

## 1GR-FE FUEL FUEL INJECTOR INSPECTION

## PROCEDURE

## 1.INSPECT FUEL INJECTOR ASSEMBLY

23250

- a. Measure the resistance according to the value(s) in the table below.

**Standard Resistance:**

Tester Connection	Condition	Specified Condition
1 - 2	20°C (68°F)	11.6 to 12.4 Ω

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

## 2.INSPECT INJECTION VOLUME AND LEAKAGE

23250

- a. Check the injector injection.

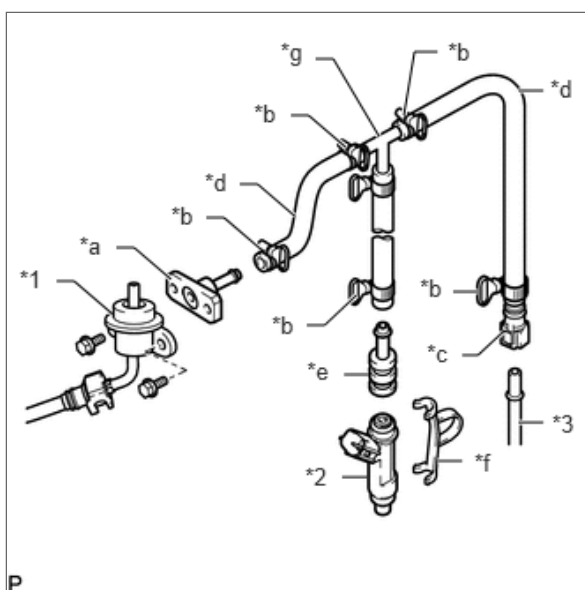
**CAUTION:**

- This test involves high-pressure fuel and electricity.
- Take every precaution regarding safe handling of both the fuel and the electrical parts.
- Perform this test in a safe area, and avoid any sparks or flame.
- Do not smoke.

- i. Discharge the fuel system pressure.

Click here[Engine / Hybrid System>1GR-FE FUEL>FUEL SYSTEM>PRECAUTION](#)

ii.



*1	Fuel Pressure Regulator Assembly
*2	Fuel Injector Assembly
*3	Fuel Pipe
*a	SST (Union)
*b	SST (Hose Band)
*c	SST (Fuel Tube Connector)
*d	SST (Hose)
*e	SST (Adapter)
*f	SST (Clamp)
*g	SST (T-Joint)

Assemble SST as shown in the illustration.

**SST**

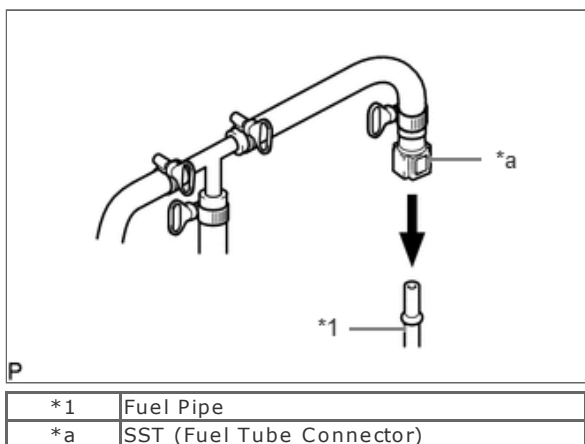
**09268-31014 (09268-41091, 09268-41120, 09268-41141, 09268-41410, 09268-41500, 09268-41700, 95336-08070)**

- iii. Disconnect the fuel inlet hose (fuel tube connector) from the fuel pipe.
- iv. Remove the 2 bolt and disconnect the fuel pressure regulator assembly from the fuel delivery pipe sub-assembly.

**NOTICE:**

Do not disconnect the No. 2 fuel pipe sub-assembly from the fuel pressure regulator assembly.

v.



Connect SST to the fuel pipe.

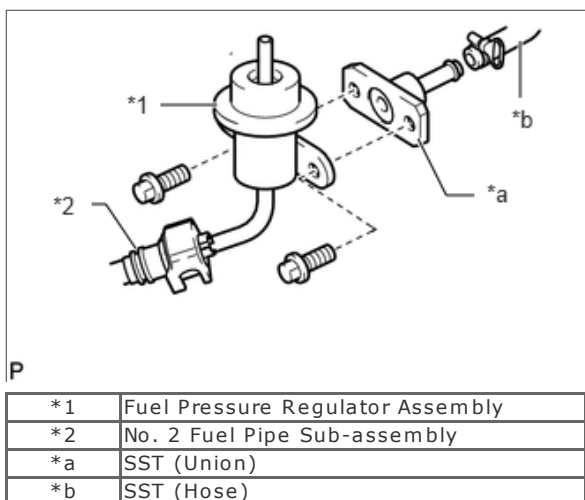
**SST**

**09268-31014 (09268-41500)**

**CAUTION:**

Always read the precautions before connecting the fuel tube connector.

vi.



Connect SST (hose) to the fuel inlet of the fuel pressure regulator assembly with another SST (union) and the 2 bolts.

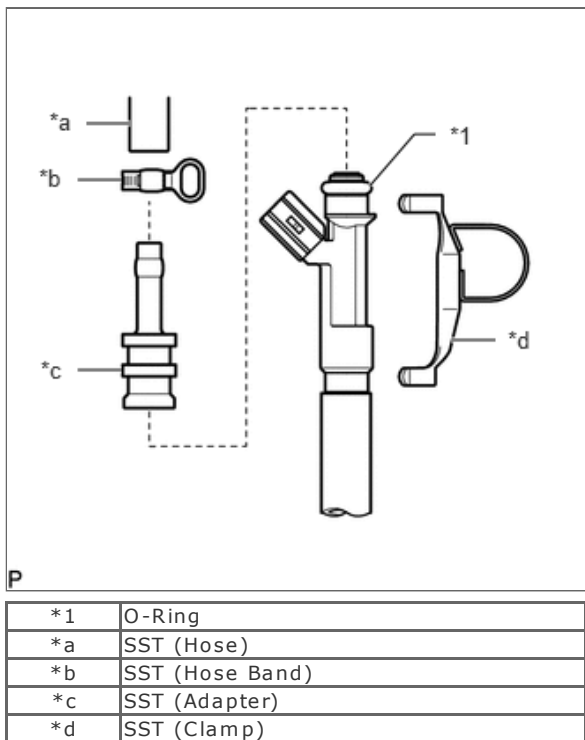
**SST**

**09268-31014 (09268-41091, 95336-08070)**

**Torque:**

**9.0 N\*m (92 kgf\*cm, 80 in.\*lbf)**

vii.



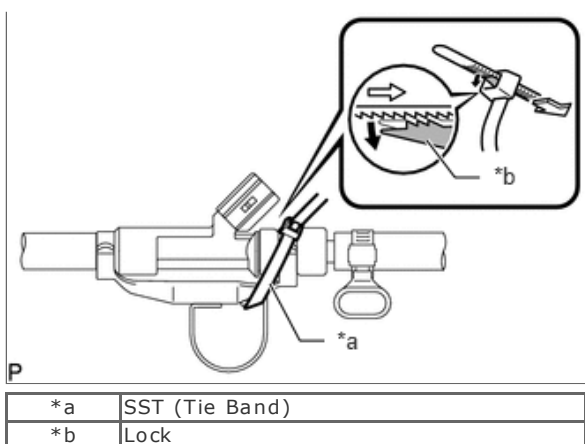
Install a new O-ring to the fuel injector assembly.

viii. Connect SST (adapter and hose) to the fuel injector assembly, and hold the fuel injector assembly and adapter with SST (clamp).

**SST**

**09268-31014 (09268-41141, 09268-41410, 09268-41700, 95336-08070)**

ix.



Pass SST (tie band) through the loop on the handle of SST (clamp) to secure SST (clamp) to SST (adapter).

**SST**

**09268-31014 (09268-41800)**

**NOTICE:**

- As SST (tie band) does not completely prevent SST (clamp) from becoming loose, do not subject the parts to any impacts while using them.
- Before using SST (tie band), make sure that there is no deterioration, damage or cracks. If there are any abnormalities, replace SST.

**HINT:**

When removing SST (tie band), disengage the lock.

x. Check that SST (clamp) and SST (adapter) cannot be easily separated.

xi. Put the fuel injector assembly into a graduated cylinder.

**CAUTION:**

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

xii. Connect the GTS to the DLC3.

xiii. Turn the ignition switch to ON.

**NOTICE:**

Do not start the engine.

xiv. Turn the GTS on.

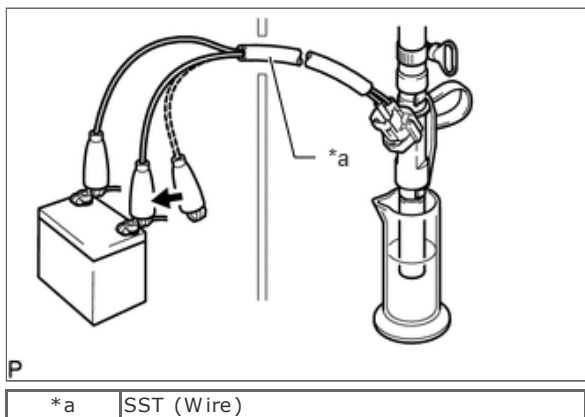
xv. Enter the following menus: Powertrain / Engine and ECT / Active Test / Activate the Fuel Pump Speed Control.

**Powertrain > Engine and ECT > Active Test**

Tester Display
Activate the Fuel Pump Speed Control

**Execute**

xvi.



Connect SST (wire) to the fuel injector assembly and battery for 15 seconds, and measure the injection volume with the graduated cylinder. Test each fuel injector assembly 2 or 3 times.

**SST**

**09842-30080**

**Standard injection volume:**

**76 to 91 cc (4.6 to 5.6 cu. in.) per 15 seconds**

**Difference between each injector:**

**15 cc (0.9 cu. in.) or less**

**NOTICE:**

Always turn the voltage on and off on the battery side, not the fuel pump side.

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

b. Check for fuel leakage.

i. In the condition above, disconnect the tester probes of SST (wire) from the battery and check for fuel leakage from each fuel injector assembly.

**Standard:**

**1 drop or less per 17 minutes**

If the leakage is not as specified, replace the fuel injector assembly.