



Technical Service Bulletin

GROUP RECALL	NUMBER 17-01-066
DATE NOVEMBER, 2017	MODEL(S) IONIQ EV

SUBJECT: IONIQ EV EPCU (RECALL CAMPAIGN 166)

* IMPORTANT

*** Dealer Stock and Retail Vehicles ***

Dealers must perform this Recall Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: The Hyundai Ioniq EV utilizes an Electronic Power Control Unit (EPCU) to supply power to the vehicle's motor and charge the vehicle's high-voltage battery system. The aluminum housing for the EPCU may contain voids, allowing coolant to contact the control unit's circuit board, potentially resulting in the illumination of warning lights in the vehicle's instrument cluster and causing the vehicle to stall in some cases. This bulletin describes the procedure to inspect the Electronic Power Control Unit (EPCU) and replace it if necessary.

Applicable Vehicles: Certain 2017 Model Year Ioniq (EV)

Parts Information:

Model	Part Name	Part Number	Qty
Ioniq (EV)	Electric Power Control Unit	36601-0E150QQH	1

SST Information:

Description	Part Number	Qty
UV Flash Light	UVLT0-AEEV0QQH	1

Note: Dealers in California will receive 1 UV flash light. Additional flash lights can be ordered through the PDC.

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part No.	Nature Code	Cause Code
Ioniq (EV)	71C062R0	EPCU Inspection	0.3 M/H	36601-0E150	Q75	ZZ1
	71C062R1	EPCU Inspection And Replacement	1.5 M/H	36601-0E150	Q75	ZZ1

NOTE 1: Submit Claim on Campaign Claim Entry Screen

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.

NOTE 3: Labor operation code 71C062R1 includes reimbursement for 1.5 M/H in labor, 1 EPCU assembly, and 5 qt of coolant.



The vehicle contains a high voltage battery and associated components. Follow all applicable electrical system precautions outlined in the Shop Manual before performing the procedure.

Shop Manual > General Information > General Safety Information and Caution

Service Procedure:

1. Follow the High Voltage Cut-off Procedure in the Shop Manual before performing the inspection.

Shop Manual > General Information > High Voltage Cut-off Procedure



Follow the high voltage cut-off procedure before performing the inspection.

2. Open the hood and remove the EPCU top plastic cover (“engine” cover).



3. Remove the EPCU service cover (A).

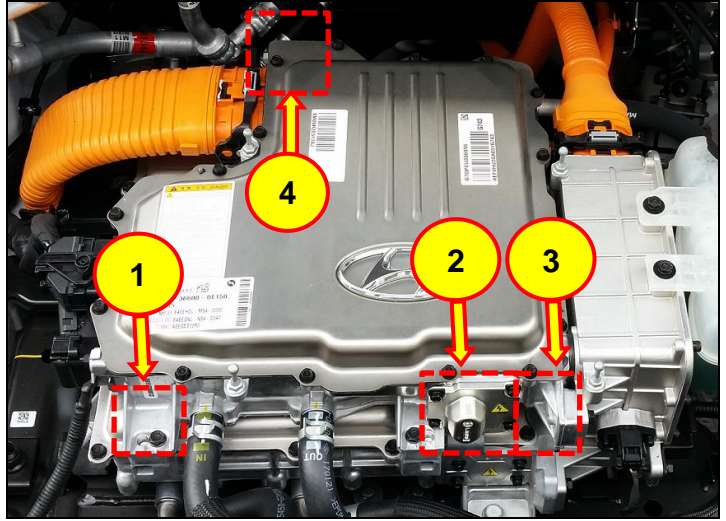
Tightening torque:

3.9 - 5.9 N.m (0.4 - 0.6 kgf.m, 2.9 - 4.3 lb-ft)

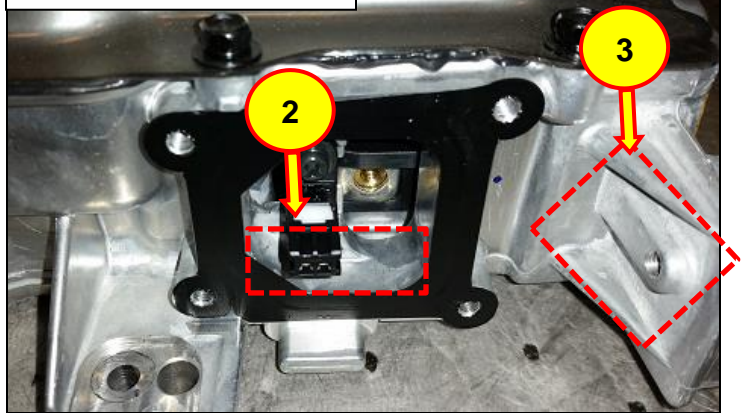


4. Inspect the EPCU using the UV Flash Light in areas #1 through #4.

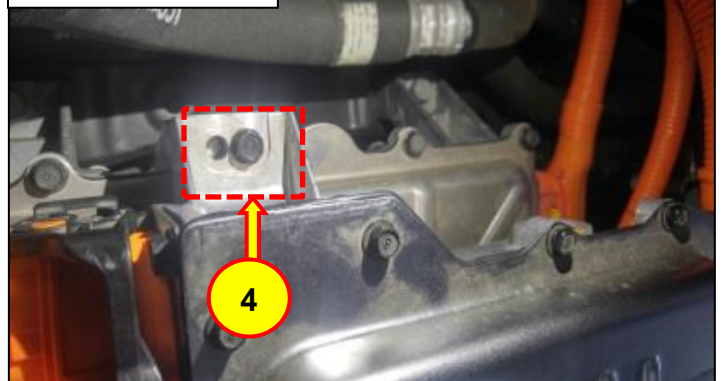
Area #4 is located on the back of the EPCU assembly.



Detail - Areas #2 & #3



Detail - Area #4

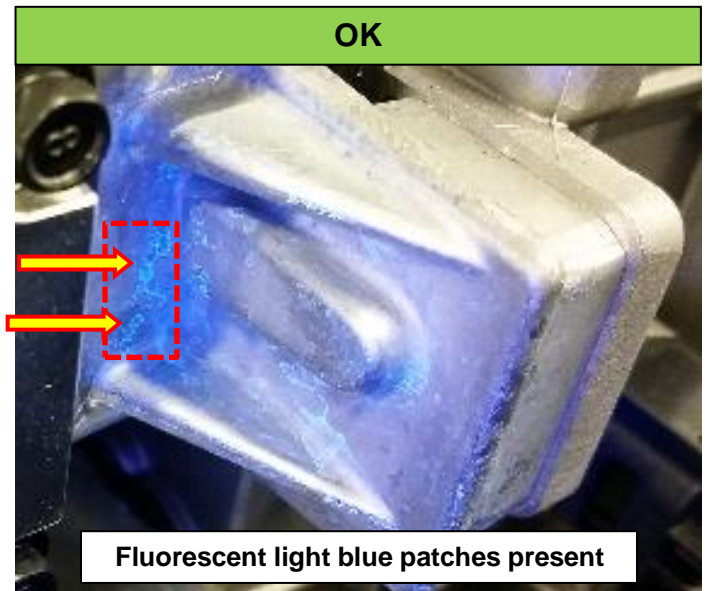
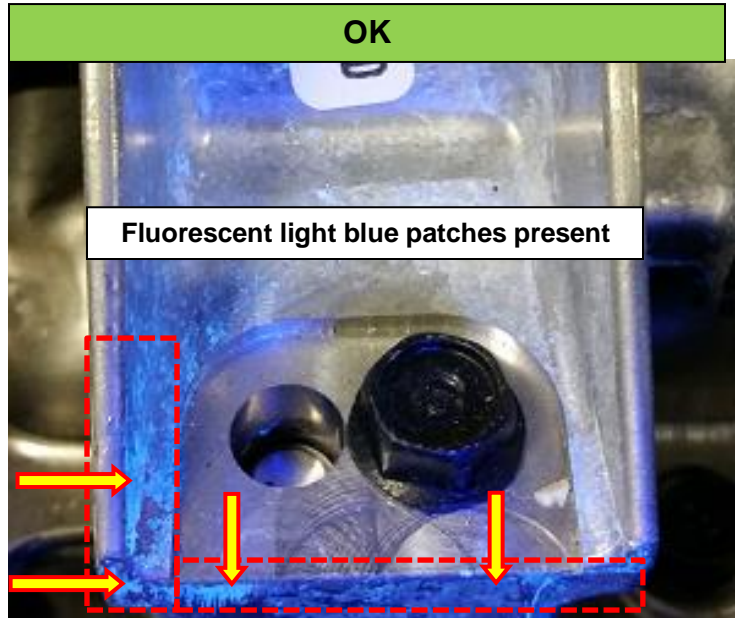


- Inspect the EPCU for fluorescent light blue patches as shown on the right.

If light blue patches **are present in 2 or more of the 4 areas**, the EPCU is **OK**.

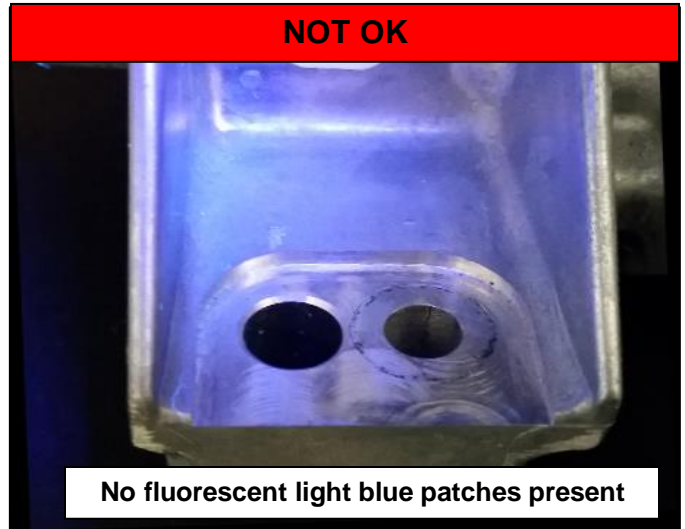
Follow the preceding steps in reverse order to complete the procedure. **DO NOT** replace the EPCU.

# of Areas with Light Blue Patches	Inspection Result
0 of 4 areas	Not OK
1 of 4 areas	Not OK
2 of 4 areas	OK
3 of 4 areas	OK
4 of 4 areas	OK



6. If light blue patches are **not present in any areas OR present in 1 of the 4 areas**, the EPCU is **NOT OK**. Continue to the next step to replace the EPCU.

# of Areas with Light Blue Patches	Inspection Result
0 of 4 areas	Not OK
1 of 4 areas	Not OK
2 of 4 areas	OK
3 of 4 areas	OK
4 of 4 areas	OK



7. Follow the Shop Manual to replace the EPCU assembly.

Shop Manual > Vehicle Control System > Electric Power Control Unit (EPCU)

8. Carefully install the EPCU side power cable connector (A).

⚠ CAUTION

Take caution when installing the side power cable connector. Improper assembly may cause injury to the service technician and/or result in damage to the inverter, drive motor, and high voltage battery.



9. Fill the motor coolant system, check for leakage, and then bleed the system using the GDS.

Shop Manual > Motor System > Motor Cooling System > Coolant

10. Perform the EPCU calibration procedure.

Shop Manual > Motor System > Motor Assembly > Motor Position & Temperature Sensor > Initialization of Motor/HSG Resolver Calibration

The Hybrid warning lamp and induced DTCs will clear immediately after the calibration is completed.

NOTICE

Drive the vehicle at 30+ mph during the calibration process.

NOTICE

If the calibration procedure is not performed, reduced max power output and reduced drive range could result.

NOTICE

Replaced parts may be requested by the HMA WTC for inspection.