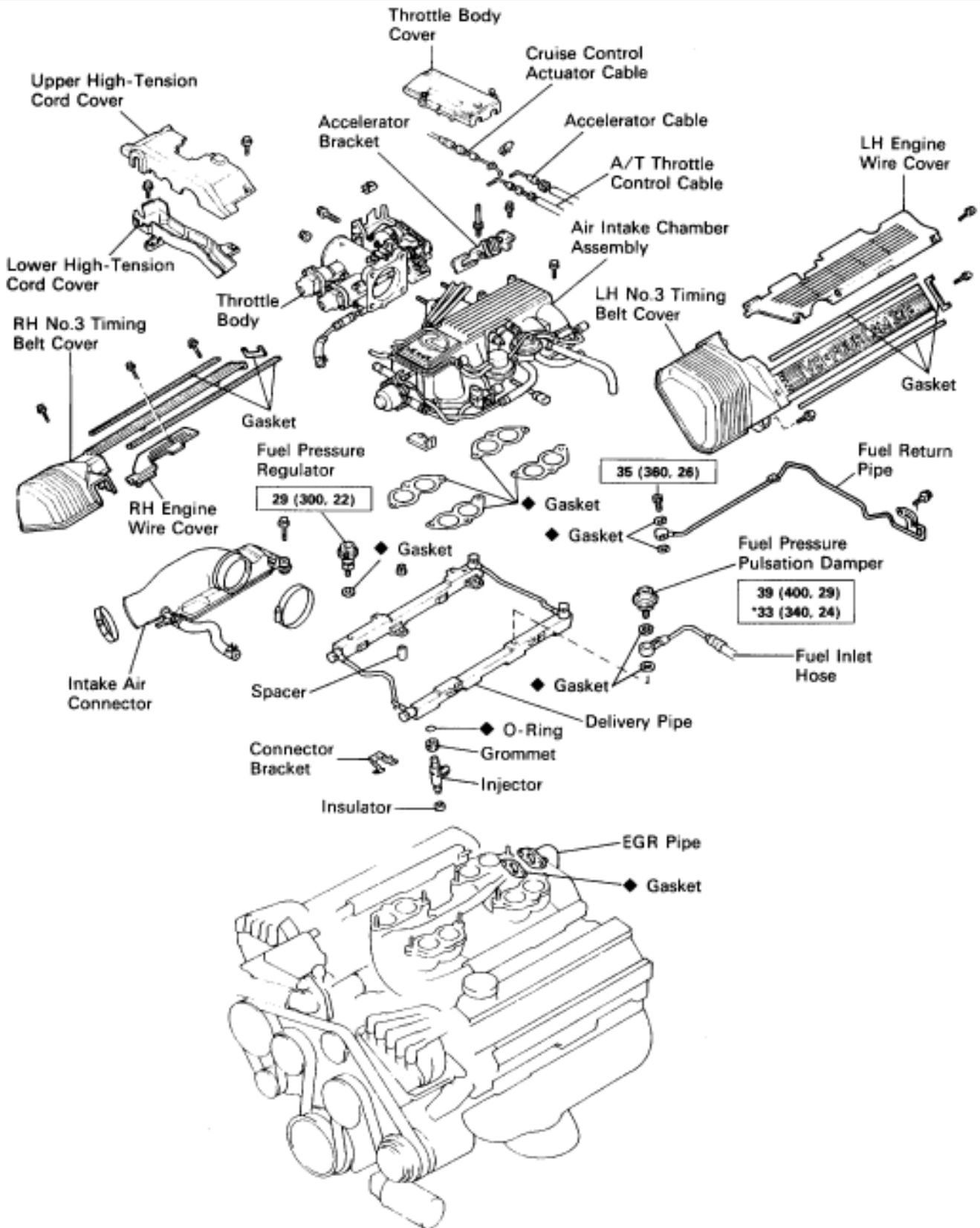




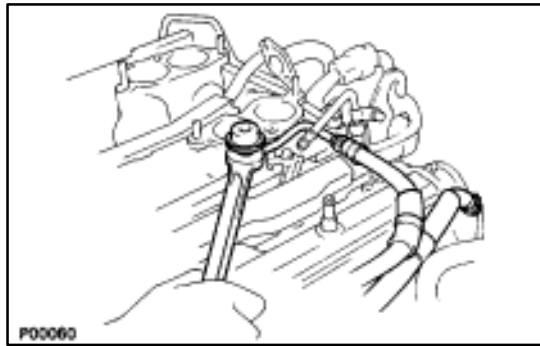
# COMPONENTS FOR REMOVAL AND INSTALLATION



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

\* For use with SST

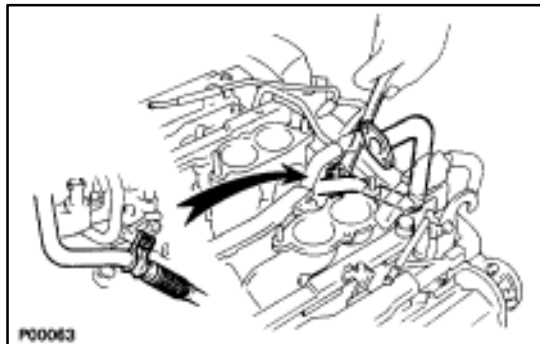


## REMOVAL OF INJECTORS

(See Components on page FI-49)

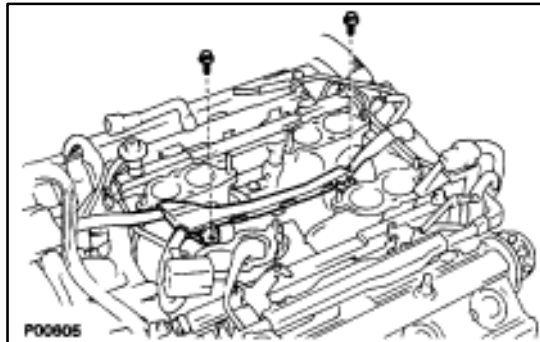
1. **REMOVE AIR INTAKE CHAMBER**  
(See steps 1 to 16 on pages FI-27 to 32)
2. **DISCONNECT FUEL INLET HOSE FROM LH DELIVERY PIPE**

Remove the pulsation damper and two gaskets, and disconnect the inlet hose.

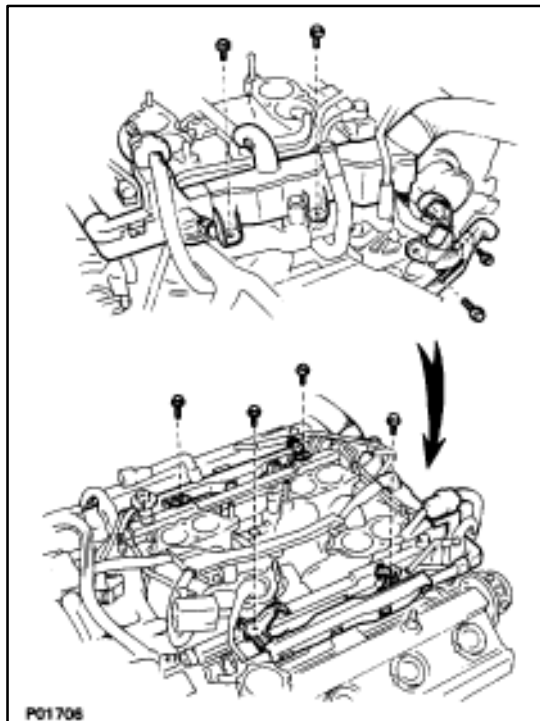


3. **DISCONNECT FUEL RETURN HOSE FROM FUEL RETURN PIPE**

4. **DISCONNECT EGR PIPE FROM RH CYLINDER HEAD**  
Remove the bolt holding the EGR pipe to the cylinder head, and disconnect the EGR pipe.

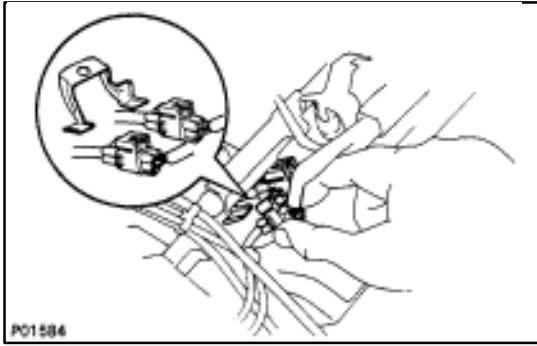


5. **DISCONNECT ENGINE WIRE FROM INTAKE MANIFOLD**  
Remove the two bolts, and disconnect the engine wire.

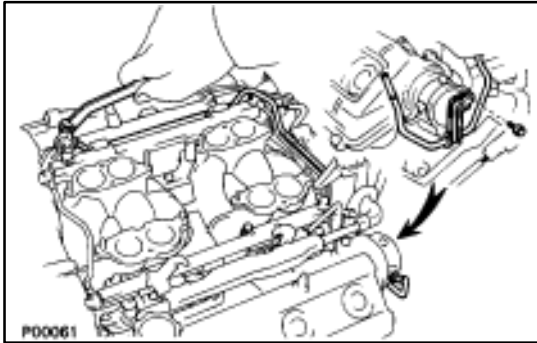


6. **DISCONNECT ENGINE WIRE FROM DELIVERY PIPES AND REAR WATER BY-PASS JOINT**

- (a) Remove the four bolts holding the engine wire to the delivery pipes, and disconnect the engine wire from the delivery pipes.
- (b) Remove the two bolts holding the engine wire to the rear water by-pass joint, and disconnect the engine wire from the rear water by-pass joint.
- (c) Remove the two bolts holding the engine wire to the rear side of the RH cylinder head, and disconnect the engine wire from the RH cylinder head.

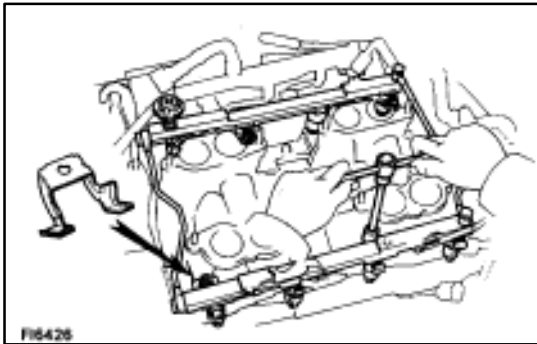


- (d) Disconnect the two engine wire connectors from the connector bracket on the front side of the LH delivery pipe.
- (e) Disconnect the eight injector connector.



## 7. REMOVE FUEL RETURN PIPE

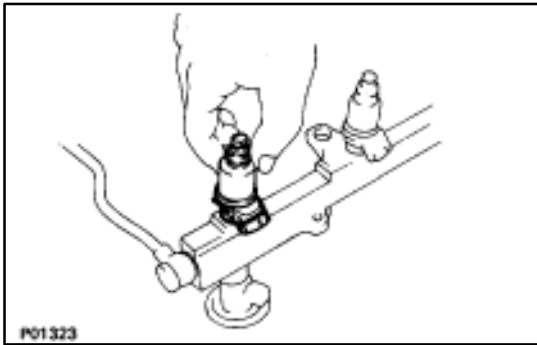
- (a) Remove the bolt holding the return pipe to the LH cylinder head.
- (b) Remove the union bolt and two gaskets and return pipe.



## 8. REMOVE DELIVERY PIPES AND INJECTORS

- (a) Remove the four nuts holding the delivery pipe to the intake manifold.
- (b) Remove the connector bracket, the two delivery pipes and eight injector assembly, four spacers and eight insulators.

**NOTICE:** Be careful not to drop the injectors, when removing the delivery pipe.

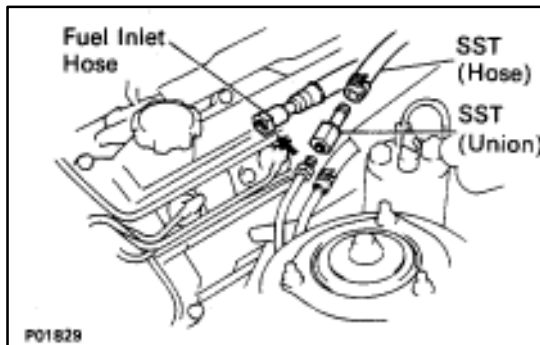
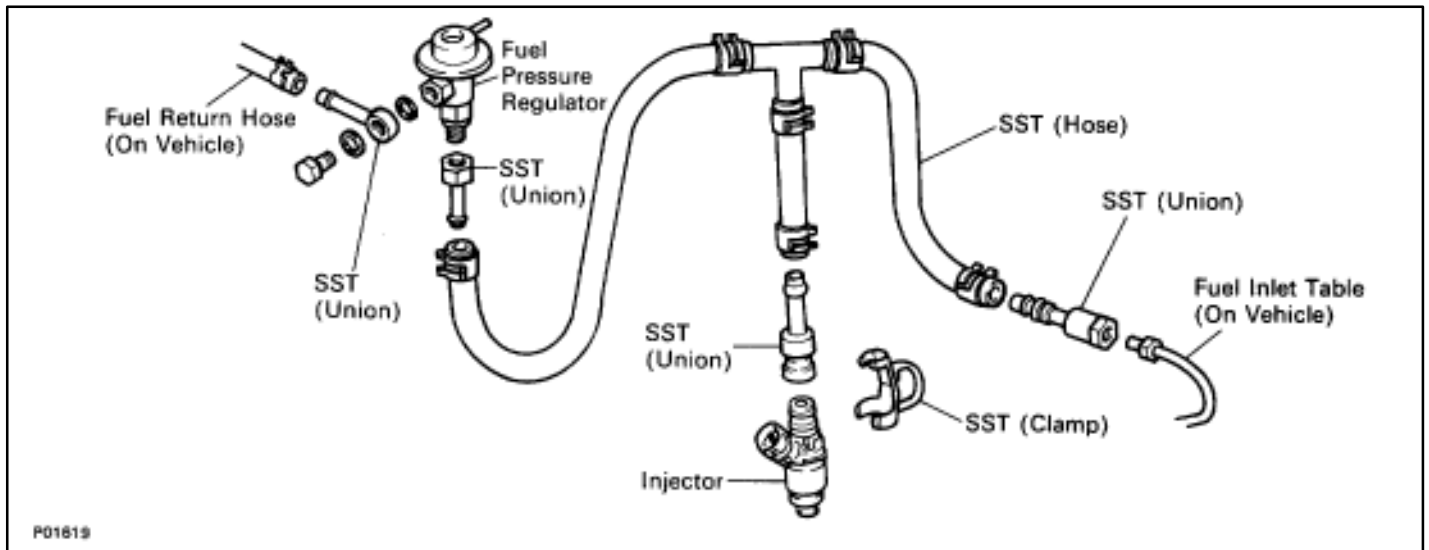


- (c) Pull out the eight injectors from the delivery pipes.
- (d) Remove the O-ring and grommet from each injector.

## INSPECTION OF INJECTORS

### 1. INSPECT INJECTOR INJECTION

**CAUTION:** Keep injector clear of sparks during the test.



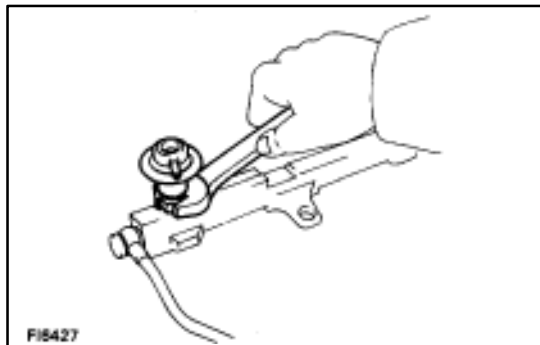
- Disconnect the fuel inlet hose from the fuel tube.
- Connect SST (hose) to the fuel inlet tube with SST (union). Tighten the flare nut on the fuel tube.

SST 09268-41045 (90405-52010)

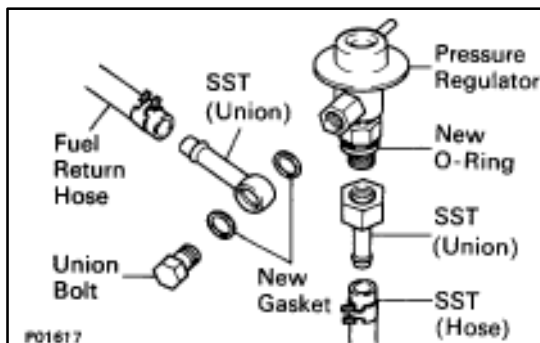
**Torque: 30 N·m (310 kgf·cm, 22 ft·lbf)**

HINT: Use SST. (See page [FI-15](#))

SST 09631-22020



- Loosen the lock nut, and remove the pressure regulator from the RH delivery pipe. Remove the O-ring from the pressure regulator.



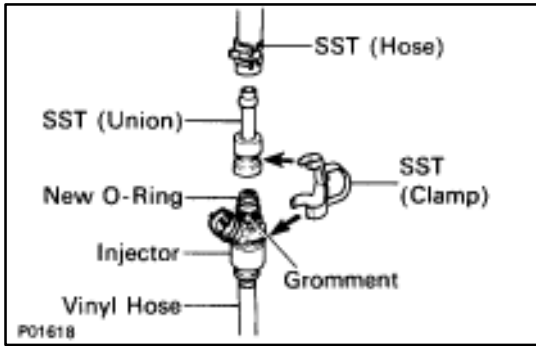
- Install a new O-ring to the fuel inlet of the pressure regulator.

- Connect SST (hose) to the pressure regulator with SST (union). Tighten the lock nut on the pressure regulator.
- SST 09268-41045 (09268-52010)

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

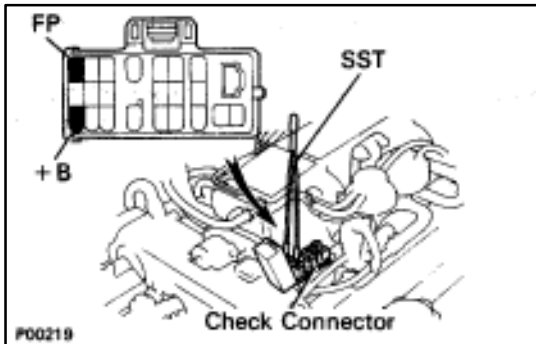
- Connect the fuel return hose to the fuel outlet of the pressure regulator with SST (union), two new gaskets and union bolt.

SST 09268-41045 (09268-41070)



- (g) Install the grommet and a new O-ring to the injector.
- (h) Connect SST (hose) to the injector with SST (union), and hold the injector and union with SST (clamp).  
SST 09268-41045

(i) Put the injector into the graduated cylinder.  
HINT: Install a suitable vinyl hose onto the injector to prevent gasoline from splashing out.

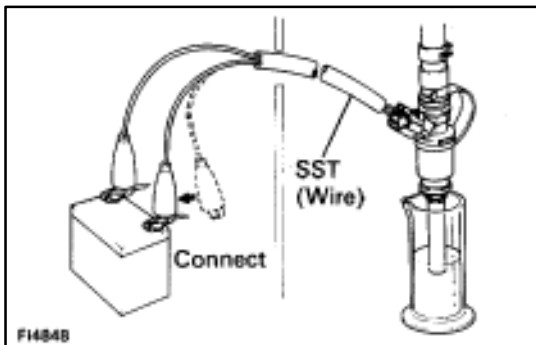


- (j) Using SST, connect terminals +B and FP of the check ("DIAGNOSIS") connector.

SST 09843-18020

- (k) Reconnect the cable to negative (-) terminal of battery.
- (l) Turn the ignition switch ON.

**NOTICE: Do not start the engine.**



- (m) Connect SST (wire) to the injector and battery for 15 seconds, and measure the injection volume with a graduated cylinder. Test each injector two or three times.

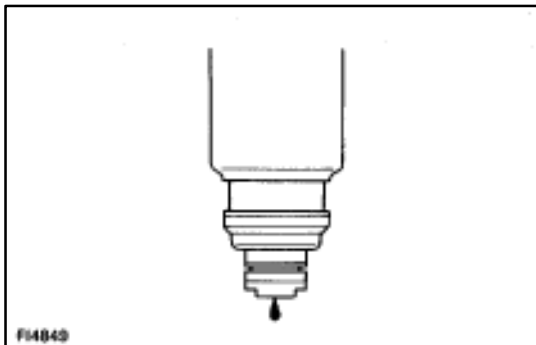
SST 09842-30070

**Volume: 55-70 cc (3.4-4.3 cu in.) per 15 sec.**

**Difference between each injector:**

**10 cc (0.6 cu in.) or less**

If the injection volume is not as specified, replace the injector.



## 2. INSPECT LEAKAGE

- (a) In the condition above, disconnect the test probes of SST (wire) from the battery and check the fuel leakage from the injector.

SST 09842-30070

**Fuel drop: One drop or less per minute**

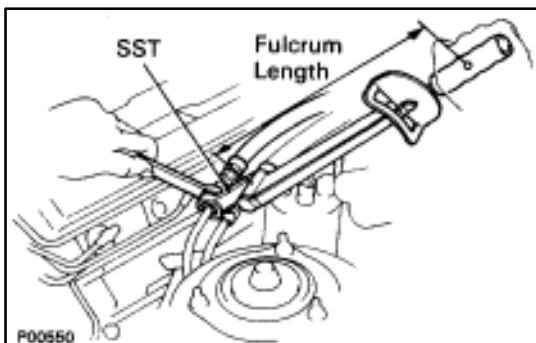
- (b) Disconnect the battery negative (-) cable.
- (c) Remove SST.

SST 09268-41045 and 09843-18020

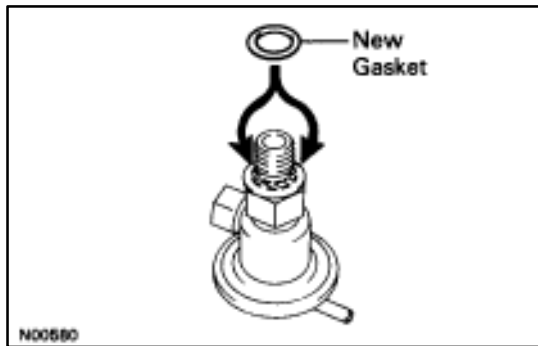
- (d) Reconnect the fuel inlet hose to the fuel tube.

**Torque: 30 N·m (310 kgf·cm, 22 ft·lbf)**

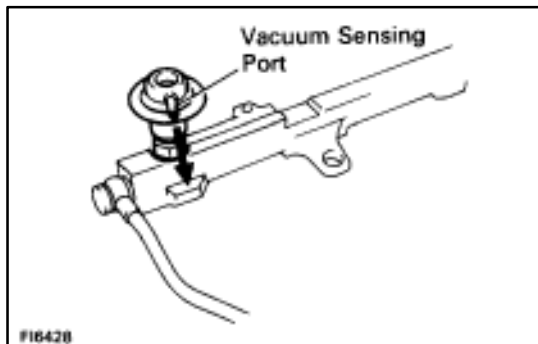
HINT: Use a torque wrench with a fulcrum length of 30 cm (11.81 in.).



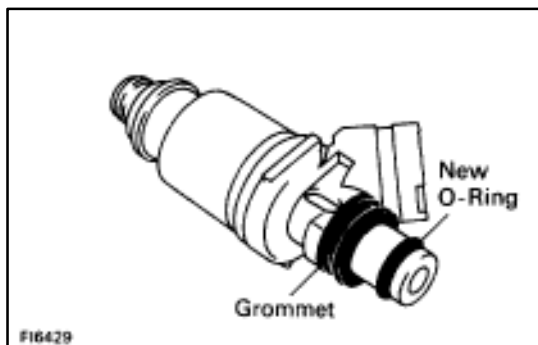




- (e) Reinstall the fuel pressure regulator to the RH delivery pipe.
- Fully loosen the lock nut on the pressure regulator.
  - Apply a light coat of gasoline to a new O-ring, and install it to the pressure regulator.



- Completely insert the pressure regulator into the delivery pipe by hand.
- Turn the pressure regulator counterclockwise until the vacuum sensing port faces in the direction indicated in the illustration.

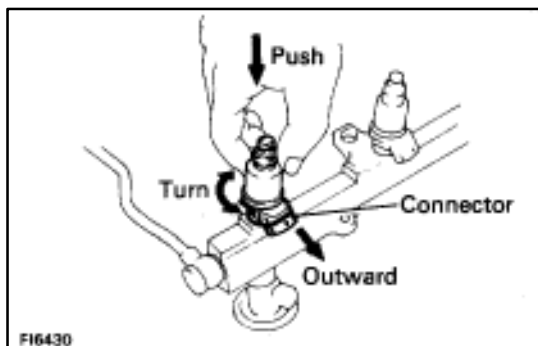


## INSTALLATION OF INJECTORS

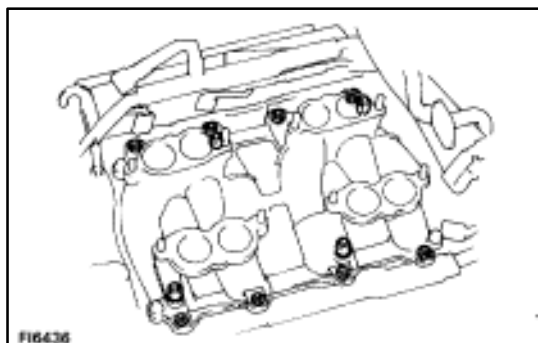
(See Components on page [FI-49](#))

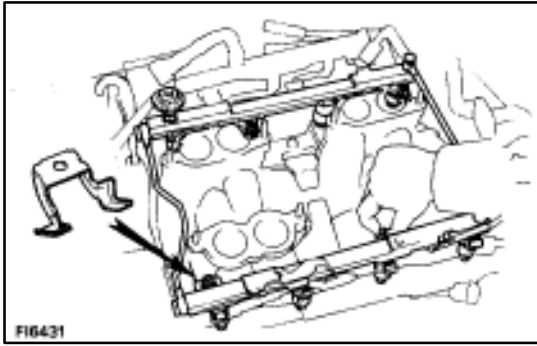
### 1. INSTALL INJECTORS AND DELIVERY PIPE

- Install the grommet to each injector.
- Apply a light coat of gasoline to a new O-ring and install it to each injector.
- While turning the injector clockwise and counterclockwise, push it to the delivery pipes. Install the eight injectors.
- Position the injector connector outward.

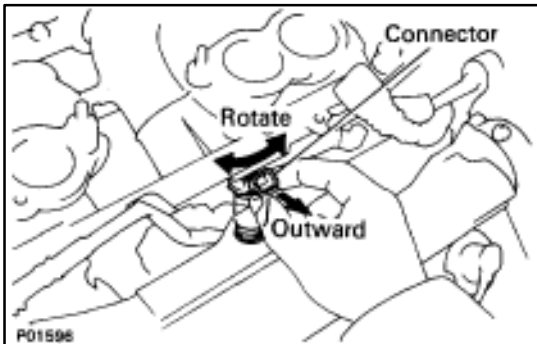


- Place the eight insulators and four spacers in position on the intake manifold.

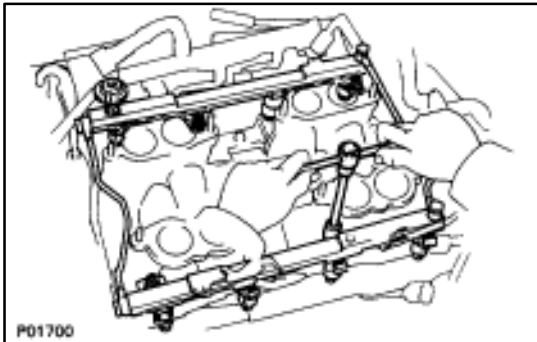




- (f) Place the eight injectors and two delivery pipes assembly in position on the intake manifold.
- (g) Temporarily install the connector bracket and four mounting bolts.

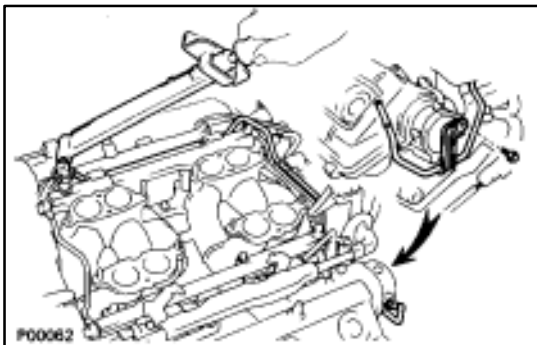


- (h) Check that the injectors rotate smoothly.  
HINT: If injectors do not rotate smoothly, the probable cause is incorrect installation of O-rings. Replace the O-rings.
- (i) Position the injector connector outward.



- (j) Tighten the four bolts holding the delivery pipes to the intake manifold.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

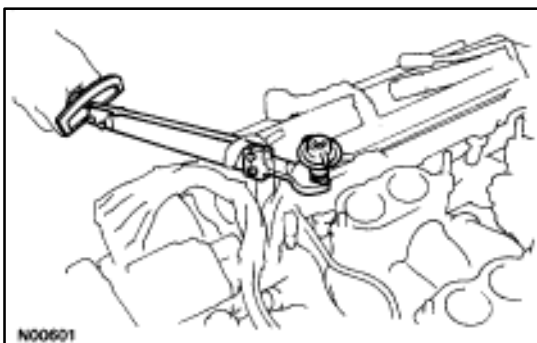


## 2. INSTALL FUEL RETURN PIPE

- (a) Temporarily install the return pipe with the bolt, two gaskets and union bolt.
- (b) Tighten the union bolt holding the return pipe to the pressure regulator.

**Torque: 35 N·m (360 kgf·cm, 26 ft·lbf)**

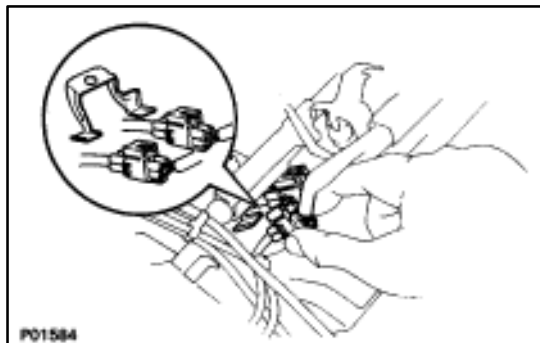
- (c) Tighten the bolt holding the return pipe to the LH cylinder head.



## 3. TIGHTEN LOCK NUT ON FUEL PRESSURE REGULATOR

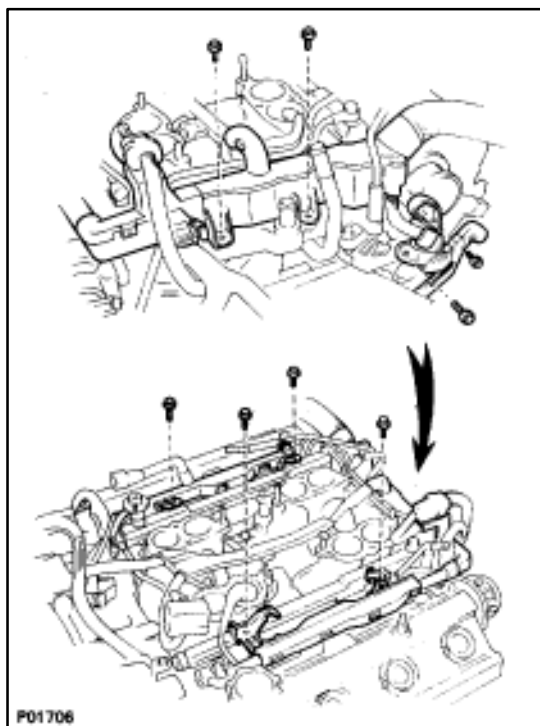
**Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)**



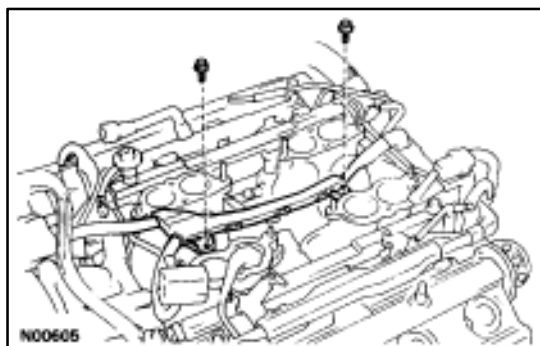


**4. INSTALL ENGINE WIRE TO DELIVERY PIPES, REAR WATER BY-PASS JOINT AND RH CYLINDER HEAD**

- (a) Connect the eight injector connectors.
- (b) Connect the two engine wire connectors to the connector bracket on the LH delivery pipe.

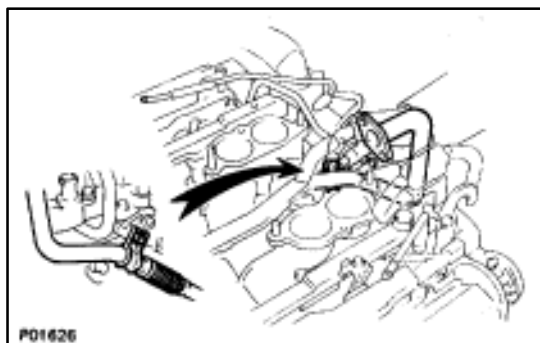


- (c) Install the engine wire to the RH cylinder head with the two bolts.
- (d) Install the engine wire to the rear water by-pass joint with the two bolts.
- (e) Install the engine wire to the delivery pipes with the four bolts.



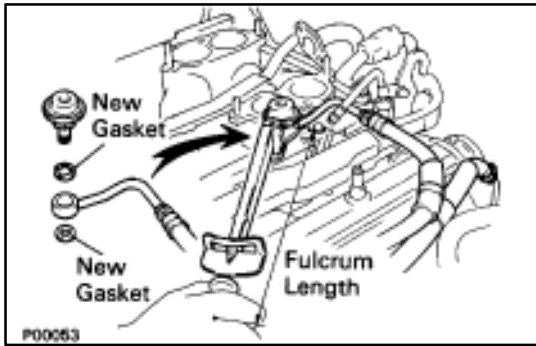
**5. INSTALL ENGINE WIRE TO INTAKE MANIFOLD**

Install the engine wire with the two bolts.



**6. TEMPORARILY INSTALL EGR PIPE TO RH CYLINDER HEAD**

Temporarily Install the EGR pipe with the bolt.

**7. CONNECT FUEL RETURN HOSE TO FUEL RETURN PIPE****8. CONNECT FUEL INLET HOSE TO LH DELIVERY PIPE**

Using SST, connect the inlet hose with two new gaskets and pulsation damper.

SST 09612-24014 (09617-24011)

**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**

**33 N·m (340 kgf·cm, 24 ft·lbf) for SST**

**HINT:** Use a torque wrench with a fulcrum length of 30 cm (11.81 in.).

**9. INSTALL AIR INTAKE CHAMBER**

(See steps 2 to 18 on pages [FI-35](#) to 41)

**HINT:** After the air intake chamber installed, tighten the bolt holding to the EGR pipe to the RH cylinder head.