Service Information

Volkswagen

Diagnostic Device Hardware & Windows® **Number: VHW-16-01**

Subject: VAS Diagnostic Laptops - Windows 7 System Recovery Instructions **Date: Jan. 21, 2016**

Supersedes VHW-15-04 due to revised and new information.

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Notes:

- *Please **read these instructions carefully and in their entirety** before performing any procedures. **If you do not understand these instructions, arrange to have a qualified person perform these procedures.***
- *Heed all prerequisite requirements and notes, and **follow all instruction steps in the Section order given**.*
- ***Discard all printed copies of this document after use**. Revised versions may be issued at any time. Always check ServiceNet for the latest version.*

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1.0 – Introduction

1.1 – General Information

This document contains step-by-step instructions required to perform **Windows 7 operating system recovery** on **VAS 6150 A through D diagnostic laptop devices ONLY.**

Due to their function as diagnostic tools, **VAS diagnostic laptops** are equipped with a proprietary Windows 7 operating system. Unlike their commercially-available Panasonic equivalents, VAS laptops utilize a partitioned hard drive.

The Windows 7 recovery instructions provided here supersede any information contained in Panasonic manuals that may be included with the laptop.

1.2 – Process Overview

Recovery

Windows 7 recovery files are located on the device's hard drive partition**.** The Windows recovery procedure is initiated to overwrite the existing (corrupt or malfunctioning) Windows 7 boot files with a copy from the hard drive partition.

All data on hard drive C:\ is erased and replaced. The Windows 7 recovery data resident on the hard drive partition is retained if recovery is required in future.

Post-Recovery Setup

The post-recovery setup steps described here are specific to the device's function as a diagnostic tester with installed ODIS Service diagnostic software.

Various Windows settings and configurations are necessary to ensure optimum function of the diagnostic software in the dealership workshop environment.

Diagnostic Software and Security Certificate Reinstallation

The Windows 7 recovery process deletes the previously-installed ODIS Service license and certificate files. As a result, **the license and security certificate files** that were originally obtained and saved as instructed in the **Installation Phase 1** instructions document **must be on hand for reinstallation**. A text document containing the device's **hardware key** should also be on hand.

If the license file was not saved, a replacement license must be requested from **eShop** prior to reinstalling ODIS Service. If the security certificate was not saved, a replacement must be requested from **eCRMs** and imported to ODIS Service prior to placing the device back into service.

IMPORTANT!

If the Windows - Panasonic CDs originally included with the device when new were retained, please LOCATE and DISCARD THESE DISCS NOW! Inadvertent use of the Panasonic CDs for recovery will completely erase the device-specific data and partitioned image, and install a standard, non-partitioned Windows XP or Windows 7 operating system.

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2.0 – Additional Documentation

These instructions include references to the following **Service Information (SI)** documents that contain additional instruction steps needed before returning the laptop to service. Locate and print as necessary.

SI Document Category	Document Titles
ODIS Service	**Installation Phase 2 - Software Installation & Configuration Instructions**
Diagnostic Device Hardware & Windows	**VAS Diagnostic Device Computer Name Builder**
	VAS 5054A Diagnostic Interface - Bluetooth & EDIC Configuration
	VAS 5054A Diagnostic Interface - USB Configuration

☐ **Additional Documentation steps completed. Proceed to Section 3.0 – below.**

3.0 – Preparation Checklist

Complete the **Preparation Checklist** below. Additional checkboxes are provided throughout this document to note the fulfillment of prerequisites, completion of sections etc..

✓	Preparation Checklist
☐	**Print** the additional documentation from ServiceNet as specified in **Section 2.0.**
☐	**Note** the device type and model number.
☐	**Connect** the A/C power adapter directly to the laptop.
☐	**If the device is capable of booting to Windows and starting ODIS Service:** Finalize all saved diagnostic sessions and transmit logs where applicable.
☐	**Disconnect** the Ethernet (network) cable where applicable.
☐	**Switch** the **Wireless Operation Switch** to the **OFF position** as illustrated **-arrows-:** **VAS 6150A** Front panel behind handle **VAS 6150B/C/D** Middle right side behind **WIRELESS** door
☐	**All Preparation steps completed. Proceed to** **Section 4.0 – Page 4.**

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4.0 – Recovery

Prerequisites:

- ☐ *All devices **removed** from their base station (port replicator) where applicable.*
- ☐ ***Confirm: Ethernet cable DISCONNECTED & wireless operation switch in the OFF POSITION!***

ATTENTION!
The A/C power adapter must be connected directly to the device during recovery. DO NOT recover on battery power alone!

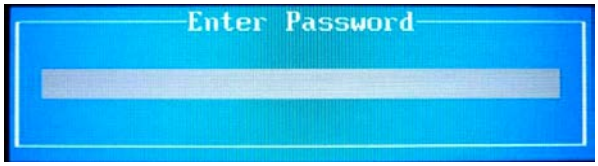
1. **Turn on** the diagnostic device.
2. When the **Panasonic** logo is displayed, quickly press the **F2** key on the keyboard to enter the setup.

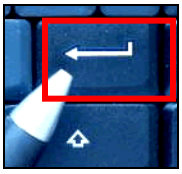
A password prompt appears.

3. **Note** the device-specific password from the table below:

Model	Password
VAS 6150A	**vas6150**
VAS 6150B	**vas6150b**
VAS 6150C	**vas6150c**
VAS 6150D	**vas6150d**

4. **Enter** the password **exactly as noted above** (lower case, no spaces):
5. **Press** the keyboard (or onscreen keyboard) **Enter** key:





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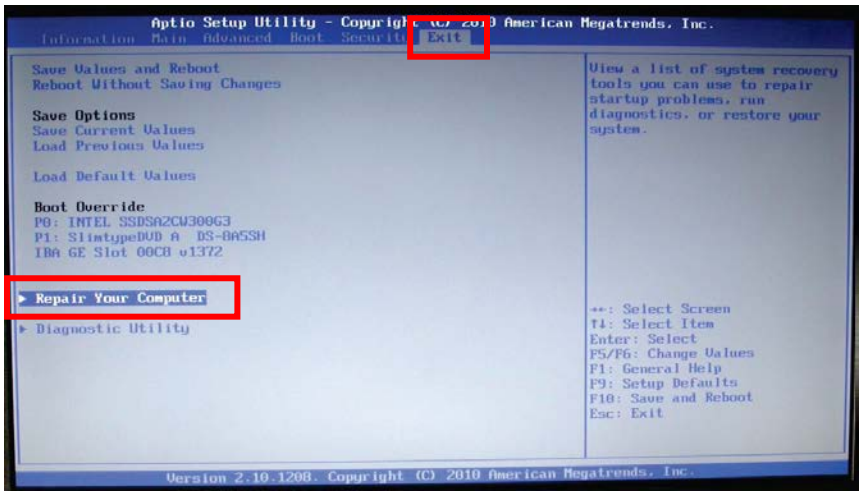
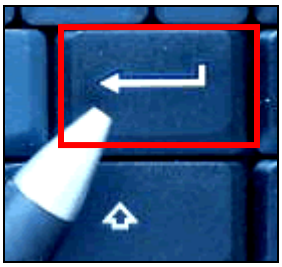
6. Use the **right and left arrow keys** to select the **Exit** tab:
7. Using the **up and down arrow keys**, select **either:**

   Repair Your Computer **OR** **Recovery Partition**

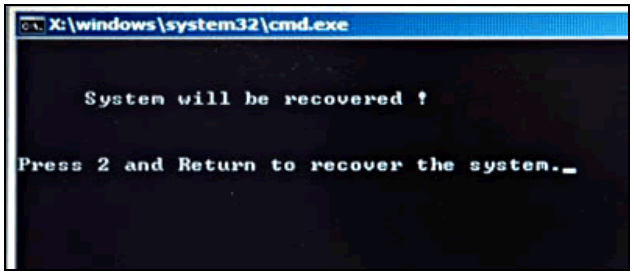
   as applicable. Press the **Enter** key to continue:

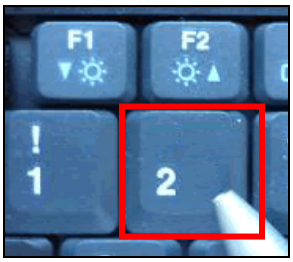




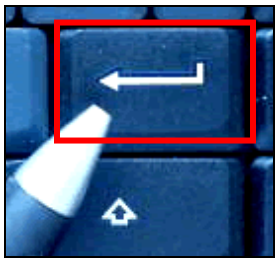
After the **Enter** key is pressed, the system recovery starts. After approximately 2 minutes, the message "**System will be recovered**" is displayed.

8. **Press** the **2** key, then press the **Enter** key to continue:





……



- Allow 30 – 90 minutes for device recovery (device-dependent).
- The progress window may appear to stall at 99% - 100%. Please be patient!
- When complete, the system will automatically reboot and display a series of automatic setup, registry and service screens followed by the initial Windows setup screen.

☐ **Recovery steps completed. Proceed to** **Section 5.0 - Page 6.**

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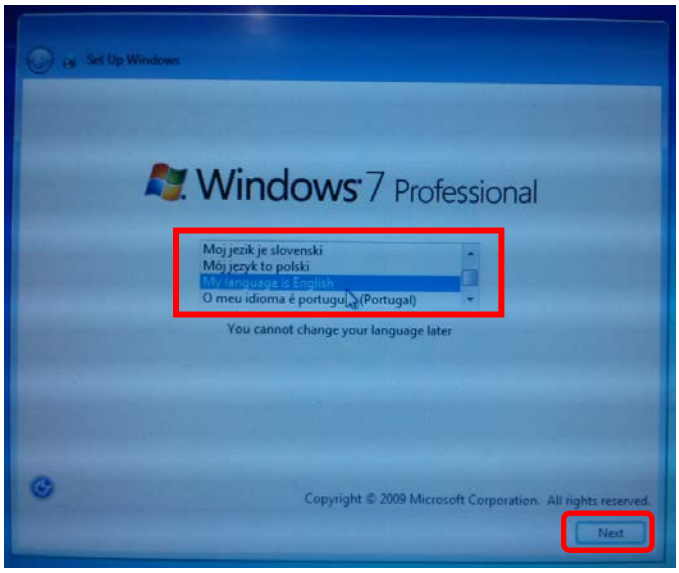
5.0 – Post-Recovery Setup

5.1 – Windows 7 Startup & Initial Setup

Note:

The initial language selection made in Step 1 below cannot be changed after the device is placed in service. ***Avoid having to repeat the recovery process by selecting the language carefully!***

1. **If** the following Windows setup screen appears, **carefully scroll down** and select **My language is English** and select **Next:** …otherwise, skip to Step 2.



2. **Confirm** the regional settings, time/currency and keyboard layout as illustrated, and then select **Next**:

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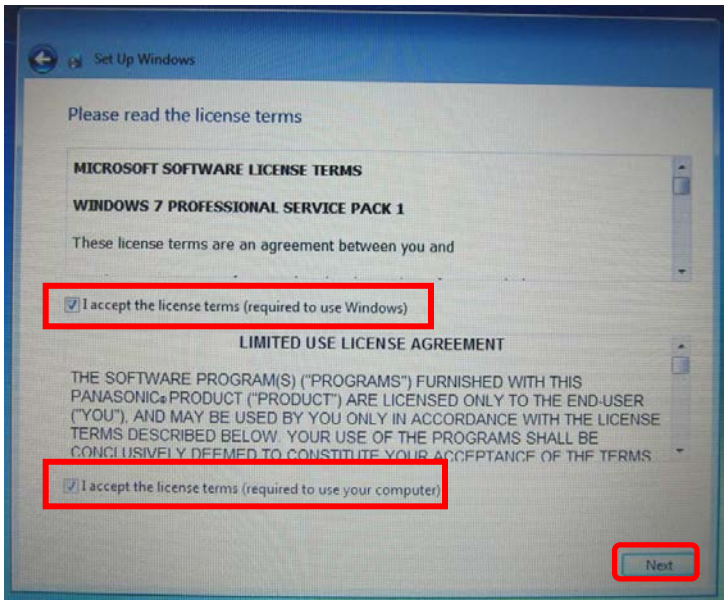
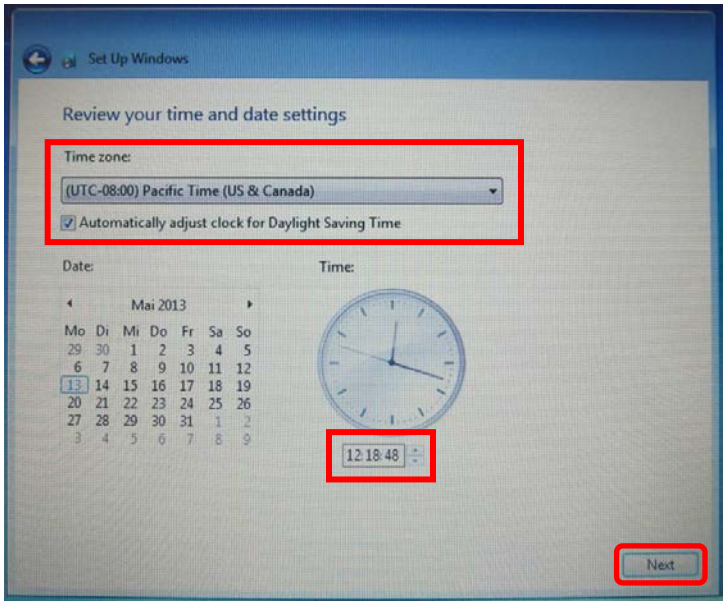
3. **If** the **license terms and conditions are displayed,** accept by checking the appropriate boxes and click **Next:** …otherwise skip to Step 4.



4. **Set** the **Time Zone, Daylight Saving Time, Date** and **Time** as applicable to your location. Click **Next:**



- Various settings are saved and the device automatically reboots to the Windows desktop.
- For convenience, the device can now be returned to its base station **if desired** (not mandatory).
- In all cases **the A/C power adapter must remain connected** for the following procedures. The USB mouse and keyboard should also remain connected where applicable.

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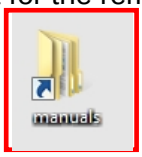
5.1.1 – Delete Non-Applicable Information

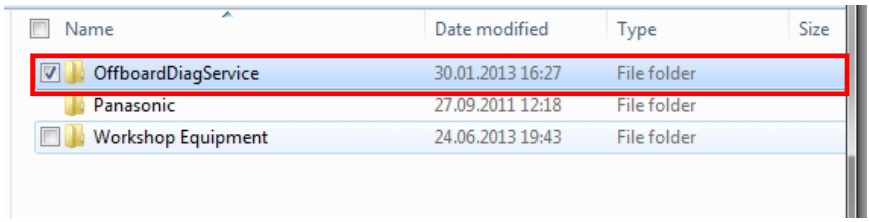
The Windows 7 desktop may include documents that are not applicable to the -US/CDN- market**. If present as described below, please delete these documents** as follows:

1. From the Windows desktop: **Locate** two document **shortcut icons** entitled:

   HowTo Guide_ODIS Service Set-Up_EN and **HowTo Guide_ODIS Service Set-Up_DE:**

2. **Right-click** a shortcut icon, and then select **Delete** from the dropdown.
3. When prompted to confirm file delete, click **Yes**. Repeat for the remaining icon.
4. From the Windows desktop: **Open** the **Manuals** folder: 

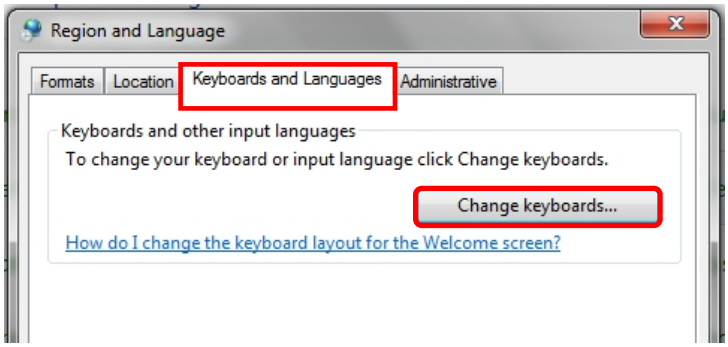
5. **Right-click** the **OffboardDiagService** folder, and then select **Delete** from the dropdown:



5.1.2 – Confirm Keyboard Language

1. Go to: **Windows (Start)** **> Control Panel > Region and Language:**

2. **Select** the **Keyboards and Languages** tab. Click **Change Keyboards…:**



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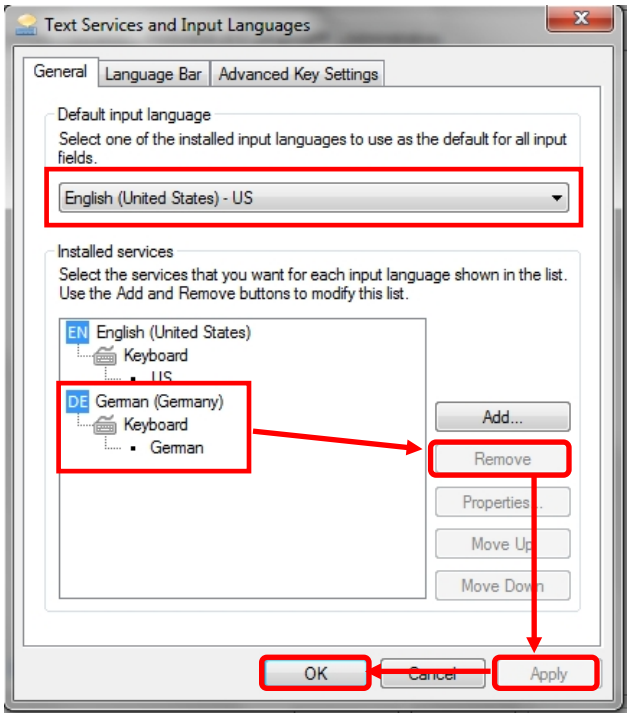
3. **Confirm** that the **Default input language** is set to **English (United States) - US** as illustrated below. If not, select it from the dropdown.
4. **If** the **German (Germany)** input language service appears, select it and click **Remove.**
5. If any changes were necessary, save them by clicking **Apply,** and then **OK:**



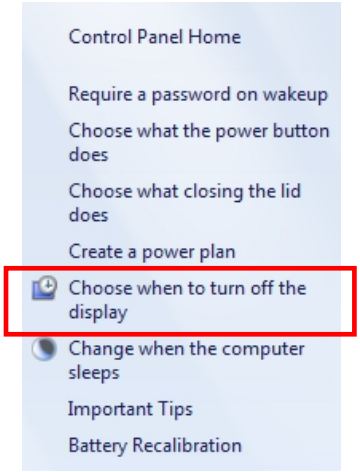
6. Close the languages window and return to the **Control Panel** menu.

5.1.3 – Device Power Management

To ensure uninterrupted data transfer when performing lengthy Software Version Management (SVM) procedures, configure the device to remain on as follows:

1. Go to: **Control Panel > Power Options:**

2. From the Control Panel Home menu, select **Choose when to turn off the display:**



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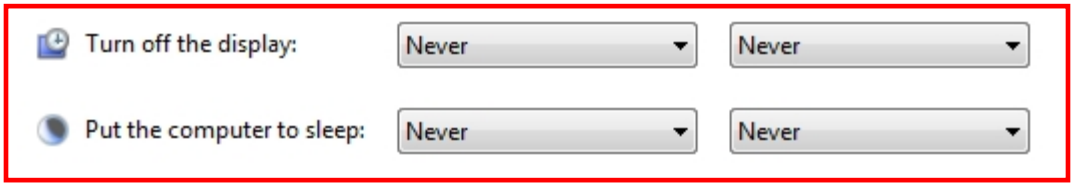
3. Select **Never** from the dropdowns as illustrated:



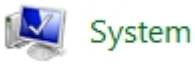
4. Click **Save changes** (at bottom frame):

5. **Close** the power options window and return to the **Control Panel** menu.
6. **Check and proceed** to the model-specific sections as applicable:
   - ☐ **VAS 6150B/C/D:** Proceed to **Section 5.1.5 – Page 12.**
   - ☐ **VAS 6150A:** Proceed to **Section 5.1.4** immediately below:

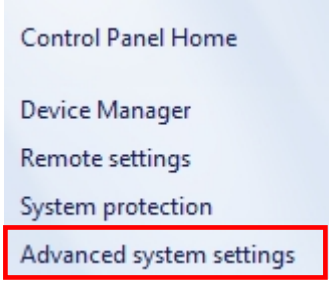
5.1.4 – VAS 6150A Diagnostic Laptops: Increase Paging File Size

For optimum performance, increase the paging file size **on VAS 6150A laptops** as follows:

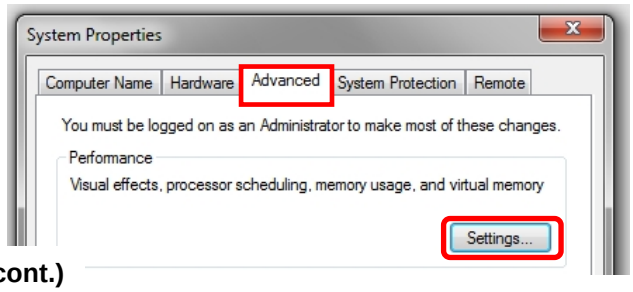
1. Go to: **Control Panel > System:**



2. From the Control Panel Home menu, click **Advanced system settings:**



3. Select the **Advanced** tab. In the **Performance** category, click **Settings:**



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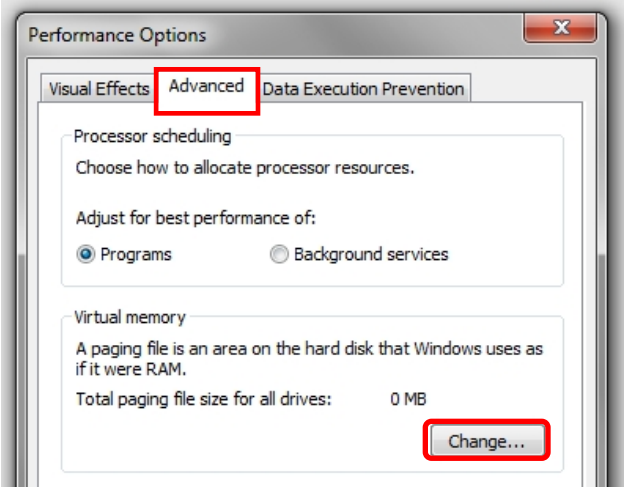
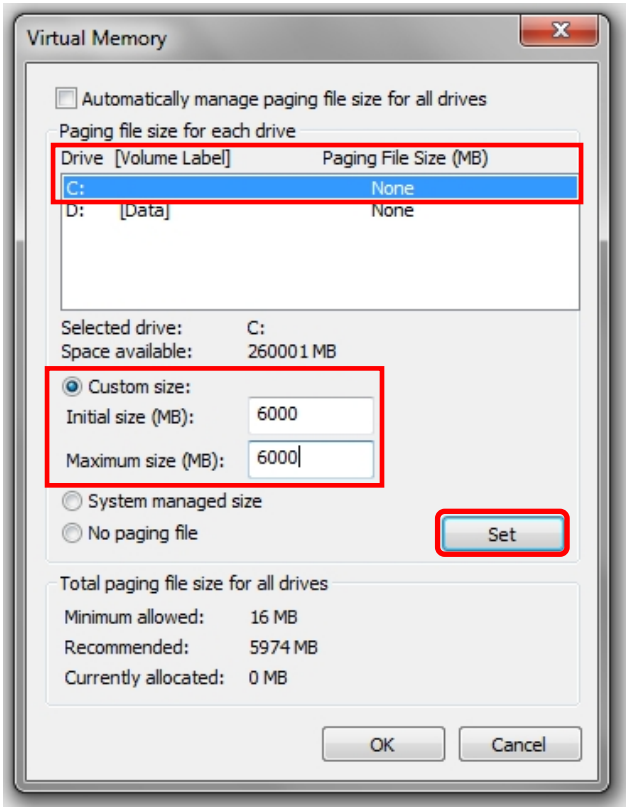
4. Select the **Advanced** tab. In the **Virtual memory** category, click **Change:**



5. Ensure **Automatically manage paging file size for all drives** is **deselected** and **Drive [Volume Label] C:** is highlighted:

6. Select **Custom size:**, and then **enter 6000** in both the **Initial** and **Maximum** size entry fields as illustrated below: When complete, click **Set:**



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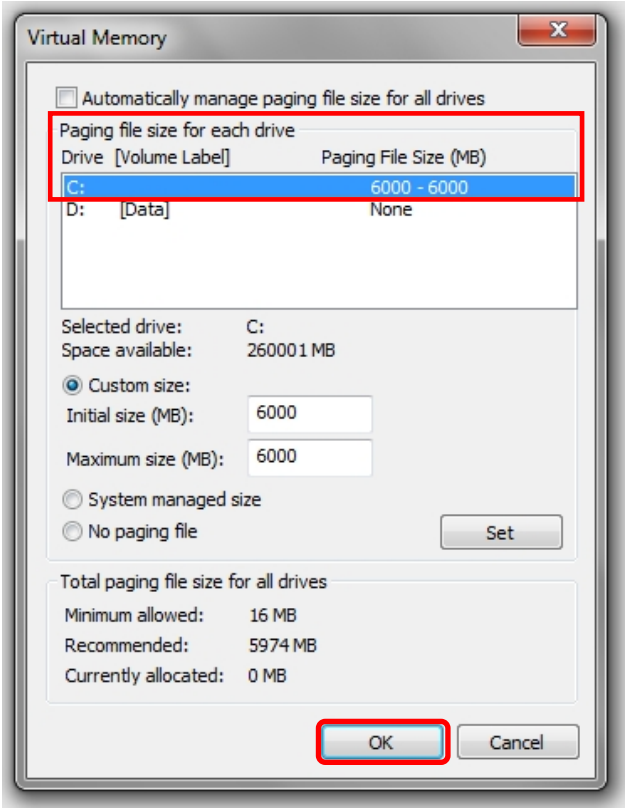
7. Ensure that the **Paging File Size (MB)** indicated for **C:** is displayed as **6000 - 6000:** Click **OK:**



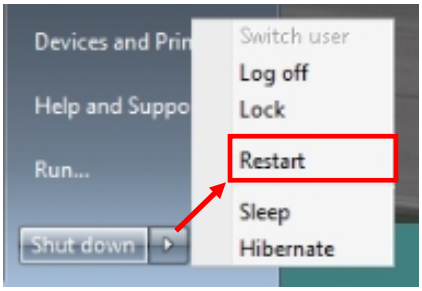
Note:

The recommended page file size of 6000 MB allows for 2GB of additional RAM that may be added.

5.1.5 – Restart Windows

A restart is required to complete automatic Windows configurations on certain devices. Proceed as follows, and note the **Windows 7 Shut down** and **Restart** routines for future reference:

1. Close all windows and **Restart** the device. Go to: **Windows (Start)** **>** **> Restart:**



Windows 7 Startup & Initial Setup steps complete – Proceed to **Section 5.2 – Page 13.**

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5.2 – Windows Update Settings

The default setting for Windows updates is to automatically download files when a network connection is present, and then prompt the user to install them.

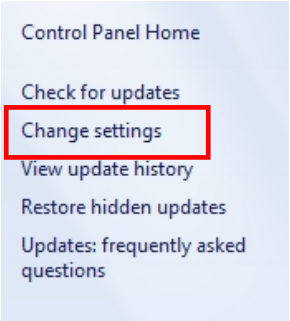
As the automatic background loading of (often large) Windows files can place significant loads on the device memory, ODIS Service online update functions that may run simultaneously are negatively affected.

Change the default setting to (manually) check for updates and prompt the user to choose the updates as specified below. Separate instructions on managing Windows updates are covered in **Section 5.7.**

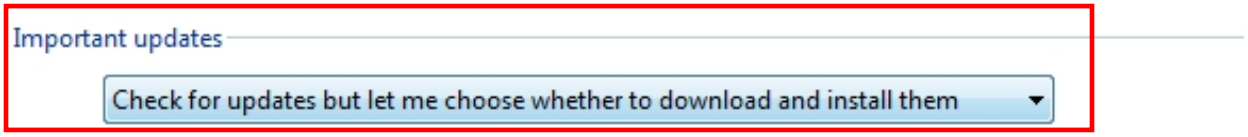
Perform the following configuration **BEFORE setting up the network connection:**

1. Go to: **Windows (Start)** **> Control Panel > Windows Update:**

2. From the Control Panel Home menu, select **Change settings:**



3. Select the **"Check… & …choose"** update method from the **Important updates** selection dropdown:



4. Click **OK** (at bottom frame):

5. **Close** the **Control Panel** window.

☐ **Windows Update Settings steps completed – Proceed to** **Section 5.3 – Page 14.**

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Note:

*Before proceeding with **Sections 5.3** through **5.5**, have the additional documentation specified in Section 2.0 – Page 3 on hand.*

5.3 – Network Setup

5.3.1 – Set Computer Name

If more than one VAS diagnostic device is connected to the dealership network, each device must be assigned a different computer name.

Assign the computer name before proceeding. For detailed instructions refer to **Service Information – Diagnostic Device Hardware & Windows** document title: **VAS Diagnostic Device Computer Name Builder**

5.3.2 – Enable Network Connections

For dealership networks using **DHCP** for Internet access, no network connection configuration is necessary (the device default setting is DHCP). If the dealership network uses DHCP for Internet access, skip to **Section 6.3.3** below.

For networks using **Static IP** configurations for Internet access, the IP configurations must be renewed by manual entry of the dealership-specific IPs. Ask your dealership systems administrator or IT professional for details and assistance.

If the device is to be used over a wireless LAN connection, switch the **wireless switch** to the **ON position** and perform the required wireless configuration at this time. Ask your dealership systems administrator or IT professional for details and assistance.

ATTENTION!

ODIS Service software functions require open network connections. Open access must be enabled on an individual basis for each diagnostic device. For details, refer to *Service Information – ODIS Service* document title: *Required Open Internet Addresses (URLs)*

5.3.3 – Reinstall Netviewer

1. Launch **Internet Explorer** and logon to **ServiceNet**.
2. Navigate through **Vehicle Diagnostics > Diagnostic Device Hardware & Windows > Software**.
3. Right click / select the link: **Netviewer one2one – Telediagnosis Software**.
4. **Save** file to Windows desktop.

☐ **Network Setup steps completed – Proceed to** **Section 5.4 – Page 15.**

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5.4 – Reinstall & Configure Offboard Diagnostic Information System Service (ODIS Service) Diagnostic Software

Reinstall and configure ODIS Service. For detailed instructions, refer to **ODIS Service – Service Information** document title**:**

Installation Phase 2 - Software Installation & Configuration Instructions

☐ ODIS Service Installation **Phase 2** steps completed.

5.5 – Configure VAS 5054A Diagnostic Interface

1. Perform the Windows Bluetooth and EDIC configuration for wireless operation. For detailed instructions refer to **Service Information - Diagnostic Device Hardware & Windows** document title:

   VAS 5054A Diagnostic Interface – Bluetooth & EDIC Configuration

2. Perform the UBS configuration for cabled operation. For detailed instructions refer to **Service Information – Diagnostic Device Hardware & Windows** document title:

   VAS 5054A Diagnostic Interface – USB Configuration

☐ **VAS 5054A Diagnostic Interface setup steps completed.**

☐ **Windows 7 and ODIS Service reinstallation completed.**
Supplementary instructions: Refer to **Section 5.6 – Page 16** **and** **Section 5.7 – Page 17.**

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5.6 – Supplementary Setup & Function

Depending on the recovered diagnostic device's previous preparation level and/or dealership requirements, the following supplementary setup procedures **may or may not** be required. Review and confirm as applicable.

5.6.1 – VAS 6356 Test Instruments Box - Configuration

If a VAS 6356 Test Instruments Box was previously configured for use with the recovered device, it must be connected and the initial configuration repeated.

For detailed instructions refer to **Service Information – Diagnostic Device Hardware & Windows** document title**: VAS 6356 Test Instruments Box – Software Configuration – ODIS Service Only**

☐ Completed ☐ Not applicable

5.6.2 – Printer Driver Reinstallation

If a USB (cabled) or wireless (WLAN) printer was previously configured for use with the updated device, the necessary driver installation and/or configuration must be repeated.

Obtain the printer driver CD where applicable and refer to the installation documentation supplied with the printer. Ask your dealership systems administrator or IT professional for assistance if necessary.

☐ Completed ☐ Not applicable

5.6.3 – Reinstall Antivirus Software

Reinstall the antivirus software as may be required by the dealership IT policy. Ask your dealership systems administrator or IT professional for assistance if necessary.

☐ Completed ☐ Not applicable

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5.7 – Windows 7 Update Management & Internet Explorer Version

5.7.1 – General Information

All VAS diagnostic devices must be kept up-to-date with the latest Windows security and vulnerability updates. However, dealership service or IT personnel tasked with maintaining both ODIS Service and Windows updates **must be aware of the following, and act accordingly:**

- The initial package of important Windows updates available for a Windows 7 reinstallation may take considerable time to install and download (typically 120 minutes or more, device, content and bandwidth dependent).

  As a result, we recommend that the initial selection, download and installation of Windows updates **be managed so that the update process takes place outside of workshop service hours.**

  Instructions on how select and initiate Windows updates follow in the **Managed Windows Update** section below.

- **Internet Explorer (IE) version 11** should be installed as part of the Managed Windows Update process, or downloaded directly from the Microsoft® website.

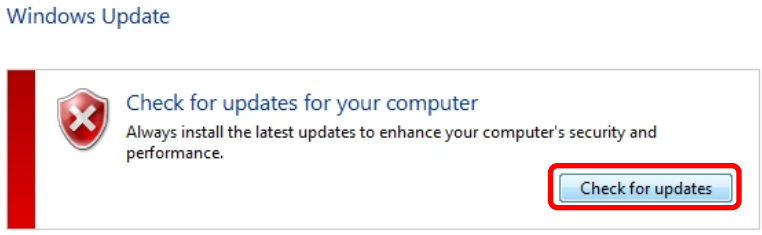
5.7.2 – Managed Windows Update Procedure

Prerequisites:

- ☐ *Diagnostic device removed from service, after hours etc.*
- ☐ *Diagnostic device with active network connection.*

Go to: **Windows (Start) > Control Panel > Windows Update:**

1. Click **Check for updates:**



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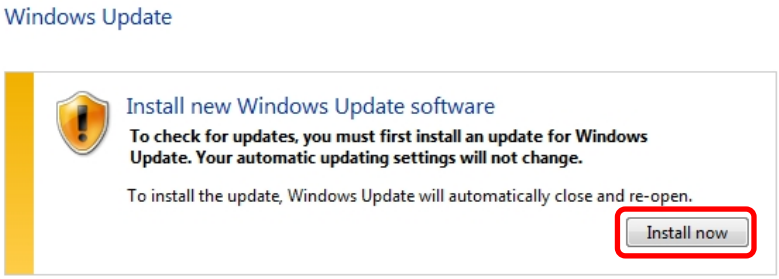
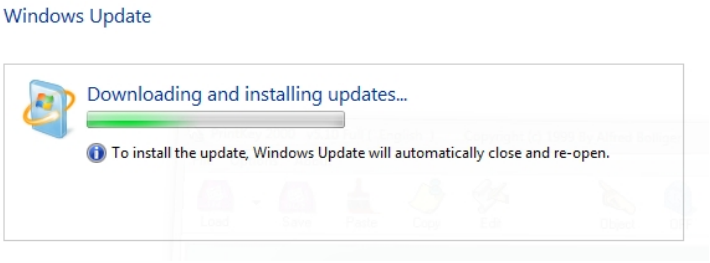
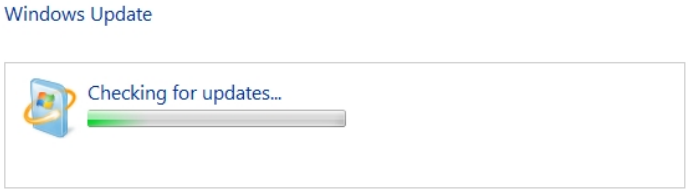
2. The first time after a Windows 7 reinstallation, an update prompt for **Windows Update** may or may not appear. If so, click **Install now:**



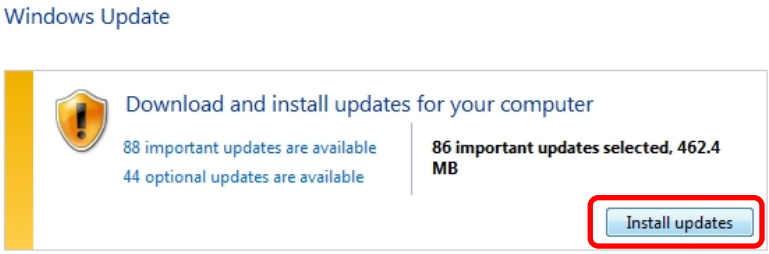
3. **Wait** while an update for Windows Update is installed:



5. After the update closes and re-opens, **wait** while the system checks for updates. (This process make take 30 minutes or more. Please be patient.):



6. When the results are displayed, select **Install Updates:**



Notes:

- *The number of updates illustrated* ***is for reference only!*** *The number of available updates will always vary depending on type of device and date when available updates are checked.*
- *It is recommended to* **not** *download and install* **"optional"** *updates. For details refer to* **Service Information – Diagnostic Device Hardware & Windows** *document title:* **Optional Windows Updates**

(cont.)

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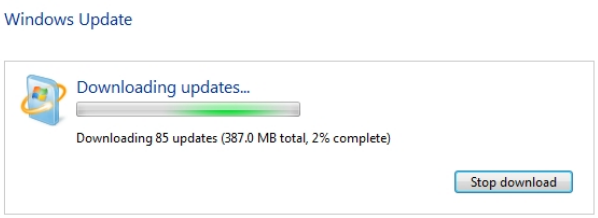
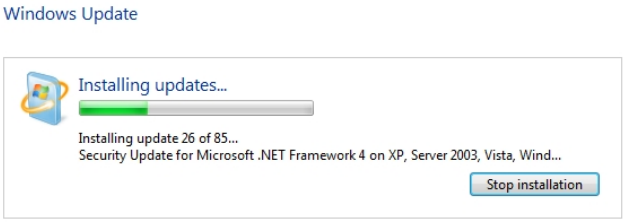
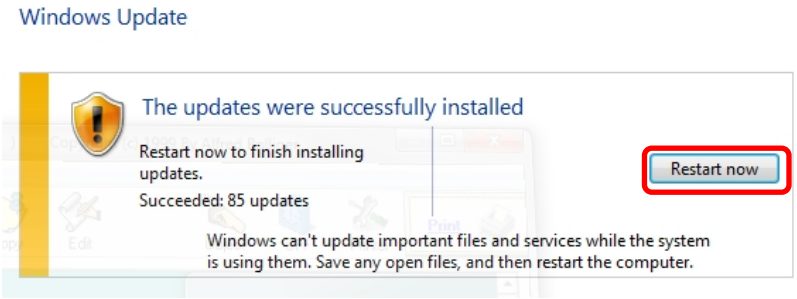
7. Accept any **Microsoft License Terms** if prompted, and then click **Finish.**
8. **Wait** while the updates are downloaded and installed (no user intervention is necessary):



...



9. Click **Restart now:**



- Additional Windows update configurations are performed during the shut-down and restart routine.
- On completion, the device boots to the Windows desktop, and an information prompt on the installed updates appears.

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