

c. Cylinder Wear

Pressure from the piston, the piston rings and combustion, causes heavy wear at the points shown to be measured.

Using an inside micrometer or cylinder gauge, take two measurements (front to back, side to side) at each of the three points indicated. If any of the six measurements is out of tolerance, or if any two measurements vary by more than .0020 in. (0.05 mm) bore and hone the cylinder, or replace it.

Cylinder Measurement

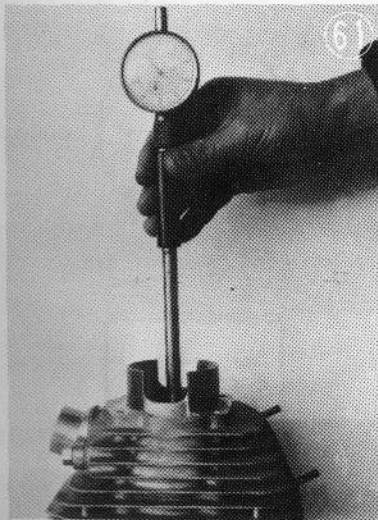
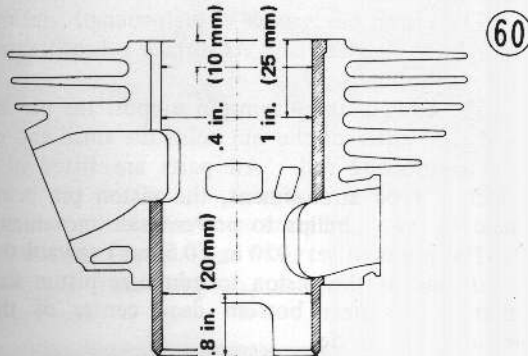


Table 4 Cylinder Diameter

Model	Standard Diameter	Service Limit
H1	60 $\begin{smallmatrix} +0.019 \\ -0 \end{smallmatrix}$ mm	60.15 mm
	2.3622 $\begin{smallmatrix} +0.0007 \\ -0 \end{smallmatrix}$ in	2.3681 in
H2	71 $\begin{smallmatrix} +0.019 \\ -0 \end{smallmatrix}$ mm	71.15 mm
	2.7953 $\begin{smallmatrix} +0.0007 \\ -0 \end{smallmatrix}$ in	2.8012 in

d. Piston/Cylinder Clearance

While the engine is running, the piston is subjected to constant high temperature and expands much more than the cylinder which can radiate a certain amount of its heat. Therefore,

the piston and cylinder are made with a certain amount of clearance between them. Piston seizure, slap, lubrication oil consumption, compression, etc., are all closely related to this clearance.

When the cylinder is honed or if the cylinder is replaced, the piston clearance must be measured and the standard value maintained. Measure the cylinder inside diameter and the piston diameter at the points indicated in Fig. 62; the difference between these two measurements is the piston/cylinder clearance. Compare the measured clearance with standard values in Table 5.

Piston Clearance

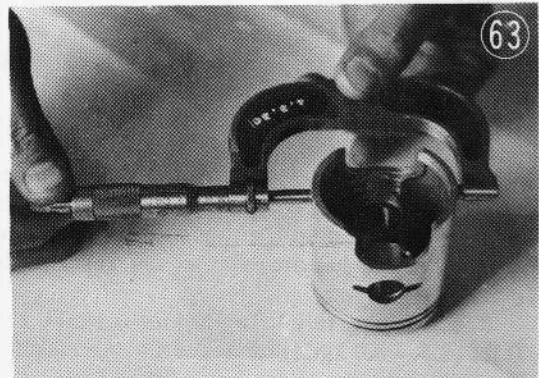
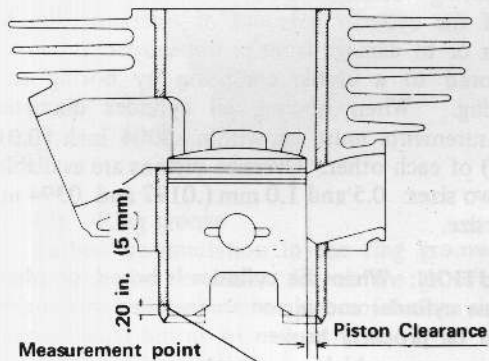


Table 5 Piston Clearance

Model	Standard Clearance
~73 H1	0.0024~0.0028 in. (0.062~0.070 mm)
~74 H1	0.0022~0.0026 in. (0.057~0.065 mm)
H2	0.0028~0.0031 in. (0.070~0.078 mm)

e. Compression

Confirm that the head is tightened down with the standard torque, and that there is no compression leadage at the head gasket. Standard torque is 14.5–17.5 ft-lbs (2.0–2.4 kg-M) for the H1, and 30 ft-lbs (4.2 kg-M) for the H2. Then thoroughly warm up the engine to bring piston clearance to normal, and to be sure of sufficient lubrication oil between the piston and cylinder.

Next remove all spark plugs and insert a compression gauge firmly into one spark plug opening at a time, allowing no compression