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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: PARK ASSIST / MONITORING: INTUITIVE PARKING ASSIST SYSTEM: C1AE687; Ultrasonic Sensor (Rear Left Corner) Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

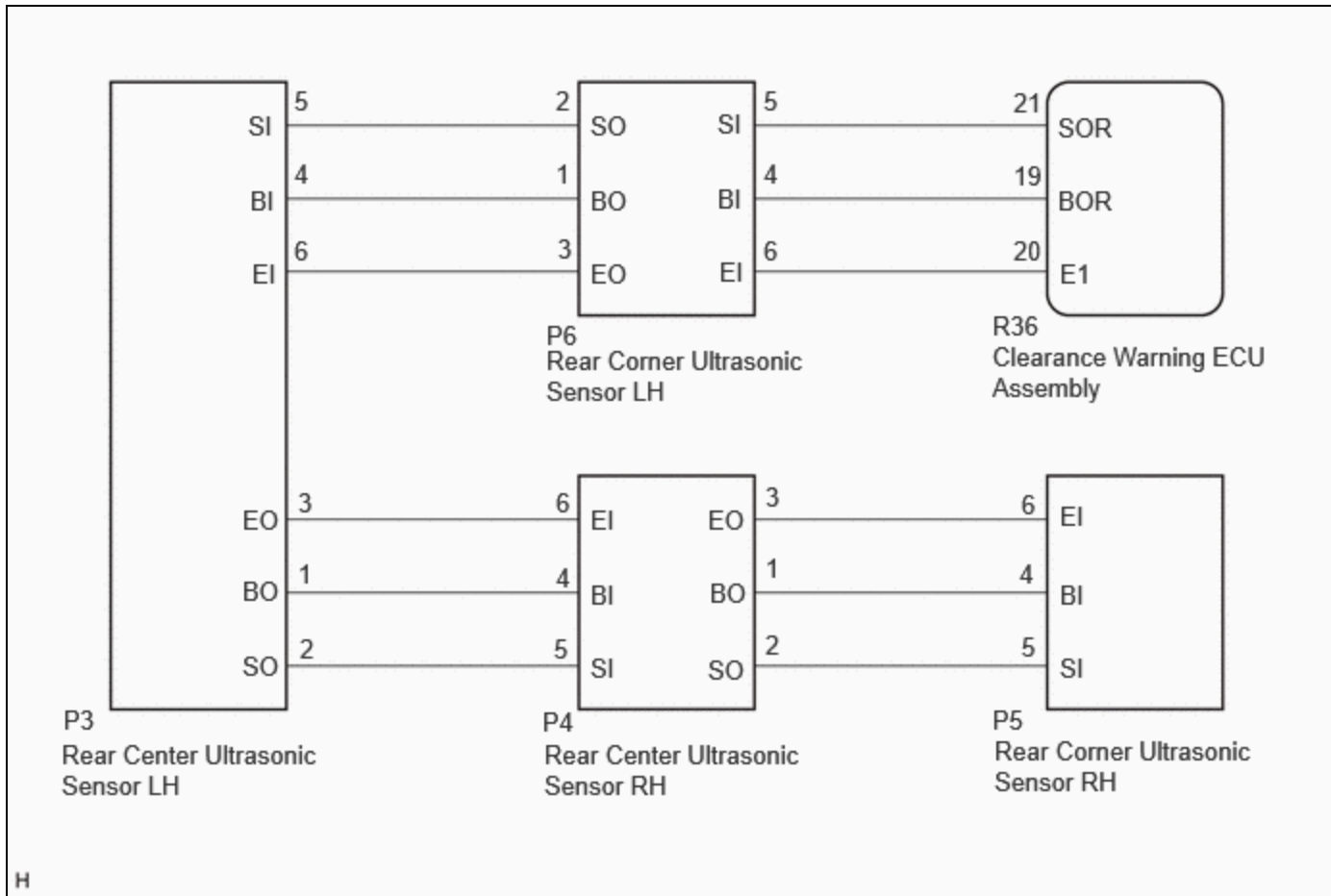
DTC	C1AE687	Ultrasonic Sensor (Rear Left Corner) Missing Message
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DESCRIPTION

This DTC is output when an open circuit or short occurs in the communication line between the rear corner ultrasonic sensor LH and the clearance warning ECU assembly, or when a malfunction occurs in the rear corner ultrasonic sensor LH.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C1AE687	Ultrasonic Sensor (Rear Left Corner) Missing Message	Rear corner ultrasonic sensor LH lost communication	<ul style="list-style-type: none"> Rear corner ultrasonic sensor LH Harness or connector Clearance warning ECU assembly 	Clearance Warning	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- Perform registration after replacing and installing the ultrasonic sensor or clearance warning ECU assembly.

Click here [INFO](#)

- If a DTC is detected again after the repair, turn the ignition switch to ON and turn the intuitive parking assist system on, and then clear the DTC.

PROCEDURE

1.	VEHICLE CONDITION AND WORK DETAILS CHECK
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(a) Check the vehicle condition and work details.

RESULT	PROCEED TO
The clearance warning ECU assembly or ultrasonic sensor has not been replaced	A
The clearance warning ECU assembly or ultrasonic sensor has been replaced	B

B **GO TO CALIBRATION**

A**2. CHECK CONNECTOR CONNECTION CONDITION (ULTRASONIC SENSOR)**

- (a) Check that the connector is properly connected to the rear corner ultrasonic sensor and rear center ultrasonic sensor.

NEXT**3. CLEAR DTC**

- (a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs

NEXT**4. CHECK FOR DTC**

- (a) Check for DTCs.

Body Electrical > Clearance Warning > Trouble Codes

RESULT	PROCEED TO
C1AE687 is not output	A
C1AE687 is output	B

A **END (CONNECTOR CONNECTION MALFUNCTION)**

B**5. CHECK CONNECTOR CONNECTION CONDITION (CLEARANCE WARNING ECU ASSEMBLY)**

(a) Check that the connector is properly connected to the clearance warning ECU assembly.

NEXT



6.	CLEAR DTC
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(a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs

NEXT



7.	CHECK FOR DTC
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(a) Check for DTCs.

Body Electrical > Clearance Warning > Trouble Codes

RESULT	PROCEED TO
DTCs are not output	A
C1AE687, C1AE787, C1AE887 and C1AE987 are output	B
C1AE787, C1AE887 and C1AE987 are output	C
C1AE887 and C1AE987 are output	D
C1AE987 is output	E
Only C1AE687 is output	F

A ► **USE SIMULATION METHOD TO CHECK**

C ► **GO TO CORRESPONDING FLOWCHART (INTUITIVE PARKING ASSIST SYSTEM (C1AE787))**

D ► **GO TO CORRESPONDING FLOWCHART (INTUITIVE PARKING ASSIST SYSTEM (C1AE887))**

E ► **GO TO CORRESPONDING FLOWCHART (INTUITIVE PARKING ASSIST SYSTEM (C1AE987))**

F ► **GO TO STEP 9**

B



8. CHECK WIRE HARNESS AND CONNECTOR (CLEARANCE WARNING ECU ASSEMBLY - REAR CORNER ULTRASONIC SENSOR LH)

Pre-procedure1

- (a) Disconnect the R36 clearance warning ECU assembly connector.
- (b) Disconnect the P6 rear corner ultrasonic sensor LH connector.

Procedure1

- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R36,P6\)](#)

[Click Connector\(R36\)](#)

[Click Connector\(P6\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
R36-19 (BOR) - P6-4 (BI)	Always	Below 1 Ω	Ω
R36-21 (SOR) - P6-5 (SI)	Always	Below 1 Ω	Ω
R36-20 (E1) - P6-6 (EI)	Always	Below 1 Ω	Ω
R36-19 (BOR) or P6-4 (BI) - Body ground	Always	10 k Ω or higher	k Ω
R36-21 (SOR) or P6-5 (SI) - Body ground	Always	10 k Ω or higher	k Ω
R36-20 (E1) or P6-6 (EI) - Body ground	Always	10 k Ω or higher	k Ω

Post-procedure1

- (d) None

NG ► **REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR**


OK



9. REPLACE REAR CORNER ULTRASONIC SENSOR LH

(a) Replace the rear corner ultrasonic sensor LH with a new or normally functioning one.

HINT:

- Click here 
- To check if the ultrasonic sensor is functioning correctly, replace it with another ultrasonic sensor.

NEXT



10. CLEAR DTC

(a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs

NEXT



11. CHECK FOR DTC

(a) Check for DTCs.

Body Electrical > Clearance Warning > Trouble Codes

RESULT	PROCEED TO
DTCs are not output	A
C1AE687 is output	B

A ▶ **END (REAR CORNER ULTRASONIC SENSOR LH WAS DEFECTIVE)**

B ▶ **REPLACE CLEARANCE WARNING ECU ASSEMBLY**

