

Hybrid Warning With DTC U011087 and U029387 in Freezing Temperatures

Service Category Engine/Hybrid System

Section Hybrid/Battery Control System

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2019 - 2020	RAV4 HV	

Introduction

Some 2019 – 2020 model year RAV4 HV vehicles may experience a difficult-to-start condition accompanied by a hybrid system warning lamp occurring during below-freezing temperatures (< 32°F). This condition may occur at initial start-up after a short-distance drive.

After performing a Health Check, the Diagnostic Trouble Codes (DTCs) U011087 and U029387 may be present. These codes are because of the IGCT (90987-02025) relay not being able to supply power to HV ECU. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

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

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RAV4 HV	TICO #1	AWD	JTMDWRFV#LD525769
	TICO #2		
	Takaoka		JTMDWRFV#LJ030104
	TMMC		2T3LWRFV#LW060567

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
832251	Relay Replacement	0.2	IGCT Relay (90987-02025)	8C	01

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- This is for vehicles sold, registered, and operated in California, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. This repair is covered under the California Emission Warranty. This warranty is in effect for 36 months or 50,000 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.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
90987-02025	90987-02031	Relay	1

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 15.00.028 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

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Repair Procedure

1. Confirm the condition exists.

The vehicle may “Ready on” with no issues. This issue occurs ONLY in below-freezing temperatures (< 32°F). Using Techstream, perform a Health Check.

Are DTCs U011087 and U029387 present?

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

2. Replace the IGCT relay with the NEW part number.

Refer to TIS, applicable model and model year Repair Manual:

- [2019 – 2020](#) RAV4 HV:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Hybrid Control System (for AWD): ECU Power Source Circuit”

3. Clear DTCs and confirm the condition is no longer present.