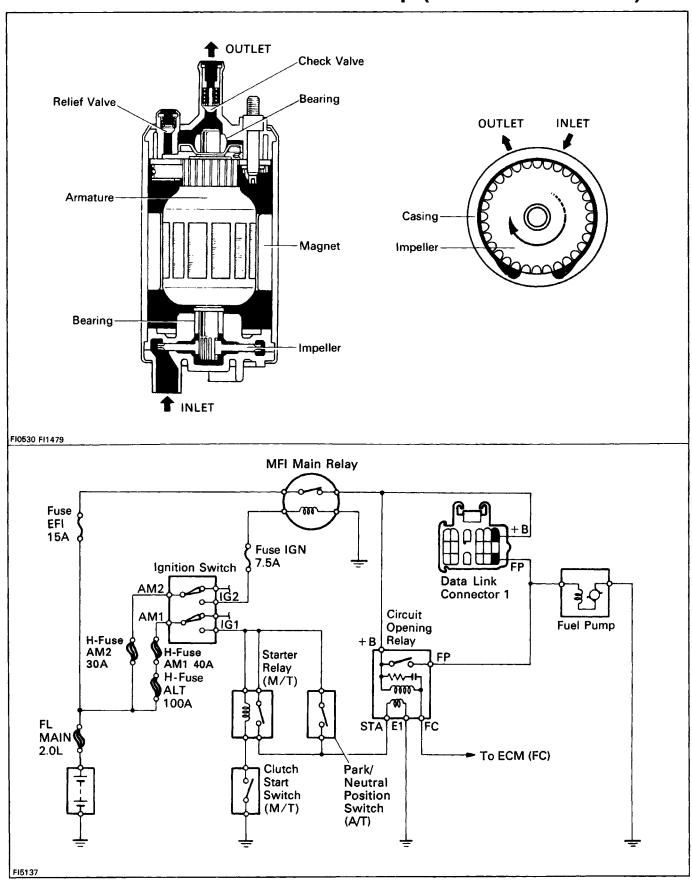
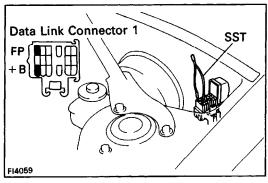
FUEL SYSTEM Fuel Pump (4A-FE and 5S-FE)



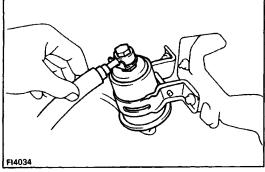


ON-VEHICLE INSPECTION

1. CHECK FUEL PUMP OPERATION

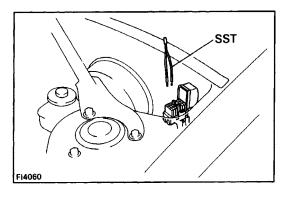
- (a) Using SST, connect terminals +B and FP of the data link connector 1. SST 09843-18020
- (b) Turn the ignition switch ON.

NOTICE: Do not start the engine.



(c) Check that there is pressure in the hose from the fuel filter.

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



(d) Remove SST. SST 09843-18020

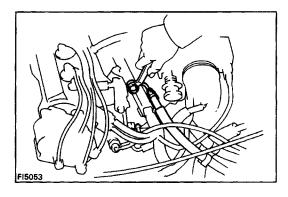
- (e) Turn the ignition switch OFF. If there is no pressure, check the following parts:
- Fusible link
- Muse (AM2 30A)
- Fuses (EFI 15A, IGN 7.5A)
- MFI main relay
- Fuel pump
- Wiring connections

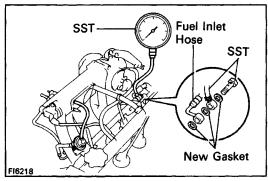
2. (4A-FE)

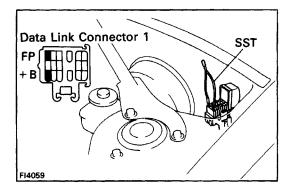
CHECK FUEL PRESSURE

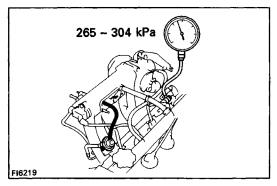
- (a) Check that the battery voltage is above 12 volts.
- (b) Disconnect the cable from the negative (-) terminal of the battery.

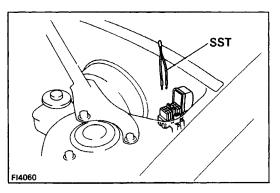
CAUTION: Work must be started after approx. 20 seconds or longer from the time the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.











- (c) Remove the union bolt and two gaskets, and disconnect the fuel inlet hose from the delivery pipe. HINT:
- Put a suitable container or shop towel under the cold start injector pipe.
- Slowly loosen the union bolt.
- (d) Install the fuel inlet hose and SST (pressure gauge) to the delivery pipe with three new gaskets and SST

(union bolt).

SST 09268-45012

Torque: 29 N-m (300 kgf-cm, 22 ft-lbf)

- (e) Wipe off any splattered gasoline.
- (f) Using SST, connect terminals +B and FP of the data link connector 1. SST 09843–18020
- (g) Reconnect the battery negative (–) cable.

- (h) Turn the ignition switch ON.
- (i) Measure the fuel pressure.

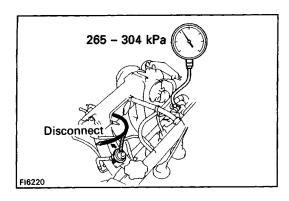
Fuel pressure: 265 - 304 kPa

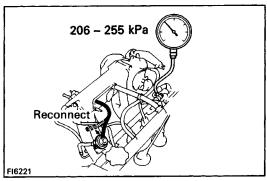
(2.7 - 3.1 kgf/cm2, 38 - 44 psi)

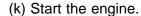
If pressure is high, replace the fuel pressure regulator. If pressure is low, check the following parts:

- Fuel hoses and connections
- Fuel pump
- Fuel filter
- Fuel pressure regulator
- (i) Remove SST.

SST 09843-18020

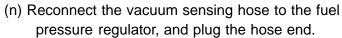






- (1) Disconnect the vacuum sensing hose from the fuel pressure regulator.
- (m) Measure the fuel pressure at idle.

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



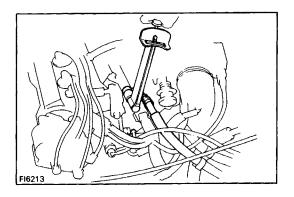
(0) Measure the fuel pressure at idle.

Fuel pressure: 206 – 255 kPa (2.1 – 2.6 kgf/cm², 31 – 37 psi)

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

(p) 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.

 (q) After checking fuel pressure, disconnect the battery negative (–) cable and carefully remove the SST to prevent gasoline from splashing. SST 09268–45012



(r) Reconnect the fuel inlet hose to delivery pipe with two new gaskets and the union bolt.

Torque: 29 N-m (300 kgf-cm, 29 ft-lbf)

- (s) Reconnect the cable to the negative (–) terminal of the battery.
- (t) Check for fuel leakage. (See page FI-10)

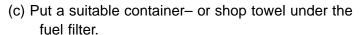
P03000

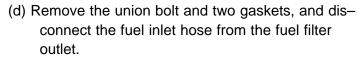
3. (5S-FE)

CHECK FUEL PRESSURE

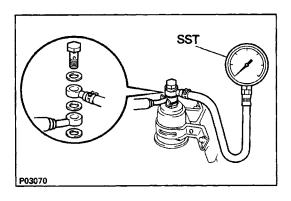
- (a) Check that the battery voltage is above 12 volts.
- (b) Disconnect the cable from the negative (–) terminal of the battery.

CAUTION: Work must be started after approx. 20 seconds or longer from the time the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.





HINT: Slowly loosen the union bolt.



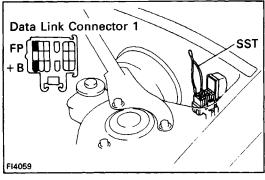
(e) Install the fuel inlet hose and SST (pressure gauge) to the fuel filter outlet with three new gaskets and the union bolt.

SST 09268-45012

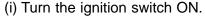
Torque: 29 N-m (300 kgf-cm, 22 ft-lbf)

(f) Wipe off any splattered gasoline.

Reconnect the battery negative (–) cable.



(h) Using SST, connect terminals +B and FP of the data link connector 1. SST 09843–18020



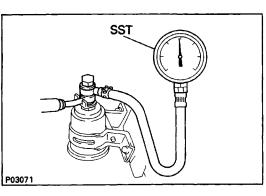
(j) Measure the fuel pressure.

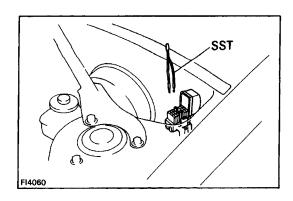
Fuel pressure: 265 - 304 kPa

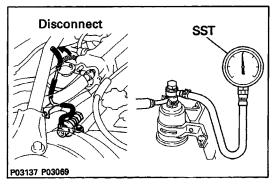
 $(2.7 - 3.1 \text{ kgf/cm}^2, 38 - 44 \text{ psi})$

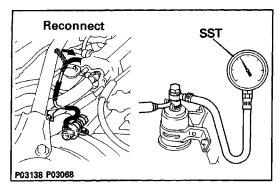
If pressure is high, replace the fuel pressure regulator. If pressure is low, check the following parts:

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









(k) Remove SST. SST 09843-18020

- (I) Start the engine.
- (m) Disconnect the vacuum sensing hose from the air intake chamber and plug the air intake chamber outlet.
- (n) Measure the fuel pressure at idle.

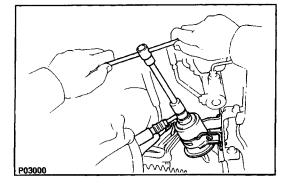
Fuel pressure: 265 - 304 kPa (2.7 - 3.1 kgf/cm², 38 - 44 psi)

- (o) Reconnect the vacuum sensing hose to the air intake chamber.
- (p) Measure the fuel pressure at idle.

Fuel pressure: 206 – 255 kPa (2.1 – 2.6 kgf/cm², 31 – 37 psi)

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

- (q) 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.
- (r) After checking fuel pressure, disconnect the battery negative (–) cable and carefully remove the SST to prevent gasoline from splashing. SST 09268–45012



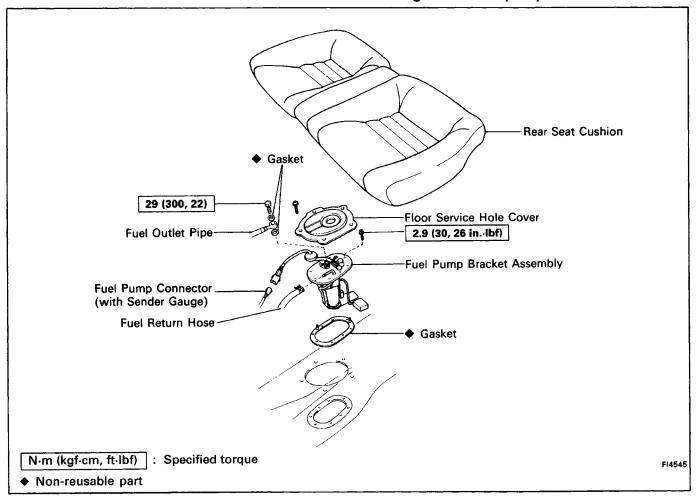
(s) Connect the fuel inlet hose with two new gaskets and the union bolt.

Torque: 29 N-m (300 kgf-cm, 22 ft-lbf)

- (t) Reconnect the cable to the negative H terminal of the battery.
- (u) Check for fuel leaks. (See page FI-10)

REMOVAL OF FUEL PUMP

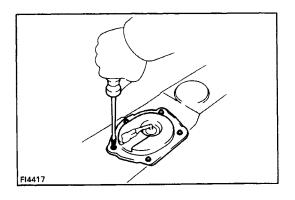
CAUTION: Do not smoke or work near an open flame when working on the fuel pump.



1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY

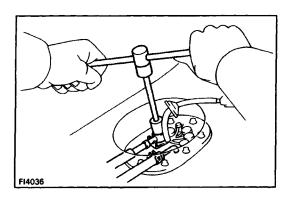
CAUTION: Work must be started after approx. 20 seconds or longer from the time the ignition switch is turned to the "LOCK" position and the negative (–) terminal cable is disconnected from the battery.

2. REMOVE REAR SEAT CUSHION



3. REMOVE FLOOR SERVICE HOLE COVER

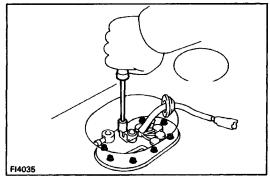
- (a) Disconnect the fuel pump (with fuel sender gauge) connector.
- (b) Remove the five screws and service hole cover.



4. DISCONNECT FUEL PIPE AND HOSE FROM FUEL PUMP BRACKET

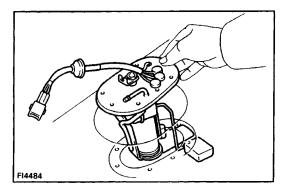
CAUTION: Remove the fuel filter cap to prevent the fuel from flowing out.

- (a) Remove the union bolt and two gaskets, and disconnect the outlet pipe from the pump bracket.
- (b) Disconnect the return hose from the pump bracket.



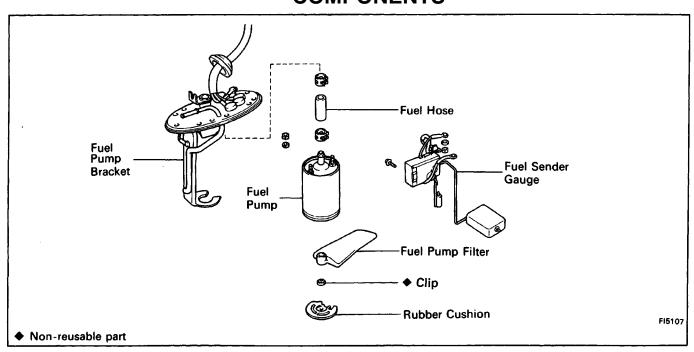
5. REMOVE FUEL PUMP BRACKET ASSEMBLY FROM FUEL TANK

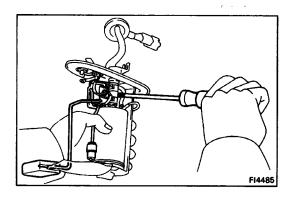
(a) Remove the eight bolts.

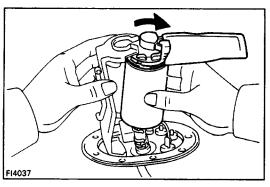


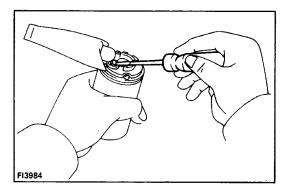
- (b) Pull out the pump bracket assembly.
- (c) Remove the gasket from the pump bracket.

COMPONENTS









DISASSEMBLY OF FUEL PUMP

(See page FI-131)

- 1. REMOVE FUEL SENDER GAUGE FROM FUEL PUMP BRACKET
 - (a) Remove the nut and spring washer, and disconnect the lead wire from the pump bracket. Disconnect the three lead wires.
 - (b) Remove the two screws and sender gauge.

2. REMOVE FUEL PUMP FROM FUEL PUMP BRACKET

- (a) Remove the nut and spring washers, and disconnect the lead wire from the fuel pump. Disconnect the two lead wires.
- (b) Pull out the lower side of the fuel pump from the pump bracket.
- (c) Disconnect the fuel hose from the fuel pump, and remove the fuel pump.
- (d) Remove the rubber cushion from the fuel pump.

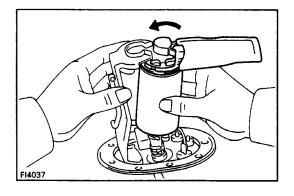
3. REMOVE FUEL PUMP FILTER FROM FUEL PUMP

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

ASSEMBLY OF FUEL PUMP

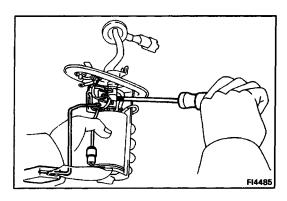
(See page **FI-131**)

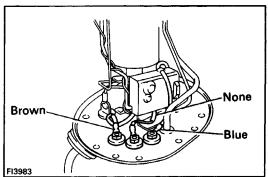
1. INSTALL FUEL PUMP FILTER TO FUEL PUMP Install the pump filter with a new clip.



2. INSTALL FUEL PUMP TO FUEL PUMP BRACKET

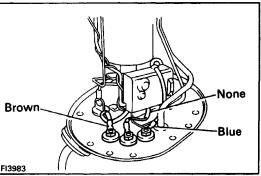
- (a) Install the rubber cushion to the fuel pump.
- (b) Connect the fuel hose to the outlet port of the fuel pump.
- (c) Connect the lead wire to the fuel pump with the spring washer and nut. Connect the two lead wires.
- (d) Install the fuel pump by pushing the lower side of the fuel pump.



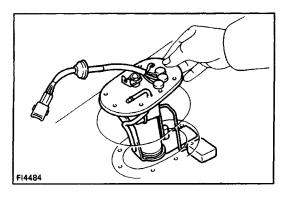


3. INSTALL FUEL SENDER GAUGE TO FUEL PUMP **BRACKET**

(a) Install the sender gauge with the two screws.



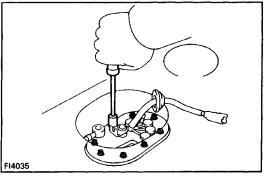
(b) Connect the lead wire to the pump bracket with the spring washer and nut. Connect the three lead wires as shown.



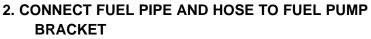
INSTALLATION OF FUEL PUMP

(See page FI-130)

- 1. INSTALL FUEL PUMP BRACKET ASSEMBLY TO FUEL **TANK**
 - (a) Install a new gasket to the pump bracket.
 - (b) Insert the pump bracket assembly into the fuel tank.



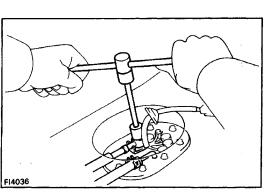
(c) Install the pump bracket with the eight bolts. Torque: 2.9 N-m (30 kgf-cm, 26 in.-lbf)

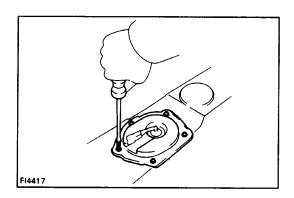


(a) Connect the outlet pipe to the pump bracket with two new gaskets and the union bolt.

Torque: 29 N-m (300 kgf-cm, 22 ft-lbf)

- (b) Connect the return hose to the pump bracket.
- 3. CHECK FOR FUEL LEAKAGE (See page FI-10)





4. INSTALL FLOOR SERVICE HOLE COVER

- (a) Install the service hole cover with the five screws.
- (b) Connect the fuel pump (with fuel sender gauge) connector.

- **5. INSTALL REAR SEAT CUSHION**
- 6. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY