SERVICE CAMPAIGN BULLETIN

SUBJECT:		NO:	**SC-18-001**
MIL ILLUMINATION WITH DTC P0AA7/P0AA8/P0AA9 – SERVICE CAMPAIGN		DATE:	**October 2018**
		MODEL:	**2018 Outlander PHEV**

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

This Service Campaign supersedes TSB–18–54–005, issued July 2018, to revise the DTC information, production date of affected vehicles, part numbers and warranty information. Changes are italicized and indicated by ◄.

BACKGROUND

This Service Campaign instructs dealers to reprogram the sub-BMU with a countermeasure software.

PURPOSE

► On certain vehicles, several malfunction indicators may illuminate, including: Engine Malfunction, EV System Service Required, and RBS (Regenerative Brake System), with Diagnostic Trouble Codes (DTCs) P0AA7, P0AA8 and *P0AA9* (Leak Sensor Detection Circuit). This is accompanied by a decrease in vehicle power and vehicle speed being restricted to a maximum of 37 mph (60 km/h).

NOTE: Vehicle power/speed restriction will be released once the Power switch is turned OFF, then back ON. The malfunction indicators will stop illuminating after the Power switch is turned OFF and ON several times.

This condition may be caused by inappropriate programming of the sub-Battery Management Unit (sub-BMU). The sub-BMU may falsely judge the leak detection circuit as faulty by picking up electrical noises from operation of the drive selector, brake application, or air conditioner operation.

AFFECTED VEHICLES

► Certain 2018 Outlander PHEV vehicles, built **between** *September 14, 2017 and August 7, 2018*.

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. Dealers must check their inventory vehicles' VINs on the Warranty Superscreen to verify whether the vehicle is involved in this service campaign.*

CUSTOMER NOTIFICATIONS

A letter will be sent to all owners of affected vehicles requesting them to bring their vehicle to a local Authorized Mitsubishi dealer to have their vehicle remedied. A copy of the customer notification letter appears at the end of this bulletin.

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)*.

(4751)

REQUIRED OPERATIONS

1. Confirm your MUT-III is updated with the latest reprogramming database.
2. Reprogram the sub-BMU with the new software. Refer to the "Sub-BMU 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 Sub-BMU memory, diagnose and repair those DTCs per the service manual <u>before</u> reprogramming. **DO NOT** reprogram the Sub-BMU until the reason(s) for other DTCs being set is corrected.

EQUIPMENT

The following equipment is needed to reprogram the sub-BMU.

- 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) - MB992745V.
- USB 2.0 cable - RRAR1MBR108GL.
- MEDIC 3.5/4 update at *557* or higher. ◄
- For Standalone MUT-III units, MUT3-SE Reprogramming Database *N180901* or higher. ◄

SUB-BMU REPROGRAMMING CHART

Sub-BMU Part Number		Data Number	Software Version	
			Previous	New
9479A057	Without Battery Heater	*9479A184*	BE3100 *BE3101*	*BE3102* ◄
9479A058	With Battery Heater	*9479A185*	BE3014 *BE3015*	*BE3016* ◄

REPAIR PROCEDURE

SOFTWARE/MEDIC VERSION VERIFICATION

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

NOTE: Reprogramming the Sub-BMU with the latest database (e.g., *N180901*) includes all past and current reprogramming for TSBs of affected vehicles. It is not necessary to reprogram the Sub-BMU for each previous TSB. ◄
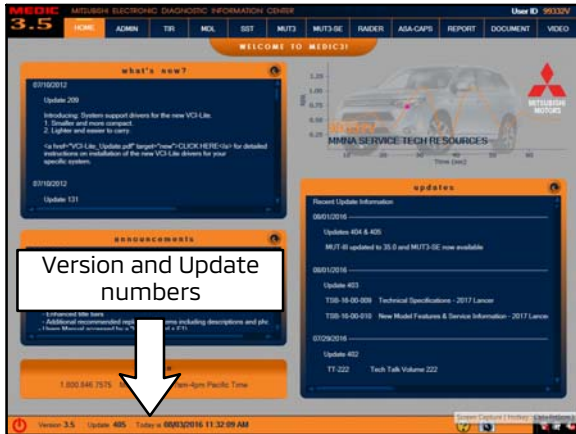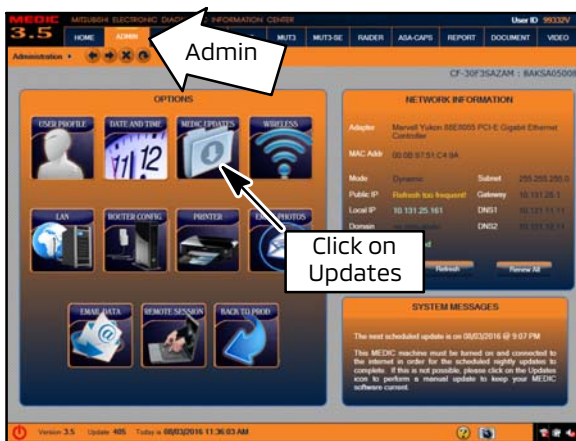
For MEDIC 3.5/4 users only: (MUT-III STV users go to step 5)
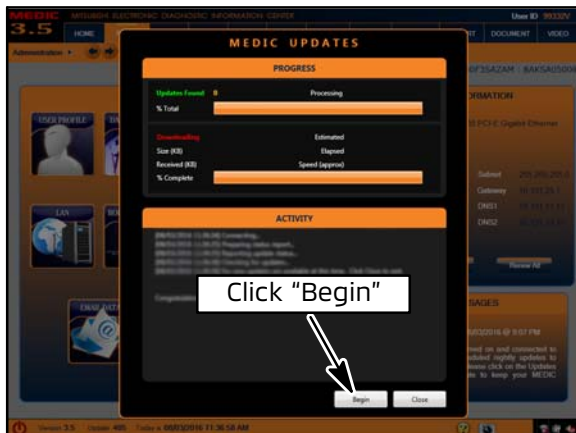
2. Verify the MEDIC 3.5/4 is at version 3.5 and at update *557* or higher. ◄

   If your **MEDIC 3.5/4 update is at least *557***, continue with the Reprogramming Procedure. ◄

   If your **MEDIC 3.5/4 update is below *557***, 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 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."
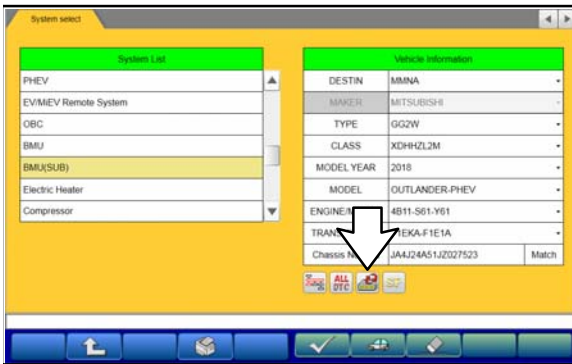
b. Click the "ECU Reprogramming" button.
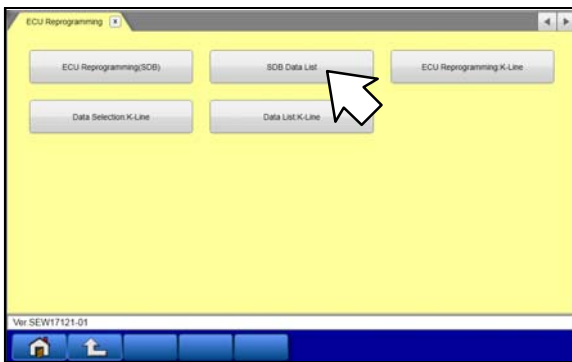
c. Click "SDB Data List."
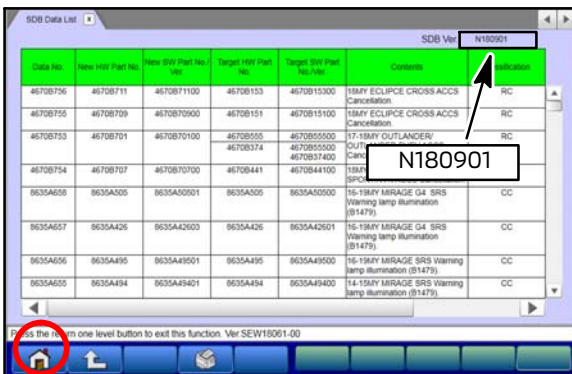
d. Confirm that the database number displayed in the upper right above the chart is **_N180901_ or higher** ◄

- If the database number displayed on your MUT3-SE is *N180901* or higher, continue to the next section. ◄

- If the reprogramming database number displayed on your MUT3-SE is **lower** than **_N180901_**, 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 12V starter battery during the procedure.**
The 12V starter battery can be accessed from the rear of the vehicle under the luggage floorboard, in the location shown below.

12V Starter Battery Location
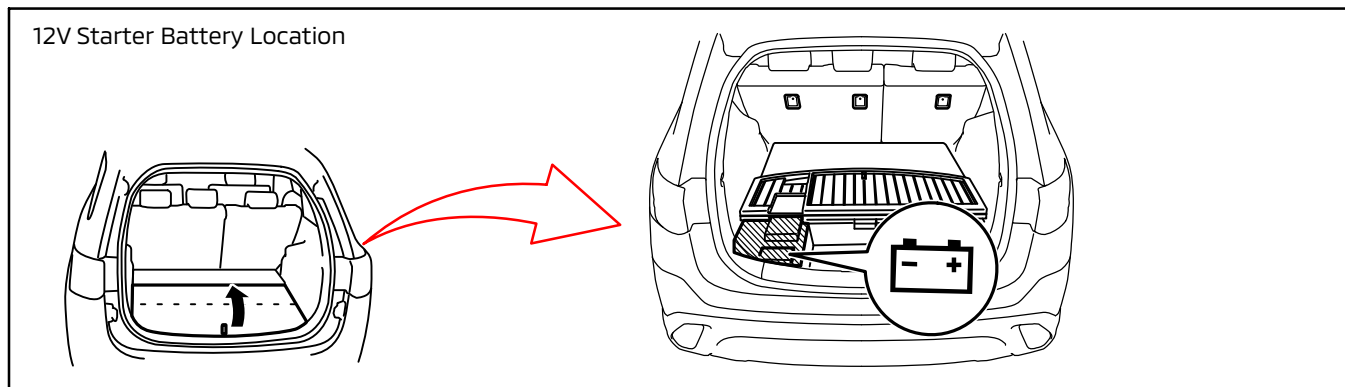
NOTE: **VCI Stand-alone reprogramming is not available for this procedure.**
        The laptop/tablet and the VCI must remain connected for the entire procedure.

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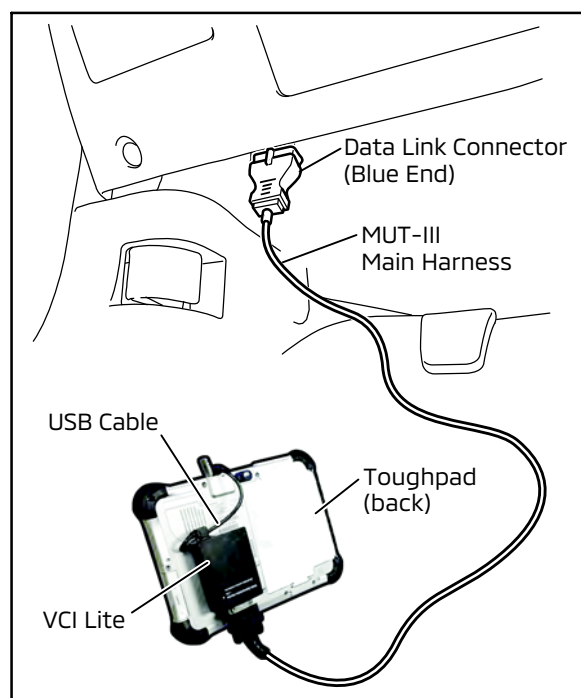
- Turn the MEDIC PC/tablet on. If the battery indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the battery be charged prior to beginning, or be used with the A/C power adaptor connected.

- 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.
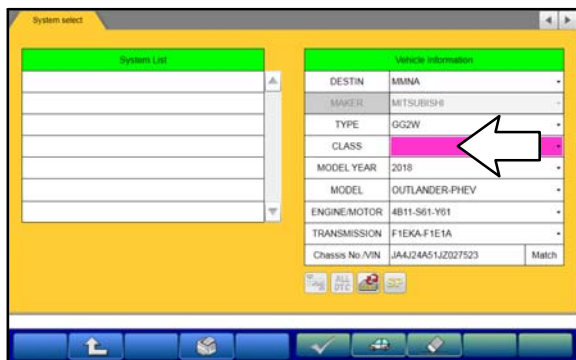
4. The System Select screen opens and populates with some basic information from the vehicle.

   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 Sub-BMU has not already been updated to the latest S/W number shown in the **"Sub-BMU Reprogramming Chart"** in this TSB.
   If the Sub-BMU is at the latest level, reprogramming is not necessary.
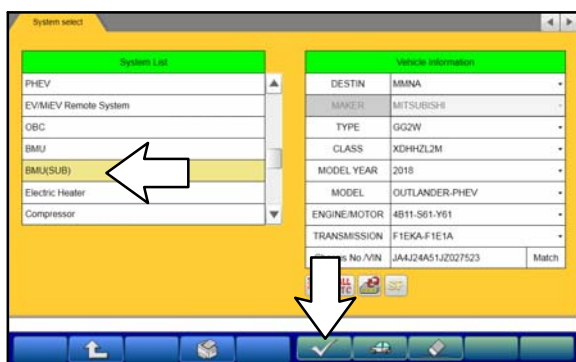
   a. Select "**BMU(SUB)**" from the System List, then click on the check mark at the bottom of the screen.

b. Select "Special Function."
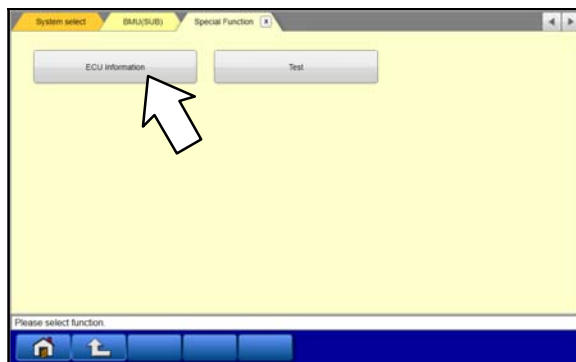
c. Select "ECU Information."
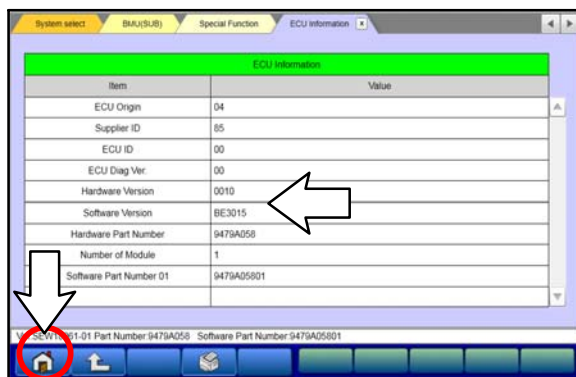
d. If the Software Version listed is **not** at the latest level (shown in the **"Sub-BMU Reprogramming Chart"** in this TSB), proceed with the next step. Click the Home button to return to the System Select screen.

If the Software Version **is** at the latest level, then reprogramming is not necessary.
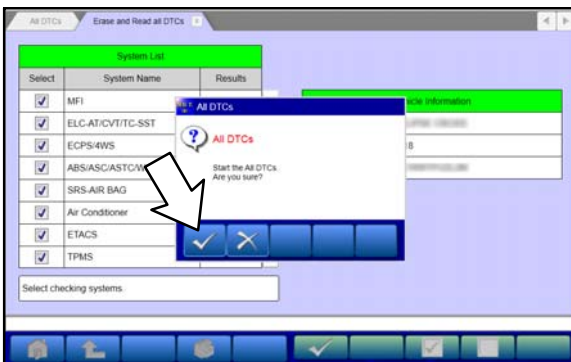
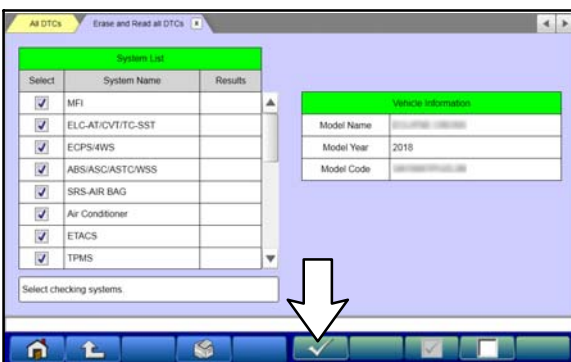6. Before reprogramming, perform an "**Erase and Read All DTCs**" to clear any DTCs that may have set.
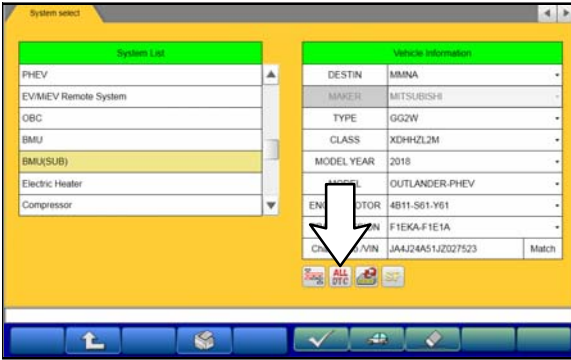
a. On the System Select screen click the "ALL DTC" button.
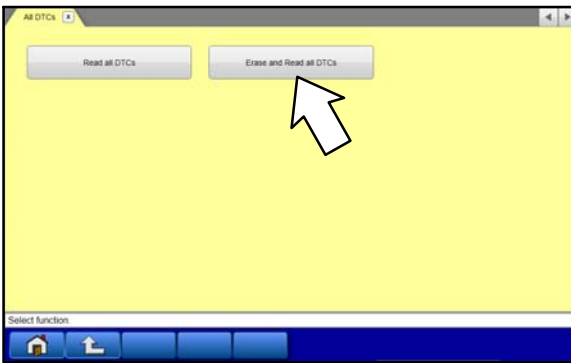
b. Select "Erase and Read All DTCs."

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.

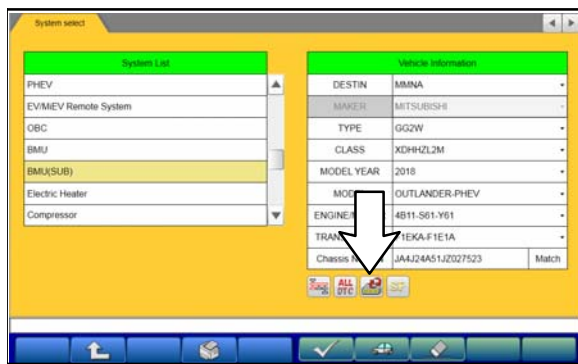e. Click the check mark to continue.
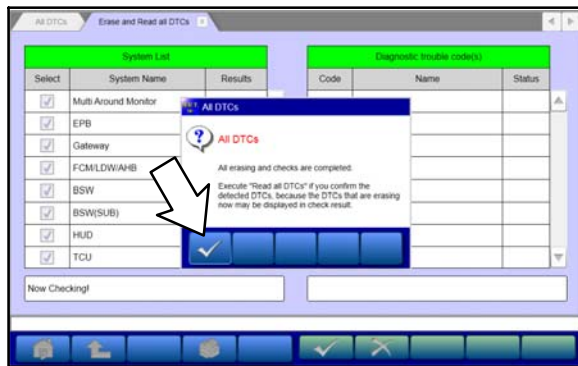
7. When DTC erasing is completed, click the check mark in the pop-up message that reads "All erasing and checks are completed."

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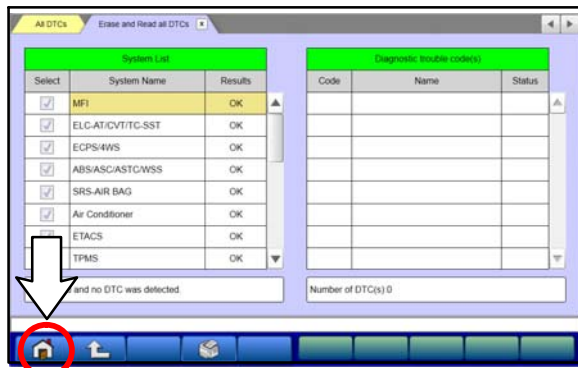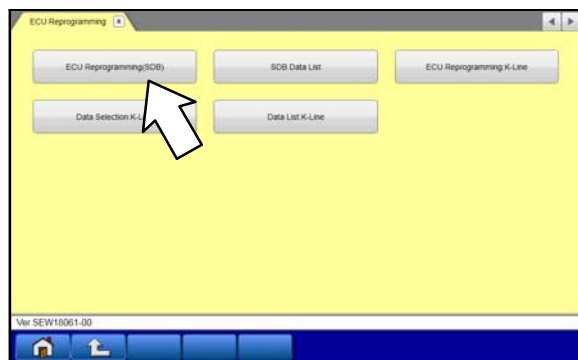
   b. If DTCs do not return, click the check mark to clear the window, then click the Home icon in the lower left to return to the System Select menu.
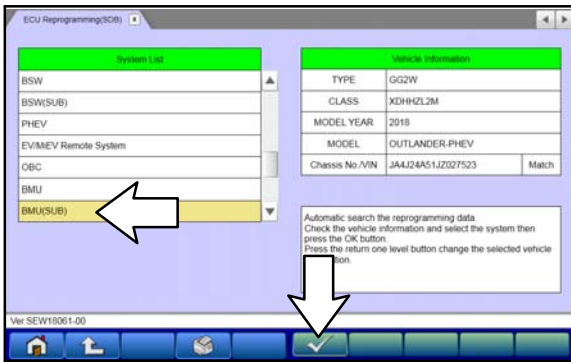
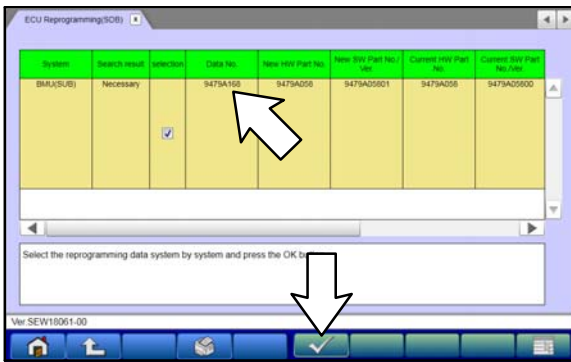8. **Reprogram the Sub-BMU** following the steps below.

   a. On the System Select page, click on the Reprogram button.
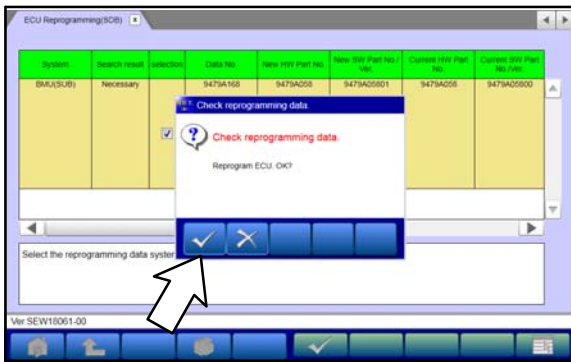
   b. Select "ECU Reprogramming (SDB)."

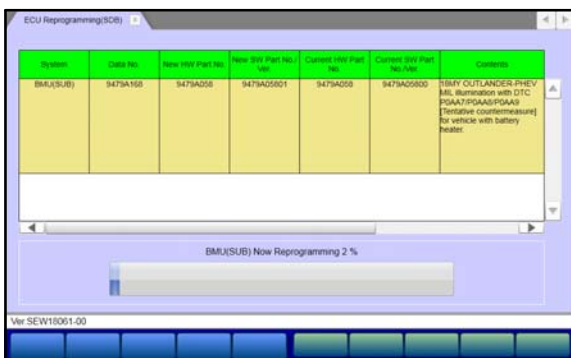c. Select "**BMU(SUB)**" in the System List, then click the check mark.

d. Verify that the correct data file listed in the table matches the one in the **"Sub-BMU Reprogramming Chart**."

e. Click the check mark at the bottom of the page to initiate reprogramming.
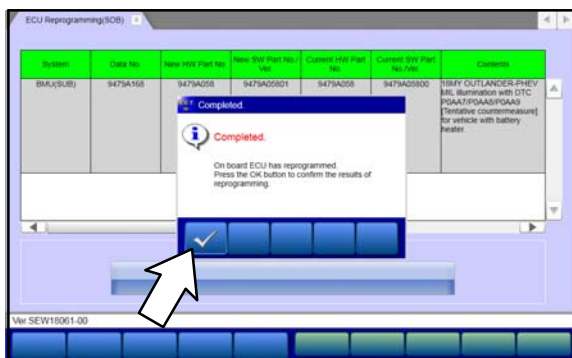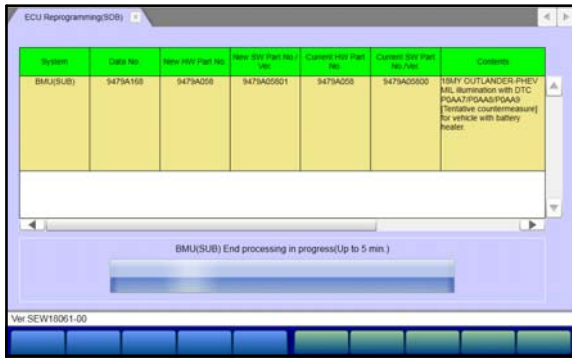

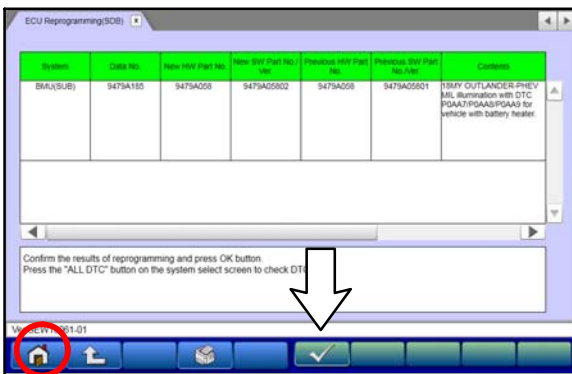f. Click the check mark in the "Check reprogramming data" dialog box.

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.
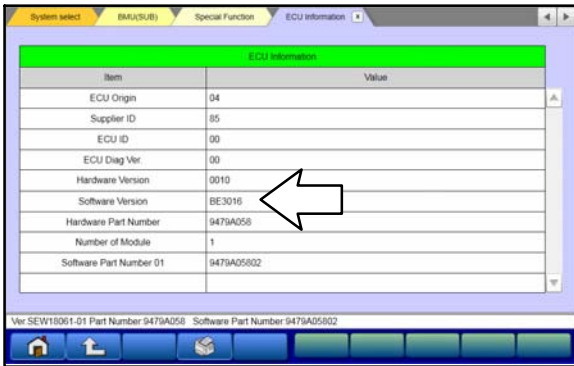
Confirm "Software Version" now matches the NEW one shown in the **"Sub-BMU Reprogramming Chart"** in this TSB.

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 / RECALL CAMPAIGN CLAIM INFORMATION

Enter all claims as claim type 'C' – Recall/Campaign Claims

Please follow the campaign instructions when entering each claim. See the example below.

Certain 2018 Outlander PHEV models.

Claim Header Section

After entering the vehicle data, select the applicable campaign number and the one repair scenario that was actually performed.

Service Campaign Claim:

Labor Operations:

There are **MULTIPLE** repair scenarios for this campaign. Use only the applicable campaign labor operation that applies shown below.

Outlander PHEV

#	Repair Procedure	Labor Operation Code	Labor Time	Operation
1	Reflash sub-BMU	C1811R01	0.3 hrs	Reflash
2	Reflash sub-BMU (with C1810R FCM-ECU & C1809R ASC-ECU at the same time)	C1811R02	0.1 hrs	Reflash

RENTAL CARS:

If there is a need to provide the owner with a rental car, claim the applicable charges in this section of the claim on the lower portion of the labor entry screen.

Select	Labor Operation	Labor Operation Description		Amount
☐	SHO	SPECIAL HANDLING ORDER	SHO Parts Order	
☐	RENTACAR	RENTAL CAR CHARGES	Days Reason (Select one) ▼ Rental Company Invoice Number	
☐	95300040	FREIGHT CHARGES	Freight Company Invoice Number	
☐	95200040	TOWING CHARGES	Towing Company Invoice Number	

NOTE: Rental cars applicable in the US and Puerto Rico only.

Mitsubishi Motors North America, Inc.

6400 Katella Avenue
Cypress, CA 90630
Telephone: 714-372-6000
www.mitsubishicars.com

AFFECTED VEHICLES
MODEL: 2018 Outlander PHEV

This notice applies to your vehicle, _____.

Date: October 2018

Re: Customer Satisfaction Campaign SC-18-001

Dear **NAME**,

Mitsubishi Motors always strives to build vehicles with the highest level of quality, and continuously improve that quality with every vehicle built. To help assure continued satisfaction with your Mitsubishi vehicle, we are recommending that the following product improvement be performed on certain 2018 Outlander PHEV vehicles built between September 14, 2017 and August 7, 2018.

Recommended Product Improvement:
Due to inappropriate programming of the sub-Battery Management Unit (sub-BMU), the sub-BMU may falsely judge the leak detection circuit as faulty by picking up electrical noises from operation of the drive selector, brake application, or air conditioner operation. False judgment of the leak detection circuit may result in several malfunction indicators illuminating, including: Engine Malfunction, EV System Service Required, and RBS (Regenerative Brake System), with Diagnostic Trouble Codes (DTCs) P0AA7, P0AA8, and P0AA9 (Leak Sensor Detection Circuit). The malfunction indicators may be accompanied by a decrease in vehicle power and vehicle speed being restricted to a maximum of 37 mph (60 km/h).

What your dealer will do:
Your local Mitsubishi dealer will reprogram the sub-BMU with updated software to correct the issue. This repair will take approximately **0.5** hours to complete. However, the dealer may need your vehicle for a longer period of time, but every effort will be made to minimize your inconvenience. Product improvements will be completed **free of charge**.

What you should do:
Please contact your local Mitsubishi dealership to schedule an appointment. Although not required, it is recommended to bring this letter when you take your vehicle into the dealership.

If you have any questions regarding this customer satisfaction campaign, please contact us:

Mitsubishi Customer Relations Department
P.O. Box 6400
Cypress, CA 90630-0064
Phone 1-888-648-7820
Hours: Monday – Friday 7 a.m. – 4 p.m. Pacific Time

If you have already encountered a problem with the sub-BMU as a result of this specific condition and have paid for the repair, you may send your original repair order or invoice, **and** original receipt/proof of payment to the following address for reimbursement consideration:

Mitsubishi Customer Relations Department, P.O. Box 6400, Cypress, CA 90630-0064

We appreciate your prompt attention to this matter, and apologize for any inconvenience.

Sincerely,

Mitsubishi Motors North America, Inc.

C1811R