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Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]

Title: PARK ASSIST / MONITORING: BLIND SPOT MONITOR SENSOR: DRIVING ADJUSTMENT; 2023 - 2024 MY Prius Prius Prime [12/2022 -   ]

DRIVING ADJUSTMENT

CAUTION / NOTICE / HINT

NOTICE:

- Make sure to read "Before Starting Driving Adjustment" before proceeding with work.

  Click here **INFO**
- Make sure that the alignment is suitable and non-standard tires are not installed.
- Make sure to perform the transition to online axis alignment mode with the vehicle stopped.
- Transitioning to online axis alignment mode will erase the learning value, so make sure to complete the adjustment.
- Turning the ignition switch off while in online axis alignment mode will cause the system to exit online axis alignment mode, so to continue with the adjustment, it is necessary to transition to online axis alignment mode again.
- All of the driving support system functions will be inoperative while the adjustment is in progress.
- When driving the vehicle with the GTS connected, be careful with how the wires are routed.
- If the adjustment does not complete within a total cumulative time of 15 minutes when the vehicle is driven with all conditions met, perform the adjustment on another route.
- If the adjustment does not complete within a total cumulative time of 30 minutes when the vehicle is driven with all conditions met, perform the adjustment using target recognition.
- After adjustment is complete, to start the various systems it is necessary to turn the ignition switch off and then to ON again.
- In situations such as when the online axis alignment terminates abnormally, to perform online axis alignment again, turn the ignition switch off and then back to ON and enter online axis alignment mode again.
- If the rear bumper cover has been replaced or body repair has been performed at a radio wave transmission area, "driving adjustment" cannot be performed.
- If body repairs have been performed, perform "Check Reflection Power".

  Click here **INFO**

PROCEDURE

1. PERFORM BLIND SPOT MONITOR BEAM AXIS LEARNING

(a) Adjust the tire pressures to the standard values.

Click here **INFO**

(b) Check that the surface and back of the rear bumper cover and the surface of the blind spot monitor sensors are clean and free of foreign matter such as dirt and snow. If foreign matter such as dirt and snow is found, remove it.

(c) Check that the rear bumper assembly is not damaged or deformed and that it is securely installed, and repair or replace it if any abnormality is found.

(d) Perform Transition to Online Axis Alignment Mode.

(1) With the ignition switch off, connect the GTS to the DLC3.

(2) Turn the ignition switch to ON.

(3) Enter the following menus: Body Electrical / Blind Spot Monitor "B" or Blind Spot Monitor "A" / Utility / Transition to Online Axis Alignment Mode.

HINT:

The "B" is on the LH side and the "A" is on the RH side.

for Type A:

Body Electrical > Blind Spot Monitor "B" > Utility

TESTER DISPLAY
Transition to Online Axis Alignment Mode

Body Electrical > Blind Spot Monitor "A" > Utility

TESTER DISPLAY
Transition to Online Axis Alignment Mode

for Type B:

Body Electrical > Blind Spot Monitor "B" > Utility

TESTER DISPLAY
Transition to Online Axis Alignment Mode

Body Electrical > Blind Spot Monitor "A" > Utility

TESTER DISPLAY
Transition to Online Axis Alignment Mode

(4) Confirm the conditions displayed on the screen and then press "Next".

(5) Select "Blind Spot Monitor "B"" or "Blind Spot Monitor "A"" and then press "Next".

(6) Check the GTS screen and confirm that it has transitioned to online axis alignment mode.

(7) Press "Next".

(8) When driving with GTS not connected to vehicle:

1. In accordance with the instructions on the screen press "Exit" and then disconnect the GTS from the DLC3.

(e) Online axis adjustment (Beam Axis Learning)

(1) Drive the vehicle to perform beam axis learning.

HINT:

If the alignment is performed with the GTS connected to the vehicle, the alignment progress can be monitored through 5 stages on the GTS screen.

(2) If the online axis alignment completes normally, the buzzer will sound intermittently for 1.5 seconds.

NOTICE:

- In the case of abnormal termination, the buzzer sounds intermittently for 1 second.
- When driving with GTS connected to vehicle:
  - If an error code is displayed, perform troubleshooting according to the following table, then perform the beam axis alignment again.
- When driving with GTS not connected to vehicle:

○ When the system terminates abnormally, connect the GTS and refer to the following error code table, then perform beam axis alignment again.

Click here **INFO**

ERROR NO.	ERROR DESCRIPTION	CAUSE OF ERROR	ACTION TO BE TAKEN
2	Target angle abnormality	• The beam axis of the blind spot monitor sensor is outside the automatic correction range.	Check the condition of the blind spot monitor sensor and rear bumper assembly.
3	Radar abnormality	• Operation of the blind spot monitor sensor is abnormal.	Replace the blind spot monitor sensor.
4	Temperature abnormality	• The temperature around the blind spot monitor sensor is too high.	Wait until the temperature drops to the operable range (-40 to 85 °C (-40 to 185 °F)).
5	Voltage abnormality	• IG power source voltage is outside the operable range of the blind spot monitor sensor.	Check the auxiliary battery voltage (specified condition: 7.5 to 16 V). • for M20A-FXS: Click here **INFO** • for 2ZR-FXE: Click here **INFO**
6	Vehicle information undefined	• There is a blind spot monitor sensor communication error (CAN communication error between the blind spot monitor sensors).	Check that the connectors of the blind spot monitor sensor and the junction block are firmly connected.
7	Vehicle speed abnormality	• The vehicle is moving.	Ensure that the vehicle remains stationary.
8	Time out	• The vehicle cannot communicate with GTS normally. • Operation of the blind spot monitor sensor is abnormal.	• Ensure that the vehicle is connected with the GTS correctly. • Perform online axis adjustment again and replace the blind spot monitor sensor if the same error code is output.

(3) When driving with GTS connected to vehicle:

    1. Press "Exit" to exit the Online axis adjustment mode.

(4) Turn the ignition switch off.

(5) When driving with GTS not connected to vehicle:

    1. Connect the GTS to the DLC3.

(6) Turn the ignition switch to ON and check that the warning light turns off.

(7) Check that the value of Data List item "Beam Axis Adjustment Completion Status" is "Completed".

HINT:
- If the value of "Beam Axis Adjustment Completion Status" is "Incompleted", perform "Online Axis Alignment Mode" again.
- The "B" is on the LH side and the "A" is on the RH side.

Body Electrical > Blind Spot Monitor "B" > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Beam Axis Adjustment Completion Status	Represents beam axis adjustment completed state	Incompleted / Completed	Incompleted: Beam axis adjustment not completed Completed: Beam axis adjustment completed	-

Body Electrical > Blind Spot Monitor "B" > Data List

TESTER DISPLAY
Beam Axis Adjustment Completion Status

Body Electrical > Blind Spot Monitor "A" > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Beam Axis Adjustment Completion Status	Represents beam axis adjustment completed state	Incompleted / Completed	Incompleted: Beam axis adjustment not completed Completed: Beam axis adjustment completed	-

Body Electrical > Blind Spot Monitor "A" > Data List

TESTER DISPLAY
Beam Axis Adjustment Completion Status

Standard:

The value of the Data List item is displayed as "Completed".

(8) In accordance with the instructions on the screen press "Exit".

(9) Turn the ignition switch off.

(10) Disconnect the GTS from the DLC3.

(f) blind spot monitor beam axis learning is complete.

(g) After beam axis adjustment completes, clear the following system vehicle control history entries.

(1) Clear vehicle control history (Blind Spot Monitor System).

Click here