

GROUP <b>CAMPAIGN</b>	NUMBER <b>19-01-030H</b>
DATE <b>OCTOBER 2019</b>	MODEL <b>IONIQ HYBRID (AE HEV)</b>

**SUBJECT:** NVLD AIR FILTER KIT REPLACEMENT  
(SERVICE CAMPAIGN T4C)

**\*\*\* Dealer Stock and Retail Vehicles \*\*\***

Dealers must perform this Service 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:**

Certain 2017-2019 vehicles may experience check engine light "ON" with the following DTC stored:

- DTC P0456 - Evaporative System (EVAP) - Very Small Leak



These conditions primarily occur in the California coastal areas that are subject to marine layer cloud cover. Salt particulate deposit can form inside the Natural Vacuum Leak Detection (NVLD) which may cause intermittent operation prompting the DTC P0456 and the check engine light "ON".

This bulletin provides the procedure to install a new Air Filter Kit with an updated filter to help prevent entry of the salt particulates.

In addition, vehicles with check engine light "ON" and DTC P0456 found stored in the Engine Control Module (ECM) must also replace the NVLD part.

**APPLICABLE VEHICLES:** Certain 2017-2019 Ioniq Hybrid (AE HEV)

**Parts Information:**

MODEL	PART NUMBER	DESCRIPTION	PHOTO	REMARK
Ioniq hybrid (AE HEV)	31450-G2501QQH	AIR FILTER KIT		All vehicles
	31480-4R100QQH	SENSOR ASSY-PRESSURE (NVLD)		Replace only when check engine light "ON" and DTC P0456 found stored in the ECM

**Warranty Information:**

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL P/N	NATURE CODE	CAUSE CODE
Ioniq Hybrid (AE HEV)	90C059R0	AIR FILTER KIT REPLACEMENT	0.5	31450-G2501QQH	I3A	ZZ3
	90C059R1	AIR FILTER KIT & NVLD REPLACEMENT	1.0	31480-4R100QQH	I3A	ZZ3

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

**NOTE 2:** If a part is found in need of replacement while performing this Service Campaign and the affected part is still under warranty, submit a separate claim using the same Repair Order Number and the same Causal Part Number as the Campaign Claim. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.

**Service Procedure:**

Perform the following repair sequence based on the result:

**BOTH** the check engine light is "ON" and the DTC P0456 reading is stored in the ECM:

- Replace the Air Filter Kit (pgs 3-5)
- Replace the NVLD (pg 6)
- Perform the GDS Evap Leakage Test (pg 7)

Only **ONE** or **NEITHER** of the conditions occur:

- Replace the Air Filter Kit (pgs 3-5)
- Perform the GDS Evap Leakage Test (pg 7)

**A). Air Filter Kit Replacement:**

1. Lift the vehicle and remove the rear LH tire & wheel (A).



2. Remove the rear LH wheel guard (B).



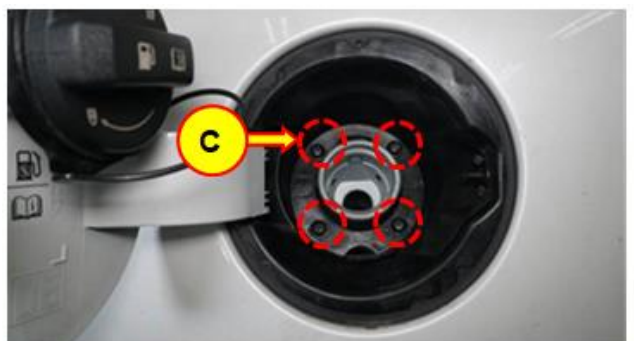
3. Make note of the customer radio presets.

Pull forward the driver's side rear seat to locate the 12V battery service disconnect plastic panel as shown.

Pull out the panel and disconnect the 12V battery service disconnect as shown.



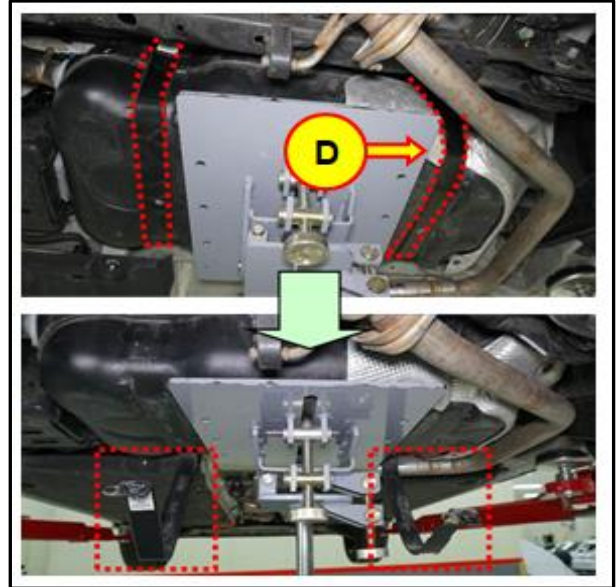
4. Open the fuel filler door and loosen the filler neck mounting bolts (C).



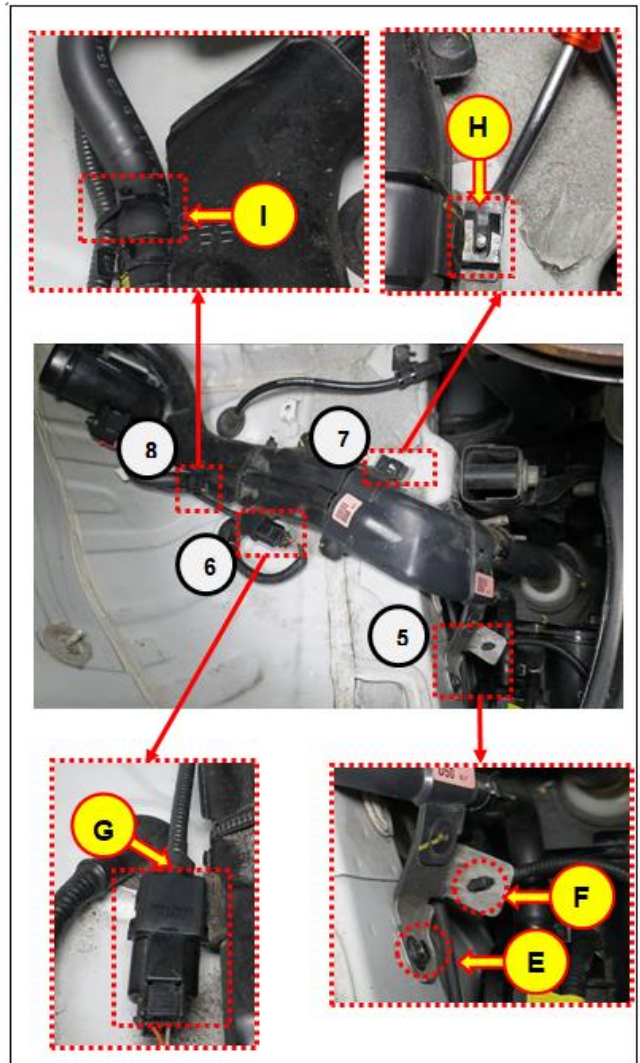
- Loosen the fuel tank band (D) mounting nuts.

**NOTE:**

*Use a jack stand to support the fuel tank.*



- Loosen the mounting bolt (E) and the mounting clip (F) of the filler neck assembly.
- Disconnect the connector (G).
- Disconnect the mounting clip (H).
- Disconnect the mounting clip (I).





10. Separate the filler neck assembly as shown.



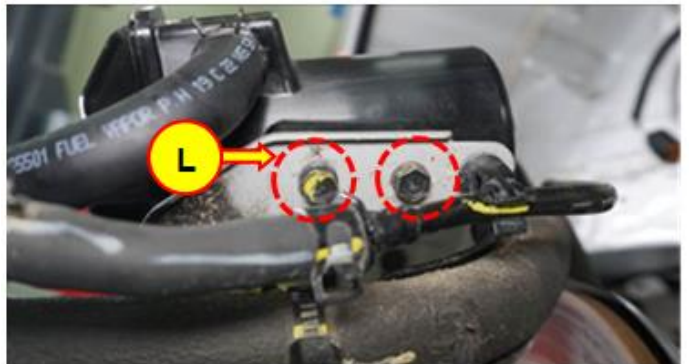
11. Release the mounting clamp (J) of the filler neck assembly to disassemble the hose.



12. Release the air filter hose clamp (K), and disconnect the air drain case.



13. Remove the 2 mounting bolts (L) from the air filter assembly.



14. Replace with the new Air Filter Kit.

**NOTE:**

- Replacement Air Filter Kit includes CCV, extension wire and upper & lower hose

15. Reinstall the removed parts in reverse order of removal.

**B). NVLD Replacement:**

**NOTE:** Only perform these steps in event of check engine light was "ON" with DTC P0456 found stored in the ECM.

1. Loosen the 3 bracket mounting bolts (M) from the NVLD.



2. Release the upper and lower hose clamps (N) of the NVLD to disconnect the hoses.



3. Disconnect the NVLD connector (O) to detach the part.
4. Replace the NVLD.



5. Reinstall the removed parts in reverse order of removal.
- Restore the customer radio presets.

**C). GDS Evap Leakage Test:**

Perform GDS Evap Leakage Test according to the GDS instructions.

This will confirm that the installation of parts and hoses are secure without a system vacuum leak.

S/W Management

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• EVAP Leakage Test

Purpose	To check the evaporative system and fuel leakage when evaporative system related repair is done or component is replaced.
Enable Condition	<ol style="list-style-type: none"> <li>1. Engine Idle</li> <li>2. No DTC</li> <li>3. Fuel Level : 20-70%</li> <li>4. Battery voltage greater than 11V</li> <li>5. 2 Min after the engine start</li> <li>6. Coolant Temperature : 80°C(176°F)</li> </ol>
Concerned Component	Purge Control Solenoid Valve(PCSV), Canister Close Valve(CCV), Fuel Tank Pressure Sensor(FTPS), Evap. Line
Concerned DTC	P0441, P0442, P0455, P0456, P2422
Fail Safe	Warning Lamp On
Etc	Wait at least 5 min. before re-performing Evap. leakage test.

OK

! Do not touch any system buttons while performing this function.

S/W Management

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■ Evap. Leakage Test

• [ Evap. Leakage Test ]

This test is used for functional check of the evaporative system and leakage check.

**Information**

Test completed !

No leak detected.

OK

Cancel

! Do not touch any system buttons while performing this function.