



Technical Service Bulletin

GROUP	NUMBER
RECALL	18-01-023
DATE	MODEL(S)
JUNE, 2018	IONIQ (AE)

SUBJECT: 2017MY IONIQ (AE) HEV HYDRAULIC CLUTCH ACTUATOR (HCA) PHASE CAP: INSPECTION, REPAIR, OR REPLACEMENT (RECALL CAMPAIGN 176)

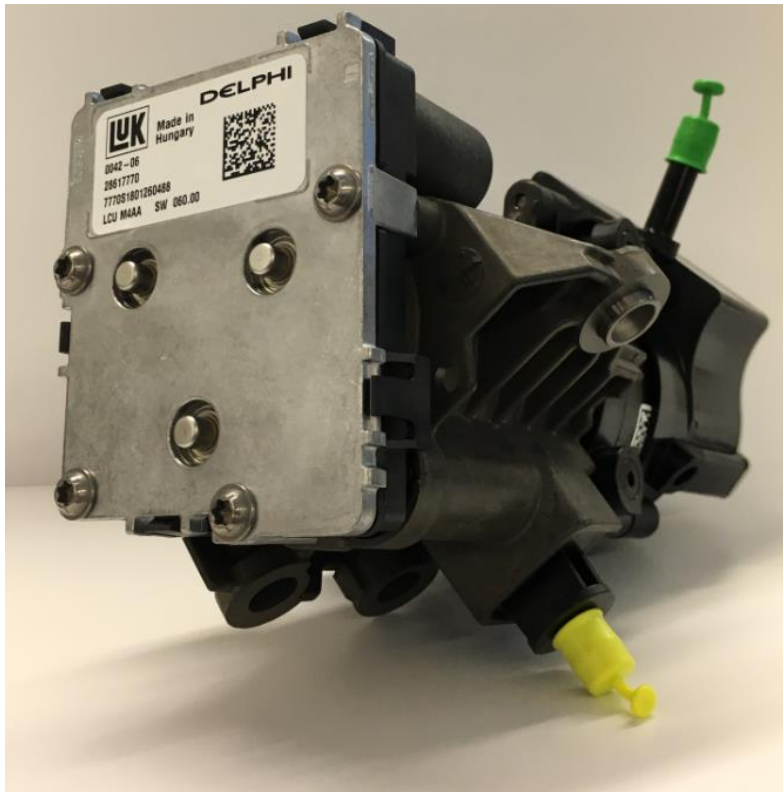
★ IMPORTANT

*** 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: This bulletin describes the procedure to inspect, repair, or replace the Hydraulic Clutch Actuator (HCA) on 2017MY Ioniq (AE HEV) Hybrid Electric Vehicles. A burr on the HCA housing can lead to oil seal damage that can lead to an internal oil leak. A short can then occur between the motor and phase cap, increasing the risk of a fire.



Applicable Vehicles: 2017MY Ioniq (AE HEV) Hybrid Electric Vehicles

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Parts Information:

Part Name	Part Number		Description (Quantity)
HCA PHASE CAP REPAIR KIT	41050-2B050QQH		Metal Bracket (1)
			Plastic Phase Caps (4)
			Tube of Glue (1)
			Cleaning and Installation Tool (1)
			Torx Wrench (1)
			LCU Screw (1)
HCA Assembly	41050-2B003QQH		Hydraulic Clutch Actuator Assembly (1)

Warranty Information:

Model	Op Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Ioniq (AE) HEV	81C021R0	HCA PHASE CAP INSPECTION	0.2 M/H	41050-2B050QQH	I3A	ZZ3
	81C021R1	HCA PHASE CAP INSPECTION AND REPAIR	0.4 M/H			
	81C021R2	HCA PHASE CAP INSPECTION AND HCA ASSEMBLY REPLACEMENT	0.8 M/H	41050-2B003		

IMPORTANT:

81C021R2 – If performing HCA Phase Cap Inspection and HCA Assembly Replacement you **must** attach to the claim a single picture showing the OE HCA with electrode contamination/oil leakage and the RO. Claims with incorrect attachments may be subject to chargeback.

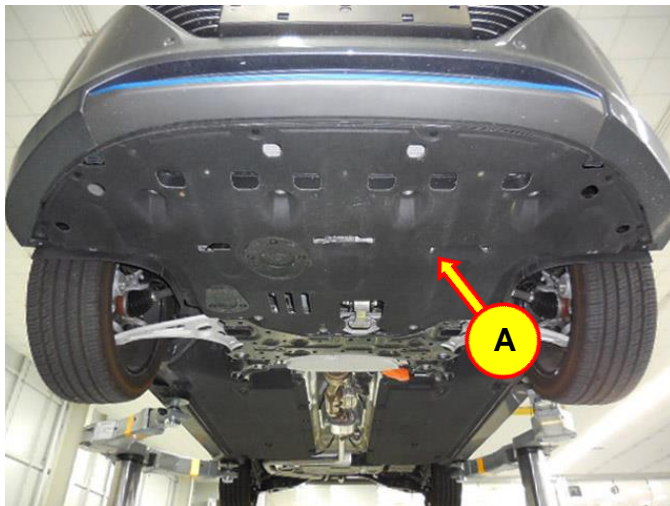
NOTE 1: Submit Claim on Campaign Claim Entry Screen

NOTE 2: If a part is found in need of replacement while performing Recall Campaign 176 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.

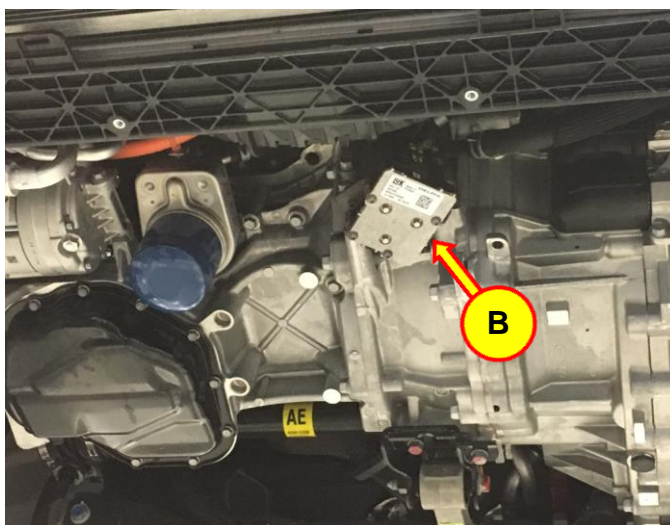
Service Procedure:

HCA PHASE CAP INSPECTION

1. Lift up the vehicle. Remove the engine undercover (A). Locate the Hydraulic Clutch Actuator.

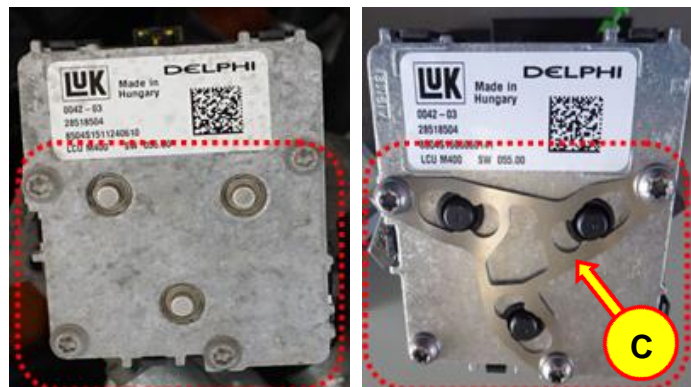


2. Locate the Hydraulic Clutch Actuator (B).



3. If the metal bracket (C) is present on the HCA, reinstall the engine undercover. The inspection is complete. **Inspection Op Code: 81C021R0**

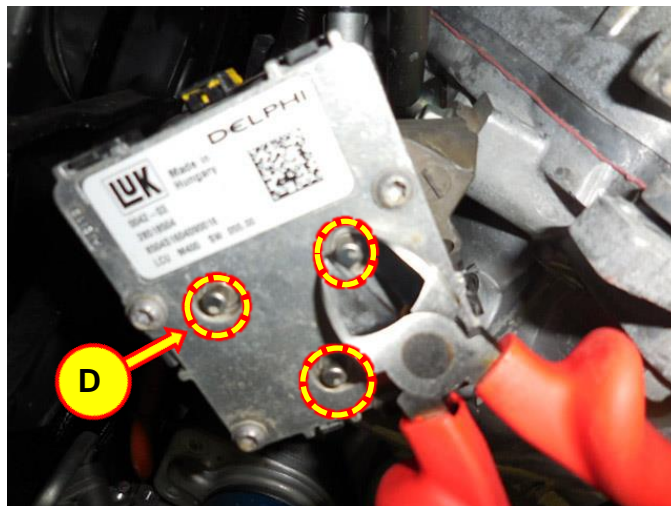
If the metal bracket is not present on the HCA proceed to the HCA Phase Cap Repair procedure below.



HCA PHASE CAP REPAIR

1. Remove the 3 phase caps (D).

NOTE: Remove the phase caps by lightly squeezing and pulling with a set of Diagonal Cutting Pliers.



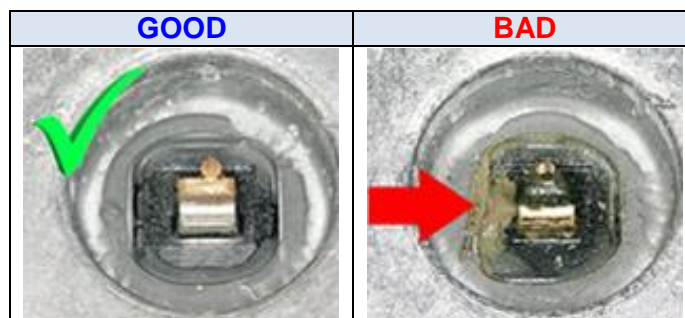
2. With the phase caps removed, inspect for electrode contamination or any signs of oil. If the electrodes are contaminated or there are signs of oil, replace the HCA according to the applicable shop manual.

*Engine clutch system > Clutch system > Engine Clutch actuator

NOTE : If the HCA is replaced, be sure to carry out all steps of the GDS recalibration procedure.

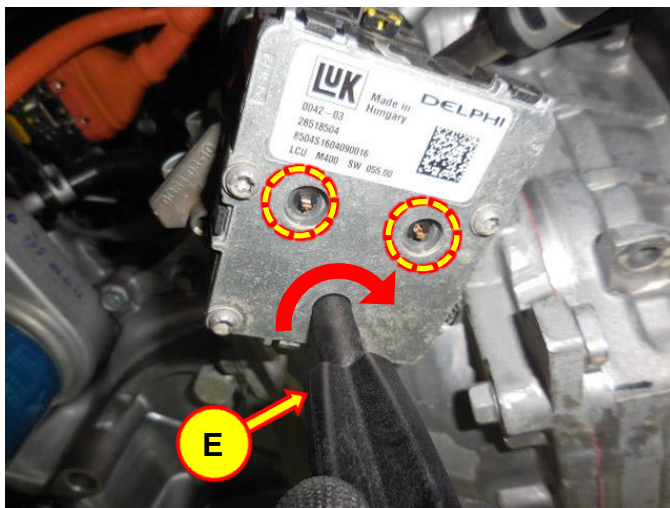


NOTE : How to check for electrode contamination.



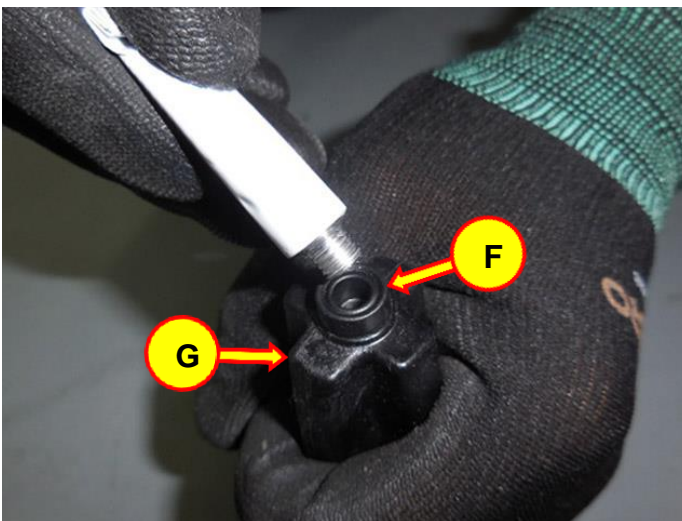
3. If the electrodes are not contaminated, insert the cleaning side of the cleaning and installation tool (E) into the cap hole, turn the tool and remove any debris that may be in the cap holes.

NOTICE
 Take care not to damage the electrodes. Do not use compressed air to clean out the phase cap holes.



Cleaning	Installing

4. Place a new phase cap (F) into the install side of the cleaning and installation tool (G).



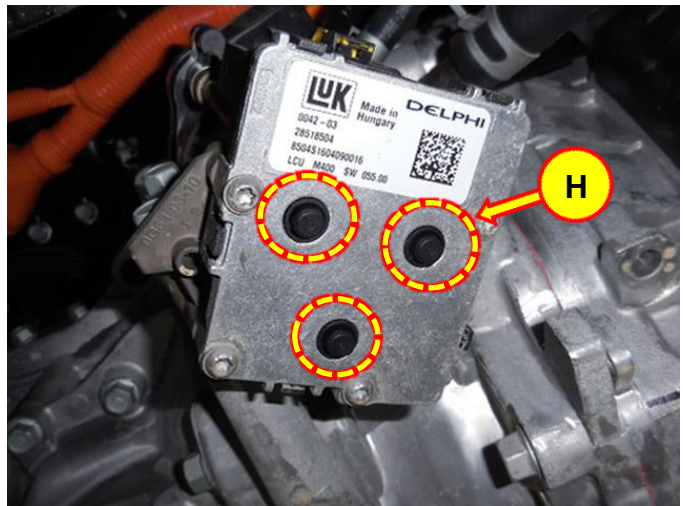
5. Using the supplied glue, apply it to the phase cap as shown.



6. After applying glue, install phase cap into the cap hole on the HCA.



7. Repeat for both the remaining phase caps (H).



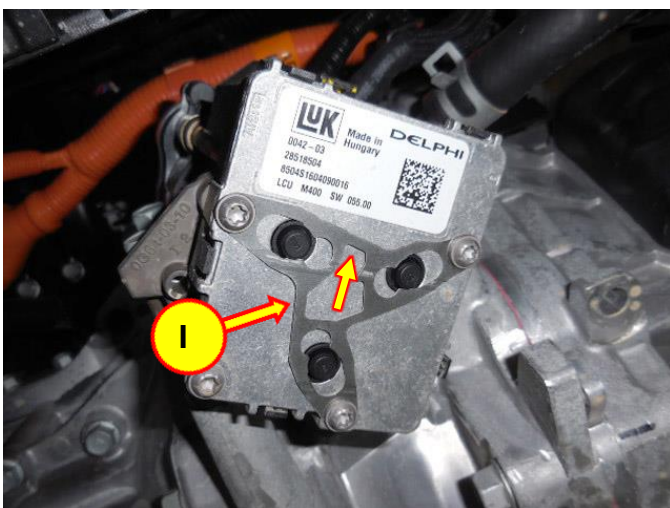
NOTE : Discard the tool after cleaning and installing the three phase caps.

8. Remove the three Torx bolts indicated on the photo using the supplied Torx wrench.



9. Install the supplied metal bracket (I). Position the bracket so the notch cut out in the center stamping points towards the label.

**Screw tightening torque:
2.95lb-ft (35.4 lb-in, 0.41kgf.m, 4.0N.m)**



10. Install the engine undercover.