



Technical Service Bulletin

SB-10056298-8928

SUBJECT:			No: TSB-14-13-002
ROUGH IDLE OR ENGINE STALL (HIGH AMBIENT TEMPERATURE, LOW RPM) – PUERTO RICO ONLY			DATE: June, 2014
			MODEL: See below
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

PURPOSE

In certain tropical areas, affected vehicles may exhibit a rough idle or engine stalling condition at very low speeds, just prior to stopping/starting. This condition occurs if lower quality fuel was used in the vehicle and it is operated in high ambient temperatures, with the air conditioning operating, in stop and go traffic.

This TSB instructs dealers only in Puerto Rico to reprogram the ECM with new software that optimizes throttle and purge flow operations at low engine speeds.

BACKGROUND

Vehicles sold in Puerto Rico are subject to U.S. emissions regulations. However, certain characteristics of the fuel sold there contribute to it being of lower quality than fuel sold in the mainland U.S., Alaska and Hawaii. The lower fuel quality sold in Puerto Rico may lead to an unstable idle and stalling when affected vehicles are operated under the previously described conditions.

AFFECTED VEHICLES

The following vehicles currently operated in Puerto Rico only:

- 2011–2013 Outlander Sport with CVT
- 2011–2014 Lancer 2.0L with CVT built prior to November 1, 2013
- 2011–2014 Lancer Sportback 2.0L with CVT built prior to November 1, 2013

REQUIRED OPERATIONS

OVERVIEW

1. Confirm your MUT–III is updated with the latest reprogramming database.
2. Reprogram the ECM with the new software. Refer to the ECM Reprogramming Chart for new software information.

IMPORTANT: If an affected vehicle has a Malfunction Indicator Lamp (MIL) illuminated before reprogramming, and DTCs are listed in the ECM memory, diagnose and repair those DTCs per the service manual before reprogramming. **DO NOT** reprogram the ECM until the reason(s) for other DTCs being set is corrected.

EQUIPMENT

The following equipment is needed to reprogram the ECM.

- VCI (Vehicle Communication Interface) – MB991824 or VCI LITE – MB992744
- Laptop computer with A/C power adaptor – 520924, or MIT547708.
- MUT–III main harness 'A' (blue connector at the DLC end) – MB991910.
- USB 2.0 cable – MB991827.
- “Engine Compartment/Control Module” label – p/n MSSF024G00.
- MEDIC–3 update at M266 or higher.
- For Standalone MUT–III units, MUT–III Reprogramming Database N14051 or higher.

ECM REPROGRAMMING CHART

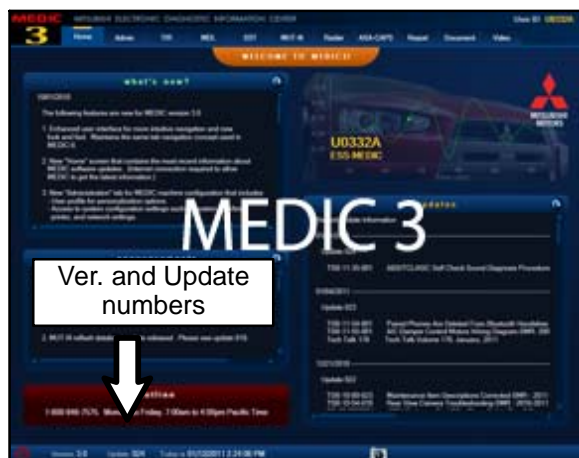
Database No. 14051

MODEL	CURRENT PART NO.	DATA NO.	DISPLAY ON MUT-III AFTER REPROGRAMMING	
			New Part No.	New S/W Part #
11 Outlander Sport 4B11 D4 VVT CVT	1860B638	1862B840	1860B638	1860B63805
12 Outlander Sport 4B11 D4 VVT CVT	1860B745	1862B841	1860B745	1860B74502
13 Outlander Sport 4B11 D4 VVT CVT	1860C038	1862B832	1860C038	1860C03802
11 Lancer/Lancer Sportback 4B11 D4 VVT CVT	1860B365	1862B843	1860B365	1860B36506
12 Lancer/Lancer Sportback 4B11 D4 VVT CVT	1860B731	1862B844	1860B731	1860B73102
13-14 Lancer/Lancer Sportback 4B11 D4 VVT CVT	1860C036	1862B845	1860C036	1860C03602

REPAIR PROCEDURE

NOTE: Reprogramming the ECM with the latest database (i.e. N14051) includes all past and current reprogramming for TSBs of affected vehicles. It is not necessary to reprogram the ECM for each previous TSB.

1. Check the underside of the hood to verify there is no “Authorized Modification” label (see page 11 for example) previously installed to indicate this reprogramming has already been completed. If a label is present and the “ROM ID #” on the label matches the “New S/W Part No.” in the table above, the ECM is at the latest level and reprogramming is not necessary. Conduct normal diagnosis for the described condition.

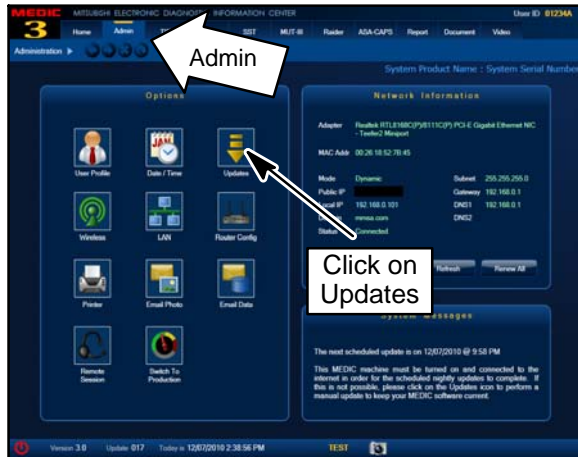


For MEDIC 3 users only: (MUT-III users go to step 5)

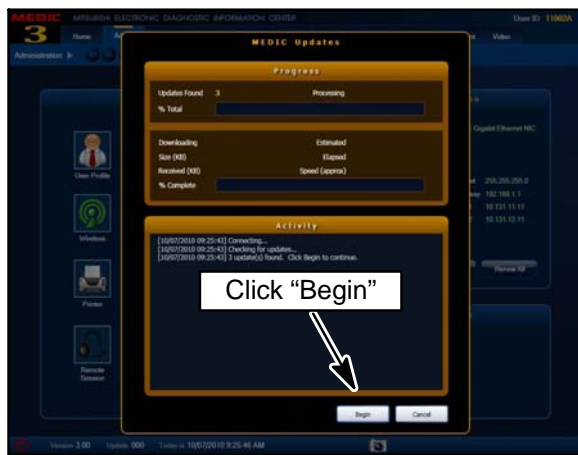
2. Verify the MEDIC 3 is at version 3.1 and at update 266 or higher.

If your **MEDIC 3 update is at least 266**, continue with the Reprogramming Procedure on page 4.

If your **MEDIC 3 update is below 266**, update your MEDIC 3 as follows.



3. Select the MEDIC 3 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 ON PAGE 4.**

The screenshot shows the 'ECU Reprogramming - Database File Display (CAN)' table. A callout box points to the 'CD Ver.:N14051' column header. Another callout box highlights the value 'N14051' in the table.

File	Data No.	System	Name ECU File	New SW Part No.	Current ECU File	Current SW Part No.	Description
01	18029413	TC-ECU	18029413	18029413	18029413	18029413	08 LANCER ECUCUTION 4811 C11 C12 C13 Countermeasures for rabs noise test
02	18029932	ENGINE	1800C298	1800C298	1800C298	1800C298	14 OUTLANDER SPORTSWR) 4811 C11 C12 Countermeasures of lighting of ML to anti-
03	18029931	ENGINE	1800C297	1800C297	1800C297	1800C297	14 OUTLANDER SPORTSWR) 4811 C11 C12 Countermeasures of lighting of ML to anti-
04	18029845	ENGINE	1800C038	1800C038	1800C038	1800C038	1314 LANCERLANCER SPORTBACK 4811 C11 C12 Countermeasures for rough idling in Park
05	18029844	ENGINE	18008731	18008731	18008731	18008731	1312 LANCERLANCER SPORTBACK 4811 C11 C12 Countermeasures for rough idling in Park
06	18029843	ENGINE	18008065	18008065	18008065	18008065	11 LANCERLANCER SPORTBACK 4811 C11 C12 Countermeasures for rough idling in Park

5. **STANDALONE MUT-III SCAN TOOL VIEWER (STV) ONLY: (MEDIC 3 USERS GO TO THE REPROGRAMMING PROCEDURE ON PAGE 4).** Verify that your MUT-III has the most current version of the reprogramming database:

- a. From the MUT-III Main Page:
 - Select “Special Function”
 - Select “ECU Reprogramming”
 - Select :Database File Display-CAN”
 - Confirm the database number displayed at the top right of the chart is **N14051 or higher**
- (1) If the database number displayed on your MUT-III is **N14051** or greater, continue to the Reprogramming Procedure on page 4.
- (2) If the reprogramming database number displayed on your MUT-III is lower than **N14051**, locate the reprogramming CD containing database N14051 and follow the instructions provided with the CD to update your MUT-III.

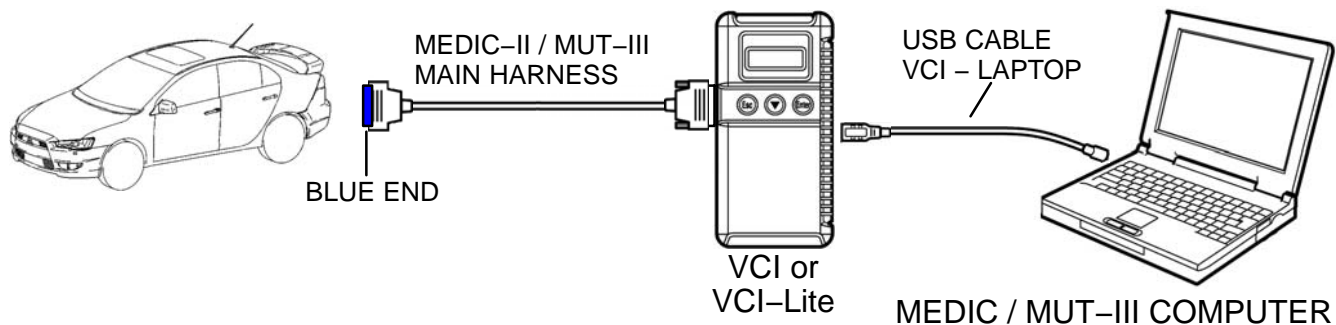
REPROGRAMMING PROCEDURE

CAUTION

CONNECT A BATTERY CHARGER TO THE VEHICLE'S BATTERY DURING THE REPROGRAMMING PROCEDURE. DO NOT ALLOW THE BATTERY CHARGER TO TIME OUT. BATTERY VOLTAGE (AS MEASURED AT THE BATTERY POSTS WITHOUT ELECTRICAL LOAD) MUST BE KEPT AT 12.4V OR HIGHER IN ORDER TO REPROGRAM THE ECM. MEASURE THE BATTERY VOLTAGE AND CHARGE AS NECESSARY.


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

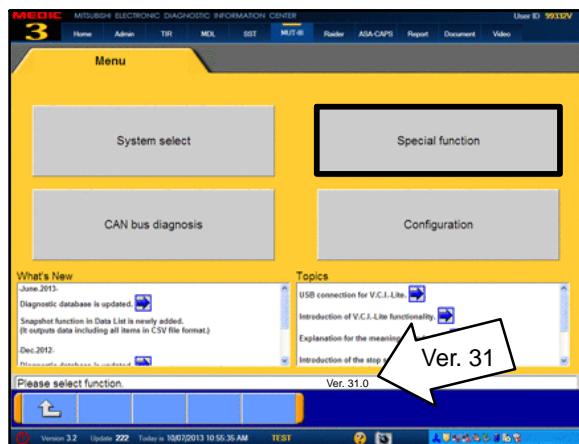
Connect the equipment as follows:



- Turn the laptop computer on. If you're running on battery power and the charge indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the laptop battery be charged prior to beginning, or that reprogramming be completed with the A/C power adaptor connected to the laptop.
- Connect the USB cable to the VCI (or VCI-LITE).
- When the laptop displays the MUT-III main screen, connect the USB cable to the laptop.
- Connect the MUT-III main harness (blue DLC connector) to the VCI.
- Connect the blue connector of the MUT-III main harness to the vehicle's data link connector.
- Turn the VCI power switch ON. Verify the indicator lamp in the upper right corner of the screen is green.

ECU Reprogramming

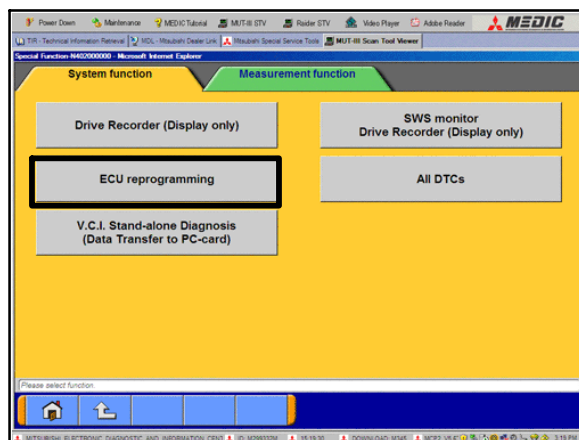
 CAUTION	<p>DO NOT DISTURB THE HARNESS CABLES OR CONNECTIONS DURING THE REPROGRAMMING PROCESS AS IT COULD CAUSE THE CONTROL UNIT TO LOSE DATA OR PREVENT FUTURE REPROGRAMMING. IF THE USB CABLE IS DISCONNECTED DURING THIS PROCEDURE, A WARNING MESSAGE WILL DISPLAY.</p>
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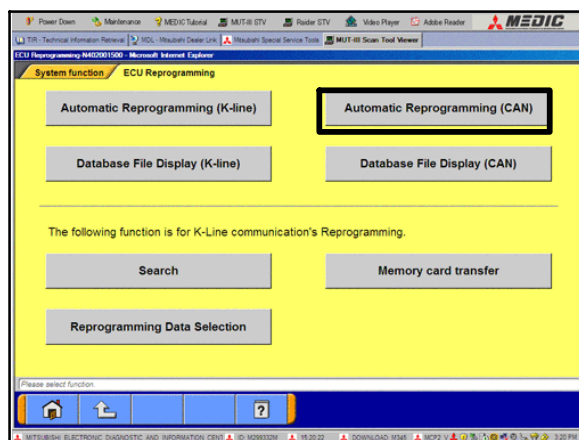
1. Conduct the following steps to reprogram the ECM.
 - a. Turn the ignition switch to the ON position. If the vehicle is equipped with the F.A.S.T. System, the transmitter must remain in the vehicle for the entire procedure.

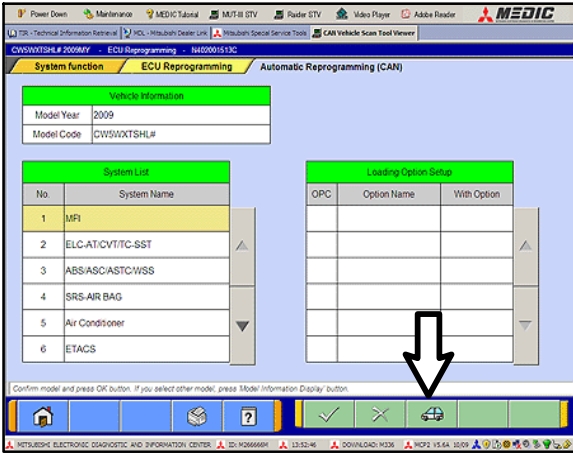
For vehicles equipped with OSS, press the START/STOP button twice without applying the brake. The LED in the button should be green.

- b. If using MEDIC, from the main page, click the MUT-III STV icon at the top center of the screen to open MUT-III.
 - c. From the MUT-III Main Menu, select “Special Function.”
 - d. Select “ECU Reprogramming.”

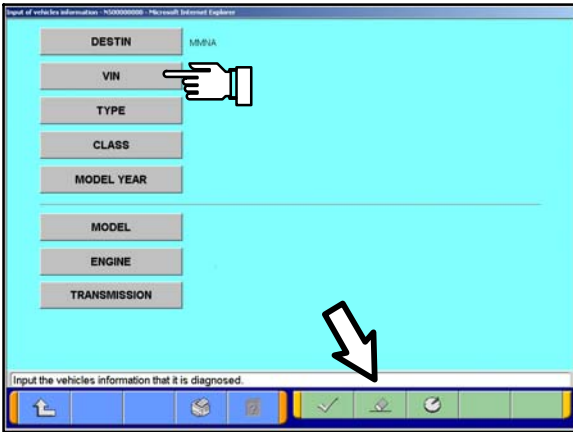


- e. Select “Automatic Reprogramming (CAN).”

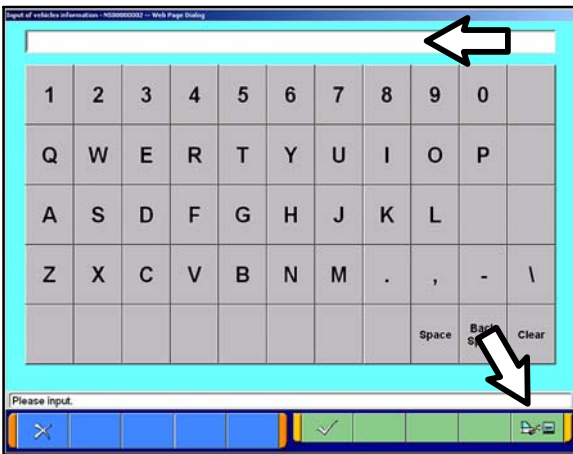




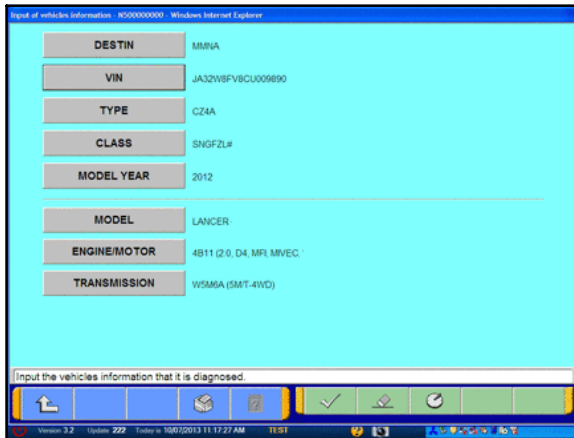
f. Click the car icon at the bottom of the page.



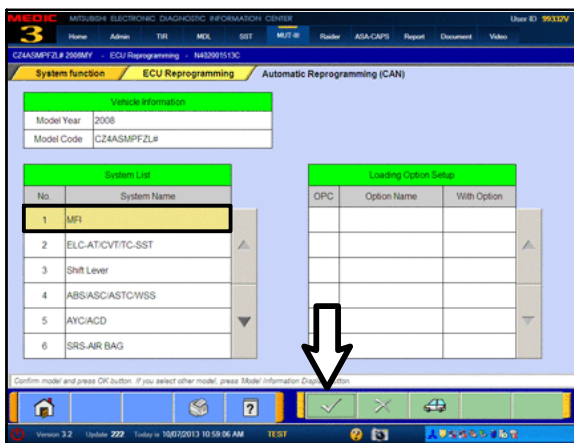
g. If the VIN or vehicle description displayed does not match the vehicle you are working on, click the eraser icon at the bottom of the page to erase vehicle data. Then click the VIN button.



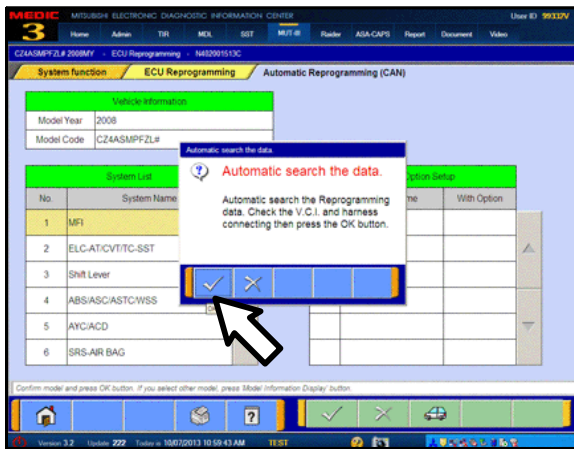
h. Click the icon in the lower RH corner of the screen to have MUT-III automatically read the VIN. If a message appears saying the VIN cannot be input automatically, manually enter the 17 digit VIN into the VIN field at the top of the page. Make sure the VIN is correct and click the check mark.



i. Confirm all data matches the vehicle and click the check mark at the bottom of the page.



j. MFI should be highlighted as the default. If not, click it to highlight it.
Click the check mark at the bottom of the page.



k. A message will advise the system will "Automatic search the data."
Click the check mark to continue.

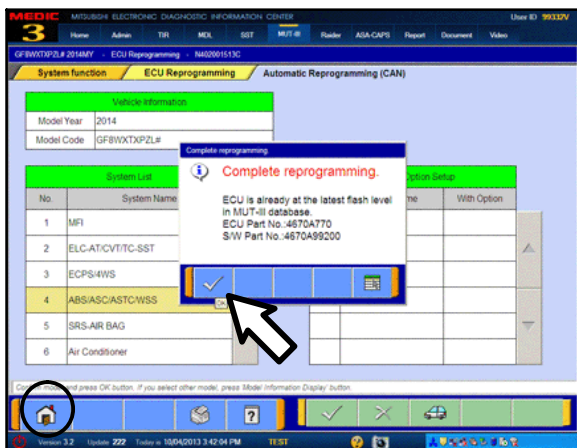
ECM TO LATEST VERSION

If a “Complete Reprogramming” message **does not** appear, continue with step I.

If the message seen at left is displayed, the ECM software as already at the most current level. Do not continue with the reprogramming procedure. This TSB does not apply.

Click the check mark to clear the window, then click the Home icon at the lower left corner of the screen to return to the System Select main page.

Turn the ignition switch to the OFF position and disconnect the MUT-III. Turn off and disconnect the battery charger. Conduct normal diagnosis per the service manual.



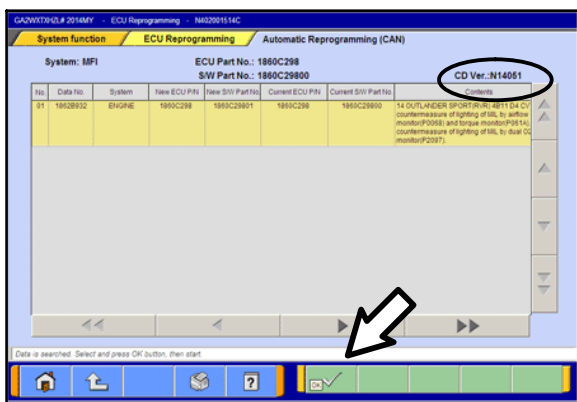
- I. The Automatic Reprogramming (CAN) database screen will display.

Confirm the database number at the top right of the table is **N14051** or higher.

If more than one row is displayed in the table, refer to the ECM Reprogramming Chart on Page 2 to select the correct row.

Click on the row to highlight it.

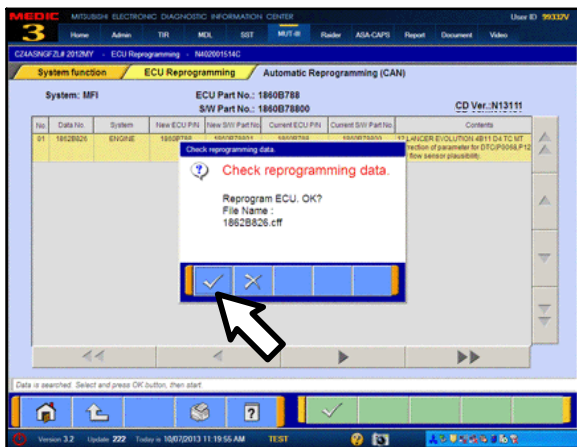
Click the check mark to continue.

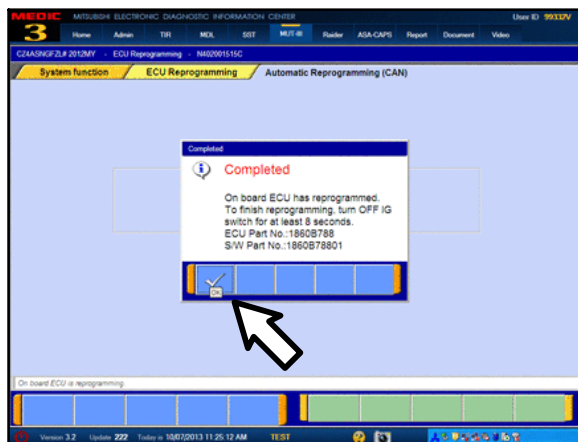


- m. A message will ask you to “Check reprogramming data.”

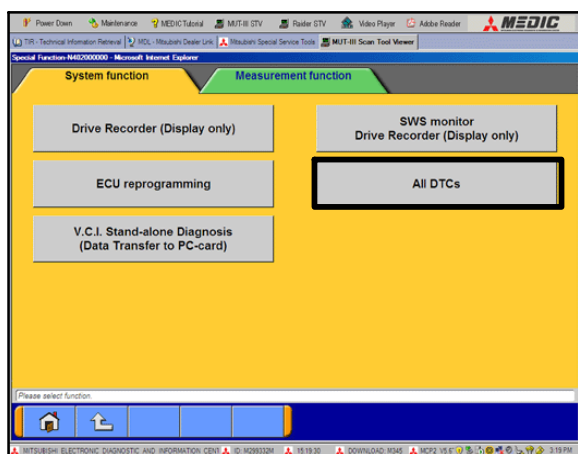
- n. Click the check mark to begin reprogramming.

Reprogramming will take up to 5 minutes to complete.

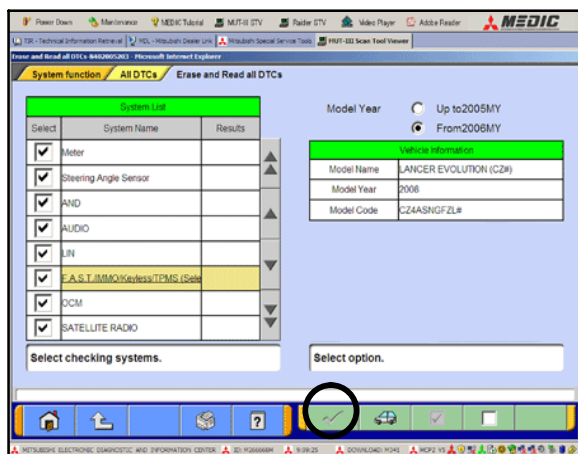




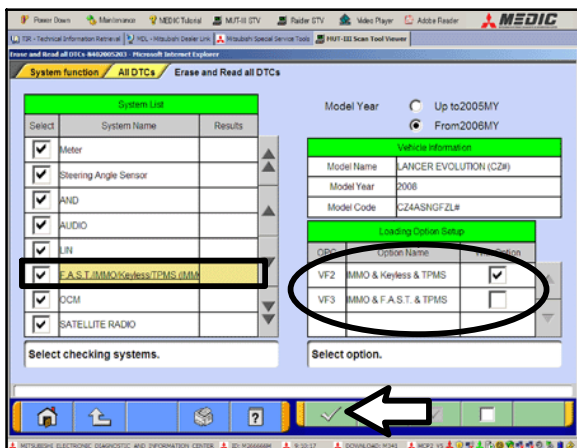
- o. This message will display when ECM reprogramming is successfully completed. Confirm the “New S/W P/N” displayed matches the table at the beginning of this TSB. Then click the check mark to clear the message.
2. Click the UP arrow at the lower left corner of the page to return to the System Function page.



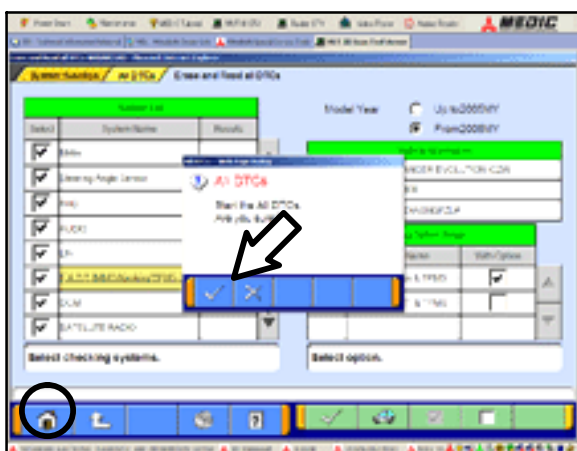
3. Using MUT-III, check and erase ALL DTCs from all systems as follows.
 - a. Select “Special Function.”
 - b. Select “All DTCs,” then select “ERASE AND READ ALL DTCs.”



- c. The “System List” on the left side of the screen will have all selections checked. Do not change these selections. DTCs may be set if the vehicle is equipped with options that are unchecked.
- d. If the check mark at the bottom of the screen is highlighted, click it and move ahead to step 4. If not, continue with sub step e.

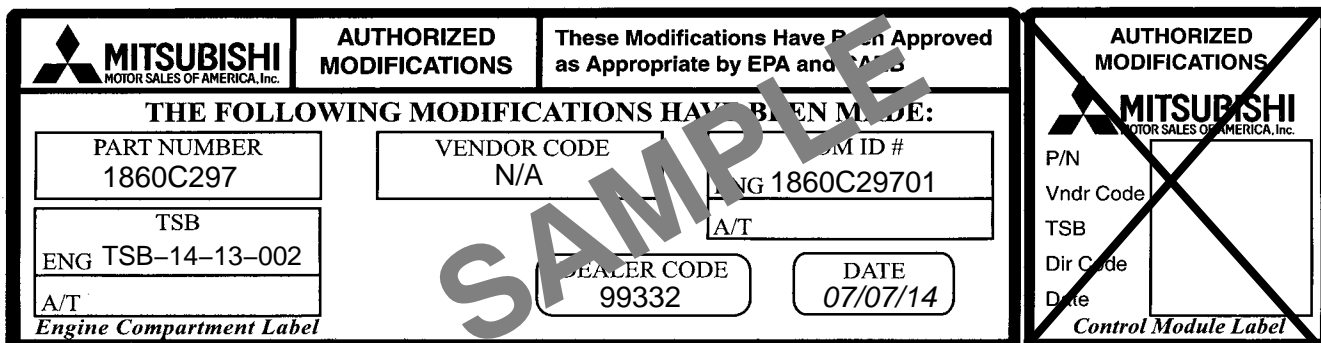


- e. In the left column, scroll to and click FAST/IMMOB/KEYLESS/TPMS. In the right column, check the correct option code (VF#) from the Loading Options Setup list. This will activate the check mark at the bottom of the page.
 - Vehicles with regular keyless entry (buttons on a multi-function key), select VF2.
 - Vehicles with F.A.S.T. Key, select VF3.
- f. In the left column, scroll to and select METER. A chart will display. Check the correct display type for the vehicle.
 - Click the check mark to continue.



4. A window will pop up asking you to confirm DTC erasing. Click the check mark for DTC erasing and reading to begin.
5. When DTC erasing is completed, a window will display.
 - a. If DTCs return after reprogramming, click the check mark to clear the window. Diagnose and repair per the Service Manual.
 - b. If DTCs do not return, click the check mark to clear the window, then click the home icon at the lower left of the screen to return to the main menu.
6. Turn off the ignition switch and disconnect the MUT-III. Turn off and disconnect the battery charger.

7. Using a ball-point pen, enter the appropriate Engine Control Module (ECM) part number, Software Part Number (ROM ID#), this Technical Service Bulletin number (TSB-14-13-002), 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.



The Control Module Label is NOT used for this reflash. It should be discarded.

8. Carefully remove all dirt and oil from a vacant area near the VECI label on the underside of the hood and affix the Engine Compartment Label (LH side, above) to that area.
9. Test drive the vehicle to confirm proper operation and the MIL does not illuminate. Diagnose and correct any DTCs that return.

PARTS INFORMATION

Use only the Genuine Mitsubishi Parts listed below.

Description	Model	Part Number
Label, Engine Compartment	All	MSSF024G00

WARRANTY INFORMATION

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 following information.

!! IMPORTANT !!

REPAIRS DESCRIBED IN THIS TSB APPLY ONLY TO VEHICLES BEING OPERATED IN PUERTO RICO AND ONLY PUERTO RICO BASED DEALERS MAY BE REIMBURSED FOR SUBMITTING CLAIMS. CLAIMS SUBMITTED BY DEALERS OTHER THAN THOSE WITH PUERTO RICO DEALER NUMBERS WILL BE CHARGED BACK.

Rough Idling and Engine Stall – Puerto Rico Only

Nature Code: 16C)

Cause Code: 490

Labor Operation No.: 138501 13

Time Allowance: 0.3 hr.

Warranty Coverage: Emissions Coverage – Refer to the Superscreen for individual vehicle warranty coverage terms.