

FUEL PUMP

ON-VEHICLE INSPECTION

SF00K-03

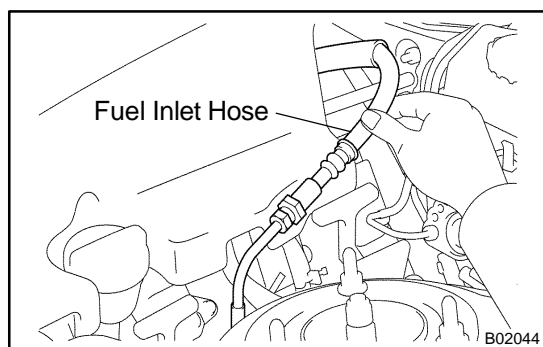
1. CHECK FUEL PUMP OPERATION

- Connect a LEXUS hand-held tester to the DLC3.
- Turn the ignition switch ON, and push the LEXUS hand-held tester main switch ON.

NOTICE:

Do not start the engine.

- Select the active test mode on the LEXUS hand-held tester.
- Please refer to the LEXUS hand-held tester operator's manual for further details.
- If you have no LEXUS hand-held tester, connect the positive (+) and negative (–) leads from the battery to the fuel pump connector. (See step 3)



- Check that there is pressure in the fuel inlet hose from the fuel filter.

HINT:

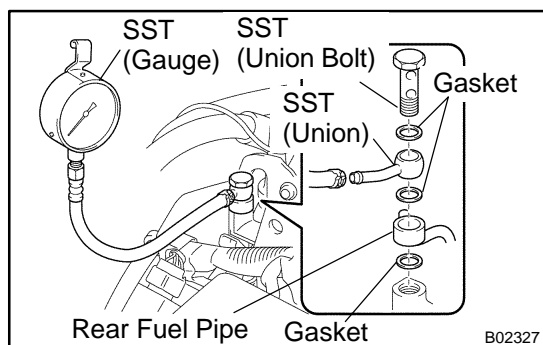
If there is fuel pressure, you will hear the sound of fuel flowing.
If there is no pressure, check these parts:

- Fusible link
- Fuses
- EFI main relay
- Fuel pump
- ECM
- Wiring connections

- Turn the ignition switch OFF.
- Disconnect the LEXUS hand-held tester from the DLC3.

2. CHECK FUEL PRESSURE

- Check the battery positive voltage is above 12 V.
- Disconnect the negative (–) terminal cable from the battery.
- Remove the fuel pressure pulsation damper from the RH delivery pipe. (See page [SF-28](#))



- Install the rear fuel pipe and SST (pressure gauge) to the delivery pipe with 3 lower gaskets and SST (union bolt).
SST 09268-45014 (09268-41190, 90405-06167)
Torque: 39 N·m (400 kgf-cm, 29 ft-lbf)
- Wipe off any splattered gasoline.
- Reconnect the negative (–) terminal cable to the battery.
- Connect a LEXUS hand-held tester to the DLC3.
(See step 1 in check fuel pump operation (a) to (e))
- Measure the fuel pressure.

Fuel pressure:**304 – 343 kPa (3.1 – 3.5 kgf/cm², 44 – 50 psi)**

If pressure is high, replace the fuel pressure regulator.

If pressure is low, check these parts:

- Fuel hoses and connections
 - Fuel pump
 - Fuel filter
 - Fuel pressure regulator
- (i) Disconnect the LEXUS hand-held tester from the DLC3.
 - (j) Start the engine.
 - (k) Measure the fuel pressure at idle.

Fuel pressure:**304 – 343 kPa (3.1 – 3.5 kgf/cm², 44 – 50 psi)**

- (l) Stop the engine.
- (m) Check that the fuel pressure remains as specified for 5 minutes after the engine has stopped.

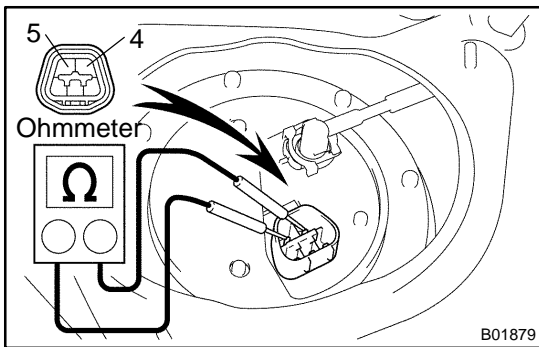
Fuel pressure: 147 kPa (1.5 kgf/cm², 21 psi) or more

If pressure is not as specified, check the fuel pump, pressure regulator and/or injectors.

- (n) After checking fuel pressure, disconnect the negative (–) terminal cable from the battery and carefully remove the SST to prevent gasoline from splashing.

SST 09268–45014

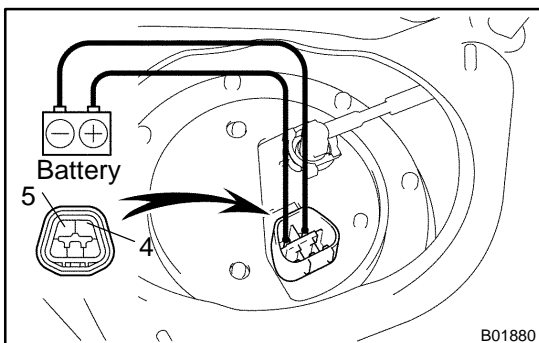
- (o) Reinstall the fuel pressure pulsation damper to the RH delivery pipe. (See page [SF-29](#))
- (p) Reconnect the negative (–) terminal cable to the battery.
- (q) Check for fuel leaks.

**3. INSPECT FUEL PUMP**

- (a) Remove the rear seat cushion.
- (b) Remove the 3 cap nuts and floor service hole cover.
- (c) Disconnect the fuel pump & sender gauge connector.
- (d) Using an ohmmeter, measure the resistance between terminals 4 and 5.

Resistance: 0.2 – 3.0 Ω at 20°C (68°F)

If the resistance is not as specified, replace the fuel pump.



- (e) Inspect the fuel pump operation. Connect the positive (+) lead from the battery to terminal 4 of the connector, and the negative (–) lead to terminal 5. Check that the fuel pump operates.

NOTICE:

- These tests must be done quickly (within 10 seconds) to prevent the coil burning out.
- Keep the fuel pump as far away from the battery as possible.
- Always do the switching at the battery side.

If operation is not as specified, replace the fuel pump.

- (f) Reconnect the fuel pump & sender gauge connector.
- (g) Reinstall the floor service hole cover with the cap nuts.
- (h) Reinstall the rear seat cushion.