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Diagnostic Device Hardware & Windows®		Number: AHW-17-04
Subject:	VAS 6150D Diagnostic Laptop - Windows 10 System Recovery Instructions	Date: Feb. 08, 2017

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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**. Revisions 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 instructions to recover Windows 10 on VAS 6150D diagnostic laptops.

Due to their function as diagnostic tools, **VAS diagnostic laptops** are equipped with a proprietary Windows operating system that utilizes a partitioned hard drive.

ATTENTION!

The Windows 10 system recovery instructions provided here supersede the system recovery information in the Panasonic booklet included with the laptop shipment when new, as well as the recovery information found in Windows 10 *Control Panel* and *Settings*.

1.2 – Process Overview

Recovery

Windows 10 recovery files are located on the device's hard drive partition. A recovery procedure overwrites the corrupt or malfunctioning Windows 10 boot files with a copy from the hard drive partition.

All data on hard drive C:\ is erased and replaced. The Windows 10 recovery data resident on the hard drive partition is retained if recovery is required in future.

Post-Recovery Setup

The post-recovery setup instructions included here restore the device to its operational state as initially unpacked and set up when new (using VWGoA Service Information instructions).

Included are references to additional documentation for various additional settings, the reinstallation of ODIS Service diagnostic software and VAS 6154 Diagnostic Interface setup. Details in Section 2.0.

Diagnostic Software License and Security Certificate Reinstallation

The Windows 10 recovery process deletes the previously-installed ODIS Service license and certificate files. As a result, <u>the license and security certificate files</u> that were originally obtained and saved on a USB flash drive as instructed in the **Installation Phase 1** instructions document <u>must be available for</u> <u>reinstallation.</u> A backup text document containing the device's **hardware key** must also be available.

Note:

- If a backup copy of the **security certificate** was not saved, a replacement must be requested from **eCRMs** and imported to Windows, and ODIS Service after reinstallation.
- If a backup copy of the **license file** was not saved, a replacement license must be requested from **eShop** prior to reinstalling ODIS Service.

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2.0 – Additional Documentation

Access or print the following Service Information (SI) documents with additional instructions.

SI Document Category	Document Titles
g J	
	Installation Phase 1 – Preparation, License & Security Certificate Process Instructions
ODIS Service	Installation Phase 2 - Software Installation & Configuration Instructions
Diagnostic	VAS Diagnostic Device Computer Name Builder
Device Hardware &	VAS 6154 Diagnostic Interface – Initial Setup Guide
Windows	VAS 6154 Diagnostic Interface – Startup Guide
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.

\checkmark	Preparation Checklist		
	Additional documentation available from ServiceNet as specified in Section 2.0.		
	USB flash drive with backup copies of the license, security certificate and hardware key doc. are available.		
	Connect the 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 -arrow-: VAS 6150D 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:

- **Confirm:** Device **removed** from base station (port replicator).
- □ Confirm: Ethernet cable DISCONNECTED & wireless operation switch in the OFF POSITION!

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

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



A password prompt appears.

3. Enter password: vas6150

(lower case, no spaces):



4. Press the keyboard Enter key:



(cont.)

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- 5. Use the right arrow key to select the Exit tab:
- 6. Use the **down arrow key** to select: **Recovery Partition**, and then 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.

7. Press the 2 and Enter keys 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.

covery steps completed. Proceed to <u>Section 5.0 - Page</u>

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5.0 – Post-Recovery Setup

5.1 – Windows 10 Startup & Initial Setup

5.1.1 – Startup Settings

1. Confirm the regional settings. Then scroll down and select the applicable time zone. Select Next:

li there		State State	
t's get a few basic things out of the way.			
What's your home country/region?			
United States	~		
What's your preferred app language?			
English (United States)	v		
What keyboard layout would you like to use?			
us	~		
(UIC-05:00) Eastern Time (US-& Canada)			
G-			1

3. Accept the license terms:



A series of automatic welcome and setup screens appears (no user intervention required). This is followed by a "...signed out" display and automatic restart after a one minute delay.

4. Wait until the device restarts. Click Close if desired.



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After the device restarts, it can be mounted to its base station (port replicator) **if desired.** However, the **power adapter must remain connected** to the laptop or base station for the remaining setup steps.

5.1.2 – Delete Non-Applicable Information

- 1. Right-click > Delete the manuals folder from the Windows desktop:
- 2. Empty the Recycle Bin.

5.1.3 – Prepare Windows Desktop

The desktop layout and icons on VAS 6150D should remain limited to those essential for its initial setup, and subsequent use as a **vehicle diagnostics device only.**

The installation of personal software and desktop personalization other than that specified below is not recommended or supported.

The following shortcut "drag-and-drop" link creation steps enable quick, familiar access to key Windows functions directly from the desktop. Shortcut locations will be referenced during the remaining setup steps and in other Service Information documents.

- 1. From the taskbar, click the
- icon to reveal the **Windows Start menu**.
- 2. Scroll down and locate the Settings category from the Windows Start menu.



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category.

5.1.4 – Set Date & Time

Note:

The correct date and local time must be set on the device to ensure accurate ODIS Service diagnostic protocol submissions.

Control Panel

Date and Time

icon.

- 1. From the Windows desktop, click the
- 2. From the Control Panel menu, select the
- 3. Confirm that the correct **Date:** appears, and then select **Change date and time...**:



4. Set the correct time and time of day as applicable, and then select **OK**:



5. **Close** the Date & Time window.

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category.

5.1.5 – 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. From the Control Panel main menu, select the W Power Options
- 2. From the Control Panel Home menu (on the left), select: Change when the computer sleeps
- 3. Select **Never** from all category dropdowns, and then select **Save changes**:

Change settings for the plan: Panasonic Power Management (Standard) Choose the sleep and display settings that you want your computer to use.					
	Î	On battery	🛷 P	lugged in	
Turn off the display:	Never	~	Never	× 1	
Put the computer to sleep:	Never	~	Never	~	
🔆 Adjust plan brightness:	•	×	•		
Change advanced power settings					
Restore default settings for this p	lan				
			s	ave changes	Cancel

4. **Close** all remaining Windows.

Note:

Retrieve the additional documentation specified in Section 2.0 before continuing.

5.2 – Network Setup

5.2.1 – Set Computer Name

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

For detailed instructions refer to *Service Information – Diagnostic Device Hardware & Windows* document title: *VAS Diagnostic Device Computer Name Builder*

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5.2.2 – Enable Network Connections

Prerequisites:

- Network cable (Ethernet) and Wireless Local Access Network (WLAN) connections available.
- Person performing network setup is familiar with all dealership network particulars, and I.T. Policy where applicable. E.g.: Network set for DHCP, <u>OR</u> Static IP setup (all IP addresses known), WLAN SSID (name) & security key, additional antivirus and security firewall settings if applicable etc.
- 1. Open the **WIRELESS / Headphones / SD slot** access cover (right side middle) and switch the wireless operation switch to the **ON** position:



2. Connect the Ethernet cable to the network port (right side - rear)



3. If the following prompt appears, select Yes:



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- 4. From the Windows desktop, click the Settings icon.
 5. From the Settings menu, select the Network & Internet Wi-Fi, airplane mode, VPN
- 6. Select the Wi-Fi and/or Ethernet subcategory as applicable:

Review the setup instructions for both and enable their connections in accordance with the dealership network setup, and I.T. policies where applicable:

🔅 Home	Network status
Find a setting Network & Internet	
🖨 Status	No Internet access
na Wi-Fi	Your device is connected, but you might not be able to access anything on the network.
문 Ethernet	▲ Troubleshoot
লি Dial-up	Show available networks
∞ VPN	Change your network settings
$\frac{n}{2r}$ Airplane mode	Change adapter options View network adapters and change connection settings.
(1) Mobile hotspot	Sharing options For the networks you connect to, decide what you want to share.
🕒 Data usage	• HomeGroup Set up a homegroup to share pictures, music, files, and printers with
Proxy	other PCs on your network.
	View your network properties
	Windows Firewall

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5.3 – Re-Import Security Certificate to Windows

Note:

The folder containing the **backup license and security certificate files,** and **hardware key document** must be copied from the USB flash drive to the Windows desktop before proceeding.

- 1. Navigate to the folder containing the license and certificate files.
- 2. Open the Certificate subfolder:
- 3. Double-click the certificate file:

📙 🛃 📙 🖛 Certificate		- 0	×
File Home Share	View		~ 🕐
\leftarrow \rightarrow \checkmark \land \land \land VAS	6150D_1 > Certificate	✓ ♂ Search Certificate	9
Ouick access	Name	Date modified Type	
Desktop 🖈	🦻 188027-cert	1/27/2017 10:49 AM Personal Infor	mati
🖊 Downloads 🖈			
🔮 Documents 🖈			

4. Select Current User, and then select Next: ... Next:



(cont.)

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- 5. Open the Hardware Key document:
- 6. Select and Copy the first 32 characters (only) of the device's hardware key.



The characters are saved in Windows "clipboard" memory.

7. Paste the 32-characters into the Password: entry field, and then select Next: ... Next:

4 - A Catificate Impact Warred	×	Certificate Import Witard	×
Private key protection To maintain security, the private key was protected with a password.	_	Certificate Store Certificate stores are system areas where certificates are kept.	_
Type the password for the private key.		Windows can automatically select a certificate store, or you can specify a location for the certificate.	
Password:		Automatically select the certificate store based on the type of certificate	
•••••		Place all certificates in the following store	
Display Password		Certificate store:	
Import onlight:		Browse	
Input topbals Input t			
Mark this key as exportable. This will allow you to back up or transport your keys at a later time.			
Indude all extended properties.			
	_		
Next Cancel		Next Cancel	

(cont.)

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8. Select Finish ... Yes:

←	
Completing the Certificate Import Wizard	Security Warning X
The certificate will be imported after you click Finish.	You are about to install a certificate from a certification authority (CA) claiming to represent:
You have specified the following settings: Certificate Store Selected Automatically determined by the wizard Content PFX File Name C: \Users\VAS6150D\Desktop\SS256 License & Certificate\Cer	VWGoA ODIS RootCA 2022 Windows cannot validate that the certificate is actually from "VWGoA ODIS RootCA 2022". You should confirm its origin by contacting "WWGoA ODIS RootCA 2022". The following number will assist you in this process: Thumbprint (sha1): 44E4F0F7 2CFD635C 6088FBC2 0AA03374 E9CE31C0
< >>	Warning: If you install this root certificate, Windows will automatically trust any certificate issued by this CA. Installing a certificate with an unconfirmed thumbprint is a security risk. If you click "Yes" you acknowledge this risk. Do you want to install this certificate?
Finish Cancel	Yes No

9. Click OK:



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

Follow the detailed instructions in Service Information – ODIS Service document:

Installation Phase 2 – Software Installation & Configuration Instructions

5.5 – Setup VAS 6154 Diagnostic Interface

Perform initial setup procedures. Follow the detailed instructions in **Service Information** -Diagnostic Device Hardware & Windows document:

VAS 6154 Diagnostic Interface – Initial Setup Guide

Perform startup procedures. Follow the detailed instructions in Service Information - Diagnostic Device Hardware & Windows document:

VAS 6154 Diagnostic Interface – Startup Guide

Recovery and Post-Recovery Setup steps completed. Refer to Section 5.6 – Page 15

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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 print driver as 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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