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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 - ]		
<b>Title:</b> STEERING GEAR / LINKAGE: STEERING GEAR: INSPECTION; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]				

# **INSPECTION**

## **PROCEDURE**

#### 1. INSPECT TIE ROD END SUB-ASSEMBLY LH

(a) Secure the tie rod end sub-assembly LH in a vise between aluminum plates.

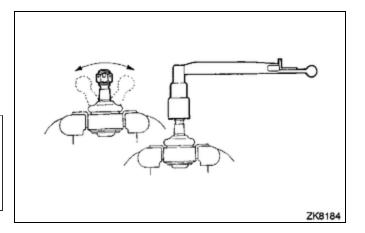
#### **NOTICE:**

Do not overtighten the vise.

- (b) Install the nut to the stud bolt.
- (c) Flip the ball joint back and forth 5 times.
- (d) Using a torque wrench and the nut, turn the stud bolt continuously at a rate of 2 to 4 seconds per turn, and check the turning torque on the 5th turn.

### **Standard Turning Torque**

SPECIFIED CONDITION	RESULT
0.49 to 3.43 N*m	N*m
5 to 34 kgf*cm	kgf*cm
5 to 30 in.*lbf	in.*lbf



- (e) If the turning torque is not within the specified range, replace the tie rod end sub-assembly LH with a new one.
- (f) Check that the dust cover is not cracked and that there is no grease on it.
- (g) If the dust cover is cracked or there is grease on it, replace the tie rod end sub-assembly LH with a new one.

#### 2. INSPECT TIE ROD END SUB-ASSEMBLY RH

#### HINT:

Perform the same procedure as for the LH side.

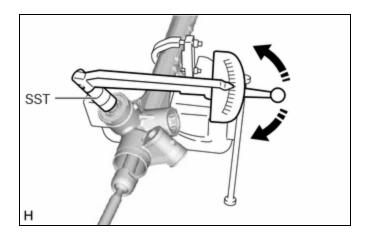
#### 3. INSPECT TOTAL PRELOAD

#### **NOTICE:**

Inspect the total preload in a no-load condition by removing the tie rod end sub-assemblies RH and LH, and steering rack boots.

(a) Install SST to the pinion shaft and turn it left and right 5 times or more.

SST: 09616-00020



(b) Using SST and a torque wrench, turn the pinion shaft continuously at a rate of 4 to 6 seconds per turn to inspect the total preload of the steering gear assembly.

#### **Preload**

SPECIFIED CONDITION	RESULT
1.5 to 2.4 N*m	N*m
16 to 24 kgf*cm	kgf*cm
14 to 21 in.*lbf	in.*lbf

#### **NOTICE:**

Inspect the total preload around the steering rack center position.

(c) If the total preload is not within the specified range, replace the steering gear assembly with a new one.



