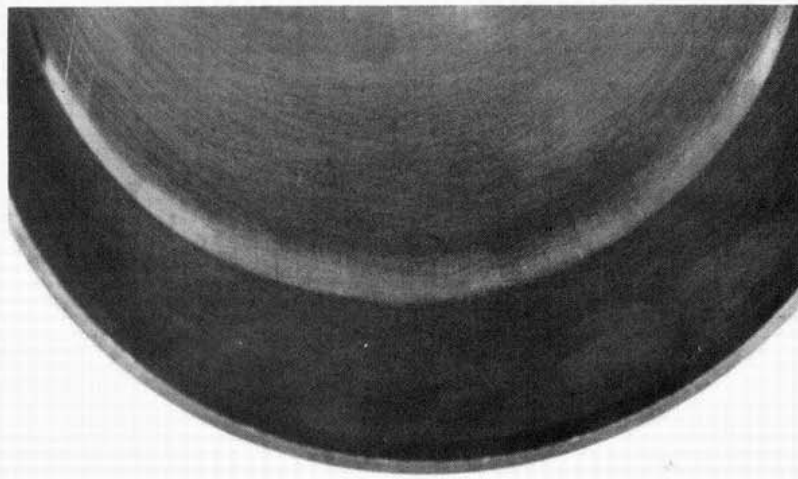


1.6



1 Piston Skirt

1-6 Piston jamming caused by cylinder deformation resulting from incorrect installation

Symptoms A sharply confined seizure area at the lower skirt end with several “smeared-over” spots, partly glossy without deep seizure score marks. The cylinder exhibits a glossy circumferential belt at the level of the rubber seal.

Cause and Effect This case involves a localized reduction in clearance, which may occur particularly with liner engines. With wet cylinder liners, incorrect fitting diameters or rubber seals which are too thick may neck the cylinder. Faults of this type may also arise with block engines where liners have been fitted. It is obvious in this case that a machining operation produced an offset, e.g. when boring the block or turning the outer diameter of the liner, and that this has constricted the liner.

Local seizures can be caused by deformed, because not properly installed cylinders and by uneven tightening of cylinder bolts (a particular danger with air-cooled finned cylinders)

Remedy Insert wet cylinder liners at first without rubber sealings, in order to check that no deformation (lack of clearance) occurs. In the case of block engines, uneven wear of the honing stones may cause the lower part of the cylinders to be narrower; for this reason always measure cylinder bores at several levels. Insufficient flatness of the cylinder block or cylinder head, or wrong cylinder head gasket, may also cause deformation of the cylinders.