

FUEL PUMP

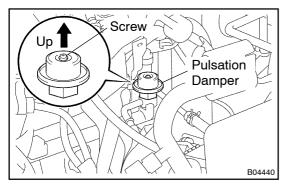
ON-VEHICLE INSPECTION

- **CHECK FUEL PUMP OPERATION**
- (a) Connect a hand-held tester to the DLC3.
- Turn the ignition switch ON, and push the hand-held tester main switch ON.

NOTICE:

Do not start the engine.

- Select the ACTIVE TEST mode on the hand-held tester.
- (d) Please refer to the hand-held tester operator's manual for further details.
- If you have no hand-held tester, connect the positive (+) (e) 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-(f) bank cover.
- (g) Remove the 2 bolts, nuts and V-bank cover.



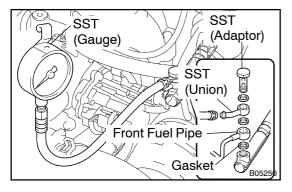
(h) Check that the pulsation damper screw rises up when the fuel pump operates.

If operation is not as specified, check these parts:

- **Fuses**
- EFI main relay
- Fuel pump
- **Engine ECU**
- Wiring connections
- (i) Turn the ignition switch OFF.
- (i) 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 bat-
- Remove the front fuel pipe from the LH delivery pipe. (c) (See page FI-27)



(d) 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)

- (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.

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

Fuel pressure:

265 – 304 kPa (2.7 – 3.1 kgf/cm , 3 8 – 44 psi)

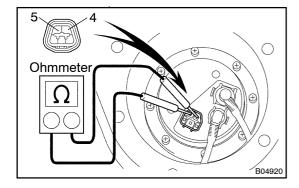
- (I) Stop the engine.
- (m) Check that the fuel pressure remains as specified for 5 minutes after the engine has stopped.

Fuel pressure: 147 kPa (1.5 kgf/cm , 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 –45012
- (o) Reinstall the front fuel pipe to the LH delivery pipe. (See page FI-32)
- (p) Reconnect the negative (–) terminal cable to the battery.
- (q) Check for fuel leaks. (See page FI-1)
- (r) Reinstall the V -bank cover with the 2 bolts and nuts.
- (s) Reconnect the fuel return hose to the clamp on the V bank cover.

3. INSPECT FUEL PUMP

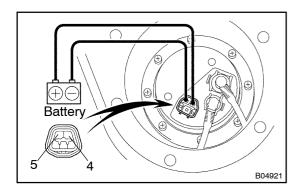
- (a) Remove the No. 1 rear seats.
- (b) Remove the 2 rear door scuff plates, step plates and rear seat lock covers.
- (c) Pull off the front and rear floor carpets.
- (d) Remove the 2 screws and rear floor service hole cover.
- (e) Disconnect the fuel pump & sender gauge connector.



(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 sear lock covers.
- (I) Reinstall the No. 1 rear seats.