]

| Last Modified: 12-04-2024 6.11:8.1.0 Doc 1  |                    | Doc ID: RM100000029HMD        |  |  |  |
|---|--------------------|-------------------------------|--|--|--|
| Model Year Start: 2023  | Model: Prius Prime | Prod Date Range: [12/2022 - ] |  |  |  |
| Title: POWER ASSIST SYSTEMS: POWER STEERING ECU: INSTALLATION; 2023 - 2024 MY Prius Prius Prime |                    |                               |  |  |  |
| [12/2022 - ]  |                    |                               |  |  |  |

# **INSTALLATION**

# **CAUTION / NOTICE / HINT**

# **COMPONENTS (INSTALLATION)**

|   | 18.5 (189, 14)<br>x 2<br>1 2<br>1 2 |     |
|---|-------------------------------------|-----|
| H |                                     | — 3 |

|   | PROCEDURE                                  | PART NAME CODE | !    |   | Ø |
|---|--|----------------|------|---|---|
| 1 | ELECTRIC POWER STEERING MOTOR SHAFT DAMPER | 45254B         | INFO | - | - |
| 2 | POWER STEERING ECU ASSEMBLY                | 89650          | INFO | - | - |
| 3 | STEERING COLUMN ASSEMBLY                   | -              | -    | - | - |

\*1 ELECTRIC POWER STEERING COLUMN SUB-ASSEMBLY

-

-

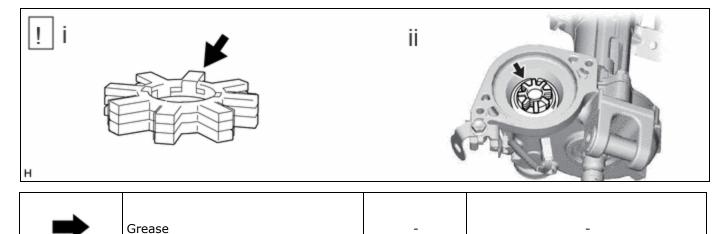
ΙГ

]

|   | Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf) | • | Non-reusable<br>part |
|---|--|---|----------------------|
| • | Grease   | - | -                    |

# **PROCEDURE**

# **1. INSTALL ELECTRIC POWER STEERING MOTOR SHAFT DAMPER**



(1) Apply grease to a new electric power steering motor shaft damper.

## **NOTICE:**

First wipe off the existing grease from the serrated part, and then apply the dedicated grease supplied with a new power steering ECU assembly or electric power steering column sub-assembly.

(2) Install the electric power steering motor shaft damper.

# 2. INSTALL POWER STEERING ECU ASSEMBLY

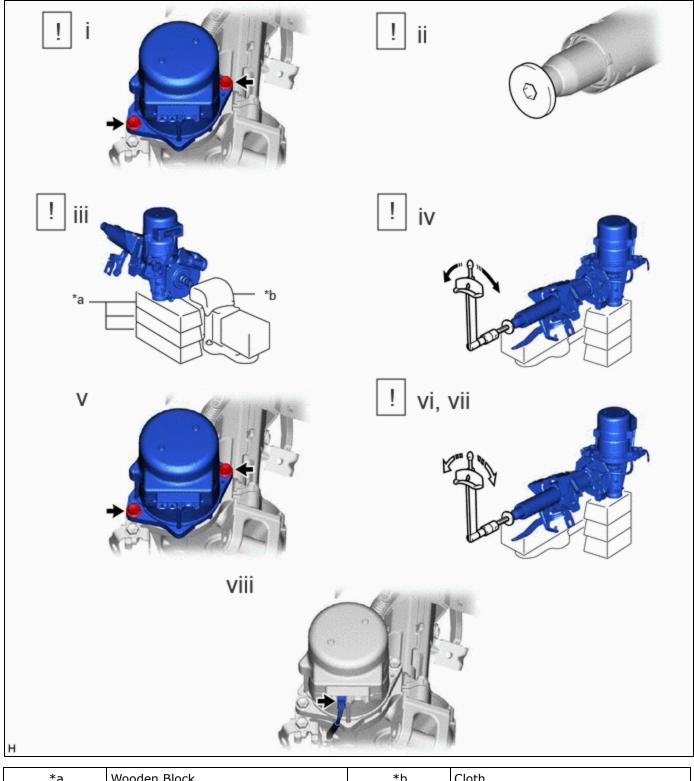
## NOTICE:

- Do not drop the power steering ECU assembly, strike it with tools or subject it to impacts.
- If the power steering ECU assembly is subjected to an impact, replace it with a new one.
- Do not pull the wire harness of the electric power steering column sub-assembly.
- Do not allow any moisture to come into contact with the power steering ECU assembly.
- Do not loosen any bolts not mentioned in the procedure.
- Do not allow any foreign matter to contaminate the power steering ECU assembly.

12/9/24, 10:54 PM

POWER ASSIST SYSTEMS: POWER STEERING ECU: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [12/2022 -

]



| *а | Wooden Block | *b | Cloth |
|----|--------------|----|-------|
|    | Rotate       |    | Turn  |

(1) Temporarily install the power steering ECU assembly with the 2 bolts.

#### **NOTICE:**

When temporarily installing the 2 bolts to the power steering ECU assembly, do not tighten them all the way down.

12/9/24, 10:54 PM

POWER ASSIST SYSTEMS: POWER STEERING ECU: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [12/2022 -

(2) Using a 10 mm hexagon socket wrench, install the steering wheel assembly set bolt to the steering main shaft.

## **NOTICE:**

Do not apply excessive torque to the steering wheel assembly set bolt by using a tool such as an impact wrench.

### HINT:

The steering wheel assembly set bolt is used for turning the steering main shaft during inspection of the steering main shaft rotating torque. Remove the steering wheel assembly set bolt after performing this inspection.

(3) Secure the steering column assembly in a vise using aluminum plates, cloths and wooden blocks.

#### **NOTICE:**

- Do not overtighten the vise, as the steering column assembly may become deformed.
- Support the steering column assembly with wooden blocks or similar items to ensure that it does not fall.
- Secure the power steering ECU assembly so that it faces straight up.
  - (4) Rotate the steering main shaft 180 degrees counterclockwise and then 180 degrees clockwise at a speed of 60 rpm, and repeat 2 to 3 times to center the axis of the power steering ECU assembly. [\*1]

(5) Tighten the 2 bolts. [\*2]

#### **Torque:**

## 18.5 N·m {189 kgf·cm, 14 ft·lbf}

(6) Using a torque wrench, measure the turning torque of the steering main shaft.

Preload:

1.0 to 2.3 N\*m (11 to 23 kgf\*cm, 9 to 20 in.\*lbf)

#### **NOTICE:**

Ensure that there is no abnormal resistance during rotation.

- (7) If the turning torque is not as specified, loosen the 2 bolts and repeat steps [\*1] and [\*2] to recenter the axis of the power steering ECU assembly.
- (8) Connect the connector.

### 3. INSTALL STEERING COLUMN ASSEMBLY

Click here



Ф ТОУОТА

1