

ECU Software Update: Charging System Improvement

Service
 Category Engine/Hybrid System

Section Hybrid/Battery Control System

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012	RAV4 EV	

REVISION NOTICE

July 29, 2013 Rev1:

- The Warranty Information and Calibration Information sections have been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

The EV Gateway Control ECU logic has been updated to improve vehicle operation and charging timer operation. Use the following procedure to reprogram the ECU.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL1310	Reprogram EV Gateway Control ECU	0.5	89881-0R011	99	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Powertrain Warranty. This warranty is in effect for 60 months or 60,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Calibration Information

MODEL	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
RAV4 EV	1.3.57	1.3.62

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Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
89881-0R011	Same	Computer, EV Gateway Control	-
00451-00001-LBL	Same	Authorized Modification Labels	1

NOTE

- The ECU should **NOT** be replaced as part of the repair procedure.
- Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Dealer Support Materials Orders*.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1

NOTE

- Only Techstream 2.0 should be used for this update.
- Techstream Software version 8.20.019 or later is required.
- Tesla Powertrain Service Diagnostic Software version 0.5.23 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	<u>00002-MCGR8</u>	1
EV HV Powertrain Diagnostic Cable Kit**	82824-36150-01	1

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

* Essential SST.

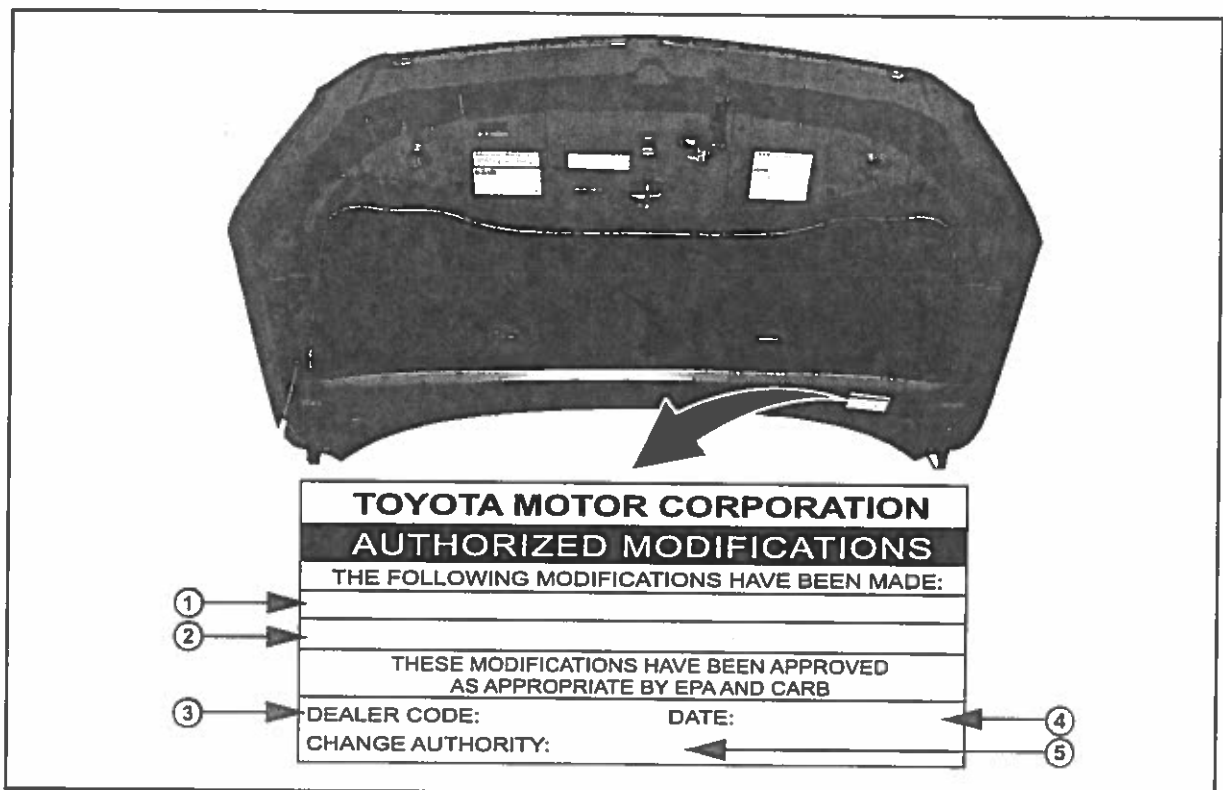
** Special order.

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Repair Procedure

1. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECU calibration has been updated. If the calibration ID listed is NOT the latest ECU calibration — go to step 2.

Figure 1. Location of Authorized Modifications Label on 2012 RAV4 EV



1	Replacement ECU Part Number (i.e., 89881-0R011)
2	New Calibration ID(s) (i.e., 1.3.62)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

2. Flash reprogram the EV Gateway Control ECU.

NOTE

- The GR8 Battery Diagnostic Station **MUST** be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the GR8 Instruction Manual located on the Technical Information System (TIS), *Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin No. T-SB-0043-13, "RAV4 EV ECU Flash Reprogramming Procedure", and flash reprogram the ECU with the NEW calibration file update.

3. Install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- ECU part number [Refer to the **Parts Information** section for the **CURRENT PART NUMBER**]
- Calibration ID(s) [Refer to the **Calibration Information** chart for the **NEW CALIBRATION ID**]
- Dealer Code
- Repair Date
- Change Authority [**This SB number**]

B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

4. Test drive the vehicle to confirm proper vehicle operation.