 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	<b>GROUP</b> <b>RECALL</b>	<b>NUMBER</b> <b>23-01-020H</b>
	<b>DATE</b> <b>MARCH 2023</b>	<b>MODEL</b> <b>SANTA FE</b> <b>Plug-In Hybrid</b> <b>(TM PHEV)</b>
<b>SUBJECT:</b> FUEL TANK LOT CODE INSPECTION AND REPLACEMENT (RECALL 240)		

<b>* IMPORTANT</b>
<p>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.</p> <p>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.</p> <p>Access the "Vehicle Information" screen* via WEBDCS to identify open Recalls.</p>

**Description:** On certain 2022MY Santa Fe Plug-In Hybrid (TM PHEV) vehicles, the fuel tank may be built out of specification which could lead to a fuel leak. Follow the service procedure to inspect the fuel tank LOT code and replace the fuel tank if necessary.



**STUI**



This TSB includes STUI pictures as a requirement. Where indicated, please include the last 6 digits of the VIN and date of repair on a piece of paper. Ensure the VIN and date of repair are clearly visible. Finally, please ensure the captured pictures are completed according to the steps in this TSB and uploaded to STUI. All claims submitted that have illegible, incomplete, missing, or incorrect picture(s) are subject to debit.

**IMPORTANT 1<sup>st</sup> STEP\*:** When looking up the VIN in the “Vehicle Information” screen, make sure to go to the “Campaign Not Performed” section, and view the “Campaign Description” field.

- If the op code listed is “21D181R2”, then skip directly to the procedure for fuel tank replacement on page 5.

Campaign Code	Recall	Campaign Description	Campaign Start Date	Vin Activation Date
240	Y	21D181R2 - FUEL TANK REPLACEMENT	01/26/2023	01/26/2023

- If there is no op code listed, then proceed to performing the LOT Code inspection of the fuel tank.

**Applicable Vehicles:**

MODEL	PRODUCTION DATE RANGE
Certain 2022 Santa Fe Plug-In Hybrid (TM PHEV)	April 11, 2022 – July 21, 2022

**Parts Information:**

PART NAME	PART NUMBER	NOTES
FUEL TANK ASSEMBLY (w/ Service Kit*)	31150-P4800QQH	Replace fuel tank only if under one of these (2) criterias: <ul style="list-style-type: none"> <li>• If WEBDCS shows “21D181R2 – Fuel Tank Replacement”</li> <li>• If fuel tank has affected LOT Code.</li> </ul> <b>NOTE:</b> Includes one (1) new O-ring for the fuel pump module.
BOLT (Propeller Shaft)	11435-10256K	<b>Order six (6) new flange bolts (3 Front, 3 Rear) to be used during reinstallation of the propeller shaft whenever the fuel tank is being replaced.</b>

**Warranty Information:**

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL P/N	NATURE CODE	CAUSE CODE
Santa Fe Plug-In Hybrid (TM PHEV)	21D181R0	FUEL TANK LOT CODE INSPECTION ONLY	0.3M/H	31150-P4800QQH	B25	ZZ4
	21D181R1	FUEL TANK LOT CODE INSPECTION AND REPLACEMENT	2.5M/H			
	21D181R2	FUEL TANK REPLACEMENT ONLY (WEBDCS SHOWS VIN HAS AFFECTED LOT CODE)	2.3M/H			

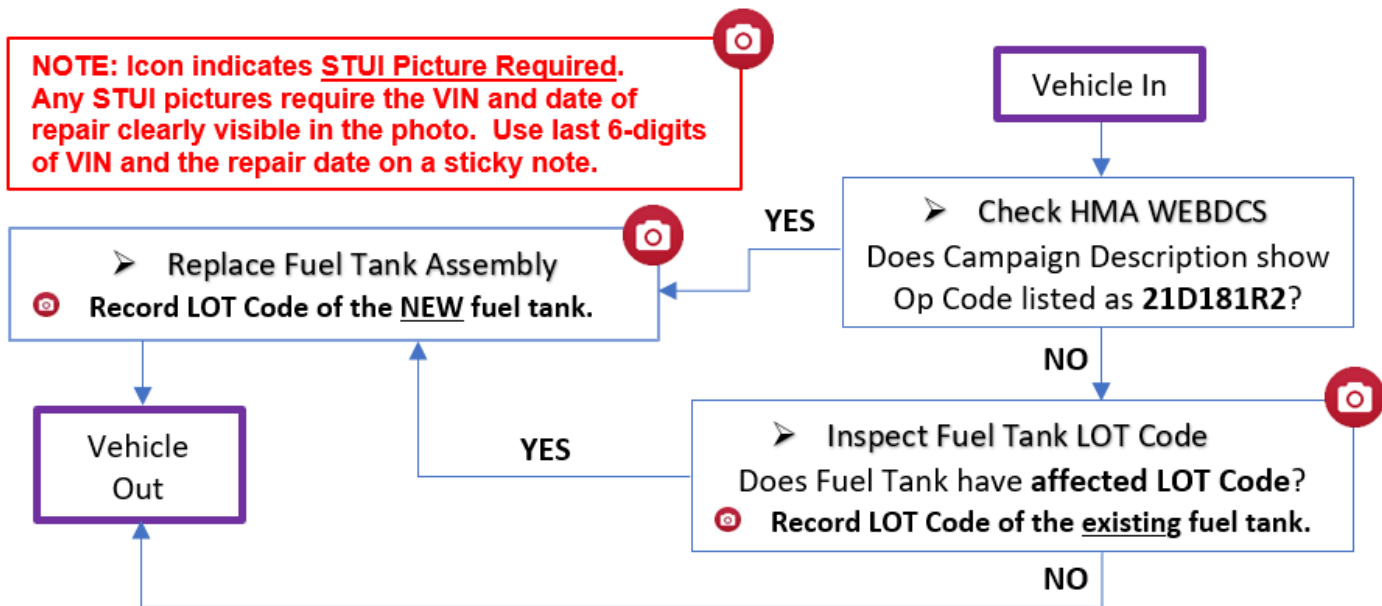
**NOTE 1:** Submit claim on Campaign Claim Entry Screen

**NOTE 2:** If a part that is not covered by this recall is in need of replacement while performing this recall, and the affected part is still under warranty, please 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.

**NOTE 3:** Op times include taking STUI photo(s) and uploading. The STUI photo(s) must include the LOT Code on the fuel tank of the inspected tank (not required for op code 21D181R2) and newly replaced tank (if replacement was necessary) 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.**

**NOTE 4:** The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the parts requested are not returned.**

**Service Process Overview:**



[\(Refer to the QR link for additional video information →\)](#)

**Service Procedure:**

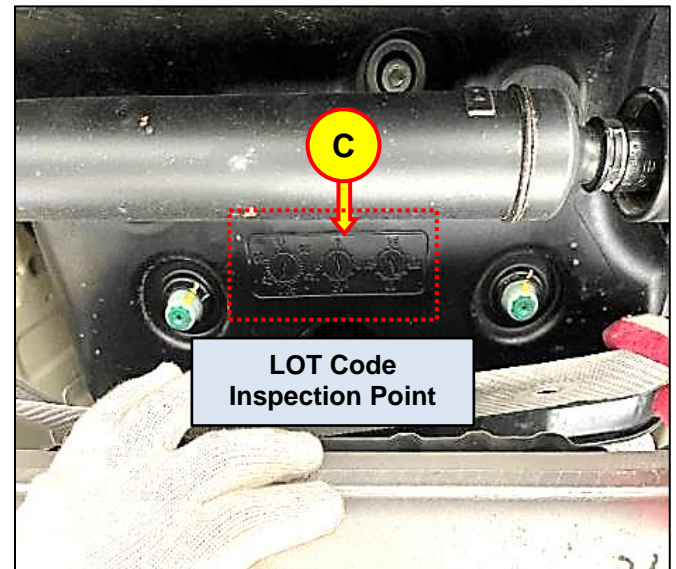
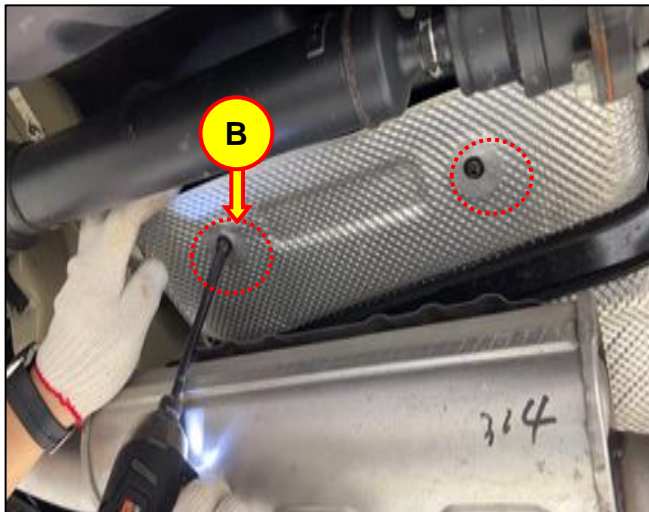
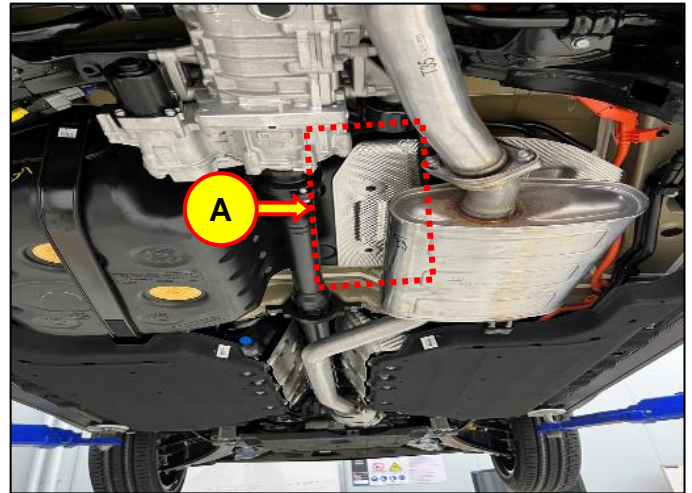
- Look up the VIN in the “Vehicle Information” screen via WEBDCS and go to the “Campaign Not Performed” section to view the “Campaign Description” field for Recall 240.
  - If the op code listed is “21D181R2”, then skip directly to **Fuel Tank Replacement** on page 5.

Campaign Code	Recall	Campaign Description	Campaign Start Date	Vin Activation Date
240	Y	21D181R2 - FUEL TANK REPLACEMENT	01/26/2023	01/26/2023

- If there is no op code listed, then follow **Fuel Tank LOT Code Inspection** on next page.

**\*\*\* Fuel Tank LOT Code Inspection \*\*\***

2. Lift vehicle on a hoist.
  - Refer to Shop Manual: General Information > Lift and Support Points
3. Locate the inspection point (A) after lifting the vehicle.
4. Remove the heat shield fasteners (B) of the fuel tank.



5. Position the heat shield slightly away to record the Year/Month/Day LOT Code (C) imprinted on the fuel tank and check if it is in the affected LOT range.

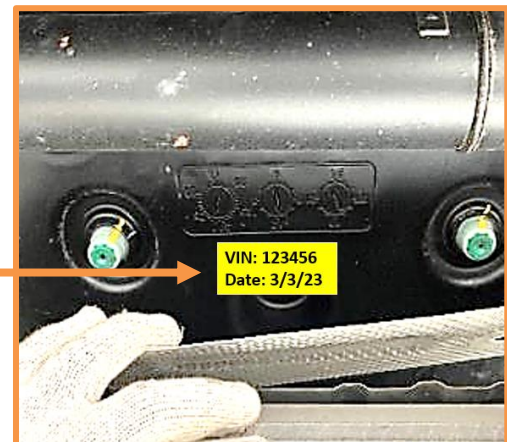
**STUI**



Using STUI in the GDS, take a picture of the **EXISTING** Fuel Tank LOT Code with last 6-digits of VIN and date of repair on a piece of paper.

Ensure the picture is in focus and **VIN with date of repair** are legible.

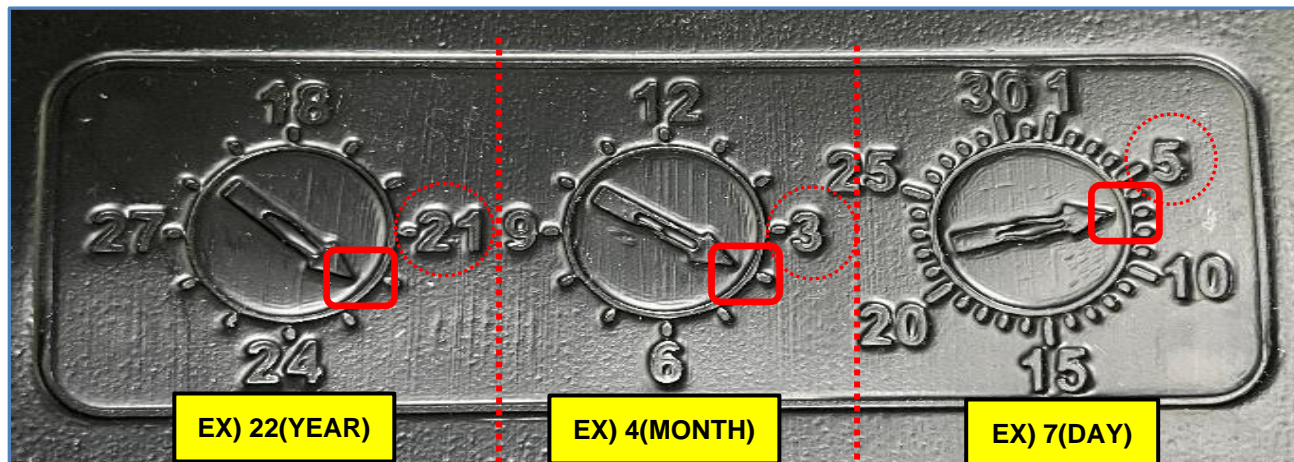
**Upload the photo in STUI.**



**NOTE:** See next page for detailed information regarding the LOT Code reading method.

**NOTE:** Read the printed LOT Code with the numbers facing correctly (right side up, not upside down), starting from LEFT (Year), MIDDLE (Month), RIGHT (Day). The LOT Code indication arrows follow clockwise direction to indicate the number in 1 unit increments from the appropriate Reference Point.

- ❖ **Year** [Reference Points 18, 21, 24, 27]
- ❖ **Month** [Reference Points 3, 6, 9, 12]
- ❖ **Day** [Reference Points 1, 5, 10, 15, 20, 25, 30]



The following are **affected LOT Codes** that require fuel tank replacement:

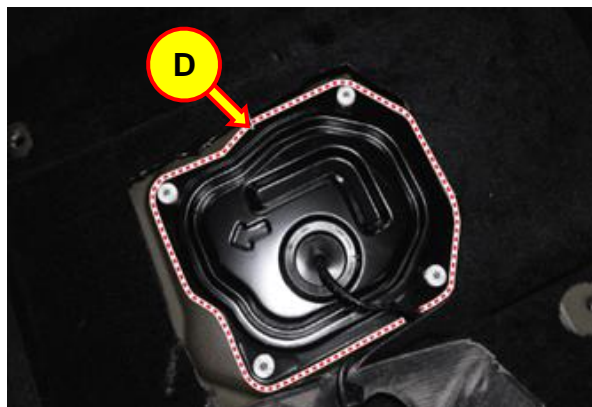
- **22 4 7** (Year 22, Month 4, Day 7)
  - **22 4 8** (Year 22, Month 4, Day 8)
  - **22 4 9** (Year 22, Month 4, Day 9)
- If the inspected fuel tank LOT Code matches any of the affected LOT Codes listed above, then follow the remaining service procedure to perform **Fuel Tank Replacement**.
- If the inspected fuel tank LOT Code are not part of the affected LOT Codes, then the service procedure is complete. Do not replace the fuel tank.

**\*\*\* Fuel Tank Replacement \*\*\***

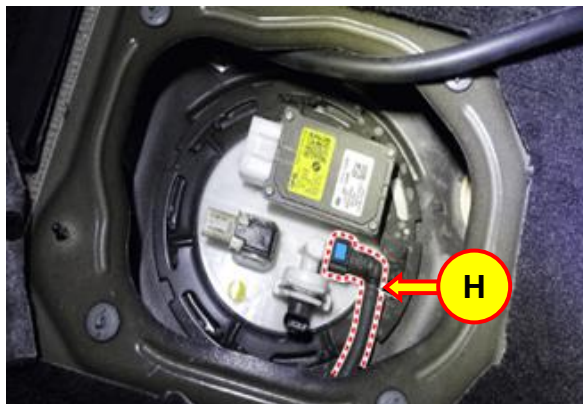
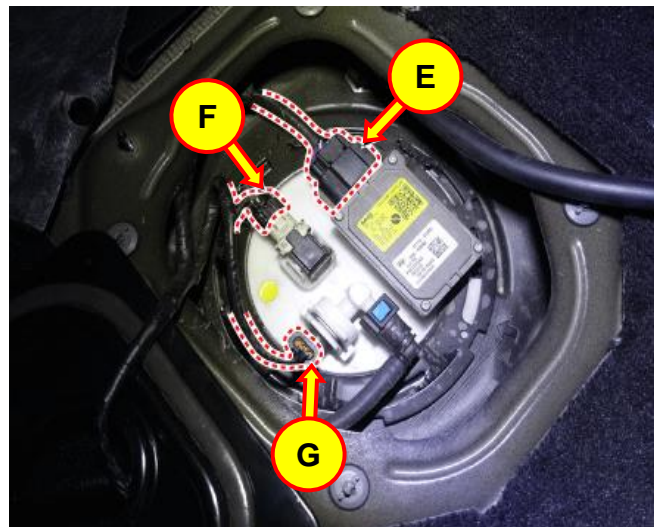
6. Release the residual pressure in fuel line.
  - Refer to Shop Manual: Fuel Delivery System > Release Residual Pressure in Fuel Line
7. Turn the ignition switch OFF and disconnect the battery (-) terminal.

**NOTE:** Be sure to record radio presets before battery disconnection.
8. Remove the (LH) rear seat.
  - Refer to Shop Manual: Body > Rear Seat Assembly
9. Remove the fuel pump service cover (D).

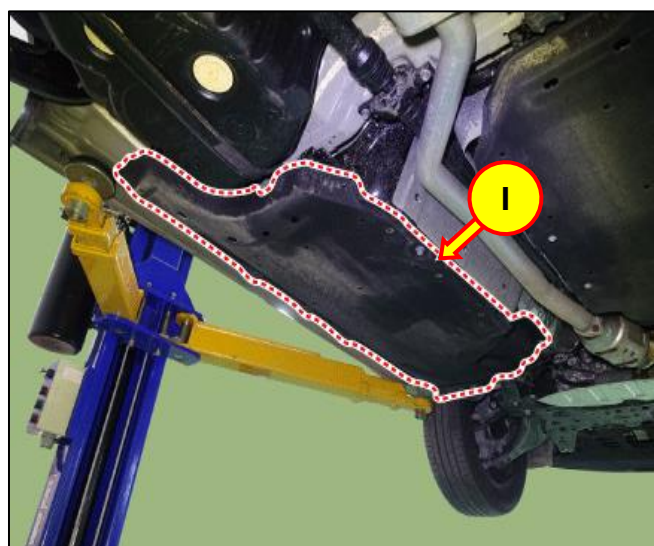
**NOTE:** When removing the fuel pump service cover, remove the 4 clips by rotating them clockwise.



10. Disconnect the Fuel Pump Control Module (FPCM) connector (E).
11. Disconnect the fuel tank pressure sensor connector (F).
12. Disconnect the Fuel Pressure Sensor (FPS) connector (G).
13. Disconnect the fuel feed tube quick connector (H).

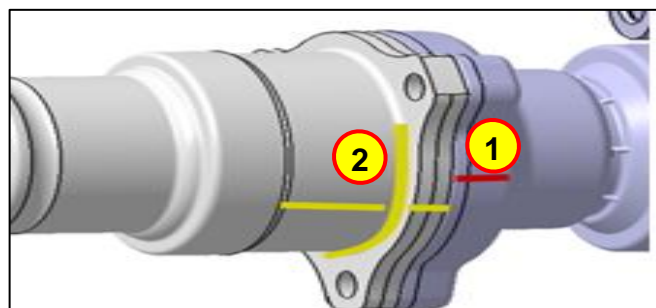


14. Lift the vehicle.
15. Remove the floor under cover (I).  
**Tightening Torque:**
  - Fasteners → 9.85 Nm (87 lb-in)
16. Remove the catalytic converter & center muffler assembly.
  - Refer to Shop Manual: Engine Mechanical System > Muffler
17. Remove the propeller shaft assembly.
  - Refer to Shop Manual: Driveshaft and Axle > Propeller Shaft Assembly



**NOTES:**

- Prior to removing the propeller shaft, be sure to note the "1" and "2" indexing marks at the front and rear flanges. It must be reinstalled at the same indexed positions.
- If necessary, use a paint pen to create new index marks at each end of the propeller shaft and mating flanges for reference.



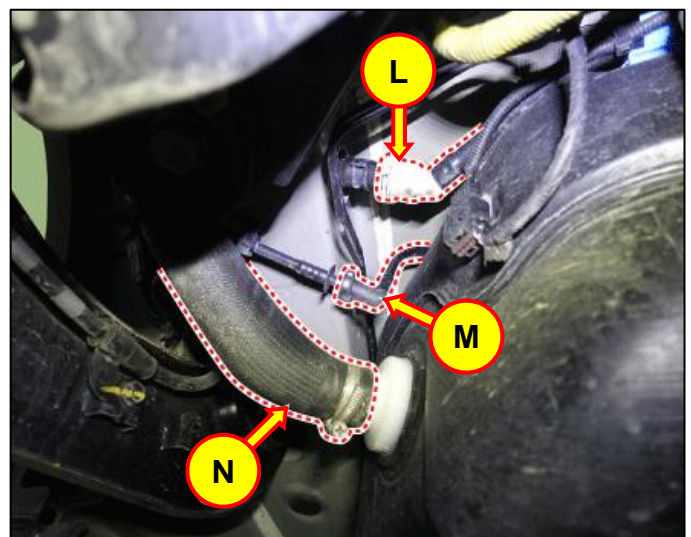
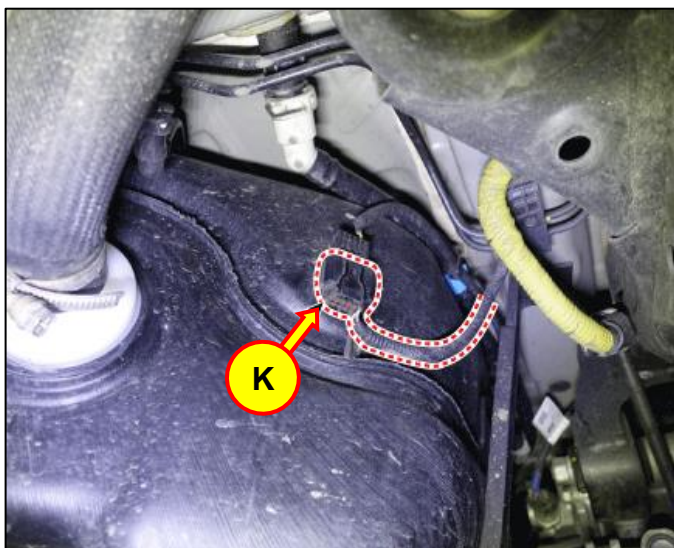
- Remove the entire multiple propeller shaft pieces completely as one unit. To prevent possible damage or imbalance, do not try to separate the propeller shaft pieces.
- Do not reuse the propeller shaft flange bolts. Use the 6 newly supplied bolts with 14mm sized hex heads (P/N 11435-10256K) during propeller shaft reinstallation.
- When the propeller shaft is being reinstalled after installing the new fuel tank, be sure to realign and match the “1” and “2” indexing marks (or newly drawn lines) at the flanges.

**Tightening Torque:**

- 6 Flange Bolts (**New**) → 61 Nm (45 lb.-ft)
- 4 Carrier Bolts (Reuse) → 61 Nm (45 lb.-ft)

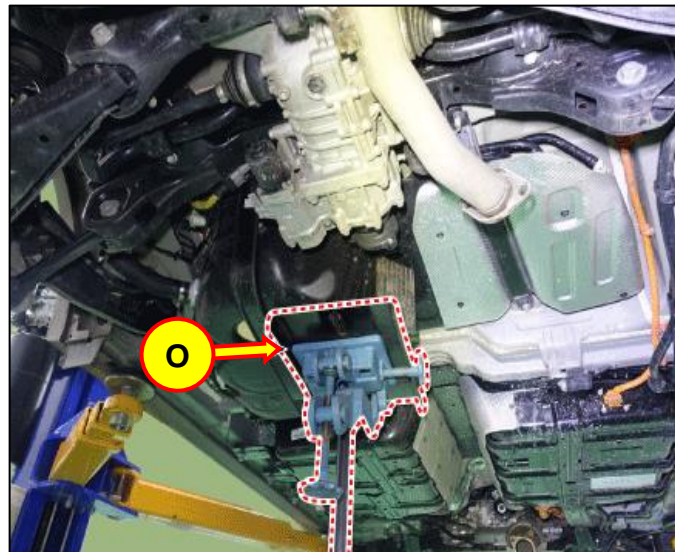


18. Disconnect the purge tube quick-connector (J).
19. Disconnect the Fuel Tank Isolation Valve (FTIV) extension wiring connector (K).
20. Disconnect the recirculation tube quick-connector (L).
21. Disconnect the air vent tube quick-connector (M).
22. Separate the fuel filler neck hose (N).



23. Support the fuel tank with a jack or suitable component lifting platform (O).

**NOTE:** Insert the rubber block (or equivalent) between the fuel tank and jack/platform to prevent damage to the fuel tank.

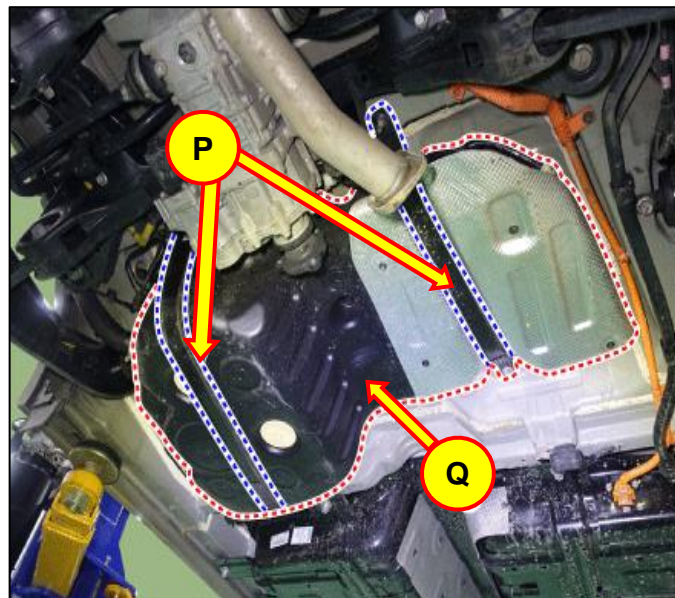


24. Remove the fuel tank bands (P) and then remove the fuel tank (Q).

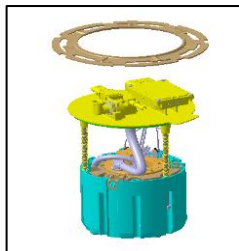
**Tightening Torque:**

- Fuel Tank Band Fasteners → 5 Nm (44 lb-in)

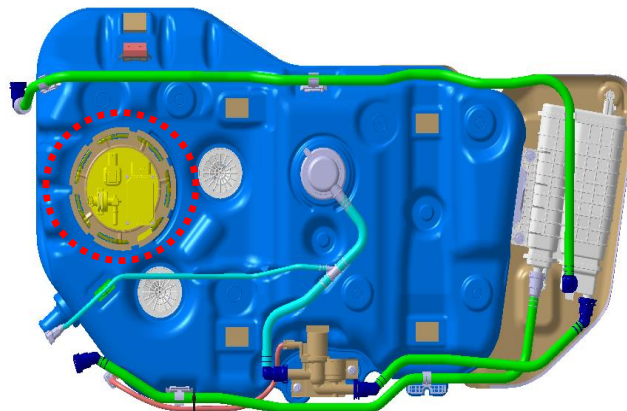
**NOTE:** Do not over-torque.



25. Remove the fuel pump module and remove the fuel inside the fuel tank (to transfer over to the new fuel tank using a suitable siphoning pump).

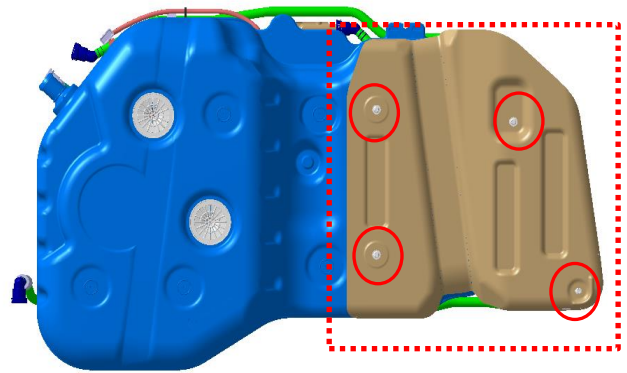
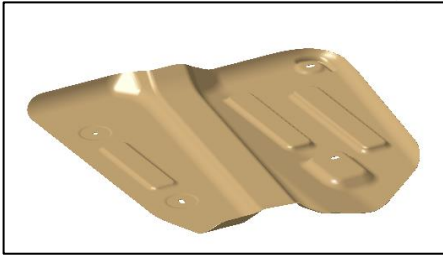


**NOTE:** The newly supplied O-ring of the fuel pump module top plate must be installed during reinstallation.

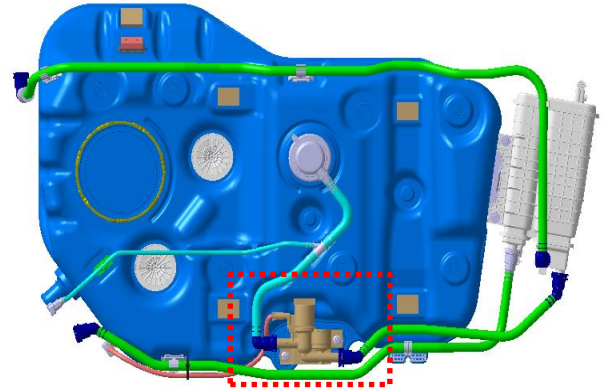
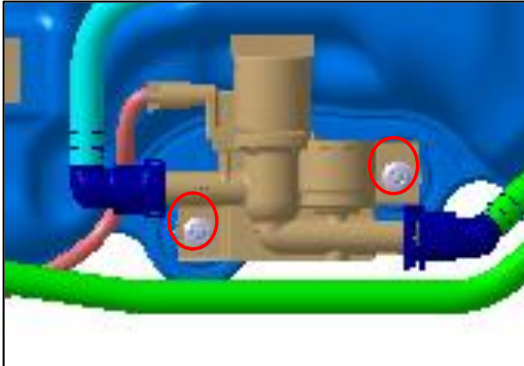




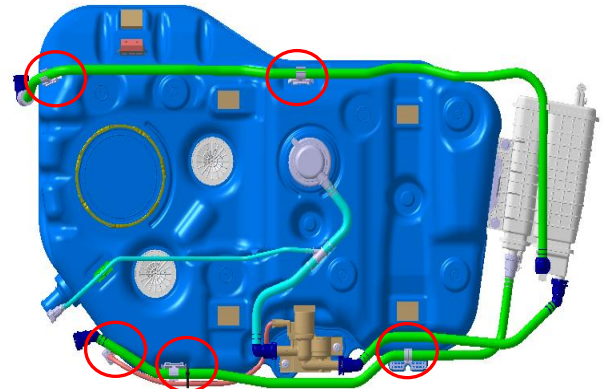
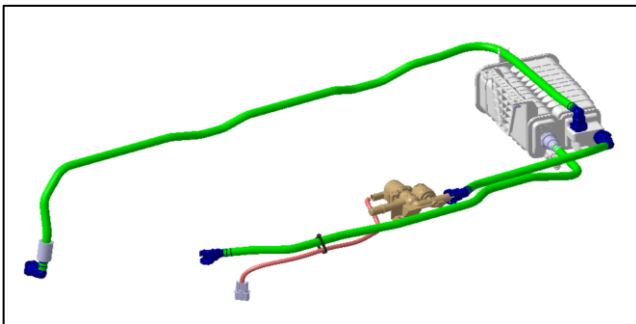
26. Loosen the heat shield fixing bolts.



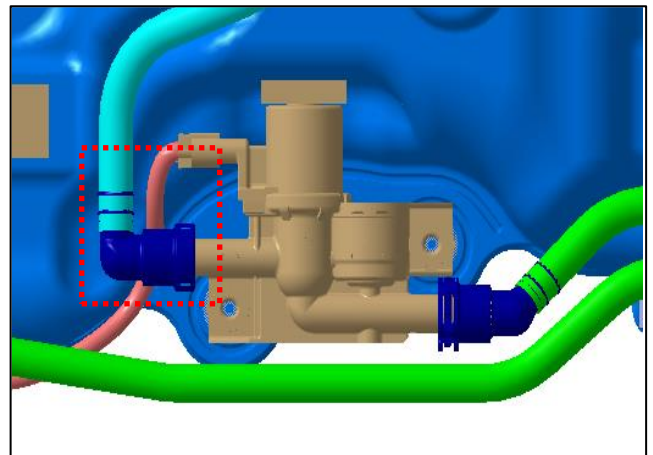
27. Loosen the 2 fasteners of the Fuel Tank Isolation Valve (FTIV).



28. Disconnect the tube and wiring from the 5 fixed locations.



29. Remove the quick connector of the Fuel Tank Isolation Valve (FTIV).

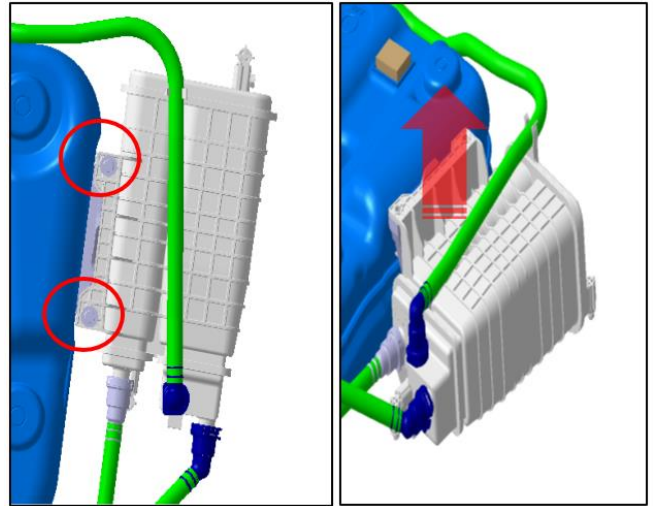


30. Loosen the 2 charcoal canister mounting fasteners and raise the canister upwards to dislodge it from the fuel tank.

**Tightening Torque:**

- Mounting Fasteners → 4 Nm (35 lb-in)

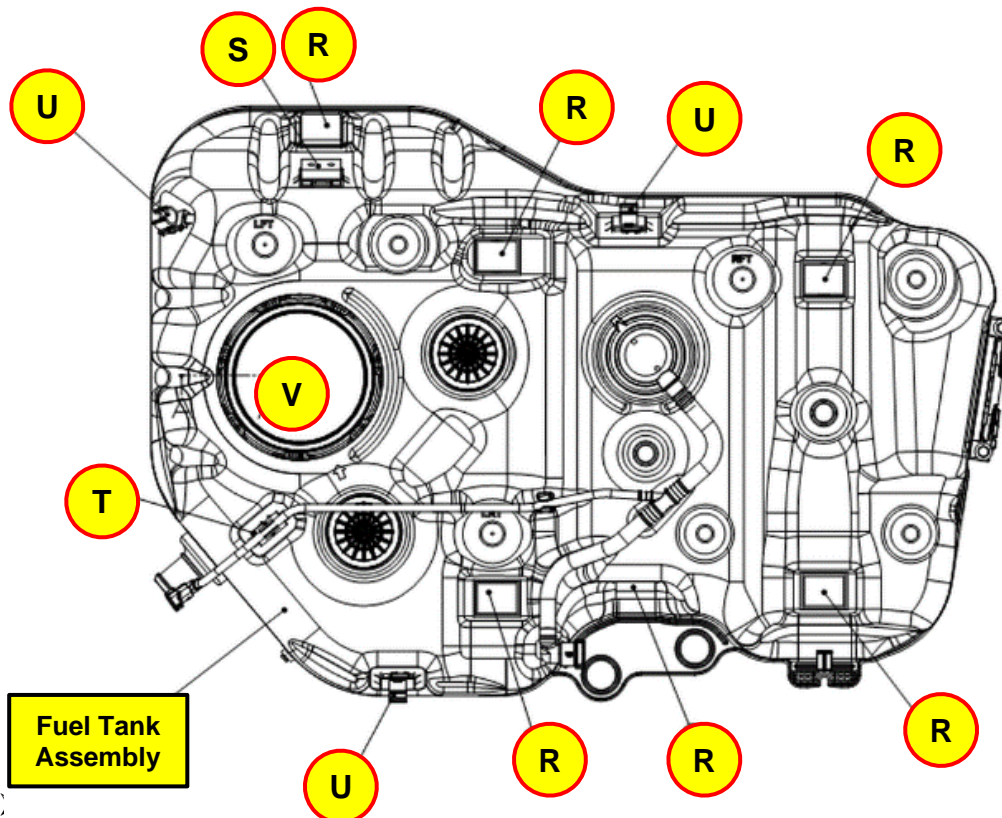
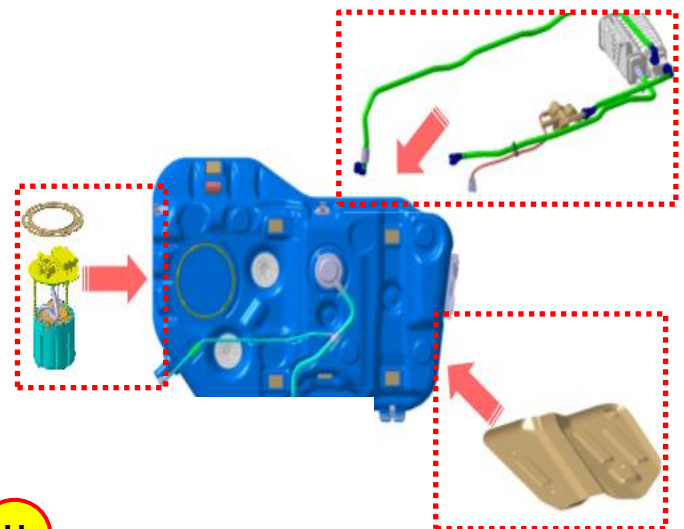
**NOTE:** Do not over-torque.



31. Reinstall the removed parts (fuel pump module, charcoal canister, FTIV, and bottom heat shield) onto the newly supplied fuel tank.

**NOTE:** Fuel Tank Assembly (P/N 31150-P4800QQH) includes the Service Kit with the following contents.

- 6x Fuel Tank Rubber Pads (R)
- 1x Clip Pad Assembly (S)
- 1x Clip (T)
- 3x Clips (U)
- 1x Fuel Pump O-Ring (V)
- ❖ Be sure to install all items of the Service Kit.



32. Record the LOT Code of the new fuel tank.

**STUI**



Using STUI in the GDS, take a picture of the **NEW** Fuel Tank LOT Code with last 6-digits of VIN and date of repair on a piece of paper.

Ensure the picture is in focus and **VIN with date of repair are legible.**

**Upload the photo in STUI.**



33. Reinstall all other components in reverse order of removal.

34. Reconnect the battery (-) terminal.

**NOTE:** Reprogram the radio presets recorded from Service Procedure Step 7.

35. Start the engine and confirm all function is normal with no warning lights ON.