

GROUP	MODEL
Service Campaign	2013-2016MY Optima Hybrid (TF HEV)
NUMBER	DATE
SC269	July 2023

## VOLUNTARY SERVICE CAMPAIGN

# HIGH-VOLTAGE BATTERY SAFETY PLUG FUSE INSPECTION AND REPLACEMENT (SC269)

This bulletin provides information to inspect and, if necessary, replace the High Voltage Battery (HVB) Safety Plug Fuse Assembly or Main Fuse on 2013-2016MY Optima Hybrid (TF HEV) vehicles produced from September 27, 2012 through July 22, 2015. The high-voltage fuse in the subject vehicles may have been replaced with an improper aftermarket fuse by third-party repair facilities. A fuse of incorrect capacity may experience a shortened service life, which may result in illumination of the "Hybrid System Warning" and/or "Check Engine Light," followed by a no-start condition. Furthermore, an improper aftermarket fuse may fail and result in a fire. Follow the procedure outlined in this publication to inspect and, if necessary, replace the HVB Safety Plug Fuse Assembly or Main Fuse. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

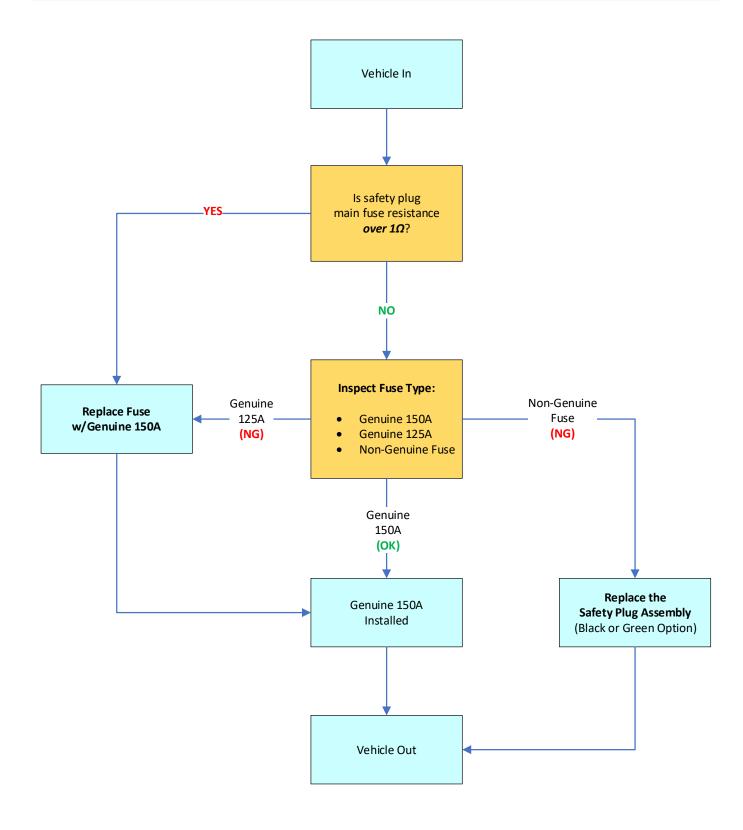


#### **■** NOTICE

SUBJECT:

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

#### Flowchart:



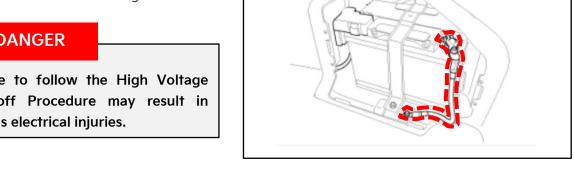


#### **Inspection & Replacement Procedure:**

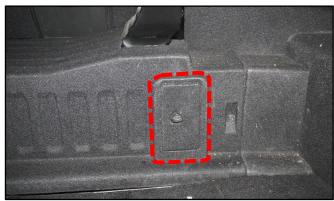
Disconnect the auxiliary 12V battery negative (-) cable located in the rear cargo area.

# **A** DANGER

Failure to follow the High Voltage Shut-off Procedure may result in serious electrical injuries.



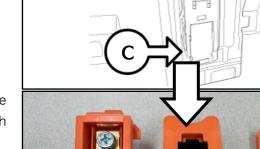
2. Open the High Voltage Battery (HVB) safety plug service cover in the rear cargo area.



3. Unlock the lever hook (A).

Pull down on the lever (B).

Remove the safety plug (C).



4. Using a flathead screwdriver, remove the safety plug cover (D) to expose the High Voltage (HV) main fuse (E).

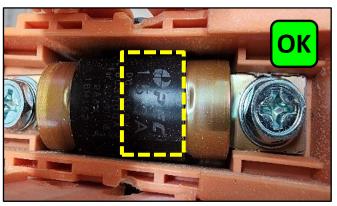
Note: OPEC 125A/150A is the Kia genuine fuse.





- 5. Using a multimeter, measure the HV main fuse resistance (in Ohms).
  - Resistance is 1Ω or less (OK), proceed to step 6.
  - Resistance is over 1Ω (NG), replace the HV main fuse with a new 150A fuse, then proceed to step 7.
- 6. Inspect existing Genuine Kia (Opec) amperage rating of the HV main fuse installed and/or if the fuse has been replaced with an aftermarket (non-genuine Kia) fuse.
  - Genuine Kia (Opec) 125A HV main fuse present (NG): Replace the 125A main fuse with a new 150A, then proceed to step 7.
  - Genuine Kia (Opec) 150A HV main fuse present (OK): No further action is required. Proceed to step 7.
  - A 'non-genuine Kia' HV main fuse is present (NG): Replace the Safety Plug Fuse Assembly (150A, Black or Green option, as applicable), then proceed to step 7.
- 7. Reinstall all removed parts in the reverse order of removal.
- 8. Confirm normal vehicle operation.





Genuine Fuse (150A)



Non-Genuine 150A Fuse



#### AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Optima Hybrid (TF HEV)	September 27, 2012 to July 22, 2015		

#### **REQUIRED TOOL:**

Tool Name	Part Number	Figure	Comments
Multimeter	N/A	N/A	Locally Sourced

#### **REQUIRED PART:**

Part Name	Part Number	Figure	Qty.
Safety Plug Fuse Assembly* (Black Locking Hook)	37586 4R000ASQQK		1
Safety Plug Fuse Assembly* (Green Locking Hook)	37586 4R002QQK		1
High Voltage Main Fuse	375F2 4R150QQK	O A A A A A A A A A A A A A A A A A A A	1

Note: The replacement part numbers will require a VIN entry for parts ordering. This repair is an inspect and if necessary, replace. DO NOT order these parts for stocking purposes, related to this Campaign. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing. \*When replacing the Safety Plug Fuse Assembly, DO NOT ORDER the HV Main Fuse as the fuse is included with a new Safety Plug fuse assembly.



#### **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.
R 37586 4R002		0	(SC269) Fuse Inspection (OK) (Genuine Fuse 150A)	230041R3	0.2 M/H	N/A	0
			(SC269) Fuse Inspection (NG) + Fuse Replacement	230041R0	0.3 M/H	375F2 4R150QQK	1
	37586 4ROO2 O		(SC269) Fuse Inspection (Non-genuine Fuse) + Safety Plug Replacement	230041R1	0.3 M/H	37586 4R002QQK <u>or</u> 37586 4R000ASQQK	1
			(SC269) Fuse Inspection (Genuine Fuse 125A) + Fuse Replacement	230041R2	0.3 M/H	375F2 4R150QQK	1

<u>Note</u>: Refer to Warranty Bulletin 2023-20 for claim submission procedures. Manually enter sublet code 'X2' for reimbursement of one roundtrip rideshare expense or up to three (3) days of rental expense, with supporting documentation for Fuse and Safety Plug Replacement only.

### **■ NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC269 when accessing the KDealer+ system.

