

MIL ON With DTC(s) P0D2A19, P1C1B00, P0E8919, and/or P1BD300 and Inoperative Onboard Plug-in Charger

Service

Category Engine/Hybrid System
Hybrid/Battery Control

Section System

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021 - 2022	RAV4 Prime	

Introduction

Some 2021 – 2022 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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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	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 OFF. Choose the correct OFF 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.
- 2021 – 2022 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 Zero Emissions (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.)
- Four additional states (Delaware [beginning with 2014 model year], Colorado [starting 2022 model year], Pennsylvania [beginning with 2008 model year], Washington [beginning with 2009 model year]) have adopted the California Emission Warranty; however, in these states performance and long-term defect warranty coverage is 7 years or 70,000 miles, whichever occurs first.

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Parts Information

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

Required Tools & Equipment

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

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 17.10.012 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

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?

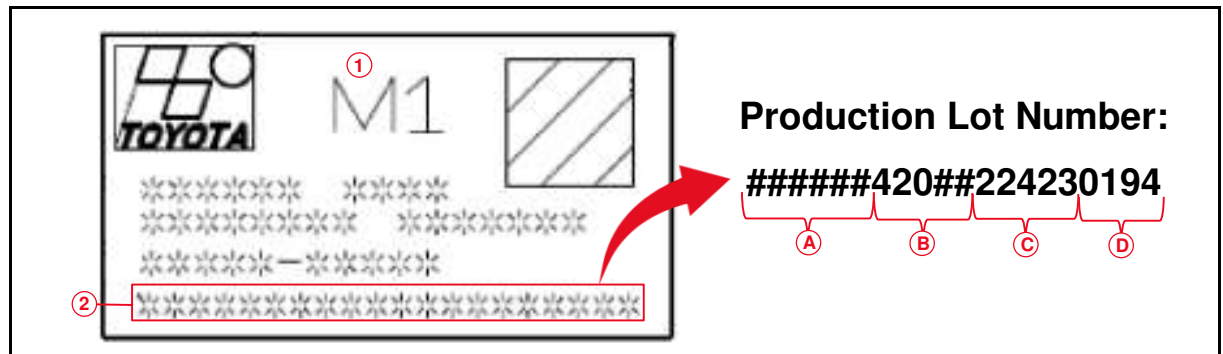
- P0D2A19 – Hybrid/EV Battery Charger Input Current Sensor Circuit Current Above Threshold
- P1C1B00 – (PFC Boosting Circuit Malfunction)
- P0E8919 – (Charger “B” Input Current Too High Circuit Current Above Threshold)
- P1BD300 – (Charger “B” PFC Boosting Circuit Malfunction)
- **YES** — Continue to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

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Repair Procedure (continued)

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

Figure 1. Label



1	Label
2	Production Lot Number
A	Fixed Value
B	Last Five Digits of Part Number
C	Production Date (YYM*DD)
D	Consecutive Number

*Hexadecimal number: 1: January, 2: February...9: September A: October, B: November. C: December

Are the last five digits of the part number listed on the label 42050, 42051, 42060, or 42061?

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

4. Confirm production date of the electric vehicle charger sub-assembly.

Are the last nine digits of the production lot number listed on the label less than 224230194?

- **YES** — Continue to step 5.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (continued)

5. Remove the electric vehicle charger sub-assembly.
Refer to TIS, applicable model and model year Repair Manual:
 - [2021](#) / [2022](#) RAV4 Prime:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Electric Vehicle Charger Assembly: Removal”
6. Install the NEW electric vehicle charger sub-assembly.
Refer to TIS, applicable model and model year Repair Manual:
 - [2021 – 2022](#) RAV4 Prime:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Electric Vehicle Charger Assembly: Installation”
7. Using Techstream, clear ANY DTCs and confirm the condition is no longer present.