

FUEL PUMP

ON-VEHICLE INSPECTION

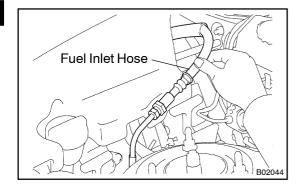
1. CHECK FUEL PUMP OPERATION

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

NOTICE:

Do not start the engine.

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

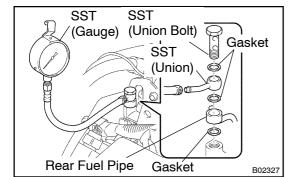


(f) Check that there is pressure in the fuel inlet hose from the fuel filter.

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
- Engine and ECT ECU
- Wiring connections
- (g) Turn the ignition switch OFF.
- (h) Disconnect the hand-held tester from the DLC3.
- 2. CHECK FUEL PRESSURE
- (a) Check the battery positive voltage is above 12 V.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Remove the fuel pressure pulsation damper from the RH delivery pipe. See page FI-29)



(d) 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)

- (e) Wipe off any splattered gasoline.
- (f) Reconnect the negative (-) terminal cable to the battery.
- (g) Connect a hand-held tester to the DLC3.(See step 1 in check fuel pump operation (a) to (e))
- (h) Measure the fuel pressure.

LEXUS GS300/GS430 SUP (RM786E)

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 hand-held tester from the DLC3.
- (j) Start the engine.
- (k) Measure the fuel pressure at idle.

Fuel pressure:

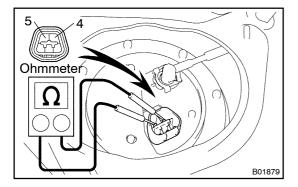
- (I) Stop the engine.
- (m) Check that the fuel pressure remains as specified for 5 minutes after the engine has stopped.

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[FI-30]
- (p) Reconnect the negative (-) terminal cable to the battery.
- (a) Check for fuel leaks.

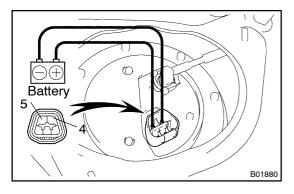


3. INSPECT FUEL PUMP

- (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.