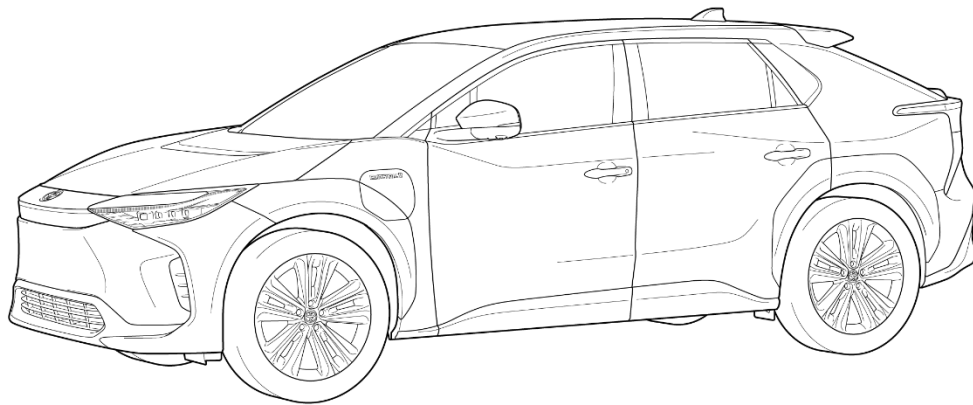




bZ4X

***ELECTRIC VEHICLE
DISMANTLING
MANUAL***



XEAM10/YEAM15 Series

Foreword

This guide was developed to educate and assist dismantlers in the safe handling of Toyota bZ4X electric vehicles. bZ4X dismantling procedures are similar to other non-electric Toyota vehicles with the exception of the high voltage electrical system. It is important to recognize and understand the high voltage electrical system features and specifications of the Toyota bZ4X electric vehicle, as they may not be familiar to dismantlers.

High voltage electricity powers the compressor with motor assembly, electric motor, DC/DC converter, electric heater, and inverter with converter assembly. All other conventional automotive electrical devices such as the head lights, radio, and gauges are powered from a separate 12 V auxiliary battery.

Numerous safeguards have been designed into the bZ4X to help ensure the high voltage, approximately 355.2 V, Lithium-ion (Li-ion) EV supply battery assembly is kept safe and secure in an accident.

The Li-ion EV supply battery assembly contains sealed batteries that are similar to rechargeable batteries used in some battery operated power tools and other consumer products. The electrolyte is absorbed in the cell plates and will not normally leak out even if the battery is cracked.

High voltage cables, identifiable by orange insulation and connectors, are isolated from the metal chassis of the vehicle.

Additional topics contained in the guide include:

- Toyota bZ4X identification.
- Major electric vehicle component locations and descriptions.

By following the information in this guide, dismantlers will be able to handle bZ4X electric vehicles as safely as the dismantling of a conventional non-electric automobile.

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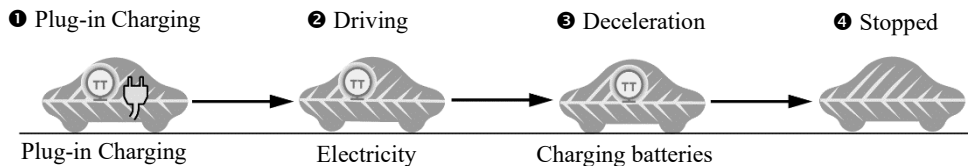
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About the bZ4X

The bZ4X 5-door wagon joins the electric vehicle model for Toyota. Electric Vehicle means that the vehicle contains only an electric motor and does not have a gasoline engine for power. Electricity is stored in a high voltage EV supply battery assembly for the electric motor.

The following illustration demonstrates how the bZ4X operates in various driving modes.

- ❶ A plug-in charge control system has been adopted, which allows electrical power to be supplied to the high-capacity EV supply battery from external power source such as an electrical socket or charger. The plug-in charge control system supports 2-types of charging, AC charging and DC charging.
- ❷ During driving, the vehicle will drive using electric power.
- ❸ During deceleration, such as when braking, the vehicle regenerates the kinetic energy from the front wheel to produce electricity that recharges the EV supply battery assembly.
- ❹ While the vehicle is stopped, the electric motor is off, however the vehicle remains on and operational.

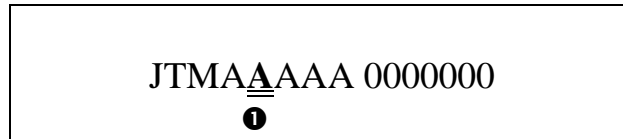


bZ4X Identification

In appearance, the bZ4X is nearly identical to the conventional, non-electric Toyota bZ4X. The bZ4X is a 5-door wagon. Exterior, interior, and motor compartment illustrations are provided to assist in identification.

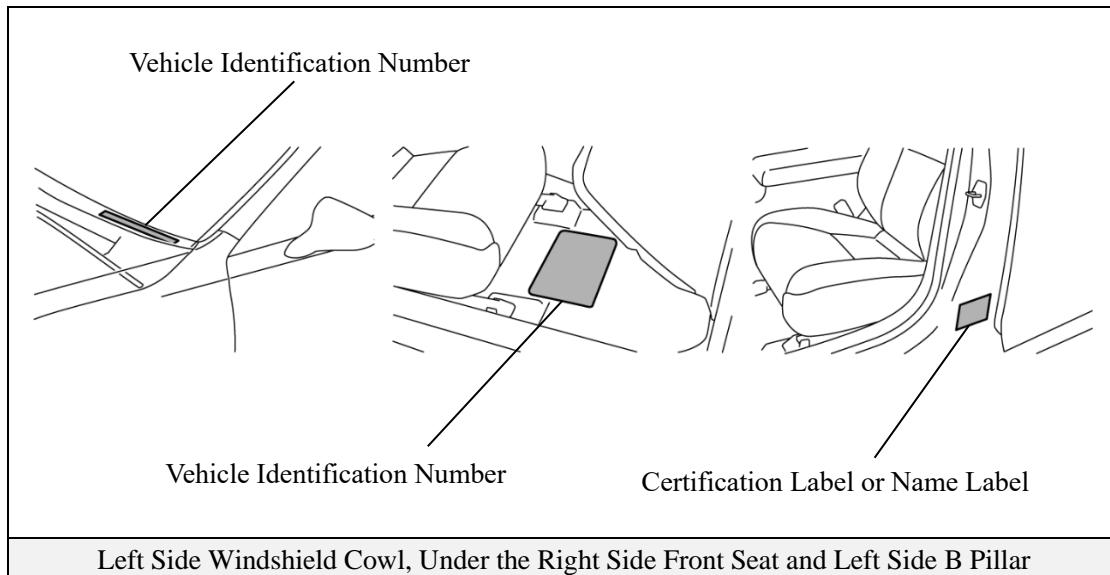
The alphanumeric 15 character Vehicle Identification Number (VIN) is provided on the left side windshield cowl, floor under the right side front seat and right side B pillar.

Example VIN:



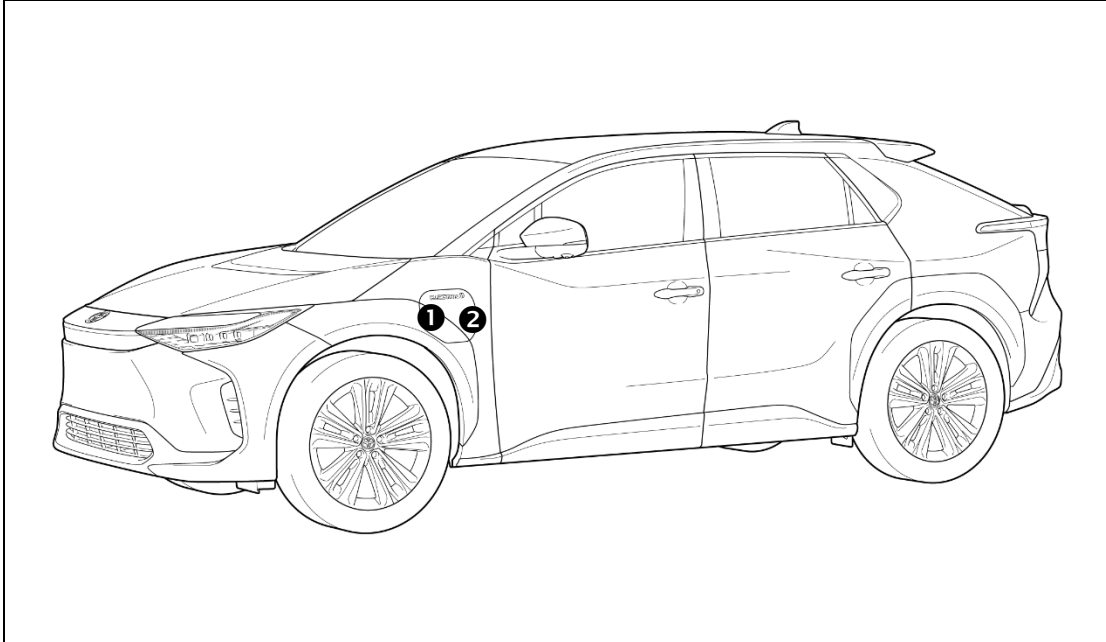
A bZ4X is identified by the 5th alphanumeric character of the VIN.

| ① | Drive Type |
|---|------------|
| A | 2WD |
| B | 4WD/AWD |

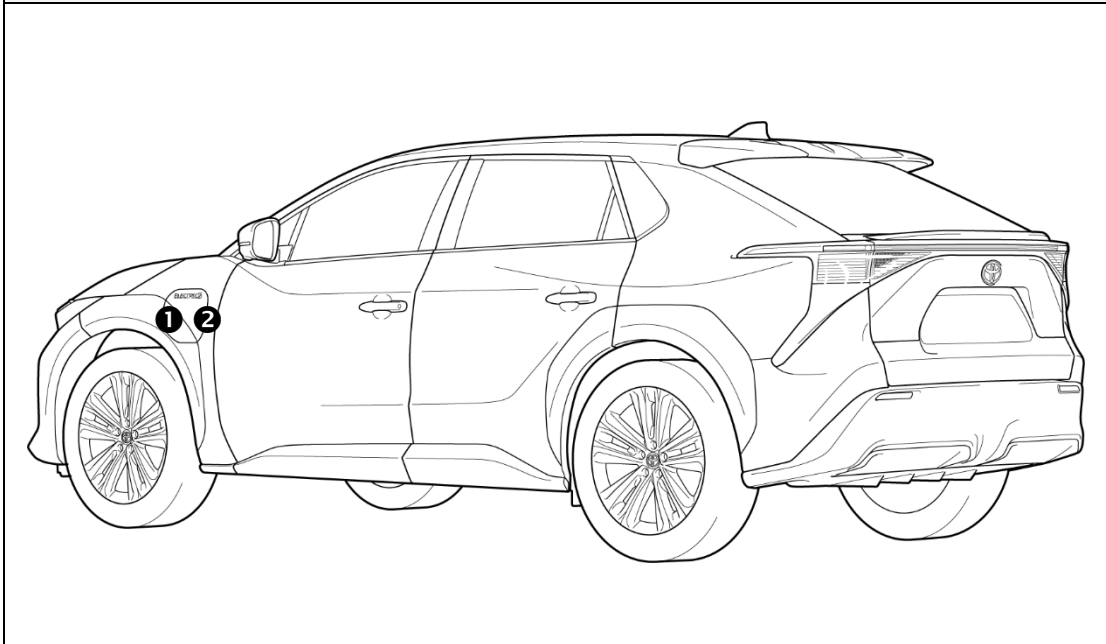


Exterior

- ❶ **ELECTRIC** logos on each front fender.
- ❷ Charge inlet door located on left side front fender.



Exterior Front and Left Side View



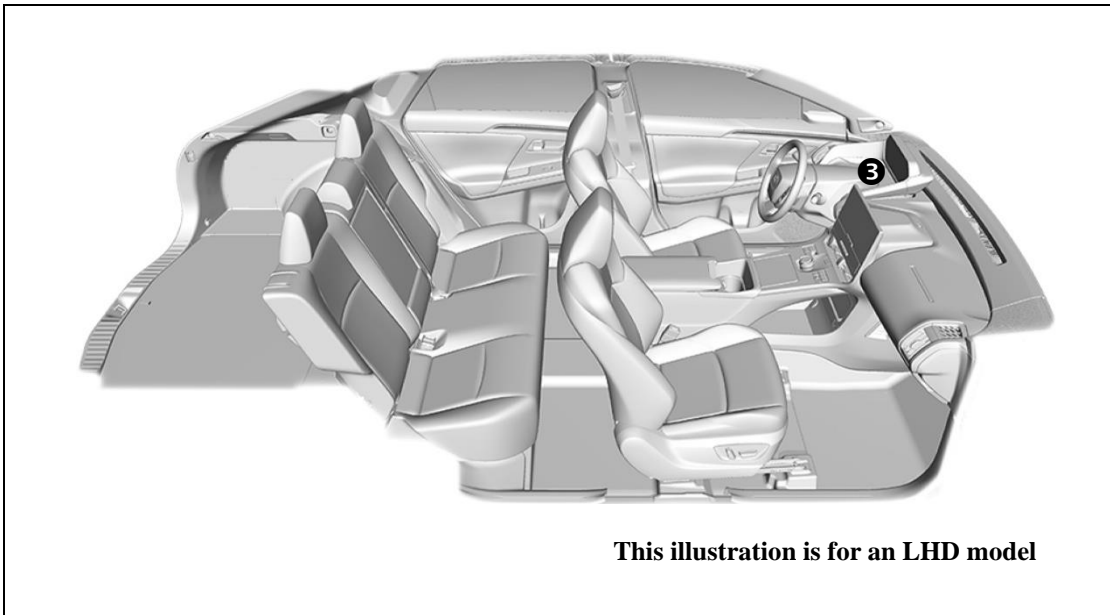
Exterior Rear and Left Side View

Interior

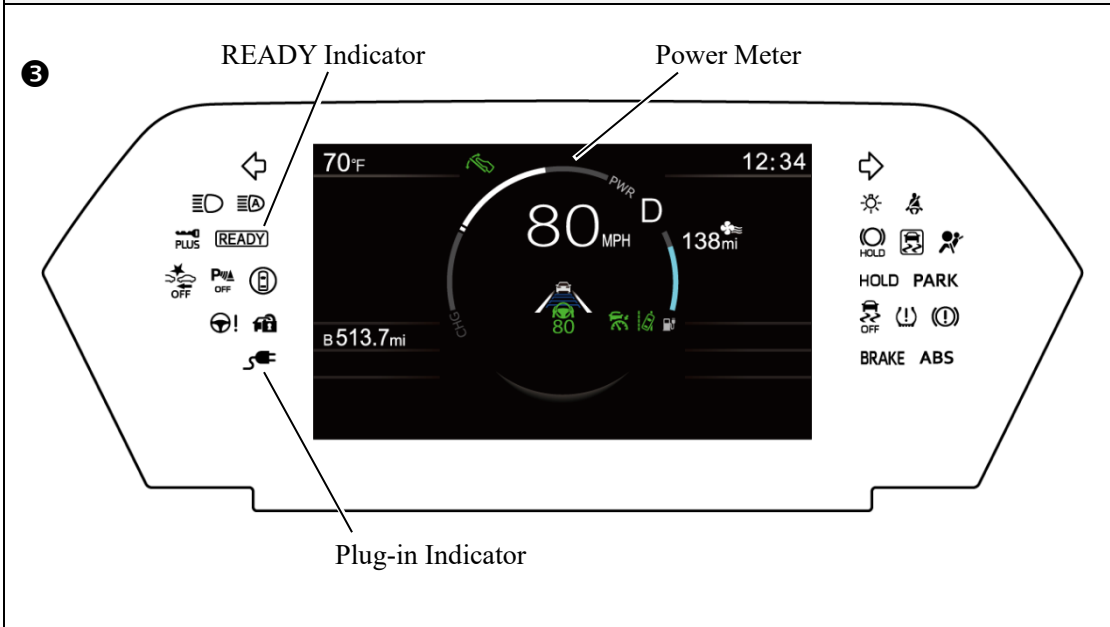
- ③ The instrument cluster (power meter, **READY** indicator, plug-in indicator and warning lights) is located in the dash behind the steering wheel.

NOTICE:

If the vehicle is shut off, the instrument cluster gauges will be “blacked out”, not illuminated.



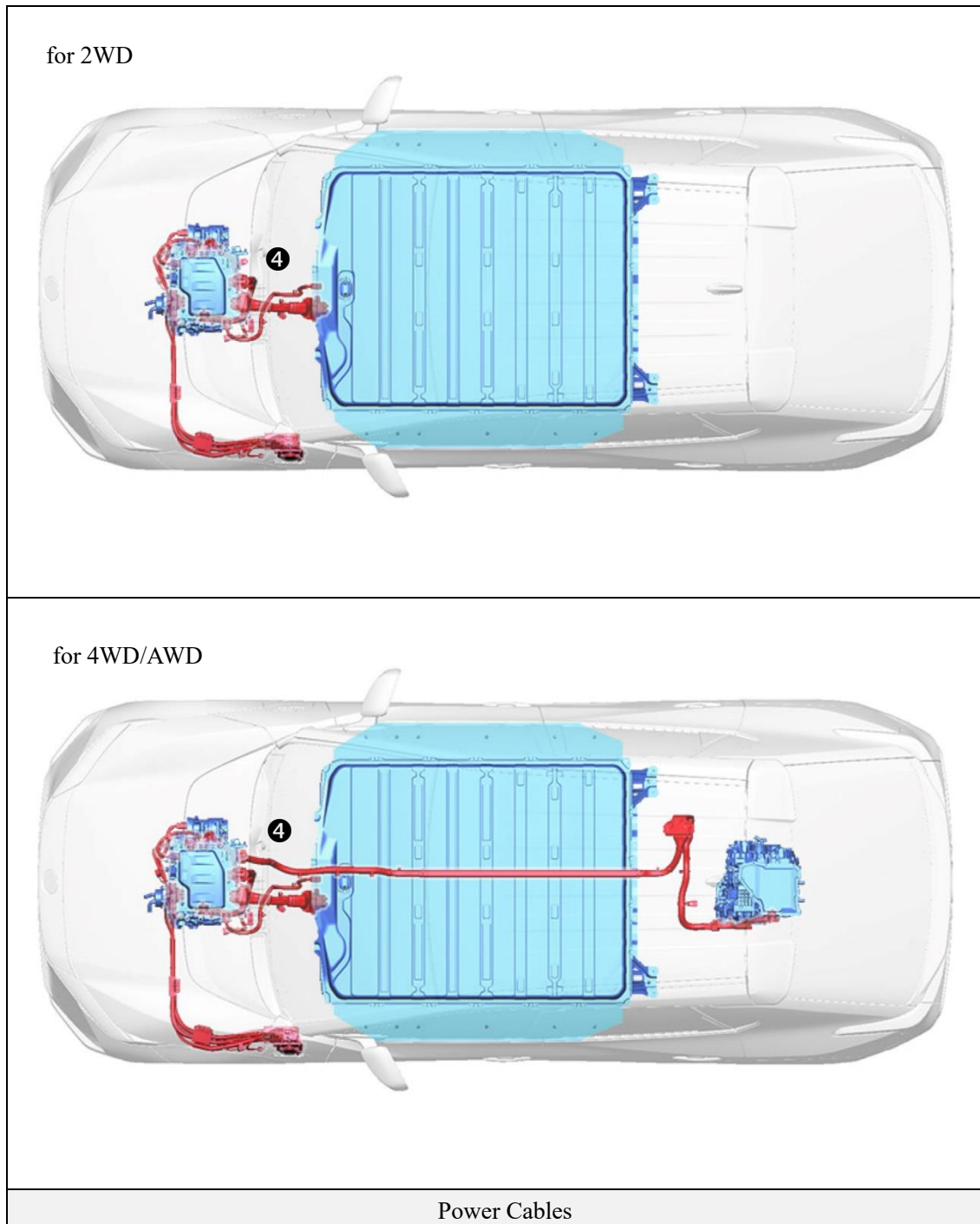
Interior View



Combination Meter View

Motor Compartment

- ④ Orange colored high voltage power cables.



Electric Vehicle Component Locations & Descriptions

| Component* | Location | Description |
|---|-------------------------------------|---|
| 12 Volt Auxiliary Battery ❶ | Driver Side of Motor Compartment | A lead-acid battery that supplies power to the low voltage devices. |
| EV Supply Battery Assembly ❷ | Undercarriage | Supplies electrical power to motor control inverter assembly in accordance with the driving conditions of the vehicle. Recharged by electric motor in accordance with the SOC and the driving conditions of the vehicle. Accumulates power from the external power source supplied by charging. |
| Power Cables ❸ | Undercarriage and Motor Compartment | The power cables (floor under wire, No. 2 floor under wire*, DC charger inlet cable, etc) are set of high-voltage, high-amperage cables that connect the EV supply battery assembly with the front eAxle, the EV supply battery assembly with the rear eAxle*, the EV supply battery assembly with the electric converter unit assembly and the electric converter unit assembly with the compressor with motor assembly. |
| Electric Converter Unit Assembly ❹ | Motor Compartment | Converts the direct current from the EV supply battery assembly into alternating current for electric motor, and vice versa (from AC to DC). |
| DC/DC Converter for 12 Volt Auxiliary Battery ❺ | Electric Converter Unit Assembly | Steps down the EV supply battery nominal voltage in order to supply electricity to the electrical components, as well as to recharge the auxiliary battery. |

| Component* | Location | Description |
|---|-------------------|---|
| Front Transaxle with Motor & Inverter Assembly ⑥ | Motor Compartment | Drives by electrical power from the EV supply battery assembly, generates motive force for the drive wheels. Generates high-voltage electricity to recharge the EV supply battery, during braking, or when the accelerator pedal is released. |
| Rear Transaxle with Motor & Inverter Assembly *1 ⑦ | Motor Compartment | Drives by electrical power from the EV supply battery assembly, generates motive force for the drive wheels. Generates high-voltage electricity to recharge the EV supply battery, during braking, or when the accelerator pedal is released. |
| Compressor with Motor Assembly ⑧ | Motor Compartment | Driven by the EV control ECU using power from the EV supply battery to intake, compress and discharge refrigerant at a speed calculated by the air conditioning amplifier assembly. |

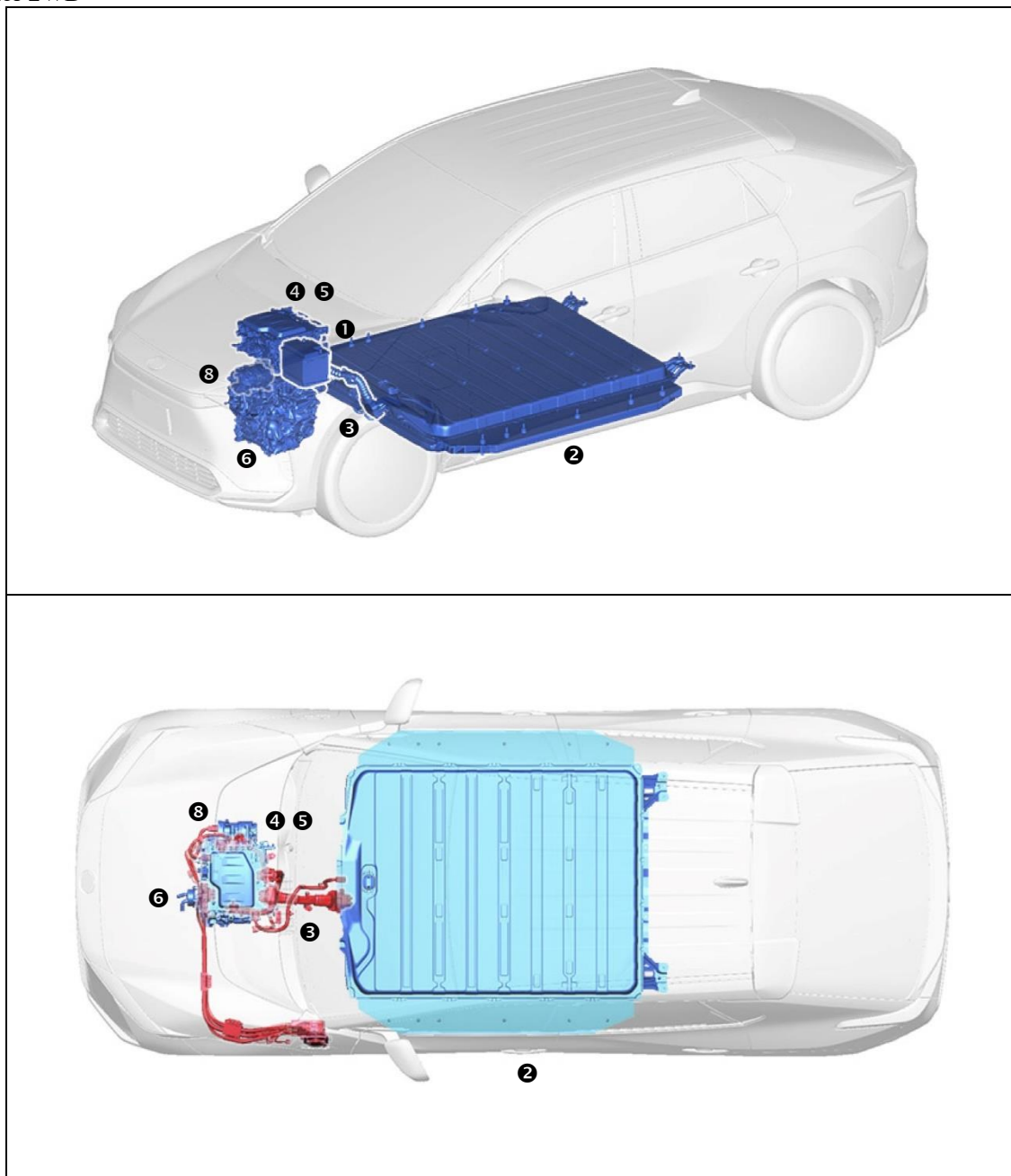
*Numbers in the component column apply to the illustrations on the following page.

*1: for 4WD/AWD

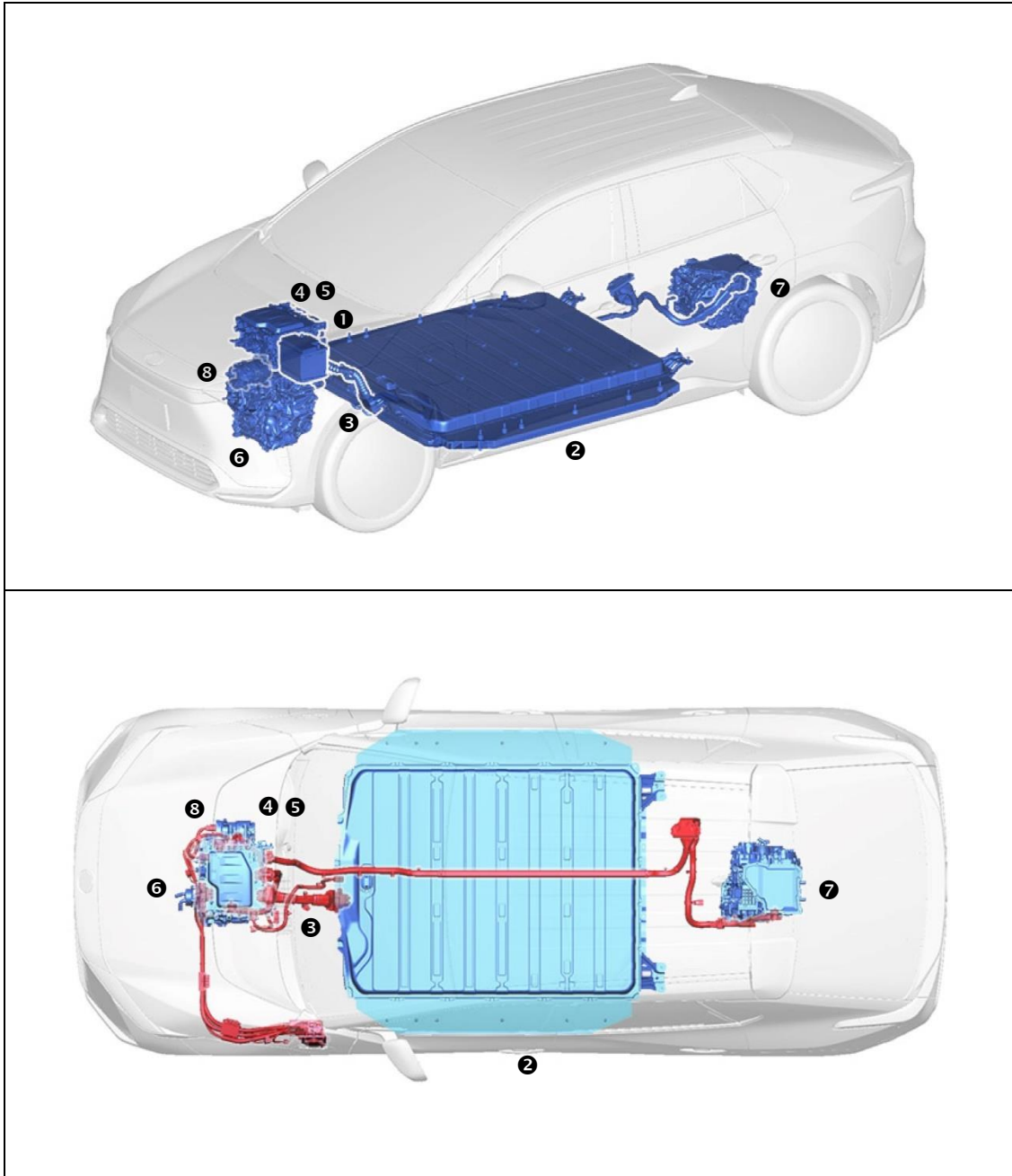
Specifications

| | |
|-----------------------------|---|
| Electric Motors: | 150 kW, AC Permanent Magnet Motor |
| Front: | 80 kW, AC Permanent Magnet Motor (for 4WD/AWD) |
| Rear: | 80 kW, AC Permanent Magnet Motor (for 4WD/AWD) |
| Transmission: | Automatic Only |
| EV Supply Battery Assembly: | 355.2 Volt Sealed Li-ion Battery |
| Curb Weight: | 4,178 lbs/1,895 kg - 4,365 lbs/1,980 kg |
| | 4,375 lbs/1,975 kg - 4,553 lbs/2,065 kg (for 4WD/AWD) |
| Frame Material: | Steel Unibody |
| Body Material: | Steel Panels except for Aluminum Engine Hood |
| Seating Capacity: | 5 passenger |

for 2WD



for 4WD/AWD

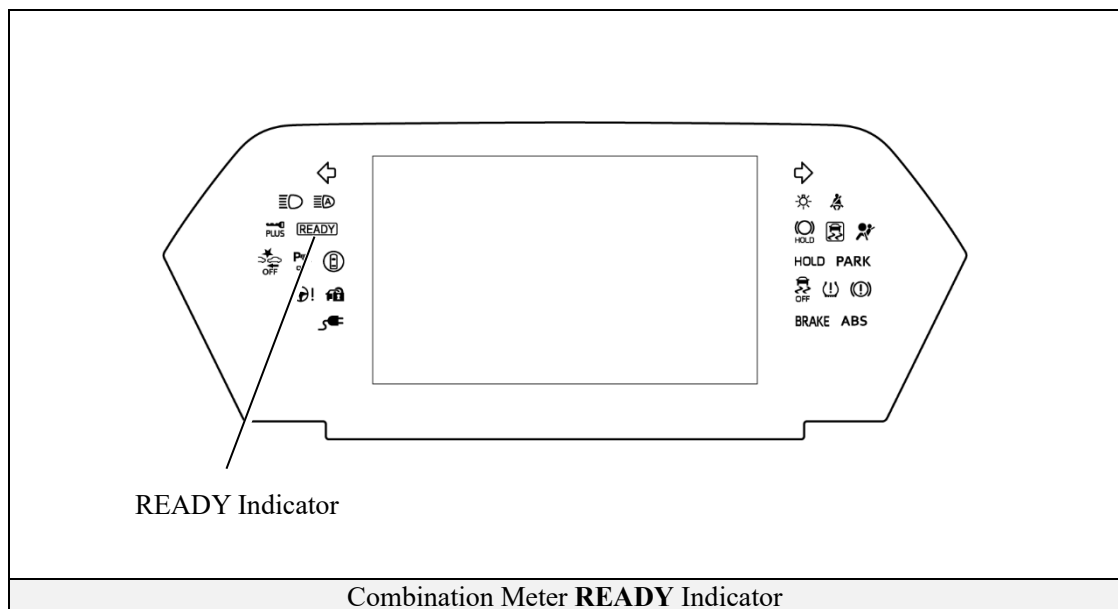


Electric Vehicle Operation

Once the **READY** indicator is illuminated in the instrument cluster, the vehicle may be driven. However, as there is no gasoline engine, no sound will be produced from the vehicle. It is important to recognize and understand the **READY** indicator provided in the instrument cluster. When lit, it informs the driver that the vehicle is on and operational even though the motor compartment is silent.

Vehicle Operation

- With the bZ4X, the system is operational while the **READY** indicator is on.
- Never assume that the vehicle is shut off just because the motor compartment is silent. Always look for the **READY** indicator status. The vehicle is shut off when the **READY** indicator is off.



EV Supply Battery Assembly and Auxiliary Battery

The bZ4X features a high voltage EV supply battery assembly that contains sealed Lithium-ion (Li-ion) battery cells.

EV Supply Battery Assembly

- The EV supply battery assembly is enclosed in a case and is rigidly mounted under the floor. The case is isolated from high voltage.
- The EV supply battery assembly consists of 96 low voltage (3.7 Volt) Li-ion battery cells connected in series-parallel to produce approximately 355.2 Volts. Each Li-ion battery cell is non-spillable and sealed in a case.
- The electrolyte used in the Li-ion battery cells is a flammable organic electrolyte. The electrolyte is absorbed into the battery cell separator and will not normally leak, even in a collision.

| EV Supply Battery Assembly | |
|---|---------|
| Battery assembly voltage | 355.2 V |
| Number of Li-ion battery cells in the battery | 96 |
| Li-ion battery cell voltage | 3.7 V |

Components Powered by the EV Supply Battery Assembly


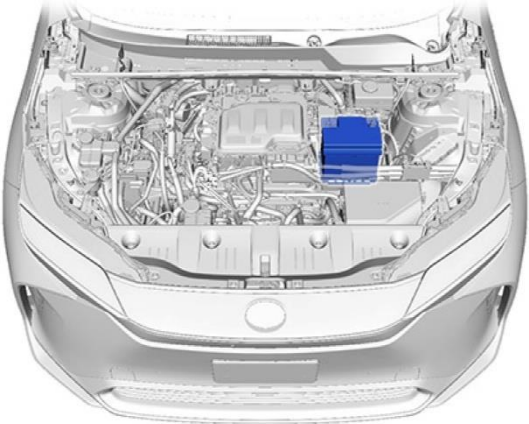

- Front Transaxle with Motor & Inverter Assembly
- Electric Converter Unit Assembly
 - DC-DC Converter for 12 Volt Auxiliary Battery
- Rear Transaxle with Motor & Inverter Assembly
- Compressor with Motor Assembly

EV Supply Battery Assembly Recovery

- Contact either your Toyota Distributor or the nearest Toyota dealer.

Auxiliary Battery

- The bZ4X contains a sealed lead-acid 12 Volts battery. This 12 Volts auxiliary battery powers the vehicle electrical system similar to a conventional vehicle. As with other conventional vehicles, the negative terminal of the auxiliary battery is grounded to the metal chassis of the vehicle.
- The auxiliary battery is located in the motor compartment.

| | |
|--|--|
|  |  |
| 355.2 Volt EV Supply Battery Assembly | 12 Volt Auxiliary Battery Mounted in Motor Compartment |
|  | |
| EV Supply Battery Assembly Mounted in Under the Floor | |

High Voltage Safety

The EV supply battery assembly powers the high voltage electrical system with DC electricity. Positive and negative orange colored high voltage power cables are routed from the EV supply battery assembly, under the vehicle floor pan, to the drive unit (inverter and motor) and DC/DC converter. The inverter contains a circuit that boosts and inverts the 355.2 Volts DC from the EV supply battery assembly to 500 Volts AC to power the motor. The electric converter unit assembly creates 3-phase AC to power the motor. Power cables are routed from the electric converter unit assembly to each high voltage motor (electric motor, electric heater, and compressor with motor assembly). The following systems are intended to help keep occupants in the vehicle and emergency responders safe from high voltage electricity:


High Voltage Safety System

- Positive and negative high voltage power cables ❶* connected to the EV supply battery assembly are controlled by 12 Volt normally open relays (system main relays ❷*). When the vehicle is shut off, the relays stop electrical flow from leaving the EV supply battery assembly.



WARNING:

- ***The high voltage system may remain powered for up to 10 minutes after the vehicle is shut off or disabled. To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or opening any orange high voltage power cable or high voltage component.***

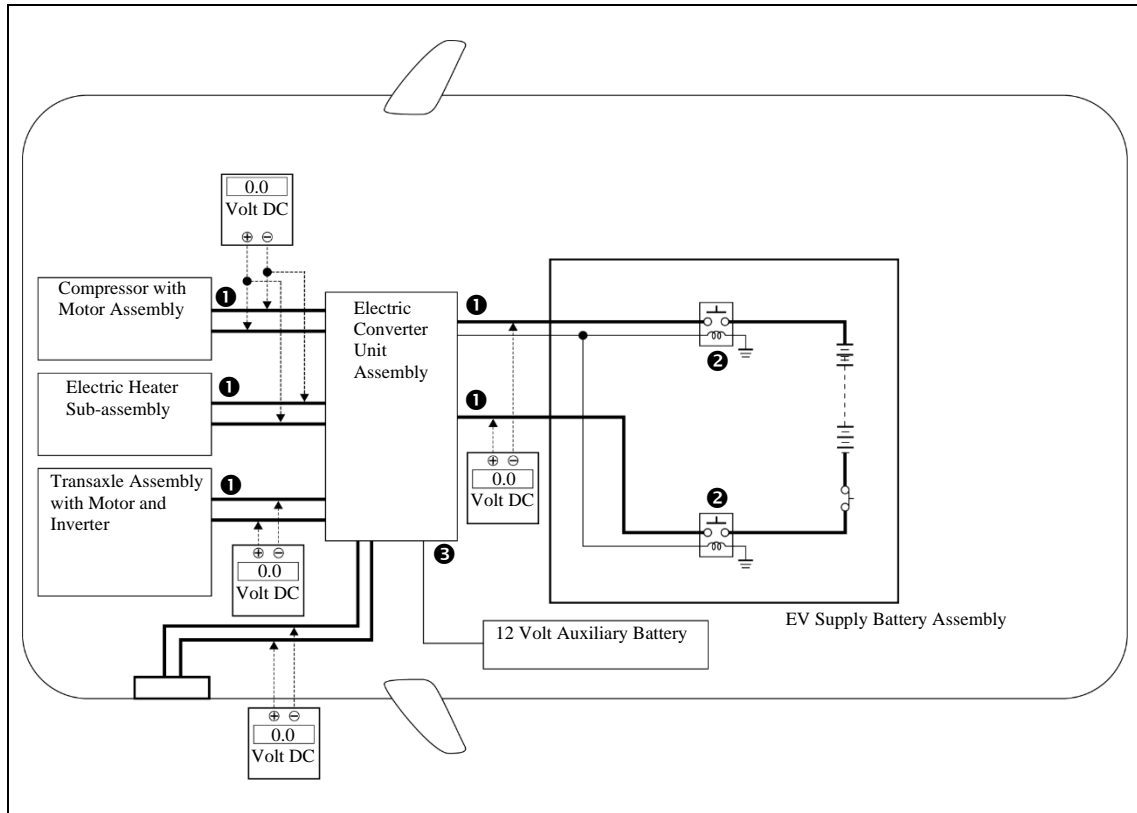
- Both positive and negative power cables ❶* are insulated from the metal body. High voltage electricity flows through these cables and not through the metal vehicle body. The metal vehicle body is safe to touch because it is insulated from the high voltage components.
- A ground fault monitor in the electric vehicle computer ❸* continuously monitors for high voltage leakage to the metal chassis while the vehicle is running. If a malfunction is detected, the electric vehicle computer ❸* will illuminate the master warning light  in the instrument cluster and indicate “EV System Malfunction” on the multi-information display.
- The EV supply battery assembly contactors will automatically open to stop electricity flow in a collision sufficient to activate the SRS.

*Numbers apply to the illustration on the following page.

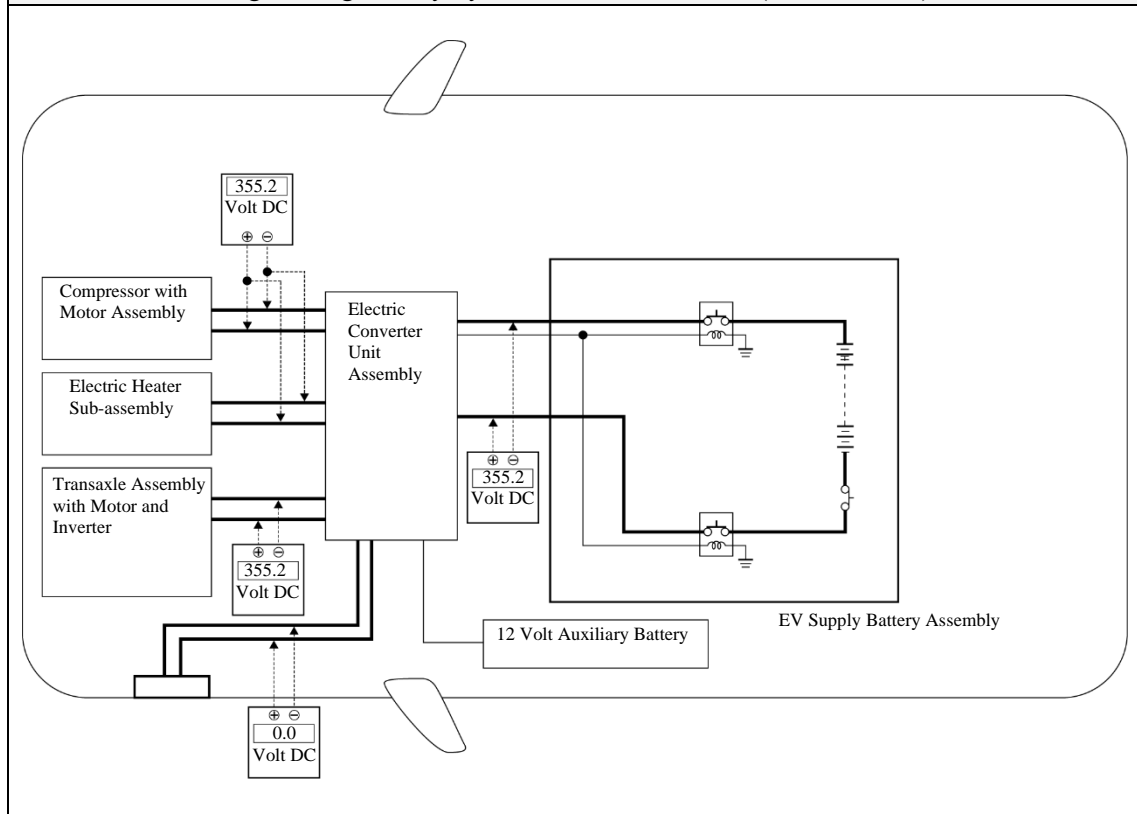
Service Plug Grip

- The high voltage circuit is cut by removing the service plug grip (see page 18).

for 2WD

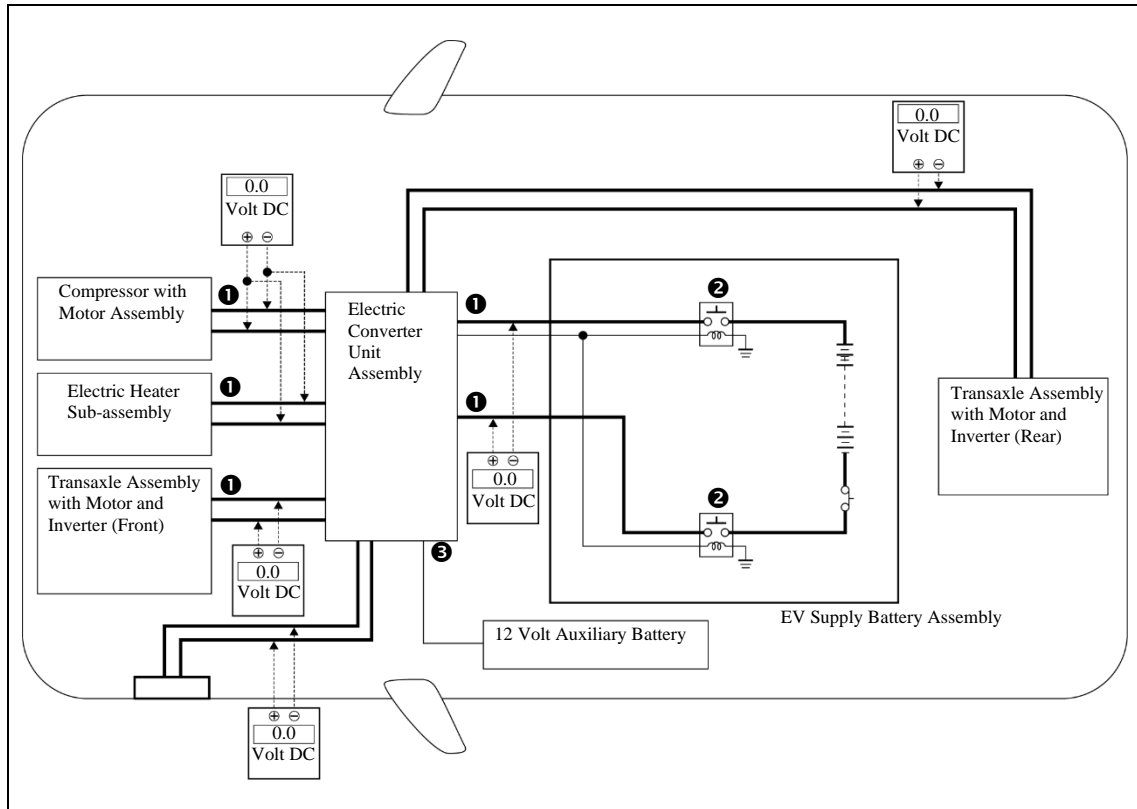


High Voltage Safety System – Vehicle Shut Off (READY-OFF)

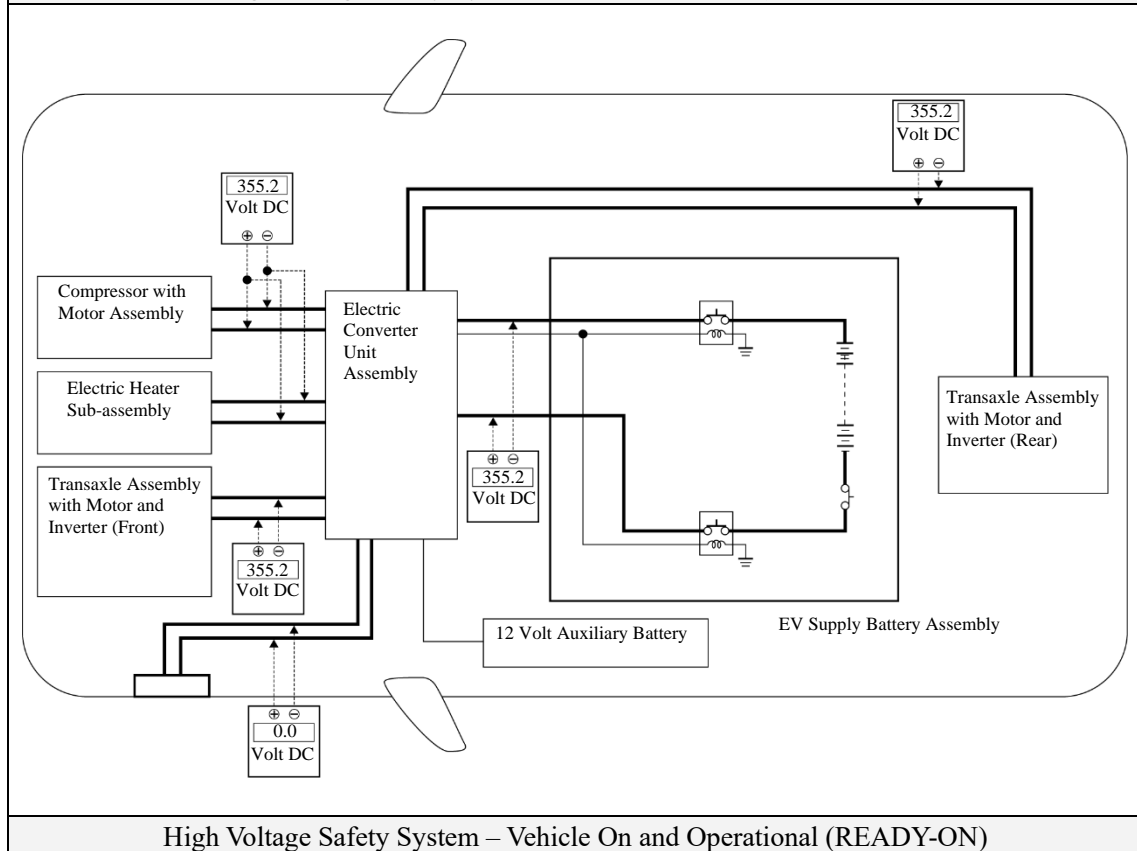


High Voltage Safety System – Vehicle On and Operational (READY-ON)

for 4WD/AWD



High Voltage Safety System – Vehicle Shut Off (READY-OFF)



High Voltage Safety System – Vehicle On and Operational (READY-ON)

Precaution to be observed when dismantling the vehicle

- To prevent electric shock, wear insulated gloves when working on wire harnesses and components of the high voltage system.
Before using insulated gloves, be sure to check them for cracks, tears and other types of damage.
- When servicing the vehicle, do not carry metal objects like mechanical pencils or rulers that can be dropped accidentally and cause a short circuit.
- 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 electric converter unit assembly.
- Do not touch any high voltage wire harnesses, connectors or parts with bare hands.
- Do not touch the terminals of the service plug grip.
- Make sure to insulate the high-voltage connectors and terminals of the EV supply battery assembly with insulating tape after removing them.
- After removing the service plug grip, put it in your pocket to prevent other technicians from accidentally reconnecting it while you are working on the high-voltage system.
- Before touching a bare high-voltage terminal, wear insulated gloves and use a tester to make sure that the terminal voltage is 0 V.
- Electrolyte leaks may cause acute poisoning if a high concentration of the vapor from the electrolyte is inhaled. In case of inhalation, move the affected person to a place with ample fresh air and let them lie quietly. Seek medical care.
- If the electrolyte comes in contact with your skin, wash the area thoroughly with soap and plenty of water, and seek medical care. If the electrolyte comes in contact with an article of clothing, take it off immediately. Prolonged contact with the electrolyte may cause skin irritation.
- If the electrolyte comes in contact with your eyes, call out loudly for help. Do not rub your eyes. Immediately flush them with a large amount of water for at least 15 minutes and seek medical care.
- If electrolyte is swallowed, seek medical care immediately. Do not induce vomiting, unless instructed by the doctor.
- If the vehicle catches on fire, use an ABC fire extinguisher to extinguish the fire.
Trying to extinguish a fire using only a small amount of water can be more dangerous than effective. Use a substantial amount of water or wait for firefighters.
- Do not allow any foreign matter or water to enter the EV supply battery assembly.

Necessary Items

- Protective clothing such as insulated gloves (electrically insulated), rubber gloves, helmet, safety goggles, safety shoes and SCBA or protective mask.
- Insulating tape such as electrical tape that has a suitable electrical insulation rating and insulation tool set.
- An electrical tester that is capable of measuring DC 750 Volts or more.

Spills

The bZ4X contains some of the same common automotive fluids used in other non-electric Toyota vehicles, with the exception of the Li-ion electrolyte used in the EV supply battery assembly. The electrolyte used in the Li-ion battery cells is a flammable organic electrolyte. The electrolyte is absorbed into the battery cell separators, even if the battery cells are crushed or cracked, it is unlikely that liquid electrolyte will leak. Any liquid electrolyte that leaks from a Li-ion battery cell quickly evaporates.



WARNING:

- ***The Li-ion battery contains organic electrolyte. Only a small amount may leak from the batteries which may irritate the eyes, nose, throat, and skin.***
- ***Contact with the vapor produced by the electrolyte may irritate the nose and throat.***
- ***To avoid injury by coming in contact with the electrolyte or vapor, wear personal protective equipment for organic electrolyte including SCBA or protective mask for organic gases.***

Handle Li-ion electrolyte spills using the following Personal Protective Equipment (PPE):

- Splash shield or safety goggles. Fold down helmet shields are not acceptable for electrolyte spills.
- Butyl rubber or suitable organic solvent gloves.
- Apron or protective clothing suitable for organic solvents.
- Rubber overboots or boots suitable for organic solvents.
- Full face respirator suitable for organic solvents or SCBA.

Dismantling the vehicle

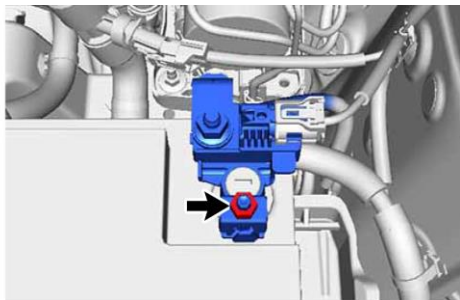
The following 7 pages contain general instructions for use when working on a bZ4X. Read these instructions before proceeding to the EV supply battery assembly removal instructions on page 25.



WARNING:

- ***The high voltage system may remain powered for up to 10 minutes after the vehicle is shut off or disabled. To prevent serious injury or death from severe burns or electric shock, avoid touching, cutting, or opening any orange high voltage power cable or any high voltage component.***

1. Shut off the ignition (**READY** indicator is off).
2. Disconnect cable from negative auxiliary battery terminal.
 - a.



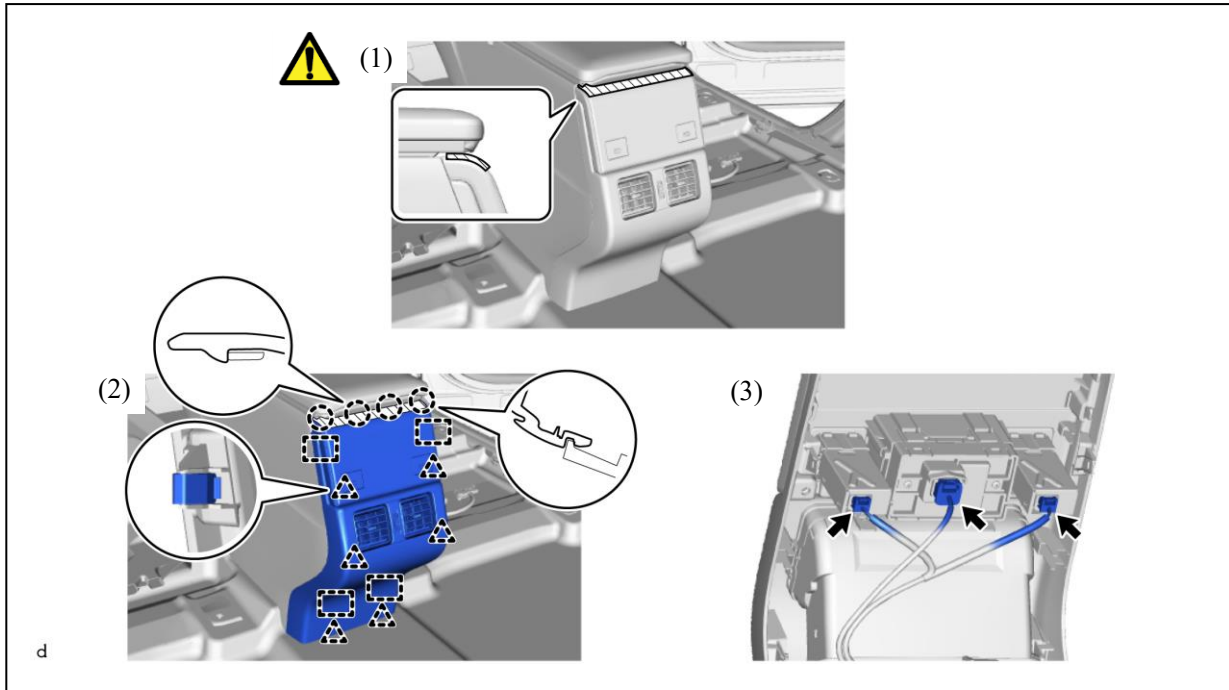
P

3. Remove console rear end panel sub-assembly.

HINT:

The illustrations are representative examples, and details may differ.

a.



- (1) Apply protective tape around the upper part of console rear end panel sub-assembly as shown in the illustration.
- (2) Disengage the claws, clips and guides to remove the console rear end panel sub-assembly.
- (3) Disconnect each connector.

4. Remove service plug grip.


CAUTION:

- **Wear insulated gloves.**
- **Do not inspect or service the high voltage system with the service plug grip installed.**

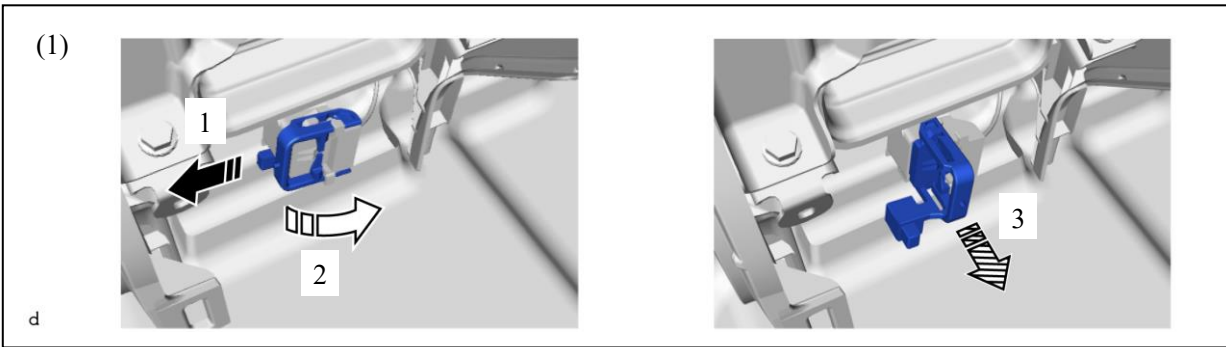


- **To reduce the risk of electric shock, make sure to remove the service plug grip to cut off the high voltage circuit before servicing the vehicle.**
- **To reduce the risk of electric shock, make sure to wait at least 10 minutes after removing the service plug grip to fully discharge the high voltage capacitor inside the inverter with converter assembly.**



| | |
|---|--|
|  | <p>NOTICE:</p> <ul style="list-style-type: none"> • 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. <p>HINT:</p> <p>Waiting for at least 10 minutes is required to discharge the high voltage capacitor inside the inverter with converter assembly.</p> |
|---|--|

a.



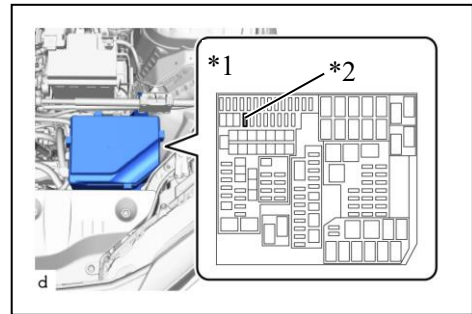
(1) While wearing insulated gloves, rotate the handle of the service plug grip and remove the service plug grip as indicated by the arrows, in the order shown in the illustration.

5. Make other staff aware that a high-voltage system is being dismantled by using the following sign: CAUTION: HIGH-VOLTAGE. DO NOT TOUCH (see page 24).

6. If the service plug grip cannot be removed due to damage to the vehicle, remove the **IGP-MAIN No. 1** fuse.

CAUTION:

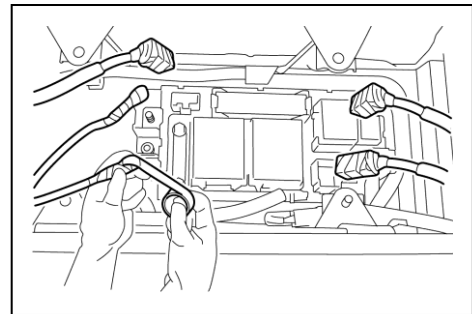
This operation shuts off the EV system. Be sure to wear insulated gloves because high voltage is not shut off inside the EV supply battery assembly. When it is possible to remove the service plug grip, remove it and continue the procedure.



| | |
|----|-------------------------------|
| *1 | Front Compartment Relay Block |
| *2 | IGP-MAIN No. 1 Fuse |

7. After disconnecting or exposing a high-voltage connector or terminal, insulate it immediately using insulating tape. Before disconnecting or touching a bare high-voltage terminal, wear insulated gloves.

8. Check the EV supply battery assembly and nearby area for leakage. If you find any liquid, it may be strong alkaline electrolyte. Wear rubber gloves and goggles and neutralize the liquid using a saturated boric acid solution or vinegar. Then wipe up the liquid using waste rags etc.



9. If the electrolyte comes into contact with your skin, wash the skin immediately using a saturated boric acid solution or a large amount of water. If the electrolyte adheres to any article of clothing, take the clothing off immediately.

10. If the electrolyte comes into contact with your eye(s), call out loudly for help. Do not rub your eye(s). Instead, wash the eye(s) with a dilute boric acid solution or a large amount of water and seek medical care.

11. With the exception of the EV supply battery assembly, remove parts by following procedures which are similar to conventional Toyota vehicles. For the removal of the EV supply battery assembly, refer to the following pages.

Person in charge:

CAUTION:
HIGH-VOLTAGE.
DO NOT TOUCH.

CAUTION:
HIGH-VOLTAGE.
DO NOT TOUCH.

Person in charge:

When performing work on the HV system, fold this sign and put it on the roof of the vehicle.

Removal of EV Supply Battery Assembly



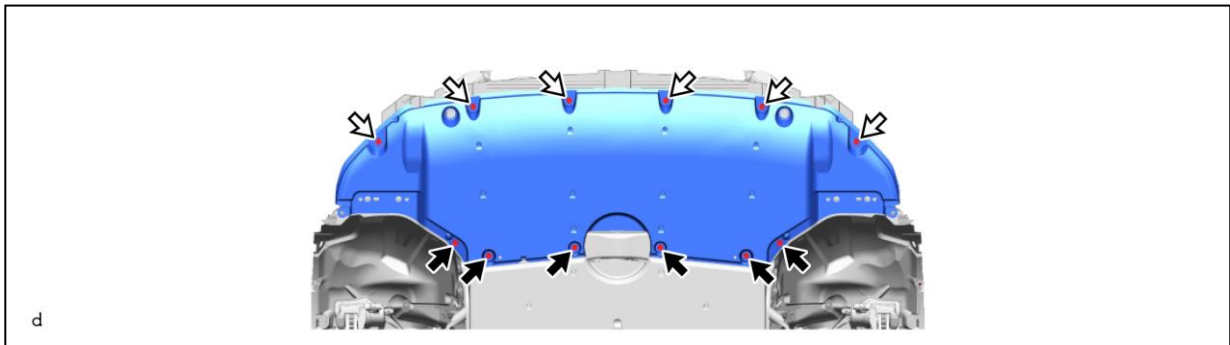
WARNING:

- *Be sure to wear insulated gloves when handling high-voltage parts.*
- *Even if the vehicle is shut off and the relays are off, be sure to remove the service plug grip before performing any further work.*
- *Power remains in the high voltage electrical system for 10 minutes even after the EV supply battery assembly is shut off because the circuit has a condenser that stores power.*
- *Make sure that the tester reading is 0 V before touching any high-voltage terminals which are not insulated.*
- *The SRS may remain powered for up to 90 seconds after the vehicle is shut off or disabled. To prevent serious injury or death from unintentional SRS deployment, avoid cutting the SRS components.*

1. SHUT OFF IGNITION (**READY** indicator is off)

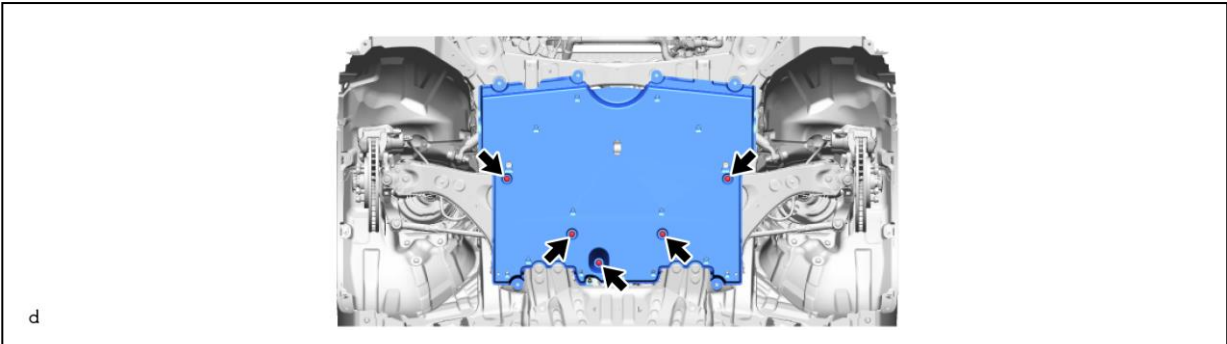
2. REMOVE NO. 1 MOTOR UNDER COVER

a.



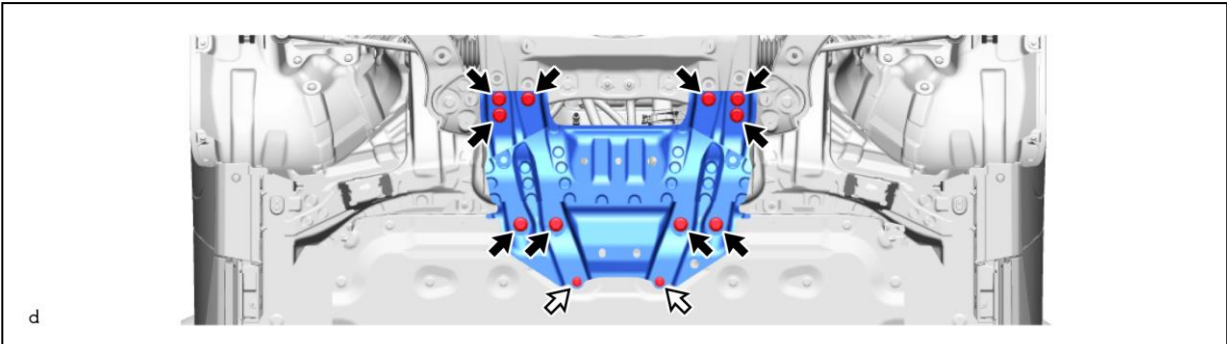
3. REMOVE NO. 2 MOTOR UNDER COVER

a.



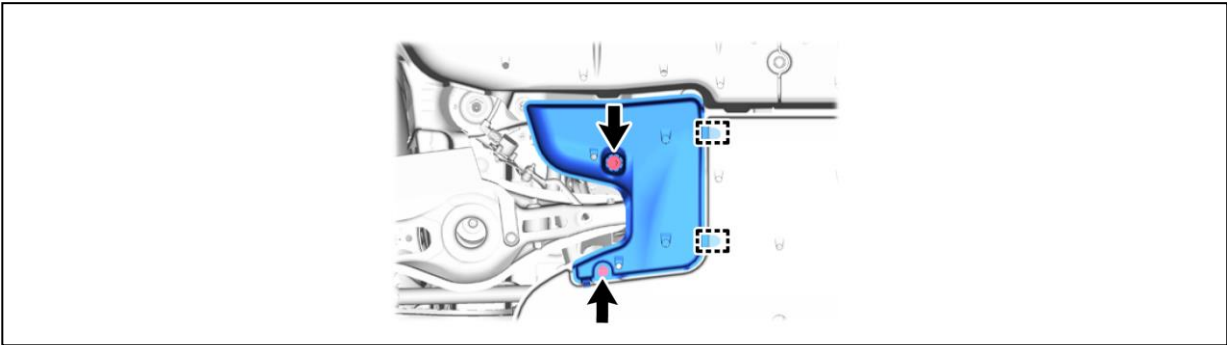
4. REMOVE FRONT SUSPENSION MEMBER BRACE SUB-ASSEMBLY

a.



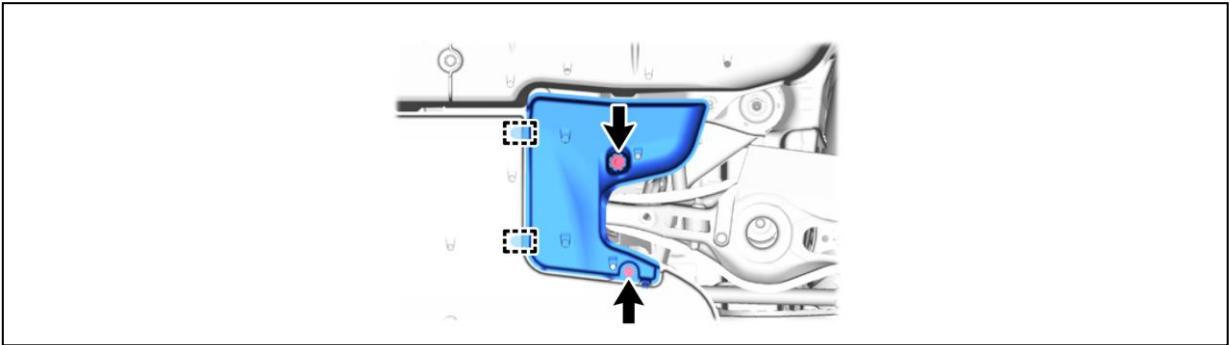
5. REMOVE NO. 2 DIFFERENTIAL SUPPORT PROTECTOR (for 4WD/AWD)

a.



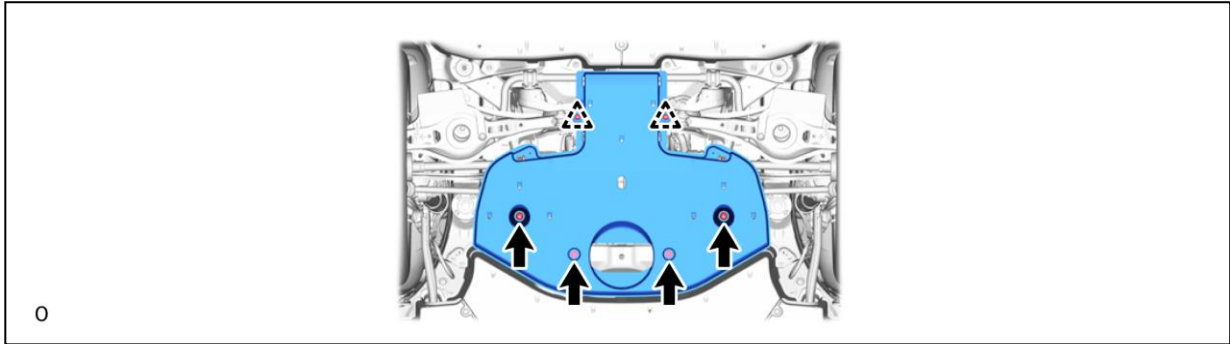
6. REMOVE NO. 1 DIFFERENTIAL SUPPORT PROTECTOR (for 4WD/AWD)

a.



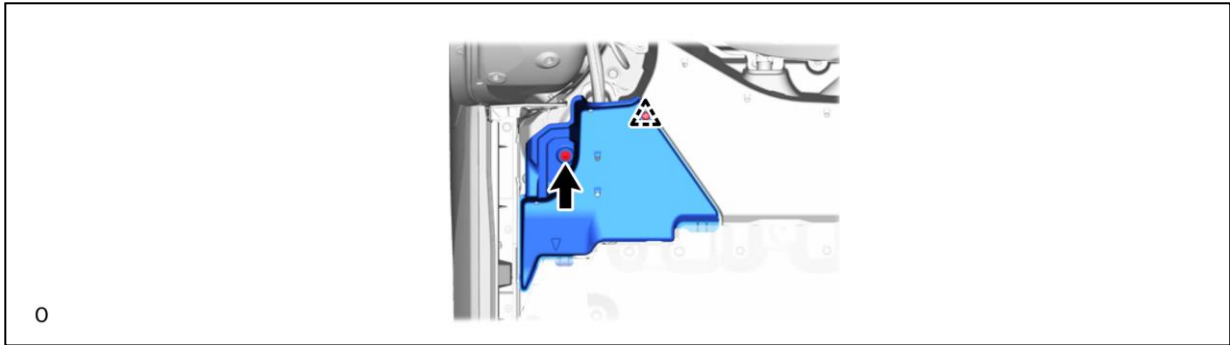
7. REMOVE REAR SUSPENSION BRACE COVER (for 4WD/AWD)

a.



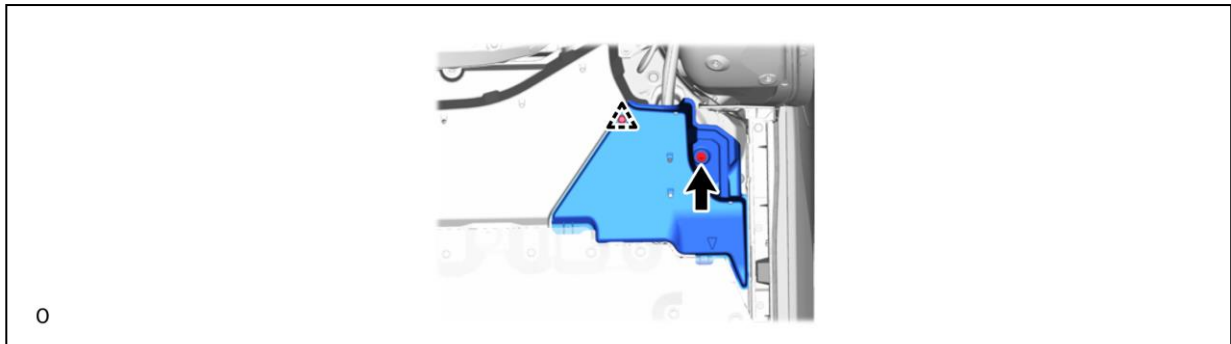
8. REMOVE REAR FLOOR SIDE MEMBER COVER LH (for 4WD/AWD)

a.



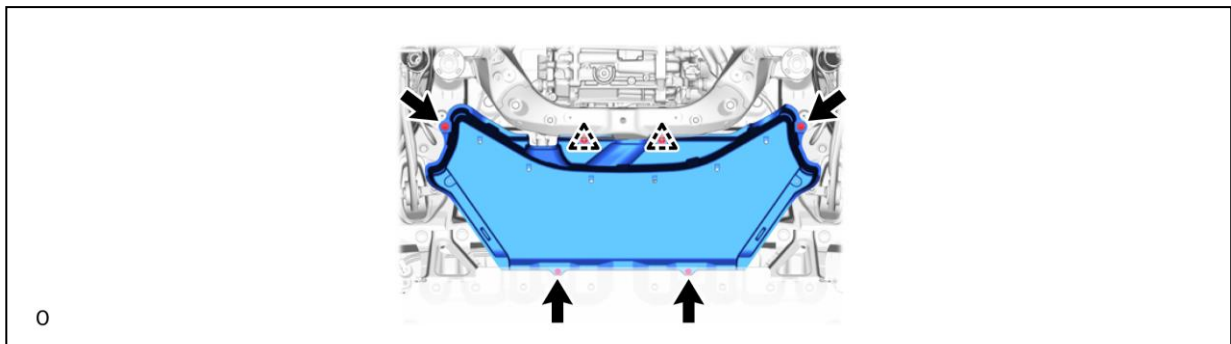
9. REMOVE REAR FLOOR SIDE MEMBER COVER RH (for 4WD/AWD)

a.



10. REMOVE NO. 3 FLOOR UNDER COVER (for 4WD/AWD)

a.



(1) Remove the 2 bolts and 2 screws.

(2) Loosen the clip A to remove the No.3 floor under cover.

HINT:

Clip A cannot be removed.

11. DRAIN COOLANT (for Inverter)

CAUTION:

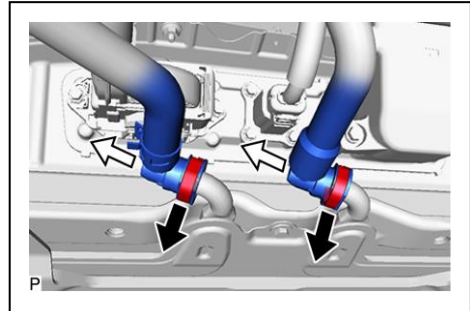
To avoid the danger of being burned, do not remove the reserve tank cap while the coolant (for inverter) is still hot. Pressurized, hot coolant (for inverter) and steam may be released and cause serious burns.

NOTICE:

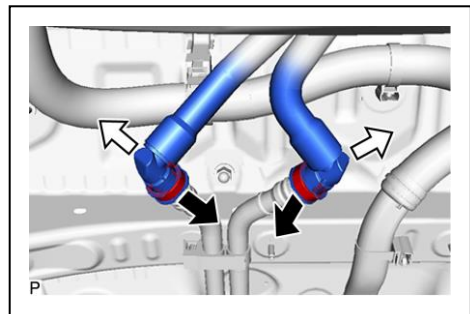
- Do not reuse the drained coolant because it may contain foreign matter.
- Collect the drained coolant and measure its volume to establish a benchmark. When adding coolant, make sure to add more coolant than the measured amount.

- The procedure can only be performed with the ignition switch ON and READY OFF.
- Do not perform this procedure when there are malfunctions in related components.
- Perform the procedure within 20 minutes of turning the ignition switch ON.

- (1) Turn the power switch on (IG).
- (2) On the air conditioning control panel, press the OFF switch 6 times, then press the air outlet mode switching switch 6 times.
- (3) Press and hold the air conditioning control panel fresh/recirculation switch for 5 seconds.
- (4) Disconnect the No. 3 EV water by-pass hose and drain the coolant.
- (5) Connect the No. 3 EV water by-pass hose.
- (6) Disconnect the EV water by-pass hose assembly and drain the coolant.
- (7) Connect the EV water by-pass hose assembly.



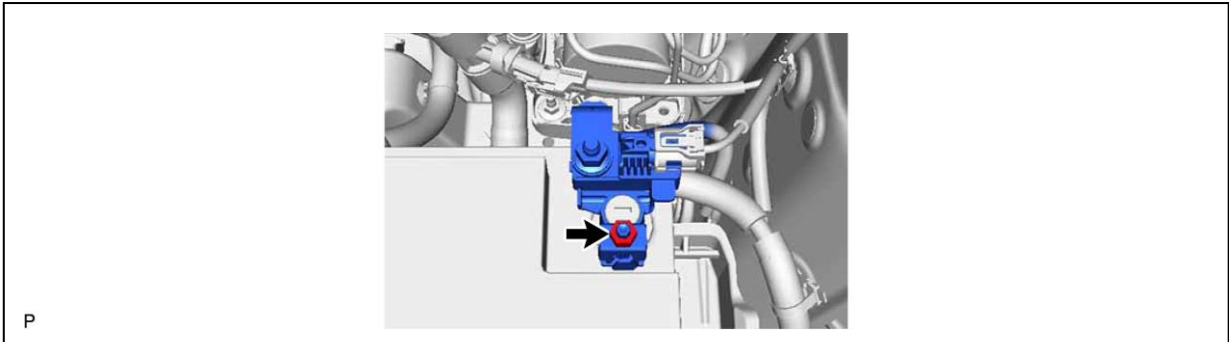
- (8) for 4WD/AWD :
Disconnect the No. 8 inverter cooling hose subassembly and drain the coolant.
- (9) for 4WD/AWD :
Connect the No. 8 inverter cooling hose subassembly.



- (10) for 4WD/AWD :
Disconnect the No. 9 inverter cooling hose subassembly and drain the coolant.
- (11) for 4WD/AWD :
Connect the No. 9 inverter cooling hose subassembly.

12. DISCONNECT CABLE FROM NEGATIVE AUXILIARY BATTERY TERMINAL

a.

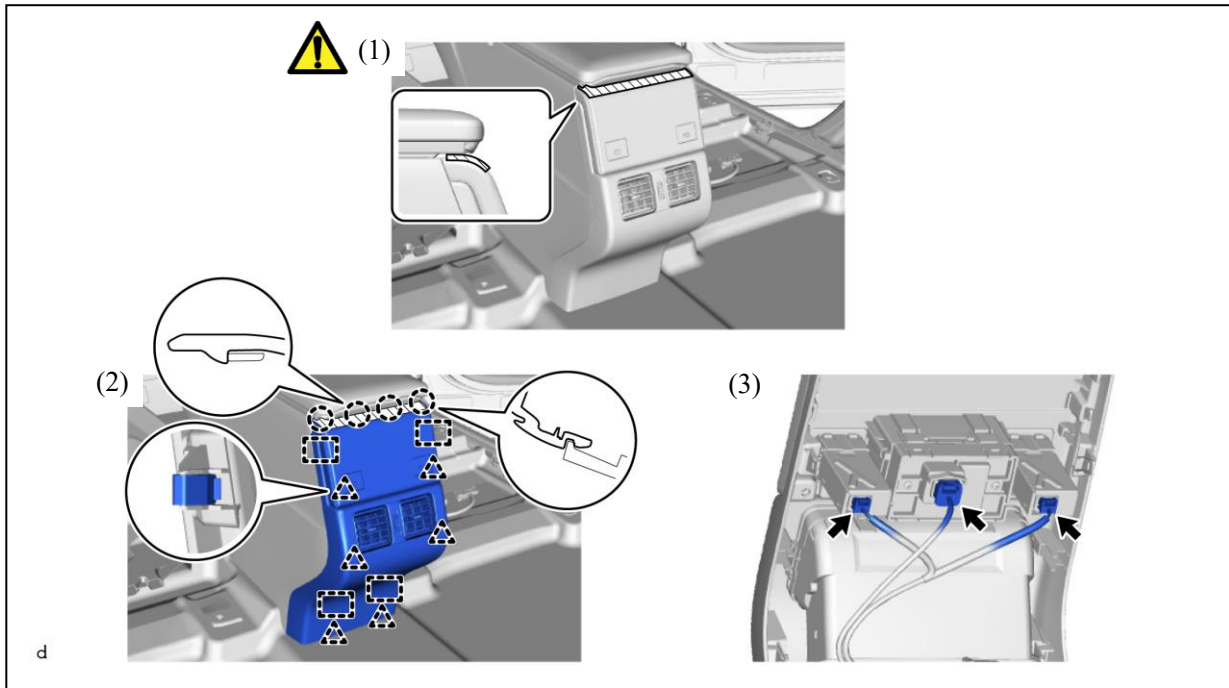


13. REMOVE CONSOLE REAR END PANEL SUB-ASSEMBLY

HINT:

The illustrations are representative examples, and details may differ.

a.



- (1) Apply protective tape around the upper part of console rear end panel sub-assembly as shown in the illustration.
- (2) Disengage the claws, clips and guides to remove the console rear end panel sub-assembly.
- (3) Disconnect each connector.

14. 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.





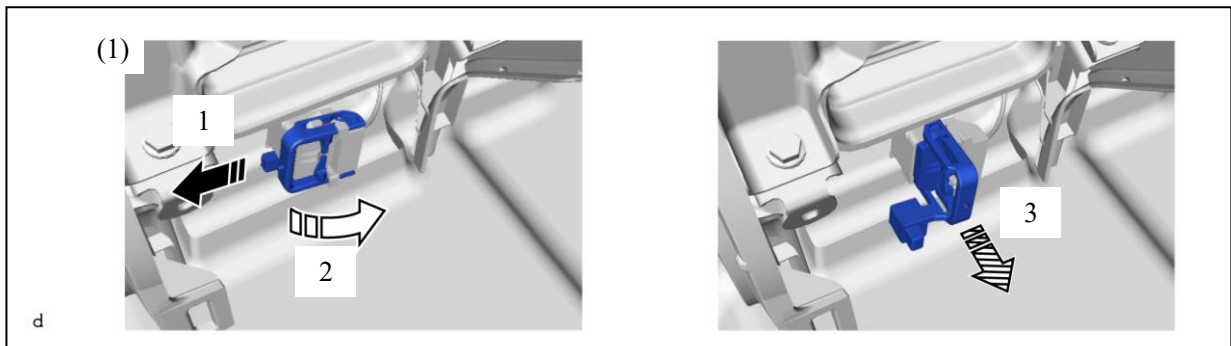
NOTICE:

- 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.

a.

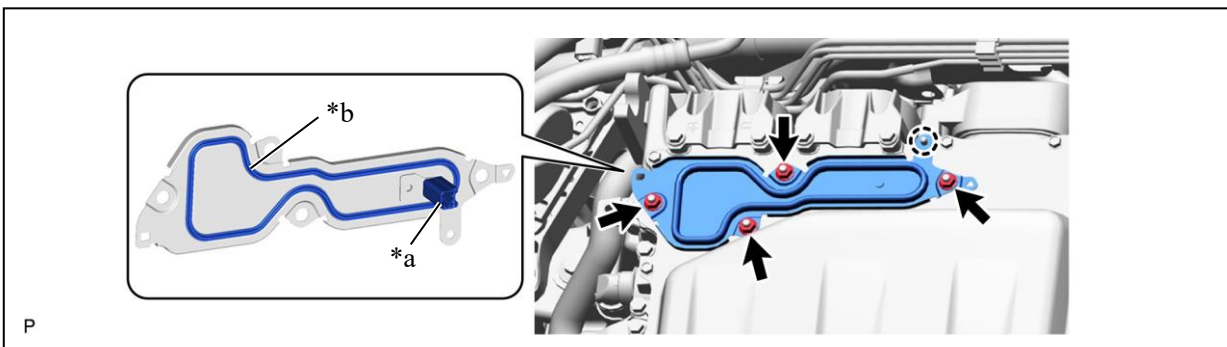


- (1) While wearing insulated gloves, rotate the handle of the service plug grip and remove the service plug grip as indicated by the arrows, in the order shown in the illustration.

15. REMOVE NO. 2 TERMINAL COVER


| | |
|---|---|
|  | <p>CAUTION: Wear insulated gloves.</p> <p>NOTICE:</p> <ul style="list-style-type: none"> • 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. |
|---|---|

a.

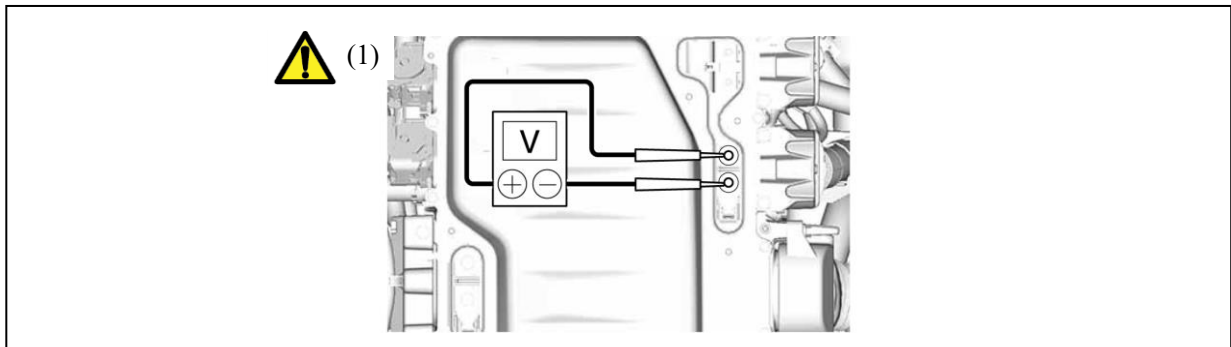


| | | | |
|----|-----------|----|-----------------|
| *a | Interlock | *b | Waterproof Seal |
|----|-----------|----|-----------------|

16. CHECK TERMINAL VOLTAGE

| | |
|---|---|
|  | <p>CAUTION: Wear insulated gloves.</p> <p>NOTICE: Do not allow any foreign matter or water to enter the electric converter unit assembly.</p> |
|---|---|

a.



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

Standard Voltage:

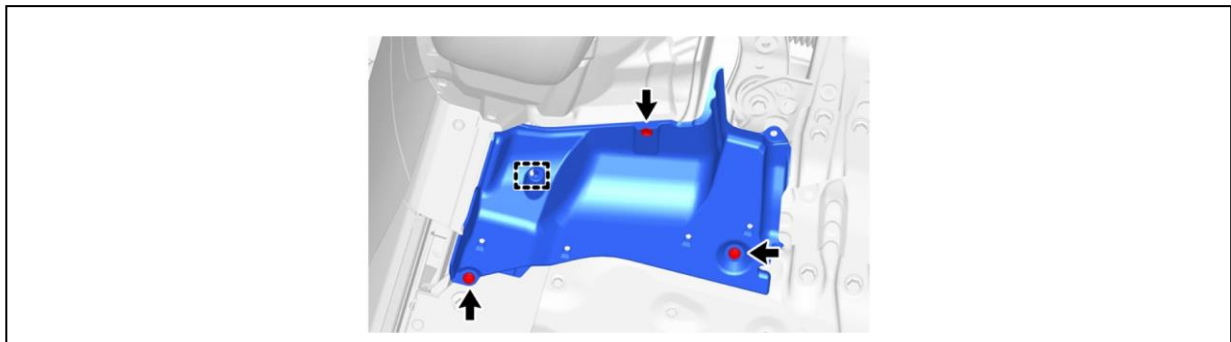
0 V

HINT:

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

17. REMOVE FRONT FLOOR COVER RH

a.

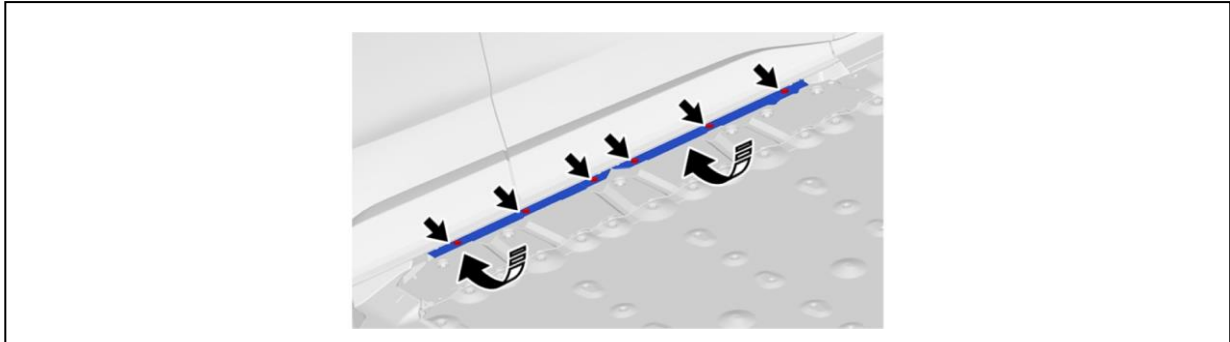


18. REMOVE FRONT FLOOR COVER LH

(1) Perform the same procedure as for the RH side.

19. DISCONNECT BODY ROCKER PANEL MOULDING ASSEMBLY RH

a.

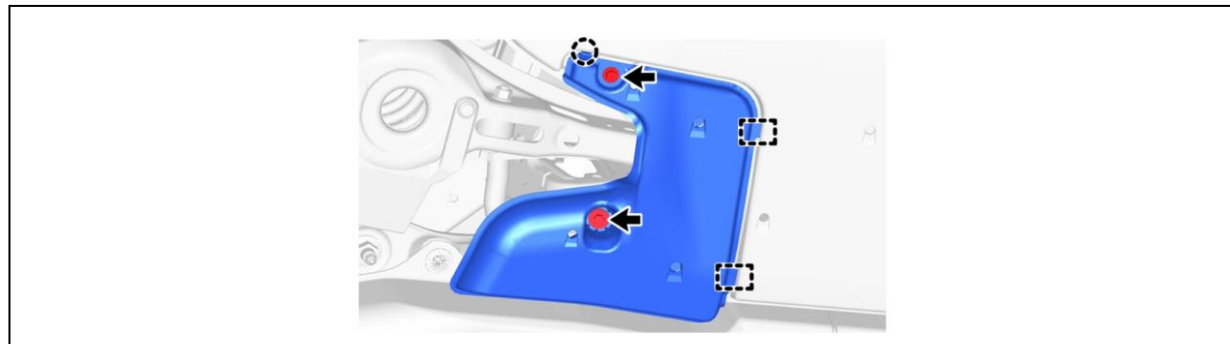


20. DISCONNECT BODY ROCKER PANEL MOULDING ASSEMBLY LH

(1) Perform the same procedure as for the RH side.

21. REMOVE NO. 1 DIFFERENTIAL SUPPORT PROTECTOR (for 2WD)

a.

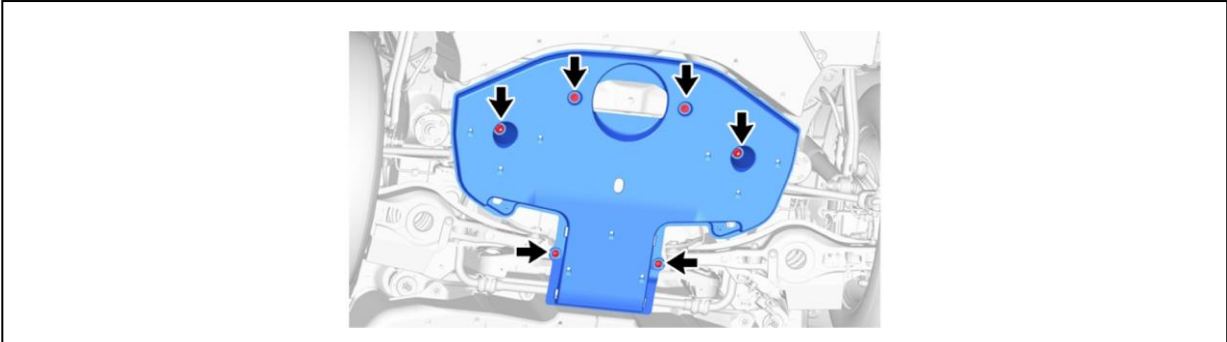


22. REMOVE NO. 2 DIFFERENTIAL SUPPORT PROTECTOR (for 2WD)

(1) Remove in the same way as the No. 1 differential support protector.

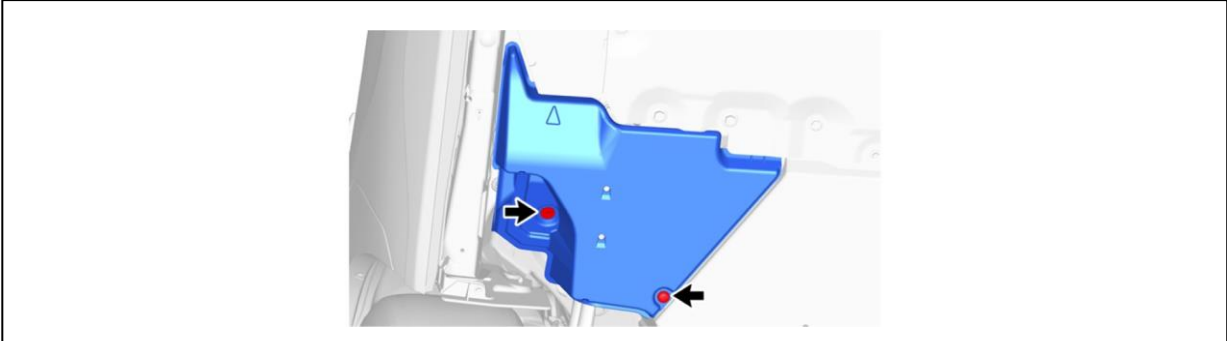
23. REMOVE REAR SUSPENSION BRACE COVER (for 2WD)

a.



24. REMOVE REAR FLOOR SIDE MEMBER COVER RH (for 2WD)

a.

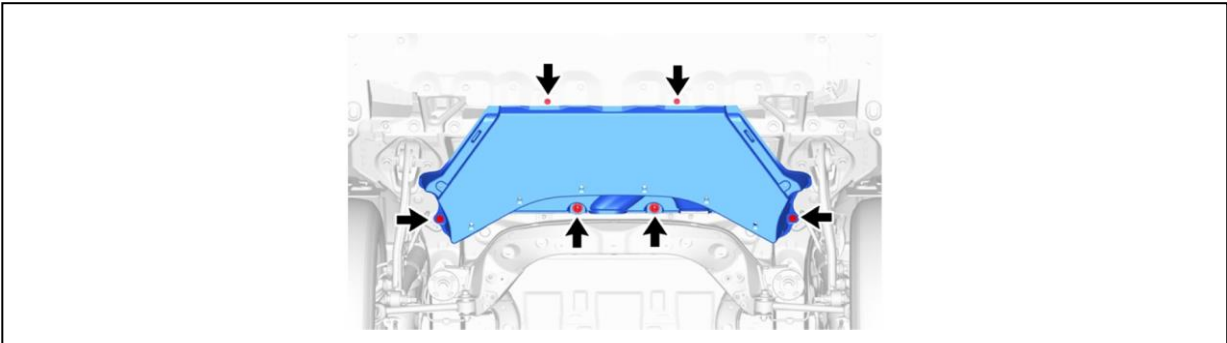


25. REMOVE REAR FLOOR SIDE MEMBER COVER LH (for 2WD)

(1) Perform the same procedure as for the RH side.

26. REMOVE NO. 3 FLOOR UNDER COVER (for 2WD)

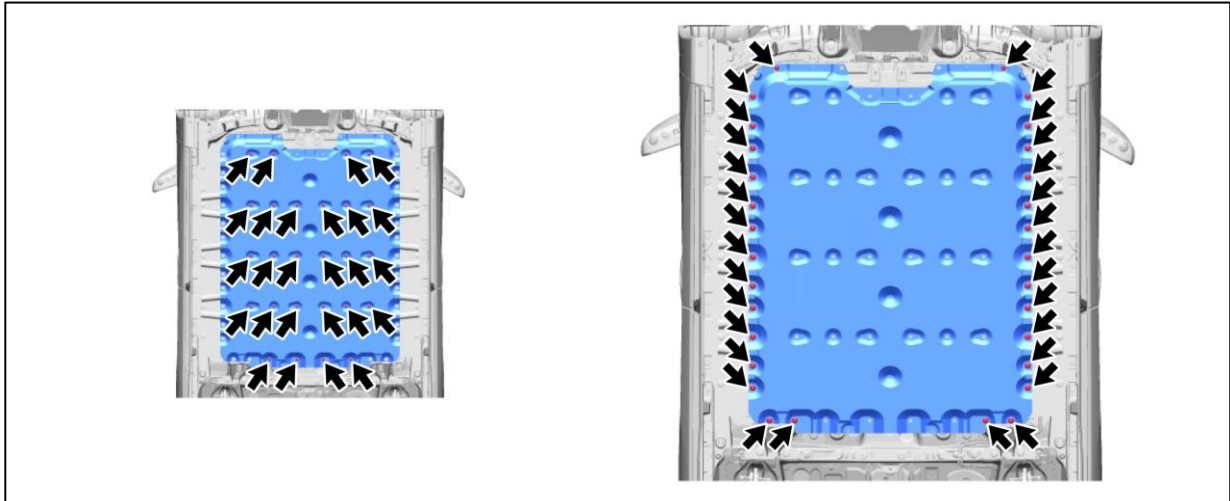
a.



27. REMOVE BATTERY BOX COVER

| | |
|---|---|
|  | <p>HINT: Perform this procedure only when replacement of the battery box cover is necessary.</p> |
|---|---|

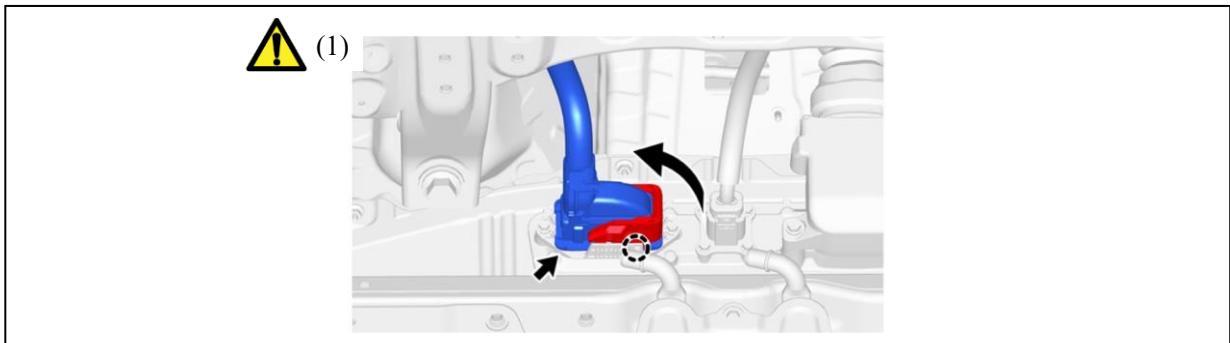
a.



28. REMOVE MOTOR COMPARTMENT MAIN WIRE

| | |
|---|---|
|  | <p>CAUTION: Wear insulated gloves.</p> |
|---|---|

a.



- (1) Move the lock lever while pushing the lock on the connector, and disconnect the motor compartment main wire connector.

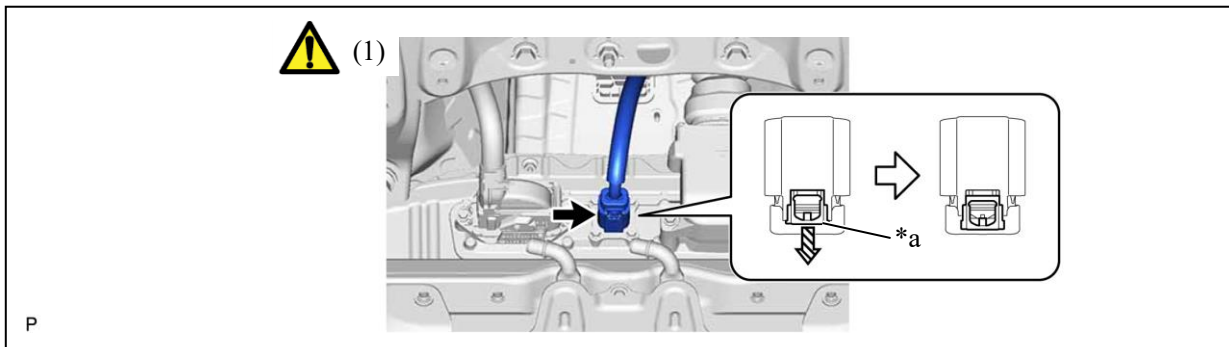
NOTICE:


- Do not damage the terminals, connector housing or EV supply battery assembly during disconnection.
- Cover the hole where the cable was connected with tape (non-residue type) or equivalent to prevent entry of foreign matter.
- Insulate the disconnected terminals with insulating tape.
- Do not touch the waterproof seal or terminals of the connector.

29. DISCONNECT HV SOCKET INVERTER WIRE

| | |
|---|---|
|  | <p>CAUTION: Wear insulated gloves.</p> |
|---|---|


a.



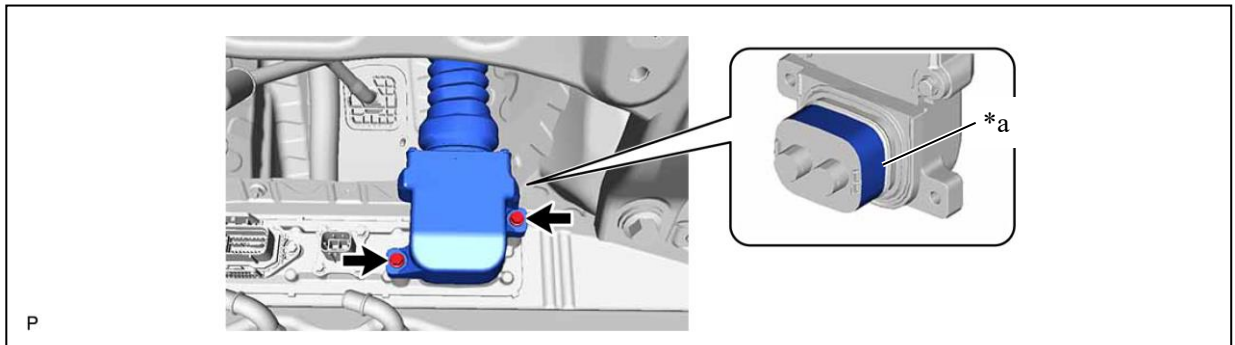
| | | | |
|---|--------------------|---|---|
| *a | Green-colored Lock | - | - |
|  | Slide | - | - |

- (1) Using a screwdriver, slide the green-colored lock of the connector as shown in the illustration to release it and disconnect the HV socket inverter wire.

30. DISCONNECT FLOOR UNDER WIRE

| | |
|---|--|
|  | <p>CAUTION: Wear insulated gloves.</p> <p>NOTICE:</p> <ul style="list-style-type: none"> • Do not allow any foreign matter or water to enter the EV supply battery assembly. • Do not touch the waterproof seal or terminals of the connector. • Do not damage the terminals, connector housing or EV supply battery assembly during disconnection. • Cover the hole where the cable was connected with tape (non-residue type) or equivalent to prevent entry of foreign matter. • Insulate the disconnected terminals with insulating tape. |
|---|--|

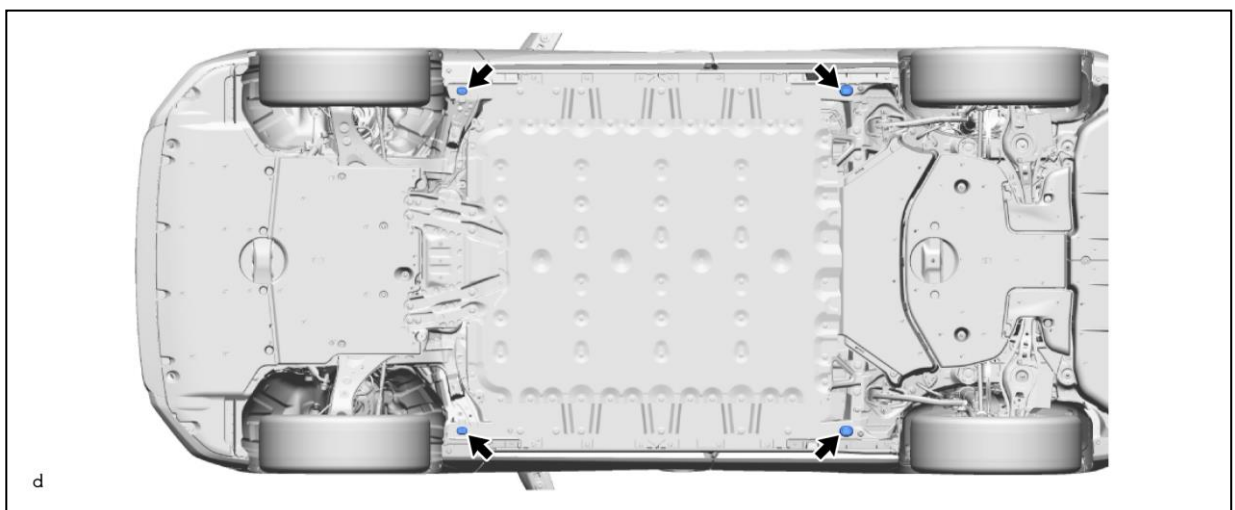
a.




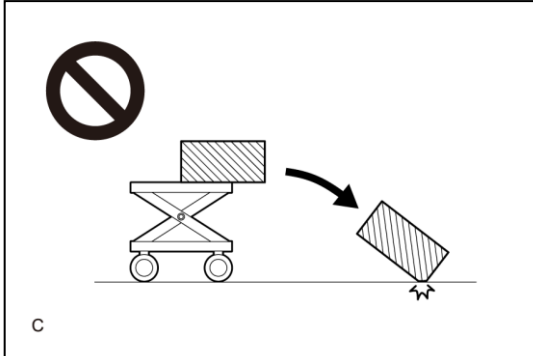
| | | | |
|----|-----------------|---|---|
| *a | Waterproof Seal | - | - |
|----|-----------------|---|---|

31. REMOVE HOLE PLUG

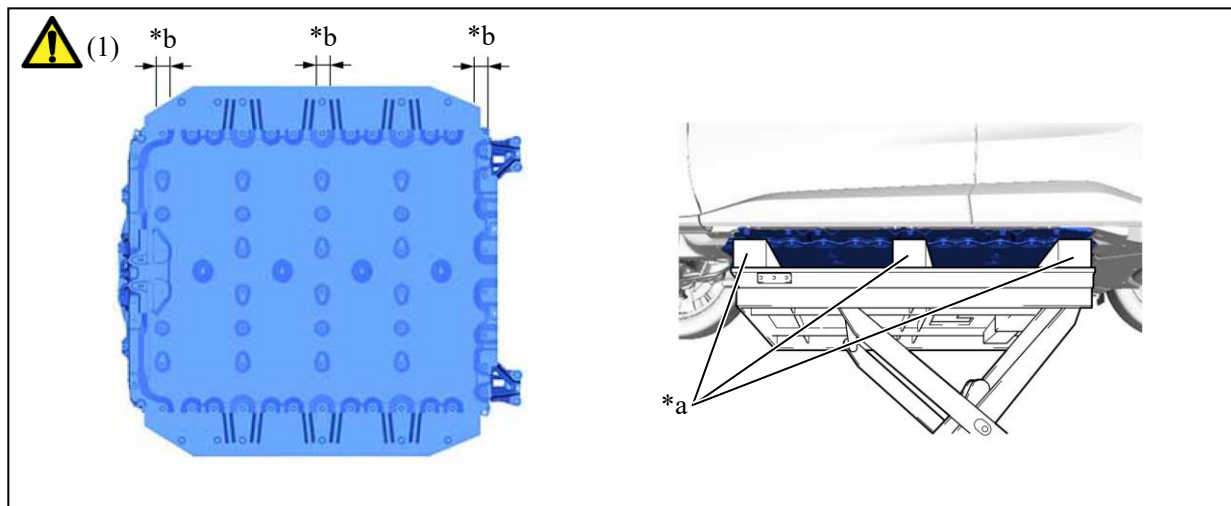
a.



33. REMOVE EV SUPPLY BATTERY ASSEMBLY

| | | |
|---|---|---|
|  | <p>CAUTION:</p> <ul style="list-style-type: none"> • Because the weight of the EV 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 EV supply battery assembly with the fork etc. • Be sure to wear insulated gloves and protective goggles. |  <p style="text-align: left; margin-left: 5px;">C</p> |
|---|---|---|

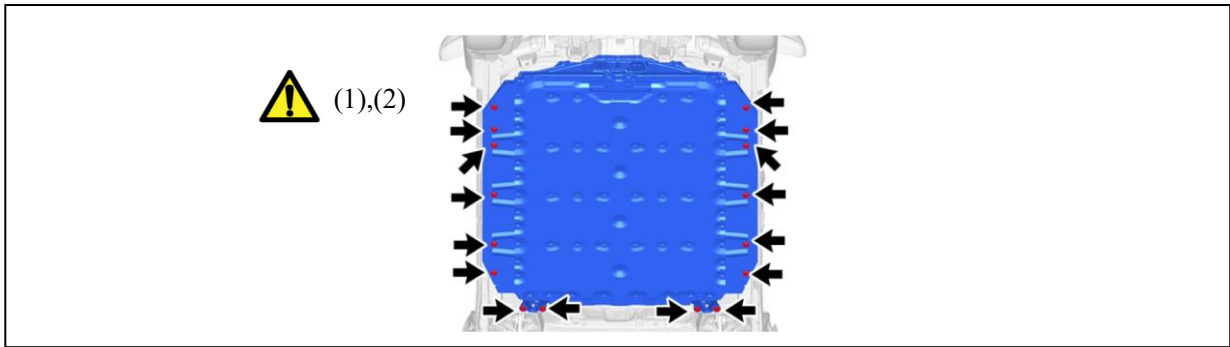
a.



| | | | |
|----|--------------|----|-----------------|
| *a | Wooden Block | *b | Supporting area |
|----|--------------|----|-----------------|

(1) Using an engine lifter support the EV supply battery assembly as shown in the illustration.

b.



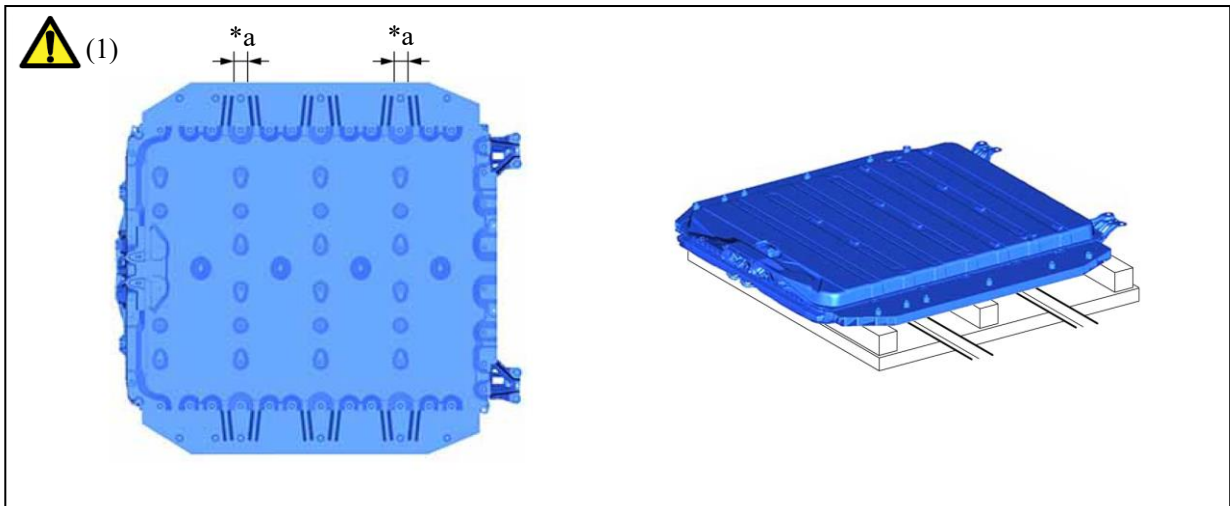
(1) Remove the 16 bolts.

(2) Slowly lower the engine lifter to remove the EV supply battery assembly.

NOTICE:

Be careful not to drop the EV supply battery assembly.

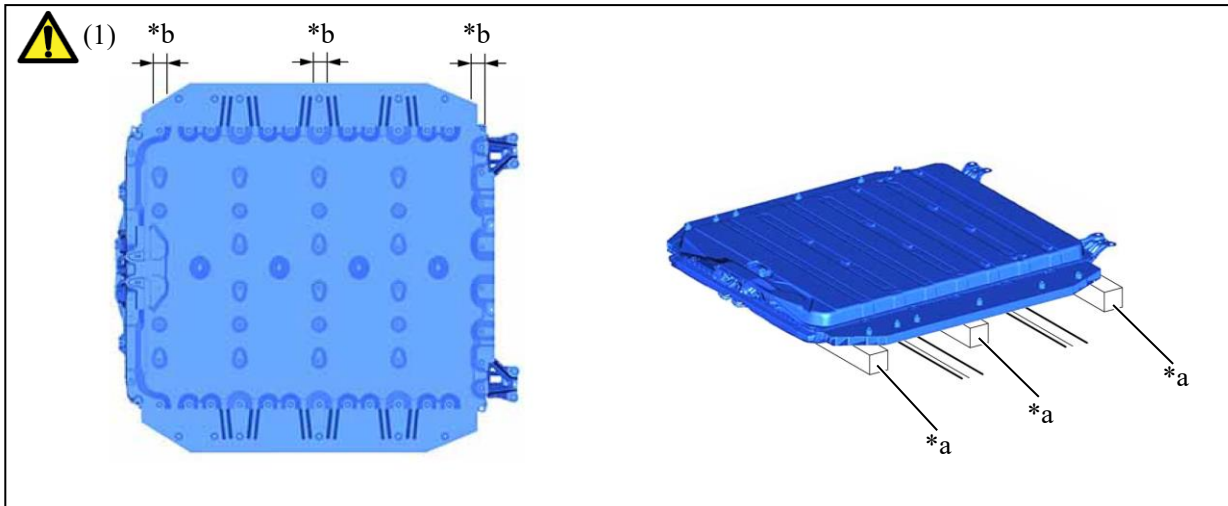
c.



| | | | |
|----|-----------------|---|---|
| *a | Supporting Area | - | - |
|----|-----------------|---|---|

(1) Support the position with the forklift etc, lower the EV supply battery assembly from the engine lifter.

d.



| | | | |
|----|--------------|----|-----------------|
| *a | Wooden Block | *b | Supporting area |
|----|--------------|----|-----------------|

(1) Support the position with the wooden block Lower the EV supply battery assembly.

NOTICE:

- Store in an area where it will not get wet by rainwater or be in direct sunlight.
- Do not bring the removed battery near an open flame or a heat source.