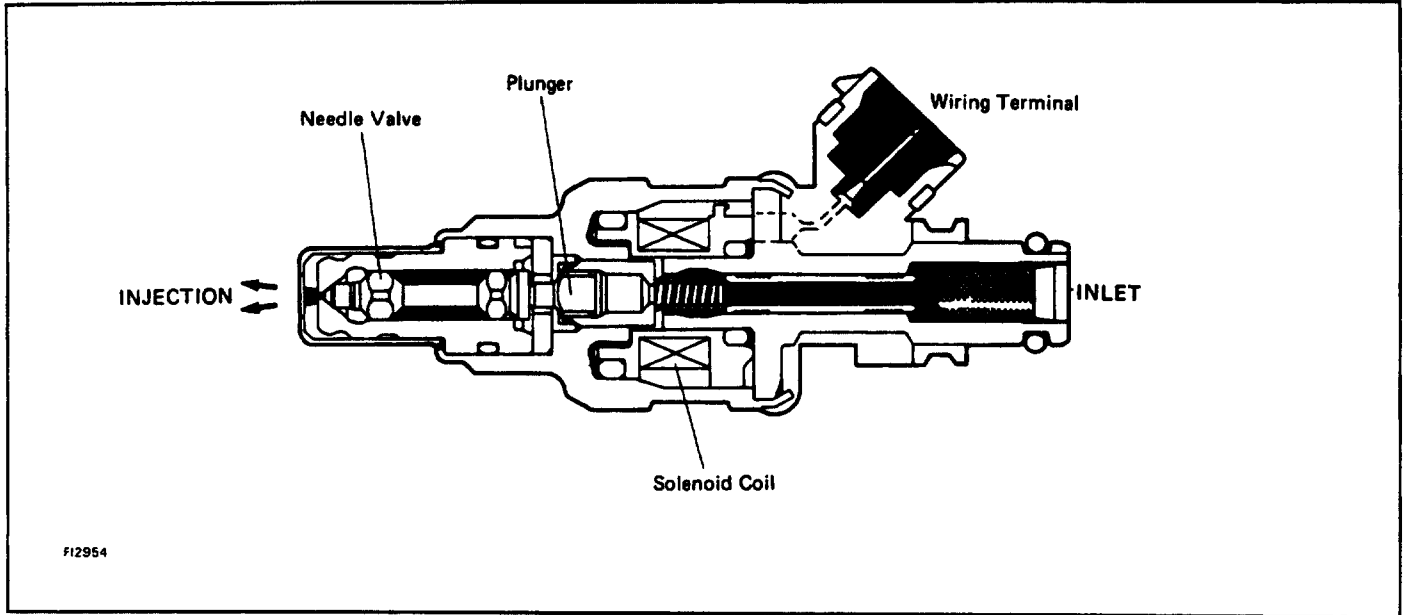
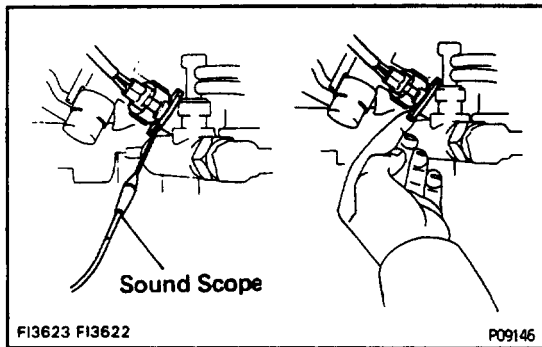


INJECTOR

E9110-01



F12954



F13623 F13622

P09146

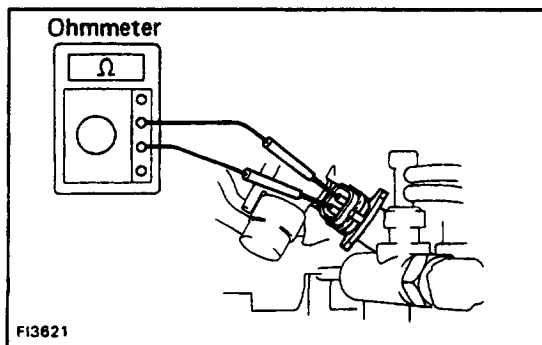
ON-VEHICLE INSPECTION

1. CHECK INJECTOR OPERATION

Check for operating sound from each injector.

- (a) With the engine running or cranking, use a sound scope to check that there is normal operating noise in proportion to engine rpm.
- (b) If you have no sound scope, you can check the injector transmission operation with your finger.

If no sound or an unusual sound is heard, check the wiring connector, injector or injection signal from ECM.



F13621

2. MEASURE RESISTANCE OF INJECTOR

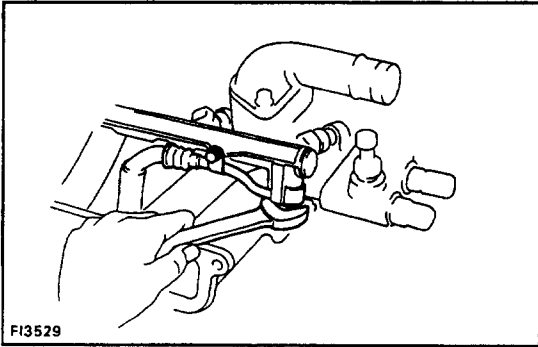
- (a) Unplug the wiring connector from the injector.
- (b) Using an ohmmeter, measure the resistance of both terminals.

Resistance:

13.4-14.2 Ω

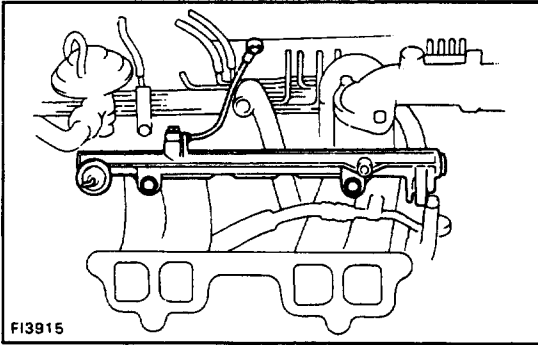
INJECTORS REMOVAL

1. **DISCONNECT NEGATIVE TERMINAL CABLE FROM BATTERY**
2. **DRAIN COOLANT**
3. **REMOVE CHAMBER WITH THROTTLE BODY**
(See steps 9 to 15 on pages [EG1-16](#), 17)
4. **DISCONNECT WIRES**
(See step EG 17 page [EG1-17](#))
5. **DISCONNECT FUEL HOSE FROM DELIVERY PIPE**
Remove the bolt, union bolt and 2 gaskets.



FI3529

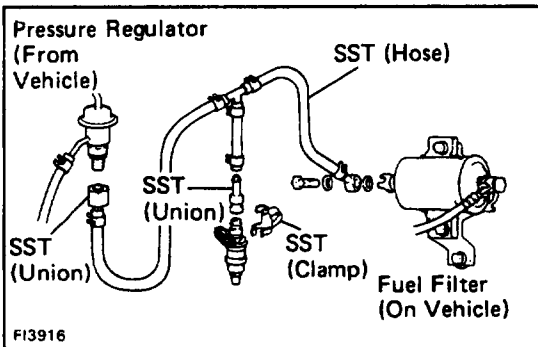
6. **REMOVE DELIVERY PIPE WITH INJECTORS**
Remove 2 bolts and then remove the delivery pipe with the injectors.



FI3915

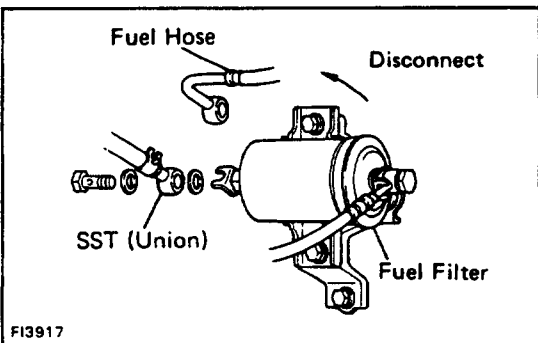
INJECTORS INSPECTION

1. **TEST INJECTION OF INJECTOR**
CAUTION: Keep injector clear of sparks during the test.

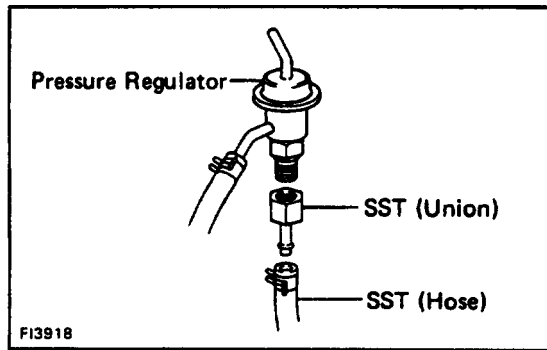


FI3916

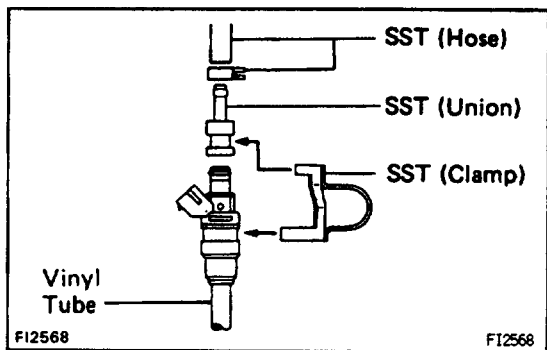
- (a) Disconnect the fuel hose from the fuel filter outlet.
 - (b) Connect SST (Union) to the fuel filter outlet.
SST 09268-41045 (90405-09015)
- HINT:** Use the vehicle's fuel filter.



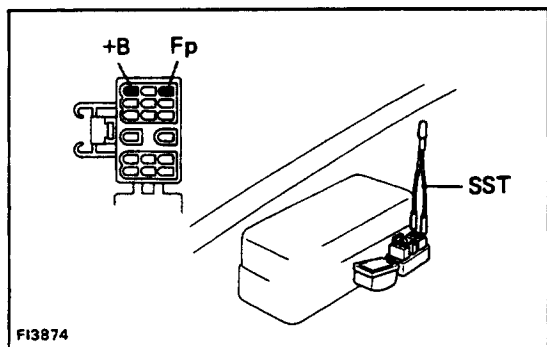
FI3917



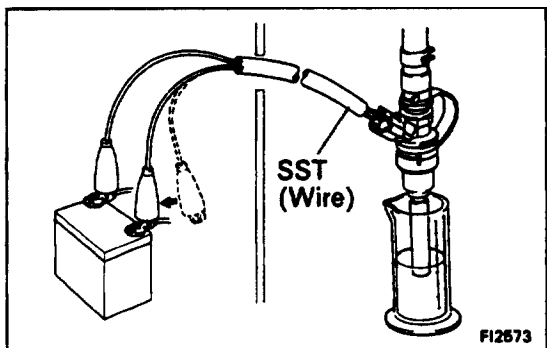
- (c) Install SST (Union) to the removed pressure regulator.
SST 09268-41045 (09268-52010)



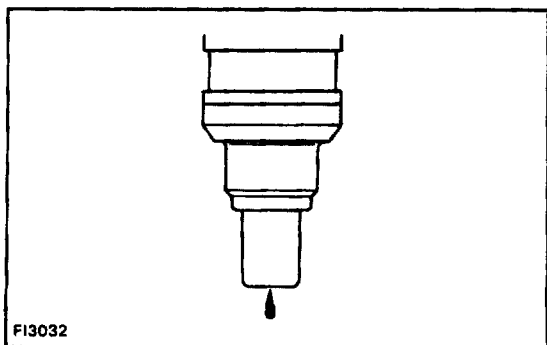
- (d) Install SST (Union) to the injector and hold the injector and union with SST (Clamp).
SST 09268-41045
- (e) Put the injector into the graduated cylinder.
HINT: Install a suitable vinyl tube onto the injector to prevent gasoline from splashing out.
- (f) Connect the battery cable.
- (g) Turn the ignition switch ON.
HINT: Do not start the engine.



- (h) Using SST, connect terminals Fp and +B of the DLC1.
SST 09843-18020
HINT: Fuel pump will operate.

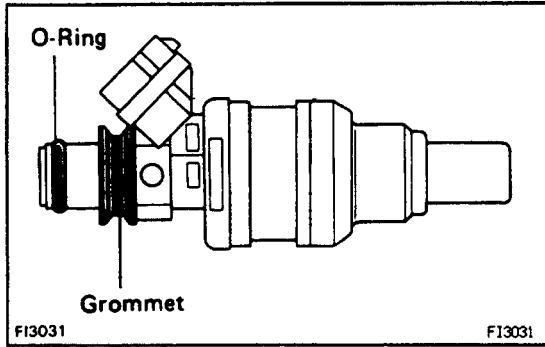


- (i) Connect SST (Wire) to the injector and battery for 15 seconds and measure the injection volume with a graduated cylinder. Test each injector 2 or 3 times.
SST 09842-30070
Volume: 45-55 cm³/15 sec. (2.7-3.4 cu in.)
Difference between each injector:
6 cm (0.4 cu in.) or less
If not within specified volume, replace the injector.



2. CHECK LEAKAGE

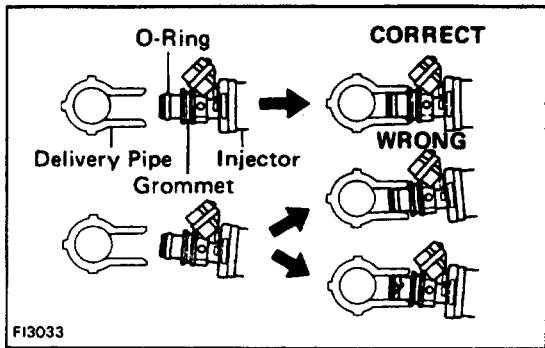
- (a) In the condition above, disconnect SST from the battery and check for fuel leakage from the injector nozzle.
SST 09842-30060
Fuel drop: One drop or less per minute
- (b) Disconnect the battery cable.
- (c) Remove SST.



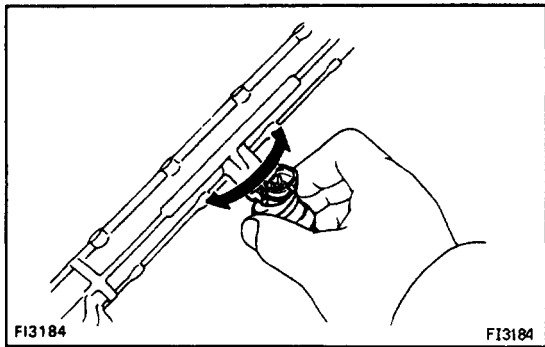
INJECTORS INSTALLATION

1. INSTALL INJECTORS INTO DELIVERY PIPE

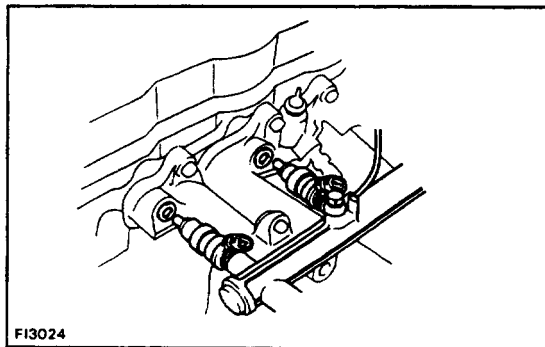
- (a) Install the grommet and a new O-ring to the injector.



- (b) Apply a light coat of gasoline to the O-rings and install the injectors into the delivery pipe.

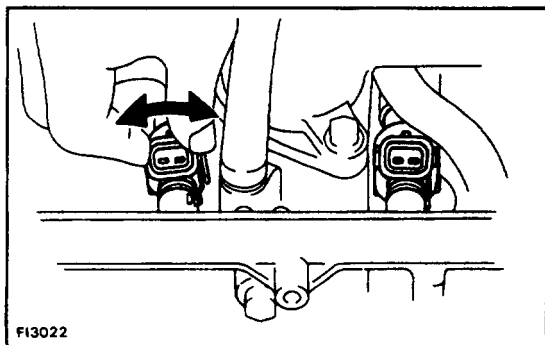


- (c) Make sure that the injectors rotate smoothly.
HINT: If the injectors do not rotate smoothly, the O-rings are probably incorrectly installed. Replace the O-rings.

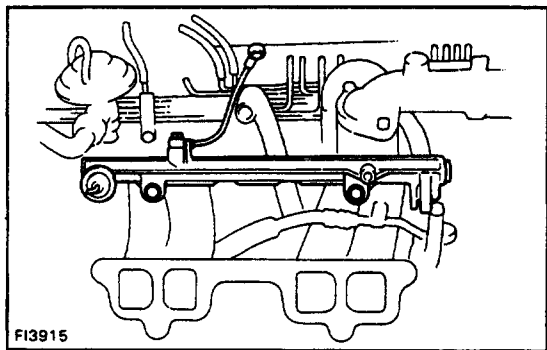


2. INSTALL DELIVERY PIPE WITH INJECTORS

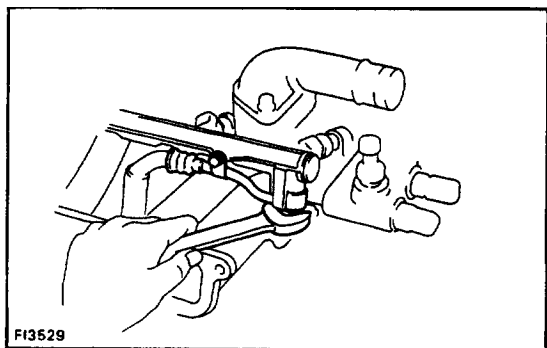
- (a) Install the 4 insulators into the injector hole of the intake manifold.
(b) Place the injectors together with the delivery pipe to the manifold.



- (c) Make sure that the injectors rotate smoothly.
HINT: If the injectors do not rotate smoothly, probable cause may be incorrect installation of O-rings. Replace O-rings again after removing the injectors.

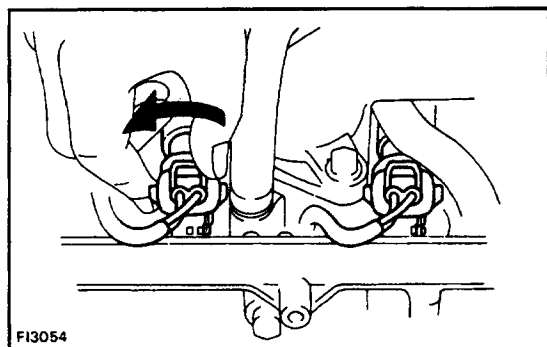


- (d) Install and torque the bolts.
Torque: 17 N·m (175 kgf·cm, 13 ft·lbf)



3. CONNECT FUEL HOSE TO DELIVERY PIPE

- (a) Install the fuel hose with a bolt.
(b) Install the union bolt and new gaskets. Torque the union bolt.
Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)



4. CONNECT WIRES

(See step on page [EG1-37](#))

Turn the injector so that the injector positioning guide is aligned with the positioning rib of the delivery pipe.

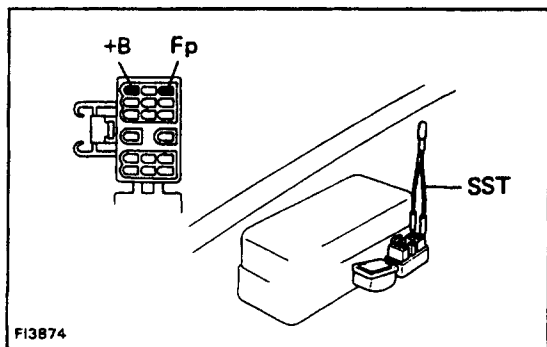
5. INSTALL CHAMBER WITH THROTTLE BODY

(See steps 7 to 14 on pages [EG1-38](#), 39)

6. FILL WITH COOLANT

(See step 3 on page [EG1-230](#))

7. CONNECT NEGATIVE TERMINAL CABLE TO BATTERY



8. CHECK FOR FUEL LEAKAGE

- (a) With the ignition switch ON, use SST to connect terminals Fp and +B of the DLC1.
SST 09843-18020
(b) Check for fuel leakage.
(c) Remove SST from the DLC1.