

## ENGINE TECH TIPS

### Subject:

### ECU File Downloading, Reprogramming and *INF* File Uploading via HinoNet

#### 1. RELEVANT MODELS:

All 2005 thru 2009 Conventional Models

#### 2. PURPOSE:

To fully explain the various programming scenarios of the Engine Control Unit (ECU) and the required file upload procedures for the following Hino Warranty and non Warranty repairs:

**A)** Programming Update of ECU (re-flash), (Page 2 thru 18).

**B)** Injector Replacements, (Page 19 thru 32).

The following two (2) sections labeled A & B outline the requirements for each of the above as well as provide a step-by-step tutorial of programming via the Hino Reprogram Manager software.

#### **Section A:** Programming Update of ECU (re-flash)

Should an ECU need to be re-flashed for any reason, it will be necessary to download the new ECU program file (*RPR* file) from Hino; then upon successful programming of the ECU, an information file (*INF* file) is generated and must be uploaded to Hino for purposes of emission compliance regulations. This section will outline the process of downloading the new RPR file from HinoNet and programming the ECU. The section will also outline the process in which the corresponding *INF* file is located and uploaded to HinoNet to complete the process.

#### **Section B:** For All Injector Replacements

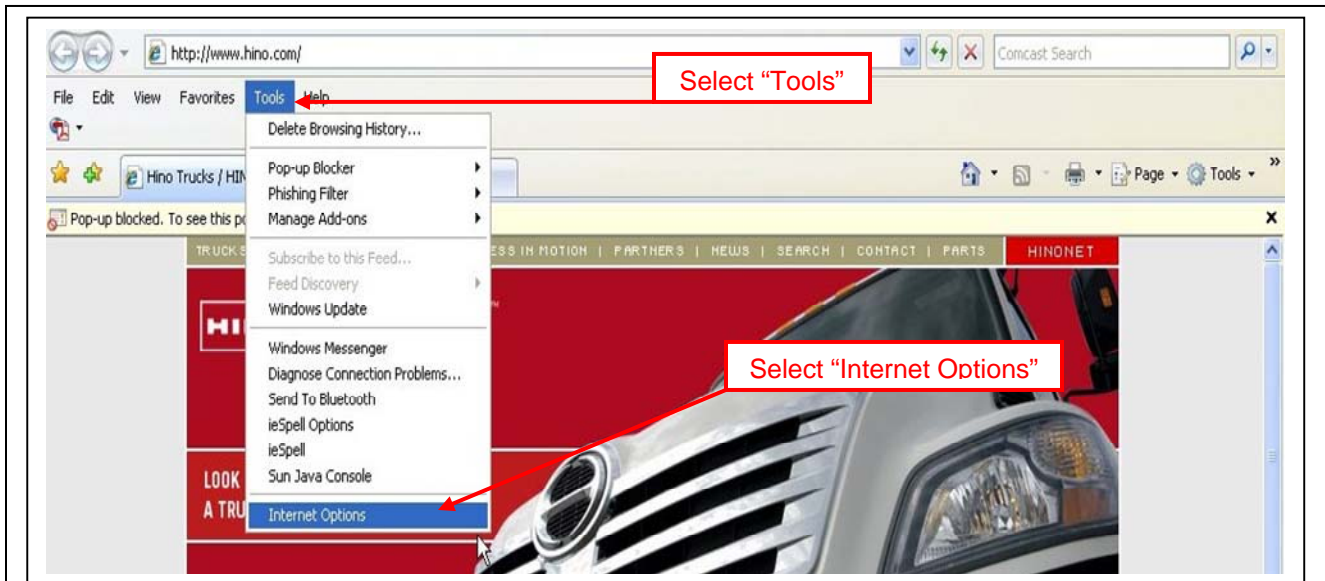
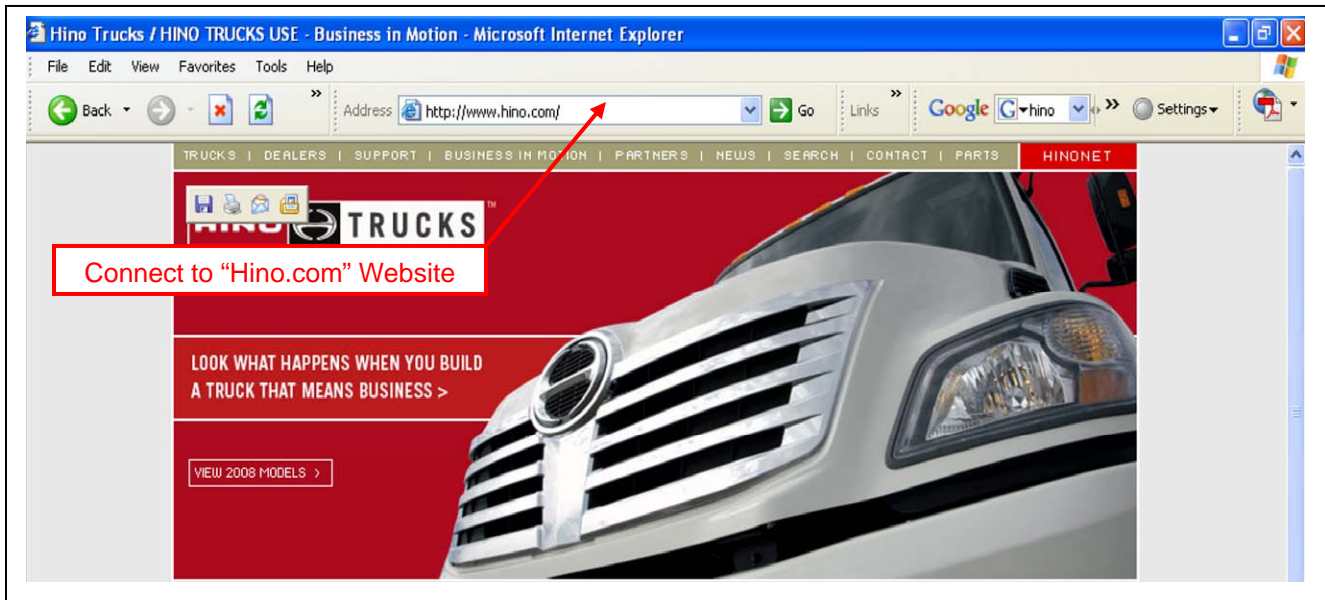
For purposes of emission compliance regulations, upon all injector replacements it is a requirement to report new injector calibration information to the manufacturer. This process will outline the upload of a new information file (*INF* file) to Hino following the completion of injector calibration code programming. This section will also outline the process of generating, locating and uploading the *INF* file to HinoNet to complete the process.

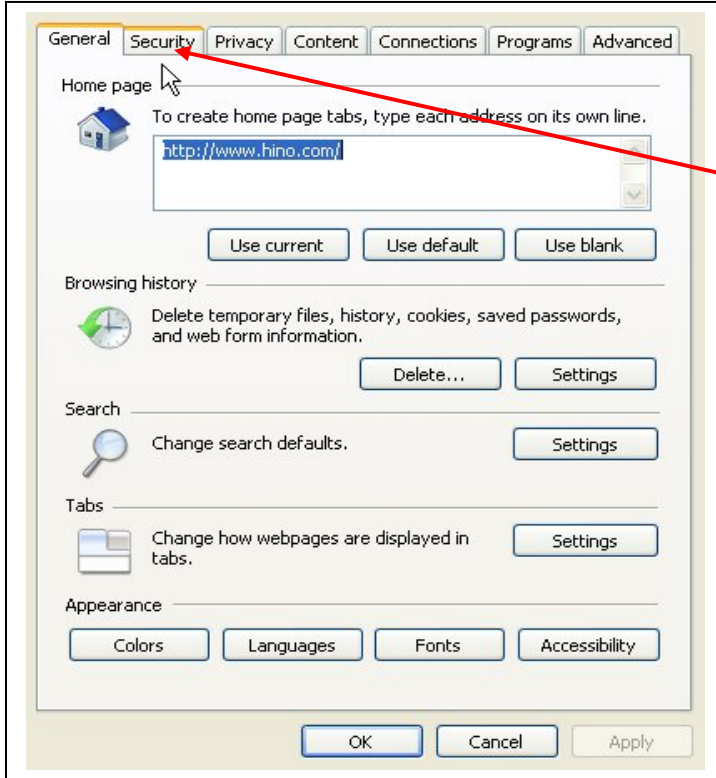
**SECTION A:**

**ECU PROGRAM UPDATE (re-flash):**

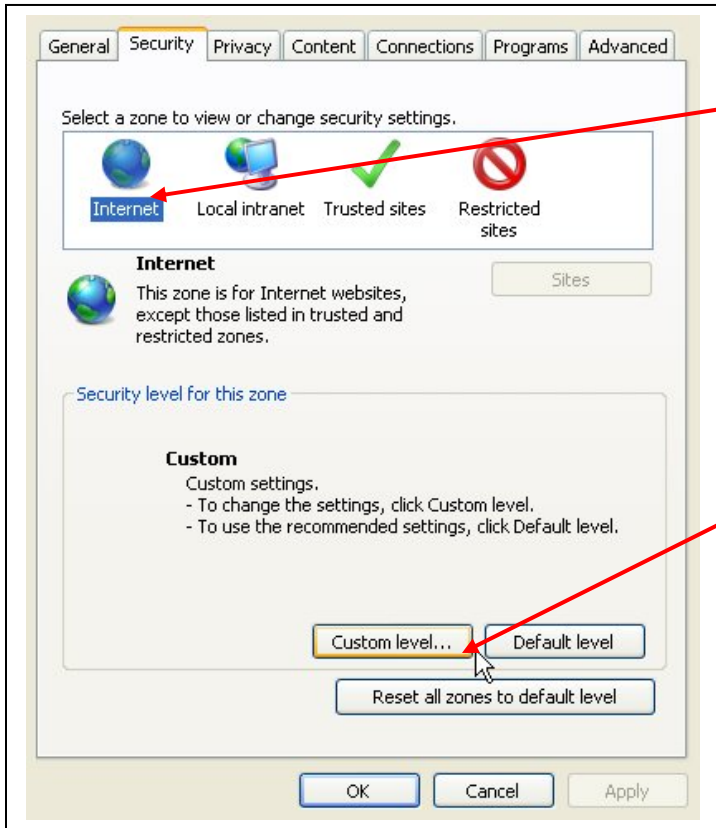
**Verify Internet Security Settings:**

**NOTE: Once these Security Settings are set these steps will not have to be performed for every download.**



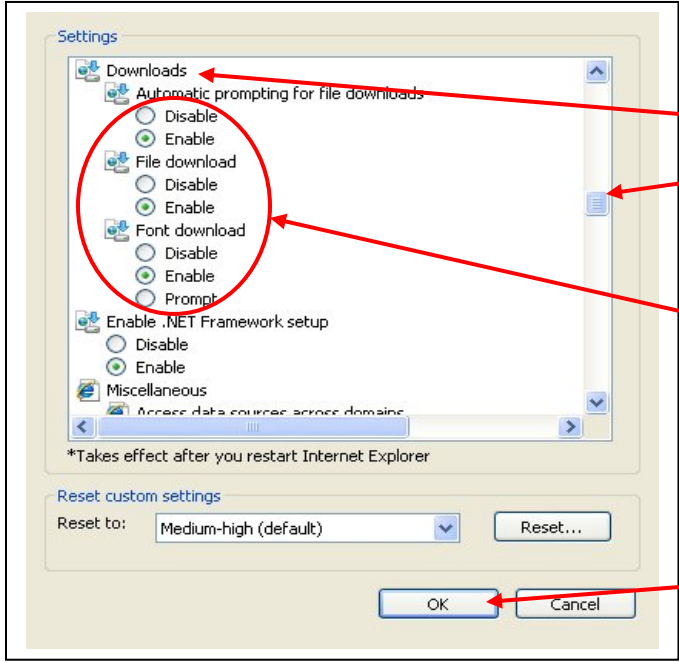


Select "Security"



Verify "Internet" is highlighted

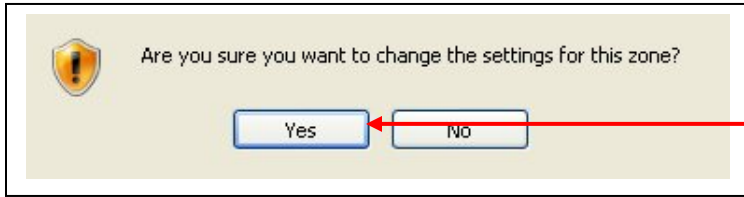
Select "Custom Level"



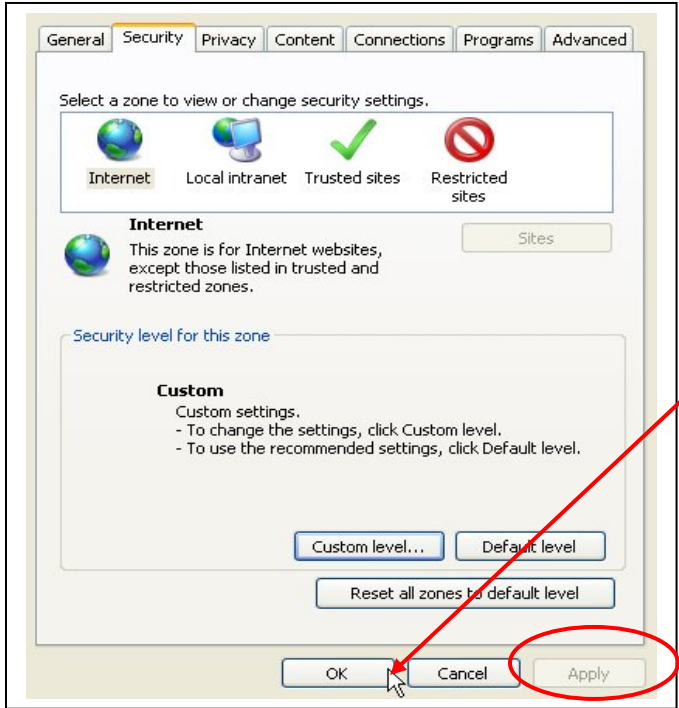
Scroll down to "Downloads"

Verify that all download options are set to "Enable"

Select "OK"

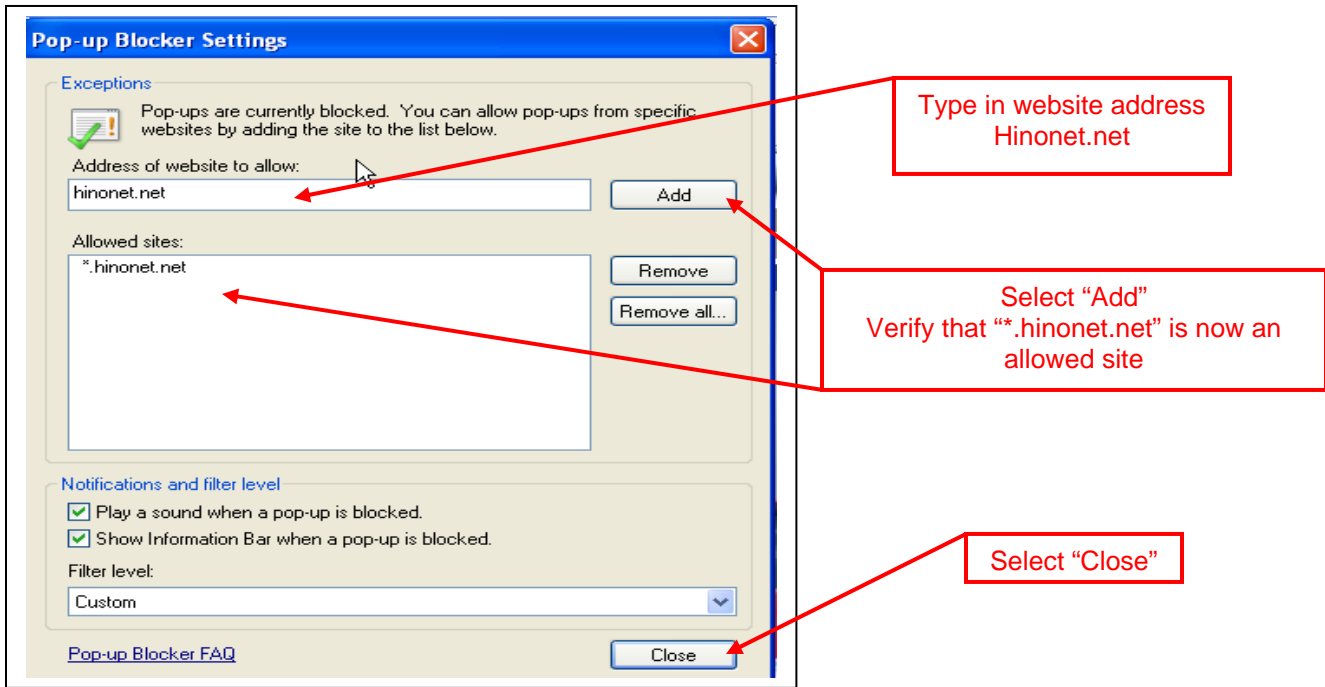
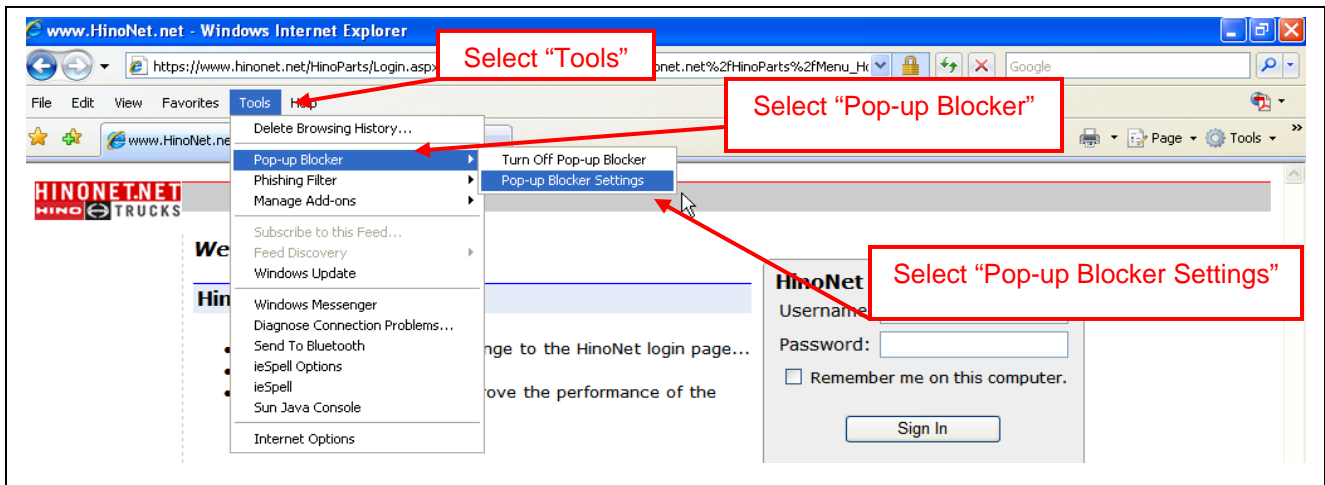
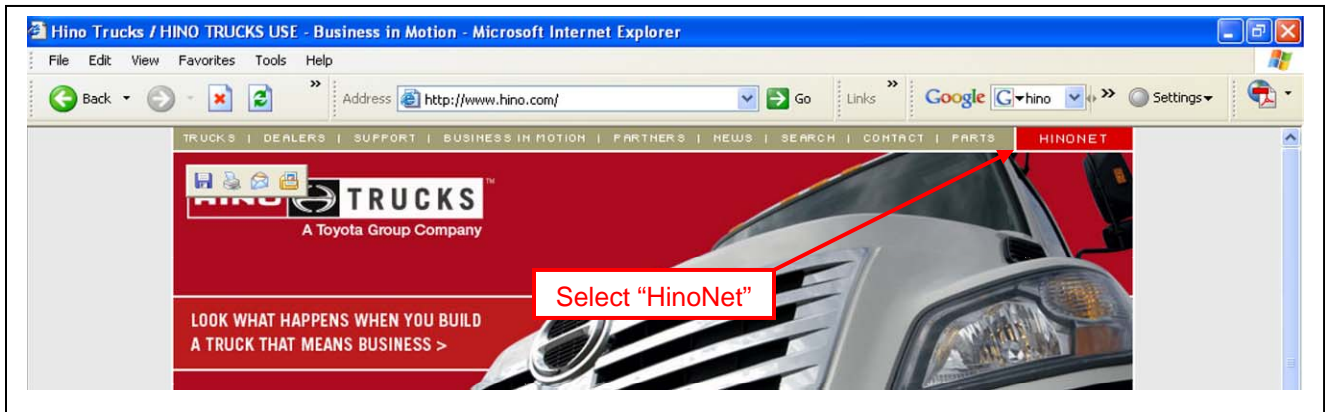


Select "Yes"

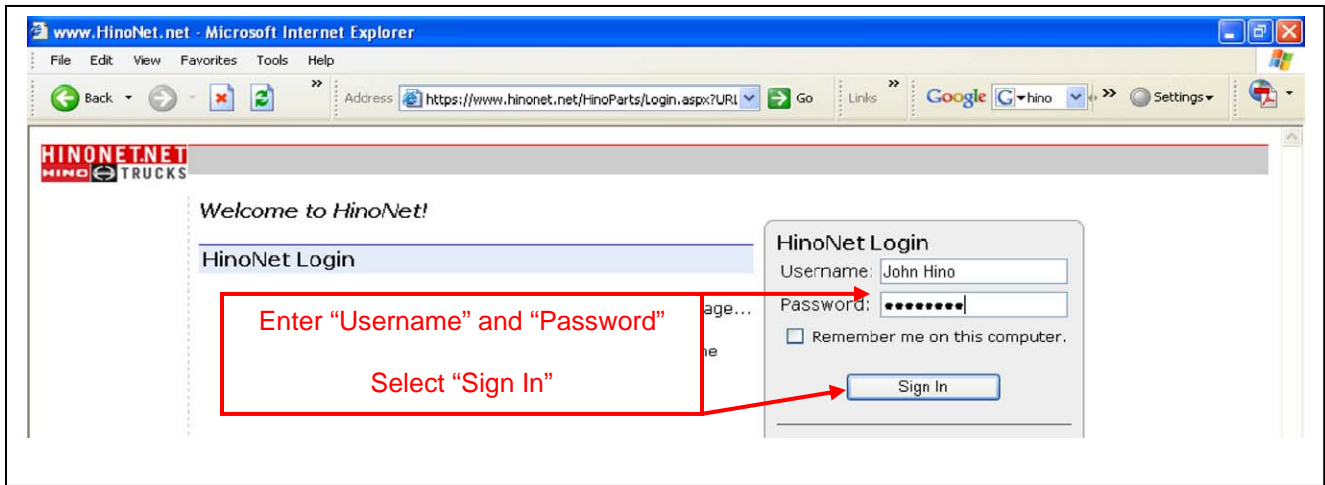


If "Apply" button becomes available select "Apply" then Select "OK" to finish

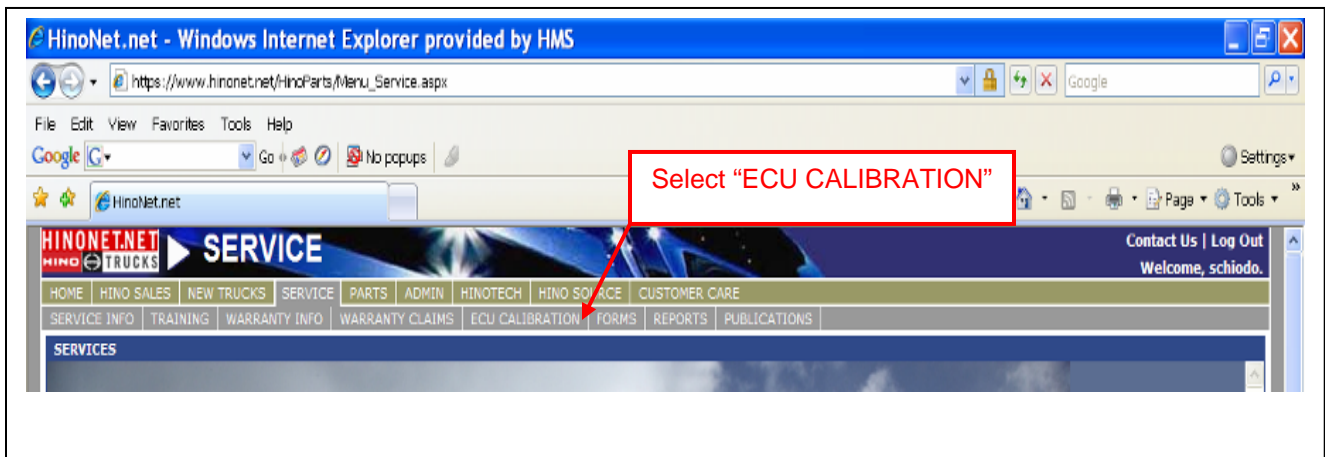
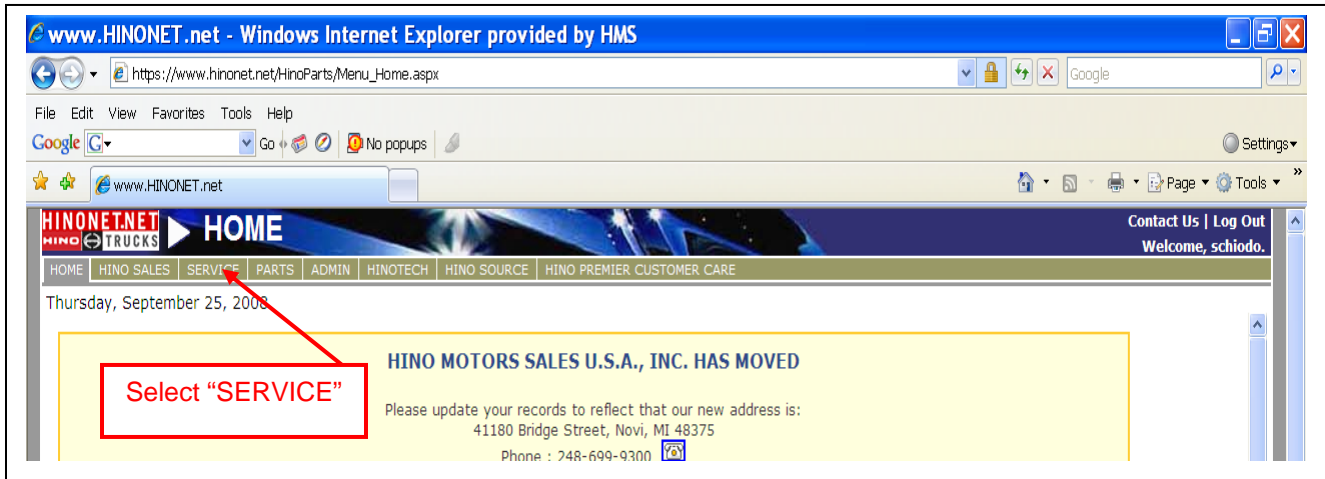
**Verify that Pop-ups are allowed from this website:**

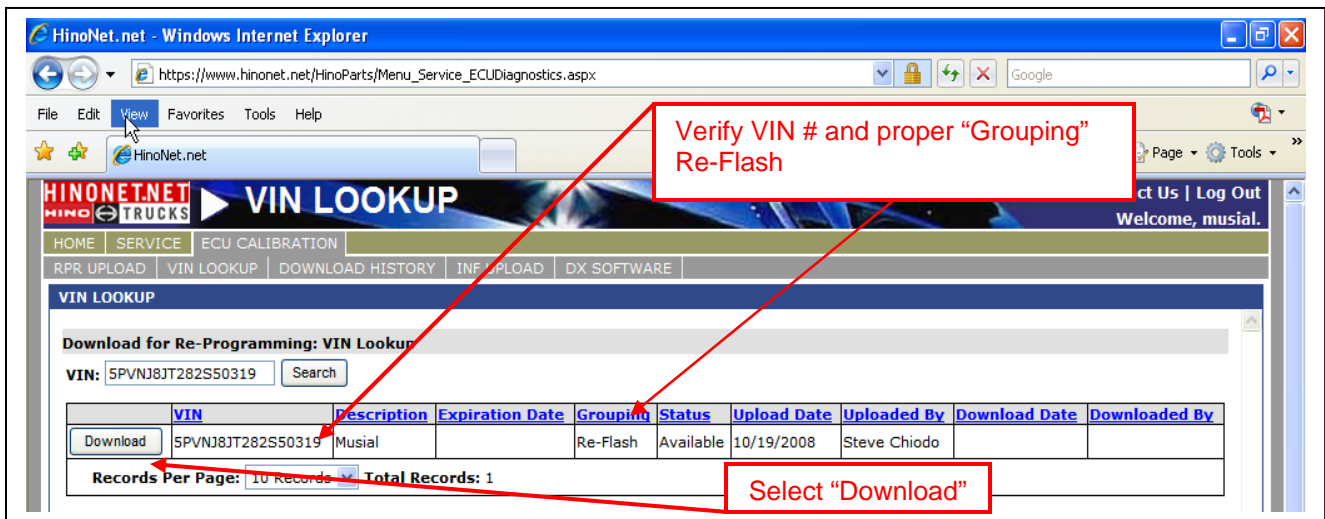
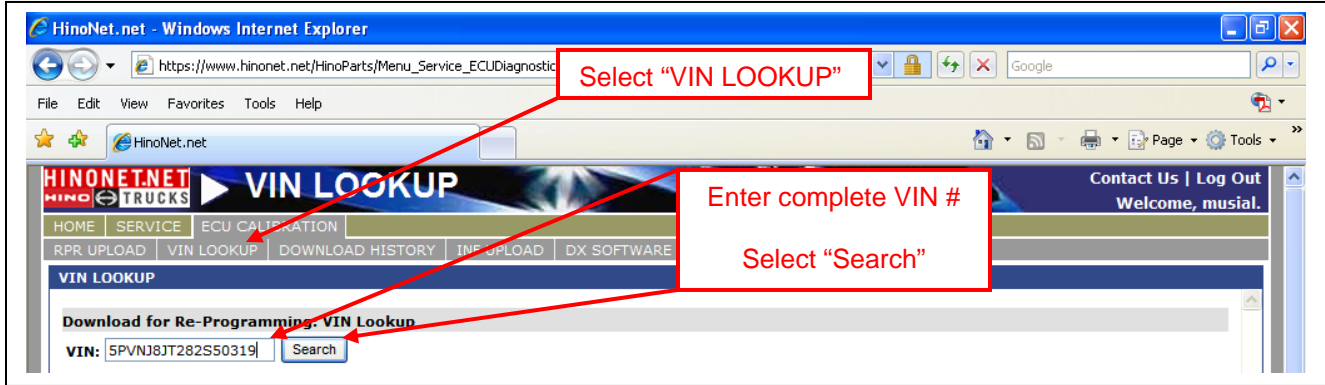


### Signing onto HinoNet:

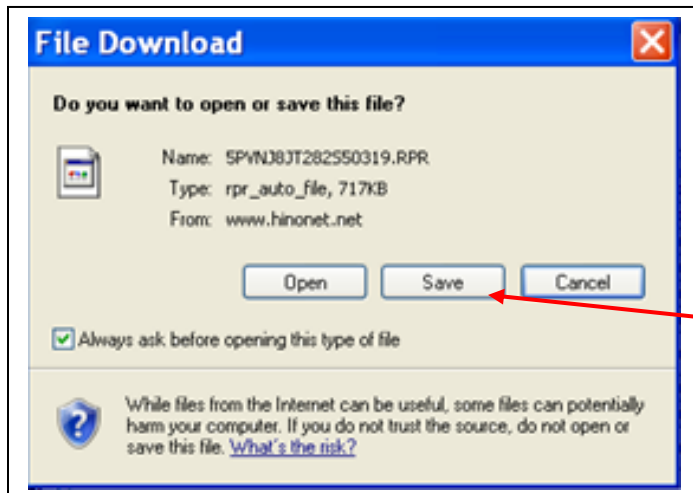


### File download procedure:



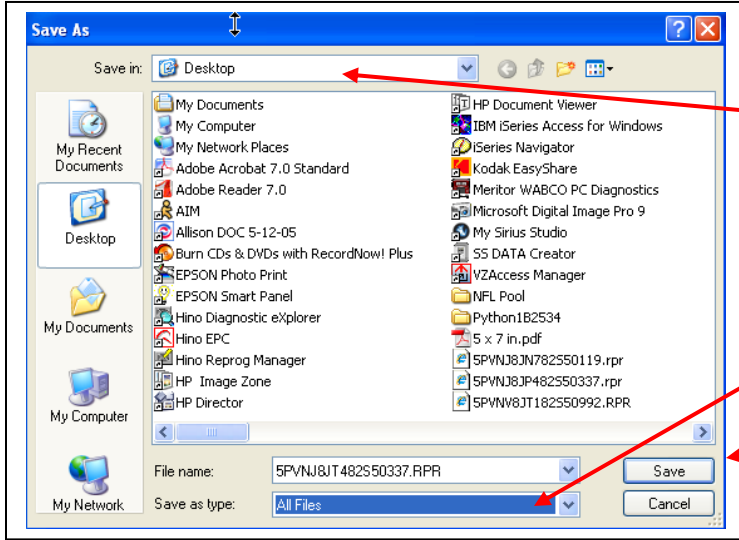


**NOTE: If the file has been previously downloaded by someone else the box will be grey and there will not be any "Download" button. To resolve this issue contact your TSM to get the file reset for download.**



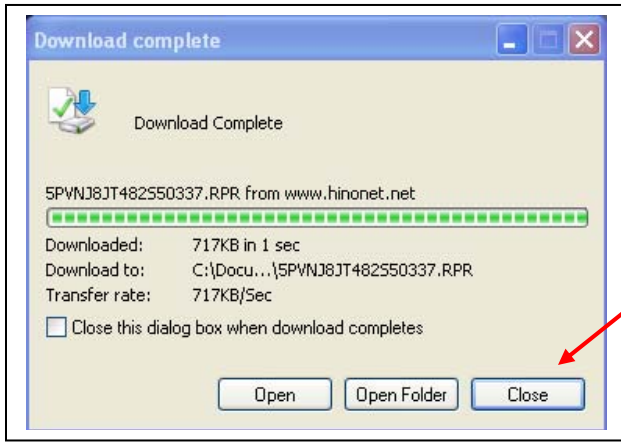
**If OPEN option is available. DO NOT OPEN FILE**

**Select "Save"**

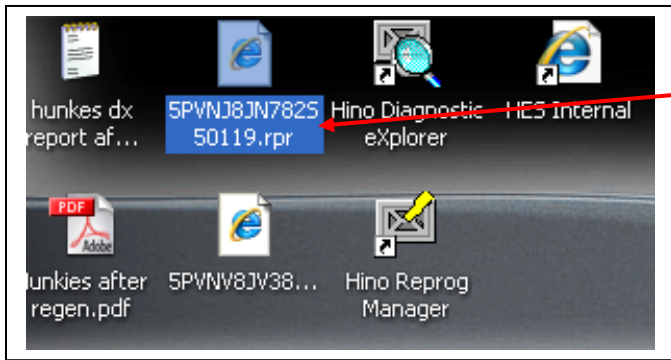


Verify that RPR file will be saved to desktop.  
**NOTE: Save as "All Files" type.**

Select "Save"



Download is complete select "Close"  
Exit from HinoNet



File is now saved to the desktop

**CAUTION: Disable Screen Saver and Energy Saving features on computer. Failure to disable these features could severely damage the ECU during programming.**

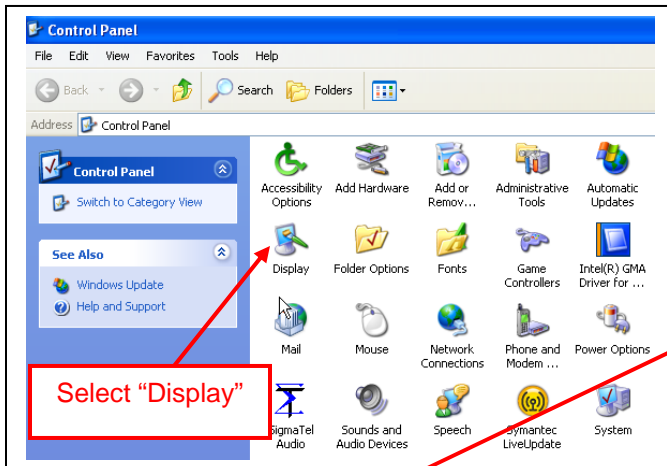
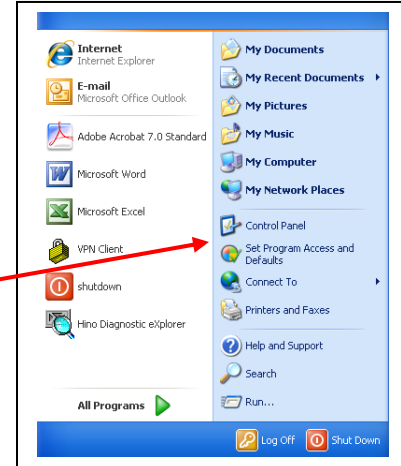
1. Screen saver
2. Energy saving features
  - a) Monitor
  - b) Hard disks
  - c) System standby

**Disabling Screen Saver:**

Select "start" from bottom task bar

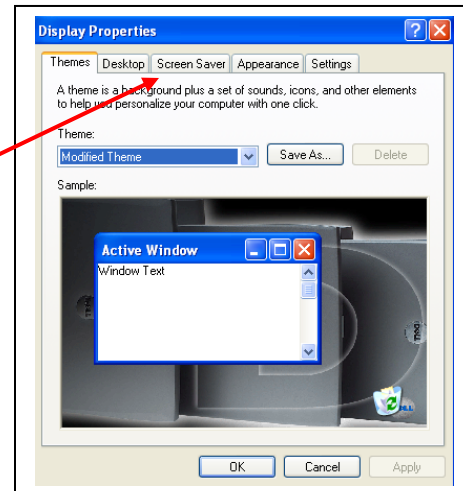


Next select "Control Panel"



Select "Display"

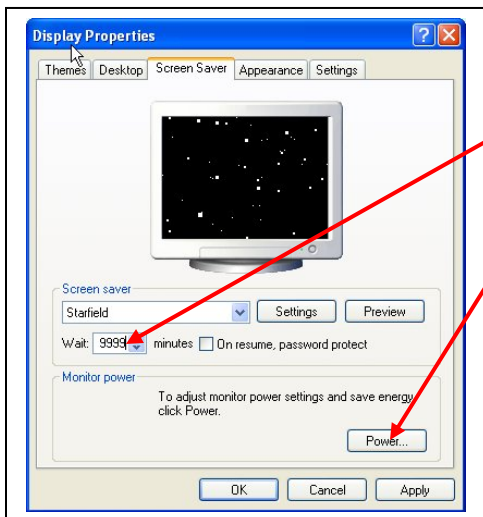
Select "Screen Saver" tab



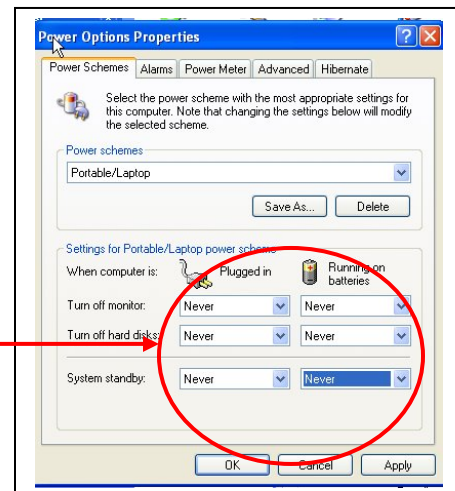
To disable screen saver set minutes to 9999

Select "Power" button

Select "Never" for monitor, hard disk, and system standby for both plugged in and running on batteries.



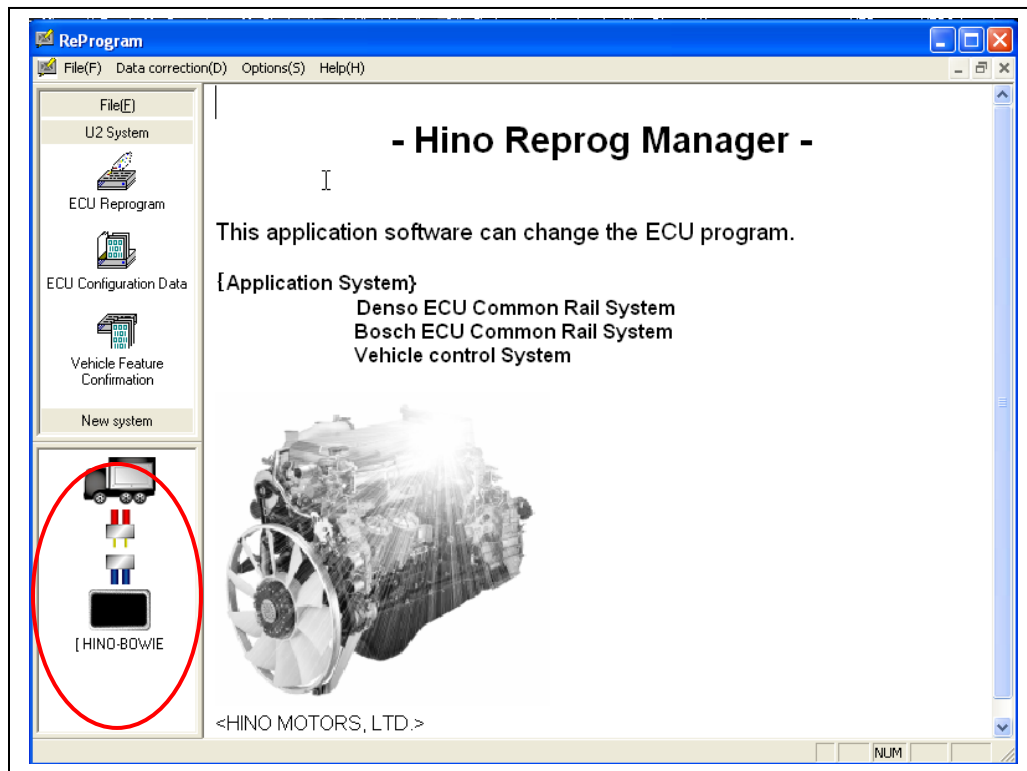
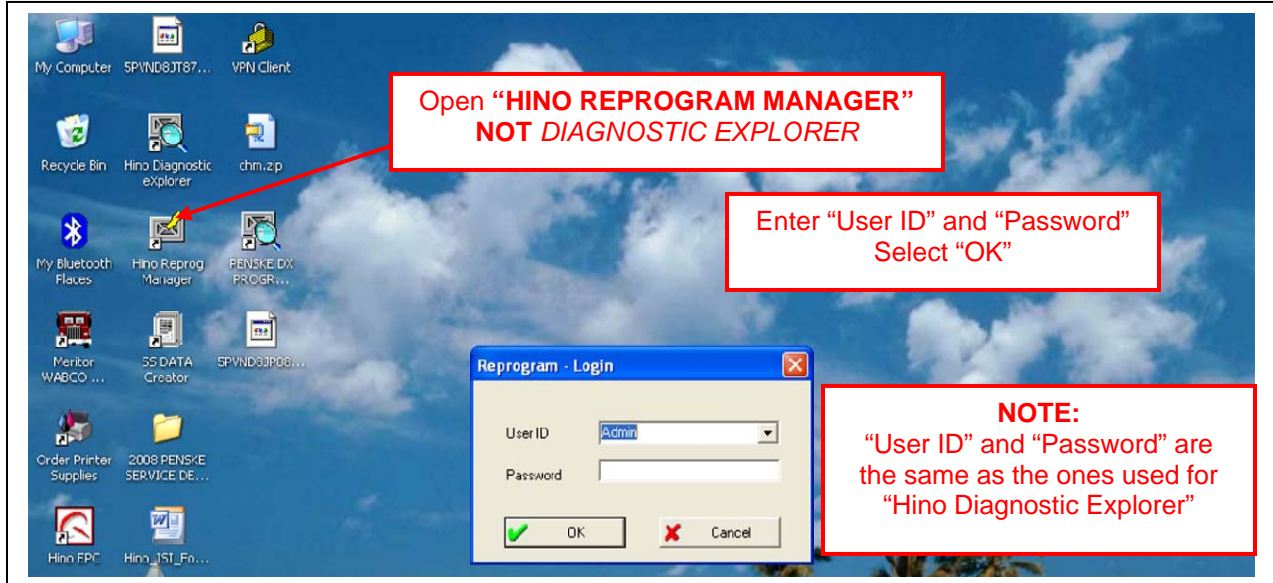
Select "OK", "Apply" and "OK"



**NOTE: The illustrations above depict what you may see on your computer screen with regard to the features that must be disabled. The location or layout of these features may vary based upon your operating system. If unsure check with your IT person.**

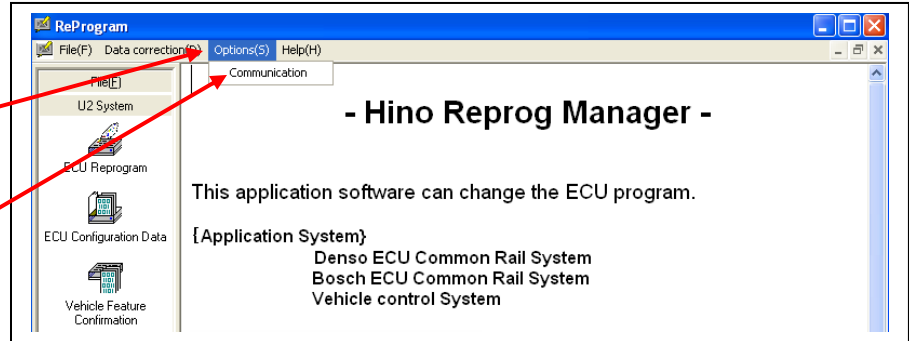
### Reprogramming ECU:

Connect one end of the interface cable to diagnostic link connector under the dash panel and the other end to your computer. **Turn the ignition key to the run position.**

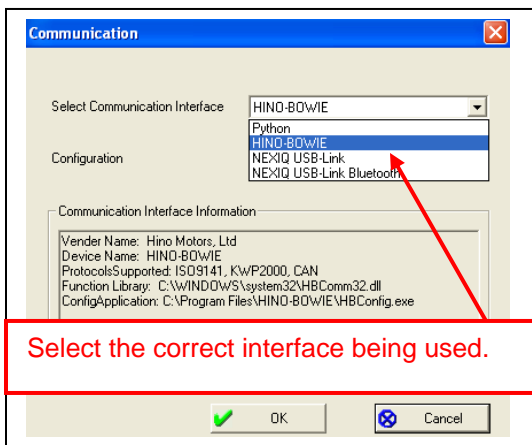


**NOTE: Confirm that the correct interface is identified in the lower left portion of the "Hino Reprogram Manager" screen. If not follow instructions on next page.**

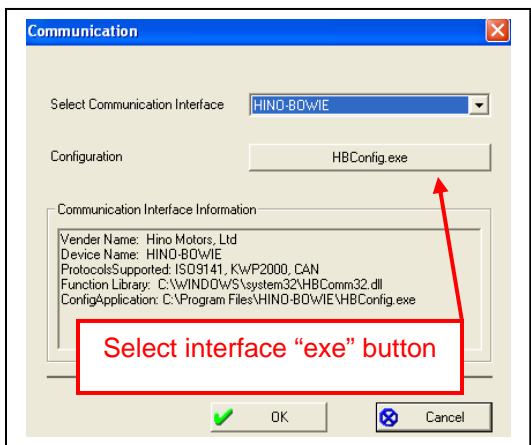
**Selecting Correct Interface:**



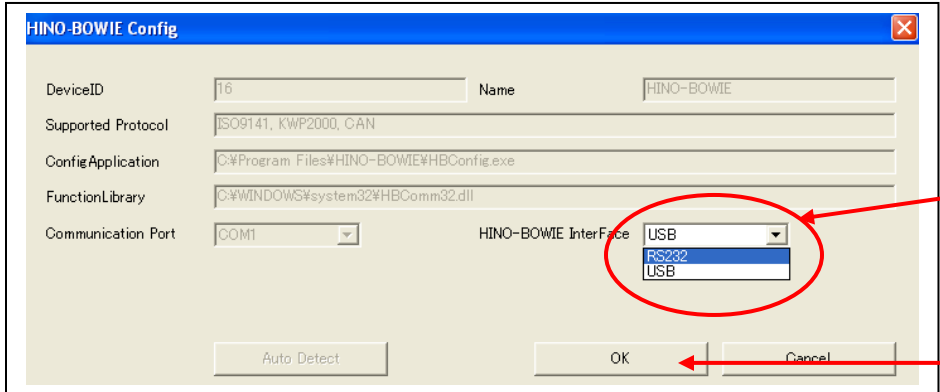
First select "Options" than "Communications"



Select the correct interface being used.



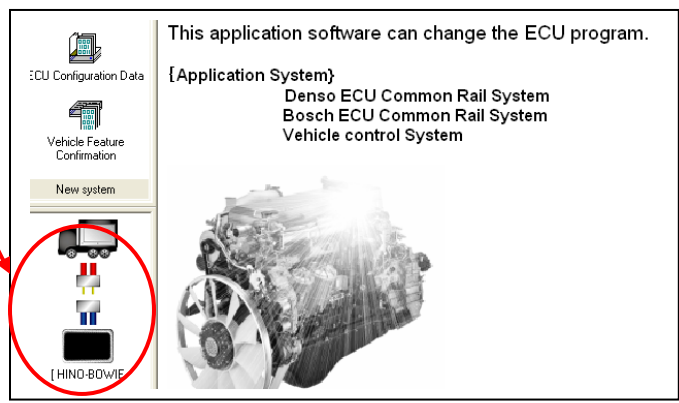
Select interface "exe" button



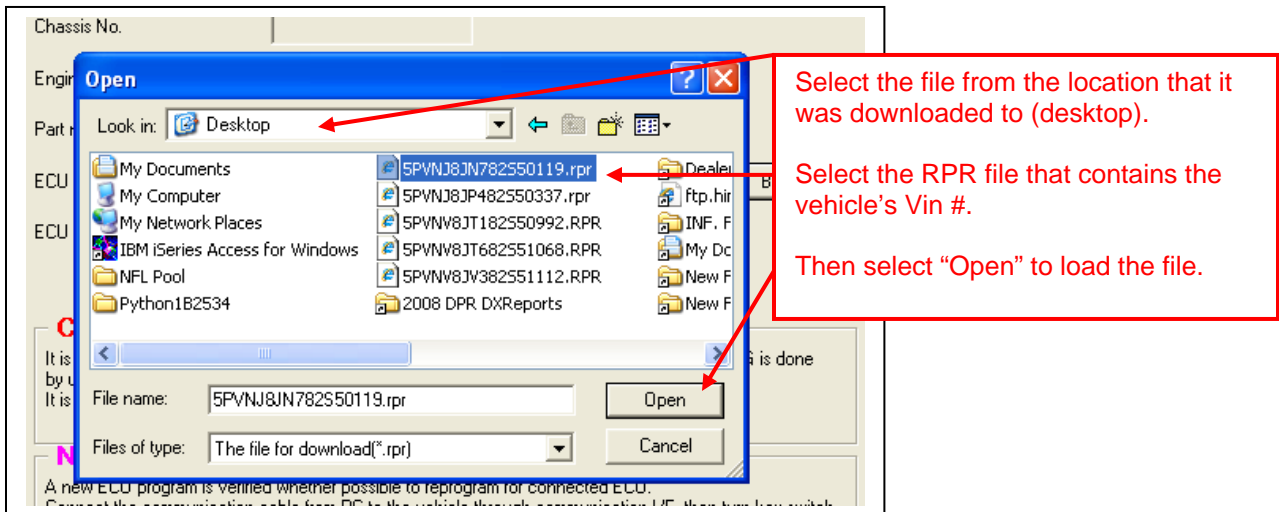
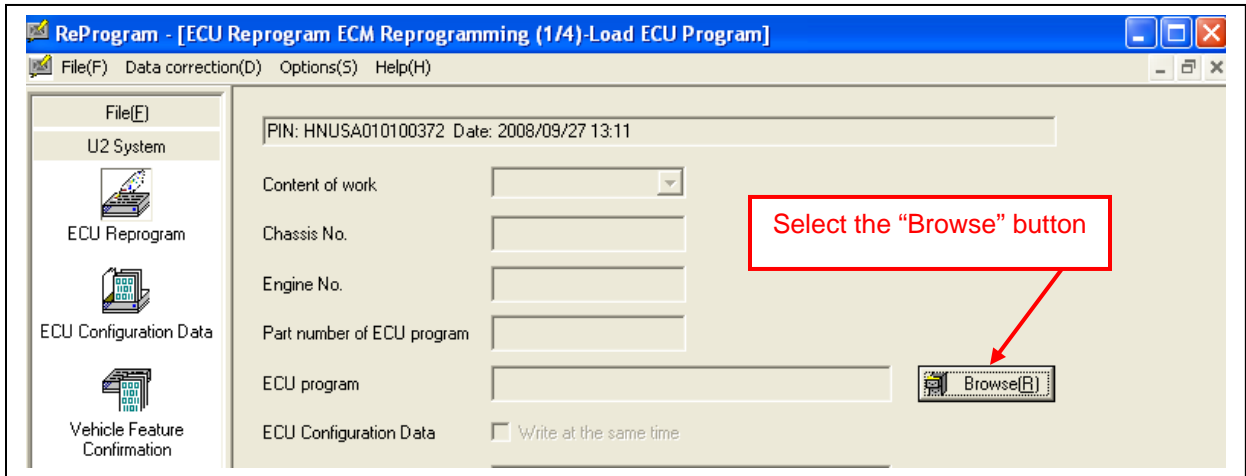
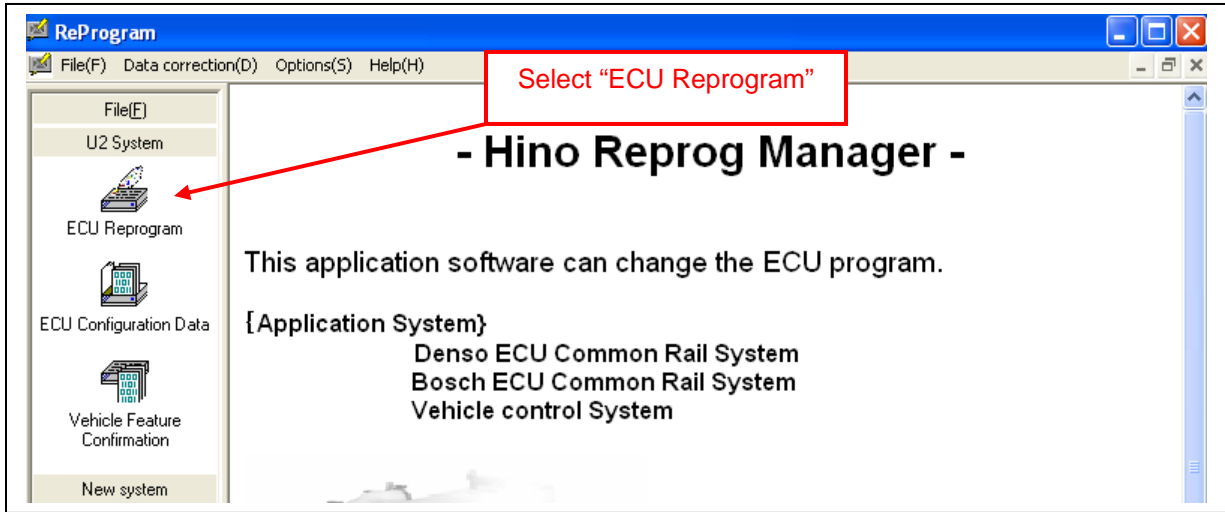
Select the correct connection style for your interface from the pull down menu.

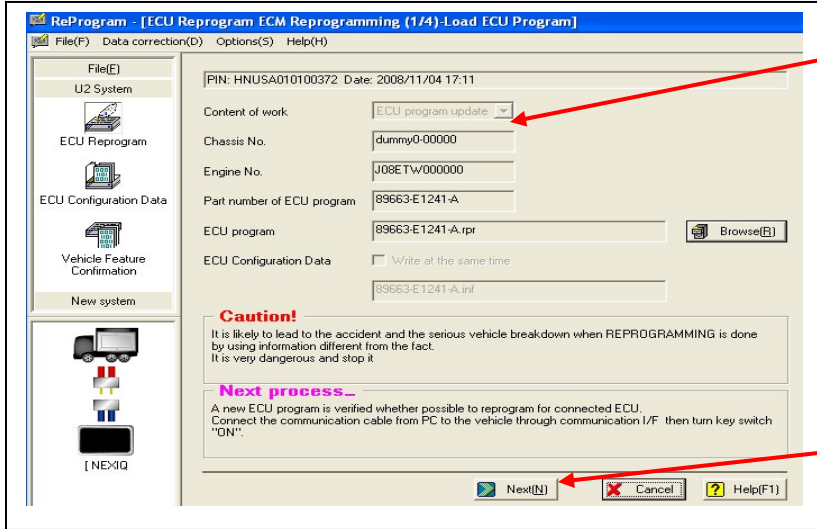
Select "OK"

Confirm that the correct interface is now identified in the lower left portion of the "Hino Reprogram Manager" screen.



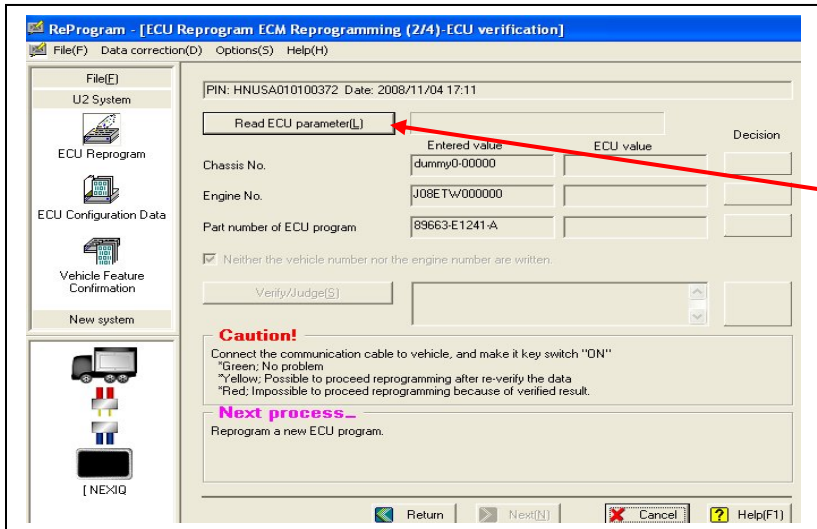
**Reprogramming of ECU:**



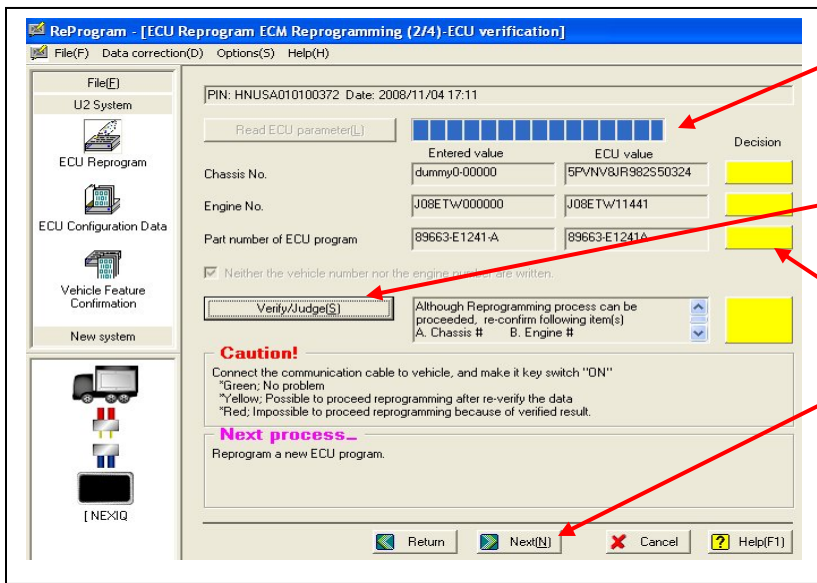


Confirm Content of Work  
"ECU program update"

Select "Next"



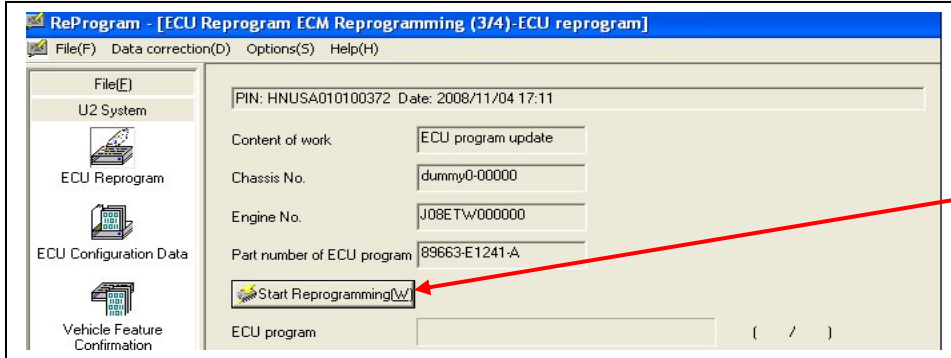
Select "Read ECU parameter"



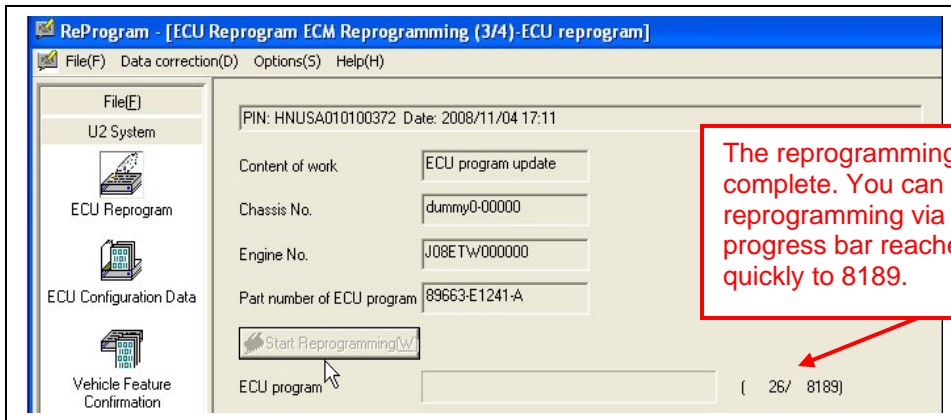
The horizontal bar graph indicates the progress of the ECU reading. Once completed select the "Verify/Judge" button.

If the 4 decision boxes are green or yellow, select "Next".

**NOTE: If any boxes are red return and select correct file or reprogram will be canceled.**

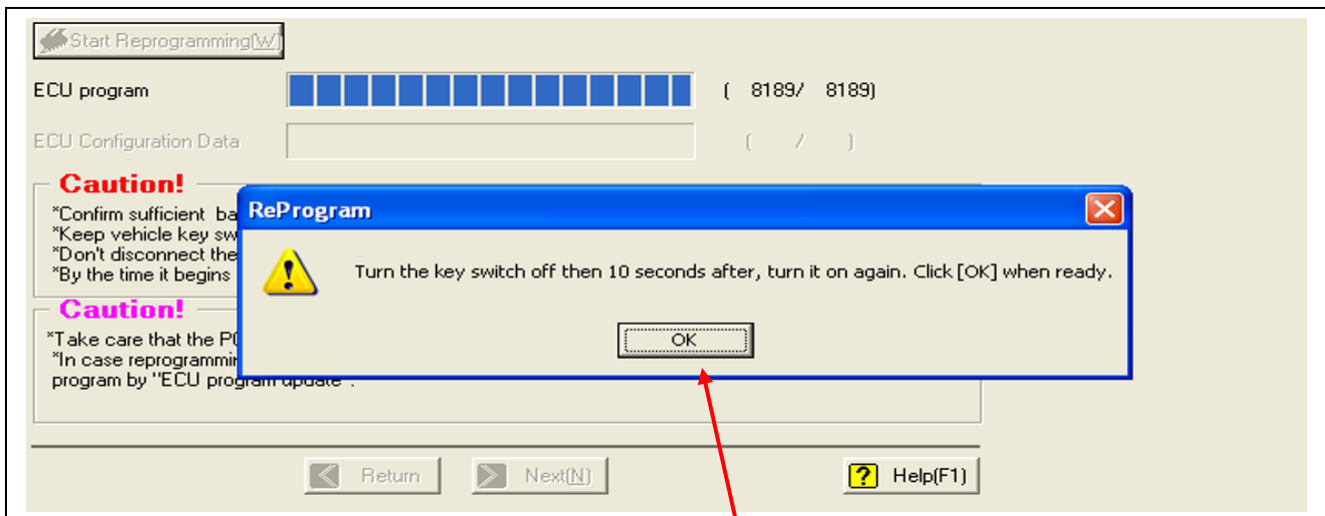


Select "Start Reprogramming"

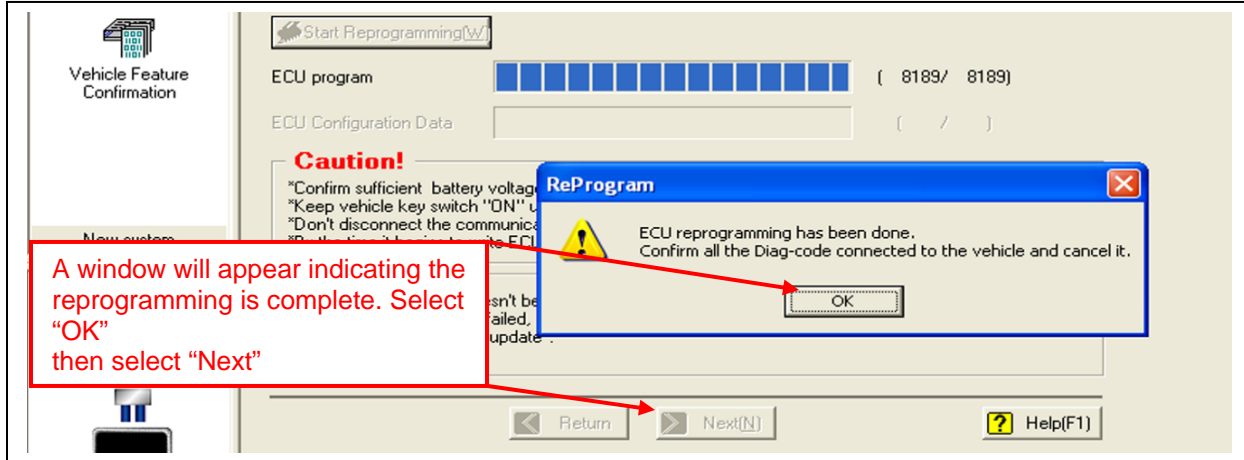


The reprogramming will take 20 - 40 minutes to complete. You can monitor the progress of the reprogramming via the progress bar. Once the progress bar reaches 6445 / 8189 it will move quickly to 8189.

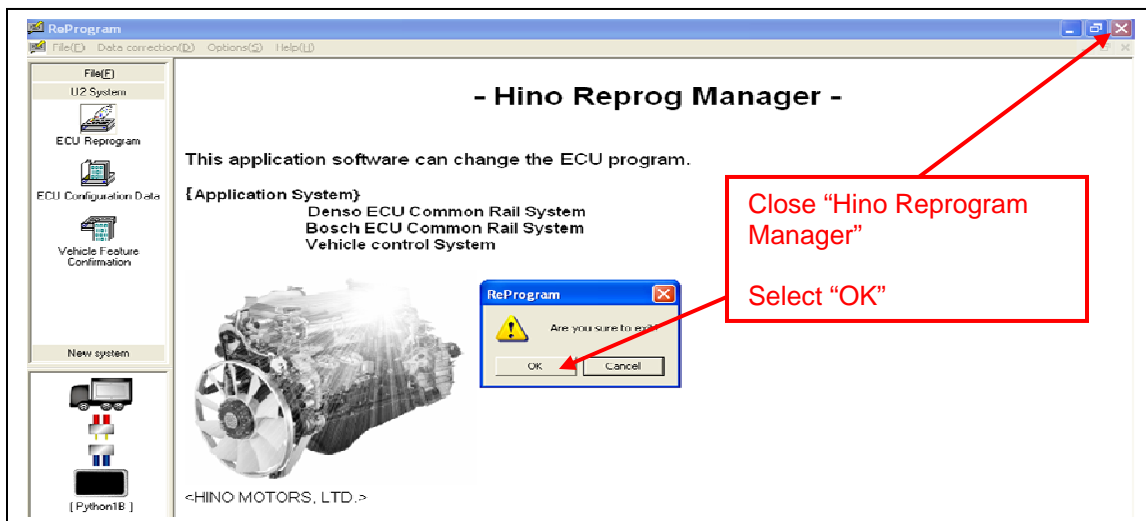
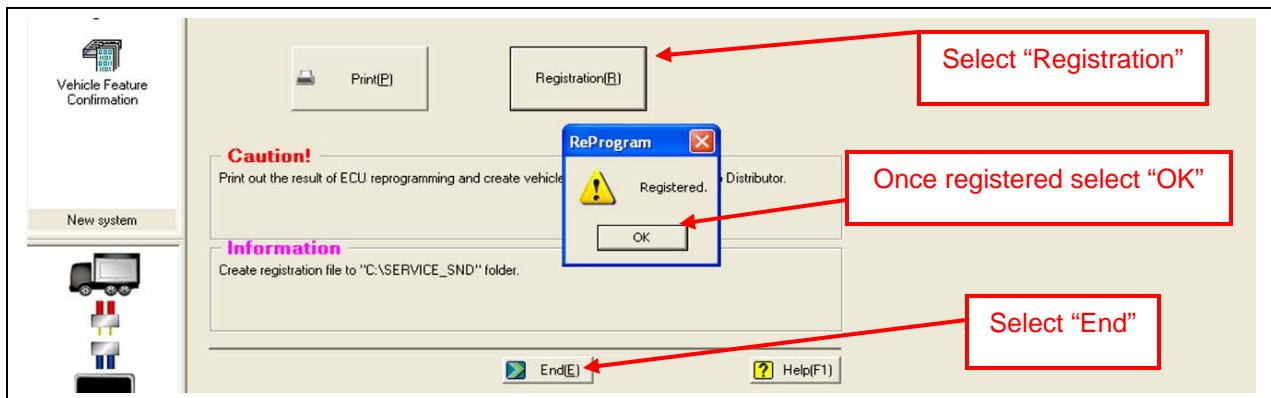
**CAUTION:** During the following step, never select "OK" until at least 10 seconds have elapsed after turning the ignition off (lock). If you select "OK" too soon, you will lose the reprogramming and will have to start over.



Once 8189 / 8189 is reached, you will be prompted to turn key switch off for 10 seconds. After 10 seconds turn the key to the on position. Select "OK"



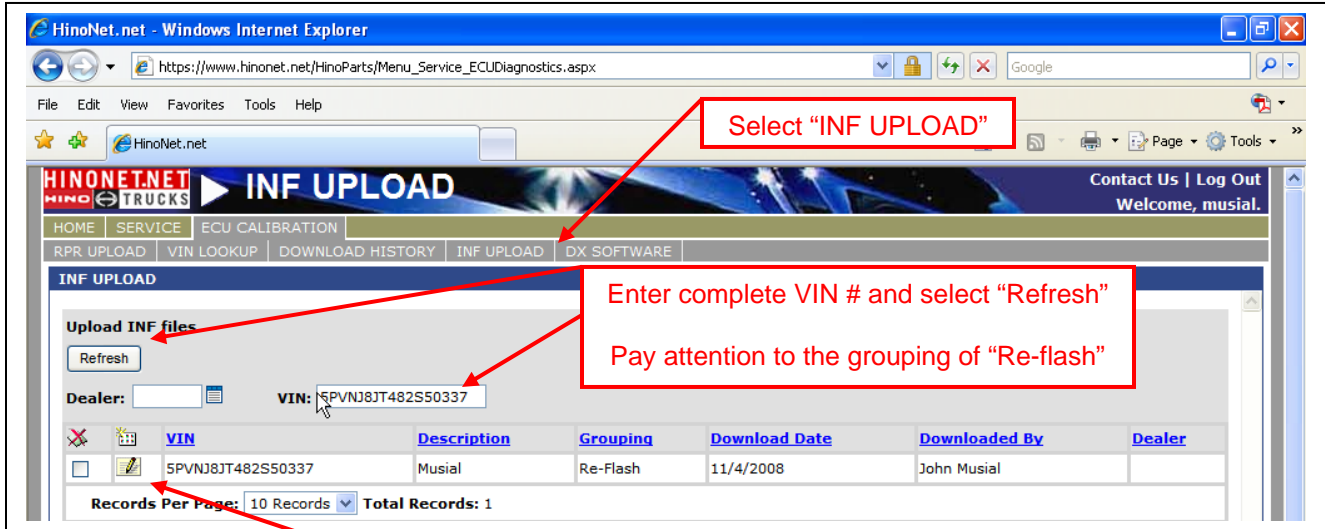
**CAUTION: Make sure file is registered before ending program.**



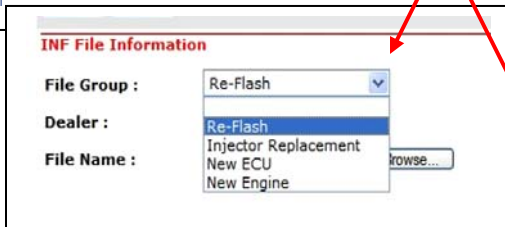
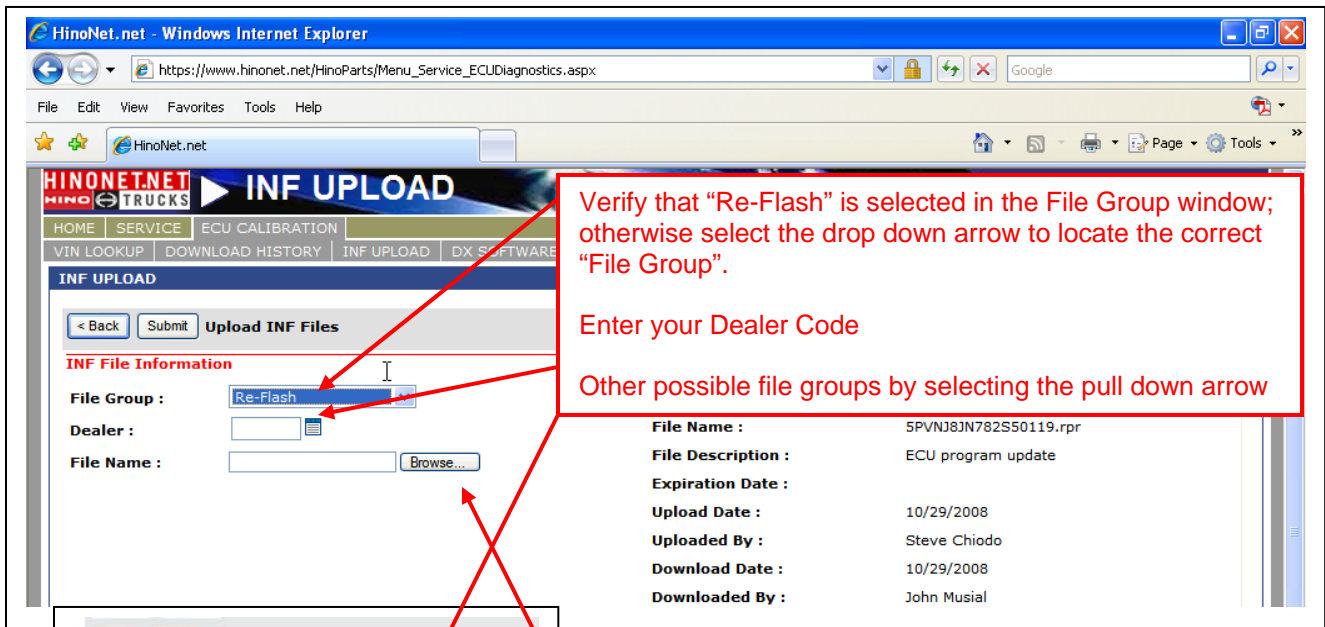
**NOTE: If at any time during the reprogramming process an error occurs, follow the prompts on the screen to restart the programming process. Start the engine to confirm that programming was successful. Disconnect the interface cable from the vehicle.**

**Upload inf File:**

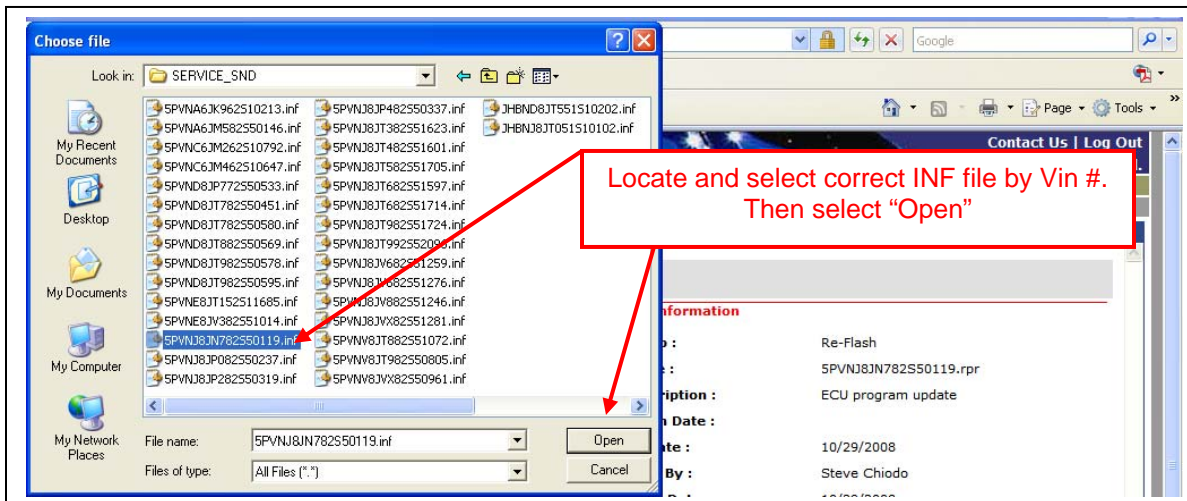
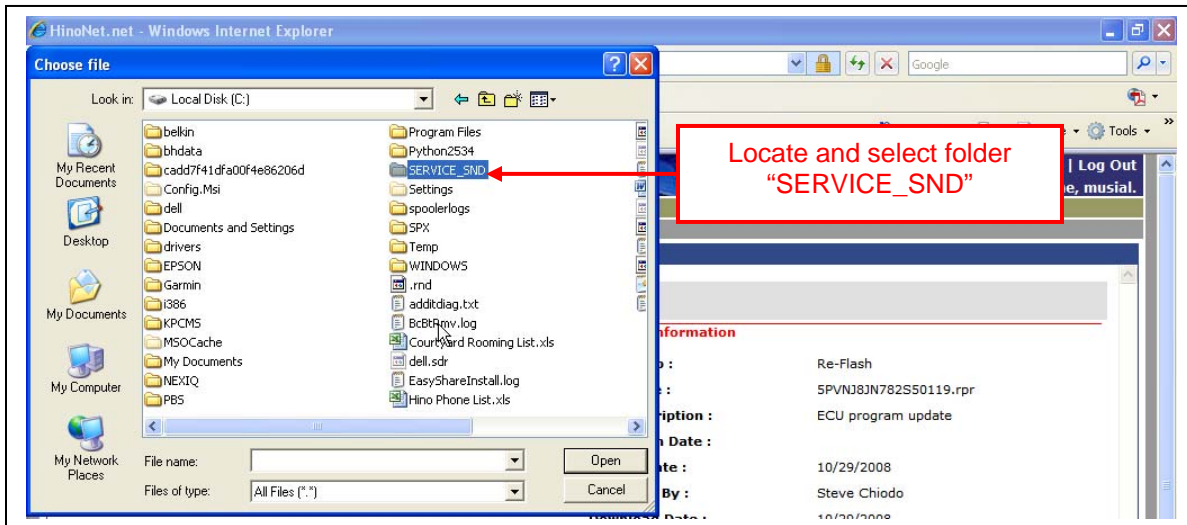
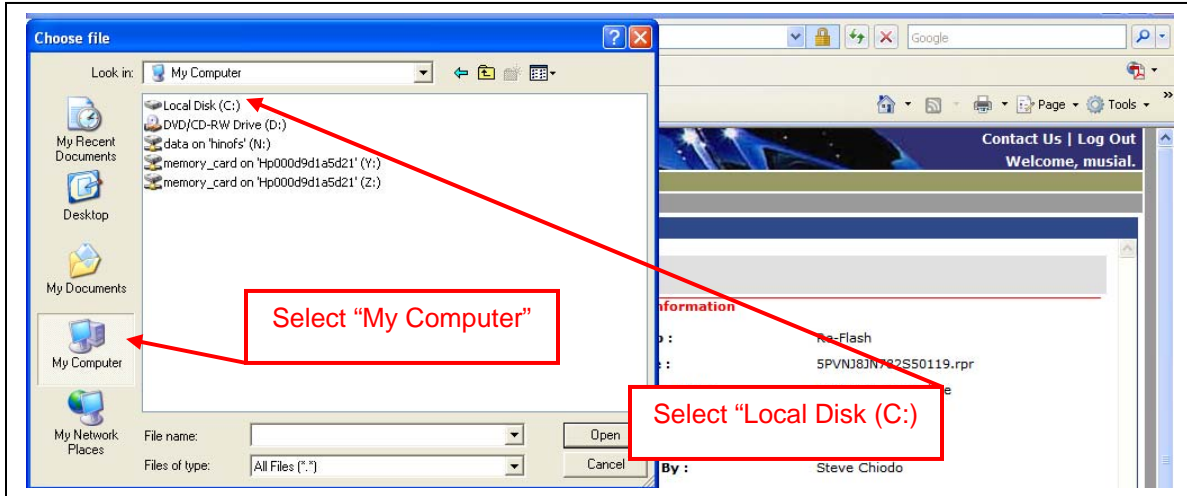
As in earlier procedures connect to the Hino.com Web site. Select “HINONET” enter “Username” and “Password” select “Sign In”. Select “SERVICE” then “ECU CALIBRATION”.

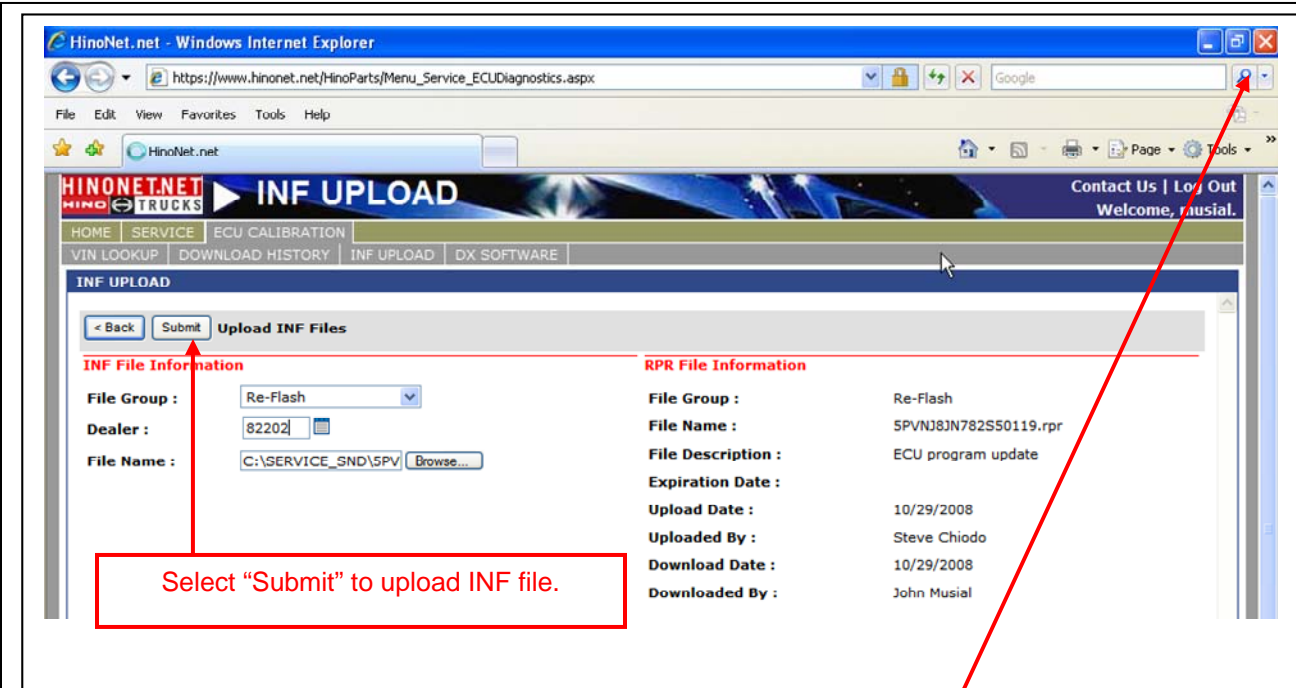


Select the correct Vin # which you previously downloaded / reprogrammed by selecting the icon box (pencil and paper) next to the Vin #.



Select browse to locate INF file for upload. File is located in the “SERVICE SEND” folder.



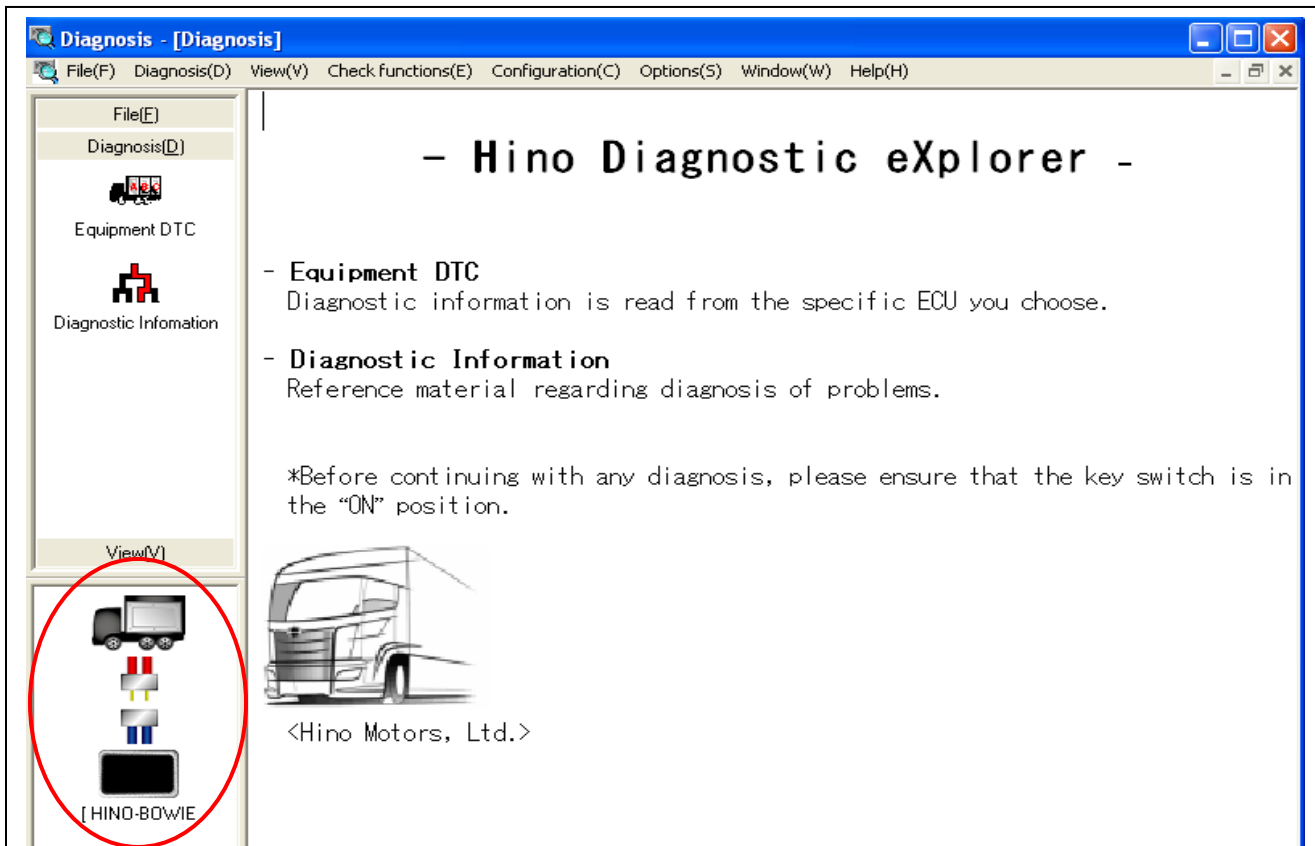
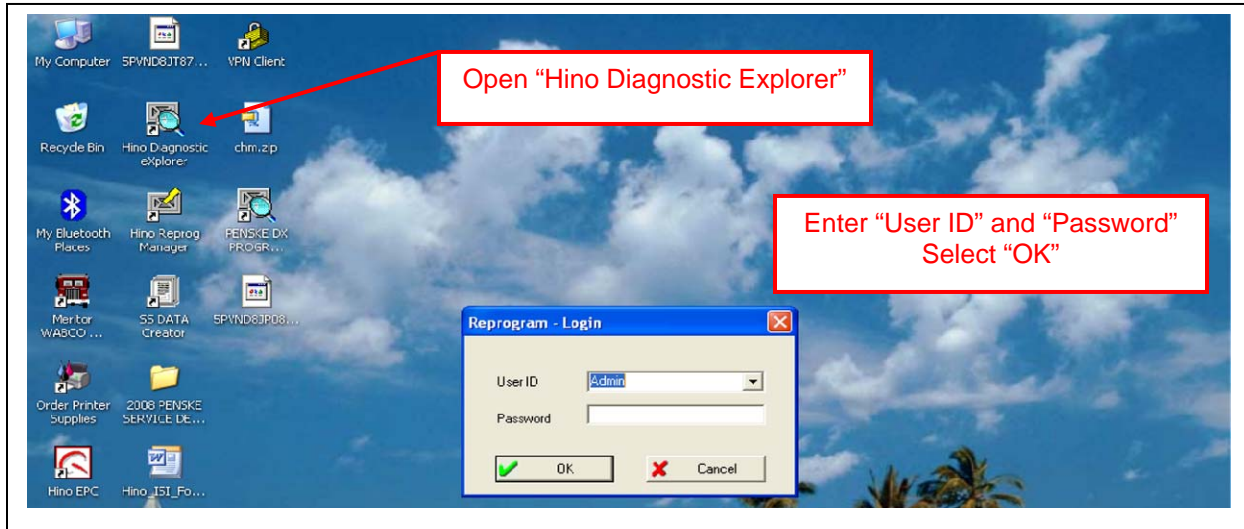


**SECTION B:**

**New Injector calibration codes & INF upload:**

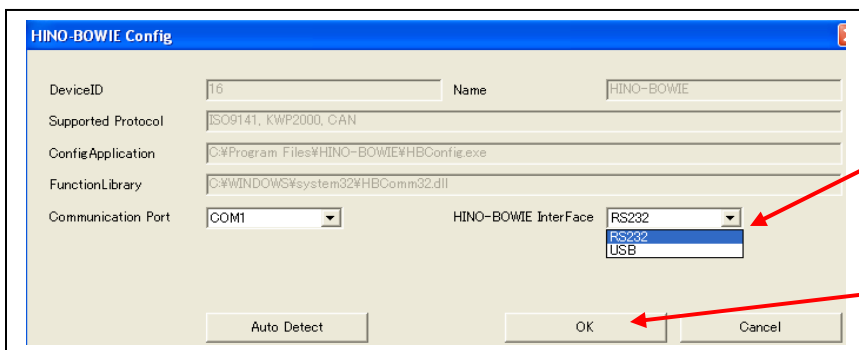
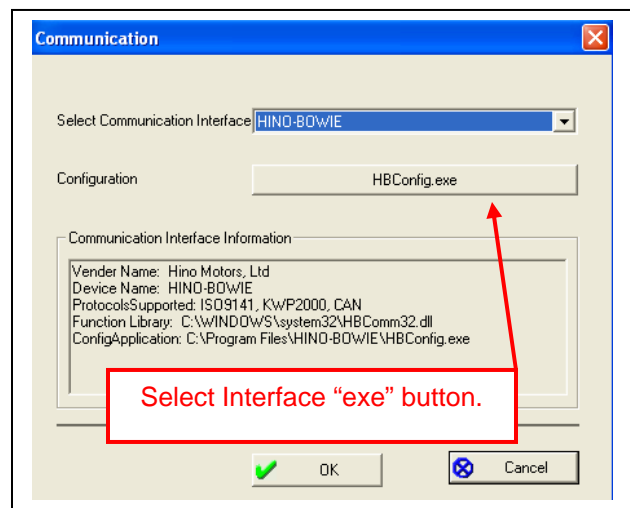
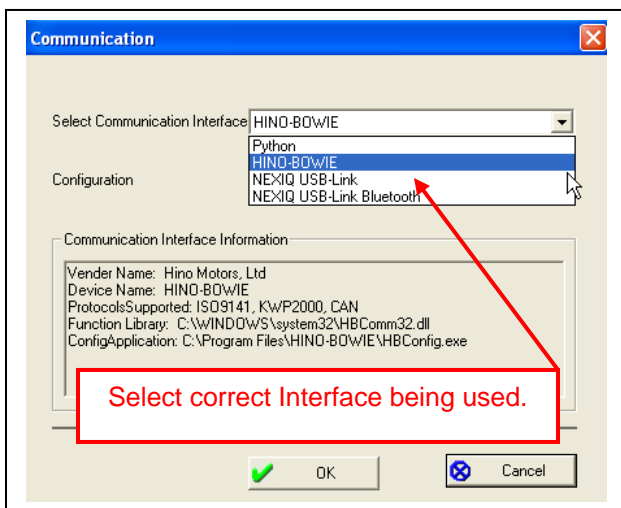
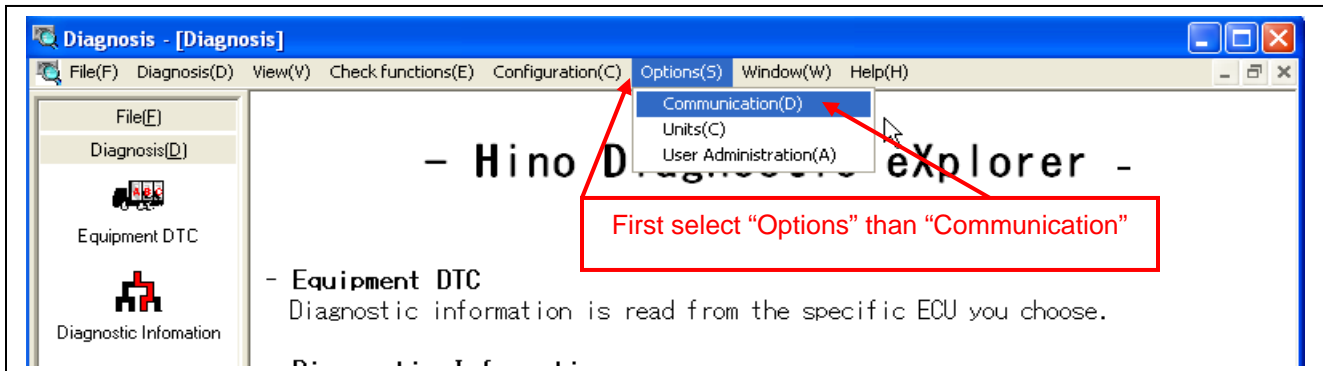
After any injector replacement write new injector calibration codes to ECU.

Connect one end of the interface cable to diagnostic link connector under the dash panel and the other end to your computer. **Turn the ignition key to the run position.**



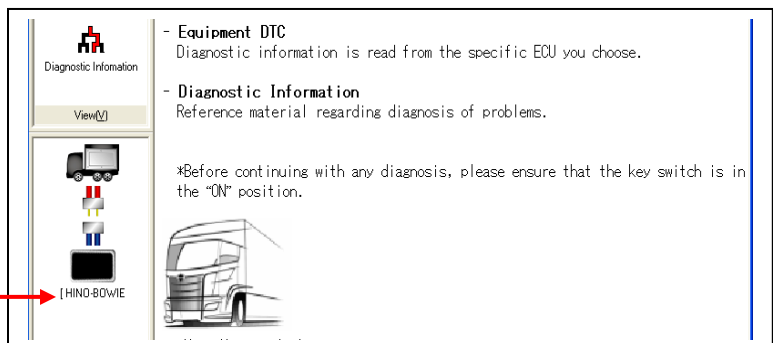
**NOTE: Confirm that the correct interface is identified in the lower left portion of the "Hino Reprogram Manager" screen. If not follow instructions on next page.**

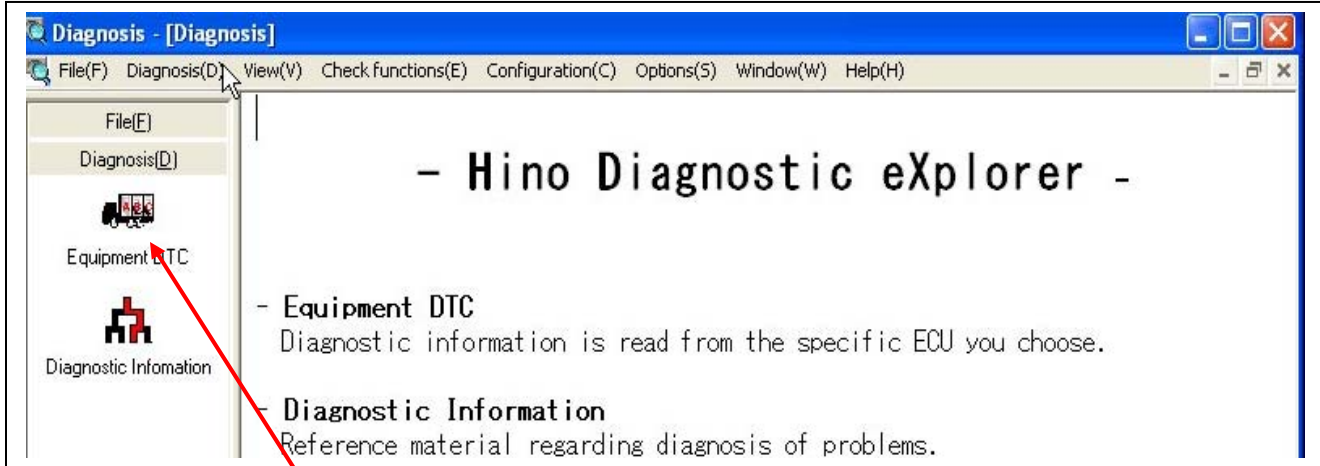
**Selecting Correct Interface:**



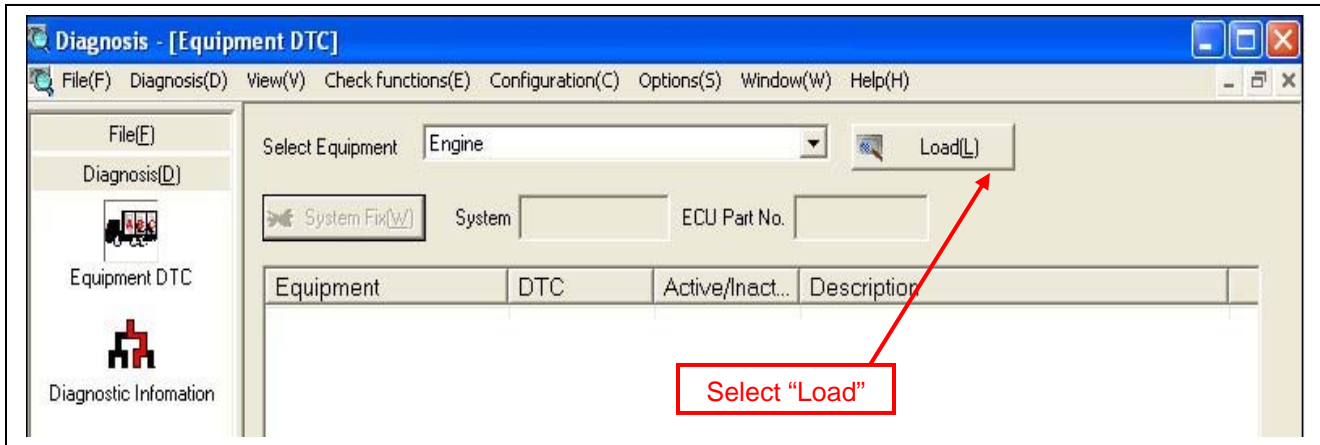
Select "OK"

Confirm that the correct interface is now identified in the lower left portion of the "Hino Diagnostic Explorer" screen.

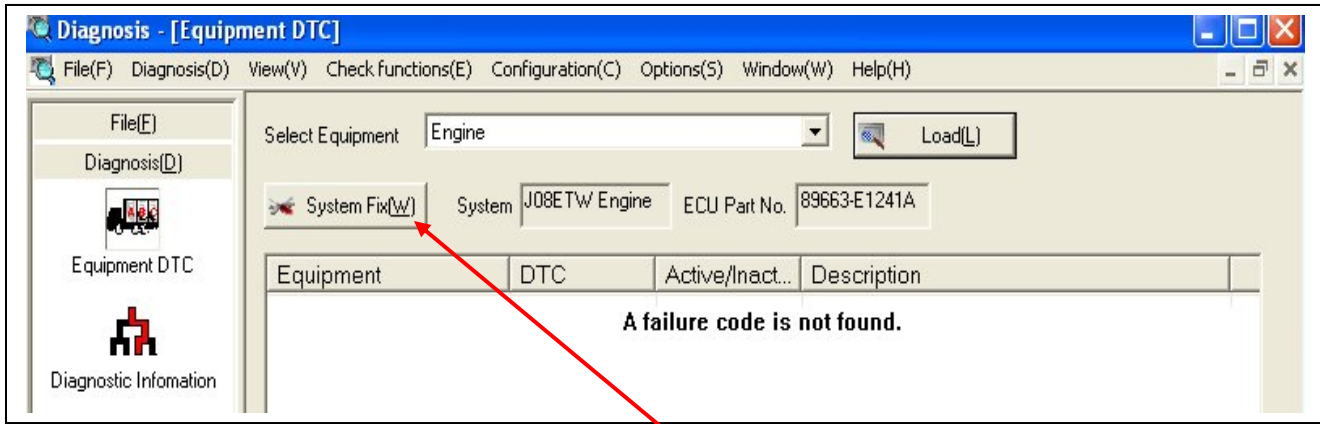




Select "Equipment DTC"



Select "Load"



Select "System Fix"

**System Fix**

Date: 11/4/2008 6:55  
 Technician: Administrator  
 Correspond System: 89663-E1241A J08ETW Engine  
 Work ID: Admin-20081104  
 Work Memorandum:   
 Customer: Customer Name  
 License Plate Number:   
 Mileage: 10,870 Mile  
 Engine No.: J08ETW11441  
 Chassis No.: 5PVNV8JR982S5032

OK Cancel

Add "Customer" and "Mileage" as needed.

Select "OK"

**Diagnosis - [Fault Information]**

File(F) Diagnosis(D) View(V) Check functions(E) Configuration(C) Options(S) Window(W) Help(H)

89663-E1241A J08ETW En

File(E) Diagnosis(D) View(V) Fault Information

Reload(R) Injector Calibration(I)

Manufacturer Parameters(P)  
 Customization(C)  
 Injector Calibration(I)  
 Read/Write ECU Configuration Data(E)  
 Maximum Vehicle and Cruise Control Speed Setting(I)

Equipment	DTC	Active/Inact...	Description
			FRZF

A failure code is not found.

Under "Configuration" select "Injector Calibration"

**Injector Calibration**

#1 INJ  #2 INJ  #3 INJ  #4 INJ

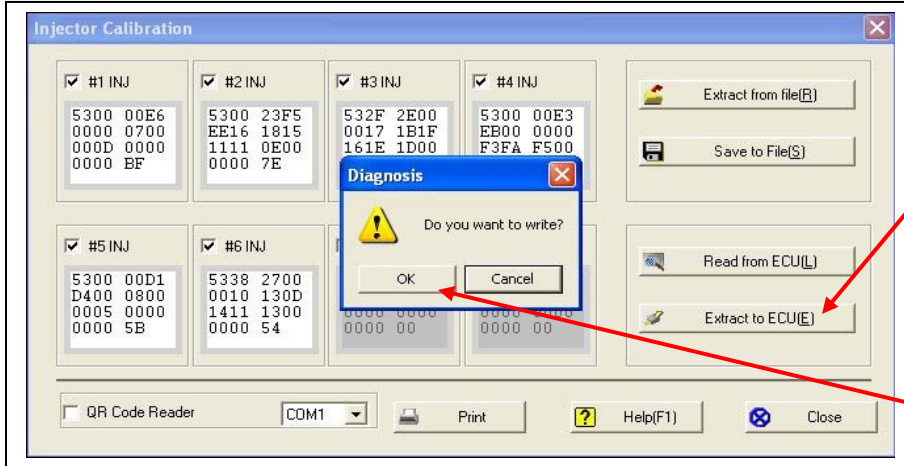
#5 INJ  #6 INJ  #7 INJ  #8 INJ

Extract from file(B)  
 Save to File(S)  
 Read from ECU(L)  
 Extract to ECU(E)

QR Code Reader COM1 Print Help(F1) Close

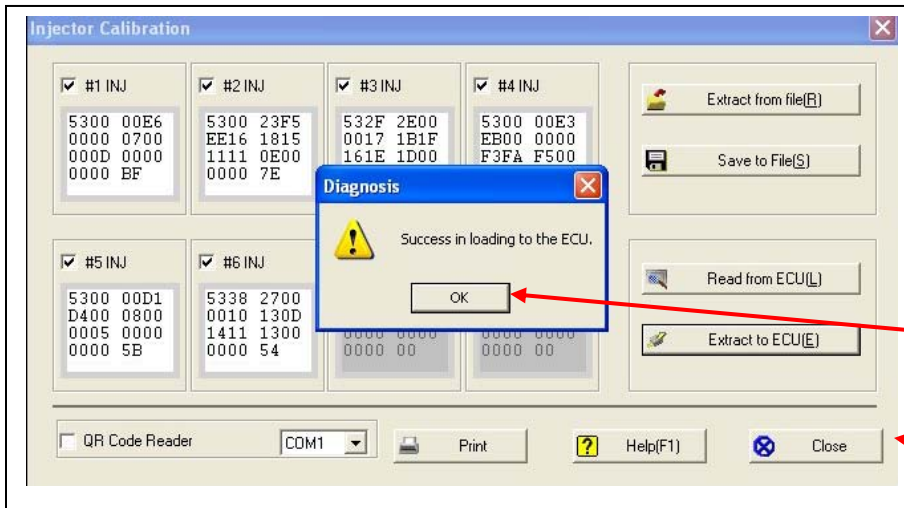
Select the injector positions that need new calibration codes.

Enter calibration codes that came with new injectors.



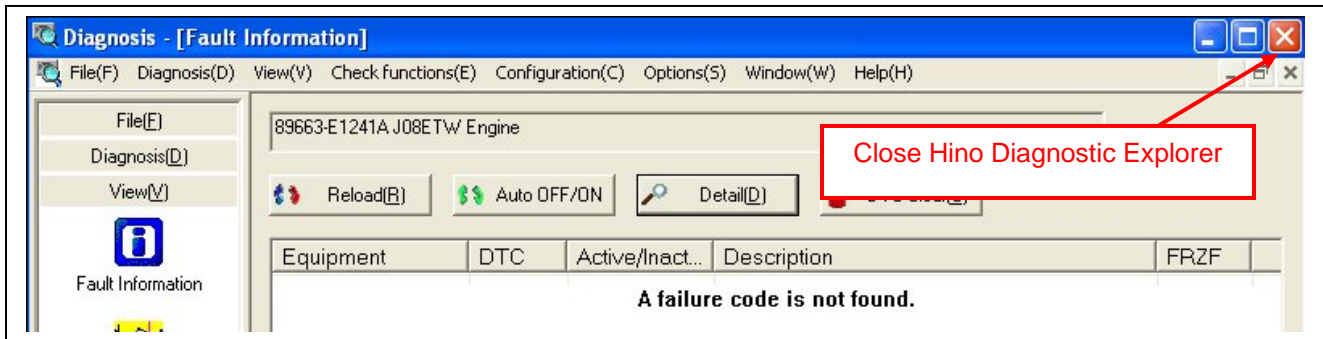
After all injector calibration codes are entered select "Extract to ECU"

Select "OK"

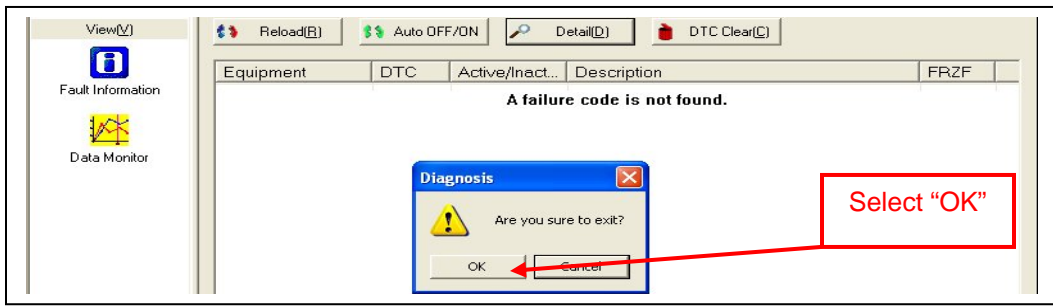


Select "OK"

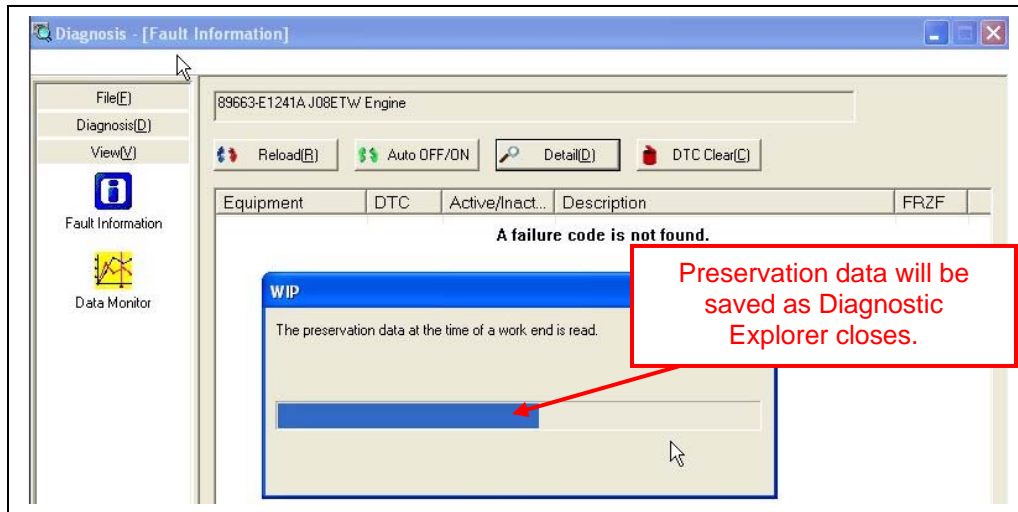
Select "Close"



Close Hino Diagnostic Explorer



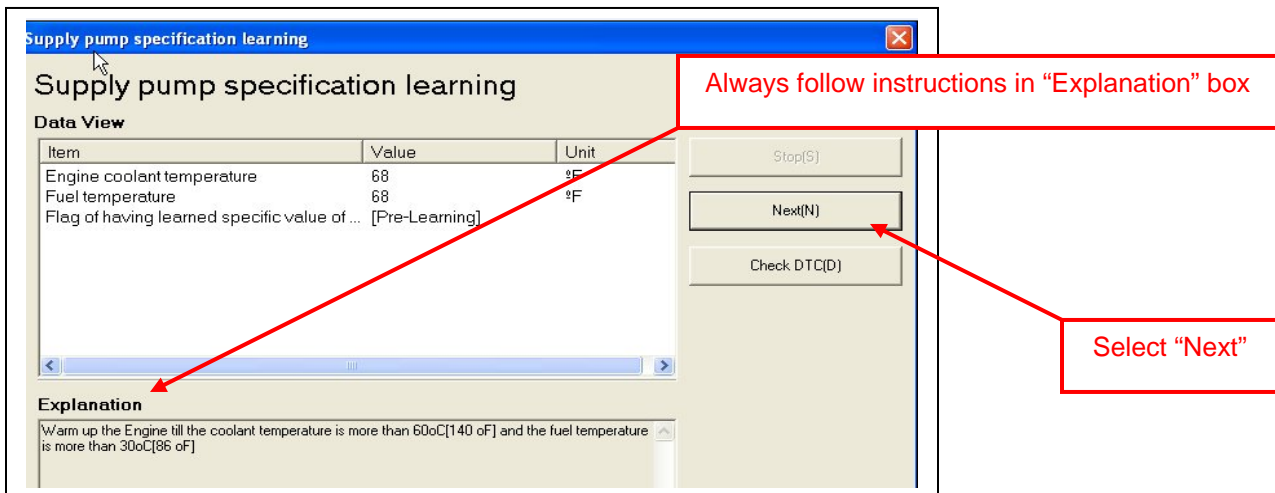
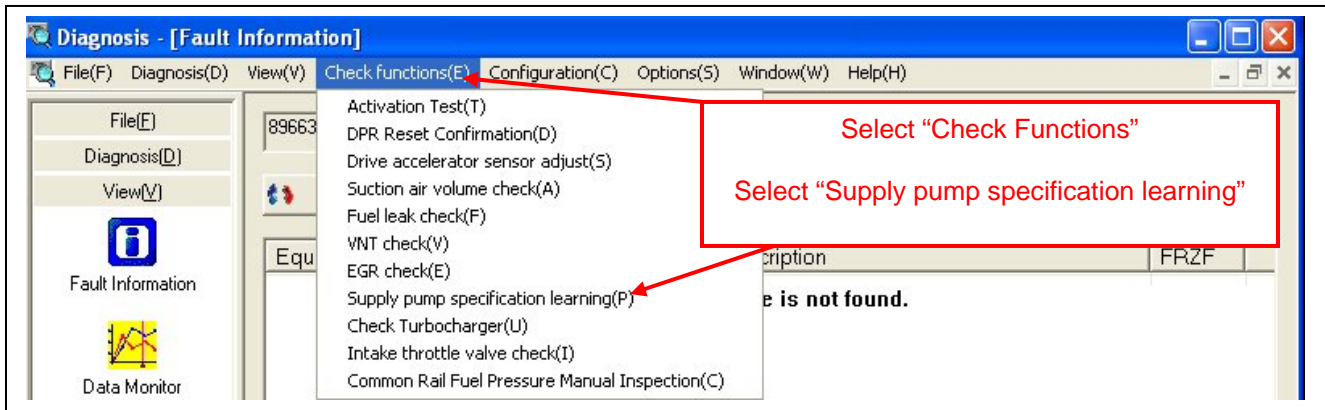
Select "OK"



**NOTE: Disconnect battery for three (3) minutes and then reconnect. Perform "Pump Relearn"**

**Pump Relearn:**

As in the procedures mentioned earlier re-open Hino Diagnostic Explorer, select "Equipment DTC", "Load" and "System Fix".



**Supply pump specification learning**

**Supply pump specification learning**

**Data View**

Item	Value	Unit
Engine coolant temperature		°F
Fuel temperature		°F
Flag of having learned specific value of ...	[Pre-Learning]	

**Explanation**

Initialize supply pump learning value. Stop the Engine, Shift into neutral of the Transmission and turn the starter key on "ON" position.

Buttons: Stop(S), Next(N), Check DTC(D)

Stop engine, turn key to on position

Select "Next"

**Supply pump specification learning**

**Supply pump specification learning**

**Data View**

Item	Value	Unit
Engine coolant temperature		°F
Fuel temperature		°F
Flag of having learned specific value of ...	[Pre-Learning]	

**Explanation**

Confirm neutral gear position of the transmission, parking brake engagement and its efficiency and PTO off, then start the Engine.  
-Stop the engine after 5 seconds. Leave the engine more than 10 seconds as it is, then turn the starter key on "ON" position.

Buttons: Stop(S), Next(N), Check DTC(D)

Start engine. Stop engine after 5 seconds. Leave engine off for more than 10 seconds, then turn key to on position.

Select "Next"

**Supply pump specification learning**

**Supply pump specification learning**

**Data View**

Item	Value	Unit
Engine coolant temperature	138	°F
Fuel temperature	97	°F
Flag of having learned specific value of ...	[Complete]	

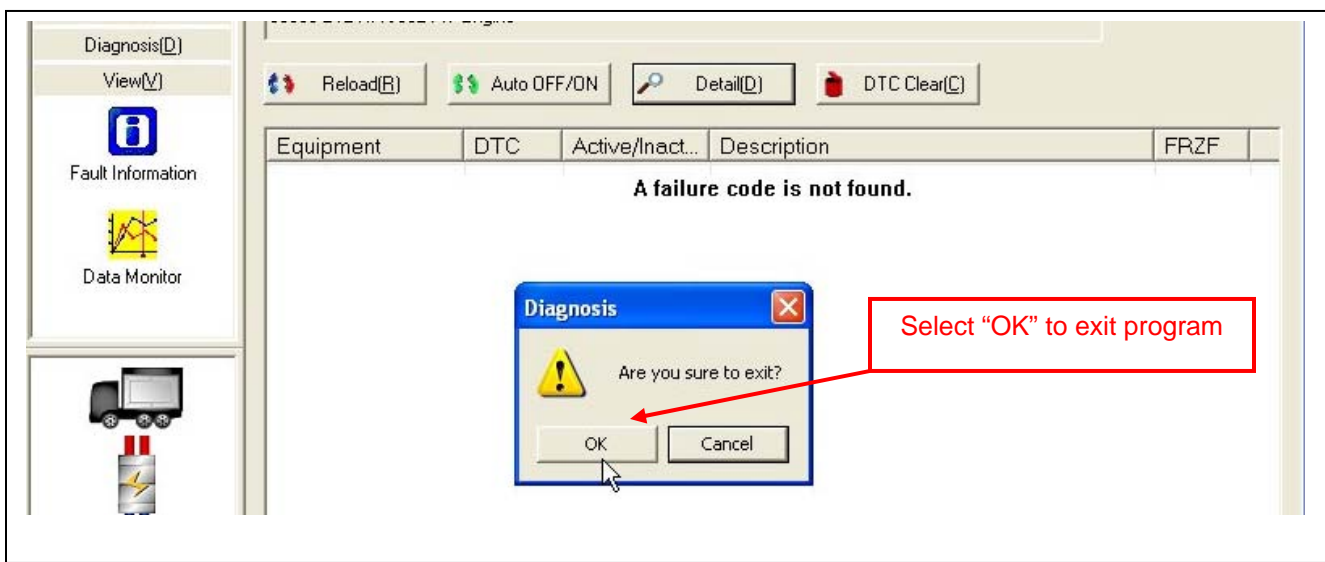
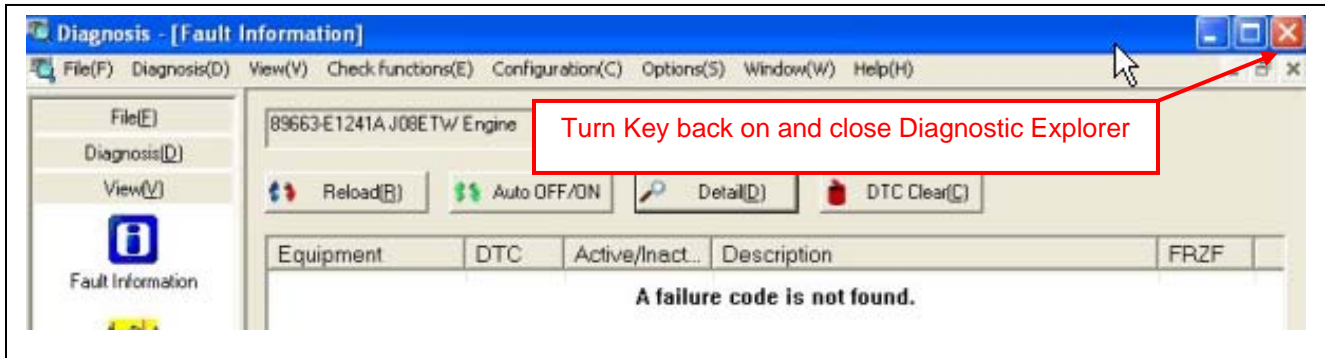
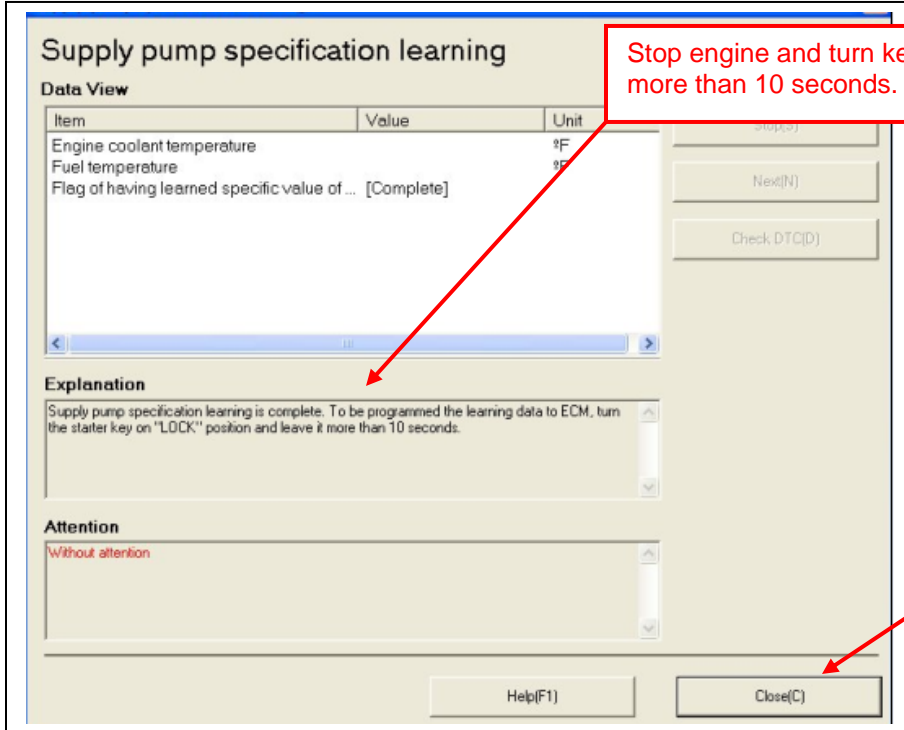
**Explanation**

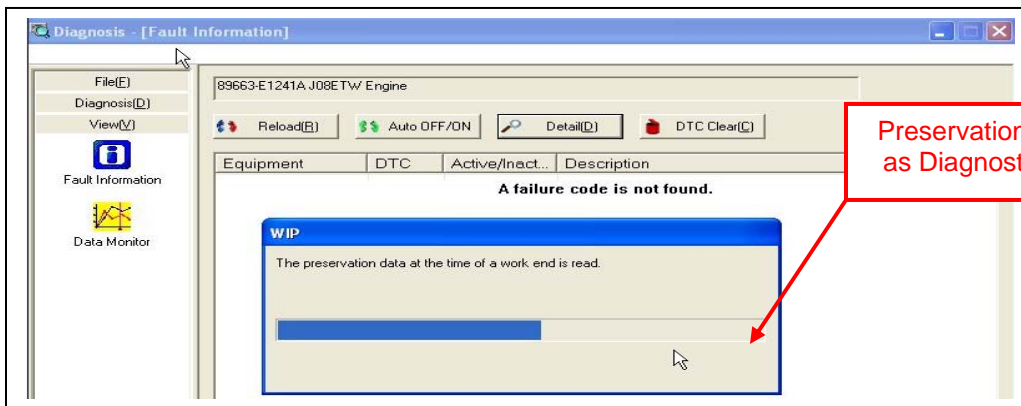
Confirm neutral gear position of the transmission, parking brake engagement and its efficiency, PTO off, auto idle condition and cancel of exhaust brake warming up switch, then start the engine. When the learning is complete, click [NEXT] button.

Buttons: Stop(S), Next(N), Check DTC(D)

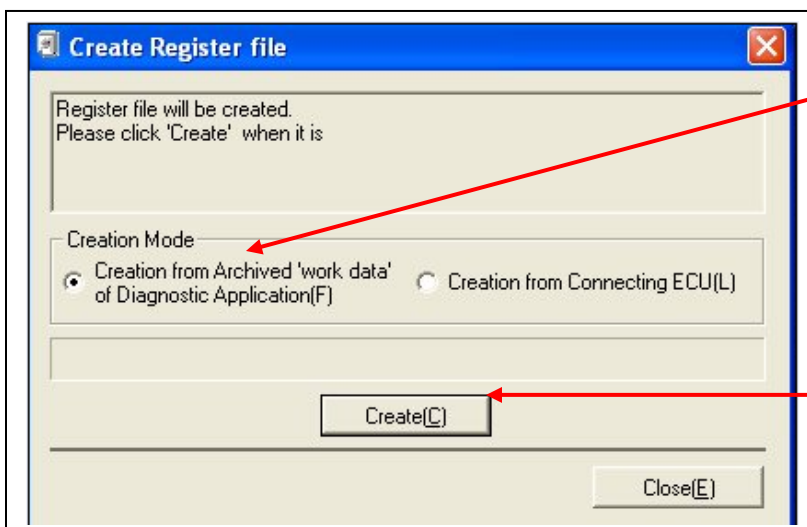
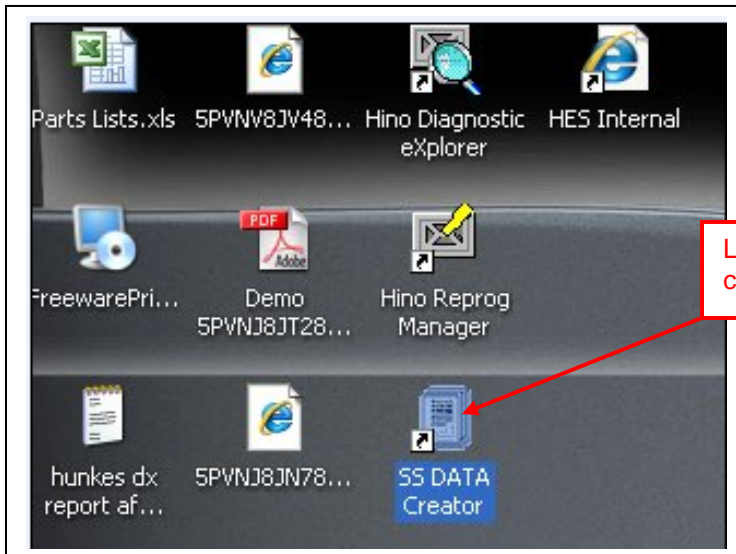
Start engine until learning is complete

Select "Next"





**Registering, located and uploading INF file:**



Select Archived 'work data'

Date	Equipment	Chassis No.	Engine	Licens...
2008-11-04 19:08	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-11-04 18:55	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-11-04 15:11	J08ETW Engine	5PVNV8JG982S50046	J08ETW1	
2008-10-31 14:55	E13CTL Engine	SYARYOUBANGOU	ENGINE I	
2008-10-31 13:55	J08ETV Engine	5PVNJ8JV382S51316	J08ETV1	
2008-10-31 08:22	E13CTL Engine	SYARYOUBANGOU	ENGINE I	
2008-10-27 19:13	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 18:44	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 18:13	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 17:20	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 15:39	Aisin AutoTransmissi	5PVNA6JM582S50146	J05DTF1	
2008-10-27 15:33	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-22 11:11	J08ETW Engine	5PVNV8JV382S51112	J08ETW1	
2008-10-22 10:02	J08ETW Engine	5PVNV8JV382S51112	J08ETW1	
2008-10-21 09:32	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-20 15:43	J08ETV Engine	5PVNJ8JT782S51649	J08ETV1	
2008-10-20 15:11	J08ETV Engine	5PVNJ8JT782S51649	J08ETV1	
2008-10-20 14:36	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-20 12:14	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-15 21:08	J08ETW Engine	5PVNV8JR092S50343	J08ETW1	
2008-10-15 20:48	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-10-09 11:48	J08ETV Engine	5PVNV8JT982S51425	J08ETV1	

Open(O) Cancel(C)

Expand "Date" and "Chassis" fields. Locate VIN # of unit that had injectors replaced. Select and highlight latest entry date and time for unit in question.

Select "Open"

Select Archived 'work data'

Date	Equipment	Chassis No.	Engine	Licens...
2008-11-04 19:08	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-11-04 18:55	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-11-04 15:11	J08ETW Engine	5PVNV8JG982S50046	J08ETW1	
2008-10-31 14:55	E13CTL Engine	SYARYOUBANGOU	ENGINE I	
2008-10-31 13:55	J08ETV Engine	5PVNJ8JV382S51316	J08ETV1	
2008-10-31 08:22	E13CTL Engine	SYARYOUBANGOU	ENGINE I	
2008-10-27 19:13	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 18:44	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 18:13	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 17:20	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-27 15:39	Aisin AutoT	5PVNA6JM582S50146	J05DTF1	
2008-10-27 15:33	J05DTF Engine	5PVNA6JM582S50146	J05DTF1	
2008-10-22 11:11	J08ETW Engine	5PVNV8JV382S51112	J08ETW1	
2008-10-22 10:02	J08ETW Engine	5PVNV8JV382S51112	J08ETW1	
2008-10-21 09:32	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-20 15:43	J08ETV Engine	5PVNJ8JT782S51649	J08ETV1	
2008-10-20 15:11	J08ETV Engine	5PVNJ8JT782S51649	J08ETV1	
2008-10-20 14:36	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-20 12:14	J08ETV Engine	5PVNJ8JT782S51270	J08ETV1	
2008-10-15 21:08	J08ETW Engine	5PVNV8JR092S50343	J08ETW1	
2008-10-15 20:48	J08ETW Engine	5PVNV8JR982S50324	J08ETW1	
2008-10-09 11:48	J08ETV Engine	5PVNV8JT982S51425	J08ETV1	

Open(O) Cancel(C)

Once file is registered select "OK"  
 INF file is now saved in "Service Send Folder"

Select "Cancel"

Create Register file

Register file will be created.  
 Please click 'Create' when it is

Creation Mode

Creation from Archived 'work data' of Diagnostic Application(F)  Creation from Connecting ECU(L)

Create(C)

Close(E)

Select "Close"

**Signing on to HinoNet for INF file upload:**

