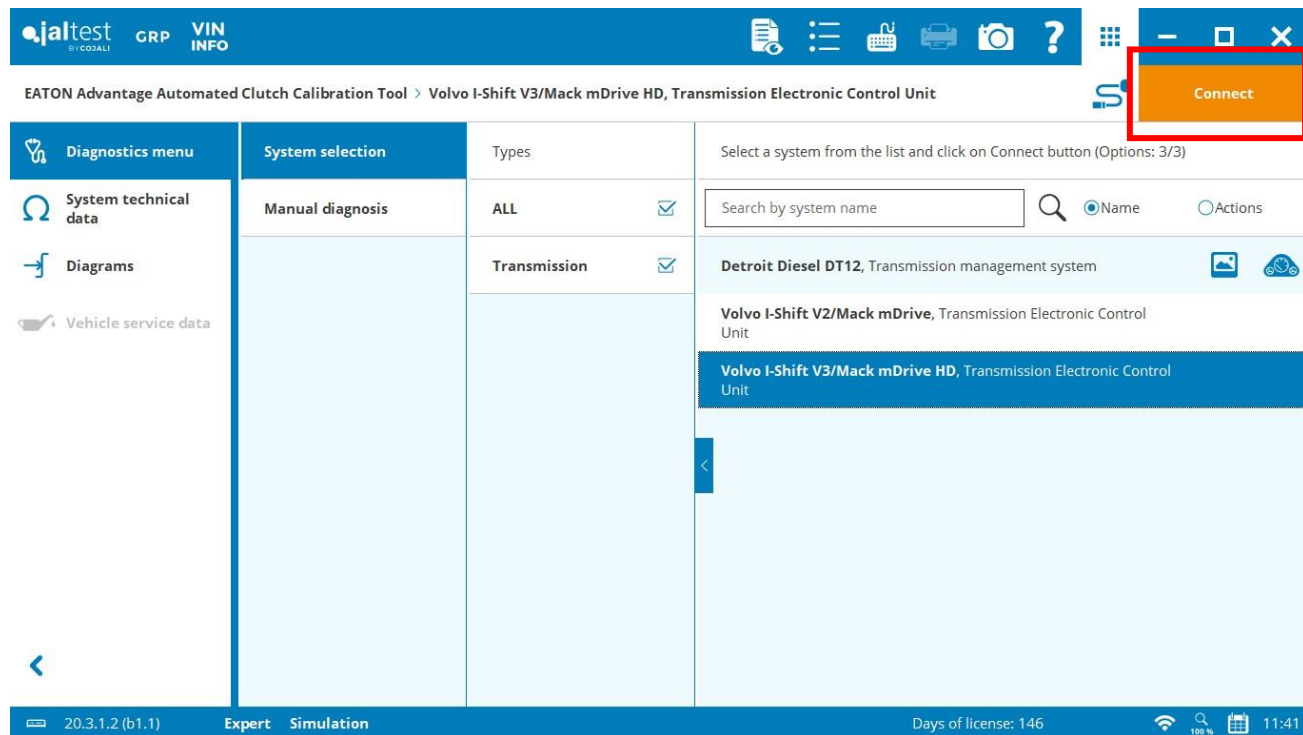
The screenshot shows the jalttest software interface. At the top, there is a blue header bar with the jalttest logo, GRP, VIN INFO, and a red box highlighting a grid icon (the 'Hide/Show options button'). Below the header, the main area is divided into a left sidebar with 'Diagnostics menu' (System technical data, Diagrams, Vehicle service data) and a main content area. The main content area has a 'System selection' table with columns 'Types' and 'Manual diagnosis'. The 'Types' column has checkboxes for 'ALL' and 'Transmission'. The 'Manual diagnosis' column has a search bar and a list of systems: 'Detroit Diesel DT12, Transmission management system', 'Volvo I-Shift V2/Mack mDrive, Transmission Electronic Control Unit', and 'Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit'. The 'Volvo I-Shift V3/Mack mDrive HD, Transmission Electronic Control Unit' is selected. At the bottom, there is a status bar with version 20.3.1.2 (b1.0), Expert Simulation, Days of license: 150, and a clock showing 10:08.

Printer

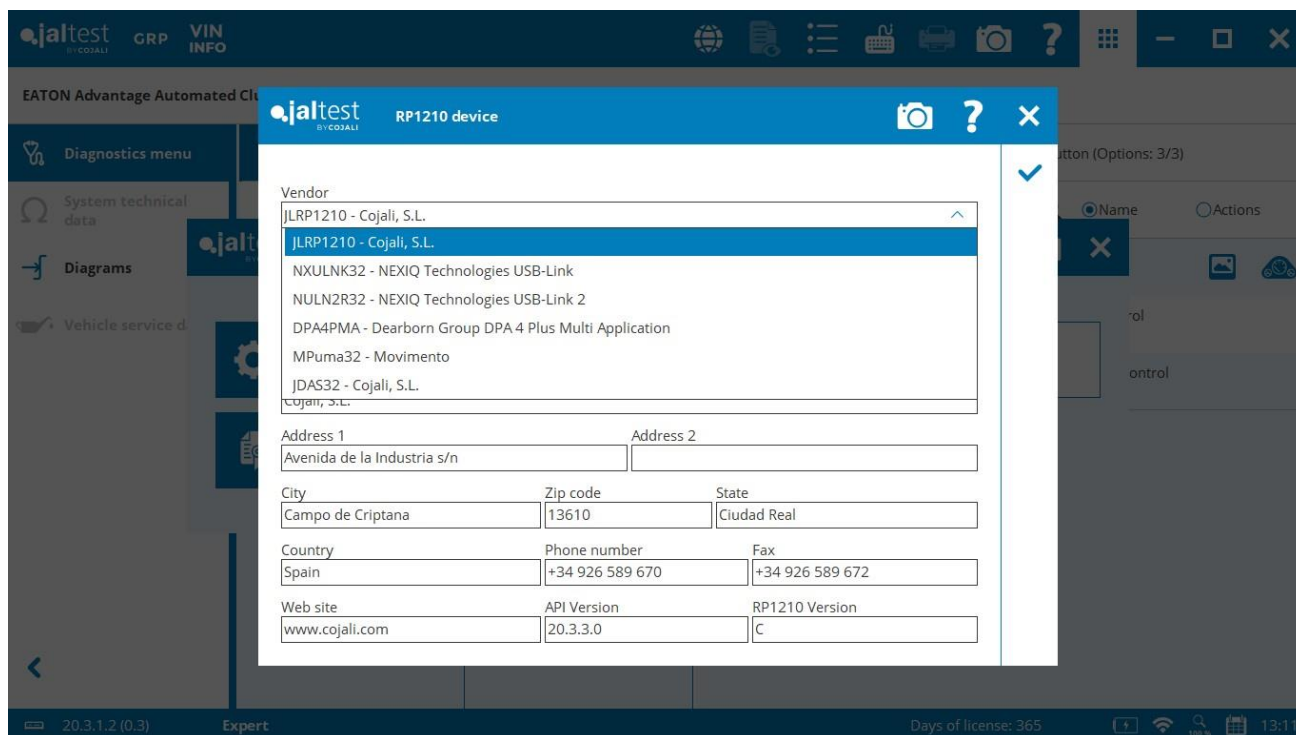
The screenshot shows the jalttest software interface. At the top, there is a blue header bar with the jalttest logo, GRP, VIN INFO, and a red box highlighting a printer icon (the 'Printer' button). Below the header, the main area is divided into a left sidebar with 'Diagnostics menu' (Wiring diagram, System technical data, Diagrams, Vehicle service data) and a main content area. The main content area has a 'Wiring diagram' section with a search bar and a list of systems: 'TCM DT12_V 15.1'. The 'TCM DT12_V 15.1' is selected. The main content area displays a wiring diagram for the TCM DT12_V 15.1. The diagram shows a power supply (7.5A, 15A, 15A) connected to a control unit (CX1) and a transmission control unit (TCM DT12_V 15.1). The diagram also shows a transmission control unit (TCM DT12_V 15.1) connected to a transmission (CB1, CB2, CB3). At the bottom, there is a status bar with version 20.3.1.2 (b1.1), Expert Simulation, Days of license: 146, and a clock showing 14:19.

Connecting to the transmission control unit

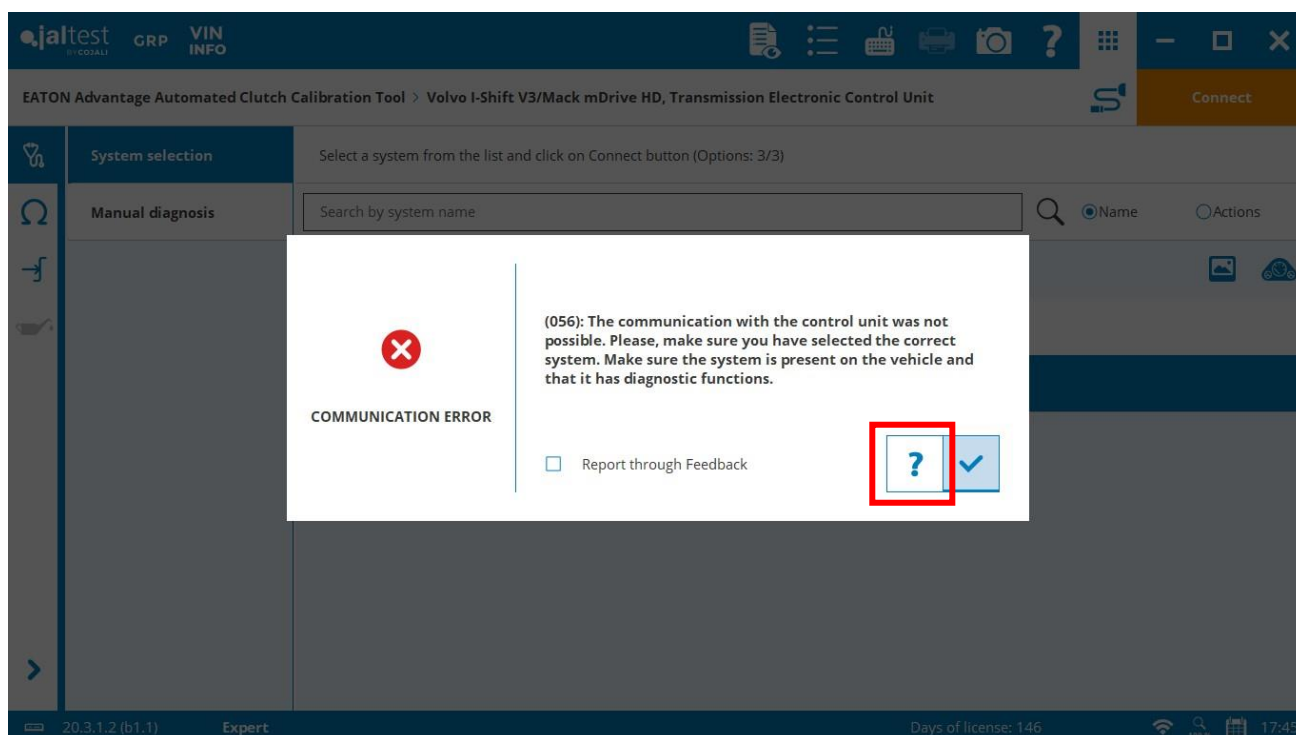
Select the system and a “Connect” button will appear. Click on the “Connect” button.

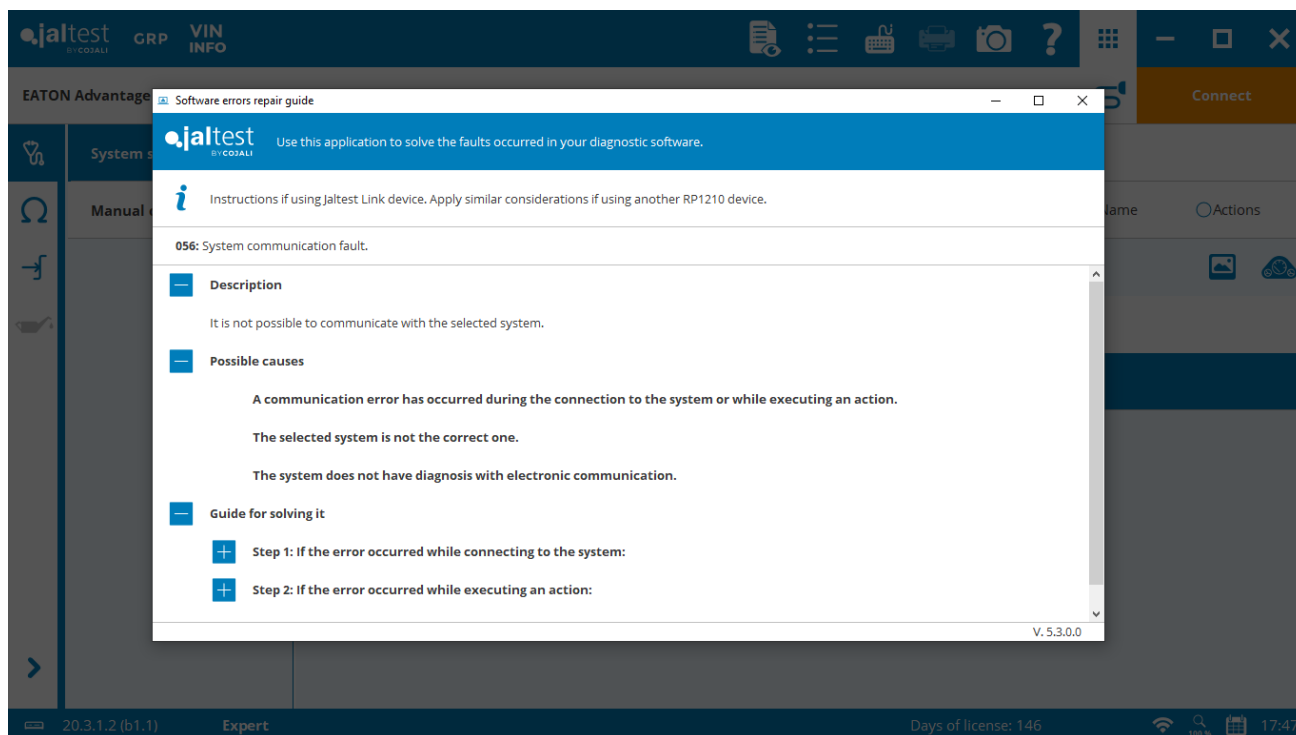


During the first connection, the software will request to identify the RP1210 device used. This can be modified, as explained before, from the “Preferences” menu > “RP1210 device” section.



If the connection fails, or potential issues occur, troubleshooting guides will be provided.





Main menu

Read fault codes

Clear fault codes

System data (e.g., ECU data, SW and HW references)

Operation data (e.g., Total and trip data)

Monitoring (Live data and System display)

Actuate components

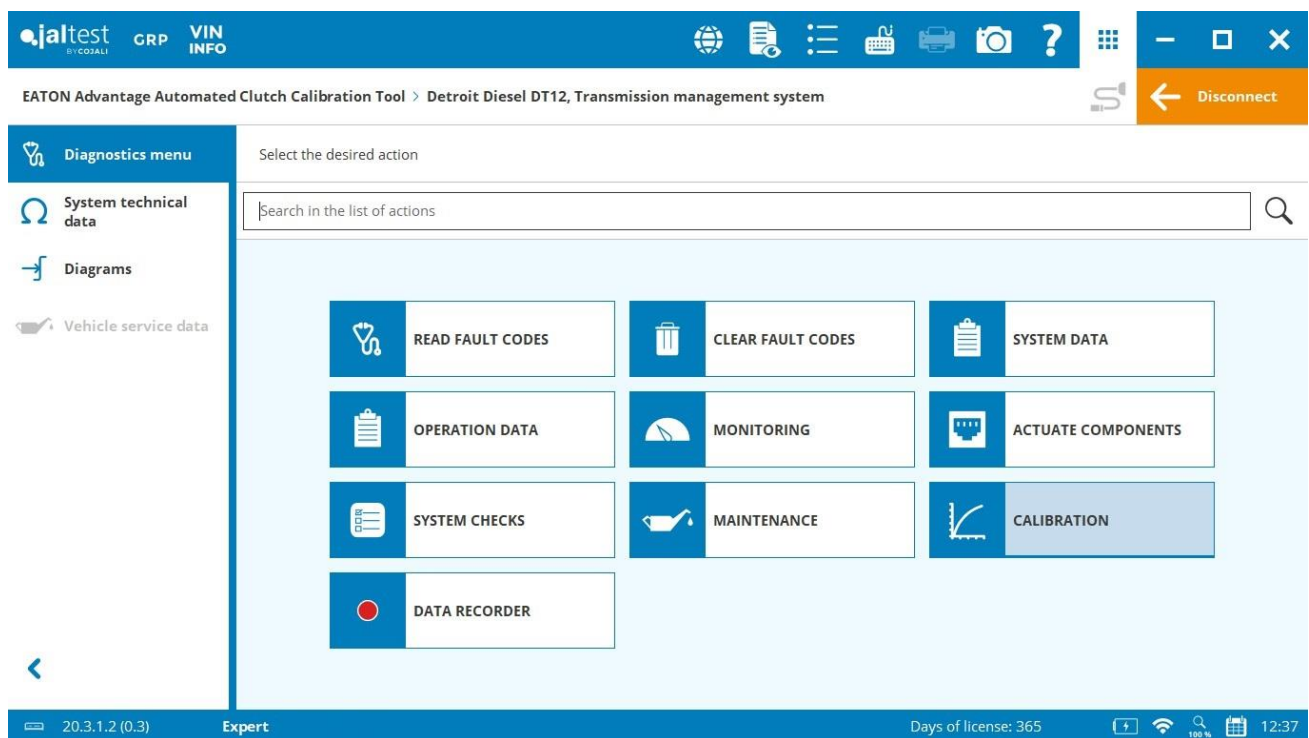
System checks

Maintenance (components reset)

Calibration (e.g., clutch calibration)

Parameters (reprogram transmission ECU memory)

Data recorder (perform a road test)



Read fault codes

- 1) Fault code status
- 2) Fault code number
- 3) Number of occurrences
- 4) Description
- 5) Freeze frame data
- 6) Help and components related

READ FAULT CODES

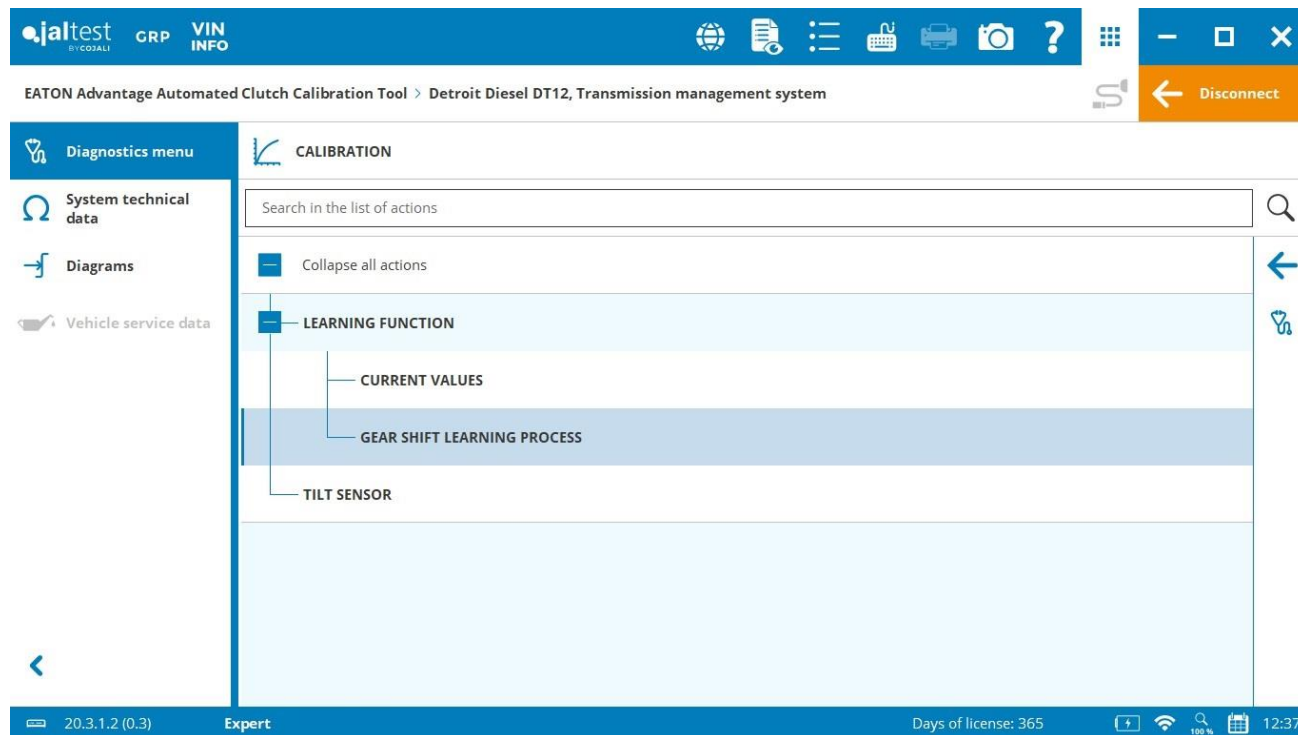
FAULT CODE(S) STORED IN MEMORY: 2

	P1058 x1 Rpm sensor of the intermediate shaft of the transmission.	i ?	✓
	P1066 x1 Fast disengagement solenoid valve.	i ?	✗

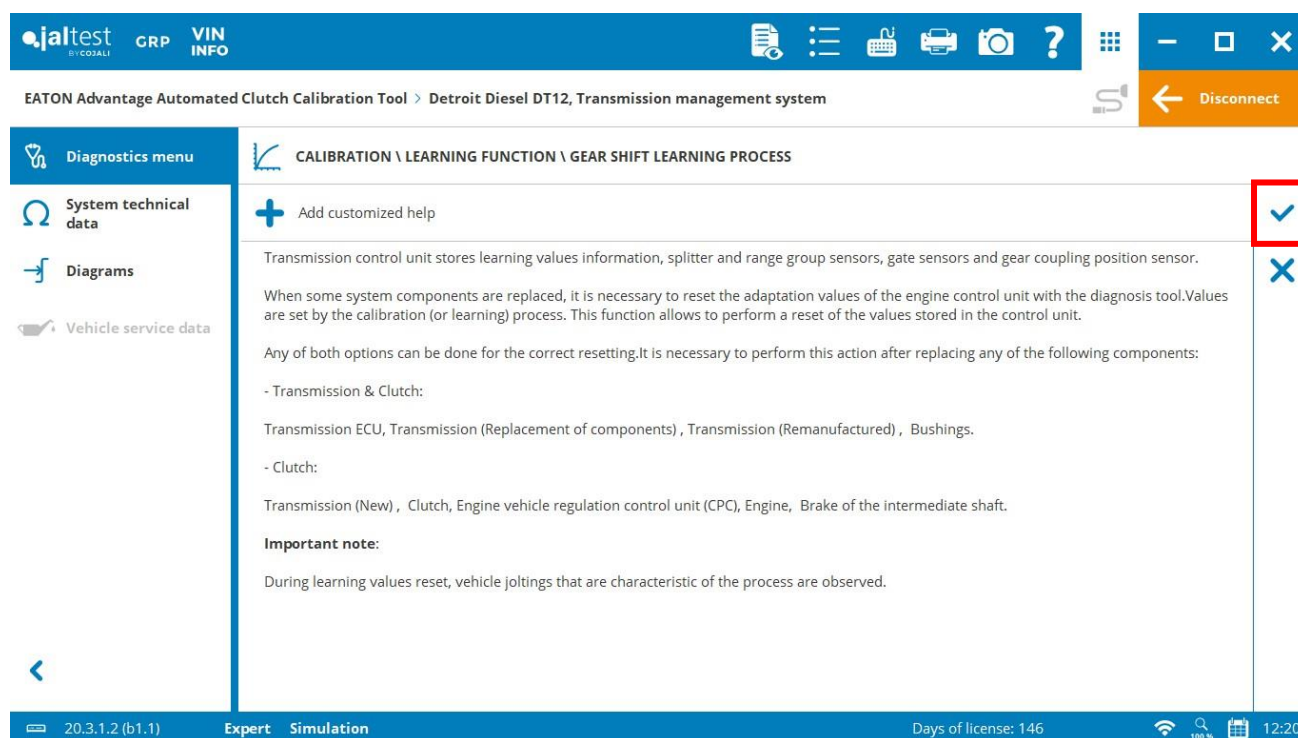
Legend: ACTIVE FAULT NON-ACTIVE FAULT OTHER FAULT STATES

Calibration

Select the functionality



Action Help will be displayed. Read carefully and click on the checkmark icon. During the rest of the steps of the functionality, it will be possible to go back to this information through the question mark. See third picture below.



It is possible to customize the action help using the next highlighted icon.

The screenshot shows the jaltest software interface for the EATON Advantage Automated Clutch Calibration Tool. The top bar includes the jaltest logo, GRP, VIN INFO, and various icons. The main menu on the left lists 'Diagnostics menu', 'System technical data', 'Diagrams', and 'Vehicle service data'. The main content area is titled 'CALIBRATION \ LEARNING FUNCTION \ GEAR SHIFT LEARNING PROCESS'. In the first screenshot, the '+ Add customized help' button is highlighted with a red box. In the second screenshot, a table of initial conditions is displayed, with a question mark icon in the right margin highlighted by a red box.

Parameter	Value	Status	Action
BEFORE CONTINUING, PLEASE READ CAREFULLY THE INITIAL CONDITIONS AND THE HELP PROVIDED.			
- ENGINE OFF, KEY ON			
- THE AIR SUPPLY PRESSURE OF THE SYSTEM MUST BE OPTIMAL > 120 psi (8.3 bar)			
ENGINE SPEED	2430 rpm	Warning	?
SUPPLY PRESSURE	127 psi (lbf/in²)	Success	✓
CLUTCH CALIBRATION, STATE	STORED DATA		📄
TRANSMISSION CALIBRATION, STATE	STORED DATA		

During the functionality, some initial conditions will need to be met in order to successfully carry out the procedure. Pay attention to the next icons to make sure those conditions are met. Click on the checkmark once these initial conditions are met.

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool > Detroit Diesel DT12, Transmission management system

Disconnect

Diagnostics menu

- System technical data
- Diagrams
- Vehicle service data

CALIBRATION \ LEARNING FUNCTION \ GEAR SHIFT LEARNING PROCESS

BEFORE CONTINUING, PLEASE READ CAREFULLY THE INITIAL CONDITIONS AND THE HELP PROVIDED.

- ENGINE OFF, KEY ON
- THE AIR SUPPLY PRESSURE OF THE SYSTEM MUST BE OPTIMAL > 120 psi (8.3 bar)

ENGINE SPEED	2430 rpm	
SUPPLY PRESSURE	127 psi (lbf/in²)	
CLUTCH CALIBRATION, STATE	STORED DATA	
TRANSMISSION CALIBRATION, STATE	STORED DATA	

20.3.1.2 (b1.1) Expert Simulation Days of license: 146 100% 12:22

The calibration process will start. Checkmark is disabled as this is an automatic step. It will finish automatically.

jaltest GRP VIN INFO

EATON Advantage Automated Clutch Calibration Tool > Detroit Diesel DT12, Transmission management system

Disconnect

Diagnostics menu

- System technical data
- Diagrams
- Vehicle service data

CALIBRATION \ LEARNING FUNCTION \ GEAR SHIFT LEARNING PROCESS

THIS CALIBRATION WILL BE AUTOMATICALLY PERFORMED: CALIBRATING
PLEASE WAIT...

ENGINE SPEED	600 rpm	
SUPPLY PRESSURE	120,6 psi (lbf/in²)	
CLUTCH CALIBRATION, STATE	STORED DATA	
TRANSMISSION CALIBRATION, STATE	PROCESSING	

20.3.1.2 (0.3) Expert Days of license: 365 100% 12:55

The calibration has finished. After this step, the new values stored on the ECU will be shown.

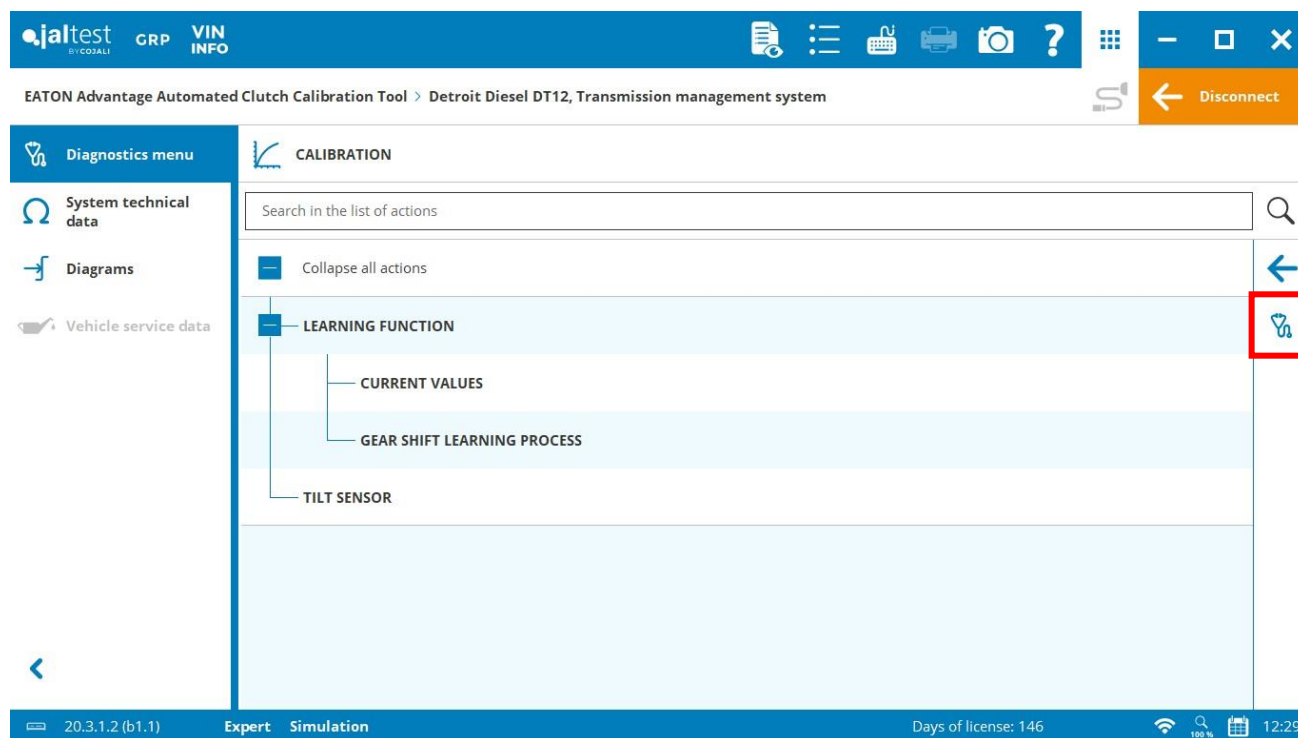
The screenshot shows the jAltest software interface. The top bar includes the jAltest logo, GRP, VIN INFO, and various icons. The main menu on the left has options: Diagnostics menu, System technical data, Diagrams, and Vehicle service data. The main display area shows the title "CALIBRATION \ LEARNING FUNCTION \ GEAR SHIFT LEARNING PROCESS" and a message: "PROCESS FINISHED. PLEASE, DIAGNOSE THE SYSTEM AND CHECK THERE ARE NO FAULTS STORED IN THE CONTROL UNIT. BEFORE PROCEEDING, TURN THE IGNITION OFF AND ON, IN ORDER TO PERFORM A 'SWITCH OFF' RESET OF THE CONTROL UNIT AND SAVE THE CHANGES." The bottom status bar shows version 20.3.1.2 (b1.1), Expert Simulation mode, and a license duration of 146 days.

See new values stored in the next picture. It is possible to add comments in the diagnostics report.

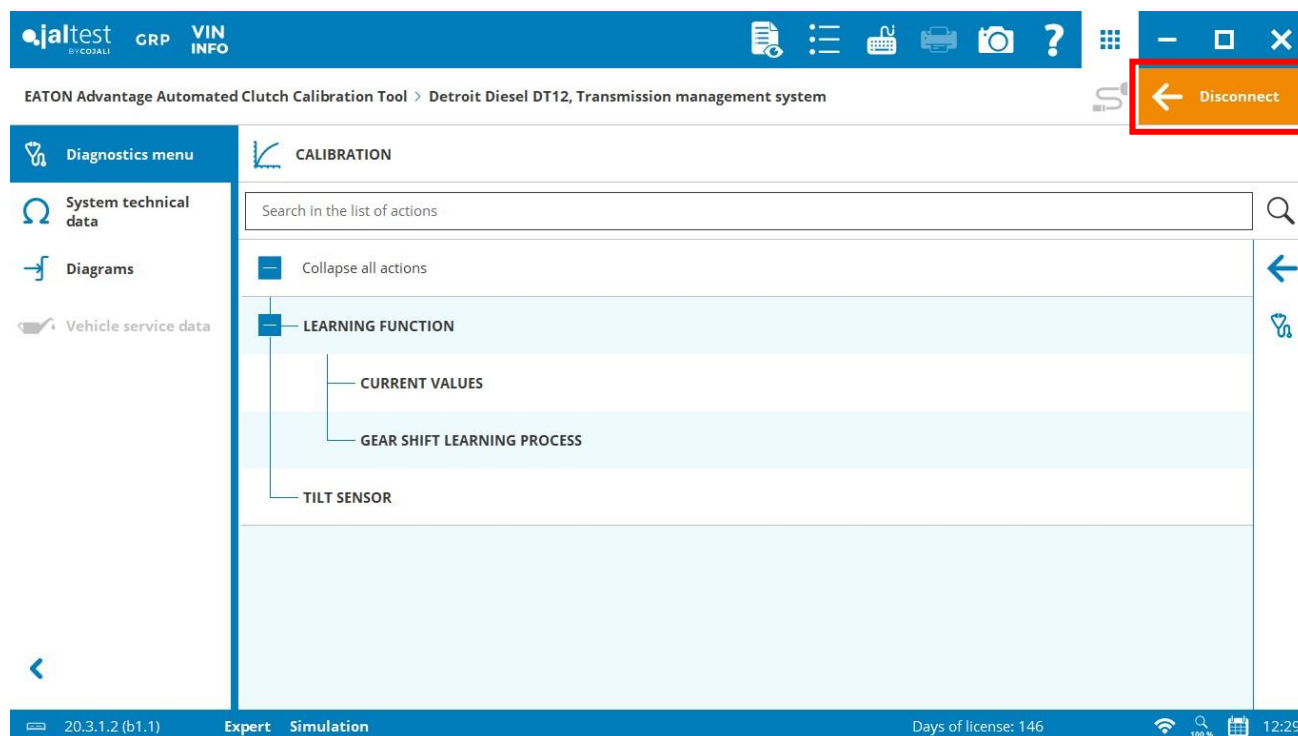
The screenshot shows the jAltest software interface with the calibration process completed. The main display area shows the title "CALIBRATION \ LEARNING FUNCTION \ GEAR SHIFT LEARNING PROCESS" and a message: "CALIBRATION PROCESS COMPLETED THE CURRENT VALUES ARE DISPLAYED NEXT." Below the message is a search bar and a table of learned values. The table has two columns: the sensor name and the learned value. The values are: SPLITTER GROUP SENSOR, LEARNED VALUE (MINIMUM VALUE) at 3,267 in; SPLITTER GROUP SENSOR, LEARNED VALUE (MAXIMUM VALUE) at 2,440 in; RANGE GROUP SENSOR, LEARNED VALUE (MINIMUM VALUE) at 1,535 in; RANGE GROUP SENSOR, LEARNED VALUE (MAXIMUM VALUE) at 3,622 in; GEAR SENSOR, LEARNED VALUE (MINIMUM VALUE) at 3,661 in; and GEAR SENSOR, LEARNED VALUE (MAXIMUM VALUE) at 1,692 in. The bottom status bar shows version 20.3.1.2 (b1.1), Expert Simulation mode, and a license duration of 146 days.

Sensor Name	Learned Value
SPLITTER GROUP SENSOR, LEARNED VALUE (MINIMUM VALUE)	3,267 in
SPLITTER GROUP SENSOR, LEARNED VALUE (MAXIMUM VALUE)	2,440 in
RANGE GROUP SENSOR, LEARNED VALUE (MINIMUM VALUE)	1,535 in
RANGE GROUP SENSOR, LEARNED VALUE (MAXIMUM VALUE)	3,622 in
GEAR SENSOR, LEARNED VALUE (MINIMUM VALUE)	3,661 in
GEAR SENSOR, LEARNED VALUE (MAXIMUM VALUE)	1,692 in

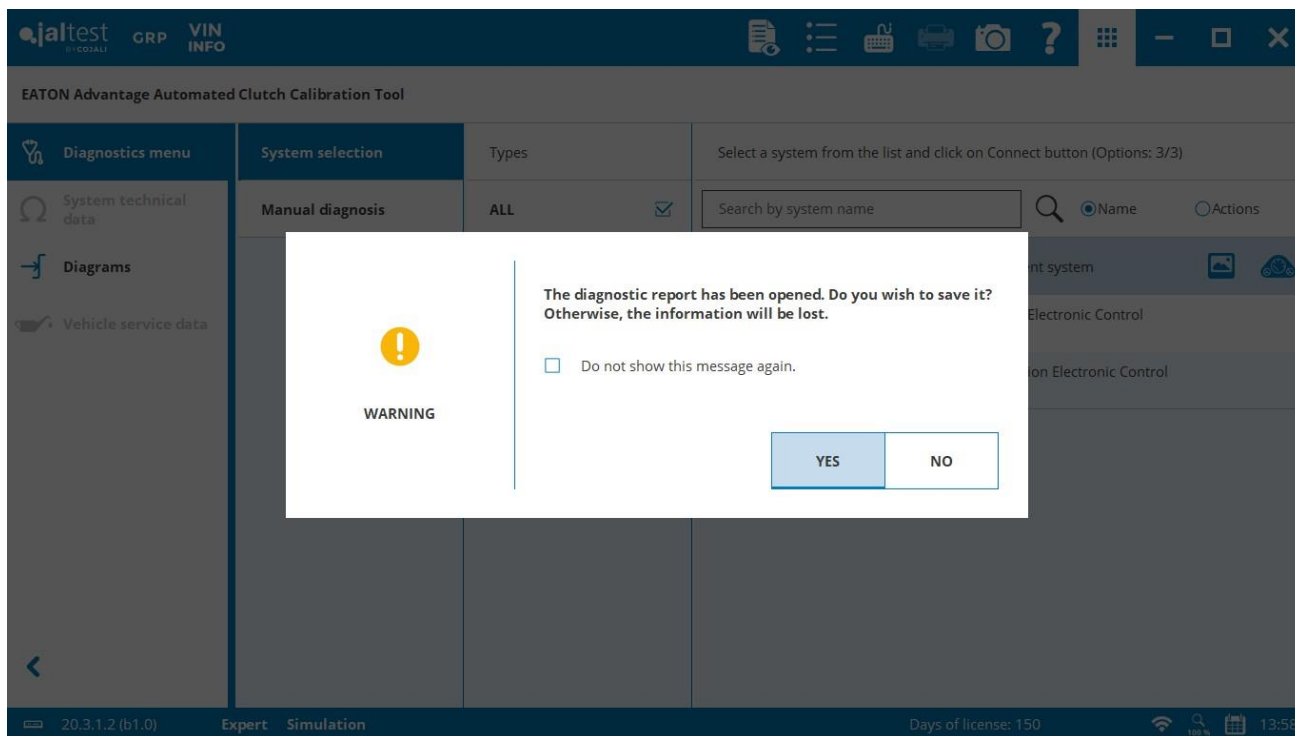
Every time a functionality is completed, there is a shortcut to read fault codes.



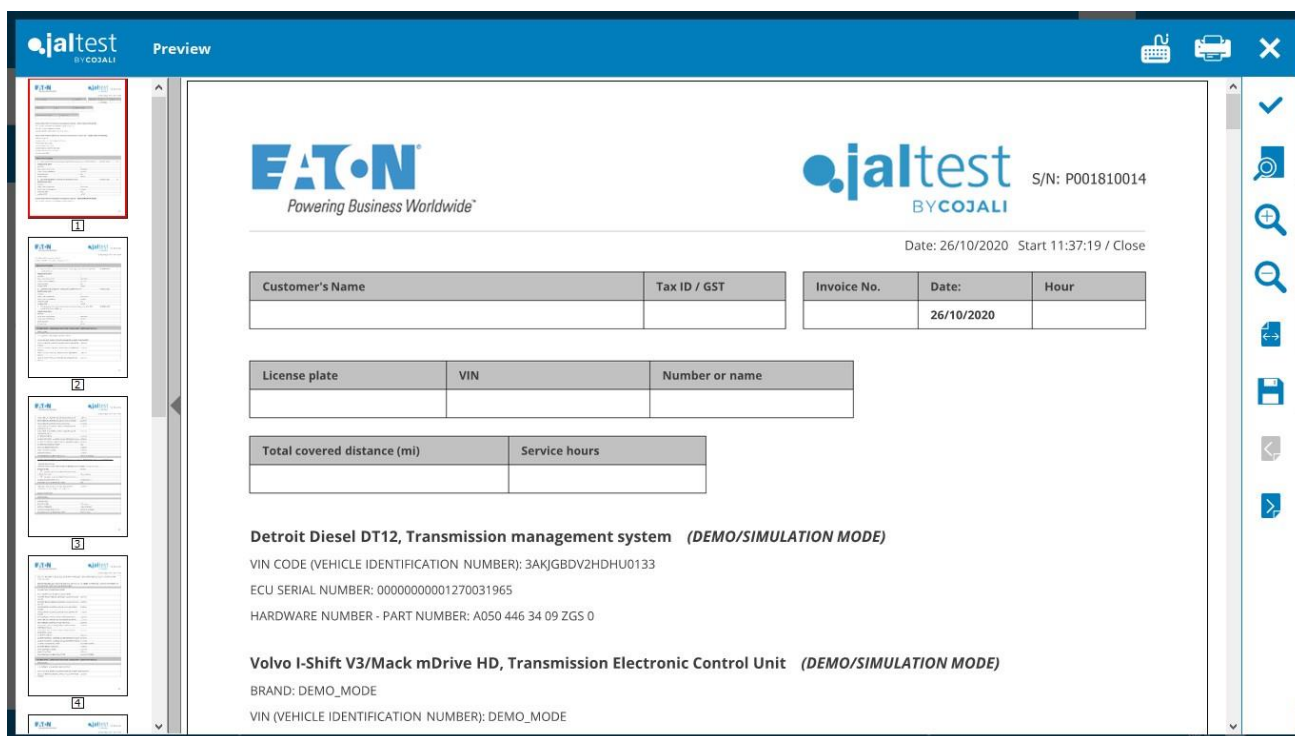
Once the diagnostics session is completed, it is possible to select “Disconnect”, to disconnect from the system.



When closing the software or when selecting to preview the diagnostics report (at the top, icon beside the “Preferences” button), it is possible to generate a diagnostic report which can be stored in the GRP module. Also, the checkbox shown below can be enabled to save these preferences for future times.



Select “YES” and a diagnostics report preview will appear. The report can be saved and printed (in PDF format as well).

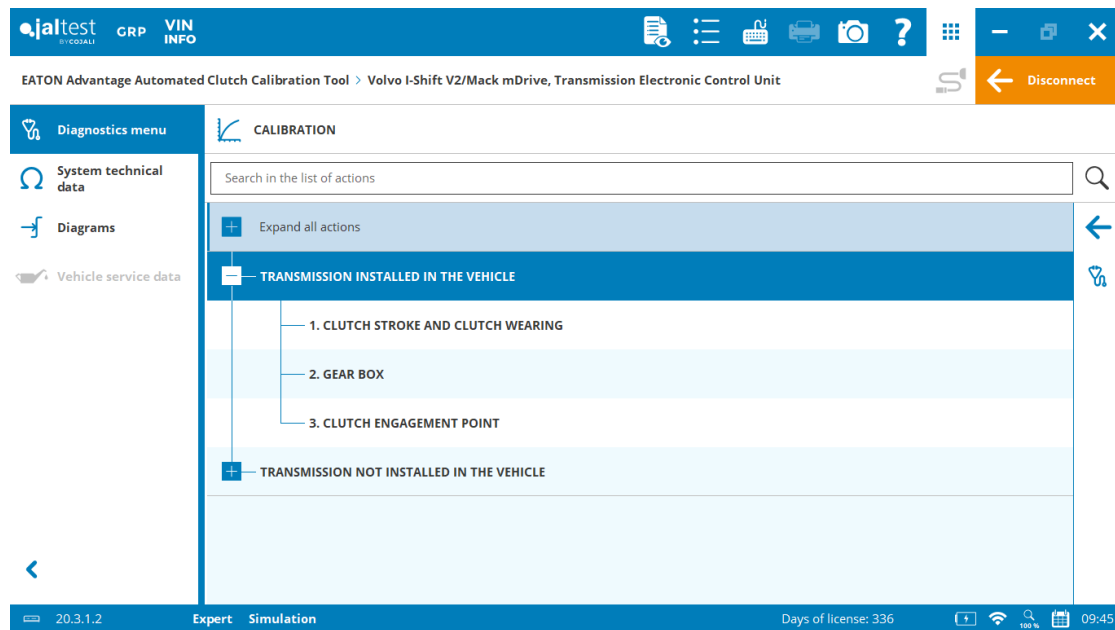


4. Clutch calibration

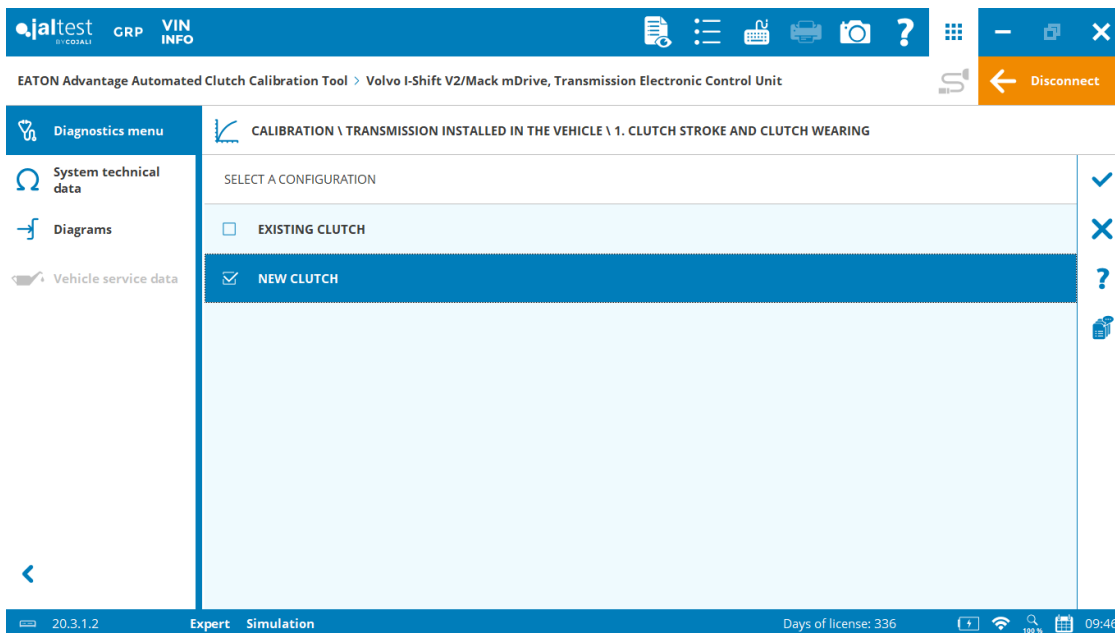
This is the necessary selection when a new Eaton Advantage Automated Clutch tool is installed.

Volvo I-Shift V2 / Mack mDRIVE

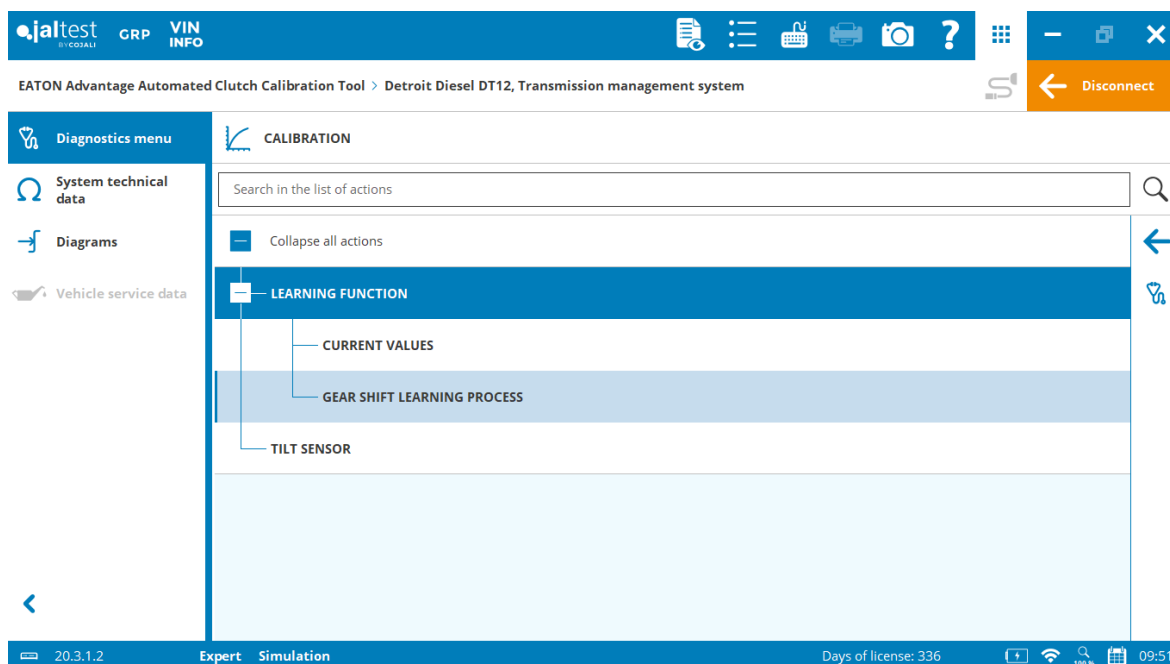
Note: Clutch calibration with the transmission not installed in the vehicle is also supported.



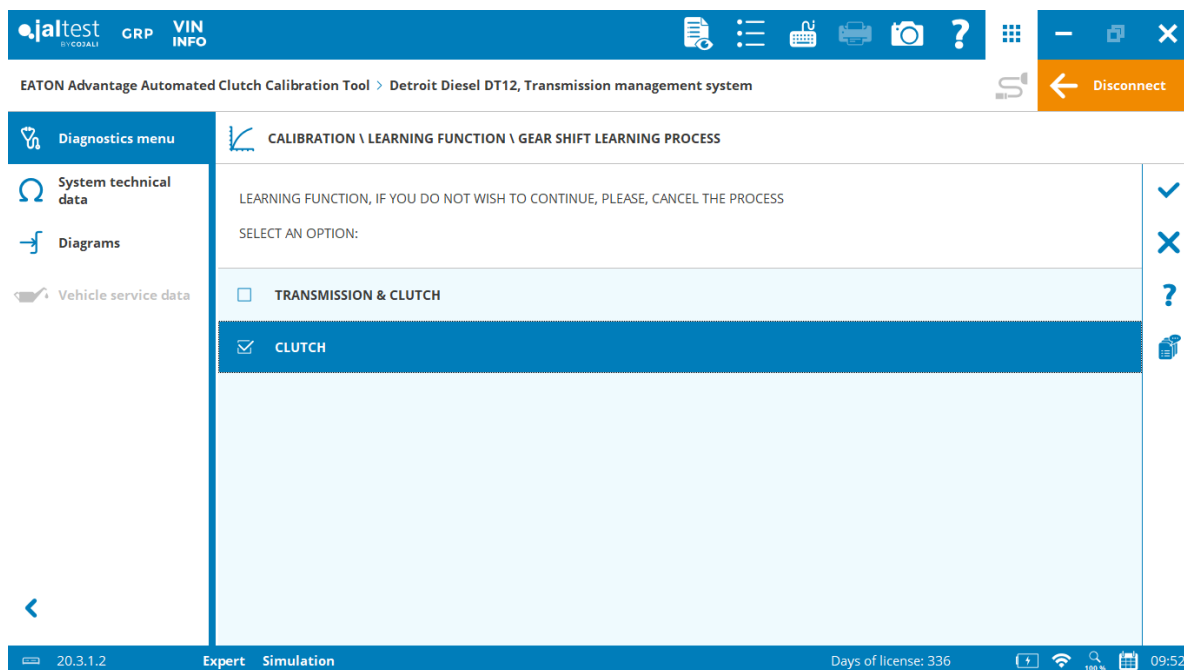
Select "New clutch" option.



Detroit DT12



Important. Select “Clutch” option. The other option is used in case TECU and/or other components would have been replaced.



Volvo I-Shift V3 / Mack mDRIVE HD

Select the option highlighted. The first one would be in case you want to perform the adjustment without clutch disc replacement.

