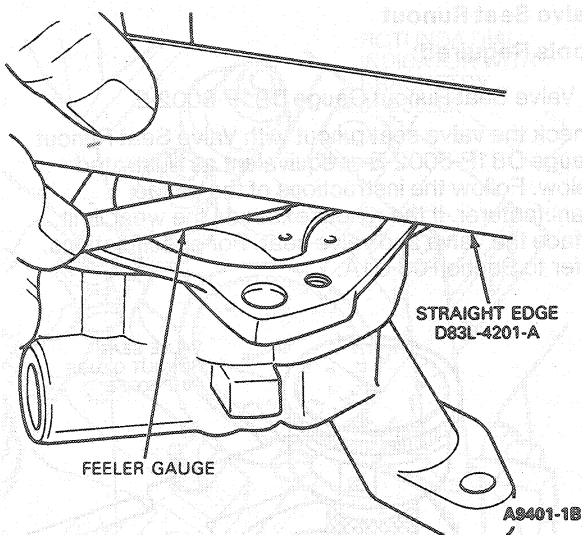


OVERHAUL (Continued)

Measure the clearance (rotor end play) between the straightedge and the rotor and outer race. Maximum clearance must not exceed 0.13mm (0.005 inch).

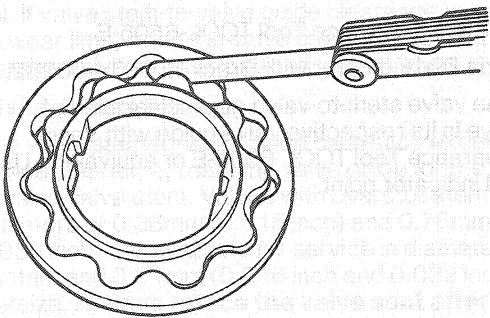


Inspect the relief valve spring to see if it is collapsed or worn. Check the relief valve spring tension. If the spring tension is not within specification and/or the spring is worn or damaged, replace the pump. Check the relief valve piston for free operation in the bore.

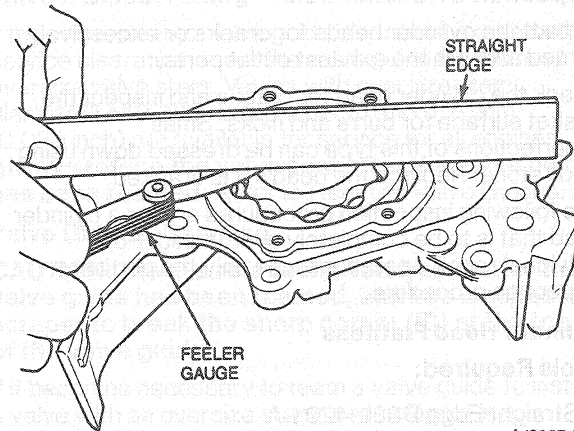
NOTE: Internal components are not serviced. If any component is out of specification, the complete pump must be replaced.

3.0L/3.2L SHO

The inner rotor tip-to-outer rotor tip clearance must not exceed 0.06-0.18 (0.0024-0.0071 inch) with the feeler gauge inserted 12.7mm (1/2 inch) minimum and rotors removed from the pump housing.



With the rotor assembly installed in the pump housing, place a straightedge over the rotor assembly and the housing. Measure the clearance (rotor end play) between the straightedge and the rotor and outer race. The clearance should be 0.03-0.09mm (0.0012-0.0035 inch).



Inspect the relief valve spring to see if it is collapsed or worn. Check the relief valve spring tension. If the spring tension is not within specification or the spring is worn or damaged, replace the pump. Check the relief valve piston for free operation in the bore.

NOTE: Internal components cannot be serviced. If any component is out of specification, the complete pump must be replaced.

Oil Pan

Cleaning

CAUTION: Do not damage the oil level sensor (if equipped) when cleaning the oil pan.

Scrape any dirt or metal particles from the inside of the pan. Scrape all old gasket material from the gasket surface. Wash the pan in a solvent and dry it thoroughly. Ensure all foreign particles are removed.

Inspection

Check the pan for cracks, holes, damaged drain plug threads. Check the gasket surface for damage caused by over-tightened bolts. Replace with a new oil pan if repairs cannot be made.

Cylinder Heads

Replace the head if it is cracked. Do not plane or grind more than 0.25mm (0.010 inch) from the original cylinder head gasket surface. Remove all burrs or scratches with an oil stone.

Cleaning

With the valves installed to protect the valve seats, remove deposits from the combustion chambers and valve heads with a scraper and a wire brush. Be careful not to damage the cylinder head gasket surface. After the valves are removed, clean the valve guide bores. Use cleaning solvent to remove dirt, grease and other deposits. Clean all bolt holes. Remove all deposits from the valve with a fine wire brush or buffing wheel.