Pushrod Adjustment

1. Bring Cam to Base circle for the tappets you wish to adjust.
   a. Rotate the engine. Watch the intake valve open (pushrod goes up) and then close (pushrod goes down). Continue rotating slowly until the cylinder’s piston reaches top dead center (TDC). The cylinder that you’re adjusting will now have both its tappets on the base circle of their camshaft lobes. This is the lowest point in the tappet blocks for the tappets. **Notice:** Valve is on its seat and fully closed.

2. Adjust the pushrods
   a. Bring pushrods to Zero lash, no up and down movement, tight against rocker arm, and tight against tappet/lifter.
   b. Mark the pushrod with a marker or paint stick.
   c. Extend the pushrod (4) four full turns or 24 flats (if using S&S Pushrods, S&S pushrods have a 32 Threads per inch) 
   d. Allow the tappet/lifter to bleed down 20/30 minutes, longer is better.
   e. If after 20/30 minutes you can spin the pushrod with your fingers **you do not have limited travel tappets (HL2T kit).**
   f. If you **do not** have HL2T or Travel limited tappets, lock the pushrod down. Repeat process for the other cylinder and pushrods, you are now done adjusting.
   g. If you **do** have HL2T or Travel limited tappets move on to the next step.

3. If you cannot spin the pushrod, you have S&S Limited Travel tappets (HL2T kit).
   a. From this point you want to shorten the pushrod. While shortening you will feel drag on the pushrod, this is the valve spring tension.
   b. While shortening, you will feel the valve spring release the pressure on the pushrod. When the adjustment is correct, you will again be able to spin the pushrod with your fingers. The pushrod must spin freely, with **NO** up and down movement.
   c. From this point you want to shorten one full turn, 6 flats.
   d. Lock down the pushrod and repeat for the rear cylinder.

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**Do not try to make short cuts in this process. Proper bleeding down of the tappets is critical for healthy running motors. Damage to motor will happen not following these instructions.**
STEP 1
• Lifter on base circle of cam
• Pushrod at zero lash
Notice: Valve is on the Seat

STEP 2
• Extend pushrod 4 turns (0.1252")
(S&S pushrods are 32 threads per inch. Pushrods that are not 32 threads per inch will require a modified adjustment).
• Notice: Valve is off the seat
• Wait 15 minutes for valve spring pressure to bleed oil out of the lifter.

STEP 3
• You should be able to spin the pushrod with your fingers.
• Tighten the jam nut.
**STEP 1**
- Lifter on base circle of cam
- Pushrod at zero lash

**Notice:** Valve is on the Seat

**STEP 2**
- Extend pushrods 4 turns (.125")

S&S Pushrods are 32 threads per inch. Pushrods that are not 32 threads per inch will require a modified adjustment.

(Notice: Valve is off the Seat)

**STEP 3**
- Wait 15 minutes for valve spring pressure to bleed oil out of the lifter.
- Notice the plunger had traveled down and contacted the travel limiter spacer.
- Valve will not be seated.

**STEP 4**
- Loosen (shorten) pushrod until the pushrod can be rotated with your fingers with slight drag.
- Notice the plunger is still bottomed out against travel limiter and the valve is back on the seat.

**STEP 5**
- Loosen (shorten) the pushrod 1 turn (.0313") and tighten the jam nut.
- The pushrod will be loose until the engine is run and lifter pumps back up. Valve train may be noisy for 20+ miles.