

SONATA(NF) >2009 > G 2.4 DOHC > Engine > Engine Control > P2096 Post Catalyst Fuel Trim System too Lean (Bank 1)
> Inspection/Repair > Component Inspection

Component Inspection

■ Exhaust system Inspection

1. Visually/physically inspect the following conditions:
 - Exhaust system between HO2S and Three way catalyst for air leakage, restriction and damage.
 - Damage, and for loose or missing hardware
2. Was a problem found in any of the above areas?

YES	<input type="checkbox"/> Repair or replace as necessary and go to "Verification of Vehicle Repair" procedure
NO	<input type="checkbox"/> Go to next step as below

■ TWC Inspection

1. Visually/physically inspect the three-way catalyst(TWC) converter for the following damage:
 - Severe discoloration caused by excessive temperature
 - Dents and holes
 - Internal rattle caused by a damaged catalyst
2. Also, ensure that the TWC is a proper original equipment manufacturer part.
3. Was a problem found?

YES	<input type="checkbox"/> Replace TWC and go to "Verification of Vehicle Repair" procedure
NO	<input type="checkbox"/> Go to next step as below

■ HO2S Inspection

1. Visually/physically inspect the HO2S for the following conditions:
 - Ensure that the HO2S is securely installed.(Pigtail and wiring harness not making contact with the exhaust pipe)
 - Check for corrosion on terminals and terminal tension (at the HO2S and at the PCM)
 - Front HO2S for silicon contamination. This contamination will be indicated by a white powdery coating on the portion of the sensor exposed to the exhaust stream and this will result in a but false(high) voltage signal
 - Fuel, engine coolant or oil contamination
 - Use of improper sealant
 - If contamination is evident on the HO2S, Fix the source of the sensor contamination before replacing the sensor to prevent future contamination. Go to "Verification of Vehicle Repair" procedure.
2. Warm up the engine to normal operating temperature and let it idle.
3. Connect Scantool and monitor the "O2 SNSR VOL.-B1/S1" and "O2 SNSR VOL.-B1/S2" parameters on the Scantool data list.

Specification : Refer to "Signal Waveform & Data" in the "General Information" procedure

- Front HO2S(O2 SNSR VOL.-B1/S1) : Verify signal is switching from rich(above 0.45V) to lean(below 0.45V) a minimum of 3 times in 10 seconds (voltage will vary between 0.1 and 0.9V) at idle.
- Rear HO2S(O2 SNSR VOL.-B1/S2) : Above 0.6V at idle

4. Was a problem found in any of the above areas?

YES	<input type="checkbox"/> Repair or replace as necessary and go to "Verification of Vehicle Repair" procedure
NO	<input type="checkbox"/> Check for poor connection between PCM and component: backed out terminal, improper mating, broken locks or poor terminal to wire connection. Repair as necessary and go to "Verification of Vehicle Repair" procedure