

## INSPECTION

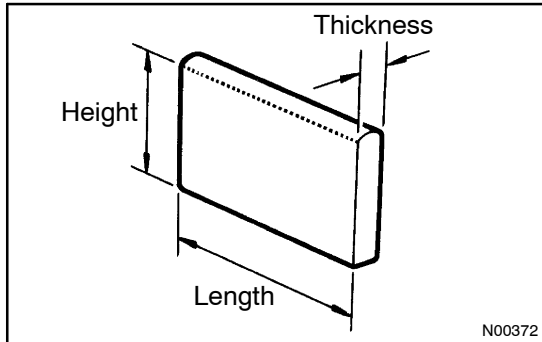
### NOTICE:

When using a vise, do not overtighten it.

#### 1. INSPECT CAM RING

Check the cam ring for wear or scratches.

If necessary, replace the cam ring with the vane pump rotor and vane plates.



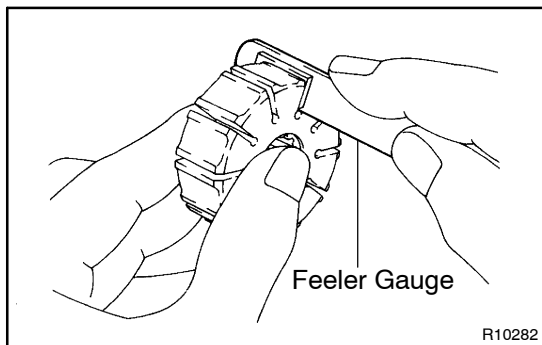
#### 2. INSPECT VANE PUMP ROTOR AND VANE PLATES

- (a) Using a micrometer, measure the height, thickness and length of the plates.

**Minimum height: 8.9 mm (0.350 in.)**

**Minimum thickness: 1.965 mm (0.07736 in.)**

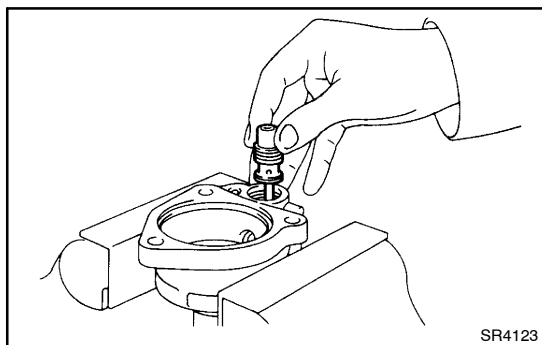
**Minimum length: 15.953 mm (0.62807 in.)**



- (b) Using a feeler gauge, measure the clearance between the rotor groove and plate.

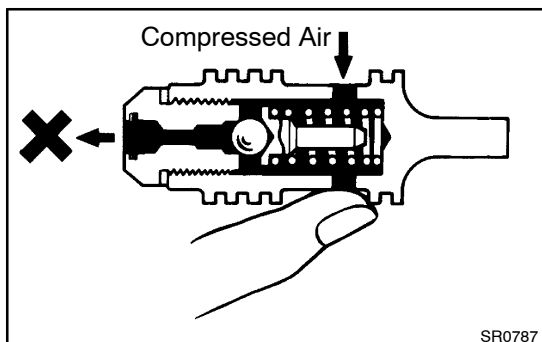
**Maximum clearance: 0.03 mm (0.0012 in.)**

If they are not within the specifications, replace the rotor and vane plates with the cam ring.

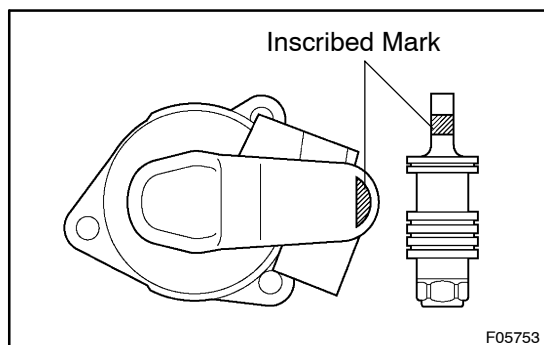


#### 3. INSPECT FLOW CONTROL VALVE

- (a) Check the flow control valve for wear or damage.  
 (b) Coat the valve with power steering fluid and check that it falls smoothly into the valve hole by its own weight.

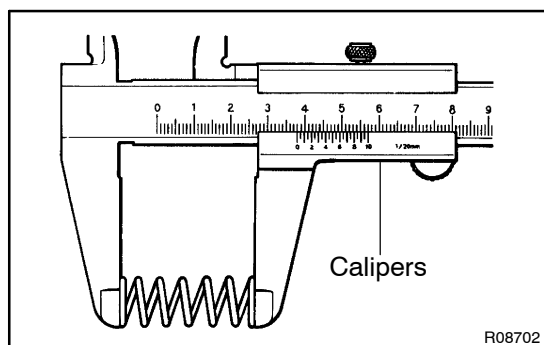


- (c) Check the valve for leakage. Close one of the holes and apply compressed air 392 – 490 kPa (4 – 5 kgf/cm<sup>2</sup>, 57 – 71 psi) into the opposite side hole, and confirm that air does not come out from the end hole.



If necessary, replace the valve with the one having the letter corresponding to the mark inscribed on the rear housing.

Pump housing mark	Valve mark
0	II
1	I
2	None

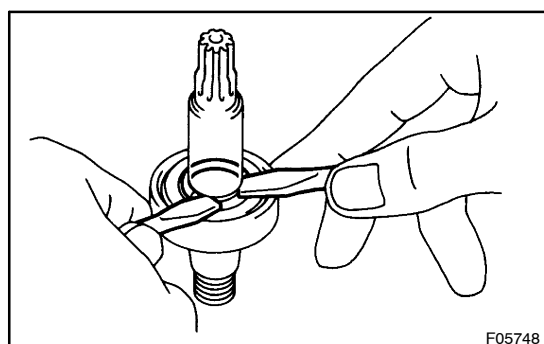


#### 4. INSPECT SPRING

Using a calipers, measure the free length of the spring.

**Standard free length: 50 – 55 mm (1.97 – 2.17 in.)**

If it is not within the specification, replace the spring.

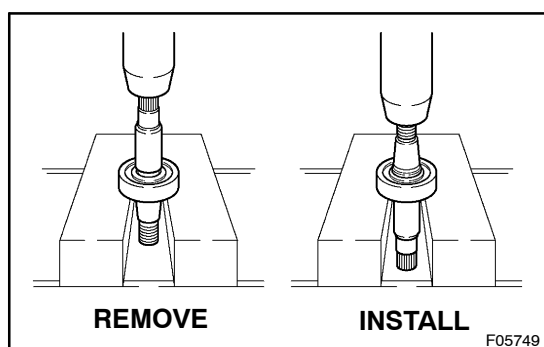


#### 5. IF NECESSARY, REPLACE BEARING

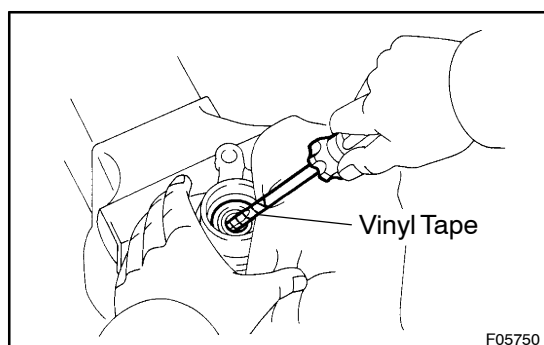
(a) Using 2 screwdrivers, remove the snap ring.

**NOTICE:**

**Be careful not to damage the shaft.**



- (b) Press out the bearing.
- (c) Coat a new bearing with power steering fluid and press in it.
- (d) Install a new snap ring.



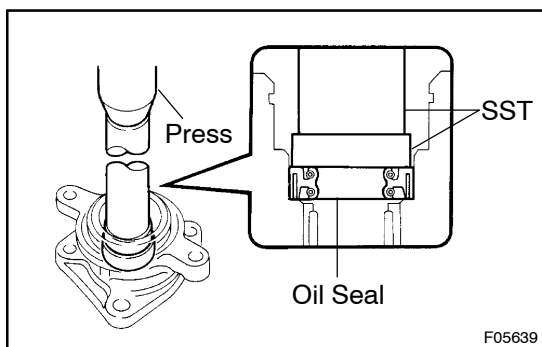
#### 6. IF NECESSARY, REPLACE OIL SEAL

(a) Using a screwdriver with vinyl tape wound around its tip, remove the oil seal.

**NOTICE:**

**Be careful not to damage the front housing.**

(b) Coat a new oil seal lip with molybdenum disulfide lithium base grease.



- (c) Using SST, press in the oil seal.  
SST 09950-60010 (09951-00330),  
09950-70010 (09951-07100)

**NOTICE:**

**Make sure to install the oil seal facing the correct direction.**