



Volkswagen

Service Information

Diagnostic Device Hardware & Windows®

Number: VHW-16-08

Subject: VAS 6154 Diagnostic Interface – Startup Guide

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Notes:

- Please **read these instructions carefully and in their entirety** before performing the startup procedures. **If you do not understand these instructions, arrange to have a qualified person perform these procedures.**
- Heed all prerequisite requirements and notes, and **heed all cross-references to additional documents posted on ServiceNet.**
- This guide may be revised at any time. Always check ServiceNet for the latest version.



Service Information

1.0 – Introduction

1.1 – General Information – **MUST READ!**

This document describes the **startup processes** required to use **new VAS 6154** with diagnostic laptop or tablet devices with Offboard Diagnostic Information System Service (ODIS Service) diagnostic software.

General user guidelines and tips are included as well.

IMPORTANT!

This guide describes the VAS 6154 WLAN and USB startup processes for:

- ☐ **New** diagnostic devices where a diagnostic interface has not yet been configured and
- ☐ **Existing** diagnostic devices in service with a configured VAS 5054A Diagnostic Interface.

Please be sure to identify the diagnostic device(s) accordingly, and follow the startup and use instructions that apply, e.g.: **New** or **Existing**

1.2 – Initial Setup and Accessibility

New VAS 6154 must have their initial setup performed by qualified personnel before the operating modes and access conditions described below are in effect.

For detailed information refer to **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Initial Setup Guide

VAS 6154 Operating Mode	Access Conditions
WLAN Infrastructure	VAS 6154 can be accessed by <u>any</u> diagnostic device connected to the dealership LAN / WLAN
USB Cable	
WLAN Direct	VAS 6154 can be accessed <u>only</u> by diagnostic laptops and tablets on which a wireless access point network was established in Windows*
*A wireless access point network can be established between a VAS 6154 and more than one diagnostic device as necessary. However, to avoid confusion when switching between the WLAN modes, technician users must be made aware of the devices on which this was or was not established.	



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2.0 – Startup Instructions

2.1 – Module Preparation – **MUST READ!**

Prerequisites:

- ☐ Technician user is familiar with VAS 6154 features and functions outlined in **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Introduction Guide

- ☐ Initial setup successfully performed by qualified personnel as specified in **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Initial Setup Guide

- ☐ ODIS Service application version 3.0.3 or higher installed on diagnostic device.
- ☐ Diagnostic device plugged in to power adapter and booted to Windows desktop.
- ☐ Wireless switch on diagnostic device in ON position, (“Wireless LAN ON” & “802.11a Enabled”).
- ☐ Diagnostic device connected to dealership WLAN with **strong** WLAN signal.

ATTENTION!

Always check the dealership WLAN signal strength before proceeding. A weak WLAN signal will result in failed startup attempts!

1. Plug the **WLAN Module** into the end of the VAS 6154 module:



2. Insert assembled module into vehicle **Data Link Connector (DLC)** and turn on ignition.
3. **Wait a moment**, and then confirm the status of the **three LED indicators** as follows:

- ☐ **Green** (Power): **ON**
- ☐ **Blue** (Communication): **Blinking 1 Hz**
- ☐ **Orange** (WLAN Infrastructure): **ON**

4. Proceed with the **device-applicable startup**:

- ☐ **New** Diagnostic Device: [Section 2.2 - Page 4](#)

or

- ☐ **Existing** Diagnostic Device with configured VAS 5054A: [Section 2.3 - Page 4.](#)



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2.2 – WLAN Infrastructure Startup on **New** Diagnostic Device

Prerequisites:

- ☐ VAS 6154 **was selected** as the applicable **Diagnostic Interface** during the ODIS Service installation routine.
- ☐ VAS 6154 was set to **start automatically in WLAN Infrastructure mode** during initial setup.
- ☐ **All Startup Preparation prerequisites fulfilled: Section 2.1 – Page 3.**

VAS 6154 initially setup for use on the same WLAN as the diagnostic device, with WLAN Infrastructure mode set to start automatically, will automatically connect to ODIS Service on startup.

1. Start ODIS Service.
2. **Wait** until the WLAN Infrastructure connection appears as confirmed by the ODIS Service Connection Mode Indicator - **WLAN Infrastructure:** 
3. Start GFF.



Note:

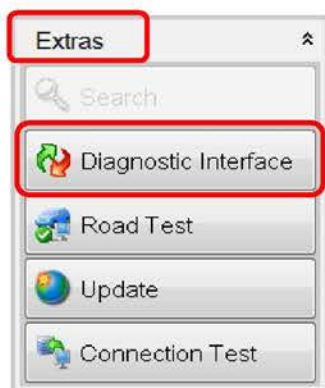
If ODIS Service does not connect to the VAS 6154 on a **strong WLAN signal**, it may not have been selected during the ODIS Service installation routine. If a repeat connection attempt fails after shut-down and restarting ODIS Service, refer to **Section 2.3** below to manually add the VAS 6154.

2.3 – WLAN Infrastructure Startup on **Existing** Diagnostic Device

Prerequisites:

- ☐ VAS 6154 **was not selected** as the applicable **Diagnostic Interface** during the ODIS Service installation routine, or was unable to initially connect as a new device.
- ☐ **Startup Preparation prerequisites fulfilled: Section 2.1 – Page 3.**

1. Start ODIS Service.
2. From the operating mode menu, select **Extras**, and then select **Diagnostic Interface:**

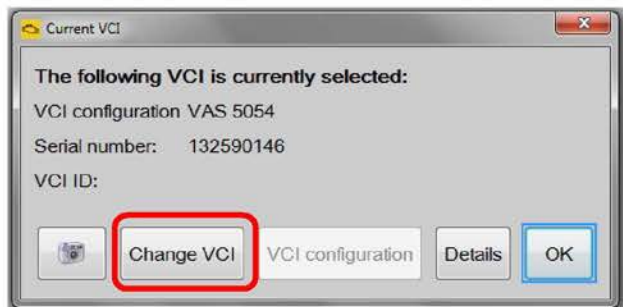


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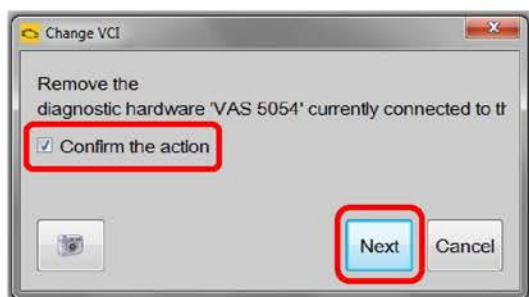


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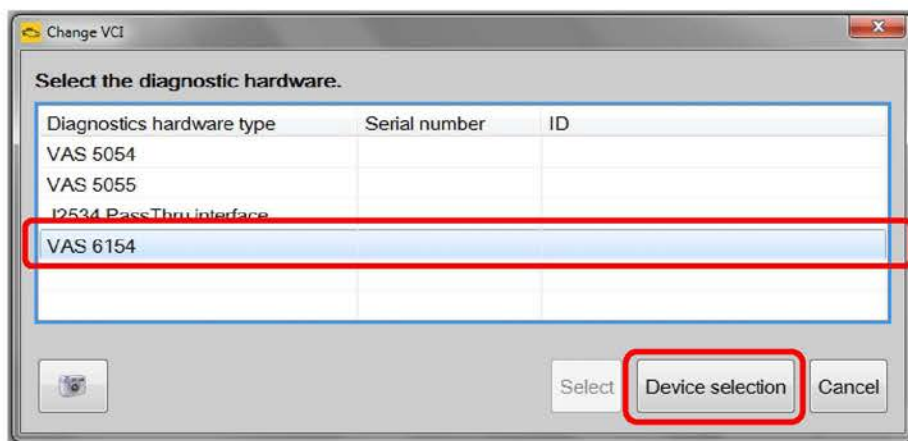
3. Select Change VCI:



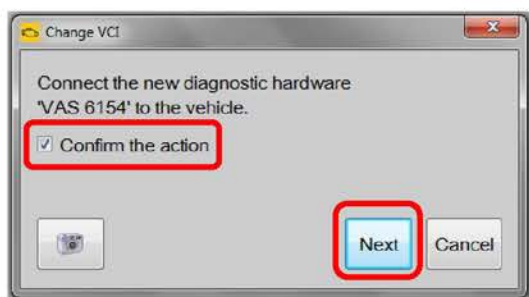
4. Check Confirm the action, and then select Next:



5. Select /highlight VAS 6154, and then select Device selection:



6. Check Confirm the action, and then select Next:

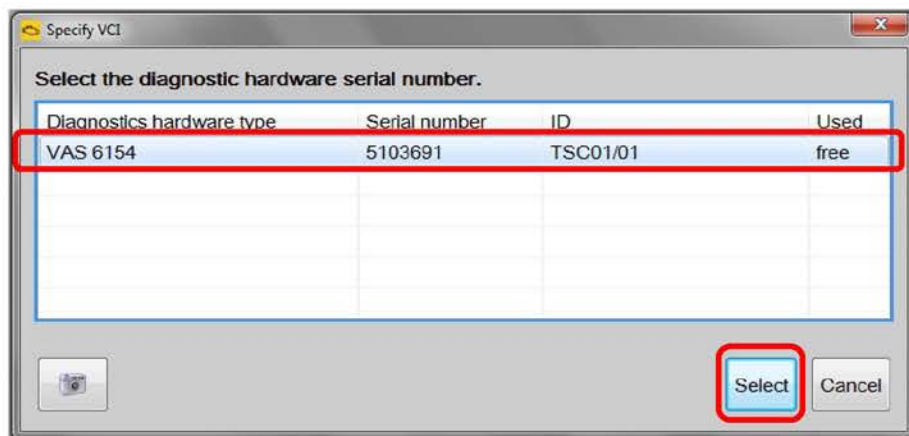


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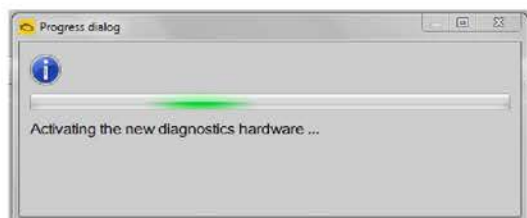
7. Select /highlight the VAS 6154 etc. listed, and then select **Select**:



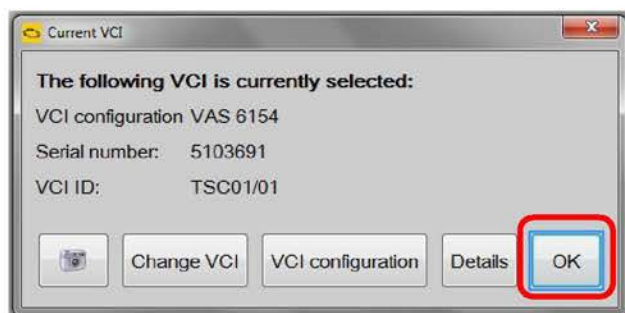
Note:

The VAS 6154 **serial number** and **ID** illustrated are **examples only!** All VAS 6154 serial numbers are different, and all IDs are unique (assigned by dealership personnel that performed the initial setup).

8. No action needed:



9. Select **OK**:



10. **Wait** until the WLAN Infrastructure connection appears as confirmed by the ODIS Service Connection Mode Indicator - **WLAN Infrastructure:** →



11. Start GFF.

Note:

To resume use of the original VAS 5054A diagnostic interface via Bluetooth, insert the VAS 5054A into the vehicle DLC, **start a new ODIS Service GFF session**, and perform steps 1 through 10 above. Select the applicable VAS 5054A by its serial number.

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2.4– USB Startup

The VAS 6154 USB startup routines mirror that of WLAN Infrastructure mode for both new and existing diagnostic devices. The startup routines **are summarized below**.

Prerequisite:

- ☐ *Initial USB setup performed and USB drivers installed during initial setup. For details refer to **Service Information – Diagnostic Device Hardware & Windows** document title:*

VAS 6154 Diagnostic Interface – Initial Setup Guide

2.4.1 – Prepare USB Module

- 1 **Remove** the VAS 6154 with WLAN module from the vehicle DLC if connected.
- 2 Depress the side grips on the WLAN module and separate it from the VAS 6154:



ATTENTION!

DO NOT connect or disconnect any of the add-on modules from the VAS 6154 when it is powered-up and transmitting (LEDs on). Module malfunctions will result!

Connections and disconnections of all add-on modules must ONLY take place when the VAS 6154 module is removed from the base station or vehicle DLC.

- 3 Connect the **USB Module with cable** to the VAS 6154:



- 4 Connect USB cable to the **round USB 2.0 port** on the diagnostic device.
- 5 Insert assembled module into **vehicle DLC** and turn on ignition.

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6 Proceed with the device-applicable startup:

- ☐ USB Startup on **New** devices: [Section 2.4.2.](#)
- ☐ USB Startup on **Existing** devices: [Section 2.4.3.](#)

2.4.2 – USB Startup on **New** Diagnostic Device

3 Start ODIS Service.

4 **Wait** until the USB connection appears as confirmed by the ODIS Service Connection Mode Indicator – **USB Mode:** →



5 Start GFF.

2.4.3 – USB Startup on **Existing** Diagnostic Device

1. Start ODIS Service

2. Jump to **Section 2.3 - Page 4.**

3. Perform manual VAS 6154 selection [Steps 2 through 9.](#)

4. **Wait** until the USB connection appears as confirmed by the ODIS Service Connection Mode Indicator – **USB Mode:** →



5. Start GFF.



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3.0 – Operating Mode Notes

3.1 – Operating Mode Matrix

Operating Mode:	Use When:	Operation Notes:
WLAN Infrastructure	- Guided Fault Finding (GFF) is performed on vehicles in the workshop environment. - The diagnostic device is connected to the dealership WLAN. This is the primary operating mode for most GFF procedures.	- Before starting GFF, ensure that a strong WLAN signal is received by the diagnostic device. - This operating mode is required for sending diagnostic logs on test plan completion and submitting GFF feedback. - LED Indication: Section 3.2.1 – Page 10.
WLAN Direct	- GFF is performed on vehicles outside out the workshop environment, - The diagnostic device is not connected to the dealership WLAN. E.g.: test drive. This is a secondary operating mode for specialized GFF procedures.	Sending diagnostic logs and submitting GFF feedback <u>is not possible</u> in this mode. - Logs and feedback must be sent after switching back to WLAN Infrastructure mode. - LED Indication: Section 3.2.2 – Page 10.
USB Cable	- Vehicle Software Version management (SVM) is performed on vehicles in the workshop environment. - The diagnostic device is physically connected to the dealership LAN for SVM.	Until further notice, the USB operating mode is mandatory for SVM.



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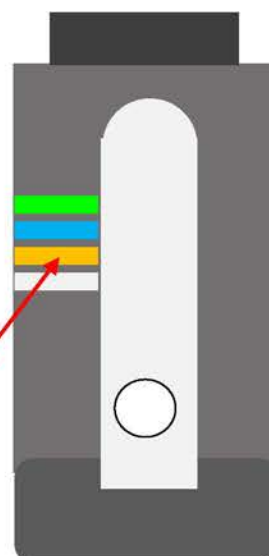
3.2 – LED Indicator Overviews

Notes:

- VAS 6154 automatically run an LED check routine immediately after being plugged in to a power source. Wait a moment to allow the check to end before evaluating its operation status.
- Until further notice, disregard the fourth (red) LED for DoIP function indications.

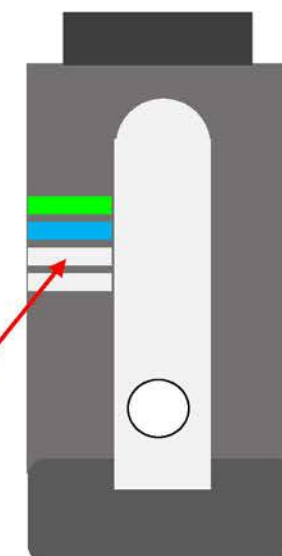
3.2.1 – WLAN Infrastructure

LED / Function	Status	Indication
Green / Power	ON	Normal Operation
	Blinking 1 Hz	Error*
	OFF	No power supply**
Blue / Communication	ON	Comm. Established
	Blinking - 1 Hz	Comm. Setup In Process
	Blinking - Random	Data Being Transferred
	OFF	No connection
Orange / WLAN Mode	ON	WLAN Infrastructure Mode



3.2.1 – WLAN Direct

LED / Function	Status	Indication
Green / Power	ON	Normal Operation
	Blinking 1 Hz	Error*
	OFF	No power supply**
Blue / Communication	ON	Comm. Established
	Blinking - 1 Hz	Comm. Setup In Process
	Blinking - Random	Data Being Transferred
	OFF	No connection
Orange / WLAN Mode	OFF	WLAN Direct Mode



*Refer to **User's Guide on CD** for error indications.

**Check power and ground connections on vehicle Data Link Connector (DLC).



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3.3 – Switching Between Operating Modes

VAS 6154 can be switched between WLAN Infrastructure and WLAN Direct modes by pressing the button on the front of the module and performing a brief Windows networking routine.

Prerequisites:

- ☐ Initial WLAN Direct setup routine and additional network setup manually in Windows as specified in **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Initial Setup Guide

- ☐ The Windows network indicator icon was copied to the taskbar.
- ☐ VAS 6154 plugged in to vehicle DLC and ignition switched on.
- ☐ A new ODIS Service session is connected to a VAS 6154 running in WLAN Infrastructure mode.

3.3.1 – Switch from WLAN Infrastructure to WLAN Direct

1. Briefly press the button on the front of the module.

- ☐ The module **beeps once**.
- ☐ ODIS Service Connection Mode Indicator change: 



2. Click the **Windows networking icon** in the taskbar:



3. Select /highlight the listed **VAS 6154_serial number**, and then click **Connect**:



Note:

*The VAS 6154 serial number and various network SSID illustrated in these routines are **examples only**!*

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4. **Wait** until the WLAN Direct network connection is established.
A delay is normal. **Please be patient!**

☐ ODIS Service Connection Mode Indicator change:



5. Click the **Windows networking icon** in the taskbar and confirm direct network connection with VAS 6154:



3.3.2 – Switch from WLAN Direct to WLAN Infrastructure

The module automatically reconnects to the dealership WLAN and VAS 6154 WLAN Infrastructure modes.

1. Briefly press the button on the front of the module.
☐ The module **beeps twice**.
2. **Wait** while the ODIS Service Connection Mode Indicator automatically cycles from:



WLAN Direct



WLAN Reconnect



WLAN Infrastructure Mode Active



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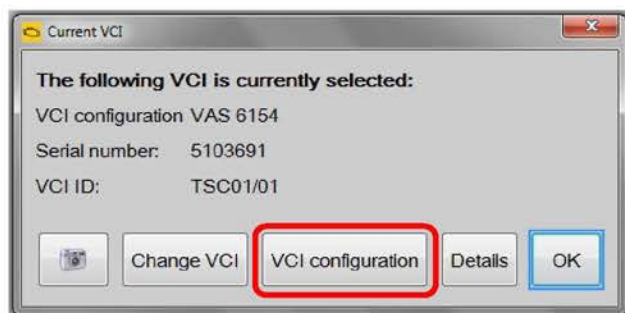
3.4 – Web Interface Access

The web interface used to perform the VAS 6154 initial setup can be accessed during active communication between the VAS 6154 and ODIS Service. This enables minor changes to be made “on-demand” without the base station.

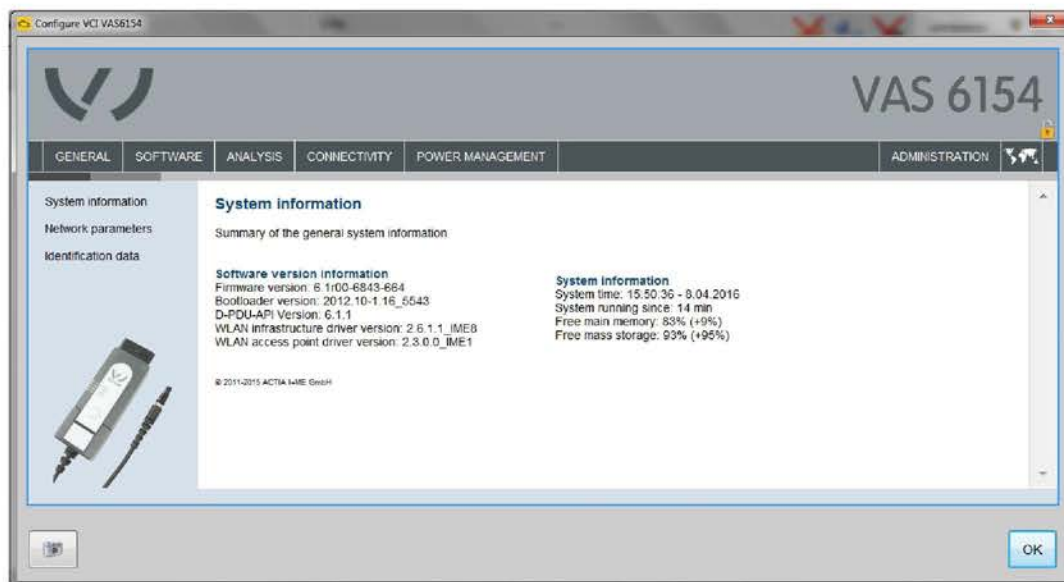
Common setup changes are activating or deactivating the **VAS 6154 Power-Saving, Auto-Off and Warning Buzzer features**. If needed, the network SSIDs, encryption keys, unique name assigned to the module and module ID can also be read directly from the web interface.

To access the VAS 6154 web interface during an active ODIS Service session, proceed as follows:

1. From the ODIS Service operating mode menu, select **Extras**, and then select **Diagnostic Interface**.
2. Select **VCI Configuration**:



3. Select the desired **Main Category (top menu)** and **Subcategory (left margin menu)**
4. Perform the necessary changes, “Accept” the changes, and then click **OK** to close the interface.



For detailed additional information on the web interface and the various settings, refer to the **User's Guide on CD**.



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3.5 – Troubleshooting

Troubleshooting procedures and error code indications for qualified personnel are covered in detail in the User's Guide on CD.

Refer to User's Guide on CD:

- **Troubleshooting** - Section 5.2 – from Page 76
- **Error Message indications** - Appendix – from Page 90.