



# Technical Service Bulletin

<b>GROUP</b>	<b>NUMBER</b>
<b>RECALL</b>	<b>24-01-087G</b>
<b>DATE</b>	<b>MODEL(S)</b>
<b>NOVEMBER 2024</b>	<b>SEE BELOW</b>

**SUBJECT:** DTC P1A9096 CHECK FOR ICCU & FUSE REPLACEMENT & ICCU SOFTWARE UPDATE (RECALL 025G)

This TSB supersedes TSB 24-01-023G (Recall 021G) to update sections, including Warranty Information, ROM ID information, Manual Mode Information, GDS screenshots, and certain warnings.

**\* IMPORTANT**

Vehicle repairs related to safety recalls are critically important and must be performed properly in accordance with TSB procedures. Review this bulletin in its entirety prior to beginning any repair work.

As required by federal law, retailers must not deliver new vehicles for sale or for lease to guests until all open recalls have been performed. Retailers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into guest use and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the "Vehicle Information" screen via WebDCS to identify open recalls.

**Description:** Certain 2023-2025MY GV60 (JW1 EV), 2023-2025MY GV70 Electrified (JK1A EV), and 2023-2024MY G80 Electrified (RG3 EV) vehicles are equipped with an Integrated Charging Control Unit (ICCU) which charges the vehicle's 12-volt auxiliary battery and powers low-voltage vehicle accessory equipment. The ICCU may be subject to certain electrical load conditions that can cause the internal metal-oxide semiconductor field-effect transistor (MOSFET) to fail, potentially resulting in an open ICCU fuse. An open ICCU fuse results in an inability to charge the 12-volt battery. Upon fault detection, and accompanied by a series of driver warnings, the vehicle will enter a design-intended "fail-safe" driving mode that allows immediate full propulsion while gradually reducing motive power over time as the vehicle's battery is discharged. If the vehicle is driven until the 12-volt battery state-of-charge is fully depleted the vehicle will lose all motive power, potentially increasing the risk of a crash. Vehicle systems such as air bags, braking, and powered steering remain operational.

The Service Procedure flow to be followed is outlined by the flowchart on page 6. If the DTC P1A9096 is not found, perform the ICCU software update ONLY. If the DTC P1A9096 is found, replace the ICCU and ICCU fuse and check the software version of the replacement ICCU. If the replacement ICCU does not have the latest software version, perform the ICCU software update. If the replacement ICCU has the latest software version, no further action is required.



**Applicable Vehicles (Certain):**

- 2023-2025MY GV60 (JW1 EV) produced from 02/04/2022 – 09/27/2024
- 2023-2025MY GV70 Electrified (JK1A EV) produced from 01/25/2023 – 11/09/2024
- 2023-2024MY G80 Electrified (RG3 EV) produced from 02/23/2022 – 08/22/2024

**NOTICE**

To avoid any potential damage to Genesis EVs, this recall can only be performed by EV certified Genesis retailers.


**GDS Information:**

System	Event #*	Description
ICCU	1158	JW (23MY) ICCU SOFTWARE UPDATE, AND ICCU AND FUSE REPLACEMENT (Secondary)
	1159	JW (24MY) ICCU SOFTWARE UPDATE, AND ICCU AND FUSE REPLACEMENT (Secondary)
	1160	JK EV ICCU SOFTWARE UPDATE, AND ICCU AND FUSE REPLACEMENT (Secondary)
	1157	RG3 EV ICCU SOFTWARE UPDATE, AND ICCU AND FUSE REPLACEMENT (Secondary)

(\*or use a later available event as listed in the GDS **ICCU** Update screen if one is available.)

**NOTE:** Event #1159 states only “24MY”, but this event applies to both 2024 and 2025MY.

**Parts Information:**

Part Name	Model	Part Number	Remarks
Integrated Charge Control Unit (ICCU)*	GV60 (JW1 EV) (23MY)	36400-1XCA0QQH	
	GV60 (JWI EV) (24-25MY)	36400-1XCA1QQH	
	GV70 Electrified (JK1A EV)	36401-1XDA0QQH	
	G80 Electrified (RG3 EV)	36401-1XBA0QQH	
High Voltage Fuse*	GV60 (JW1 EV)	375F2-GI040QQH	Order High Voltage Fuse in Conjunction with the ICCU
	GV70 Electrified (JK1A EV)	18790-00728QQH	
	G80 Electrified (RG3 EV)		
Pink Coolant	All	00232-19098	Up to 3.7 liters (1 gallon)

\*As needed, only if DTC is stored.

**NOTICE**

Do **NOT** install fuse alone without ICCU replacement. If vehicle is placed in **Ready Mode** after replacing only the fuse and not the replacement ICCU, there is a possibility of DTC P1B77 Battery PRA damage.

**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
ALL	41D226R0	DTC Check ( <b>NO</b> P1A9096) and ICCU Software Update	0.4 M/H	36400-1XCA0QQH (JW1 EV)		
				36401-1XBA0QQH (JK1A EV, RG3 EV)		
GV60 (JW1 EV)	41D226R1	DTC Check ( <b>YES</b> P1A9096), ICCU & Fuse Replacement and Replaced ICCU has Latest Software Version ( <b>YES</b> )	2.1 M/H	36400-1XCA0QQH	W11	ZZ3
	41D226R2	DTC Check ( <b>YES</b> P1A9096), ICCU & Fuse Replacement, Replaced ICCU Does <b>NOT</b> have Latest Software Version, and ICCU Software Update	2.4M/H	36400-1XCA0QQH		
GV70 Electrified (JK1A EV) and GV80 Electrified (RG3 EV)	41D226R3	DTC Check ( <b>YES</b> P1A9096), ICCU & Fuse Replacement and Replaced ICCU has Latest Software Version ( <b>YES</b> )	3.3 M/H	36401-1XDA0QQH		
	41D226R4	DTC Check ( <b>YES</b> P1A9096), ICCU & Fuse Replacement, Replaced ICCU Does <b>NOT</b> have Latest Software Version, and ICCU Software Update	3.6 M/H	36401-1XBA0QQH		

**NOTE 1:** Submit claim on Claim Entry Screen as “Campaign” type.

**NOTE 2:** If a part is found in need of replacement while performing this campaign and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to performing the work.

**NOTE 3:** This TSB includes Repair validation photos. Op times include VIN, Mileage, and Repair validation photo(s) as outlined in the Digital Documentation Policy.

**NOTE 4:** The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

**NOTE 5:** Op Codes 41D226R1, 41D226R2, 41D226R3, and 41D226R4 include reimbursement of coolant (up to 3.7 liters/1 gallon).

**ROM ID Information:**

Model	Event	System	ECU Part Number	ROM ID	
				Old	New
23MY GV60 (JW1 EV)	1158	ICCU	36401-1XCA0	EJW1E1-IDS02R000	EJW1E3-IDS10R000
				EJW1E1-IDS03R000	
				EJW1E1-IDS04R000	
				EJW1E1-IDS05R000	
				EJW1E3-IDS06R000	
				EJW1E3-IDS07R000	
				EJW1E3-IDS09R000	
24-25MY GV60 (JW1 EV)	1159	ICCU	36401-1XCA1	EJW1E4-IDS03R000	EJW1E4-IDS06R000
				EJW1E4-IDS05R000	
GV70 Electrified (JK1A EV)	1160	ICCU	36401-1XDA0	EJK1E1-IDS01R000	EJK1E3-IDS07R000
				EJK1E1-IDS02R000	
				EJK1E3-IDS03R000	
				EJK1E3-IDS04R000	
				EJK1E3-IDS06R000	
G80 Electrified (RG3 EV)	1157	ICCU	36401-1XBA0	ERG3E1-IDS01R000	ERG3E3-IDS10R000
				ERG3E1-IDS02R000	
				ERG3E1-IDS51R000	
				ERG3E1-IDS04R000	
				ERG3E1-IDS05R000	
				ERG3E3-IDS06R000	
				ERG3E3-IDS07R000	
				ERG3E3-IDS09R000	

**Service Procedure:**

**STUI**

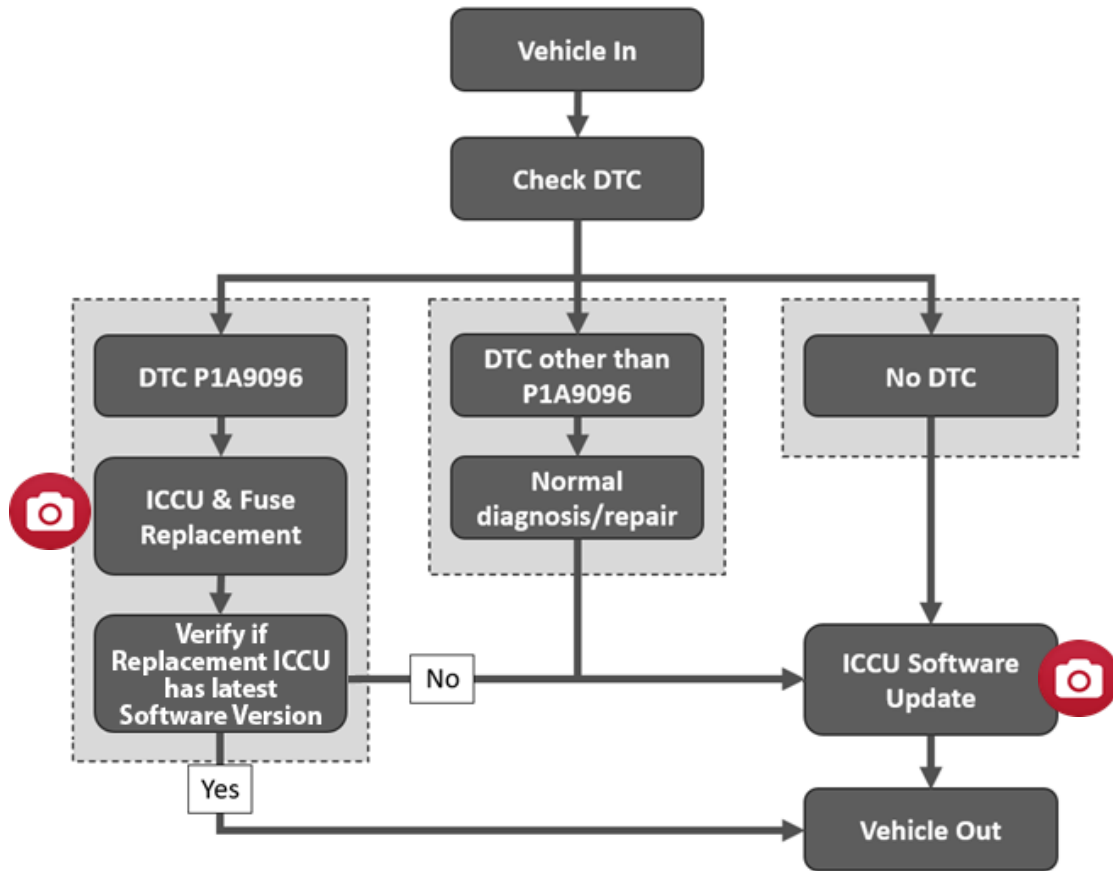


This TSB includes Repair validation photos. Refer to the latest Warranty Digital Documentation Policy for requirements.

**Table of Contents:**

Section	Pages	Description
<a href="#">A</a>	7	DTC P1A9096 Check
<a href="#">B</a>	8 – 11	ICCU Software Update
<a href="#">C</a>	11 – 18	ICCU & Fuse Replacement for GV60 (JW1 EV)
<a href="#">D</a>	19 – 20	ICCU & Fuse Replacement for GV70 Electrified (JK1A EV) and G80 Electrified (RG3 EV)

**Service Procedure Flowchart:**



A. DTC Check

A1. Perform **All Fault Search** by GDS.

A2. Check the ICCU system for DTC P1A9096 either found as an active or history DTC:

- **No** – (DTC P1A9096 is **NOT** found stored):
  - Perform ICCU software update – see **Section B (Submit 41D226R0, 0.4 M/H)**

**i** Information

If any other DTC or symptom is found stored, diagnose and repair per shop manual **before** performing the ICCU Update (Warranty claim).

- **Yes** – (DTC P1A9096 is found stored):
  - Replace ICCU and Fuse:
    - GV60 (JW1 EV) – see **Section C**
    - GV70 Electrified (JK1A EV) – see **Section D**
    - G80 Electrified (RG3 EV) – see **Section D**
  - Check if replaced ICCU has latest software version.
    - **No** – Update ICCU software:
      - GV60 (JW1 EV) - **Submit 41D226R2, 2.4 M/H**
      - GV70 Electrified (JK1A EV), G80 Electrified (RG3 EV) - **Submit 41D226R4, 3.6 M/H**
    - **Yes** –
      - GV60 (JW1 EV) - **Submit 41D226R1, 2.1 M/H**
      - GV70 Electrified (JK1A EV), G80 Electrified (RG3 EV) - **Submit 41D226R3, 3.3 M/H**

**NOTICE**

Replace the high-voltage fuse in conjunction with the ICCU. Failure to do so may result in PRA damage.

If any other DTC or symptoms is found/stored, diagnose and repair per shop manual before performing the ICCU update.

**NOTICE**

When performing repairs it is **critical** to ensure the ICCU and high-voltage fuse are replaced simultaneously. Damage to the PRA may occur if the vehicle is in **Ready Mode** without the replacement ICCU part installed.

B. ICCU Software Update

**NOTICE**

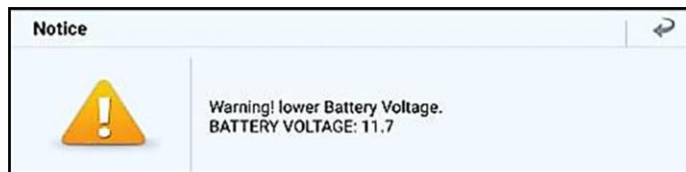
**You must initially perform the GDS ECU Update in Auto Mode.**

- If the ECU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

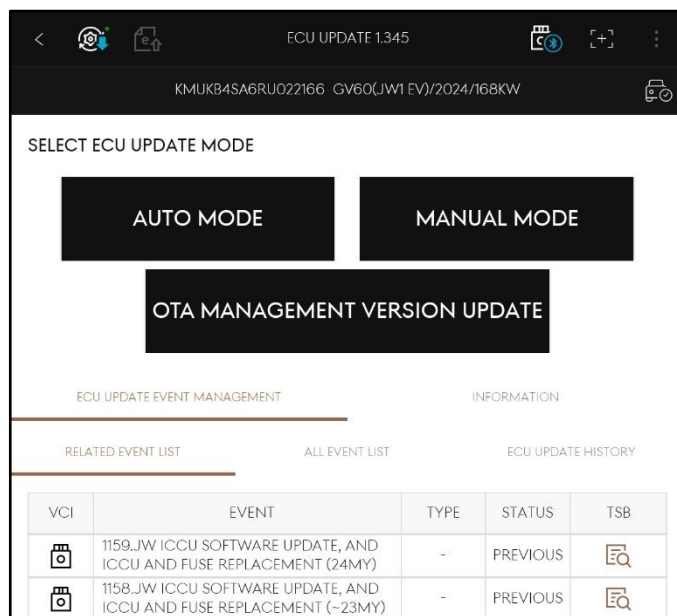
**NOTICE**

**GDS Vehicle Battery Low Voltage Warning:**

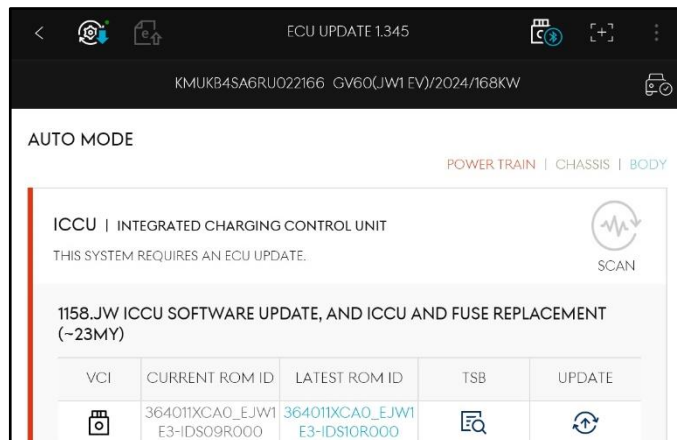
If voltage is below 12 volts per the GDS warning, then select **Back** and attach a battery charger to ensure an adequate battery charge for reliable update results. Turn ignition back **ON**, and then retry the ECU update again.



- B1. Perform the ICCU update in **Auto Mode**. Use the **ID Check** to verify the ROM ID before updating the software.



- B2. Select the **ICCU** system to scan the vehicle's current ROM ID.

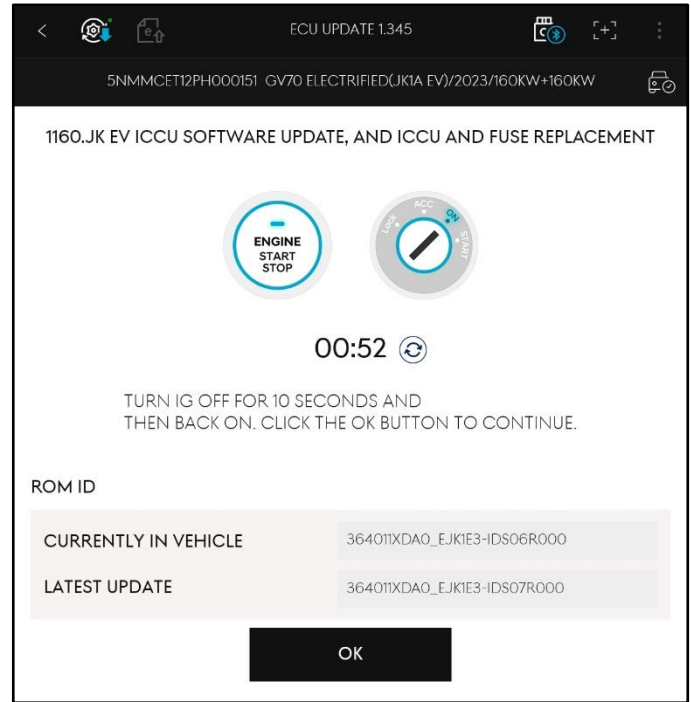




B3. After the ECU update process shows 100% complete, follow the prompts on the screen to cycle the ignition **OFF** for at least **10 seconds** to reset the control unit (certain models may take up to **30 seconds**).

**i Information**

Use the **Refresh** button to reset the timer.

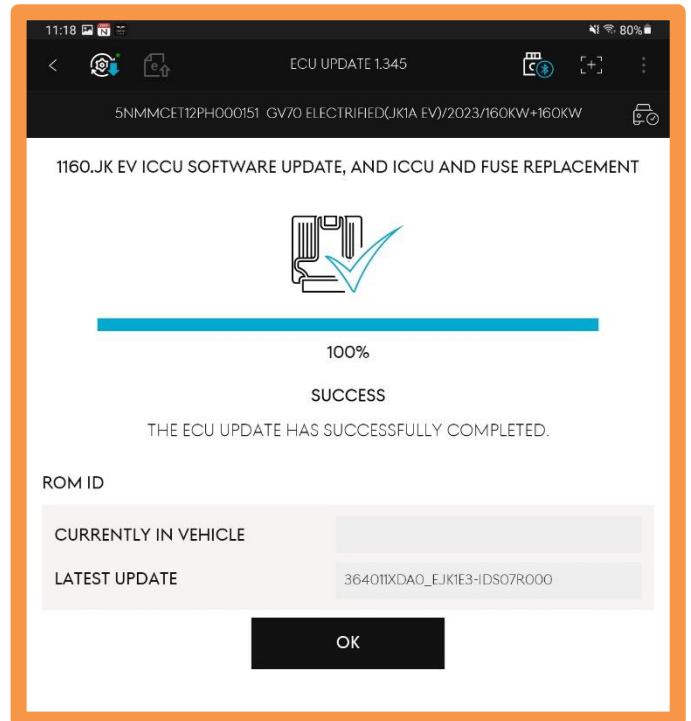


B4.

**STUI**



Take a screenshot of the ECU update complete screen using your tablet and upload to STUI.



- B5. After the update, remove the power connector from the indoor fuse box, and reconnect it after **5 seconds**.

Alternatively, remove the battery negative from the terminal and reconnect it after **5 seconds**.

JW1 Connector Location



JK1A and RG3 Connector Location



- B6. Perform an **All Systems Fault Code** search and erase DTC history that had incidentally occurred from the ECU update.
- B7. Start the vehicle in **Ready** mode to confirm proper operation of the vehicle.



### Information

For multiple ECU updates, go back to the Auto Mode screen to view all updates available in one screen.

**NOTICE**

If the ECU update fails in Auto Mode, perform the update in Manual Mode using the password(s) below.

**Manual Mode Password Information:**

Event	ECM Menu	Password
1158	JW ICCU 36401-1XCA0 (~23MY)	8739
1159	JW ICCU 36401-1XCA1 (24MY/25MY)	4030
1160	JK EV ICCU 36401-1XDA0	5453
1157	RG3 EV ICCU 36401-1XBA0	7589

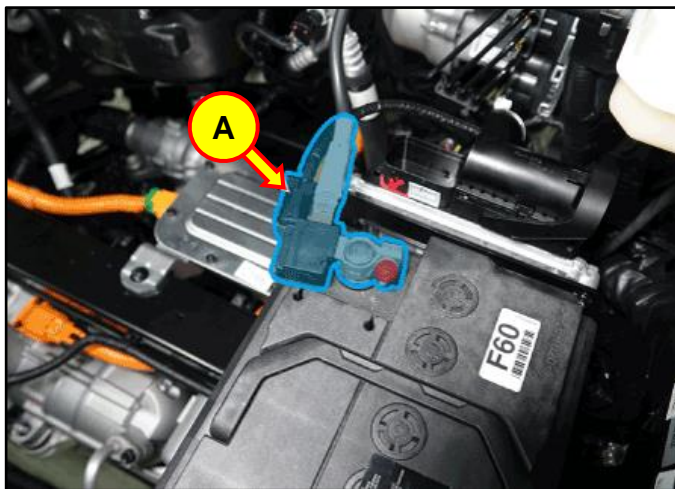
C. ICCU & Fuse Replacement for GV60 (JW1 EV)

**! WARNING**

Read the **Safety and Precautions** and **High Voltage Shut-Off** procedures before performing work related to high-voltage systems. Failure to do so may result in serious electrical injuries.

Ensure to follow your country's/region's regulations when performing work on or around HV components.

- C1. Disconnect the auxiliary 12V battery negative (-) terminal (A).



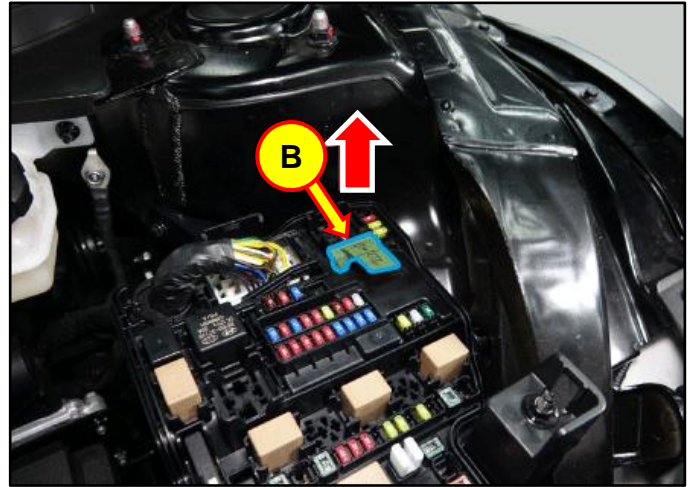
C2. Disconnect the high voltage cut-off switch (B) in the direction of the arrow.

Refer to the shop manual:

- **Battery Control System > High Voltage Shut-off Procedures**

**CAUTION**

Wait for more than **5 minutes** so that the capacitor in the high voltage system will be fully discharged.



C3. Open the coolant reservoir tank cap (C) to release pressure.

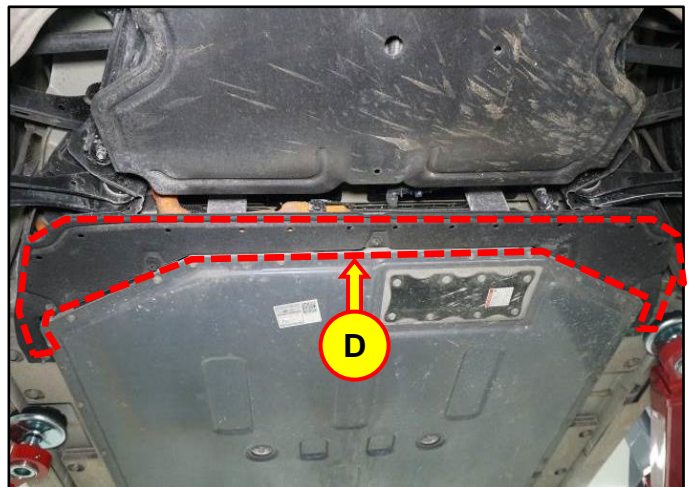


C4. Raise the vehicle on a lift.

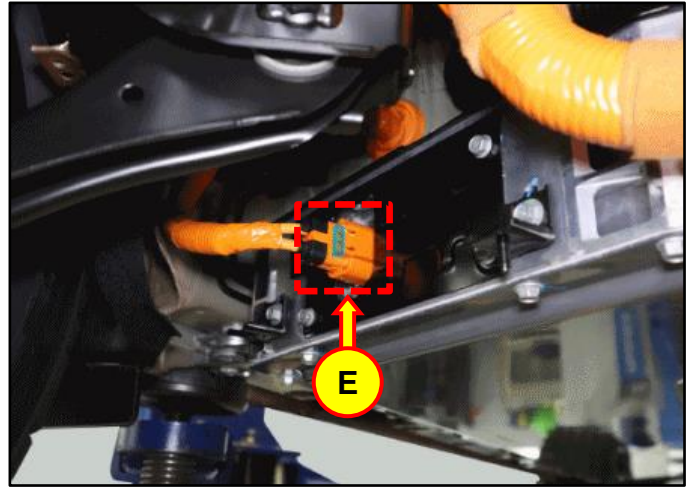
Loosen the rear undercover bolts and remove the cover (D).

**Tightening Torque:**

lb-ft	6.5
lb-in	78
N.m	8.8



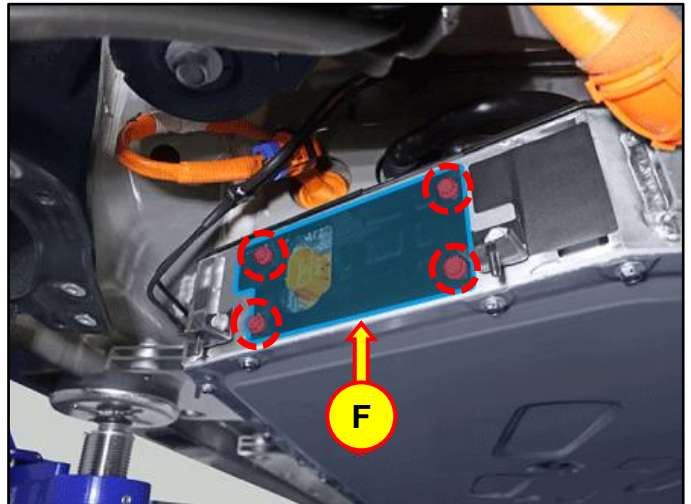
C5. Disconnect the ICCU high voltage connector (E).



C6. Loosen the 4 bolts and remove the ICCU high voltage connector assembly cover (F).

**Tightening Torque:**

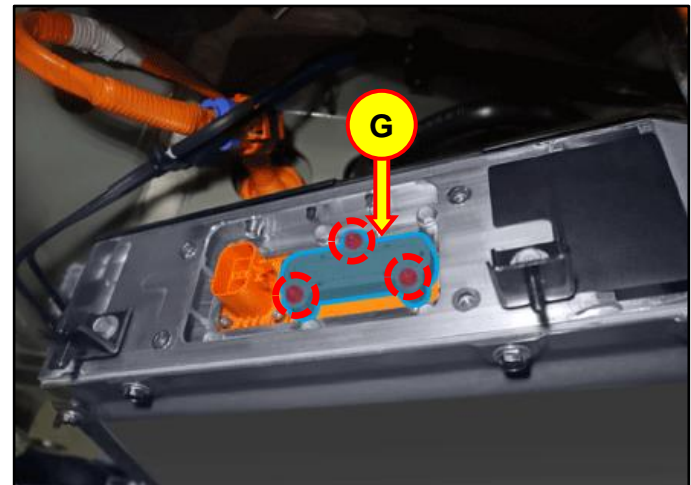
lb-ft	7.3
lb-in	87
N.m	9.8



C7. Using a T3 Hex bolt wrench, unscrew the three (3) hex bolts and remove the ICCU fuse cover (G).

**Tightening Torque:**

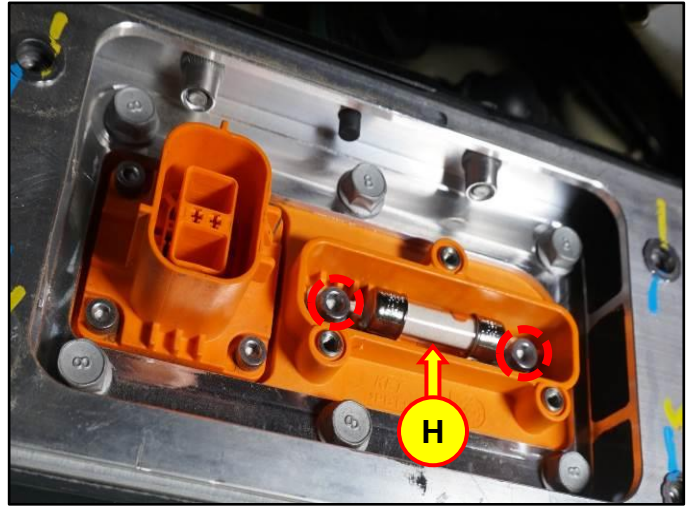
lb-ft	2.2
lb-in	26
N.m	2.9



- C8. Using a T5 Hex bolt wrench, loosen the hex bolts fixed by fuses (2 each) and remove the ICCU fuse (H). Replace the fuse with the newly provided one. Reinstall all removed parts in reverse order of disassembly.

**Tightening Torque:**

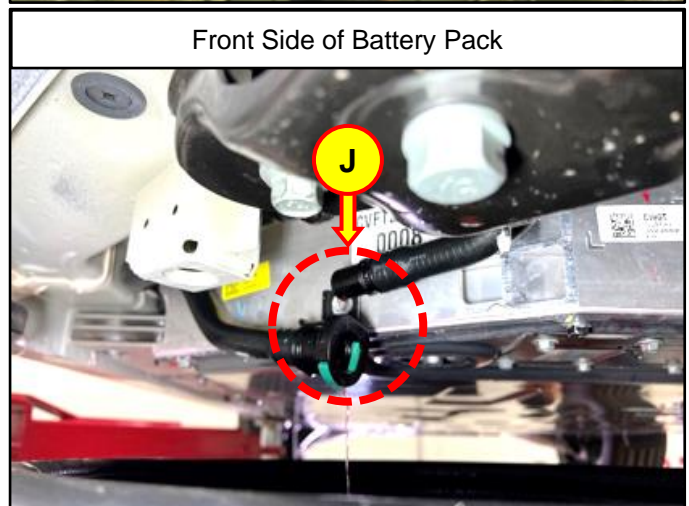
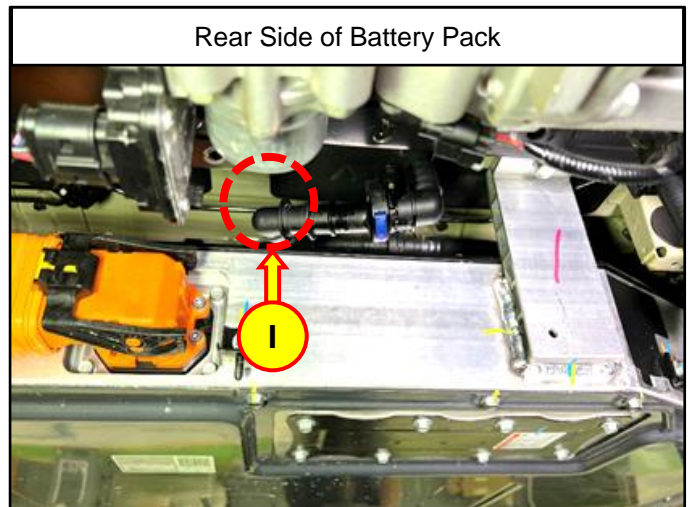
lb-ft	3.7
lb-in	44
N.m	4.9



- C9. Disconnect the rear coolant hose (I) and front coolant hose (J).

Insert an air gun into the rear coolant hose (I) to blow out internal coolant of the ICCU as shown in the photo.

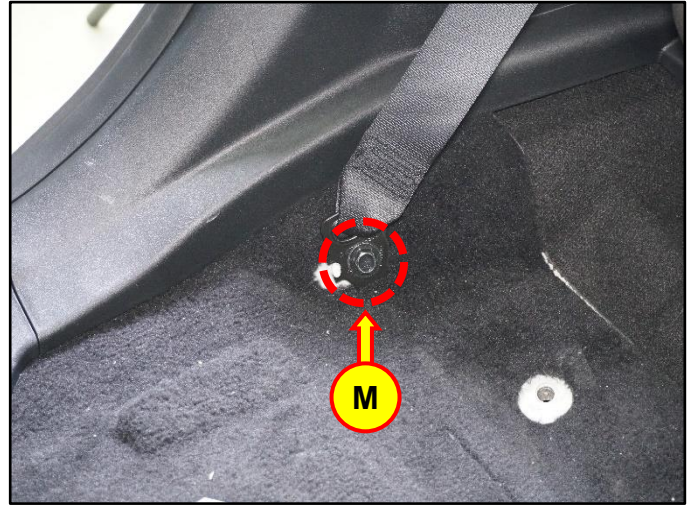
The ICCU coolant will be drained through the front coolant hose (J).



- C10. Remove the rear seat assembly by referring to shop manual:
- **Body (Interior / Exterior / Electrical) > Rear Seat > Rear Seat Assembly > Removal and Installation**

- C11. Remove the rear door LH/RH scuff trim by referring to shop manual:
- **Body (Interior / Exterior / Electrical)**  
**> Interior Trim > Door Scuff Trim > Removal and Installation**

- C12. Loosen the LH/RH bolts (M) and remove the rear seat belt lower anchor.



- C13. Remove the LDC cable fixing bolt (O), disconnect the cable, and then loosen 2 ICCU bolts (P).

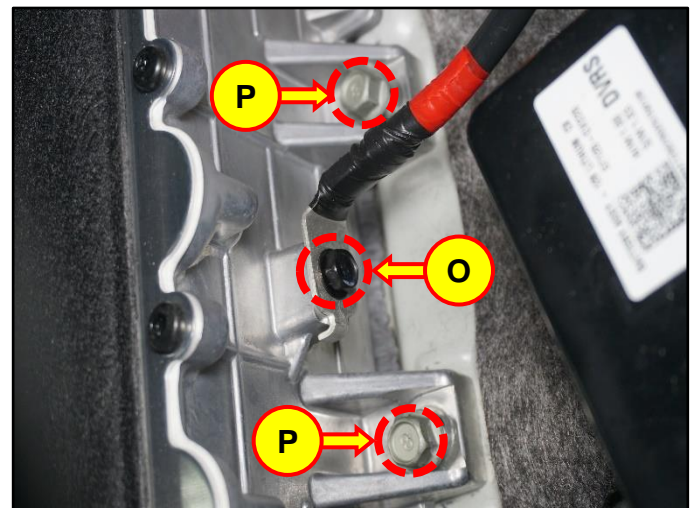
**Tightening Torque:**

**Bolt O:**

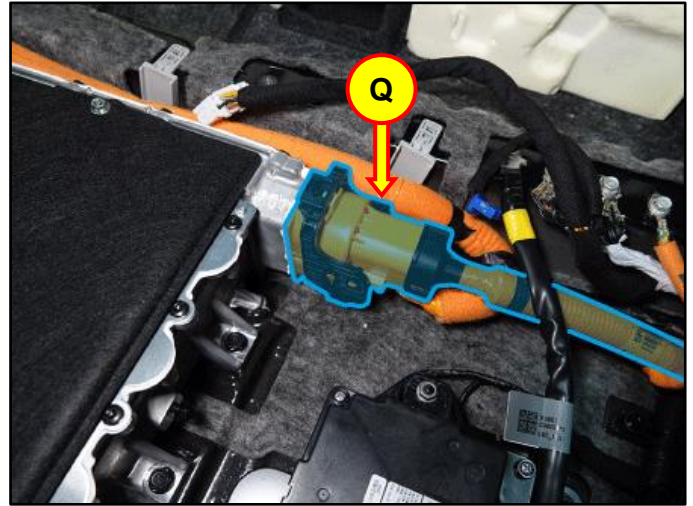
lb-ft	6.5
lb-in	78
N.m	8.8

**Bolt P:**

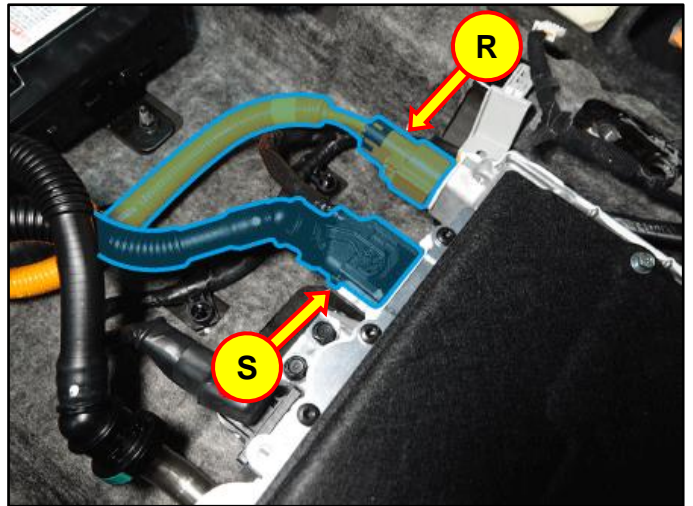
lb-ft	7.3
lb-in	87
N.m	9.8



C14. Disconnect the ICCU AC connector (Q).



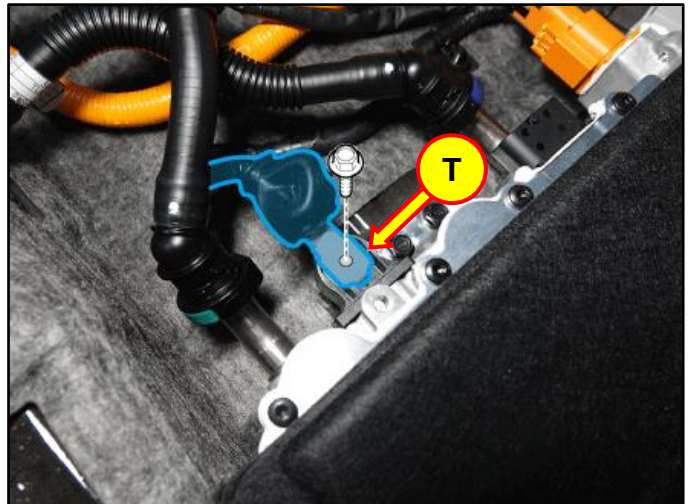
C15. Disconnect the ICCU DC connector (R).  
Disconnect the ICCU signal connector (S).



C16. Remove bolt (T) securing the LDC to the ICCU.

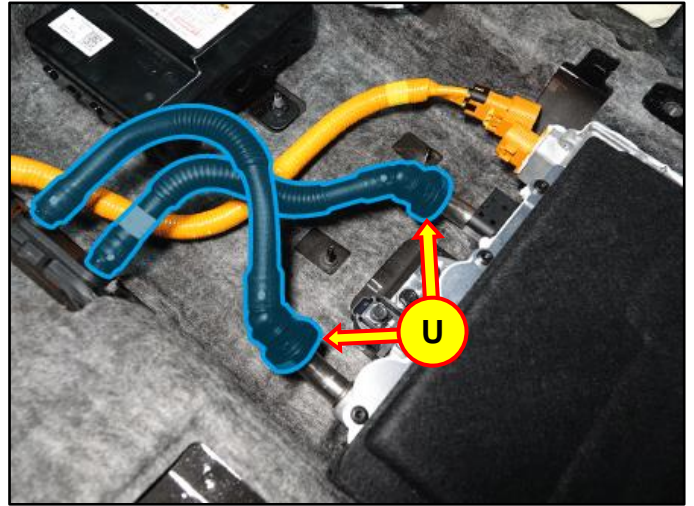
**Tightening Torque:**

lb-ft	6.2
lb-in	74
N.m	8.4





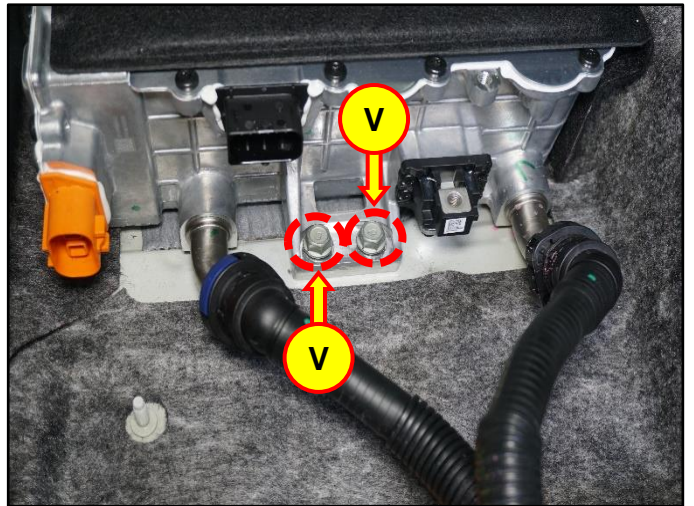
C17. Place absorbent mat prior to disconnecting the coolant tube quick connectors (U).



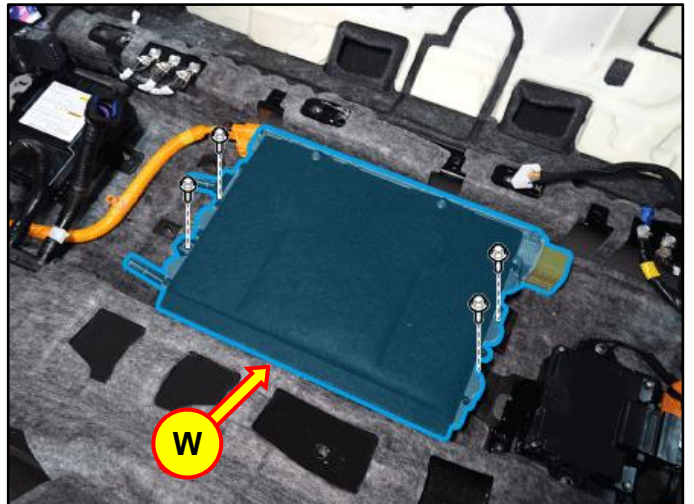
C18. Loosen the two (2) ICCU mounting bolts (V).

**Tightening Torque:**

lb-ft	18
N.m	25



C19. Remove the ICCU assembly (W) and replace with the updated part.



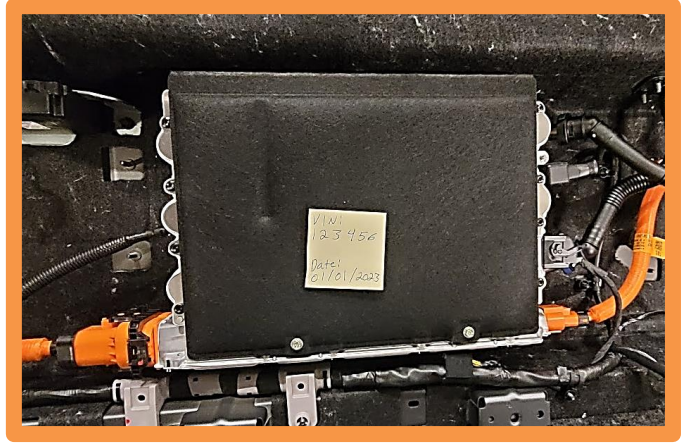
C20.

**STUI**



Using STUI, take a photo of the installed new ICCU with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



C21. Install all removed parts in the reverse order of removal.

**NOTICE**

- Be sure to install all components according to specified torques.
- Be careful not to drop any components, as this may cause internal damage.

C22. Refill the motor cooling system with coolant and then fully bleed out air using the GDS diagnostic tool.

**NOTICE**

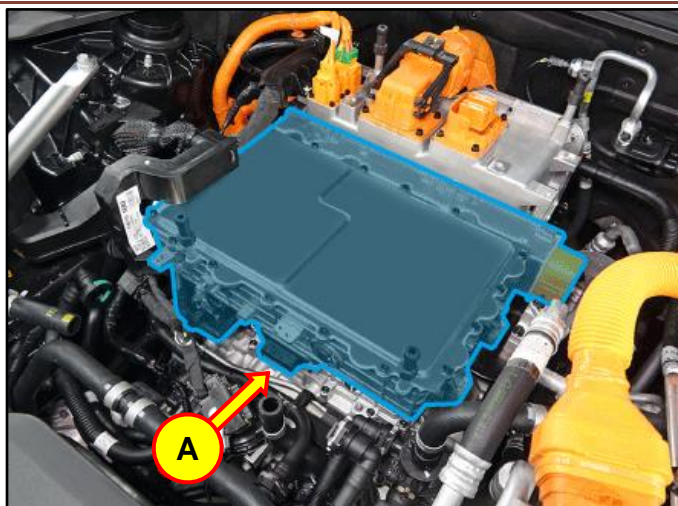
Do **NOT** reuse coolant that was drained from the vehicle. Doing this may bring foreign substances and impurities into the coolant system.

D. ICCU & Fuse Replacement for GV70 Electrified (JK1A EV) and G80 Electrified (RG3 EV)

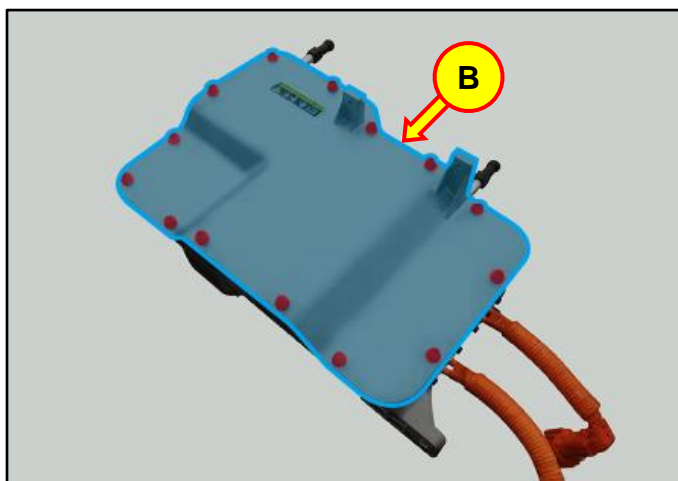
D1. Remove the Integrated Charge Control Unit (ICCU) (A).

Refer to Shop Manual:

- **Battery Control System > High Voltage Charging System > Integrated Charge Control Unit (ICCU) > Removal**



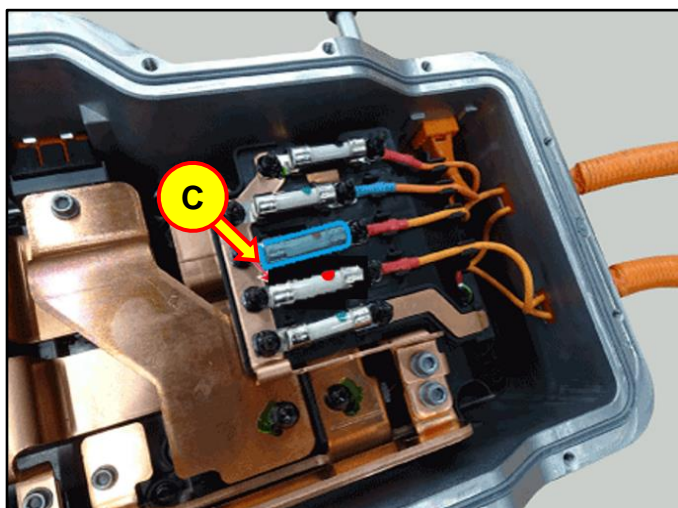
D2. Remove the high-voltage junction block upper cover (B).



D3. Loosen the mounting nuts, and remove the ICCU fuse (C).

**Tightening Torque:**

lb-ft	3.6
lb-in	43
N.m	4.9



- D4. After removing the fuse, carefully clean the fuse mating surface prior to installation.

**NOTICE**

Any foreign substance in this area may cause poor contact between terminals.



- D5. Install the replacement part for the ICCU.

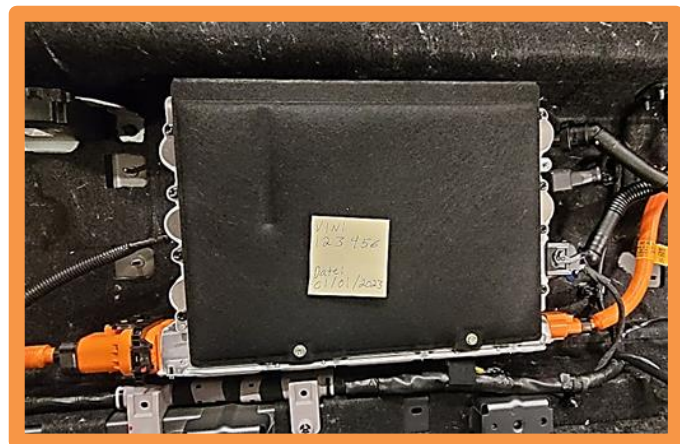
- D6.

**STUI**



Using STUI, take a photo of the new ICCU with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



- D7. Reinstall all parts in the reverse order of the removal process.

**NOTICE**

When installing the fuse, use a low-strength thread locker.

Ensure all parts are installed according to specified guidelines to avoid damage.

Handle parts with care to avoid any internal damage from accidental drops.

- D8. Refill the motor cooling system with new coolant then fully bleed out air using the GDS diagnostic tool.

**NOTICE**

Do **NOT** reuse coolant that was drained from the vehicle which may pollute the coolant system with foreign substances and impurities.