

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002A070
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: PA10/PB10/PB12 (HYBRID TRANSMISSION / TRANSAXLE): SHIFT CONTROL ACTUATOR: REMOVAL; 2023 - 2024 MY Prius Prime [12/2022 -]		

REMOVAL

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during shift control actuator assembly removal/installation 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
Replacement of shift actuator ECU (Shift control actuator assembly)*	Perform actuator position learning	<ul style="list-style-type: none"> Shift position not correctly changing Shift position indicator not illuminating or displaying the incorrect drive state 	INFO

*: Even when not replacing the part, it is necessary to perform the specified necessary procedures after installation.

NOTICE:

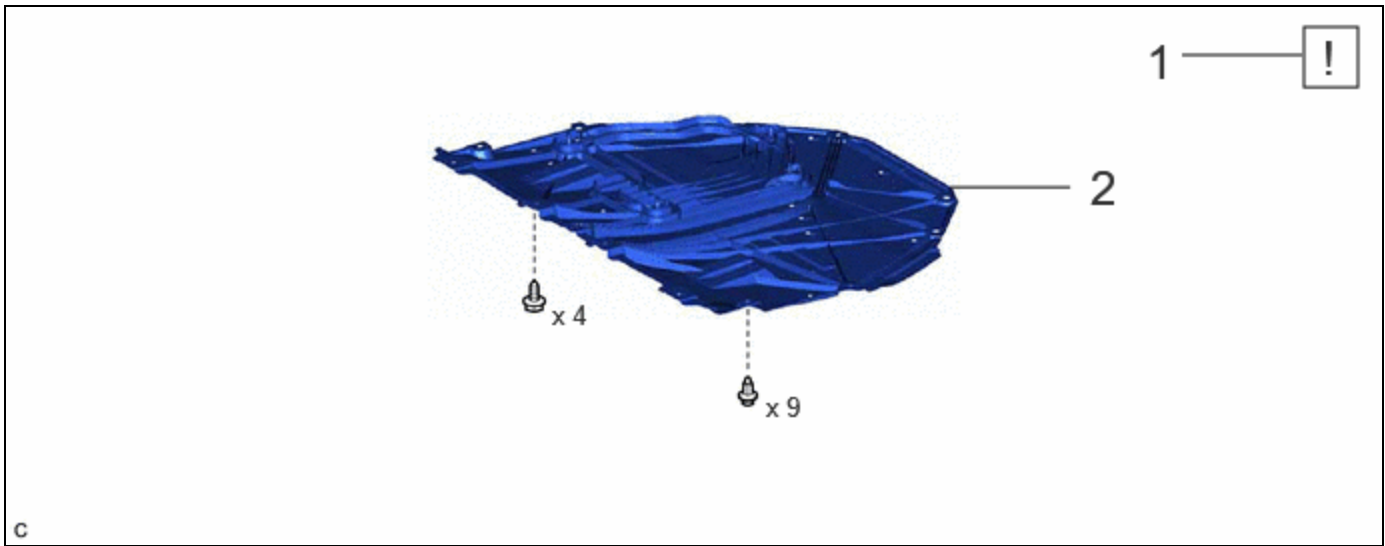
- When disconnecting a wire harness of any component connected to the supply power of the integrated capacitor (integration control supply) or when removing the integrated capacitor (integration control supply), make sure to wait 5 minutes or more after turning the ignition switch off for self-diagnosis 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.

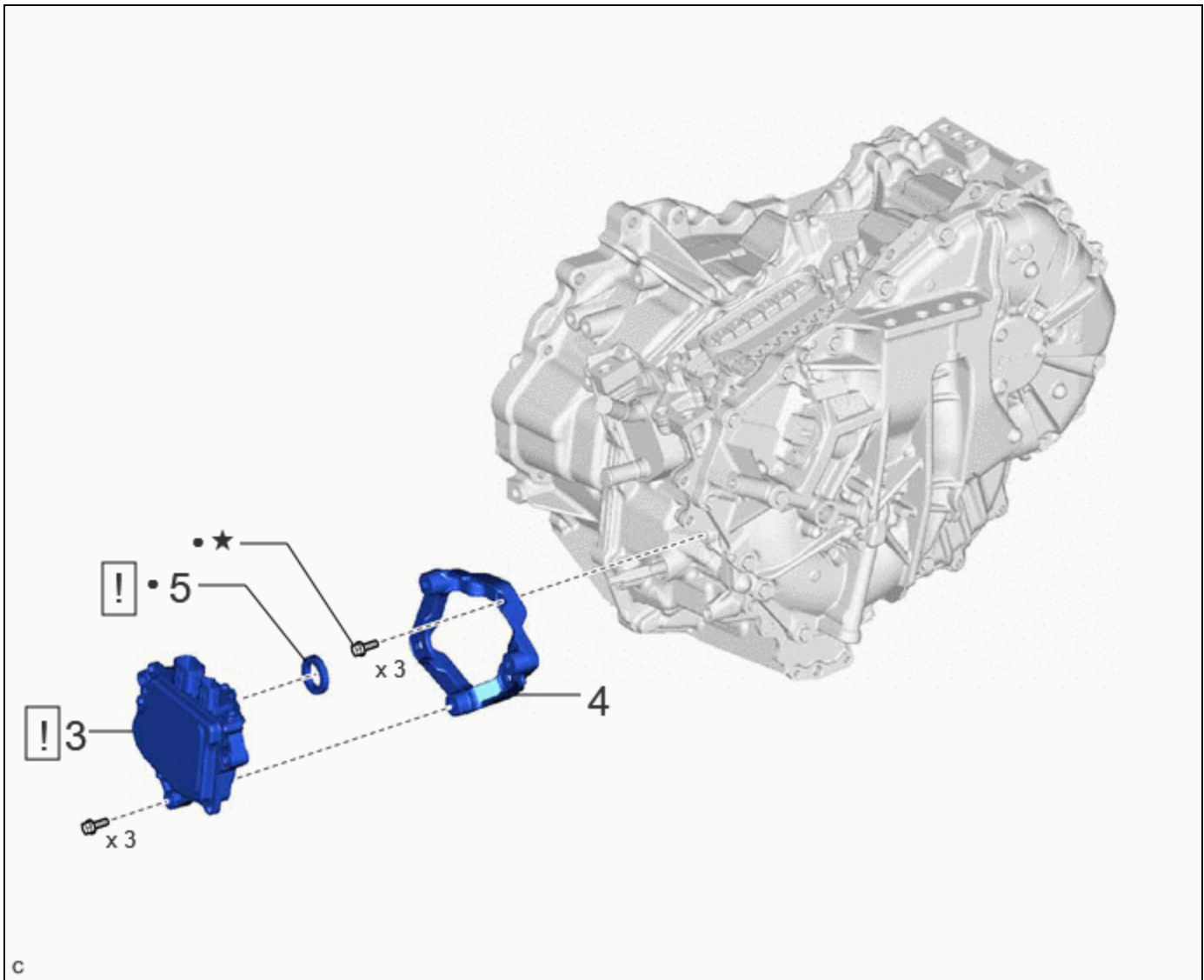
- When the shift control actuator assembly is replaced or removed, although the displayed value of Data List item "ACT Position Learning Complete Status" may be "Complete" based on information from before removal, make sure to perform actuator position learning.
- When any of the above procedures are 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 (REMOVAL)



PROCEDURE		PART NAME CODE			
1	SECURE VEHICLE	-	INFO	-	-
2	NO. 1 ENGINE UNDER COVER ASSEMBLY	51410	-	-	-



PROCEDURE	PART NAME CODE	!		
3 SHIFT CONTROL ACTUATOR ASSEMBLY	35580	INFO	-	-
4 SHIFT CONTROL ACTUATOR BRACKET	35541	-	-	-
5 SHIFT CONTROL ACTUATOR SEAL	35563	INFO	-	-

• Non-reusable part	★ Precoated part
---------------------	------------------

PROCEDURE

1. SECURE VEHICLE



(1) Fully apply the parking brake and chock a wheel.

CAUTION:

- Make sure to apply the parking brake and chock a wheel before performing this procedure.
- If the vehicle is not secure and the shift lever is moved to N, the vehicle may suddenly move, possibly resulting in an accident or serious injury.

2. REMOVE NO. 1 ENGINE UNDER COVER ASSEMBLY

- for 2ZR-FXE:

Click here [INFO](#)

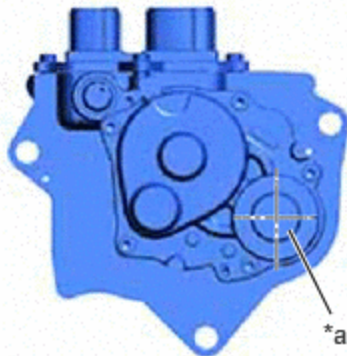
- for M20A-FXS:

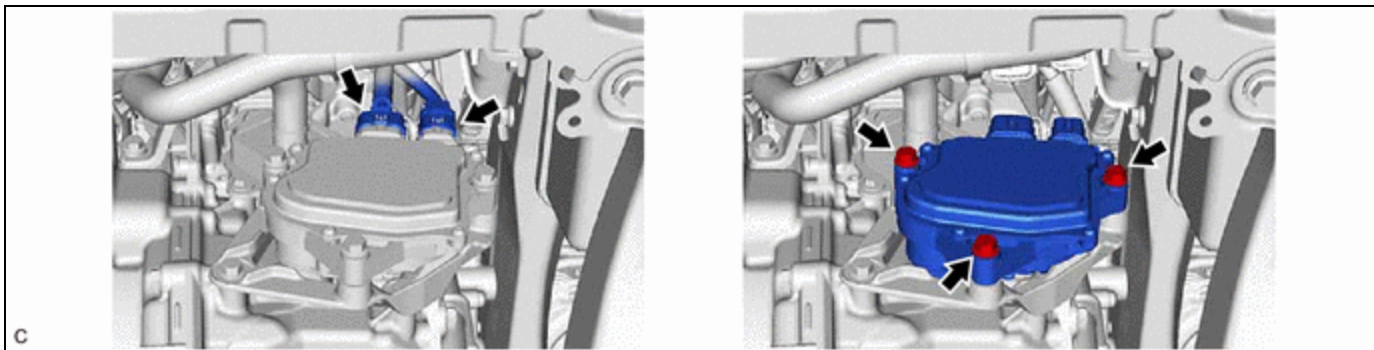
Click here [INFO](#)

3. REMOVE 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.

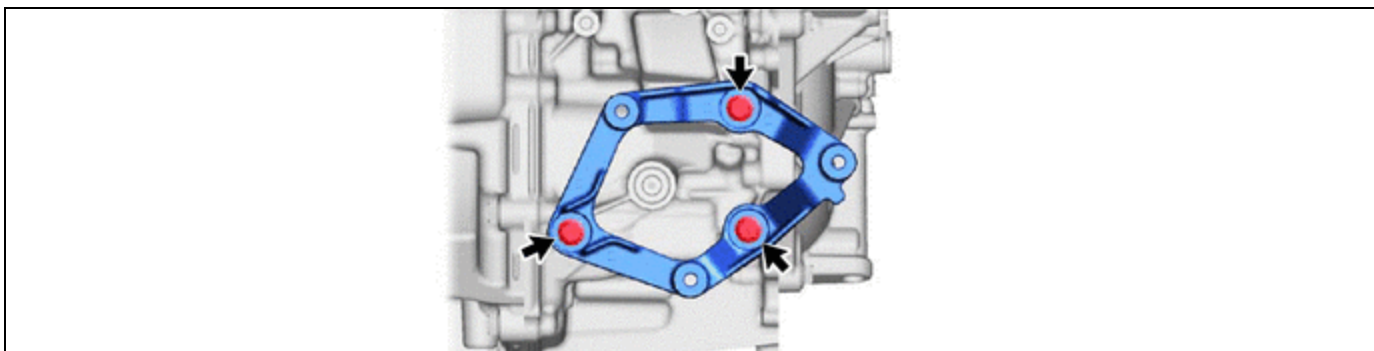




4. REMOVE SHIFT CONTROL ACTUATOR BRACKET

HINT:

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



5. REMOVE SHIFT CONTROL ACTUATOR SEAL



NOTICE:

- Remove all fragments of the shift control actuator seal.
- The shift control actuator seal may remain attached to the hybrid vehicle transaxle assembly side. Make sure to remove it.
- Do not use a sharp tool such as a scraper.

HINT:

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

