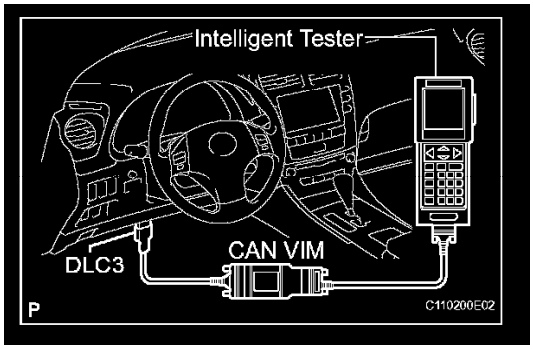
Fuel Pressure: Testing and Inspection

ON-VEHICLE INSPECTION

1. CHECK FUEL PUMP OPERATION AND FOR FUEL LEAKS



   a. Connect the intelligent tester to the DLC3.
      1. Turn the engine switch on (IG).

         NOTE: Do not start the engine.

      2. Push the intelligent tester main switch ON.
      3. Select the given menus: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / FUEL PUMP / SPD.

   b. Check the fuel pump operation.
      1. Check for pressure in the fuel inlet tube from the fuel line. Check that sound of fuel flowing in the fuel tank can be heard.

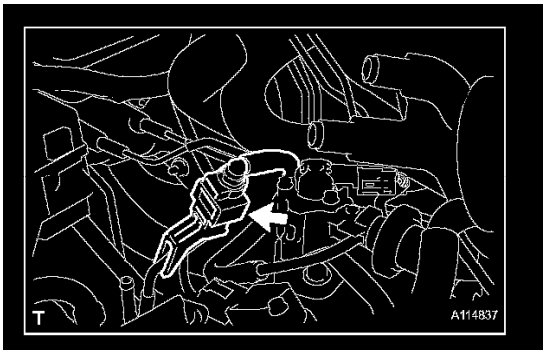
         If no sound can be heard, check the integration relay, fuel pump, ECM and wiring connector.

   c. Check for fuel leaks.
      1. Check that there are no fuel leaks anywhere on the system after performing maintenance.

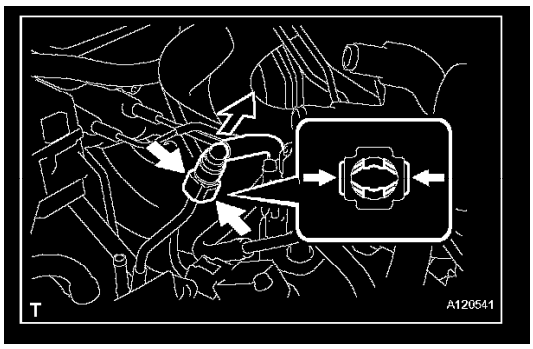
         If there is a fuel leak, repair or replace parts as necessary.

2. CHECK FUEL PRESSURE

   a. Check that the battery positive voltage is **12 V**.
   b. Discharge the fuel system pressure.
   c. Disconnect the cable from the negative (-) battery terminal.

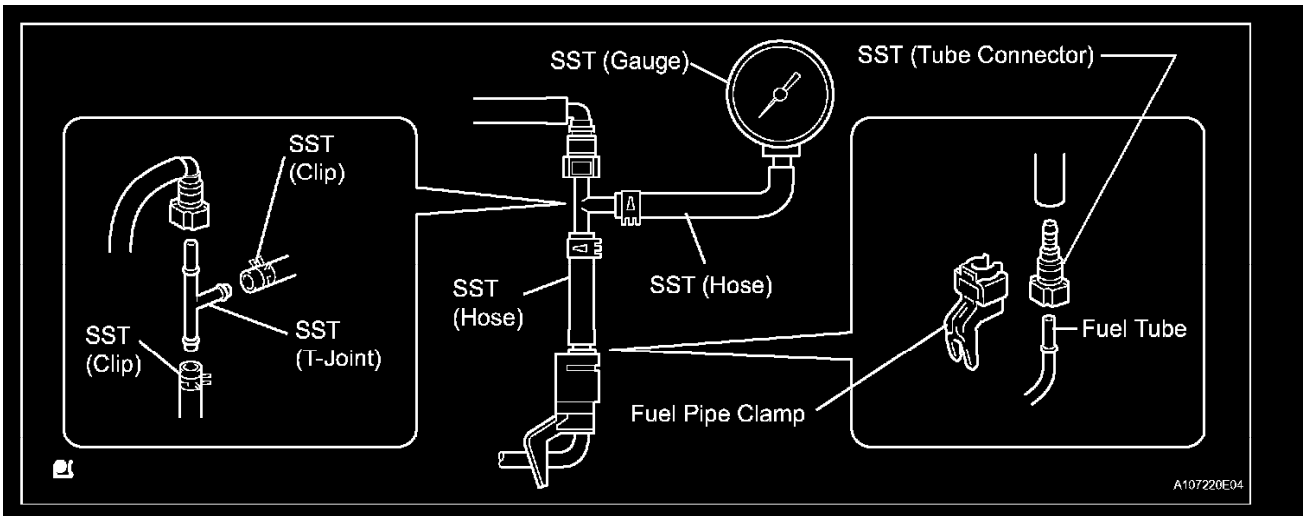


   d. Pinch and pull the fuel pump main tube.
      1. Remove the fuel pipe clamp.



2. Disconnect the fuel tube.

CAUTION:
- **Always read the precautions before disconnecting the fuel tube connector (quick type A).**
- **The fuel tube may spray fuel as a result of pressure that remains in the tube. Do not allow fuel to be sprayed in the engine compartment.**



e. Install SST (pressure gauge) as given in the illustration.

SST 09268-31010 (90467-13001, 95336-08070, 09268-41500), 09268-45014 (09268-41200, 09268-41220, 09268-41250)

f. Wipe off any gasoline.
g. Reconnect the cable to the negative (-) battery terminal.

h. Operate the fuel pump.
1. Connect the intelligent tester to the DLC3.
2. Turn the engine switch on (IG).

NOTE: Do not start the engine.

3. Push the intelligent tester main switch ON.
4. Select the given menus: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / FUEL PUMP/SPD.

i. Measure the fuel pressure.

Fuel pressure: **196 to 588 kPa (2 to 6 kgf/sq.cm, 28 to 85 psi)**

HINT
- If the fuel pressure is higher than the specification, replace the fuel pump (built-in fuel tank).
- If the pressure is lower than the specification, check the fuel hoses, connections, and fuel pump (built-in fuel tank).

j. Start the engine.

k. Measure the fuel pressure at idle.

Fuel pressure: **196 to 588 kPa (2 to 6 kgf/sq.cm, 28 to 85 psi)**

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

l. Stop the engine.

m. Check that the fuel pressure remains as specified for **5 minutes** after the engine has stopped.

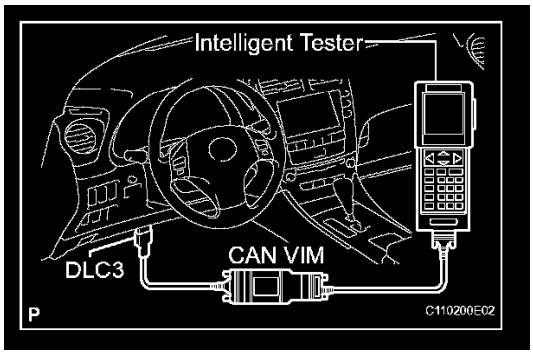
Fuel pressure: **147 kPa (1.5 kgf/sq.cm, 21 psi)** or more

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

n. After checking the fuel pressure, disconnect the cable from the negative (-) battery terminal and carefully remove SST and the fuel tube connector to prevent fuel from spilling.

o. Reconnect the fuel pump main tube.
p. Check for fuel leaks.

3. CHECK FUEL PRESSURE (for High Pressure)



a. Connect the intelligent tester to the DLC3.
   1. Turn the engine switch on (IG).
   2. Push the intelligent tester main switch ON.

b. Start and warm up the engine.
c. Run the engine at idle.
d. Select the given menus: DIAGNOSIS / ENHANCED OBD II / DATA LIST / FUEL PRESS.

e. Check the high pressure side fuel pressure.

Fuel pressure: **3.5 to 4.5 MPa (35.7 to 45.9 kgf/sq.cm, 508 to 653 psi)**

If the pressure is not as specified, check the fuel pump, high pressure side fuel pump, fuel pressure sensor and wirings.

f. Stop the engine.

4. PERFORM INITIALIZATION

a. Perform initialization.

HINT: Certain systems need to be initialized after reconnecting the cable to the negative (-) battery terminal.