TERADYNE GNA600 GATEWAY DEVICE USER GUIDE FOR HONDA VEHICLES



GNA600 Gateway Device User Guide

CONTENTS

1		COMPLIANCE	2
	1.1	FCC Statement	2
	1.2	Use of This Equipment in Canada	2
	1.3	Use of This Equipment in the European Union	2
	1.0		-
2		SAFETY PRECAUTIONS	3
	2.1	Basic Safety Precautions	3
	2.2	Proper Installation and Use of This Equipment	4
3		INTRODUCTION	5
	3.1	Overview	5
	3.2	GNA600 Kit	6
	3.3	Description of Parts	7
		•	
4		SOFTWARE USE	9
	4.1	Overview	9
	4.2	Use With HDS Software	10
	4.3	Use With Control Module Update Software	11
5		SETUP	12
	5.1	Before You Start	12
	5.2	Setup Basics	12
	5.3	Connection With the USB PC Interface Cable	13
	5.4	Connection With an Ethernet Cable	13
6		UPDATING CONTROL UNITS/MODULES	15
	6.1	Overview	15
	6.2	Control Unit/Module Update in Pass-thru Mode	17
	6.3	Control Unit/Module Update in Storage Mode	22
-			
7		TROUBLESHOOTING	25
	7.1	Cannot Communicate with the Host PC	25
	7.2	Cannot Communicate with the Vehicle	25
	7.3	GNA600 LED Patterns	26
0			77
8	Q 1	CARE AND MAINTENANCE Cleaning the GNA600 Unit	<u> </u>
	8.2	Cable Care	27
	8.3	PCMCIA Memory Card Compartment Lid	
	0.3		27
9		SPECIFICATIONS	28
3	9.1	Hardware	28
L	0.1		20
10		SUPPORT INFORMATION	29
	10.1	Warranty	29
	10.2	Customer Service Assistance	30
L			

1 – COMPLIANCE

1.1 FCC Statement

The United States Federal Communications Commission (in 47 CFR 15.105) has specified that the following notice be brought to the attention of users of this equipment.

This equipment has been tested and found to comply with the limits for a Class "A" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

Users may find the following booklet prepared by the FCC to be useful: How to Resolve Radio/TV Interference Problems. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock # 004-000-00345-4.

1.2 Use of This Equipment in Canada

This digital apparatus does not exceed Class "A" limits for radio emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications (DOC).

1.3 Use of This Equipment in the European Union



NOTE – This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This product has been designed and tested primarily for use in a commercial/light industrial environment. It has been tested for higher levels of R.F. field immunity up to those levels required for automotive products, but in safety-critical applications, its use in the proximity of the following operating devices must be avoided: mobile telephones, amateur radio, emergency services and CB transceivers, other forms of mobile radio communications, TV/radio broadcast and relay transmitters, radar transmitters, and similar devices.

2 – SAFETY PRECAUTIONS

2.1 Basic Safety Precautions

Underwriters Laboratories, the North American standards agency, requires that the suppliers of all garage equipment bring the following notice to users in North America. While the requirement is specific to North America, users elsewhere are advised to follow the same precautions. When using your equipment, follow these basic safety precautions:

- 1. Read all instructions.
- 2. Take care to avoid burns from touching hot parts.
- 3. Do not operate equipment with a damaged cord.
- 4. If the equipment has been dropped or damaged, do not operate it until examined by qualified service personnel.
- 5. Do not let the cord hang over the edge of a table, bench, or other counter surface, or come in contact with hot manifolds or moving fan blades.
- 6. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Take care to arrange the cord so that it will not be tripped over or pulled accidentally.
- 7. Always unplug the equipment from the electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp the plug and pull it to disconnect.
- 8. Let the equipment cool completely before putting it away. Loop the cord loosely around the equipment when storing it.
- 9. To reduce the risk of fire, do not operate the equipment near open containers of flammable liquids.
- 10. When working on operating internal combustion engines, make sure you have adequate ventilation.
- 11. Keep hair, loose clothing, and all body parts away from moving parts.
- 12. To reduce the risk of electric shock, do not use the equipment on wet surfaces or expose it to rain or any other fluid.
- 13. Use the equipment only as directed in the manual. Use only the equipment supplier's recommended attachments. Use of non-recommended parts may invalidate the equipment warranty.
- 14. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact-resistant lenses; they are NOT safety glasses.
- 15. While using the GNA600, ensure that the auto DLC cable does not get trapped between the door and the vehicle body.

2.2 **Proper Installation and Use of This Equipment**

This equipment has been designed, manufactured, and tested to meet the requirements of international standards; however, like any apparatus, care must be taken in its use.

The GNA600 has a 230/110V AC input to the power supply and is supplied with a power cord. The electrical power source outlet socket must be located adjacent to the equipment, and it must be easily accessible and readily identifiable to the operator as the means of disconnection of the electrical power source to this equipment.

For continued protection against electric shock, certain parts of this equipment, including the PC compatible signal interface connections, have been designed such that the voltage is limited to a safe value. To maintain this level of protection, equipment connected to this equipment must have interface connections that are similarly protected.

DO use this equipment in accordance with the operating procedures.

DO switch this equipment off (unplug the AC charger power cord at the electrical socket outlet if necessary) before carrying out maintenance and cleaning operations (refer to the Care and Maintenance section). Use only a well-diluted, mild, non-abrasive cleaning agent applied by using a soft, lint-free cloth.

DO NOT allow the GNA600 to operate below or within 460 mm (18 in.) of the floor.

DO NOT use this equipment outside the supplier specifications.

DO NOT use or apply undiluted cleaning agent directly to the equipment surface, and do not soak the cloth. Take care that cleaning fluid does not enter electrical connector receptacles.

DO NOT immerse equipment in water.

DO NOT continue to use this equipment if you have ANY doubt that it may not be working properly or is damaged in any way. Remove the power source to the equipment.

DO NOT connect any equipment to the PC-compatible signal interface connections of the GNA600 until you are satisfied that the equipment is safe.

DO NOT remove any fixed covers unless you are authorized/qualified to do so for the preparation of this equipment.

DO NOT obstruct ventilation of this equipment. Obstruction can cause overheating and reduced reliability, shortening the life of this equipment.

DO NOT expose this equipment to spilled liquids or any types of fluid.

DO NOT replace detachable power cords with a different type (or fuse rating) from that detailed in the documentation or supplied with this equipment.

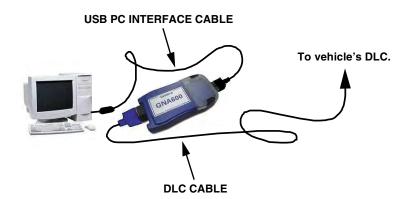
3 - INTRODUCTION

3.1 Overview

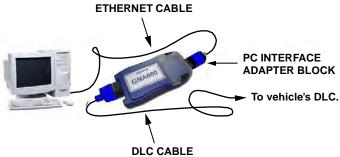
The GNA600 is a vehicle interface device with the speed and storage capacity required to update control units/modules in vehicle systems that use the CAN (control area network) communications protocol on the DLC (data link connector). The GNA600 does all the functions of the HIM (Honda Interface Module) but with additional capabilities.

The GNA600 is easiest to use with a wired USB connection, but it can also be used with an Ethernet connection. Here are the two connection configurations:

Wired connection with the USB PC Interface Cable (easiest connection):

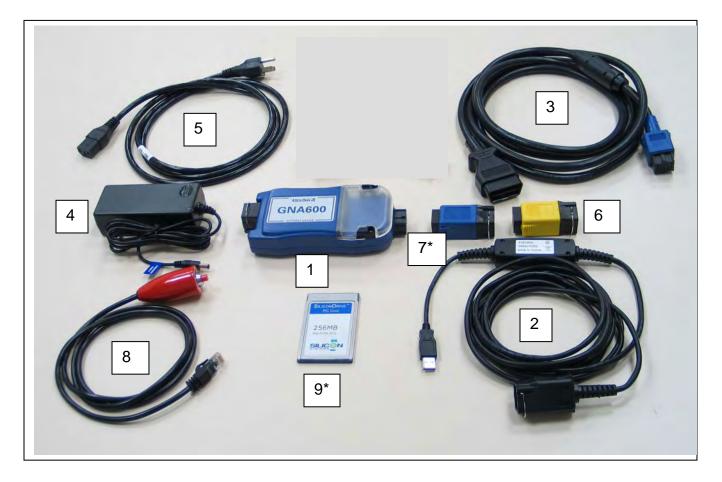


Wired connection with an Ethernet cable and the PC Interface Adapter Block* (optional connection):



*This is an optional part that can be purchased separately.

3.2 GNA600 Kit



Part Name	Part Number
1. GNA600 Unit	TDS35540000
2. USB PC Interface Cable	TDS35525406
3. DLC Cable	TDS35541433
4. Power Supply Unit	TDS60678010
5. Power Supply Cord	TDS35481214
6. Trigger Switch Adapter Block (Yellow)	TDS35541434
7. PC Interface Adapter Block (Blue)*	TDS35541441
8. Trigger Switch	TDS35541359
9. 256 MB PCMCIA Memory Card*	SSDP25M3012

*These are optional parts that can be purchased separately.

3.3 Description of Parts



GNA600 Unit (TDS35540000)

The main communications unit between the vehicle and the PC.

USB PC Interface Cable (TDS35525406) Connects the GNA600 to a PC for transferring software and data, and to display diagnostic data on the PC screen.

DLC Cable (TDS35541433) Connects the GNA600 to the vehicle's 16-pin DLC.

Power Supply Unit (TDS60678010) Provides A/C power to the GNA600 when it is not connected to a vehicle.

Power Supply Cord (TDS35481214) Connects the Power Supply Unit to A/C power.

Trigger Switch Adapter Block (Yellow) (TDS35541434) Connects the trigger switch (NUD420094) to the

GNA600 for control unit/module updating in Storage Mode (without a PC).



PC Interface Adapter Block (Blue)* (TDS35541441) Connects the PC to the GNA600 through a standard PC Ethernet cable (cable not included).



NOTE – The PC Interface Adapter Block is not needed if you connect the PC to the GNA600 with the USB PC Interface Cable (TDS35525406).



SILICONDRIVE" PC CARD 256MB SSD-925M-3012 SID-925M-3012

Trigger Switch (TDS35541359)

When it is connected to the Trigger Switch Adapter Block (TDS35541434), the Trigger Switch allows the GNA600 to update control units/modules in Storage Mode (without a PC). Not all software runs in Storage Mode. Refer to each software package to see if it can run in Storage Mode.

256 MB PCMCIA Memory Card* (SSDP25M3012)

This memory card is used by the GNA600 (in Storage Mode) for updating (reprogramming) control units/modules.

To order replacement parts, call the Honda Tool and Equipment Program at (888) 424-6857.

*These are optional parts that can be purchased separately.

4 – SOFTWARE USE

4.1 Overview

The GNA600 can be used with two different software suites that are distributed with the HDS software package, and can be installed according to the instructions provided by the software distributor.

The GNA600 can be used with both HDS software and Control Module (CM) Update software. Once installed to your computer, either software can be run by double clicking on its associated icon on the desktop.

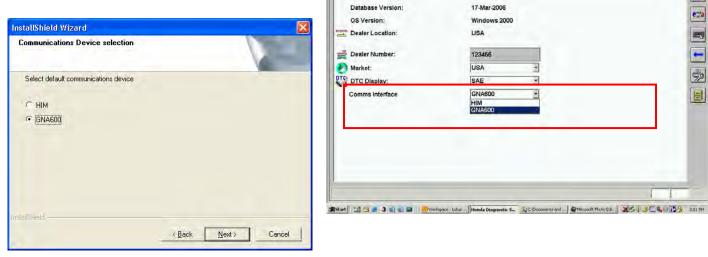




Diagnostic System CM Update

4.2 Use With HDS Software

The GNA600 can be selected as the default vehicle interface during installation of the HDS software or from the setup screen.



"?"-

Software Version:

HIM Firmware:

Set-up

After you select the GNA600 as the interface, its icon appears in the top right corner of the HDS intro screen. This icon means your PC is connected to the GNA600.





No connection between the PC and GNA600.

Connection OK between PC and GNA600. This does not indicate a connection to a vehicle.

1

-

-

+

9

8

m

Set-up Details

٠

2.004.004.USE.WIN32

Not available

4.3 Use With Control Module Update Software

The GNA600 can be selected as the default vehicle interface during installation of the Control Module (CM) Update software or fro the setup screen.

Communications Device selection		0	100
			<u>e</u> ==
Confirm or amend the default communica	tions device		
СНИ			
• GNA600			
tall3) neid			
	< Back	Next>	Cancel

Control Modules Update

Version

information

The LED patterns seen on various screens during use of the CM Update software should mimic the LED patterns on the GNA600.



(Refer to section 7.3 for details on GNA600 LED patterns.)

default	Plea	se select	an Interface Dev	lice
f the re or from	GN/	600	2	
	Plea	se Select	a COM Port	
×	CON	41		
	Plea	se select	a language	
	Eng	lish(Ameri	can) 🚽	
	Plea	se select	a destination	
	USA	í.	•	
	Inter	nal Softwa	re Version Cheo	:k
Cancel		Check yes	rsion	
rol Modules Update				
	Updating Hond	a Control Modules	P	6
Note: Ma	ke sure that the bat	tery voltage does r	not decrease.	
Please select "Pass-thru Mode" Control Module using the Inter <u>connected</u> to the host PC.			rage Mode" to update vehicle using the Interface Device n the host PC.	
Do no share b	(ada		Tenner Made	-
Pass-thru N	For use		storage Mode	
Normal use	trigger		Setup	∕ ♥

Application Version V6.04.04

Database Update 20-JUL-2006

2 Start 🕞 🖓 🖉 💭 😑 20f... 🔄 20f...

2

7

screen

5 - SETUP

5.1 Before You Start

For the initial setup of the GNA600, the latest version of HDS software must be installed on the host PC.

We strongly recommend using the USB PC Interface Cable (TDS35525406) as your wired connection to the GNA600. The correct device drivers for the USB PC Interface Cable are included with the HDS software. If an Ethernet cable is used for your wired connection, you will need to do extra steps.



NOTE – Setup of the GNA600 connection is fully automatic if you have the correct drivers from the HDS software installed, use the USB PC Interface Cable, and carefully follow the set up instructions. If you use an Ethernet cable, you must do a manual setup of the GNA600 connection (see section 5.4).

5.2 Setup Basics

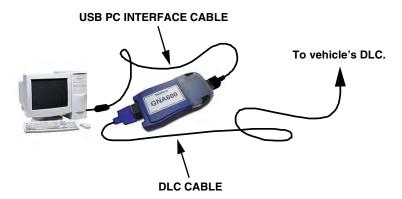
Here are the basics in setting up the GNA600 connection:

- Install the latest HDS software to your computer.
- Connect the USB PC Interface Cable into any free USB port, and wait for the device drivers to complete the installation.
- Connect the GNA600 to the USB PC Interface Cable.
- Power up the GNA600 by connecting to a vehicle with its DLC Cable or by using its Power Supply Unit and Cord.

For more setup information, see section 5.3.

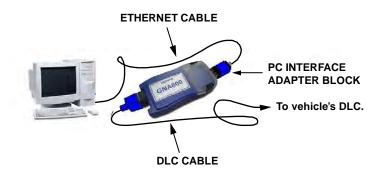
5.3 Connection With the USB PC Interface Cable

When the USB PC Interface Cable is used, the connection is fully automatic after you install the latest HDS software from the HDS installation disc. The HDS software includes the correct device drivers to work with the USB PC Interface Cable.



5.4 Connection With an Ethernet Cable

To use an Ethernet connection, you must configure the network adapter on the PC to a static address and use a straight through Ethernet cable (not supplied). You must also connect the PC Interface Adapter Block* (TDS35541441) between the Ethernet cable and the GNA600.



To establish the Ethernet connection, install a second network adapter card in the host PC. This allows for a connection to the Internet on one card and a connection to the GNA600 on the other.

*This is an optional part that can be purchased separately.

On the PC, set the network adapter to a static IP address of **192.168.0.1** or **172.16.0.1**, with a subnet mask of **255.255.255.0**. Use an address that does not conflict with other network settings on that PC. No gateway or DNS settings are required. Once the address is set, restart the PC, launch the HDS software, and verify that the GNA600 icon in the top right corner of the screen has a green light.



Internet Protocol (TCP/IP) Prope	rties 🛛 🛛 🛛
General	
You can get IP settings assigned autor this capability. Otherwise, you need to the appropriate IP settings.	
O Dbtain an IP address automatical	ly .
• Use the following IP address:	
IP address:	172.16.0.1
S <u>u</u> bnet mask:	255 . 255 . 255 . 0
Default gateway:	· · ·
Obtain DNS server address autor	natically
Output the following DNS server addresses and the server addresses	dresses:
Preferred DNS server:	· · ·
Alternate DNS server:	· · ·
	Ad <u>v</u> anced
	OK Cancel

6 – UPDATING CONTROL UNITS/MODULES

6.1 Overview

The GNA600 can be used to update (reprogram) any Honda control unit or module with EEPROM (electronically erasable programmable read only memory) storage. Currently, EEPROM handles the software storage in some PGM-FI and automatic transmission control units/modules.

The GNA600 is much faster than the HIM (Honda Interface Module) that it replaces. You will see rapid upload times from the PC to the GNA600 and also from the GNA600 to vehicles that use the new CAN (control area network) protocol. Based on the communication protocol used, connection speed between the GNA600 and different vehicles will vary.

To update control units/modules, the CM Update software must be loaded into the PC used with the GNA600. The CM Update software has been enhanced to show the progress during the update, as well as showing on-screen instructions and the LED patterns you will see on the GNA600.

The CM Update software can be used in Pass-thru Mode or Storage Mode. Pass-thru Mode is used when the GNA600 can be connected to the PC and vehicle at the same time. Storage Mode is used when the GNA600 cannot be connected to the PC and vehicle at the same time.

Program ID	CJC570
Program Part No.	37805-RCJ-C57
Control Module Part No.	37820-RCJ-C59
Year	2005
Model	Accord
Engine	JNA1
Trans	AT
Update Description	No upshift to 4th

Each CM Update software program is identified by its program ID, program part number, vehicle specifics, and update description. An example is shown below.



CAUTION – During a control unit/module update, the vehicle battery voltage must remain constant. Failure to maintain battery voltage can damage the vehicle's ECM/PCM. Before doing an update, test the vehicle's battery and continue only if the battery passes the test (see Honda Service Bulletin 88-023, *Battery Testing and Replacement*). To help maintain battery voltage during the update, connect the battery to a battery booster, and turn off all lights and accessories.



As shown to the right, the CM Update software is launched from the Windows **Start** menu. To do control unit/module updates, the latest HDS software must be installed (see section 4).

6.2 Control Unit/Module Update in Pass-thru Mode

NOTE:

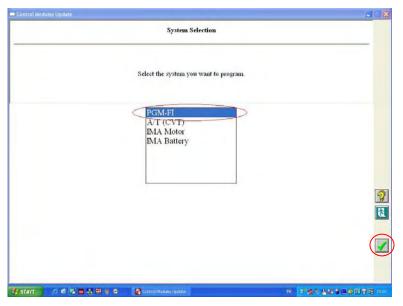
- These instructions are a summary of the updating process.
- For a description of the GNA600 Kit parts used in this procedure, refer to section 3.3.
- For a description of the GNA600 LED patterns, see section 7.3.
- 1. Connect the USB PC Interface Cable to the *i*N Workstation and to the GNA600. From the **Updating Honda Control Modules** main screen, select **Pass-thru Mode**.

Chowing your	la Control Modules
Note: Make sure that the ba	attery voltage does not decrease.
Please select "Pass-thru Mode" to update vehicle ECM/PCM using the interface module <u>connected</u> to the host PC.	Please select "Storage Mode" to update vehicle ECM/PCM using the interface module <u>disconnected</u> from the host PC.
Pass-thru Mode	Storage Mode
	Storage Mode
	Storage Mode
Application	
	Version V6.03.07 date 19-DEC-2005

- 2. Connect the DLC Cable to the GNA600 and to the vehicle's DLC. (You don't need to turn the ignition switch to ON (II) before connecting the GNA600. This applies only to the HIM.)
- 3. Turn the ignition switch to ON (II), and wait until the green #2 LED on the GNA600 stays on. Click on the **Check Mark** to continue.

Control Medules Update	
Updating Honda Control Modules	
At the vehicle, turn the ignition switch ON (II), then connect the Interface Module to OBDII DLC. The Green and Yellow LEDs flash alternately.	o the
2. Wait until the Green LED glows steadily.	
3 · · · · · · · · · · · · · · · · · · ·	
Start C d 🖬 🖬 🔆 🖬 🖉 🖉 🖓 Concellinguises inspace 👘 👘 😤 🖓 🖓 👘	2 9 0 0 0 9 15 15 15 15 15 15 15 15 15 15 15 15 15

4. Select the vehicle system that you are updating, then click the **Check Mark** on the right side of the screen.



5. Verify that the Program ID and the Program Part No. are for the system you selected in step 4, then click on the **Check Mark**.

Current Program ID CJC550 Recommended Update gram DD CJC570 gram Part No. 37805-RCJ-C57 atrol Module Part No. 37820-RCJ-C59 atrol Module CJC50 gram CJC50
Recommended Update gram ID CJC570 gram Part No. 37805-RCJ-C57 strol Module Part No. 37820-RCJ-C59
gram ID CJC570 gram Part No. 37805-RCJ-C57 atrol Module Part No. 37820-RCJ-C59
gram Part No. 37805-RCJ-C57 atrol Module Part No. 37820-RCJ-C59
atrol Module Part No. 37820-RCJ-C59
and the second sec
r 2005
del Accord
JNA1
ns AT
late Description N

6. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. The CM Update software loads the program file onto the GNA600. This takes only a few seconds.

	Confirm the Co	ontrol Module Update		
Current Program		Update Selected		
Program ID:	CJC550	Program ID:	CJC570	
Control Module Part No.:	37820-RCJ-A55	Control Module Part No.:	37820-RCJ-C59	
Program Part No.:	37805-RCJ-C55	Program Part No.:	37805-RCJ-C57	
	Is this the Ul	odate that you want?		
				R
	Yes	No		

	Programming	
Up	date is being programmed on the <i>Interface Moi</i>	Anle:
	Downloading 37805-RCJ-C570	
	17%	
	Downloading Update Files	
		- 1. And a second second second second
start 🔰 🖉 🕫 🖳 🖬 👯 🖽 🗑 🔾	Correct Modules Lipdate	0 1%* 141 80 80 90

7. Click on the **Check Mark** to begin the control unit/module update. NOTE: On non-CAN vehicles, the update can take 15 to 30 minutes.



CAUTION – To avoid ECM/PCM damage, do not interrupt the update.

	Programming	
	Update is being programmed on the Inter	face Module.
	Programming the Interface Module i	in complete
Press the Enter butt	on on the screen to continue the control i	module reprogramming procedures.
	100%	
00000000	🔹 👔 Control Monaules Landaria	8 5'8% 40 8 B
and the second second		
len Update	Updating Honda Control Mo	dada.
	Updating Ronda Control Mo	ame

TO AVOID PERMANENT CONTROL MODULE DAMAGE, DO NOT TURN OFF THE VEHICLE IGNITION SWITCH

3300

The Progress Bar is only a gauge and does not accurately portray the reprogramming status

🖅 start 👘 🕫 🖬 🖨 🖉 🗑 🖓 Connel Nosles I

1

8. Once the update is completed, turn the ignition switch to LOCK (0), and then back to ON (II) within 60 seconds.



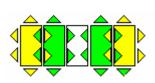
9. Once the software verifies that the control unit/module has been successfully updated, click on **Yes** to update another vehicle, or click on **No** to exit the update program.

Updating Honda Cor	ntrol Modules	
The Control Module up	ulate is complete.	
Do you want to update another Control Mod	ule with the currently selected update?	
Yes	No	9

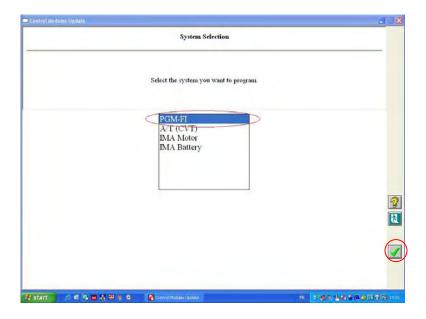
6.3 Control Unit/Module Update in Storage Mode

NOTE:

- Storage Mode works similar to Pass-thru Mode. You will see the same CM Update software screens during the vehicle system selection. To complete a Storage Mode update at the vehicle, you need the Trigger Switch Adapter Block (TDS35541434) and the Trigger Switch (TDS35541359).
- These instructions are a summary of the updating process.
- For a description of the GNA600 Kit parts used in this procedure, refer to section 3.3.
- 1. Connect the USB PC Interface Cable to the *I*N Workstation and to the GNA600. From the **Updating Honda Control Modules** main screen, select **Storage Mode** and follow the on-screen instructions.
- 2. Connect the DLC Cable to the GNA600 and to the vehicle's DLC. (You don't need to turn the ignition switch to ON (II) before connecting the GNA600. This applies only to the HIM.)
- 3. Turn the ignition switch to ON (II), and wait until the green #2 LED on the GNA600 stays on. Turn the ignition switch off, and disconnect the DLC Cable from the vehicle.
- 4. Connect the USB PC Interface Cable to the *i*N Workstation and to the GNA600. Connect the Power Supply Unit and Power Supply Cord to the GNA600. The GNA600 will start a self-check. After about 30 seconds, the GNA600 LEDs flash green and yellow.



5. Select the vehicle system that you are updating, then click on the **Check Mark** on the right side of the screen.



6. Verify that the Program ID and the Program Part No. are for the system you selected in step 5, then click on the **Check Mark**.

	Update Information	
	Current Program ID	
	CJC550	
	Recommended Update	
Program ID	CJC570	
Program Part No.	37805-RCJ-C57	
Control Module Part No.	37820-RCJ-C59	
Year	2005	
Model	Accord	
Engine	JNA1	
Trans	AT	
Update Description	N	

7. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. The CM Update software loads the program file onto the GNA600. This takes only a few seconds.

	Confirm the Co	ontrol Module Update		
<u>Current Program</u> Program ID: Control Module Part No.: Program Part No.:	CJC550 37820-RCJ-A55 37805-RCJ-C55	<u>Update Selected</u> Program ID: Control Module Part No.: Program Part No.:	CJC570 37820-RCJ-C59 37805-RCJ-C57	
	Is this the Up	edate that you want?		
				1
6	Yes	No		-
		10		
start / C C S B A B I	• Domeniation	a	-	1718
	Concentration (con	-	-	1718 of
estart 👘 🥵 🖷 🎘 🖷	C Concretenter	<i>1</i> .	n - 197 an 2001	8 8 8
		gramming		
	Pro	gramning	 Instruction 	
	Pro Update is being program	gramming amed on the <i>Interface Module</i>	* *******	
	Pro Update is being program	gramning		
	Pro Update is being program	gramming amed on the <i>Interface Module</i>	* ********	
	Pro Update is being program	gramming amed on the <i>Interface Module</i>		
	Pro Update is being program	gramming amed on the <i>Interface Module</i>		
	Pro Update is being program	gramming amed on the <i>Interface Module</i>		
	Pro Update is being program	gramming amed on the <i>Interface Module</i>		
	Pro Update is being program	gramming anced on the Interface Module: g 37805-RCI-C570		
	Pro Update is being program Downloadin	gramming aned on the Interface Mohale g 37805-RCI-C570		
	Pro Update is being program Downloadin	gramming anced on the Interface Module: g 37805-RCI-C570		
	Pro Update is being program Downloadin	gramming aned on the Interface Mohale g 37805-RCI-C570		

- 8. Disconnect the GNA600 from the USB PC Interface Cable, then connect the Trigger Switch Adapter Block and the Trigger Switch to the GNA600 as shown below. NOTE: The DLC cable should still be connected to the GNA6000.

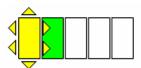


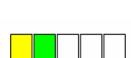
- 9. Reconnect the DLC Cable to the vehicle's DLC.
- 10. Turn the ignition switch to ON (II), and wait until the green #2 LED on the GNA600 stays on. Press and release the trigger switch button.
- 11. The yellow #1 LED blinks, and the green #2 LED stays on. This indicates that the control unit/module is being updated. NOTE: On non-CAN vehicles, the update can take 15 to 30 minutes.

CAUTION – To avoid ECM/PCM damage, do not interrupt the update.

- 12. When the #1 LED stays on and the #2 LED goes out, turn the ignition switch off.
- 13. Turn the ignition switch to ON (II). When the #1 and #2 LEDs stay on, the control unit/module update is completed.
- 14. Turn the ignition switch off, and disconnect the DLC Cable from the vehicle. The software update is stored in the GNA600. To do the same update on another vehicle, repeat steps 9 thru 14.







7 – TROUBLESHOOTING

If you have either of the two problems listed below, do the checks for each problem. If these checks do not solve the problem, call **(800) 210-8699**.

7.1 Cannot Communicate With the Host PC

- 1. Check that the DLC Cable is properly connected to the GNA600 and to the vehicle's DLC.
- 2. If you are using the GNA600 in Storage Mode, make sure the Power Supply Unit and the Power Supply Cord are properly connected.
- 3. Make sure the USB PC Interface Cable is properly connected to the GNA600 and to the computer. To verify this connection, look for the HDS icon in the top right corner of the PC screen.
- 4. Verify that the latest version of HDS or CM Update software is installed on the computer.
- 5. Check that all setup details are correct.
- 6. Reboot the computer and restart the software.
- 7. Completely disconnect the GNA600 from the computer, the vehicle and power supply, and reconnect according to section 5.2.

7.2 Cannot Communicate With the Vehicle

- 1. Check that the DLC Cable is properly connected to the GNA600 and to the vehicle's DLC.
- 2. Make sure the USB PC Interface Cable is properly connected to the GNA600 and to the *I*N workstation computer. To verify this connection, look for the HDS icon in the top right corner of the PC screen.
- 3. Check that the ignition switch is turned to ON (II).
- 4. Verify that the latest version of HDS or CM Update software is installed on the computer.
- 5. Check that all setup details are correct.
- 6. Check for broken or missing terminal pins on the DLC Cable ends.
- 7. Reboot the computer and restart the software .
- 8. Completely disconnect the GNA600 from the computer, the vehicle and power supply, and reconnect according to section 5.2.

7.3 GNA600 LED Patterns

1 <mark>2 3 4</mark> 5	YELLOW #1	GREEN #2	RED #3	PATTERN DESCRIPTION
	OFF	BLINKS	OFF	Self-test during the power up.
	BLINKS	BLINKS	OFF	Searching for a valid connection to the PC or the control unit/module.
	BLINKS	BLINKS	BLINKS	Communicating with the PC.
	BLII ALTERI	NKS NATELY	OFF	Gathering information from the control unit/module.
	OFF	ON	OFF	Ready for updating.
	BLINKS	ON	OFF	Updating is in progress.
	ON	OFF	OFF	The control unit/module has been updated. Turn off the ignition switch.
	BLINKS	OFF	OFF	The ignition switch is on, and the Program ID and DTCs are being checked.
	ON	ON	OFF	The control unit/module update is successful, or the control unit/module was already updated.
	OFF	ON	BLINKS	An incorrect control unit/module calibration was selected, or the GNA600 needs to be reprogrammed.
	OFF	ON	ON	GNA600 device error. Disconnect the power.

8 - CARE AND MAINTENANCE

8.1 Cleaning the GNA600 Unit



WARNING – Switch off the power to the GNA600 Unit, and disconnect all electrical cables before cleaning it.

- Clean the GNA600 Unit with a non-abrasive, mild cleaning agent only. Apply the cleaner to a soft, lint free cloth, then lightly rub the unit with the cloth. Never apply the cleaner directly to the unit.
- Do not soak the cleaning cloth, and do not allow cleaning fluid to enter the electrical connectors.
- Do not use abrasive cleaners or any type of polish.
- If dust or other particles get on the GNA600 Unit, lightly brush the unit off with a soft, lint free cloth.

8.2 Cable Care

- Always return the cables to their appropriate storage area. The cables can be damaged if they are driven over or exposed to excessive temperatures.
- To avoid damaging the cable ends and the adapter blocks, always connect and disconnect these parts slowly and carefully.

8.3 PCMCIA Memory Card Compartment Lid

- Once the PCMCIA card* has been installed and configured, keep the compartment lid secured to the GNA600 Unit.
- To avoid damaging the compartment lid seal, install the PCMCIA card slowly and carefully.

*This is an optional part that can be purchased separately.

9 - SPECIFICATIONS

9.1 Hardware

GNA600 Unit

Rating: Vehicle Protocols:	8V – 18V DC (12V nominal) at 4 Amps (maximum) SCP UBP CAN (High & Medium Speed) ISO-9141 WEN SCS DIAG-H
Host Protocols:	Ethernet 10/100 Base T RS-232 USB
Vehicle Connection: Enclosure:	5
Dimensions:	1m freefall test impact resistant Height – 37 mm (1.46 in) Width – 80 mm (3.15 in) Length – 155 mm (6.1 in)
	268 g (9.4 oz) without cables Operating Temp: 0°C to 40°C (32°F to 104°F) at 15% to 85% RH non-condensing Storage: -20°C to 70°C (-4°F to 158°F) at 15% to 85% RH non-condensing
	The GNA600 fulfills the requirements of the CE marking scheme and UL201 – Garage Equipment
256 MB PCMCIA Memory C	ard*
Manufacturer's Part Number:	Industrial Grade ATA Flash Card

Environmental:	Operating Temp: 0°C to 70°C (32°F to 158°F) High shock and vibration resistance, MIL-STD 810F.
Standards and Regulatory	-

Compliances: Supports "fixed-disk" mode and DMA enabled

*This is an optional part that can be purchased separately.

10 - SUPPORT INFORMATION

10.1 Warranty

The GNA600 Kit is covered by a 1-year limited warranty.

The limited warranty applies to normal use only. It does not cover any damage or defects arising from:

- Failure to use the GNA600 according to the written instructions of Teradyne or American Honda, or use with vehicles, motors, or systems other than those for which it was designed. It is particularly important to follow all written instructions in any software used with the GNA600 relating to required cable connections. Failure to follow these instructions can result in permanent damage to the GNA600. Such damage is not covered by this warranty.
- Neglect or misuse of the GNA600 Kit, including any damage arising from accident, abuse, or disaster.
- Any alteration, modification, or maintenance of the GNA600 Kit by a party other than Teradyne or without Teradyne's prior written consent.
- The use of parts or accessories not approved by Teradyne.
- Any lost parts, or parts that fail from normal wear and tear.

Neither Teradyne nor American Honda is responsible for any resultant damage caused to third party equipment.

10.2 Customer Service Assistance

- 1. Make sure you do the troubleshooting steps in section 7 before you call.
- 2. If you need assistance with the GNA600 hardware or software, call (800) 210-8699.
- 3. Have this information handy before you make your call:
 - GNA600 serial number
 - Vehicle year and model
 - Vehicle system
 - Description of problem

Disclaimer

Information in this document is subject to change without notice. American Honda Motor Co. does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages. Commercial product used does not constitute an endorsement or recommendation. No part of this document may be reproduced or transmitted in any form by any means without the express written permission of America Honda Motor Co. All brand names and product names used in this document are trademarks or registered trademarks of their respective holders.