

F04871

## DISASSEMBLY

### NOTICE:

When using a vise, do not overtighten it.

#### 1. MEASURE PS VANE PUMP ROTATION TORQUE

- Check that the pump rotates smoothly without abnormal noise.
- Temporarily install the vane pump pulley set nut.
- Using a torque wrench, check the pump rotating torque.

#### Rotating torque:

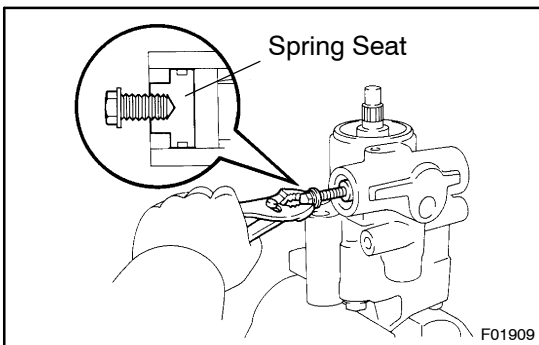
**0.25 N·m (2.5 kgf·cm, 2.2 in.·lbf) or less**

#### 2. REMOVE SUCTION PORT UNION

- Remove the 2 bolts.
- Remove the O-ring from the union.

#### 3. REMOVE PRESSURE PORT UNION, FLOW CONTROL VALVE AND SPRING

Remove the O-ring from the union.



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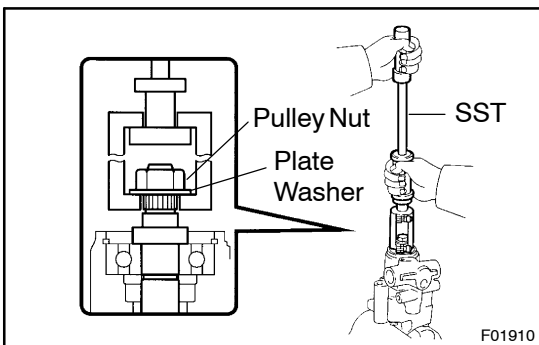
#### 4. REMOVE SPRING SEAT

- Using snap ring pliers, remove the snap ring from the front housing.
- Temporarily install a bolt to the seat and pull it out together with the seat.

#### HINT:

Use a bolt with diameter 6 mm (0.24 in.) and pitch 1.0 mm (0.039 in.).

- Remove the O-ring from the seat.



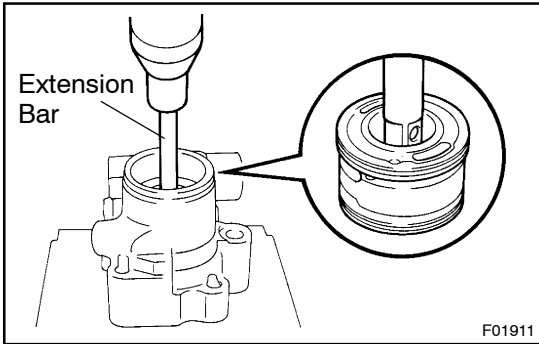
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#### 5. REMOVE VANE PUMP SHAFT WITH BEARING

- Using snap ring pliers, remove the snap ring from the front housing.
- Temporarily install a appropriate plate washer and the pulley set nut to the pump shaft.
- Using SST, pull out the pump shaft with the bearing. SST 099 10-00015 (099 11-00011, 099 12-00010)

#### 6. REMOVE REAR BRACKET

- Remove the 4 bolts.
- Remove the O-ring from the rear bracket.

**7. REMOVE WAVE WASHER****8. REMOVE SIDE FRONT PLATE, CAM RING, VANE PUMP ROTOR, 10 VANE PLATES AND SIDE REAR PLATE**

- (a) Using an extension bar and press, press out the side front plate, cam ring, rotor, vane plates and side rear plate as an assembly.
- (b) Remove the O –ring from the side rear plate.
- (c) Remove the cam ring, rotor and vane plates.

**NOTICE:**

**Take care not to drop the vane plate.**

- (d) Remove the shorter straight pin from the side front plate.
- (e) Remove the 2 O –rings from the side front plate.
- (f) Using pliers, remove the longer straight pin from the front housing.