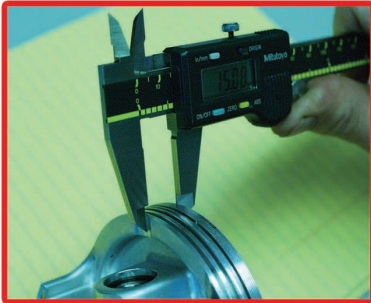




## HOW TO MEASURE ENGINE DECK HEIGHT USING THE PISTON COMPRESSION HEIGHT AND CONNECTING ROD LENGTH.

(YOU CAN USE METRIC OR INCH MEASUREMENTS.)

1



### STEP 1-

Measure from top of piston just above the rings and record this dimension. In our example this is 15mm.

### STEP 2-

Measure the piston pin size and divide by two (one half). In our example the pin size is 20mm and one half of this is 10mm. Add 10mm to the 15mm from STEP 1 for a total of 25mm. This calculated dimension, 25mm is called the piston compression height.

2



### STEP 3-

Measure the distance between the big end of the rod and the small end of the rod and record this size. In our example this is 83mm.

### STEP 4 & 5-

Measure the big end of the rod and the small end of the rod and add these two dimensions together. The big end is 39mm and the small end is 17mm for a total of 56mm. Divide the total by two (one half) and add this number to the measurement from STEP 3. In our example  $39 + 17 = 56$ , divided by two is 28. Add 83mm and 28mm and the total is 111mm which is the rod length; the distance from the center of the big end to the center of the small end of the rod.

3



## HOW TO CALCULATE DECK HEIGHT FOR STROKER CRANKSHAFT INSTALLATION. (DECK HEIGHT IS THE DISTANCE FROM THE CENTER OF THE CRANKSHAFT TO THE TOP OF THE BLOCK OR CYLINDER)

4



### STEP 6-

Add the piston compression height to the rod length. In our example this is 25mm plus 111mm for a total of 136mm. Deck height is useful for calculating the change of piston or rod required for installing a stroker crank. The compression height change is always one half the stroke change. So if you install a +4mm stroker crankshaft, you will need a compression height of one half of the change or 2mm shorter. In our example a 4mm stroker will need a deck height of 134mm to put the piston top in the exact spot it was originally. The 2mm change can be made by using a -2mm short rod or a piston with a minus (-) 2mm compression height; a pin that has been relocated upward 2mm.

5

