



GROUP	MODEL
ELE	2022-2024MY EV6 (CV1)
NUMBER	DATE
420	April 2026

TECHNICAL SERVICE BULLETIN

SUBJECT:

ICCU INSPECTION/REPLACEMENT (WTY044)

This bulletin provides information associated with the 'Warranty Extension Program' (WTY044) to inspect and, if necessary, replace the Integrated Charging Control Unit (ICCU) and/or the ICCU Fuse on 2022-2024MY EV6 (CV1) vehicles produced from November 17, 2021 through July 22, 2024. The affected vehicles may exhibit difficulty or inability to charge the subject vehicles using Level 1 or Level 2 AC charging and/or inability to use the Vehicle-to-Load (V2L) function, and/or display of the "Check electric vehicle system" warning message. The warranty coverage for repairs related to the ICCU with above symptoms will be extended from 10 years / 100,000 miles to 15 years / 180,000 miles, whichever comes first, starting from the date the vehicle was first put into service. Follow the procedure outlined in this publication to inspect and, if necessary, replace the ICCU and/or ICCU Fuse on the applicable vehicle.

DTC Description:

P1A9096 - DC/DC Converter Input Voltage Sensor Fault

P1E011C - PFC Voltage Sensor Reliability and Initial Offset Value Check

P1E0211 - PFC Voltage Sensor Circuit Low

P1E1300 - Battery Charger Power Module System Voltage

P1E1417 - PFC Output Voltage Too High

P1E0C73 - Input Relay Stuck Closed Check

P0D5C00 - Battery Charger Hybrid/EV Battery Output Power Performance

Note: Please check for any applicable recalls or subsequent repair actions prior to performing this repair. ICCU issues related to DTC P1A9096 are covered under the terms of safety recall SC327 and SC327Y1. Once SC327 AND SC327Y1 are completed, any subsequent ICCU inspections are to be completed under ELE421 (WTY044).

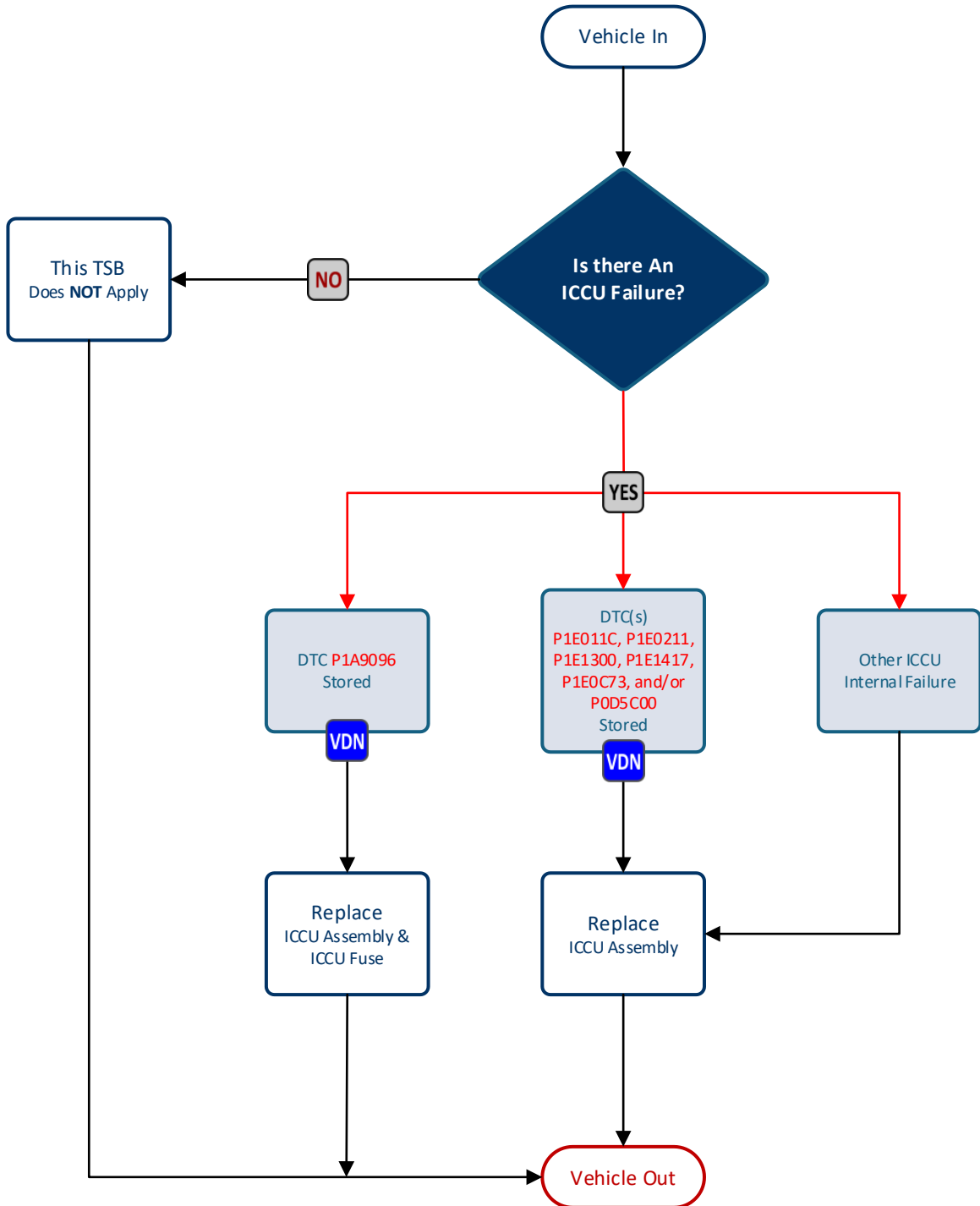
NOTICE

A Warranty Extension Campaign is a repair program with customer notification. There is no charge to the vehicle owner for this repair.

Repair status for a VIN is provided on KDealer+ (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on KDealer+ (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.

This issue number is WTY044.

Flowchart:



Note: A Vehicle Diagnosis Number (VDN) must be created for DTC's prior to ordering parts and performing necessary procedure(s), as outlined in this TSB. If a VDN is not created, Parts Ordering and Warranty claim submission issues WILL occur. Any claims for replacement parts are subject to Warranty review and chargeback.



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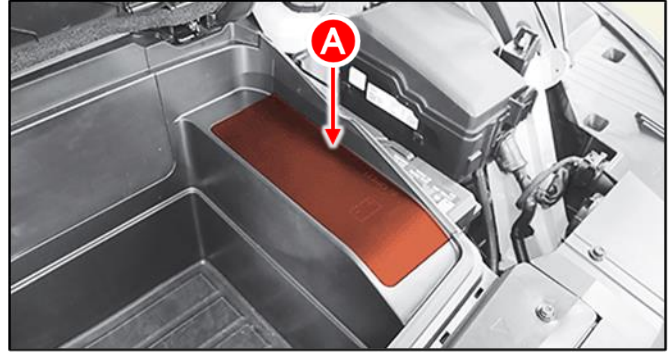
Inspection Procedure:

1. Using the KDS, confirm if any of the following DTCs are stored:
 - If no DTCs are stored, then proceed to step 2.
 - If DTC P1A9096 is stored, and vehicle is not part of SC327 and SC327Y1, then proceed to 'ICCU Replacement Procedure' on page 4 and 'ICCU Fuse Replacement Procedure' on page 9. **Claim Labor Op Code 262082R0.**
 - If DTC(s) P1E011C, P1E0211, P1E1300, P1E1417, P1EOC73, and/or POD5C00 are stored, then proceed to 'ICCU Replacement Procedure' on page 4. **Claim Labor Op Code 262082R1.**
2. If NO listed DTCs are stored, Inspect the ICCU for any other internal failures not related to listed DTC's above:
 - If the issue is related to the ICCU then proceed to 'ICCU Replacement Procedure' on page 4. **Claim Labor Op Code 262082R2.**
 - If the issue is not related to an ICCU failure, then this TSB does not apply. **Claim Labor Op Code 262082I0 (DTC Inspection ONLY).**

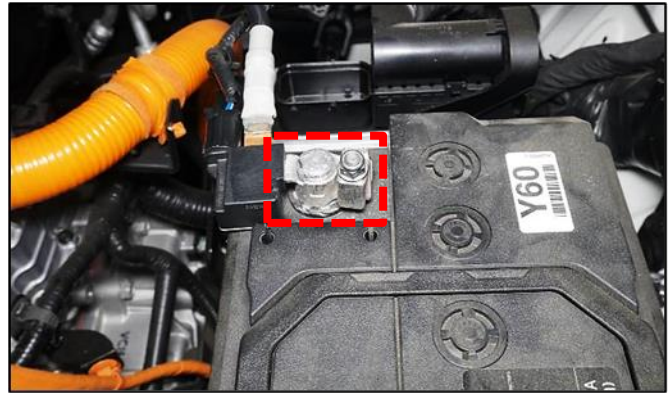


ICCU Replacement Procedure:

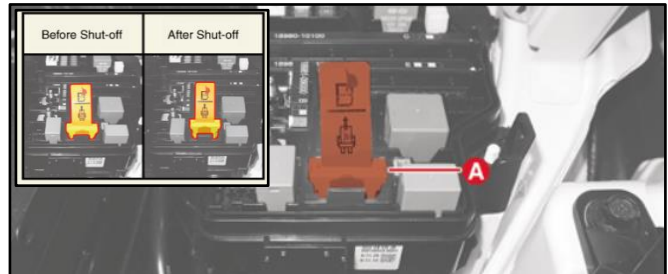
- 1a. Open the hood and open the auxiliary battery (12V) service cover and fuse (A).



- 1b. Open the hood and disconnect the battery negative (-) post cable.



2. Perform the 'High Voltage Shut-Off Procedure' by referring to "Body Electrical System → High Voltage Shut-Off Procedures → High Voltage Shut-Off Procedures (Steps 1 - 4 Only)" in the applicable Shop Manual on KGIS.

**WARNING**

Failure to follow the High Voltage Shut-off Procedure may result in serious electrical injuries.

3. Open the coolant reservoir tank pressure cap (B) to release pressure.



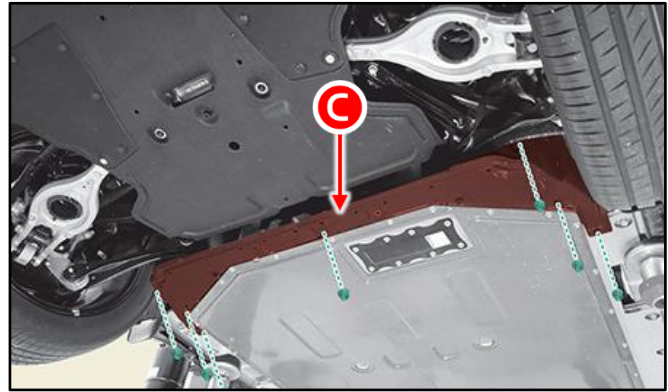
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4. Remove the rear under cover (C).



Tightening torque for nuts:
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)

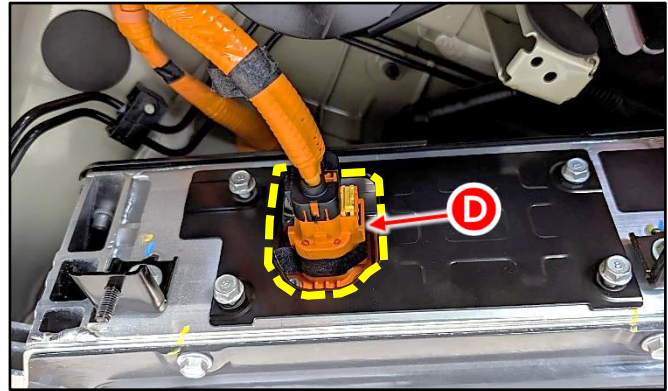


Note: Long Range model shown for reference use only.
Standard range will appear different.

5. Disconnect the ICCU Connector (D).

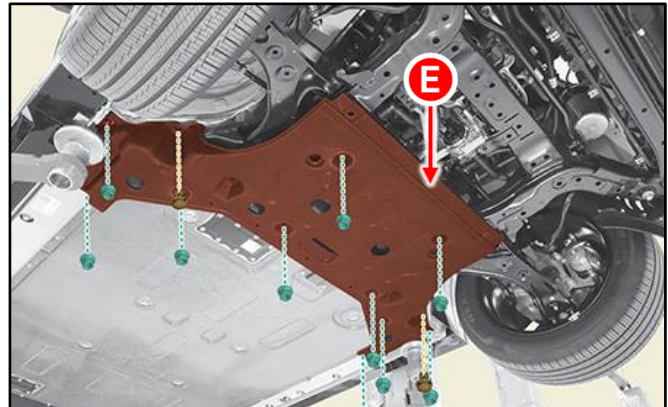
! WARNING

Be sure to read and follow the "General Safety Information and Caution" information on KGIS when working with a High Voltage system. Failure to do so can result in serious electrical injuries.



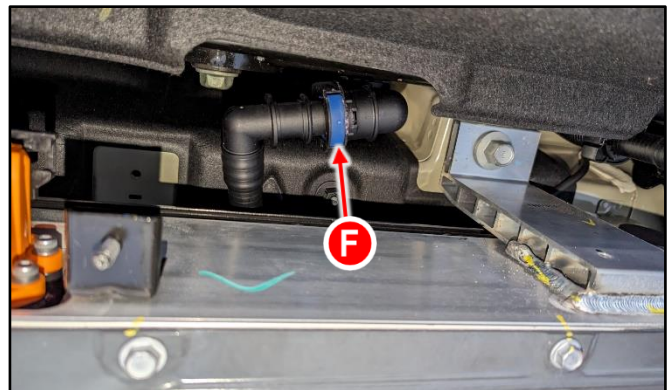
6. Remove the front rear under cover (E).

Note: The front under cover does not need to be removed. Image shown for reference only.



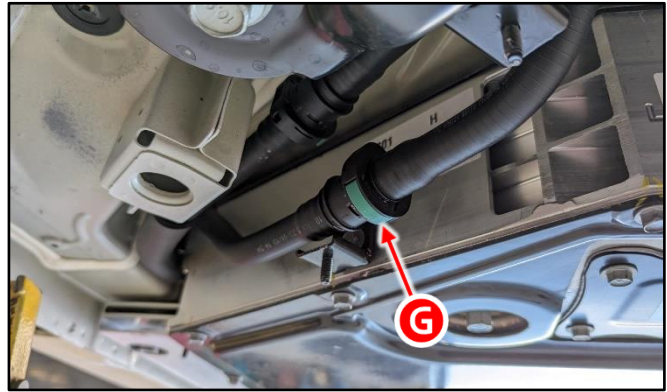
Front of Battery

7. Disconnect the blue rear coolant hose connector (F).



Rear of Battery

- 8a. Disconnect the front coolant **green** hose connector (G).

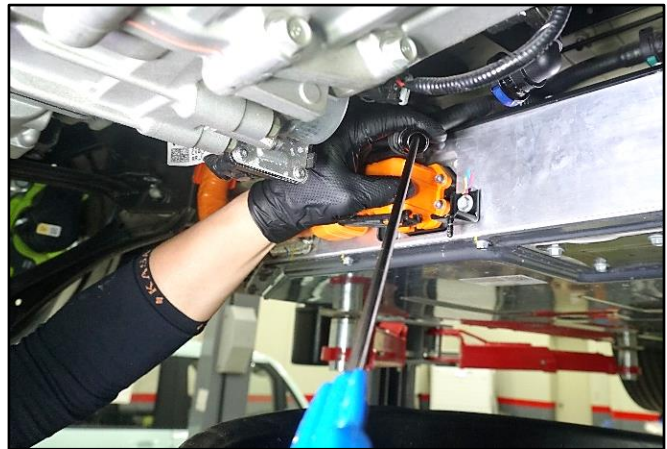


Front Right Side of Battery

- 8b. Using shop air, blow out the ICCU coolant from the **blue** rear disconnected coolant hose (F).

 **TECH TIP**

Wearing a rubber glove, create a tight seal using hand when blowing into the **blue** hose connector end.



Note: Use a drain pan to collect the coolant fluid from the front disconnected hose.

- 9. Remove the rear seat assembly (H) by referring to "Body Interior and Exterior → Rear Seat Assembly → Removal and Installation" in the applicable Shop Manual on KGIS.



- 10. Remove the left (LH) and right (RH) side rear door scuff trim (I).



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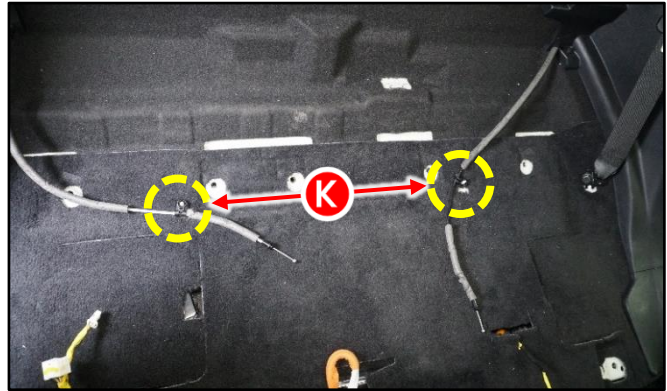
11. Remove **both** (LH and RH) the rear seat belt lower anchor retaining bolts (J).



Tightening torque for bolt (J):
29.7 - 44.1 lb.ft (40.2 - 59.8 N.m)



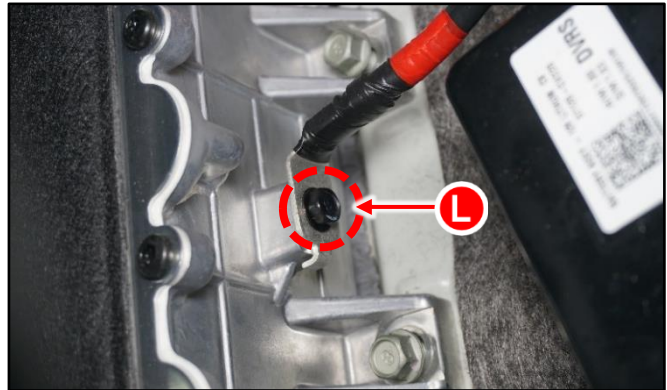
12. Detach the two (2) folding lever cables (K) from the floor carpet.



13. Disconnect the LDC cable by loosening the retaining bolt (L).



Tightening torque for bolt (L):
5.8 - 7.2 lb.ft (7.8 - 9.8 N.m)



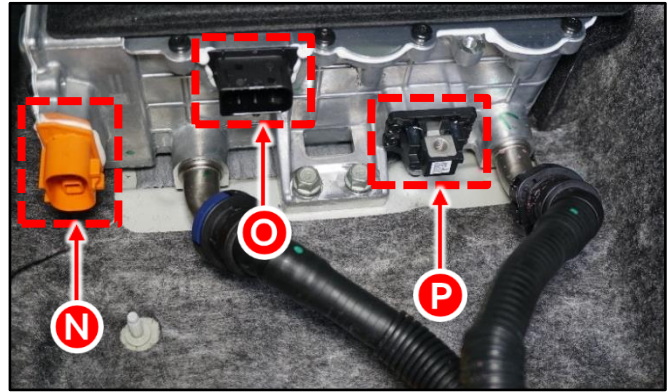
14. Disconnect the combo charge inlet wire harness connector (M).




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15a. Disconnect the following:

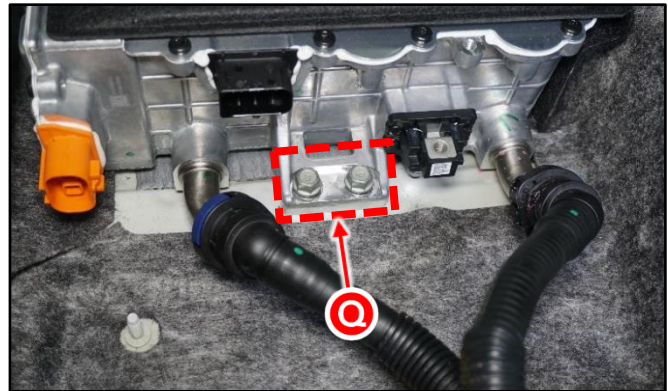
- HV power connector (N)
- ICCU connector (O)
- LDC positive (+) cable (P)



15b. Remove the two (2) ICCU assembly retaining bolts (Q).

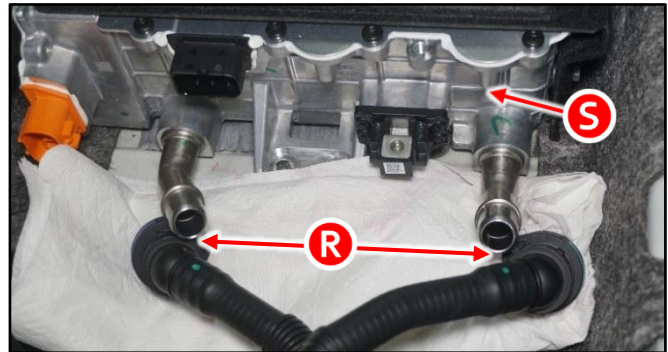


Tightening torque for bolts (Q):
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)



15c. Disconnect the two (2) ICCU coolant hoses (R) from the ICCU assembly (S).

Note: Place an absorbing towel to collect any remaining coolant fluid residue when detaching the coolant hoses.



16. Replace the ICCU assembly (S) with a new part in the reverse order of removal.

Note: If ICCU Fuse Replacement is required, proceed to and complete steps for 'ICCU Fuse Replacement Procedure' on page 9 FIRST, then complete steps 17 - 18 below.



17. Refill the coolant by referring to "Cooling System → Coolant → Motor Coolant (Coolant Refilling and Air Bleeding)" in the applicable Shop Manual on KGIS.

18. Confirm normal vehicle operation.



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ICCU Fuse Replacement Procedure:

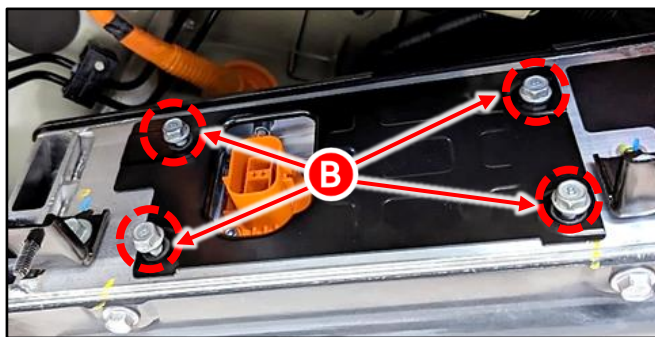
1. Disconnect the ICCU power cable (A) .



2. Remove the four (4) ICCU fuse service cover retaining bolts (B).



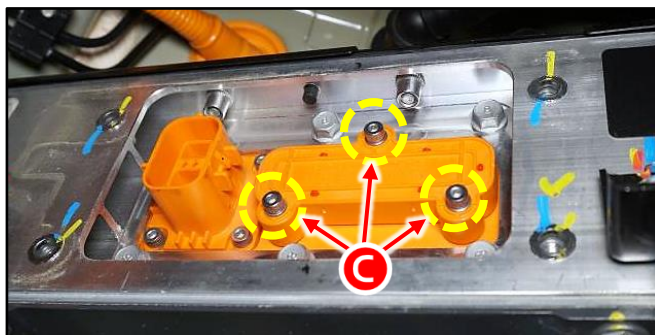
Tightening torque for bolts (B):
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)



3. Remove the three (3) ICCU fuse cover retaining bolts (C).



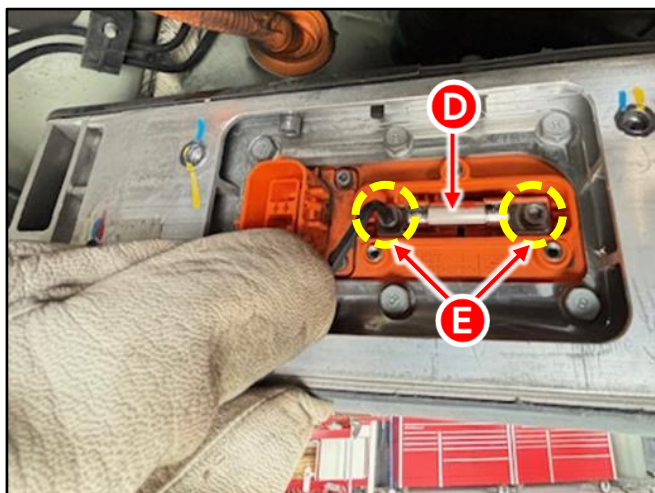
Tightening torque for T3 hex bolts (B):
22.6 - 29.5 lb.in (2.5 - 3.3 N.m)



4. Carefully and gently remove the two (2) ICCU fuse (D) retaining allen head bolts (E) using a hand tool and replace the ICCU fuse (D) with a new part.



Tightening torque for T5 hex bolts (E):
39.1 -47.7 lb.in (3.3 - 4.0 N.m)



NOTICE

DO NOT use a power tool to remove these bolts. There are two (2) securing nuts inside the battery. If the nuts fall inside the battery, additional time will be required to extract them.

5. Reinstall all removed parts in reverse order of removal.
6. Confirm normal operation.


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AFFECTED VEHICLE RANGE:

Model	Production Date Range
EV6 (CV1)	November 17, 2021 to July 22, 2024

REQUIRED TOOL:

Tool Name	Part Number	Figure	Location	Comments
Coolant Refiller Tool	OK253 J2300		O/H 2	N/A

Note: The replacement QQK part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this Campaign. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

REQUIRED PART:

Part Name	Part Number	Figure	Qty.	Comments
ICCU Assembly	36400 1XFA0AQQK		1	N/A
ICCU Fuse	375F2 GI040QQK	N/A	1	N/A
Coolant	UM020 CH263	N/A		Premix (Pink)

Note: The replacement part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

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WARRANTY INFORMATION:

N Code: D23 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	36400 1XFAOA	0	(WTY044) DTC Inspection Only	262082I0	0.3 M/H	N/A	0
			(WTY044) ICCU & Fuse Replacement (DTC P1A9096)	262082R0	1.9 M/H	36400 1XFAOAQQK	1
						375F2 GIO40QQK	1
						UM020 CH263	1
			(WTY044) ICCU Replacement (DTC P1E011C, P1E0211, P1E1300, P1E1417, P1E0C73, POD5C00)	262082R1	1.8 M/H	36400 1XFAOAQQK	1
						UM020 CH263	1
			(WTY044) ICCU Replacement (Other ICCU Internal Failure)	262082R2	1.8 M/H	36400 1XFAOAQQK	1
						UM020 CH263	1

Note: Refer to [Warranty Extension Bulletin 2602](#) for claim submission procedures. For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

Note: A [Vehicle Diagnosis Number \(VDN\)](#) must be created for DTC's prior to ordering parts and performing necessary procedure(s), as outlined in this TSB. If a VDN is not created, Parts Ordering and Warranty claim submission issues WILL occur. Any claims for replacement parts are subject to Warranty review and chargeback.

