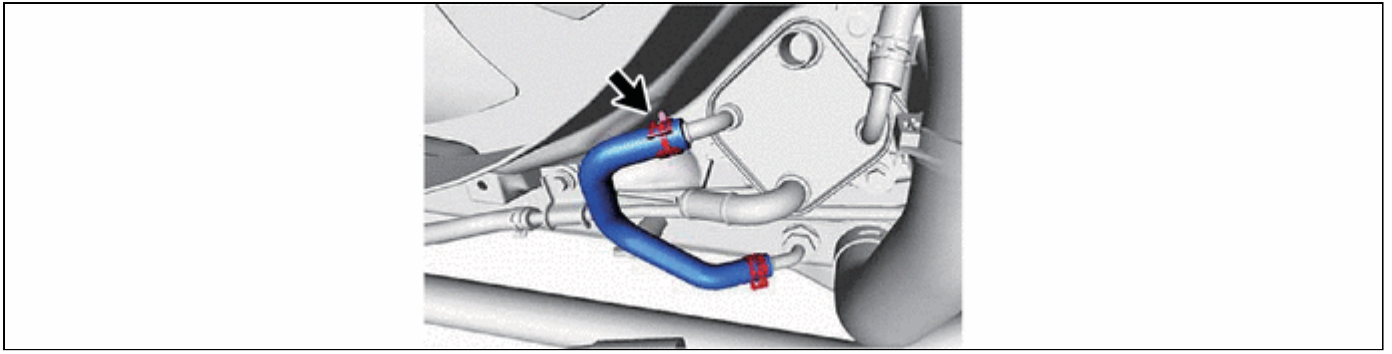


Your Ultimate Source for OEM Repair Manuals

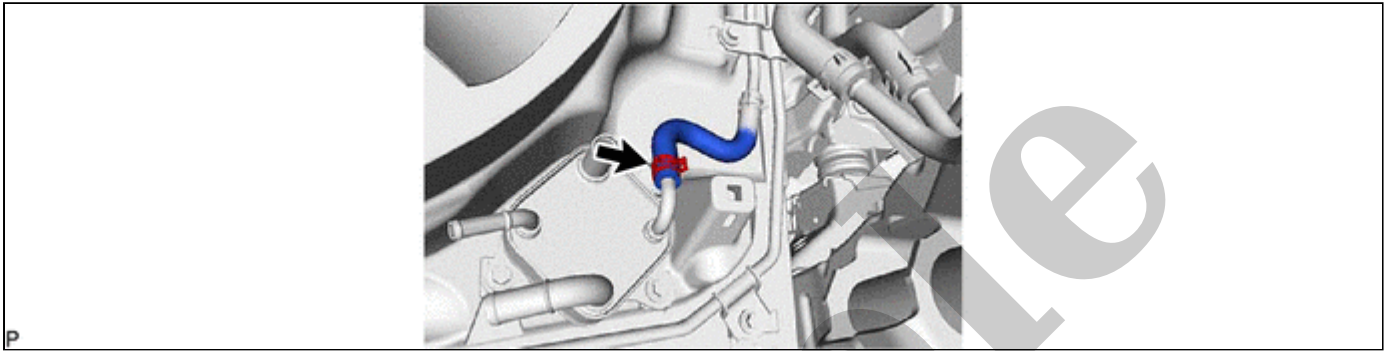
FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2021 Lexus RX 350 Service and Repair Manual

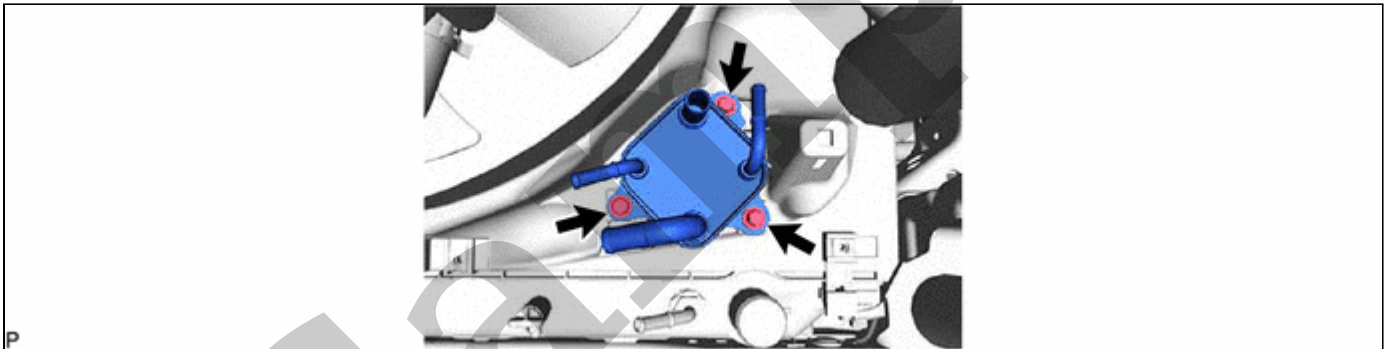
[Go to manual page](#)







7. DISCONNECT NO. 1 TRANSMISSION OIL COOLER HOSE



8. REMOVE OIL COOLER ASSEMBLY

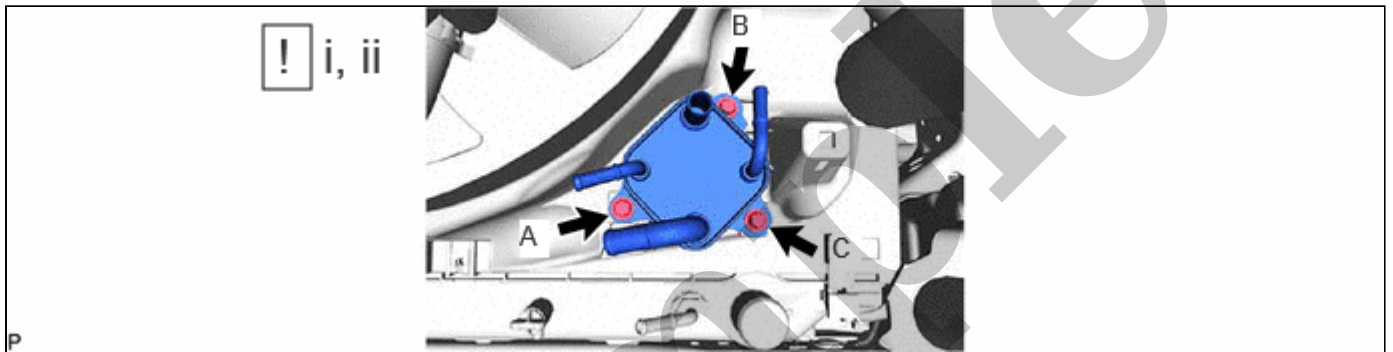


PROCEDURE		PART NAME CODE			
9	AFTER FILLING AUTOMATIC TRANSMISSION	-	INFO	-	-
10	ATF THERMAL DEGRADATION ESTIMATE RESET	-	INFO	-	-
11	NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY	51405A	-	-	-

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

PROCEDURE

1. INSTALL OIL COOLER ASSEMBLY



(1) Install the bolt (A).

Torque:

5.5 N·m {56 kgf·cm, 49 in·lbf}

NOTICE:

Align the protrusion of the cooler condenser assembly with the cutout of the oil cooler assembly.

(2) Install the oil cooler assembly to the cooler condenser assembly with the 2 bolts in the order shown in the illustration.

Torque:

5.5 N·m {56 kgf·cm, 49 in·lbf}

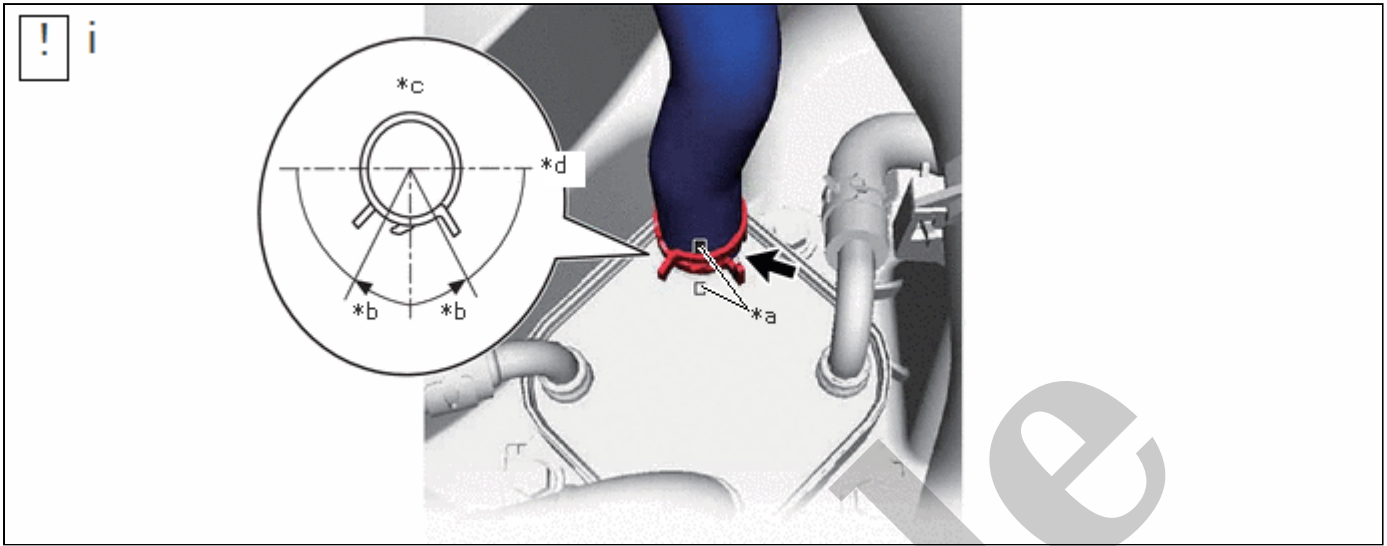
HINT:

Fully tighten bolt (B) → Fully tighten bolt (C)

2. CONNECT NO. 1 TRANSMISSION OIL COOLER HOSE

- Make sure to align the paint mark of the No. 3 transmission oil cooler hose with the paint mark of the oil cooler assembly.
- Make sure to align the claw of the hose clip with the paint mark of the No. 3 transmission oil cooler hose.

4. CONNECT NO. 3 WATER BY-PASS HOSE



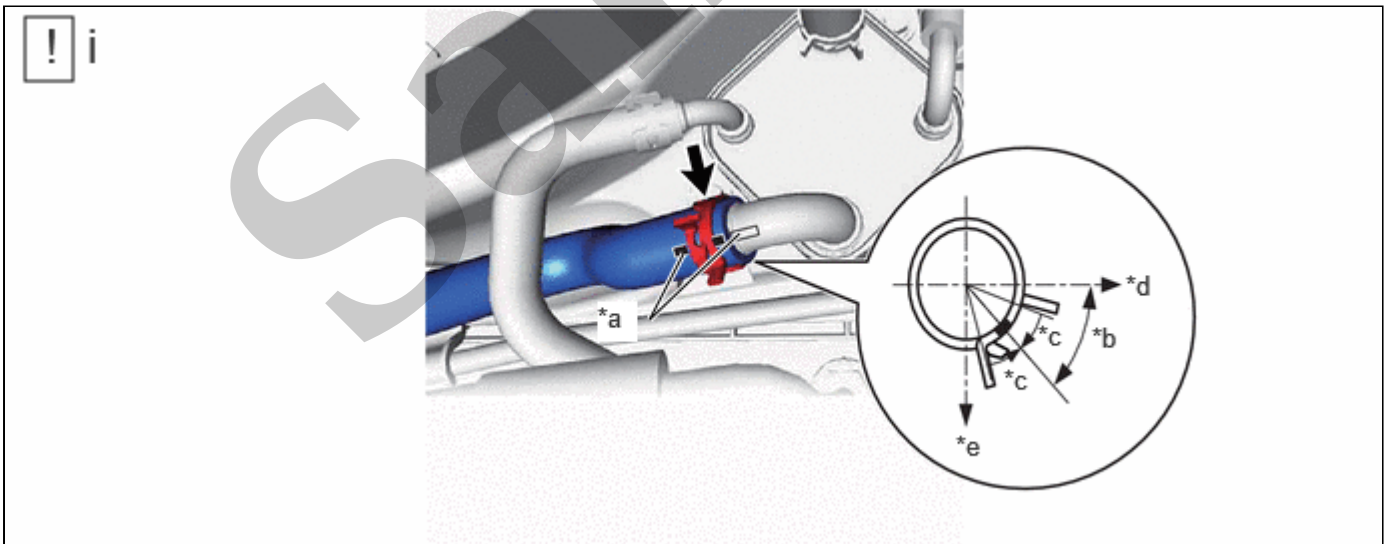
*a	Paint Mark (Bottom Side of Vehicle)	*b	25° (Claw of Hose Clip Location)
*c	Upper Side of Vehicle	*d	Right Side of Vehicle

(1) Connect the No. 3 water by-pass hose to the oil cooler assembly and slide the hose clip to secure the hose.

NOTICE:

- Make sure to align the paint mark of the No. 3 water by-pass hose with the paint mark of the oil cooler assembly.
- Make sure that the claws of the hose clip are within the location shown in the illustration.
- Make sure that the paint mark of the No. 3 water by-pass hose the location bottom side of the vehicle.

5. CONNECT NO. 4 WATER BY-PASS HOSE



*a	Paint Mark	*b	45° (Claw of Hose Clip Location)
*c	25° (Claw of Hose Clip Location)	*d	Rear Side of Vehicle
*e	Bottom Side of Vehicle	-	-

(1) Connect the No. 4 water by-pass hose to the oil cooler assembly and slide the hose clip to secure the hose.

NOTICE:

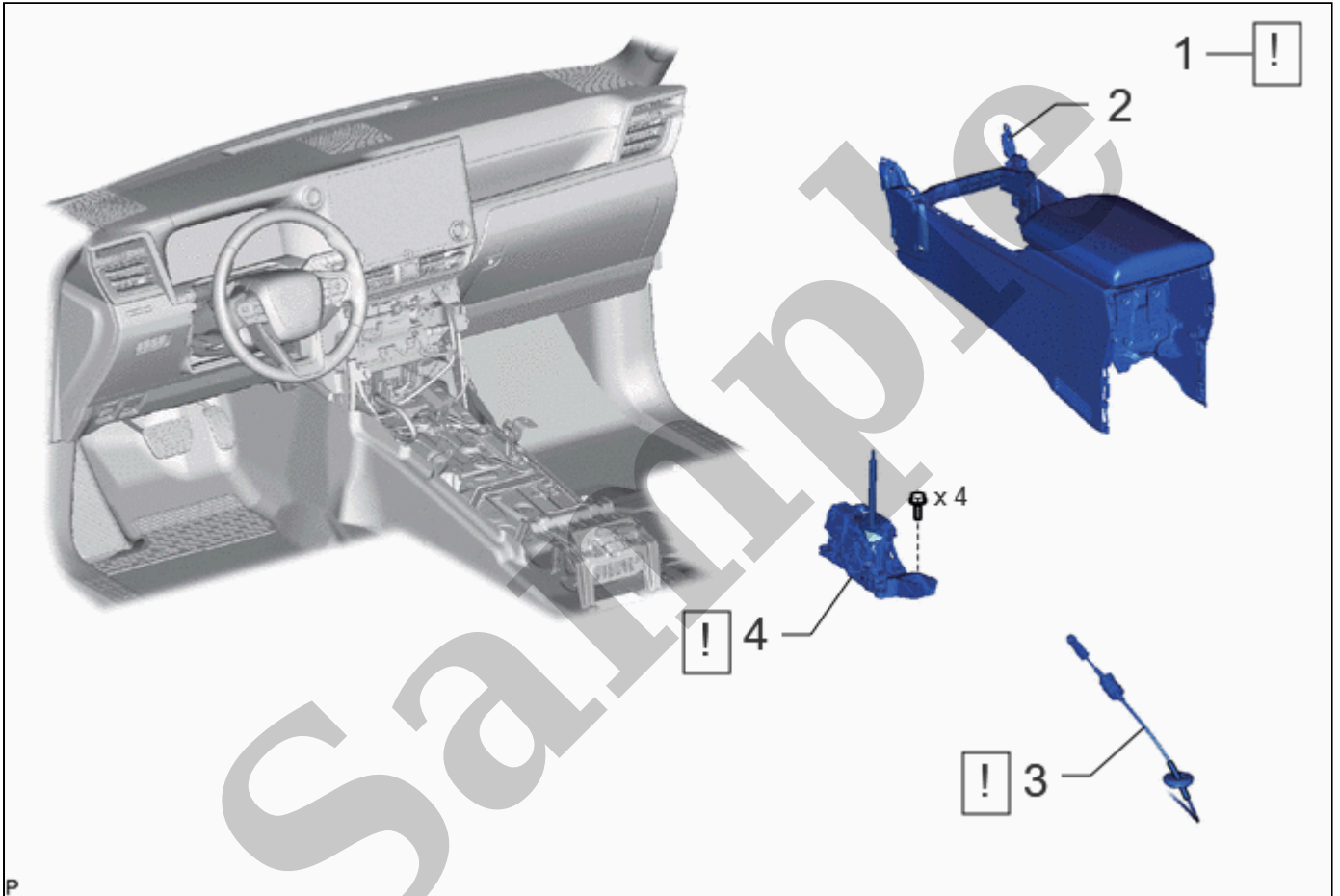
- Make sure to align the paint mark of the No. 4 water by-pass hose with the paint mark of the oil cooler assembly.

Last Modified: 10-07-2024	6.11:8.1.0	Doc ID: RM100000002G6F3
Model Year Start: 2024	Model: GX550	Prod Date Range: [12/2023 -]
Title: AJA0F (AUTOMATIC TRANSMISSION / TRANSAXLE): SHIFT LEVER: REMOVAL; 2024 MY GX550 [12/2023 -]		

REMOVAL

CAUTION / NOTICE / HINT

COMPONENTS (REMOVAL)



PROCEDURE		PART NAME CODE			
1	SECURE VEHICLE	-	INFO	-	-
2	REAR CONSOLE BOX ASSEMBLY	58910C	-	-	-
3	TRANSMISSION CONTROL CABLE ASSEMBLY	33820B	INFO	-	-
4	TRANSMISSION FLOOR SHIFT ASSEMBLY	-	INFO	-	-

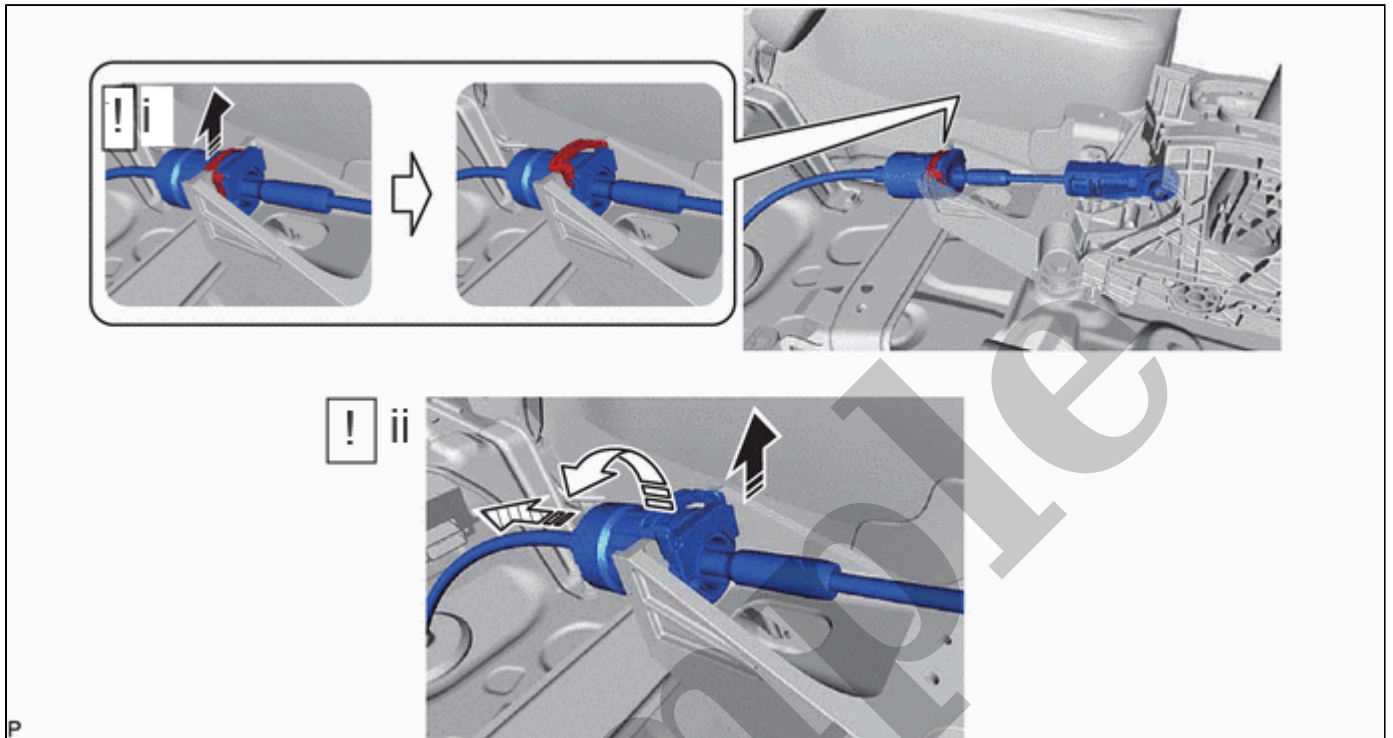
PROCEDURE

1. SECURE VEHICLE

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

*c	Slide	*d	Pull
*e	Clip	*f	45° to 60°

- (1) Slide the slider of the transmission control cable assembly in the direction indicated by the arrow in the illustration and pull the lock piece outward.
- (2) While disengaging the clip as shown in the illustration, disconnect the transmission control cable assembly from the transmission floor shift assembly together with the clip.



	Pull Out		Turn 180° counterclockwise and hold
	While pushing toward vehicle rear	-	-

- (1) Pull out the cable locks of the transmission control cable assembly.
- (2) Turn the nut 180° counterclockwise and hold it, then lift it up while pushing it toward the vehicle rear to disconnect the transmission control cable assembly from the transmission floor shift assembly.

NOTICE:

Do not over-rotate the nut as it will come off the internal spring and the transmission control cable assembly will not be reusable.

4. REMOVE TRANSMISSION FLOOR SHIFT ASSEMBLY

	<p>NOTICE:</p> <p>Do not drop or impact the transmission floor shift assembly.</p>
--	---

Last Modified: 10-07-2024	6.11:8.1.0	Doc ID: RM100000002G6F4
Model Year Start: 2024	Model: GX550	Prod Date Range: [12/2023 -]
Title: AJA0F (AUTOMATIC TRANSMISSION / TRANSAXLE): SHIFT LEVER: INSPECTION; 2024 MY GX550 [12/2023 -]		

INSPECTION

PROCEDURE

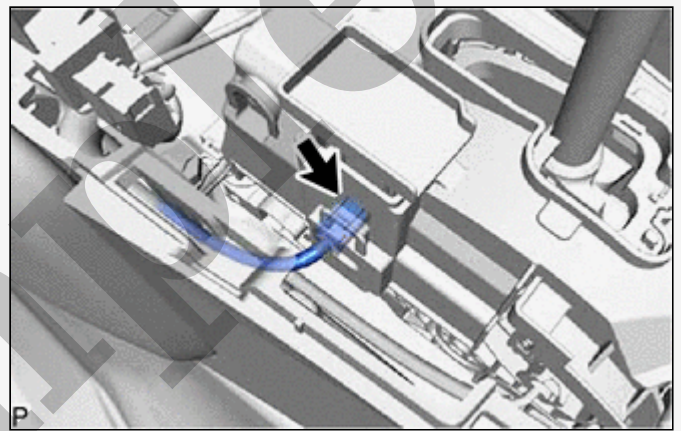
1. INSPECT SHIFT LOCK CONTROL ECU

HINT:

If the results of the following inspections are as specified but a malfunction has occurred, replace the shift lock control unit assembly.

(a) Inspect wire harness:

(1) Disconnect the shift lock control ECU connector.



(2) Measure the voltage according to the value(s) in the table below.

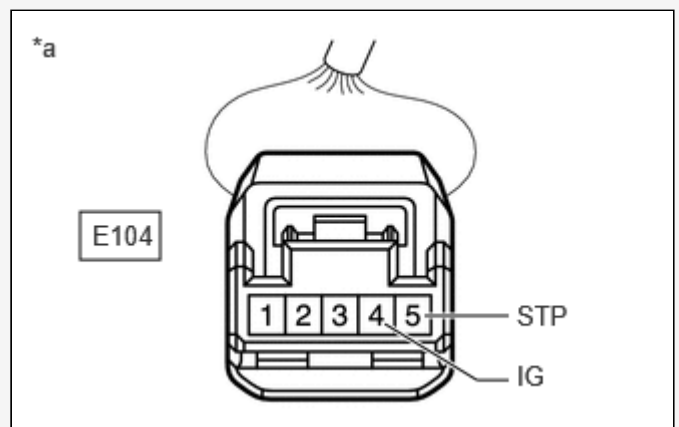
Standard Voltage:



[Click Location & Routing\(E104\).](#)
[Click Connector\(E104\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
E104-5 (STP) - Body ground	Brake pedal depressed	11 to 14 V	V
E104-5 (STP) - Body ground	Brake pedal released	Below 1 V	V
E104-4 (IG) - Body ground	Ignition switch ON	11 to 14 V	V
E104-4 (IG) - Body ground	Ignition switch off	Below 1 V	V

If the result is not as specified, repair or replace the shift lock control ECU wire harness.



*a Front view of wire harness connector (to Shift Lock Control ECU)


TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
E98-3 (SFTU) - E98-2 (E)	Shift lever not held in "+" (Up-shift)	10 k Ω or higher	k Ω
E98-1 (SFTD) - E98-2 (E)	Shift lever held in "-" (Down-shift)	Below 1 Ω	Ω
E98-1 (SFTD) - E98-2 (E)	Shift lever not held in "-" (Down-shift)	10 k Ω or higher	k Ω

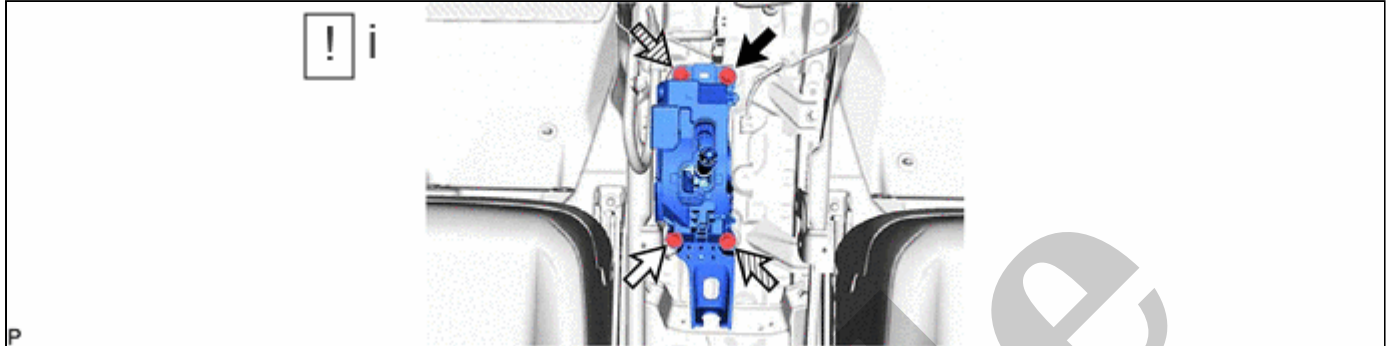
If the result is not as specified, replace the shift lock control unit assembly.





Sample

PROCEDURE

1. INSTALL TRANSMISSION FLOOR SHIFT ASSEMBLY

	<p>NOTICE: Do not drop or impact the transmission floor shift assembly.</p>
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	Bolt A		Bolt B
	Bolt C		Bolt D

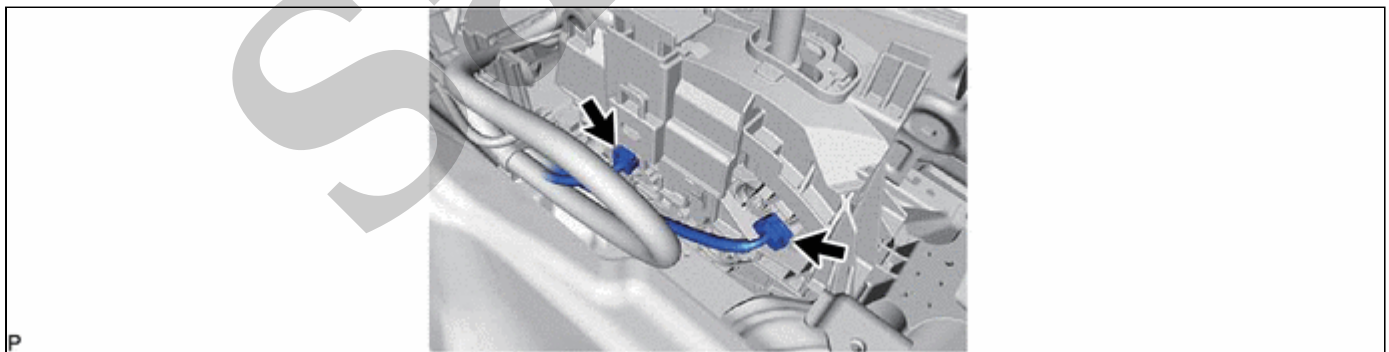
(1) Install the transmission floor shift assembly to the vehicle body with the 4 bolts.

Torque:


12 N·m {122 kgf·cm, 9 ft·lbf}

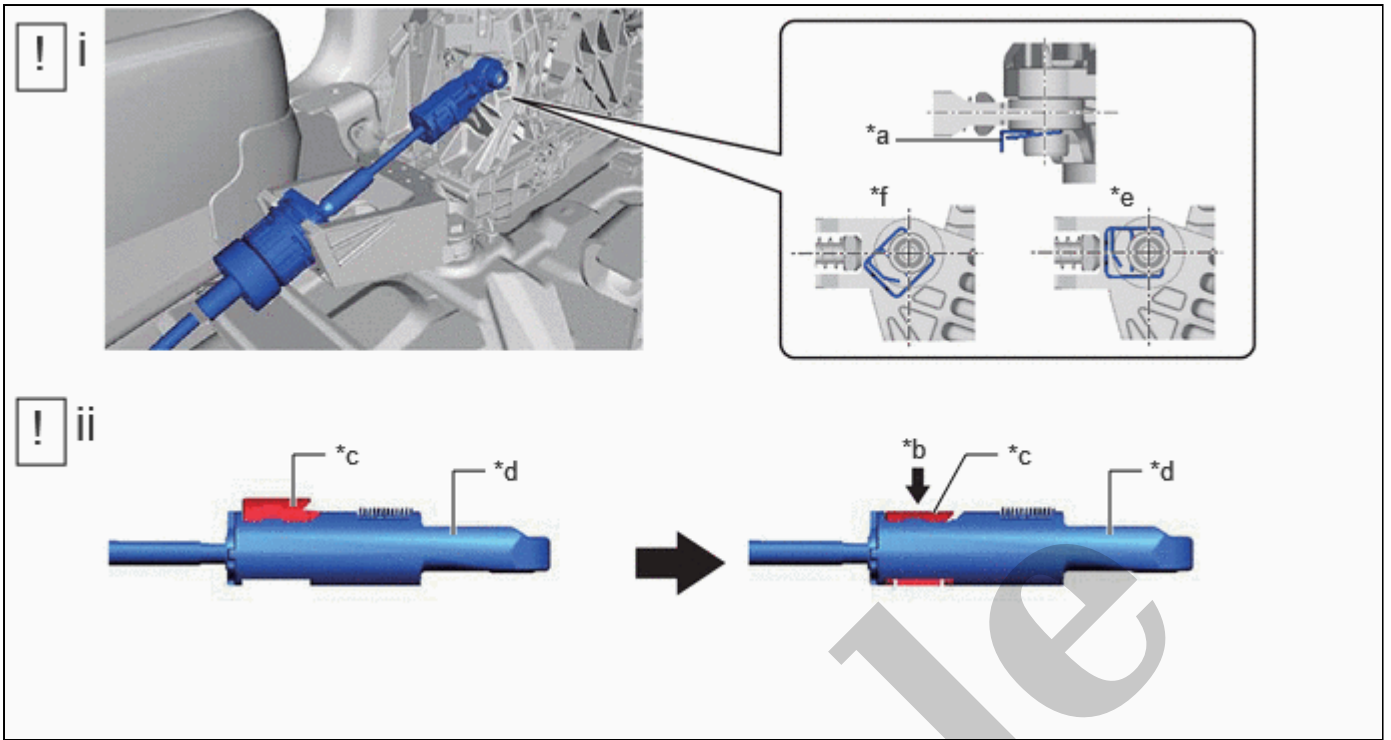
HINT:

Tightening order: Temporarily install bolt A, bolt B, bolt C and bolt D → Tighten bolt A → Tighten bolt B → Tighten bolt C → Tighten bolt D



2. CONNECT TRANSMISSION CONTROL CABLE ASSEMBLY

	<p>NOTICE: Before connecting the transmission control cable assembly, check that the shift lever is in N.</p>
---	--



*a	Clip	*b	Push In
*c	Lock Piece	*d	Adjuster Case
*e	Correct	*f	Incorrect

(1) While engaging the clip as shown in the illustration, connect the transmission control cable assembly to the transmission floor shift assembly.

NOTICE:

- Check that the lock piece is pulled out.
- Push the end of the transmission control cable assembly all the way to the base of the transmission floor shift assembly pin.
- Connect the transmission control cable assembly so that the lock piece faces the passenger side.

(2) Push the lock piece into the adjuster case.

NOTICE:

- Check that the park/neutral position switch assembly and shift lever are in neutral.
- Securely push in the lock piece until it locks.

3. INSTALL REAR CONSOLE BOX ASSEMBLY

- w/ Cool Box:

Click here [INFO](#)

- w/o Cool Box:

Click here [INFO](#)

4. INSPECT SHIFT LEVER POSITION

	Click here INFO
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