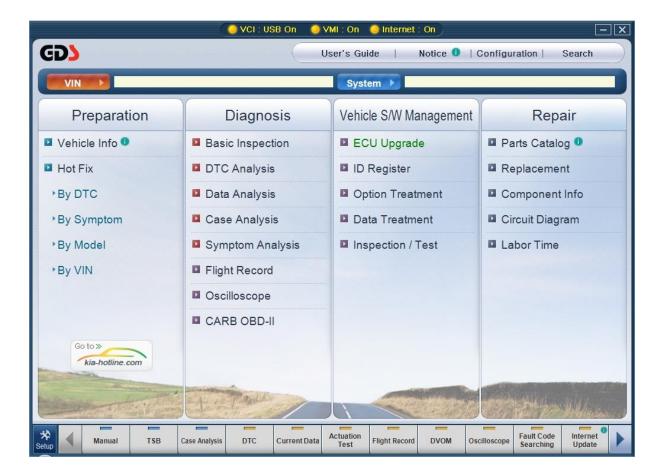




# **GDS - Basic Operation**

Ver. 04. 06. 2010





## **Recovery Procedure**



GDS - Basic Operation

Module: A-02-001-1 (p.01)

**Recovering the GDS Software** 



- When reinstallation procedure is performed, the contents of the hard disk will be erased. Be sure to back up any critical data on your hard disk to another media or to an external hard disk before running the reinstallation procedure. The reinstallation procedure will return the computer to its original condition.
- If you have created partitions for data, the data may be erased or become corrupt as a result of the reinstallation procedure.

#### Before Installing or Recovering

#### 1. What is "Recovering"?

Recovering refers to formatting the hard disk, and reinstalling GDS.

#### 2. When is "Recovering" necessary?

- When Windows or GDS does not start up, or when Windows or GDS operation is unstable and cannot be recovered.

#### 3. Preparing

- You will need the Product Recovery DVD-ROM (included).

#### 4. Confirm the following

Remove all installed peripherals devices. (Printers, USB devices, network cables, PCMCIA cards, etc.).

# **Before Installing or Recovering**

- 1. Connect the AC Adaptor.
- 2. Connect the DVD-ROM.
- 3. Turn on the computer after inserting the GDS DVD S/W in the DVD-ROM.
- 4. The following screen will be shown when the computer is booted with GDS DVD:

Select a number
1. [ Recovery ] Reinstall Windows. 2. [ Erase HDD ] Erase the whole data on HDD for security.
Ø. [ Cancel ] Cancel.
Please select a number >> _

5. Select **"1"** at the screen above.

The following screen will appear.

<ul> <li>In order to continue with the recovery process, you must agree to the following:</li> <li>(1) this software may be used only for restoring or reinstalling software on the hard disk of the computer system with which the Product Recovery DVD-ROM(s) were originally provided.</li> <li>(2) the Microsoft product(s) contained on the Product Recovery DVD-ROM(s) are subject to the terms of each End User License Agreement which is indicated at installation process in such product(s)</li> </ul>
<ol> <li>Yes, I agree to the provisions above and wish to continue!</li> <li>No, I do not agree to the provisions above and do not wish to continue!</li> <li>Please select a number &gt;&gt; _</li> </ol>

6. Select "1" at the screen above.

The following screen will appear.

Reins	stalling : Windows(R) XP Professional
1. Recovery only C: Drive 2. Factory Recovery (include devide two	partition)
0. Cancel	

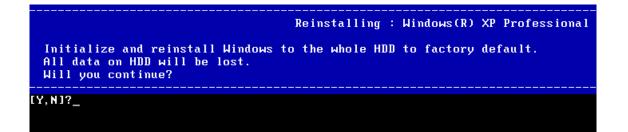
7. Select "1" at the screen above for Recovery only C: Drive.

The following screen will appear.



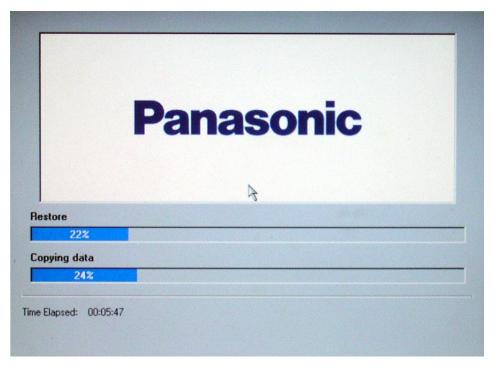
Select "2" at the screen above for Factory Recovery.

The following screen will appear

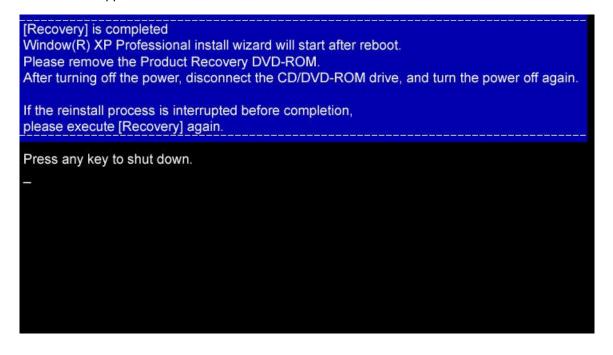


8. Select "Y" at this screen.

The following screen will appear.

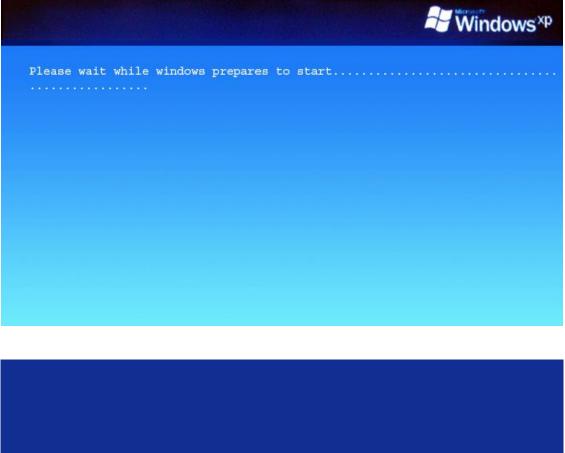


9. A progress bar will be displayed during the installation procedure. When complete, the following screen will appear.



#### **User's Manual**

- 10. Remove the Recovery DVD from the CD/DVD-ROM drive, and press any key to shutdown the computer.
- 11. Restart the computer.
- 12. The computer will load device drivers as needed.





13. Window XP Professional Setup.



14. Read the License Agreement, and click on "I ACCEPT" and click on "NEXT" to continue.

Windows XP P	Professional Setup	×		
	Agreement accept the terms of the License Agreement for Windows XP?	Ğ		
٦	Please read the following License Agreement. Press the PAGE DOWN Key to see the rest of the agreement. To continue with Setup, you must accept the agreement.			
	Microsoft(R) Windows(R)XP Professional, Microsoft(R) Windows(R)XP Table PC Edition and Microsoft(R) Windows(R) XP Media Center Edition 2004			
	END-USER LICENSE AGREEMENT FOR MICROSOFT SOFTWARE			
	IMPORTANT-READ CAREFULLY;This End-User License Agreement("EULA:) is a legal agreement between you	•		
	I accept this agreement			
	O I don't accept this agreement			
	< Back Next >			

15. The first screen that requires any user input in this phase is Regional and Language Options. If you're using English and you do entry via the keyboard the defaults will suit you fine.

Windows XP Pr	rofessional Setup	×
-	and Language Options n customize Windows XP for different regions and languages.	Ì
3	Regional and Language Options allow you to change the way numbers, date: currencies and the time are displayed. You can also add support for additiona languages, and change your location setting.	
	The Standards and formats setting is set to English (United States), and the location is set to United States.	
	To change these settings, click Customize.	э
	Text Input Languages allow you to enter text in many different languages, usin a variety of input methods and devices.	ng
	Your default text input language and method is: US keyboard layout	
	To view or change your current configuration , click Details.	
	< <u>B</u> ack	

16. Now it is time to personalize Windows. Fill in your name and if you wish you can also type in the Organization section. Click "NEXT" when ready.

Windows XP Professional Setup 🛛 🕅						
Personalize Your Software Setup uses the information you provide about yourself to personalize your Windows XP software.						
<u>K</u>	Type your full name and the name of your company or organization.					
	Na <u>m</u> e:					
	Organization:					
		ß				
		< <u>B</u> ack <u>N</u> ext >				

17. Now select your computer name and your admin password. Confirm the Admin password and press "NEXT".

Windows XP Professional Setup 🛛 🕅					
Computer Name and Administrator Password You must provide a name and an Administrator password for your computer.					
<b>B</b> 1		ame for your computer. If your computer is on a ministrator can tell you what name to use.			
	<u>C</u> omputer name:				
a second	Setup creates a user acco you need full access to yo	ount called Administrator. You use this account when our computer.			
	Type an Administrator pas	sword.			
	Administrator password:	•••••			
	C <u>o</u> nfirm password:	•••••			
		< <u>B</u> ack <u>N</u> ext >			

18. Date and Time settings are next; change as needed, then press "NEXT".

Windows XP Professional Setup
Date and Time Settings Set the correct date and time for your Windows computer.
Date & Time Thursday, January 23, 2003 💽 4:29:50 PM 🚊
Time Zone         (GMT-05:00) Eastern Time (US & Canada)         ✓         Automatically adjust clock for daylight saving changes
< Back Next >

#### 19. Network Settings process

Windows XP	Professional Setup 🛛 🔀
Instal	ting Settings ling network software allows you to connect to other computers, networks, ne Internet
<b>։</b> Ն _	Please wait while Windows installs networking components.
	< <u>B</u> ack <u>N</u> ext >

20. Performing Final Tasks

Windows XP P	rofessional Setup			×
Performir Setup r	i <b>g Final Tasks</b> nust complete a final set of tasks.			Ē
õ	<ul> <li>Please wait while Setup:</li> <li>✓ Installs Start menu items</li> <li>✓ Registers components</li> <li>→ Samves settings Removes any temporary files used</li> </ul>			
		< <u>B</u> ack	<u>N</u> ext >	

21. This way, it is possible to run GDS by double clicking the GDS icon on the desktop.



# **Installation Procedure**



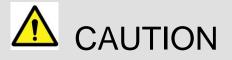
#### GDS - Basic Operation

Module: A-02-001-2 (p.01)

#### Laptop Requirements

To install GDS, user's computer must match the following requirements:

- 1. PC must be a laptop. Desktop PCs have possibilities of power troubles that can cause damage to the GDS system.
- 2. Model that is provided with the Windows XP Professional Recovery CD/DVD. Model that is always recoverable.
- 3. Model with a DVD-ROM Drive that can read Dual layer DVD.
- 4. Model with more than 512Mbyte RAM and 60Gbyte Hard Disk Drive(HDD) with at least 40Gbyte of free space.
- 5. Model with the USB Ports.
- 6. GDS program runs at Internet Explorer 6.0 or higher. If web browser is not set as Internet Explorer, please reset Internet Explorer as the default browser.
- 7. File systems for the drives are recommended to be both NTFS.
- 8. PC that GDS is to be installed must have Internet connection at all times.



This indicates incorrect handling may lead to injury or damage to property. Under certain conditions more serious consequences may result.

- Please do not install any other programs on the PC except for GDS and MS Office after OS recovery.
- Do not install any Internet Explorer Plug-ins such as Google toolbar. It attributes malfunctioning of GDS since the GDS is operated on the Internet Explorer basis.
- GDS program CD/DVD media supplied by GIT are not to be reproduced or duplicated at any circumstances.
- Close all windows and programs running before installing GDS.
- (During this installation process, OS (Window XP) may reset without any warning which result a data loss the user is working on. GIT is not responsible for any loss of data caused by this action.)
- Installation time may change depending the PC peripherals performance. If installation runs for more than 30minutes, please ensure to change all Power management settings (Settings for portable power scheme) to "Never". Installation done without changing these settings may not start GDS properly.
- GDS changes Windows XP background image during GDS installation process. If User desires to change the background image at users preference, the user may do so by changing the image at Display settings in Control panel.
- PCs like laptop relying on its portable battery should always be connected to the AC main during GDS installation. PC may end up with a critical error or end up in unrecoverable state if battery power runs out during the installation process.
- GDS program itself and all its contained information and images are secured by International Copyrights. Therefore, they should never be copied or reproduced in any unacceptable manner. Violating this regulation can stand in front of Court and GIT can ask for any applicable compensation.
- All images and data contained in GDS can change without any prior notice for improvements in service.

#### **User's Manual**

#### GDS Install Procedure

#### A. Beginning InstallShield Wizard

- 1. Insert installation DVD to the DVD ROM.
- 2. InstallShield will start automatically in a few seconds.
- 3. Press Next button in following dialogs.

GDS - InstallShield Wi	zard 🛛 🗙	GDS - InstallShield Wizard
	Welcome to the InstallShield Wizard for GDS	Ready to Install the Program The wizard is ready to begin installation.
	The InstallShield® Wizard will install GDS on your computer. To continue, click Next.	Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
	< <u>Back</u> <u>Next&gt;</u> Cancel	InstallShield

<u>Exception</u>. Selecting Target Drive (If your hard disc is not partitioned, below process will be skipped.)

 Select the HDD drives where the user wants to install. In this step, user can choose between C drive and D drive to install the Data folder that requires about 12 GBytes. Press "Next" button to go to the next step.

GDS_General_Phili_060309 - InstallShield Wizard	
Setup Type Select the setup type to install.	4
Please select a setup type.	
Install complete GDS program to C Drive	
All program features will be installed in C Drive.	
Install GDS program to C and D drive by sepatating applications and data	
Applications will be installed in C:\gvci folder, amd Data will be installed in D:\gvciData folder. For the safe of your private data, we recommand this setup type.	
InstallShield	
< <u>Back</u> <u>N</u> ext>Canc	xel

#### **B. Installing the Viewers**

1. Install the viewers to access the GDS information. Select the viewers.

	GDS_General_Phili_060309 - InstallShield Wizard	
	Select Options Select the options you want to install.	
	To install a viewer, click the check box next to it. If the check box is clear, that feature v	will not
	be installed.	
	MS Word Viewer	
	Adobe Acrobat Reader	
	InstallShield	
		ancel
👸 Adobe Reader 7.0 - Setup	🗙 🛃 Adobe Reader 7.0 - Setup	
10 Handra Handra Handra	16. vonne usansi vn seinh	🖟 Adobe Reader 7.0 - Setup
Welcome to Setup for Adobe Reader 7.0	Destination Folder	Installing Adobe Reader 7.0
Setup will install Adobe Reader 7.0 on your computer. To continue, click Next.	Click Next to install to this folder, or click Change to install to a different folder.	The program features you selected are being installed.
	C: WProgram Files #Adobe #Acrobat 7.0 W	Please work while setup installs Adobe Reader 7.0. This may take several minutes. Status:
WARNING: This program is protected by copyright law and international treaties.		
InstalSheld	InstalSheld	Instalisheid
< Back Next > Cancel	Change Destination Folder < Back Next > Cancel	<back next=""> Cancel</back>
🛃 Adobe Reader 7.0 - Setup	K         Microsoft Office Word Viewer 2003 Setup         □         X           Microsoft Office Word Viewer 2003         □         □         X	Image: Microsoft Office Word Viewer 2003 Setup           Microsoft Office Word Viewer 2003
	End-User License Agreement	Microsoft Office Word Viewer 2003 Choose where to install Word Viewer
Setup Completed Setup has successfully installed Adobe Reader 7.0. Click Finish to exit setup.	To continue with Word Wewer Installation, you must accept the terms of the End-User License Agreement. To accept the agreement, dick the check-box below.	Instalj Word Viewer to: C Whog as FlexWhorosch OfficeW
Secup has successfully installed Adobe Reader 7.0. Lick missi to exit secup.	LICENSE TERMS FOR MICROSOFT SOFTWARE MICROSOFT OFFICE WORD VIEWER 2003 THESE LICENSE TERMS ARE AN AREEMENT DETWEEN MICROSOFT COPPORATION	Available space on local hard disks:
	The Service of The Terminal Service Se	Volume         Disk.Size         Available         Require           C:         19 GB         8027 MB         46 M           D1:         33 GB         2335 MB         0 K
	UPDATES,     UPDATES,     UPDATES,     UPDETS,     WITEPHET-RASED SERVICES, AND     UPDATES,     UPDATES	
	SIMPLEMENTS,     S	
InstalStreid	PT/Daline Store Market Store Market Store Index	
L	<back uext=""> Cancel</back>	< Back Install Cancel
Microsoft Office Word Viewer 2003 Setup		
Now Installing Word Hewer	Microsoft Office Word Viewer 2003 Setup has completed successfully.	
Installation Progress:		
Current Action:		
	ОК	
Cancel	1	

InstallShield will launch the selected install programs: Acrobat reader, MS Word viewer, MS PPT viewer, and MS Excel viewer.

After installing all the required viewers, press "Next" button to go to the next step.

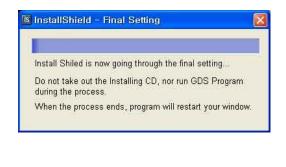
#### C. Copying Files to the Computer

1. GDS files will be copied into your computer. This step will take about 30 to 50 minutes.

GDS - InstallShield Wizard	
Setup Status	No.
GDS is configuring your new software installation.	
Installing	
C:\\Common Files\InstallShield\UpdateService\agent.exe	
(*********	
InstallShield	Cancel

2. Press "Continue" button on the dialog. Then install shield will go through various settings required for the GDS installation. The setting process takes around 5 to 10 minutes. PC will reboot automatically after the settings. Therefore, save any of the workings files, before or right after pressing the "Continue" button on the Dialog. <u>During this process, do not take out the installing DVD, nor run GDS program. GDS will not be installed correctly if these actions taken during the installation process.</u>

GDS - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed GDS. Click Finish to exit the wizard.	
	< Back Finish Cancel	



#### **D. Installing IIS and Configuring GDS**

1. After the rebooting process, GDS installation dialog will popup and automatically continue the GDS installation. Press "OK" button to continue.

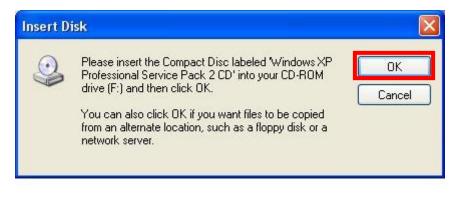


2. IIS(Internet Information Service) will be installed if it is not installed on the User's PC.

Windows Components Wizard	×	Windows Components Wizard	×
Configuring Components Setup is making the configuration changes you requested.	t	Completing the Windows Components Wizard	
Please wait while Setup configures the components. This may take several minutes, depending on the components selected.		You have successfully completed the Windows Components Wizard.	
Status: Copying files		South States	
		To close this wizard, click Finish.	
< Back Next >	Cancel	< Back Finish	

3. IIS will be installed automatically. Do not touch the dialog during the installation of IIS. If the PC has I386 installed in the PC, then there is no need to insert Windows XP Pro CD during the installation of IIS. However, if not, then the user should insert the Windows XP CD, which is used for installing the Windows XP on the user's computer. After the IIS installation, there will be a few more installation processes for GDS.





C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ControlBackDTC.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\GProject.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\Pf_UserSetting.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\Pf_uin.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\Pf_system.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\Pf_system.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\XeeedCry.d11	📾 C:\WINDOWS\system32\cmd.exe	- 🗆 ×
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P6_UserSetting.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P7_vin.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P9_system.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PLogin3_2.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GVCI\ocx}regsur32 /s c:\guci\ocx\Contro1BackDTC.ocx	<u>^</u>
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P?_vin.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P9_system.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PLogin3_2.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsvr32 /s c:\guci\ocx\GProject.ocx	
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P9_system.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PLogin3_2.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsvr32 /s c:\guci\ocx\P6_UserSetting.ocx	
C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\PLogin3_2.ocx C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\PingOcx.ocx C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\P7_vin.ocx	
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ConfigOCX.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsur32 /s c:\guci\ocx\P9_system.ocx	
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\PLogin3_2.ocx	
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\ReadUinOcx.ocx	C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\ConfigOCX.ocx	
Non-Advance (Second Control of Second Control of	C:\GUCI\ocx>regsur32 /s c:\guci\ocx\PingOcx.ocx	
C:\GUCI\ocx>regsur32 /s c:\guci\ocx\XceedCry.dll	C:\GUCI\ocx>regsvr32 /s c:\gvci\ocx\ReadVinOcx.ocx	
	C:\GUCI\ocx>regsur32 /s c:\guci\ocx\XceedCry.dll	

4. When whole installation process is completed, there will be a message box showing that GDS installation is completed.



#### **User's Manual**

## **Starting GDS Install**

- 1. Now, connect to Internet and start the GDS program by clicking icon on your desktop. You'll find the "GDS User Certification" window.
- 2. Please insert your ID and Password then click OK button.
- 3. Start the GDS.

If you find this "GitBDtc MFC 응용 프로그램" pop up or "Internet Explorer" popup alert dialog while using GDS, PLEASE CHOOSE "UNBLOCK" button to operate GDS normally.

😻 Windows Security Alert 🛛 🗙
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: <b>GitBDtc MFC 응용 프로그램</b> Publisher: Unknown
Keep Blocking
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. <u>When should I unblock a program?</u>
Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name:         Internet Explorer           Publisher:         Microsoft Corporation
Keep Blocking Unblock Ask Me Later



#### **Starting GDS**

After the Software installation, start GDS by double clicking the shortcut icon located on your desktop as shown in [Figure 1] below.



Figure 1. GDS Shortcut icon shown on desktop

## **GDS Certification**

Some GDS functions are only usable when GDS is certified with a correct GSW ID.

Functions that need Recertification:

- Vehicle Info
- Hot Fix
- TSB
- Case Analysis
- ECU Upgrade

How to certificate GDS:

1. From the GDS initial page, click on the "Configuration" page then move to "Dealer Tab".

User Information					
Region			Distributor Na	me	
ID			Name		
Tel.			e-mail		
Address					
		Recer	tification		
Language					
English	Français	Deutso	h	español	Italiano
Ελληνικά	Čeština	русский я	азык	Türkçe	Polski
Português	Български	Magya	ir 🗌	Română	日本語
汉语					
		S	ave		

Figure 2. GDS Certification

2. Under 'Dealer Tab' page, click on the "Recertification" button in 'User Information' section and connect to server to certify GDS.

<ul> <li>ID</li> <li>Password</li> <li>Log in</li> </ul>	
GDS Without Certification Cancel	

Figure 3. GDS Certification

3. As shown in the [Figure 2], enter in the user's ID/Password in the 'Log in' window. Then click 'Log in' button to save information to complete "GDS Recertification".



# Main Screen Layout



#### **GDS** - Basic Operation

Module: A-02-003 (p.01)

The Main page of GDS consists of four rows.

- The first row shows indications for VCI, VMI and Internet connections.
- The second row consists User's Guide, Notice(Internet Connection required), Configuration and Search functions.
- The third row indicates the VIN selection and system selection.
- The forth row consists Preparation, Diagnosis, Vehicle S/W Management and Repair sections for detailed diagnosis process.
- The fifth row contains the shortcuts to individual functions in "Contents Information" and "Diagnosis process".

The program is optimized for 1024x768 resolution. Functions with  $\blacksquare$  logo shown in [Figure 1] can only be used when Internet is connected (e.g. Parts-Catalog can only be used with the Internet).



Figure 1. Main screen layout

# Main Screen Menu

# First row column: Preparation

Icon	Description
Vehicle Info	Checks Production / Sales information, and Warranty History for selected VIN. This function requires an Internet connection.
Hot Fix	Accesses TSB / Local TSB / Case Study / Local Case Study / Distributor Hot Line / Dealer Hot Line search function.

# Second row column: Diagnosis

Icon	Description
Basic Inspection	Offers a checklist for basic inspection for vehicles.
DTC Analysis	Checks DTC and related information confirmed by communication between VCI and ECU.
Data Analysis	Checks "Current Data" and related information through communication with an ECU.
Case Analysis	Offers maintenance cases for selected trouble symptom chosen in Vehicle Selection function.
Symptom Analysis	Offers a diagnosis guide for selected trouble symptom chosen in Vehicle Selection function.
Flight Record	Saves a data from vehicle control module to a VCI module memory by setting up VCI module to keep connection automatically with an ECU of a specific system.
Oscilloscope	Offers an oscilloscope function.
CARB OBD-II	Generic OBD-II mode.

# Third row column: Vehicle S/W Management

Icon	Description
ECU Upgrade	Performs functions for ECU Reprogramming (Upgrade).
	Menu is arranged in the initial page in order to offer a direct link to
ID Register	important special (upgrade) functions.
Option Treatment	
Data Treatment	
Inspection / Test	

# Fourth row column: Repair

Icon	Description
Parts Catalog 0	This function requires an Internet connection.
Replacement	Offers information about vehicle component removal and installation process.
Component Info	Vehicle Component-related data.
Circuit Diagram	Offers a Full Electrical Circuit Diagram. (ETM)
Labor Time	Accesses labor Time information

# Top Menu of Main Screen

Icon	Description
User's Guide	Offer a function to view the User Manual.
Notice 0	Offers a function to check system notices. This function requires an Internet connection.
Configuration	Offers functions to check version, to input "VCI Firmware Update", to input Dealer Information, to input Connection information, and to configure units for VCI and VMI functions.
Search	Offers a search function for GDS supported data.

# Vehicle Selection and Connection Status for Internet and VCI Communications

lcon	Description
	Offers a function to select vehicle and system used by GDS, to select
VIN 🕨	control module for Fault Code Searching, and to select trouble
	symptoms for selected vehicle.
VCI : Off	Shows current connection status between a PC and a VCI. Shows
	status among "WLAN ON", "USB ON" and "VCI OFF". If the connection
	is made by WLAN between the VCI and the PC, then the status bar
VCI : USB On	will appear as "WLAN ON", if the connection is made by USB cable,
	then the status bar will appear as "USB ON". If the VCI module is
	turned off, then the status bar will appear as "VCI OFF"
VCI : WLAN On	
SVMI : Off	"VMI OFF", "VMI ON" Indication is lit to indicate connection between VMI and PC.
💛 VMI : On	
Internet : Off	Shows current connection status between PC and the Internet. Menus
e internet . On	with 💶 logos can only be used when the status is "Internet On".
🥥 Internet : On	

# Global Service Way (GSW)

Icon	Description
Go to » kia-hotline.com	Offers a function to link to the URL, which is assigned by a user in the "Configuration". This function can be used with a connection to the Internet.

## **User Setting**

14 Hotkeys of frequently used functions are arranged at the bottom of GDS.GDS To re-arrange HotKeys, click "Setup" button to bring out HotKey Configuration Popup and re-arrange the layout of Hotkeys.



Figure 2. Settup button for "Hotkey Config"

Hotkey Config	
Items Fault Code Searching Knowledge Feedback	Selected items Manual TSB Case Analysis DTC Current Data Actuation Test Flight Record DVOM Oscilloscope ECU Upgrade Simulation Test Internet Update
Load Default setting	Save
с	lose

Figure 3. User Setting for icons

Items: Items that are removed from Hotkeys at the bottom of GDS.

Selected Items: Items that are included in the Hotkeys at the bottom of GDS.

Icon	Description
<<	Removes the item from Hotkey region by moving the item to 'Items' from 'Selected Items'.
>>	Adds the item from Hotkey region by moving the item to the 'Selected Items' from Items.
	Moves up the item that user selected in the "Selected Items". Moves item to the left by one in the Hotkey.
	Moves down the item that user selected in the "Selected Items". Moves item to the right by one in the Hotkey.
Load Default setting	Loads default setting.
Save	Saves the layout of Hotkeys that user organized in the Hotkey configuration.

[Figure 3] Each buttons functions are as following..

'Items can be selected and added and removed by using and buttons located in the middle of Hotkey Configuration.

Hotkeys located at the bottom of GDS is arranged from left to right as the items are arranged from top to bottom. If the selected items exceed more than 11 items, Hotkeys area at the bottom of the GDS will be added with  $\blacksquare$  and  $\blacktriangleright$  buttons enabling the user to navigate through the Hotkey area.

Descriptions for the shortcut icons, located in the lower section of the initial page, are as follows:

# Hotkey icon functions

lcon	Description
Manual	"Manual" shortcut triggers a viewer for information such as "DTC Guide" and "Shop Manual", "ETM".
TSB	Shortcut directly linked to "Technical Service Bulletin(TSB)".
Case Analysis	Shortcut directly linked to similar Maintenance cases.
DTC	Shortcut directly linked to "Diagnostic Trouble Code (DTC) Analysis" function in the "Diagnosis" section
Current Data	Shortcut directly linked to "Current Data" function in the "Diagnosis" section.
Actuation Test	Shortcut directly linked to "Actuation Test" function.
Flight Record	Shortcut directly linked to "Flight Record Review" function.
DVOM	Shortcut directly linked to "DVOM" function in the "Diagnosis" section. (This function is not yet in service.)
Oscilloscope	Shortcut directly linked to "Oscilloscope" function in the "Diagnosis" section. (This function is not yet n service.)

# User's Manual

Simulation Test	Shortcut directly linked to "Simulation Test" function in the "Diagnosis" section. (This function is not yet in service.)
ECU Upgrade	Shortcut directly linked to the "ECU Upgrade" and "Special Functions" in the "Vehicle S/W Management".
Fault Code SearchingFault Code SearchingDTCFound Fault Code 	Performs "Fault Code Searching" for the control module selected at the "Vehicle Selection" stage. The icon changes according to the status: whether the Search is in progress or whether there is a DTC. If DTC is found, user can check the "DTC List" by clicking the shortcut icon.
Knowledge Feedback	This button is enables you to get to GSW "Distributor Hotline" page directly. (This function is only available when logged in with Distributor admin)
Internet <sup>1</sup> Update	Clicking the shortcut icon manually performs "Internet Update". GDS must be connected to the Internet.



# Internet Update



#### **GDS** - Basic Operation

Module: A-02-004 (p.01)

An Internet Update provides updates for the GDS operating software and the firmware of VCI module. Internet Updates are to be carried out for known issues and to increase the efficiency of the GDS.

There are three methods to perform Internet Updates.

- Internet Update being automatically triggered by SmartUpdate.exe at the start of the GDS program. (GDS Internet Update window will only pop up when the GDS PC is connected to the internet at the time. And the GDS (Local) version is lower than the SERVER version.)
- Run Internet Update by clicking the "Internet update" button located in the right-bottom of the Main screen.
- □ Or click "Internet update" button under "Version" Tab in the 'Configuration' page.

# Smart Update Screen Menu

When the Smartupdate.exe program is triggered, the Smartupdate program automatically connects to the designated Update Server and displays the available version and update files.

		ram for updating ite another progra	GDS. am, during the upda	te.		
A -	Mode	Local Version	Server Version	Files	Total Size	Update
	Source	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
	Contents	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
	ECU Upgrade	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
	System	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
~		The latest ve	ersion. No more nee	d to up	date	

Figure 1. When there are no internet update files available.

		ram for updating ite another progra	GDS. am, during the upda	ite.		
A -	Mode	Local Version	Server Version	Files	Total Size	Update
	Source	N-K-01-06-0000	N-K-01-06-0001	2	4MB	Yes
	Contents	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
= *	ECU Upgrade	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
	System	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
	)	Upd	4 / 4 late Information fou	nd.		

Figure 2. When there are internet update files available for download.

Icon	Description
Download	Download available internet update files from the server.
Start	"Start" button is activated when all available files are downloaded. This installs the downloaded files to the GDS program.

#### **User's Manual**

## Smart Update Process

If there are update files available for download as shown in Figure 2., click "Download" button to download update files.

		ram for updating ite another progr	GDS. am, during the upda	ite.		
A -	Mode	Local Version	Server Version	Files	Total Size	Update
	Source	N-K-01-06-0000	N-K-01-06-0001	2	4MB	Yes
	Contents	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
= '	ECU Upgrade	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
GD	System	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
			1/4 is receiving.			
Exit			Downlo			Start

Figure 3. Internet Update File Download.

When the download is completed, 'Download" button will be deactivated and "Start" button will be activated in order to install downloaded files.

Contents ECU Upgrade System	N-K-01-06-0000 N-K-01-06-0000 N-K-01-06-0000 N-K-01-06-0000	N-K-01-06-0001 N-K-01-06-0001 N-K-01-06-0001 N-K-01-06-0000	2 1 1 0	4MB 4MB 4MB 0Byte	Yes Yes Yes No
	Undating MD	3 / 4 18 file. Wait a few m	inutes	VIN	

Figure 4. Internet Update in progress.

		ram for updating ite another progr	GDS. am, during the upda	ite.		
A -	Mode	Local Version	Server Version	Files	Total Size	Update
	Source	N-K-01-06-0000	N-K-01-06-0001	2	4MB	Yes
	Contents	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
= '	ECU Upgrade	N-K-01-06-0000	N-K-01-06-0001	1	4MB	Yes
GD	System	N-K-01-06-0000	N-K-01-06-0000	0	OByte	No
~			4 / 4 Completed update.			

Figure 5. Internet Update completed.

### VCI Firmware update Process

If a new VCI Firmware Update is included in an Internet Update, The VCI Firmware Update is automatically triggered as shown in Figure 6.

If the VCI is not connected at the time, the prompt message will be shown for VCI connection as shown in Figure 7. Click "OK" button after connecting the VCI to the GDS and Click "VCI Update" button to start VCI Firmware Update. Press "Cancel" if you are willing to perform VCI Firmware Update at another time. This VCI Firmware Update can be done manually under "Version" Tab in 'Configuration' page.

	cable.	k' ESC' button	to close firmware
ë your VCI in con	figuration pag	je later	

Figure 6. VCI Firmware update in progress



Figure 7. When there are no connection between the VCI and the GDS.

Please connect t 9 you cannot pre 1 yodate program.	ı frimware update. he VCI by USB cable. pare the VCI now, plea: your VCI in configuratic		to close firmware
	10	0%	

Figure 8. VCI Firmware Update completed.

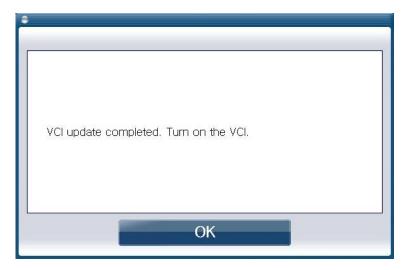


Figure 9. VCI power ON prompt pop-up



GSW (Global Service Way) and Notice



#### GDS - Basic Operation

Module: A-02-005 (p.01)

#### GSW (Global Service Way)

"Global Service Way" is a system constructed to allow access to the Internet Portal system containing large amount of vehicle maintenance information that GDS Hard Disk cannot store efficiently.

By clicking button in the Main page in [Figure 1], it will connect to the Internet Portal system site for vehicle maintenance system as shown in [Figure 2].

URL address of the site can be changed in the "Configuration" menu on the main page. By selecting configuration menu, a window appears as shown in [Figure 3]. Change URL address at the "Global Service Way URL" input box on the window. Press "Save" button to apply the change in URL address.



Figure 1. Initial screen of GDS

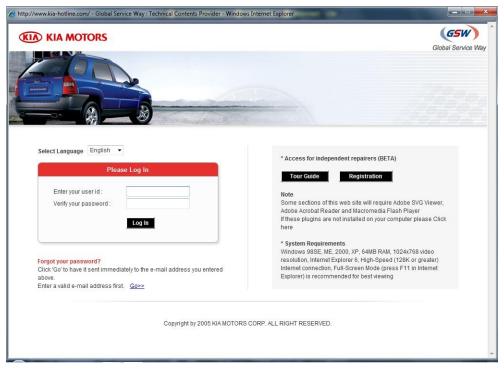


Figure 2. Connection to GSW site

Configuration		
Version Wireless Confi	g Dealer Units of Measure	Self Test (Semi-Test)  Server
Server Connection		
Global Service Way URL	www.kia-hotline.com	
<ul> <li>S/W Update Server URL</li> </ul>	www.kia-hotline.com	
	Edit URL	
	Close	

Figure 3. URL change for GSW connection

# Notice

An Internet connection is required to view system notices.

iDS No Se	tice earch <b>&gt;</b>	Date 01/01/1995 ~ 04/09/2010 = Category All      V Subject      Content	Go Close	
page / ī	7 pages ] 123 A	viticles		
No.	Date	Subject	Category	Views
123	11/23/2009	[INFO] V3 2004 Pro Anti Virus User upgrade	Notice	1111
122	4/29/2009	[INFO] Internet update trouble shooting guide is available in GDS FAQ.	Notice	1904
121	2/13/2008	[ Tips ] GDS Manual update Procedure !!!	Notice	2764
120	4/2/2010	GDS Smart Update Version [E-K-02-04-0020] - AVAILABLE NOW	GDS Update	95
119	3/24/2010	GDS Smart Update Version [E-K-02-04-0019] - AVAILABLE NOW	GDS Update	178
118	3/12/2010	GDS Smart Update Version [E-K-02-04-0018] #2 - AVAILABLE NOW	GDS Update	224
117	3/10/2010	GDS Smart Update Version [E-K-02-04-0018] - AVAILABLE NOW	GDS Update	132
116	2/25/2010	GDS Smart Update Version [E-K-02-04-0017] #2 - AVAILABLE NOW	GDS Update	181
115	2/22/2010	GDS Smart Update Version [E-K-02-04-0017] - AVAILABLE NOW	GDS Update	179
114	2/12/2010	GDS Smart Update Version [E-K-02-04-0016] - AVAILABLE NOW	GDS Update	160
113	2/11/2010	Notice for Lunar Year Vacation	GDS Update	190
112	2/5/2010	GDS Smart Update Version [E-K-02-04-0015] - AVAILABLE NOW	GDS Update	127
111	1/27/2010	GDS Smart Update Version [E-K-02-04-0014#2] - AVAILABLE NOW	GDS Update	132
110	1/26/2010	[ Tips ] Method to optimize virtual memory in GDS PC	Notice	151
109	1/25/2010	GDS Smart Update Version [E-K-02-04-0014#1] - AVAILABLE NOW	GDS Update	90
108	1/22/2010	Windows Internet Explorer 8 Multilingual User Interface (MUI)	Notice	304
107	1/15/2010	GDS Smart Update Version [E-K-02-04-0013] - AVAILABLE NOW	GDS Update	148
106	1/13/2010	GDS Smart Update Version [E-K-02-04-0012]#2 - AVAILABLE NOW	GDS Update	107

Figure 4. Notice



# Configuration



## **GDS - Basic Operation**

Module: A-02-006 (p.01)

The GDS "Configuration" function is located on the upper section of the Main page. Clicking the "Configuration" button activates it. "Configuration" functions consist of 6 sections: "Version", "wireless setting", "Dealer", "Units of measure", "self test(semi-test) "and "server"

### Version

This tab displays the Software version, Contents version and ECU Upgrade Version. In addition, VCI/VMI/TPMS firmware update can be done in this tab.

PC Software Contents ECU Upgrade	Internet	E-K-03-00-0000 E-K-03-00-0000 E-K-03-00-0000		
VCI				VCI
<ul> <li>VCI Firmware</li> </ul>	1.74 VCI Firmw	<ul> <li>VCI DLL</li> <li>are Update</li> </ul>	1.74	Connect the VCI DLC or Cigar Power to the vehicle.     Turn On the VCI.     Connect the USB cable from VCI to the PC.
▶ VMI				- Update VCI.
VMI Firmware	1.70	VMI OCX	1.70	
	VMI Firmw	are Update		> VMI
FTPMS				- Connect the VMI to battery (+) and (-) terminals with power cable properly.     - Turn On the VMI
TPMS Firmware	2.6	• TPMS DAT	2.6	- Turn On the VML     - Connect the USB cable from VMI to the PC.
-	TPMS Firm	ware Update		- Update VMI.

Figure 1. Configuration - Version

## PC

### Software

"Software" represents the current version for the vehicle communication software related to "Diagnosis" functions.

## Contents

"Contents" represents the current version for vehicle data included in GDS.

## ECU Upgrade

"ECU Upgrade" represents version that ECU upgrade events that are included which can be done using the GDS.

### Internet update

Starts "Smartupdate.exe" program manually to download available internet update

# VCI

VCI DLL Displays the latest VCI firmware stored in the PC.

## VCI Firmware

"VCI Firmware" item represents the version of the "Firmware" in the VCI module.

## VCI Firmware Update

It is a function for downloading the latest VCI Module "Firmware". It establishes settings for the communication between the PC and VCI through a USB cable (does not support WLAN for the Update), and downloads the latest "Firmware" from the PC to the VCI module when the user presses the "VCI Update" button.

## VMI

### VMI DLL

"VMI Firmware" item represents the version of the "Firmware" in the VMI module.

### **VMI** Firmware

"VMI Firmware" item represents the version of the "Firmware" in the VMI module.

## **VMI Update**

Updates the VMI firmware with the latest VMI firmware available in the PC.

## TPMS

## TPMS Firmware

Displays the latest TPMS firmware stored in the PC.

## **TPMS DAT**

"TPMS Firmware" item represents the version of the "Firmware" in the TPMS module.

# **TPMS Update**

Updates the TPMS firmware with the latest TPMS firmware available in the PC.

#### **Wireless Config**

VCI module ID, for communication with PC, must be established in order to communicate using Wireless LAN.

If more than one VCI module are used in one workshop that uses same ID, then there may be an IP conflict in WLAN communication. Therefore, it is necessary to use a distinctive ID for each VCI module.

Check the ID setting on the VCI module by clicking "Read VCI Setting" button. It will read the ID for a VCI module currently connected to the PC through the USB cable.

Next, choose ID from 1 to 15, and click "Save VCI Setting" button to check and modify the VCI module ID.

After the ID change, attach the matching color label on the back of the VCI module.

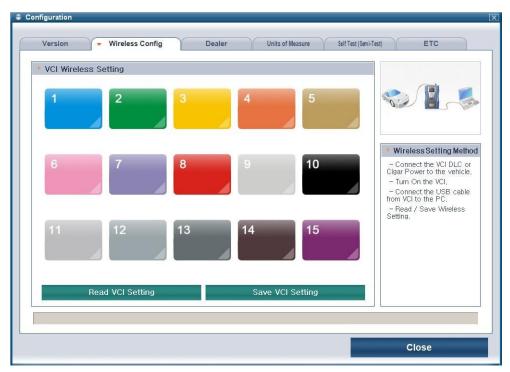


Figure 2. Configuration – Wireless Config

#### Dealer

### **User Information**

"Dealer" function shows and modifies information of current GDS dealer. The items shown in the "Dealer" function are "Region", "Distributor Name", "ID", "Name", "Telephone Number", "e-mail" and "Address".

Displayed information is automatically entered when "Recertification" is successfully done.

### Language

This function can be used to change Language settings in GDS. After clicking the "Save" button, the selected language will be applied. All menus in the initial page of GDS and diagnosis information and contents will be shown in changed language. (If the contents are not translated, it will be shown in English.)

Region ID Tel. Address		<ul> <li>Distributo</li> <li>Name</li> <li>e-mail</li> </ul>	or Name	
Language English	Français	Recertification Deutsch	español	Italiano
Ελληνικά Português	Čeština Български	русский язык Magyar	Türkçe Română	Polski
	1	Save		

Figure 3. Configuration - Dealer

# Unit of measure

Units that are used in GDS can be selected at user's preference.

<ul> <li>Pressure</li> <li>Air Rate</li> <li>default</li> <li>default</li> <li>gm/s</li> <li>b/m</li> <li>b/m</li> <li>b/m</li> <li>b/n</li> <li>b/n</li> <li>kg/h</li> <li>b/n</li> <li>b/n</li> <li>kg/h</li> <li>b/n</li> <li>b/n<th>default       kPa       MPa       hPa       mmHq       inHq       mbar       psi</th><th>Version</th><th>Wireless Config</th><th>Dealer</th><th>Units of Measure Self Test (Sami-Test) Server</th></li></ul>	default       kPa       MPa       hPa       mmHq       inHq       mbar       psi	Version	Wireless Config	Dealer	Units of Measure Self Test (Sami-Test) Server
Speed     Temperature	Speed     Temperature	default kPa MPa hPa mmHg inHg mbar bar			default gm/s Ib/m Ib/h
	default MPH km/h	Speed			
					Save
Save	Save				

Figure 4. Configuration – Unit of Measure

### VCI Self Test (Semi-Test)

### STEP-A

The purpose of STEP-A is to self-test the VCI main module. This self-test function does not test all the VCI circuits. For more information see chapter A-01-006 Self-test adapter Use. In step-A the VCI gets power through the self-test adapter and DLC main cable, and only tests specific communication circuits.

The test method follows as below.

- 1. Connect VCI main module and PC with USB cable.
- 2. Connect VCI and Vehicle's OBD-II Connector with DLC cable and Self Test Adaptor on the end of the cable. (OBD-II side)
- 3. Turn on the VCI main module by pressing Power Button.
- 4. Select Start Button in the STEP-A of the program Window.
- 5. Fix problem according to the result message shown after the test.

(Test will take few seconds.)

	bes not test all VCI circuits. For mation, refer to the 'Hardware' s al.	section of	PC	VCI Adapter (Self Test J	OBD-II Connector (Vehicle)
cable. 2. Connect the with DLC cable cable. (OBD-II: 3. Turn on the V Button. 4. Select the Si	VCI main module and PC with VCI and Vehicle's OBD-II Conn e and Self Test Adaptor on the e side) /CI main module by pressing Po tart Button in 'STEP-A' program according to the result message	ector nd of the ower	'STEP-B' test.	START with the test of 16-pin DLC n module may be inoperative provider.	

Figure 5. VCI Self Test STEP-A

Test Scope This function does not test all VCI circuits. For additional information, refer to the 'Hardware' section of the User Manual.	PG VCI Adapter Compositor
Test Method 1. Connect the VCI main module and PC with USB cable. 2. Connect the VCI and Vehicle's OBD-II Connector with DLC cable and Self Test Adaptor on the end of the cable. (OBD-II side) 3. Turn on the VCI main module by pressing Power Button. 4. Select the Start Button in 'STEP-A' program window. 5. Fix problem according to the result message shown after the test. (Test will take few seconds.)	START  Result  Good: Proceed with the test of 16-pin DLC cable; begin the 'STEP-B' test.  Failure: VCI main module may be inoperative. Contact the authorized service provider.
48%	

Figure 6. VCI Self Test STEP-A Processing

1. Fix problem according to the result message shown after the test.(Test will take few seconds).

T							
Test Scope				- ~ /			
	s not test all VCI circuits. For tion, refer to the 'Hardware' section	on of -	PC	VCI	Adapter (Self Test JIG	OBD-II Connector (Vehicle)	
Test Method	CI main module and PC with USB		Result	Good!	START		
cable. 2. Connect the V with DLC cable a cable. (OBD-II sin 3. Turn on the VC Button. 4. Select the Stal	CI and Vehicle's OBD-II Connecto nd Self Test Adaptor on the end o' le) I main module by pressing Power t Button in 'STEP-A' program wink cording to the result message sho	r f the = dow.	Good: Pro 'STEP-B' t Failure: VO	est.	st of 16-pin DLC o nay be inoperativ r.		*
		*	-				Ψ.
			100%				

Figure 7. VCI Self Test STEP-A Complete

The explanation for results follows as shown below.

Good: Proceed with the test of 16-pin DLC cable; begin the "STEP-B" test.

Failure: VCI main module may be inoperative. Contact the authorized service provider.

### STEP-B

The purpose of STEP-B is to self test 16pin main DLC cable after VCI main module is judged to be normal through Step-A. This self-test function does not test all of VCI. For more information of self-test function, see chapter A-01-006 Self test adapter of supplied User Manual. On step-B, VCI get power through self-test adapter and DLC main cable, and test open circuit and short circuit of communication lines of DLC main cable except power and ground line.

The test method follows below.

- 1. Setup VCI, PC, and cables as done in STEP-A.
- 2. Turn on the VCI main module by pressing Power Button.
- 3. Select Start Button in the STEP-B of the program view.
- 4. Fix problem according to the result message shown after the test.
- 5. Fix problem according to the result message shown after the test.

(Test will take few seconds.)

\*\* Notice \*\*

Self Test Adaptor is only used for VCI self test. It should not be used for vehicle diagnosis.

STEP-A STEP-B	
<ul> <li>Test Scope</li> <li>This function does not test all VCI circuits. For additional information, refer to the 'Hardware' section of the User Manual.</li> </ul>	PC VCI Adapter (Self Test JIG) Connector (Vehicle)
Test Method     Setup the VCI, PC, and cables as shown in STEP-A     Turn on the VCI main module by pressing Power Button.     Select Start Button in STEP-B of the program view.     Fix problem according to the result message shown     after the test. (Test will take few seconds).     Fix problem according to the result message shown     after the test.     (Test will take few seconds.)     ** Notice **	Result     Good: You may still need to test cable integrity by wiggling to test for intermittent connections.** If the test results indicate 'Good' and the vehicle communication continues to fail after the self-test adaptor is removed, verify that the communication problem is not vehicle related, contact the authorized service provider if necessary.     Failure: When the test result in self-diagnosis STEP-A are good but the result of STEP-B is failure, then there is a high

Figure 8. VCI Self Test STEP-B

Version Wireless Config Dealer STEP-A STEP-B	Units of Measure Soli Test (Seni-Test) Server
Test Scope This function does not test all VCI circuits. For     additional information, refer to the 'Hardware' section of     the User Manual.	PC VCI Adapter Connector
Test Method     Setup the VCI, PC, and cables as shown in STEP-A.     Z. Turn on the VCI main module by pressing Power Button.     Select Start Button in STEP-B of the program view.     Fix problem according to the result message shown after the test. (Test will take few seconds).     Fix problem according to the result message shown after the test.     (Test will take few seconds.)     ** Notice **	(Vehicle)     (Vehicle)     START      Good. You may still need to test cable integrity by wigging to     test for intermittent connections.** If the test results indicate     'Good' and the vehicle communication continues to fail after     the self-test adaptor is removed, verify that the communication     problem is not vehicle related; contact the authorized service     provider if necessary.     Failure: When the test result in self-diagnosis STEP-A are     good but the result of STEP-B is failure, then there is a high
48%	

Figure 9. VCI Self Test STEP-B Processing

4. Fix problem according to the result message shown after the test.

Test Scope	
This function does not test all VCI circuits. For additional information, refer to the 'Hardware' section of the User Manual.	PC VCI Adapter (Vehicle)
Test Method     Setup the VCI, PC, and cables as shown in STEP-A     Z. Turn on the VCI main module by pressing Power Button.     Select Start Button in STEP-B of the program view.     4. Fix problem according to the result message shown after the test.     (Test will take few seconds.)     Fix problem according to the result message shown after the test.     (Test will take few seconds.)     ** Notice **	Result Good! Good: You may still need to test cable integrity by wiggling to test for intermittent connections. <sup>14</sup> If the test results indicate Good and the vehicle communication continues to fail after the self-test adaptor is removed, verify that the communication problem is not vehicle related; contact the authorized service provider if necessary. Failure: When the test result in self-diagnosis STEP-A are good but the result of STEP-B is failure, then there is a high

Figure 10. VCI Self Test STEP-B Complete

Module: A-02-006 (p.11)

The test result messages are explained below:

Good: You may still need to test cable integrity by wiggling to test for intermittent connections.

\*\* If the test results indicate "Good" and the vehicle communication continues to fail after

the self-test adaptor is removed, verify that the communication problem is not vehicle related; contact the authorized service provider if necessary.

Failure: When the test result in self-diagnosis STEP-A are good but the result of STEP-B is failure, then there is a high possibility that the 16-pin DLC cable is inoperative. Contact the authorized service provider.

### Server

It is possible in "Server Connection" to assign web system URL that appears when a user selects "Global Service Way" menu in the initial page. It is also possible to assign URL and IP address for GDS "Software Update".

The "Global Service Way URL" and "S/W Update Server URL" are pre-set at initial installation. These items may be modified if needed.

onfiguration				
Version Wireless Conf	ig Dealer Units of I	Measure Self Test (Semi-Test	) - Server	
Server Connection				
Global Service Way URL	www.kia-hotline.com			
S/W Update Server URL	www.kia-hotline.com			
	Edit URL			

Figure 11. Configuration - Server Connection



# Search



## GDS - Basic Operation

Module: A-02-007 (p.01)

### Setup for Searching

"Search" functions can give various search criteria to view the desired information from the GDS supported contents.

There is a change in screen display as shown in [Figure 1] when "Search" button is clicked at the GDS initial page. Users should always select a Model and Year. (Too much time may be required for a search without any criteria selected.)

Click "Search" button after all the criteria setting and keyword input is made. Search Results will appear on the lower section of the page.

	OPIRUS(GH)				- 💛 Ke	yword		Search
•	Select Group		- 0	Select Group			04-09 - 2010-	04-09 -
	🔽 All Bulletin	TSB	Local TSB	☑ Case Study	Local Case Study	☑ Dist. Hotline	🔽 Dealer Hotline	
	All Manual	Shop	ETM	☑ DTC	V Symptom	Replacement	Component	V Training Guide

#### Figure 1: Selecting criteria for a search

### **User's Manual**

Next step is to select an information category to be searched. The available categories are "All Bulletin", "TSB", "Local TSB", "Case Study", "Local Case Study", "Dist. Hotline", "Dealer Hotline", "All Manual", "Shop", "ETM", "DTC", "Symptom", "Replacement", "Component", and "Traning Guide". It is possible to choose more than one, however it may cause a longer search time.

It is also possible to assign criteria to a specific group and symptom. The groups are Body "Electrical System", "Brake System", "Fuel System", and etc. The symptoms are "Engine Stalls", "Hard/No Start", "Improper Exhaust gas", and etc. Further more, there is a search criteria that filters to see Bulletin information of less than one year, or see all.

Click "Search" Button after all the criteria setting and keyword input is made. Search Results will appear on the lower section of the page.

#### **Search Result**

The sample screen below shows the search results. Each category chosen will have the number of results found displayed next to the category title. Clicking on a category will show/hide the available sub-categories.

ə All		🗕 \varTheta All	
	☑ TSB ☑ Lo ☑ Shop ☑ E <sup>-</sup>		se Study 🗹 Local Case Study 🕼 Dist. Hotline 🕼 Dealer Hotline C 🐨 Symptom 🖤 Replacement 🐨 Component 🐨 Training Guide
TSB(12)	Date	Model	Subject
Local TSB(0)	7/4/2006	OPIRUS(G	CHANGE OF SIGMA ENGINE CYLINDER HEAD COVER BOLT
Case Study(0)	7/21/2008	OPIRUS(G	CAUTION WHEN REMOVING LAMBDA ENGINE OIL FILTER ELEMENT
Local Case Study(0)	5/8/2007	CARNIVAL/	CHANGE OF BAFFLE PLATE FOR LAMBDA ENGINE
	4/3/2008	OPIRUS(G	ABNORMAL NOISE FROM TIMING CHAIN TENSIONER OF LAMBDA ENGINE
Shop(100)	4/25/2007	OPIRUS(G	NEW PARTS INFORMATION FOR DELTA ENGINE CYLINDER BLOCK
ETM(1)	3/26/2008	OPIRUS(G	ABNORMAL NOISE FROM TIMING CHAIN TENSIONER OF LAMBDA ENGINE
DTC(100)	3/24/2008	SPORTAG	CHANGE OF DELTA ENGINE CYLINDER BLOCK AND OIL SEAL CASE
Symptom(100)	2/19/2008	OPIRUS(G	CHANGE OF LAMBDA ENGINE CONNECTING ROD AND CRANKSHAFT
Replacement(0)	12/1/2008	SOUL(AM),	API SERVICE CLASSES OF ENGINE OIL FOR KIA GASOLINE CARS
	10/30/2003	VQ16,SOR	Revising the inspection method for Ignition coil of 3.5L engine
Component(0)	10/20/2009	SOUL(AM),	CAUTIONS DURING A/D/U DIESEL ENGINE INJECTOR REPLACEMENT
Training Guide(0)	1/23/2008	SORENTO(	CHANGE OF ENGINE OIL FILTER SERVICE KIT

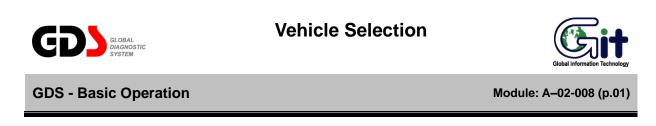
Figure 2: Search results

# **Contents Open**

[Figure 3] Sample screen showing search results within content.

Contents			<b>a</b>				
Subject	CHANGE OF SIGMA ENGINE CYLINDER HEAD COVER BOLT						
Model	OPIRUS(GH),SORENTO(BL),VQ16-all						
No.	KT2006070401	TSB Type	General				
.anguage	English	Distributor	TEEF				
Date	07/04/2006	Modified					
Area		Group Code	Engine Mechanical System				
System Code	Lubrication System	Component Co	ode Engine Oil				
		Diagnosis					
	part information as below. Please r	refer to the below when servicing.	It washer" to "Bolt". Therefore, this bulletin is issued to				
- Model: SORI - Affected vehi - Area: All	ENTO(BL), OPIRUS/AMANTI( cle producction date: Produced fro n		ine				
- Model: SORJ - Affected vehi - Area: All Part Informatio	ele producction date: Produced fro	om Job #1 ~					
- Affected vehi	ele producction date: Produced fro						

Figure 3: Contents open



All the functions of GDS can be used after the "Vehicle Selection". "Vehicle Selection" window appears as shown in [Figure 1] after clicking the "VIN" button at the initial page.

GDS VIN Search	Search		Clear Previous Vehicle
Model		Year	Engine
AVELLA(FV) BESTA(TP) CADENZA(VG) CARENS(FJ) CARENS(UN) CARNIVAL/SEDONA(GQ) CARNIVAL/SEDONA(VQ) Cee'd(ED) CERATO(LD) CERATO/FORTE(TD) CLARUS(FE) ENTERPRISE(DB)			
System	_	_	
Symptom		S	Sub Symptom
Fault Code Searching		ок	Cancel

Figure 1. Vehicle selection

# **VIN Selection**

There are 2 ways to select vehicles.

- To input Vehicle Identification Number combined in 17-figure code combined with letters and numbers.
- D To select vehicle, model year, and engine manually.

## Input of VIN

Using manual VIN entry, type the full 17-digit VIN in the box and click the "Search" button. The model, model year, engine configuration and supported systems will display as shown in Figure 2.

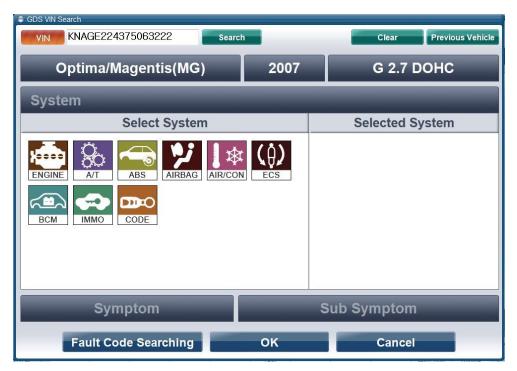


Figure 2. VIN Input – full VIN

The last 6 digits may be entered in the box if desired; a separate screen will appear that prompts for specific vehicle selection as shown in Figure 3.

/in Search					
VIN	Model	Year	Engine		
KNAFE222335063222	CERATO(LD)	2003	G 1.6 DOHC		
KNAGE224375063222	Optima/Magentis(MG)	2007	G 2.7 DOHC		
KNCSE061257063222	K2500/K2700/K3000/K3	2005	D 2.7 J2		
KNEBA24325T063222	PICANTO(SA)	2005	G 1.1 SOHC		
KNEDE221366063222	RIO(JB)	2006	G 1.4 DOHC		
KNEFG52427K063222	CARENS(UN)	2007	D 2.0 TCI-D		
KNEJE55255K063222	SPORTAGE(KM)	2005	G 2.0 DOHC		
U5YFF24427L063222	Cee'd(ED)	2007	D 1.6 TCI-U		
U5YFF52428L063222	Cee´d(ED)	2008	D 1.6 TCI-U		
OK Cancel					

Figure 3. VIN Input – last 6 digits

# Method to select vehicle, model year and engine

Select "Vehicle", "Model year", and "Engine" in each section for a vehicle, and supported systems will be displayed as shown. VIN-specific functions will not work if this method is used.

GDS VIN Search     Search     Search	Clear Previous Vehicle		
Optima/Magentis(MG)	G 2.7	7 DOHC	
System	-	_	_
Select System		Selected	l System
ENGINE AT ABS ABS ARBAG AIR/CON BCM IMMO CODE		Unleaded GEN	
Symptom		Sub Sympto	m
Fault Code Searching	ок	Cano	el

Figure 4. Direct selection for vehicle, Model Year and Engine

Control Module Selection for Diagnosis and Fault Code Searching

### Selection of control module(s) for diagnosis

After selecting the "Vehicle" model, "Year" and "Engine", as shown in the [Figure 4], available Systems for the selected vehicle are listed. Selected systems will be included in the area of "System" and first selected system becomes the first priority for diagnosis function.



Figure 5. System Selection – A single system (Engine) selected.

GDS VIN Search	Search	1	Clear	Previous Vehicle
OPIR	US(GH)	2008	G 2.7	ронс
System				
	Select System		Selected S	System
ECS			Image: Second	
Sym	ptom		Sub Symptom	
Fault Co	de Searching	ОК	Cancel	

Figure 6. System Selection – Multiple systems selected.

# Changing the selected Systems or removing from the list.

To change the default system from the list, click the desired system once from the list. and to remove system from the list, do a double click on the system that you wish to remove or click once from the "System Area".

GDS VIN Search VIN	Search		c	lear Previous Vehicle
OPIRUS	S(GH)	2008	G	2.7 DOHC
System			_	
Se	lect System		Selec	ted System
(0) 🖚 🗲	SP AIRBAG AIR/CON MO PIC AHLS	EPS CODE	Image: Constraint of the second se	Transaxle Stability Program
Sympt	tom		Sub Sym	ptom
Fault Code	Searching	ок	c	ancel

Figure 7. System Selection – Changing the default system.

# Selection of correct vehicle DLC cable

After selection of the vehicle and control module, a window, which displays the DLC cable and a description of the selected vehicle test conditions, appears below.



Figure 8. Information Window

### Procedures for fault code searching functions

By Setting and running "Fault Code Searching" function in the "Vehicle Selection" users can automatically diagnose a DTC during the use of another GDS function using the communication between the VCI and a vehicle.

The progress status for the Fault Code Searching will be displayed on the top of the "Fault Code Searching" icon, which is located on the lower section of the GDS screen.

It will be displayed as shown in [Figure 10-1] when there is a communication with the assigned module. When there is a DTC in any of the module, the icon will be displayed as shown in [Figure 10-2]. DTC list can be checked by clicking the icon in the state of [Figure 10-3].







The Fault Code Searching window has five buttons:

- "Go to Hot Fix" will cause the GDS to search for data based on the DTCs retrieved from the vehicle after a DTC is clicked
- "Go to DTC Analysis" will access the related ECU after a DTC is clicked.
- "Retry Fault Code Searching," repeats the DTC check on the systems previously selected.
- "All Erase" button deletes all the DTC codes that are detected by Fault Code Searching function.
- "Stop" button can be used to stop fault code searching function after selecting various systems from the "VIN Selection".
- "Print" either prints the DTC codes found or saves screen capture of the DTC codes found.
- "Close" closes the window; the window may be displayed again by clicking on the "Fault Code Searching" button at the bottom of the screen.

State: Running (3/4)			
System	Code	Description	State
ENGINE - Unleaded GEN	P2122	Accelerator Position Sensor 1 Signal Circuit Low Input	
ENGINE - Unleaded GEN	P2127	Accelerator Position Sensor 2 Signal Circuit Low Input	
ENGINE - Unleaded GEN	P2104	Throttle Actuator Control System Malfunction-Force Idle	
ENGINE - Unleaded GEN	P1295	Throttle Actuator Control System Malfunction-Power	
ENGINE - Unleaded GEN	P0222	Throttle Position Sensor 2 Signal Circuit Low Input	
ENGINE - Unleaded GEN	P0123	Throttle Position Sensor 1 Signal Circuit High Input	
ENGINE - Unleaded GEN	P1610	Non-Immobilizer-EMS Connected to an Immobilizer	
ENGINE - Unleaded GEN	P0685	ECM/PCM Power Relay Control Circuit /Open	
TRANSMISSION - Auto	P2122	Throttle/Pedal Position Sensor/Switch "D" Circuit Lo	
TRANSMISSION - Auto	P2127	Throttle/Pedal Position Sensor/Switch "E" Circuit Lo	
TRANSMISSION - Auto	P2104	Throttle Actuator Control System - Forced Idle	
TRANSMISSION - Auto	P1295	ETC System Power Management	
TRANSMISSION - Auto	P0222	Throttle/Pedal Position Sensor/Switch "B" Circuit Low	
TRANSMISSION - Auto	P0123	Throttle/Pedal Position Sensor/Switch "A" Circuit High	
TRANSMISSION - Auto	P1610	Immobilizer Smartra Error	
TRANSMISSION - Auto	P0685	ECM/PCM Power Relay Control Circuit /Open	
Selected System :			
Go To I	lot Fix	Go To DTC Analysis	
Retry Code Searchi	ng	All Erase Stop	

Figure 11. Fault Code Searching window

#### **Trouble symptoms selection**

Select and input vehicle symptom in the "Symptoms in this vehicle" section on the "Vehicle Selection" window. Selection Menu on the left can be categorized into groups of "Engine", "Transmission", and "Brake". The right menu is for the selection of symptom for the selected group on the left. The symptoms are "Hard/No starts", "Idle-irregularity", "Engine Stall" and etc. If there is more than one symptom, it is possible to choose symptoms in addition. Double click the item to remove from the selected symptoms.

It is possible to use "By Symptom" function in the "Bulletin" menu at the initial page after the completion of vehicle symptom input. "Symptom Analysis" function in the "Guide Diagnosis" menu can also be used.

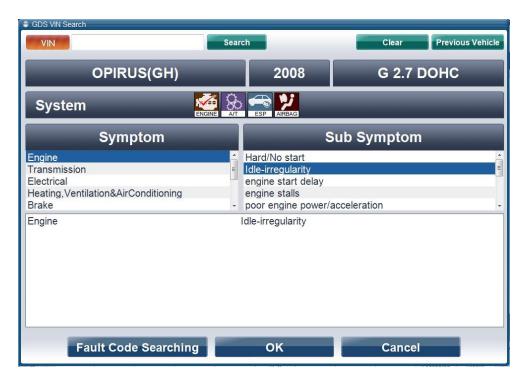


Figure 12. Input of Symptoms and Comments

In addition, a window will display showing a breakdown of each selected system's DTC contents. This window will also indicate if no DTC data was found or if a communication failure is present. (ECU communication failures may be due to an actual communication problem OR if a system was selected that is not fitted to the vehicle being checked.)

# **Trouble Symptoms Selection**

Select vehicle symptoms from the system and symptom drop-down boxes as shown.

GDS VIN Search	earch Clear Previous V			
OPIRUS(GH)	)	2008	G 2.7 I	оонс
System			_	_
Symptom			Sub Symptom	1
Engine Transmission Electrical Heating,Ventilation&AirConditionin Brake		Hard/No start Idle-irregularity engine start delay engine stalls poor engine power.	/acceleration	E E
Engine		dle-irregularity		
Engine		engine start delay		
Engine	e	engine stalls		
Fault Code Search	hing	ок	Cancel	

Figure 13. Input of Symptoms and Comments