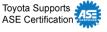


**Service** 

Category Engine/Hybrid System

Section Outline-Engine/Hybrid System Market USA



#### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021	RAV4 Prime	

#### **REVISION NOTICE**

December 23, 2021 Rev1:

The Warranty Information and Parts Information sections have been updated.

Any previous printed versions of this bulletin should be discarded.

#### Introduction

Some 2021 model year RAV4 Prime vehicles may store Diagnostic Trouble Code (DTC) P1CE931 (Charger Cooler Fan Revolution Sensor No Signal). Some vehicles may also exhibit a longer charging period or reduced charging efficiency. The charger assembly plug-in logic has been modified to reduce the possibility of these conditions. Follow the Repair Procedure in this bulletin to address these conditions.

### **Production Change Information**

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VIN shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RAV4 Prime	Nagakusa (TICO)	AWD	JTM#B3FV#MD016136



#### **Warranty Information**

OP CODE	DESCRIPTION		OFP	T1	T2
EL9062	Reprogram Charger Assy Plug-in		G9099-####*	8B	74

<sup>\*</sup>Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

#### 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.
- For 2021 model year RAV4 Prime vehicles that are registered and normally operated in California, Arizona (2012 model year only), Connecticut (starting with 2005 model year), Maine (starting with 2004 model year), Maryland (starting with 2011 model year), Massachusetts (starting with 2004 model year), New Hampshire (2005 2009 model year only), New Jersey (starting with 2005 model year), New Mexico (2010 2011 model year only), New York (beginning with 2004 model year with ZE models only; all models starting with 2016 model year), Oregon (starting with 2008 model year), Rhode Island (starting with 2005 model year), and Vermont (starting with 2004 model year) Partial Zero Emission Vehicle (PZEV) Emission Warranty Coverage is in effect for 15 years or 150,000 miles, from the vehicle's in-service date, whichever occurs first. (Please reference Warranty Policy Bulletin POL14-09 for additional information.)
- For Delaware (beginning with 2014 model year), Pennsylvania (beginning with 2008 model year), and Washington (beginning with 2009 model year) California Long-term Emissions Warranty Coverage for 2021 model year RAV4 Prime vehicles is 84 months 70,000 miles from the vehicle's in-service date, whichever occurs first.

#### **Parts Information**

PART NUMBER	PART NUMBER PART NAME	
G9099-####	Plug-in, Charger Assy	-
00451-00001-LBL	Authorized Modifications Labels	1

### **NOTE**

- The charger assembly plug-in should NOT be replaced as part of the Repair Procedure.
- Authorized Modifications Labels may be ordered in packages of 25 from the Materials
  Distribution Center (MDC) through Dealer Daily Parts Dealer Support Materials Orders.



## **Required Tools & Equipment**

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVI*		TSADVUNIT	
Techstream 2.0	ADE	TS2UNIT	
Techstream Lite	ADE	TSLITEPDLR01	] '
Techstream Lite (Green Cable)	]	TSLP2DLR01	

<sup>\*</sup>Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 16.30.011 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	DCA-8000P_T	1

<sup>\*</sup>Essential SST.

#### NOTE

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



#### **Calibration Information**

MODEL	ENGINE	CALIBRATION ID		
		PREVIOUS	NEW	
RAV4 Prime	A25A	G911F4201005	<u>G911F4201105</u>	
		G911F4201006	<u>G911F4201106</u>	
		G911F4202007	<u>G911F4202107</u>	
		G911F4202008	<u>G911F4202108</u>	

### **Repair Procedure**

1. Confirm the condition exists.

Using Techstream, perform Health Check to confirm DTC P1CE931 (Charger Cooler Fan Revolution Sensor No Signal) is present.

Is DTC P1CE931 present?

- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.



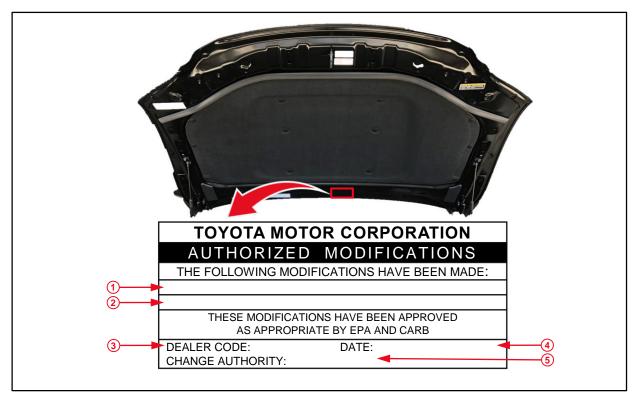
### **Repair Procedure (continued)**

Use Techstream to confirm if the charger assembly plug-in calibration has been updated and check for the Authorized Modifications Label affixed to the vehicle in the location shown below.

Is the calibration ID listed in Techstream and on the label the latest charger assembly plug-in calibration?

- YES This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- NO Continue to step 3.

Figure 1. Location of Authorized Modifications Label on 2021 RAV4 Prime



1	Replacement ECM (PCM) Part Number e.g., G9099-#####
2	New Calibration ID e.g., G911F4201105
3	Dealer Code

4	Date Completed
5	This SB Number



### **Repair Procedure (continued)**

3. Flash reprogram the charger assembly plug-in.

#### **NOTE**

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.0 13.5V while flash reprogramming the charger assembly plug-in.
- For details on how to use the battery diagnostic station, refer to the <u>DCA-8000 Instruction Manual</u> located at *TIS Diagnostics Tools & Equipment Battery Diagnostics*.

Follow the procedures outlined in <u>T-SB-0107-20</u>, *Techstream ECU Flash Reprogramming Procedure*, and flash the charger assembly plug-in with the NEW calibration file update.

- 4. Prepare and install the Authorized Modifications Label.
  - A. Using a permanent marker, enter the following information on the label:
    - ECM (PCM) part number [Refer to the Parts Information section for the NEW PART NUMBER].
    - Calibration ID(s) [Refer to the **Calibration Information** section for the **NEW CALIBRATION ID**].
    - Dealer Code.
    - · Repair Date.
    - Change Authority [This bulletin number].
  - B. Install the Authorized Modifications Label onto the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- 5. Test-drive the vehicle to confirm proper operation and ensure the condition is no longer present.