

Service

Category Engine/Hybrid System Hybrid/Battery Control

Section

Hybrid/Battery Control System

Market USA and Mexico



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021 - 2023	RAV4 Prime	

REVISION NOTICE

February 24, 2023 Rev1:

- Applicability has been updated to include 2023 model year RAV4 Prime vehicles.
- The market indicator has been updated to include the Mexico market.
- The Production Change Information section has been added.
- The Repair Procedure section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2021 – 2023 model year RAV4 Prime XSE grade vehicles equipped with a 6.6 kW electric vehicle charger sub-assembly may exhibit a MIL ON condition with one or more of the following Diagnostic Trouble Codes (DTCs):

- P0D2A19 Hybrid/EV Battery Charger Input Current Sensor Circuit Current Above Threshold
- P1C1B00 PFC Boosting Circuit Malfunction
- P0E8919 Charger "B" Input Current Too High Circuit Current Above Threshold
- P1BD300 Charger "B" PFC Boosting Circuit Malfunction

The vehicle may also exhibit an inoperative onboard plug-in charger. Follow the Repair Procedure in this bulletin to address this condition.

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Production Change Information

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

MODEL	PLANT	DRIVETRAIN PRODUCTION CHANGE EFFECTIVE VIN JTMEB3FV#PD114015 JTMFB3FV#PD114015			
			JTMEB3FV#PD114015		
RAV4 Prime			JTMFB3FV#PD114015		
	TMC	AWD	JTMEB3FV#PD114015 JTMFB3FV#PD114015 JTMGB3FV#PD114015 JTMCB3FV#PD114015 JTMAB3FV#PD114015		
			JTMEB3FV#PD114015 JTMFB3FV#PD114015 JTMGB3FV#PD114015 JTMCB3FV#PD114015 JTMAB3FV#PD114015		
			JTMAB3FV#PD114015		

Warranty Information

For USA Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
890411	R & R Hybrid or Electric Vehicle Charger Sub-assy	1.2	G9099-#####*	8A	50

*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.
- PZEV vehicles equipped with a California Certified Emission Control System that are registered and operated in California or any state that have adopted the California Emission Warranty – 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, Warranty Policy 4.7, and/or the Owner's Warranty & Maintenance Guide for additional information).

For Mexico Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
890411	R & R Hybrid or Electric Vehicle Charger Sub-assy	1.2	G9099-#####*	8A	50

*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 Basic Warranty. This warranty is in effect for 36 months or 60,000 kilometers, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

For USA and Mexico Markets

PART NUMBER	PART NAME	QTY
G9099-42051	Charger Sub 2004 Electric Vehicle	1
G9099-42061	Charger Sub-assy, Electric vehicle	

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVi*		TSADVUNIT	- 1
Techstream 2.0	ADE	TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 17.30.011 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 (USA) or 01-55-50103041 (Mexico).

Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit a MIL ON condition with one or more of the following Diagnostic Trouble Codes (DTCs) and/or an inoperative onboard plug-in charger?

- P0D2A19 Hybrid/EV Battery Charger Input Current Sensor Circuit Current Above Threshold
- P1C1B00 PFC Boosting Circuit Malfunction
- P0E8919 Charger "B" Input Current Too High Circuit Current Above Threshold
- P1BD300 Charger "B" PFC Boosting Circuit Malfunction
- **YES** Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

Repair Procedure (continued)

- 2. Locate the electric vehicle charger sub-assembly in the vehicle and refer to the attached part number.
- 3. Confirm the vehicle is equipped with a 6.6 kW electric vehicle charger sub-assembly.

Are the last five digits of the part number listed on the label 4205#, or 4206#?

- YES Continue to step 4.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.



- 4. Remove the electric vehicle charger sub-assembly. Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021</u> / <u>2022</u> / <u>2023</u> RAV4 Prime: *Engine/Hybrid System – Hybrid/Battery Control System –* "Hybrid / Battery Control: Electric Vehicle Charger Assembly: Removal"
- Install the NEW electric vehicle charger sub-assembly.
 Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021 2023</u> RAV4 Prime: *Engine/Hybrid System – Hybrid/Battery Control System –* "Hybrid / Battery Control: Electric Vehicle Charger Assembly: Installation"
- 6. Using Techstream, clear ANY DTCs and confirm the condition is no longer present.