



# HYUNDAI

## Technical Service Bulletin

GROUP <b>RECALL</b>	NUMBER <b>18-01-037</b>
DATE <b>DECEMBER 2018</b>	MODEL(S) <b>IONIQ HYBRID (AE HEV) IONIQ PLUG-IN (AE PHEV)</b>

**SUBJECT:** IONIQ HEV/PHEV MAIN RELAY / POWER RELAY ASSY REPLACEMENT (RECALL CAMPAIGN 178)

### ★ IMPORTANT

#### \*\*\* Retail Vehicles \*\*\*

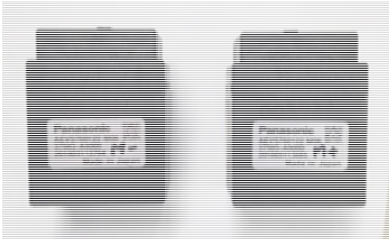

Dealers must perform this Campaign on all affected vehicles whenever an affected vehicle is in the shop for any maintenance or repair.

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

**Description:** Ioniq HEV/PHEV vehicles contain a Power Relay Assembly ("PRA") located underneath the rear seat. The PRA is equipped with a main relay which may have been loosely installed during assembly. If the PRA continues to operate in this condition, a loose connection between the main power relay contacts could increase electrical resistance thereby generating heat and increasing the risk of a fire. This bulletin describes the procedure to inspect the PRA and main relays and replace them if necessary.

**Applicable Vehicles:** Certain 2017-2018 MY Ioniq (AE) HEV/PHEV vehicles

### Part Information:

Part Name	Part Number / Figure	Qty	Note
MAIN RELAY	 37583-A8000QQH	1	Only required based on vehicle inspection results. Refer to Service Procedure.  Note: The main relays are packaged as a set of two.
PRA	 37514-G2100QQH	1	Includes new main relays preinstalled.  Only required based on vehicle inspection results. Refer to Service Procedure.

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

**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part No.	Nature Code	Cause Code
IONIQ HYBRID (AE HEV)	81C068R0	PRA INSPECTION AND MAIN RELAY REPLACEMENT	0.8 M/H	37514-G2100QQH	I3A	ZZ3
	81C068R1	PRA INSPECTION AND PRA REPLACEMENT	0.8 M/H	37514-G2100QQH		
IONIQ PLUG-IN (AE PHEV)	81C068R2	MAIN RELAY REPLACEMENT	0.7 M/H	37583-A8000QQH		

**Notes:**

- 1) Submit Claim on Campaign Claim Entry Screen
- 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(s) are out of warranty, request a Prior Authorization # for goodwill consideration prior to completing the Campaign.

**⚠ DANGER**

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 any work.

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

**⚠ WARNING**

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

**2. For PHEV (plug-in) vehicles:**

Replace the main relays according to the Shop Manual. Then continue with Step 6 below.

Hybrid control system > High voltage battery control system > Main relay

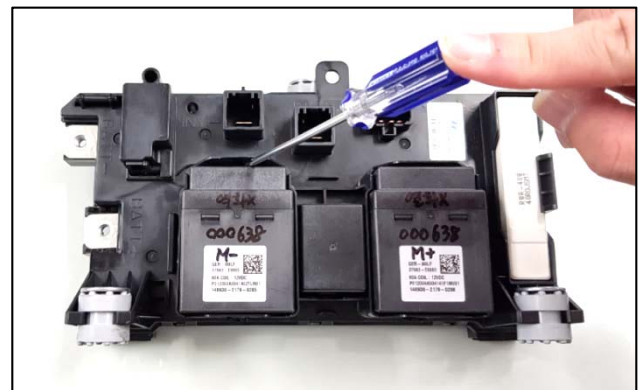
**For HEV (hybrid) vehicles:**

The PRA and main relays will be inspected. Remove the PRA assembly according to the Shop Manual.

Hybrid control system > High voltage battery system > Power relay assembly (PRA)



3. Spread the main relay hooks at the top and bottom of the relay using a flat blade screwdriver. Insert a tie wrap between the PRA housing and main relay to hold the hooks disengaged.



4. Remove the main relays using a wrench.



5. Inspect the PRA and main relays.

**If the PRA OR main relays are damaged:**

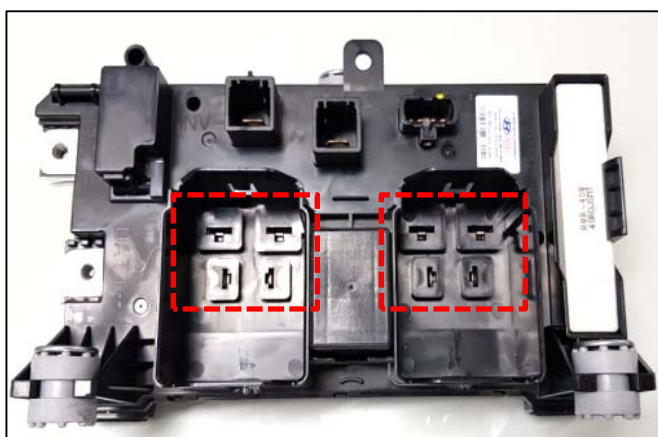
Replace the PRA according to the Shop Manual.  
The new PRA comes with new main relays preinstalled.

Hybrid control system > High voltage battery  
system > Power relay assembly (PRA)

**If the PRA AND main relays are NOT damaged:**

Replace both main relays according to the Shop Manual.

Hybrid control system > High voltage battery  
control system > Main relay



**NOTICE**

The specific location(s) and extent of the damage can vary. If any damage is present, replace the PRA.



**DAMAGED**



**NO  
DAMAGE**

6. Reinstall all removed parts in the reverse order of removal.

7. Check for DTCs and perform the appropriate diagnostic service. Ensure no warning lights are present.