Opel-Vauxhall-VCI

en operating instruction

Content English

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1. Symbols used

1.1 In the documentation

1.1.1 Warning notices – structure and explanation

Warnings warn of dangers to the user or people in the vicinity. Warning notices also indicate the consequences of the danger as well as preventive action. Warnings have the following structure:

Warning symbol	**SIGNAL WORD – nature and source of danger!** Consequences of the danger in the event of failure to take action and observe notices given. ➢ Actions and instructions to prevent the danger.

The signal word indicates the likelihood of occurrence and the severity of the danger in the event of non-observance:

Signal word	Likelihood of occurrence	Severity of danger with non-observance
DANGER	**Immediate** threat of **danger**	**Death** or **serious** injury
WARNING	**Possible** impending **danger**	**Death** or **serious** injury
CAUTION	Possible **dangerous situation**	**Minor** injury

1.1.2 Symbols – designation and explanation

Icon	Designation	Meaning
!	Attention	Warning of possible damage.
	Information	Practical hints and other useful information.
1. 2.	Multiple-step instruction	Procedure involving several actions.
➢	Single-step instruction	Procedure involving only one action.
⇨	Intermediate result	An instruction produces a visible intermediate result.
➜	Final result	The final result becomes apparent on completion of the instruction.

1.2 On the product

! Observe all warning signs on products and ensure they remain legible.

Icon	Meaning
CE	EU declaration of conformity
FC	US declaration of conformity
EAC	Certification for the Russian Federation
	Certification for Ukraine
	Certification for Australia, New Zealand
	Certification for Morocco
	Certification for South Korea
	Use of the Opel-Vauxhall-VCI and and recording of diagnostic data while driving may only be performed by trained and instructed employees of the service workshop.
	Attention: general warning sign indicating danger. Before commissioning, connecting and operating Bosch products, it is absolutely essential to read the entire operating instructions carefully, especially the safety instructions.
	Dispose of used electrical and electronic devices, including cables, accessories and batteries, separately from household waste.
	China RoHS (environmental protection)

2. User instructions

Before commissioning, connecting and operating this product, it is absolutely essential that the operating instructions/owner's manual and, in particular, the safety instructions are studied carefully. By doing so you can eradicate any uncertainties about this product and any associated safety risks upfront; something which is in the interests of your own safety and will ultimately help avoid damage to the device. When this product is handed over to another person, not only the operating instructions but also the safety instructions and information on its designated use must be handed over to the person.

2.1 Intended users

The product may be used by skilled and instructed personnel only. Personnel scheduled to be trained, familiarized, instructed or to take part in a general training course may only work with the product under the supervision of an experienced person.

All work on electrical devices must be carried out by individuals with sufficient knowledge and experience in the fields of electrical and hydraulic equipment.

2.2 FCC Compliance (USA)

Opel-Vauxhall-VCI complies with the requirements of Section 15 of the FCC Rules. The following conditions apply regarding operation:

- Opel-Vauxhall-VCI must not cause any harmful disruptions;
- Opel-Vauxhall-VCI must permit reception of interference, including interference that can cause unwanted operation.

The Opel-Vauxhall-VCI was tested and complies with the limits for a Class A digital device as defined in Part 15 of the FCC regulations. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. Opel-Vauxhall-VCI may generate, use and emit energy at radio frequencies that can disrupt radio communication if installed improperly or used in a manner inconsistent with the operating instructions. Operation of Opel-Vauxhall-VCI in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her expense.

All changes or modification to the Opel-Vauxhall-VCI that are not expressly allowed by Opel Automobile GmbH can result is loss of permission to operate Opel-Vauxhall-VCI.

2.3 Open-source software (OSS)

For an overview of the open-source software licenses, see "C:\PROGRAM FILES (X86)\BOSCH\VTX-VCI\VCI SOFTWARE (6531-BOSCH)\LEGAL".

2.4 Electromagnetic compatibility (EMC)

The Opel-Vauxhall-VCI satisfies the requirements of the EMC directive 2014/30/EU.

Opel-Vauxhall-VCI is a class/category A product in accordance with EN 61 326. The Opel-Vauxhall-VCI may cause high-frequency household interference (radio interference) so that interference suppression may be necessary. In such cases, the operator may be required to take appropriate action.

2.5 Range of application

The Opel-Vauxhall-VCI is intended for indoor use only.

- Do not expose Opel-Vauxhall-VCI to rain or moisture and prevent the formation of condensation.
- Degree of contamination 2, keep area around Opel-Vauxhall-VCI clean.

2.6 Wireless link (Bluetooth and WLAN)

Opel-Vauxhall-VCI users are responsible for compliance with the applicable directives and restrictions in the country concerned.

Important information on WLAN and Bluetooth
WLAN (Wireless Local Area Network) is the term used to describe a wireless local network. Bluetooth and WLAN provide a radio link on the free 2.4 GHz ISM band (ISM: Industrial, Scientific, Medical). This frequency range is subject to state legislation, can however be used without a license in most countries. Consequently a large number of applications and devices employ this frequency band for transmission. This can result in frequency interference and faults.
Depending on ambient conditions, the radio link may deteriorate, e.g. in the case of Bluetooth links, cordless telephones, radio-controlled thermometers, radio-controlled garage door openers, radio-controlled light switches or radio-controlled alarm systems.

Bluetooth can cause bandwidth collapse in the WLAN network. The antennas of Bluetooth and WLAN devices should be at least 30 centimeters apart. Use the USB extension cable (special accessory) to maintain a distance between the Bluetooth USB adapter on the computer and the WLAN antenna.

Extreme caution is to be taken if wearing pacemakers or other vital electronic devices when using wireless systems, as proper functioning of these items could be impaired.

Pay attention to the following to ensure the best possible connection:
- ➢ The radio signal always tries to find the most direct path. When setting up the computer and access point, make sure there are as few obstacles as possible (e.g. steel doors and concrete walls) which could interfere with the signal from and to the Opel-Vauxhall-VCI.
- ➢ Inside buildings, the range of the WLAN / Bluetooth is also greatly influenced by the construction materials used. Conventional masonry, wooden walls and various types of dry construction wall scarcely impair the propagation of radio waves. Thin gypsum walls are however problematic, as considerable amounts of moisture may accumulate in the gypsum and result in the absorption of radio signals. Metal walls and concrete (in particular reinforced concrete) largely block out radio waves. Cellar ceilings are often impenetrable. Generally speaking, walls with a lot of installed metal (e.g. pipes, cables) obstruct radio waves.
- ➢ Radio reception is also impeded by large metal objects such as radiators and window frames as well as active sources of interference such as radio telephones, motion detectors and microwave ovens.
- ➢ Human beings are also an obstacle to wireless transmission. It must therefore always be ensured that no-one stands between the transmitter and receiver.
- ➢ We advise having the network infrastructure installed and maintained by a network specialist.
- ➢ When using a WLAN connection, keep the SSID and the codes for the wireless link in a safe place. Make sure these data are readily to hand in case faults occur.
- ➢ When commissioning, we recommend that you tour the site thoroughly: Determine where in your building Opel-Vauxhall-VCI functions and where the limits for wireless transmission are located.
- ➢ The wireless link is affected by weather conditions. The reception signal may therefore vary.
- ➢ Please contact your network specialist for any queries.
- ➢ In the event of problems with the radio link, the USB link can be activated and used instead of the radio connection.

2.7 Other applicable documents

Designation	Document number
Quick Start Guide	1 689 989 452
Important information and safety instructions	1 689 989 453
Specifications – WLAN USB adapter	1 689 989 305

3. Safety instructions

These operating instructions are intended to ensure easy and safe setup and use of the Opel-Vauxhall-VCI. Read these operating instructions and other applicable documentation carefully before using the Opel-Vauxhall-VCI and the software.

4. Product description

4.1 Intended use

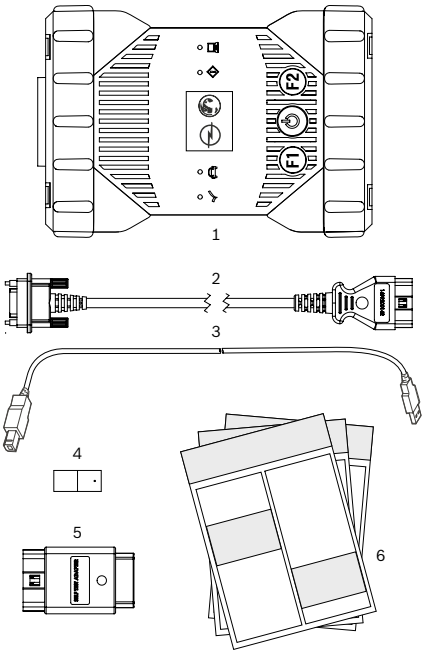
If the Opel-Vauxhall-VCI and the scope of delivery are operated contrary to the way specified by the manufacturer in the operating instructions, the protection provided by the Opel-Vauxhall-VCI and the supplied accessories may be compromised.

The Opel-Vauxhall-VCI is a measuring instrument used by professional technicians as an aid in diagnosing and repairing automotive electrical and electronic systems. Additionally, the software application with Opel-Vauxhall-VCI can be used to measure voltage levels, for example.

4.2 Scope of delivery

The Opel-Vauxhall-VCI Base Kit includes connecting cables and hardware needed to transfer data and reprogram ECUs on vehicles through the diagnostic connector.

The scope of delivery depends on the product variant ordered as well as the optional accessories ordered, and can deviate from the following list.

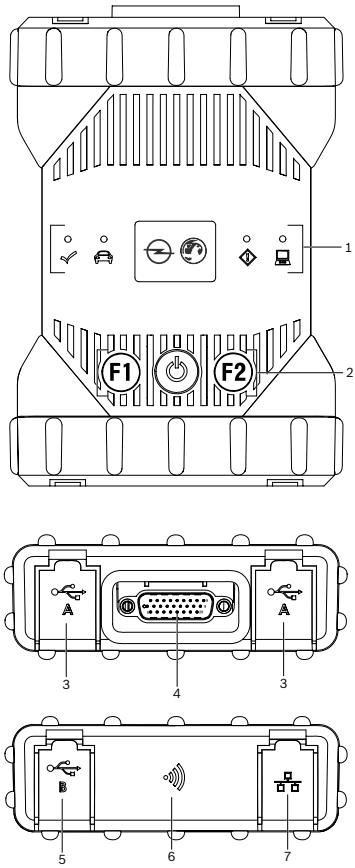


Item	Kit Component	Part number	
1	VCI system tester	1 699 200 790	1
2	Diagnostic connection cable (data transmission to J1962)	1 699 200 366	1
3	USB connecting cable A to B, 3 m	F00K.108.653	1
4	Ethernet connecting cable 1.5 m	1 684 465 811	1
5	Wireless WiFi USB stick	–	2
6	Test adapter (self-test)*	1 699 200 154	1
7	Applicable documentation	–	3

** Optional accessories*

4.3 Opel-Vauxhall-VCI Ports and control elements

The Opel-Vauxhall-VCI has various keys and standardized ports for operating the device and connecting it to the vehicle electrical system and workshop network. These connectors and controls are shown in the following illustrations.



Item	Description
1	LED status display
2	Control keys
3	2x USB-A port
4	Port for diagnostic connection cable
5	USB-B port
6	WiFi Adapter
7	Ethernet Port

4.4 Universal Serial Bus (USB) Port

The Opel-Vauxhall-VCI has a fixed USB configuration which cannot be changed. This ensures that the Opel-Vauxhall-VCI can always be connected to a single computer running the software "VCI Manager" or the user software so you can configure LAN or WLAN settings required by your local network. In addition, it is important to note that a USB connection is required to configure the firmware on the Opel-Vauxhall-VCI, to pair the computer with the Opel-Vauxhall-VCI and to update the firmware.

4.5 Wireless Local Area Network (WLAN)

During setup and configuration of the WLAN connection (802.11b/g/n), the Opel-Vauxhall-VCI must be connected via USB to a computer running the software "VCI Manager" and be paired with the computer.

4.6 Ethernet

During setup and configuration of the Ethernet connection, the Opel-Vauxhall-VCI must be connected via USB to a computer running the software "VCI Manager" and be paired with the computer.

4.7 Additional Opel-Vauxhall-VCI Features

4.7.1 Data transfer

The connection between the Opel-Vauxhall-VCI and the vehicle electronics is established via the 26-pin diagnostic connection cable.

4.7.2 Power Supply

The Opel-Vauxhall-VCI is designed for voltage to be supplied from the vehicle via the diagnostic connection cable. For data transfer or a system update, the Opel-Vauxhall-VCI can also be supplied with voltage from the USB port on a computer.

If the is Opel-Vauxhall-VCI to be configured for a wireless connection, the voltage must be supplied via the USB connecting cable.

4.7.3 LED status display

Four light emitting diodes (LEDs) are located on the front of the Opel-Vauxhall-VCI. The LED indicators provide the following status information.

Icon	Color Status	LED Function
	green	Opel-Vauxhall-VCI without errors
	red	Error occurred, perform a reset
	green	Opel-Vauxhall-VCI connected to vehicle
	Flashing red	Not connected to external 12 or 24 V power
	off	Opel-Vauxhall-VCI without errors
	red	Error occurred or Opel-Vauxhall-VCI in recovery state
	off	Opel-Vauxhall-VCI not connected to a computer
	Flashing green	Opel-Vauxhall-VCI connected to computer
	off	Opel-Vauxhall-VCI off
	green	Opel-Vauxhall-VCI on
	yellow/ green	depending on user software
	yellow/ green	depending on user software

4.8 VCI Manager program

The "VCI Manager" program is a host computer application which runs on the Windows operating system to configure and update Opel-Vauxhall-VCI. The software "VCI Manager" allows the configuration of VCI-to-host computer communications and facilitates VCI firmware updates.

4.9 System requirements

The Opel-Vauxhall-VCI is set up and updated via the "VCI Manager" software. VCI Manager is installed on a computer. The Opel-Vauxhall-VCI is controlled in the corresponding user software.

The system requirements listed below refer to use of the "VCI Manager" software. The user software requirements may differ.

- Windows 7, Windows 8 or Windows 10 (32-bit and 64-bit)
- 100 MB free hard disk space
- 512 MB RAM
- 1 GHz processor
- 1 free USB ports
- 1024x768 display resolution

5. Operation

The following sections provide the information needed to begin using the Opel-Vauxhall-VCI, including installing the "VCI Manager" software, updating the firmware on the device, configuring connection methods, and communicating with the vehicle.

5.1 Installation notes

Please follow the installation instructions for the user software.

5.2 Installing the VCI Manager software

The "VCI Manager" software must be installed on the computer in order to configure, update and run diagnostic applications targeted for the computer. Initially you use the "VCI Manager" software to set up the configuration of each Opel-Vauxhall-VCI.

Visit TIS2Web for OPEL-VAUXHALL VCI Manager software download.

5.3 Setting up the diagnostic device hardware

5.3.1 Identifying your diagnostic device

The rating plate is located on the back of Opel-Vauxhall-VCI. The Opel-Vauxhall-VCI identification number has two parts: a manufacturing code for traceability and a unique serial number. The serial number is used to identify Opel-Vauxhall-VCI in the "VCI Manager" software. You will need to refer to this serial number when you are using VCI Manager to configure Opel-Vauxhall-VCI and perform software updates.

5.3.2 Updating the diagnostic device software

Opel-Vauxhall-VCI is shipped from the factory without firmware. Your first connection is to the computer where you have installed the "VCI Manager" software. You will need the USB connecting cable to configure your Opel-Vauxhall-VCI using VCI Manager.

Use the following procedure to update the firmware on your VCI.

1. Start the "VCI Manager" program.
2. Connect the Opel-Vauxhall-VCI to your computer using the USB connecting cable.
   ⇨ The Opel-Vauxhall-VCI will boot in Recovery mode. (only in factory setup)
3. Choose the new Opel-Vauxhall-VCI from the shown list.
   ⇨ The button <Verbinden> (Connect) will be renamed to the button <Wiederherstellen> (Recover). Your Opel-Vauxhall-VCI will be displayed without the serial number when initially connected to VCI Manager.
4. Press <**Wiederherstellen**>(Recover) to start the update process.

! Do not unplug the Opel-Vauxhall-VCI from the computer during the update process.

5. Click <**Update starten**> (Start update) to install firmware on the Opel-Vauxhall-VCI.
6. Click <**OK**> to continue.
7. The update process will take about 5 minutes to complete. Once the update process is complete, the Opel-Vauxhall-VCI will automatically reboot. Wait until you hear the beep from the Opel-Vauxhall-VCI before proceeding to use your Opel-Vauxhall-VCI.

5.3.3 Configuring the Opel-Vauxhall-VCI using VCI Manager

In order to configure the Opel-Vauxhall-VCI to communicate on your network, you must connect the Opel-Vauxhall-VCI, via USB, to a computer running the "VCI Manager" software. The VCI Manager icon displayed on the Opel-Vauxhall-VCI will inform you of the communication method to be used when <**Verbinden**> (Connect) is selected.

Icon	Description
	VCI Manager will connect to the Opel-Vauxhall-VCI via USB
	VCI Manager will connect to the Opel-Vauxhall-VCI via Ethernet
	VCI Manager will connect to the Opel-Vauxhall-VCI via Wireless
	Wireless Point-to-Point is not set up. Use a USB connecting cable to connect the Opel-Vauxhall-VCI to the computer to complete setup.
	Wireless adapters in the computer and in the diagnostic device are incompatible with each other.
	VCI Manager is connected to the Opel-Vauxhall-VCI

Use the following steps to configure your Opel-Vauxhall-VCI.

1. Double-click the VCI Manager icon on your desktop to launch the "VCI Manager" software.
2. Select Opel-Vauxhall-VCI in "**VCI Explorer**".
3. Click <**Verbinden**> (Connect) to connect to the selected Opel-Vauxhall-VCI over USB.

➜ Opel-Vauxhall-VCI is displayed with a green checkmark on your display, indicating that your "VCI Manager" software is in control of this Opel-Vauxhall-VCI.

4. Click <**Details anzeigen**> (Show details) to see details about the selected Opel-Vauxhall-VCI.

If your Opel-Vauxhall-VCI is connected to another networked computer, it will still be detected by the VCI Manager, but will not be available for connection.

If your Opel-Vauxhall-VCI is connected via USB to your computer, the VCI Manager functions on all tabs are available; if your Opel-Vauxhall-VCI is not connected via USB, the functions on the **Network Setup** and Opel-Vauxhall-VCI Update tabs are not available.

5.3.4 Checking the computer and Opel-Vauxhall-VCI software versions

Ensure, that the "VCI Manager" software installed on your computer and the software installed on the Opel-Vauxhall-VCI have matching software versions in order for Opel-Vauxhall-VCI to operate properly. Use the following steps to check your software versions.

1. Connect the Opel-Vauxhall-VCI to your computer using the USB connecting cable.
2. Double-click the VCI Manager icon on your desktop to launch the "VCI Manager" software.
3. Choose your Opel-Vauxhall-VCI in "**VCI Explorer**".
4. Click <**Verbinden**> (Connect) to connect to the selected Opel-Vauxhall-VCI over USB.
5. Choose "**Help**" to see details about the software versions.

5.4 Setting up wireless communications

Opel-Vauxhall-VCI is capable of communicating on your workshop network over Wireless. The "**Network Setup**" tab in the "VCI Manager" software provides a number of functions used to select and configure Opel-Vauxhall-VCI network connection interfaces, including wireless access and security settings.

You must be connected to the Opel-Vauxhall-VCI via USB to access the settings on the "**Network Setup**" tab. If you are not connected via USB, the controls on the "**Network Setup**" tab are disabled.

The Opel-Vauxhall-VCI supports the Point-to-Point method for wireless communication.

Point-to-point

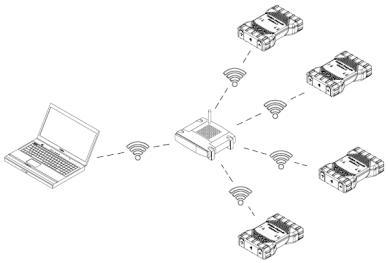
With the Point-to-Point Wireless Communication method, the Opel-Vauxhall-VCI connects to your computer directly using a USB wireless adapter. Each of these methods are described in the following sections.

5.4.1 Activating the WLAN link via an access point

The Opel-Vauxhall-VCI can be configured to connect via an access point. The following must be prepared before configuring:

- An IP address and subnet mask that can be assigned to the Opel-Vauxhall-VCI (if the existing LAN does not assign IP addresses automatially)
- A wireless network access point SSID (network name)
- Network security standard WPA2 enabled
- Data encryption via TKIP or WEP (64-bit or 128-bit)
- WLAN password

The figure below shows several Opel-Vauxhall-VCIs that are connected to a single computer via a wirelss access point.



You use the following procedure to configure your Opel-Vauxhall-VCI for a wirelss connection in your network environment. Contact your IT administrator before starting setup.

1. Double-click the VCI Manager icon on your desktop to launch the "VCI Manager" software.
2. Plug the Opel-Vauxhall-VCI into an external 12 V power source.
3. Plug the USB connecting cable into the computer and Opel-Vauxhall-VCI and allow Opel-Vauxhall-VCI to boot completely.

4. Connect to your Opel-Vauxhall-VCI in the VCI Manager software.
5. Select the "**Network Setup**" tab.
6. In the "**Wireless (802.11)**" tab, select the option "**Activate wireless interface**"
   ⇨ The "**IP address configuration**" input field beocmes active.
7. Select the option "**Automatic assignment of IP address**" if your network assigns IP addresses automatically.

If your network uses fixed IP addresses, your IT administrator will assign the IP address and subnet mask.

8. Select <**Access Point >**>.
9. Assign network name:
   – If the network uses a hidden SSID or is not within range, the network name can be enter via the option "Enter network name (SSID)" .
   – If the network is within range, the network can be selected via the option "Select from list of available networks". Press <Aktualisieren> (Update) to have the Opel-Vauxhall-VCI search for available WLAN signals.
10. After the network name has been entered, continue with <**Configurieren>**(Configure).
11. Enter the security settings for the network and select <**Weiter**> (Next).
12. Select <Ja> (Yes) to configure the Opel-Vauxhall-VCI again, or <Nein> (No) to cancel the procedure.
13. Select the "Settings" tab and check that the Opel-Vauxhall-VCI was configured correctly.

By disconnecting the USB connection, you can check whether configuration was successful.

14. Back up the settings for future changes.

5.4.2 Enabling point-to-point wireless communication

The Opel-Vauxhall-VCI can be configured for point-to-point wireless communication. The following illustration shows a single diagnostic device connected to a computer using point-to-point wireless communication.

If you need to reconfigure Point-to-Point on your Opel-Vauxhall-VCI, use the following procedure. The steps presented below assume you are running the Windows 7 operating system on your computer. The steps may differ depending on the operating system.

1. Plug the WLAN USB adapter into an available USB port on your computer.

Do not plug the wireless adapter into a USB hub.

2. Switch on your computer.
3. Connect the Opel-Vauxhall-VCI to your computer via the USB connecting cable and allow the Opel-Vauxhall-VCI to boot completely.

Do not plug the Opel-Vauxhall-VCI USB connecting cable into a USB hub.

4. Start the "VCI Manager" program.

The Point-to-Point connection is automatically configured. Wireless communication will be available when you are powered through the DLC cable.

If you have the need to reset your Point-to-Point passphrase, you can use the following steps.

1. Click the Wireless Network icon in your Windows taskbar.
   ⇨ A list of the available wireless networks in range of your computer is displayed.
2. Choose "**Open Network and Sharing Center**".
3. Choose "**Manage Wireless Networks**" from the left column.
4. Choose "**Change adapter**" menu and choose VCI from the list.
5. Remove your stored Point-to-Point network. The name will contain MTS6531 and the last 8 digits of Opel-Vauxhall-VCI serial number, (MTS6531xxxxxxxx).
6. When you reconnect Opel-Vauxhall-VCI to the computer using the USB connecting cable, a new passphrase will be established.

5.4.3 Setting to factory default

Setting the Opel-Vauxhall-VCI to Factory Default restores the Point-to-Point communication settings to the point it had when it left the factory. Any software upgrades that have been installed to Opel-Vauxhall-VCI are still installed. When the reset is finished, the VCI Manager software displays the "**VCI Explorer**" tab. All wireless access point configurations will be lost.

1. Start the "VCI Manager" program.
2. Plug the Opel-Vauxhall-VCI into an external 12 V power source.
3. Plug the USB connecting cable into the computer and Opel-Vauxhall-VCI and allow Opel-Vauxhall-VCI to boot completely.
4. Connect to your Opel-Vauxhall-VCI in the VCI Manager software.
5. Select the "**Network Setup**" tab.
6. Click <**Set Factory Default**>.

➜ Opel-Vauxhall-VCI is set to Factory Default.

5.5 Connecting the diagnostic device to a vehicle

Opel-Vauxhall-VCI Vehicle Communication Interface kit contains a diagnostic connection cable that connects Opel-Vauxhall-VCI to the vehicle's SAE J1962 Data Link Connector (DLC).

Refer to the electrical wiring diagram for the vehicle you are testing to determine the location of the DLC on the vehicle.

1. Connect the 26-pin end of the diagnostic connection cable to the top of Opel-Vauxhall-VCI, then tighten the screws.
2. Connect the 16-pin end of the diagnostic connection cable to the vehicle DLC.

Powering the diagnostic device

Opel-Vauxhall-VCI is powered by the vehicle's 12 or 24-volt battery.

CAUTION – Non-approved Accessories - Malfunction
Possible risk of personal injury

➢ Non-Bosch cables are not approved for use with this equipment, including a non-Bosch USB connecting cable.

CAUTION – Cables - Overload
Possible risk of personal injury

➢ Make sure that any cable connected to a high current capable power source, such as a 12-volt automotive battery, is in good condition. The Opel-Vauxhall-VCI is protected by its own internal protection device. A fault in the cable itself, especially a power to ground short, is capable of creating a hazardous situation that can cause personal injury.

CAUTION – Loopback Self-Test Adapter - Overload
Possible risk of personal injury

➢ Do not apply power to Opel-Vauxhall-VCI through the self-test adapter barrel connector unless the circuit is protected by a fuse, circuit breaker, or current-limited power supply. The fuse, circuit breaker, or current-limited power supply must be set to no more than 3 amps.

5.6 Resetting the Opel-Vauxhall-VCI

1. Disconnect the voltage supply from the Opel-Vauxhall-VCI.
2. Wait at least 20 seconds.
3. Reattach the voltage supply to the Opel-Vauxhall-VCI.

5.7 Loopback self-test

With the self-test adapter you can conduct a loopback self-test of the Opel-Vauxhall-VCI. using the following steps.

1. Connect the diagnostic connection cable to the Opel-Vauxhall-VCI.
2. Connect the self-test adapter to the vehicle end of the diagnostic connection cable.
3. Power the self-test adapter either via a vehicle connection or a 12-V power adapter.
4. Start VCI Manager and connect the Opel-Vauxhall-VCI.
5. In VCI Manager, choose "**Help**".
6. Press <Aktualisieren> (Update) to have the search for available WLAN signals.

6. Troubleshooting

This section is intended to help you get back on track if the Opel-Vauxhall-VCI appears to be operating abnormally. If the error is not eliminated by the indicated remedy, it is necessary to contact Service.

6.1 Opel-Vauxhall-VCI error LED lights after power On

Recommendations

1. Power down the Opel-Vauxhall-VCI and verify that the same problem exists when you power up again.
2. Connect the Opel-Vauxhall-VCI to a computer using USB and perform the recovery procedure.

6.2 The Opel-Vauxhall-VCI fails to power up

Opel-Vauxhall-VCI should power up as soon as external power is applied. If Opel-Vauxhall-VCI does not turn on, first check the cable connections. Try supplying power to Opel-Vauxhall-VCI from two different power sources – the vehicle DLC and the USB connector.

Recommendations

➢ Check that the cables are securely attached to the Opel-Vauxhall-VCI and the connector pins are clean.
  – While the diagnostic device is connected to the vehicle DLC, try powering from the USB connector.
  – While the diagnostic device is connected to USB, try powering from the vehicle DLC.

6.3 "Vehicle LED is flashing red

If the Opel-Vauxhall-VCI does not detect 12 V on Pin 16 of the diagnostic connection cable, Opel-Vauxhall-VCI will inform the user by automatically turning on and flashing the Vehicle LED red. This condition might be seen if Opel-Vauxhall-VCI is only powered by a 5-V USB connection or if the diagnostic connection cable has accidently been displaced from the vehicle Data Link Connector and is powered from the backup capacitor. When Opel-Vauxhall-VCI detects 12 V on Pin 16, the Vehicle LED will stop flashing red.

Recommendations

1. Ensure that 12 V is applied to Pin 16 of the diagnostic connection cable.
2. Ensure ground on J1962 pin 5 is good.

6.4 Opel-Vauxhall-VCI speaker is beeping

If Opel-Vauxhall-VCI is performing diagnostic services for the computer and does not detect 12 V on Pin 16 of the diagnostic connection cable, Opel-Vauxhall-VCI will inform the user of the loss of power by beeping the speaker. Opel-Vauxhall-VCI will continue to beep until the backup capacitor is drained. When Opel-Vauxhall-VCI detects 12 V on Pin 16, the speaker will stop beeping.

Recommendations

➢ Ensure that 12 V is applied to Pin 16 of the diagnostic connection cable during diagnostic sessions.

6.5 Opel-Vauxhall-VCI turns off immediately when disconnected from the vehicle during a diagnostic session

If Opel-Vauxhall-VCI does not remain on during cranking or DLC disconnect, there may be a problem charging the internal capacitor.
The Opel-Vauxhall-VCI should remain powered up if power is lost during engine cranking or after it is disconnected from power (vehicle DLC) during a diagnostic session. The Opel-Vauxhall-VCI speaker will beep to notify the user that power has been lost unexpectedly during the diagnostic session.

Recommendations

1. Check for 12 V power supply at the vehicle DLC.
2. Ensure that the Opel-Vauxhall-VCI has been connected to the vehicle DLC for at least 90 seconds to charge the internal capacitor.

6.6 "Checkmark" LED flashing on the Opel-Vauxhall-VCI

If the internal temperature of Opel-Vauxhall-VCI has exceeded the maximum limit,
Opel-Vauxhall-VCI will automatically turn off the wireless adapter. This will be visible to the user by the Checkmark LED flashing. When the internal temperature of Opel-Vauxhall-VCI lowers to an acceptable value, the wireless adapter will be re-enabled for wireless communication.

Recommendations

➢ Move Opel-Vauxhall-VCI to a cooler location near the vehicle.

6.7 Suspected defective diagnostic connection cable

If you suspect a defective diagnostic connection cable, you should perform the cable test from the VCI Manager. The "VCI Manager" software supports a cable test with the use of the self-test adapter. The cable test will suggest whether or not the diagnostic connection cable is defective. The self-test adapter used for the test is not intended to be used for vehicle communication. The following steps can be used to perform the cable test.

1. Connect the diagnostic connection cable to the Opel-Vauxhall-VCI.
2. Connect the self-test adapter to the vehicle end of the diagnostic connection cable.
3. Power the self-test adapter either via a vehicle connection or a 12-V power adapter.
4. Start VCI Manager and connect the Opel-Vauxhall-VCI.
5. In VCI Manager, choose "**Help**".
6. Enter the security settings for the network and select <**Weiter**> (Next).

➜ The "VCI Manager" software will run a series of tests on the diagnostic connection cable. The results will be displayed as PASS or FAIL.

6.8 Wireless communication with network unsuccessful using DWA131 E1 dongle

The D-Link DWA131 E1 dongle is not intended to be used for computer wireless communication to a network. The DWA131 E1 dongle is only intended to be used with Opel-Vauxhall-VCI for Point-to-Point communication or Infrastructure wireless communication.

Recommendations

1. Make sure you do not have two D-Link wireless dongles connected to the computer.
2. Make sure you are not trying to connect the computer to your dealership network using the DWA131 E1 dongle.

6.9 VCI Manager displays yellow icon over Opel-Vauxhall-VCI after previous use

There may be instances when Windows does not recognize the installation of the DWA131 E1 wireless adapter. In these cases, Windows may create a new wireless profile instead of using the existing one already stored on the computer. The yellow icon displayed over your Opel-Vauxhall-VCI instructs you to plug in the USB connecting cable between Opel-Vauxhall-VCI and the computer.

Recommendations

➢ Unplug and then re-install your wireless adapter. Windows will attempt to recognize the wireless adapter. If successful, the yellow icon will disappear and Opel-Vauxhall-VCI will be ready for wireless Point-to-Point communication.

6.10 Computer application is unable to communicate with the Opel-Vauxhall-VCI over USB

The "VCI Manager" software must be installed on the computer, and Opel-Vauxhall-VCI must be powered up before it will communicate. Opel-Vauxhall-VCI must be configured through USB before it will communicate using any other connection types.

Recommendations

If other applications including the VCI Manager are able to connect to Opel-Vauxhall-VCI then:

➢ Check the Windows Firewall settings to see if the application is being blocked.

If all installed applications are unable to communicate with Opel-Vauxhall-VCI then:

1. Connect Opel-Vauxhall-VCI to the computer using USB, but do not connect it to the vehicle.

! Do not plug the Opel-Vauxhall-VCI USB connecting cable into a USB hub.

2. Verify that the USB connecting cables are securely attached and Opel-Vauxhall-VCI has completed its power up sequence.
3. Start the "VCI Manager" program.
4. Does VCI Manager detect the Opel-Vauxhall-VCI?

If "No", then:

- Try a different USB connecting cable / port on the computer.
- Check the Windows Firewall to see if the VCI Manager is blocked.
- Check that the Opel-Vauxhall-VCI USB connection is detected by Windows.

6.11 Computer application is unable to communicate with Opel-Vauxhall-VCI over wireless or Ethernet

1. Check that the wireless USB adapter is properly seated in Opel-Vauxhall-VCI.
2. Confirm that Opel-Vauxhall-VCI can connect over USB.
3. If using point to point, confirm that the computer has a single dongle connected:
   - Connect the Opel-Vauxhall-VCI to the computer using USB.
   - Confirm the communication is enabled and the IP configuration is properly set using the "VCI Manager" software.
4. If using infrastructure wireless:

Contact your IT department and check that your computer is detecting the wireless access point, and the correct security settings have been configured for Opel-Vauxhall-VCI.

7. Cleaning and Maintenance

The housing of the Opel-Vauxhall-VCI may only be cleaned with soft workshop rags and a neutral cleaning agent. Do not use abrasive cleaning agents and

coarse workshop rags.

The Opel-Vauxhall-VCI does not contain any user-serviceable parts. Do not open the Opel-Vauxhall-VCI; opening voids the warranty.

➢ Do not immerse the Opel-Vauxhall-VCI or any of its parts or accessories in water.
➢ Even though the Opel-Vauxhall-VCI and the accessories are water-resistant, they are not waterproof. Allow to dry thoroughly before storing.
➢ Avoid using harsh solvents such as petroleum based cleaning agents, Acetone, Benzene, Trichloroethylene, etc.

7.1 Restoring the system software on the Opel-Vauxhall-VCI (Recovery)

As a result of a power failure or a communications error during a software update, the Opel-Vauxhall-VCI software may become corrupted. In this case, it is necessary to execute a recovery:

1. Connect the Opel-Vauxhall-VCI to your computer using the USB connecting cable.
2. Launch the VCI Manager.
3. Select Opel-Vauxhall-VCI in "**VCI Explorer**".
4. To start the recovery, press and hold the power button on the Opel-Vauxhall-VCI for at least 5 seconds.
   ⇨ The Opel-Vauxhall-VCI icon in the VCI Manager is identified by "Recovery".
5. Select the Opel-Vauxhall-VCI in the VCI Manager.
6. Carry out recovery.

7.2 Spare and wearing parts

Kit Component	Part number
VCI system tester	1 699 200 790
Diagnostic connection cable (data transmission to J1962)[1)]	1 699 200 366
USB connecting cable A to B, 3 m[1)]	F00K.108.653
WLAN USB stick[1)]	1 687 010 590
Test adapter (self-test)[1) 2)]	1 699 200 154

1) Wearing part

2) Special accessory

8. Decommissioning

➢ Disconnect the Opel-Vauxhall-VCI from the voltage supply.

8.1 Temporary shutdown

For an extended period of non-use:

➢ Disconnect the Opel-Vauxhall-VCI from the voltage supply.

8.2 Changing location

➢ If the Opel-Vauxhall-VCI is handed over to someone else, hand over all the documentation included in the scope of delivery as well.

➢ The Opel-Vauxhall-VCI must only be transported in the original or equivalent packaging.

➢ Read and follow the instructions concerning initial commissioning.

➢ Disconnect the electrical port.

8.3 Disposal

Opel-Vauxhall-VCI, accessories and packaging must be recycled in an environmentally friendly manner.

➢ Do not dispose of the Opel-Vauxhall-VCI in general trash.

Only for EC countries:

The Opel-Vauxhall-VCI is subject to the European directive 2012/19/EU (WEEE).

Dispose of used electrical and electronic devices, including cables, accessories and batteries, separately from household waste.

➢ Make use of the local return and collection systems for disposal.

➢ Proper disposal prevents environmental pollution and health hazards.

9. Glossary

Term	Description
AC	Alternating Current
Baud rate	The speed at which data is transferred over a serial data link
BPS	Bits per second
Computer	Personal computer
DC	Direct Current
DCE	Data Communication Equipment
DLC	Data Link Connector
DTE	Data Terminal Equipment. A term used to describe a device connected to an RS232 link.
ECU	Engine Control Unit
ECM	Engine Control Module
Ethernet	Connection of systems to networks by means of twisted-pair cabling in compliance with IEEE 802.3.
Hz	Hertz - a unit of measure for frequency
I/P	Instrumentation Port
I/O	Input/Output
I/F	Interface
LAN	Local Area Network
LED	Light-Emitting Diode
MTS6531	Technical product type, corresponds to Opel-Vauxhall-VCI
OBD	On Board Diagnosis
OEM	Original Equipment Manufacturer
PCM	Powertrain Control Module
PCU	Powertrain Control Unit
RCV	Receive
RS232C	Standard serial communication interface
SCI	SERIAL COMMUNICATION INTERFACE
USB power	Universal Serial Bus - a common standard for interfacing with a computer
VCI	Vehicle Communication Interface Abbreviation for diagnostic device
Vdc	Volts DC
WLAN	Wireless Local Area Network

10. Technical data

Property	Value / range
Host Interface	
Wired	High speed USB 480 Mbps Ethernet 10/100 Mbps
Wireless WiFi USB stick	802.11b/g/n
Processor System	
Microprocessor	Intel MX6 Solo
Clock Speed	800 MHz
RAM	512 MB DDR3 RAM
ROM	256 MB flash memory
Mass storage (optional)	4 GB - 128 GB Micro-SD memory card
User interface	
LEDs	4 status LEDs 3 lighted buttons
Beeper	Signal tone
Power Supply	
From the vehicle battery using the diagnostics connection cable or from the computer using a connected USB connecting cable. ***Caution:*** The diagnostic connector of the vehicle must be protected by a fuse with a max. rating of 6 amps / 32 volts.	7 V – 32 V, 750 mA 5 V, 0.5 A
Mechanical properties	
Size	165 x 115 x 40 mm (6.5 x 4.5 x 1.6 inch)
Weight	0.24 kg (0.53 lb)
Operating Temperature	-20 °C – +70 °C (-4 °F – 158 °F)
Storage Temperature	-20 °C – +80 °C (-4 °F – 176 °F)
Humidity at 25 °C	30 % – 95 %
Maximum operating altitude	4000 m
Degree of protection with the diagnostic connection cable ***not connected***	IP 30
Degree of protection with the diagnostic connection cable ***connected*** according to IEC 60529	IP 54, Cat. 2
Diagnostic connection cable	
J1962 (ISO 15031-3) Voltage resistance	DLC 26-pin 18 V, Cat. 0

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