

Inspecting Cylinders

The 1600 S-90 engine is equipped with light alloy cylinders with ferral bore surfaces. The following size group table is valid for the 1600 S-90 engine only.

Matching cylinder and piston pairs are marked with the same letter. The cylinders are marked at the base while the pistons are marked on the crown. Only cylinders and pistons of the same size group are to be matched. Cylinders must be measured using an inside micrometer and gauge ring P 13 c.

Size group divisions

Group	Cylinder Dia. mm	Piston Dia. mm
A	82.460-82.465	82.430-82.435
B	82.465-82.470	82.435-82.440
C	82.470-82.475	82.440-82.445
D	82.475-82.480	82.445-82.450
E	82.480-82.485	82.450-82.455
F	82.485-82.490	82.455-82.460
G	82.490-82.495	82.460-82.465
H	82.495-82.500	82.465-82.470
I	82.500-82.505	82.470-82.475
K	82.505-82.510	82.475-82.480

Cylinder measurement should be taken approximately 30 mm (1 3/16 in.) from the bottom of the bore.

Piston cylinder clearance, new, should be from 0.025 to 0.035 mm (.00098 to .00138 in.). The wear limit is 0.1 mm (.00394 in.).

Cylinders approaching the wear limit should be replaced together with their pistons by new pairs of the same size group. Within one engine it is permissible to have a size group difference of not more than four, i.e. A and D sizes may be used, but not A and E.

Matching cylinder and piston pairs are marked with the same letter. The cylinders are marked at the base while the pistons are marked on the face.

Only cylinders and pistons of the same size group are to be matched.

Note

Cylinder heights between the base and the cylinder head mounting surface are available in four height groups.

Only cylinders of the same height group may be installed under a common cylinder head. The height group is marked on the cylinder base in an equilateral triangle next to the size group with a 5, 6, 7, or 8.