

## INSPECTION

### 1. 1HD-T:

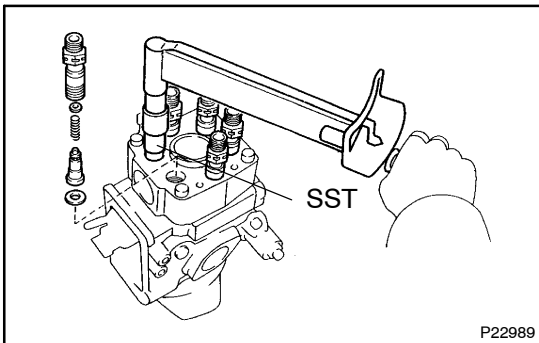
#### INSPECT DELIVERY VALVES

- (a) Attach the nozzle tester to the delivery valve holder of the pipe you wish to measure.
- (b) Use the nozzle tester to check the valve opening pressure of the delivery valve.

**Standard valve opening pressure:**

**7,350 – 8,330 kPa**

**(75 – 85 kgf/cm<sup>2</sup>, 1,067 – 1,209 psi)**



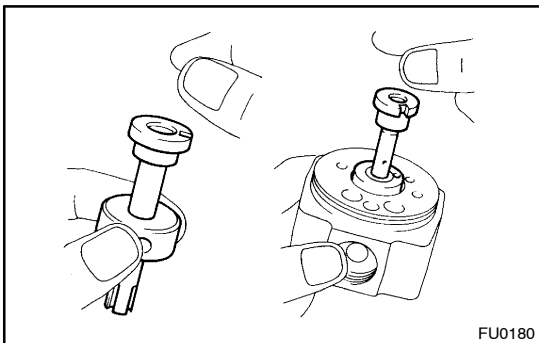
If the valve opening pressure of the delivery valve is not within specification, replace the delivery valve assembly.

SST 09260 –54012 (09269 –54020)

**Torque: 58.85 N·m (600 kgf·cm, 43 ft·lbf)**

#### NOTICE:

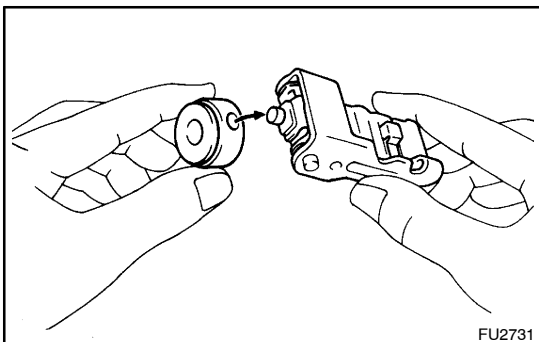
**Do not lose the steel ball when doing an overhaul.**



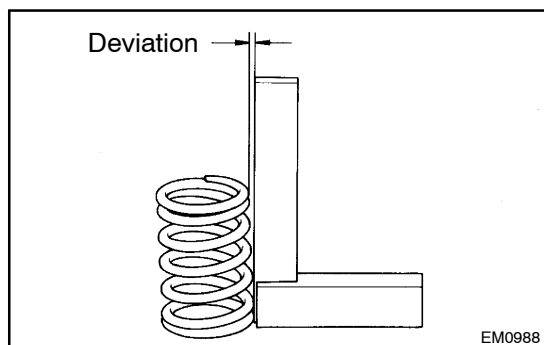
### 2. INSPECT PUMP PLUNGER, SPILL RING AND DISTRIBUTIVE HEAD

- (a) Tilt the spill ring (distributive head) slightly and pull out the plunger.
- (b) When released, the plunger should sink down smoothly into the spill ring (distributive head) by its own weight.
- (c) Rotate the plunger and repeat the test at various positions.

If the plunger sticks at any position, replace the parts as a set.



- (d) Insert the governor link ball pin into the spill ring and check that it moves smoothly without any play.

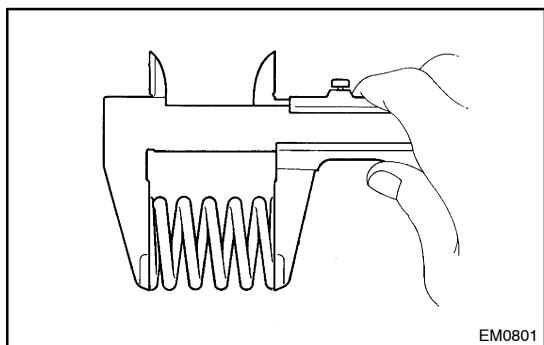


### 3. INSPECT PLUNGER SPRINGS FOR DEVIATION

Using a steel square, check the deviation of the plunger springs.

**Maximum deviation: 2.0 mm (0.079 in.)**

If deviation is greater than maximum, replace the springs.



### 4. INSPECT SPRING LENGTH

Using vernier calipers, measure the free length of each spring.

**Spring free length:**

**Delivery valve spring:**

1HZ	24.4 mm (0.96 1 in.)
1HD-T	12.6 mm (0.496 in.)

**Plunger spring:**

1HZ	30.0 mm ( 1.181 in.)
1HD-T	31.2 mm ( 1.228 in.)

**Coupling spring:**

1HZ	16.6 mm (0.654 in.)
1HD-T	15.5 mm (0.6 10 in.)

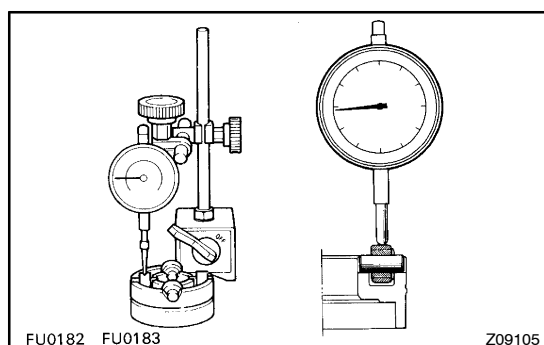
**1HZ (w/HAC):**

**Pneumatic bellows spring: 35.0 mm ( 1.378 in)**

**1HD-T:**

**Boost compensator spring: 19.4 mm (0.764 in.)**

If the free length is not as specified, replace the spring (s).

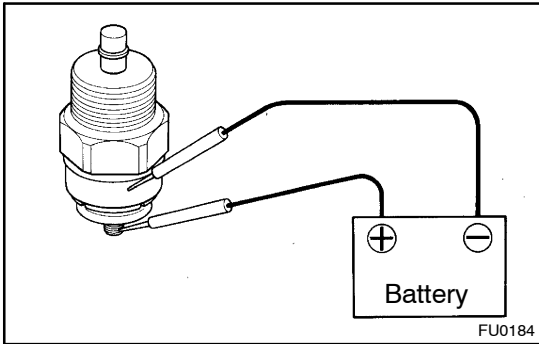


### 5. INSPECT ROLLER RING AND ROLLERS

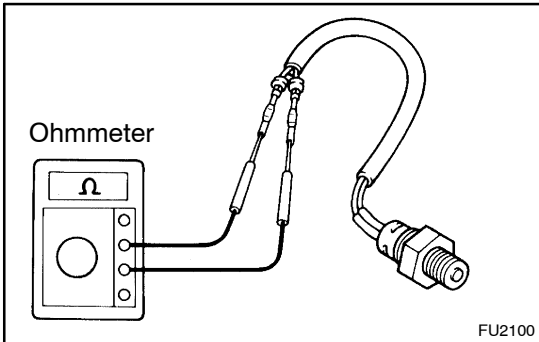
Using a dial indicator, measure the roller height.

**Maximum roller height variation: 0.02 mm (0.0008 in.)**

If the variation is greater than specification, replace the roller ring and roller as a set.

**6. INSPECT FUEL CUT SOLENOID**

- (a) Connect the solenoid valve body and terminal to the battery terminals.
- (b) You should feel the click from the solenoid valve when the battery power is connected and disconnected.  
If the solenoid valve is not operating properly, replace it.

**7. INSPECT PICKUP SENSOR**

Using an ohmmeter, measure the resistance between the terminals.

**Resistance: 650 –970  $\Omega$**

If resistance is not as specified, replace the sensor.