



CYLINDER GRADE LETTER

Fig. 48. Position on cylinder block of cylinder bore grade letters

With a feeler gauge check vertical clearance of the rings in the grooves.

Fit the rings to the pistons in such a way that the ring gaps are equally spaced out round the piston, and not in line with one another, making sure that the rings checked in No. 1 cylinder are fitted to No. 1 piston and so on. No. 1 cylinder is the cylinder nearest to the crankshaft pulley.

CYLINDER BLOCK

Piston and Cylinder bore grading (See Fig. 48)

Bore grading

All cylinder blocks are graded A, B and C by stamping any one of these letters, in the position shown in Fig. 48. The bore grade diameters for these letters are given in General Data under "Engine".

Piston grades—Saloon and van

These pistons are graded A, B, C, D or A1, B1, C1 or D1. Pistons with suffix 1 after the grade letter have thicker bosses above the gudgeon pin and are .0003 in. (.007 mm) smaller in diameter than the equivalent A, B, C or D grade.

Piston grades—Sport

Sport engine pistons are graded A, B, C or D. They are .0006 in. (.015 mm) smaller than saloon and van A, B, C or D grade and .0003 in. (.007 mm), smaller than A1, B1, C1 and D1 pistons.

Piston fitting

Saloon and van pistons to grades A, B, C or D and A1, B1, C1 or D1 can be fitted in service repair work to a clearance of .001 in. (.025 mm). Sport pistons should be fitted with a mean clearance of .0015 in. (.038 mm).

On new engines correct piston fits are obtained by fitting pistons to cylinders having the same grade letter as that stamped on the piston crown.

After a new engine has been run for a few hundred miles the cylinder grade letter sizes no longer apply because the running in process results in a very small increase in cylinder bore diameter, and if a piston, or pistons have to be changed the piston grading sizes and grading letter are used in the following way:—

1. Check the cylinder bore diameter with a Mercer, or other dial type measuring gauge, after setting its zero reading, in a suitable ring gauge.
2. From the size obtained subtract the correct piston clearance given in the Data Section under "Piston" and from this size choose a suitable grade of piston.

Example

Bore size given by clock gauge 2.6773 ins.—.0011 ins. (piston skirt clearance) = 2.6762 ins.

Nearest piston size to 2.6762 ins. is C grade and this would be the piston to use.

To rebore and fit oversize pistons

The maximum oversize for reboring is given in the Data Section under "Cylinder Block". When reboring