

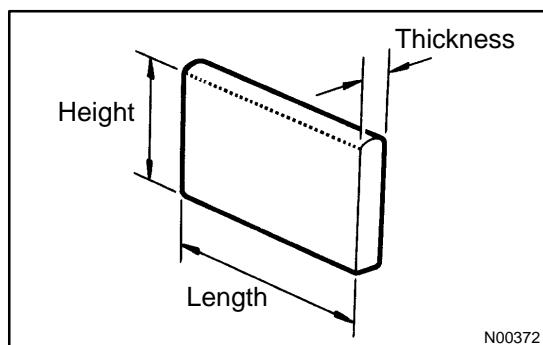
INSPECTION

1. MEASURE OIL CLEARANCE BETWEEN VANE PUMP SHAFT AND BUSHING

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

Maximum clearance: 0.07 mm (0.0028 in.)

If it is more than the maximum, replace the vane pump assembly.

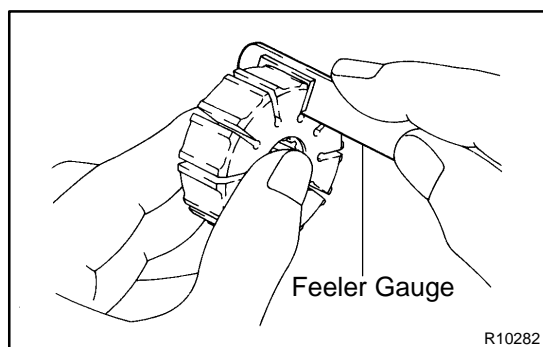


2. INSPECT VANE PUMP ROTOR AND VANE PLATES

(a) Using a micrometer, measure the thickness of the 10 vane plates.

Standard thickness:

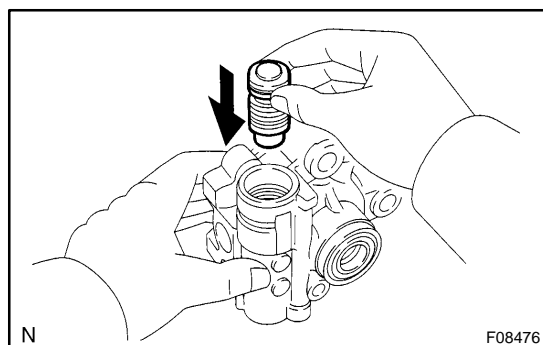
1.405 to 1.411 mm (0.05531 to 0.05555 in.)



(b) Using a feeler gauge, measure the clearance between a side face of the vane pump rotor groove and the vane plate.

Maximum clearance: 0.03 mm (0.0012 in.)

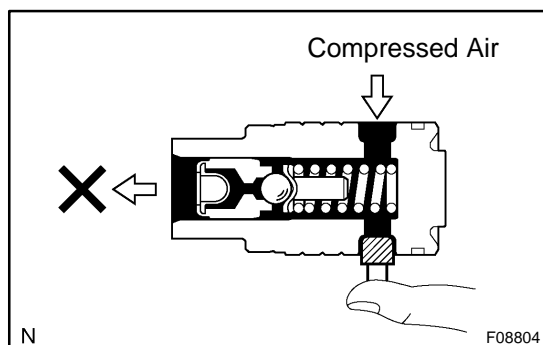
If it is more than the maximum, replace the vane pump assembly.



3. INSPECT FLOW CONTROL VALVE

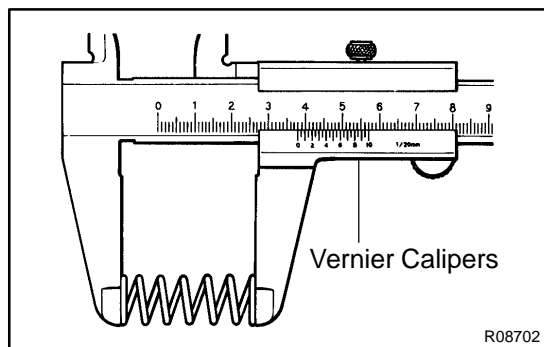
(a) Coat the flow control valve with power steering fluid and check that it falls smoothly into the valve hole of the front housing under its own weight.

If it lacks smoothness, replace the vane pump assembly.



(b) Check the flow control valve for leakage. Close one of the holes and apply compressed air of 392 to 490 kPa (4 to 5 kgf/cm², 57 to 71 psi) into the opposite side hole, and confirm that air does not come out from the end hole.

If air leaks, replace the vane pump assembly.



4. INSPECT SPRING

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

Minimum free length: 36.9 mm (1.453 in.)

If it is not within the specification, replace the vane pump assembly.

5. INSPECT PRESSURE PORT UNION

If the union seat in the pressure port union is severely damaged, it may cause fluid leakage. In that case, replace the vane pump assembly.