Technical Service Bulletin

SUBJECT:	No:	TSB−18−54−001
COMMUNICATION MALFUNCTION OF TELEMATICS CONTROL UNIT (TCU) / MITSUBISHI CONNECT	DATE:	**February 2018**
	MODEL:	**2018 Eclipse Cross**

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

PURPOSE

This bulletin provides instructions for reprogramming the Telematics Control Unit (TCU) with new software. This software will address communication malfunctions with Mitsubishi Connect in the following situations:

- When a vehicle moves out of the United States to another country such as Canada and Mexico, and returns to the U.S., some functions of the Connected Car Service do not operate.

- After a contract for Connected Car Service has expired, and a customer re−signs a contract, the service cannot be used.

BACKGROUND

Possible causes for these malfunctions are:

- After crossing a national border, the IP address is not switched correctly. The emergency warning can be used, but the data communication is disabled, even after the vehicle returns back to the U.S.

- After a customer re−signs their contract, the Connected Car Service cannot be reactivated unless the 12V battery has been disconnected and reconnected. This updates the status of data communication.

AFFECTED VEHICLES

2018 Eclipse Cross vehicles equipped with Telematics Control Unit (TCU) / Mitsubishi Connect produced **BEFORE** March 6, 2018.

NOTE: Affected vehicles can be identified on the Superscreen by the Description "Eclipse Cross Telematics Re−Flash — See TSB−18−54−001" under "Open Vehicle Services."

Vehicles with TCU / Mitsubishi Connect
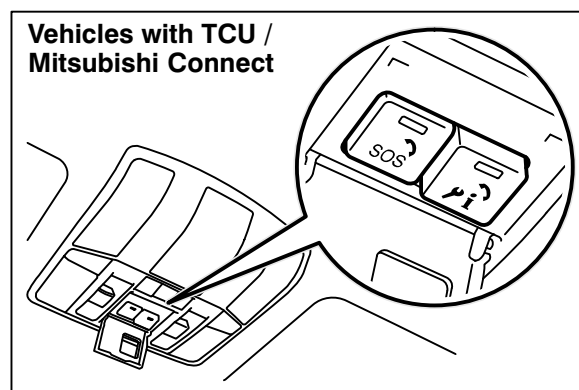
Identification of TCU−Equipped Vehicles:

To identify whether a vehicle is equipped with the Telematics Control Unit (TCU) / Mitsubishi Connect:

Look for the "SOS" and "i" buttons in the dome light area.

Continued

REQUIRED OPERATIONS

!! IMPORTANT !!   **Some vehicles may have already had the reflash completed at the Port. These vehicles have been marked with an 8 mm orange sticker on the Airbag Caution tag attached to the right side of the glove box, in the approximate location shown below.**

Vehicles with Reflashed TCU Have an Orange Sticker on Airbag Caution Tag (approx. location)

1. Confirm your MUT−III is updated with the latest reprogramming database.

2. Reprogram the TCU with the new software. Refer to the **TCU 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 TCU memory, diagnose and repair those DTCs per the service manual <u>before</u> reprogramming.

EQUIPMENT

**The following equipment is needed to reprogram the TCU.**

- VCI Lite − 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 **513** or higher.
- For Standalone MUT−III SE units, MUT3−SE Reprogramming Database **N180201** or higher.

TCU REPROGRAMMING CHART

M.F.F. Software No.	TCU Part Number	Software Version	
		NEW	**OLD**
8637C352	8637B872	6.00.00	4.00.00
			5.00.00

REPAIR PROCEDURE

1. Verify that the TCU has not already been updated to the latest S/W number in the TCU Reprogramming Chart. If the TCU is at the latest level, reprogramming is not necessary.
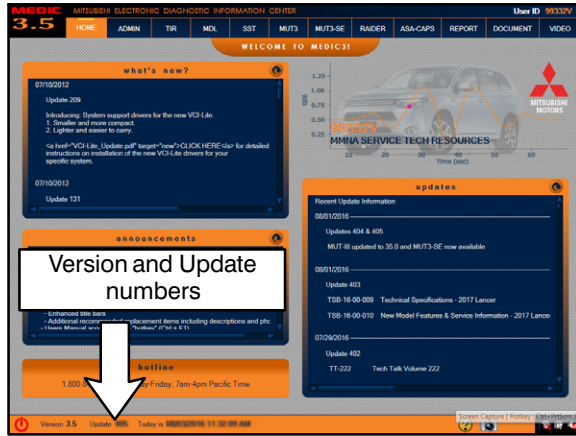
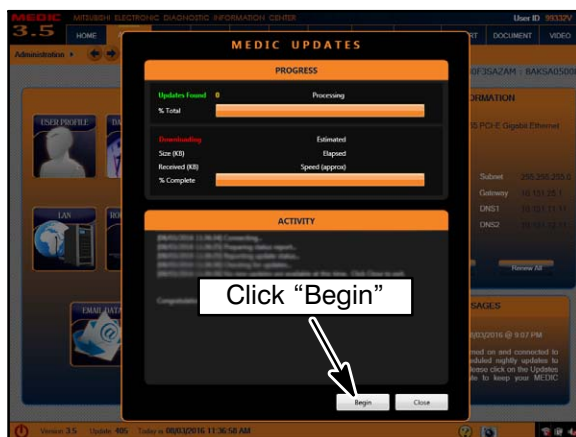**For MEDIC 3.5/4 users only: (MUT—III STV users go to step 5)**

2. Verify the MEDIC 3.5/4 is at version 3.5 and at update **513** or higher.

   If your **MEDIC 3.5/4 update is at least 513**, continue with the Reprogramming Procedure on page 4.

   If your **MEDIC 3.5/4 update is below 513**, update your MEDIC as follows.

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

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

5. **STANDALONE MUT−III SCAN TOOL VIEWER (STV) ONLY: (MEDIC 3.5 USERS − GO TO "PREPARATION").** Verify that your MUT3−SE has the most current version of the reprogramming database: From the MUT3−SE Main Page:
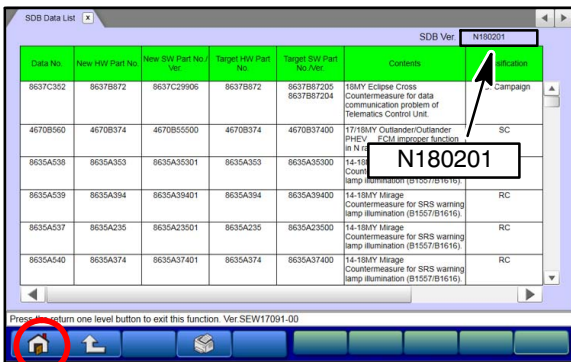
a. Click "STV."
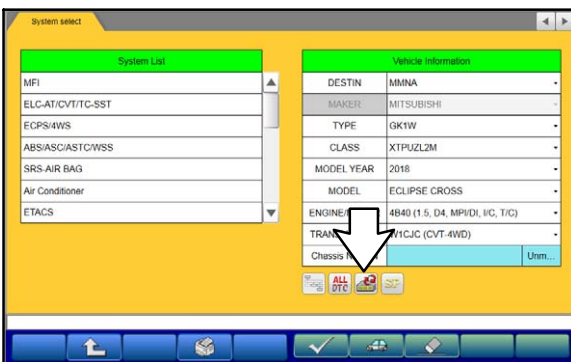
b. Click the "ECU Reprogramming" button.
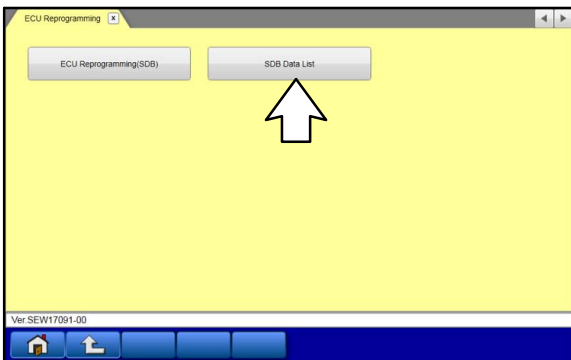
c. Click "SDB Data List."

d. Confirm that the database number displayed in the upper right above the chart is **N180201 or higher**

- If the database number displayed on your MUT3−SE is N180201 or greater, continue to the **Preparation** section.

- If the reprogramming database number displayed on your MUT3−SE is **lower** than **N180201**, 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.

PREPARATION

Before beginning the TCU software update, 2 fusible links (No. 19 and 23) should be removed during the reprogramming process to avoid vehicle battery consumption.

NOTE: Removing these fusible links will also prevent the cooling fans from turning on during reprogramming.
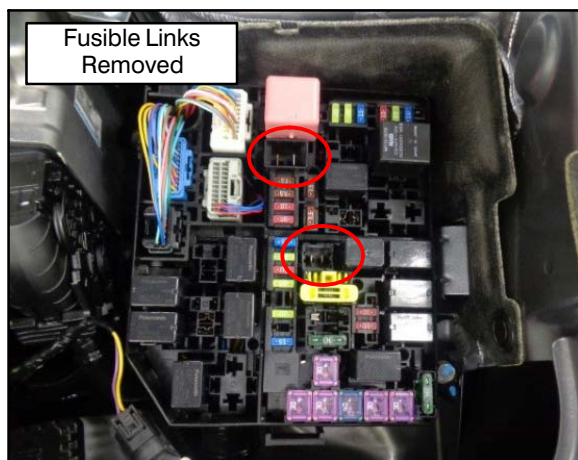

1. Locate fuse box in engine compartment.
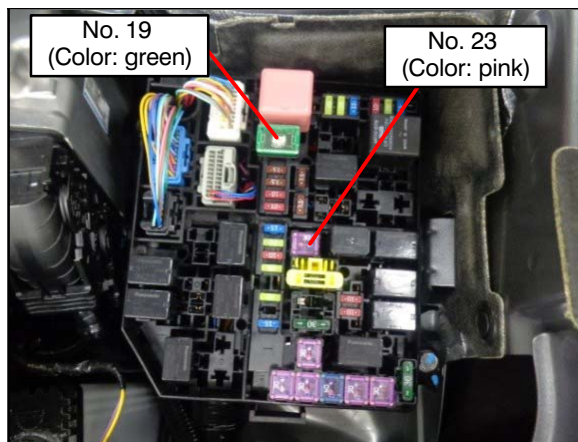
2. Remove the following fusible links:
    *   No. 19 (Green)
    *   No. 23 (Pink)


3. Once fusible links are removed, proceed to **Reprogramming Procedure**.

REPROGRAMMING 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.**

⚠ **CAUTION** **To ensure that the vehicle battery maintains 12V during the procedure, hook—up a battery charger to the vehicle during the 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
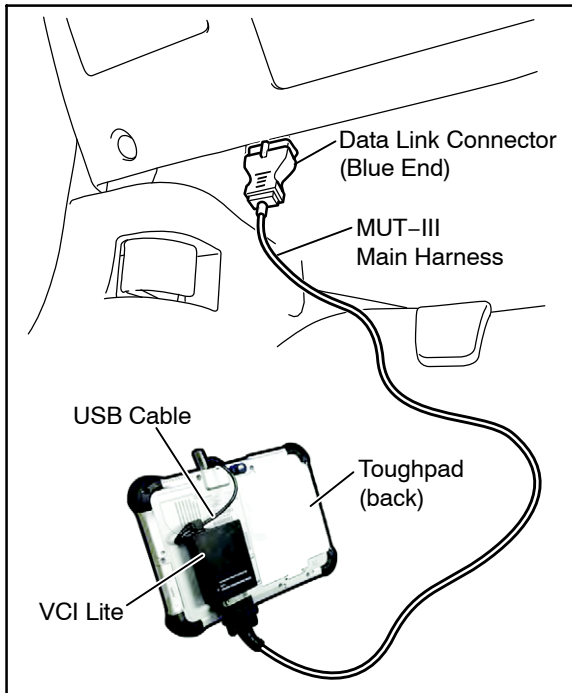
- Turn the MEDIC PC/tablet on. If the battery indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the battery be charged prior to beginning, or be used with the A/C power adaptor connected.

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

- When the laptop/tablet displays the MEDIC 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.

- 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 CODING 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. If the System Select screen is not open:
Using MEDIC, from the main page, click the "MUT3−SE" icon at the top center of the screen to open MUT−III SE.
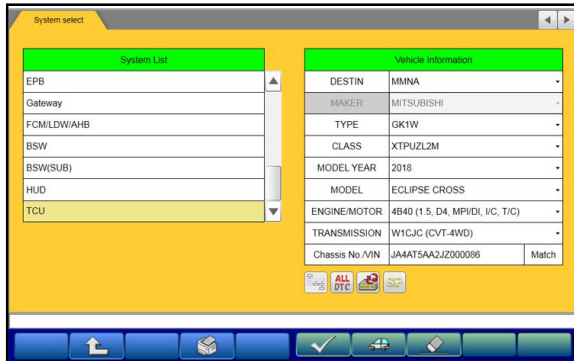
Click the "STV" button.
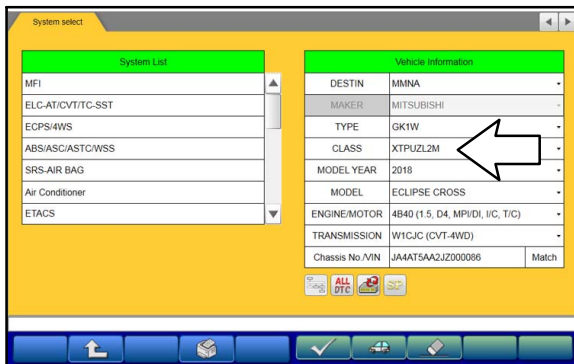
4. The System Select screen opens and populates with some basic information from the vehicle.

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. The System List should now populate with vehicle information.

If required, select the correct Loading Option Setup from the drop−down lists.

- TPMS: (e.g., with F.A.S.T. / w/o F.A.S.T.)
- F.A.S.T./OSS/IMMO/Keyless: (e.g., with F.A.S.T. / w/o F.A.S.T.)

6. Verify that the TCU has not already been updated to the latest S/W number shown in the **TCU Reprogramming Chart** in this TSB.
   If the TCU is at the latest level, reprogramming is not necessary.
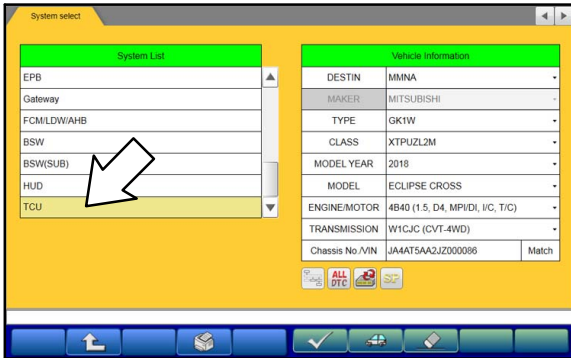
a. Select (double−click) "TCU" in the System List.
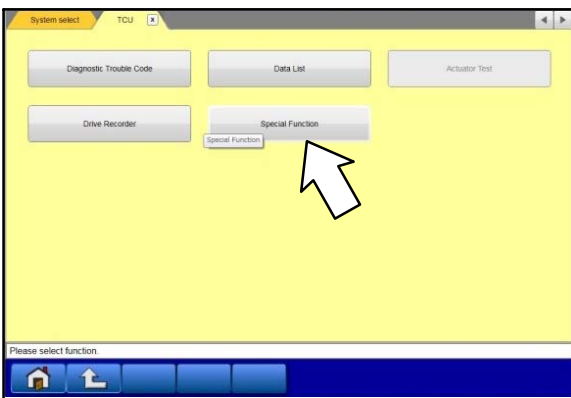
b. Select "Special Function."
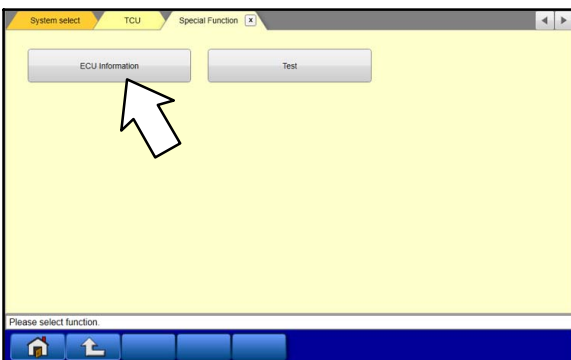
c. Select "ECU Information."
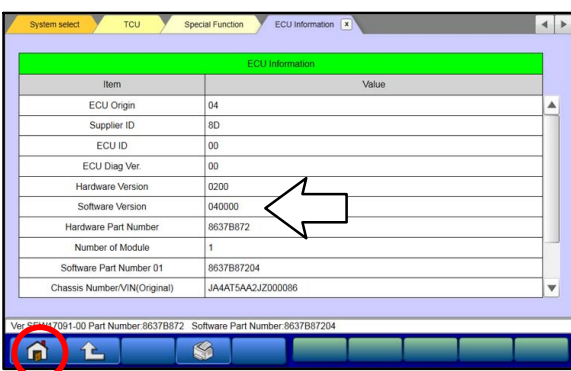
d. If "Software Version" is "060000": the TCU has already been reprogrammed.
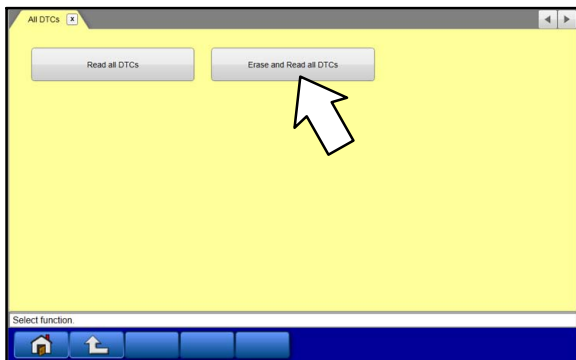
   If software version is **older** than "060000" (040000, 050000), then the TCU needs to be reprogrammed to the latest version.

e. Hit the Home button to go back to the System Select screen.

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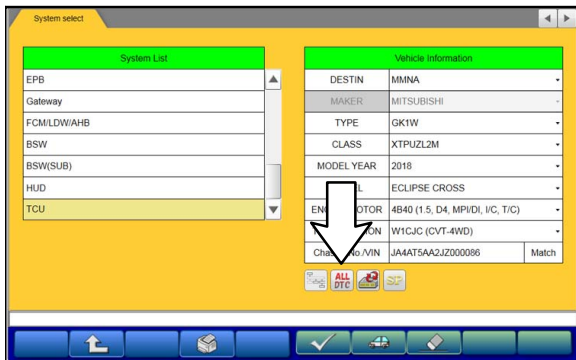
a. On the System Select screen click the "ALL DTC" button.
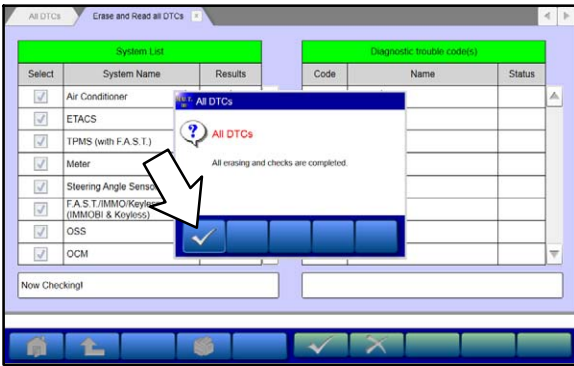

b. Select "Erase and Read All DTCs."
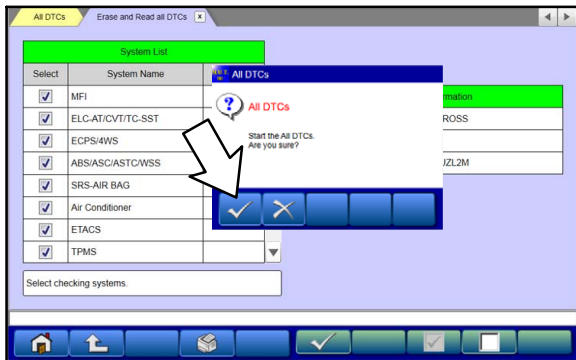
c. A window will pop up asking you to confirm DTC erasing. Click the check mark in the dialog box for DTC erasing and reading to begin.
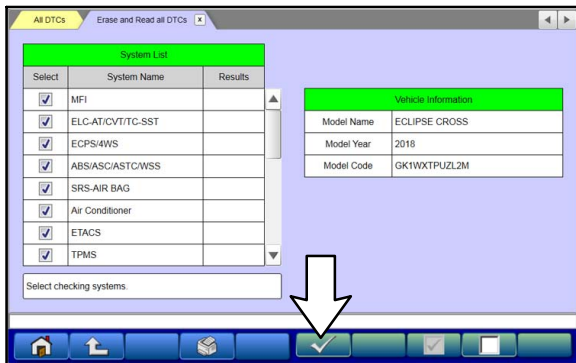
d. The "System List" on the left side of the screen will have all selections checked. <u>Do not</u> change these selections.
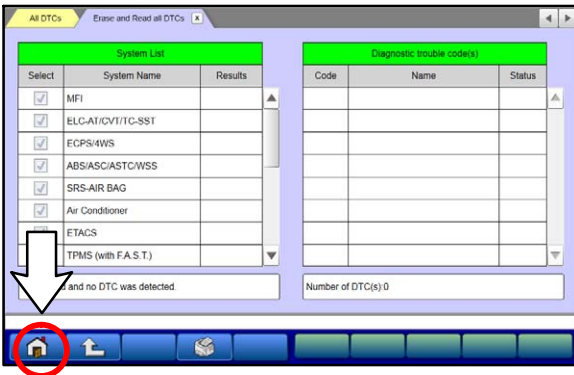
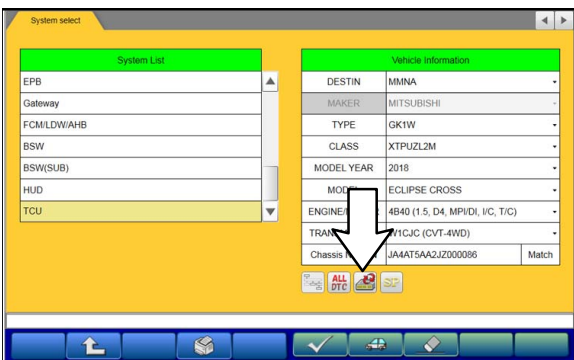e. Click the check mark to continue.

8. 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.
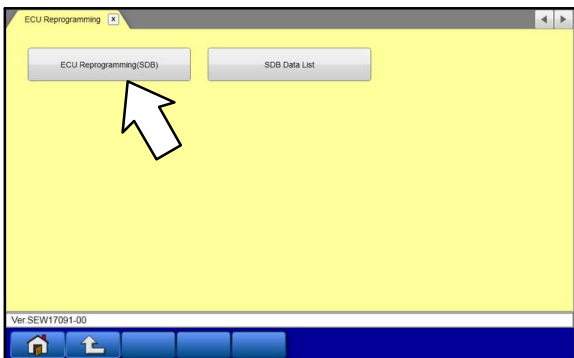

   b. If DTCs do not return, click the check mark to clear the window, then click the Home icon in the lower left to return to the System Select menu.
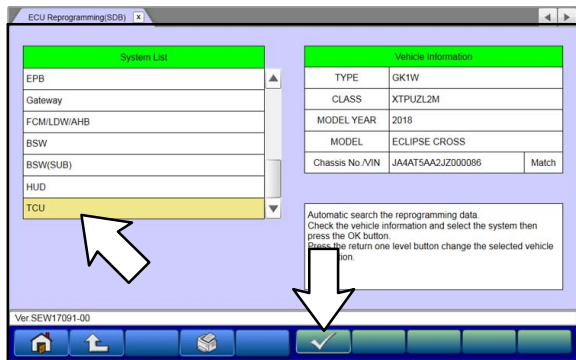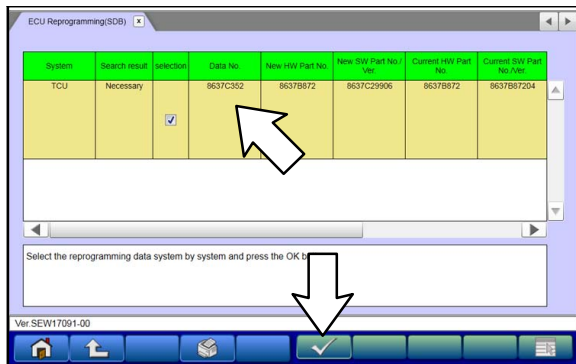
9. Reprogram the TCU following the steps below.

   a. On the System Select page, click on the Reprogram button.
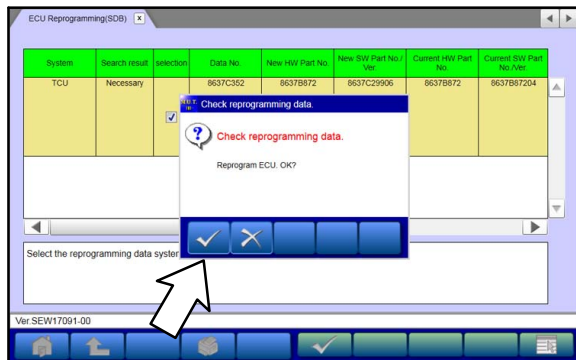

   b. Select "ECU Reprogramming (SDB)."

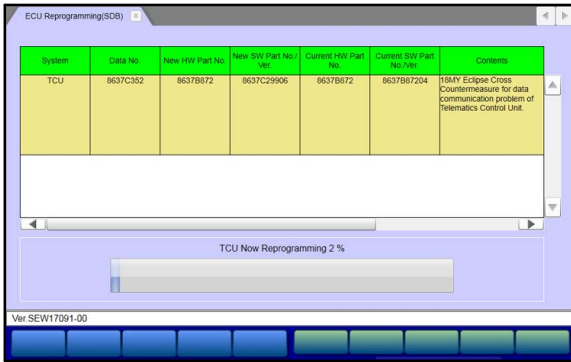c. Select "TCU" in the System List, then click the check mark.

d. Verify that the correct M.F.F. data file listed in the table matches the one in the **TCU Reprogramming Chart**.

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

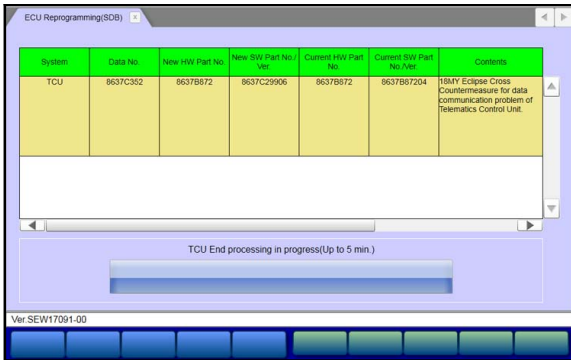f. Click the check mark in the "Check reprogramming data" dialog box.

g. Once the reprogramming is initiated, the screen shown will indicate the reprogramming progress.

NOTE: It may take 30−60 seconds for the progress bar to start moving.
**Do NOT disturb the cables or turn off the ignition during reprogramming.**

NOTE: Since the fusible links were removed during Preparation, the cooling fans will **not** turn on during reprogramming.
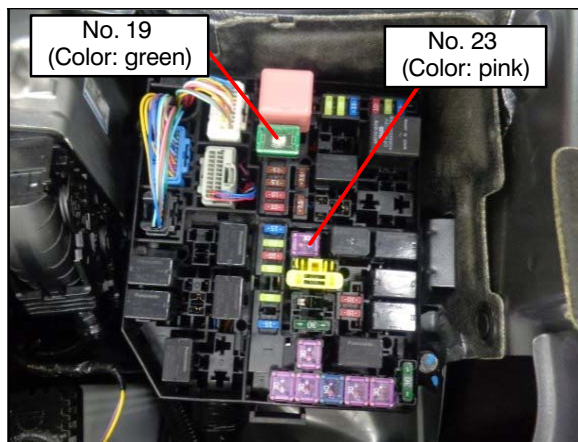
h. When reprogramming is completed, click the check mark in the "Completed" dialog box.
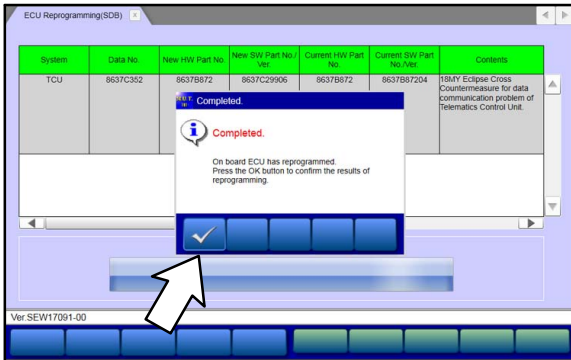
i. Verify the correct information is listed in the table. Click the Home button to return to the System Select screen.
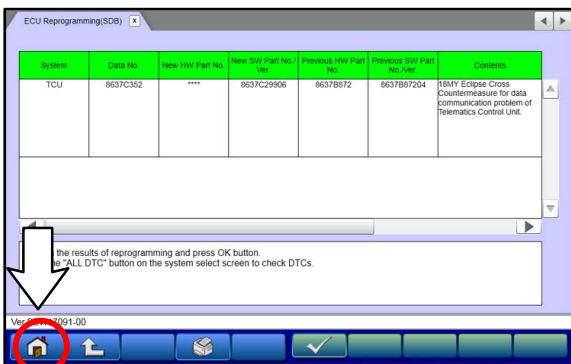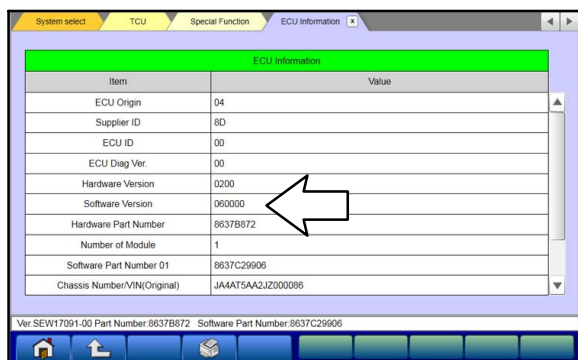
10. Reinstall the fusible links that were removed before reprogramming:

    - No. 19 (Green)
    - No. 23 (Pink)

11. Perform an "Erase and Read All DTCs" again to clear any DTCs that may have set.
    For instructions, refer to steps 7 and 8 in this TSB.

12. Confirm the software version has been updated.
    For instructions, refer to step 6 in this TSB.

Confirm "Software Version" is now "060000."

13. Turn off the ignition switch and disconnect the MUT−III. Turn off and disconnect the battery charger.

14. Test drive the vehicle to confirm proper operation.

PARTS INFORMATION

No parts are required for the completion of this reflash.

WARRANTY INFORMATION

Please submit the claim as claim type W with the following code. **Do NOT submit a claim if the reflash was already done.**

Labor Operation Code	Nature Code	Cause Code	Time Allowance
548524TY	4B0	59D	0.4 hrs

Warranty Coverage: 5/60 Basic Coverage