

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002A07N
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: PA10/PB10/PB12 (HYBRID TRANSMISSION / TRANSAXLE): SHIFT CONTROL ACTUATOR: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

INSTALLATION

CAUTION / NOTICE / HINT

NOTICE:

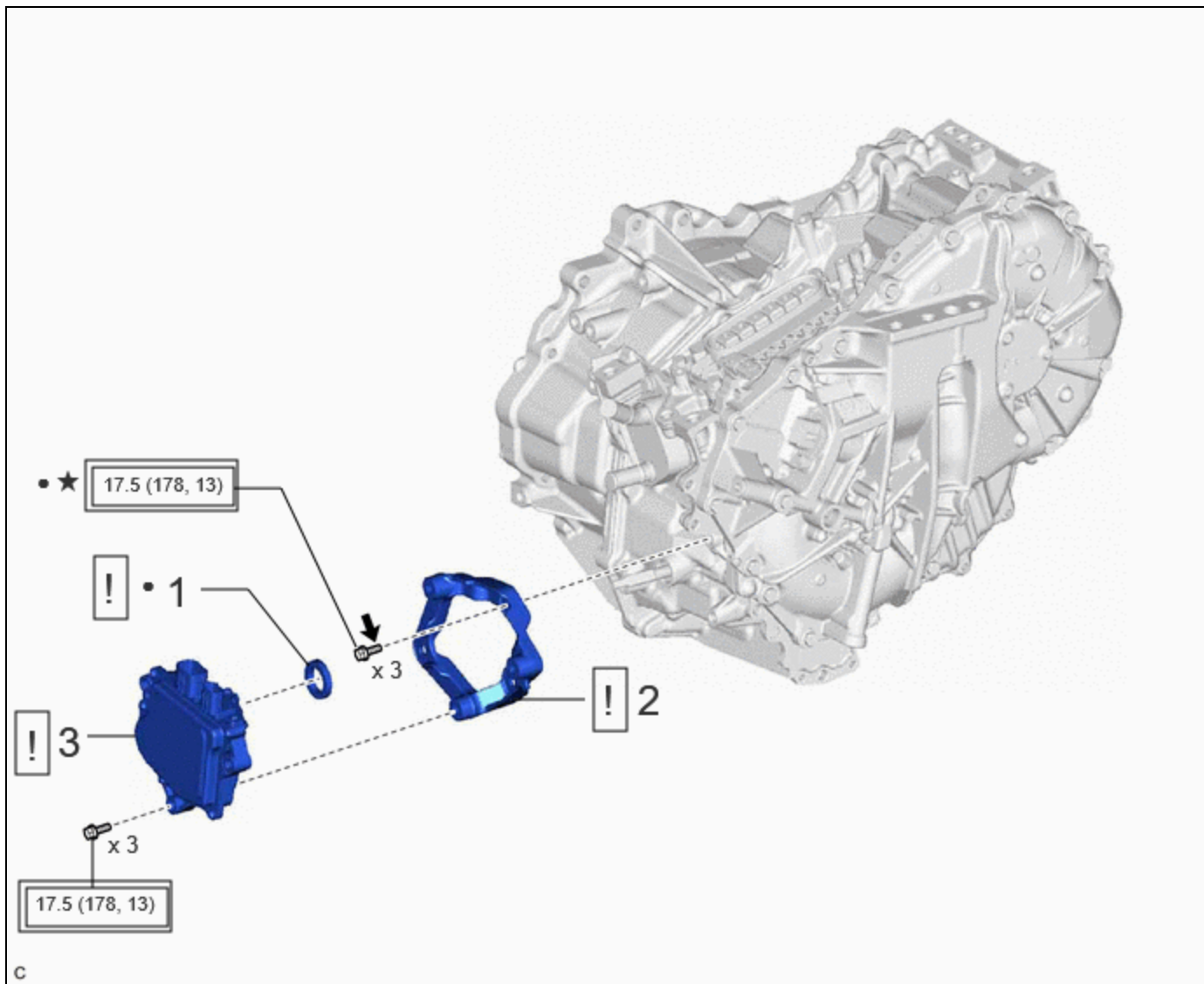
- When disconnecting a wire harness of any component connected to the supply power of the integrated capacitor (integration control supply) or when removing the integrated capacitor (integration control supply), make sure to wait 5 minutes or more after turning the ignition switch off for self-diagnosis to complete and the voltage of the integrated capacitor (integration control supply) to discharge.
- If the shift control actuator assembly is replaced or removed, make sure to perform actuator position learning.

If not performed after replacing the shift control actuator assembly, a malfunction such as the shift position not correctly changing, the shift position indicator not illuminating or displaying the incorrect drive state, etc. may occur.

- When the shift control actuator assembly is replaced or removed, although the displayed value of Data List item "ACT Position Learning Complete Status" may be "Complete" based on information from before removal, make sure to perform actuator position learning.
- When any of the above procedures are completed, change the shift position to all positions and check the following items:
 - The shift position indicator illuminates in accordance with the current position.
 - The vehicle does not move when in shift state P (parking brake released)
 - The vehicle does not drive when in shift state N
 - The vehicle drives when in shift state D or R

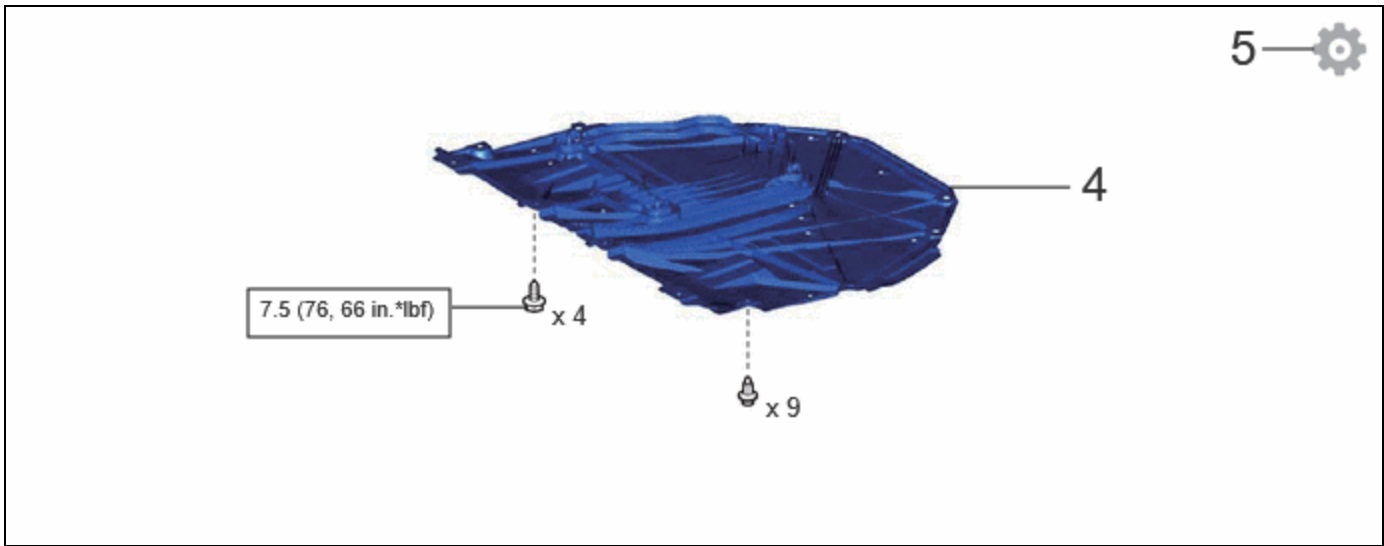
CAUTION / NOTICE / HINT

COMPONENTS (INSTALLATION)



PROCEDURE	PART NAME CODE	!	📝	⚙️
1 SHIFT CONTROL ACTUATOR SEAL	35563	INFO	-	-
2 SHIFT CONTROL ACTUATOR BRACKET	35541	INFO	-	-
3 SHIFT CONTROL ACTUATOR ASSEMBLY	35580	INFO	-	-

	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf)	•	Non-reusable part
	Toyota Genuine Adhesive 1324, Three Bond 1324 or equivalent	★	Precoated part



PROCEDURE		PART NAME CODE			
4	NO. 1 ENGINE UNDER COVER ASSEMBLY	51410	-	-	-
5	ACTUATOR POSITION LEARNING	-	-	-	INFO

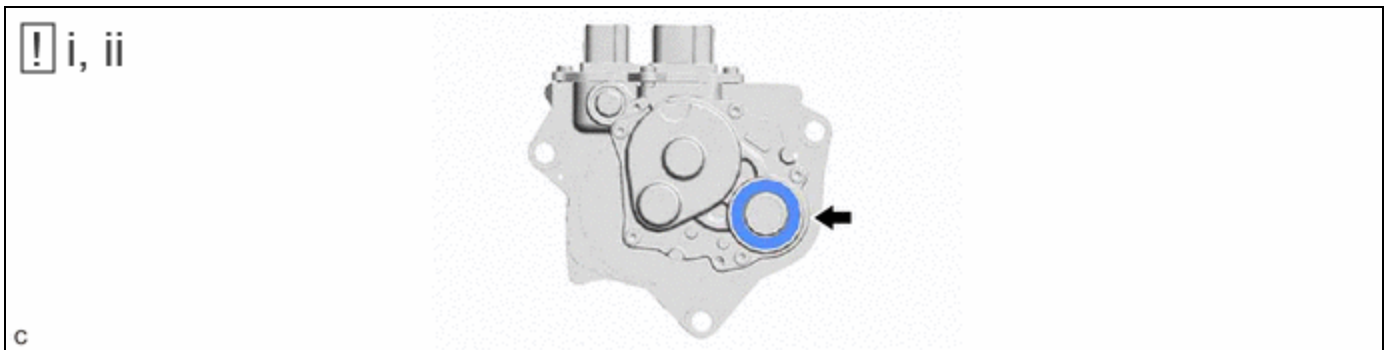
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-
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PROCEDURE

1. INSTALL SHIFT CONTROL ACTUATOR SEAL

HINT:

- Perform this procedure only when replacement of the shift control actuator seal is necessary.
- As a new shift control actuator assembly has the shift control actuator seal already installed, it is not necessary to install a shift control actuator seal if a new shift control actuator assembly is used.



(1) Clean and degrease the installation surface of the shift control actuator seal and contact surface of the hybrid vehicle transaxle assembly.

NOTICE:

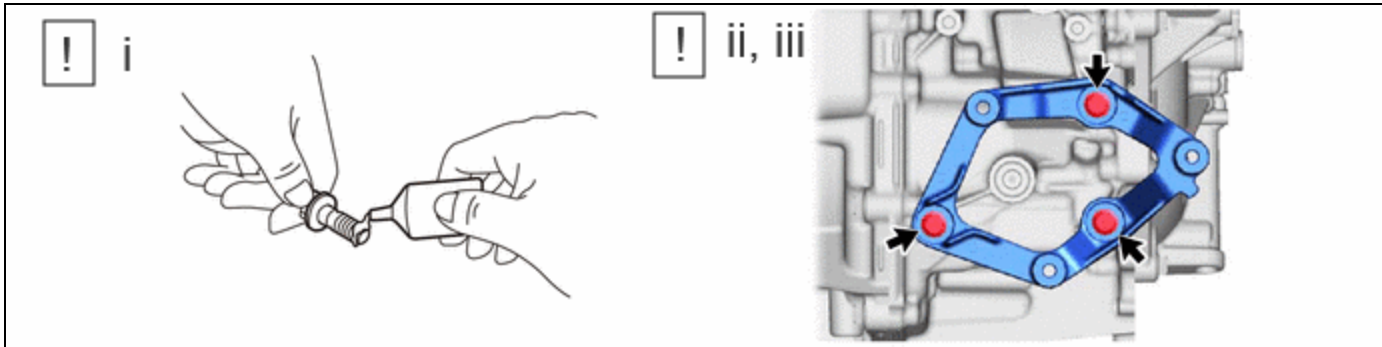
Do not use a sharp tool such as a scraper.

(2) Install a new shift control actuator seal to the shift control actuator assembly.

2. INSTALL SHIFT CONTROL ACTUATOR BRACKET

HINT:

Perform this procedure only when replacement of the shift control actuator bracket is necessary.



(1) Apply adhesive to 2 or 3 threads on the ends of the 3 new bolts.

Adhesive:

Toyota Genuine Adhesive 1324, Three Bond 1324 or equivalent

NOTICE:

Make sure to install the 3 bolts immediately after applying adhesive to prevent foreign matter from attaching to them.

(2) Temporarily install the shift control actuator bracket to the hybrid vehicle transaxle assembly with 3 new bolts.

(3) Tighten the 3 bolts.

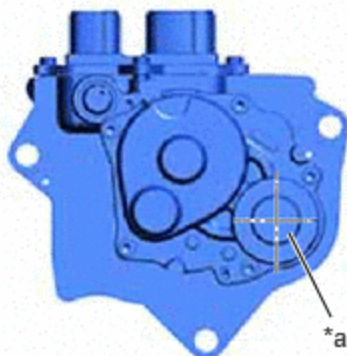
Torque:

17.5 N·m {178 kgf·cm, 13 ft·lbf}

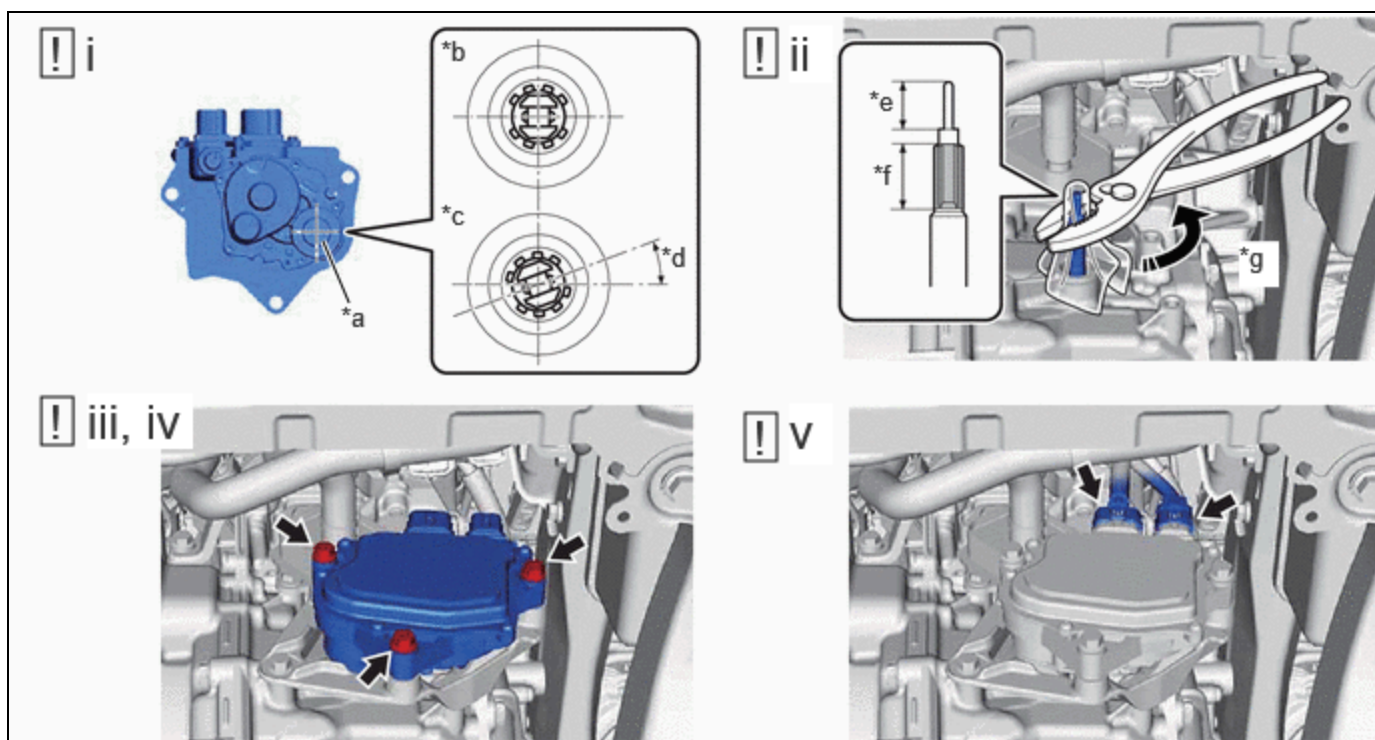
3. INSTALL SHIFT CONTROL ACTUATOR ASSEMBLY

NOTICE:

- When disconnecting a wire harness of any component connected to the supply power of the integrated capacitor (integration control supply) or when removing the integrated capacitor (integration control supply), make sure to wait 5 minutes or more after turning the ignition switch off for self-diagnosis to complete and the voltage of the integrated capacitor (integration control supply) to discharge.
- Do not rotate the spline part (*a) of the shift control actuator assembly.



- Make sure to engage the parking lock before performing this procedure.
- Make sure that the wheels of the vehicle are unable to rotate with the parking brake released.



*a	Spline Portion of Shift Control Actuator Assembly	*b	Not P Position
*c	P Position	*d	20.6°
*e	2-flats Portion of Parking Lock Shaft	*f	Spline Portion of Parking Lock Shaft
*g	Rotate Approximately 20°	-	-

(1) Check the spline portion (*a) of the shift control actuator assembly.

- If the spline portion is not in the P position, perform step (ii).
- If the spline portion is in the P position, perform step (iii).

(2) Using a pair of pliers, grip the spline portion (*f) of the parking lock shaft that has been wrapped with a cloth or other material and rotate it approximately 20° in the direction shown by the arrow in the illustration to release the parking lock.

NOTICE:

- Do not rotate the wheels of the vehicle.
- Do not grip the 2-flats portion (*e) of the parking lock shaft.
- Make sure to use a cloth or other material to prevent damage to the spline portion (*f) of the parking lock shaft.

(3) Temporarily install the shift control actuator assembly to the shift control actuator bracket with the 3 bolts.

(4) Fully tighten the 3 bolts.

Torque:

17.5 N·m {178 kgf·cm, 13 ft·lbf}

(5) Connect the 2 shift control actuator assembly connectors.

NOTICE:

Make sure to perform actuator position learning after removing and installing the shift control actuator assembly.

4. INSTALL NO. 1 ENGINE UNDER COVER ASSEMBLY

- for 2ZR-FXE:

Click here [INFO](#)

- for M20A-FXS:

Click here [INFO](#)

5. ACTUATOR POSITION LEARNING

Click here [INFO](#)

