Fuel Pump Current Draw Test

Meets NATEF Task: (A8-D-3) Inspect and test fuel pumps and pump control systems for pressure, regulation, and volume; perform necessary action. (P-1)

Name _____ **Date** _____ **Time on Task** _____

Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

_____ **1.** Many electric fuel pumps can be measured for current draw in amperes. A higher than normal amperage draw may indicate a clogged fuel filter causing back pressure for the pump or a worn pump.

NOTE: Other makes and models of vehicles can be tested by connecting the ammeter in series with the fuel pump fuse and then operating the engine. Check the wiring diagram for your specific vehicle.

_____ **2.** Connect the digital multimeter, set to read amperes (A) and connect the red lead to the positive (+) of the battery. Connect the black lead to the fuel pump test terminal. The pump should run and an amperage reading should be observed on the meter. (Allow the pump to run for 30 seconds.) Confirm the reading with acceptable specifications.

Reading = _____ amp

Normal readings: TBI = 2 to 5 amps (9-13 psi)
Port injection = 4 to 8 amps (35-45 psi)
Central port injection = 8 to 12 amps (55-64 psi)

- If the current is *lower* than specifications, check for:

  1. poor electrical connection at the fuel pump relay.
  2. poor connection at the fuel pump electrical connector.
  3. poor ground connection.
  4. defective fuel pressure regulator

- If the current is *higher* than specifications, check for:

  1. clogged fuel filter.
  2. pinched fuel lines.
  3. slowly rotating fuel pump.

_____ **3.** Based on the test results, what is the necessary action?

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