		GROUP	MODEL	
		FUE	2017-2019MY Niro (DE HEV)	
	NUMBER	DATE		
		041	August 2019	
TECHNICAL SERVICE BULLETIN				
COMBINATION TSB / SERVICE ACTION: AIR				
SUBJECT:	FILTER KIT & NVLD REPLACEMENT (SA395)			

This bulletin provides the procedure to perform an evaporative leak test and replace the fuel tank air filter, and, if necessary, the natural vacuum leak detector (NVLD) on some Niro (DE HEV) vehicles, produced from November 1, 2016 through March 22, 2019, which may experience an evaporative leak concern with DTC P0456. If DTC P0456 is not active, follow the procedure in this bulletin to replace only the fuel tank air filter. If DTC P0456 is active, replace both the fuel tank air filter and NVLD. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

For vehicles not on the Affected Vehicles list, but still experiencing the issue described above, perform the procedure outlined in this bulletin and submit a warranty claim per "customer concern" (Standard TSB) claim information on page 9.

## DTC P0456: Evaporative Emission System-Leak Detected (Very Small Leak)



# **\*** NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry  $\rightarrow$  Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs  $\rightarrow$  Not Completed Recall  $\rightarrow$  Recall VIN  $\rightarrow$  Select Report), which includes a list of affected vehicles.

This issue number is <u>SA395</u>.

 File Under: <Fuel>

 Circulate To:
 Image: I

#### Page 2 of 7

SUBJECT:

# COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

## **Evaporative Leakage Test Procedure:**

- Using a KDS, perform an evaporative leakage test: Home → S/W Management → Engine Control → Evap. Leakage Test. Ensure the "Enable Conditions" are met.
  - If no leak is detected, perform the fuel tank air filter replacement procedure below.
  - If a leak is detected and DTC P0456 is active, perform the fuel tank air filter replacement <u>and</u> the NVLD replacement procedures. <u>Prior to</u> <u>performing the procedures, clear the</u> <u>DTC.</u>

Purpose	To check the evaporative system and fuel leakage when evaporative system related repair is done or component is replaced.		
	1. Engine Idle		
	2. No DTC		
Enable Condition	3. Fuel Level : 20-70%		
	4. Battery voltage greater than 11V 5. 2 Min after the engine start		
	<ol> <li>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.		

## Fuel Tank Air Filter & NVLD Replacement Procedure:

1. Raise the vehicle on a lift and remove the left rear wheel.



2. Remove the left rear fender liner.

Page 3 of 7

#### SUBJECT:

## COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

3. Open the fuel filler door and remove the four (4) retaining screws (A) of the filler neck.

Torque specification for screw (A): 5.75 – 8.70 ft.lb. (7.8 – 11.8 N.m, 0.8 – 1.2 kgf.m).



4. If only the fuel tank air filter is being replaced, skip this step and proceed to step 5. This step is only required for replacement of the NVLD.

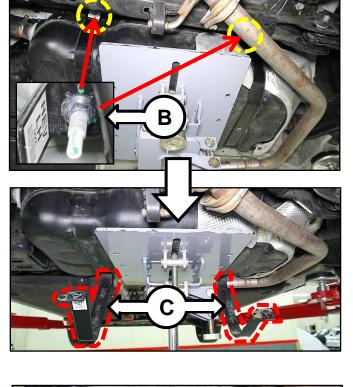
Support the fuel tank with a suitable jack and then partially remove both of the fuel tank bands (C) by removing bolts (B).

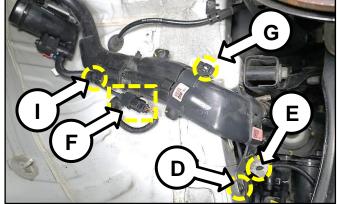
Torque specification for bolt (B): 28.9 – 39.8 ft.lb. (39.2 – 54.0 N.m, 4.0 – 5.5 kgf.m)

5. Remove the filler neck mounting bolt (D) and clip (E).

# Torque specification for bolt (D): 2.8 - 5.7 ft.lb. (3.9 - 7.8 N.m, 0.4 - 0.8 kgf.m)

- 6. Disconnect the filler neck connector (F).
- 7. Carefully detach the filler neck mounting clip (G) from the body.
- 8. Carefully cut the zip tie (I).





#### Page 4 of 7

SUBJECT:

# COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

9. Lower the fuel filler neck assembly.



10. Release the mounting clamp (J).

11. Release the mounting clamp (K).

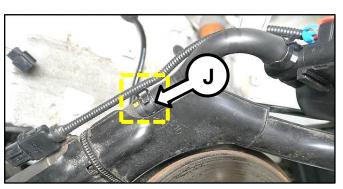
12. Remove the two (2) air filter retaining bolts (L) and remove the air filter assembly.

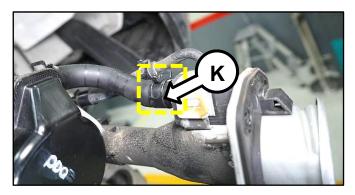
Torque specification for bolt (L): 2.8 - 5.7 ft.lb. (3.9 - 7.8 N.m, 0.4 - 0.8 kgf.m)

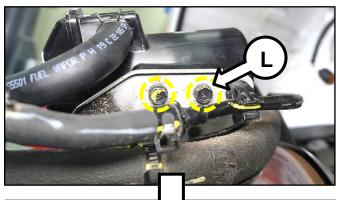
13. Install the new improved air filter assembly (M).

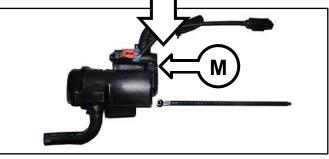
If only the fuel tank air filter required replacement, reinstall all removed components in the reverse order of removal. Ensure proper operation of the vehicle. If the NVLD requires replacement, proceed to the next step.

TSB: FUE041 / SA395 Niro (DE HEV) August 2019









Page 5 of 7

#### SUBJECT:

# COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

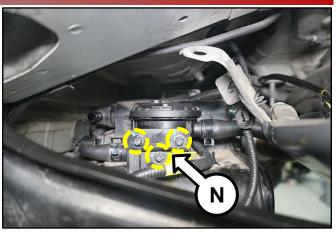
- Carefully lower the fuel tank approximately eight (8) inches (twenty (20) centimeters) to allow access to the NVLD.
- 15. Remove the three (3) NVLD bracket mounting bolts (N).

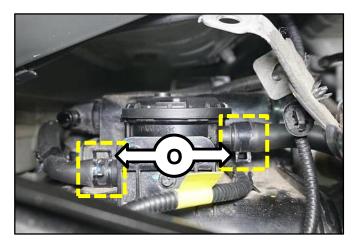
Torque specification for bolt (N): 2.8 – 5.7 ft.lb. (3.9 – 7.8 N.m, 0.4 – 0.8 kgf.m)

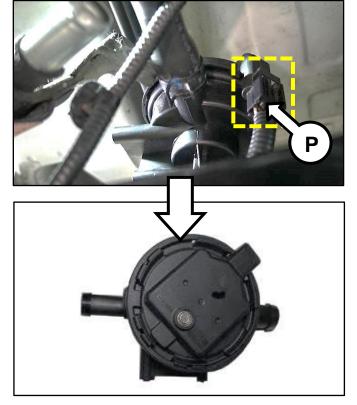
 Release the upper and lower hose clamps (O) and carefully detach both hoses.

17. Disconnect the NVLD connector (P) and then remove the NVLD.

- 18. Install the new NLVD and reinstall all removed components, including the filler neck with the new air filter, in the reverse order of removal.
- 19. Verify proper operation of the vehicle.







#### Page 6 of 7

SUBJECT:

# COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

## AFFECTED VEHICLE RANGE:

Model	Production Date Range				
Niro (DE HEV)	November 1, 2016 through March 22, 2019				

### **REQUIRED PART:**

Part Name	Part Number	Figure
Fuel Tank Air Filter Kit	<u>FUE041</u> : 31450 G5501FFF <u>SA395</u> : 31450 G5501QQK	
Natural Vacuum Leak Detector (NVLD)	<u>FUE041</u> : 31480 4R100FFF <u>SA395</u> : 31480 4R100QQK	

#### WARRANTY INFORMATION: N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V 31480 4	24400 40400	0	(SA395) Evap Leak Test & Fuel Tank Air Filter Replacement	190041R0	0.5 M/H	31450 G5501QQK	1
	31480 4R 100	0	(SA395) Evap Leak Test, Fuel	10004101	1.0 M/H	31450 G5501QQK	1
			Tank Air Filter <u>&amp;</u> NVLD Replacement	190041R1		31480 4R100QQK	1

Note: When necessary, sublet code 'X2' can be used to submit rental expense (3 days max) in conjunction with replacement <u>Labor Op 190041R1 only</u>.

# **\*** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA395</u> when accessing the WebDCS system.

# COMBINATION TSB / SERVICE ACTION: AIR FILTER KIT & NVLD REPLACEMENT (SA395)

### STANDARD WARRANTY CLAIM INFORMATION:

Use this information only to file a warranty claim for vehicles for which:

- 1. A customer complains of the same concern, as described on Page 1.
- 2. The VIN does not appear on the Affected Vehicles list for Service Action 395.
- 3. The vehicle model year and production date range are as identified in this bulletin.

#### N Code: IA3 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W 31480 4R100	31480 4R100	0	Evap Leak Test & Fuel Tank Air Filter Replacement	31450F01	0.5 M/H	31450 G5501FFF	1
			Evap Leak Test, Fuel Tank Air Filter & NVLD	21450502	1.0	31450 G5501FFF	1
			Replacement	31450F02	M/H	31480 4R100FFF	1