



SERVICE CAMPAIGN BULLETIN

SUBJECT:			No: SC-13-001
i-MiEV EV-ECU SOFTWARE UPDATE FOR CLIPPER CREEK EVSE – SERVICE CAMPAIGN			DATE: January, 2013
			MODEL: 2012 i-MiEV
CIRCULATE TO:	<input checked="" 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 checked="" type="checkbox"/> SALES MANAGER

PURPOSE

The current internal software programming for the EV-ECU is incompatible with the Electric Vehicle Supply Equipment charger produced by Clipper Creek. Use of a Clipper Creek charger could potentially damage the internal components within the i-MiEV electrical system. If this damage occurs, it could potentially affect the i-MiEV's ability to start. This bulletin describes the procedures necessary to update the software programming of the EV-ECU to ensure compatibility between an i-MiEV and the Clipper Creek EVSE.

AFFECTED VEHICLES

2012 i-MiEV built from 10/28/2011 – 9/07/2012

CUSTOMER NOTIFICATIONS

A letter will be sent to all owners of affected vehicles requesting them to bring their vehicle to a local certified Mitsubishi i-MiEV dealer to have their EV-ECU updated to the latest software. A copy of the customer notification letter appears at the end of this bulletin.

REQUIRED OPERATIONS

Before starting this campaign procedure, **CHECK THE WARRANTY SUPERSCREEN** to verify if the vehicle is an affected VIN for this campaign and this campaign procedure has not already been completed.

Repairs must be completed by a certified i-MiEV technician. Please ensure the Main Drive battery's charge is properly maintained while the vehicle is not being serviced.

IMPORTANT

Please ensure the Main Drive battery is fully charged prior to vehicle delivery. If the vehicle cannot be immediately remedied, the Main Drive battery should be charged while the vehicle is waiting for the update. This will limit customer inconvenience and maximize customer satisfaction.

Do not charge the Main Drive battery while performing this reprogramming procedure. If the Main Drive battery is being charged, please disconnect the charging cable before proceeding.

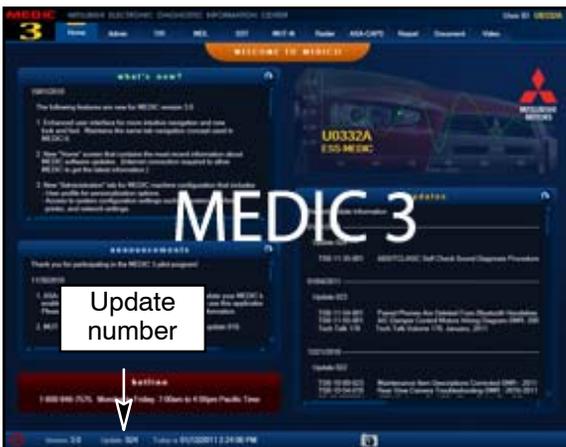
SPECIAL EQUIPMENT

The following equipment is needed to reprogram the EV-ECU:

- VCI (Vehicle Communication Interface) – MB991824.
- MEDIC Laptop computer with A/C power adapter – 520924, or 547708.
- MUT-III main harness 'A' (blue connector at the DLC end) – MB991910.
- USB 2.0 cable – MB991827.
- Reprogramming Database N12121 or higher
 - MEDIC 3 update at 163 or higher.
 - Standalone MUT-III laptop with Reprogramming CD 01/13 installed.

REPAIR PROCEDURE

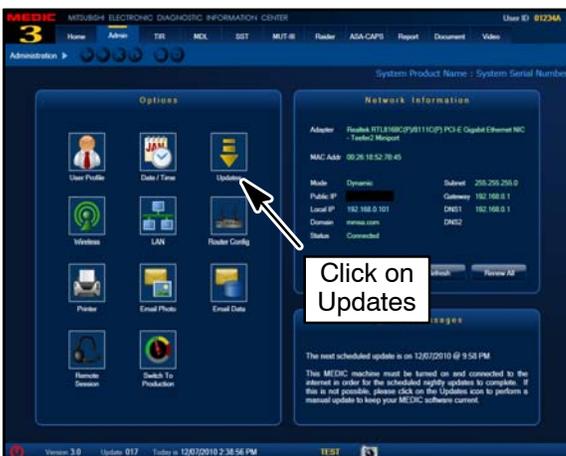
For MEDIC 3 users only: (Stand alone MUT-III users go to step 5)



1. Verify the MEDIC 3 is at update **163** or higher.

If your **MEDIC 3 update is at least 163**, continue with the **REPROGRAMMING PROCEDURE** below.

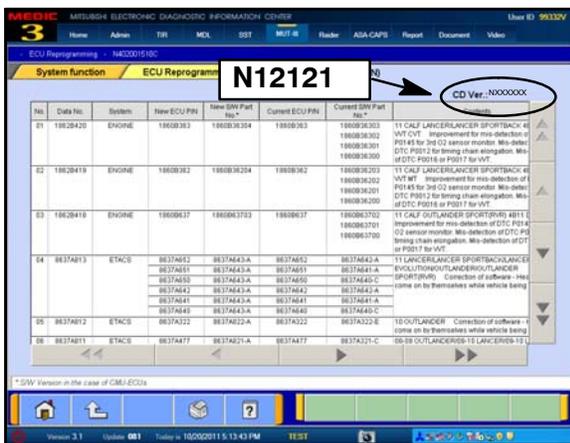
If your **MEDIC 3 update is below 163**, update your MEDIC 3 as follows.



2. Select the MEDIC 3 "Admin" tab. Click on "Updates."



3. If the MEDIC Updates screen advises updates are available, click the “Begin” button.
4. Once MEDIC 3 is at update 163 or higher, continue to the **REPROGRAMMING PROCEDURE** on the following pages.



5. **Standalone MUT-III Scan Tool Viewer (STV) ONLY: (MEDIC 3 USERS go to the REPROGRAMMING PROCEDURE below).** 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 **N12121**.
 - (1) If the database number displayed on your MUT-III is N12121 or greater, continue to the Reprogramming Procedure below.
 - (2) If the database number displayed on your MUT-III is lower than N12121, locate the Yellow MUT-III Reflash CD 01/13 and follow the instructions on the CD label to update your MUT-III.

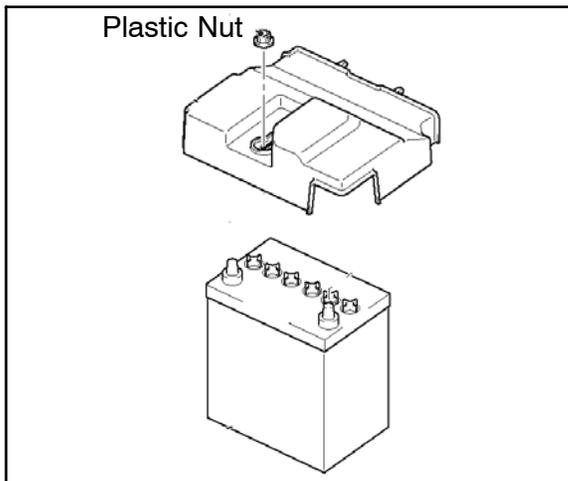
REPROGRAMMING PROCEDURE

IN ORDER TO REPROGRAM THE EV-ECU, A BATTERY CHARGER (WITH A CHARGING RATE NOT TO EXCEED 10 AMPS) MUST BE CONNECTED TO THE VEHICLE'S 12V AUXILIARY BATTERY DURING THE REPROGRAMMING PROCEDURE. DO NOT ALLOW THE BATTERY CHARGER TO TIME OUT. CONNECT THE BATTERY CHARGER WHEN INSTRUCTED.

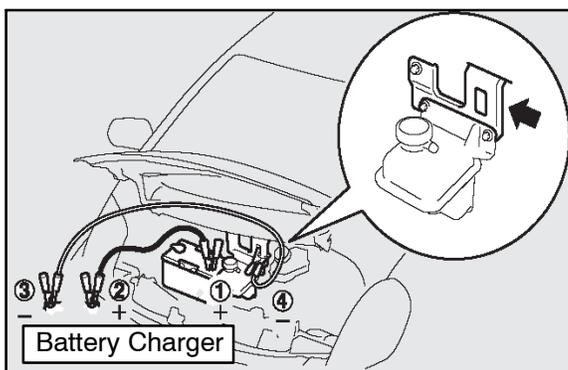
⚠ CAUTION

WHEN BATTERIES ARE BEING CHARGED, AN EXPLOSIVE GAS FORMS BENEATH THE COVER OF EACH CELL. DO NOT SMOKE NEAR BATTERIES ON CHARGE OR WHICH HAVE RECENTLY BEEN CHARGED. DO NOT BREAK LIVE CIRCUITS AT THE TERMINALS OF THE BATTERIES ON CHARGE. A SPARK WILL OCCUR WHERE THE LIVE CIRCUIT IS BROKEN. KEEP ALL OPEN FLAMES AWAY FROM THE BATTERY.

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



1. With the vehicle parked, set the parking brake and open the hood.
2. Remove the 12V auxiliary battery cover. Unscrew the plastic nut (pull up while turning).



3. Attach the battery charger (with a charging rate not to exceed 10 amps) to the 12V auxiliary battery.

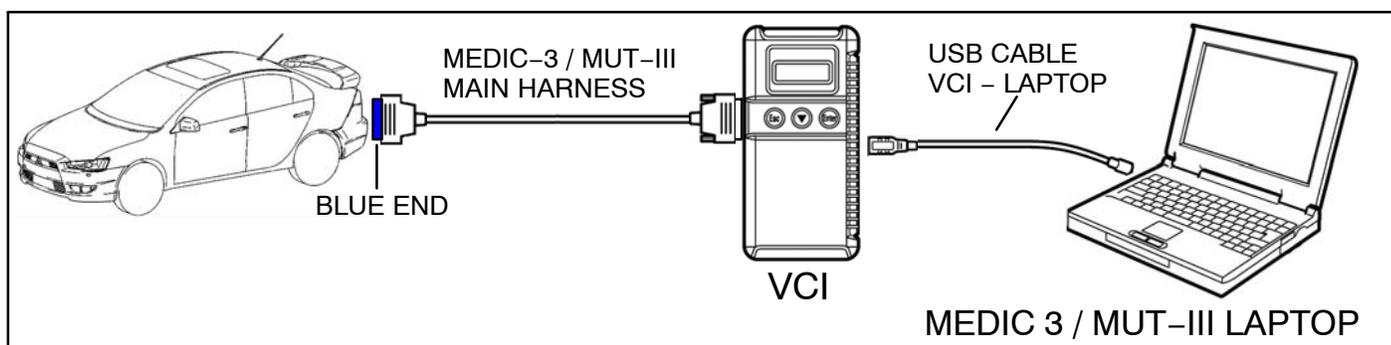
NOTE: Ensure battery charger does not time out during this procedure.

NOTE:

Connect the positive (+) terminal of the 12V auxiliary battery (1) to the positive (+) battery charger cable (2). Connect the negative (-) battery charger cable (3) to the designated ground location (4).

4. Connect MUT-III 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 with the blue DLC connection 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 that the indicator lamp in the upper right corner of the screen is green.


CAUTION

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.

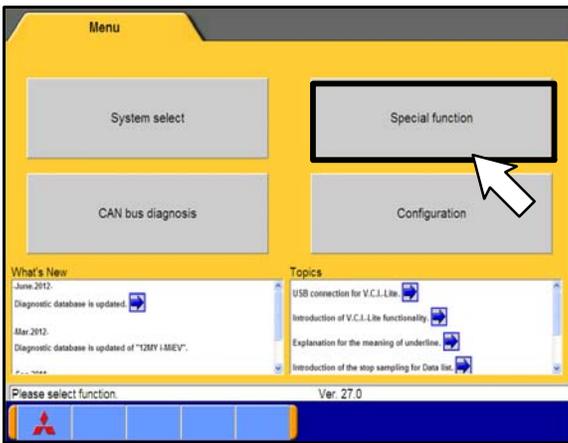


5. Turn the electric motor switch to the ON position.

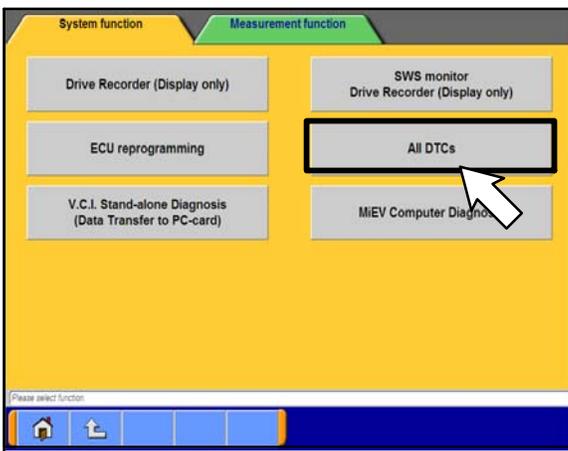
NOTE: Ensure all accessories are off (e.g. lights, heating and AC system, audio/navi unit, etc...).

6. From the MEDIC main page,

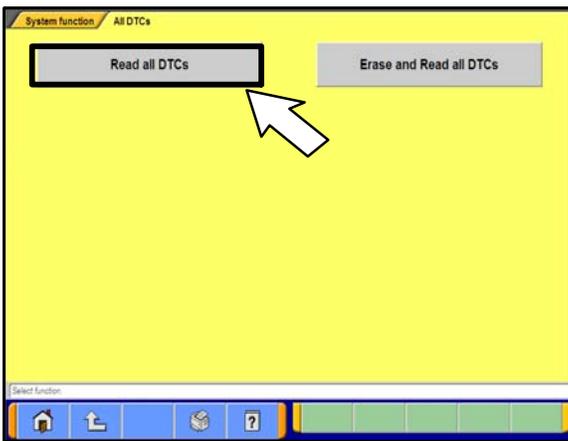
- Click on MUT-III



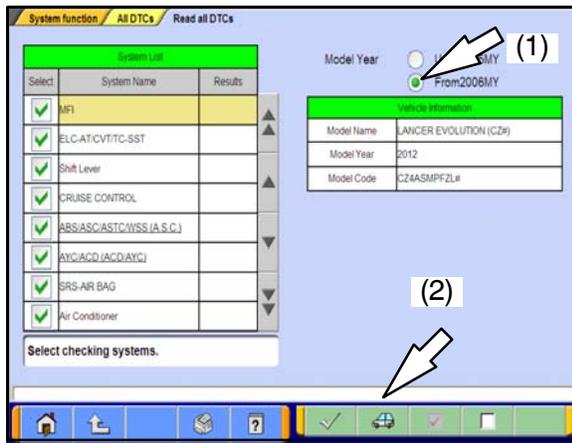
b. Select "Special Function."



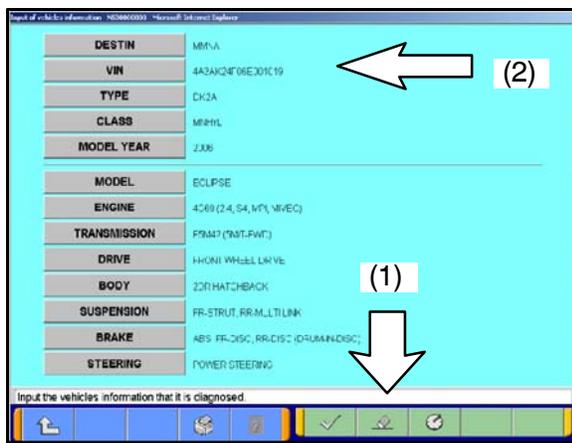
c. Select "All DTCs."



d. Select "Read all DTCs."

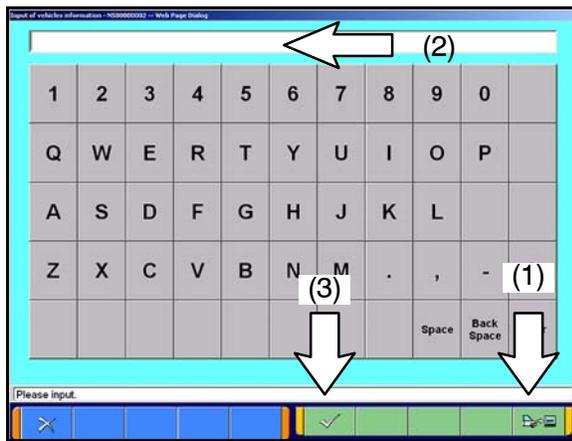


- e. Make sure the “From 2006MY” field is selected (1). Click on the car icon at the bottom of the page to select your vehicle (2).



- f. If the VIN listed does not match the vehicle you are working on, click on the eraser icon at the bottom of the page (1).

Click on the VIN button (2).



- g. Click on the icon in the lower RH corner of the screen to have the MUT-III automatically read the VIN (1). If a message appears saying that the VIN cannot be read automatically, manually type the 17 digit VIN into the VIN field (2).

When the VIN is entered correctly, click on the check mark icon to continue (3).

DESTIN	MMNA
VIN	JA3215H17CU008933
TYPE	H33W
CLASS	GLDDL#
MODEL YEAR	2012
MODEL	I-MEV
ENGINE/MOTOR	Y4F1
TRANSMISSION	F1E1A

Input the vehicles information that it is diagnosed.

- h. Ensure the VIN entered is correct (1).
Click on the check mark icon to continue (2).

Select	System Name	Results
<input checked="" type="checkbox"/>	MMOBLIZER (Gasoline EV)	
<input checked="" type="checkbox"/>	ECPS-4WS	
<input checked="" type="checkbox"/>	ABS/ASC/ASTC/WSS (A.S.C.)	
<input checked="" type="checkbox"/>	SRS-AR BAG (For N/A/S)	
<input checked="" type="checkbox"/>	Air Conditioner	
<input checked="" type="checkbox"/>	ETACS (Except JPN)	
<input checked="" type="checkbox"/>	TPMS (without F.A.S.T.)	
<input checked="" type="checkbox"/>	Meter	

Select checking systems.

- i. Click on the check mark icon at the bottom of the page to initiate DTC scan.
Confirm scanning for all DTCs by clicking on the check mark icon when prompted.

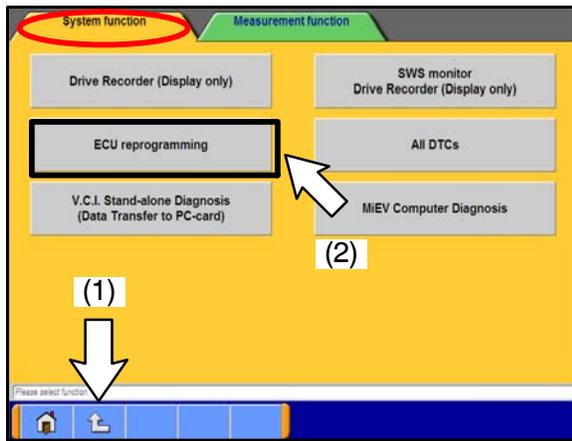
Select	System Name	Results
<input checked="" type="checkbox"/>	MMOBLIZER (Gasoline EV)	TC
<input checked="" type="checkbox"/>	ECPS-4WS	OK
<input checked="" type="checkbox"/>	ABS/ASC/ASTC/WSS (A.S.C.)	OK
<input checked="" type="checkbox"/>	SRS-AR BAG (For N/A/S)	OK
<input checked="" type="checkbox"/>	Air Conditioner	OK
<input checked="" type="checkbox"/>	ETACS (Except JPN)	TC
<input checked="" type="checkbox"/>	TPMS (without F.A.S.T.)	TC
<input checked="" type="checkbox"/>	Meter	TC

Check end and DTC(s) was detected.

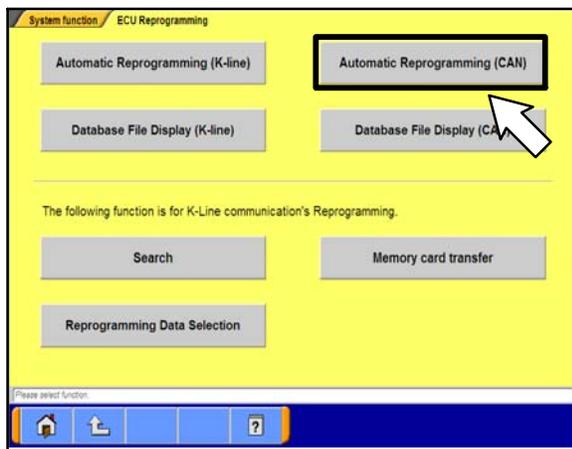
Code	Name	Status
U1111	Display CAN timeout/Not equipped	Active
U1111	Display CAN timeout/Not equipped	Active
U1111	Display CAN timeout/Not equipped	Active
U1116	F.A.S.T. CAN timeout/No equipped	Active

Number of DTC(s):4

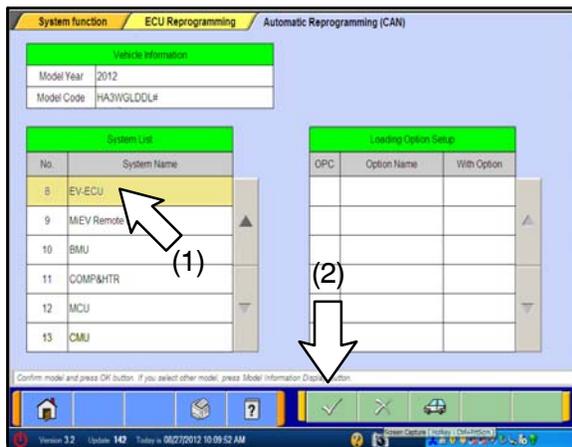
- j. When the DTC scan completes, there may be 4 DTCs displayed with codes "U1111" and "U1116". This is normal. Proceed with the reprogramming procedure. If there are separate DTC's displayed, trouble shoot the DTC's according to the service manual before proceeding.



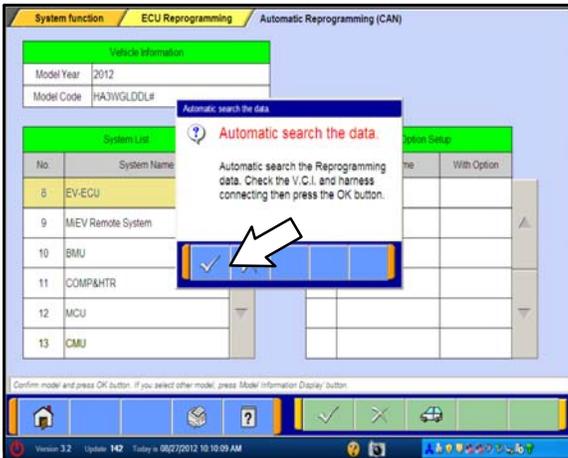
k. Click the back arrow icon (1) twice to arrive at the “System Function” screen. Select “ECU reprogramming” (2).



l. Select “Automatic Reprogramming (CAN)”.

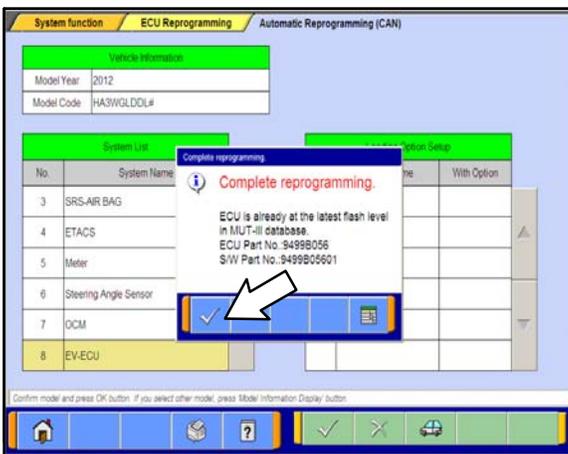


m. In the lower left column labeled “Systems List”, scroll down and select “No. 8, EV-ECU” (1). Click on the check mark icon (2) to continue.



- n. A message will advise you that the system will “Automatic search the data.”

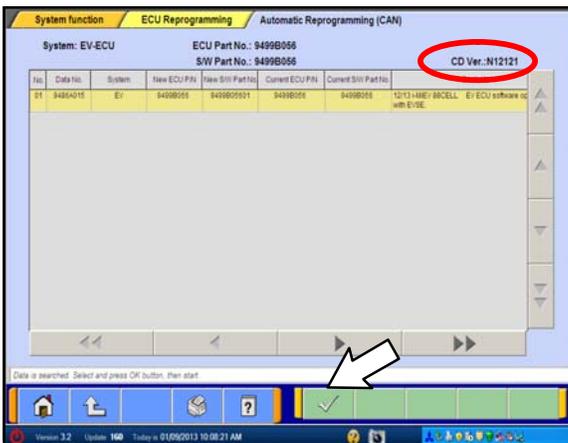
Click on the check mark icon to search for the updated software.



NOTE:

If a “Complete Reprogramming” message is displayed, the EV-ECU is already reprogrammed for this concern. If this message displays, do not continue with this reprogramming procedure. Click the check mark to clear the window, then click on the Home icon at the lower left corner of the screen to return to the System Select main page.

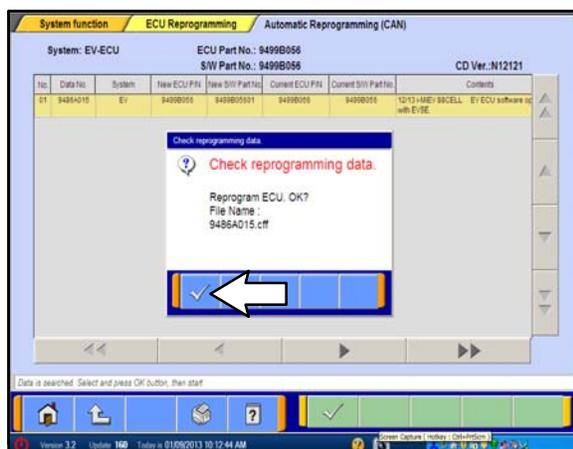
If a “Complete Reprogramming” message **does not** appear, continue with this procedure.



- o. The CAN database screen will display.

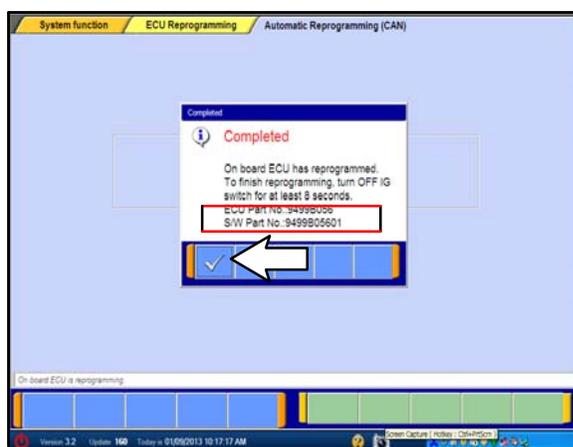
Confirm the database number at the top right of the table is **N12121** or higher.

Click on the check mark icon to continue.



- p. Confirm reprogramming by clicking on the check mark icon when prompted. It may take up to 15 minutes to complete the reprogramming.

NOTE: The fog lamps (if applicable) will automatically be turned on during reprogramming.



- q. Once the reprogramming has completed, confirm the new software version is “9499B05601”. Click on the check mark icon to continue.
7. Turn the electric motor switch to the OFF position. Wait approximately 10 seconds, and turn it back ON. Confirm that the “READY” light is illuminated.
 8. Turn OFF the electric motor switch. Disconnect the MUT-III and the battery charger.
 9. Reinstall the 12V auxiliary battery cover and plastic nut. Close the hood.

Warranty / Service Campaign Claim Information

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

Please follow the campaign instructions when entering each claim in order to select the applicable operation codes that correctly match up with the work that was actually performed. A claim example to follow is provided below.

Certain 2012MY – I-MiEV Electric Vehicles

Required Operation to be performed	Labor Operation	Labor Time
1. Reprogram the EV-ECU	C1301E01	.3 hrs.

Claim Header Section: 2012MY I-MiEV EV-ECU UPDATE Reprogramming

The screenshot shows the 'Service Warranty' interface with the following fields and callouts:

- Claim Entry** / **Vehicle Information** / **PQR/VQR** / **Help**
- Campaign Information** section:

 - Campaign Operation No:** C1301E___. Callout: "Enter in the first 6 characters of this campaign labor operation: C1301E__." Below the field are buttons for "Enter As" and "TSR".
 - Miles/Km:** 5000
 - VIN:** JA..... Callout: "This campaign is for the reprogramming the EV-ECU on certain 2012MY I-MiEV electric vehicle models only." Below the field is a "Repair Date In" field.
 - Service Technician:** [Empty field]
 - Spec Value *:** [Empty field] / **Duplicate Recall *:** [Unchecked checkbox]
 - Dealer:** 99320 / **Ref No:** [Empty] / **VIN:** [Empty]
 - Claim No:** [Empty] / **Adj:** [Empty] / **Claim Status:** Incomplete / **Model and Year:** [Empty]
 - Buttons: **Save & Continue** and **Main Menu**

After entering in the required customer data, vehicle information, Campaign Operation number and hitting "Save and Continue", the "Repair Performed" fields will be automatically filled in as there is only one possible repair scenario for this campaign.

CAMPAIGN INFORMATION			
Campaign Operation	C1301E	IMIEV EV-ECU SOFTWARE UPDATE	Repair Performed C1301E01-UPDATE ECU SOFTWARE Repair Order No EX12345
Miles / KM	5000		Enter As Sublet [Empty] TSB SC-13-001
VIN	JA3215H8CU010000	Repair Date In 02 / 02 / 2013	Repair Date Out 02 / 02 / 2013

Campaign Claim Example:

Follow these instructions for claiming for performing the required 2012MY I-MiEV EV-ECU update on involved vehicles.

PARTS:

No parts are required or allowed to be claimed for this campaign. Leave this page blank.

Delete	Part No	Part Description	Qty	Unit Price	Part Amount	Primary
1						
2						

LABOR:

The full campaign labor operation number of **C1301E01** and the allowed labor time of .3 hours will be automatically entered as a result of your 'Repair Performed' entry from the "Vehicle" page.

Delete	Sublet	Labor Op	Labor Operation Description	Qty	Hours / Sublet Amt	Total Labor Amt
		C1301E01	UPDATE EV-ECU SOFTWARE	1	0.3	0.3 XX.XX

OTHER CHARGES:

In some cases, it may be necessary to pick up and drop off a customer's vehicle and/or provide a rental car to allow for adequate recharging of the vehicle for the customer to make a return trip home. Claim the actual vehicle transport costs as towing charges and/or claim for related rental car charges in the lower area of the campaign claim. Towing and/or rental car charges that exceed your dealership's Self-Auth limits will require DPSM approval.

Special Sublet Selection

Select	Labor Operation	Labor Operation Description	Amount
<input type="checkbox"/>	SHO	SPECIAL HANDLING ORDER	SHO Parts Order
<input type="checkbox"/>	RENTACAR	RENTAL CAR CHARGES	Days Reason <Select one> Rental Company Invoice Number
<input type="checkbox"/>	95300040	FREIGHT CHARGES	Freight Company Invoice Number
<input type="checkbox"/>	95200040	TOWING CHARGES	Towing Company Invoice Number



Mitsubishi Motors North America, Inc.

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

AFFECTED VEHICLES

MODEL: 2012 i-MiEV (built from 10/28/2011 – 9/7/2012)

Date: February, 2013

Re: Customer Satisfaction Campaign SC-13-001

Dear Mitsubishi Owner,

Mitsubishi Motors always strives to build vehicles with the highest level of quality and continuously improve the level of quality with every vehicle built. We are recommending the following product improvement be performed on your 2012 i-MiEV:

Recommended Product Improvement:

The current internal software programming for the EV-ECU is not compatible with the Electric Vehicle Supply Equipment charger produced by Clipper Creek. This incompatibility is caused by a software miscommunication between the i-MiEV EV-ECU and the charger. This could potentially damage the internal components within your i-MiEV electrical system. If damage occurs, it could potentially affect your i-MiEV's ability to start.

What your dealer will do:

Your Certified Mitsubishi i-MiEV dealer will update the EV-ECU with the latest programming. This update will be completed free of charge and will take approximately ½ hour to complete. However, the dealer may need your vehicle for a longer period of time due to scheduling. Every effort will be made to minimize your inconvenience.

What you should do:

Please contact your Certified Mitsubishi i-MiEV 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 already encountered the problem described above, and have paid for the update, you may submit your original receipts and/or other adequate proof of payment to your Certified Mitsubishi dealer for reimbursement.

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

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

Sincerely,

Mitsubishi Motors North America, Inc.

C1301E01