



Technical Service Bulletin

GROUP CAMPAIGN	NUMBER 21-01-082H
DATE DECEMBER 2021	MODEL(S) NEXO (FE)

SUBJECT: NEXO BPCU SOFTWARE UPDATE
(SERVICE CAMPAIGN T7Q)

★ IMPORTANT

*** Dealer Stock and Retail Vehicles ***

Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Vehicle Information Screen (VIS)" via WEBDCS to identify open Campaigns.

Description:

This bulletin describes the procedure to update the software of the Blower Power Control Unit (BPCU). The BPCU update optimizes control logic to reduce power consumption of the air compressor.

Applicable Vehicles: Certain 2019MY - 2021MY Nexo (FE) vehicles.

GDS Information:

Event	Description
721	BLOWER POWER CONTROL UNIT SOFTWARE UPGRADE (BPCU)"

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
Nexo (FE)	10D213R0	BPCU UPDATE	0.3 M/H	39915-M5000	I3A	ZZ3

NOTE 1: Submit Claim on Campaign Claim Entry Screen

NOTE 2: If a part that is not covered by this campaign is found in need of replacement while performing this campaign and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.

NOTICE

Verify that vehicle is affected by checking the vehicle's BPCU control unit ROM ID version and referencing the ROM ID Information Table before attempting to update the control unit software.

CAUTION

- Run the fuel cell a sufficient amount of time to ensure that the 12-volt auxiliary battery is sufficiently charged for the update. Turn off the vehicle after 12-volt auxiliary battery is charged.
- Ensure the 12-volt battery will not become discharged during the update by turning off all lights and accessories, heater/air conditioner, fan, audio, heated seats, rear defroster, etc.
- Do not leave the headlight switch in auto mode.
- Before performing the update, set the POWER button to the ON position. To set the POWER button to the ON position, press the button two times without pressing the brake pedal.
- Do not start the fuel cell.
- Do not turn OFF the POWER button during the update.
- Do not disconnect any cables connected to the vehicle or GDS-M during the update

NOTICE

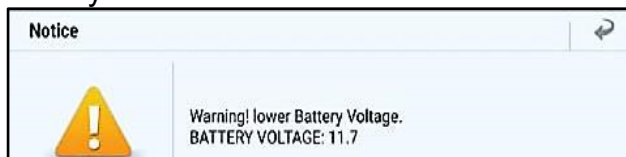
Confirm your GDS-M has the most recent software version. If not, connect the GDS-M Mobile to an Internet port, open the GDS-M home page and select "Internet Update". Refer to www.hyundaitechinfo.com if necessary.

If you encounter GDS-M related problems, call the GIT Helpline at 888-437-0308.

WARNING

When the vehicle auxiliary 12-volt battery is lower than 12 volts, the GDS-M will trigger a Low Battery Voltage Warning. If this Warning occurs, then perform A or B as follows.

- A. Connect the battery to a fully charged battery jump pack or GR8 charger using "Power Supply Mode" to continue the software update.
- B. Select "BACK" to exit the SW update. Then, start the fuel cell and let it run with until the auxiliary 12-volt battery is sufficiently charged. Return to the software update after charging the battery.



Service Procedure:

Connect the VCI-II into the vehicle's driver side instrument panel OBD-II port and verify the device is operational.

Do not set up the trigger module.

**NOTICE**

- GDS-M control unit upgrading operates with wireless communication ad Wi-Fi direct. It is also possible to perform the update via USB cable between the tablet PC and VCI-II.
- Ensure the tablet battery has reasonable charge before starting the update.

NOTICE

You must initially perform GDS-M BPCU Update in Auto Mode.

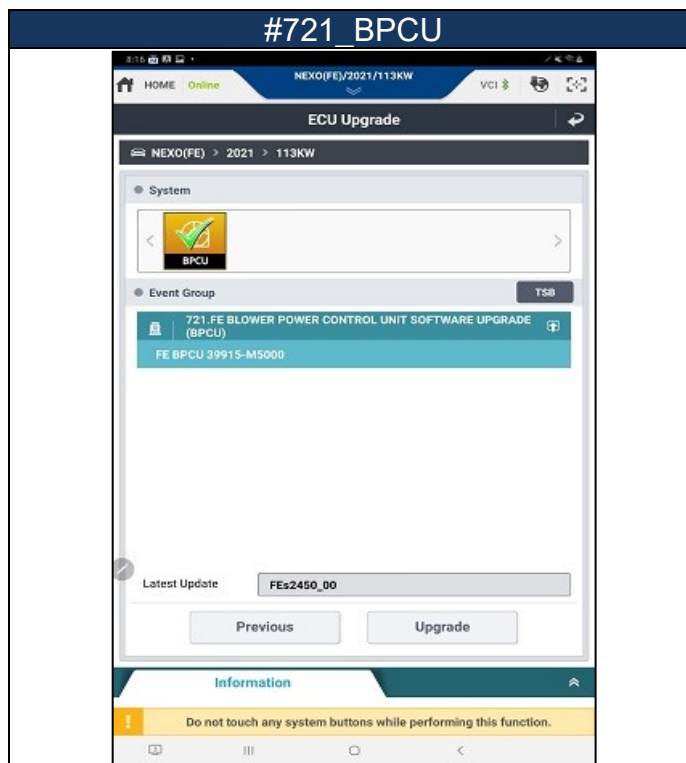
If the ECM Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

A. Automatic GDS-M Update Procedure

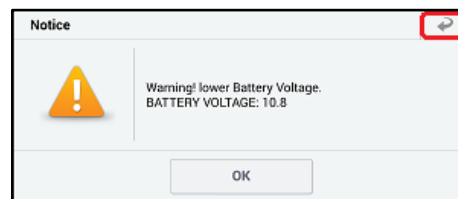
1. Enter the vehicle's information and on the next screen select ECU Upgrade.
Using the push button start/stop, ensure the vehicle is in the ON mode. Do not perform the update while the vehicle is in the READY mode.
2. Select Auto Mode and then select System, BPCU.
3. Read information and select ID check.
4. GDS-M will read the current vehicle ROM ID and check for the newest update event.

5. Select the upgrade event.

5-1) "721. FE BLOWER POWER CONTROL UNIT SOFTWARE UPGRADE (BPCU)"



6. If the low battery warning message appears, then select the BACK arrow  and run the fuel cell to ensure the battery is adequately charged for the update.



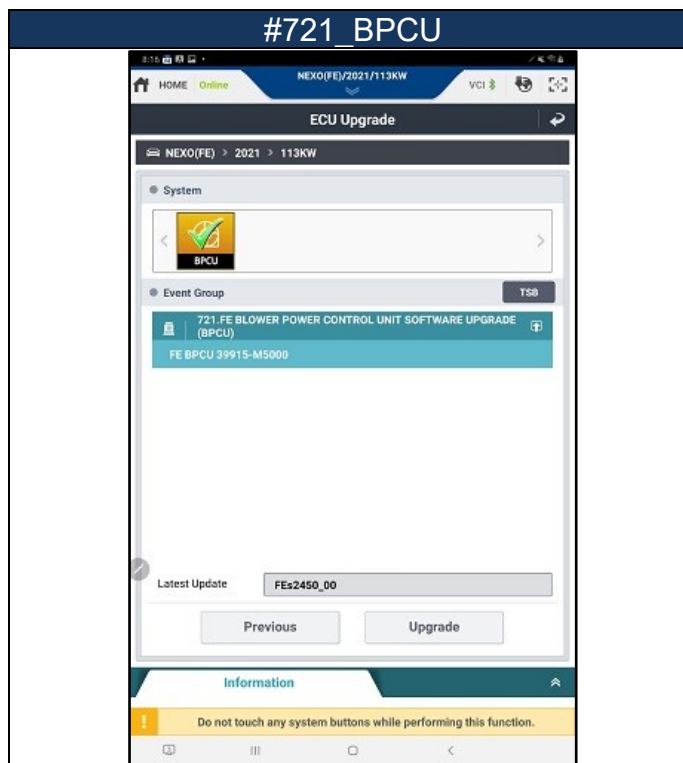
7. Update (1/2) will begin and progress will be displayed on the bar graph.
8. Update (2/2) will begin and progress will be displayed on the bar graph.
9. After update (2/2) is complete, turn off the ignition for 10 seconds.
10. Turn the ignition to the ON position and press OK to continue according to information displayed on the screen. **Do not start the fuel cell. Do not put into READY mode.**
11. Select OK on the final screen and the update is complete.
12. Check for any DTCs created by the update and clear the codes.
13. Start the fuel cell (READY Mode) to confirm the vehicle is operating properly.
After confirmation, use the push button start/stop and place the vehicle into the ON mode.

NOTICE

- Only perform the manual update if the automatic update fails.
- If automatic update fails, turn the ignition off for about 10 seconds. Place it back into the ON position to reset the control unit before performing the manual update

B. Manual GDS-M Update Procedure

1. Within the upgrade screen, select Manual Mode, then select upgrade event.
2. Select the control unit part number with reference to the ROM ID Information Table at the end of this TSB. Then select Upgrade.



3. Enter the password from the password table located at the end of this TSB and press OK.
4. If the low battery warning message appears, then select the BACK arrow  and run the fuel cell to ensure the battery is adequately charged for the update.



5. Update (1/2) will begin and progress will be displayed on the bar graph.
6. Update (2/2) will begin and progress will be displayed on the bar graph.
7. After update (2/2) is complete, turn off the ignition for 10 seconds.
8. Turn the ignition to the ON position and press OK to continue according to information displayed on the screen. **Do not start the fuel cell. Do not put into READY mode.**

9. Select OK on the final screen and the update is complete.
10. Check for any DTCs created by the update and clear the codes.
11. Put the vehicle into READY mode to confirm the vehicle is operating properly.

ROM ID Reference Table**1. BPCU**

MODEL	BPCU Part Number	ROM ID	
		OLD	NEW
Nexo (FE)	39915-M5000	FEs2410_00 FEs2300_00 FEs2210_00 FEs2100_00 FEs2030_00	FEs2450_00

Manual Mode Password Information Tables:

EVENT #	MENU	PASSWORD
721	FE BPCU 39915-M5000	2450