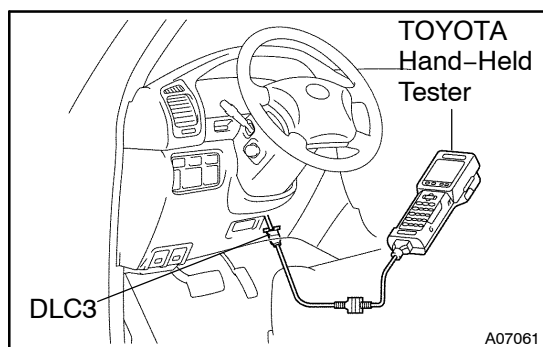




FUEL PUMP

ON-VEHICLE INSPECTION

SF0XV-06

1. CHECK FUEL PUMP OPERATION

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

NOTICE:

Do not start the engine.

- Select the ACTIVE TEST mode on the TOYOTA hand-held tester.
- Please refer to the TOYOTA hand-held tester operator's manual for further details.
- If you have no TOYOTA hand-held tester, connect the positive (+) and negative (-) leads from the battery to the fuel pump connector. (See step 3)
- Disconnect the fuel return hose from the clamp on the V-bank cover.
- Remove the 2 bolts, nuts and V-bank cover.
- Check that the pulsation damper screw rises up when the fuel pump operates.

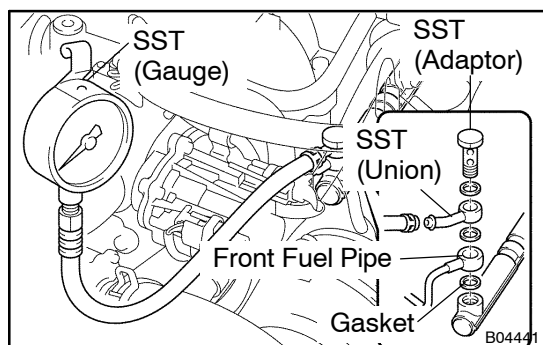
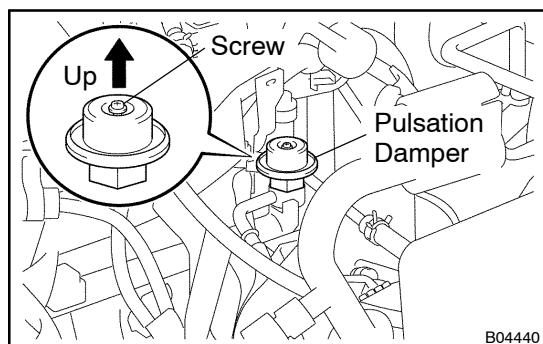
If operation is not as specified, check these parts:

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

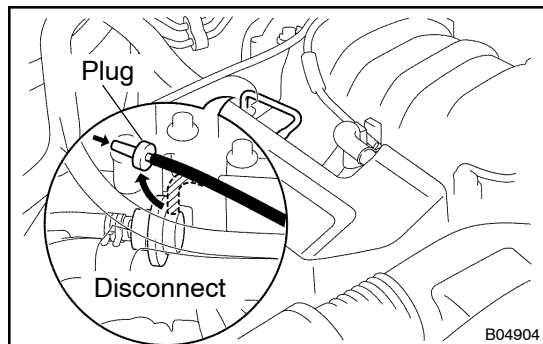
- Turn the ignition switch OFF.
- Disconnect the TOYOTA hand-held tester from the DLC3.

2. CHECK FUEL PRESSURE

- Check the battery positive voltage is above 12 V.
- Disconnect the negative (-) terminal cable from the battery.
- Remove the front fuel pipe from the LH delivery pipe. (See page [SF-22](#))



- Install the front fuel pipe and SST (pressure gauge) to the delivery pipe with 3 lower gaskets and SST (adaptor).
SST 09268-45012 (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 TOYOTA hand-held tester to the DLC3. (See step 1 in check fuel pump operation (a) to (e))
- Measure the fuel pressure.

**Fuel pressure:****265 – 304 kPa (2.7 – 3.1 kgf/cm², 38 – 44 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 TOYOTA hand-held tester from the DLC3.

(j) Start the engine.

(k) Disconnect the vacuum sensing hose from the fuel pressure regulator, and plug the hose end.

(l) Measure the fuel pressure at idle.

Fuel pressure:**265 – 304 kPa (2.7 – 3.1 kgf/cm², 38 – 44 psi)**

(m) Reconnect the vacuum sensing hose to the fuel pressure regulator.

(n) Measure the fuel pressure at idle.

Fuel pressure:**196 – 235 kPa (2.0 – 2.4 kgf/cm², 28 – 34 psi)**

(o) Stop the engine.

(p) 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.

(q) 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

(r) Reinstall the front fuel pipe to the LH delivery pipe.

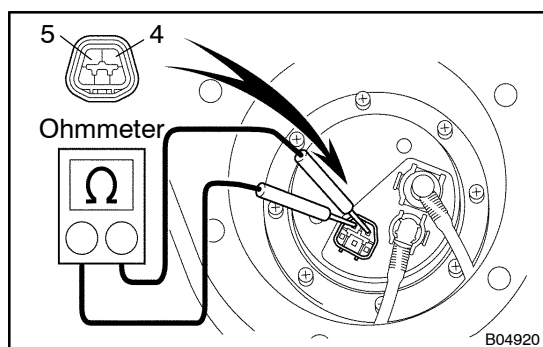
(See page [SF-27](#))

(s) Reconnect the negative (–) terminal cable to the battery.

(t) Check for fuel leaks. (See page [SF-1](#))

(u) Reinstall the V-bank cover with the 2 bolts and nuts.

(v) Reconnect the fuel return hose to the clamp on the V-bank cover.

**3. INSPECT FUEL PUMP**

(a) Remove the No.1 rear seats.

(b) Remove the 2 rear door scuff plates, step plates and rear seat lock covers.

(c) Pull off the front and rear floor carpets.

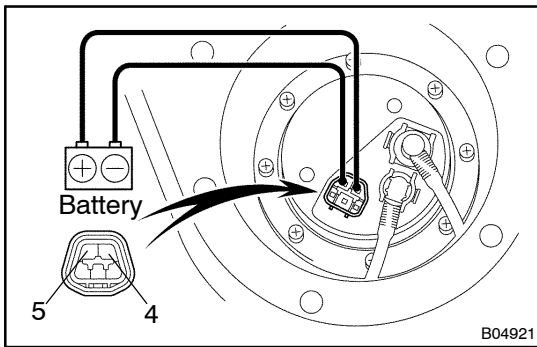
(d) Remove the 2 screws and rear floor service hole cover.

(e) Disconnect the fuel pump & sender gauge connector.

(f) 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 and/or lead wire.



- (g) 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 and/or lead wire.

- (h) Reconnect the fuel pump & sender gauge connector.
- (i) Reinstall the rear floor service hole cover with the 2 screws.
- (j) Reinstall the front and rear floor carpets.
- (k) Remove the 2 rear door scuff plates, step plates and rear seat lock covers.
- (l) Reinstall the No.1 rear seats.