

<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM10000002BZFT
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [03/2023 - ]
<b>Title:</b> AXLE AND DIFFERENTIAL: FRONT AXLE HUB: ON-VEHICLE INSPECTION; 2023 - 2024 MY Prius Prius Prime [03/2023 - ]		

## ON-VEHICLE INSPECTION

### CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization, or registration) that must be performed after parts are removed and installed, or replaced during front axle hub sub-assembly on-vehicle inspection are shown below.

#### **Necessary Procedures After Parts Removed/Installed/Replaced**

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
Tires	<ul style="list-style-type: none"> <li>Initialization*1*2</li> <li>Tire Position Identification*1*2</li> </ul>	Tire Pressure Warning System	Refer to Procedures Necessary When Replacing Parts (for Tire Pressure Warning System) table below <a href="#">INFO</a>
	Rear television camera assembly optical axis (Back camera position setting)	Parking Assist Monitor System	<a href="#">INFO</a>
	Parking assist ECU initialization*3	Panoramic View Monitor System	<a href="#">INFO</a>
		Advanced Park	<a href="#">INFO</a>
<p>*1: Also necessary after performing a tire rotation.</p> <p>*2: It is not necessary to perform this procedure if the tire pressure warning valve and transmitters are installed to the same location.</p> <p>*3: The vehicle height changes because of tire replacement.</p>			

#### **HINT:**

When the cable is disconnected / reconnected to the auxiliary battery terminal, systems temporarily stop operating. However, each system has a function that completes learning the first time the system is used.

- Learning completes when vehicle is driven

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURES ARE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Front Camera System	Drive the vehicle straight ahead at 35 km/h (22 mph) or more for 5 seconds or more.	<a href="#">INFO</a>

- Learning completes when vehicle is operated normally

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURES ARE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Power Door Lock Control System*1 <ul style="list-style-type: none"> <li>Back door opener</li> </ul>	Perform door unlock operation with door control switch or electrical key transmitter sub-assembly switch.	<a href="#">INFO</a>
Power Back Door System*2	Reset back door close position	<a href="#">INFO</a>
Air Conditioning System	<b>for HEV Model:</b> After the ignition switch is turned to ON, the servo motor standard position is recognized. <b>for PHEV Model:</b> After the ignition switch is turned to ON, the servo motor and expansion valve standard position is recognized.	-
*1: w/o Power Back Door System *2: w/ Power Back Door System		

**NOTICE:**

- When the brake pedal is first depressed after replacing the brake pads or pushing back the disc brake piston, DTCs may be stored. As there is no malfunction, clear the DTC.
- While the auxiliary battery is connected, even if the ignition switch is off, the brake control system activates when the brake pedal is depressed or any door courtesy switch turns on. Therefore, when servicing the brake system components, do not operate the brake pedal or open/close the doors while the auxiliary battery is connected.

**HINT:**

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

## PROCEDURE

### 1. PRECAUTION

**NOTICE:**

After turning the ignition switch off, waiting time may be required before disconnecting the cable from the negative (-) auxiliary battery terminal.

Click here [INFO](#)

### 2. DISABLE BRAKE CONTROL

**HINT:**

Click here [INFO](#)

### 3. REMOVE FRONT WHEEL

**HINT:**

Click here [INFO](#)

### 4. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY

**HINT:**

Click here [INFO](#)

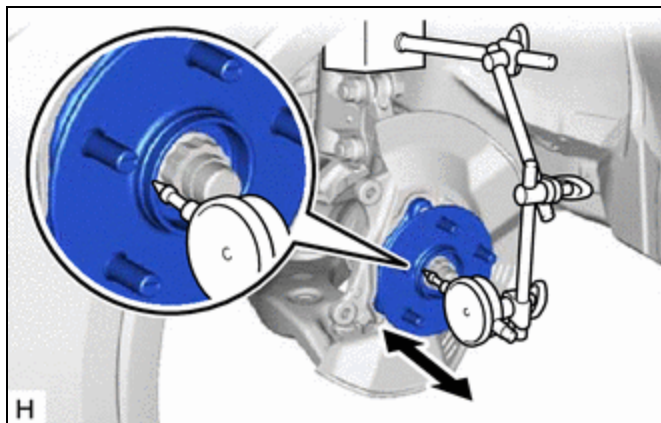
### 5. REMOVE FRONT DISC

**HINT:**

[Click here](#) INFO

## 6. INSPECT FRONT AXLE HUB BEARING LOOSENESS

- (a) Using a dial indicator with magnetic base, check for looseness near the center of the front axle hub sub-assembly.



### Front Axle Hub Bearing Looseness

SPECIFIED CONDITION	RESULT
0.05 mm or less	mm
0.00197 in. or less	in.

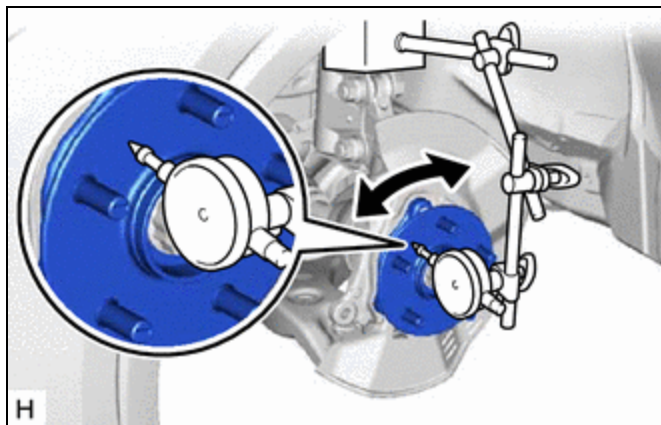
**NOTICE:**

- Ensure that the dial indicator is set perpendicular to the measurement surface.
- Keep the magnet of the dial indicator away from the front axle hub sub-assembly and front speed sensor.

- (b) If the looseness exceeds the maximum, replace the front axle hub sub-assembly.

## 7. INSPECT FRONT AXLE HUB RUNOUT

- (a) Using a dial indicator with magnetic base, check for runout on the surface of the front axle hub sub-assembly outside the front axle hub bolts.



### Front Axle Hub Runout

SPECIFIED CONDITION	RESULT
0.05 mm or less	mm
0.00197 in. or less	in.

**NOTICE:**

- Ensure that the dial indicator is set perpendicular to the measurement surface.
- Make sure to set the tip of the dial indicator towards the outside of the front axle hub bolts.
- Keep the magnet of the dial indicator away from the front axle hub sub-assembly and front speed sensor.

- (b) If the runout exceeds the maximum, replace the front axle hub sub-assembly.

## 8. INSTALL FRONT DISC

**HINT:**

[Click here](#) INFO

## 9. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY

**HINT:**

[Click here](#) INFO

## 10. INSTALL FRONT WHEEL

### HINT:

[Click here](#) 

## 11. CONNECT CABLE TO NEGATIVE AUXILIARY BATTERY TERMINAL

(a) Connect the cable to the negative (-) auxiliary battery terminal.

### HINT:

for M20A-FXS: [Click here](#) 

for 2ZR-FXE: [Click here](#) 

(b) Turn the ignition switch to ON (READY).

(c) Depress the brake pedal and release it.

(d) Clear the DTCs.

**Chassis > Brake/EPB > Clear DTCs**

**Chassis > Brake Booster > Clear DTCs**

## 12. INITIALIZATION AFTER RECONNECTING AUXILIARY BATTERY TERMINAL

### HINT:

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

[Click here](#) 

