

P1157, P0134 and LAF Sensor Replacement

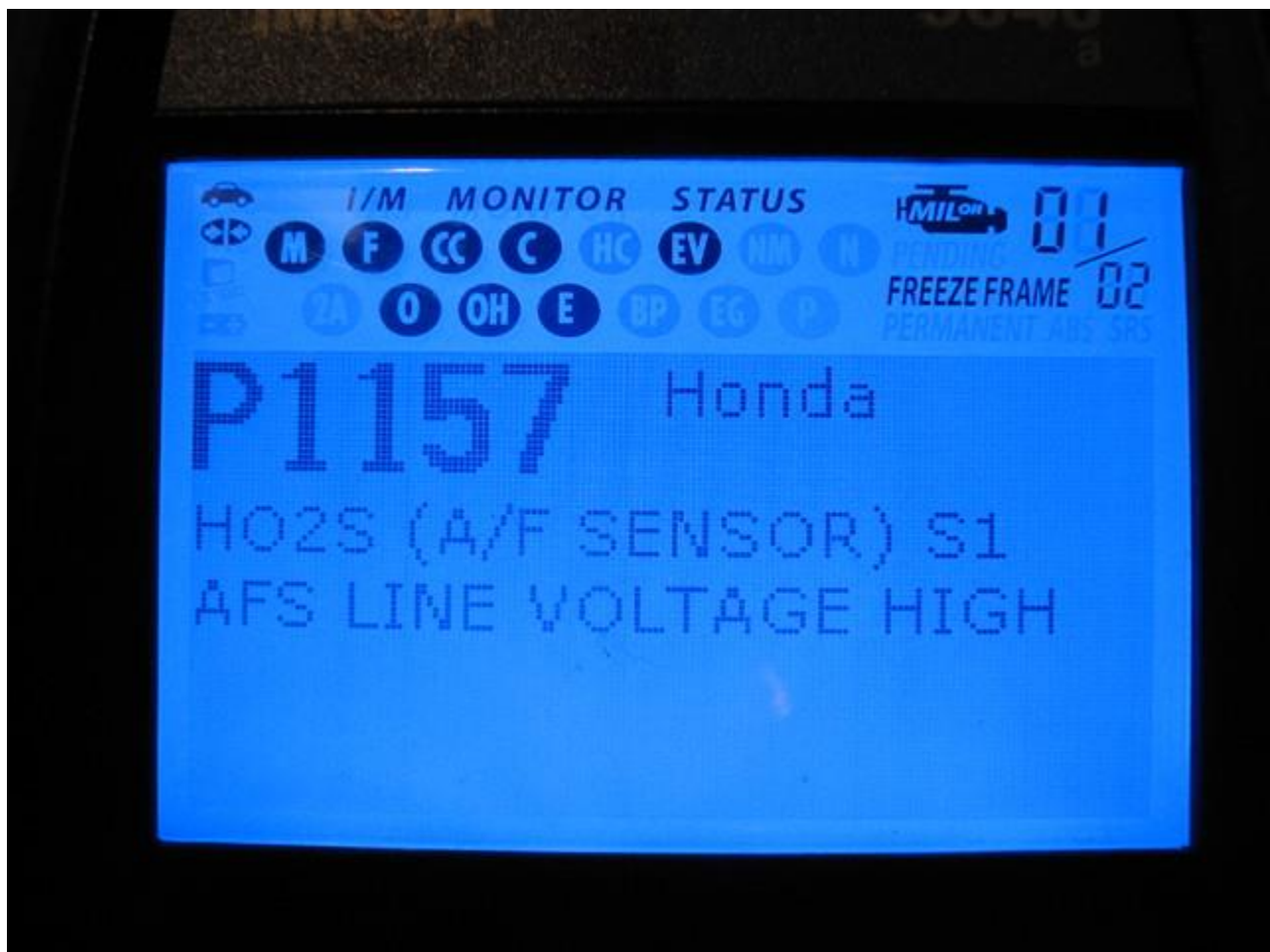
At 322K miles my 2007 4CYL Accord SE had a CEL experienced the following codes:

P0134: A/F Sensor (Sensor 1) Heater System Malfunction

P1157: A/F Sensor (Sensor 1) AFS Circuit High Voltage

These are codes for the upstream air/fuel (LAF) "Oxygen" sensor heater circuit. Due to the fault, the engine was running in "Open Loop - Fault" operation so it was not possible to monitor the oxygen sensor signal (at least using my code reader).

I began by clearing the codes and P1157 immediately came back (but not P0134).



This was still the original air/fuel sensor (with 322K miles on it) so I decided to replace it based on the code.

The air/fuel sensor is located in the exhaust pipe at the back of the engine. I used an oxygen sensor socket to remove it:



The oxygen sensor connector can be seen looking in the driver side wheel well:



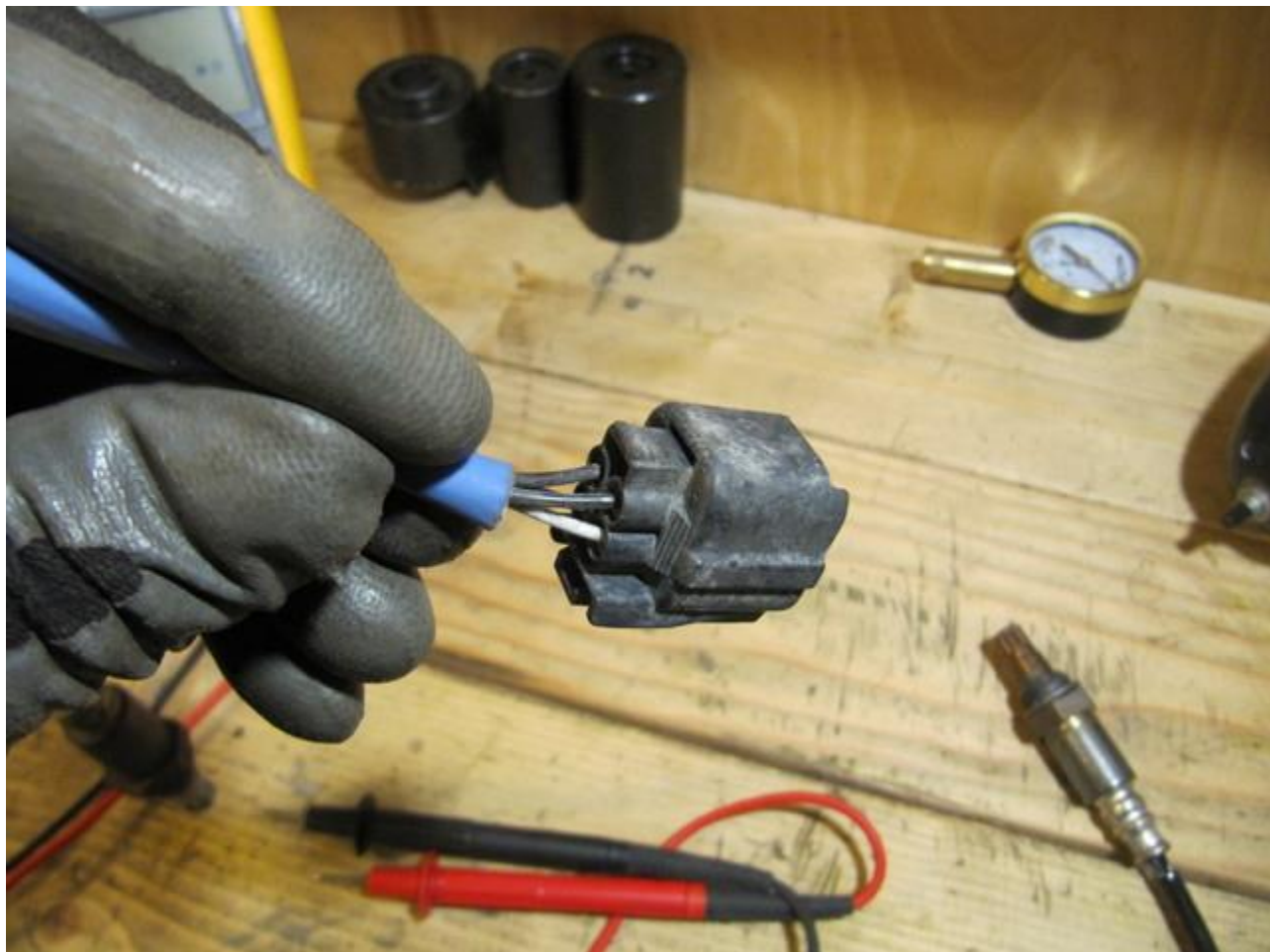
There is also a wire holder that supports the LAF sensor wire:



When installing the new oxygen sensor (I replaced with an OEM replacement unit) the torque is 33 ft-lb:



You can check the condition of the heater element by measuring the resistance between the black wires. The resistance should be between 2.1 and 2.9 Ohms at room temperature:



My old (bad) air fuel sensor measured 3.65 Ohms (OUT OF SPEC - High):



The new air/fuel sensor measured 2.65 Ohms (IN SPEC):



Replacing the air/fuel sensor successfully eliminated the CEL and trouble codes.