	GROUP <b>FUE</b>	MODEL <b>2011-2016MY Optima (TF HEV)</b>
	NUMBER <b>049</b>	DATE <b>January 2021</b>
<b>TECHNICAL SERVICE BULLETIN</b>		
<b>SUBJECT: COMBINATION TSB / SERVICE ACTION: AIR FILTER AND NVLD REPLACEMENT (SA447)</b>		

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 11-16MY Kia vehicles listed in the table below, which may experience an evaporative leak concern with DTC P0456. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

MY	Model	Production Date Range
11-12MY	Optima (TF HEV)	02/15/2011 – 12/28/2012
13-16MY		05/08/2012 – 07/23/2015

- 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.

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 7.

**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 → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.**

**This issue number is SA447.**

Printed TSB copy is for reference only; information may be updated at any time.  
Always refer to KGIS for the latest information.

Circulate To:     General Manager     Service Manager     Parts Manager  
 Service Advisors     Technicians     Body Shop Manager     Fleet Repair

**EVAP Leakage Test**

- 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 and the NVLD replacement procedures. Prior to performing the procedures, clear the DTC.

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.
OK	

S/W Management	
■ Evap. Leakage Test	
• [ Evap. Leakage Test ]	
This test is used for functional check of the evaporative system and leakage check.	
<b>Information</b>	
Test completed !	
No leak detected.	
OK	

SUBJECT:

COMBINATION TSB / SERVICE ACTION: AIR FILTER  
AND NVLD REPLACEMENT (SA447)**Fuel Tank Air Filter Replacement Procedure for (TF HEV):**

1. Replace the Fuel Tank Air Filter by referring to the “Emission Control System → Evaporative Control System → Fuel Tank Air Filter → Repair procedures” chapter in the applicable Shop Manual on KGIS.

Before install the new air filter, first remove the new air filter protector and install the existing CCV to the new air filter, and then assemble the protector.

**\* NOTICE**

**Do Not discard the canister close valve. Reuse the CCV of the existing air filter (13-16MY).**

If replacing the NVLD, proceed with NVLD Replacement below.

If **NOT** replacing the NVLD, verify proper operation of the vehicle.

**NVLD Replacement Procedure for (TF HEV):**

1. Replace the NVLD by referring to the “Emission Control System → Evaporative Control System → NVLD (Natural Vacuum Leakage Detection (NVLD) → Repair procedures” chapter in the applicable Shop Manual on KGIS.





SUBJECT:

## COMBINATION TSB / SERVICE ACTION: AIR FILTER AND NVLD REPLACEMENT (SA447)

## AFFECTED VEHICLE RANGE:

MY	Model	Production Date Range
11-12MY	Optima (TF HEV)	February 15, 2011 to December 28, 2012
13-16MY	Optima (TF HEV)	May 8, 2015, 2012 to July 23, 2015

## REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Fuel Tank Air Filter Kit (TF HEV)	(11-12MY) <u>SA447</u> : 31450 4R050QQK (13-16MY) <u>SA447</u> : 31450 4R000QQK  (11-12MY) <u>FUE049</u> : 31450 4R050FFF (13-16MY) <u>FUE049</u> : 31450 4R000FFF		1
Natural Vacuum Leak Detector (NVLD)	<u>SA447</u> : 31480 4R100QQK <u>FUE049</u> : 31480 4R100FFF		1

WARRANTY INFORMATION: SERVICE ACTION**N Code: N99 C Code: C99**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
TF (HEV)	V	31480 4R100	0	(SA447) Evap Leak Test & Fuel Tank Air Filter Replacement	190043R0	0.4 M/H	31450 4R050QQK (11-12MY) or 31450 4R000QQK (13-16MY)	1
				(SA447) Evap Leak Test, Fuel Tank Air Filter & NVLD Replacement	190043R1	0.7 M/H	31450 4R050QQK (11-12MY) or 31450 4R000QQK (13-16MY)	1
							31480 4R100QQK	
							31480 4R100QQK	

**Standard Warranty Claim on page 5.**

SUBJECT:

## COMBINATION TSB / SERVICE ACTION: AIR FILTER AND NVLD REPLACEMENT (SA447)

### 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 447.
3. The vehicle model year and production date range are as identified in this bulletin.

**N Code: IA3 C Code: ZZ3**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
TF (HEV)	W	31480 4R100	0	(FUE049) Evap Leak Test & Fuel Tank Air Filter Replacement	31450F05	0.4 M/H	31450 4R050FFF (11-12MY) or 31450 4R000FFF (13-16MY)	1
				(FUE049) Evap Leak Test, Fuel Tank Air Filter & NVLD Replacement	31450F06	0.7 M/H	31450 4R050FFF (11-12MY) or 31450 4R000FFF (13-16MY)	1
							31480 4R100FFF	
							31480 4R100FFF	

### \* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SA447** when accessing the WebDCS system.

