



SB-10053649-1137

# Technical Service Bulletin

|   |   |   |  |
|---|---|---|--|
| SUBJECT:  |   |   | No: <b>TSB-13-35-004</b>                       |
| <b>ACC/FCM/ASC WARNING LAMP ILLUMINATION:<br/>POSSIBLE DTCS STORED IN ASC – ECU</b> |   |   | DATE: <b>October, 2013</b>                     |
|   |   |   | MODEL: <b>2014 Outlander</b>                   |
| 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 type="checkbox"/> WARRANTY PROCESSOR | <input type="checkbox"/> SALES MANAGER         |

## PURPOSE

Some vehicles may display the ACC, FCM, and/or ASC warnings and DTCS may be recorded in the ASC – ECU. The warnings occur under the following conditions:



- (1) When starting to climb a grade immediately after descending a steep hill with the Adaptive Cruise Control (ACC) engaged, the following messages may be displayed on the MID.

- FCM SERVICE REQUIRED
- ACC SERVICE REQUIRED
- ASC SYSTEM SERVICE REQUIRED (with DTCS C1800, C1777)

The ECU determines this is abnormal acceleration and the system may enter “fail-safe” mode with ACC and FCM becoming inoperative.



- (2) When driving in a lane with normal traffic flow, and an adjacent lane is jammed, FCM SERVICE REQUIRED, ACC SERVICE REQUIRED and ASC SYSTEM SERVICE REQUIRED may be displayed (with DTCS C1802, C1777).

The continued presence of objects creates continuous inputs to trigger FCM operation. The system determines this as an abnormal signal. The system may enter “fail-safe” with ACC and FCM becoming inoperative.



- (3) ASC SYSTEM SERVICE REQUIRED may be displayed without DTCS.

This TSB instructs dealers to reprogram the ASC-ECU with new software to resolve mis-detections.

## AFFECTED VEHICLES

2014 Outlander

Vehicles **with** Adaptive Cruise Control and Forward Collision Mitigation built before June 5, 2013

Vehicles **without** Adaptive Cruise Control and Forward Collision Mitigation built before August 27, 2013

Continued

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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](http://www.mitsubishitechinfo.com))

## REPAIR PROCEDURE

### REQUIRED OPERATIONS

**IMPORTANT:** If an affected vehicle has any of the previously mentioned warnings illuminated before reprogramming and DTCs other than described above are stored in the ASC-ECU memory, diagnose and repair those DTCs per the service manual before reprogramming. **DO NOT** reprogram the ASC-ECU until the reason(s) for other DTCs being set is corrected.

### OVERVIEW

1. Confirm your MUT-III is updated with the latest reprogramming database.
2. Reprogram the ASC-ECU with the new software. See the ASC-ECU Reprogramming Chart for new software information.

### EQUIPMENT

**The following equipment is needed to reprogram the ASC ECU.**

- MEDIC laptop computer with A/C power adaptor – 520924, or MIT547708, or MIT540031.
- VCI (Vehicle Communication Interface) – MB991824 including:
  - (1) MUT-III main harness 'A' (blue DLC connector) – MB991910
  - (2) USB 2.0 cable – MB991827
- **or**
- VCI LITE – MB992744
  - (1) VCI LITE main harness (blue DLC connector) – MB992745
  - (2) VCI LITE USB 2.0 cable – MB992747
- “Engine Compartment/Control Module” label – p/n MSSF024G00.
- MEDIC-3 update at 226 or higher.
- For Standalone MUT-III units, MUT-III Reprogramming Database N13101 or higher.

### ASC-ECU REPROGRAMMING CHART

| MODEL                     | CURRENT PART NO. | DATA NO. | DISPLAY ON MUT-III AFTER REPROGRAMMING |
|---------------------------|------------------|----------|--|
|                           |                  |          | New S/W Part #                         |
| 14 Outlander with ACC/FCM | 4670A666         | 4670B063 | 4670A99200                             |
|                           | 4670A770         |          |  |
| 14 Outlander w/o ACC/FCM  | 4670A756         | 4670A557 | 4670A99000                             |

## DATABASE CONFIRMATION

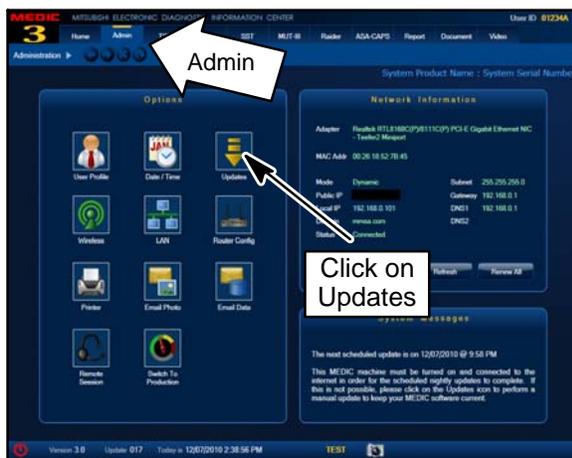


**For MEDIC 3 users only: (MUT-III users go to step 5)**

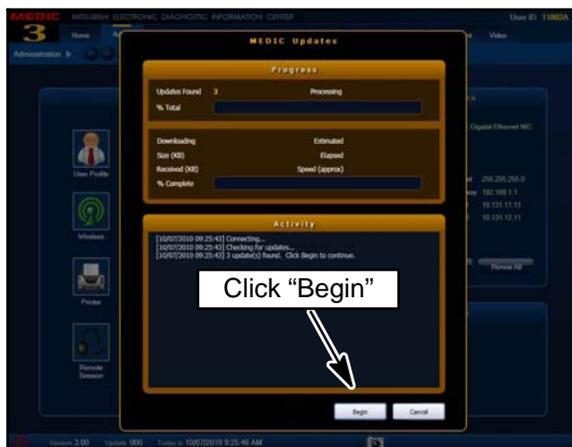
3. Verify the MEDIC 3 is at version 3.2 and at update 226 or higher.

If your **MEDIC 3 update is at least 226**, continue with the Reprogramming Procedure on page 4.

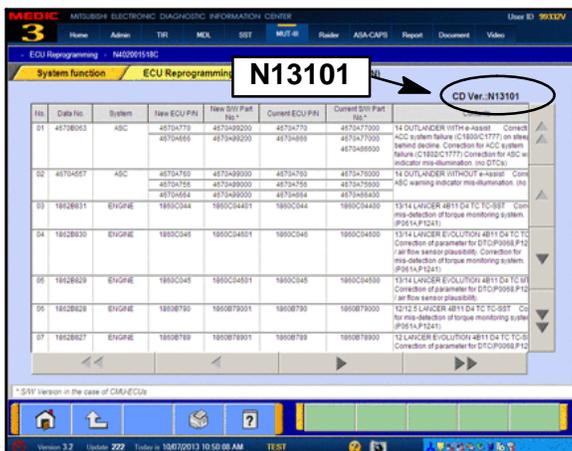
If your **MEDIC 3 update is below 226**, update your MEDIC 3 as follows.



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



5. 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.**



6. **STANDALONE MUT-III SCAN TOOL VIEWER (STV) ONLY: (MEDIC 3 USERS GO TO THE REPROGRAMMING PROCEDURE ON PAGE 4).**

Verify 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 **N13101 or higher**

(1) If the database number displayed on your MUT-III is **N13101** or higher, continue to the Reprogramming Procedure on page 4.

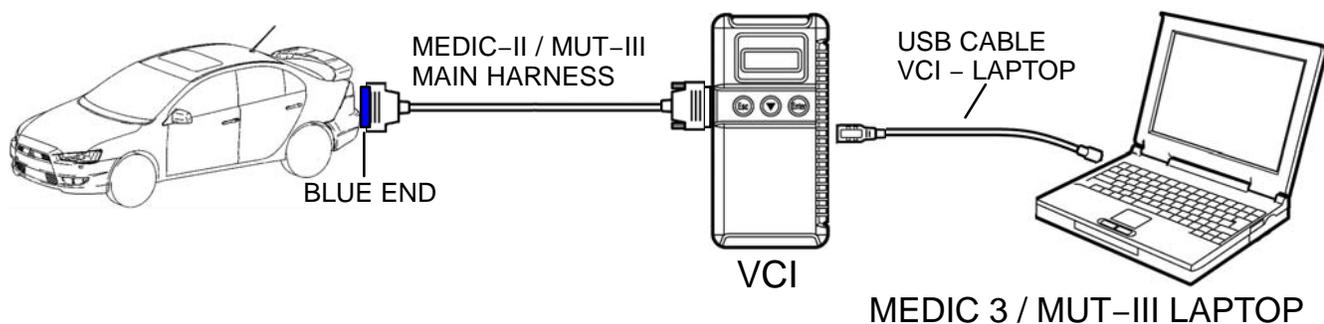
(2) If the database number displayed on your MUT-III is lower than **N13101**, locate the N13101 Reprogramming CD and follow the instructions on the CD label to update your MUT-III.

## REPROGRAMMING PROCEDURE

**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 ASC-ECU. 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:

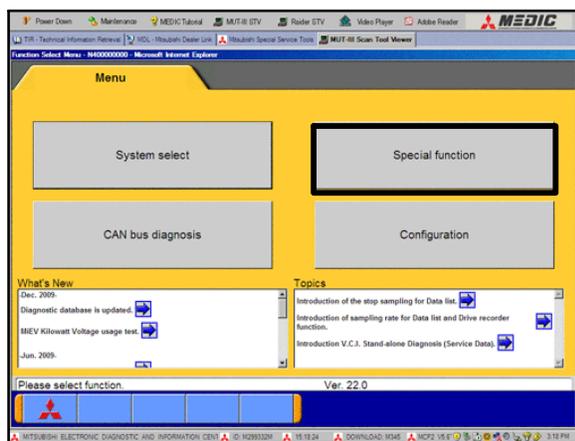


- Turn the laptop computer on. If you’re running on battery power and the charge indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the laptop battery be charged prior to beginning, or that reprogramming be completed with the A/C power adaptor connected to the laptop.
- Connect the USB cable to the VCI.

- 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.

|                  |   |
|------------------|---|
| <b>⚠ CAUTION</b> | <b>DO NOT DISTURB THE HARNESS CABLES OR CONNECTIONS. INTERRUPTION DURING THE REPROGRAMMING PROCESS 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.</b> |
|------------------|---|

## ECU reprogramming

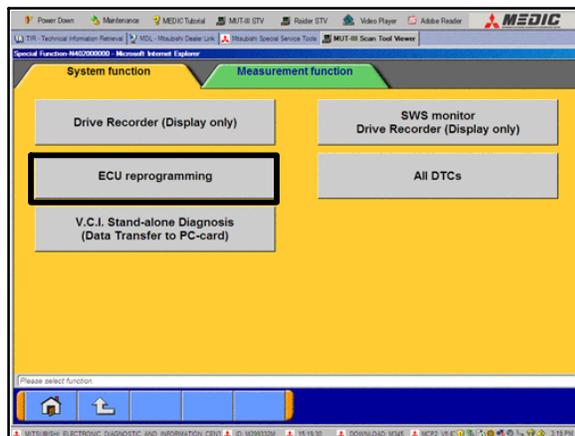


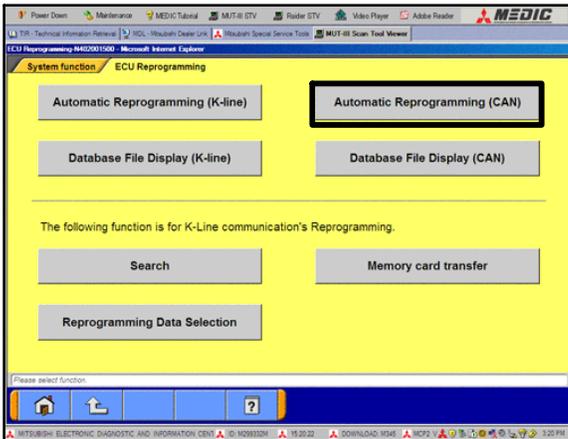
1. Conduct the following steps to reprogram the ASC-ECU.

- 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.

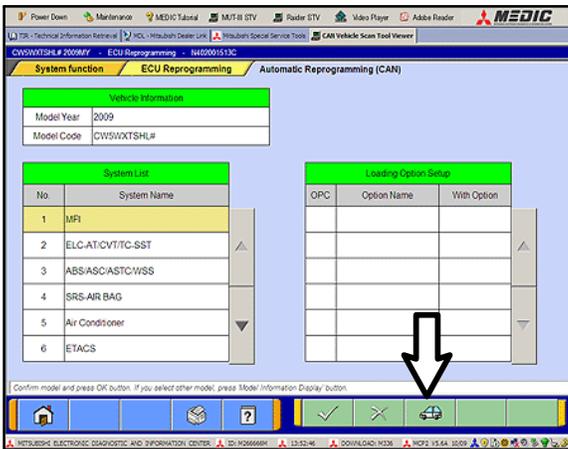
For vehicles equipped with OSS, press the START/STOP button twice without applying the brake. The LED in the button should be green.

- b. If using MEDIC 3, from the main page, click the MUT-III STV icon at the top center of the screen.
- c. From the MUT-III Main Menu, select "Special Function."
- d. Select "ECU Reprogramming."

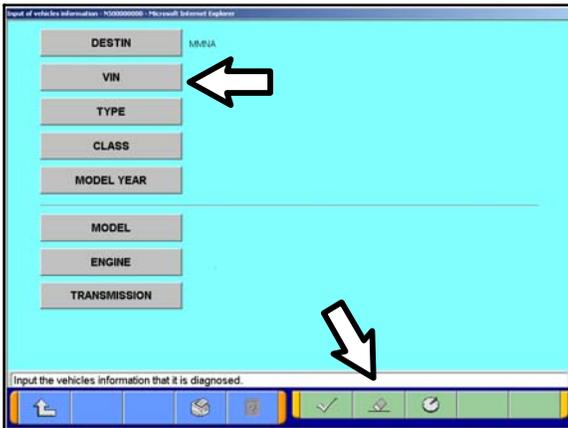




e. Select "Automatic Reprogramming (CAN)."

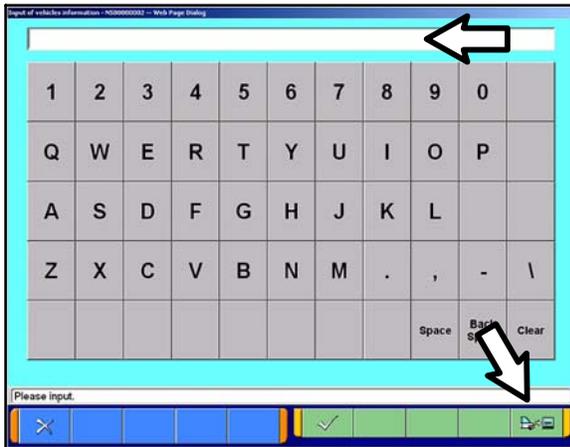


f. Click on the car icon at the bottom of the page.



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

Then click the VIN button.



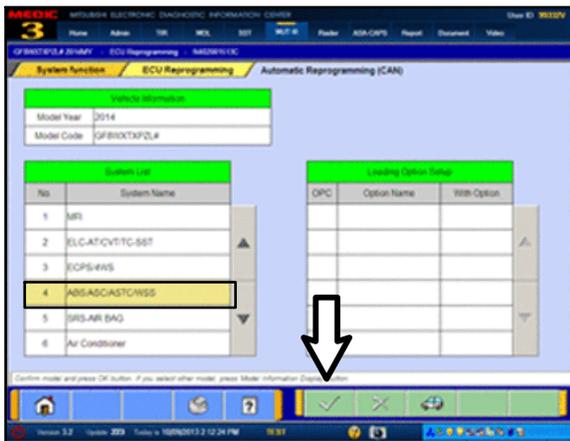
h. Click the icon in the lower RH corner of the screen to have MUT-III automatically read the VIN.

If a message appears saying the VIN cannot be input automatically, manually type 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.

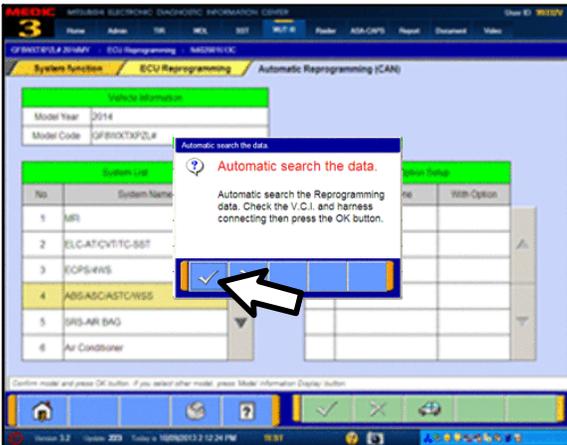


i. Confirm all data matches the vehicle and click the check mark at the bottom of the page.



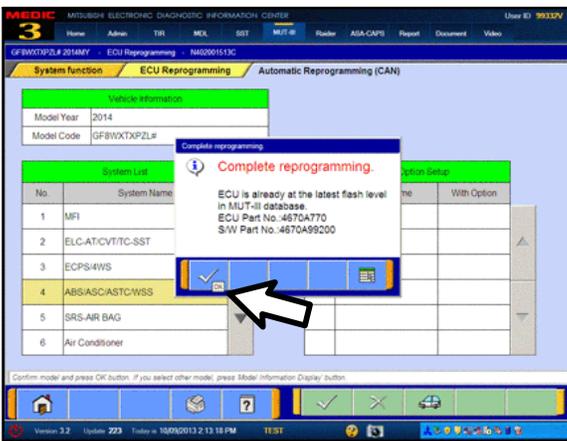
j. MFI should be highlighted as the default. Scroll to and click ABS/ASC/ASTC/WSS to highlight it.

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.



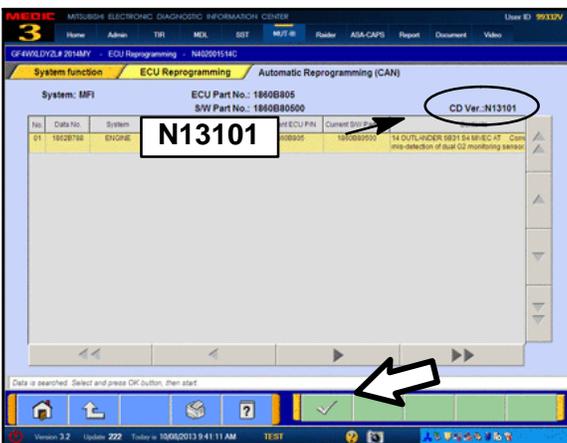
### ECM TO LATEST VERSION

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

If the message seen at left is displayed, the ECM software is 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.



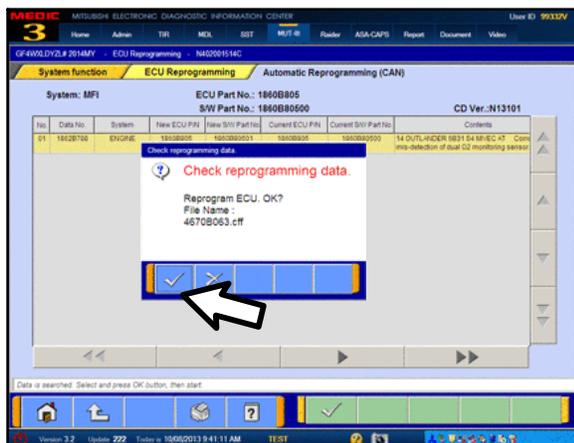
l. The Automatic Reprogramming (CAN) database screen will display.

Confirm the database number at the top right of the table is **N13101** or higher.

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

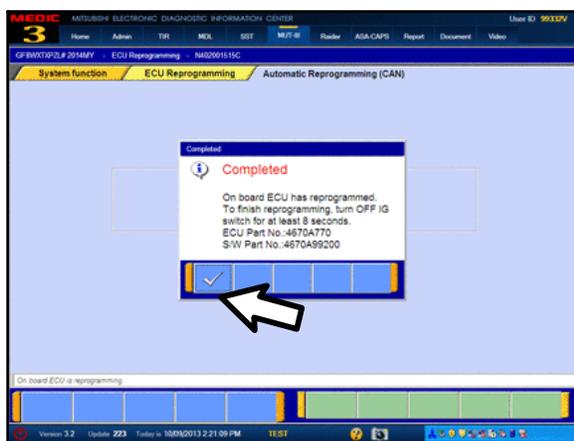
Click on the row to highlight it.

Click the check mark to continue.



- m. A message will ask you to “Check reprogramming data.”
- n. Click the check mark to begin reprogramming.

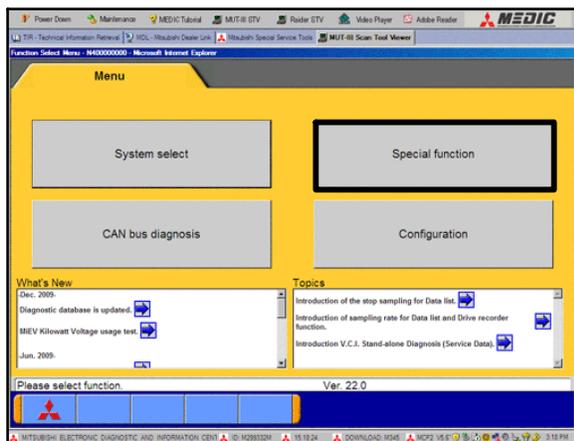
Reprogramming will take up to 5 minutes to complete.



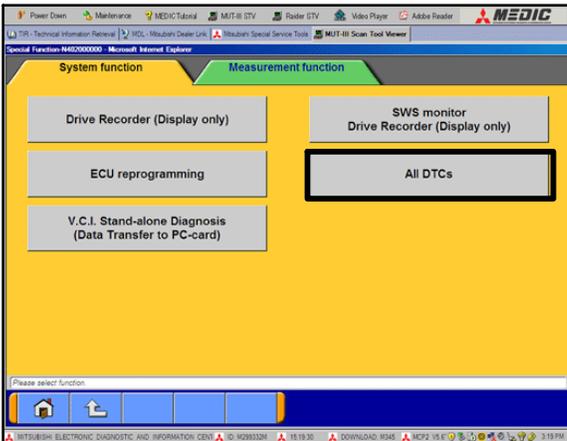
- o. A “Completed” message will display when ASC-ECU reprogramming is successfully completed. Confirm the “New S/W P/N” displayed matches the table at the beginning of this TSB.
- p. The message advises you to turn of the ignition for at least 8 seconds. Once the time has passed, turn the ignition on again.

- 2. Click the check mark in the window to return to the System Function screen.

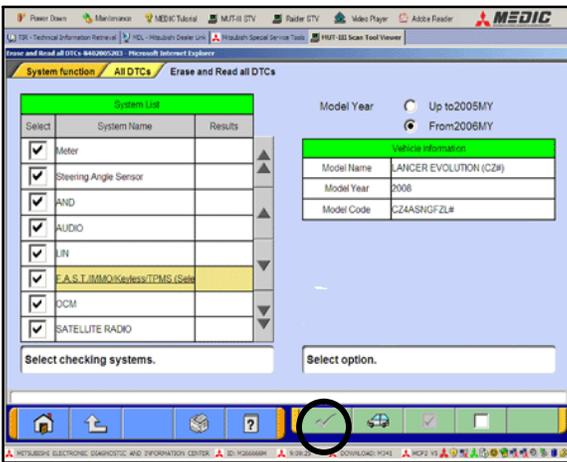
Click the Home icon in the lower left corner of the screen to return to the MUT-III main menu



- 3. Using MUT-III, check and erase ALL DTCs from all systems as follows.
  - a. Select “Special Function.”



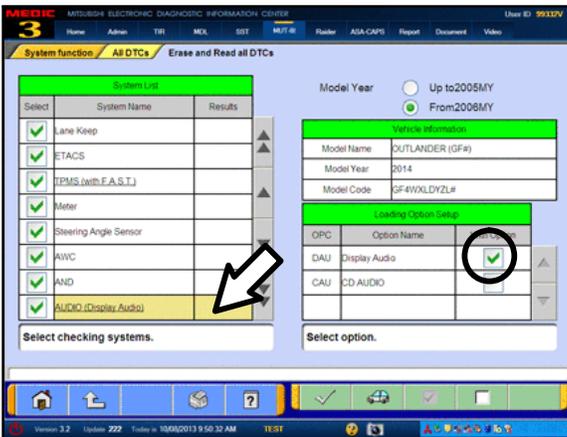
b. Select “All DTCs,” then select “ERASE AND READ ALL DTCs.”



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.

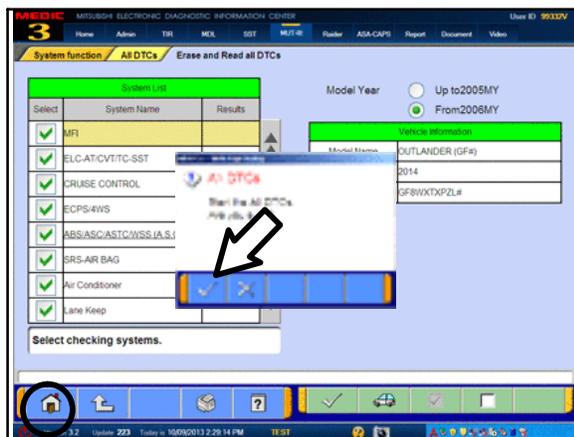
d. If the check mark at the bottom of the screen is highlighted, click it and proceed to step 4. If not, proceed to step e.

**NOTE:** A “Loading Options Setup” list on the RH side of the screen must be completed for Outlander models. For these models, the check mark at the bottom of the page is not highlighted (inactive) at this time. It will activate when step e is completed.



e. In the left column, scroll to and click “AUDIO (Display Audio)”. In the right column, check the correct option code from the Loading Options Setup list. This will activate the check mark at the bottom of the page.

- Vehicles with DISPLAY AUDIO or MMCS Navigation (touch screen units), select DAU.
- Vehicles with CD AUDIO (no touch screen), select CAU.



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.
  - a. 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. Start the engine to confirm proper operation and that ACC, FCM, and ASC warnings are not displayed on the MID. Diagnose and correct any DTCs that return.

## PARTS INFORMATION

No parts are required.

## 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 TSB and submit a normal warranty claim.

### Reprogram ASC ECU

*Nature Code:* 51

*Cause Code:* 605

*Labor Operation No.:* 354520 13

*Time Allowance:* 0.3 hr.

*Warranty Coverage:* **5/60 BASIC** Coverage