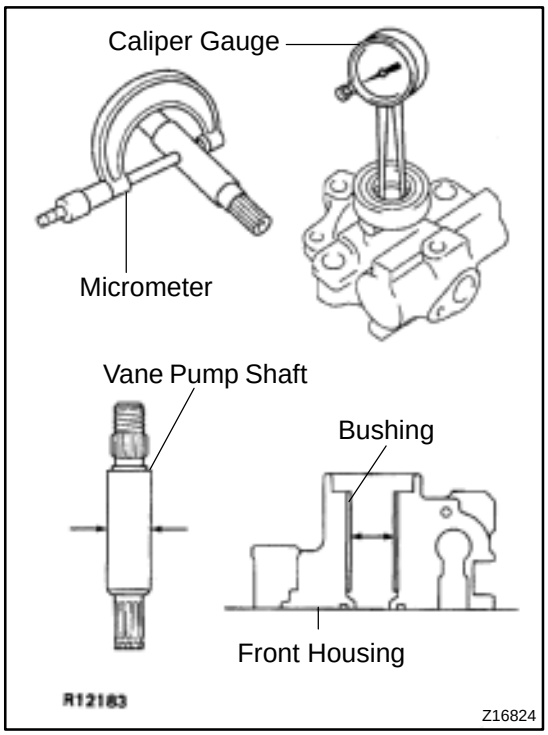


INSPECTION

NOTICE:

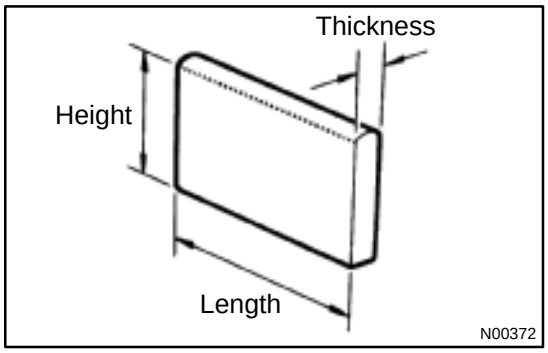
When using a vise, do not overtighten it.

1. CHECK OIL CLEARANCE BETWEEN VANE PUMP SHAFT AND BUSHING

Using a micrometer and caliper gauge, measure the oil clearance.

Standard clearance:
0.03 – 0.05 mm (0.0012 – 0.0020 in.)
Maximum clearance: 0.07 mm (0.0028 in.)

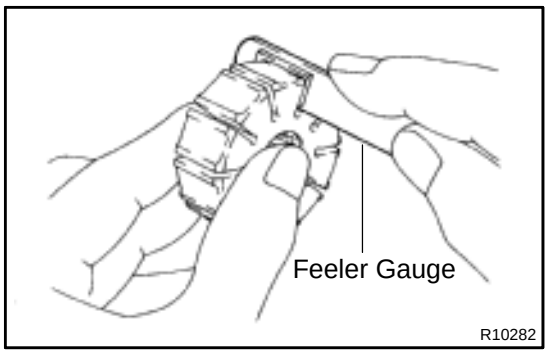
If it is more than the maximum, replace the front housing and vane pump shaft.



2. INSPECT VANE PUMP ROTOR AND VANE PLATES

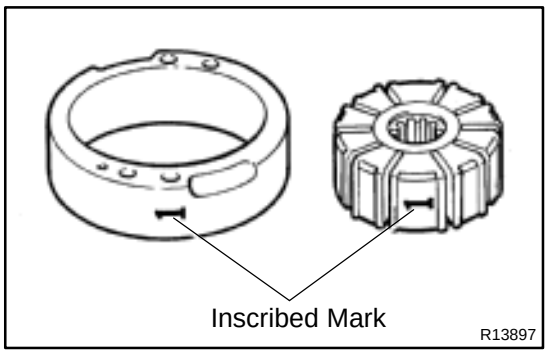
(a) Using a micrometer, measure the height, thickness and length of the 10 plates.

Minimum height: 8.6 mm (0.339 in.)
Minimum thickness: 1.397 mm (0.0550 in.)
Minimum length: 14.991 mm (0.5902 in.)



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

Maximum clearance: 0.035 mm (0.0014 in.)



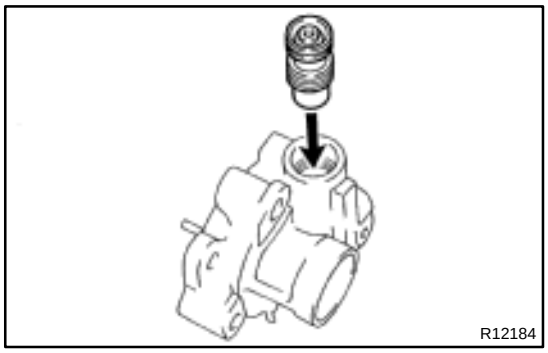
If it is more than the maximum, replace the plate and/or rotor with one having the same mark stamped on the cam ring.

Inscribed mark: 1, 2, 3, 4 or None

HINT:

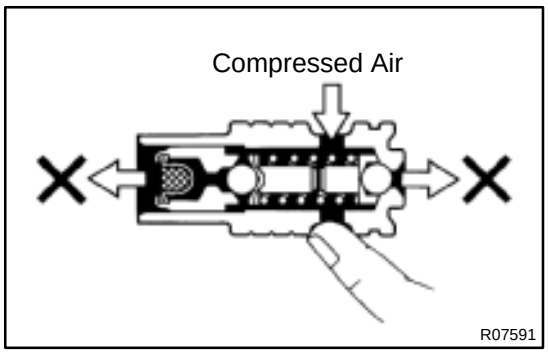
There are 5 vane plate lengths with the following rotor and cam ring marks:

Rotor and cam ring mark	Vane plate part number	Vane plate length mm (in.)
None	44345–26010	14.999–15.001 (0.59051–0.59059)
1	44345–26020	14.997–14.999 (0.59043–0.59051)
2	44345–26030	14.995–14.997 (0.59035–0.59043)
3	44345–26040	14.993–14.995 (0.59027–0.59035)
4	44345–26050	14.991–14.993 (0.59020–0.59027)

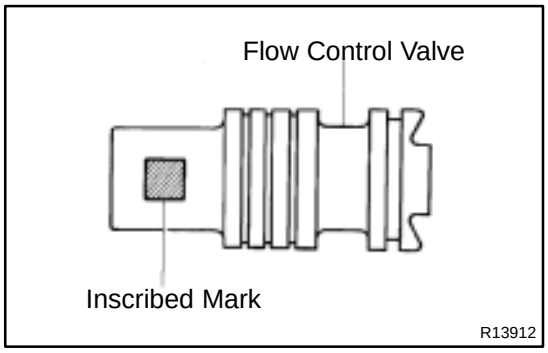


3. INSPECT FLOW CONTROL VALVE

(a) Coat the valve with power steering fluid and check that it falls smoothly into the valve hole by its own weight.



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

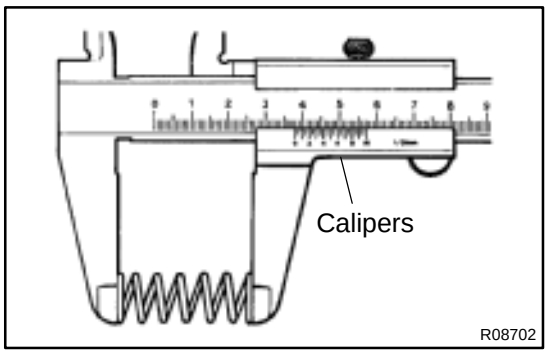


If necessary, replace the valve.

NOTICE:

Install a new valve with the same inscribed mark as the old one.

Inscribed mark: A, B, C, D, E or F

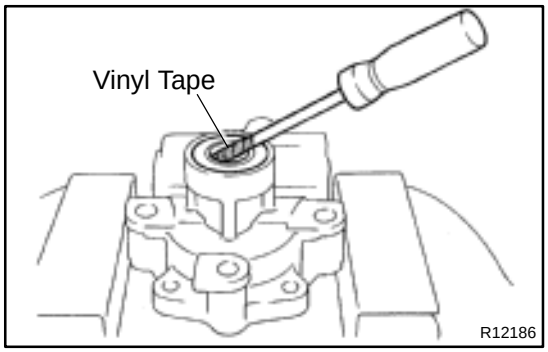


4. INSPECT SPRING

Using calipers, measure the free length of the spring.

Minimum free length: 33.2 mm (1.307 in.)

If it is not within specification, replace the spring.

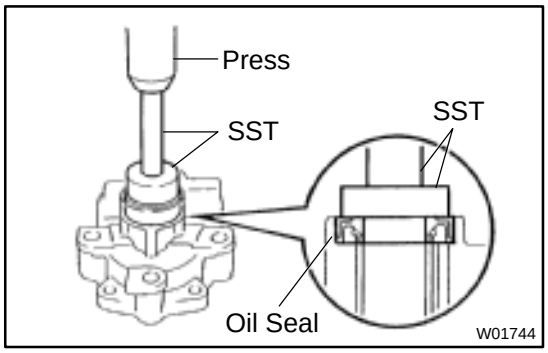


5. IF NECESSARY, REPLACE OIL SEAL

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

NOTICE:

Be careful not to damage the bushing of the front housing.



(b) Coat a new oil seal lip with power steering fluid.

(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.