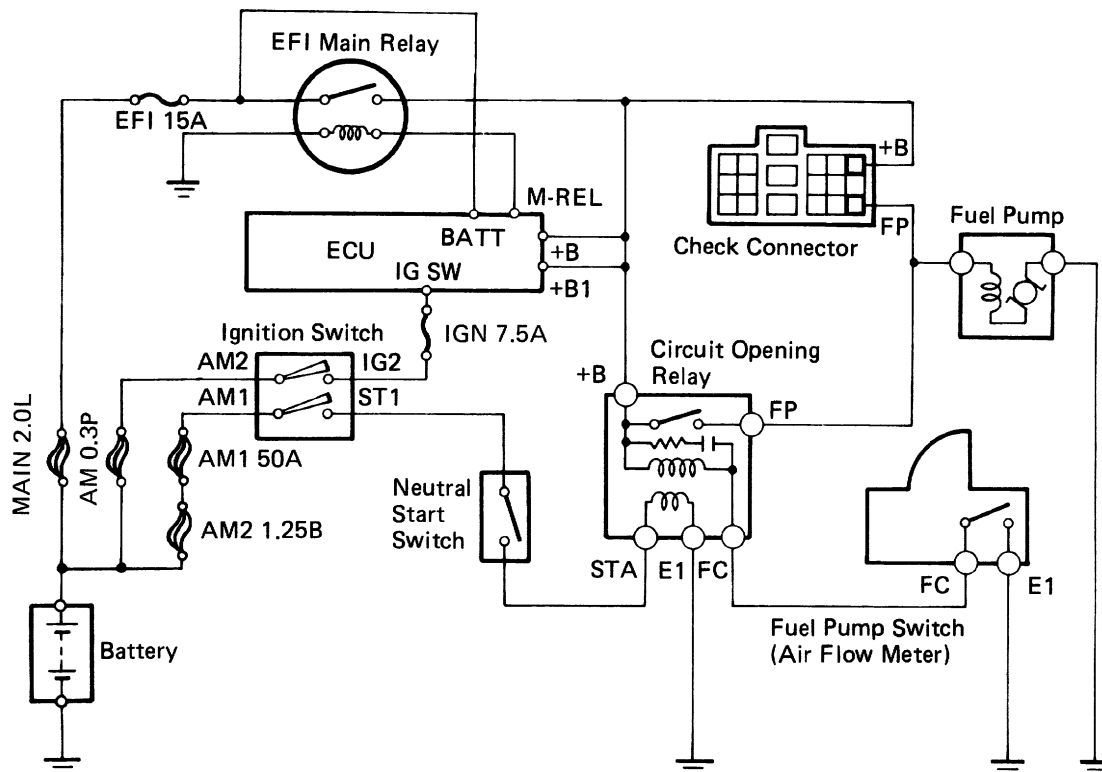
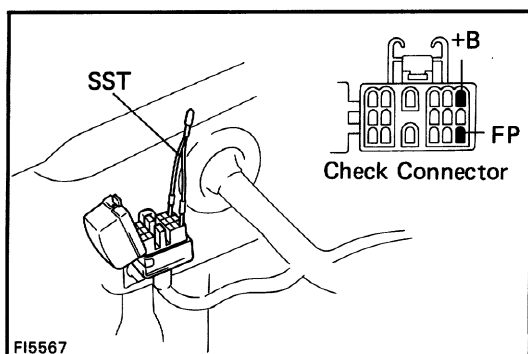


The diagram illustrates the internal components and flow of a magnetic pump. The cross-sectional view on the left shows the following parts:

- OUTLET**: The top exit port for the pumped fluid.
- Check Valve**: A valve located just below the outlet to prevent backflow.
- Bearing**: Two bearings are shown, one supporting the impeller shaft at the bottom and another supporting the armature shaft in the middle.
- Relief Valve**: A valve on the side that opens if the pressure inside the pump becomes too high.
- Armature**: The central rotating component that is magnetically coupled to the impeller.
- Magnet**: The outer rotating component that drives the armature.
- Bearing**: The bottom bearing supporting the impeller shaft.
- Impeller**: The bottom rotating component that draws fluid into the pump.
- INLET**: The bottom entrance port for the fluid.

The top-down view on the right shows the impeller's teeth meshing with the casing's teeth. Arrows indicate the flow direction: **INLET** (fluid enters), **OUTLET** (fluid exits), and a central arrow showing the direction of rotation.





ON-VEHICLE INSPECTION

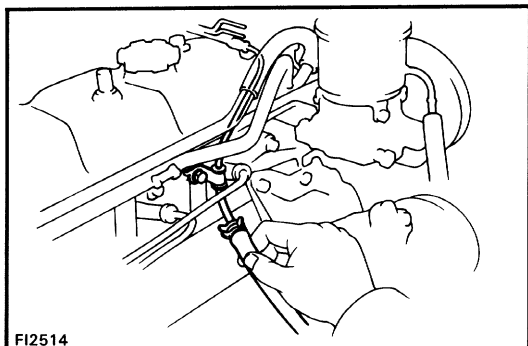
1. INSPECT FUEL PUMP OPERATION

- (a) Turn the ignition switch ON.

HINT: Do not start the engine.

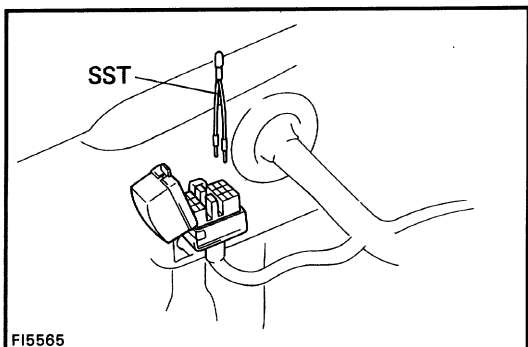
- (b) Using SST, connect terminals +B and FP of the check connector.

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- (c) Check that there is pressure in the fuel return hose.

HINT: At this time, you will hear fuel return noise.



- (d) Remove SST.

- (e) Turn the ignition switch OFF.

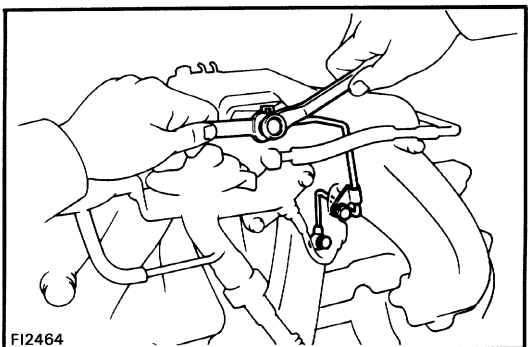
If there is no pressure, check the following parts:

- Fusible links
- Fuse (EFI 15A, IGN 7.5A)
- EFI main relay
- Fuel pump
- ECU
- Wiring connections

2. INSPECT FUEL PRESSURE

- (a) Check the battery voltage above 11 volts.

- (b) Disconnect the cable from the negative (-) terminal of the battery.

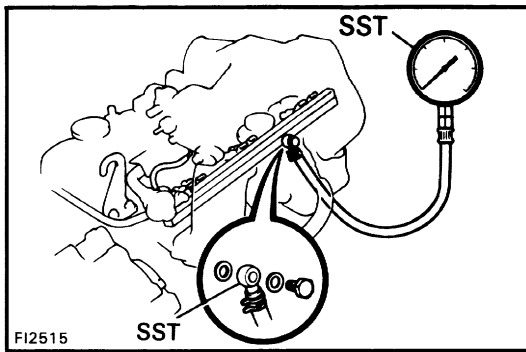


- (c) Disconnect the cold start injector connector.

- (d) Put a suitable container or shop towel under the cold start injector pipe.

- (e) Remove the two union bolts, four gaskets, pipe clamp bolt and cold start injector pipe.

HINT: Slowly loosen the union bolt.



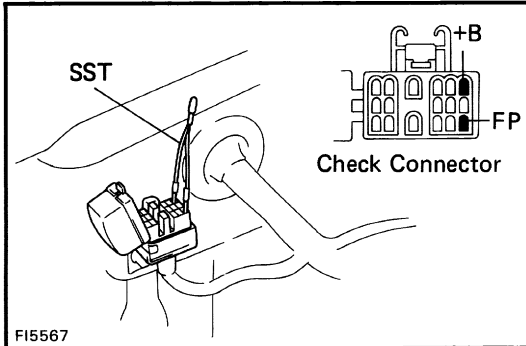
- (f) Install SST (pressure gauge) to the delivery pipe with two new gaskets and union bolt.

SST 09268-45012 (09268-41080)

Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)

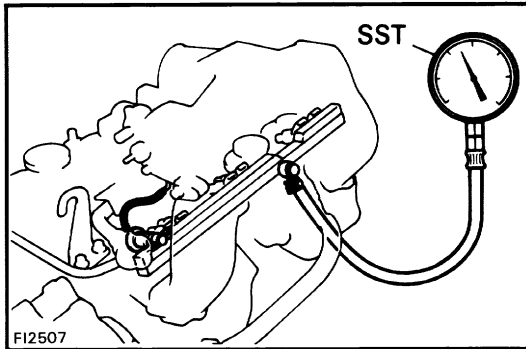
- (g) Wipe off any splattered gasoline.

- (h) Reconnect the battery negative (-) cable.



- (i) Using SST, connect terminals +B and FP of the check connector.

SST 09843-18020



- (j) Turn the ignition switch ON.

- (k) Measure the fuel pressure.

Fuel pressure: 255 – 314 kPa

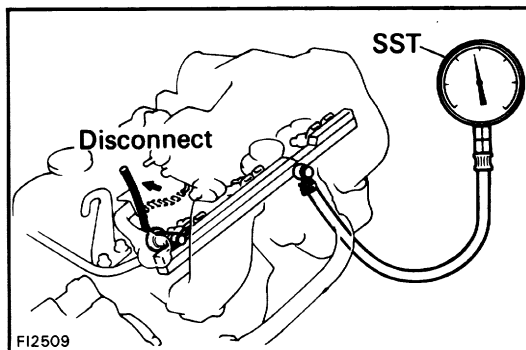
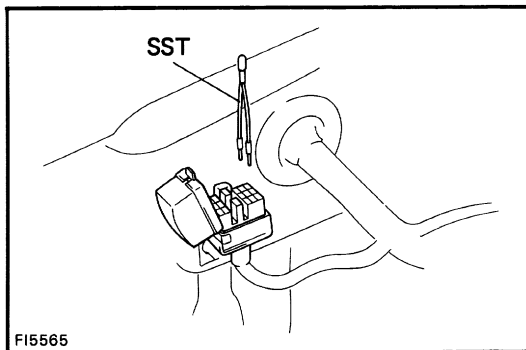
(2.6 – 3.2 kgf/cm², 37 – 46 psi)

If pressure is high, replace the fuel pressure regulator.

If pressure is low, check the following parts:

- Fuel hoses and connection
- Fuel pump
- Fuel filter
- Fuel pressure regulator

- (l) Remove SST.



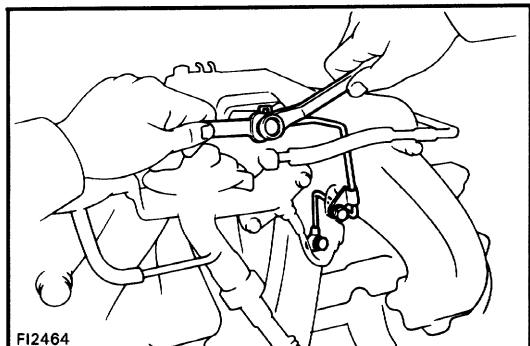
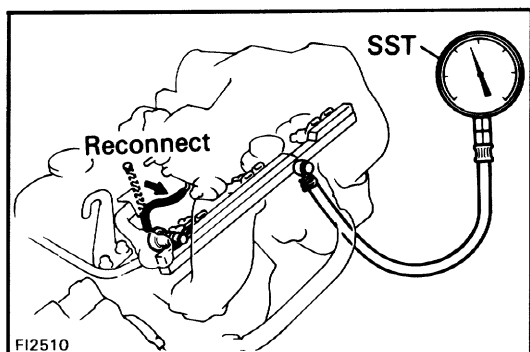
- (m) Start the engine.

- (n) Disconnect the vacuum sensing hose from the fuel pressure regulator.

- (o) Measure the fuel pressure at idling.

Fuel pressure: 255 – 314 kPa

(2.6 – 3.2 kgf/cm², 37 – 46 psi)



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

(q) Measure the fuel pressure at idling.

Fuel pressure: 226 – 265 kPa

(2.3 – 2.6 kgf/cm², 33 – 37 psi)

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

(r) Stop the engine. Check that the fuel pressure remains 147 kPa (1.5 kgf/cm², 21 psi) or more for 5 minutes after the engine is turned off.

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

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

(t) Install the cold start injector pipe with four new gaskets, the union bolts and pipe clamp bolt.

Torque:

Union bolt 19 N·m (195 kgf·cm, 14 ft·lbf)

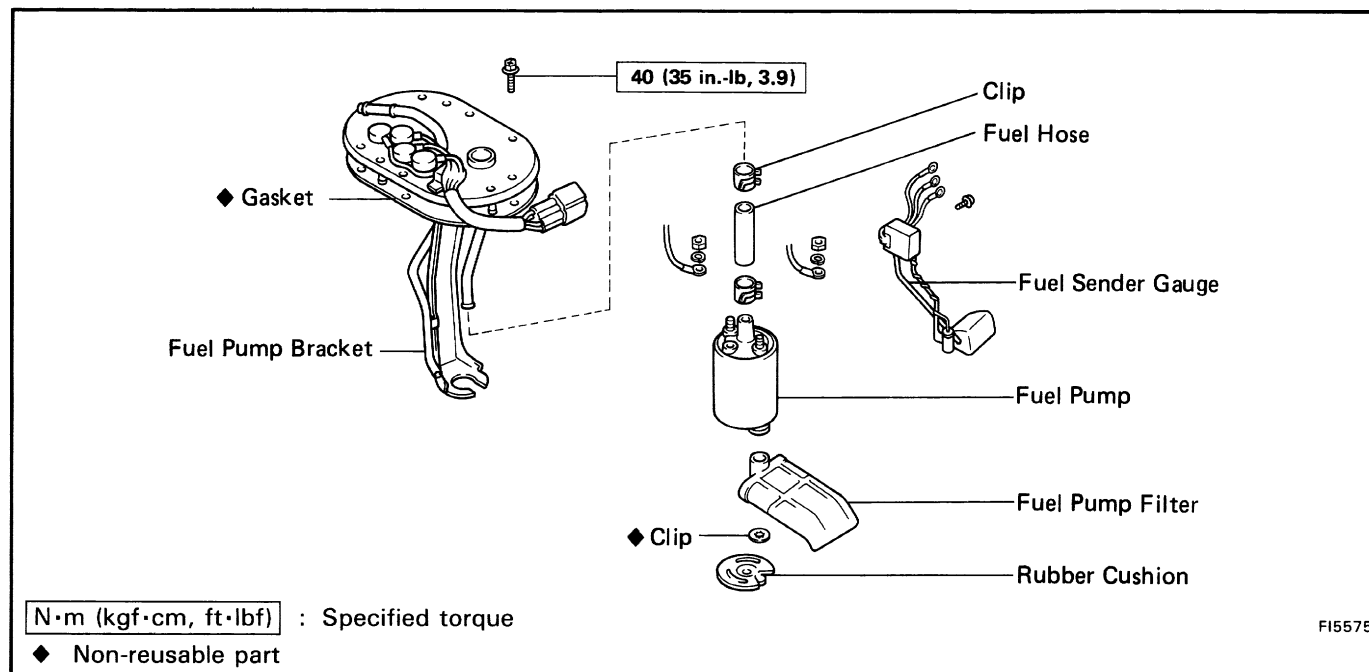
Clamp bolt 12 N·m (120 kgf·cm, 9 ft·lbf)

(u) Reconnect the cold start injector connector.

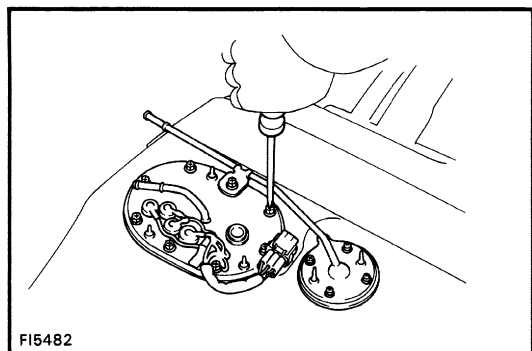
(v) Reconnect the cable to the negative (–) terminal of the battery.

(w) Check for fuel leakage.

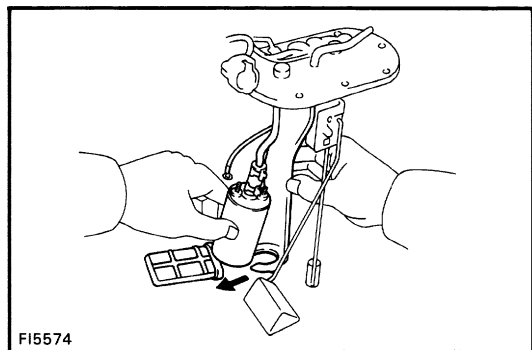
REMOVAL OF FUEL PUMP



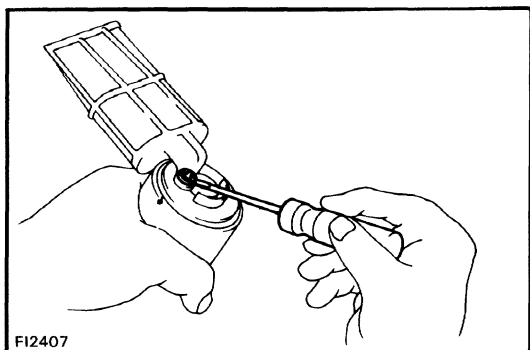
1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY
2. REMOVE SERVICE HOLE COVER



3. REMOVE FUEL PUMP BRACKET FROM FUEL TANK
 - (a) Remove the screw of the wire clamp.
 - (b) Remove the screws, pull out the pump bracket.



4. REMOVE FUEL PUMP FROM FUEL PUMP BRACKET
 - (a) Pull off the lower side of the fuel pump from the bracket.
 - (b) Remove the two nuts, and disconnect the wires from the fuel pump.
 - (c) Remove the fuel pump from the fuel hose.



5. REMOVE FUEL PUMP FILTER FROM FUEL PUMP

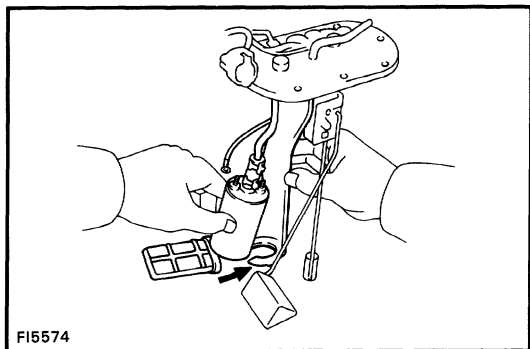
- (a) Remove the rubber cushion.
- (b) Using a small screwdriver, remove the clip.
- (c) Pull out the pump filter.

INSTALLATION OF FUEL PUMP

(See page FI-54)

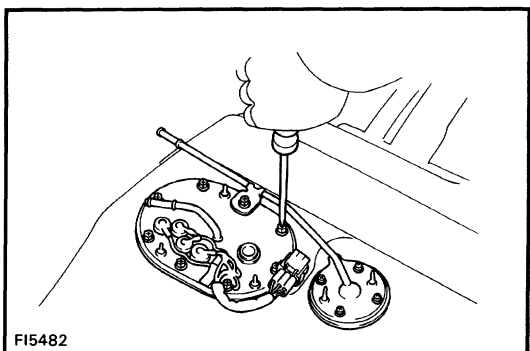
1. INSTALL FUEL PUMP FILTER TO FUEL PUMP

- (a) Install the pump filter with a new clip.
- (b) Install the rubber cushion.



2. INSTALL FUEL PUMP TO FUEL PUMP BRACKET

- (a) Connect the fuel hose to the outlet port of the fuel pump.
- (b) Connect the wires to the fuel pump with the two nuts.
- (c) Push the lower side of the fuel pump, and install the fuel pump.



3. INSTALL FUEL PUMP BRACKET TO FUEL TANK

- (a) Install a new gasket and the pump bracket with the screws.

Torque: 3.9 N-m (40 kgf-cm, 35 in.-lbf)

- (b) Connect the wire clamp with the screw.

Torque: 2.0 N-m (20 kgf-cm, 17 in.-lbf)

4. INSTALL SERVICE HOLE COVER

5. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY