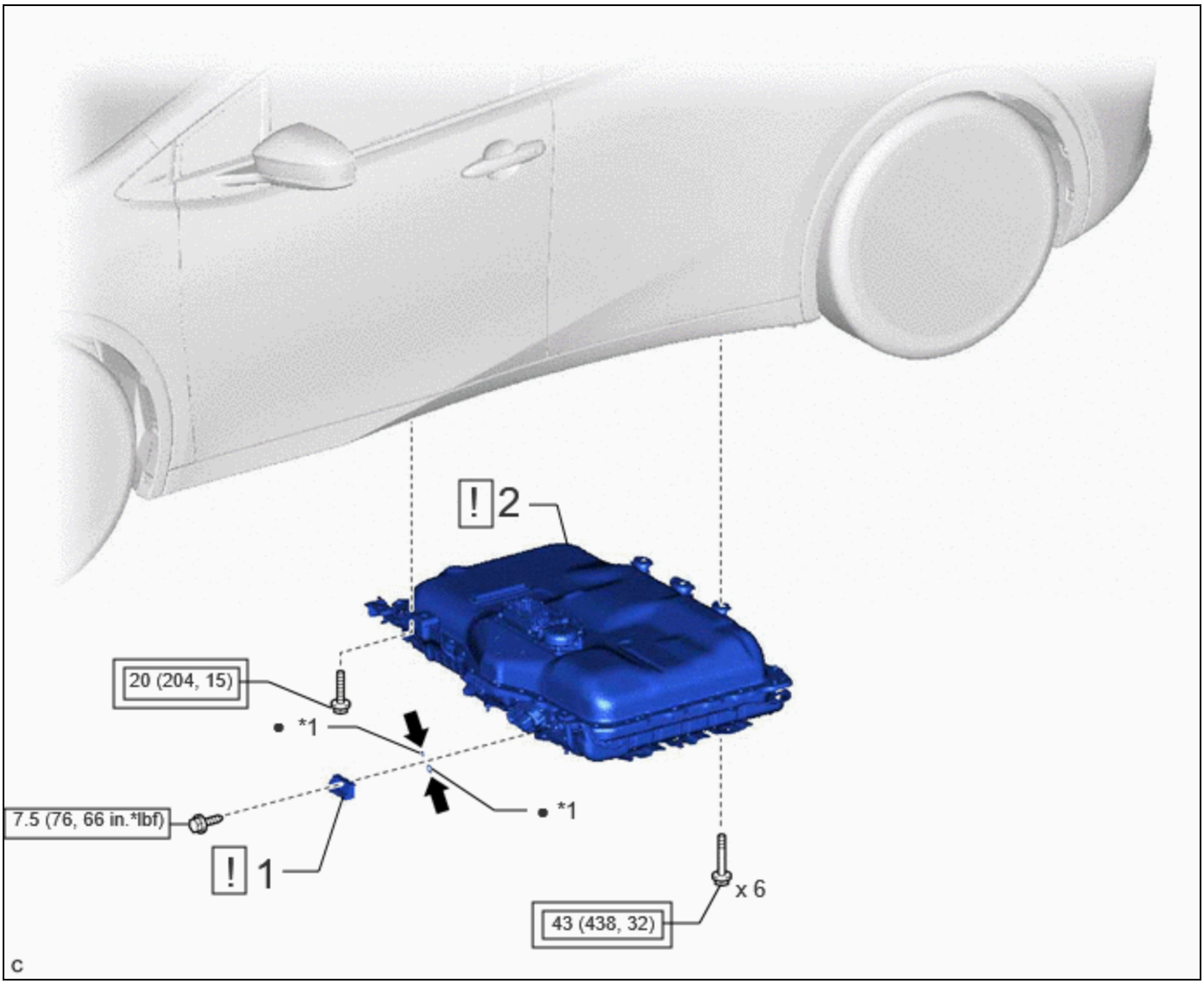
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002B7B6
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HYBRID / BATTERY CONTROL: HV BATTERY (for PHEV Model): INSTALLATION; 2023 - 2024 MY Prius Prime [03/2023 -]		

INSTALLATION

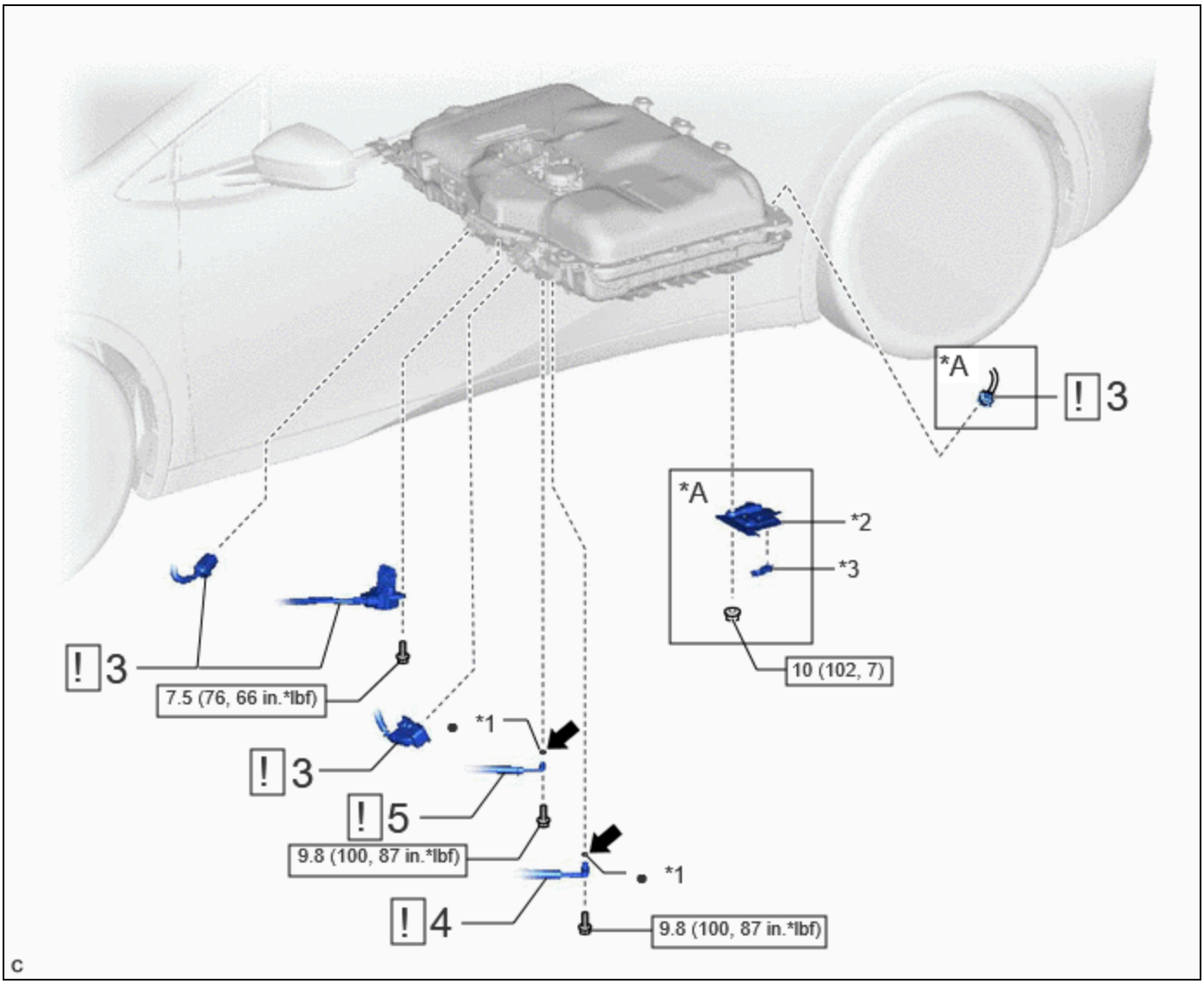
CAUTION / NOTICE / HINT

COMPONENTS (INSTALLATION)



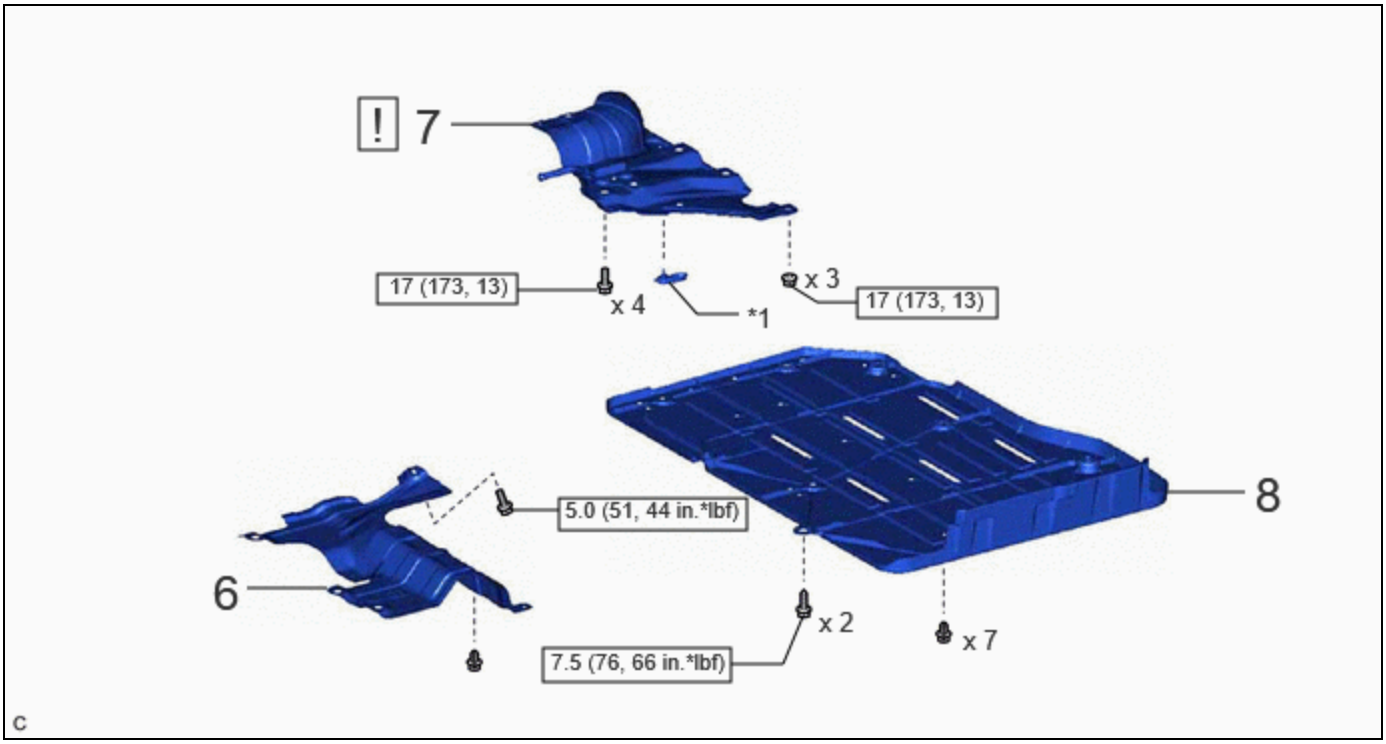
	PROCEDURE	PART NAME CODE	!		
1	VALVE TO CONNECTOR TUBE	88295A	INFO	-	-
2	HV SUPPLY BATTERY ASSEMBLY	G9510	INFO	-	-

*1	O-RING	-	-
▭	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf)	▭	N*m (kgf*cm, ft.*lbf): Specified torque
•	Non-reusable part	➡	Compressor oil ND-OIL 11 or equivalent



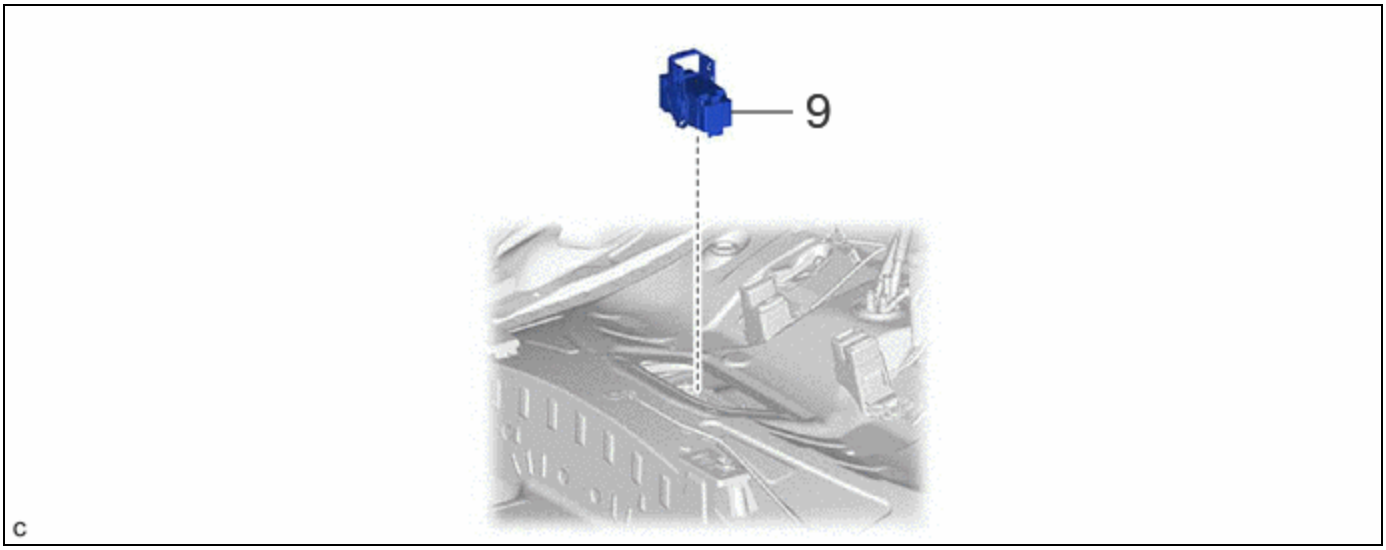
	PROCEDURE	PART NAME CODE	!		⚙
3	FLOOR UNDER WIRE	821H1	INFO	-	-
4	NO. 8 DISCHARGE TUBE	88G15J	INFO	-	-
5	LIQUID TUBE SUB-ASSEMBLY C	88706C	INFO	-	-

*A	w/ Solar Charging System	-	-
*1	O-RING	*2	NO. 20 TRACTION BATTERY BRACKET
*3	NO. 23 TRACTION BATTERY BRACKET	-	-
▭	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf)	▭	N*m (kgf*cm, ft.*lbf): Specified torque
•	Non-reusable part	➡	Compressor oil ND-OIL 11 or equivalent

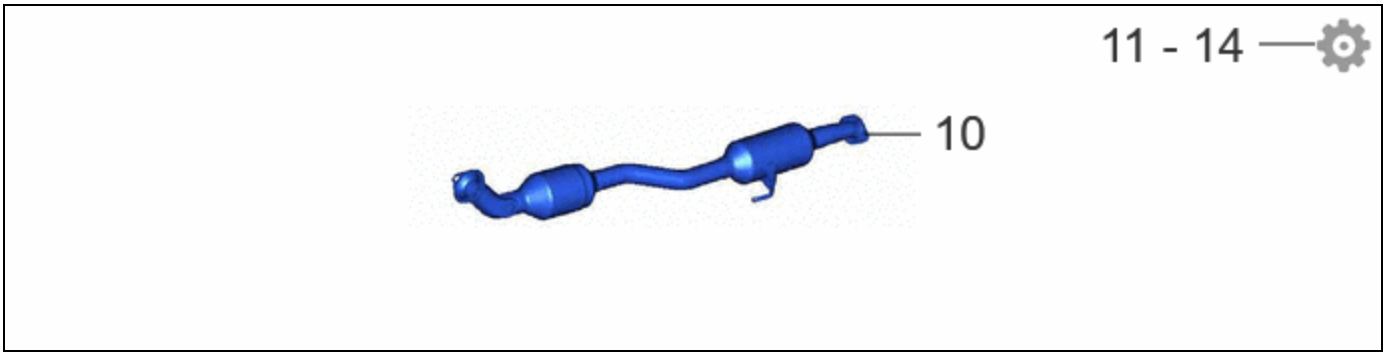


	PROCEDURE	PART NAME CODE	!		⚙
6	NO. 1 CENTER FLOOR HEAT INSULATOR SUB-ASSEMBLY	58043B	-	-	-
7	BATTERY BOX PANEL SUB-ASSEMBLY	57302A	INFO	-	-
8	BATTERY BOX COVER	58219K	-	-	-

*1	NO. 23 TRACTION BATTERY BRACKET	-	-
▭	N*m (kgf*cm, ft.*lbf): Specified torque	-	-



	PROCEDURE	PART NAME CODE	!		⚙
9	SERVICE PLUG GRIP	G3834	-	-	-



	PROCEDURE	PART NAME CODE	!		⚙
10	FRONT EXHAUST PIPE ASSEMBLY	17410	-	-	-
11	CHARGE AIR CONDITIONING SYSTEM WITH REFRIGERANT	-	-	-	INFO
12	WARM UP COMPRESSOR	-	-	-	INFO
13	INSPECT FOR REFRIGERANT LEAK	-	-	-	INFO
14	PERFORM INITIALIZATION	-	-	-	INFO

PROCEDURE

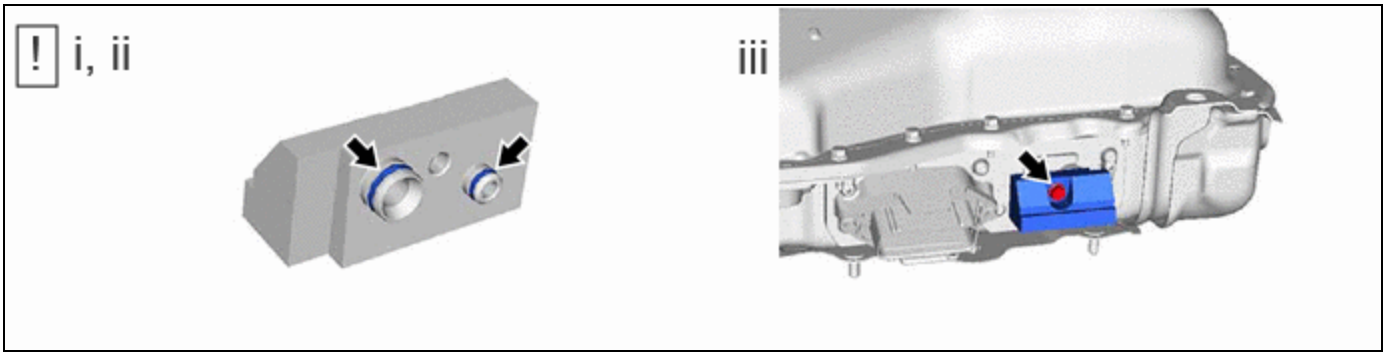
1. INSTALL VALVE TO CONNECTOR TUBE

CAUTION:

Be sure to wear insulated gloves and protective goggles.

NOTICE:

- Do not use any compressor oil other than ND-OIL 11 or equivalent. If any compressor oil other than ND-OIL 11 or equivalent is used, compressor motor insulation performance may decrease, resulting in leakage of electric power.
- Keep the O-ring and O-ring fitting surface free of foreign matter.



(1) Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the HV supply battery assembly.

Compressor Oil:
ND-OIL 11 or equivalent

(2) Install the 2 O-rings to the valve to connector tube.

(3) Install the valve to connector tube to the HV supply battery assembly with the bolt.

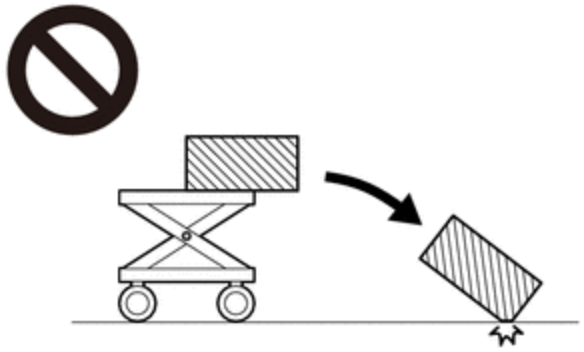
Torque:

7.5 N·m {76 kgf·cm, 66 in·lbf}

2. INSTALL HV SUPPLY BATTERY ASSEMBLY

CAUTION:

- Because the weight of the HV supply battery assembly is extremely heavy, make sure to follow the work procedures described in the repair manual.
- If work is not performed according to the procedures described in the repair manual, there is a danger that the components could fall down.
- Do not damage the HV supply battery assembly with the fork etc.
- Be sure to wear insulated gloves and protective goggles.



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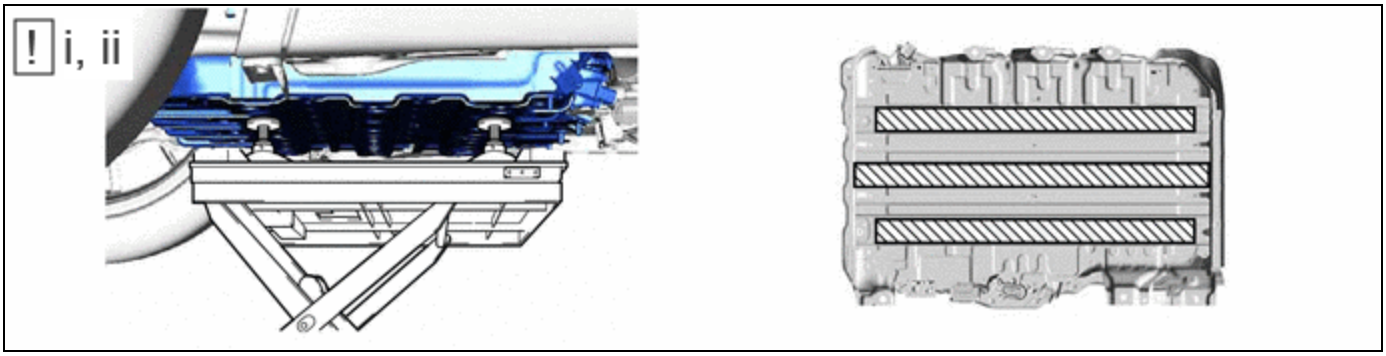


	Area That Can Touch The Ground	-	-

(1) Using an engine lifter and 4 attachments or equivalent tools, support the HV supply battery assembly as shown in the illustration.

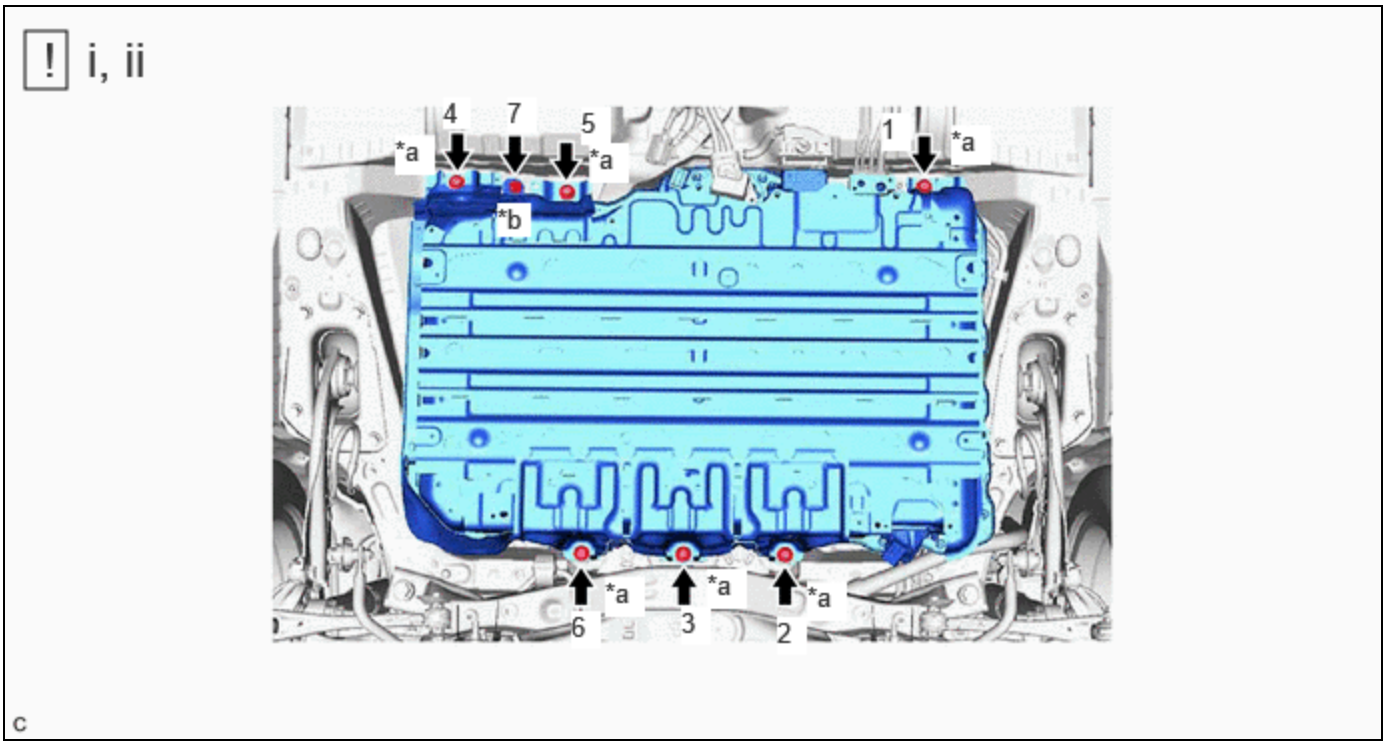
NOTICE:

- Do not allow foreign matter, such as grease or oil, to adhere to the bolts of the HV supply battery assembly.
- To prevent the wire harness from being caught, make sure to bundle the wire harness using insulating tape or equivalent.
- Since the HV supply battery assembly is very heavy, 2 people are needed to remove it. When removing the HV supply battery assembly, be careful not to damage the parts around it.
- When removing/installing/moving the HV supply battery assembly, make sure not to tilt it more than 80°.
- If the HV supply battery assembly has been struck or dropped, replace it.
- Do not apply any load outside of the area that can touch the ground.

(2) Raise the HV supply battery assembly until there is no clearance between the HV supply battery assembly and vehicle.

NOTICE:

Be careful not to drop the HV supply battery assembly.



*a	Bolt (A)	*b	Bolt (B)

	(Bolt Length: 28 mm (1.102 in.))		(Bolt Length: 24 mm (0.945 in.))

Torque:

bolt(A) :

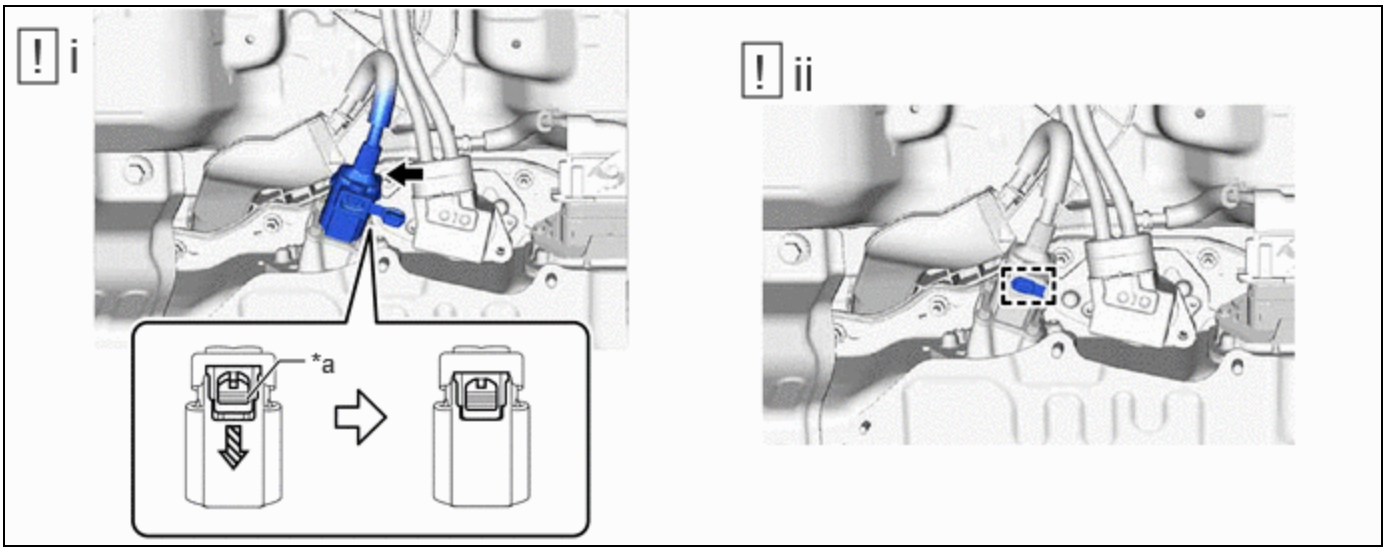
43 N·m {438 kgf·cm, 32 ft·lbf}

bolt(B) :

20 N·m {204 kgf·cm, 15 ft·lbf}

3. CONNECT FLOOR UNDER WIRE

!	**CAUTION:** Be sure to wear insulated gloves and protective goggles.

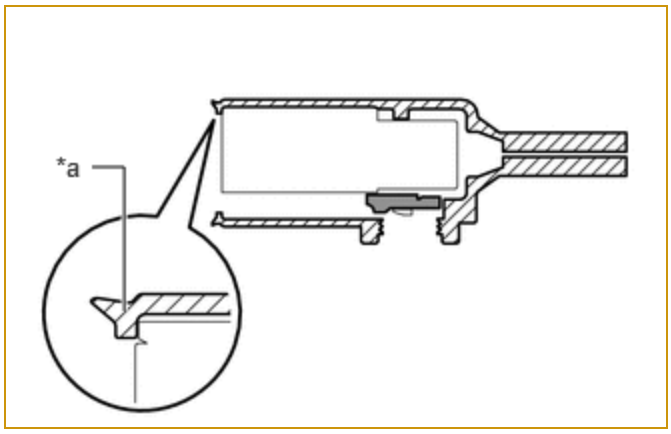


*a	Green-colored Lock	-	-
⇨	Slide	-	-

(1) Connect the connector and slide the green-colored lock as shown in the illustration to lock it securely.

NOTICE:

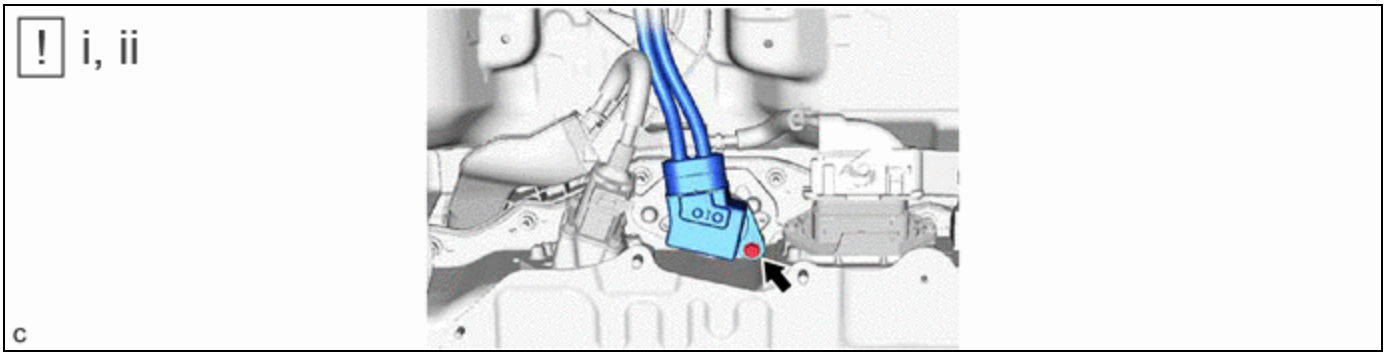
- Check that the waterproofing lip covers the connector ends.



*a	Waterproofing Lip

- Check that there are no foreign substances attached within the connector and to the waterproofing lip.

(2) Slide the rubber cap as shown in the illustration and engage it.



(1) Connect the floor under wire to the HV supply battery assembly.

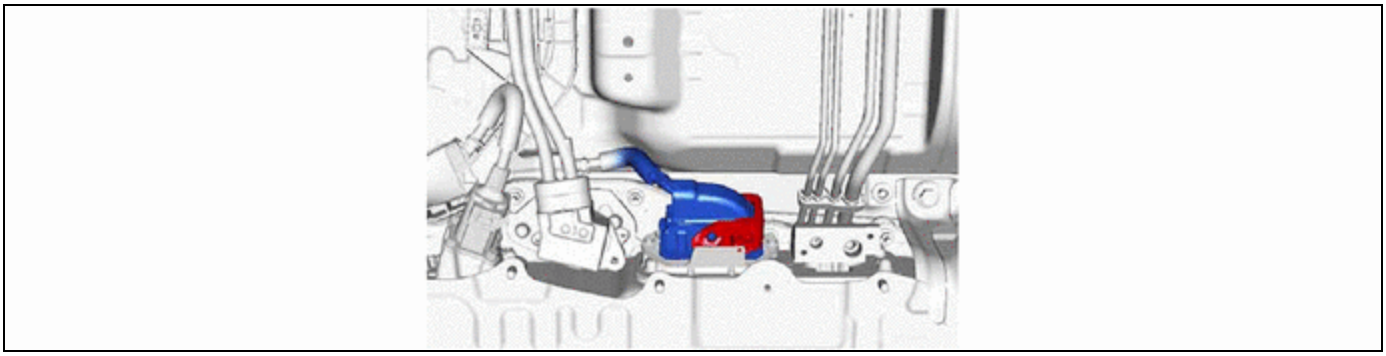
NOTICE:

Make sure that the connectors are connected securely.

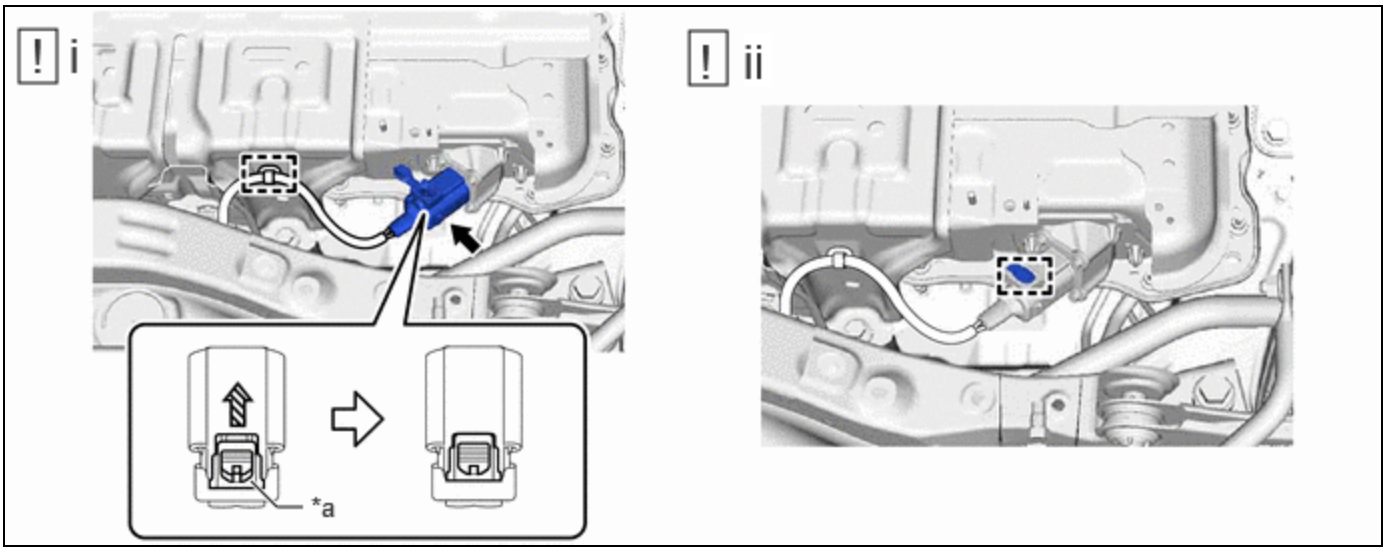
(2) Install the bolt.

Torque:

7.5 N·m {76 kgf·cm, 66 in·lbf}



(d) w/ Solar Charging System:



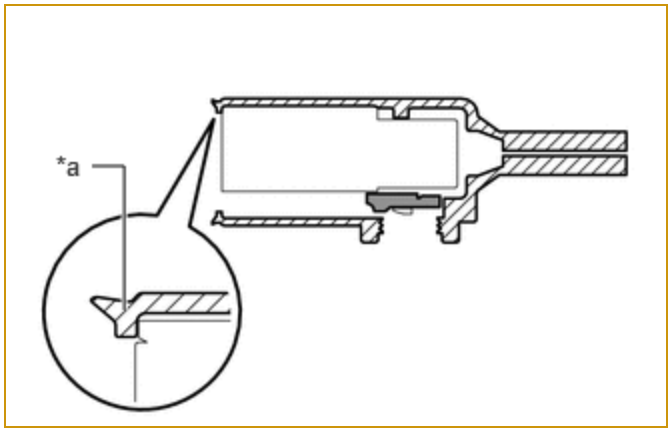
*a	Green-colored Lock	-	-
⇒	Slide	-	-

(1) Engage the clamp.

(2) Connect the connector and slide the green-colored lock as shown in the illustration to lock it securely.

NOTICE:

- Check that the waterproofing lip covers the connector ends.

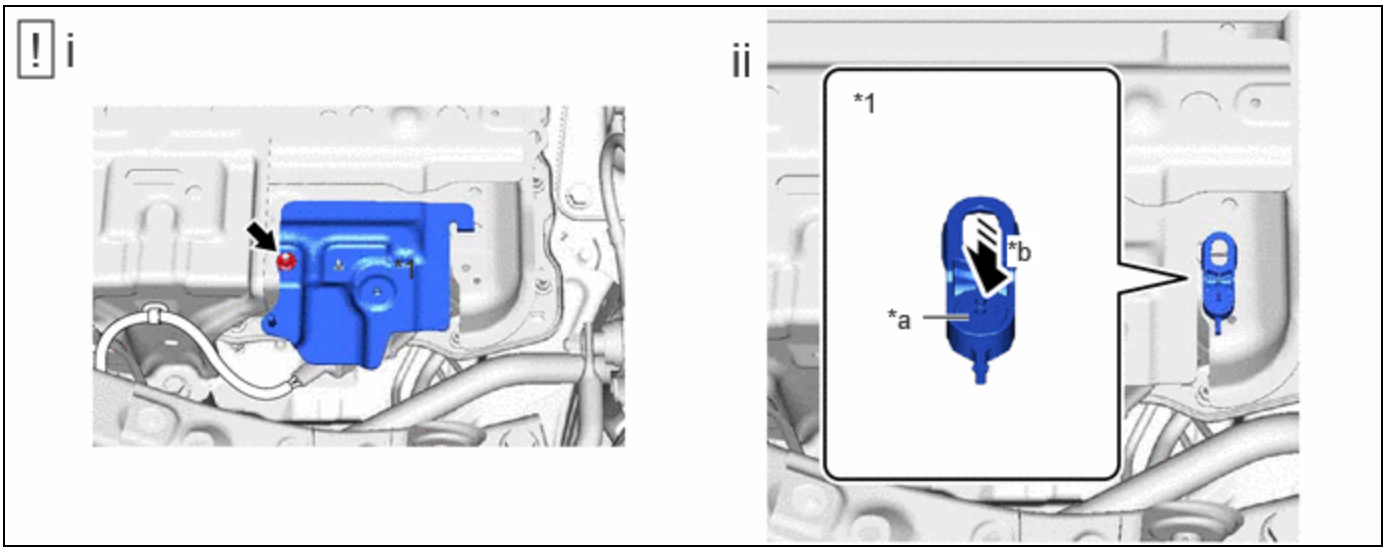


*a	Waterproofing Lip

- Check that there are no foreign substances attached within the connector and to the waterproofing lip.

(3) Slide the rubber cap as shown in the illustration and engage it.

(e) w/ Solar Charging System:



*1	No.23 Traction Battery Bracket	-	-
*a	Button	*b	Push

(1) Install the No.20 traction battery bracket to the HV battery with the nut.

Torque:

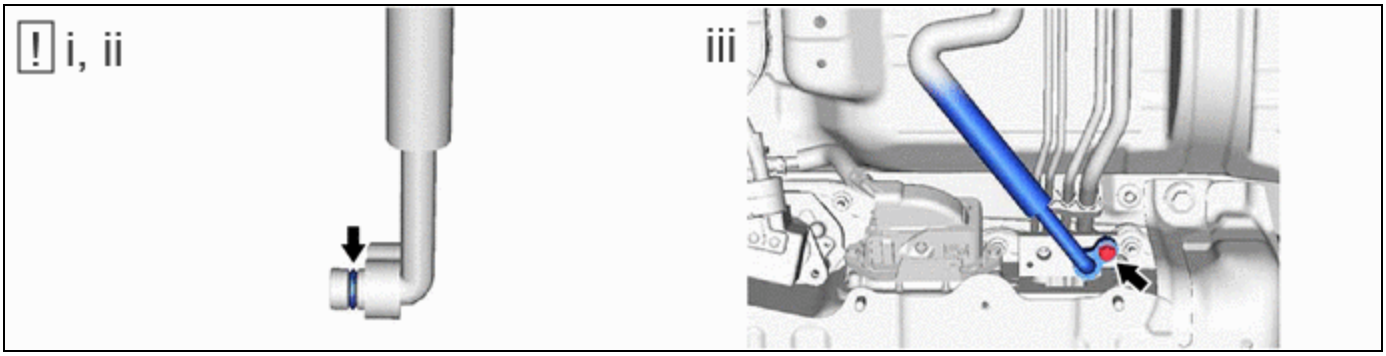
10 N·m {102 kgf·cm, 7 ft·lbf}

(2) Install the No.23 traction battery bracket, then push the button to lock it.

4. CONNECT NO. 8 DISCHARGE TUBE

CAUTION:

Be sure to wear insulated gloves and protective goggles.



(1) Sufficiently apply compressor oil to a new O-ring and the fitting surface of the No. 8 discharge tube.

Compressor Oil:

ND-OIL 11 or equivalent

NOTICE:

Do not use any compressor oil other than ND-OIL 11 or equivalent. If any compressor oil other than ND-OIL 11 or equivalent is used, compressor motor insulation performance may decrease, resulting in leakage of electric power.

(2) Install the O-ring to the No. 8 discharge tube.

NOTICE:

Keep the O-ring and O-ring fitting surface free of foreign matter.

(3) Install the No. 8 discharge tube to the HV supply battery assembly with the bolt.

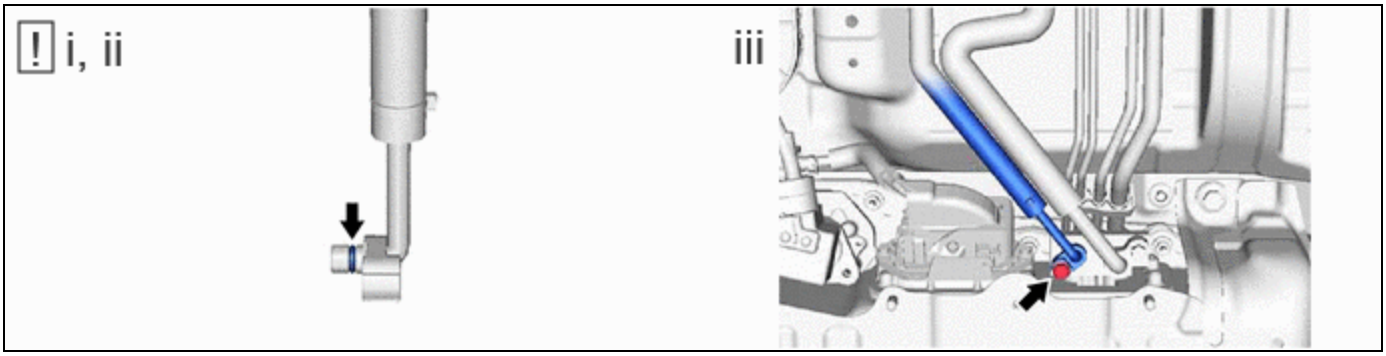
Torque:

9.8 N·m {100 kgf·cm, 87 in·lbf}

5. CONNECT LIQUID TUBE SUB-ASSEMBLY C

CAUTION:

Be sure to wear insulated gloves and protective goggles.



(1) Sufficiently apply compressor oil to a new O-ring and the fitting surface of the liquid tube sub-assembly c.

Compressor Oil:

ND-OIL 11 or equivalent

NOTICE:

Do not use any compressor oil other than ND-OIL 11 or equivalent. If any compressor oil other than ND-OIL 11 or equivalent is used, compressor motor insulation performance may decrease, resulting in leakage of electric power.

(2) Install the O-ring to the liquid tube sub-assembly c.

NOTICE:

Keep the O-ring and O-ring fitting surface free of foreign matter.

(3) Install the liquid tube sub-assembly c to the HV supply battery assembly with the bolt.

Torque:

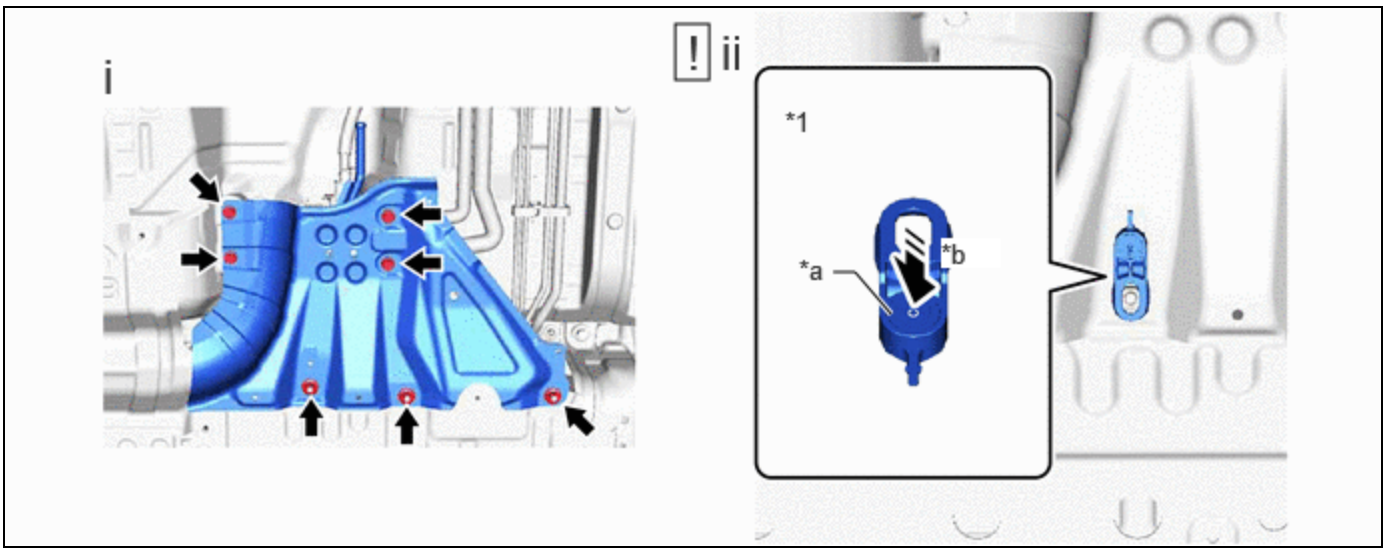
9.8 N·m {100 kgf·cm, 87 in·lbf}

6. INSTALL NO. 1 CENTER FLOOR HEAT INSULATOR SUB-ASSEMBLY

Torque:

5.0 N·m {51 kgf·cm, 44 in·lbf}

7. INSTALL BATTERY BOX PANEL SUB-ASSEMBLY



*1	No.23 Traction Battery Bracket	-	-
*a	Button	*b	Push

(1) Install the battery box panel sub-assembly with the 4 bolts and 3 nuts.

Torque:

17 N·m {173 kgf·cm}

(2) Install the No.23 traction battery bracket, then push the button to lock it.

8. INSTALL BATTERY BOX COVER

Torque:

7.5 N·m {76 kgf·cm, 6 ft·lbf}

9. INSTALL SERVICE PLUG GRIP

Click here INFO

10. INSTALL EXHAUST PIPE ASSEMBLY FRONT

Click here INFO

11. CHARGE AIR CONDITIONING SYSTEM WITH REFRIGERANT

Click here INFO

12. WARM UP COMPRESSOR

Click here INFO

13. INSPECT FOR REFRIGERANT LEAK

Click here INFO

14. PERFORM INITIALIZATION

Click here INFO