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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: FRONT CAMERA SYSTEM: C1AA800; Front Recognition Camera Optical Axis Misalignment Malfunction; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	C1AA800	Front Recognition Camera Optical Axis Misalignment Malfunction
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DESCRIPTION

The forward recognition camera monitors its optical axis status. If it determines that the optical axis alignment has become misaligned, it will store DTC C1AA800.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C1AA800	Front Recognition Camera Optical Axis Misalignment Malfunction	When a misalignment of the forward recognition camera is detected	<ul style="list-style-type: none"> Windshield glass Vehicle operating conditions Wheel alignment Forward recognition camera axis adjustment 	Front Recognition Camera	A

CAUTION / NOTICE / HINT

NOTICE:

- When replacing the forward recognition camera, always replace it with a new one. If a forward recognition camera which was installed to another vehicle is used, the information stored in the forward recognition camera will not match the information from the vehicle and a DTC may be stored.
- When the forward recognition camera has been replaced with a new one, make sure to clear all stored vehicle control history of each system and the forward recognition camera beam axis alignment data.

HINT:

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: [Click here](#) INFO

Driving Adjustment: [Click here](#) INFO

Camera Axis Adjustment Value Write: [Click here](#) INFO

- If the forward recognition camera has been replaced with a new one, make sure to perform Software Version Confirmation.

[Click here](#) INFO

- When replacing the windshield glass of a vehicle equipped with a forward recognition camera, make sure to use a Toyota genuine part. If a non-Toyota genuine part is used, the forward recognition camera may not be able to be installed due to a missing bracket or the forward recognition camera may not operate properly due to a difference in the transmissivity or black ceramic border.
- Forward recognition camera optical axis may deviate if the vehicle is driven on a banked road, such as a racetrack. This deviation can be corrected by driving the vehicle on a normal road for a while.
- Forward recognition camera optical axis may deviate when the vehicle is overloaded or the wheel alignment (toe-in) is incorrect. The forward recognition camera optical axis can be corrected by decreasing the load on

the vehicle or adjusting the toe-in.

PROCEDURE

1. CHECK FORWARD RECOGNITION CAMERA INSTALLATION

HINT:

Click here [INFO](#)

HINT:

If there is deformation or deviation in the forward recognition camera installation bracket, replace the windshield glass.

OK:

No deformation or deviation in forward recognition camera installation bracket.

NG ► [GO TO STEP 11](#)

OK



2. CHECK VEHICLE OPERATING CONDITION

HINT:

Check if a condition which caused the forward recognition camera optical axis to become temporarily misaligned existed, such as if the vehicle was overloaded, towed or modified.

OK:

Vehicle was not overloaded, towed or modified.

NG ► [GO TO STEP 9](#)

OK



3. CHECK WHEEL ALIGNMENT (TOE)

HINT:

- for Front Wheel Alignment: Click here [INFO](#)
- for Rear Wheel Alignment: Click here [INFO](#)

OK:

Front and rear wheels are not misaligned (toe)

NG ► [GO TO STEP 6](#)

OK**4. PERFORM FORWARD RECOGNITION CAMERA ADJUSTMENT****HINT:**

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: Click here [INFO](#)

Driving Adjustment: Click here [INFO](#)

Camera Axis Adjustment Value Write: Click here [INFO](#)

NEXT**5. CLEAR DTC**

(a) Clear the DTCs.

Chassis > Front Recognition Camera > Clear DTCs

NEXT **END****6. ADJUST WHEEL ALIGNMENT (TOE)****HINT:**

- for Front Wheel Alignment: Click here [INFO](#)
- for Rear Wheel Alignment: Click here [INFO](#)

NEXT**7. PERFORM FORWARD RECOGNITION CAMERA ADJUSTMENT****HINT:**

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: Click here [INFO](#)

Driving Adjustment: [Click here](#) [INFO](#)

Camera Axis Adjustment Value Write: [Click here](#) [INFO](#)

NEXT



8. CLEAR DTC

(a) Clear the DTCs.

Chassis > Front Recognition Camera > Clear DTCs

NEXT **END**

9. PERFORM FORWARD RECOGNITION CAMERA ADJUSTMENT

Pre-procedure1

(a) Return the vehicle to normal operating conditions.

Procedure1

(b) Perform forward recognition camera adjustment.

HINT:

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: [Click here](#) [INFO](#)

Driving Adjustment: [Click here](#) [INFO](#)

Camera Axis Adjustment Value Write: [Click here](#) [INFO](#)

Post-procedure1

(c) None

NEXT



10. CLEAR DTC

(a) Clear the DTCs.

Chassis > Front Recognition Camera > Clear DTCs

NEXT **END**

11. REPLACE WINDSHIELD GLASS**HINT:**

Click here [INFO](#)

NEXT**12. PERFORM FORWARD RECOGNITION CAMERA ADJUSTMENT****HINT:**

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: Click here [INFO](#)

Driving Adjustment: Click here [INFO](#)

Camera Axis Adjustment Value Write: Click here [INFO](#)

NEXT**13. CLEAR DTC**

(a) Clear the DTCs.

Chassis > Front Recognition Camera > Clear DTCs

NEXT  **END**

