# REMOVAL

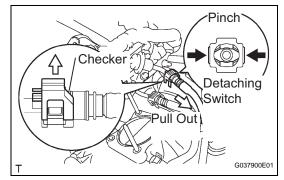
- DISCHARGE FUEL SYSTEM PRESSURE (See page FU-1)
- 2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
- 3. REMOVE ENGINE UNDER COVER SUB-ASSEMBLY NO.1
- 4. DRAIN ENGINE COOLANT (See page CO-3)
- 5. REMOVE INTAKE AIR CONNECTOR (See page ES-452)
- 6. REMOVE THROTTLE WITH MOTOR BODY ASSEMBLY (See page ES-453)

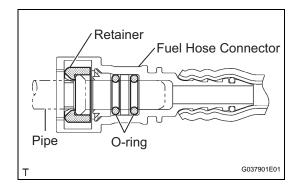


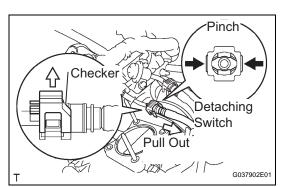
- (a) Pull the checker of the fuel hose upward.
- (b) Pinch the detaching switch of the fuel hose connector and pull out the fuel hose.

#### NOTICE:

- Remove any dirt and foreign objects on the fuel tube connector before performing this work.
- Do not allow any scratches or foreign objects on the parts when disconnecting, as the fuel tube connector has the O-ring that seals the pipe.
- Perform this work by hand. Do not use any tools.
- Do not forcibly bend, twist or turn the nylon tube.
- Protect the disconnected part by covering it with a vinyl bag after disconnecting the fuel hose.
- If the fuel tube connector and pipe are stuck, push and pull to release them.







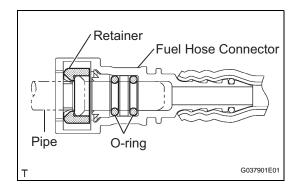
# 8. DISCONNECT NO. 2 FUEL HOSE

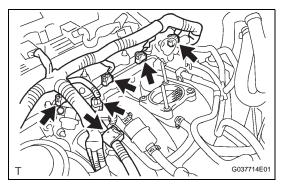
- (a) Pull the checker of the fuel hose upward.
- (b) Pinch the detaching switch of the fuel hose connector and pull out the fuel hose.

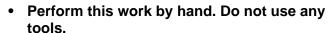
# NOTICE:

- Remove any dirt and foreign objects on the fuel tube connector before performing this work.
- Do not allow any scratches or foreign objects on the parts when disconnecting, as the fuel tube connector has the O-ring that seals the pipe.





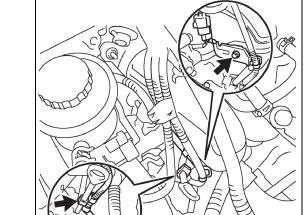




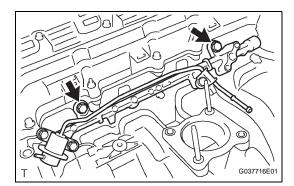
- Do not forcibly bend, twist or turn the nylon tube.
- Protect the disconnected part by covering it with a vinyl bag after disconnecting the fuel hose.
- If the fuel tube connector and pipe are stuck, push and pull to release them.
- 9. REMOVE FUEL PRESSURE PULSATION DAMPER ASSEMBLY (See page FU-21)

#### 10. REMOVE FUEL DELIVERY PIPE WITH INJECTOR

- (a) Disconnect the 4 injector connectors.
- (b) Disconnect the VSV connector.
- (c) Disconnect the engine wire harness clamp.



- (d) Disconnect the compressor magnetic clutch connector. (with AIR CONDITIONING)
- (e) Disconnect the wire harness clamp.
- (f) Remove the bolt, then remove the harness clamp bracket.

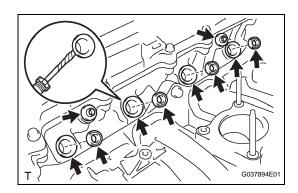


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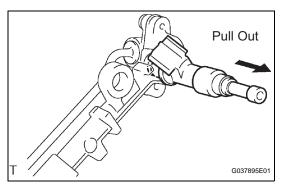
(g) Remove the 2 bolts, then remove the fuel delivery pipe together with the fuel injectors.

# NOTICE:

Be careful not to drop the fuel injectors when removing the fuel delivery pipe.

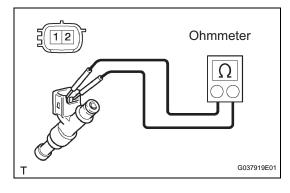


- (h) Remove the 2 delivery pipe No. 1 spacers.
- (i) Remove the 4 injector vibration insulators.
- (j) Using a screwdriver, remove the 4 spacers.

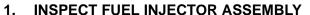


#### 11. REMOVE FUEL INJECTOR ASSEMBLY

(a) Pull the 4 fuel injectors out of the fuel delivery pipe.



# INSPECTION





(1) Using an ohmmeter, measure the resistance between the terminals.

#### Resistance:

11.6 to 12.4  $\Omega$  at 20°C (68°F)

If the result is not as specified, replace the fuel injector.

(b) Check the injection volume.

# **CAUTION:**

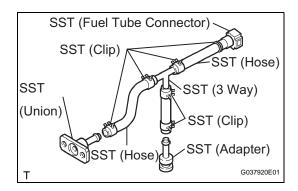
This test involves high-pressure fuel and electricity, therefore, safety precautions should be taken. Perform this test in a safe area and avoid any sparks and flames. Do not smoke.

- (1) Discharge the fuel system pressure (see page FU-1).
- (2) Remove the fuel hose from the fuel pressure pulsation damper (see page FU-21).
- (3) Remove the fuel hose from the fuel pipe (see page FU-1).
- (4) Separate the pressure regulator (see page FU-19).

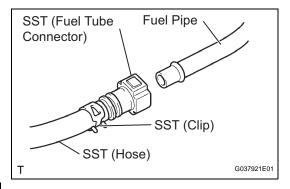
# NOTICE:

Do not separate the fuel hose No.2.



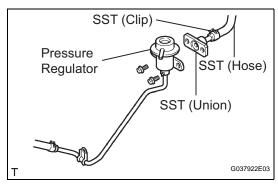


(5) Assemble SST as shown in the illustration. SST 09268-41048 (09268-41091, 09268-41110, 09268-41120, 09268-41500, 95336-08070, 90467-13001)



(6) Connect SST to the fuel pipe. SST 09268-41048 (09268-41500, 90467-13001)

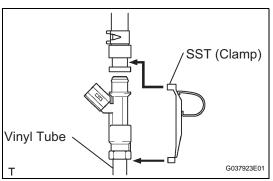




(7) Install the pressure regulator onto SST (union) with the 2 bolts.

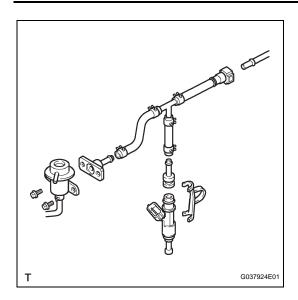
Torque: 8.5 N\*m (87 kgf\*cm, 75 in.\*lbf) SST 09268-41048 (09268-41091) NOTICE:

Make sure that the O-ring is installed onto the pressure regulator.

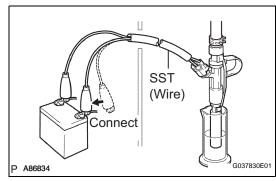


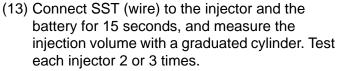
- (8) Install the O-ring onto the injector.
- (9) Assemble SST as shown in the illustration. SST 09268-41048 (09268-41110, 09268-41310)
- (10) Put the injector into a graduated cylinder. **CAUTION:**

Install a suitable vinyl tube onto the injector to contain any gasoline spray.



- (11) Make sure that SST is installed as shown in the illustration.
- (12) Operate the fuel pump (see page FU-6).





SST 09842-30080

Volume:

71 to 86 cm<sup>3</sup> (4.3 to 5.2 cu in.) per 15 seconds

Difference between each

injector:

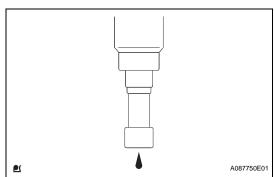
15 cm<sup>3</sup> (0.9 cu in.) or less

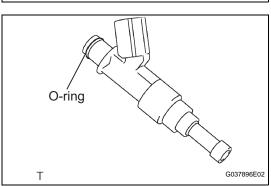
If the injection volume is not as specified, replace the injector.

- (c) Check the leakage.
  - (1) In the condition above, disconnect the tester probes of SST (wire) from the battery and check the fuel leakage from the injector.

Fuel drop:

1 drop or less in 12 minutes

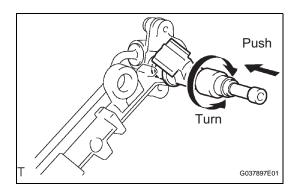


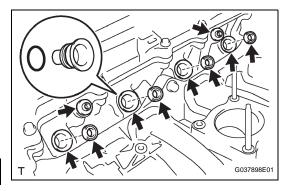


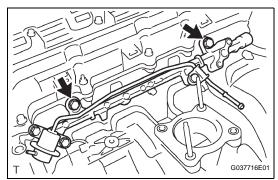
# **INSTALLATION**

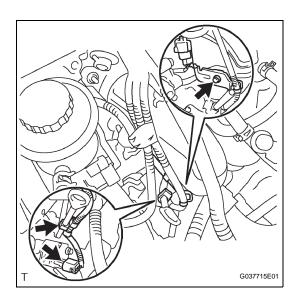
- I. INSTALL FUEL INJECTOR ASSEMBLY
  - (a) Apply a light coat of gasoline or spindle oil to new Orings, then install one onto each fuel injector.











- (b) Apply a light coat of gasoline or spindle oil to the contact surfaces of the fuel delivery pipe and the Oring of the fuel injector.
- (c) Apply a light coat of gasoline or spindle oil to the Oring again, then install the fuel injector into the fuel delivery pipe by turning it right and left.

#### NOTICE:

Make sure that the O-ring is not cracked or jammed when installing.

(d) Check that the fuel injector rotates smoothly. If the fuel injector does not rotate, replace the Oring.

# 2. INSTALL FUEL DELIVERY PIPE W/ INJECTOR

- (a) Apply a light coat of gasoline or spindle oil to new Orings, then install one onto each spacer.
- (b) Install the 4 spacers onto the cylinder head.
- (c) Install 4 new injector vibration insulators onto the cylinder head.
- (d) Install the 2 delivery pipe No. 1 spacers onto the cylinder head.

(e) Install the fuel delivery pipe together with the 4 fuel injectors, then provisionally tighten the fuel delivery pipe with the 2 bolts.

# **NOTICE:**

Do not drop the fuel injectors when installing the fuel delivery pipe.

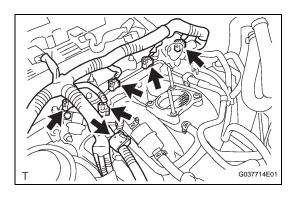
- (f) Check that the fuel injector rotates smoothly. If the fuel injector does not rotate, replace the O-ring.
- (g) Retighten the 2 bolts to the specified torque.

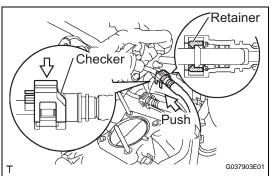
  Torque: 12 N\*m (122 kgf\*cm, 9 ft.\*lbf)
- (h) Install the harness clamp bracket with the bolt.

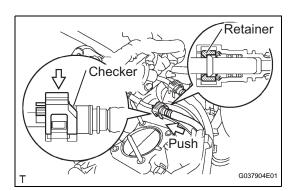
Torque: 8.2 N\*m (84 kgf\*cm, 73 in.\*lbf)

- (i) Connect the wire harness clamp.
- (j) Connect the compressor magnetic clutch connector. (with AIR CONDITIONING)









- (k) Connect the engine wire harness clamp.
- (I) Connect the VSV connector.
- (m) Connect the 4 injector connectors.
- 3. INSTALL FUEL PRESSURE PULSATION DAMPER ASSEMBLY (See page FU-21)

#### 4. CONNECT FUEL HOSE

- (a) Align the fuel hose connector with the pipe stem, and insert the fuel hose until the retainer makes a "click" sound.
- (b) Push down the checker of the fuel hose.

#### NOTICE:

- Check that there are no scratches or foreign objects around the disconnected parts of the fuel hose connector and pipe before performing this work.
- After connecting the fuel hose, check that the fuel hose is securely connected by pulling the fuel hose connector and pipe.
- (c) Push the fuel hose down until the checker of the fuel hose makes a "click" sound.

# 5. CONNECT FUEL HOSE NO.2

- (a) Align the fuel hose connector with the pipe stem, and insert the fuel hose until the retainer makes a "click" sound.
- (b) Push down the checker of the fuel hose.

#### NOTICE:

- Check that there are no scratches or foreign objects around the disconnected parts of the fuel hose connector and pipe before performing this work.
- After connecting the fuel hose, check that the fuel hose is securely connected by pulling the fuel hose connector and pipe.
- (c) Push the fuel hose down until the checker of the fuel hose makes a "click" sound.
- 6. INSTALL THROTTLE WITH MOTOR BODY ASSEMBLY (See page ES-454)
- 7. INSTALL INTAKE AIR CONNECTOR (See page ES-455)
- 8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

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

- 9. ADD ENGINE COOLANT (See page CO-3)
- 10. CHECK FOR ENGINE COOLANT LEAKAGE (See page CO-2)



- 11. CHECK FOR FUEL LEAKAGE (See page FU-7)
- 12. INSTALL ENGINE UNDER COVER SUB-ASSEMBLY NO.1

