

System Diagnostics Software/Hardware

Product overview and installation



WABCO

Original document:

The German version is the original document.

Translation of the original document:

All non-German language editions of this document are translations of the original document.

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You will find the current edition at:
<http://www.wabco.info/i/525>

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List of abbreviations

1 List of abbreviations

Abbreviation	Meaning
EBS	Electronic Braking System
ECU	Electronic Control Unit
PC	Personal Computer
USB	Universal Serial Bus

Information about this document

2 Information about this document

2.1 Validity

This document applies to the following WABCO part numbers:

246 301 900 0 Full Package

246 301 901 0 Trailer

246 301 902 0 Bus

246 301 904 0 Truck

And all individually available diagnostic programs (single downloads)

2.2 Symbols used

i Important information, notes and/or tips

Descriptive text

▶ For individual action steps

1. Action step 1

2. Action step 2

↳ Consequence of an action

• Listing

3 WABCO System Diagnostics

3.1 Introduction

The WABCO System Diagnostics are special programs with extensive functions that allow you to perform diagnostics on WABCO electronic systems.

For system diagnostics, you require:

- a standard PC or laptop
- the WABCO Diagnostic Software

➔ See: *chapter "3.2.3 Diagnostic Software overview", page 12*

- a Diagnostic Interface
- cable for the relevant vehicle type

Special testing equipment and accessories to round off the diagnostics range.

An overview of all available accessories can be found in our WABCO product catalogue at: www.wabco-customercentre.com

The rapid developments in vehicle technology and increasingly broad range of functions and sophisticated safety features mean that Diagnostic Software is required.

WABCO provides Diagnostic Software for all diagnosable WABCO systems and components in a variety of vehicles.

There are three ways to obtain the Diagnostic Software:

- as part of a WABCO System Diagnostics package
- as an online single download
- as a USB stick

For the diagnosis of multiple WABCO systems, WABCO offers you different customer-specific packages with Diagnostic Software.

➔ See: *chapter "3.2.3 Diagnostic Software overview", page 12*

These packages contain numerous programs which can be downloaded from the internet at any time in the most current version and can be used immediately.

WABCO System Diagnostics subscription has the advantage that you are quickly informed of new versions and can obtain all newly developed Diagnostic Software at no extra cost.

Diagnosis with the Diagnostic Software can be carried out by any user. If parameters need to be changed or a calibration needs to be carried out, authorisation (PIN) is required.

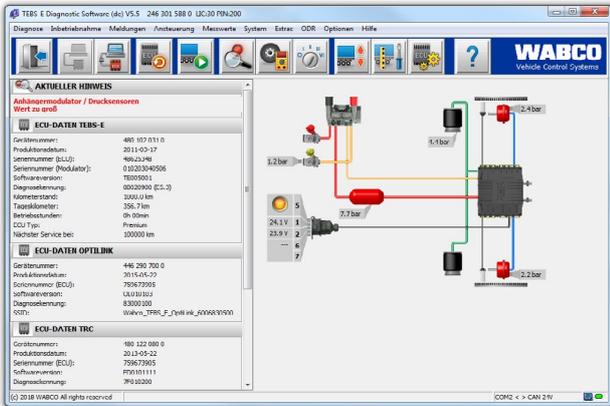
➔ See: *chapter "3.5.3 Extended authorisation (PIN)", page 32*

The graphic user interface of the Diagnostic Software is clearly structured and intuitive to operate. Thanks to detailed repair information and circuit diagrams with measured values, successful diagnosis and repair is made easy and fast.

WABCO System Diagnostics

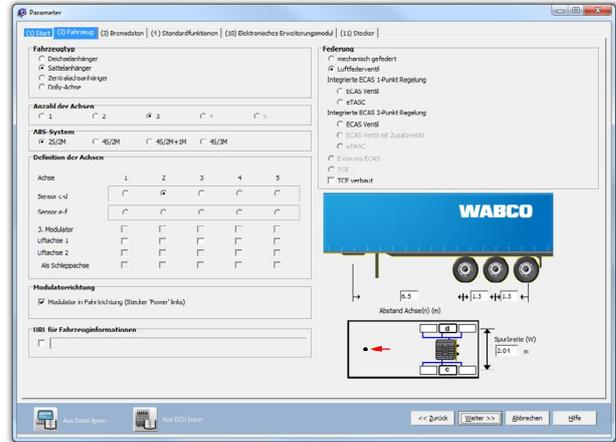
There are examples of the Diagnostic Software below, with extracts from the software for the trailer EBS E system.

Main menu



- ECU data
- Displaying the current diagnostic memory
- System configuration
- Current measured values

Configuration option (example)



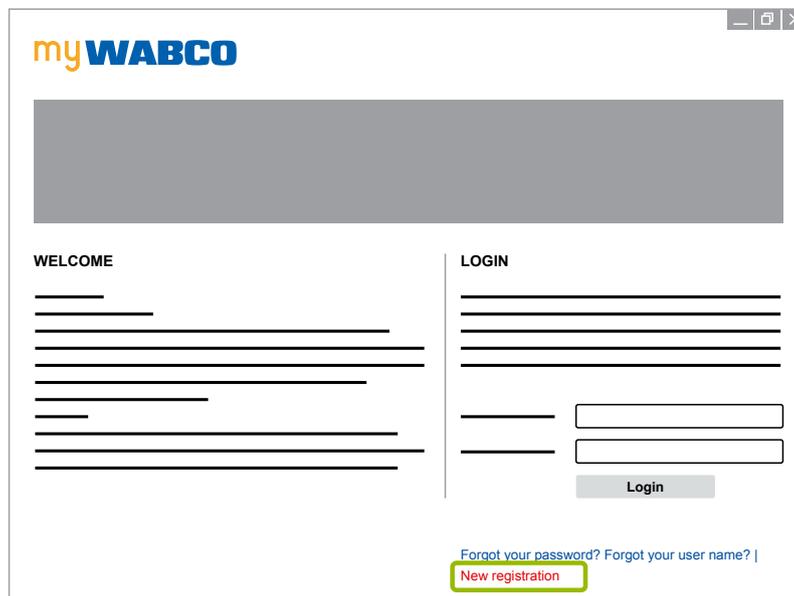
- Selection of vehicle type
- Axle definition
- Configuration of the lifting axle valves
- Selection of suspension

3.2 Diagnostic Software

3.2.1 Registration

The first step is to register with myWABCO.

1. Enter the following link in your internet browser to access the myWABCO page:
<https://www.am.wabco-auto.com>
2. Click on **New registration**.



WABCO System Diagnostics

3. Fill in the required fields (marked with an asterisk *).
4. Click on **Next**.

The screenshot shows a web browser window titled "REGISTER". On the left, there is a progress indicator with "Step 1" highlighted in orange and "Step 2" in grey. The main content area contains several form fields. The first section has two lines of text, followed by two required text input fields (marked with an asterisk) and one optional text input field. The second section has two required text input fields, one optional text input field, one required dropdown menu, one optional checkbox, and one required dropdown menu. At the bottom, there are two buttons: "Next" (highlighted with a green border) and "Cancel".

5. Fill in the required fields (marked with an asterisk *).
6. Click on **Transmit**.
 - ↳ You will promptly receive an email to confirm your email address.

The screenshot shows the same "REGISTER" form, but now "Step 2" is highlighted in orange and "Step 1" is in grey. The form fields are now populated with data. The first section has a dropdown menu, a required text input field, and one optional text input field. The second section has a required dropdown menu, a required text input field, one optional text input field, one optional text input field, one optional text input field, and one required dropdown menu. At the bottom, there are three buttons: "Back", "Transmit" (highlighted with a green border), and "Cancel".

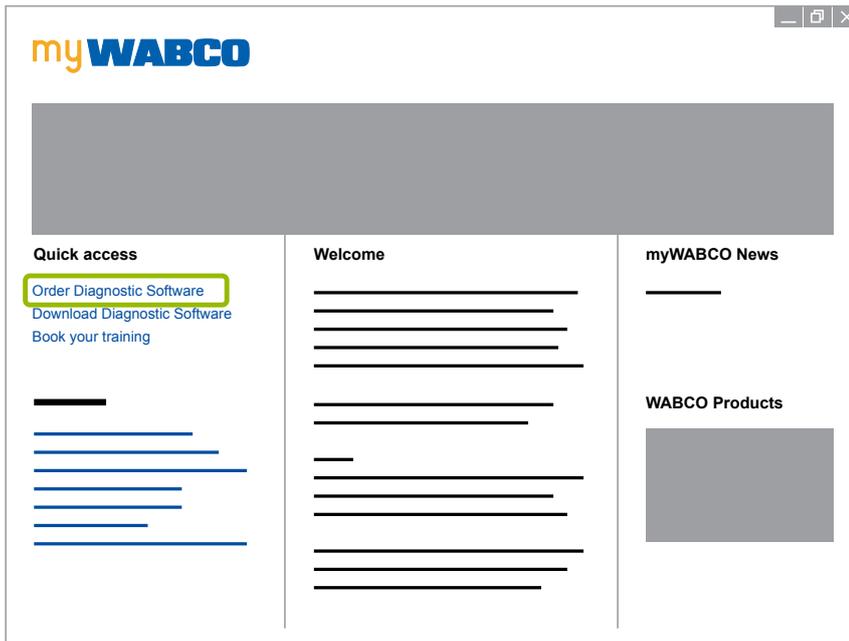
7. Click on the link in the confirmation email to activate your account.
8. Log into your myWABCO account with your user name and password.
 - ↳ You are now registered.

WABCO System Diagnostics

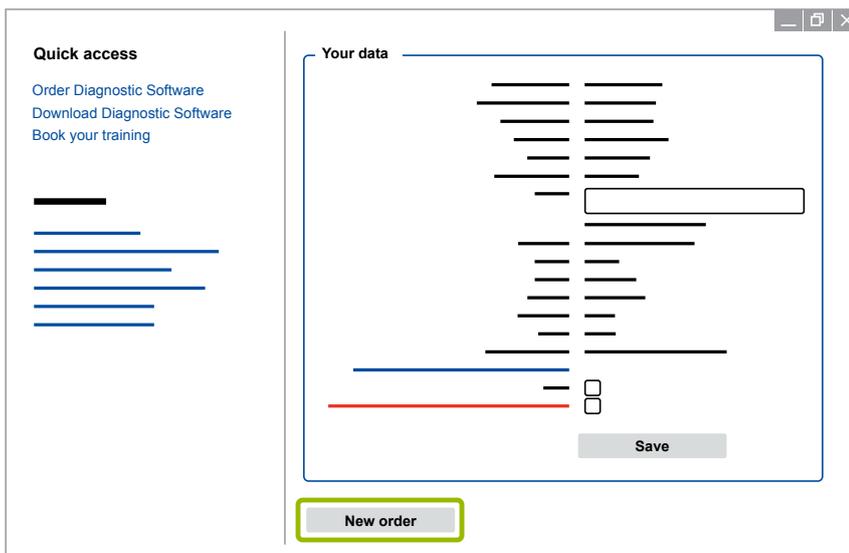
3.2.2 Ordering the Diagnostic Software

1. Login with your myWABCO account.
2. Click on **Order Diagnostic Software** in the **Quick access** area.

i If a security warning from your internet browser appears at this point, select the option to also display unsafe objects.



3. Enter your sales tax identification number (VAT ID).
4. Click on **New order**.



WABCO System Diagnostics

5. Enter your order data.

i Select the appropriate Diagnostic Software package or select a single software.
➔ See: *chapter "3.2.3 Diagnostic Software overview", page 12.*

6. Confirm that you agree to the terms of use.

7. Click on **Continue**.

Quick access
Order Diagnostic Software
Download Diagnostic Software
Book your training

WABCO Diagnostic Software subscription – New order

Your data

Order information

Continue
Reset

8. Check your data.

i If the data is incorrect, you can correct the data by clicking on **Change input**.

9. Click on **Buy now**.

Quick access
Order Diagnostic Software
Download Diagnostic Software
Book your training

WABCO Diagnostic Software subscription – Check new order

Your data

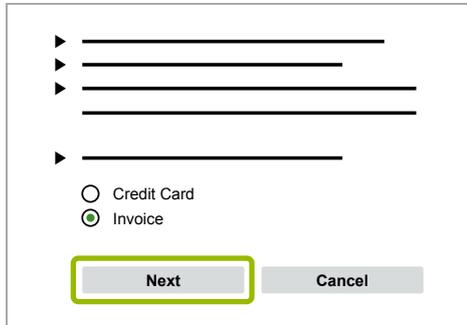
Order information

Buy now
Change input

WABCO System Diagnostics

Paying for the Diagnostic Software by invoice

1. Select **Invoice**.
2. Click on **Next**.

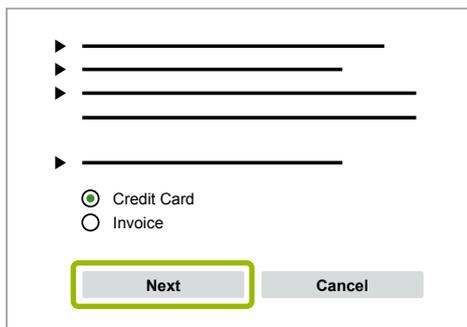


- ↳ You will receive an invoice by email and by post.
- ↳ When we receive payment we will send you an email as confirmation.

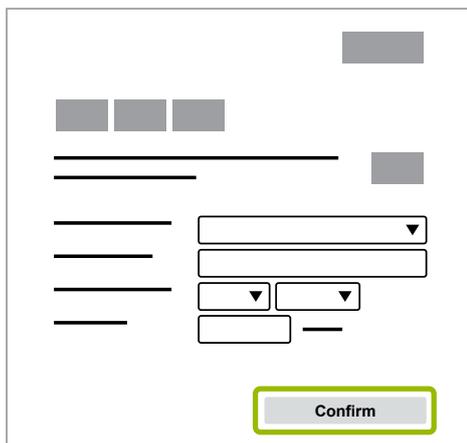
3. Log in to myWABCO.
4. Download the Diagnostic Software.

Paying for the Diagnostic Software by credit card

1. Select **Credit card**.
2. Click on **Next**.



3. Enter your credit card details.
4. Click on **Confirm**.



5. Download the Diagnostic Software.

WABCO System Diagnostics

3.2.3 Diagnostic Software overview

Order numbers for:

- the download of the diagnostic programs 246 301 XXX 0
- USB stick versions: 446 301 XXX 0

The XXX value can be found in the table of the current Diagnostic Software overview.

Software package	Part number	Content
Total	246 301 900 0	Virtually all available programs for the diagnosis in towing vehicles, buses and trailers. Includes: 246 301 901 0, 246 301 902 0, 246 301 904 0
Trailer	246 301 901 0	The most common programs for diagnosis of WABCO systems and components in trailers.
Bus	246 301 902 0	The most common programs for diagnosis of WABCO systems and components in buses.
Towing vehicle	246 301 904 0	The most common programs for diagnosis of WABCO systems and components in towing vehicles.



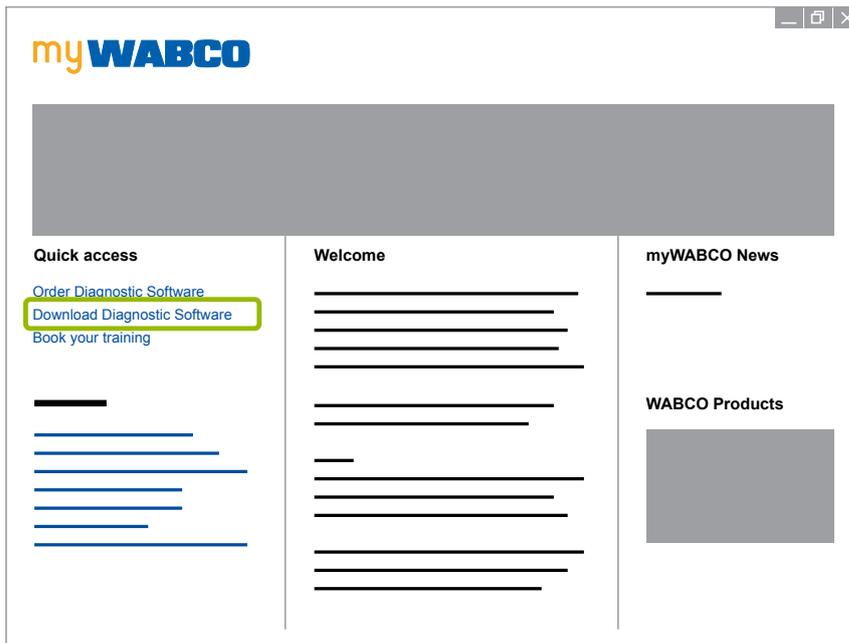
The package overview and further information on the subject of Diagnostic Software can be found at <http://www.wabco.info/i/1690>

WABCO System Diagnostics

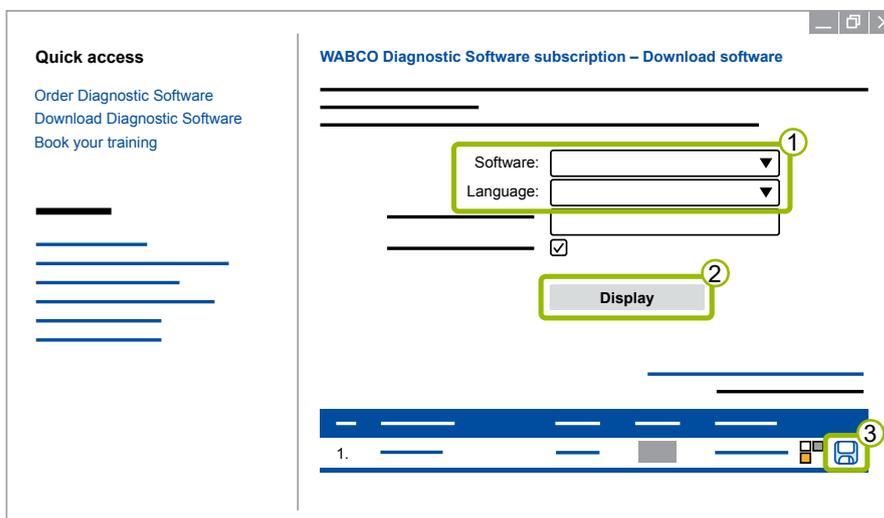
3.2.4 Installing the Diagnostic Software

Downloading the Diagnostic Software

1. Enter the following link in your internet browser to access the myWABCO page:
<https://www.am.wabco-auto.com>
2. Login with your myWABCO account.
3. Click on **Download Diagnostic Software**.



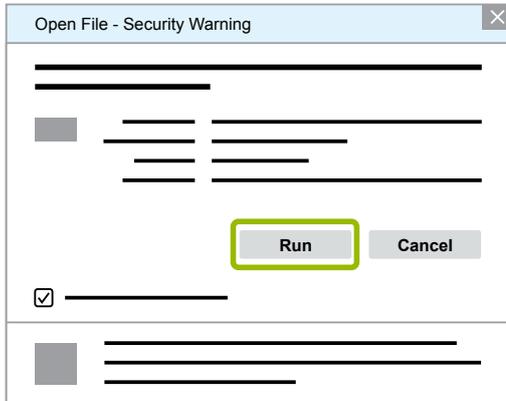
4. Select the **Software** and the **Language** ①.
5. Click on **Display** ②.
↳ The selected software is displayed.
6. Click on the **Download button** ③.
↳ The software will be downloaded.



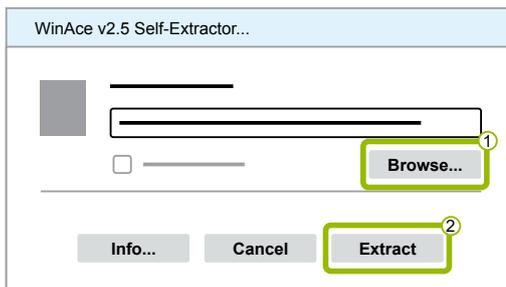
WABCO System Diagnostics

Installing the Diagnostic Software

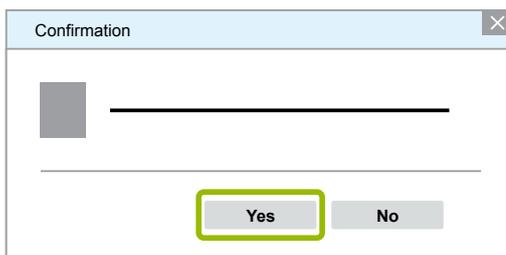
1. Double-click the EXE file of the downloaded Diagnostic Software.
2. Accept the security warning by clicking on **Run**.



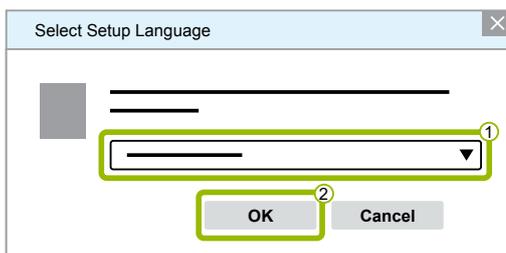
3. Click on **Browse...** ①.
4. Select a file path to extract the file.
5. Click on **Extract** ②.



6. Click on **Yes** to start the installation.



7. Select **English** ①.
8. Click on **OK** ②.



9. Click on **Next**.

WABCO System Diagnostics



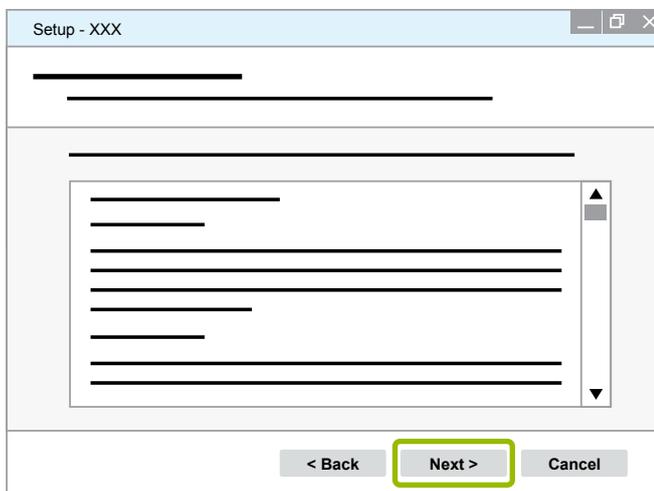
10. Accept the licence agreement ①.

11. Click on **Next** ②.



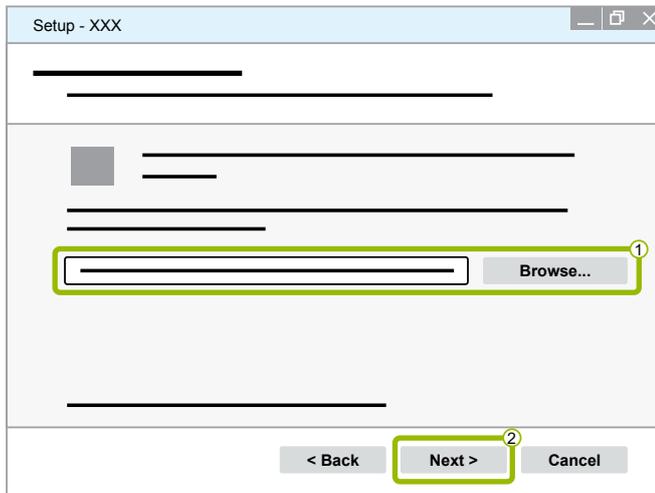
12. Read the important information.

13. Click on **Next**.



WABCO System Diagnostics

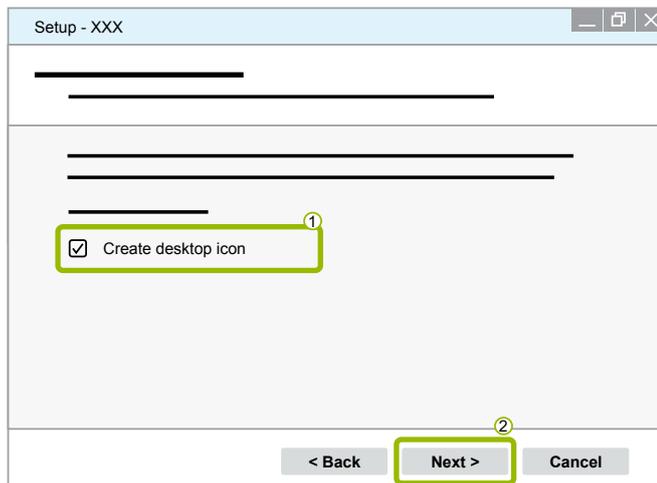
- 14. Select the target folder ①.
- 15. Click on **Next** ②.



- 16. Select a folder in which the program shortcut is to be created ①.
- 17. Click on **Next** ②.

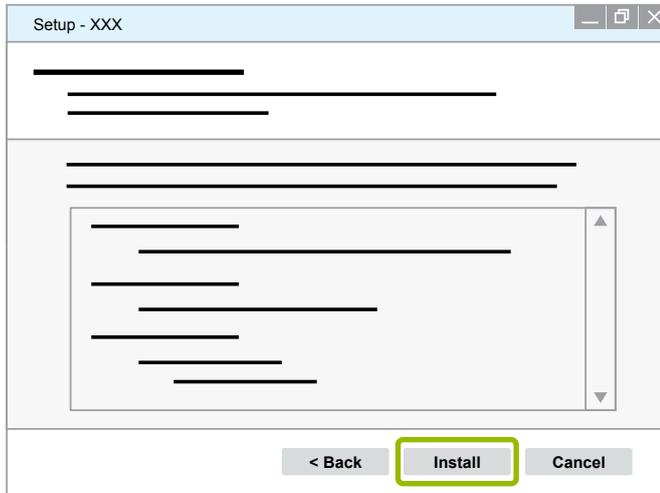


- 18. If you want to create a desktop icon, check **Create desktop icon** ①.
- 19. Click on **Next** ②.

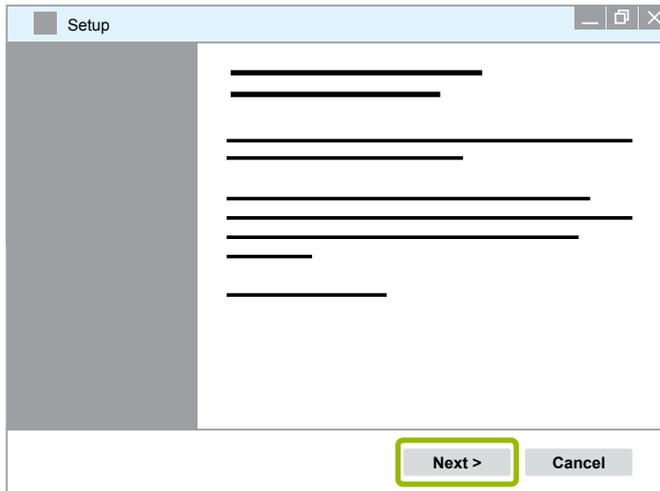


WABCO System Diagnostics

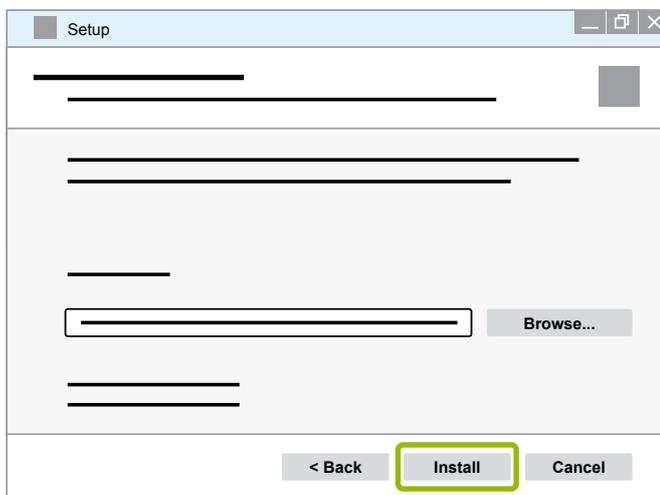
20. Click on **Install**.



21. Click on **Next**.



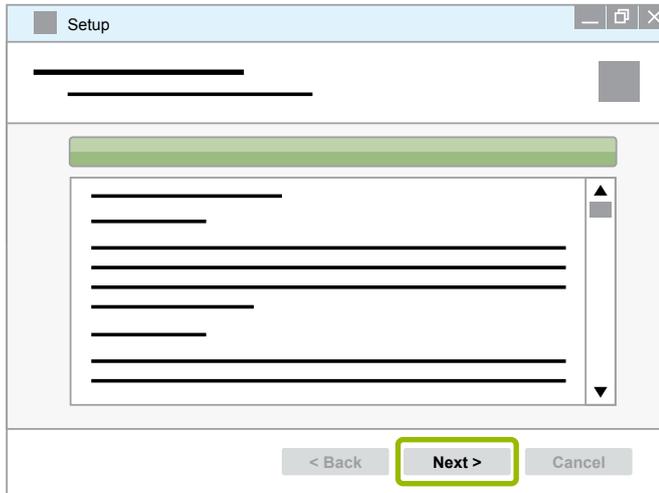
22. Click on **Install**.



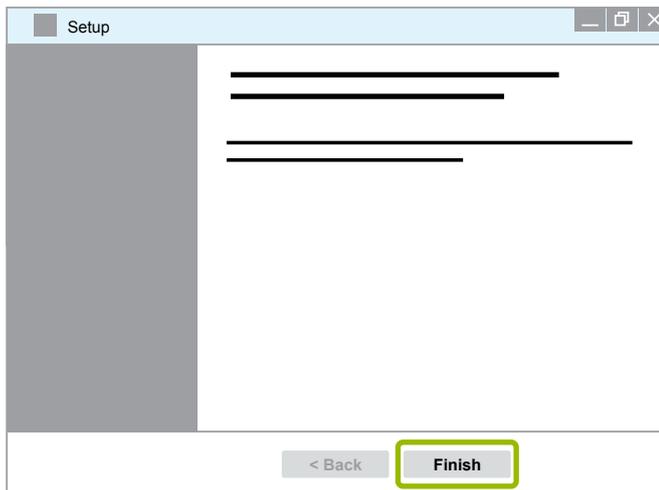
↪ The installation is executed.

WABCO System Diagnostics

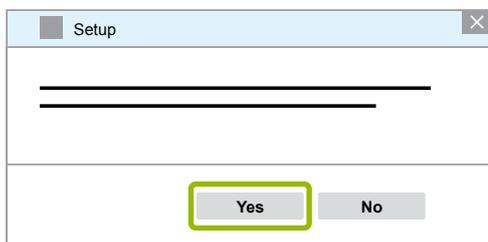
23. Click on **Next**.



24. Click on **Finish**.

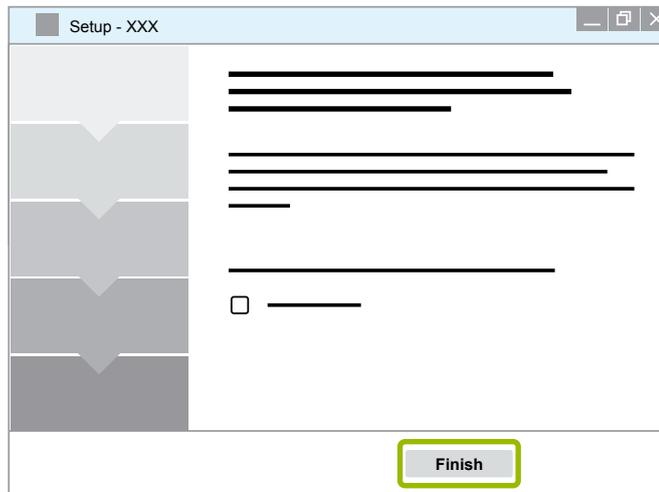


25. Click on **Yes**.



WABCO System Diagnostics

26. Click on **Finish**.



↪ The software is now installed.

3.2.5 Change language

WABCO System Diagnostics are offered in many languages.

To use the corresponding language, the basic version of the system diagnostics (e.g. T-EBS E version 5.50) must first be installed. The software is available at:

<https://www.am.wabco-auto.com/welcome>

The basic version is marked with an international flag and a small German flag. After successful installation, the language pack (Language Pack.exe) can be downloaded and installed. The new language is automatically changed and is already used the next time the program is started.

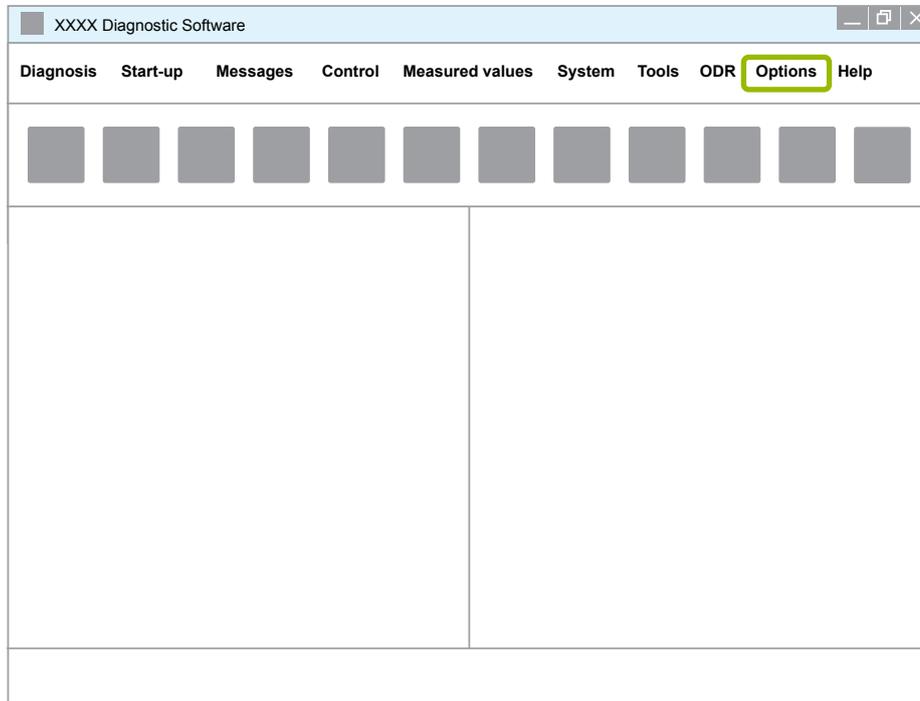
To download the desired language pack, proceed as follows:

↪ See: *chapter "3.2.4 Installing the Diagnostic Software", page 13.*

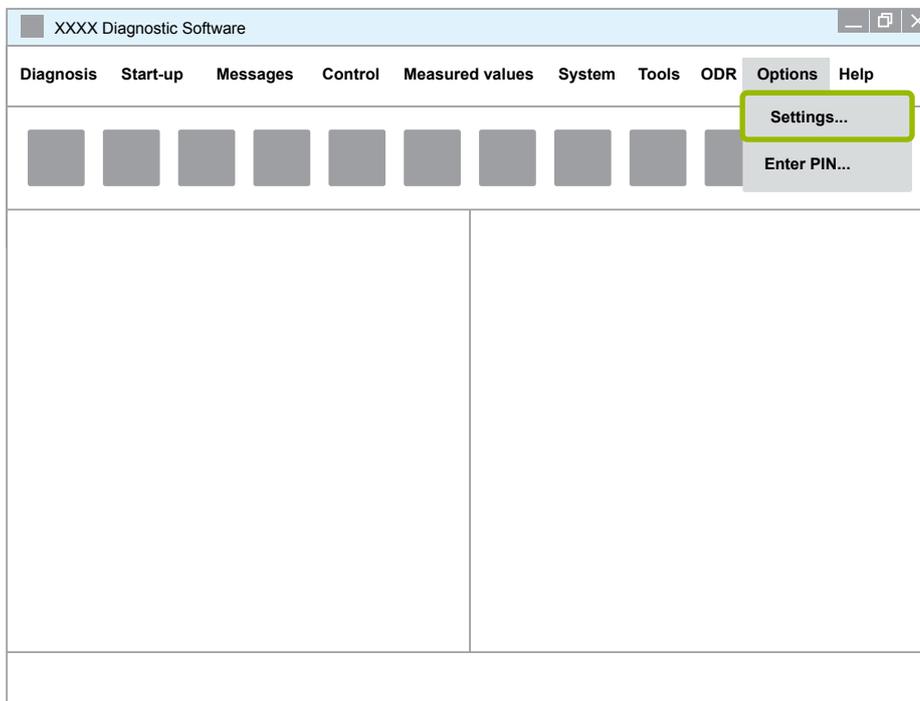
WABCO System Diagnostics

Change language

1. Start the Diagnostic Software.
2. Click on **Options**.



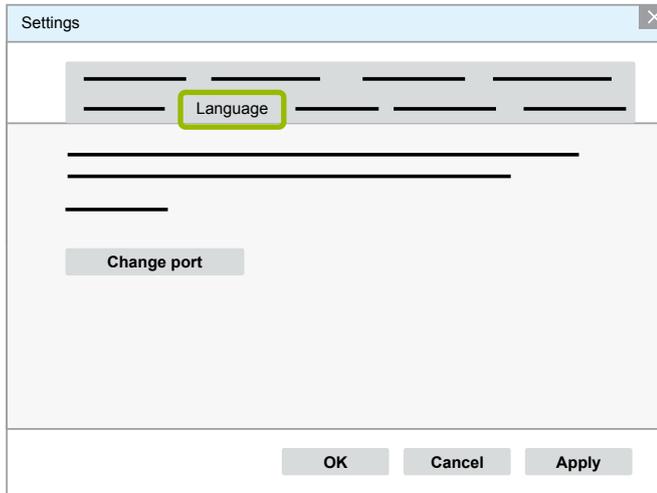
3. Click on **Settings**.



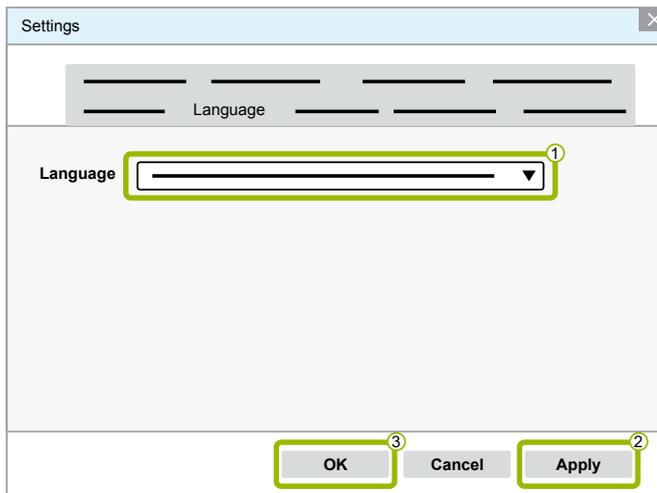
↪ The **Settings** dialogue window is opened.

WABCO System Diagnostics

4. Select the **Language** tab.



5. Select the desired language ①.
6. Click on **Apply** ②.
7. Click on **OK** ③.



↩ The language is now changed.

WABCO System Diagnostics

3.3 Diagnostic Software Search Engine

The Diagnostic Software Search Engine will enable you to find the matching Diagnostic Software for every WABCO ECU.

i Start your browser and enter the following internet address:
<http://abo.wabco.info/ecu2diag.php>

- ▶ Enter the part number of your ECU into the search field.
 - ↳ In the response you will get the name and version of the Diagnostic Software to use.

3.4 Diagnostic Newsletter

The WABCO Diagnostic Newsletter informs you about:

- Changes and updates to existing diagnostic programs
- New diagnostic programs and language versions

Use of this service is anonymous. No advertising mail is sent.

The WABCO Diagnostic Newsletter is cost-free and can be used multiple times per company.

Registering for the WABCO Diagnostic newsletter

With the newsletter, registered users receive an information email when a new version of the selected system diagnostics has been published.

i Register for the WABCO Diagnostic Newsletter using the following link
<http://www.wabco.info/i/1691>

1. Enter your email address.
2. Select the action **Subscribe**.
3. Click on the **Execute** button.
 - ↳ You will receive an email with a link.
4. Click on this link.
5. Click on the link **Edit settings**.
 - ↳ On the page that opens you can define, which topics you would like to be informed about in future.
6. Click individual fields to activate the newsletter for individual programs or activate complete columns or rows by clicking the language in the column header or name of the system.

i A green symbol indicates that the program is available in this language.
Of course, you can also click on a red symbol. In this case, you will be notified immediately the program becomes available in this language.

A second click on the previously activated field will deactivate your selection.

You can revise your personal newsletter settings by the same procedure any time you wish.

If you no longer wish to receive the newsletter, select the function **Unsubscribe**.

WABCO System Diagnostics

3.5 Licence agreement

The licence agreement is displayed automatically when a WABCO diagnostic program is installed. You must accept this licence agreement if you wish to install a diagnostic program.

A Diagnostic Subscription lasts for one year. After the expiration of the year we remind you of the extension of the contract.

If you intend to install the Diagnostic Software on several computers, you need to purchase additional licences. To install on another PC, copy the *.exe file for the Diagnostic Software you have downloaded from the internet to the other PC. You can now execute the program from this computer and install the Diagnostic Software.

3.5.1 Activating the Diagnostic Software

Following installation you can use the Diagnostic Software without restrictions for 10 days. After these 10 days have expired, you must activate the Diagnostic Software. Every time the program is started, you are informed of how long the program remains operational without activation.

i After activation, the Diagnostic Software is tied to the PC. This means the licence is used up.

- So you should only activate the Diagnostic Software on the PC on which it will be used and not, for example on an office PC for testing.

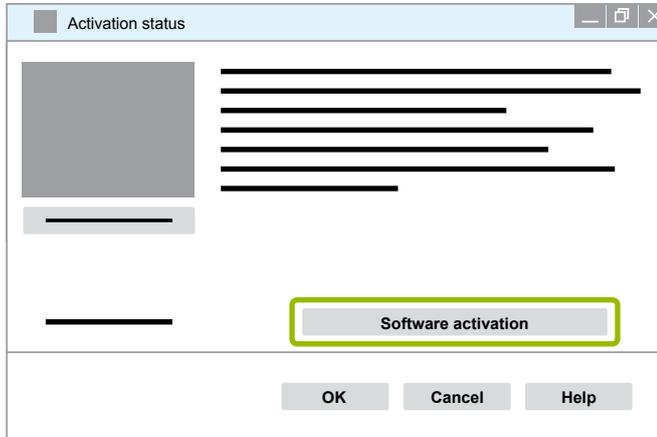
1. Start the Diagnostic Software.
2. Fill in the required user data ①.
3. Click on **OK** ②.

The screenshot shows a 'User data' dialog box. It contains several text input fields. A green box highlights a section with two rows of labels and input fields, marked with a circled '1'. At the bottom right, there are 'OK' and 'Cancel' buttons, with the 'OK' button highlighted by a green box and marked with a circled '2'.

WABCO System Diagnostics

Activating the Diagnostic Software

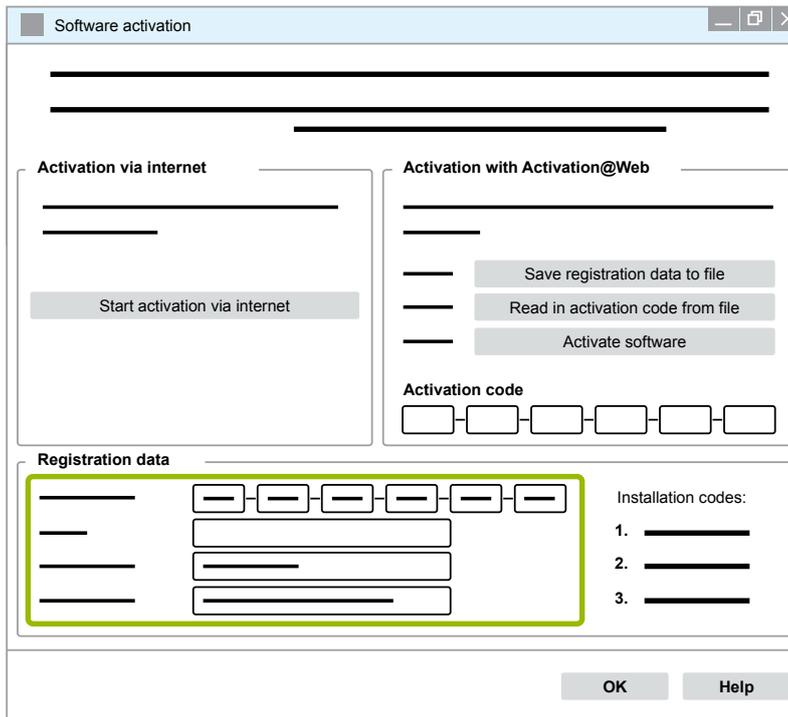
1. Click on **Software activation**.



2. Check your registration data.

You now have two options to request an activation code:

- Activation via internet
- Activation with Activation@Web



WABCO System Diagnostics

Activation via internet

Online activation requires an internet connection on the computer on which the software is to be installed.

1. Click on **Start activation via internet**.

The screenshot shows a 'Software activation' dialog box with the following elements:

- Two horizontal lines at the top for registration information.
- Two main sections: 'Activation via internet' and 'Activation with Activation@Web'.
- The 'Start activation via internet' button in the 'Activation via internet' section is highlighted with a green border.
- The 'Activation with Activation@Web' section contains three buttons: 'Save registration data to file', 'Read in activation code from file', and 'Activate software'.
- An 'Activation code' section with six empty input boxes.
- A 'Registration data' section with four input fields and a row of six small boxes.
- An 'Installation codes' section with three numbered input fields.
- 'OK' and 'Help' buttons at the bottom right.

2. Click on **Activate now**.

The screenshot shows a 'Web Activation' dialog box with the following elements:

- A progress indicator on the left.
- Two horizontal lines for registration information.
- The 'Activate now' button is highlighted with a green border.
- A 'Cancel' button to the right of the 'Activate now' button.

↪ The activation starts.

3. Click on **Close** to complete the activation.

The screenshot shows the 'Web Activation' dialog box after successful completion:

- The progress indicator now shows a green checkmark.
- The 'Close' button is highlighted with a green border.

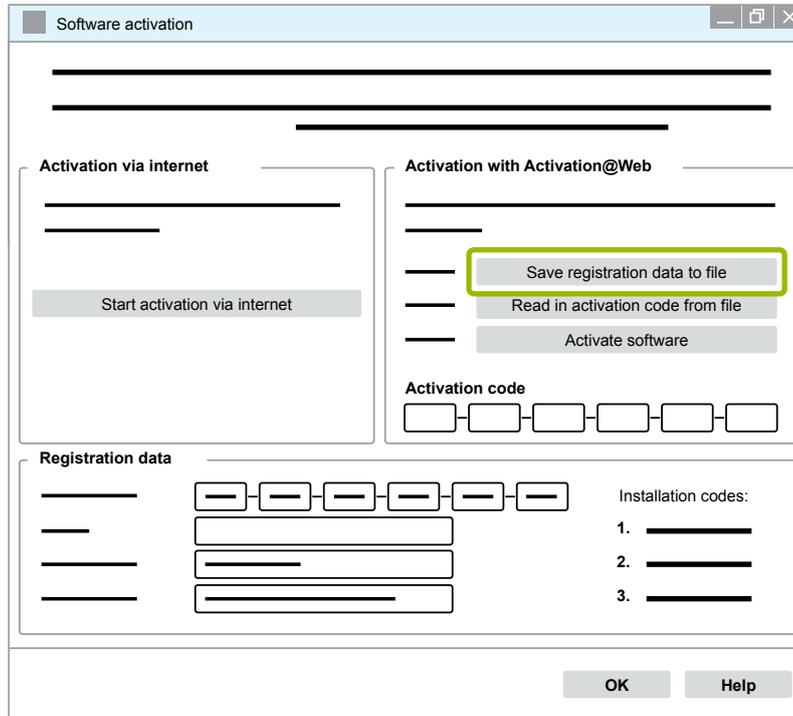
↪ You are now registered.

WABCO System Diagnostics

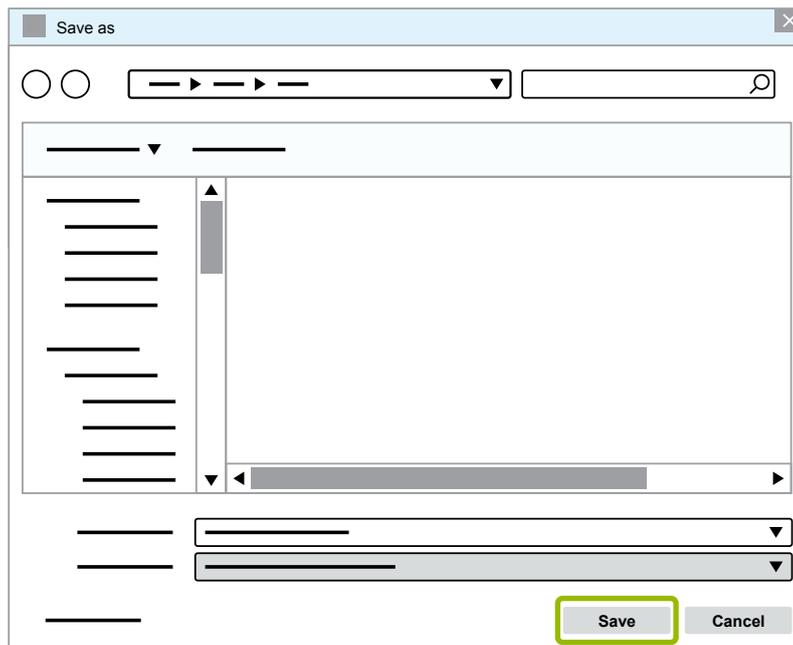
Activation with Activation@Web

Activation@Web is a continually available internet portal that can generate activation codes at any time of day or night. For this purpose you only need a PC with an internet connection. You do not need to use the PC on which the software is to be installed for this.

1. Click on **Save registration data to file**.

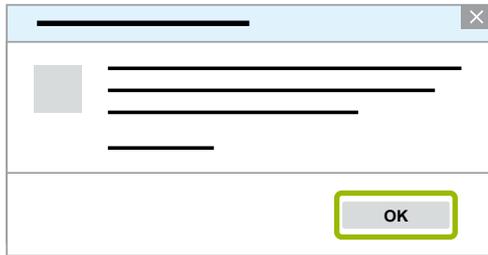


2. Select a removable storage device (USB) as the storage location.
3. Click on **Save**.



WABCO System Diagnostics

4. Click on **OK**.



5. Connect the data carrier to a computer with internet access.
6. Start your browser of the computer with internet.
7. Enter https://abo.wabco.info/software_activation.php in the address bar.

You now have two options to request an activation code:

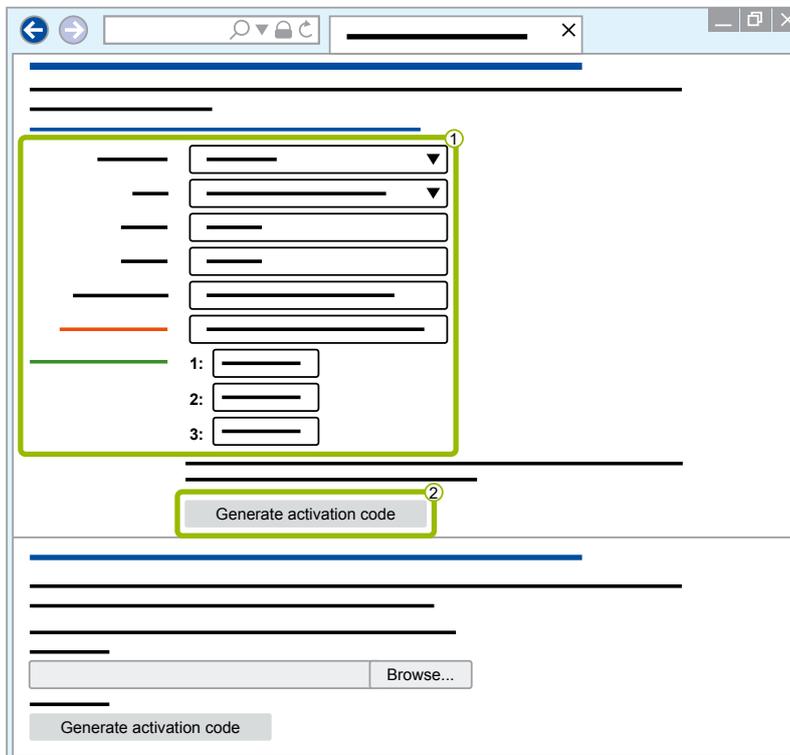
- Activation by email
- Activation via removable storage device (USB)

Activation by email

1. Fill in the fields in the form manually or transfer the data using a removable storage device (USB) ①.

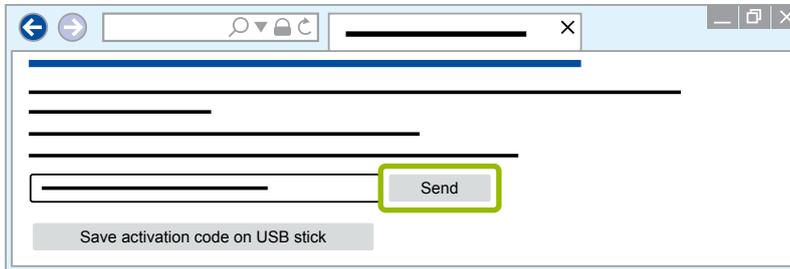
➔ See: chapter "Activation with Activation@Web", page 26

2. Click on **Generate activation code** ②.



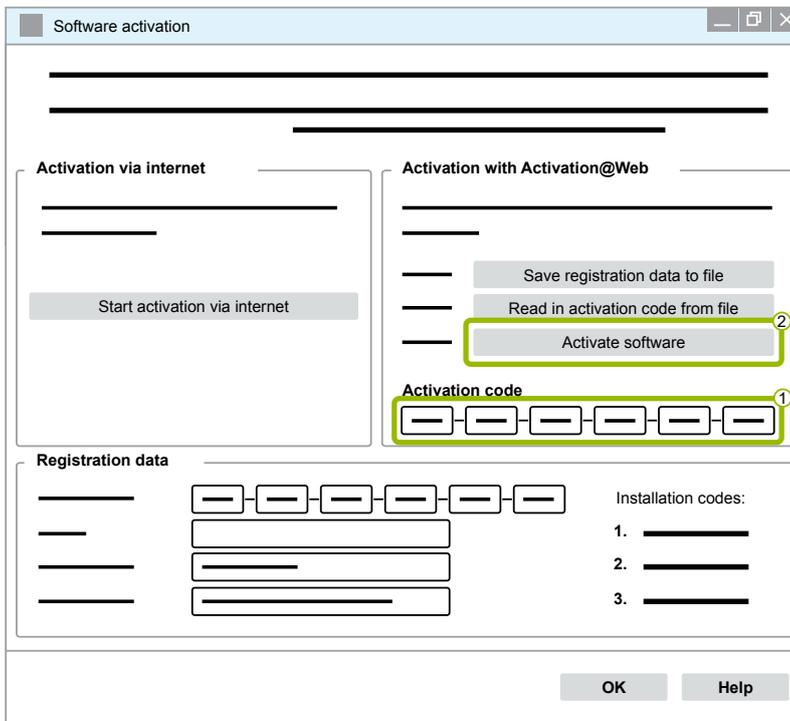
WABCO System Diagnostics

3. Enter your email address.
4. Click on **Send**.

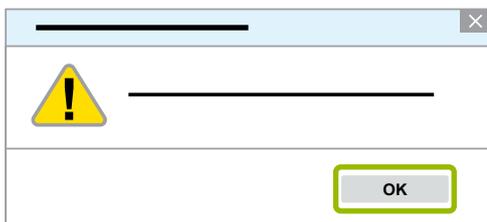


↪ The activation code will be sent to the specified email address.

5. Enter the **Activation code** ①.
6. Click on **Activate software** ②.

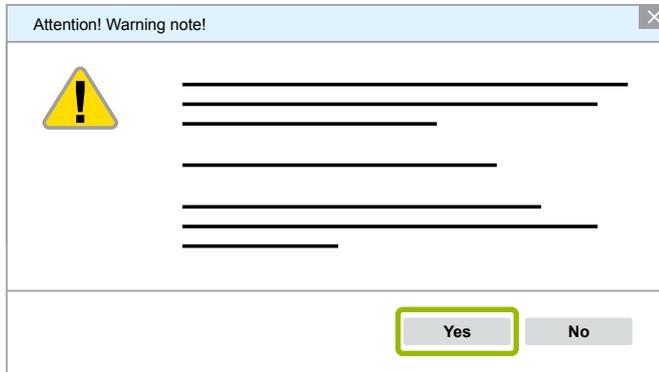


7. Click on **OK**.



WABCO System Diagnostics

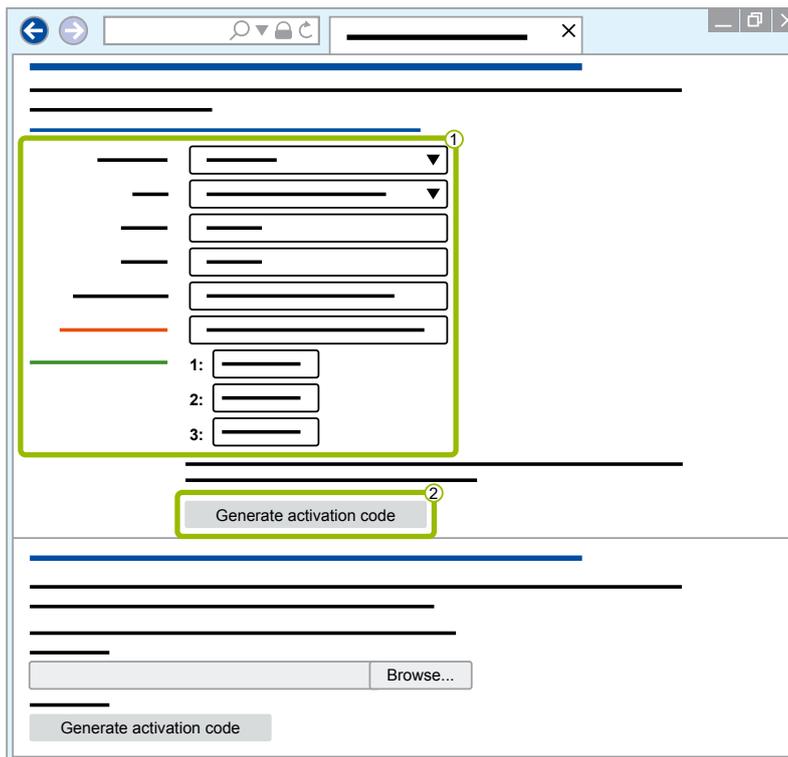
8. Read the warning note.
9. Click on **Yes**.



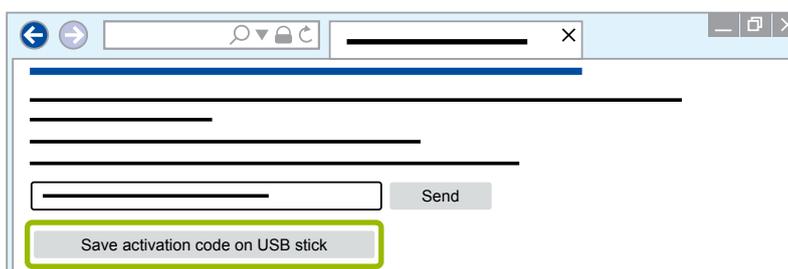
☞ The Diagnostic Software is now activated.

Activation via removable storage device (USB)

1. Fill in the fields in the form ①.
2. Click on **Generate activation code** ②.

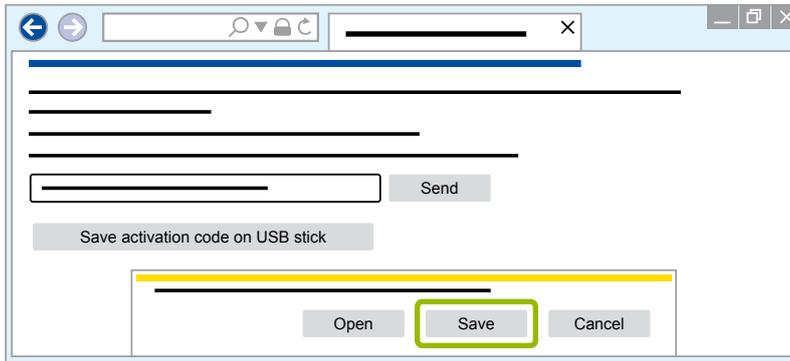


3. Click on **Save activation code on USB stick**.



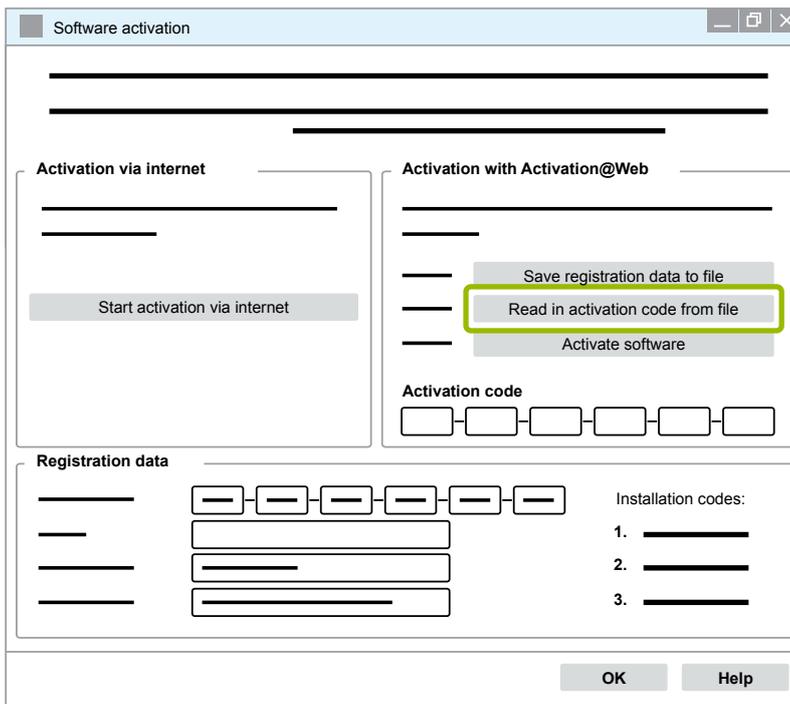
WABCO System Diagnostics

4. Click on **Save**.



↪ The activation code will be downloaded.

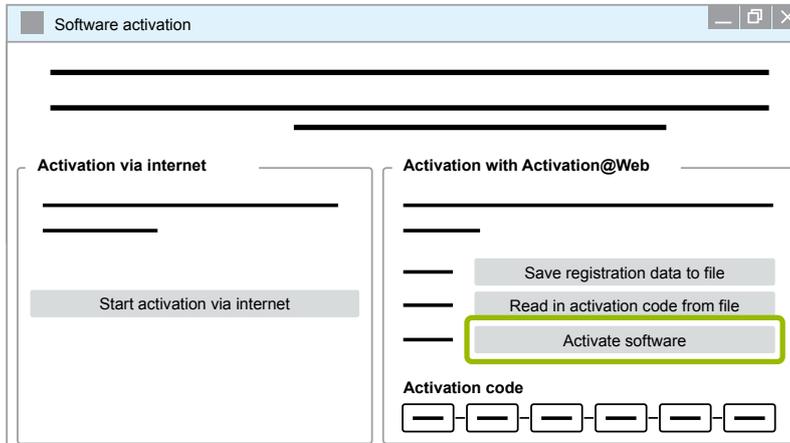
5. Save the downloaded activation code on your removable storage device (USB).
6. Insert the removable storage device (USB) into the PC where the Diagnostic Software is used.
7. Click on **Read in activation code from file**.



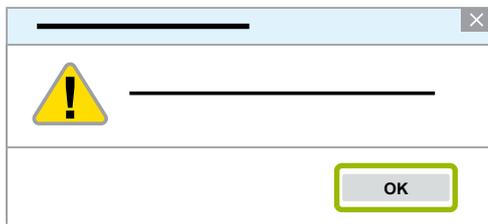
↪ The activation code is entered automatically.

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8. Click on **Activate software**.

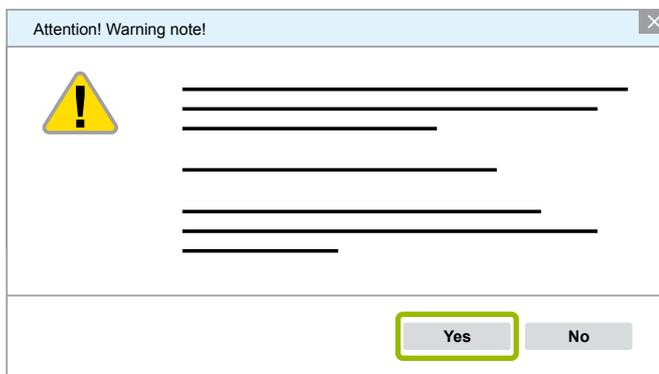


9. Click on **OK**.



10. Read the warning note.

11. Click on **Yes**.



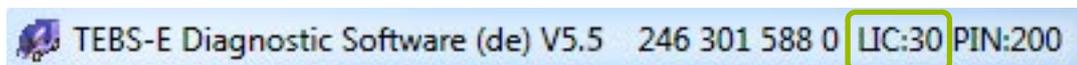
👉 The Diagnostic Software is now activated.

3.5.2 Licence version

You are provided with the licence version (LIC) in the download area as well as in the WABCO Diagnostic Newsletter if there is a software update.

If there is a change in the version as compared to the version you have, the Diagnostic Software must be reactivated.

You will find the current licence version of your program in the upper part of the window:



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3.5.3 Extended authorisation (PIN)

Training/e-learning

Diagnosis with the WABCO Diagnostic Software can be carried out by any user.

If parameters are to be changed however, authorisation is required (PIN). You can obtain this PIN through relevant training course or e-learning at the WABCO Academy.

i More information on WABCO Academy training and e-learning courses can be found on the internet at: <http://www.wabco-academy.com/>

After you have completed a corresponding training or e-learning course at the WABCO Academy, you will receive a PIN letter. This contains your personal user ID and Personal Identification Number (PIN) for WABCO Diagnostic Software. This PIN is used to enable enhanced functions of the Diagnostic Software and change the settings in the electronic control units.

You can continue to retrieve other PINs for older software versions from the internet.

PIN letter (example)

Confidential, only for Kontakt Test

You will need your personal user ID and the PIN for the PIN version of the respective diagnostic program to set parameters within the WABCO diagnostic software. This version is displayed as "PIN" in the top line of the diagnostic program.



You will find more detailed information on the subject of PIN version in the market information: <http://www.wabco.info/223> 

Your user ID is: XXXXXX

Here are the PINs for the respectively most recent version of the software for which you have completed training:

Program name	PIN Version	PIN	PIN2
ABS C - PIN-Version: 211	211	XXXX	-
ECAS Truck JED - PIN-Version: 110	110		-
TCE - PIN-Version: 230	230	XXXX	-
ABS D Hydraulic - PIN-Version: 120	120	XXXX	-
ABS D+ - PIN-Version: 100	100	XXXX	-
EBS Bus Standard - PIN-Version: 120	120	XXXX	-

Should you require PINs for older PIN versions of a diagnostic program than the ones listed here, these are available on the internet at www.wabco.info/pin/.

You will need the following personal **licence number** to log in: XXXXXX

as well as the associated **confirmation number**: XXXXXXX 

PIN version

You are provided with the PIN version in the download area as well as in the WABCO Diagnostic Newsletter if there is a software update.

If there is a difference in the new version as compared to the version that you are using, you will require a new PIN. You can obtain it through the respective training at the WABCO Academy.

You will find the current PIN version for all programs at the top section of the window in your program.

4 Hardware

The Diagnostic Software can run on any standard PC with a Windows operating system (Microsoft Windows 7 or higher).

There are no special requirements for the hardware. The PC must have a free USB port for the Diagnostic Interface however.

WABCO recommends the following hardware:

Hardware part number	Description
WABCO Laptop "Toughbook" 446 301 999 0 	<ul style="list-style-type: none">• Suitable for the workshop: shock- and dirt-resistant• On request it can also be supplied with the Diagnostic Software already installed
Diagnostic Interface Set 446 301 030 0 	<ul style="list-style-type: none">• Diagnostic Interface 2• USB connecting cable to PC/Notebook USB driver/Installation instructions: http://www.wabco.info/i/840
Diagnostic Interface Set 300 400 104 0 	<ul style="list-style-type: none">• Diagnostic Interface 3• USB connecting cable to PC/Notebook• Bluetooth and Wi-Fi ®

The vehicle connection on the Diagnostic Interface matches the connection for the Diagnostic Controller and earlier versions of the Diagnostic Interface, permitting the continued use of connecting cables used in the past.

Depending on which WABCO system you want to test, you will need appropriate connection cables. You can find an overview of the connection cables in our WABCO product catalogue under: www.wabco-customercentre.com

The USB driver required to install the Diagnostic Interface is installed together with the WABCO Diagnostic Software.

You can still use the earlier versions of the Diagnostic Interface with serial connection (446 301 021 0) and USB interface (446 301 022 0).

WABCO contact

5 WABCO contact

You can find your local WABCO contact via the following page:
<http://www.wabco.info/i/1489>



You can find information on WABCO products here: www.wabco-customercentre.com
Please contact your WABCO partner for further information.

ZF Friedrichshafen AG

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive solutions for established vehicle manufacturers and newly emerging transport and mobility service providers. ZF electrifies different kinds of vehicles. With its products, the company contributes to reducing emissions and protecting the climate.

ZF, which acquired WABCO Holdings Inc. on May 29, 2020, now has 162,000 employees worldwide with approximately 260 locations in 41 countries. In 2019, the two then-independent companies achieved sales of €36.5 billion (ZF) and \$3.4 billion (WABCO).

With the integration of WABCO, the leading global supplier of braking control systems and other advanced technologies that improve the safety, efficiency and connectivity of commercial vehicles ZF will create a new level of capability to pioneer the next generation of solutions and services for original equipment manufacturers and fleets globally. WABCO, with almost 12,000 people in 40 locations worldwide, will now operate under the ZF brand as its new Commercial Vehicle Control Systems division.