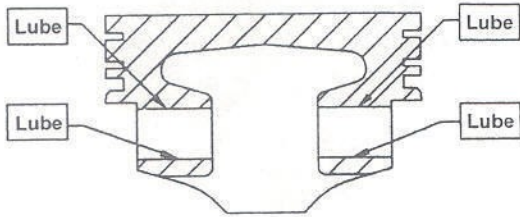


## PREVENT PIN GALLING

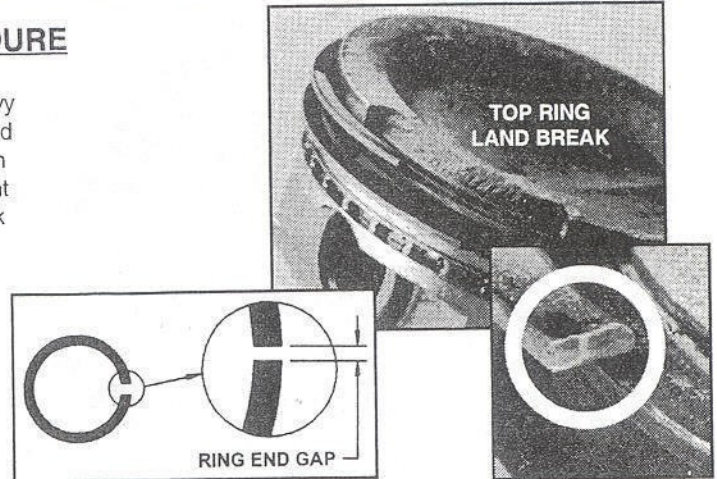


1. High pressure lubricant must be used between the pin and pin bore. Failure to properly lubricate the areas indicated may result in pin seizure.
2. It is recommended the connecting rod be heated and the pin fitted by hand to insure no damage occurs to the pin and pin bore. Pressing the pin through the rod eye is not recommended due to possible scuffing of the pin surface and pin bore.
3. After assembly the pin should move freely in the pin bore.

## HYPEREUTECTIC TOP RING GAP PROCEDURE

1. "H" suffix (hypereutectic) pistons used in high performance, heavy towing or marine applications may require an increase in ring end gap of 20% to 40% of the top ring only. The 2nd and oil ring can use factory recommended end gaps. Failure to provide sufficient top ring end gap will cause a portion of the top ring land to break as the ring ends butt and lock tight in the cylinder. The broken piece will cause further piston or engine damage.

Example: factory recommended gap = .016  
 40% increase in gap =  $(.016 \times .40) + .016 = .022$  inch



## PISTON FITTING FOR SKIRT COATED PISTONS

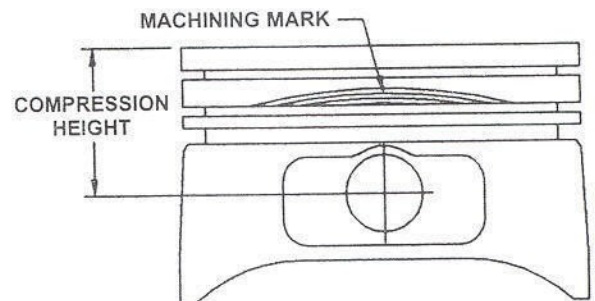


1. A "C" suffix has been added to the part numbers of pistons with anti-friction dry lubricant.
2. The label on the piston container indicates, "COATED" and lists the "Recommended Finished Bore Diameter".
3. Pistons that have dry film lubricant applied to the skirts are approximately .001 larger in diameter than uncoated pistons.
4. Failure to follow the "Recommended Finished Bore Diameter" can result in piston failure.

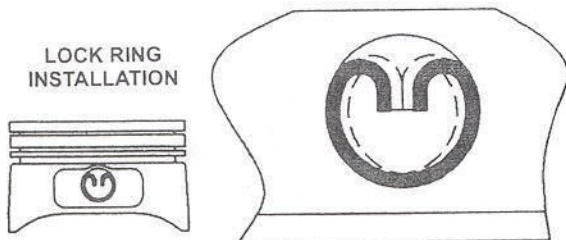
1. Some piston lands have a machining mark above the pin hole on one side only. The machining mark is made during the skirt finishing operation and in no way affects the pistons function or performance.
2. Piston to cylinder clearance:  
 Honing a cylinder to a finished diameter of the nominal bore size plus the piston oversize will provide proper piston to cylinder clearance for normal operation.  
 Example: Chevrolet 350  
 1436 Piston  
 $(4.0000" \text{ nominal bore diameter}) + (.030" \text{ oversize}) = 4.0300"$   
**Hone the cylinder to 4.0300" for a .030" oversize piston.**
3. It is important that when resizing the cylinders of a metric engine you use **millimeter** oversizes carried to a six decimal place for finished cylinder diameter calculations.  

.25mm = .009843	0.5mm = .019685	0.75mm = .029528
1.0mm = .039370	1.5mm = .059055	
4. *Pistons used in severe duty or marine applications may require additional clearance.*

## GENERAL DATA



## LOCK RING INSTALLATION



1. Lockrings should be positioned as shown in order to avoid inertial loading to the locking and possible distortion.
2. The compression of the locking to install in the lock ring grooves should be minimized to avoid the loss of spring tension. Over compressing of the locking may cause failure.