



Fitting Wet Liners - The Importance of Cleanliness

Fitting a wet cylinder liner and its sealing rings should not be difficult. Reasonable care and attention to detail makes assembly easy and the finished job perfect. Lack of care can cause sealing rings to twist and possibly shear, resulting in water leaks or cylinder liner distortion. In extreme cases, the piston may seize and cause extensive engine damage.

Most engine blocks suffer some internal corrosion during their working life. The debris tends to accumulate in the lowest regions of the cylinder, normally just above the liner sealing rings.

Remove all debris, scale and corrosion from the engine block in the sealing ring area during installation. Also, remove sharp edges to avoid cutting or shearing the seals when pushing the liner into position.

If the sealing ring grooves are located in the cylinder block, must be clean and in good condition. Damaged or dirty grooves prevent the rings from sealing correctly.

Ensure that the sealing area in the cylinder block is clean, undamaged and remove burrs or sharp edges that could damage the sealing rings. Also, ensure the rings are not twisted in their grooves. Lubricate them generously, with rubber grease if possible, and install the liner.

It is normal to feel slight resistance as the sealing rings compress into their grooves. If undue force is required, withdraw and investigate the cause of the resistance and correct. Do not use excessive force.

If dismantling a wet lined engine to investigate an operating problem shortly after reconditioning, examine the inside of each liner adjacent to the sealing ring grooves. Remove the liner if a band of wear, polishing or seizure is visible. Examine the sealing areas for any problem that could place pressure on the liner.

