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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: PARK ASSIST / MONITORING: INTUITIVE PARKING ASSIST SYSTEM: C1AE787; Ultrasonic Sensor (Rear Left Center) Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

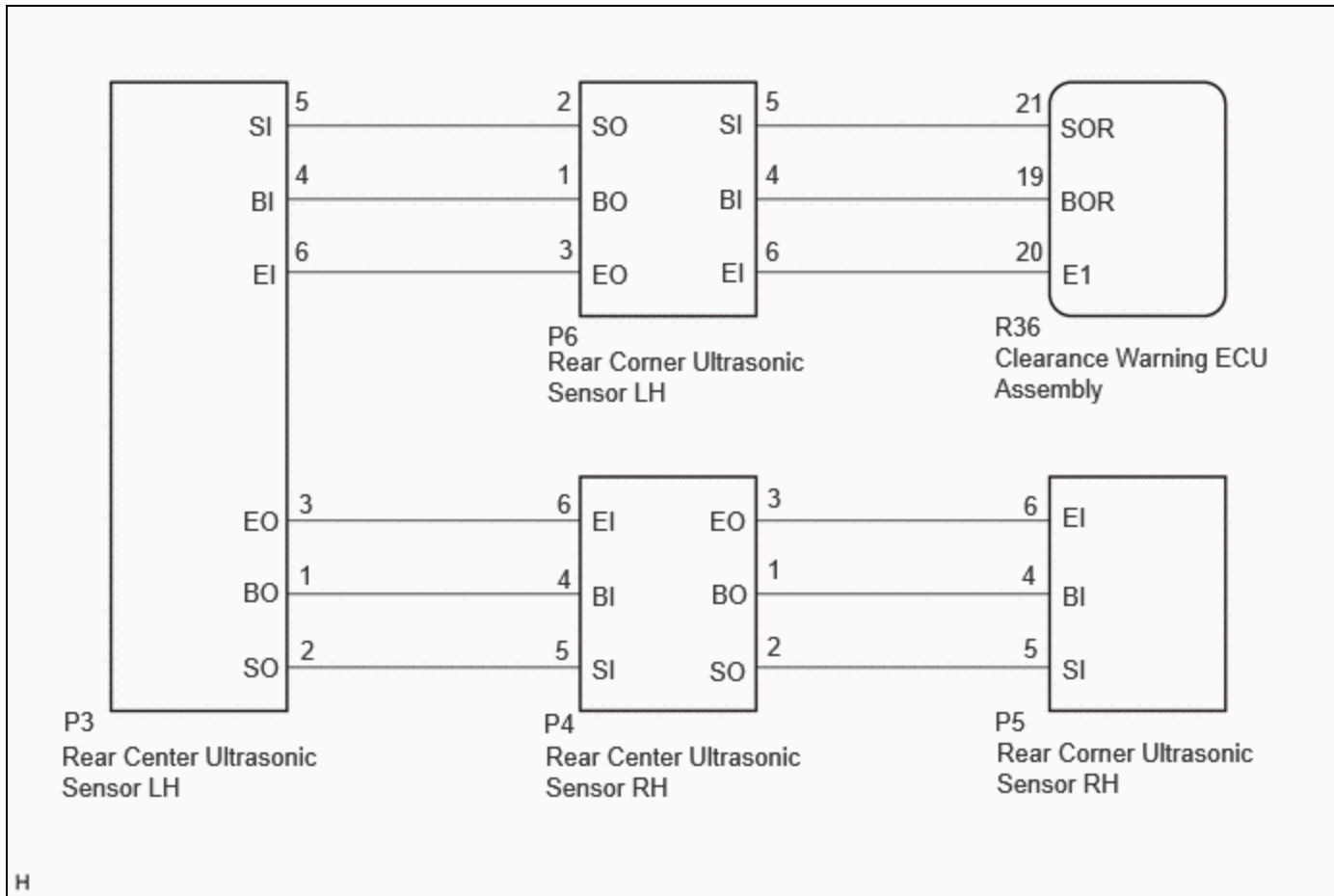
DTC	C1AE787	Ultrasonic Sensor (Rear Left Center) Missing Message
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DESCRIPTION

This DTC is stored when an open circuit or short occurs in the communication line between the rear center ultrasonic sensor LH and the rear corner ultrasonic sensor LH, or when a malfunction occurs in the rear center ultrasonic sensor LH.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C1AE787	Ultrasonic Sensor (Rear Left Center) Missing Message	Rear center ultrasonic sensor LH lost communication	<ul style="list-style-type: none"> Rear center ultrasonic sensor LH Harness or connector Clearance warning ECU assembly 	Clearance Warning	B

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.
- If C1AE696 is output at the same time, check C1AE696 first.

[Click here](#) INFO

PROCEDURE

1.	CHECK DTC
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(a) If DTC C1AE696 is output, perform troubleshooting for DTC C1AE696 first.

Body Electrical > Clearance Warning > Trouble Codes

RESULT	PROCEED TO
C1AE696 is not output	A
C1AE696 is output	B

B ► [GO TO C1AE696](#)

A



2.	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



3.	CHECK CONNECTOR CONNECTION CONDITION (ULTRASONIC SENSOR)
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(a) Check that the connector is properly connected to the rear corner ultrasonic sensor and rear center ultrasonic sensor.

NEXT



4.	CLEAR DTC
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(a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs

NEXT



5. CHECK FOR DTC

(a) Check for DTCs.

Body Electrical > Clearance Warning > Trouble Codes

RESULT	PROCEED TO
C1AE787 is not output	A
C1AE787 is output	B

A  **END (CONNECTOR CONNECTION MALFUNCTION)****B****6. CHECK CONNECTOR CONNECTION CONDITION (CLEARANCE WARNING ECU ASSEMBLY)**

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

NEXT**7. CLEAR DTC**

(a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs**NEXT****8. CHECK FOR DTC**

(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 C1AE787 is output	F

A ▶ USE SIMULATION METHOD TO CHECK

B ▶ GO TO CORRESPONDING FLOWCHART (INTUITIVE PARKING ASSIST SYSTEM (C1AE687))

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

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

F ▶ GO TO STEP 10

C



9.	CHECK WIRE HARNESS AND CONNECTOR (REAR CENTER ULTRASONIC SENSOR LH - REAR CORNER ULTRASONIC SENSOR LH)
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Pre-procedure1

- (a) Disconnect the P3 rear center ultrasonic sensor LH 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\(P6,P3\).](#)

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

[Click Connector\(P3\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
P6-1 (BO) - P3-4 (BI)	Always	Below 1 Ω	Ω
P6-2 (SO) - P3-5 (SI)	Always	Below 1 Ω	Ω
P6-3 (EO) - P3-6 (EI)	Always	Below 1 Ω	Ω
P6-1 (BO) or P3-4 (BI) - Body ground	Always	10 k Ω or higher	k Ω
P6-2 (SO) or P3-5 (SI) - Body ground	Always	10 k Ω or higher	k Ω
P6-3 (EO) or P3-6 (EI) - Body ground	Always	10 k Ω or higher	k Ω

Post-procedure1

(d) None

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

OK



10. REPLACE REAR CENTER ULTRASONIC SENSOR LH

(a) Replace the rear center ultrasonic sensor LH with a known good one.

HINT:

- Click here [INFO](#)
- All of the sensors are interchangeable. To confirm whether a sensor is functioning normally, switch it with a known good sensor from the other end of the vehicle.

NEXT



11. CLEAR DTC

(a) Clear the DTCs.

Body Electrical > Clearance Warning > Clear DTCs

NEXT



12.	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
C1AE787 is output	B

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

B ▶ **REPLACE CLEARANCE WARNING ECU ASSEMBLY**

