

Next measure the part of the camshaft that wears on the bushing. If the micrometer reading shows less than the service limit, replace the camshaft.

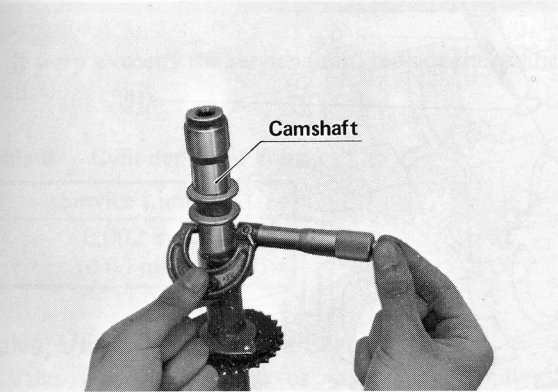


Table 6 Camshaft Diameter

Standard	Limit
.9633~.9638 in. (24.467~24.480 mm)	.9614 in. (24.420 mm)

Camshaft Runout

Remove the camshaft and take the sprocket off the shaft.

NOTE: When remounting the sprocket, use Loctite on the mounting bolts, tighten the bolts (6) with 11.0 ft-lbs (1.5 kg-M) of torque, and make sure that the exhaust and intake sprockets go on the right shaft.

Suspend the shaft in V blocks at the points on the shaft where the bushings seat. Measure runout with a dial gauge set to the sprocket mounting location, and replace the shaft if runout exceeds the service limit.

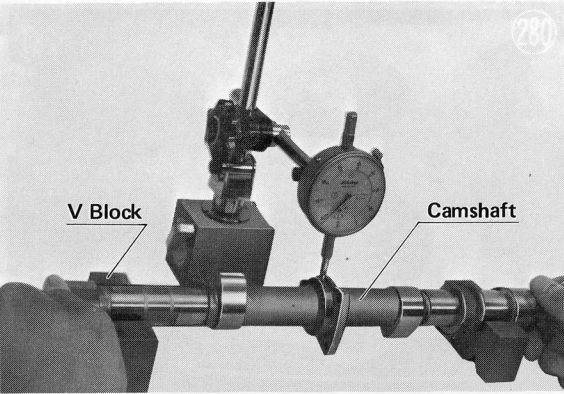


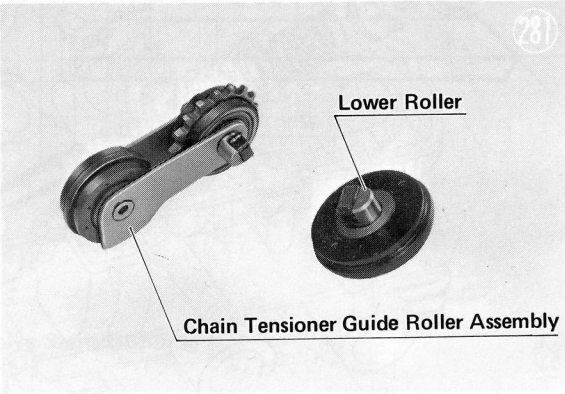
Table 7 Camshaft Runout

Standard	Limit
under .0008 in. (under .02 mm)	.004 in. (.10 mm)

CAMSHAFT CHAIN

The camshaft chain, which is driven by the crankshaft sprocket, drives the two camshafts at one-half of the crankshaft r.p.m. For maximum durability, it is an endless-type chain with no master link. Because of ample lubrication and little load on the chain, the camshaft chain and sprockets wear very little.

The guide rollers, however, are made of rubber and will slowly wear down. When the chain can no longer be adjusted enough to stop it from making noise, remove the guide rollers for inspection. If the lower roller or the chain tensioner guide roller assembly shows wear or damage, replace the parts.

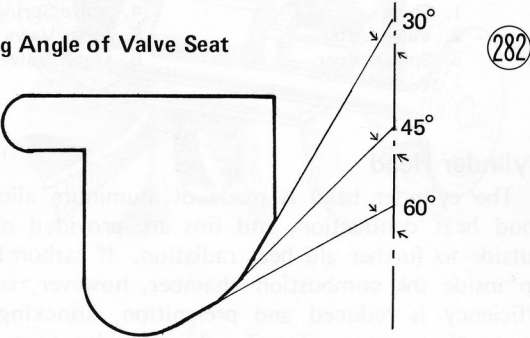


CYLINDER HEAD, VALVES

The cylinder head and valve parts are shown in Fig. 283. The valves are mounted in the head, and are pushed open by the cams, and closed by the valve springs.

Valve guides are pressed into the cylinder head, and the valve seats are cast in. The valve seat, which is cut to the angles shown in Fig. 282, not only prevents compression leakage by fitting snugly against the valve, but also prevents the valve from overheating by allowing efficient heat transmission.

Cutting Angle of Valve Seat



The clearance between the valve lifter and cam is adjustable up to .04 in. (1 mm), but when valve and seat wear and valve seat grinding make this clearance unadjustable, the valve stem end can be ground down to increase clearance. If the adjustment limit is again exceeded, the cylinder head will have to be replaced.