SR0Y5–01

INSPECTION

NOTICE:

When using a vise, do not overtighten it.

1. CHECK OIL CLEARANCE BETWEEN VANE PUMP SHAFT AND REAR HOUSING

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

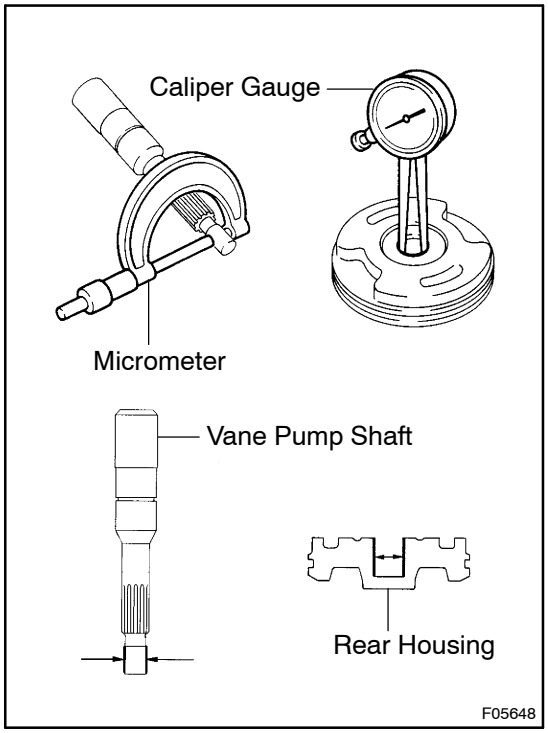
Standard clearance:
0.020 – 0.087 mm (0.00079 – 0.00343 in.)
Maximum clearance: 0.087 mm (0.00343 in.)

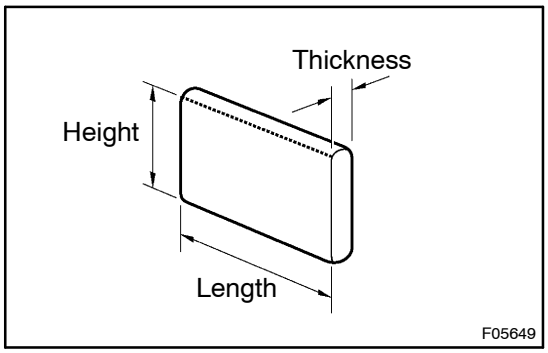
If it is more than the maximum, replace the rear housing and vane pump shaft.

2. 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.

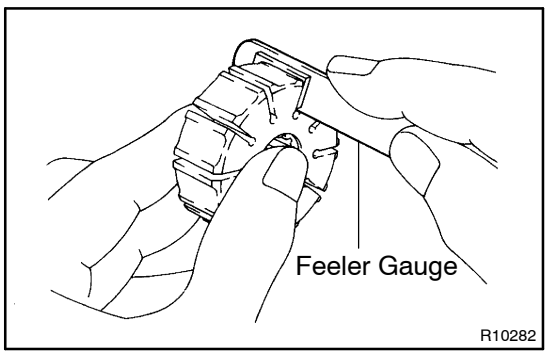




3. INSPECT VANE PUMP ROTOR AND VANE PLATES

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

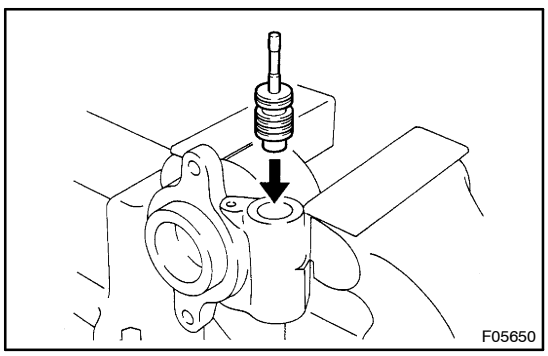
Minimum height: 9.2 mm (0.362 in.)
Minimum thickness: 1.965 mm (0.07736 in.)
Minimum length: 15.953 mm (0.62807 in.)



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

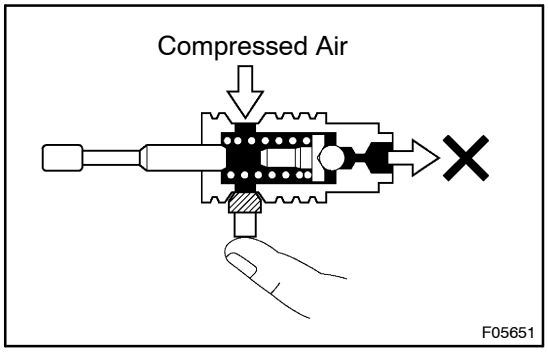
Maximum clearance: 0.03 mm (0.0012 in.)

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



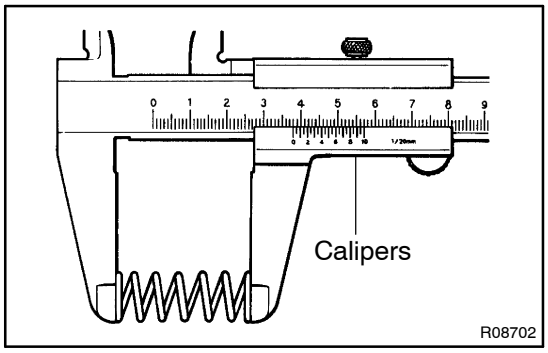
4. INSPECT FLOW CONTROL VALVE

(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 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 hole, and confirm that air does not come out from the end hole.

If necessary, replace the valve with the front housing.



5. INSPECT SPRING

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

Minimum free length: 33.4 mm (1.315 in.)

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