 <b>HYUNDAI</b>   NEW THINKING. NEW POSSIBILITIES.  <b>Technical Service Bulletin</b>	GROUP <b>HYBRID CONTROL</b>	NUMBER <b>16-HC-001</b>
	DATE <b>MAY 2016</b>	MODEL <b>SONATA HYBRID (LF HEV)</b>
<b>SUBJECT:</b> HYBRID ELECTRIC VEHICLE - OIL LEAK AT ELECTRIC OIL PUMP		

**Description:** On some Sonata Hybrid (LF HEV) vehicles, a small oil leak may occur from the electric oil pump (EOP) seals.

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.

<b>Applicable Vehicles:</b>	2016~ Sonata Hybrid (LF HEV)
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**Parts Information:**

Model	Part	Section	PNC	Part Number
2016~ Sonata Hybrid (LF HEV)	Electric oil pump	43-453	46120C	46120-3D60*
	EOP oil seal	43-452	46132 46132A	45261-3D600 45262-3D600

**NOTE:** Oil seals are not included with the electric oil pump.

**Warranty Information:**

Model	Op Code	Operation	Op time	Causal Part
2016~ Sonata Hybrid (LF HEV)	46120R00	Electric oil pump	0.4	46120-3D60*

**Service Procedure:**

1. Raise the vehicle on a hoist.

Inspect for oil residue on the splash pan under the transmission.

Remove the plastic splash pan under the transmission.

2. Remove the rear trunk cover.

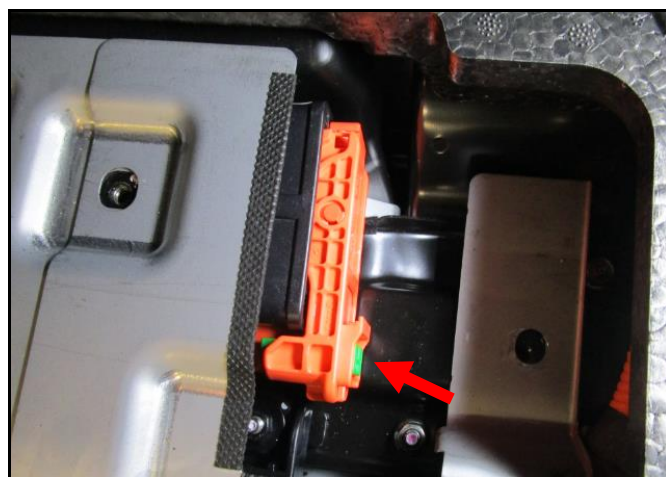
Remove two bolts and remove the access cover to the safety plug.



3. 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 perform this procedure may result in accidental injury or death.**

4. 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 5.
- If more than 30V, wait until the voltage is within specification. Go to Step 5.



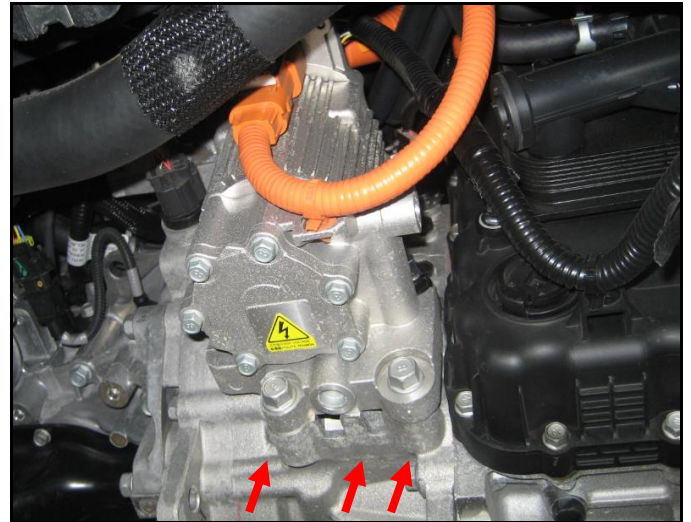
5. Record the customer's preset radio stations.

Disconnect the negative battery cable.



6. 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 so, go to step 7.



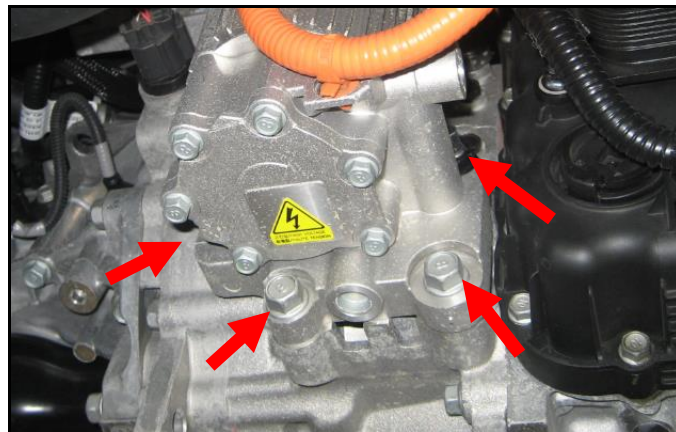
7. Disconnect the connectors to the EOP.

- 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.

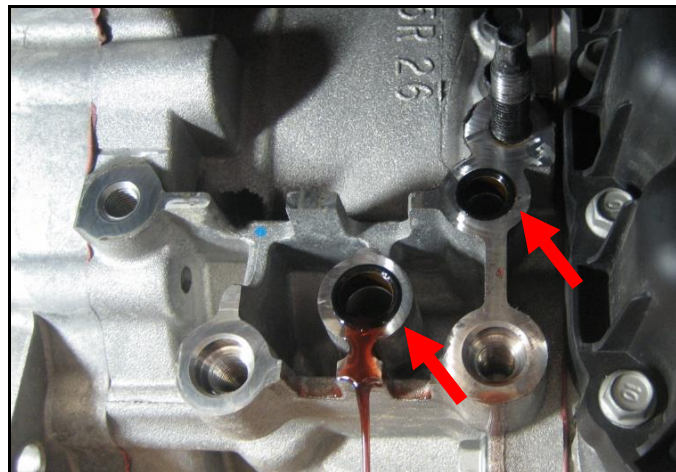




8. Remove 3 bolts and one nut. Remove the EOP.



9. Remove the two oil seals.  
Clean the bores where the oil seals are located.  
Install new oil seals.  
Reinstall the EOP and tighten the bolts and nut to specification.  
Torque: 18~22 lb-ft (25~30 Nm)  
Reconnect the connectors to the EOP.



10. Reconnect the 12 volt negative battery cable and safety plug.  
Reset the customer's radio stations.  
Depress the brake pedal and press the **Start Switch** to enable "EV Ready".  
Check for oil leaks from the EOP. If oil leaks are found, check for the source of the leaks.

11. Attach the GDS and select **Data Analysis, A/T** menu 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. If not, add SP4-M ATF and repeat Step 11.

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

Reinstall the splash shield below transmission.

