



# HYUNDAI

## Technical Service Bulletin

GROUP	NUMBER
FUEL SYSTEM	20-FL-002H
DATE	MODEL
APRIL 2020	IONIQ HYBRID (AE HEV)

**SUBJECT:** DTC P0456 NVLD AIR FILTER KIT REPLACEMENT



**Description:** Certain Ioniq hybrid 2017-2019 vehicles may experience check engine light “ON” with the following DTC stored:

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

This bulletin provides instructions to install an Air Filter Kit and a Natural Vacuum Leak Detection sensor (NVLD).

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

### Parts Information:

MODEL	PART NUMBER	DESCRIPTION	PHOTO
Ioniq hybrid (AE HEV)	31450-G2501FFF	AIR FILTER KIT	
	31480-4R100FFF	SENSOR ASSY-PRESSURE (NVLD)	

### Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL P/N	NATURE CODE	CAUSE CODE
Ioniq Hybrid (AE HEV)	31450F01	AIR FILTER KIT & NVLD REPLACEMENT	1.0	31480- 4R100FFF	I3A	ZZ3

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

1. 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.



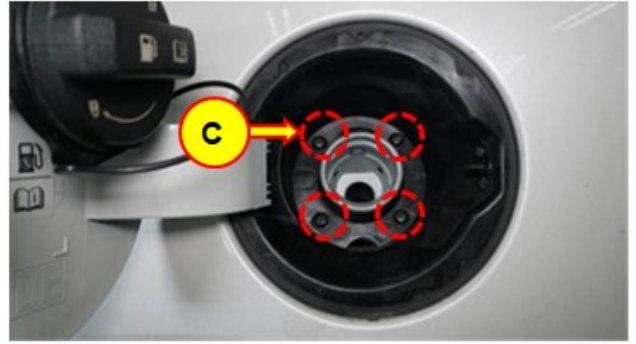
2. Lift the vehicle and remove the rear LH tire & wheel (A).



Remove the rear LH wheel guard (B).



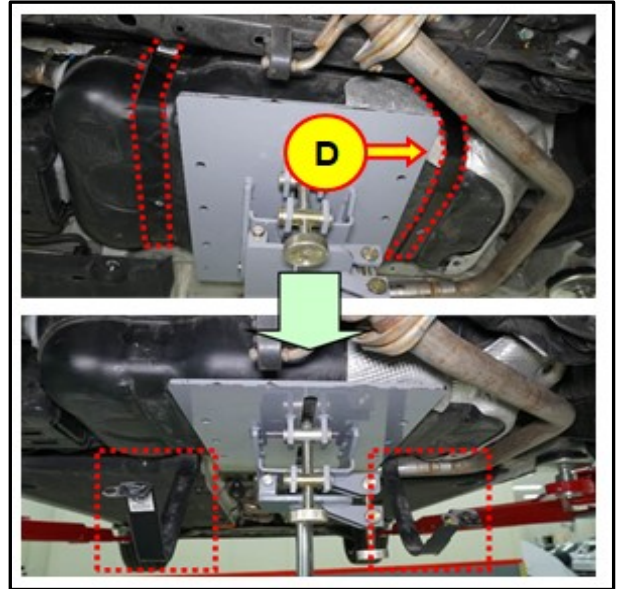
3. Open the fuel filler door and loosen the filler neck mounting bolts (C).



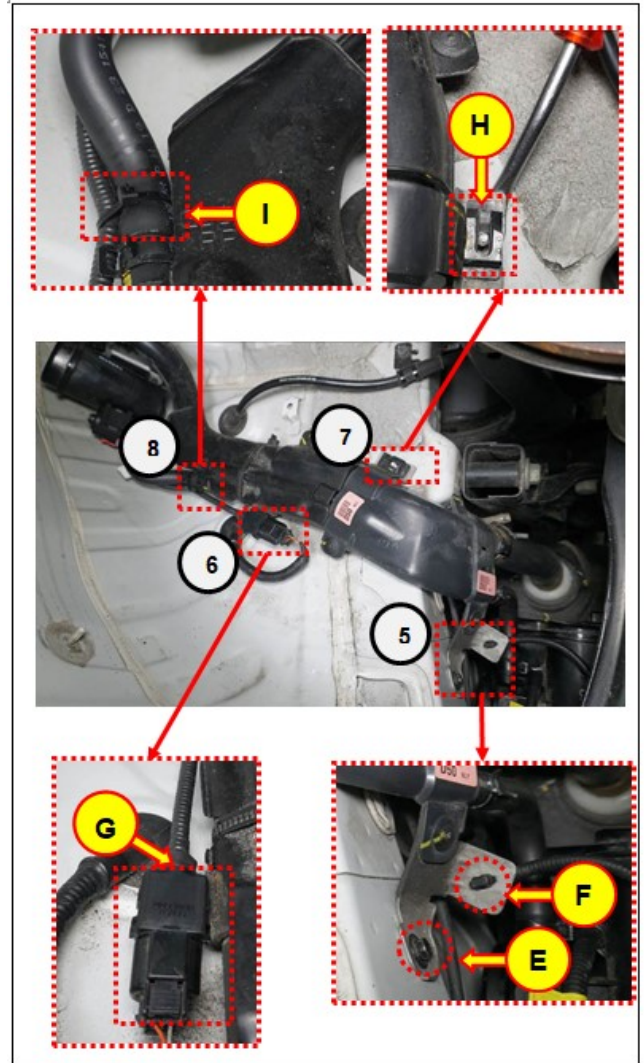
4. Loosen the fuel tank band (D) mounting nuts.

**NOTE:**

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



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



9. Separate the filler neck assembly as shown.



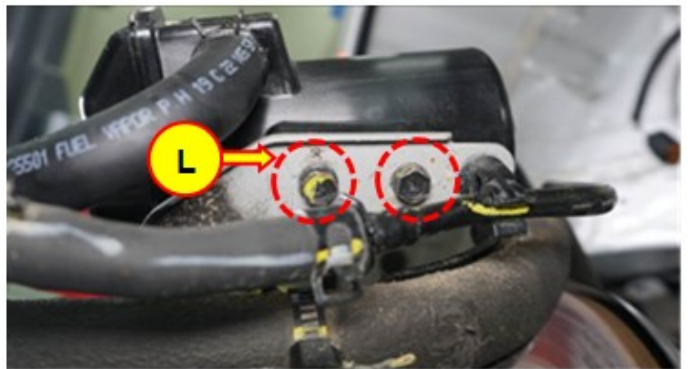
10. Release the mounting clamp (J) of the filler neck assembly to disassemble the hose.



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



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



13. Replace with the new Air Filter Kit.

**NOTE:**

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

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

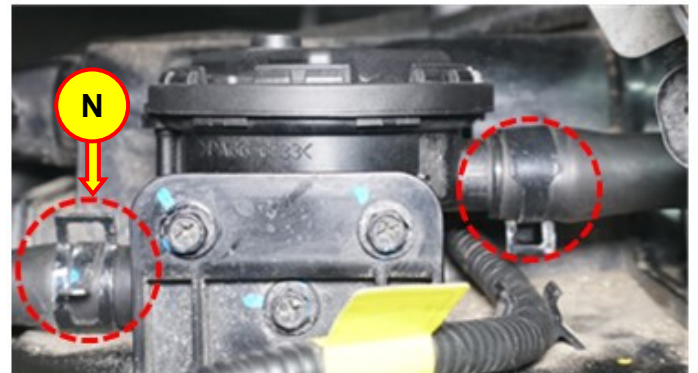


**B). NVLD Replacement:**

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 ↶

• 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.

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

S/W Management

■ 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.

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