**TECHNICAL INSTRUCTIONS**

**FOR**

**SAFETY RECALL 25LA04**

**HVAC DEFROSTER ISSUE**

**CERTAIN MODEL YEAR 2023 - 2025 RZ**

**Updated**
**09.30.2025 – Updated Freon Type and Amount**

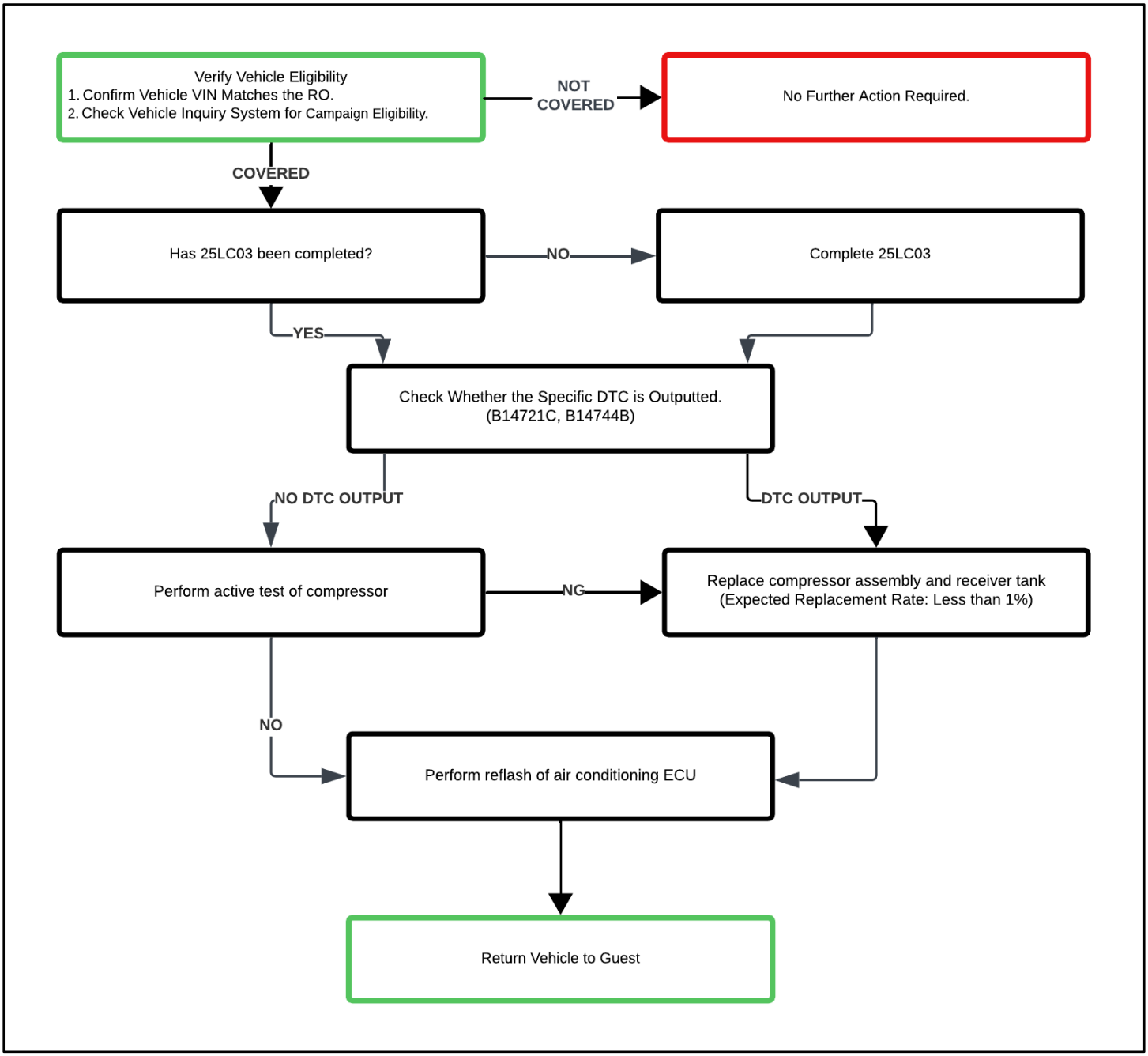
**The repair quality of covered vehicles is extremely important to Lexus. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to currently have completed the following courses:**

**- LIC209A – Electrified Powertrain Vehicle Repair**

**Always check which technicians can perform the repair by logging on to https://lexuscertification.com/certlogin.jsp. It is the dealership's responsibility to select technicians that have completed the above courses to perform this repair. Carefully review your resources, the technician's skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.**

# I. OPERATION FLOW CHART

**The flow chart is for reference only. *DO NOT* use it in place of the full technical instructions. Follow *ALL* steps as outlined in the full technical instructions to confirm the campaign is completed correctly.**



## II. IDENTIFICATION OF AFFECTED VEHICLES

### 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

a) Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
b) Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

**NOTICE:**
**TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.**

## III. PREPARATION

### A. PARTS

| Part Number | Part Description | Quantity |
|---|---|---|
| 00289-1234Y-F01 | R1234YF Freon | As Needed |
| 04005-30242 | COMPRESSOR ASSY, W/MOTOR | As Needed |

* The kit above includes the following parts.

| Part Number | Part Name | Quantity |
|---|---|---|
| 88370-42051 | COMPRESSOR WITH MOTOR ASSEMBLY | 1 |
| 88470-42110 | RECEIVER TANK | 1 |
| 90099-14169 | O-RING, SUCTION HOSE | 2 |
| 90099-14120 | O-RING, NO.1 DISCHARGE HOSE | 3 |
| 90099-14119 | O-RING, RECEIVER TANK | 2 |
| 90099-14157 | O-RING, NO.2 AIR CONDITIONING HOSE AND ACCESSORY | 2 |

### B. TOOLS, SUPPLIES & EQUIPMENT

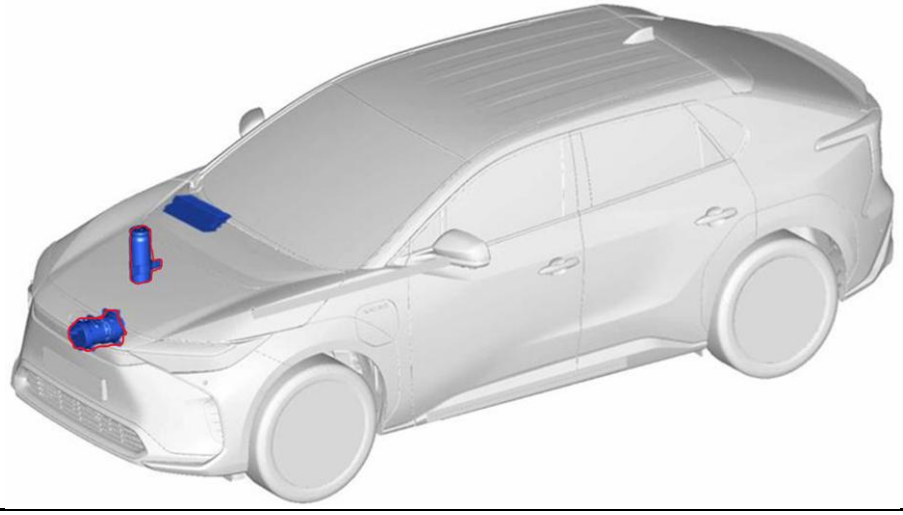
- Insulated Tool Set
- Voltmeter Set
- GTS+ (Global Tech Stream+)
- Battery Tester
- Torque wrench
- Torque Socket Wrench E8
- Halogen Leak Detector

### C. MATERIALS

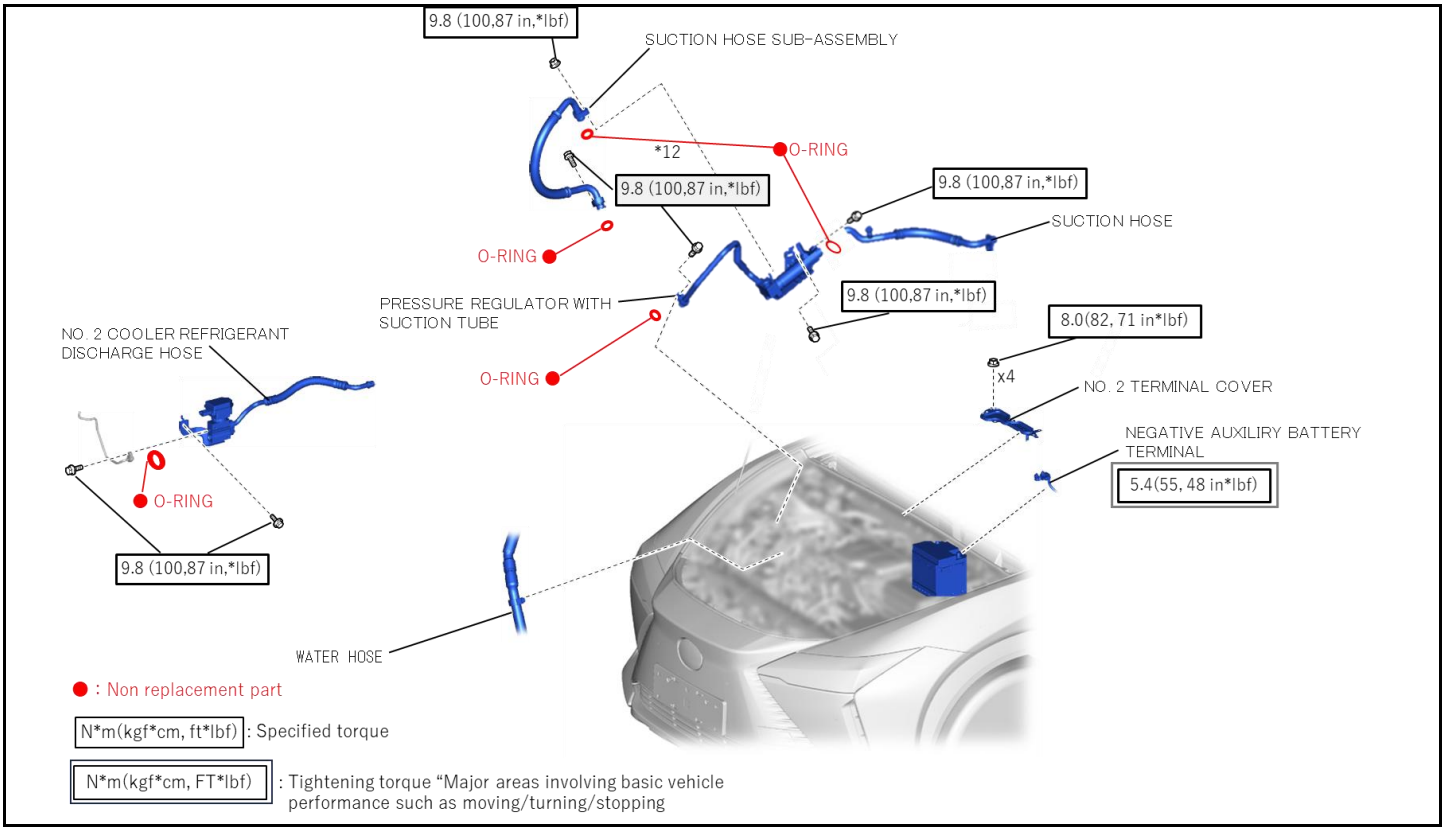
- HFO-1234yf (R1234yf)
- Brake Cleaner
- Cloths
- Protective Tape
- Goggles
- Insulated Gloves
- ND-11 Oil
- Paper Towel
- Battery Charger

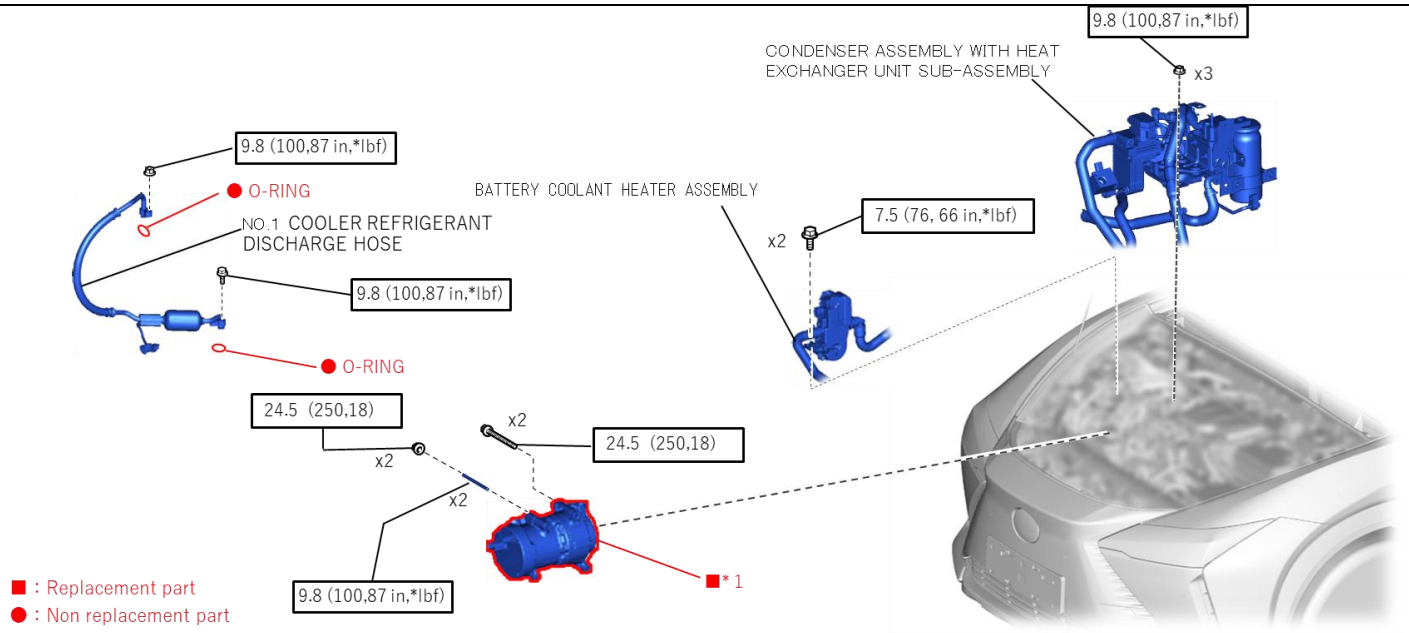
## IV. WORK PROCEDURE TABLE OF CONTENTS

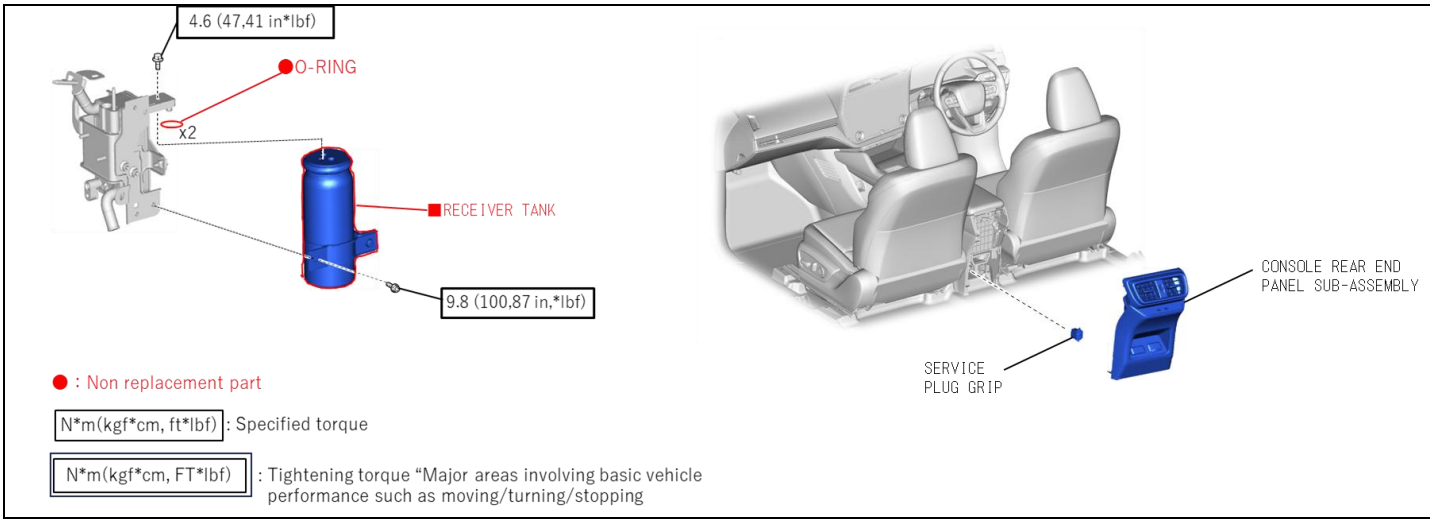
## V. BACKGROUND



## VI. COMPONENTS




9.8 (100,87 in,*lbf)
CONDENSER ASSEMBLY WITH HEAT EXCHANGER UNIT SUB-ASSEMBLY
x3
9.8 (100,87 in,*lbf)
O-RING
NO.1 COOLER REFRIGERANT DISCHARGE HOSE
BATTERY COOLANT HEATER ASSEMBLY
7.5 (76, 66 in,*lbf)
x2
9.8 (100,87 in,*lbf)
O-RING
24.5 (250,18)
x2
x2
x2
24.5 (250,18)
*1
9.8 (100,87 in,*lbf)
■ : Replacement part
● : Non replacement part
N*m(kgf*cm, ft*lbf) : Specified torque
N*m(kgf*cm, FT*lbf) : Tightening torque "Major areas involving basic vehicle performance such as moving/turning/stopping


4.6 (47,41 in*lbf)
O-RING
x2
RECEIVER TANK
9.8 (100,87 in,*lbf)
CONSOLE REAR END PANEL SUB-ASSEMBLY
SERVICE PLUG GRIP
● : Non replacement part
N*m(kgf*cm, ft*lbf) : Specified torque
N*m(kgf*cm, FT*lbf) : Tightening torque "Major areas involving basic vehicle performance such as moving/turning/stopping

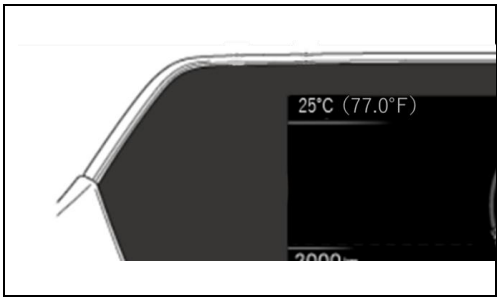
## VII. ACTIVE TEST OF COMPRESSOR

### 1. CONFIRM 25LC03 HAS BEEN COMPLETED

**Yes: Continue to step 2**
**No; Complete 25LC03 before going to step 2.**

### 2. CHECK FOR DTCs

a) Connect the GTS+ and confirm one or both of the following DTCs are present as below.
DTC:
・B14721C (A/C Inverter High Voltage Output Circuit Voltage Out of Range)
・B14744B (A/C Inverter Cooling/Heating Over Temperature)
**If DTC is present, go to section VIII, If no DTC is present proceed to next step.**




### 2. ACTIVE TEST FOR REFRIGERANT OUTLET TEMPERATURE

a) Check for the temperature of meter.

**HINT:**
**The method for inspecting the compressor varies depending on the outside air temperature measured by the meter.**

| Outside temperature | Inspection mode |
|---|---|
| Under 77.0℉ (25℃) | A/C OFF |
| Over 77.0℉ (25℃) | A/C ON |

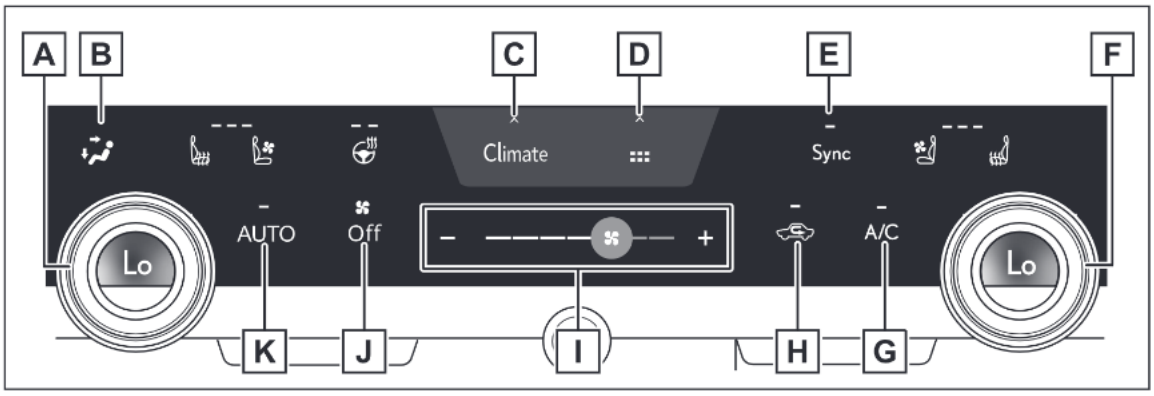
b) Operate the air conditioner under the conditions shown below:

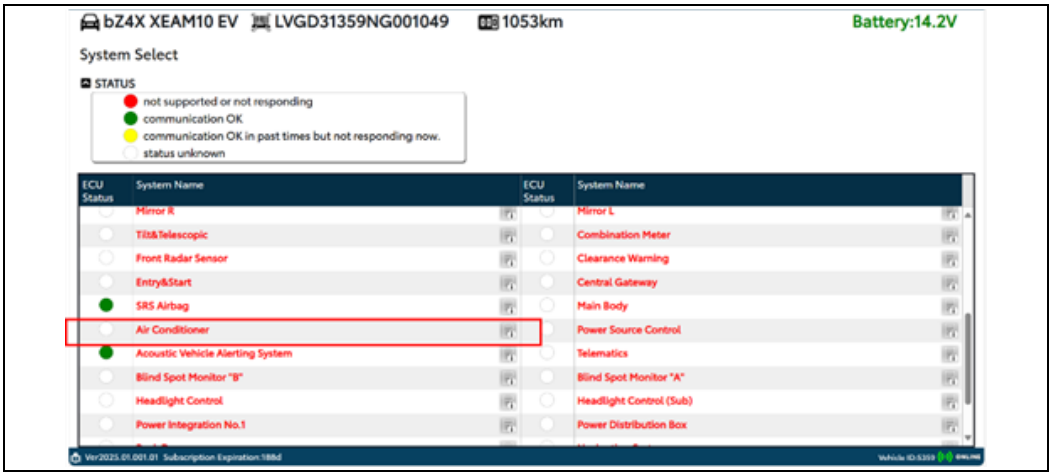
**NOTICE:**
- To ensure a reliable assessment of the compressor's condition, make sure to set it correctly.
- Turn on the A/C switch once and then operate it again to turn it off.
- Even if the meter temperature is below 25°C (77.0℉), if the vehicle protection control indicates a situation where the actual rotation remains at 0 rpm and below 1000 rpm for 30 seconds after the active test shows 5200 rpm, perform the A/C under conditions of 25°C (77.0℉) or higher.

**HINT: When you operate the airflow mode switch after operating the AUTO switch, the indicator light of AUTO switch turns off; however, all functions remain active by the automatic settings except the airflow control mode.**

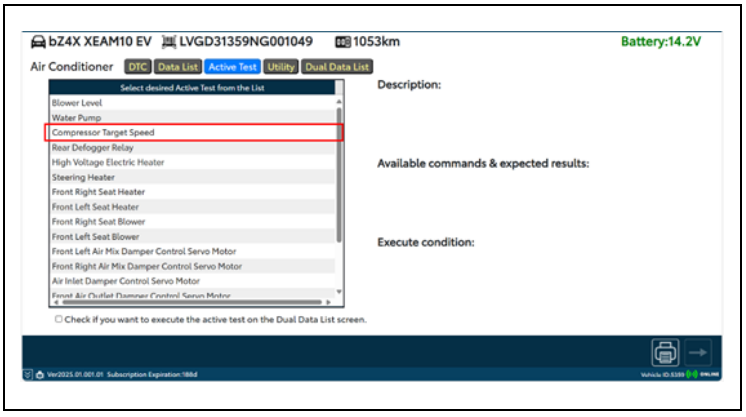
| Condition | Under 77.0℉ (25℃) (Inspection Mode：A/C OFF) | Over 77.0℉ (25℃) (Inspection Mode：A/C ON) |
|---|---|---|
| AUTO | ON * After operating to FOOT mode, the indicator turns off. | ON * After operating to FOOT mode, the indicator turns off. |
| Airflow mode control | FOOT | FOOT |
| A/C | OFF | ON |
| Outside/recirculated air mode | OUTSIDE | INSIDE |
| Temperature control | MAX HOT | MAX HOT |
| Fan speed | NO TOUCHING | NO TOUCHING |
| ECO | OFF | OFF |

| SYNC | ON | ON |
|---|---|---|
| S-FLOW | OFF | OFF |
| Ignition Switch | READY ON | READY ON |
| Window/Door | CLOSE | CLOSE |

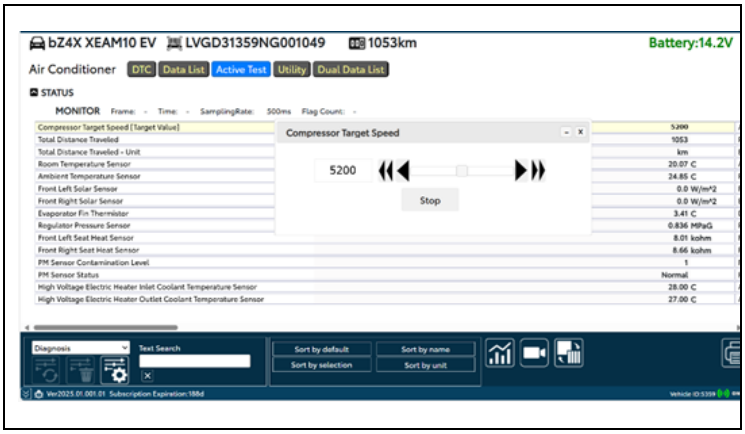


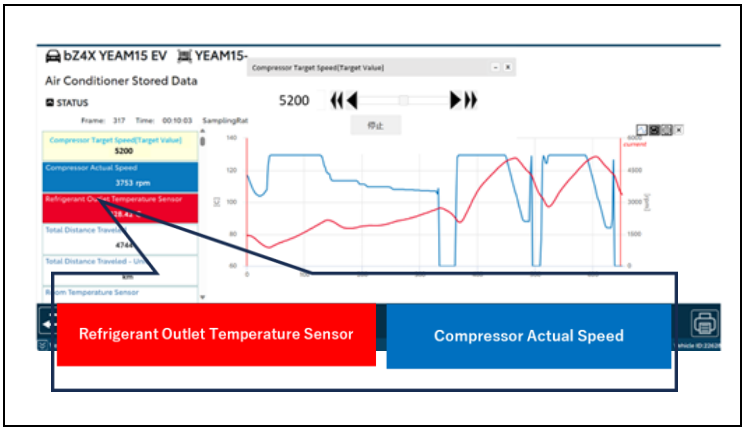

c) Using the GTS+ to select Air Conditioner in System Select.




d) Select Compressor Target Speed and perform active test.



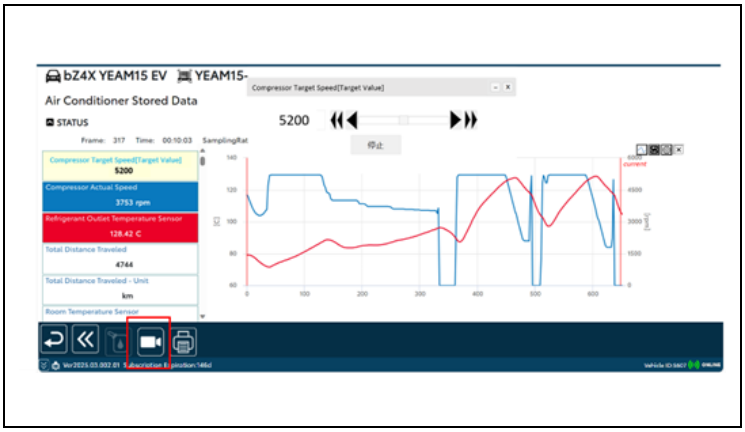

e) Set Compressor Target Speed up to 5200.



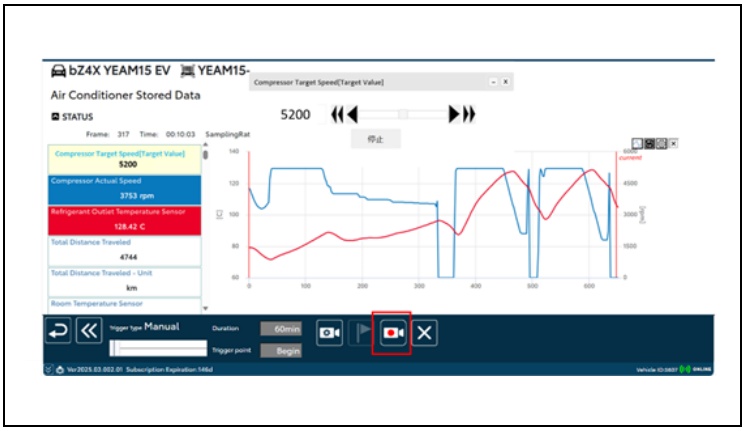

f) Select Refrigerant Outlet Temperature and Compressor Actual Speed from all data.

g) Confirm Refrigerant Outlet Temperature for 10mins.

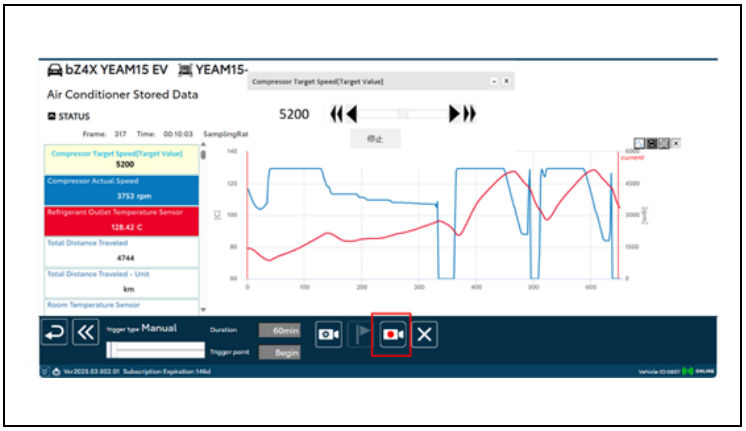
**HINT:**
**The refrigerant outlet temperature cannot be confirmed unless the data is checked in ALL mode.**



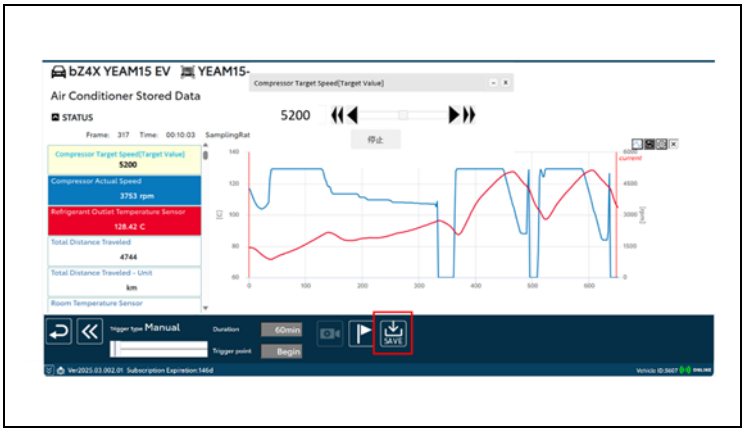

h) Choose the recording mode.



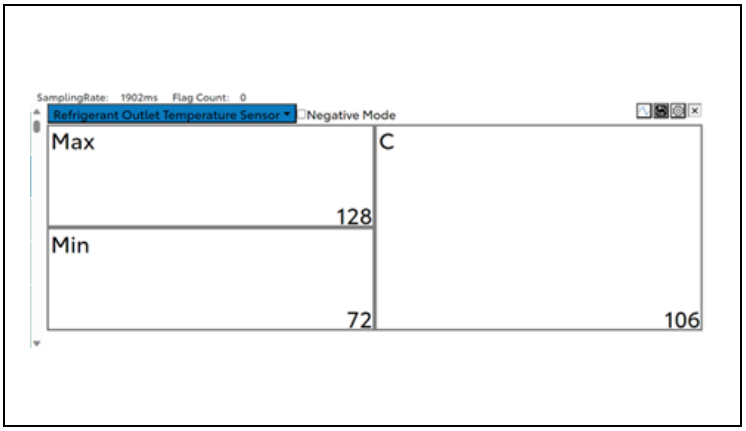

i) Select record.




j) Start data recording.



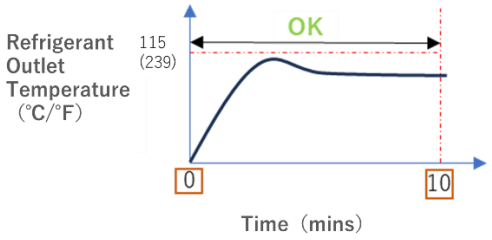

k) After 10 minutes of measurement, select SAVE to save the data.

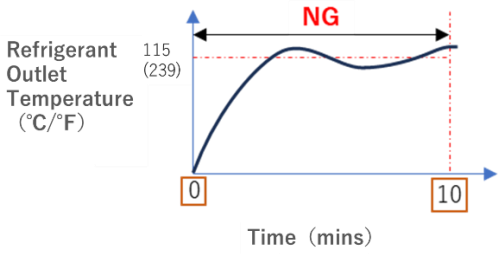



**HINT:**
**When measuring the refrigerant outlet temperature, changing the graph to numerical format makes it easier to determine the maximum temperature.**

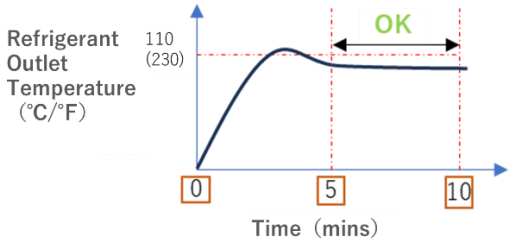
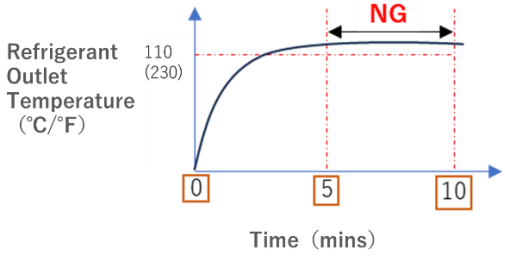
## 3. INSPECT FOR MALFUNCTION OF COMPRESSOR

a) Confirm Refrigerant Outlet Temperature for 10 minutes.

| Setting | Temperature | Result | Next Steps |
|---|---|---|---|
| **A/C**<br>**OFF**<br>**(Below 77° F/25° C)** | **OK** | It has never reached 239°F (115°C) within 10minutes.<br>  | Proceed to Section X |

| | | | |
|---|---|---|---|
| | **NG** | It has exceeded 239°F (115°C) at least once within 10minutes.<br>  | Proceed to Section VIII |

b) Confirm Refrigerant Outlet Temperature after 5 to 10 minutes.

| Setting | Temperature | Result | Next Steps |
|---|---|---|---|
| **A/C**<br><br>**ON**<br>**(Above 77° F/25° C)** | **OK** | It has not reached 230°F (110°C) after 5 to 10 minutes.<br>  | Proceed to Section X |
| | **NG** | It exceeds 230°F (110°C) after 5 to 10 minutes.<br>  | Proceed to Section VIII |

## VIII. REPLACE COMPRESSOR AND RECEIVER

Critical

- **Always remember "*SAFETY FIRST*".**

### 1. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a) Turn the ignition switch ON (READY).

b) Operate the compressor under the conditions shown below:

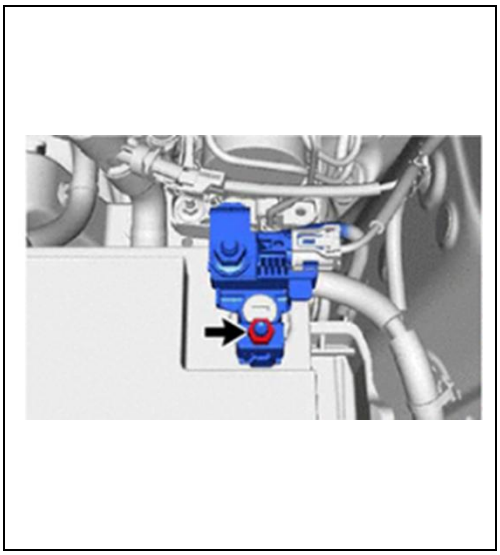
| Item | Condition |
|---|---|
| Operating time | 3 minutes or more |
| Temperature setting | Max cool |
| Blower speed | High |
| Ignition Switch | ON (READY) |
| A/C switch | ON |

This causes most of the compressor oil from the various components of the A/C system to collect in the compressor.

**HINT:**
**It is not necessary to operate the compressor if the A/C does not operate because of compressor lock, etc.**

c) Turn the ignition switch off.
d) Recover the refrigerant from the A/C system using a refrigerant recovery unit.

**HINT:**
**Use the refrigerant recovery unit in accordance with the manufacturer's instruction manual.**



**2. DISCONNECT CABLE FROM NEGATIVE AUXILIARY BATTERY TERMINAL**

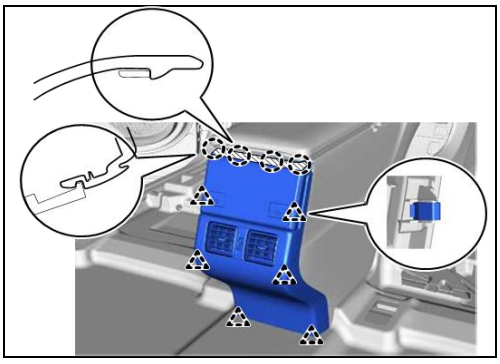
a) Disconnect cable from negative auxiliary battery terminal.

**NOTICE:**

- **After the ignition switch is turned off, the navigation system records various types of memory and settings. As a result, after turning the ignition switch off, make sure to wait at least 3 minutes before disconnecting the cable from the negative (-) battery terminal.**
- **When the cable is disconnected from the negative (-) auxiliary battery terminal and the security lock setting has been enabled, multi-display operations will be disabled upon next startup unless the password is entered. Be sure to check the security lock setting before disconnecting the cable from the negative (-) auxiliary battery terminal.**

**3. REMOVE CONSOLE REAR END PANEL SUB-ASSEMBLY**

a) Apply protective tape around the upper part of console rear end panel sub-assembly as shown in the illustration.

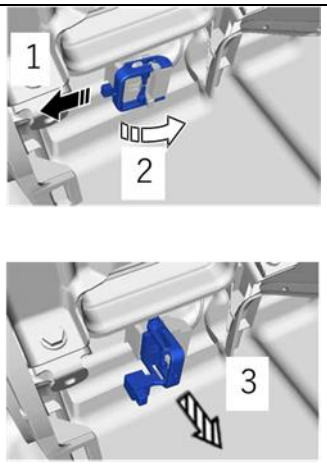


b) Disengage the claws and clips to remove the console rear end panel sub-assembly.

**4. REMOVE SERVICE PLUG GRIP**

**CAUTION:**

- **Wear insulated gloves.**
- ***DO NOT* inspect or service the high voltage system with the service plug grip installed.**
- **To reduce the risk of electric shock, make sure to remove the service plug grip to cut off the high voltage circuit before servicing the vehicle.**
- **To reduce the risk of electric shock, make sure to wait at least 10 minutes after removing the service plug grip to fully discharge the high voltage capacitor inside the inverter with converter assembly.**




a) While wearing insulated gloves, rotate the handle of the service plug grip and remove the service plug grip as indicated by the arrows, in the order shown in the illustration.

**NOTICE:**

- **After removing the service plug grip, turning the ignition switch to ON (READY) may cause a malfunction.**
- ***DO NOT* turn the ignition switch to ON (READY) unless instructed by the repair manual.**
- ***DO NOT* touch the terminals of the service plug grip.**
- **If the service plug grip has been struck or dropped, replace it.**

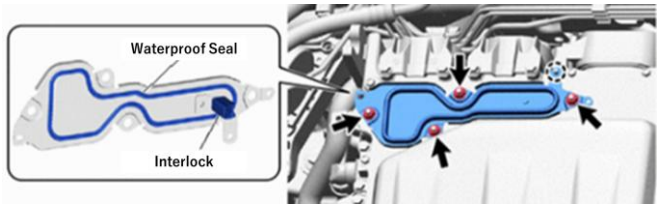
**HINT:**

**Waiting for at least 10 minutes is required to discharge the high voltage capacitor inside the inverter with converter assembly.**

## 5. REMOVE NO. 2 TERMINAL COVER

**CAUTION:**

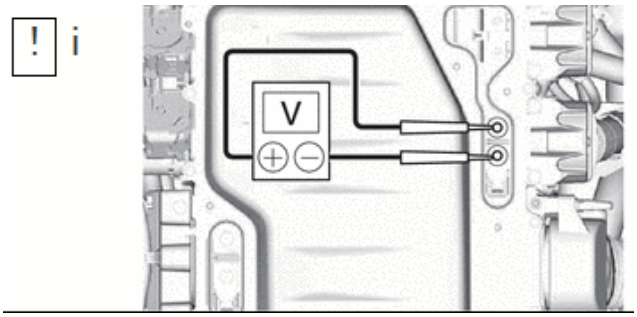
**Wear insulated gloves.**




a) Remove the 3 bolts and the No. 2 terminal cover

**NOTICE:**

- ***DO NOT* touch the No. 2 terminal cover waterproof seal.**
- ***DO NOT* allow any foreign matter or water to enter the electric converter unit assembly.**
- **Make sure that the interlock is installed to the No. 2 terminal cover.**



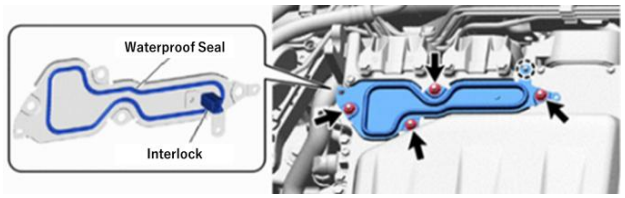

## 6. CHECK TERMINAL VOLTAGE

**CAUTION: Wear insulated gloves.**

**NOTICE: *DO NOT* allow any foreign matter or water to enter the electric converter unit assembly**

**HINT: Use a measuring range of DC 750 V or more on the voltmeter.**

a) Using a voltmeter, measure the voltage between the terminals of the 2 phase connectors.




## 7. INSTALL NO. 2 TERMINAL COVER

**CAUTION: Wear insulated gloves.**

a) Temporarily install the No. 2 terminal cover to the electric converter unit assembly with the 4 nuts.

**NOTICE:**

- **An interlock connector is installed to the No. 2 terminal cover. Make sure to install the No. 2 terminal cover after installing the inverter cover.**
- **Visually confirm that the No. 2 terminal cover waterproofing rubber is securely installed before installing the No. 2 terminal cover.**
- **Make sure that the interlock connector is fully engaged.**

b) Using an insulated tool, fully tighten the 4 nuts in the order shown in the illustration.

**Torque: 8.0 N·m {82 kgf·cm, 71 in·lbf}**

## 8. SEPARATE WATER HOSE SUB-ASSEMBLY

c) Disengage the clamp and separate the water hose sub-assembly.

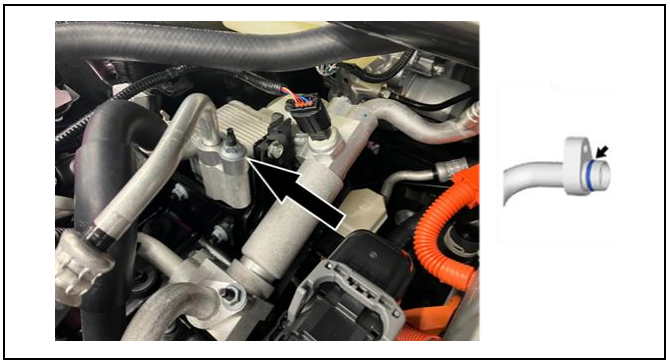
## 9. DISCONNECT SUCTION HOSE SUB-ASSEMBLY

a) Remove the nut to disconnect the suction hose sub-assembly.

b) 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.**
- ***DO NOT* use air Ratchet.**



**10. REMOVE NO. 1 COOLER REFRIGERANT DISCHARGE HOSE**

a) Remove bolt and No. 1 cooler refrigerant discharge hose.

b) Remove the O-ring from the No. 1 cooler refrigerant discharge hose.

**NOTICE:**

- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**
- ***DO NOT* use air Ratchet.**

**11. REMOVE PRESSURE REGULATOR WITH SUCTION HOSE**

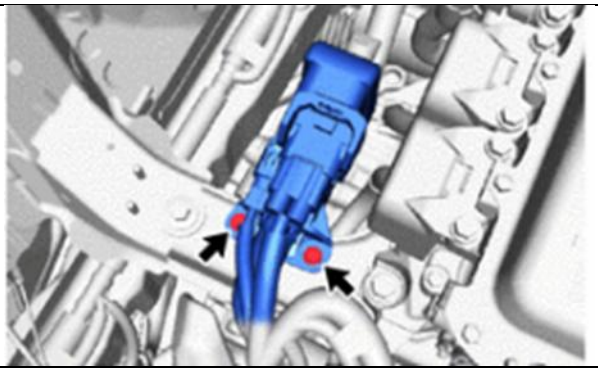
a) Disconnect the connector.

b) Remove the 3 bolts and the pressure regulator with suction tube.

c) Remove the O-ring from the suction tube and suction hose.

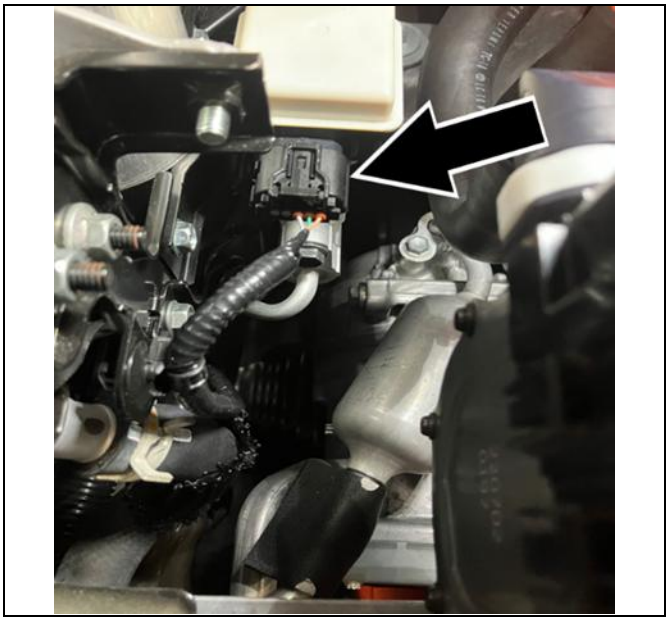
**NOTICE:**

- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**
- ***DO NOT* use air Ratchet.**



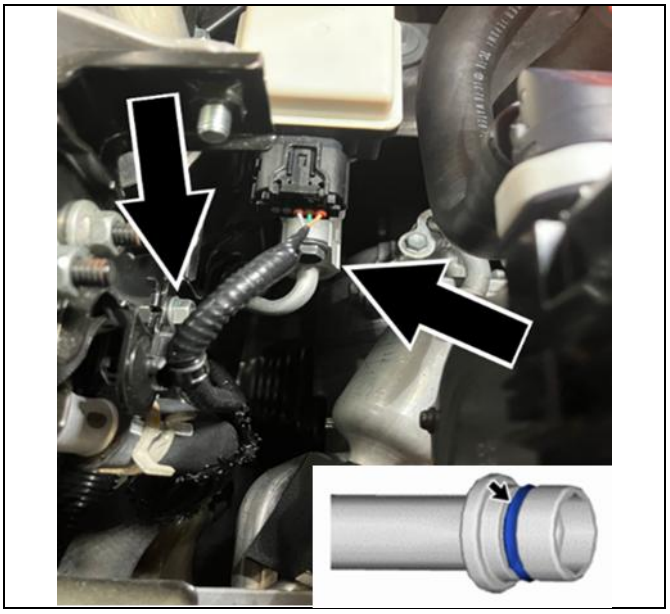
**12. SEPARATE BATTERY COOLANT HEATER ASSEMBLY**

a) Remove the 2 bolts and disconnect the battery coolant heater assembly.



**13. REMOVE NO. 2 COOLER REFRIGERANT DISCHARGE HOSE**

a) Disconnect the connector.



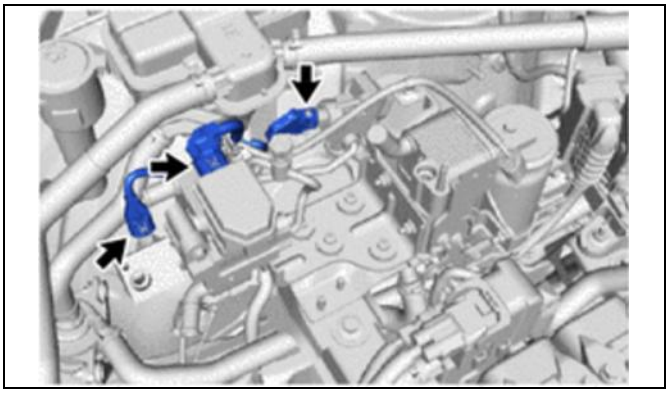
b) Remove the 2 bolts.

c) Remove the No. 2 cooler refrigerant discharge hose from the No.2 air conditioning tube and accessory assembly.

d) Remove the O-ring from the No. 2 cooler refrigerant discharge hose.

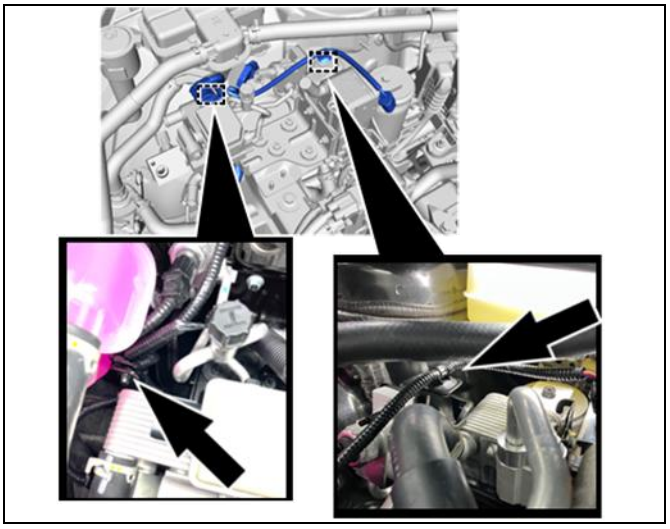
**NOTICE:**

- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**
- ***DO NOT* use air Ratchet.**

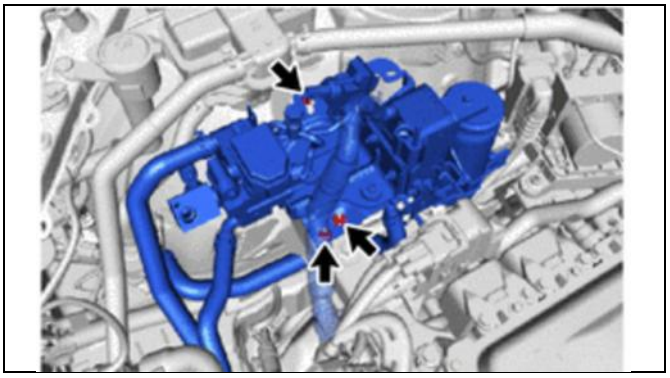


**14. SEPARATE CONDENSER ASSEMBLY WITH HEAT EXCHANGER UNIT SUB-ASSEMBLY**

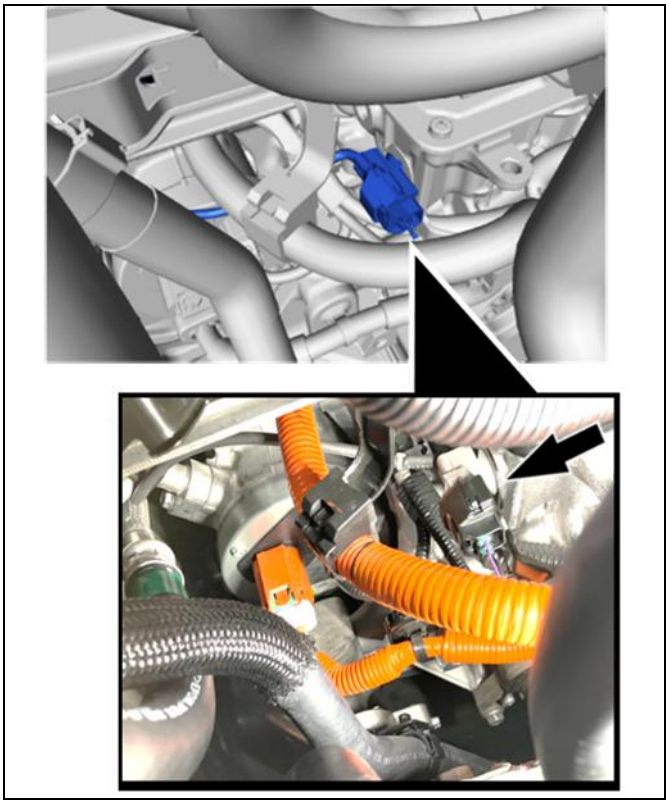
a) Disconnect the 3 connectors.



b) Disengage the 2 clamps.

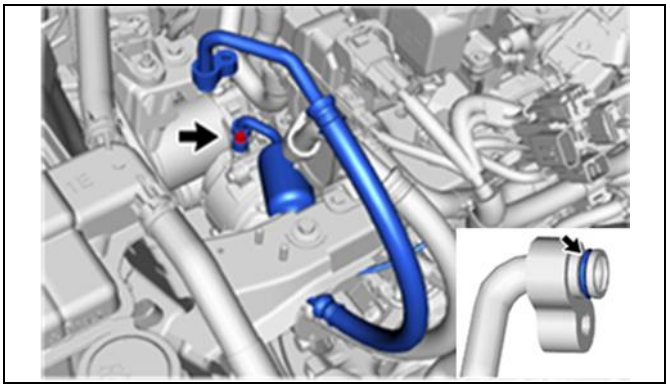


c) Remove the 3 bolts.
d) Separate condenser assembly with heat exchanger unit sub-assembly.



**15. REMOVE NO. 1 COOLER REFRIGERANT DISCHARGE HOSE**

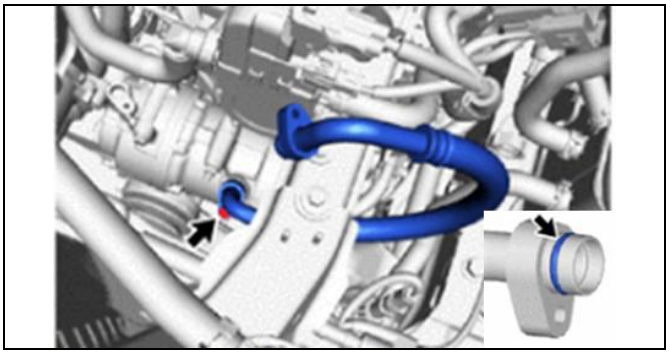
a) Disconnect the connector.
b) Disengage the clamp to disconnect the wire harness.



c) Remove bolt and No. 1 cooler refrigerant discharge hose.
d) Remove the O-ring from the No. 1 cooler refrigerant discharge hose.

**NOTICE:**

- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**
- ***DO NOT*** **use air Ratchet.**



**16. REMOVE SUCTION HOSE SUB-ASSEMBLY**

a) Remove the bolt and suction hose sub-assembly.
b) 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.**
- ***DO NOT*** **use air Ratchet.**

## 17. REMOVE SUCTION HOSE SUB-ASSEMBLY

**CAUTION:**

**Wear insulated gloves.**

a) Disconnect the connector (A).

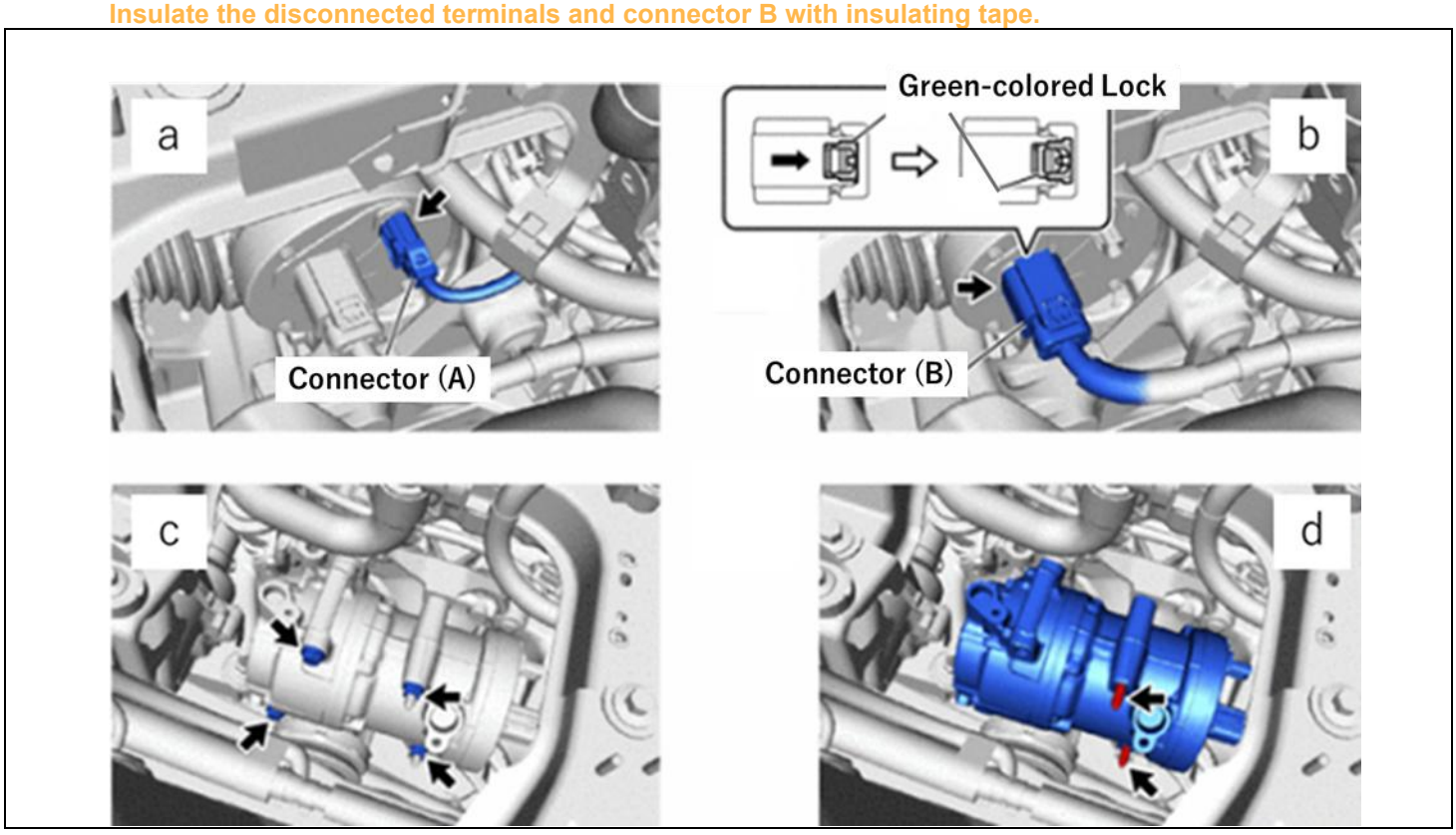
b) Slide the green-colored lock of the connector (B) as shown in the illustration to release it and disconnect the connector (B).

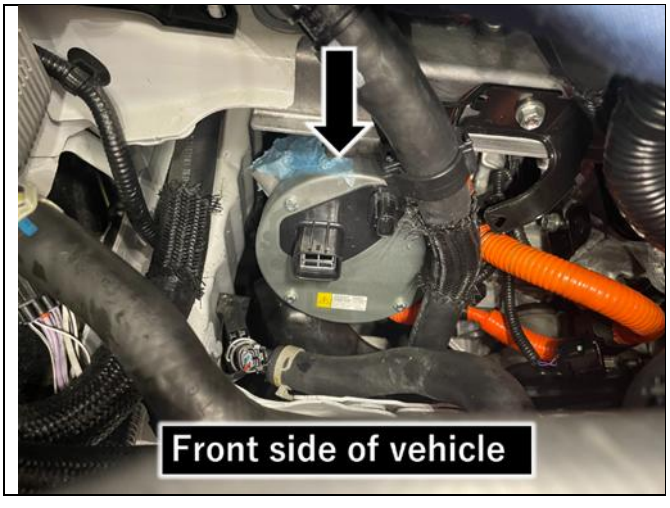
c) Remove the 2 bolts and 2 nuts.

d) Using an E8 "TORX" socket wrench, remove the 2 stud bolts and compressor with motor assembly.

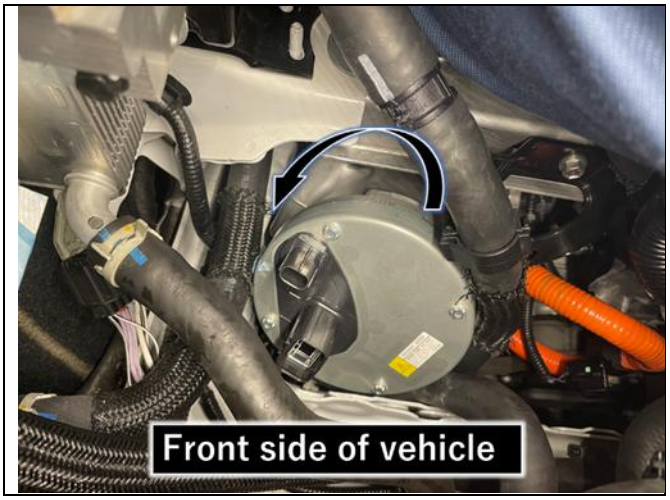
**NOTICE:**

**Insulate the disconnected terminals and connector B with insulating tape.**

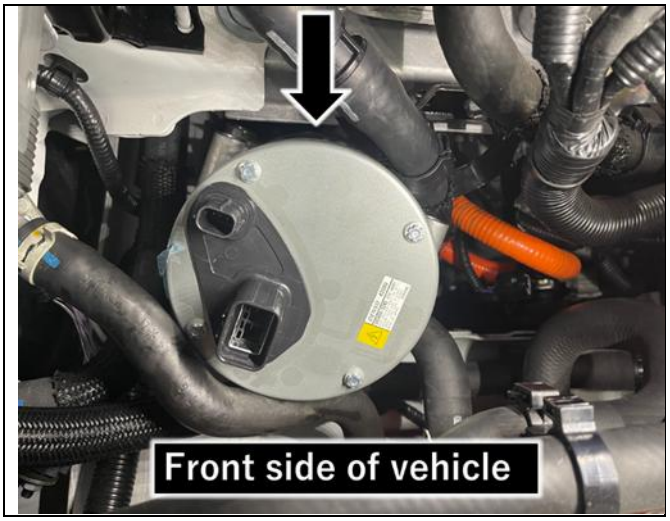


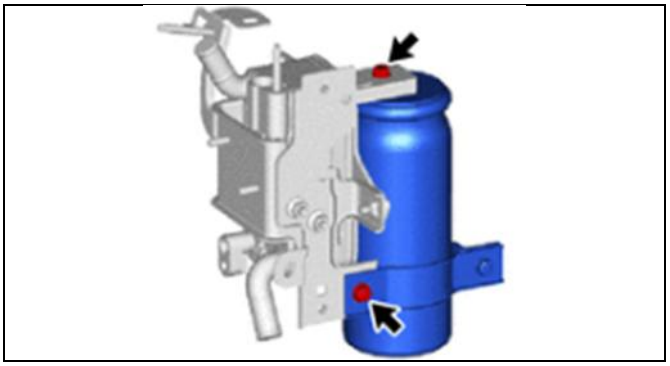

e) Pull the compressor with motor assembly towards the front of the vehicle.




f) Rotate the compressor with motor assembly counterclockwise and pull it towards the front of the vehicle.




g) Pull the compressor with motor assembly upwards from the vehicle.

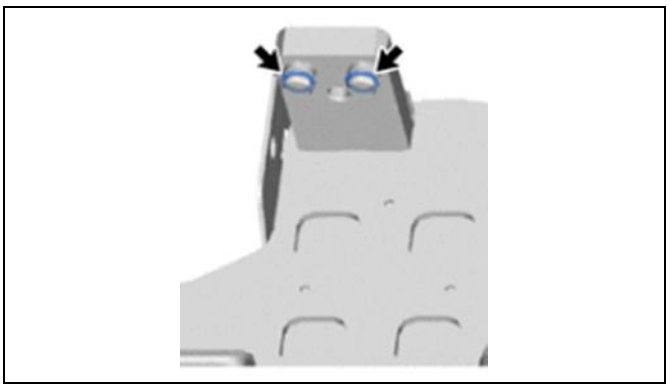


**18. REMOVE RECEIVER TANK**

a) Remove the 2 bolts and receiver tank.

b) Disengage the clamp to disconnect the wire harness.

c) Remove the band of receiver.

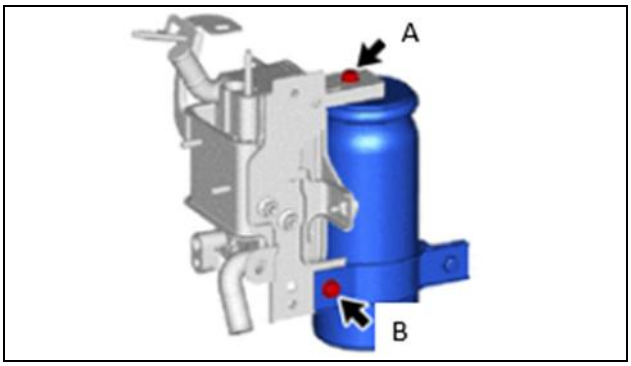


d) Remove the 2 O-rings from the condenser sub-assembly.

**NOTICE:**

**Seal the openings of the disconnected parts using vinyl tape to prevent entry of moisture and foreign matter.**

## IX. INSTALL COMPRESSOR ASSEMBY AND RECEIVER TANK




### 1. INSTALL RECEIVER TANK

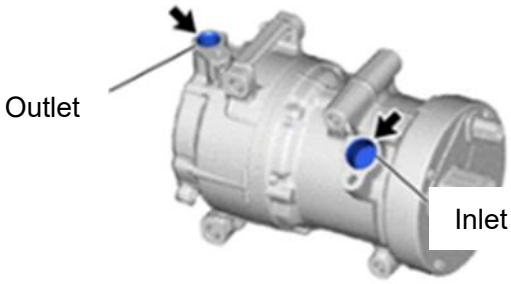
a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the condenser assembly.

b) Install the ***NEW*** receiver tank with the 2 bolts.

**Torque:**

**A: 4.6 N·m{ 47kgf*cm, 35 in.*lbf }**

**B: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**




### 2. ADJUST COMPRESSOR OIL

a) When replacing the compressor with motor assembly with a new one, gradually discharge the inert gas from the service valve, and drain the following amount of oil from the new compressor with motor assembly before installation.

**Standard:**

**Drain the oil 30 cc (1.01 fl.oz) from a new compressor with motor assembly.**

**NOTICE:**

- **If a new compressor with motor assembly is installed without removing some oil, there will be too much oil in the system due to the oil remaining in the pipes of the vehicle. Excessive oil in the system prevents heat exchange in the refrigeration cycle and causes ineffective cooling.**
- **Be sure to use ND-OIL 11 or equivalent compressor oil. If any compressor oil other than ND-OIL 11 is used, compressor with motor assembly insulation performance may decrease, resulting in leakage of electric power.**

**3. INSTALL COMPRESSOR WITH MOTOR ASSEMBLY**

**CAUTION:**

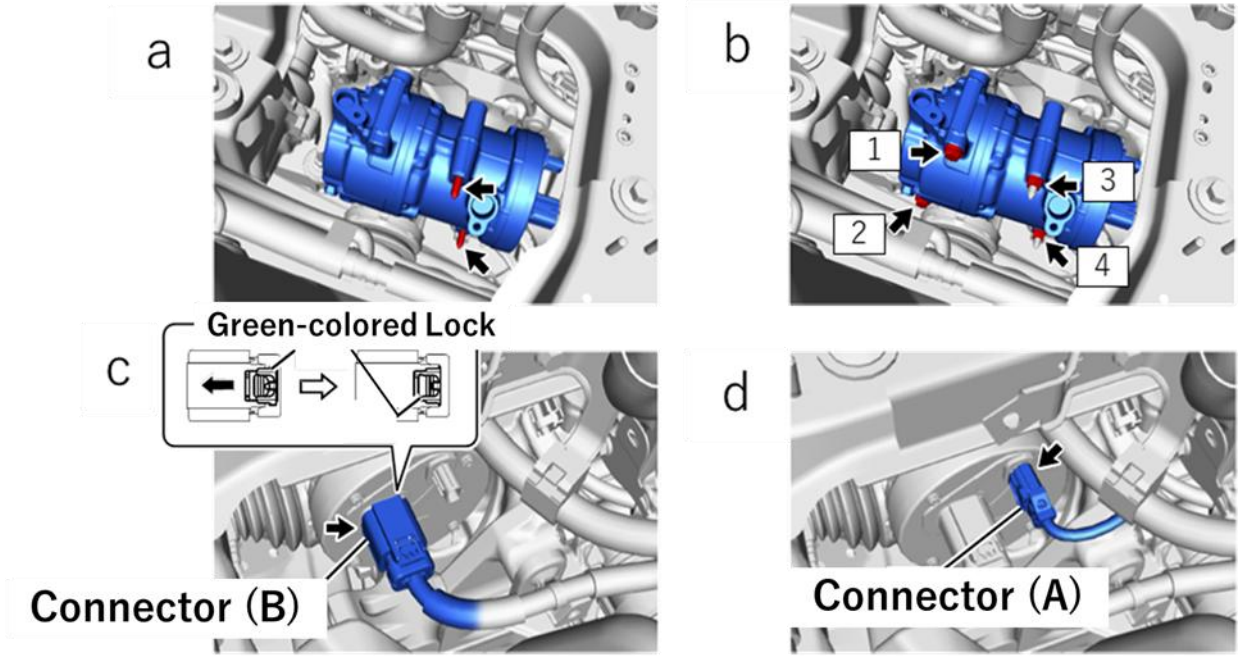
**Wear insulated gloves.**

b) Using an E8 "TORX" socket wrench, temporarily install the compressor with motor assembly with the 2 stud bolts.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

c) Install the compressor with motor assembly with the 2 bolts and 2 nuts in the order shown in the illustration.
**Torque: 24.5 N*m (250 kgf*cm, 18 ft.*lbf)**

d) Remove the insulating tape wrapped around connector (B), connect the connector (B) and slide the green-colored lock as shown in the illustration to securely lock it.

e) Connect the connector (A).




**4. CONNECT SUCTION HOSE SUB-ASSEMBLY**

a) Install the NEW O-ring with compressor oil ND-OIL 11 or equivalent applied on the suction sub-assembly.

b) Install the suction sub-assembly.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

**5. CONNECT NO. 1 COOLER REFRIGERANT DISCHARGE HOSE**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the No.1 cooler refrigerant discharge hose.

b) Install the No.1 cooler refrigerant discharge hose.

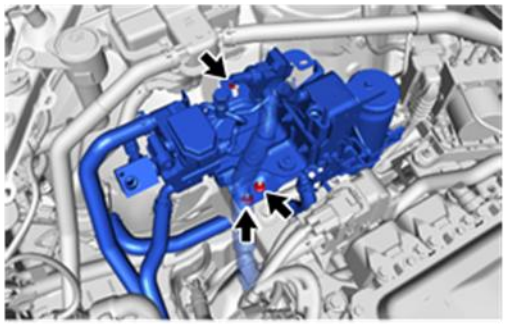
c) Connect the connector.

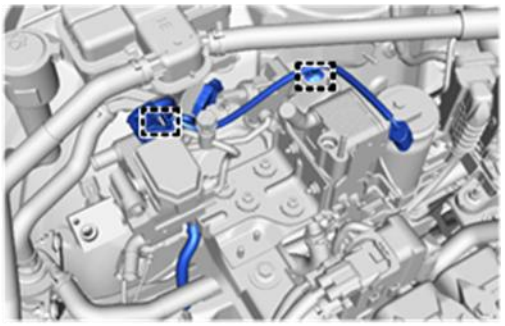
d) Engage the clamp.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

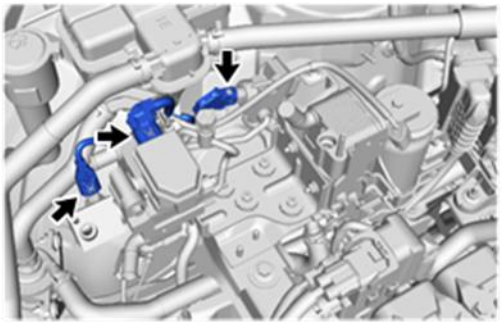
**6. INSTALL CONDENSER ASSEMBLY WITH HEAT EXCHANGER UNIT SUB-ASSEMBLY**

a) Install the condenser assembly with heat exchanger unit sub-assembly with the 3 nuts in the order shown in the illustration.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

b) Engage the clamps to connect the wire harness.
c) Connect the 3 connectors.







**7. INSTALL NO. 2 COOLER REFRIGERANT DISCHARGE HOSE**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the No.2 cooler refrigerant discharge hose.
b) Connect the No.2 cooler refrigerant discharge hose with air conditioner cube and accessory.
c) Install the No.2 cooler refrigerant discharge hose with 2 bolts.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

d) Connect the connector.

**8. INSTALL BATTERY COOLANT HEATER ASSEMBLY**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the No.2 cooler refrigerant discharge hose.
b) Connect the No.2 cooler refrigerant discharge hose with air conditioner cube and accessory.
c) Install the No.2 cooler refrigerant discharge hose with 2 bolts.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

d) Connect the connector.

**9. CONNECT PRESSURE REGULATOR WITH SUCTION HOSE**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the pressure regulator with suction cube.
b) Install the pressure regulator with suction cube with 3 bolts.
**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

**10. INSTALL NO. 1 COOLER REFRIGERANT DISCHARGE HOSE**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the No.1 cooler refrigerant discharge hose.

b) Install the No.1 cooler refrigerant discharge hose with nut.

**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

**11. INSTALL SUCTION HOSE SUB-ASSEMBLY**

a) Install the ***NEW*** O-ring with compressor oil ND-OIL 11 or equivalent applied on the suction hose sub-assembly.

b) Install the No.1 cooler refrigerant discharge hose with nut.

**Torque: 9.8 N*m (100 kgf*cm, 87 in.*lbf)**

**12. INSTALL WATER HOSE SUB-ASSEMBLY**

**13. INSTALL SUCTION HOSE SUB-ASSEMBLY**

**CAUTION:**

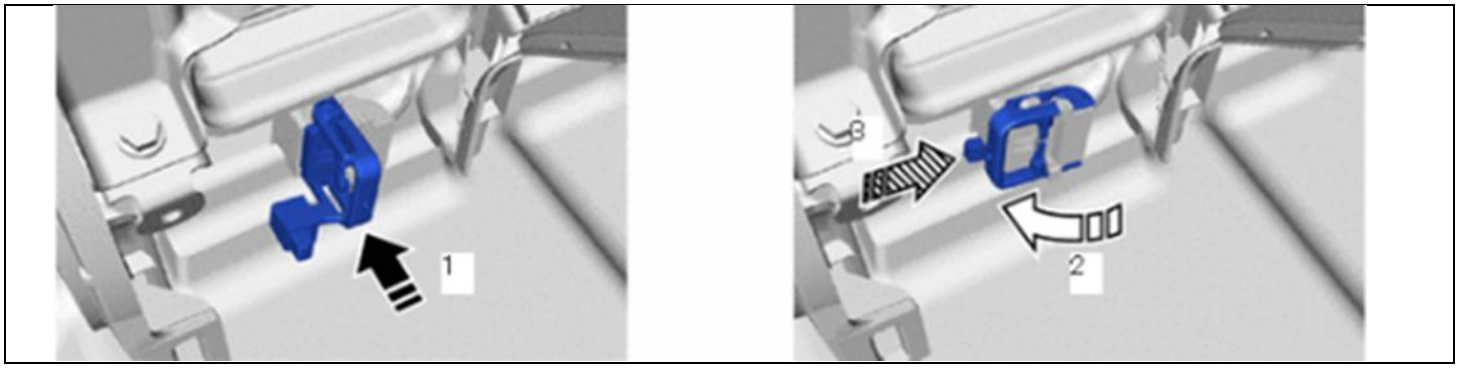
**Wear insulated gloves.**

a) While wearing insulated gloves, and temporarily install the service plug grip as indicated by the arrow (1) shown in the illustration.

b) Rotate the handle of the service plug grip 90° toward the traction battery assembly and slide it in the direction indicated by the arrow (3) shown in the illustration until a click sound is heard to install the service plug grip.

**NOTICE:**

**Before installing the service plug grip, check that no parts or tools remain, and that the high voltage terminals and connectors are connected securely.**




**14. INSTALL CONSOLE REAR END PANEL SUB-ASSEMBLY**

**15. INSTALL CONSOLE REAR END PANEL SUB-ASSEMBLY**

**Torque:5.4 N*m (55 kgf*cm, 48 in.*lbf)**

**16. CHARGE AIR CONDITIONING SYSTEM WITH REFRIGERANT**

a) Perform vacuum purging using a vacuum pump or appropriate equipment.

b) Charge the air conditioning system with refrigerant.

**Refrigerant Type: HFO-1234yf (R1234yf)**

**Standard Charge Amount:**
**690 to 750 g (24.3 to 26.5 oz.)**

**17. WARM UP COMPRESSOR**

c) Keep the A/C switch on for at least 2 minutes to warm up the compressor.

**NOTICE:**

**To prevent damage to the compressor, be sure to warm up the compressor when turning the air conditioning on after removing and installing any air conditioning system lines (including the compressor).**

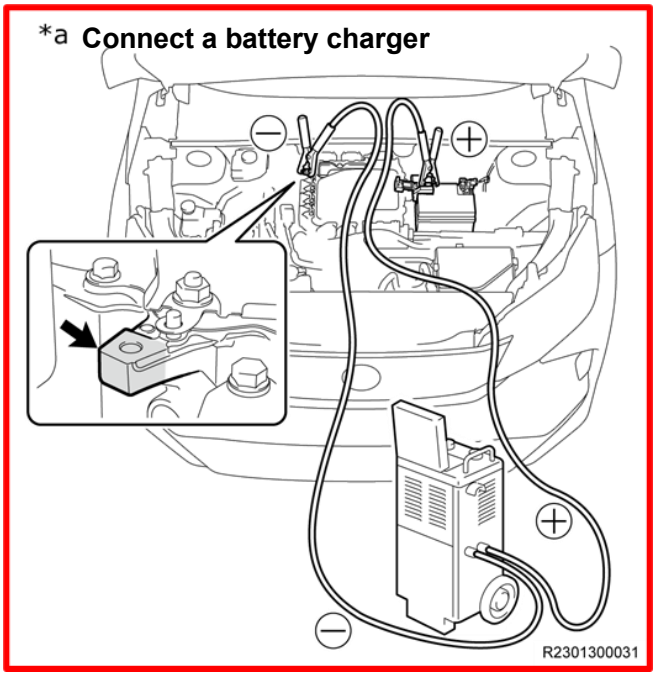
**18. INSPECT FOR REFRIGERANT LEAK**

Refer to HEATING / AIR CONDITIONING: REFRIGERANT (For HFO-1234yf(R1234yf)): REPLACEMENT (RM1000000027JCI)

**19. INITIALIZATION AFTER RECONNECTING AUXILIARY BATTERY TERMINAL**

Refer to SETUP: WHEN DISCONNECTING OR RECONNECTING BATTERY TERMINAL: BEFORE DISCONNECTING BATTERY (RM1000000029P91)

## X. REPROGRAMMING A/C ECU



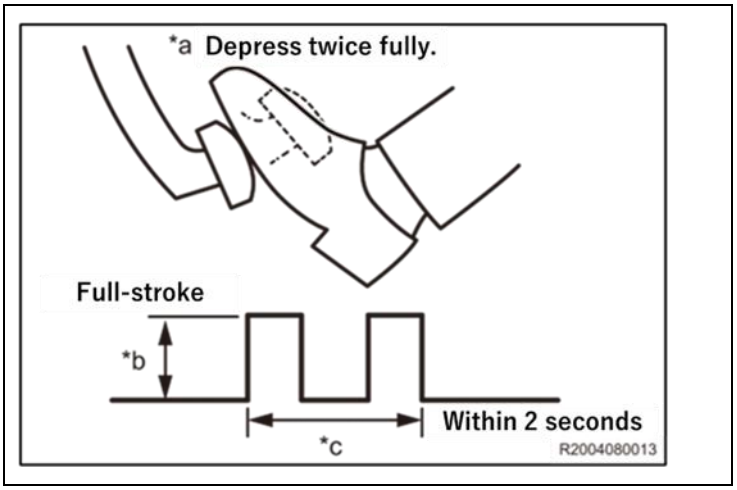

**1. CONNECT THE BATTERY CHARGER**

a) While reprogramming, connect a battery charger as shown in the illustration to charge the battery additionally at a current of approximately 15 A (and a maximum voltage of 15 V).

**NOTICE:**

- **Be sure to turn off the battery charger when connecting it.**
- ***Do not* fast charge.**
- **Remove any rust or dirt at the cable connecting point and make sure it is conductive.**

b) For battery charger, be sure to connect the positive terminal to the terminal for additional charging in the fuse box and the negative terminal to an unpainted metal portion.




**2. PRESSURIZE HYDRO BOOSTER**

a) Apply the parking brake while IG ON and at the P position.

b) Fully depress brake pedal twice.

**NOTICE:**

**Pressurize the hydro booster to the maximum before reprogramming, as the battery voltage decreases if the oil pressure of the hydro-booster becomes lower, and the pump rotates during reprogramming.**

**3. REPROGRAMMING ECU**

a) Check the current calibration ID and judge appropriate action.

| Computer Calibrations | | | |
|---|---|---|---|
| System | Vehicle Model | Calibration ID | |
| | | **Current** | ***NEW*** |
| A/C | RZ300e/RZ450e | 8865F46010B0 | 8865F4606000 |
| | | 8865F4601100 | |
| | | 8865F4602100 | 8865F4604100 |
| | | 8865F4604000 | |

**HINT:**

**The reprogramming cannot be performed unless the involved program ID has been upgraded.**
**Reference: TIS SYSTEM >TIS> Keyword >SC**
**Keyword: 25LC03 (For Lexus)**

**4. CHECK AND CLEAR DTCs**

a) Start the engine and wait for about 10 seconds then stop the engine.

b) Turn the IG ON and check the DTC using the "Health Check" menu. If any DTCs and warning message have been set, delete them.

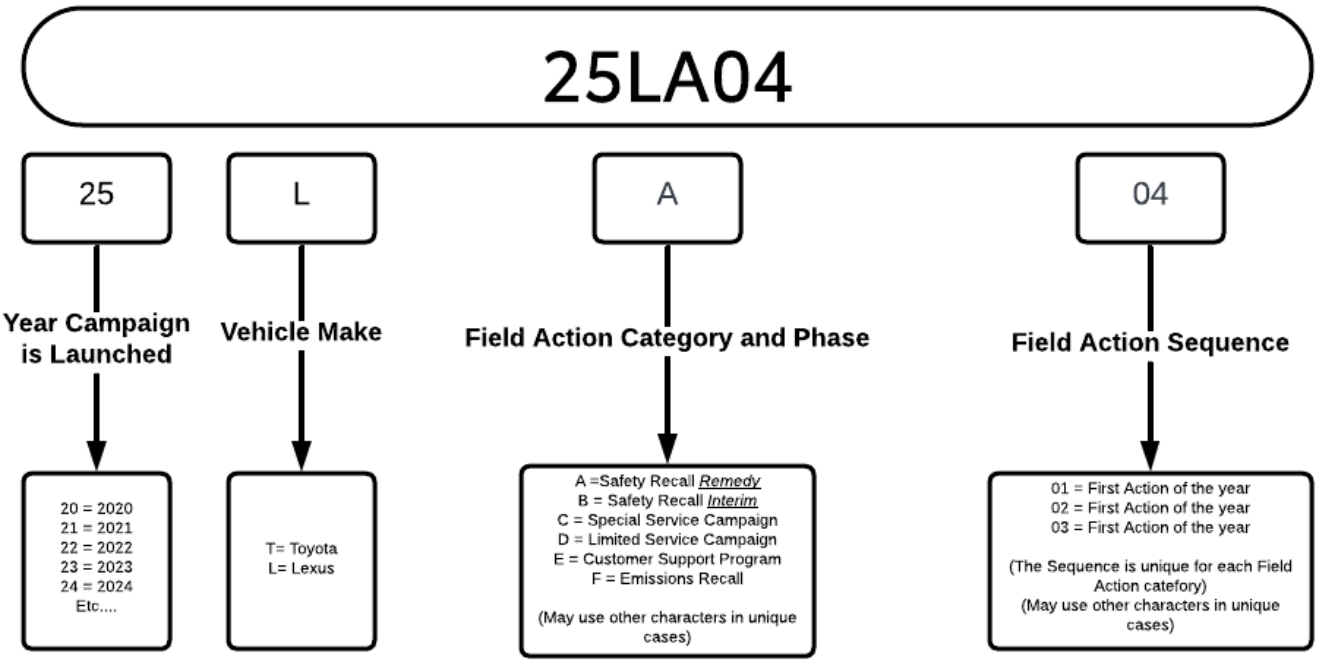
**NOTICE:**

**The DTCs found in this check are those which have been unnecessarily stored while the ECU was being reprogrammed, and they *DO NOT* indicate the occurrence of malfunctions. Delete them.**

c) Confirm that the DTCs and warning message were deleted then turn the IG off.

## I. RESTORE THE SYSTEMS WHICH WERE SHUT OFF

## A. CAMPAIGN DESIGNATION DECODER




**Examples:**
**19LA01 = Launched in 2019, Lexus, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019**
**20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020**
**21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021**

## B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return.**