

Technical Service Bulletin

SUBJECT: CHECK ENGINE LIGHT ILLUMINATES OR ENGINE				TSB-22-13-001			
MALFUNG	DATE:	January 2022					
NOW W	MODE	: 2022 Outlander					
IDLING OR DRIVING							
CIRCULATE TO:	[] GENERAL MANAGER	[X] PARTS MANAGER		[X] TECHNICIAN			
[X] SERVICE ADVISOR	[X] SERVICE MANAGER	[X] WARRANTY PROCESSO)R	[X] SALES MANAGER			

PURPOSE

This reflash is to correct the ECU software. The check engine light illuminates or an engine malfunction power reduced service now warning may appear while idling or driving. DTC P0401, P0404 or others may be set. Please perform this reflash first, then proceed to diagnosing other codes if they persist.

Please reprogram the Engine Control Module (ECU) with countermeasure software to correct the issue for any affected vehicles that come in for service (with customer approval) **and any in dealer inventory.**

AFFECTED VEHICLES

2022 Outlander - built prior to December 16, 2021

REPAIR PROCEDURE

- Confirm your MUT-III SE is updated with the latest reprogramming database.
- Write down all the electrical device settings such as A/C and radio before reprogramming. The settings should be restored after reprogramming.
- Turn off all electrical devices to minimize the vehicle's electrical load. Also use an external
 power source to ensure that the vehicle battery maintains the specified voltage during
 reprogramming.
- Make sure the USB cable and MUT-III SE main harness are not damaged.
- Connect the MUT-III SE to an AC power source to prevent internal battery discharge.
- Stay away from the under hood area during reprogramming. If the connection between the engine ECU and ETACS is lost, the cooling fan operates as fail-safe.

NOTE: If an affected vehicle has a Malfunction Indicator Lamp (MIL) illuminated before reprogramming, and DTCs are listed in the ECU memory, save the ALL-DTC results and then erase the codes prior to reprogramming. If hard codes are present that are applicable to the target ECU and won't clear, diagnose and repair these codes first and then proceed with reprogramming.

IMPORTANT

To maximize customer satisfaction with the quality of their vehicle, affected new or used inventory vehicles should be remedied before the vehicle is delivered.

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The information contained in this bulletin is subject to change. For the latest version of this document, go to the Mitsubishi Dealer Link, MEDIC, or the Mitsubishi Service Information website (www.mitsubishitechinfo.com).

EQUIPMENT

- The following equipment is needed to reprogram the ECU:
- VCI (Vehicle Communication Interface) or VCI Lite MB991824 or MB992744
- MEDIC Laptop/Tablet with A/C power adapter 520924, or FZG1MK2
- MUT III Main Harness "A" (blue connector at the DLC end) MB991910 or MB992745
- USB 2.0 Cable MB991827 or MB992747
- MEDIC 3.5/4 update at 720 or higher
- For Standalone MUT III units, MUT3-SE Reprogramming Database N211201 or higher

ECU REPROGRAMMING CHART

Part Name	Target HW Part No.	Reprograming SW file name	New SW No. / Ver.	Target SW No. / Ver.	Remarks
Engine Control Unit	237036RA3A	237614PN.4EN	237614PN4E	237614PN4C	2WD
				237614PN4D	CRUISE CONTROL
		237614PN.0EN	237614PN0E	237614PN0C	2WD
				237614PN0D	ADAPTIVE CRUISE CONTROL
		237614PN.1EN	237614PN1E	237614PN1C	2WD
				237614PN1D	ADAPTIVE CRUISE CONTROL (W/MI-PILOT)
	237034PM2A	237614PN.5EN	237614PN5E	237614PN5C	4WD
				237614PN5D	CRUISE CONTROL
		237614PN.2EN	237614PN2E	237614PN2C	4WD
				237614PN2D	ADAPTIVE CRUISE CONTROL
		237614PN.3EN	237614PN3E	237614PN3C	4WD
				237614PN3D	ADAPTIVE CRUISE CONTROL (W/MI-PILOT)

REPAIR PROCEDURE

SOFTWARE/MEDIC VERSION VERIFICATION

1. Verify that the ECU has not already been updated to the latest S/W number in the tale above. If the Engine ECU is at the latest level, reprogramming is not necessary.

NOTE: Reprogramming the Engine ECU with the latest database (e.g., **N211201**) includes all past and current reprogramming for TSBs of affected vehicles. It is not necessary to reprogram the ECU for each previous TSB.

For MEDIC 3.5/4 users only: (MUT-III SEV users go to step 5)

2. Verify the MEDIC 3.5/4 is at version 3.5 and at update **720** or higher.

If your <u>MEDIC 3.5/4 update is at least 720</u>, continue with the Reprogramming Procedure. If your <u>MEDIC 3.5/4 update is below 720</u>, update your MEDIC as follows.



3. Select the MEDIC 3.5/4 Admin tab and click on "Updates".



4. If the MEDIC update screen advises updates are available, click the "Begin" button. After all updates are complete, **GO TO THE REPROGRAMMING PROCEDURE**.



5. STANDALONE MUT-III SE SCAN TOOL VIEWER (STV) ONLY: (MEDIC 3.5 USERS – GO TO THE REPROGRAMMING PROCEDURE). Verify that your MUT3-SE has the most current version of the reprogramming database from the MUT3-SE Main Page.

a. Click "STV".



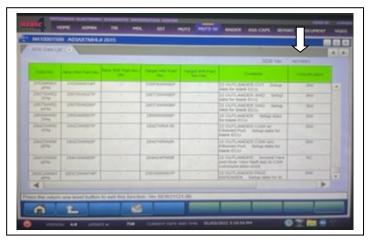
b. Click the "ECU Reprogramming" button.



c. Click "SDB Data List, select the reprogramming data system and press the OK button".



- d. Confirm that the database number displayed in the upper right above the chart is **N211201** or higher
 - i. If the database number displayed on your MUT3-SE is **N211201** or greater, continue to the next section.
 - ii. If the reprogramming database number displayed on your MUT3-SE is lower than **N211201**, then the MUT3-SE database needs to be updated.



e. Once the database number is confirmed, hit the Home button to go back to the System Select screen.

REPROGRAMMING PROCEDURE

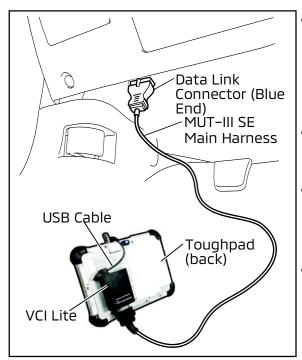
ACAUTION

To ensure that the vehicle battery maintains 12V during the procedure, hookup a battery charger to the vehicle during the procedure.

NOTE: VCI Stand-alone reprogramming is not available for this procedure. The laptop/tablet and the VCI must remain connected for the entire procedure.

1. Connect the equipment as follows:

NOTE: VCI Lite and MEDIC 4.0 Toughpad shown for illustration purposes only.

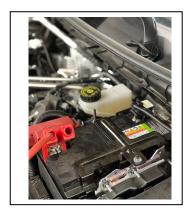


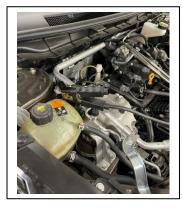
- Turn the MEDIC PC/tablet on. If the battery indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the battery be charged prior to beginning or be used with the A/C power adaptor connected.
- Connect the USB cable to the VCI/VCI Lite. When the laptop/tablet displays the MUT-III SE main screen, connect the USB cable to the device.
- Connect the MUT-III SE main harness with the blue DLC connection to the VCI/VCI Lite. Connect the blue connection of the MUT-III SE main harness to the vehicle's data link connector.
- For VCI only (p/n MB991824): Turn the VCI power switch ON. Verify that the indicator lamp in the upper right corner of the screen is green.

ACAUTION

DO NOT DISTURB THE HARNESS CABLES OR CONNECTIONS DURING THE REPROGRAMMING PROCESS AS IT COULD CAUSE THE CONTROL UNIT TO LOSE DATA. IF THE USB CABLE IS DISCONNECTED DURING THIS PROCEDURE, A WARNING MESSAGE WILL DISPLAY.

NOTE: Due to limited space it may be easiest to connect cable onto negative ground post and ground strap as shown below.





2. Turn the ignition switch to the "ON" position.



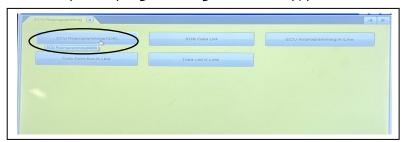
3. Using MEDIC, from the main page, click the "MUT3-SE" icon at the top center of the screen.



4. The System Select screen opens and populates with some basic information from the vehicle. Look at the label on the passenger side B pillar to identify the appropriate class. (See B pillar label below; class is labeled as "model"). If necessary, select the correct class from the drop-down list.



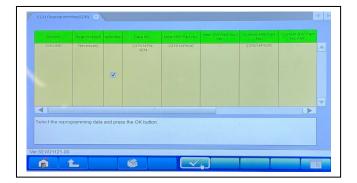
5. Verify that the ECU has not already been updated to the latest S/W number shown in the **"ECU Reprogramming Chart"** in this TSB. If the ECU is at the latest level, reprogramming **is not** necessary. If reprogramming **is** necessary, proceed with the following steps.



a. Select ECU Reprogramming (SDB).



b. Select "Engine" from Systems List and click the OK button.



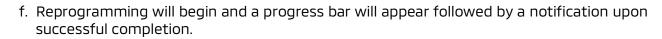
c. Click the Selection box and the OK button.

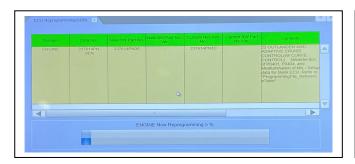


d. After confirming the reprogramming data listed, click the OK button to begin reprogramming the ECU.



e. Login to the MMC Web Application.





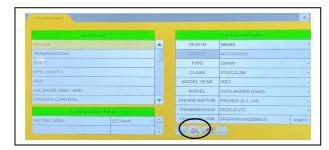




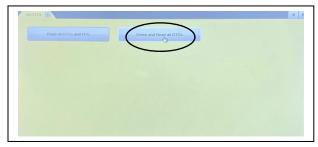
6. Confirm the reprogramming results and press the OK button. Return to the System Select screen by pressing the arrow button.



a. Select the ECU Information Tab to view the data.



b. Press the ALL DTCs button on the System Select tab to check DTCs.



c. Press the Erase and Read all DTCs button.



d. Select all systems.



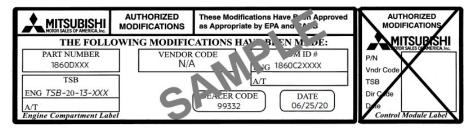
e. The results are displayed during the erase and read process.



f. Confirm that the erasing and checks have been completed and that no DTCs were detected.



7. Using a ball-point pen, enter the appropriate ECU part number, Software Part Number (ROM ID#), this Technical Service Bulletin number, your dealer code, and the current date on the Engine Compartment/Control Module Label (p/n MSSF024G00). The Vendor Code is not applicable. The label is available from your facing PDC.



8. Test drive the vehicle to confirm proper operation.

WARRANTY

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition, diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the information below.

OPERATION	NATURE CODE	CAUSE CODE	LABOR OPERATION	TIME ALLOWANCE
Engine ECU	02A	605	138501FY	0.3 HRS
Reprogramming				