

## FUEL PUMP ON-VEHICLE INSPECTION

SF0N2-08

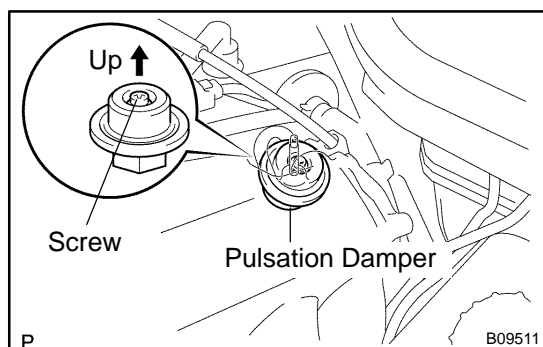
### 1. CHECK FUEL PUMP OPERATION

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

#### NOTICE:

**Do not start the engine.**

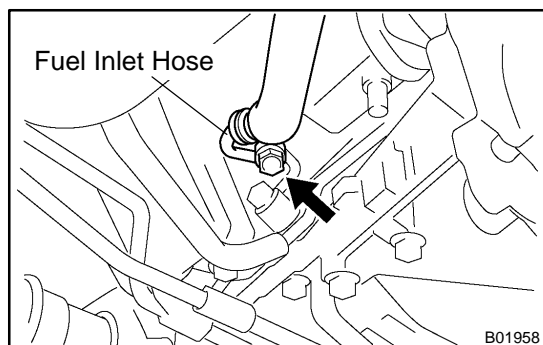
- Select the ACTIVE TEST mode on the LEXUS hand-held tester.
- Please refer to the LEXUS hand-held tester operator's manual for further details.
- If you have no LEXUS hand-held tester, connect the positive (+) and negative (–) leads from the battery to the fuel pump connector. (See step 3)



- Check that the pulsation damper screw rises up when the fuel pump operates.

If there is no pressure, check the fusible link, fuses, EFI main relay, fuel pump ECU, fuel pump, ECM and wiring connections.

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

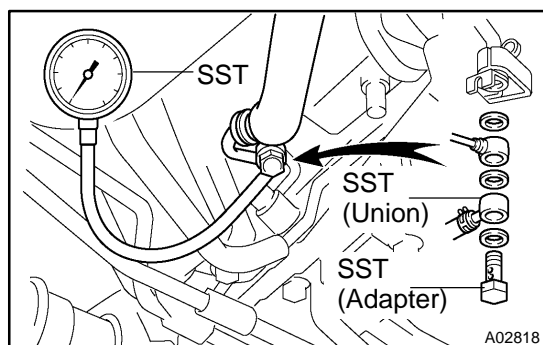


### 2. CHECK FUEL PRESSURE

- Check the battery positive voltage is above 12 V.
- Disconnect the negative (–) terminal cable from the battery.
- Remove the union bolt and 2 gaskets, and disconnect the fuel inlet hose from the fuel pipe support.

#### NOTICE:

- Put a shop towel under the fuel pipe support.
- Slowly loosen the union bolt.

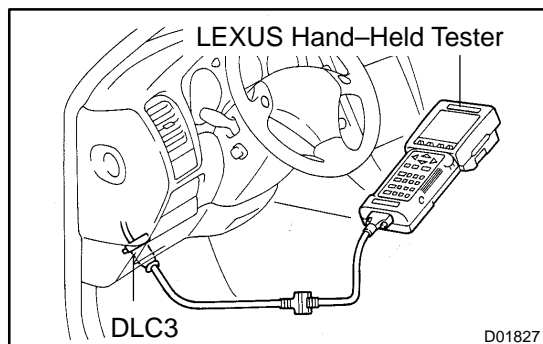


- Install the fuel inlet hose and SST (pressure gauge) to the fuel pipe support with the 3 gaskets and SST (union and adapter).

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**Torque: 29 N·m (300 kgf·cm, 21 ft·lbf)**

- Wipe off any splattered gasoline.



- (f) Connect a LEXUS hand-held tester to the DLC3.  
(See step 1 in check fuel pump operation (a) to (e))
- (g) Measure the fuel pressure.

**Fuel pressure:**

**304 – 343 kPa (3.1 – 3.5 kgf/cm<sup>2</sup>, 44 – 50 psi)**

If pressure is high, replace the fuel pressure regulator.

If pressure is low, check the fuel hoses and connections, fuel pump, fuel filter and fuel pressure regulator.

- (h) Disconnect the LEXUS hand-held tester from the DLC3.
- (i) Start the engine.
- (j) Measure the fuel pressure at idle.

**Fuel pressure:**

**304 – 343 kPa (3.1 – 3.5 kgf/cm<sup>2</sup>, 44 – 50 psi)**

- (k) Stop the engine.

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

**Fuel pressure: 147 kPa (1.5 kgf/cm<sup>2</sup>, 21 psi) or more**

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

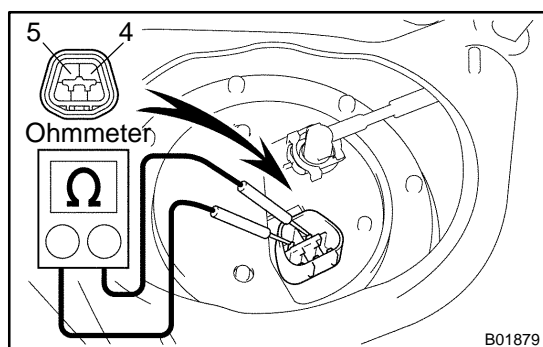
- (m) After checking fuel pressure, disconnect the negative (–) terminal cable from the battery and carefully remove SST to prevent gasoline from splashing.

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- (n) Reconnect the fuel inlet hose to the fuel pipe support with 2 new gaskets and the union bolt.

**Torque: 29 N·m (300 kgf·cm, 21 ft·lbf)**

- (o) Reconnect the negative (–) terminal cable to the battery.
- (p) Check for fuel leaks.

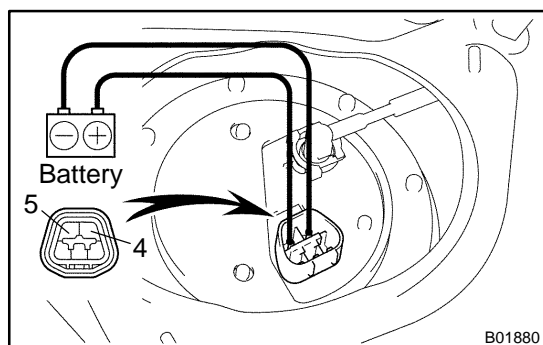


### 3. INSPECT FUEL PUMP

- (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.