HINO TRUCKS

A Toyota Group Company

EMISSIONS RECALL

CAB OVER ENGINE (COE) ECU AND DCU SOFTWARE UPDATE

CAMPAIGN NO: AADB0
DATE: 5-7-2019

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.***

5. 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.

We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

OVERVIEW:

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

1) SCR (Selective Catalytic Reduction) Feed Back Monitor (P2BAE)
2) DPF (Diesel Particulate Filter) Feed Back Monitor (P24A1 or P24A0)
3) Urea SCR Tank Heater Valve Stuck Open Monitor (P20B2)
4) MIL (Malfunction Indicator Lamp) ON software issue for DCU; OBD (On Board Diagnostics) Improvement
5) NOx (Oxides of Nitrogen) sensor offset monitor (P2201 or P229F) (18MY and 19MY ONLY)

HINO TRUCKS
A Toyota Group Company

Hino is using this opportunity to implement OBD improvement items (which are not by themselves recall items) that are included in all affected engines.

<Additional Items>
DPF Over Temperature Monitor (P200C)
All Cylinder Misfire Detection Monitor (P0300)
Misfire Monitor (Conventional vehicles: P0301-P0304)
DOC1 (Diesel Oxidation Catalyst) Over Temperature Monitor (P2428)
SCR Feed Back Monitor (P2BAE)
Reductant Temperature “Too High” Monitor (P24FF)

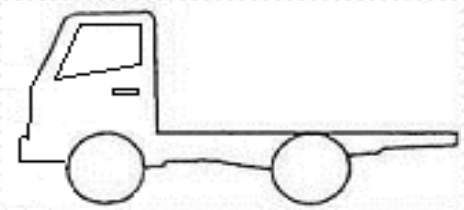
BEFORE YOU BEGIN:

- 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.

HINO TRUCKS
A Toyota Group Company

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.



HINO TRUCKS
A Toyota Group Company

4. Chock all of the wheels.



Engine ECU Software

PART NUMBER	MODEL YEAR	ENGINE SERIES	QUANTITY
89663-E4047	2018 Diesel	J05ETP	As Required By VIN
89663-E4057	2018 Hybrid	J05EUG	
89663-E4645	2019 Diesel	J05ETP	
89663-E4655	2019 Hybrid	J05EUG	

DCU Software

PART NUMBER	DESCRIPTION	QUANTITY
89550-37245	18MY	As Required by VIN
89550-37245	19MY	

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



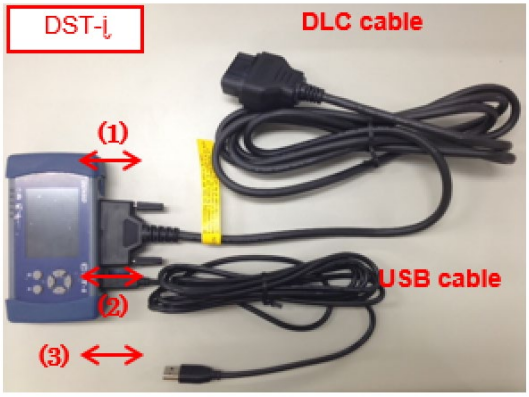
NOTICE: The illustrations above depict what you will see on your computer screen with regard to the features which must be disabled. The location on the screen of the features to be disabled will vary, however, based upon the operating software. Consult your IT (Information Technology) department as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

HINO TRUCKS
A Toyota Group Company

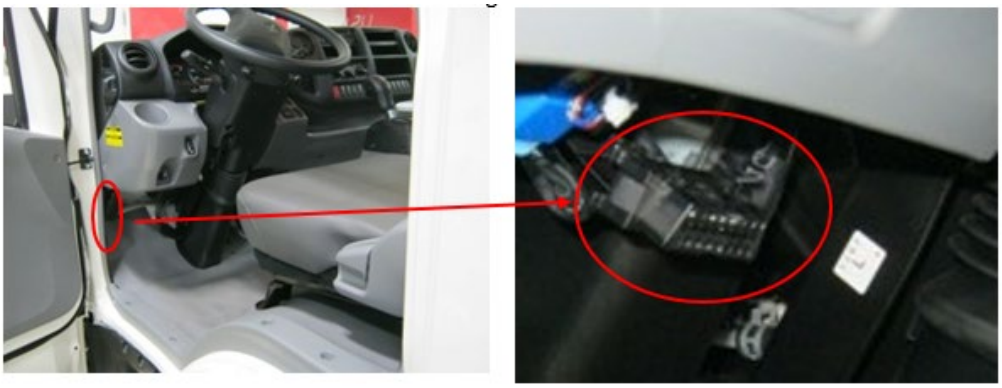
DCU & ECU REPROGRAMMING PROCEDURE

CAUTION: Two 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. **DO NOT** start the procedure without the battery charger being installed.

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.

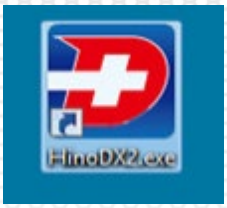


2. Connect the DLC cable to the vehicle's DLC connector. The DLC connector is found under the dash on the left side of the steering column.

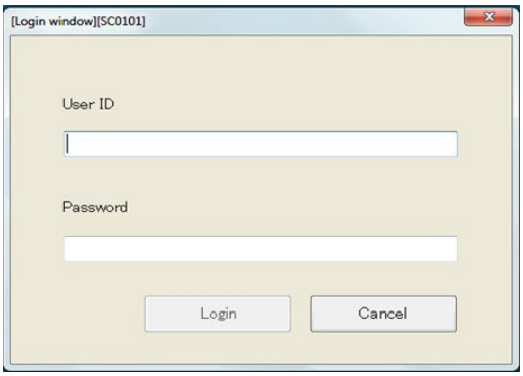


HINO TRUCKS
A Toyota Group Company

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 1.1.19.4 or later.

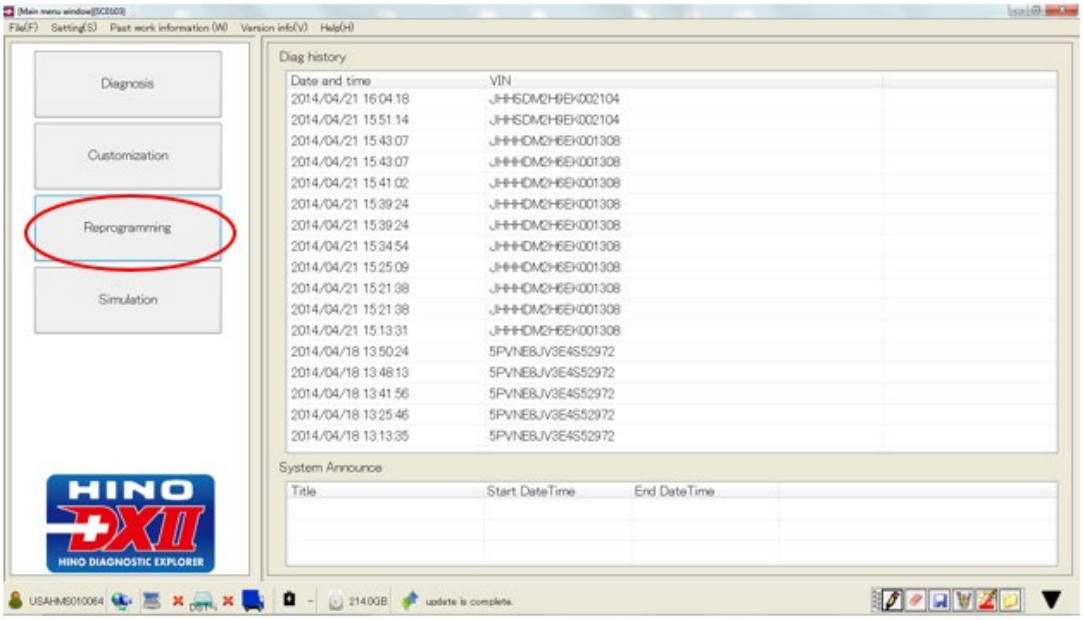


5. Insert the ignition key into the starter switch and turn the key to the “ON” position.

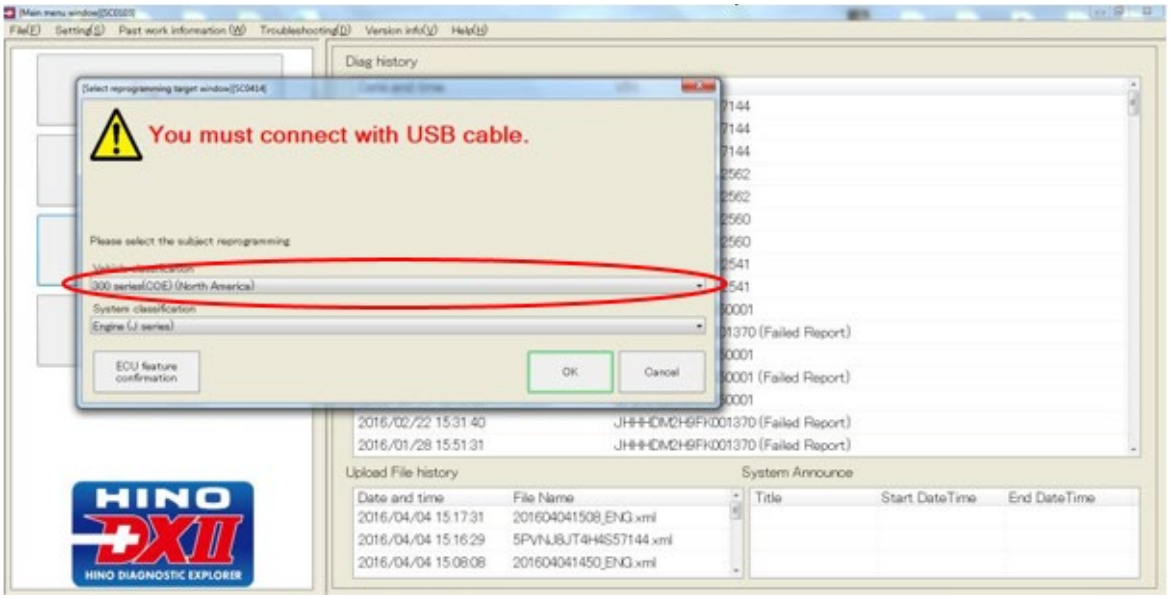


HINO TRUCKS
A Toyota Group Company

6. Select the “Reprogramming” icon.



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



HINO TRUCKS
A Toyota Group Company

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

9. 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	DESCRIPTION	QUANTITY
89550-37245	18MY	As Required by VIN
89550-37245	19MY	

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

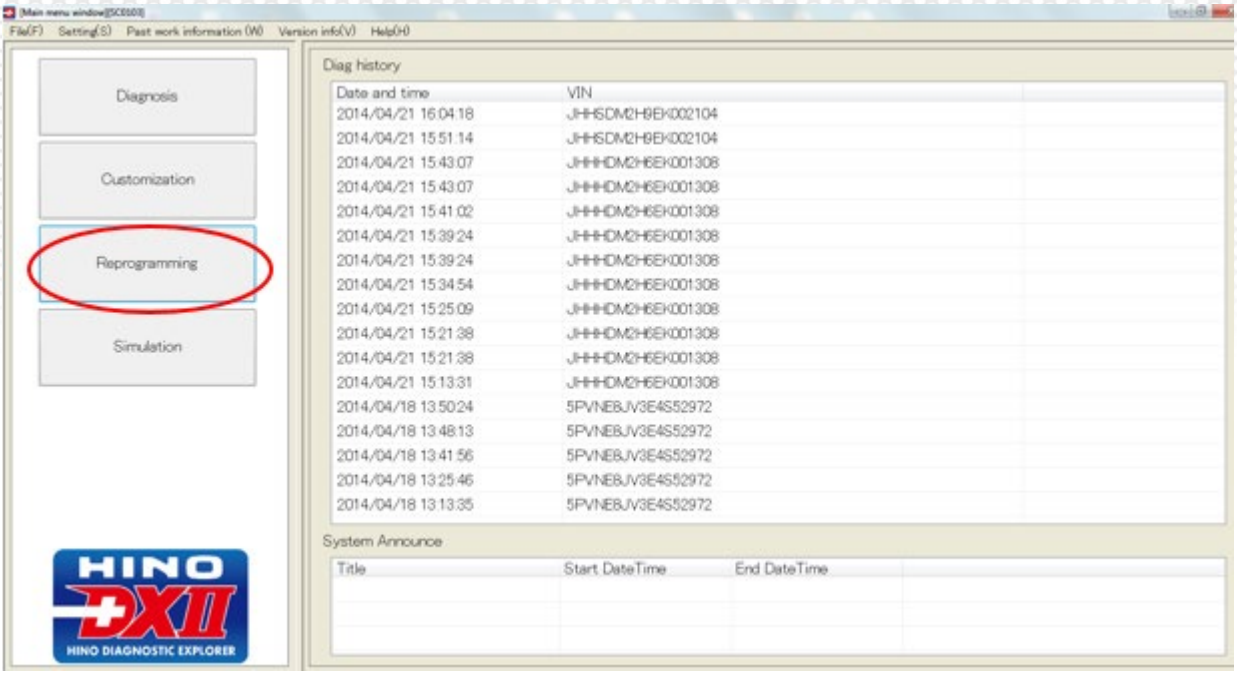


11. After waiting at least one minute, insert the ignition key into the starter switch and turn the key to the “ON” position.

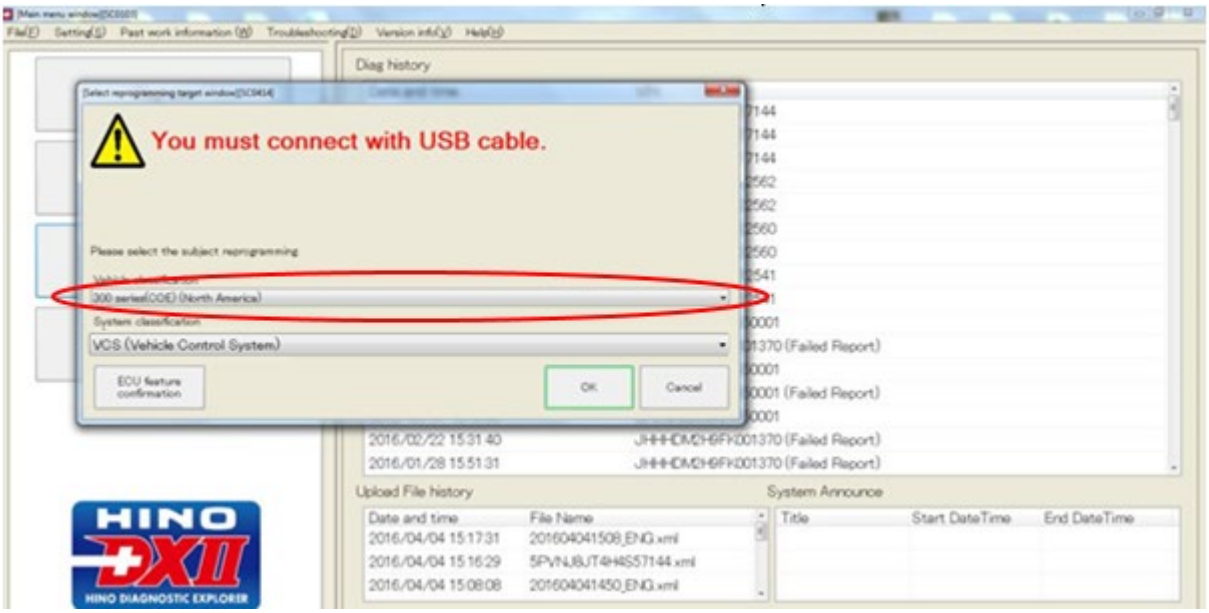


HINO TRUCKS
A Toyota Group Company

12. Again, select the “Reprogramming” icon.



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



HINO TRUCKS
A Toyota Group Company

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

15. 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	MODEL YEAR	ENGINE SERIES	QUANTITY
89663-E4047	2018 Diesel	J05ETP	As Required By VIN
89663-E4057	2018 Hybrid	J05EUG	
89663-E4645	2019 Diesel	J05ETP	
89663-E4655	2019 Hybrid	J05EUG	

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

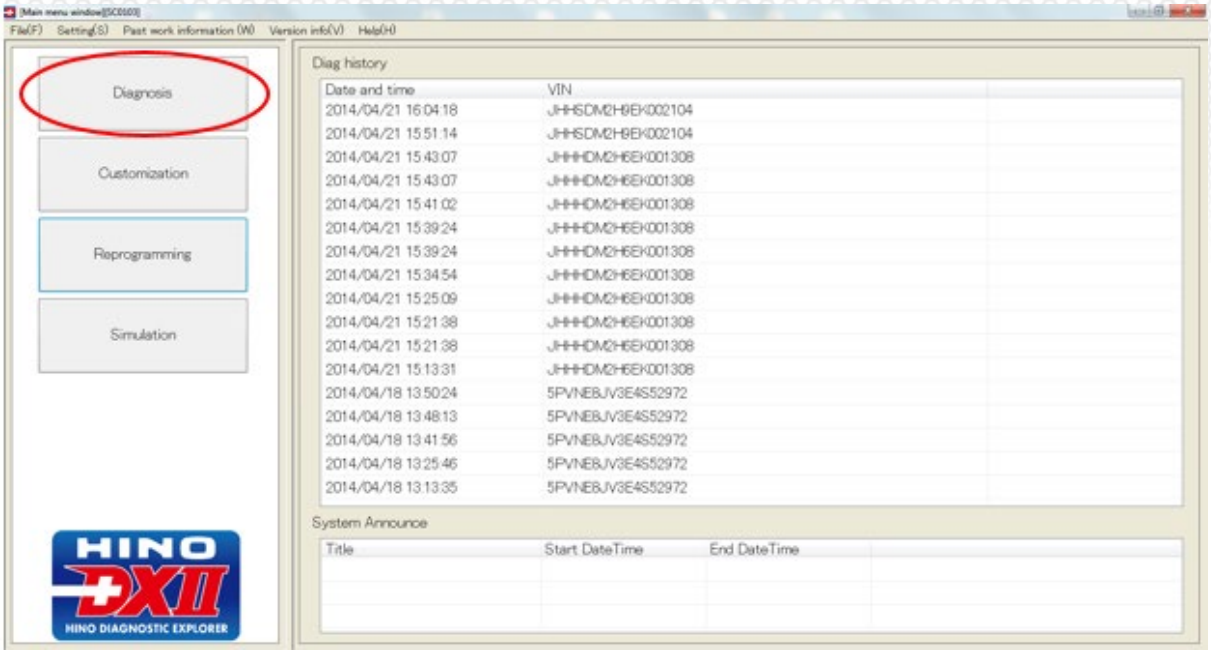


17. After waiting at least one minute, insert the ignition key into the starter switch and turn the key to the “ON” position.

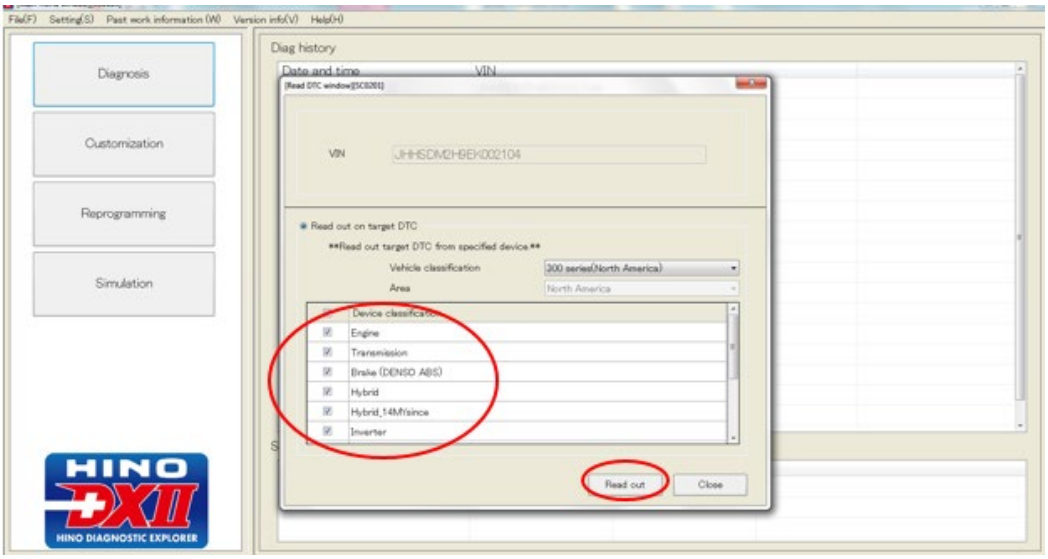


HINO TRUCKS
A Toyota Group Company

18. During ECU software reprogramming, other DTC's may have been set. These DTC's will need to be cleared, in the manner indicated in steps 19-22, prior to completing this emission recall. Select the "Diagnosis" icon.

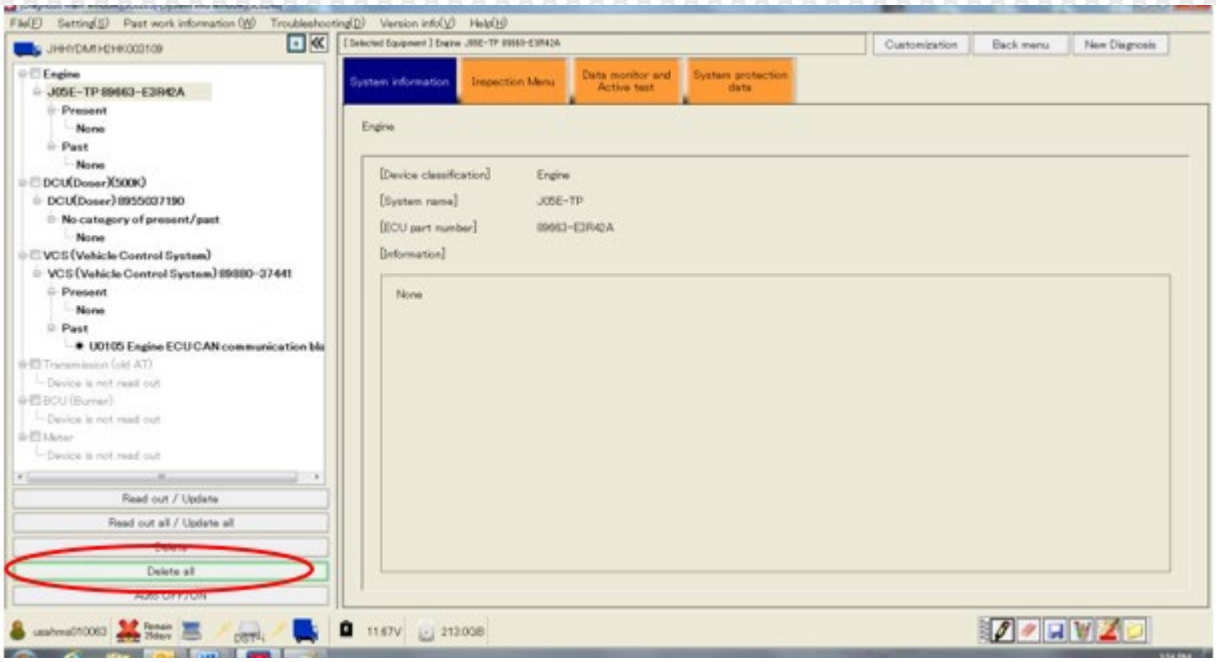


19. Check mark the "Device Classification". This should automatically check mark the remaining devices. Select the "Read Out" icon.

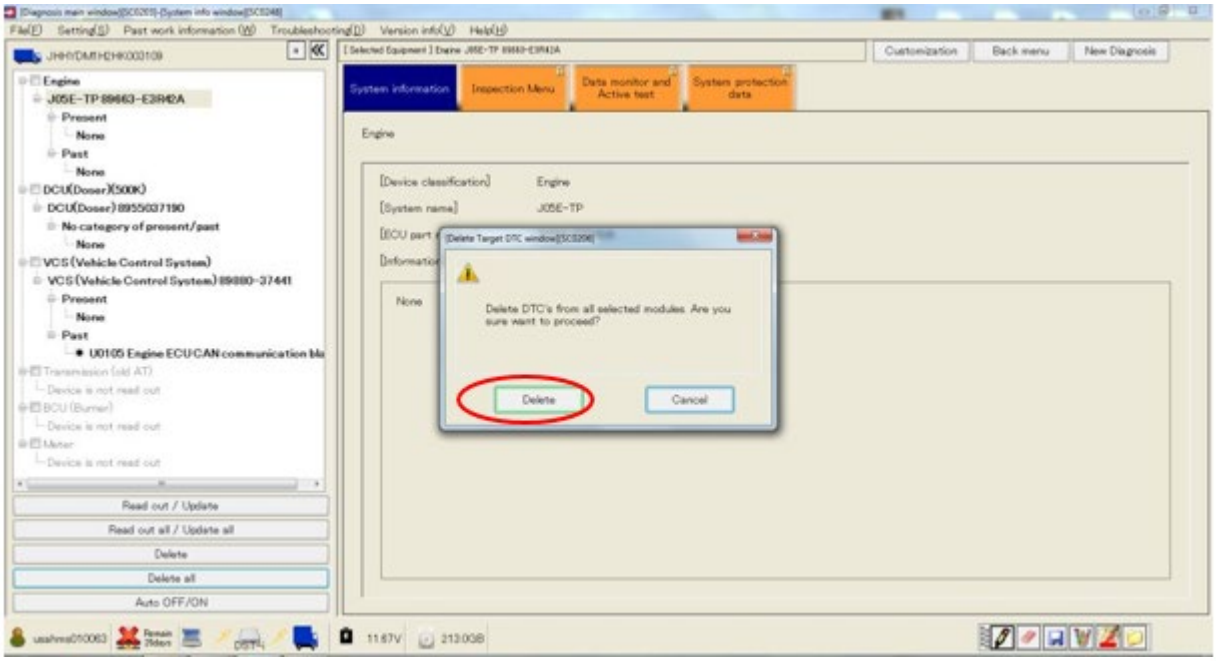


HINO TRUCKS
A Toyota Group Company

20. Select the “Delete All” icon.

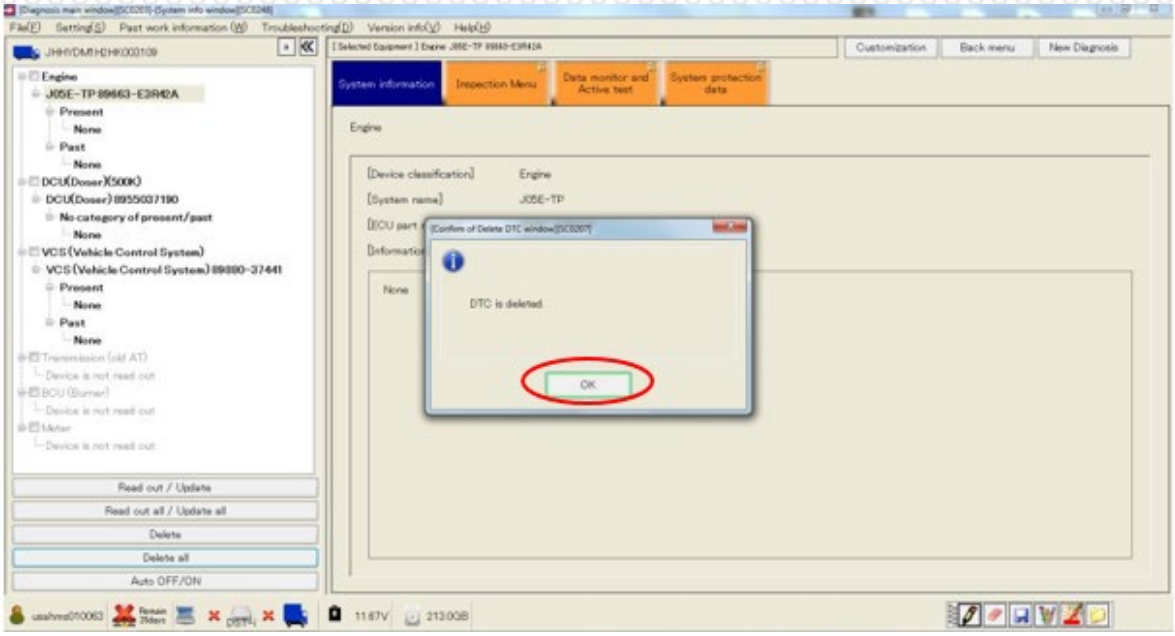


21. Select the “Delete” icon.

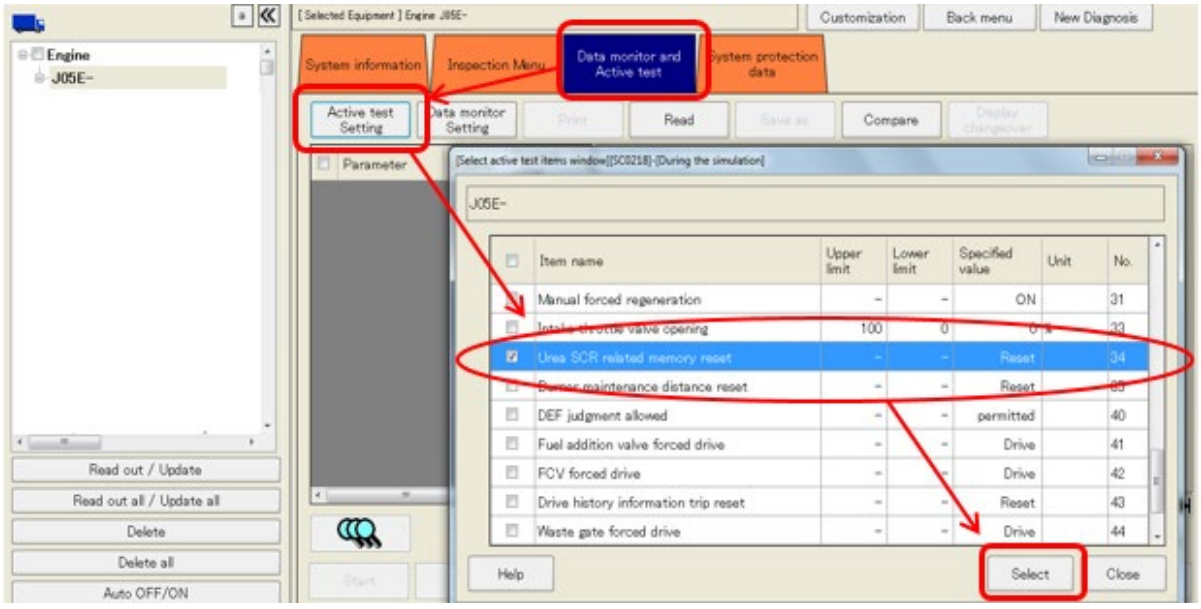


HINO TRUCKS
A Toyota Group Company

22. Select the “OK” icon.

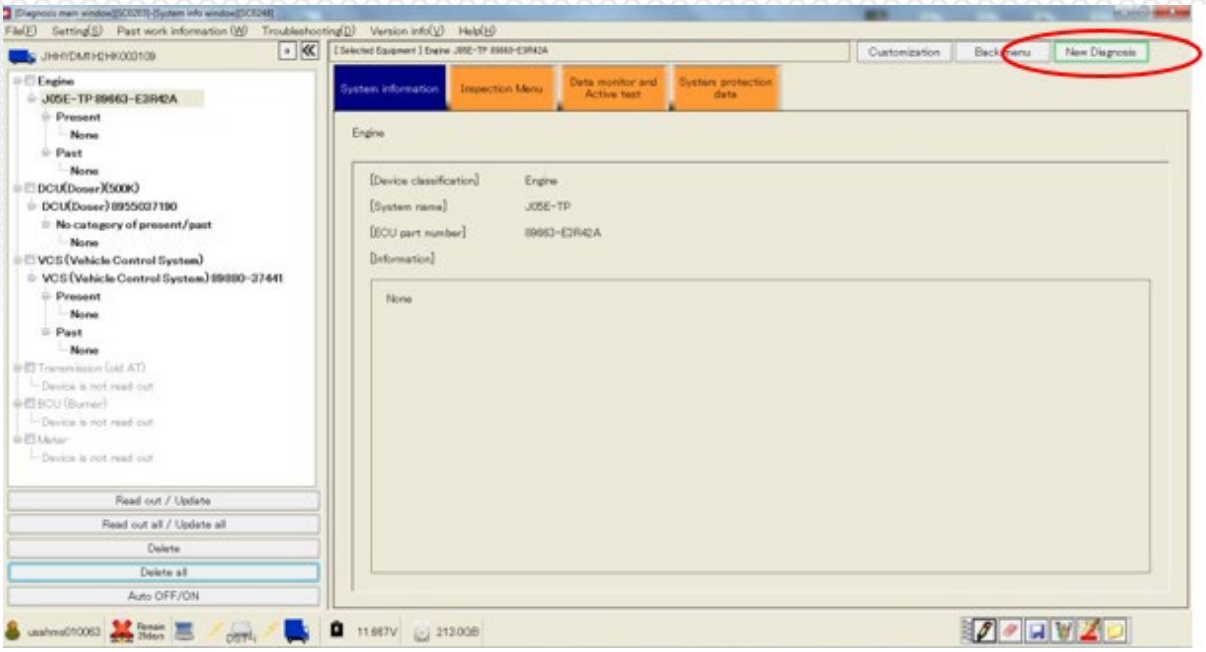


23. From the Engine ECU Data Monitor and Active Test menu, select Active Test Setting>Urea SCR Related Memory Reset> then follow the prompts to complete the reset.

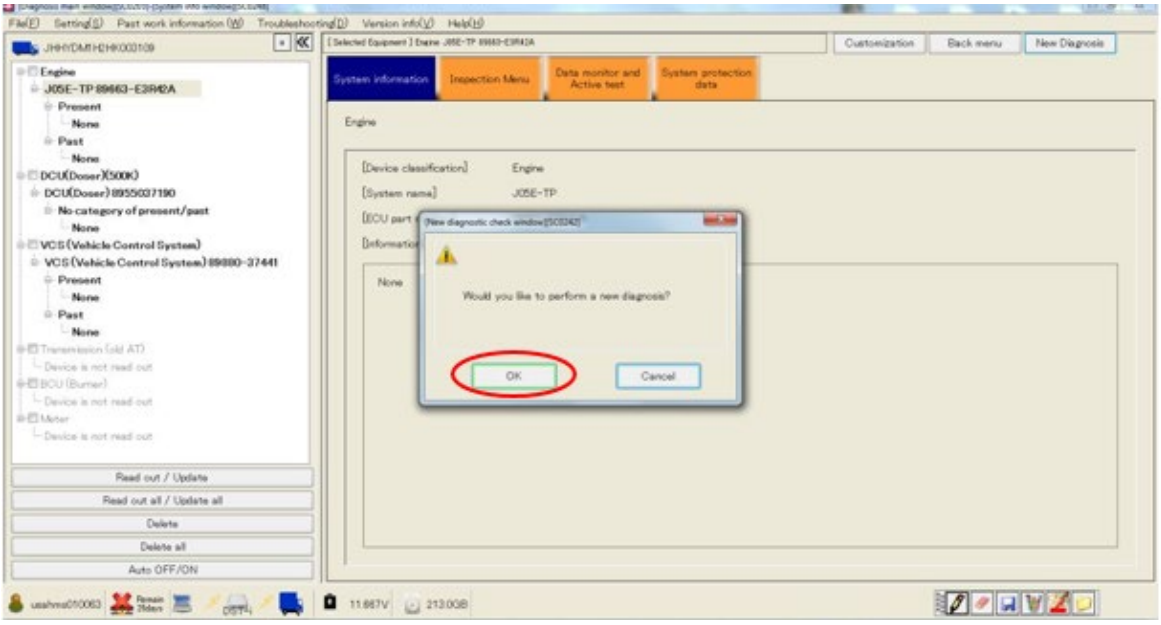


HINO TRUCKS
A Toyota Group Company

24. Select the “New Diagnosis” icon.



25. Select the “OK” icon.



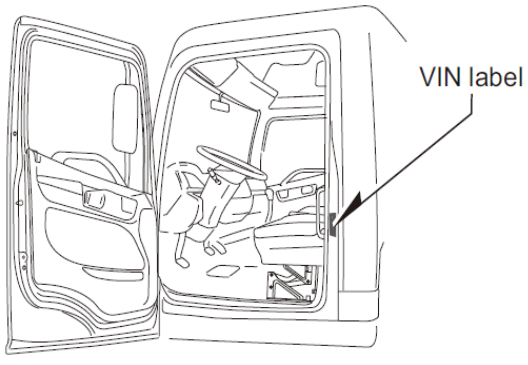
HINO TRUCKS
A Toyota Group Company

26. Turn the starter switch to the “LOCK” position and remove the key.



REPAIR LABEL INSTALLATION PROCEDURE

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.

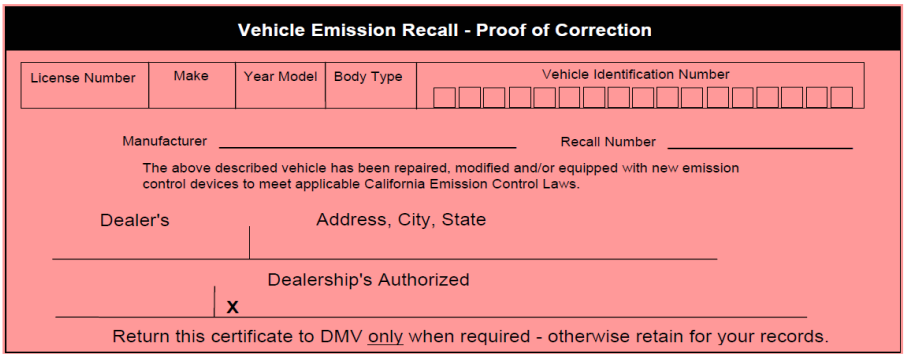




HINO TRUCKS
A Toyota Group Company

CALIFORNIA VEHICLES ONLY:

When an Emissions Recall is performed by a California Dealer a “Proof of Correction” certificate must be completed and provided to the vehicle owner to submit to the California Department of Motor Vehicles if requested during vehicle registration. If the “Proof of Correction” certificate is not provided, an owner may not be able to renew the vehicle registration. If not requested by the DMV, the form should be retained for the Owner’s records. A downloadable form can be found on Hinonet/ Service/ Print Forms under the description “Proof of Correction”.



Vehicle Emission Recall - Proof of Correction

License Number	Make	Year Model	Body Type	Vehicle Identification Number

Manufacturer _____ Recall Number _____

The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.

Dealer's Address, City, State

Dealership's Authorized

X

Return this certificate to DMV only when required - otherwise retain for your records.

FINAL INSPECTION:

- The Engine DCU and ECU 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 and DCU prior to releasing the truck back to the customer.
- The Urea SCR Related Memory Reset was performed.
- The recall label was installed on the door jamb.

CLAIM APPLICATION

COE DCU and ECU Reprogramming:

a) Campaign No: AADB0
b) Labor charge: Reprogram ECU/DCU 1.2 hrs.
c) Warranty code: 86311
d) Trouble code: 98
e) Operation code: 86350AOT
f) Original failed part: 9999999999

HINO TRUCKS
A Toyota Group Company