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## General Information

### Symbols Used in this Document

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️ <strong>DANGER</strong></td>
<td>Description of an immediate situation which will result in irreversible injury or death if the warning is ignored.</td>
</tr>
<tr>
<td>⚠️ <strong>WARNING</strong></td>
<td>Description of a possible situation which may result in irreversible injury or death if the warning is ignored.</td>
</tr>
<tr>
<td>⚠️ <strong>CAUTION</strong></td>
<td>Description of a possible situation which may result in irreversible injury if the warning is ignored.</td>
</tr>
<tr>
<td>📚 <strong>NOTICE</strong></td>
<td>Description of a possible situation which may result in material damage if the warning is ignored.</td>
</tr>
<tr>
<td>📚</td>
<td>Important information, notices and/or tips</td>
</tr>
<tr>
<td>🌐</td>
<td>Reference to information on the Internet</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION

How to Obtain Additional Maintenance, Service and Product

If you have any questions about the material covered in this publication, or for more information about the WABCO product line, please contact WABCO Customer Care Center at 855-228-3203, by email at wnacustomercare@wabco-auto.com, or visit our website: www.wabco-na.com.

Refer to the Society of Automotive Engineers (SAE) website to find all current SAE documents and standards applicable to WABCO products (such as SAE J447 and SAE J908 at www.sae.org).

Refer to the National Highway Traffic Safety Administration (NHTSA) website to find all current documents referenced in the manual at www.nhtsa.gov.

WABCO TOOLBOX PLUS™ Software

The TOOLBOX PLUS™ Software provides PC diagnostic for WABCO products and can be purchased and downloaded from https://wabco.snapon.com/.


WABCO ACADEMY

www.wabco-academy.com

WABCO Online Product Catalog

www.wabco-customercenter.com/

Your Direct Contact to WABCO

WABCO North America LLC
WABCO USA LLC
1220 Pacific Drive
Auburn Hills, MI 48326
Customer Care Center: (855) 228-3203
www.wabco-na.com
SAFETY INFORMATION

Safety Information

Provisions for a safe work environment

- Only trained and qualified technicians may carry out work on the vehicle.
- Read this publication carefully.
- Follow all warnings, notices and instructions to avoid personal injury and property damage.
- Always abide by the vehicle manufacturer’s specifications and instructions.
- Observe all accident regulations of the respective company as well as regional and national regulations.
- The workplace should be dry, sufficiently lit and ventilated.
- Use personal protective equipment if required (safety shoes, protective goggles, respiratory protection and ear protectors).

Read and observe all Danger, Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

⚠️ WARNING
To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

⚠️ WARNING
Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving. Support the vehicle with safety stands. Do not work under a vehicle supported only by jacks. Jacks can slip or fall over. Serious personal injury and damage to components can result.

⚠️ WARNING
This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.
TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

TOOLBOX PLUS™

TOOLBOX Plus™ provides computer-based diagnostics for WABCO electronic vehicle control system products. The program displays information for the vehicle systems, displays active and stored diagnostic trouble codes, repair instructions and activates system components to verify system integrity.

For complete WABCO maintenance information, refer to the appropriate maintenance manual by visiting our Literature Center at www.wabco-na.com/literature

TOOLBOX PLUS™ SYSTEM REQUIREMENTS

Prior to downloading TOOLBOX Plus™, please verify that your computer and hardware meet the minimum requirements outlined in the System Requirements Guide.

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Processor</td>
<td>PC: 1 gigahertz (GHz) or faster x32-bit or x64-bit processor</td>
</tr>
<tr>
<td>Memory</td>
<td>PC: 1 GB RAM (32-bit); 2 GB RAM (64-bit)</td>
</tr>
<tr>
<td>Hard Disk</td>
<td>PC: 300 MB of available disk space</td>
</tr>
<tr>
<td>Display</td>
<td>Standard VGA graphics adapter 800 x 600 screen resolution or higher</td>
</tr>
<tr>
<td>Operating System</td>
<td>PC: Windows 7, Windows 8, Windows 10</td>
</tr>
<tr>
<td>Framework</td>
<td>PC: Microsoft.NET 4.8 or later</td>
</tr>
</tbody>
</table>

Hardware Interface Requirements: Vehicle Diagnostic Adapter Macintosh and Linux operating systems are not supported. Windows® is a registered trademark of the Microsoft Corporation.

TOOLBOX PLUS™ SOFTWARE INSTALLATION

To ensure users have access to the most up to date diagnostic information on WABCO products and maintain full functionality of TOOLBOX Plus™ software, the computer where the TOOLBOX Plus™ software is installed must be connected to the Internet every 90 days. If the computer is not connected to the Internet every 90 days TOOLBOX Plus™ will stop working. Please contact the Snap-On (800) 639- 6774 to reactivate your software. When your TOOLBOX Plus™ subscription is nearing renewal the software provides automatic notifications of the approaching renewal deadline beginning 60 days before expiration. If a user allows the subscription to expire the TOOLBOX Plus™ application will stop working. Please contact the Snap-On Tools at (800) 639- 6774 to reactivate your software. When installing TOOLBOX Plus™ it is highly recommended you close or disable any other currently running programs including anti-virus. Some operating systems or corporate policies restrict the installation of software to users without full administrative rights. Check with your IT department to verify that you have the appropriate administrative rights to continue with the Installation. For Windows 7, 8, or 10, ensure the following:

1. The person installing the adapter drivers and TOOLBOX Plus™ Software must be logged in as “Administrator”.
2. The adapter drivers and TOOLBOX Plus™ must be installed on the machine for “ALL USERS”, and not just the current user.
3. Answer the prompts that appear during setup. TOOLBOX Plus™ will acknowledge a successful installation and automatically open the software registration process. When prompted to select between Save and Run, select the Save option. Save the file to an easy-to-access area on the computer, such as the desktop.
4. Do not attempt to install the software until the download is completed.

TOOLBOX Plus™ should be installed under “Administrator” with full rights for “All Users”. Please check with your IT department. Some PCs may require the temporary disabling of Windows UAC (User Access Control) for the downloading and installation of TOOLBOX Plus™ software. Temporarily disabling UAC settings may be required to resolve certain download and installation issues related to individual PC configurations prior to TOOLBOX Plus™ software installation.
DISABLING WINDOWS UAC  (User Access Control)

Disabling UAC on Windows 7, 8, 10

Type “UAC” into the Start Menu Control Panel search box. Select “Change User Account Control Settings” or simply press the Enter key.

In the dialogue box that appears, drag the slider down to the “Never Notify” position and then select OK.

In Firefox browser, you will see this message:

In Internet Explorer, you will see this message:

TOOLBOX PLUS™ INSTALLATION

Install TOOLBOX Plus™ Software

1. After completing your purchase from the wabco.snapon.com website, click on the blue product key number to start the software download.

2. When prompted to select between “Save” and Run,” select the “Save” option and save the file to your desktop.

Save the file to the computers such as the desktop.

3. After the files are saved, open the folder. Select “Run” which begins the setup/installation process.

You may restore the UAC setting to the desired selection after the installation of the TOOLBOX Plus™ software is complete. Rebooting the PC/Laptop will reset the UAC back to the original setting.
4. As each process is completed, click “Next” to continue.

5. Read the End User License Agreement (“EULA”). If you agree with its terms, please select “I agree” with the terms of the software agreement”, and then click on “Next” to continue the installation process. If the user does not agree with the EULA then click “I do not agree with the terms of the license agreement”. Then click cancel to stop the installation of the TOOLBOX Plus™ software. User can contact the WABCO Customer Care Center at (855) 228-3203 to review the EULA Agreement and their concerns.

6. After clicking on “Next”, the files begin downloading. A confirmation window will pop up on the screen. Click “Finish” to complete the process and launch the TOOLBOXPlus™.

Subscription Registration

User will need to register the TOOLBOX Plus™ subscription to complete before the TOOLBOX Plus™ application will work. After the TOOLBOX Plus™ software completes installation a registration window will open to register your subscription. Wabco recommends that an IT support systems person or a manager registers the software. This is due to a Login and Password will need to be created to register your subscription. PC/Laptop must be connected to the internet for the registration process. User will click “I don’t have an account” on the registration screen.

A “create an account” screen will open for the user.
After completing the online instructions to create an account,
User will receive an email to activate the registration account.
Activate your account.

Then select the TOOLBOX Plus™ icon on your desktop to
open the application.

Registration Login screen will open, enter your login ID and
password on this screen.

Next a Product Key screen will open user will need to type
the product key and serial number provided with the software
subscription.

User will click register and a message will pop up indicating
registration was successful

User will click “close” and the TOOLBOX Plus™ application
will open.

User will need to select the Adapter Button to assign what
RP1210 adapter is being used.

**ADAPTER HARDWARE SETUP**

A diagnostic RP1210 adapter is required for communications
between the vehicle’s hardware and TOOLBOX Plus™
software. TOOLBOX Plus™ software support diagnostic
interface for adapter that adhere to RP1210 specification:

- Establish a connection between the computers USB and
  the RP1210 diagnostic adapter.
- Establish connection between the diagnostic adapter and
  the vehicle’s SAE diagnostic interface connector.

Please refer to your hardware manufacturer’s installation and
connection procedures. Please ensure you have the latest
software, drivers and firmware for your diagnostic tool. The
diagnostic adapter is available for selection by clicking on the
“Adapter Selection” Icon at the top of page.
TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

TOOLBOX Plus™ diagnostic software is only operational with WABCO electronic vehicle control products. A list of common RP1210 Compliant Adapters known to operate with WABCO diagnostics application software. Please contact the manufacturer directly or visit their website to determine your specific diagnostic needs.

RP1210 Compliant Device List:

Noregon Device:
- www.noregon.com

Nexiq Device List:
- www.nexiq.com

Dearborn Group Device List
- www.dgtech.com

WABCO neither promotes nor recommends any specific manufacturers diagnostic adapters.

Subscription Registration Timeline

TOOLBOX Plus™ is a subscription based software. The subscription starts when the user registers the TOOLBOX Plus™ software. TOOLBOX Plus™ has provisions to remind the user prior to expiration of the subscription. The user will receive a message one time at 60 days and 30 days.

When there is only 7 days left to the subscription the user will receive a message every time the TOOLBOX Plus™ application is opened as well as an email reminder that the subscription is about to expire. On day 8 the user will receive a message when opening the TOOLBOX Plus™ application that the subscription has expired. The user will have a 30 day grace period before the TOOLBOX Plus™ application stop working.

After the 30 day grace period expires the user will get a message that the subscription has expired and requires purchase of another subscription purchase to be able to continue to use the TOOLBOX Plus™ application. The user will then go to https://wabco.snapon.com to purchase a new subscription.
TOOLBOX PLUS™ MAIN SCREEN

Starting TOOLBOX Plus™ Software

To open the TOOLBOX Plus™ main menu, click the following icon on your computer’s desktop:

![TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE](image)

The main menu provides multiple selections for testing and diagnosing WABCO systems. Each selection opens an independent diagnostic software package. Clicking System tab at the top of the main screen will provide a drop down menu with an Adapter Selection option which will allow the user to select the RP1210 adapter that is being used or to close the TOOLBOX Plus™ application. This will return the user back to their desktop.

Expanded Menu

The Expanded Menu allows the user to select WABCO CAN (J1939), WABCO J1708 applications and WABCO Trailer applications.

Within the Main menu the user can select the specific WABCO system to be diagnosed. An additional feature in the menu is when TOOLBOX software is first opened the software will detect all WABCO hardware installed on the vehicle. The text in the menu will highlight in **GREEN** or **RED** or **GRAY**. If the hardware is not present the text will remain **GRAY**. If the text in the menu is **GREEN** then there are no active faults in that hardware. If the text in the menu is **RED** then there are active faults in that hardware.

Warranty Submission Form

The Warranty Submission form can be accessed using the button in the provided in the Main Menu. When the user selects the Warranty Submission Form button TOOLBOX software will link the user to an online website which allows the user to complete the form, attach DTC Reports, Parameter Files, OnGuard Decoder File, etc. This then can be emailed to WNACustomerCare@wabco-auto.com.

Truck/Tractor/Bus (J1939) Main Menu

Truck/Tractor/Bus (J1939) menu provides access to the TOOLBOX Plus™ SAE J1939 Tractor diagnostics for WABCO J1939 ABS-equipped vehicles.

This application displays information for testing, displays active and stored diagnostic trouble codes, provides appropriate repair instructions and also provides a means to activate system components, verifying system integrity.

ECAS_CAN2 (Opti Ride)

Selecting the ECAS (OptiRide) from the menu opens the TOOLBOX Plus™ diagnostics for WABCO ECAS-equipped vehicles. This application displays information from the vehicle ECAS system, displays diagnostic trouble codes and provides a means to activate system components, ride height programming and verifying system integrity.

Hydraulic ABS (SmartTrac) OnGuard®

Selecting the Hydraulic ABS (SmartTrac) from the menu opens the TOOLBOX Plus™ diagnostics for WABCO SmartTrac-equipped vehicles. This application displays information from the vehicle SmartTrac system, displays diagnostic trouble codes and provides a means to activate system components and verifying system integrity.

OnGuard®

Selecting the OnGuard from the drop menu opens the TOOLBOX Plus™ diagnostics for WABCO OnGuard equipped vehicles. This
TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

application displays information from the radar. Displays active and stored diagnostic fault codes. Provides Access to decoder files and parameter files and verifying system integrity.

OnLaneALERT™

Selecting the OnLaneALERT from the menu opens TOOLBOX Plus™ diagnostics for WABCO OnLaneALERT-equipped vehicles. This application displays WABCO hardware information, user can read diagnostic trouble codes, test start up tones, set system volume and perform a various system test.

OnSide®

Selecting the OnSide from the menu opens the TOOLBOX Plus™ diagnostics for WABCO OnSide equipped vehicles. This application displays information from the radar, diagnostic trouble codes and verifies system integrity.

Pneumatic ABS/EBS™

Selecting the Pneumatic ABS/EBS from the menu opens the TOOLBOX Plus™ diagnostics for WABCO Pneumatic ABS or EBS-equipped vehicles. This application displays information from the Pneumatic ABS or EBS, diagnostic trouble codes and verifies system integrity, provides appropriate repair instructions and provides a means to activate system components. The information varies based on what ABS system the vehicle is equipped with.

J1708 DIAGNOSTICS

TOOLBOX Plus™ J1708 Main Menu

The Truck/Tractor/Bus (J1708) in TOOLBOX Plus™ menu provides multiple selections for testing and diagnosing WABCO SAE J1708 systems. Each selection opens an independent diagnostic software package.

ECAS-Truck & Bus Selecting ECAS-Truck & Bus from the menu opens the TOOLBOX Plus™ SAE J1708 ECAS diagnostics for WABCO ECAS equipped vehicles. This application displays information from the vehicle ECAS system, displays active and stored diagnostic fault codes, provides a means to activate system components, verifying system integrity.

Hydraulic ABS

Selecting Hydraulic ABS from the menu opens the TOOLBOX Plus™ SAE J1708 Hydraulic ABS diagnostics for WABCO hydraulic ABS-equipped vehicles. This application displays information from the vehicle’s ABS system, displays active and stored diagnostic fault codes, provides appropriate repair instructions and provides a means to activate system components, verifying system integrity.

Pneumatic Tractor ABS

Selecting Pneumatic ABS from the menu opens the TOOLBOX Plus™ SAE J1708 Tractor diagnostics for WABCO ABS-equipped vehicles. This application displays information from the vehicle’s ABS system, displays active and stored diagnostic fault codes, provides appropriate repair instructions and provides a means to activate system components, verifying system integrity.

Trailer ABS Main Menu

Trailer ABS give access to WABCO Enhanced Easy Stop™ equipped trailers, Roll Stability (RSS) Plus trailers, iABS and TailGuard™ equipped trailers.

If connecting directly to the ABS ECU on the trailer through a diagnostic cable, verify the protocol is set J1708/J1939. Not setting the communication protocol will result in no communication with the Trailer ABS. If you are connecting at the 7-way (J2497) nose connector make sure your protocol is set to PLC or user will not be able to connect to the Trailer ABS ECU. This application displays information from the Trailer ABS System, active and stored diagnostic fault codes, provides appropriate repair instructions and provides the means to activate system components to verify system integrity.
Trailer Enhance Easy Stop
Selecting Trailer ABS from the menu displays information from the Trailer ABS System, active and stored diagnostic fault codes, provides appropriate repair instructions and provides the means to activate system components to verify system integrity.

TailGuard™
Selecting TailGuard™ from the menu displays information for the TailGuard™ System, active and stored diagnostic fault codes, provides appropriate repair instructions and provides the means to activate system components, program components and verify system integrity.

Trailer Roll Stability System (RSS)
Selecting Trailer RSS from the menu displays information for the RSS System, active and stored diagnostic fault codes, provides appropriate repair instructions and provides the means to activate system components, program components and verify system integrity.

Utilities & Task Bar
These Icons are found at the top of the main menu screen of TOOLBOX Plus™. Each Icon is labeled for its function.

Adapter Selection
The Adapter Selection has two (2) options user can select to open this application. The first is using the Adapter Selection Button from TOOLBOX Plus Main Screen, the other is to open the drop down menu under the System Tab.

These options provide the means to select and configure the diagnostic adapter to be used. Please verify you have the latest software drivers and firmware for your specific diagnostic tool. Drivers and firmware updates are available from your hardware manufacturer’s website or by calling them directly. To configure a diagnostic adapter, select the Utilities icon to open the Utilities Menu.

Your specific adapter is only available if it is a compatible device and the software drivers have been installed correctly. If your device is not listed, please re-install the appropriate adapter drivers or contact the manufacturer. Vendor name and specifics should appear on the parts label of the adapter or its documentation.

Vendor
Click the down arrow for a list of diagnostic tools whose drivers have been correctly installed.

Choice of diagnostic tools whose drivers have been correctly installed.

Changing protocols during the use of TOOLBOX Plus™ software requires an ignition or power cycle. This is required to reset the hardware and establish communications.
TOOLBOX PLUS™ DIAGNOSTIC SOFTWARE

Language Setting
This option only functions for J1708 Truck, ECAS and Trailer. To change the language, select the following:

Tab labeled Tractor ECU

ECAS ECU

Trailer ECU
Then select “Language” option in the drop down menu.

J1939 Bus Monitor
This function allows user to monitor J1939 Bus traffic at the Vehicle diagnostic connector.

Roll Call
Selecting the roll call function allows the users to check the J1939 Bus for WABCO J1939 systems such as ABS, OnGuard.
Aftermarket Programming

Selecting the Aftermarket Programming option will open the ABS ECU programming for replacement electronic control unit (ECU) for an anti-lock brake system (ABS). Service centers can now stock a small inventory of partially programmed ABS control units. Using the TOOLBOX™ Aftermarket Programming application they can quickly configure these parts for a wide variety of vehicles.

DTC/Maintenance Manuals Lookup

Selecting this Option Provides a short cut to find fault code descriptions, access to the WABCO electronic vehicle control systems Maintenance Manuals. Note that all Maintenance Manuals can also be found on www.wabco-na.com/literature.

Exit

To close the TOOLBOX™ application the User just selects the “EXIT” in the System drop down menu at the top of the TOOLBOX™ Main Menu.
About WABCO

WABCO is the leading global supplier of braking control systems and other advanced technologies that improve the safety, efficiency and connectivity of commercial vehicles. Originating from the Westinghouse Air Brake Company founded nearly 150 years ago, WABCO is powerfully “Mobilizing Vehicle Intelligence” to support the increasingly autonomous, connected and electric future of the commercial vehicle industry. WABCO continues to pioneer innovations to address key technology milestones in autonomous mobility and apply its extensive expertise to integrate the complex control and fail-safe systems required to efficiently and safely govern vehicle dynamics at every stage of a vehicle’s journey – on the highway, in the city and at the depot. Today, leading truck, bus and trailer brands worldwide rely on WABCO’s differentiating technologies. Powered by its vision for accident-free driving and greener transportation solutions, WABCO is also at the forefront of advanced fleet management systems and digital services that contribute to commercial fleet efficiency. In 2019, WABCO reported sales of over $3.4 billion and has nearly 14,000 employees in 40 countries. For more information, visit www.wabco-na.com.

For further product details contact your distributor or the WABCO Customer Care Center at 855-228-3203.