

# Oil Ring Installation with Spacer Ring or Roll Pin Locator

**KB** long rod and stroker pistons often have very short compression heights. The resulting short distance between the piston head and wrist pin crowds the rings so that the oil ring must be positioned over the **wrist pin hole**. The bottom oil ring rail must span a 3/4" gap and the ring end must not be allowed to migrate into the oil groove gap (*fig. 1*).

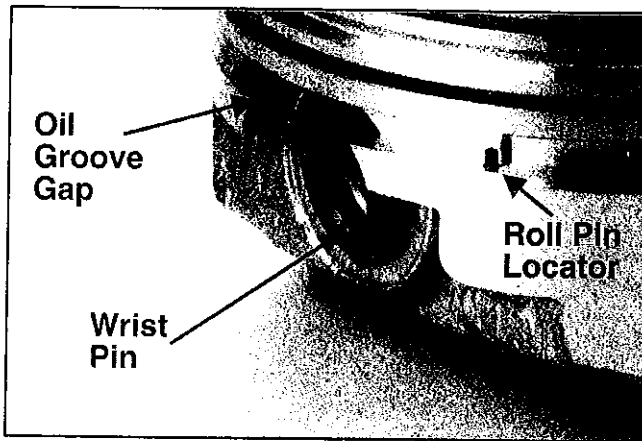


Figure 1

Many solutions for keeping the ring out of the oil groove gap and pin bore area have been tried. We feel the roll pin locator design gives the best oil control with the least added weight (*fig. 2*). The time required to slightly modify a lower oil ring rail for each piston is nominal -- all that is needed is clearance for the roll pin (*fig. 3*).

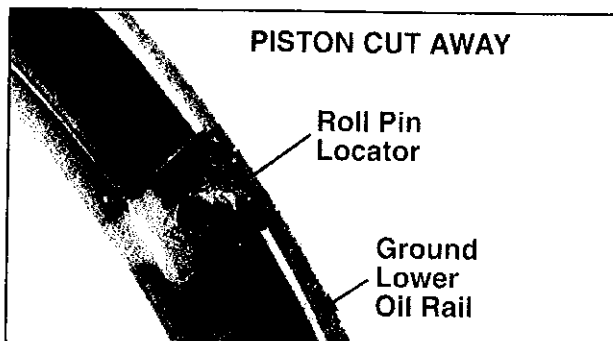


Figure 2

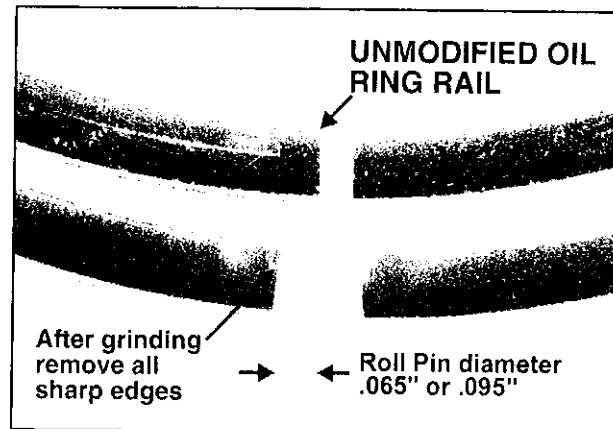


Figure 3

# Oil Ring Installation with Spacer Ring or Roll Pin Locator

Most lightweight ring expanders will slip over the roll pin.

**Do not butt expander ends against the roll pin.**

**Note** that the oil ring expander does not need to be positively located, it only needs to provide clearance for the roll pin (fig. 4). Be sure the top oil ring rail is free to rotate on the piston.

Grinding the bottom oil ring rail is usually done on a bench grinder that has a nice square stone (fig. 5).

Remove burrs with a small file.

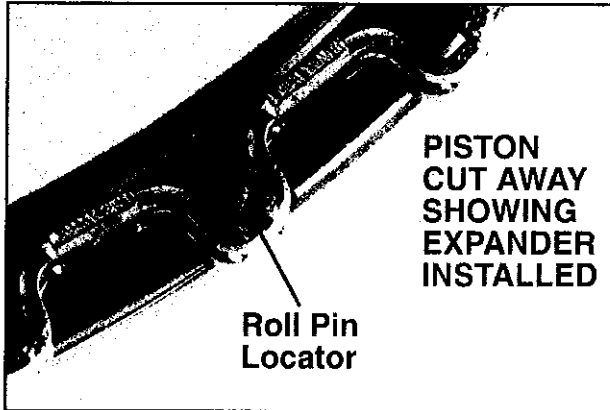


Figure 4

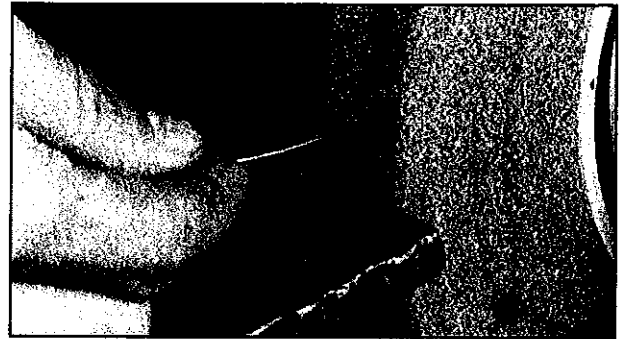


Figure 5

It is not practical to use the roll pin locator with our forged piston design. The tried and proven spacer rails come with all **KB forged** piston sets that require the oil ring to bridge the pin bore. It is recommended that the spacer rail ends be situated about 90° away from the pin bore. Avoid distorting the spacer rail as much as possible by spiraling the rail into the oil groove carefully. A ring expander is suggested for the compression rings to reduce the chance of blow by and oil consumption.

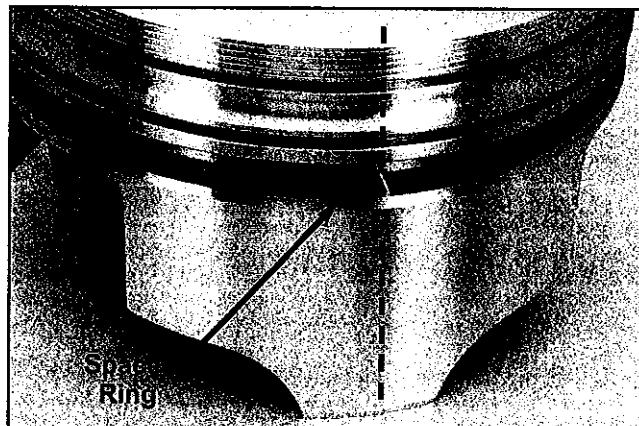


Figure 6