

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002AXE3
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: HEATING / AIR CONDITIONING: COMPRESSOR (for M20A-FXS): REMOVAL; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

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 compressor removal/installation are shown below.

CAUTION:

- Orange wire harnesses and connectors indicate high-voltage circuits. To prevent electric shock, always follow



the procedure described in the repair manual.

[Click here](#) 

- To prevent electric shock, wear insulated gloves when working on wire harnesses and components of the high



voltage system.

CAUTION / NOTICE / HINT

NOTICE:

- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

Click here [INFO](#)

- If metal dust is produced inside the cooler compressor assembly, it could cause a clog in the modulator. If any metal dust comes out, replace the cooler dryer inside the modulator also.

Click here [INFO](#)

HINT:

When the cable is disconnected / reconnected to the auxiliary battery terminal, systems temporarily stop operating. However, each system has a function that completes learning the first time the system is used.

Learning completes when vehicle is driven

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURES ARE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Front Camera System	Drive the vehicle straight ahead at 35 km/h (22 mph) or more for 5 seconds or more.	INFO

Learning completes when vehicle is operated normally

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURES ARE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Power Door Lock Control System*1 <ul style="list-style-type: none"> Back door opener 	Perform door unlock operation with door control switch or electrical key transmitter sub-assembly switch.	INFO
Power Back Door System*2	Reset back door close position	INFO
Air Conditioning System	<p>for HEV Model:</p> <p>After the ignition switch is turned to ON, the servo motor standard position is recognized.</p> <p>for PHEV Model:</p>	-

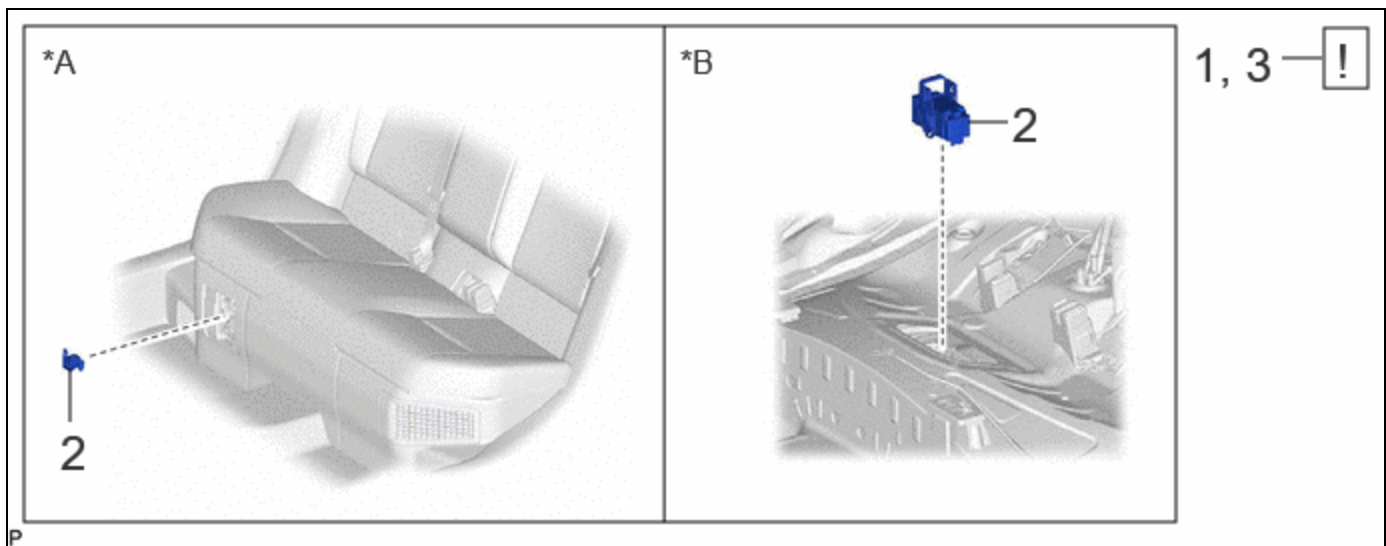
*1: w/o Power Back Door System

*2: w/ Power Back Door System

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURES ARE NOT PERFORMED	NECESSARY PROCEDURES	LINK
	After the ignition switch is turned to ON, the servo motor and expansion valve standard position is recognized.	
<p>*1: w/o Power Back Door System</p> <p>*2: w/ Power Back Door System</p>		

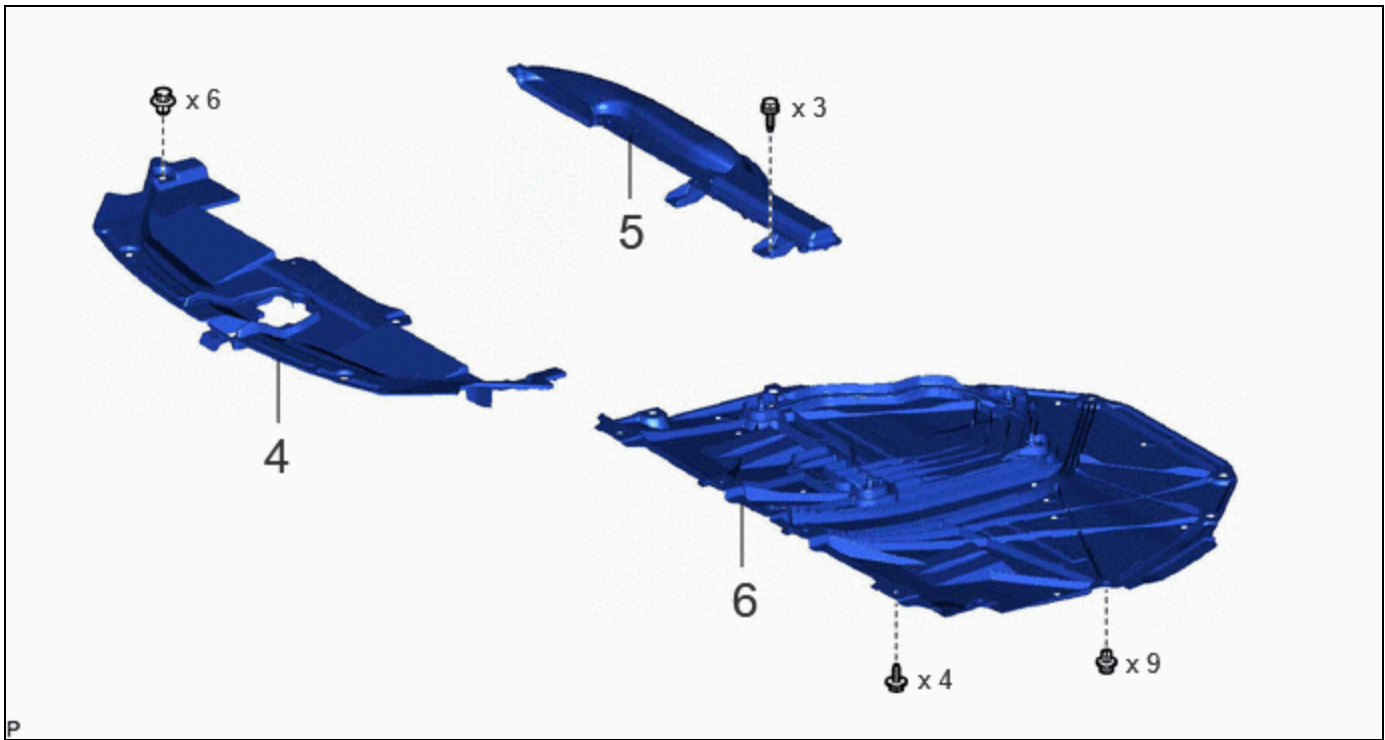
CAUTION / NOTICE / HINT

COMPONENTS (REMOVAL)

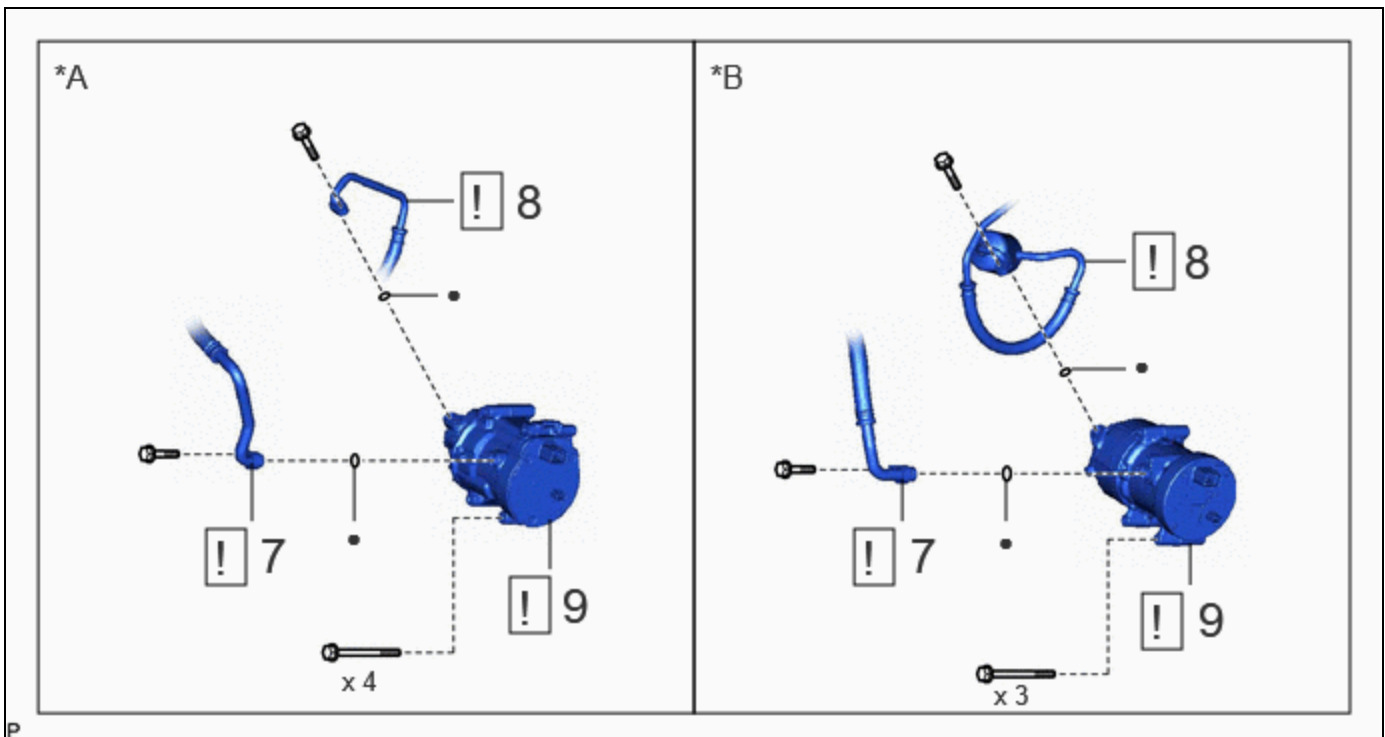





	PROCEDURE	PART NAME CODE	!	📄	⚙️
1	REFRIGERANT FROM REFRIGERATION SYSTEM	-	INFO	-	-
2	SERVICE PLUG GRIP	G3834	-	-	-
3	CHECK TERMINAL VOLTAGE	-	INFO	-	-

*A	for HEV Model	*B	for PHEV Model
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PROCEDURE		PART NAME CODE	!	📄	⚙️
4	RADIATOR SUPPORT OPENING COVER	53289A	-	-	-
5	INLET NO. 1 AIR CLEANER	17751	-	-	-
6	NO. 1 ENGINE UNDER COVER ASSEMBLY	51410	-	-	-



	PROCEDURE	PART NAME CODE			
7	SUCTION HOSE SUB-ASSEMBLY	88704	INFO	-	-
8	DISCHARGE HOSE SUB-ASSEMBLY	88703	INFO	-	-
9	COMPRESSOR WITH MOTOR ASSEMBLY	88370	INFO	-	-

*A	for HEV Model	*B	for PHEV Model
•	Non-reusable part	-	-

PROCEDURE

1. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

(a) for HFC-134a (R134a):

Click here [INFO](#)

(b) for HFO-1234yf (R1234yf):

(1) for HEV Model:

Click here [INFO](#)

(2) for PHEV Model:

Click here [INFO](#)

2. REMOVE SERVICE PLUG GRIP

(a) for HEV Model:

Click here [INFO](#)

(b) for PHEV Model:

Click here [INFO](#)

3. CHECK TERMINAL VOLTAGE

	Click here INFO
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4. REMOVE RADIATOR SUPPORT OPENING COVER

Click here [INFO](#)

5. REMOVE INLET NO. 1 AIR CLEANER

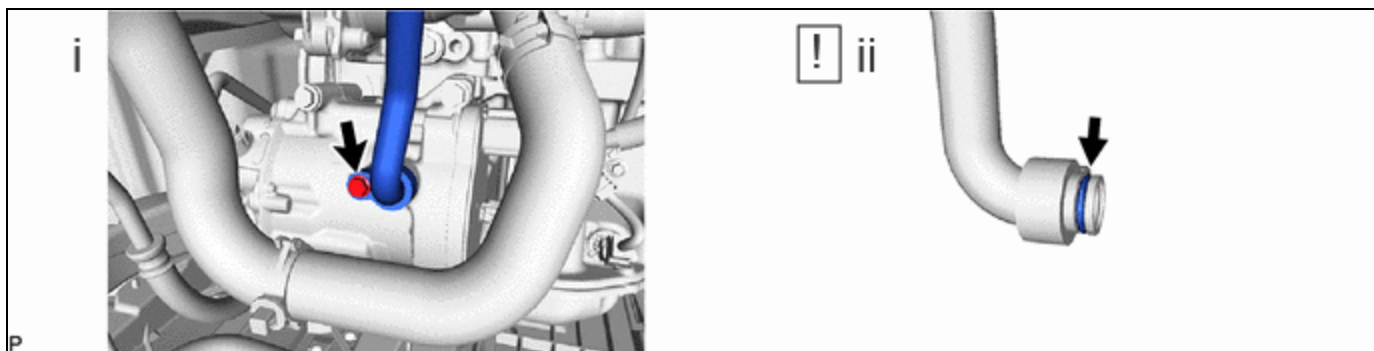
Click here [INFO](#)

6. REMOVE NO. 1 ENGINE UNDER COVER ASSEMBLY

Click here [INFO](#)

7. DISCONNECT SUCTION HOSE SUB-ASSEMBLY

(a) for HEV Model:

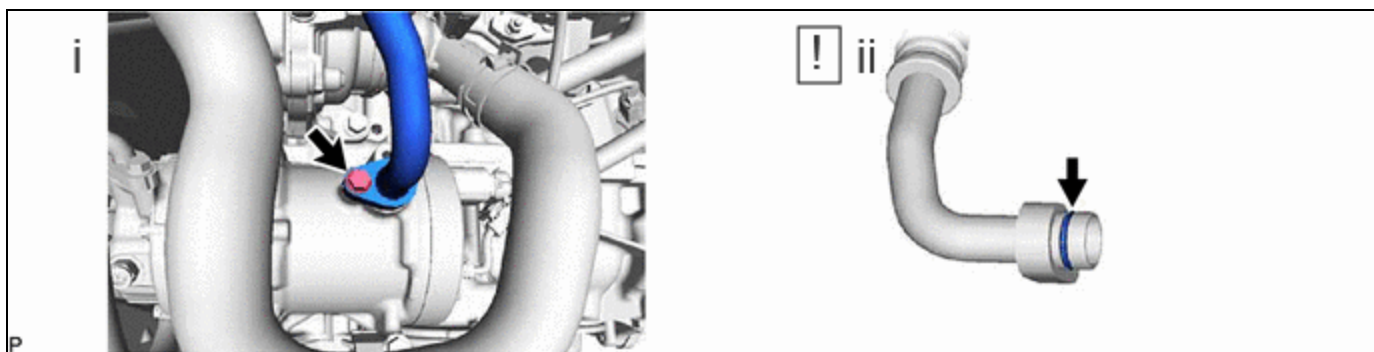


- (1) Remove the bolt and disconnect the suction hose sub-assembly from the compressor with motor assembly.
- (2) Remove the O-ring from the suction hose sub-assembly.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

(b) for PHEV Model:



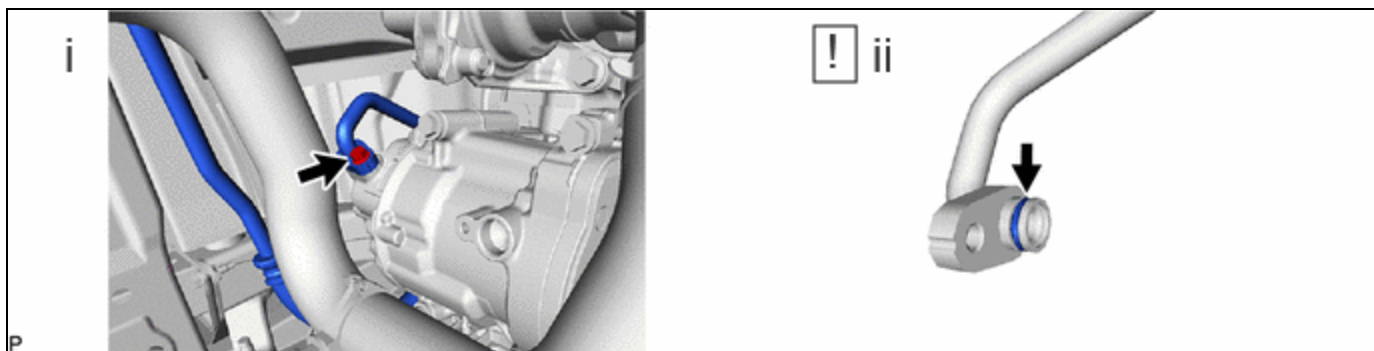
- (1) Remove the bolt and disconnect the suction hose sub-assembly from the compressor with motor assembly.
- (2) Remove the O-ring from the suction hose sub-assembly.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

8. DISCONNECT DISCHARGE HOSE SUB-ASSEMBLY

(a) for HEV Model:

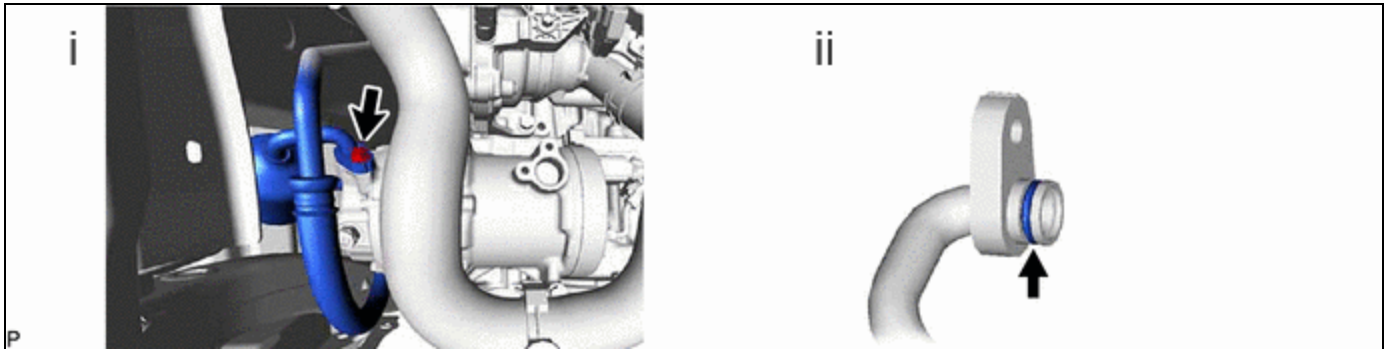


- (1) Remove the bolt and disconnect the discharge hose sub-assembly from the compressor with motor assembly.
- (2) Remove the O-ring from the discharge hose sub-assembly.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

(b) for PHEV Model:



(1) Remove the bolt and disconnect the discharge hose sub-assembly from the compressor with motor assembly.

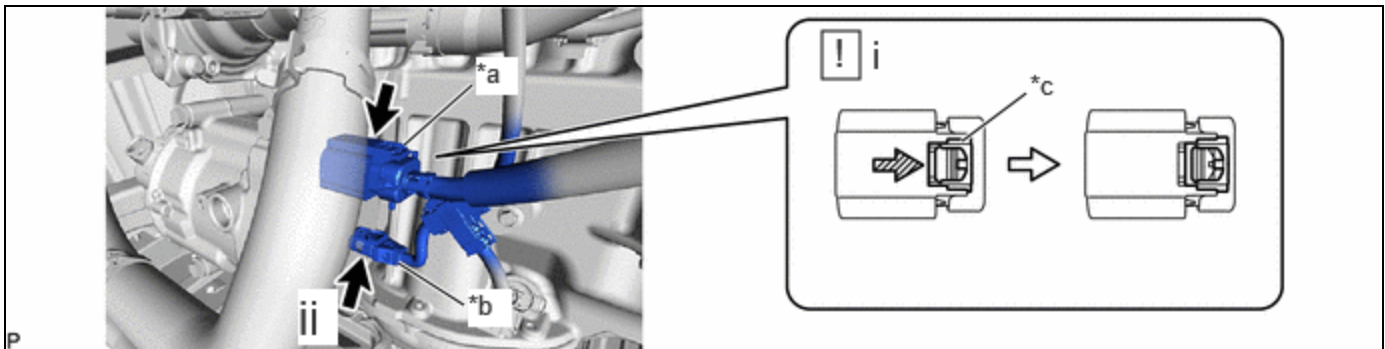
(2) Remove the O-ring from the discharge hose sub-assembly.


NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

9. REMOVE COMPRESSOR WITH MOTOR ASSEMBLY

(a) for HEV Model:



*a	Connector (A)	*b	Connector (B)
*c	Green-colored Lock	-	-
	Slide	-	-

(1) Slide the green-colored lock of the connector (A) as shown in the illustration to release it and disconnect the connector.

CAUTION:

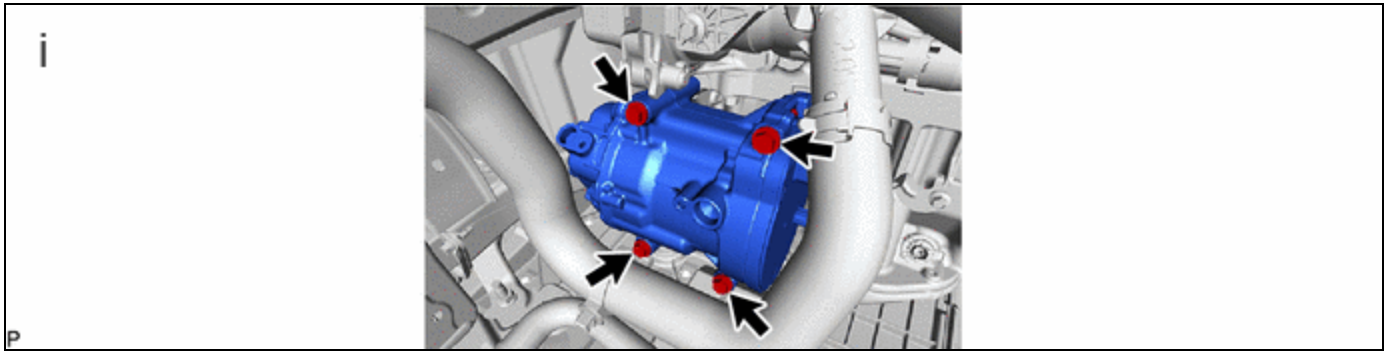
Make sure to wear insulated gloves.

NOTICE:

Insulate the disconnected terminals and connector (A) with insulating tape.

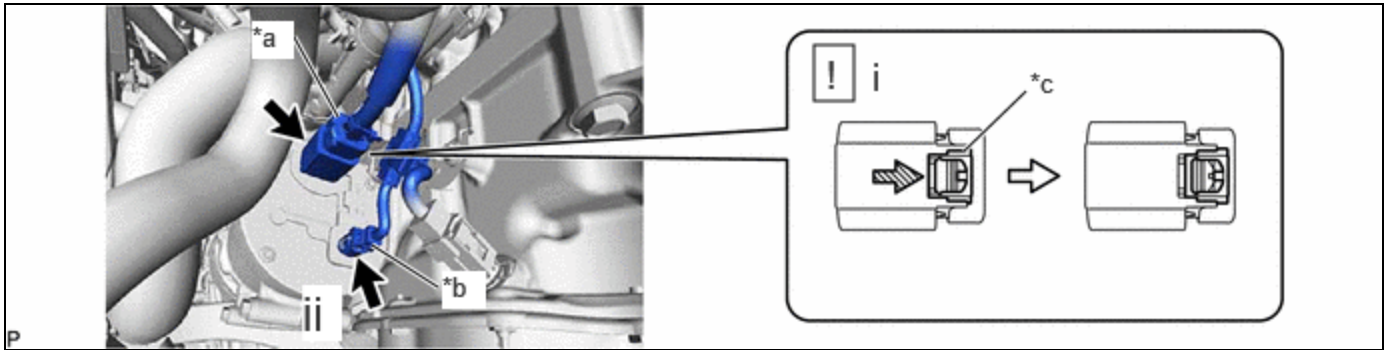
(2) Disconnect the connector (B).

(b) for HEV Model:



(1) Remove the 4 bolts and compressor with motor assembly.

(c) for PHEV Model:



*a	Connector (A)	*b	Connector (B)
*c	Green-colored Lock	-	-
	Slide	-	-

(1) Slide the green-colored lock of the connector (A) as shown in the illustration to release it and disconnect the connector.

CAUTION:

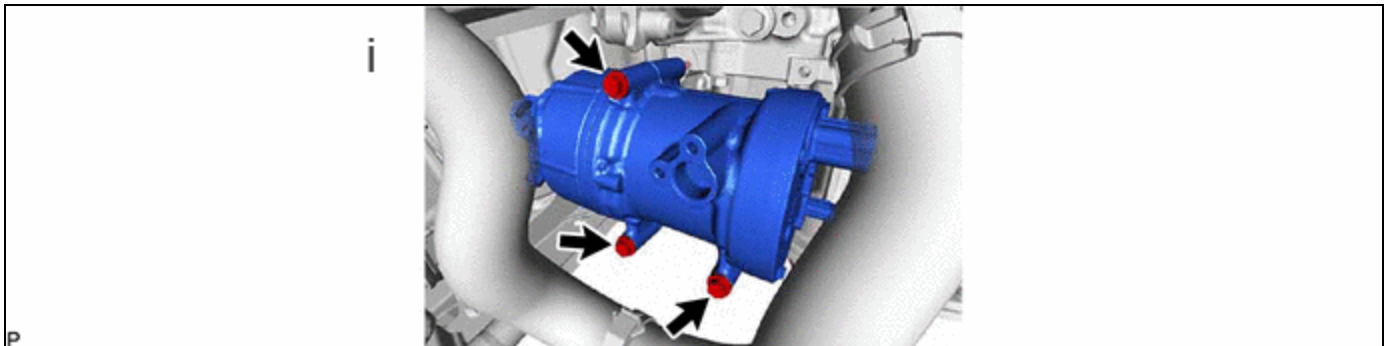
Make sure to wear insulated gloves.

NOTICE:

Insulate the disconnected terminals and connector (A) with insulating tape.

(2) Disconnect the connector (B).

(d) for PHEV Model:



(1) Remove the 3 bolts and compressor with motor assembly.

