



English

ACROSS PHEV

HV Battery Dismantling Manual

(355.2V-51Ah)



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 HV battery pack 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.

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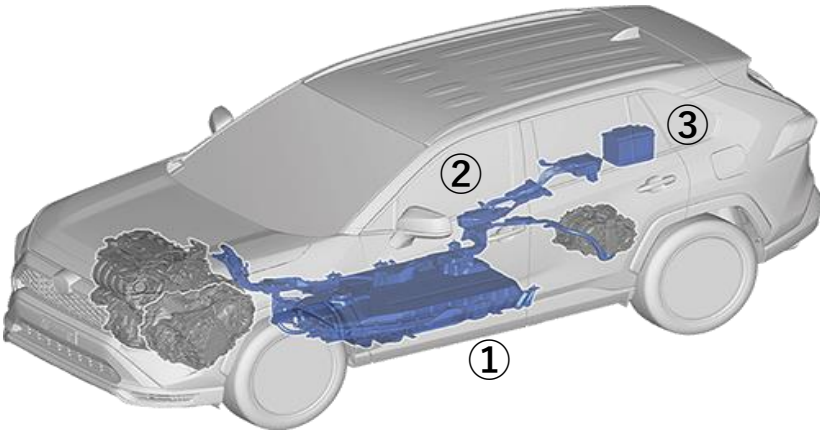
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Hybrid Battery Dismantling Procedure of
ACROSS PHEV

I . Component Locations

①	Hybrid Vehicle (HV) Battery (355.2 V Lithium Ion Battery, 155 kg)
②	Orange Colored Power Cables
③	12 V Auxiliary Battery



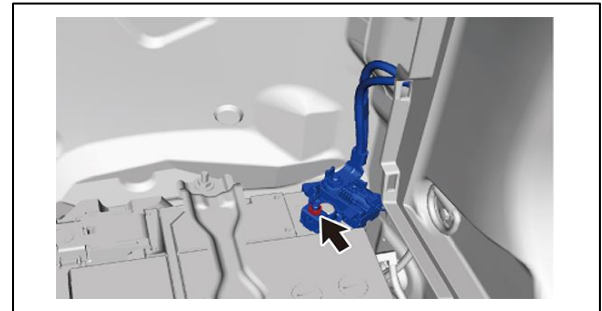
II. Removal of HV Battery

1. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

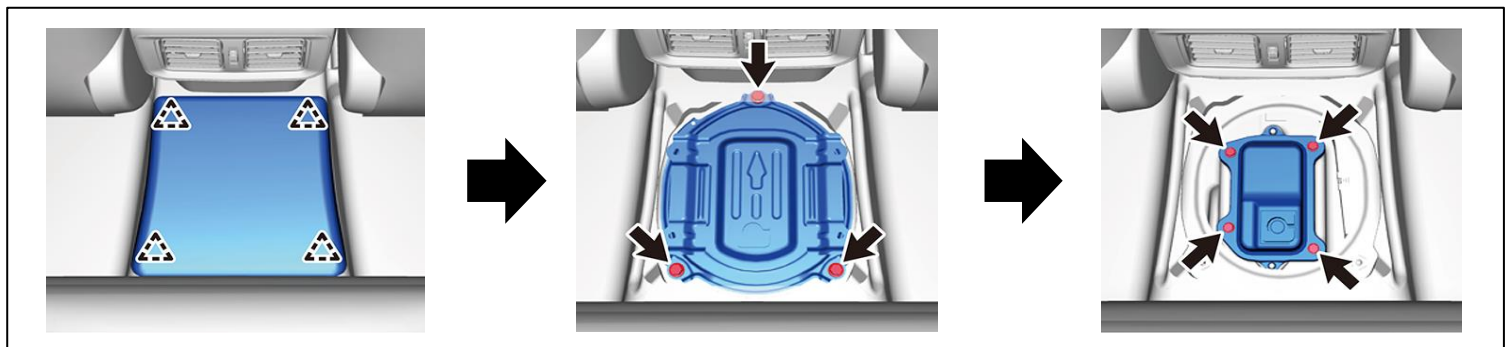
2. SHUT OFF IGNITION (READY indicator is off)



3. DISCONNECT CABLE FROM NEGATIVE AUXILIARY BATTERY TERMINAL



4. REMOVE BATTERY SERVICE HOLE COVER



5. REMOVE SERVICE PLUG GRIP



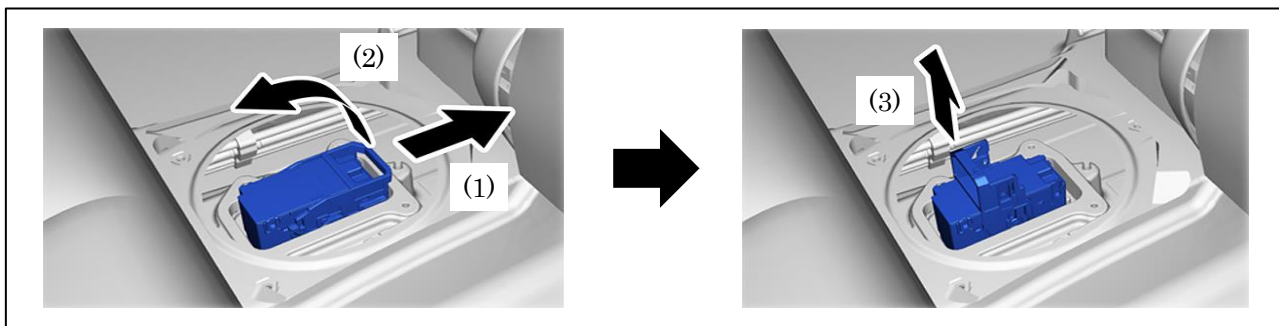
Caution:

- Wear insulated gloves.
- Do not inspect or perform service on 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.
- Keep the removed service plug grip in your pocket to prevent other technicians from accidentally installing it while you are servicing the vehicle.
- Place a "CAUTION: HIGH-VOLTAGE. DO NOT TOUCH" sign, in order to prevent other technicians from accidentally reconnecting the power while work is in progress.

Notice:

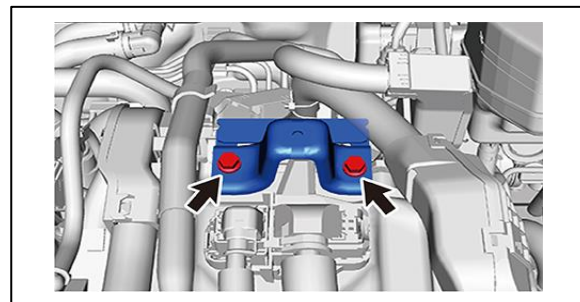
- After removing the service plug grip, turning the power switch on (READY) may cause a malfunction. Do not turn the power switch on (READY) unless instructed by the repair manual.
- Do not touch the terminals of the service plug grip.

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



6. REMOVE NO. 2 INVERTER PROTECTOR

- (1) Remove the 2 bolts and No. 2 inverter protector from the hybrid motor control inverter assembly.

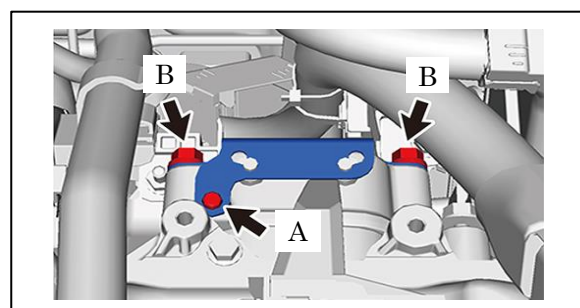


7. REMOVE CONNECTOR COVER ASSEMBLY



Caution: Wear insulated gloves.

- (1) Remove the 2 bolts (B).
- (2) Using a T25 "TORX" socket wrench, remove the bolt (A) and connector cover assembly from the hybrid motor control inverter assembly.



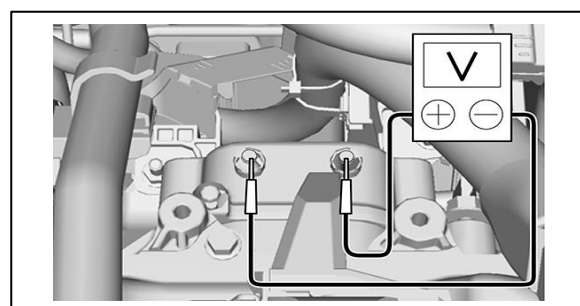
8. CHECK TERMINAL VOLTAGE



Caution: Wear insulated gloves.

Standard voltage: 0 V

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

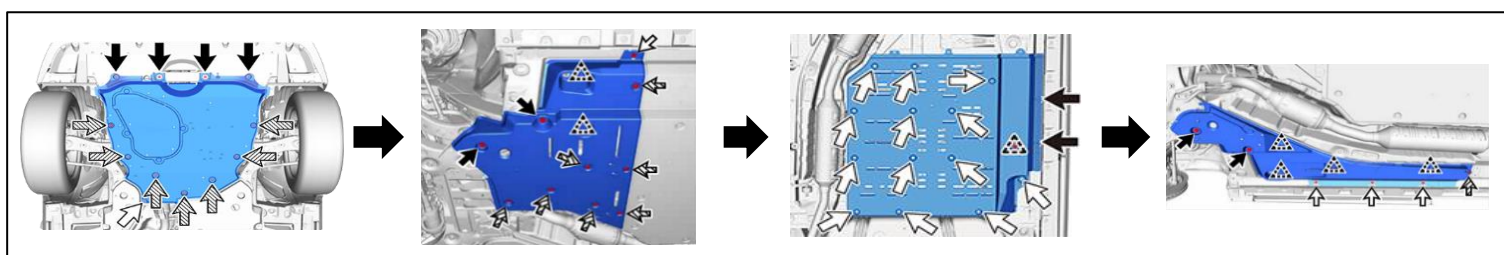


9. REMOVE NO. 2 ENGINE UNDER COVER ASSEMBLY

10. REMOVE FRONT FLOOR COVER LH

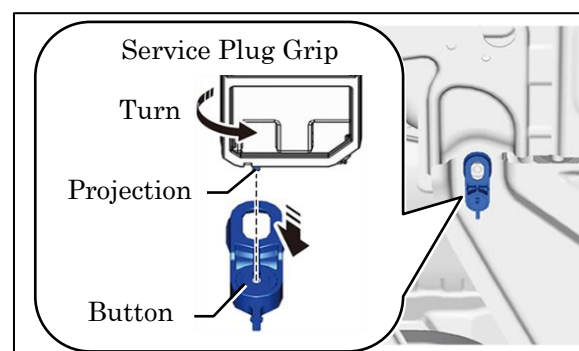
11. REMOVE NO. 2 FLOOR UNDER COVER

12. REMOVE FRONT FLOOR COVER RH



13. REMOVE ENGINE UNDER COVER HEAT INSULATOR

- (1) Using the service plug grip, remove the No.23 traction battery bracket.
- (2) Remove the engine under cover heat insulator.



14. REMOVE FRONT EXHAUST PIPE ASSEMBLY

15. DISCONNECT NO. 3 LIQUID TUBE

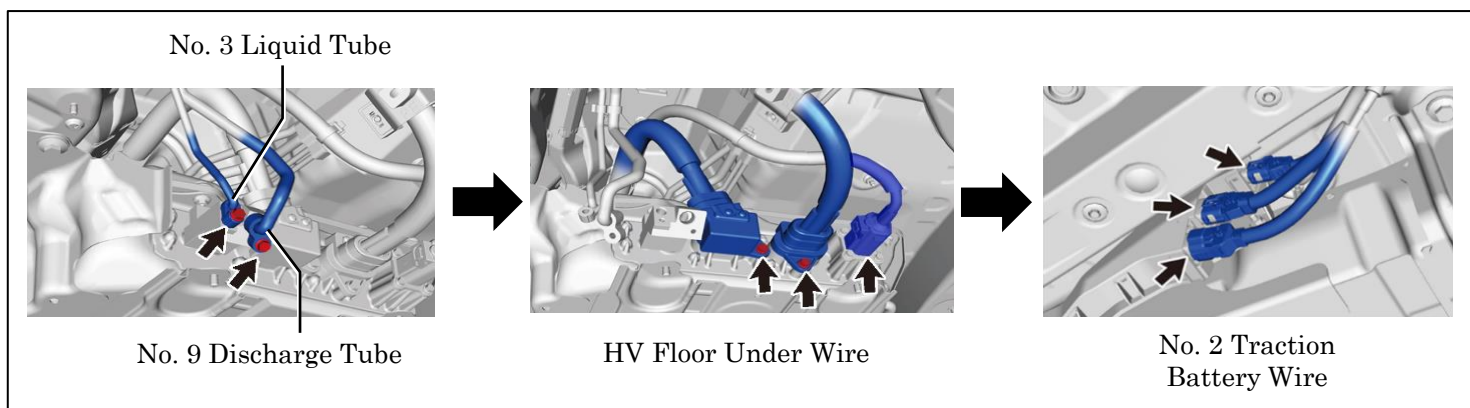
16. DISCONNECT NO. 9 DISCHARGE TUBE

17. DISCONNECT HV FLOOR UNDER WIRE

18. DISCONNECT NO. 2 TRACTION BATTERY WIRE



Caution: Be sure to wear insulated gloves and protective goggles.



19. REMOVE HV SUPPLY BATTERY ASSEMBLY



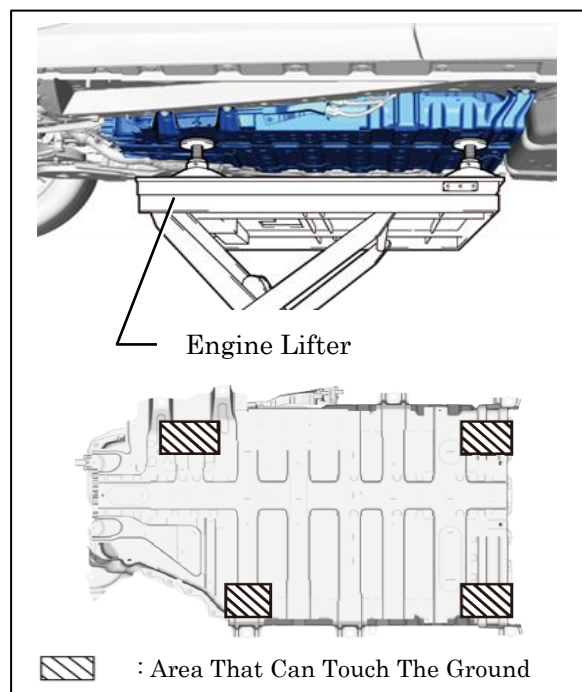
Caution: Be sure to wear insulated gloves and protective goggles.



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

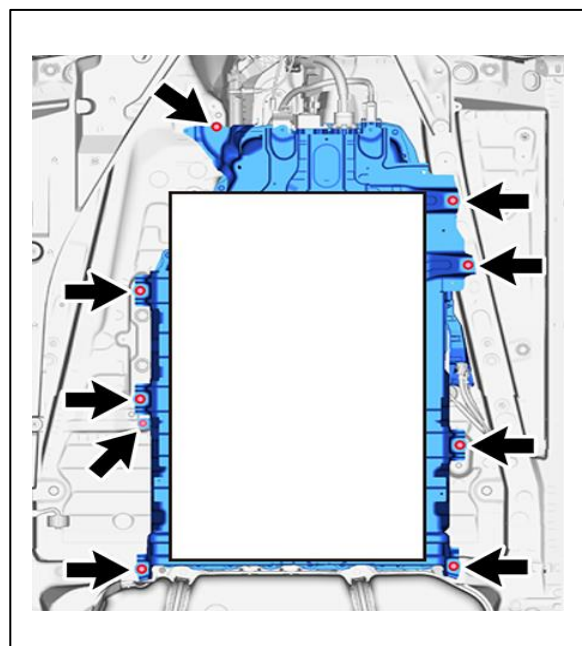
Notice:

- Since the HV supply battery assembly is very heavy, 2 people are needed to remove it.
- When removing/installing/moving the HV supply battery assembly, make sure not to tilt it more than 80°.



- (2) Remove the 9 bolts.

- (3) Slowly lower the engine lifter to remove the HV supply battery assembly.



Person in charge: _____

CAUTION:
HIGH-VOLTAGE.
DO NOT TOUCH.

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