

 HYUNDAI Technical Service Bulletin	GROUP RECALL	NUMBER 23-01-024H
	DATE MARCH 2023	MODEL(S) IONIQ HYBRID (AE HEV) IONIQ PLUG-IN (AE PHEV)
SUBJECT: IONIQ HEV/PHEV MAIN RELAY / POWER RELAY ASSY INSPECTION / REPLACEMENT (RECALL CAMPAIGN 232)		

This TSB supersedes 22-01-063H to include an information box on page 4 addressing the scenario for covered PRAs where the main relay labels are no longer visible, update the flowchart on page 5, and add Warranty notes #4 and #5 on page 3.

*** 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, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into customer 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.

STUI



This TSB includes STUI photo(s) as a requirement. STUI photo(s) requires adding a paper note with the RO date and last 6 of VIN to be clearly visible in the photos. Please ensure captured photo(s) are done according to the steps in this TSB and uploaded to STUI once completed. **All claims found that have incomplete, missing, or incorrect photo(s) are subject to debit.**

Description: The subject vehicles may not have received the proper remedy components under Recall 178, a safety recall addressing an electrical pin fit condition on the main relays within the PRA that, if continually operated in this condition, could increase electrical resistance thereby generating heat and increasing the risk of a fire.

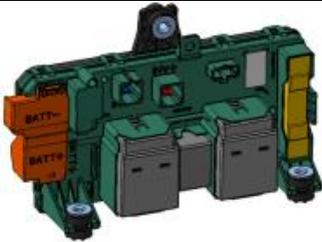
This bulletin describes the procedure to inspect the PRA and Main Relays, and replace either as defined by the service procedure flowchart.



Refer to the QR code or link below for guided video information:
<https://vimeo.com/723573458/00300dddd9>

Applicable Vehicles: Certain 2017-2018 MY Ioniq Hybrid/Plug-In Hybrid (AE HEV/PHEV) vehicles.

Part Information:

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

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part No.	Nature Code	Cause Code
IONIQ HYBRID/ PLUG-IN HYBRID (AE HEV / AE PHEV)	22R178R0	MAIN RELAY LABEL INSPECTION	0.4 M/H	37514-G2100QQH	I3A	ZZ3
	22R178R1	MAIN RELAY LABEL INSPECTION, PRA INSPECTION, AND MAIN RELAY REPLACEMENT	0.9 M/H	37514-G2100QQH		
	22R178R2	MAIN RELAY LABEL INSPECTION, PRA INSPECTION, AND PRA REPLACEMENT	0.9 M/H	37514-G2100QQH		

Notes:

- 1) Submit Claim on Campaign Claim Entry Screen.
- 2) If a part is found in need of replacement while performing this recall 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 Approval request for goodwill consideration prior to completing the recall.
- 3) 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.**
- 4) If the main relays are not visible due a covered PRA from a recent battery pack replacement, please submit op code 22R178R0.
- 5) Op times include taking STUI photo(s) and uploading. The STUI photo(s) must include the labels of the main relays with 'Panasonic' or of the covered PRA (if this scenario encountered) along with a piece of paper displaying the last 6 digits of the VIN and date of the repair. **If not included, claim will be subject to debit.**

⚠ 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.

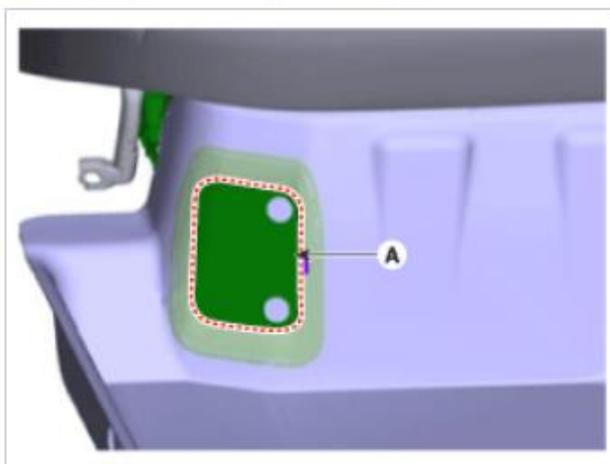
Shop Manual > General Information > General Safety Information and Caution

Service Procedure Flowchart:

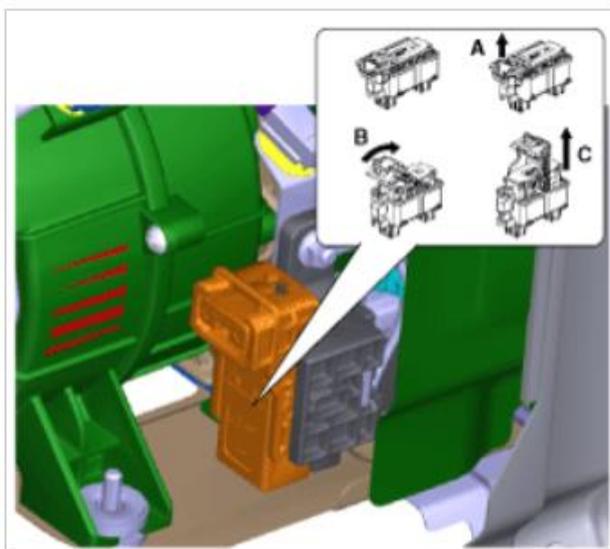
⚠ WARNING

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

1. Turn the ignition switch OFF and disconnect the auxiliary (-) battery negative (-) terminal.
2. Remove the safety plug cover (A).



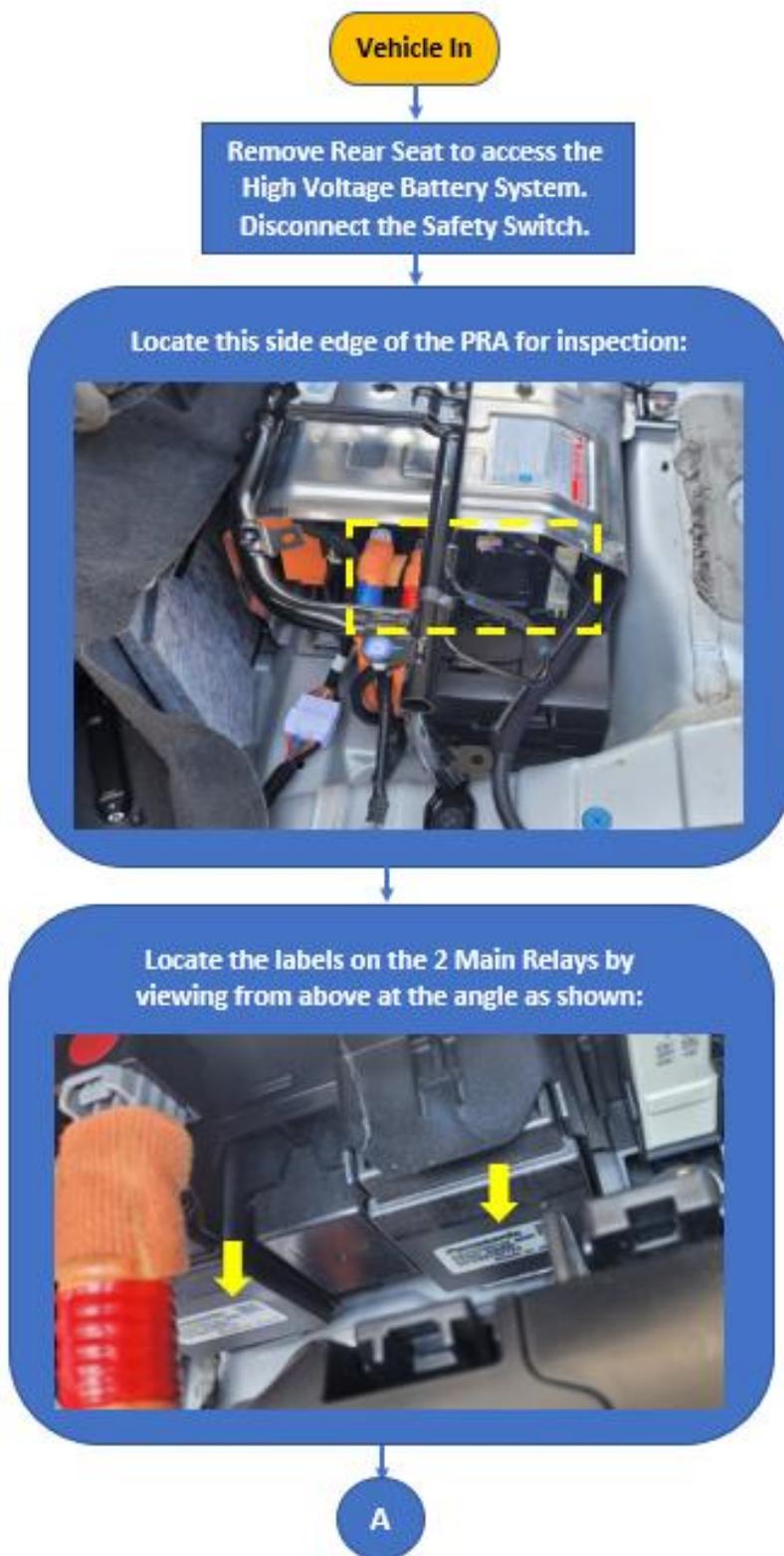
3. Unfasten the hook (A) and then remove the safety plug (C) by pulling the lever (B) to the direction of arrow.



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

i Information

Some vehicles may not have their main relay labels visible due to a more recently installed battery pack, resulting in the PRA cover that is not removable. A PRA where the cover is not removable has the latest labels enclosed with 'Panasonic'.



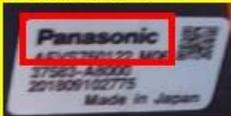
A

NO: one or both labels do not state "Panasonic" and/or not covered.

Remove the full PRA Assembly as per shop manual procedure:



YES: both labels state "Panasonic":

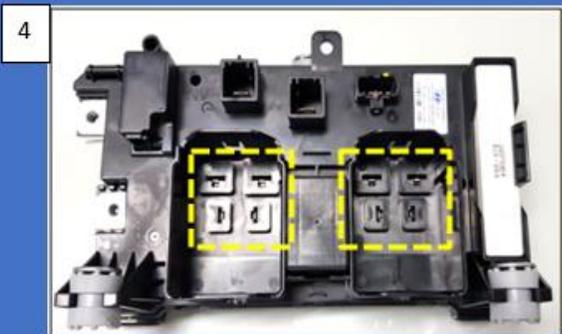


OR

YES: A covered PRA has the latest "Panasonic" labels enclosed.

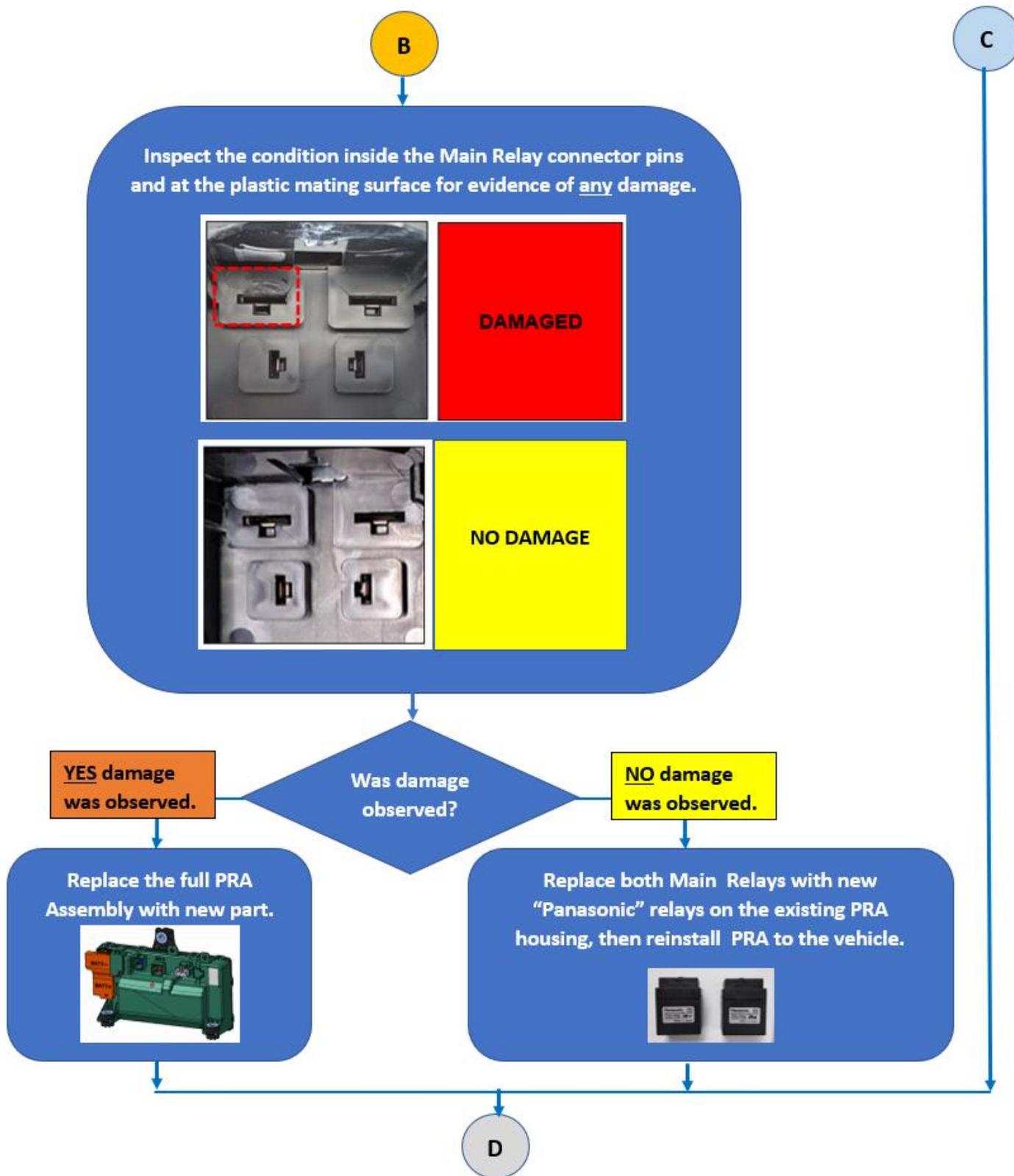


Remove each of the 2 Main Relays from the PRA as shown by these 4 steps. Pry apart each tab and hold both apart with wire ties inserted, then pull up the relay. **Please retain the main relays. They are subject to WTC callback.**



B

C



D

Reinstall HV Battery Safety Switch

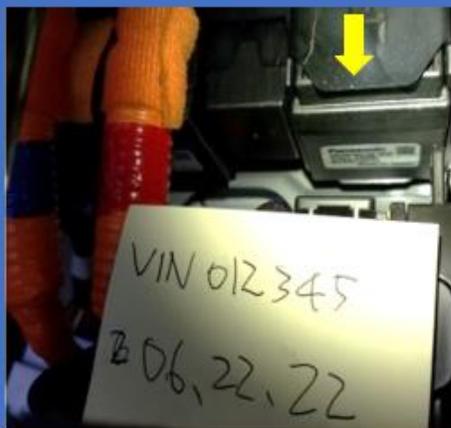
NOTE: Ignition ON and connect GDS with VCI to vehicle to perform STUI Auto VIN, then turn off vehicle ignition.



IMPORTANT - PERFORM THIS STUI PHOTO UPLOAD AS EVIDENCE OF SAFETY RELATED WORK PERFORMED.

- Write down the following on a small piece of paper or sticky note to include in photo:
 - VIN Last 6 numerical digits
 - RO Date
- IF the Main Relays are replaced, take a STUI Photo of the Main Relays to show the label and the note placed adjacent to the relay. Upload both photos to STUI.
- IF the PRA is replaced or is found to be covered during inspection, take a STUI Photo of the covered Power Relay Assembly and the note placed adjacent to the relay. Upload both photos to STUI.

IMPORTANT: Focus the photos to be sure the Main Relay label's "Panasonic" can be seen. Touch tablet screen at each label to focus it clear just before taking your photo.



Reinstall the Rear Seat. Check and clear DTC. Reset radio presets

Vehicle Complete