

## Installing and Adjusting Morel Hydraulic Lifters:

1. Do not wash in any solvent. Wipe the parts off with a lint free towel.
2. Use 10W30 oil and lube the O.D. of the body and wheel.
3. Make sure the lifter-to-bore clearance on cast iron blocks is: .0015" - .0017".

On aluminum blocks that oil the lifter (LS Series), the clearance is: .0014" - .0016".

Both of these measurements are at 70 Deg F.

The aluminum block will have a higher rate of expansion and that is why the clearance is tighter.

## Adjusting the Zero-lash setting of the Lifter:

1. I always like using the firing order to set the valves. Put the engine on #1 cylinder.
2. What we want is the int. and ex. to be on the base circle of the camshaft.
3. Adjust the rocker until the push rod just starts to get tight while taking the pushrod and rolling it between your thumb and finger. Once you feel drag, this is what we call Zero-lash.
4. You are now ready to tighten down on the adjuster using the following method:
  - a. It is important to know the thread pitch, in threads per inch, of the adjuster nut, because one complete turn of the nut will move a distance of one complete thread. Therefore, verify the thread pitch of the adjuster nut, because racing rocker manufacturers use different nut sizes and thread pitches.
  - b. If your adjuster nut is 7/16 x 20 threads per inch, then divide 1 inch by 20 threads per inch. One complete turn down on a 7/16 by 20 adjuster nut will move .050".
  - c. Next, divide .050" divide by 4 to calculate the distance for a quarter-turn of the adjuster nut (.050" / 4 = .0125").
  - d. For a 3/8 x 24 adjuster nut, the calculations are:  
 $1" / 24 \text{ TPI} = .042" \text{ per full turn and } .042" / 4 = .0105" \text{ per quarter-turn.}$
  - e. Use the chart below to determine how many quarter-turns to tighten the adjuster nut after Zero-lash:  
Cast Iron block and Cast Iron Head = .020" - .025"  
Cast Iron block and Aluminum Head = .030" - .035"  
Aluminum block and Aluminum Head = .045" - .050"
5. Repeat these adjustments for each cylinder running through the firing order.