

# **Technical Service Bulletin**

| GROUP   | NUMBER    |
|---------|-----------|
| HYBRID  | 17 HC 002 |
| CONTROL | 17-HC-002 |

DATE

SEPTEMBER, 2017

CONTROL

MODEL

SONATA HYBRID (LF HEV)

SUBJECT:

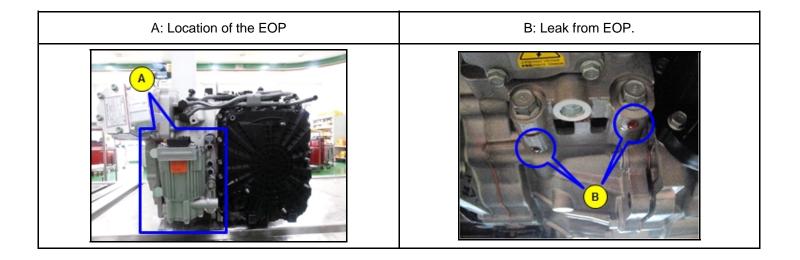
OIL LEAK AT ELECTRIC OIL PUMP

This TSB supersedes 16-HC-001 to update the Parts Information and Service Procedure.

**Description:** Some Sonata Hybrid (LF HEV) vehicles may experience a small oil leak from the electric oil pump (EOP) seals. If so, follow the Service Procedure in this bulletin to inspect and repair the oil seals between the transmission and EOP.

No drivability issues are associated with this condition.

Applicable Vehicles: 2016~ Sonata Hybrid (LF HEV)



#### **PARTS INFORMATION:**

| MODEL                           | PART     | PART NUMBER |   | LOCATION              |  |
|---------------------------------|----------|-------------|---|-----------------------|--|
| 2016~ Sonata<br>Hybrid (LF HEV) | Oil seal | 45261-3D600 |   | 452613D600 452623D600 |  |
|                                 | Oil seal | 45262-3D600 | • |                       |  |
|                                 | Bolt     | 45227-3D000 |   |                       |  |

**NOTE**: If the new bolt is not available, apply RTV Silicon Gray, P/N 00232-19061 sealant, or equivalent, to the bolt threads and reuse the bolt.

#### **WARRANTY INFORMATION:**

| MODEL                              | OP CODE  | OPERATION         | OP TIME                            | CAUSAL PART              | NATURE<br>CODE | CAUSE<br>CODE |
|------------------------------------|----------|-------------------|------------------------------------|--------------------------|----------------|---------------|
| 2016~<br>Sonata Hybrid<br>(LF HEV) | 46120R00 | Electric oil pump | Refer to<br>WEBLTS for<br>LTS time | See Parts<br>Information | B25            | ZZ2           |

### **SERVICE PROCEDURE:**

1. Remove the rear trunk cover.

Remove two bolts and remove the access cover to the safety plug.



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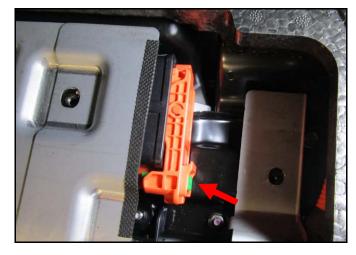
2. Put on insulation gloves.

Push the green tab forward and pull out the safety plug.

Place the safety plug on the dash so it is visible while working.



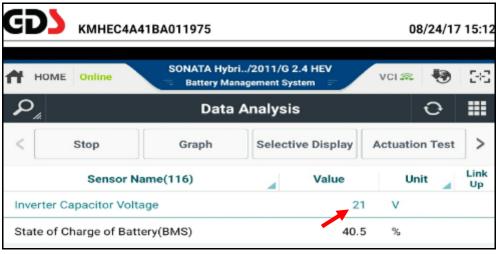
Failure to wear protective gear and perform this procedure may result in accidental injury or death.



Without depressing the brake pedal, push the Start-Stop button 2 times to power the cluster.

Attach a GDS and select **Data Analysis**, **BMS** menu **Inverter Capacitor Voltage**. Confirm the **Inverter Capacitor Voltage** is less than 30V.

- If less than 30V, the system voltage is safe for the technician. Go to Step 4.
- If more than 30V, wait until the voltage is within specification. Go to Step 4.



4. Locate the EOP near the oil pan.

Check for a small oil leak between the EOP and the transmission at the base of the EOP.

- If a leak is found, go to step 5.
- If no leak is found, check the engine area for the source of the leak.



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- 5. Disconnect the connectors to the EOP.
  - Orange High voltage connector:
     Pull down on the white tab and disconnect the connector.
  - Black Low voltage connector:
     Press the tab and disconnect the connector.



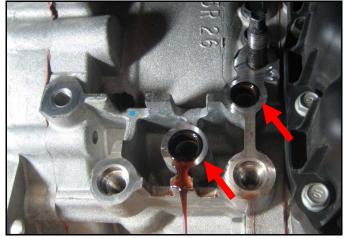
6. Remove 3 bolts and 1 nut. Remove the EOP.



7. Remove the two oil seals.

Clean the bores where the oil seals are located.

Install new oil seals.



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Reinstall the EOP.

Install a new bolt, P/N 45227-3D000, in the location shown by the arrow.

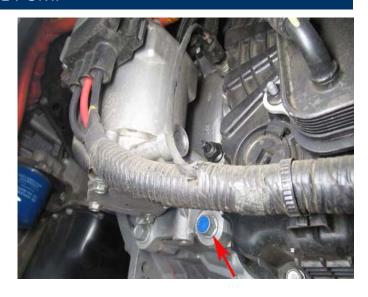
Reinstall two bolts and one nut.

Tighten the bolts and nut to specification.

Torque: 18~22 lb-ft (25~30 Nm)

## **NOTICE**

If the new bolt is not available, apply RTV Silicon Gray, P/N 00232-19061 sealant, or equivalent, to the bolt threads.



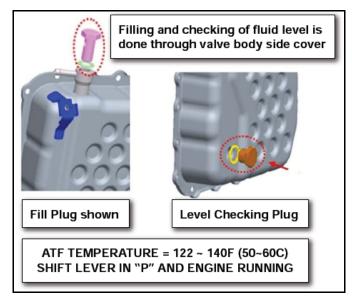
- Reconnect the connectors to the EOP and the fluid pressure switch.
   Reconnect the safety plug.
- 10. Remove the transaxle fill plug.

Use a fluid pump to add SP4-M ATF through the fill plug opening. Reinstall the fill plug.

Attach the GDS and select **Data Analysis** and **Oil Temperature Sensor**.

Start the engine and shift to Park. When the ATF is 122°F~140°F (50~60°C), remove the level checking plug. The level is correct when oil flows out of the level checking plug in a thin steady stream.

Collect and dispose of any excess fluid in accordance with local regulations.



11. Depress the brake pedal and press the **SSB** to enable **EV Ready**.

Check for leaks from the oil pump.

Reinstall the splash shield under the transmission.

Attach a GDS and select **Data Analysis, A/T** menu and **Oil Pump Speed Actual RPM**. In "EV **Ready**" mode, confirm the **Oil Pump Speed Actual RPM** is above 400 rpm when the engine is off.

12. Drive the vehicle and confirm the proper operation of the oil pump.

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