Technical Service Bulletin

SUBJECT:			NO:	**TSB-19-55-005**
HEATER/DEFROSTER INOPERATIVE WITH REMOTE & INCORRECT EV CRUISING RANGE DISPLAY			DATE:	**November 2019**
			MODEL:	**2018-2019 Outlander PHEV**

CIRCULATE TO:	[ ] GENERAL MANAGER	[**X**] PARTS MANAGER	[**X**] TECHNICIAN
[**X**] SERVICE ADVISOR	[**X**] SERVICE MANAGER	[**X**] WARRANTY PROCESSOR	[ ] SALES MANAGER

PURPOSE

Customers may notice that the heater or defroster mode is inoperative when "Timed air conditioning" is performed with the Mitsubishi Remote Control. In addition, an incorrect EV drive cruising range may be displayed in the vehicle. Both issues may be caused by improper programming of the A/C ECU.

This TSB instructs dealers to reprogram the A/C ECU with updated software to address both of these issues.

AFFECTED VEHICLES

2018 - 2019 Outlander PHEV vehicles, produced **before** August, 2019

REQUIRED OPERATIONS

1. Confirm your MUT-III is updated with the latest reprogramming database.
2. Reprogram the A/C ECU with the new software. Refer to the "A/C ECU Reprogramming Chart" for new software information.

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

EQUIPMENT

The following equipment is needed to reprogram the A/C ECU.

- VCI (Vehicle Communication Interface) or VCI Lite - MB991824 or MB992744V.
- MEDIC Laptop/Tablet with A/C power adapter - MIT540031 or FZG1MK2.
- MUT-III main harness 'A' (blue connector at the DLC end) - MB991910V or MB992745V.
- USB 2.0 cable - MB991827V or RRAR1MBR108GL.
- MEDIC 3.5/4 update at **619** or higher.
- For Standalone MUT-III units, MUT3-SE Reprogramming Database **N190801** or higher.

Continued

(4894)

A/C ECU REPROGRAMMING CHART

Model	A/C ECU Part Number	Data Number	Software Part Number	
			Previous	New
2018 Outlander PHEV	7820A478XA	7820B378	7820A849--	7820A849-A
2019 Outlander PHEV	7820B103XA			

REPAIR PROCEDURE

SOFTWARE/MEDIC VERSION VERIFICATION

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

> **NOTE: Reprogramming the A/C ECU with the latest database (e.g., N190801) includes all past and current reprogramming for TSBs of affected vehicles. It is not necessary to reprogram the A/C ECU for each previous TSB.**

Version and Update numbers
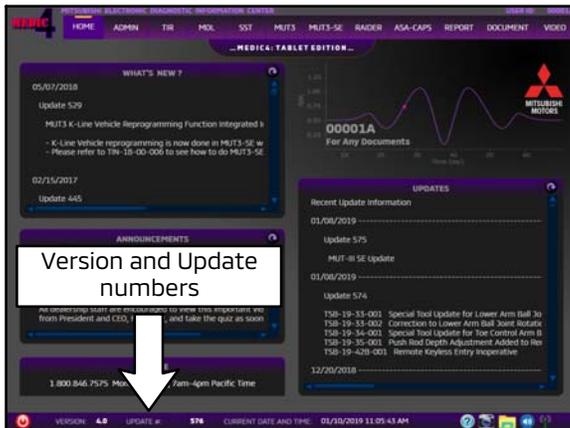
For MEDIC 3.5/4 users only: (MUT-III STV users go to step 5)

2. Verify the MEDIC 3.5/4 is at version 3.5 and at update **619** or higher.

   If your **MEDIC 3.5/4 update is at least 619**, continue with the Reprogramming Procedure.

   If your **MEDIC 3.5/4 update is below 619**, update your MEDIC as follows.

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

Admin

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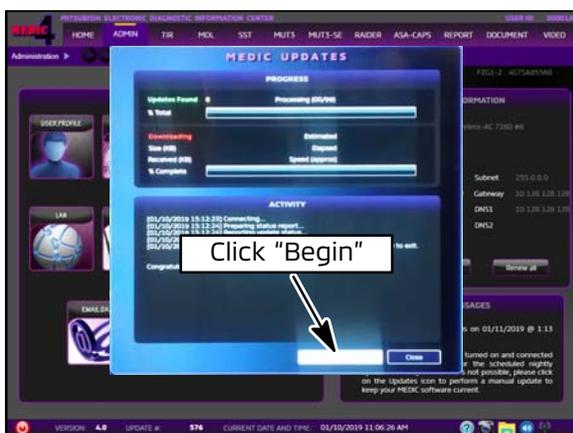
4. IF the MEDIC update screen advises updates are available, click the "Begin" button. After all updates are complete, **GO TO THE REPROGRAMMING PROCEDURE.**

Click "Begin"

5. **STANDALONE MUT-III 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.
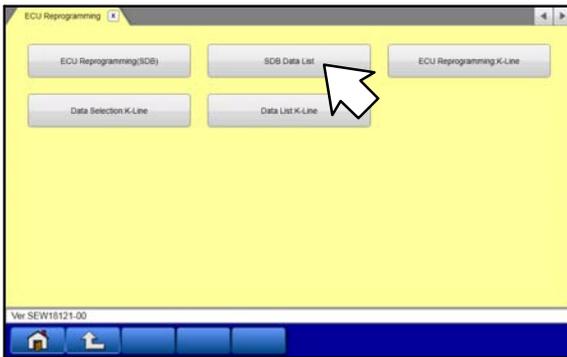
c. Click "SDB Data List."

d. Confirm that the database number displayed in the upper right above the chart is **N190801 or higher**

    ●   If the database number displayed on your MUT3-SE is N190101 or higher, continue to the next section.

    ●   If the reprogramming database number displayed on your MUT3-SE is **lower** than **N190801**, then the MUT3-SE database needs to be updated.

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

REPROGRAMMING PROCEDURE

⚠ CAUTION	**To ensure that the vehicle battery maintains 12V during the procedure, hook-up a battery charger to the vehicle during the procedure.**

12V Starter Battery Location: Outlander PHEV

Rear of vehicle, under luggage floorboard
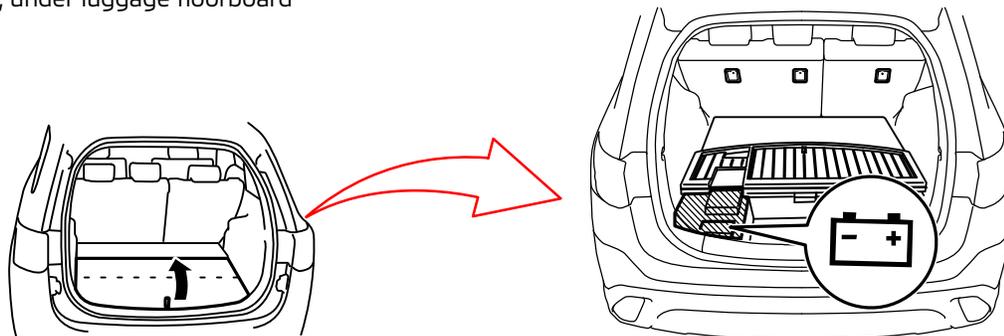
**NOTE: VCI Stand-alone reprogramming is not available for this procedure.
The laptop/tablet and the VCI must remain connected for the entire procedure.**

1. Connect the equipment as follows:
    NOTE: VCI Lite and MEDIC 4.0 Toughpad shown for illustration purposes only.

Data Link Connector
(Blue End)

MUT-III
Main Harness

USB Cable

Toughpad
(back)

VCI Lite
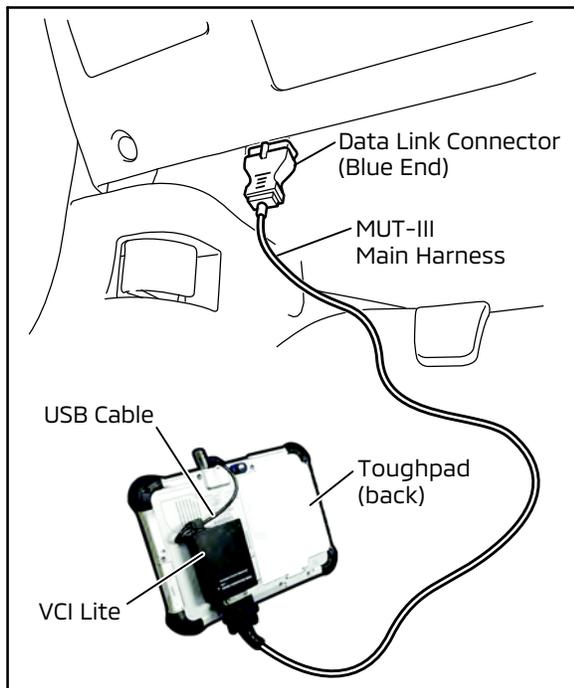
● Turn the MEDIC PC/tablet on. If the battery indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the battery be charged prior to beginning, or be used with the A/C power adaptor connected.

● Connect the USB cable to the VCI/VCI Lite.

● When the laptop/tablet displays the MUT-III main screen, connect the USB cable to the device.

● Connect the MUT-III main harness with the blue DLC connection to the VCI/VCI Lite.

● Connect the blue connection of the MUT-III 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.

⚠ CAUTION

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.

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 to open MUT-III SE.

    Click the STV button.

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.

    If necessary, select the correct class from the drop-down list.

5. Verify that the A/C ECU has not already been updated to the latest S/W number shown in the **"A/C ECU Reprogramming Chart"** in this TSB.
    If the A/C ECU is at the latest level, reprogramming is not necessary.
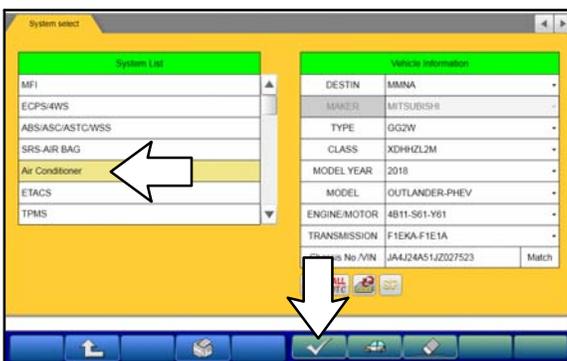
a. Select **"Air Conditioner"** from the System List, then click on the check mark at the bottom of the screen.
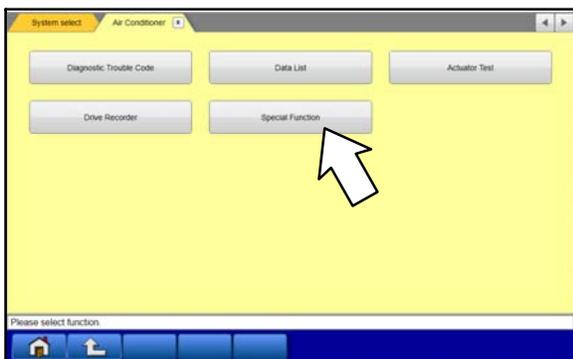
b. Select "Special Function."
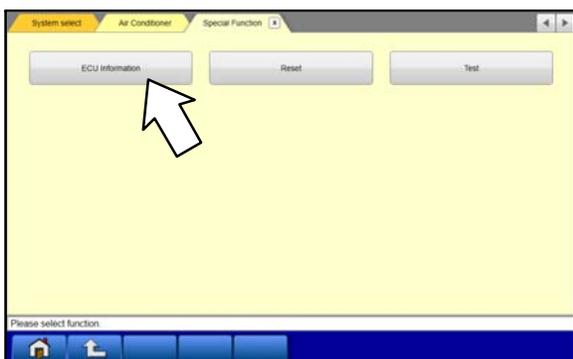
c. Select "ECU Information."
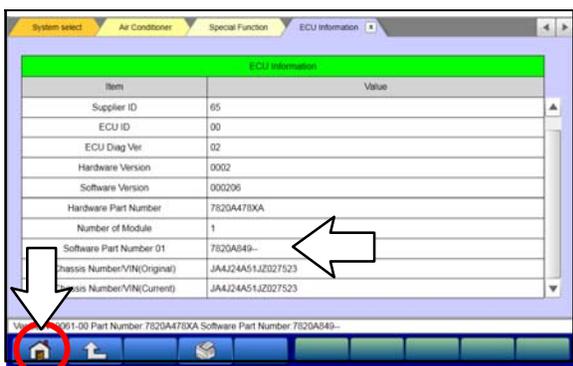
d. If the Software Part Number listed is **not** at the latest level (shown in the **"A/C ECU Reprogramming Chart"** in this TSB), proceed with the next step. Click the Home button to return to the System Select screen.

   If the Software Part Number **is** at the latest level, then reprogramming is not necessary.

6. Before reprogramming, perform an "**Erase and Read All DTCs**" to clear any DTCs that may have set.
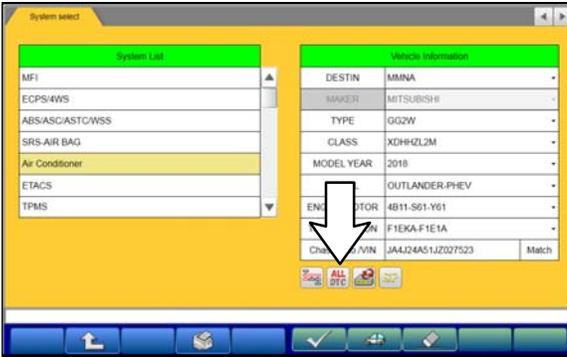
   a. On the System Select screen click the "ALL DTC" button.

   b. Select "Erase and Read All DTCs."
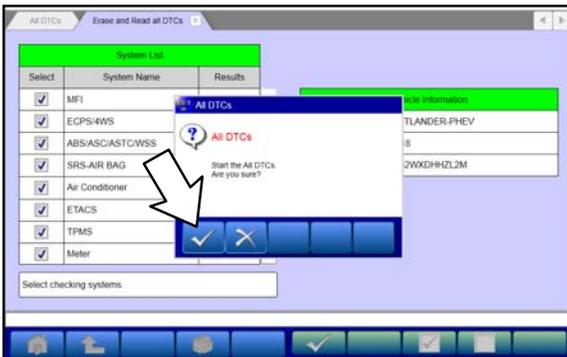
   c. A window will pop up asking you to confirm DTC erasing. Click the check mark in the dialog box for DTC erasing and reading to begin.
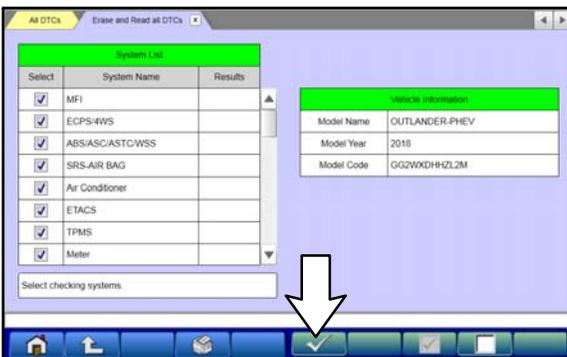
   d. The "System List" on the left side of the screen will have all selections checked. **Do not** change these selections.

   e. Click the check mark to continue.
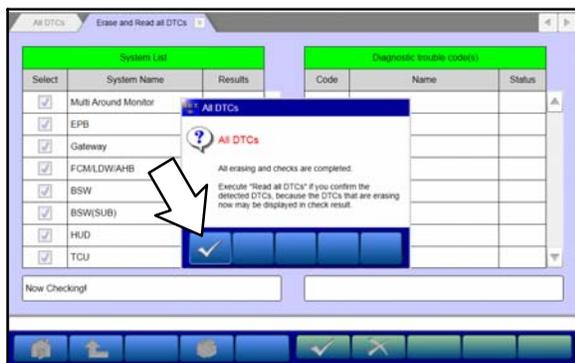
7. When DTC erasing is completed, click the check mark in the pop-up message that reads "All erasing and checks are completed."

   a. If any DTCs return after erasing is completed, click the check mark to clear the window. Diagnose and repair per the Service Manual.
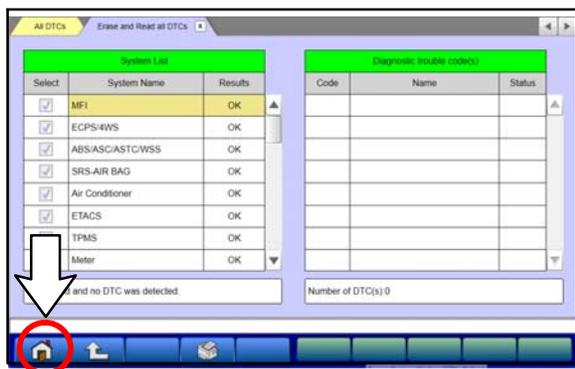
   b. If DTCs do not return, click the check mark to clear the window, then click the Home icon in the lower left to return to the System Select menu.

8. **Reprogram the A/C ECU** following the steps below.
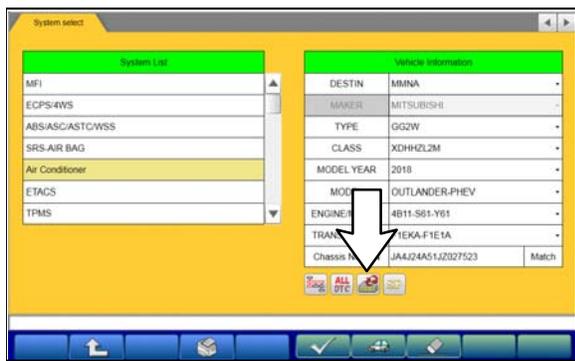
   a. On the System Select page, click on the Reprogram button.
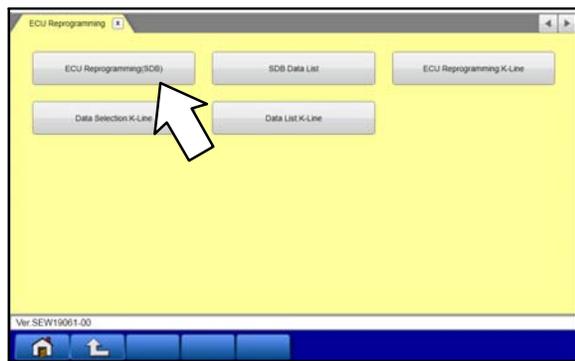
   b. Select "ECU Reprogramming (SDB)."
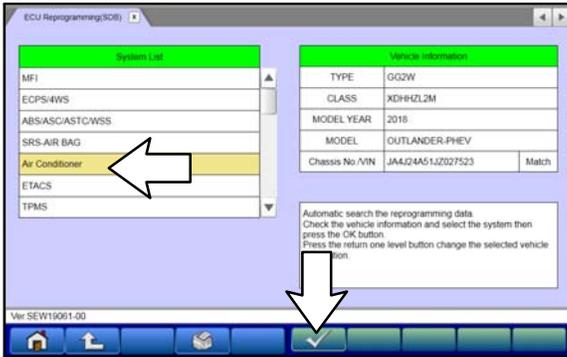
c. Select **"Air Conditioner"** in the System List, then click the check mark.
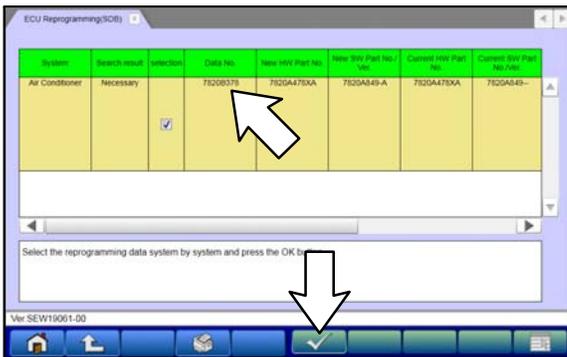
d. Verify that the correct data file listed in the table matches the one in the **"A/C ECU Reprogramming Chart**."

e. Click the check mark at the bottom of the page to initiate reprogramming.
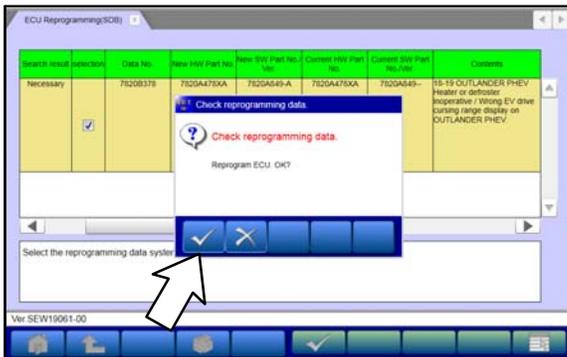
f. Click the check mark in the "Check reprogramming data" dialog box.
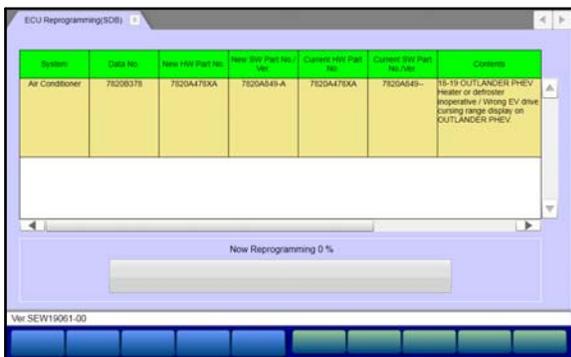
g. Once the reprogramming is initiated, the screen shown will indicate the reprogramming progress.

   NOTE: Do NOT disturb the cables or turn off the ignition during reprogramming.
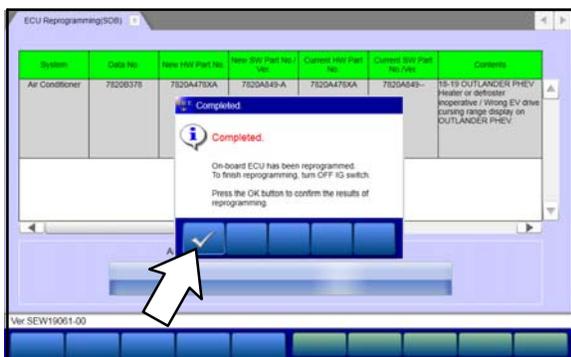
h. Once reprogramming is completed, click the check mark in the "Completed" dialog box.
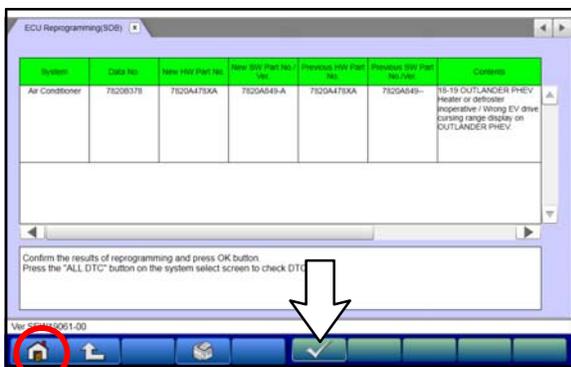
i. Verify the correct information is listed in the table. Click the check mark at the bottom of the page, then click the Home button to return to the System Select screen.

9. Perform an "Erase and Read All DTCs" again to clear any DTCs that may have set.
   For instructions, refer to steps 6 and 7 in this TSB.

10. Confirm the software version has been updated.
    For instructions, refer to step 5 in this TSB.
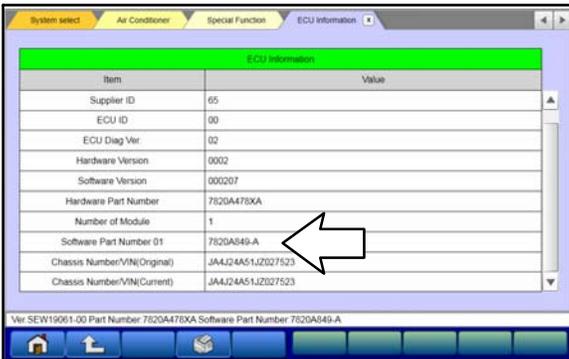
Confirm "Software Part Number" now matches the NEW one shown in the **"A/C ECU Reprogramming Chart"** in this TSB.

11. Turn off the ignition switch and disconnect the MUT-III. Turn off and disconnect the battery charger.

12. Test drive the vehicle to confirm proper operation.

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.

Operation	Labor Operation Code	Nature Code	Cause Code	Time Allowance
Reprogram A/C ECU	554010XJ	59Z	605	0.3 hrs.

Warranty Coverage: 5/60 Basic Coverage (Canada: 5/100)