



TECH TIP

**RECOVERING THE DOSER CONTROL
UNIT (DCU) AFTER A FAILED
PROGRAMMING EVENT – DCU
BLANK**

**GROUP: 0-GENERAL
TECH TIP NO: TT-23-011
DATE: 01-19-2023**

SUBJECT VEHICLES

11MY-21MY Conventional Trucks equipped with a J08 engine or 13MY-20MY Cab Over Engine (COE) trucks equipped with a J05 engine.

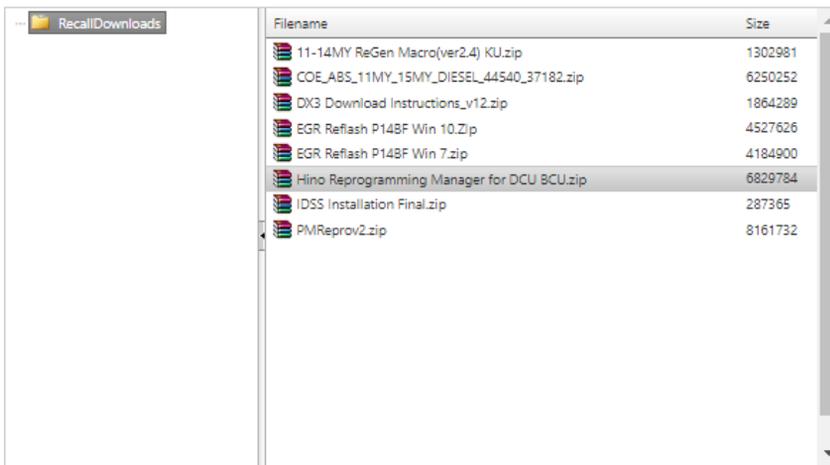
OVERVIEW:

During a Doser Control Unit (DCU) reprogramming event, the DCU may fail programming and become blank. DX3 may not be able to recover, use the procedure below to recover the DCU if necessary.

REPAIR PROCEDURE:

1. In HinoNet, select **Service > TechAssist > Recall Downloads** and locate the **Hino Reprograming Manager for DCU BCU**. Once located, open the zip file, extract the file to your desktop or downloads folder and **run the program from your computer**.

HOME : SERVICE : TechAssist : Recall Downloads



IMPORTANT:

Once the programmer has been installed, **RESTART** the computer. Failure to restart the computer will affect programming, available files for programming and drivers for the interface to connect to the truck.

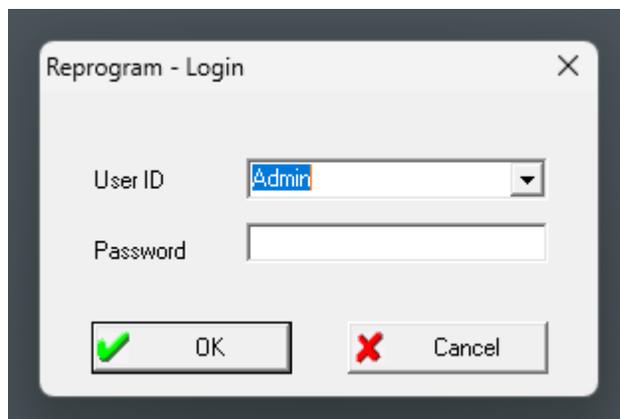
IMPORTANT:

Prior to following this procedure further, make sure there are no aftermarket devices connected to the trucks network (Telematics Devices, ELDs, Back-Up Cameras etc. must be removed), this is likely the cause of the initial programming failure when using DX3. Failure to locate and remove these devices will only lead to additional failed programming events.

2. After restarting the computer, locate the **DCU_BCU Program Manager** and open it.



3. Log in, **User Name** is **Admin** and the **Password** is **Admin**, then click **OK**.



4. Select the communication device **Options > Communication > Select Communication Interface** and click **OK** (it is not necessary to Configure after selection).

- Hino Reprog Manager -

This application software can change the after-treatment ECU program.

{Application System}
Urea SCR system (DCU)
Burner system (BCU)

[NEXIQ]

5. Click **Urea SCR** on the left, the computer screen will change to what is shown below, then click **Browse**.

File(F) Data correction(D) Options(S) Help(H)

File(E)
After treatment system
Urea SCR
Burner

PIN: Admin Date: 2023/01/18 09:54

Content of work []

Chassis No. []

Engine No. []

Part number of ECU program []

ECU program [] **Browse(B)...**

ECU Configuration Data Write at the same time

Caution!
It is likely to lead to the accident and the serious vehicle breakdown when REPROGRAMMING is done by using information different from the fact.
It is very dangerous and stop it.

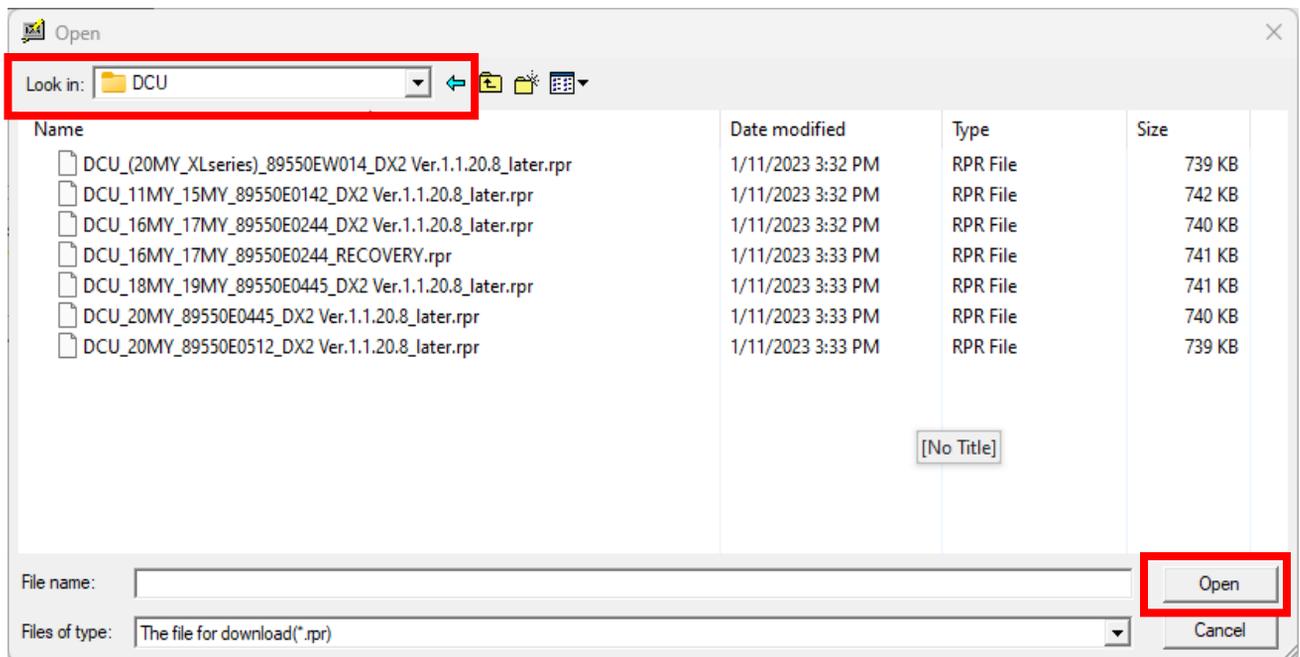
Next process...
A new ECU program is verified whether possible to reprogram for connected ECU.
Connect the communication cable from PC to the vehicle through communication I/F then turn key SW "ON".

Next(N) Cancel Help(F1)

6. Navigate to the following folder (**C:**) *drive* > **HinoServiceApplications** > **HinoDX3** > **HinoDX3** > **Reprodata** > **System** > **USA** > **Select 300 or 600 Series** > **DCU** and then select the correct file based on the model year truck needing to be programmed. Double click the file or highlight the file and click **Open**.

IMPORTANT:

Some files may have the word **RECOVERY** in them. If the software needed has the word **RECOVERY**, and the DCU is blank, choose this file for DCU recovery, otherwise, select the correct file available for programming.



7. Once the file has been selected, allow up to 30 seconds for the file to display in the ECU Program window (make sure the software number is correct). Select Content of Work as **ECU Program Update** and click **Next**.

File(E)

After treatment system

Urea SCR

Bumer

PIN: Admin Date: 2023/01/18 09:54

Content of work **ECU program update**

Chassis No.

Engine No.

Part number of ECU program 89550E0512

ECU program **DCU_20MY_89550E0512_DX2 Ver.1.1.20.8_later.rpr** Browse(B)

ECU Configuration Data Write at the same time

Caution!
It is likely to lead to the accident and the serious vehicle breakdown when REPROGRAMMING is done by using information different from the fact.
It is very dangerous and stop it

Next process...
A new ECU program is verified whether possible to reprogram for connected ECU.
Connect the communication cable from PC to the vehicle through communication I/F then turn key SW "ON".

Next(N)

8. At this time, make sure the VIM (Nexiq, DSTi, etc.) is connected to the 16 pin OBD2 connector on the truck and the USB is plugged in to the computer. Click **Read ECU Parameter(L)**, the blue bar will build from left to right until the tool reads the ECU. Once readout is complete, Verify/Judge(S) will be selectable, click **Verify/Judge(S)** and if everything passes by the two green indicators, click **Next**.

File(E)

After treatment system

Urea SCR

Burner

PIN: Admin Date: 2023/01/18 13:00

Read ECU parameter(L)

Extended value ECU value

Decision

Chassis No.

Engine No.

Part number of ECU program 89550E0512 89550E0512

Neither the vehicle number nor the engine number are written.

Verify/Judge(S)

There is no problem.
Reprogramming process can be proceeded.

Caution!

Connect the communication cable to vehicle, and make it key SW "ON"

*Green; No problem
*Yellow; Possible to proceed reprogramming after re-verify the data
*Red; Impossible to proceed reprogramming because of verified result.

Next process...

Reprogram a new ECU program.

Return Next(N) Cancel Help(F1)

9. Click *Start Reprogramming(W)*.

File(E)

After treatment system

Urea SCR

Bumer

PIN: Admin Date: 2023/01/18 13:00

Content of work

Chassis No.

Engine No.

Part number of ECU program

Start Reprogramming(W)

ECU program (/)

ECU Configuration Data (/)

Caution!

- *Confirm sufficient battery voltage of vehicle.
- *Keep vehicle key SW "ON" until any indication.
- *Don't disconnect the communication cable.
- *By the time it begins to write ECU program to ECU, it takes several seconds.

Next process...

- *Take care that the PC doesn't become a sleep mode and also doesn't shut down.
- *In case reprogramming is failed, most of the case the ECU is needed to rewrite the same program by "ECU program update".



IMPORTANT:

Monitor progress along the way. As files are installed, there will be some pauses between file numbers, typically between files 1 through 10, at file number 2060 and file number 10256 are the most common. If any of these stalls exceeds 30 seconds, it's likely programming will fail. Hold down **Ctrl + Alt** and then add **Delete** on your computers keyboard, select **Task Manager**, locate the 32bit programmer, highlight, right click and then select **End Task**. Re-open the DCU_BCU programmer from the desktop and start reprogramming again from **Step 5**. **Note:** This sounds like a long process, however it does move rather quickly.

File(E)
After treatment system

Urea SCR
Bumer

PIN: Admin Date: 2023/01/18 13:00

Content of work

Chassis No.

Engine No.

Part number of ECU program

ECU program

ECU Configuration Data

Caution!

- *Confirm sufficient battery voltage of vehicle.
- *Keep vehicle key SW "ON" until any indication.
- *Don't disconnect the communication cable.
- *By the time it begins to write ECU program to ECU, it takes several seconds.

Next process...

- *Take care that the PC doesn't become a sleep mode and also doesn't shut down.
- *In case reprogramming is failed, most of the case the ECU is needed to rewrite the same program by "ECU program update".

10. Once programming is complete, click **OK**.

File(E)
After treatment system
Urea SCR
Bumer

PIN: Admin Date: 2023/01/18 13:00

Content of work: ECU program update

Chassis No. []

Engine No. []

Part number of ECU program: 89550E0512

Start Reprogramming []

ECU program [] (42012/ 42013)

ECU Configuration Data [] (/)

Caution!
*Confirm sufficient battery voltage of vehicle.
*Keep vehicle key SW "ON" until any indication.
*Don't disconnect the communication cable.
*By the time it begins to write ECU program to ECU, it takes several s

Next process...
*Take care that the PC doesn't become a sleep mode and also does
*In case reprogramming is failed, most of the case the ECU is needed
*ECU program update".

Return [] Next []

ReProgram [X]
⚠ Reprogramming of ECU was completed.
Start Hino Diagnostic eXplorer, and check and eliminate all the Diag. codes of ECU connected to vehicles.
OK []

11. Verify programmed files are correct and click **End**.

File(F) Data correction(D) Options(S) Help(H)

File(E)
After treatment system
Urea SCR
Bumer

PIN: Admin Date: 2023/01/18 13:00

	Before work	After work
Chassis No.	[]	[]
Engine No.	[]	[]
Part number of ECU program	89550E0512	89550E0512

Print(P) []

Caution!

Information
A repro report can be printed out

End(E) [] Help(F1) []

12. Close the DCU_BCU Programmer and open DX3. Connect to all modules, again verify the software number is correct. **Clear all DTCs and Reset SCR Related Memory.**

IMPORTANT:

Failure to follow step 12 will result in DTCs returning (P204F) and the check engine light illuminating for the customer.

NOTE:

If the DCU will not recover or there is an error that cannot be resolved, open a TechAssist case and provide screen shots of the error or concern. Be sure to provide details such as the truck interface being used, driver selected and any additional details related to the programming event so assistance can be offered.

