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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: FRONT SIDE RADAR SENSOR SYSTEM: C1A1700; Front Side Radar Sensor (Module "A") Beam Axis Misalignment (Horizontal); 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	C1A1700	Front Side Radar Sensor (Module "A") Beam Axis Misalignment (Horizontal)
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DESCRIPTION

This DTC is stored when the angle of the front side radar sensor (A) deviates more than the allowable range from the horizontal axis.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C1A1700	Front Side Radar Sensor (Module "A") Beam Axis Misalignment (Horizontal)	When the front side radar sensor system is operating, the angle of the front side radar sensor (A) has deviated 6° or more from the horizontal axis.	Front side radar sensor (A)	Front Side Radar "A"	A

CAUTION / NOTICE / HINT

NOTICE:

- When checking for DTCs, make sure that the pre-collision system is turned on.
- After replacing the front side radar sensor, make sure to perform ECU writing.

Click here [INFO](#)

- If the bumper is damaged or the vehicle has a history of body repair, there is a possibility that the installation area of the front side radar sensor may be deformed and the front side radar sensor system may not operate correctly, so visually inspect the front side radar sensor installation area (frame, stud bolt) to make sure it is not dented or bent.

If the visual inspection finds a problem, check the installation condition of the front side radar sensor, and adjust the installation position of the front side radar sensor as necessary.

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- After replacing the front side radar sensor, make sure to perform front side radar sensor beam axis alignment and clear all stored vehicle control history of each system.

HINT:

Front side radar sensor beam axis alignment can be performed by using "Triangle Target", "Driving Adjustment" or "ECU DATA SAVE/WRITE".

Triangle Target: [INFO](#)

Driving Adjustment: [INFO](#)

ECU DATA SAVE/WRITE: [INFO](#)

HINT:

- If a drum tester such as a speedometer tester, brake/speedometer combination tester or chassis dynamometer is used with the pre-collision system on, the front side radar sensor may store this DTC by

mistake.

- When mud, snow, ice, a sticker, etc. is covering the sensor or its surrounding area on the front bumper, the front side radar sensor may store this DTC by mistake.

PROCEDURE

1.	CHECK VEHICLE CONDITION
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(a) Check the condition of the front bumper around the front side radar sensors.

HINT:

When mud, snow, ice, a sticker, etc. is covering the sensor or its surrounding area on the front bumper, the front side radar sensors may store this DTC by mistake.

RESULT	PROCEED TO
A sticker, mud, snow, ice, etc. is covering the sensor or surrounding area on the front bumper.	A
There are scratches or dents on the front bumper around the sensors.	B
No abnormalities.	

B **GO TO STEP 3**

A

2.	PERFORM FRONT SIDE RADAR "A" BEAM AXIS DISPLAY
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Pre-procedure1

(a) Clean the front bumper.

Procedure1

(b) Perform Front Side Radar "A" Beam Axis Display using the GTS.

Body Electrical > Front Side Radar "A" > Utility

TESTER DISPLAY
Front Side Radar "A" Beam Axis Display

Body Electrical > Front Side Radar "A" > Utility

TESTER DISPLAY
Front Side Radar "A" Beam Axis Adjustment

OK:

The front side radar sensor beam axis display position is within the specified range.

NOTICE:

Before replacing the front side radar "A" beam axis display, visually check for damage to the stud bolts or area surrounding the front side radar "A" beam axis display.

If there is any damage to the stud bolts or area surrounding the front side radar "A" beam axis display, perform front side radar sensor installation condition inspection and adjust according to the result.

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Post-procedure1

(c) None

OK ▶ **END**

NG ▶ **REPLACE FRONT SIDE RADAR SENSOR (A)**

Click here [INFO](#)

3. CHECK INSTALLATION CONDITION

(a) Check the installation condition of the front side radar sensor (A).

HINT:

Click here [INFO](#)

OK:

The front side radar sensor installation position is within the specified range.

OK ▶ **GO TO STEP 5**

NG



4. ADJUST THE INSTALLATION POSITION OF THE FRONT SIDE RADAR SENSOR (A)

HINT:

Click here [INFO](#)

NEXT



5. PERFORM FRONT SIDE RADAR "A" BEAM AXIS DISPLAY

Pre-procedure1

(a) Clean the front bumper.

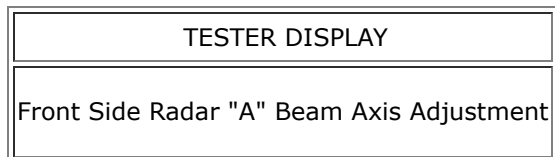
Procedure1

(b) Perform Front Side Radar "A" Beam Axis Display using the GTS.

Body Electrical > Front Side Radar "A" > Utility



Body Electrical > Front Side Radar "A" > Utility



OK:

The front side radar sensor beam axis display position is within the specified range.

Post-procedure1

(c) None

OK ► **END**

NG ► **REPLACE FRONT SIDE RADAR SENSOR (A)**

Click here

