

P310 HYBRID BATTERY CONTROL > HV BATTERY > REMOVAL

1. PRECAUTION

2. READ OUTPUT DTC

- a. Check the DTC.

NOTICE:

Check the DTC, and confirm that P0AA6 (High voltage insulation is unusual) is not output before doing removal or installation work inside the battery. If the DTC is output, perform troubleshooting procedures first.

3. DISCONNECT CABLE FROM BATTERY NEGATIVE TERMINAL

4. REMOVE SERVICE PLUG GRIP

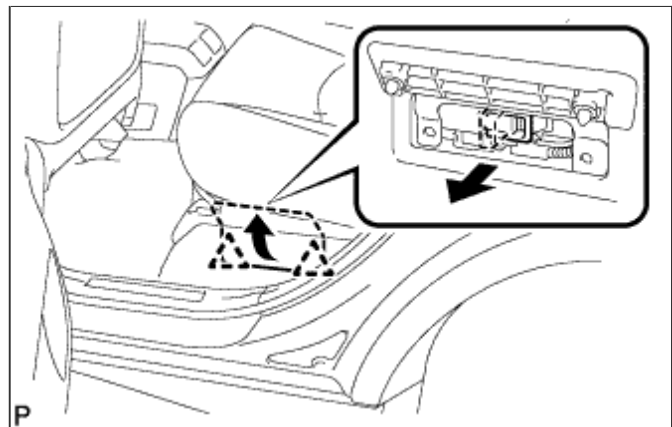
CAUTION:

- Remove the service plug to interrupt a high voltage circuit at the time of the check.
- Keep the removed service plug in your pocket to prevent other technicians from reconnecting it while you are servicing the vehicle.
- All the high voltage wiring connectors are colored in orange.

- a. Remove the 2 clips, then open the battery service hole cover.
- b. Wear insulation glove, and remove the service plug grip, after sliding up the lever of the service plug grip.

CAUTION:

- Keep the removed service plug in your pocket to prevent other technicians from reconnecting it while you are servicing the vehicle.
- After removing the service plug grip, do not touch the high voltage connectors and terminals for 5 minutes.



NOTICE:

After removing the service plug grip, do not operate the ignition switch as it may damage the hybrid vehicle control ECU.

5. REMOVE REAR SEAT TRACK BRACKET COVER

- a. Move the rear seat assembly LH to the rearmost position by operating the rear

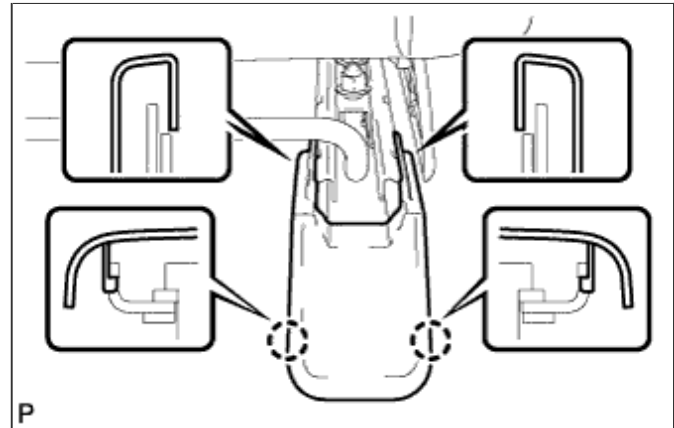
seat track adjusting handle.

- b. Using a screwdriver, disengage the 4 claws.

HINT:

Tape the screwdriver tip before use.

- c. Pull the 2 rear seat track bracket covers toward the rear of the vehicle and remove them.



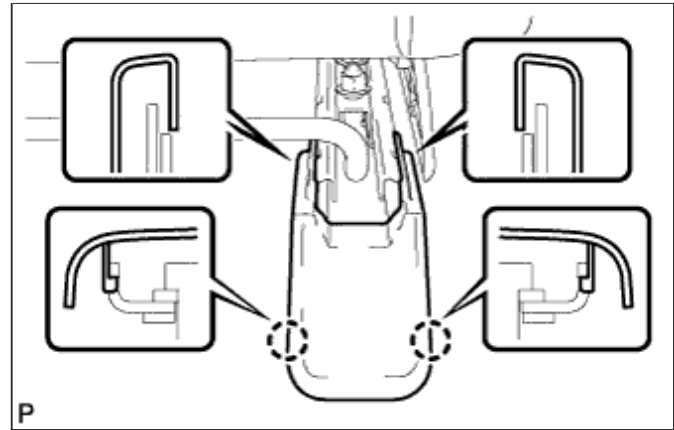
6. REMOVE REAR SEAT ASSEMBLY LH

- a. Using a clip remover, remove the 3 clips.
- b. Remove the bolt and disconnect the floor anchor side of the fold seat stopper band assembly No.2.
- c. Move the rear seat assembly LH to the rearmost position by operating the rear seat track adjusting handle.
- d. Remove the 2 bolts on the front side.
- e. Move the rear seat assembly LH fully forward by operating the rear seat track adjusting handle.
- f. Remove the 3 bolts on the rear side.
- g. Move the rear seat assembly LH to the center position and adjust the seatback to the vertical position.
- h. Remove the rear seat assembly LH.

7. REMOVE REAR SEAT TRACK BRACKET COVER

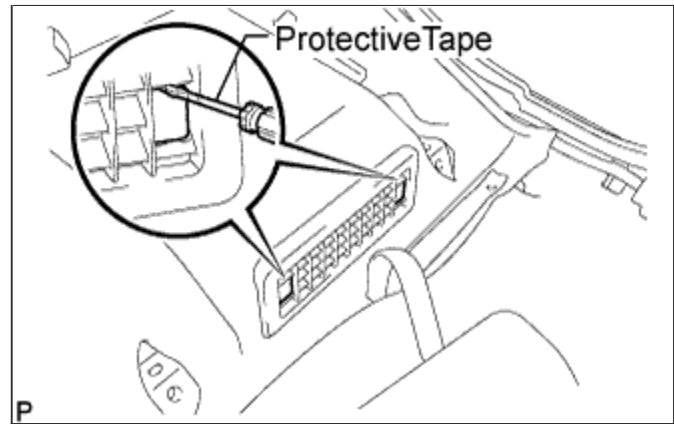
- a. Move the rear seat assembly RH to the rearmost position by operating the rear seat track adjusting handle.
 - b. Using a screwdriver, disengage the 4 claws.
- HINT:**
Tape the screwdriver tip before use.
- c. Pull the 2 rear seat track bracket covers toward the rear of the vehicle and

remove them.

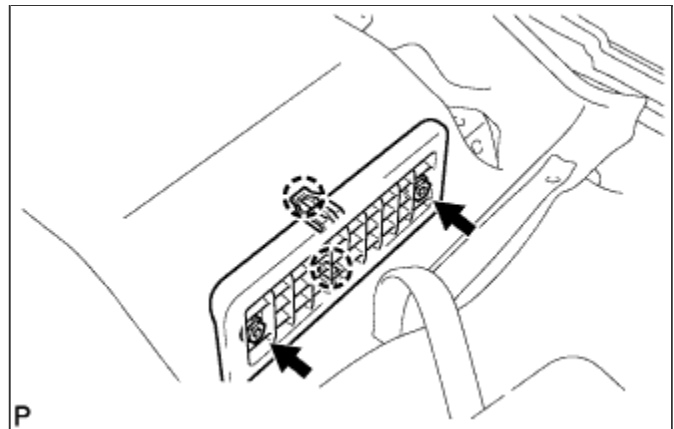


8. REMOVE REAR SEAT ASSEMBLY RH

- a. Using a clip remover, remove the 5 clips.
 - b. Remove the bolt and disconnect the floor anchor side of the fold seat stopper band assembly No.1.
 - c. Move the rear seat assembly RH to the rearmost position by operating the rear seat track adjusting handle.
 - d. Remove the 2 bolts on the front side.
 - e. Move the rear seat assembly RH fully forward by operating the rear seat track adjusting handle.
 - f. Remove the 3 bolts on the rear side.
 - g. Move the rear seat assembly RH to the center position and adjust the seatback to the vertical position.
 - h. Remove the rear seat assembly RH.
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- a. Remove the air intake cover LH.
 - i. Release the claw by using the screwdriver with the tip taped, and remove the 2 hole covers.

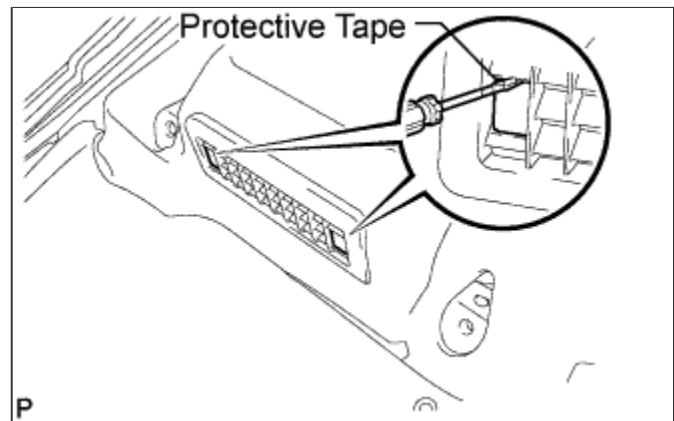


- ii. Remove the 2 screws, then release the 2 claws and remove air intake cover LH.

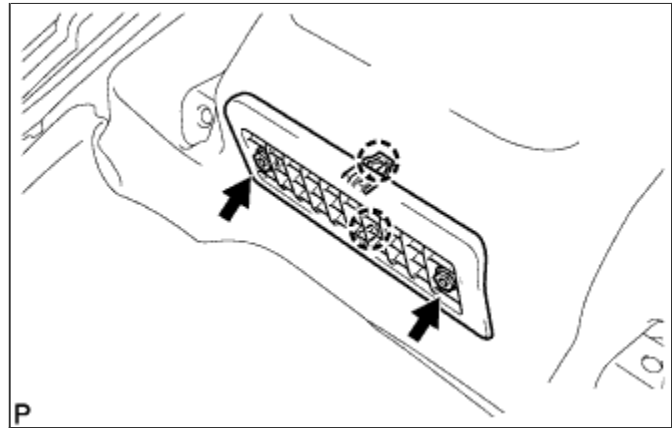


- b. Remove the air intake cover RH.

- i. Release the claw by using the screwdriver with the tip taped, and remove the 2 hole covers.

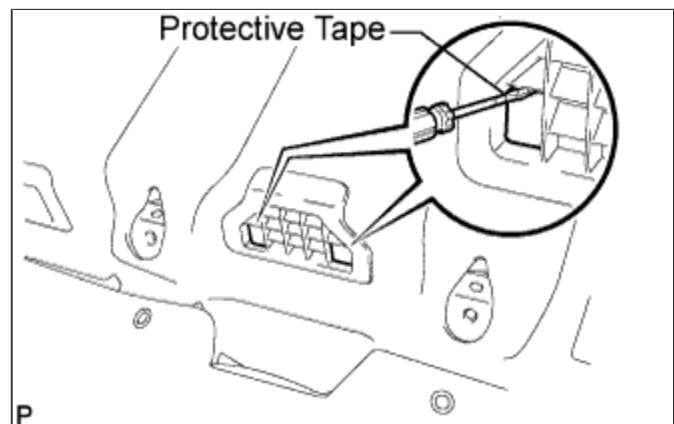


- ii. Remove the 2 screws, then release the 2 claws and remove air intake cover RH.

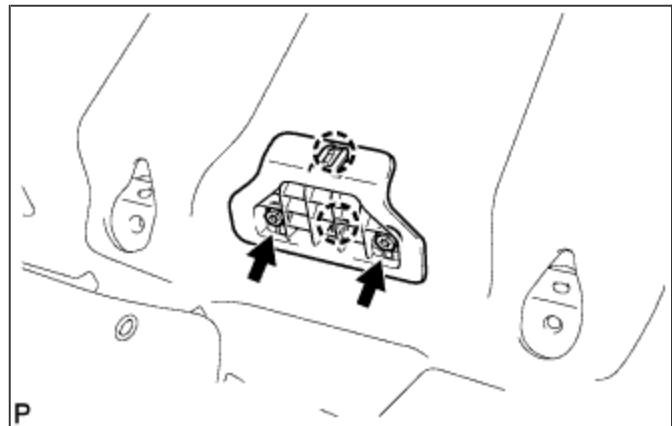


10. REMOVE AIR INTAKE COVER CENTER

- a. Release the claw by using the screwdriver with the tip taped, and remove the 2 hole covers.



- b. Remove the 2 screws, then release the 2 claws and remove air intake cover center.



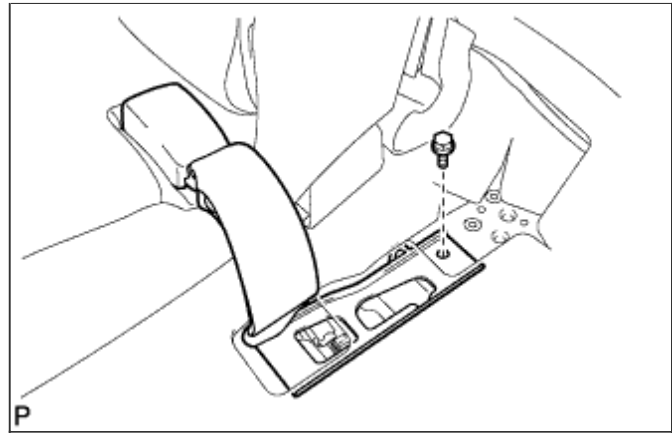
11. SEPARATE FLOOR CARPET ASSEMBLY FRONT

- a. Turn back the front floor carpet assembly.

12. REMOVE REAR CENTER SEAT INNER BELT ASSEMBLY

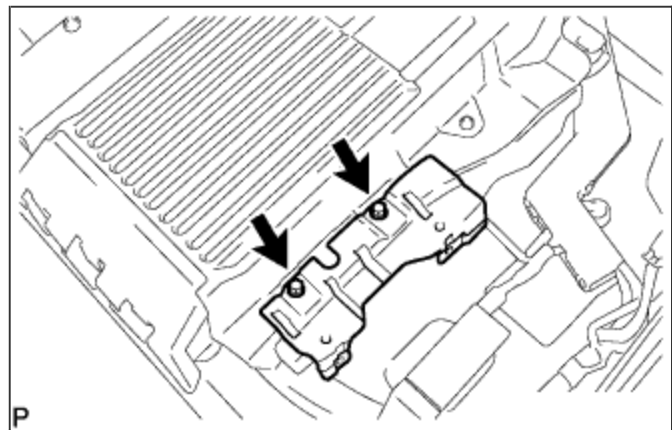
- a. Remove the bolt and rear center seat

inner belt assembly.



13. REMOVE BATTERY CARRIER BRACKET

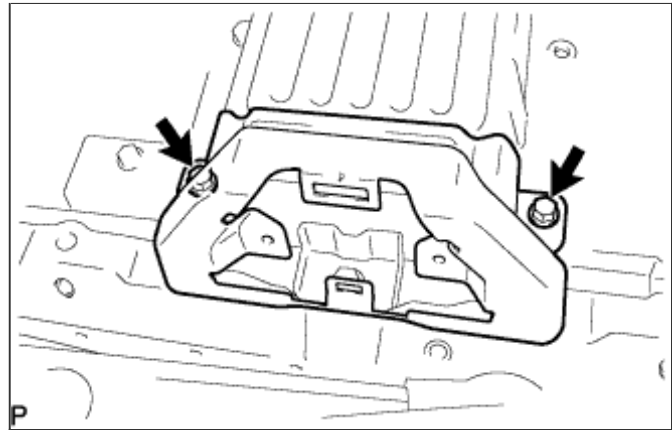
- a.** Remove the 2 bolts and battery carrier bracket.



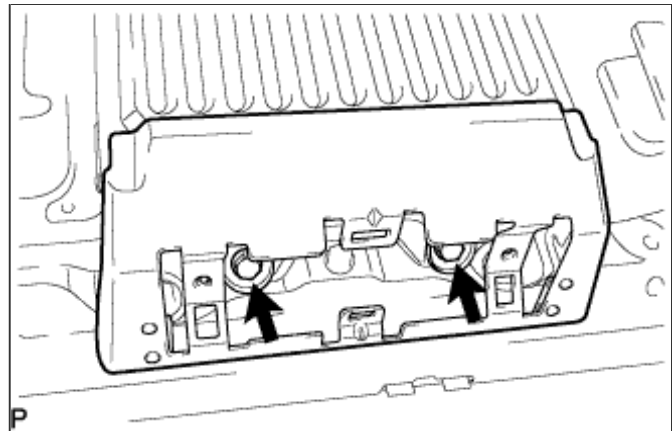
- a.** Remove the 2 bolts and battery carrier duct (LH).



- b.** Remove the 2 bolts and battery carrier duct (CTR).



- c. Remove the 2 bolts and battery carrier duct (RH).



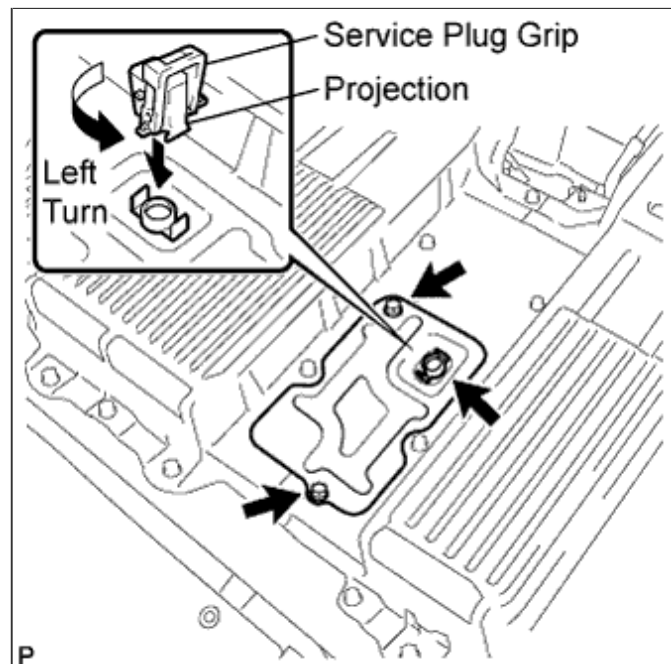
15. REMOVE HV BATTERY SERVICE HOLE COVER

- a. Using the service plug grip, remove the battery cover lock striker.

HINT:

Insert the projection part of the service plug grip, and turn the button of the battery cover lock striker counterclockwise, and release the lock.

- b. Remove the 2 bolts and battery service hole cover.

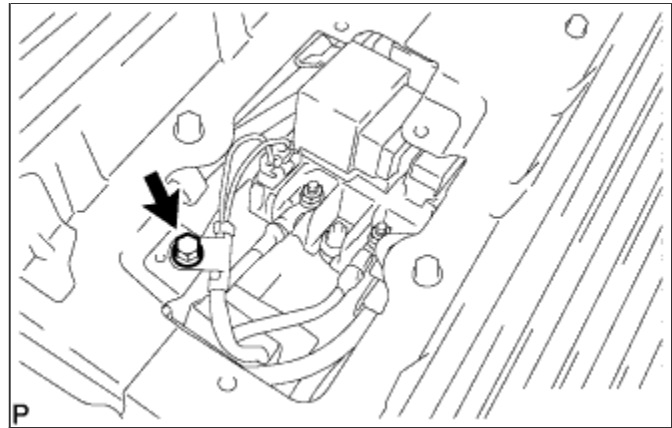


16. REMOVE BATTERY COVER SUB-ASSEMBLY

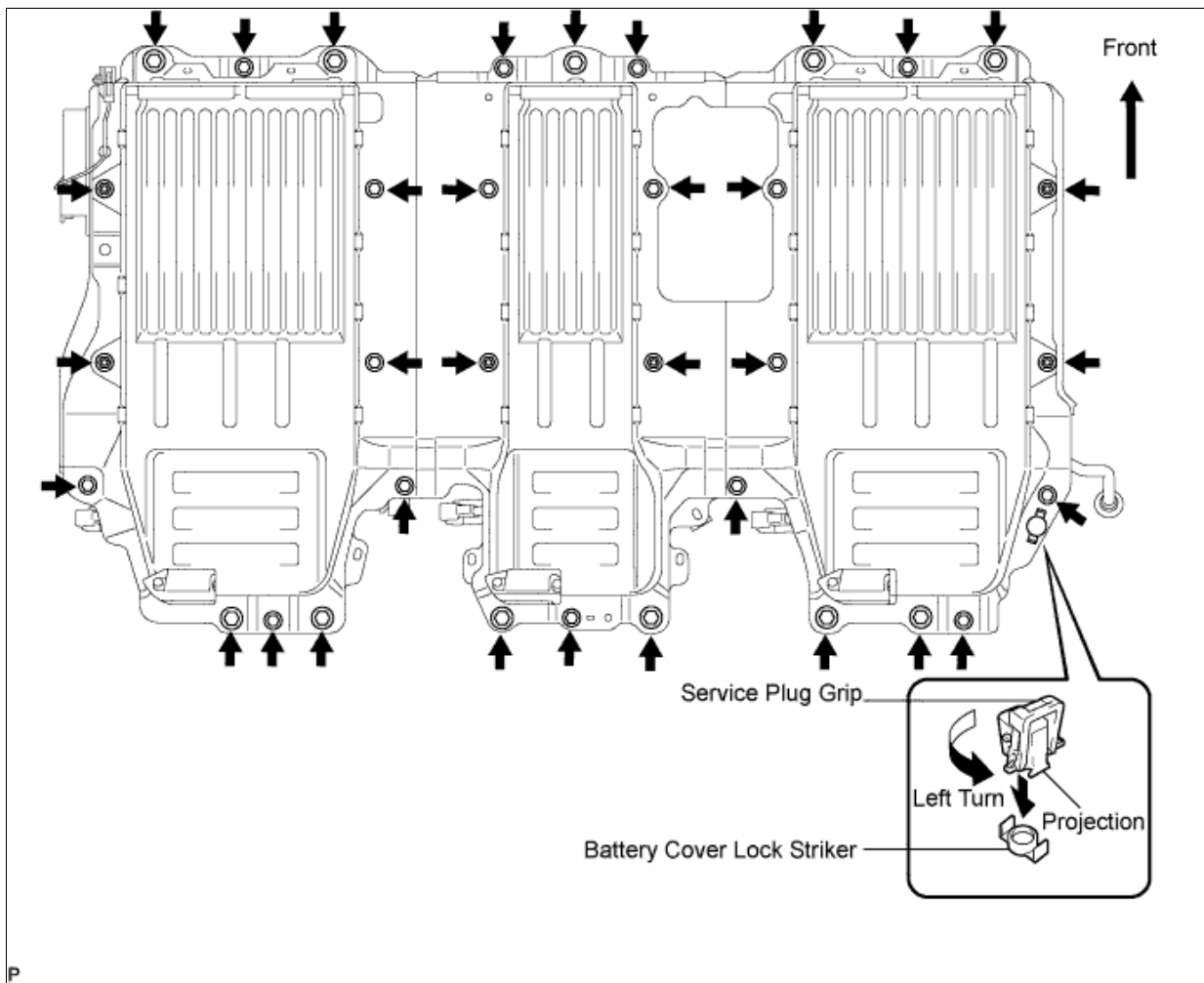
CAUTION:

Wear insulating gloves.

- a.** Remove the bolt, then disconnect the No.3 wire frame.



- b.** Using the service plug grip, remove the battery cover lock striker.



HINT:

Insert the projection part of the service plug grip, and turn the button of the battery cover lock striker counterclockwise, and release the lock.

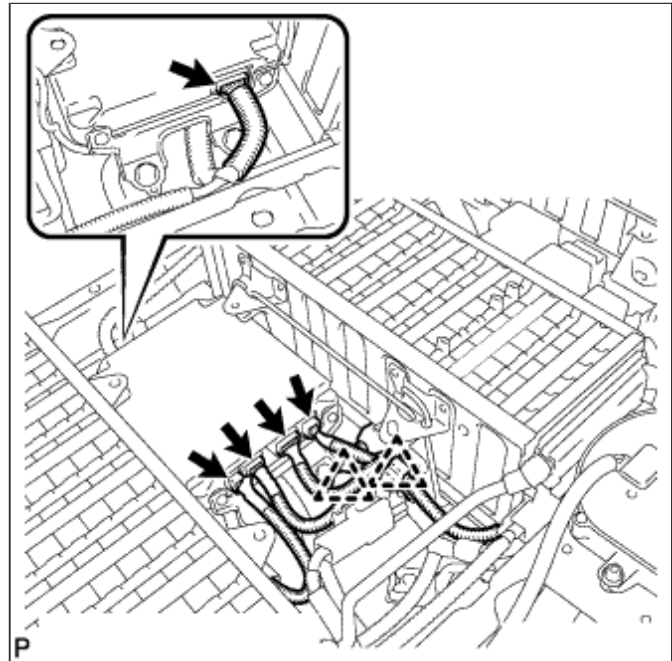
- c. Remove the 28 bolts, 6 nuts and battery cover.

17. REMOVE BATTERY SMART UNIT

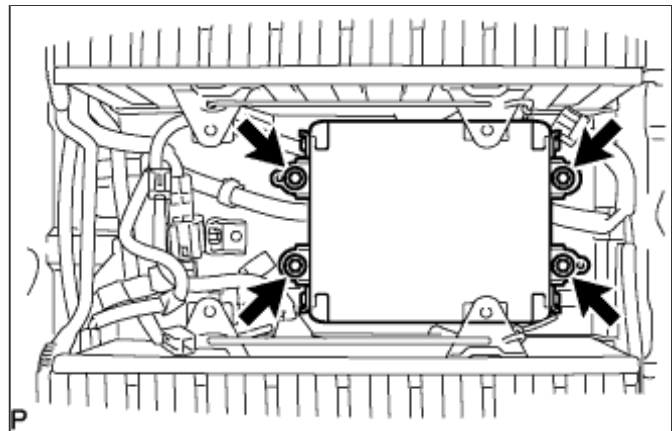
NOTICE:

Wear insulating gloves and protective glasses.

- a. Disconnect the 5 connectors and 2 clamps.



- b. Remove the 4 bolts and battery smart unit.



18. REMOVE HV BATTERY

CAUTION:

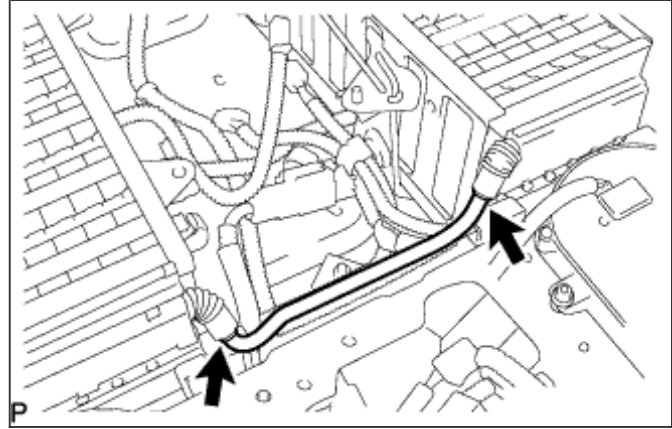
Wear insulating gloves and protective glasses.

NOTICE:

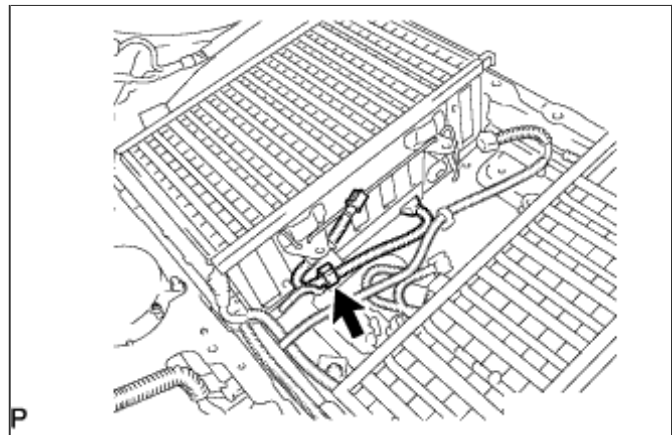
Insulate the removed terminals with insulating tape.

- a. Remove the HV battery LH.

- i. Remove the battery room ventilation hose between the HV batteries LH and CTR.



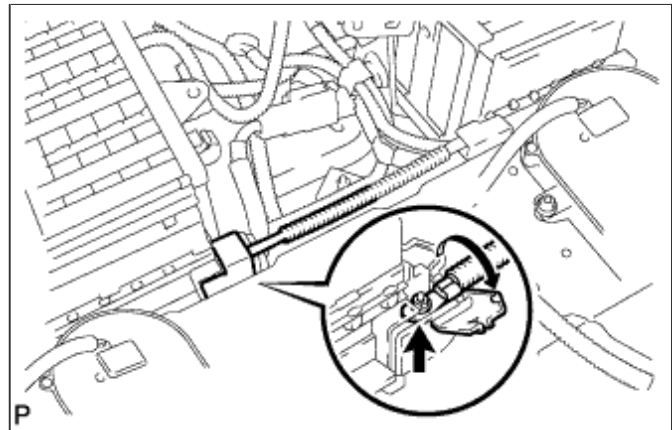
- ii. Disconnect the wire harness clamp of the battery thermo sensor.



- iii. Remove the nut and main battery cable from the HV battery LH.

NOTICE:

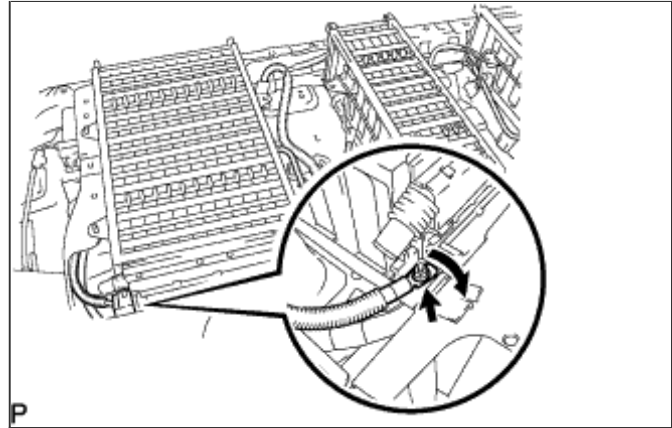
- Insulate the tool with insulating tape.
- Do not use the universal joint.



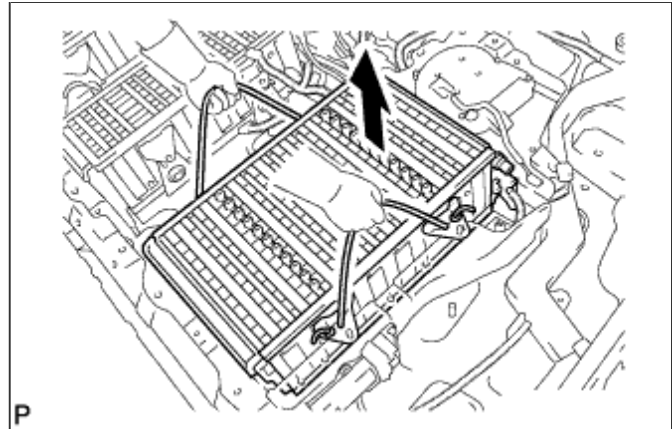
- iv. Remove the nut, then disconnect the EV battery plug from the HV battery.

NOTICE:

- Insulate the tool with insulating tape.
- Do not use the universal joint.

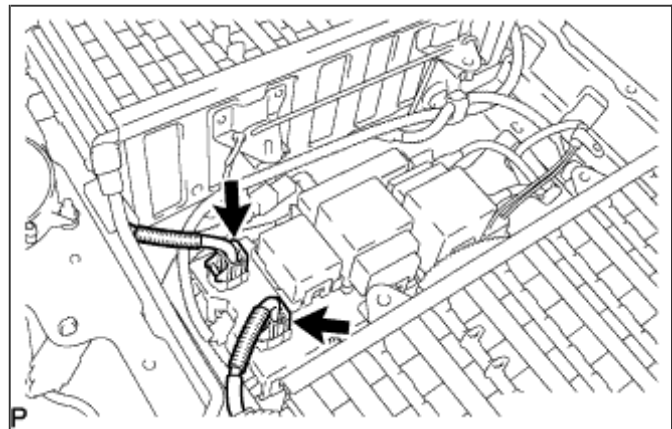


- v. Remove the HV battery LH.

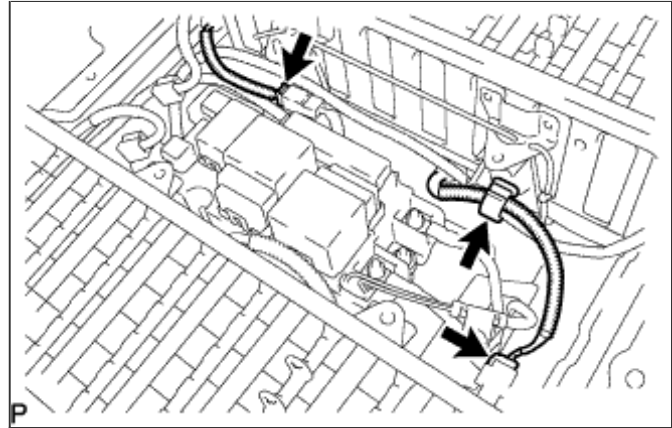


- b. Remove the HV battery CTR.

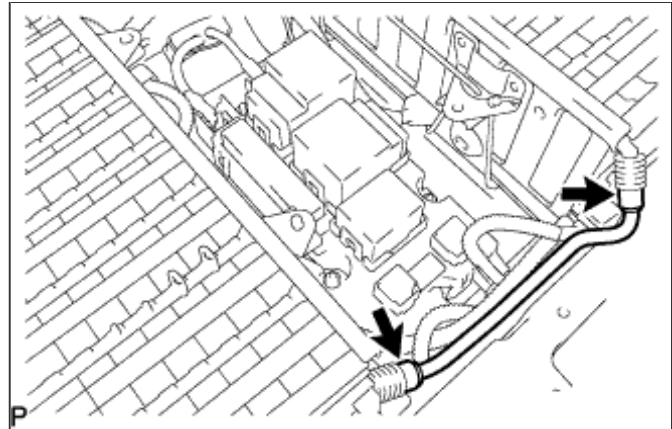
- i. Disconnect the 2 connectors from the HV relay assembly.



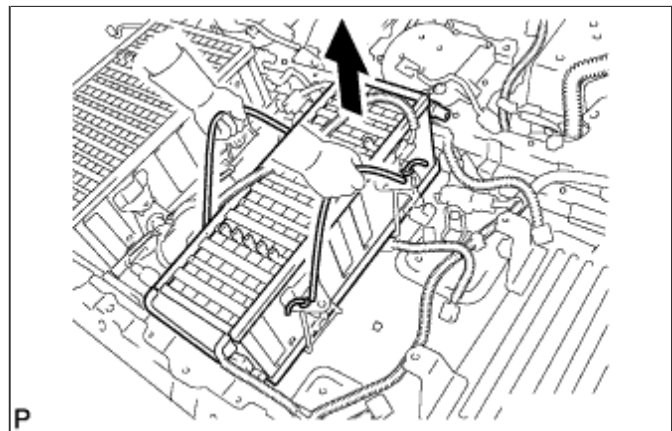
- ii. Disconnect the 2 connectors and clamp.



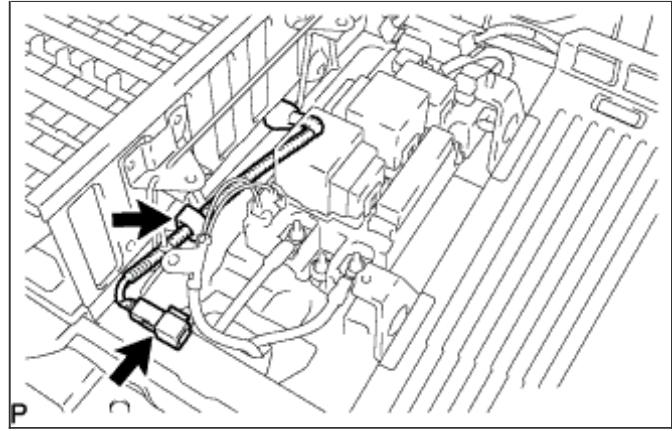
- iii. Remove the battery room ventilation hose between the HV batteries CTR and RH.



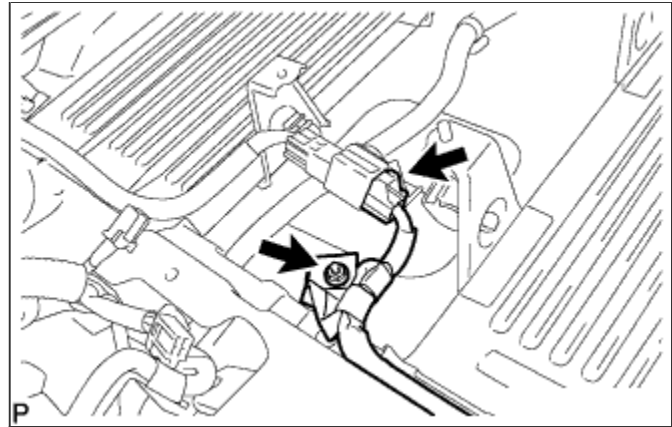
- iv. Remove the HV battery CTR.



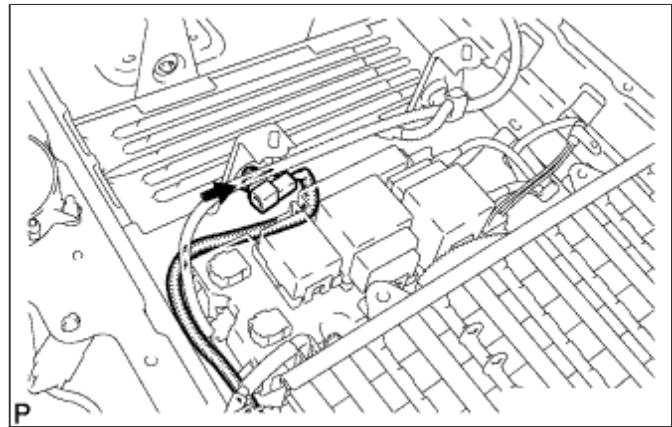
- c. Remove the HV battery RH
 - i. Disconnect the 2 clamps.



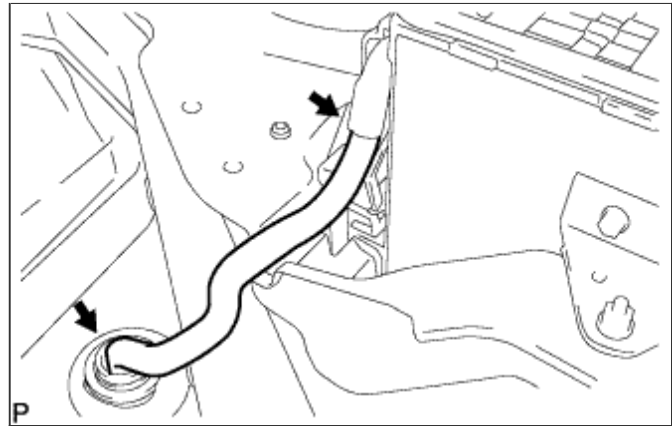
- ii. Remove the nut, then disconnect the main battery cable connector.



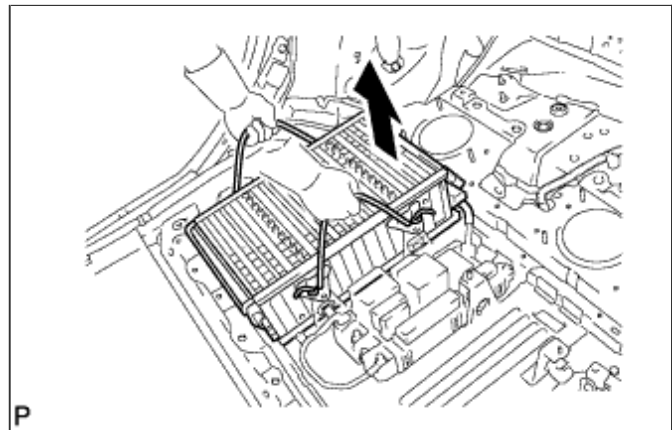
- iii. Disconnect the clamp.



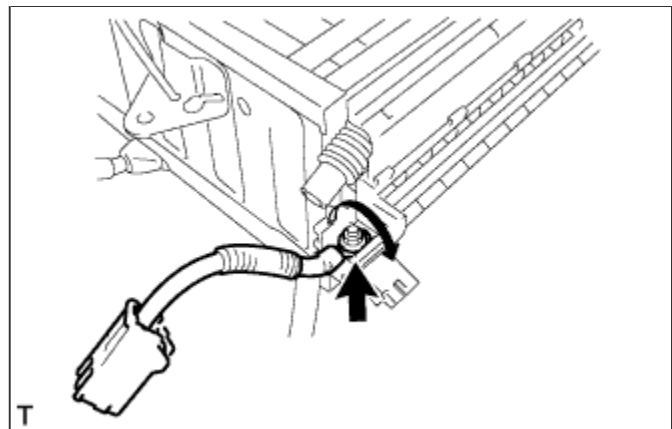
- iv. Remove the battery room ventilation hose.



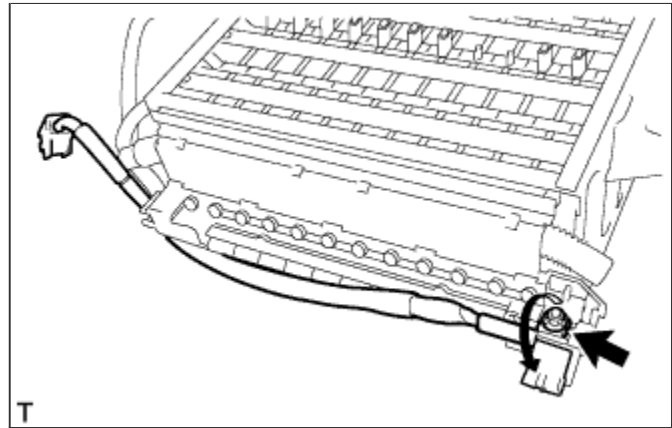
v. Remove the HV battery RH.



vi. Remove the nut and main battery cable No.2 from the HV battery RH.



vii. Remove the nut and main battery cable from the HV battery RH.

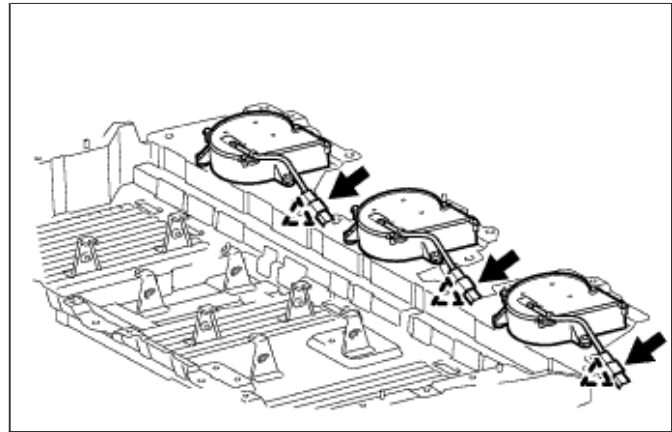


19. REMOVE BATTERY COOLING BLOWER ASSEMBLY

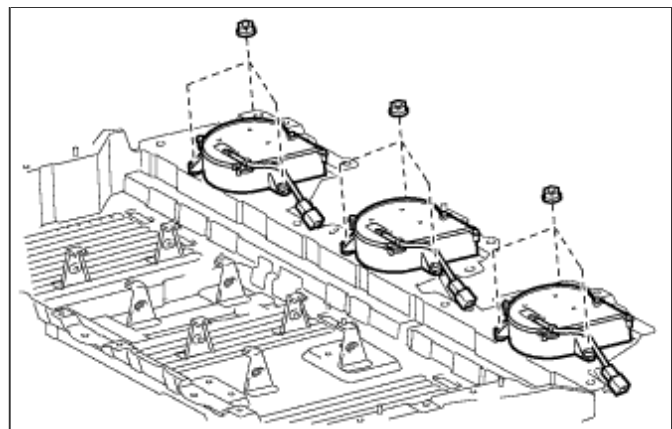
HINT:

Exchange the HV battery lower case as a set when liquids collect at the HV battery lower case and powder sticks.

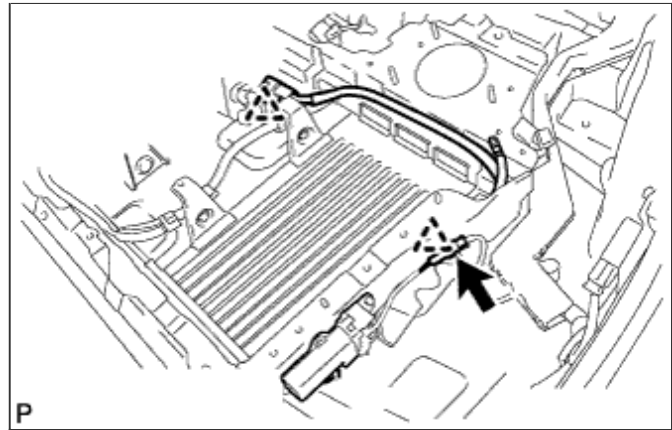
- a. Disconnect each battery cooling blower assembly connector and clamp.



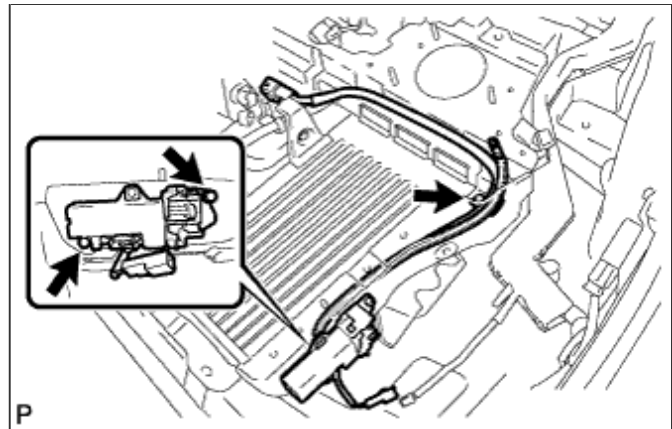
- b. Remove the 9nuts and 3 battery cooling blower assemblies.



- a. Disconnect the connector and clamps.

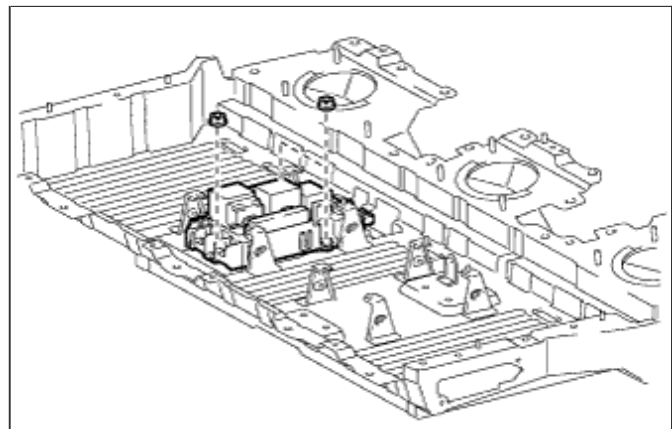


- b.** Remove the 2 bolts, nut and EV battery plug.



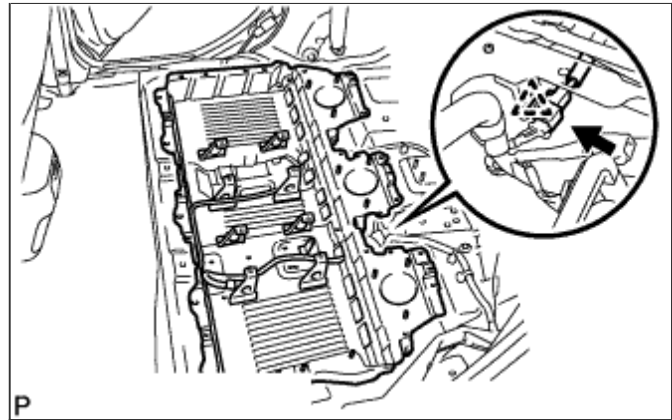
21. REMOVE HYBRID VEHICLE RELAY ASSEMBLY

- a.** Remove the 3 nuts and hybrid vehicle relay assembly.



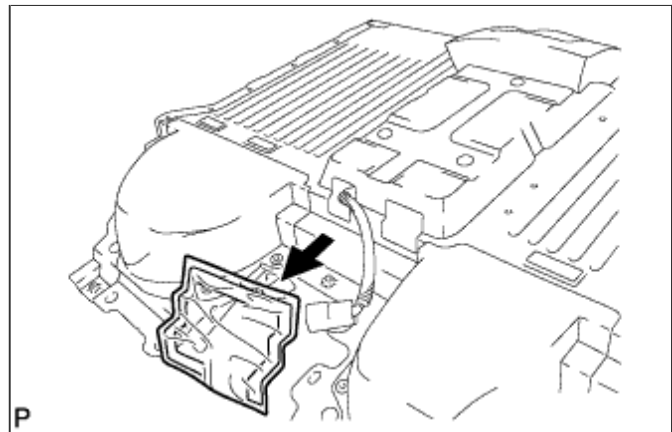
22. REMOVE HV BATTERY SERVICE HOLE COVER

- a.** Disconnect the connector and clamp, then remove the HV battery lower case.



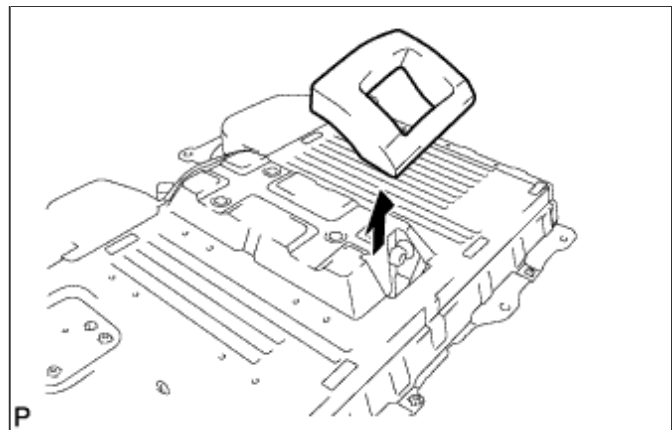
23. REMOVE BATTERY COVER

- a. Remove the battery cover from the HV battery lower case.

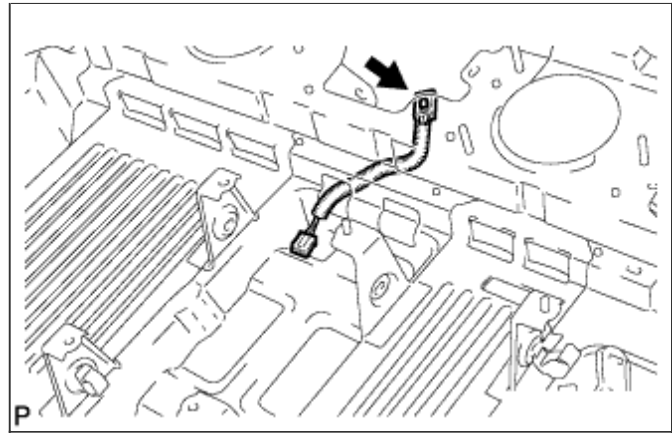


24. REMOVE BATTERY PACKING NO.2

- a. Remove the battery packing No.2 from the HV battery lower case.



- a. Disconnect the clamp, then remove the battery pack wire from the HV battery lower case.



- b.** Disconnect the 2 clamps, then remove the battery pack wire from the HV battery lower case.

