

### Cylinder Prep - Cross Hatch Pattern

Maintaining the proper cross hatch angle is important for two reasons:

- 1) Oil retention on the cylinder wall
- 2) The rate of ring rotation.

Excessively shallow cross hatch angles can hinder or slow down the necessary ring rotation that allows dissipation of heat. It can also leave too much oil on the cylinder wall allowing the rings to skate over the surface leading to excess oil consumption. Too steep of a cross hatch angle may not provide adequate oil retention and can result in dry starts and premature ring wear. A steep pattern angle can also create excessive ring rotation that will accelerate ring and piston ring groove wear.

