



EMISSIONS RECALL

**CAB OVER ENGINE (COE) ECU, DCU AND VCS
SOFTWARE UPDATE**

**CAMPAIGN NO: AA920
DATE: 8-2-2018
REFERENCE: QA-180730-N3**

SUBJECT VEHICLES: 18MY-19MY COE Trucks equipped with a J05 engine

Note: *Refer to the appropriate Vehicle Identification Number in the warranty system to determine vehicle eligibility.*

OVERVIEW:

Software updates are required for the Engine ECU (Engine Control Unit), DCU (Dosing Control Unit), and VCS (Vehicle Control System) modules. These updates are intended to address the following items.

- 1) DEF Quality monitor
- 2) SCR catalyst removal monitor (P24FE)
- 3) NOx sensor offset monitor (Upstream) P2201
- 4) NOx sensor offset monitor (downstream) P229F

6. Handling of Dealership Inventory

Under 40 Code of Federal Regulations § 1068.101, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard or contains a defect related to motor vehicle safety. A civil penalty of up to \$44,539 may be assessed for each engine or piece of equipment in violation. In addition, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.



Under Title 49, Section 30112 of the United States Code, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard or contains a defect related to motor vehicle safety. In addition, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

BEFORE YOU BEGIN:

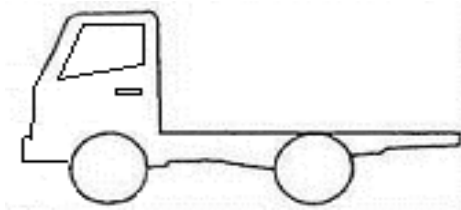
- Read and understand all instructions and procedures before you begin the work.
- Read and follow all **NOTICES, WARNINGS, and CAUTIONS** set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a level and solid surface and apply the parking brake.
- Confirm the engine is stopped, the starter switch is in the off (LOCK) position, and the key is removed.
- Wear safety glasses to prevent eye injuries.
- Place wheel chocks in front of and behind all wheels.



- **NOTICE:** Before beginning these procedures, you **MUST** install a battery charger on the vehicle to ensure battery power does not go low during reprogramming.
- **NOTICE:** Before beginning these procedures, you also **MUST** be certain that the laptop battery is fully charged, or a remote AC power supply is connected to the laptop to ensure the battery power does not go low during reprogramming.

VEHICLE PREPARATION:

1. Park the vehicle on a flat, level and solid surface.



2. Confirm the engine is stopped, the ignition switch is in the off (LOCK) position, and the key is removed.



3. Apply the parking brake.



4. Chock all of the wheels.



PARTS:

Supplement Guide and Label

KIT PART NUMBER	DESCRIPTION	QUANTITY
HN001234102	Supplement Guide (COE)	1
	Owner's Manual Label	1

Engine ECU Software

PART NUMBER	MODEL YEAR	ENGINE SERIES	QUANTITY
89663-E4045C	18MY Diesel	J05ETP	As Required By VIN
89663-E4055C	18MY Hybrid	J05EUG	
89663-E4643C	19MY Diesel	J05ETP	
89663-E4653C	19MY Hybrid	J05EUG	



DCU Software

PART NUMBER	MODEL YEAR	QUANTITY
89550-37243	18MY	As Required By VIN
89550-37243	19MY	

VCS Software

PART NUMBER	MODEL YEAR		QUANTITY
S8992-E0414	18MY Diesel	J05ETP	As Required By VIN
S8992-E0563	18MY Hybrid	J05EUG	
S8992-E0414	19MY Diesel	J05ETP	
S8992-E0563	19MY Hybrid	J05EUG	

PC PREPARATION

PC Power Management

CAUTION: Disable the computer features listed below. Failure to disable these features may severely damage the vehicle's control modules.

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



NOTICE: The illustrations above depict what you will see on your computer screen with regard to the features which must be disabled. The location on the screen of the features to be disabled will vary, however, based upon the operating software. Consult your IT (Information Technology) department as required.

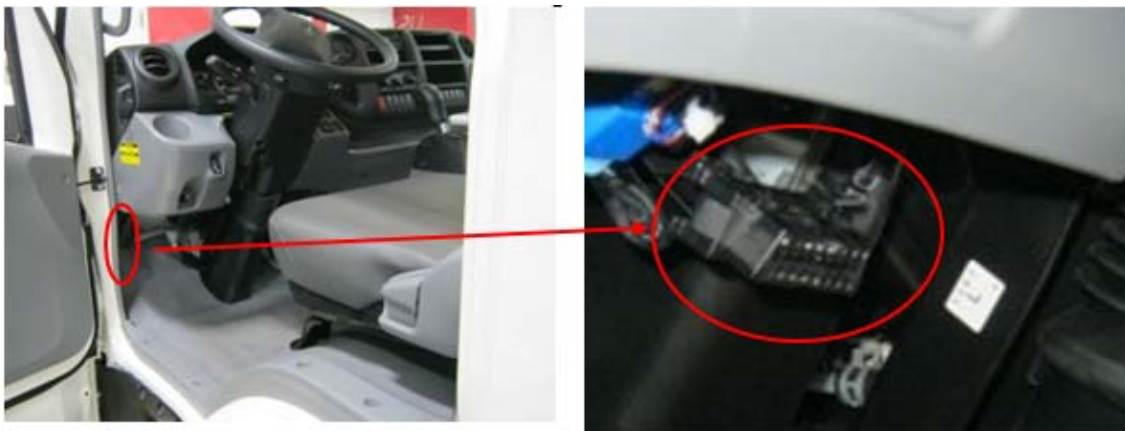


REPROGRAMMING PROCEDURE

CAUTION: Three modules will be reprogrammed during this procedure. A battery charger **MUST** be installed on the vehicle to ensure battery power does not go low during reprogramming or damage to these modules may occur.

1. Prepare a DXII compatible interface, such as the Denso DST-i or the Nexiq USB Link 2 to perform this reprogramming procedure.
To assemble the interface cable, perform the following steps.
 - (1) Connect the DLC (Diagnostic Link Connector) cable to the interface.
 - (2) Connect the USB Cable to the interface.
 - (3) Connect the USB connector to the USB port on your computer.

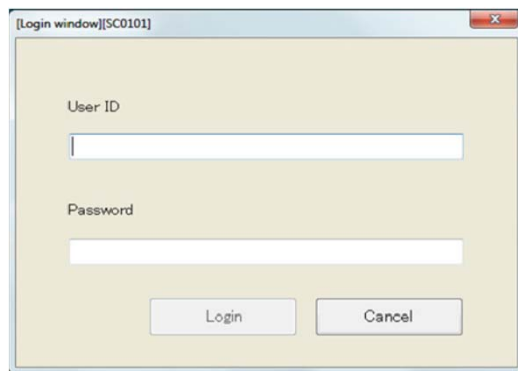
2. Connect the DLC cable to the vehicle's DLC connector. The DLC connector is found under the dash on the left side of the steering column.



3. On your computer, locate the “Hino DX2” icon and open it.



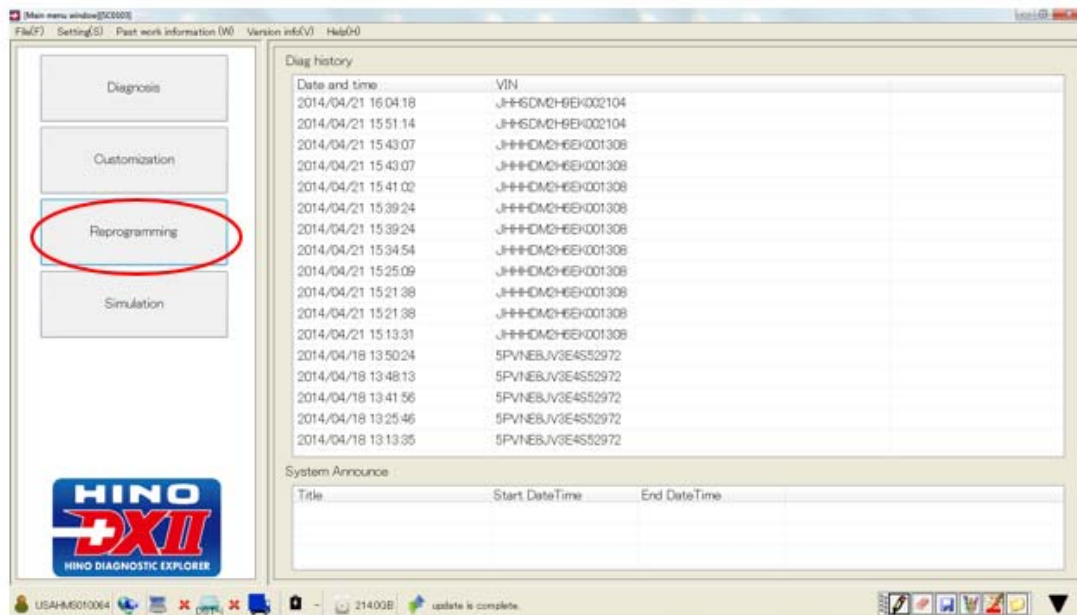
4. Hino DX2 will prompt you for a “User ID” and “Password”. Enter your User ID-, and password and then select the “Login” icon. Verify that the DX2 has software version 1.1.18.12 or later.



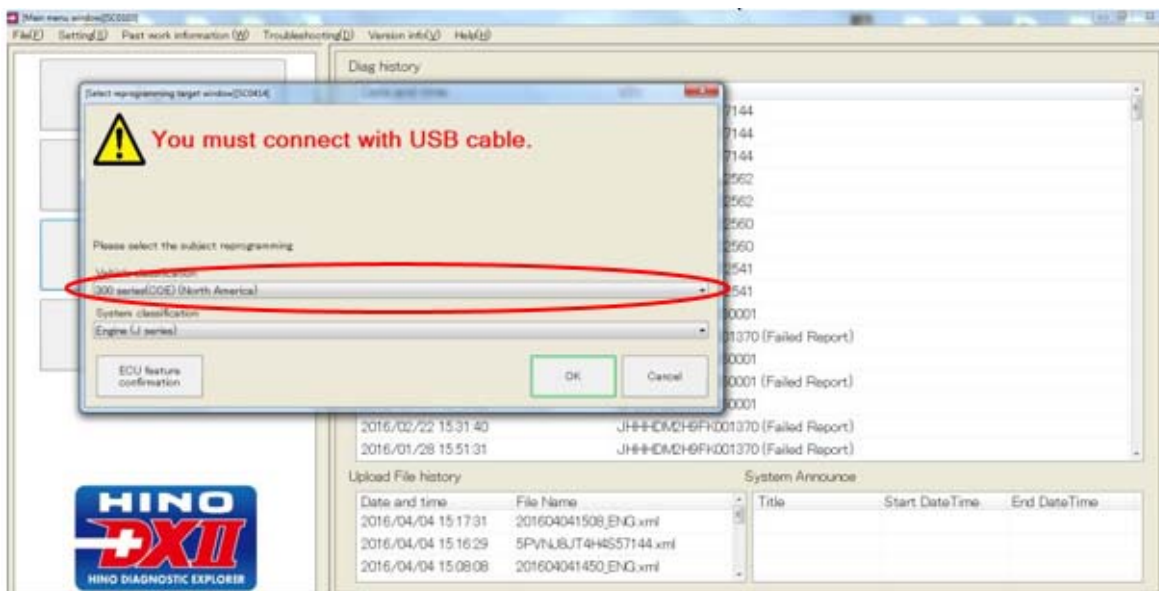
5. Insert the ignition key into the starter switch and turn the key to the “ON” position.



6. Select the “Reprogramming” icon.



7. Select “300 Series” under the “Vehicle Classification” drop down menu.



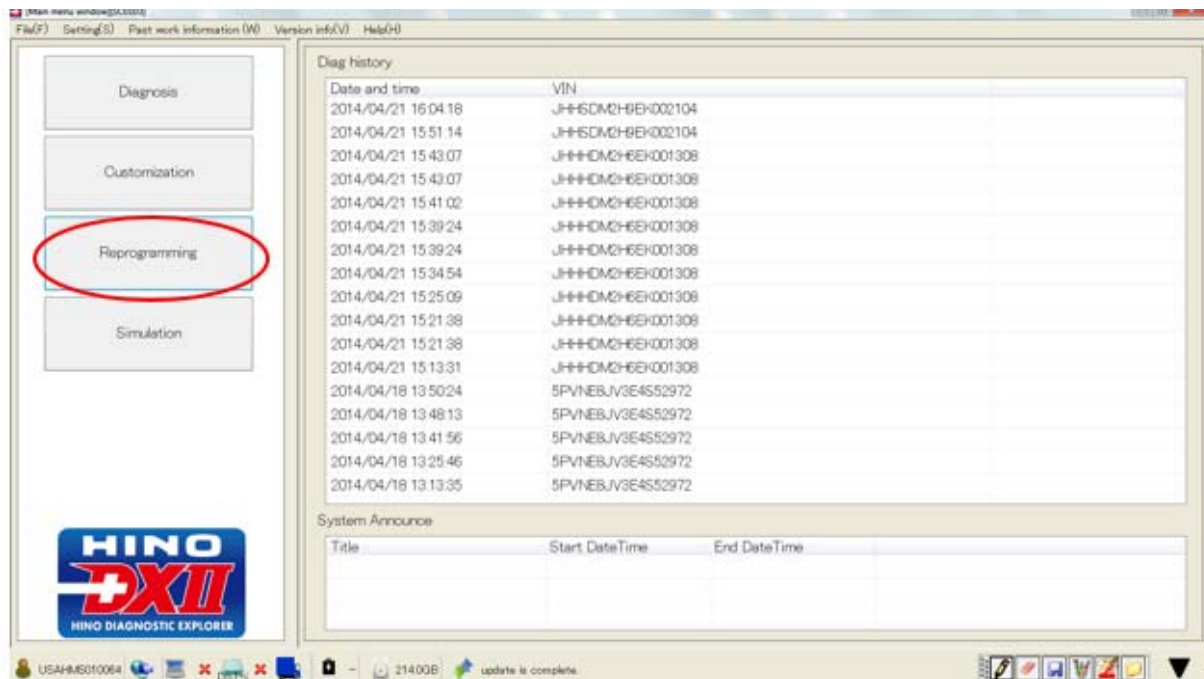
8. Select “VCS (Vehicle Control System)” under the “System Classification” drop down menu and then select the “OK” icon.

9. Follow the prompts to update the VCS to the latest software level using the Hino Diagnostic eXplorer II (Hino DX2). Refer to the following table for the appropriate software part number for the application.

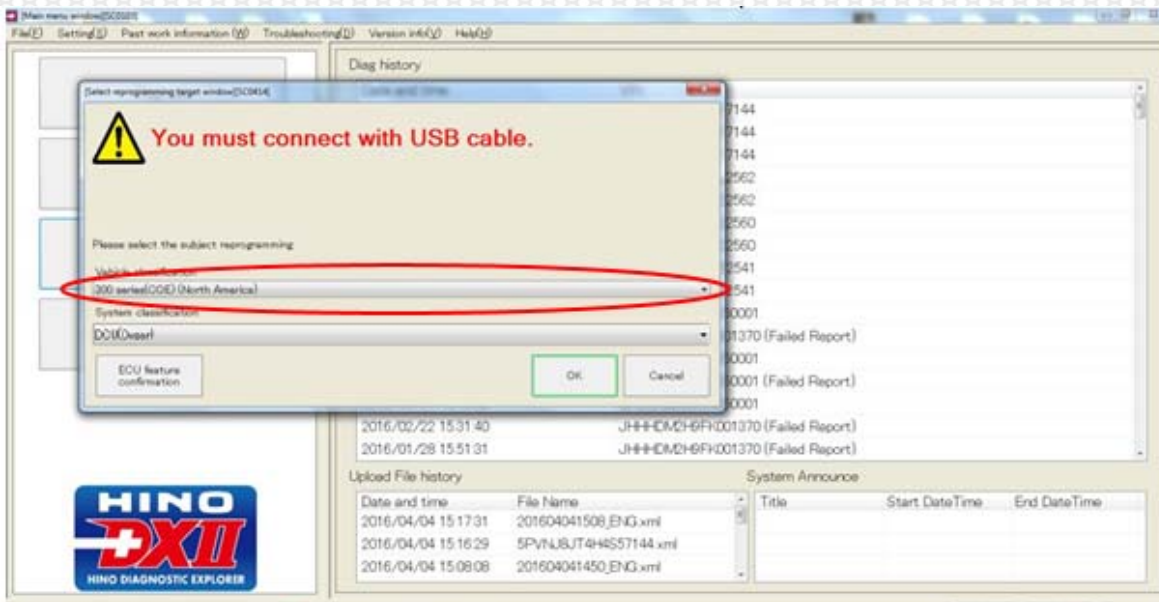
VCS Software

PART NUMBER	DESCRIPTION	
S8992-E0414	18MY Diesel	J05ETP
S8992-E0563	18MY Hybrid	J05EUG
S8992-E0414	19MY Diesel	J05ETP
S8992-E0563	19MY Hybrid	J05EUG

10. Again, select the “Reprogramming” icon.



11. Select “300 Series” under the “Vehicle Classification” drop down menu.



12. Select “DCU (Doser)” under the “System Classification” drop down menu and then select the “OK” icon.

13. Follow the prompts to update the DCU to the latest software level using the Hino Diagnostic eXplorer II (Hino DX2). Refer to the following table for the appropriate software part number for the application.

DCU Software

PART NUMBER	MODEL YEAR
89550-37243	18MY
89550-37243	19MY

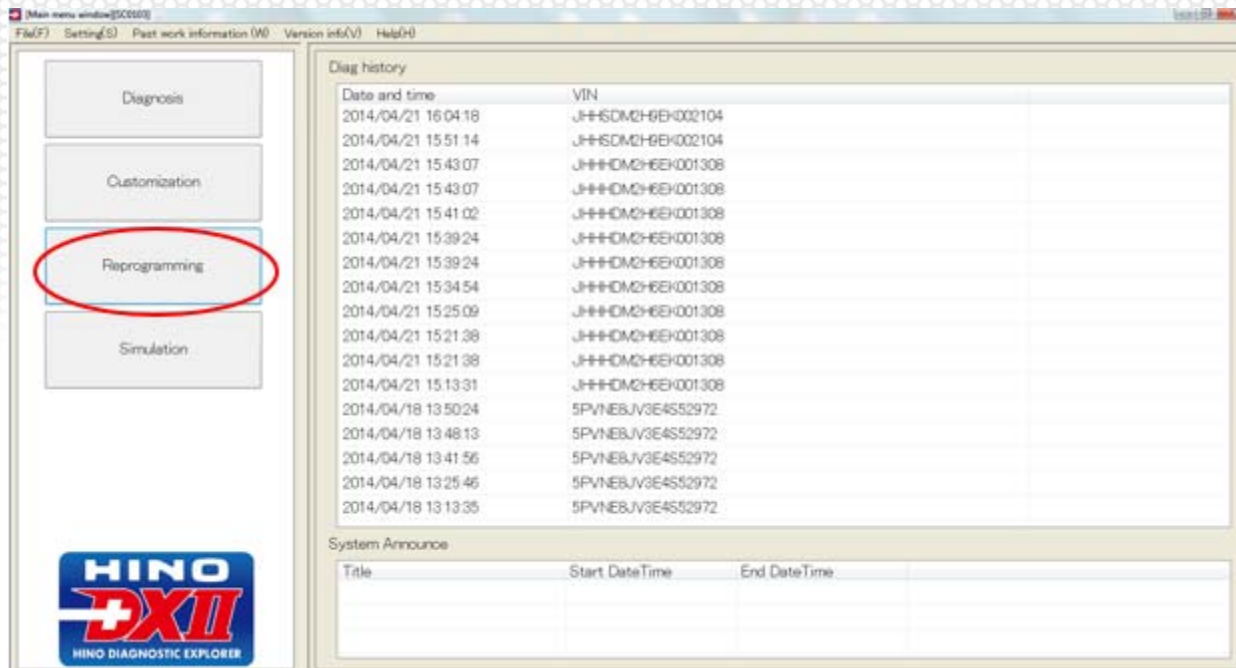
- 14.** Once DCU reprogramming is complete, turn the starter switch to the “LOCK” position and remove the key for one minute.



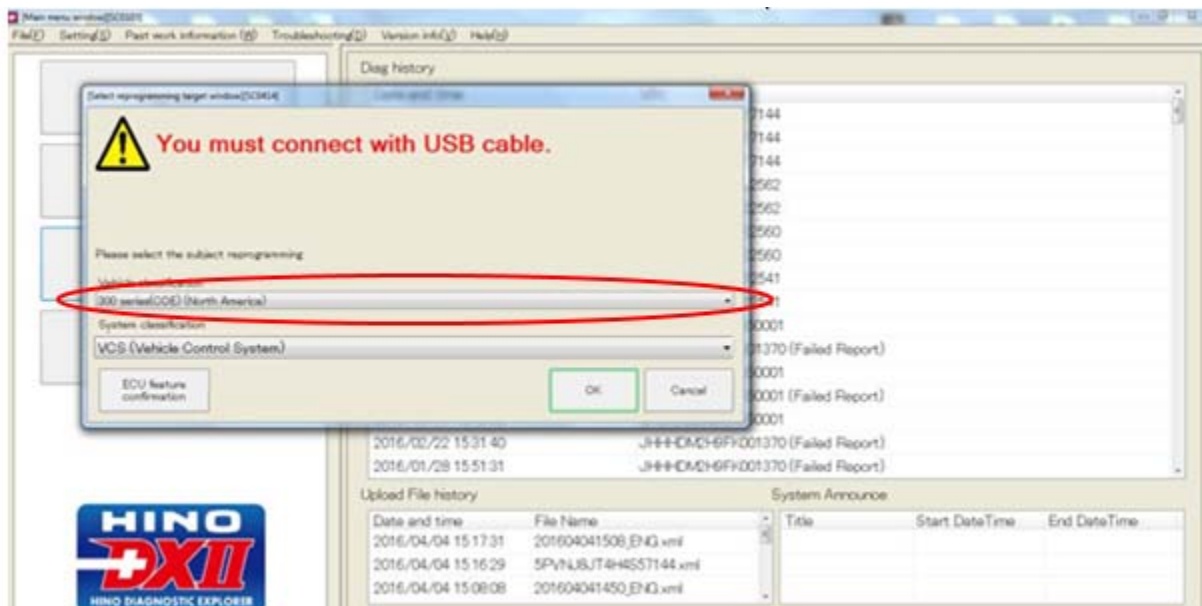
- 15.** Insert the ignition key into the starter switch and turn the key to the “ON” position.



16. For the third time, select the “Reprogramming” icon.



17. Select “300 Series” under the “Vehicle Classification” drop down menu.



18. Select “ECU (Engine J-Series)” under the “System Classification” drop down menu and then select the “OK” icon.

19. Follow the prompts to update the ECU to the latest software level using the Hino Diagnostic eXplorer II (Hino DX2). Refer to the following table for the appropriate software part number for the application.

ECU Software

PART NUMBER	DESCRIPTION	
89663-E4045C	18MY Diesel	J05ETP
89663-E4055C	18MY Hybrid	J05EUG
89663-E4643C	19MY Diesel	J05ETP
89663-E4653C	19MY Hybrid	J05EUG

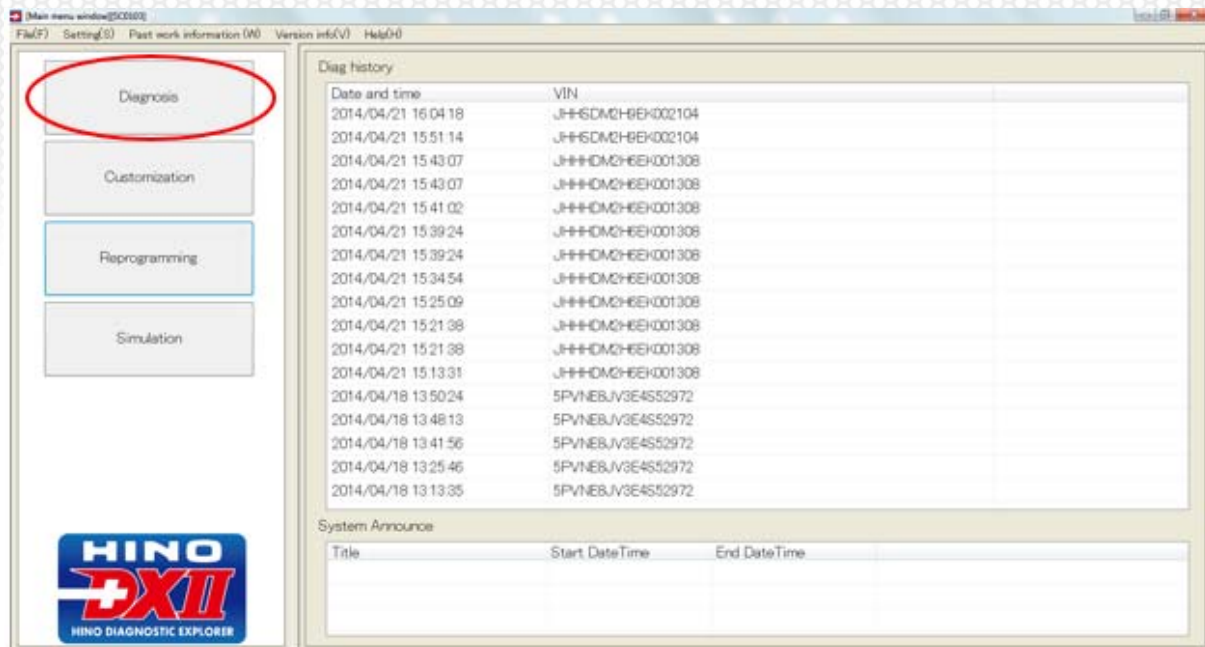
20. Once ECU reprogramming is complete, turn the starter switch to the “LOCK” position and remove the key for one minute.



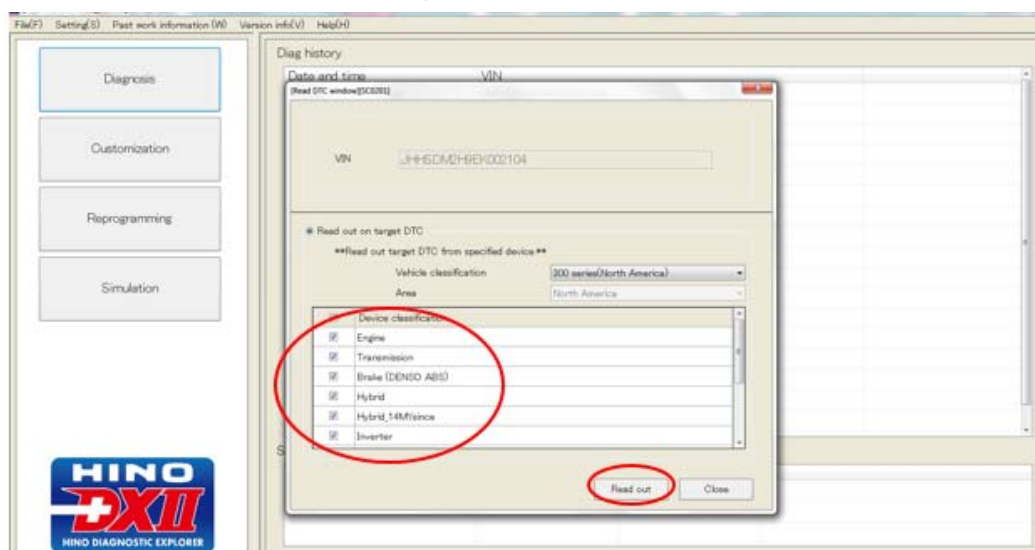
21. Insert the ignition key into the starter switch and turn the key to the “ON” position.



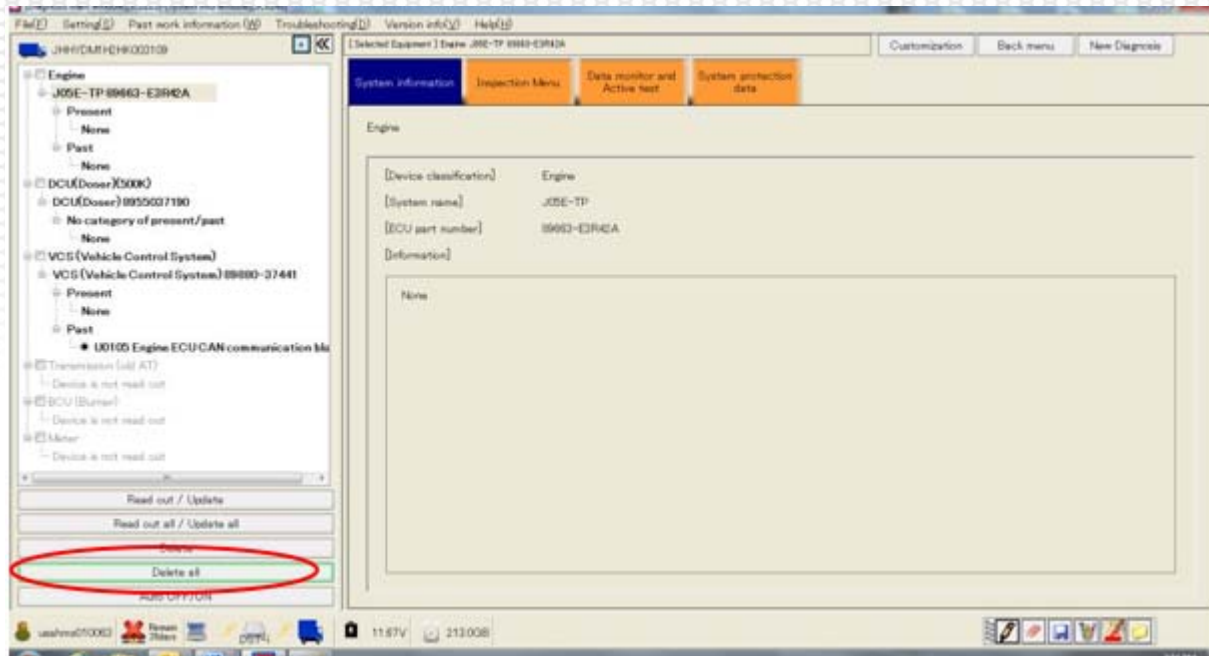
22. During ECU software reprogramming, other DTC's may have been set. These DTC's will need to be cleared prior to completing this Emission Recall. Select the "Diagnosis" icon.



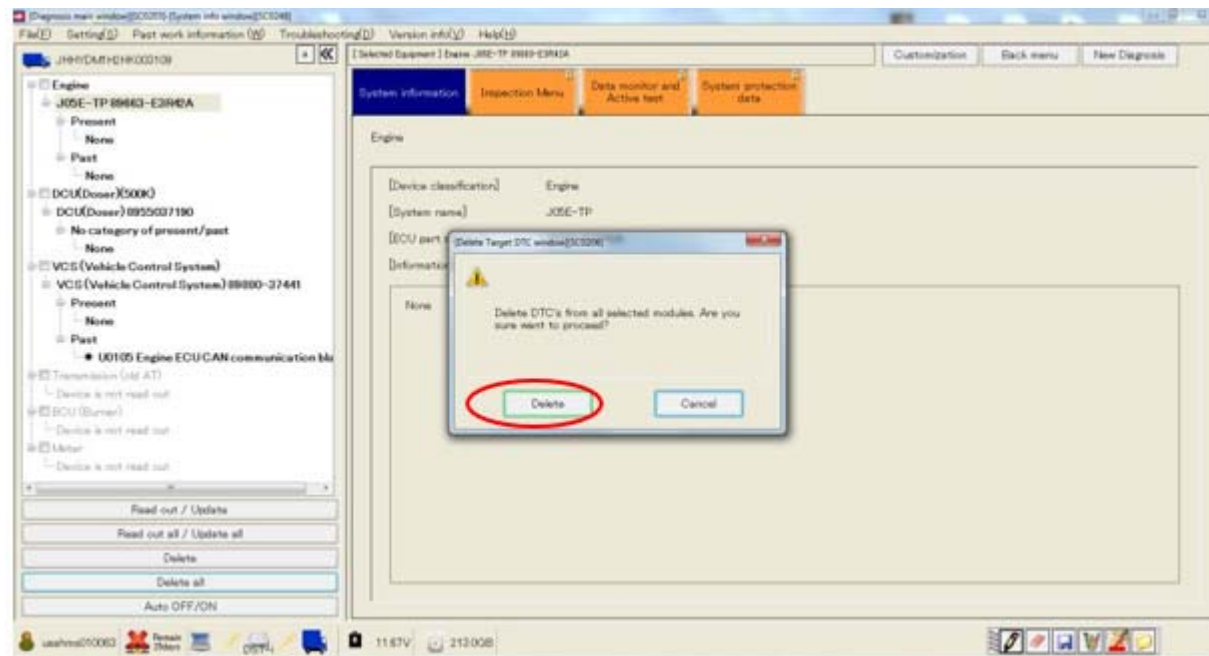
23. Check mark the "Device Classification". This should automatically check mark the remaining devices. Select the "Read Out" icon.



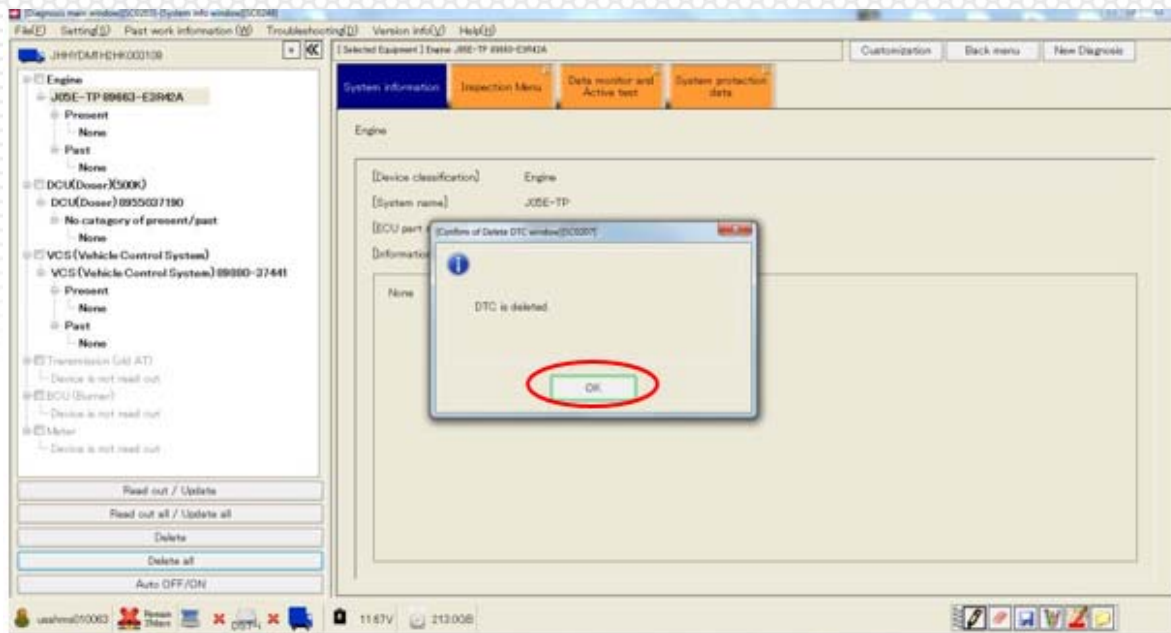
24. Select the “Delete All” icon.



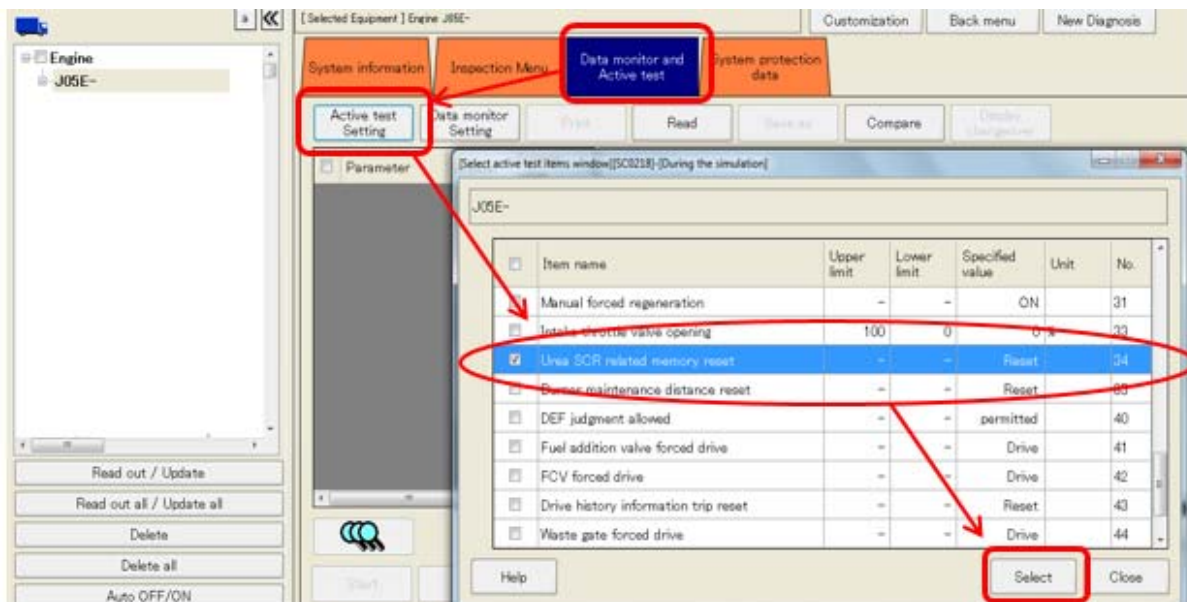
25. Select the “Delete” icon.



26. Select the “OK” icon.



27. From the Engine ECU Data Monitor and Active Test menu, select Active Test Setting>Urea SCR Related Memory Reset> then follow the prompts to complete the reset.



PTO VERIFICATION PROCEDURE

NOTICE: This procedure is only for vehicles equipped with a PTO. If the vehicle is not equipped with a PTO, proceed to Step 28 following this procedure.

PTO Verification

NOTE: For additional information on the PTO, refer to TT-17-004 COE PTO installation.

With the ECU and VCS software update in this recall, adjusting engine idle speed adjustment by use of the cruise control switch (when the vehicle is not moving) has been eliminated. This change may impact customers who were using the cruise control switch to control idle speed for PTO use. Follow the three steps below to determine if installation of a PTO switch, or modification of existing PTO switch wiring will be necessary.

1. Confirm the body application. If no PTO is present, proceed to Step 28 following this procedure. If the vehicle is equipped with a PTO, proceed to step 2, below.
2. Using the DX2 monitor PTO status (PID 8). With the engine running, engage the PTO.

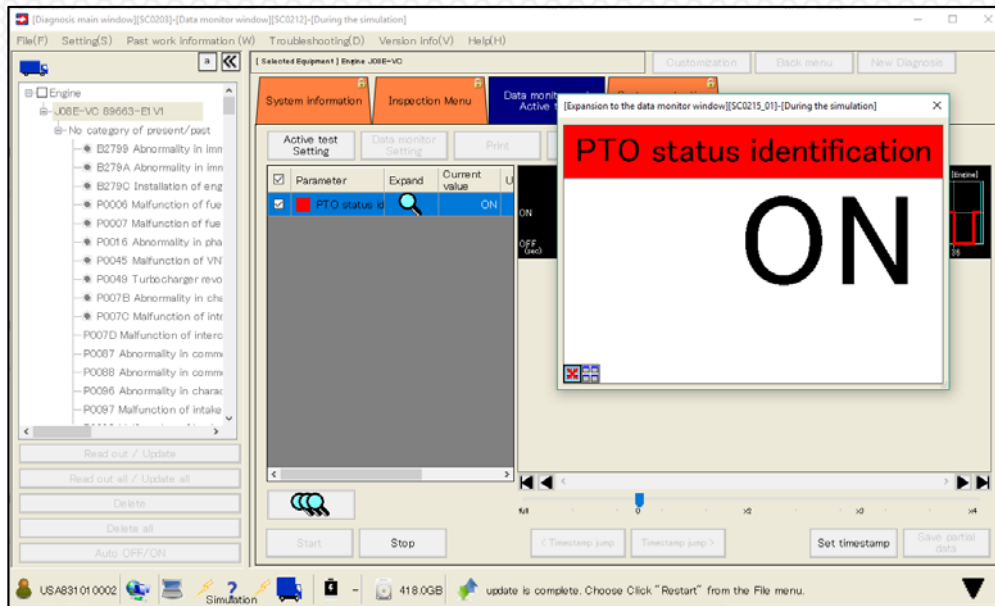
All signal list			
Item name	Description	Unit	No.
Engine coolant temperature	It means the engine coolant temperature current	° F	3
Engine revolution	It means the current number of revolutions of the engine.	rpm	4
Speed	It means the current vehicle speed.	Mph	5
Intake air temperature (Intake Man...	It means the intake air temperature of the intake side.	° F	6
Intake air flow rate	it means the current intake air flow rate.	g/s	7
PTO status identification	It means the state of the PTO(PTO accelerator operation or during PTO SW ON)		8



Does the DX2 PTO status display “ON” when the PTO switch is on?

Yes: No further action is needed. The cruise control switch will function as before to allow elevated idle speeds when the PTO switch is turned on. Proceed to Step 28 following this procedure.

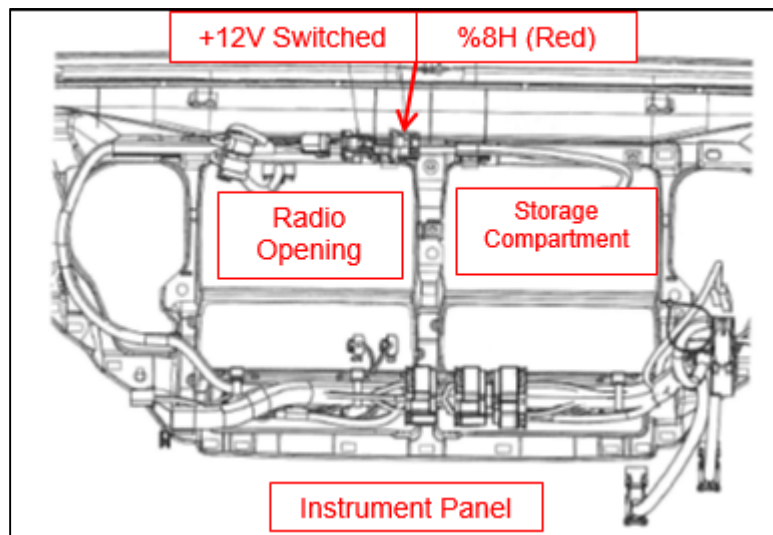
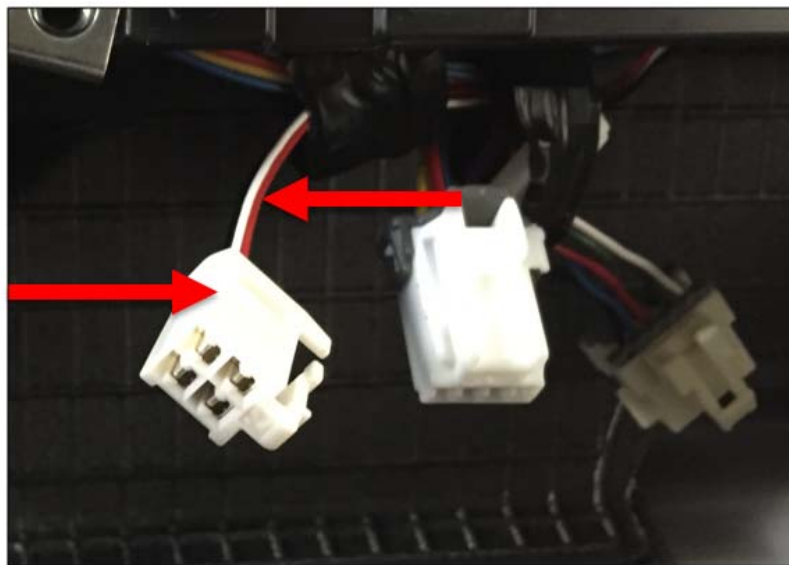
No: Modifications are needed. Proceed to step 3, below.



3. For vehicles that have a PTO switch but the DX2 PTO status did not display “ON” with the switch on, modifications are required to enable elevated idle speed by use of the cruise control switch.

In order to use the cruise control switch to elevate the idle speed, the Engine ECU must receive a switched 12 volt power signal to circuit %8H / PTO SW1 (Red) when the PTO is in use. Also, item number 229 must be set to “1” in the Engine ECU Customization Menu using DXII. Refer to chapters 7 and 11 of the body builder book as well as Tech Tip 17-004 on Hinonet to modify the existing PTO switch wiring.

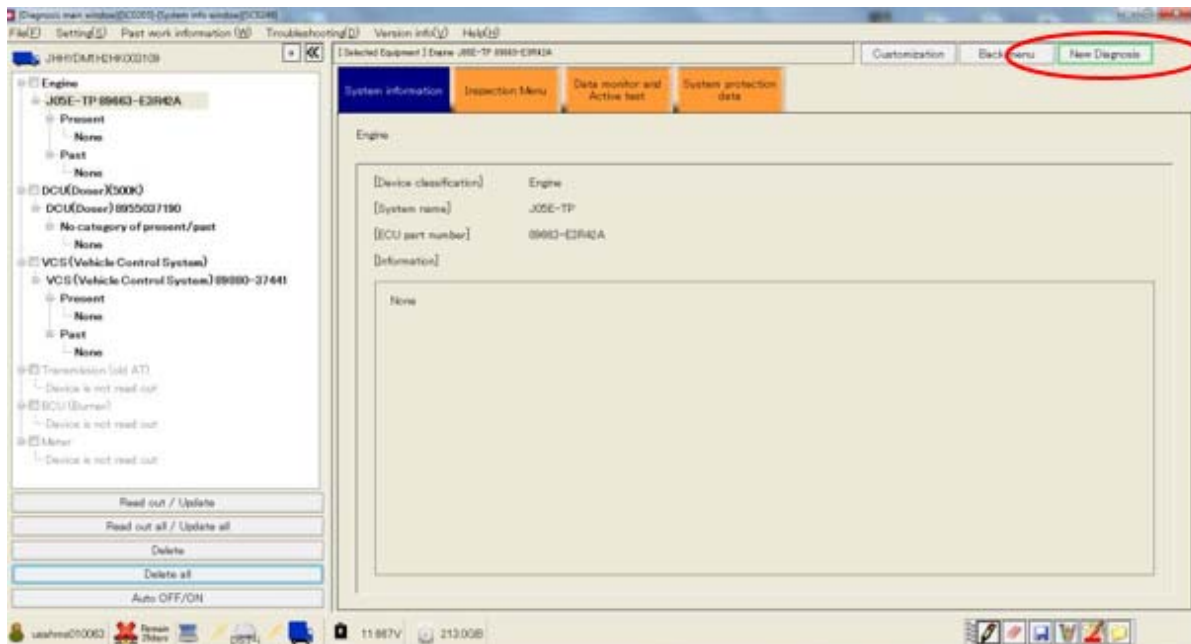
After the ECU PTO signal has been wired in and item 229 is set to “1”, recheck PTO operation. Verify that the “PTO ON” indicator illuminates when the PTO is engaged, and the engine speed is adjustable with the cruise control switch, or a preset elevated engine speed is reached. Once proper operation of the “PTO ON” indicator and elevated idle speed is verified, proceed to Step 28 following this procedure.



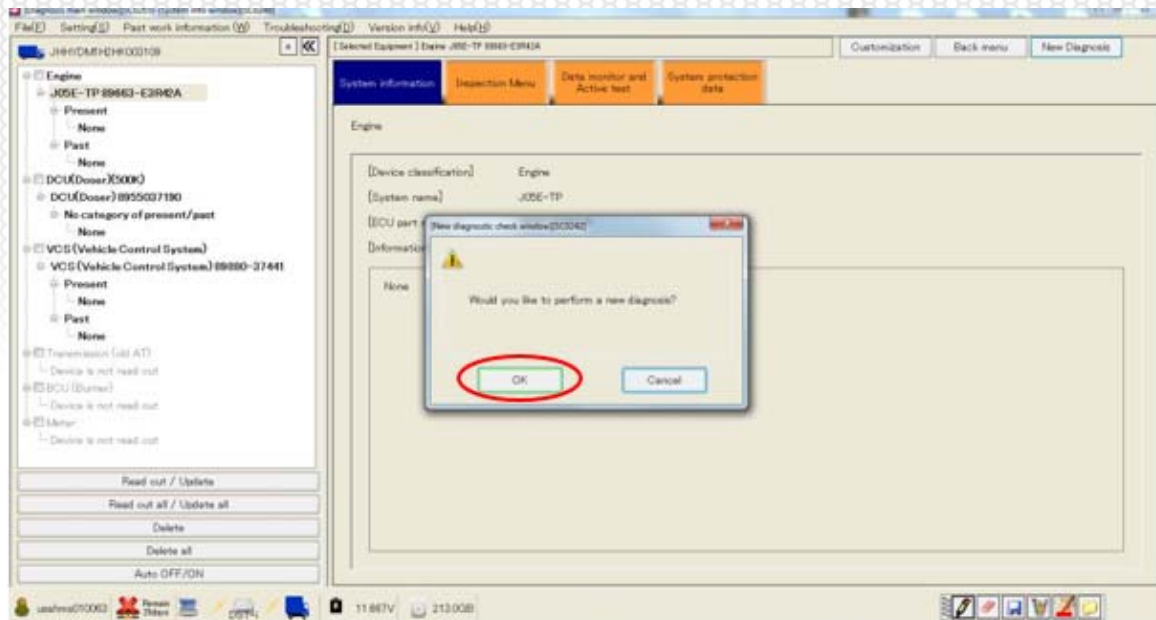
DX Number	DX Description	Operational Description	
229	Cruise Control Switch Inhibit During PTO Operation Flag	Set/resume switch = decrease/ increase RPM. This setting does NOT work when Pre-Set PTO flag is activated. This setting does not work in the following conditions. (1) Cruise main switch is NOT turned ON (08MY or before), (2) Vehicle speed is NOT "0", (3) Gear position is NOT neutral, (4) Service brake is applied, (5) Clutch pedal is applied.	0=OFF 1=ON

NOTICE: If further assistance is needed after performing the instructions in the body builder book, please submit a Tech Assist case on Hinonet.

28. Select the "New Diagnosis" icon.



29. Select the “OK” icon.

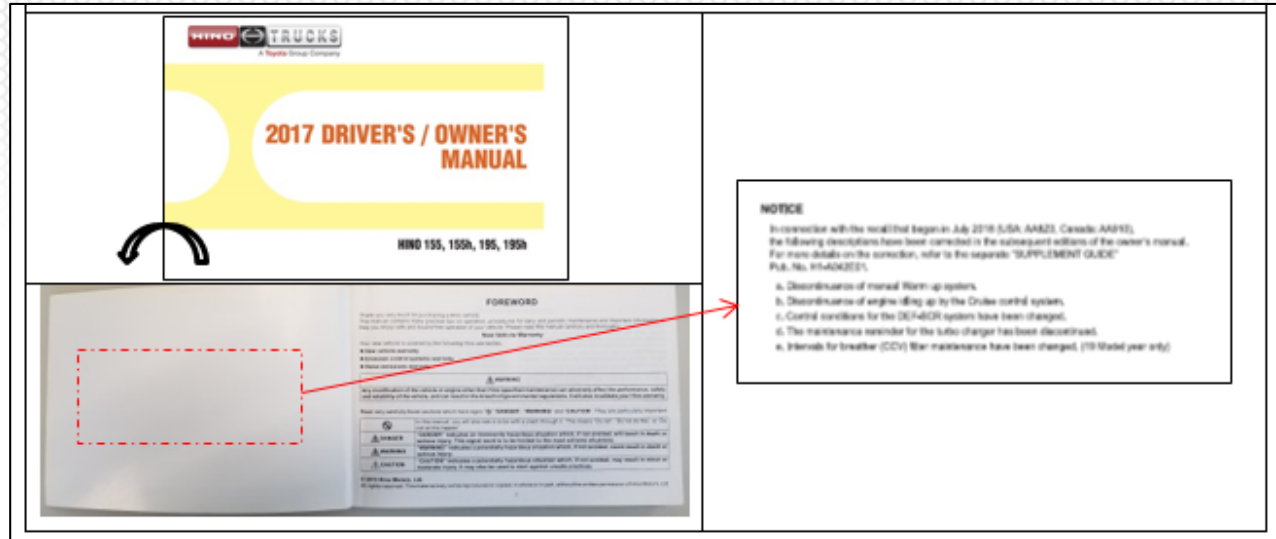


30. Turn the starter switch to the “LOCK” position and remove the key. Proceed to the Owner’s Manual Update Procedure, below.

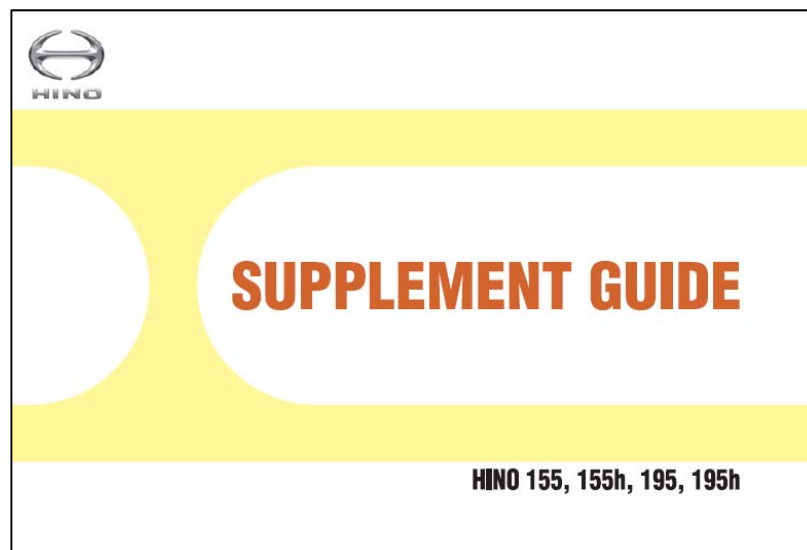


OWNERS MANUAL UPDATE PROCEDURE

1. Affix the “NOTICE” label to the back side of the cover page on the owner’s manual.

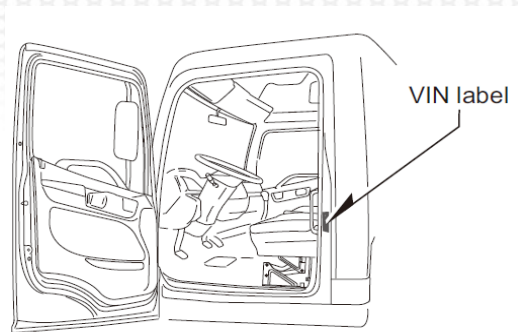


2. Place the supplement guide in the vehicle with the owner's manual to alert the operator of the changes to the cruise control idle up feature and exhaust brake at idle deletion. Proceed to the Repair Label Installation Procedure, below.



REPAIR LABEL INSTALLATION PROCEDURE

1. Once all above steps in this recall procedure have been completed, apply a recall label to the left door jamb above the VIN label. Fill in the Campaign No, Dealer code, and Repair date. Proceed to the Final Inspection Procedure, below.



FINAL INSPECTION:

1. To complete this recall procedure, review and confirm the following:
- The Engine ECU, DCU, and VCS module software were updated to the latest levels as outlined by this recall procedure.
 - When reprogramming, DTC's may have inadvertently been set. Make certain that all codes logged as a result of the ECU reprogramming have been cleared from the Engine ECU, Transmission ECU, ABS ECU, DCU and VCS prior to releasing the truck back to the customer.
 - The Urea SCR Related Memory Reset was performed.
 - The "Notice" label was applied to the owner's manual, and the supplement guide is in the vehicle with the owner's manual.
 - The elevated idle speed is working properly on vehicles equipped with PTO.
 - The recall label was installed on the door jamb.



CLAIM APPLICATION

ECU Reprogramming:

- a) Campaign No: AA920
- b) Labor charge: 1.7 hrs.
- Additional time may be claimed for PTO switch modifications on PTO applications ONLY
- c) Warranty code: 8631198
- d) Operation code: 86350AOT
- e) Original failed part: 9999999999

