

# **FUEL PUMP**

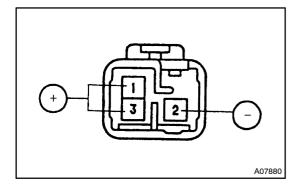
## **ON-VEHICLE INSPECTION**

- 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.

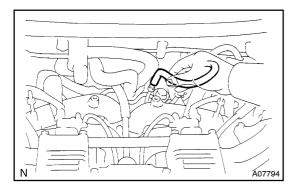
- (c) Select the active test mode on the hand-held tester.
- (d) Please refer to the hand-held tester operator's manual for further details.



(e) If you have no hand-held tester, connect the positive (+) lead from the battery to terminal 1 of the connector, and the negative (-) lead to terminal 2.

#### NOTICE:

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



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

#### HINT:

- There are 2 fuel pumps. They usually operate alternately every time the ignition switch is turned ON and OFF.
- 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
- Fuel pump relay
- Fuel pump resistor
- ECM
- Wiring connections
- (g) Turn the ignition switch OFF.
- (h) Disconnect the hand-held tester from the DLC3.

#### 2. INSPECT FUEL PUMP RESISTANCE

Using an ohmmeter, measure the resistance between the terminals.

#### Resistance:

0.2 – 3.0  $\Omega$  at 20°C (68°F)

If the resistance is not as specified, replace the fuel pump and/ or set plate.

#### 3. CHECK FUEL PRESSURE

- (a) Check the battery voltage is 10 14 V.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Purchase a new fuel tube and take out the fuel tube connector from its pipe.

Part No.

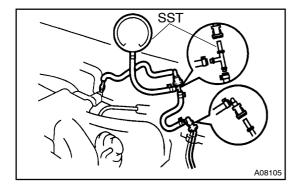
LHD 23901-32020

RHD 23901-32010

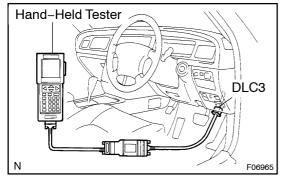
(d) Disconnect the fuel tube connector from the fuel main pipe on the vehicle side.

#### **CAUTION:**

- Perform disconnecting operations of the fuel tube connector (quick type) after observing the precautions. (See page FI-1).
- As there is retained pressure in the fuel pipe line, prevent it from splashing inside the engine compartment.



- (e) Install SST (pressure gauge) as shown in the illustration by using SST and fuel tube connector.
  - SST 09268-41250, 09268-45012
- (f) Wipe off any splattered gasoline.



- (g) Connect the hand-held tester to the DLC3. (See step 1. (a) to (e) above)
- (h) Reconnect the negative (-) terminal cable to the battery.
- (i) Turn the ignition switch ON.
- (j) Measure the fuel pressure.

**Fuel pressure:** 

Approx. 285 kPa (2.9 kgf/cm<sup>2</sup>, 41 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
- (k) Remove the hand-held tester from the DLC3.
- (I) Start the engine.
- (m) Measure the fuel pressure at idling.

## **Fuel pressure:**

## Approx. 218 kPa (2.2 kgf/cm<sup>2</sup>, 31 psi)

If pressure is not as specified, check the vacuum sensing hose and fuel pressure regulator.

- (n) Stop the engine.
- (o) Disconnect the vacuum hose from the pressure regulator and block with a plug.
- (p) Start the engine.

#### **Fuel pressure:**

## Approx. 285 kPa (2.9 kgf/cm<sup>2</sup>, 41 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 09268-45012
- (r) Reconnect the negative (-) terminal cable to the battery.
- (s) Check for fuel leaks. (See page FI-1)