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# INSTALLATION INSTRUCTIONS: Part Numbers SCP1062, SCP1063, SCP1065



### Please read these instructions and notes carefully and completely before beginning.

The most important thing to know is always adjust one cylinder at a time and turn the engine <u>in the</u> <u>normal direction of rotation</u> while installing. Follow directions closely for easy installation. If you have any problems please call our Tech Support Line. **Scorpion Tech Support: 352-512-0800** 

# Removal of the OEM Rocker Arms:

This should be done one cylinder at a time, <u>with extreme caution</u>. You <u>must</u> make sure each valve is completely closed before removing the rocker bolt. Failure to do so will result in stripping out the threads. After removing all rockers you must also remove the one-piece factory rocker arm stand, which will NOT be used.

#### Installation instructions for Scorpion L-92, LS9, LS3 V-8 Rocker Arms:

The first step is to make sure the pushrods are still in the middle of the lifters by spinning them while lightly pressing down. (If using 1.8 ratio rockers, you must check the pushrod to cylinder head clearance.) Next, you must lube the top of the pushrods with <u>Scorpion Cam & Lifter Installation</u> <u>Lubricant (part # SRPAL4-1 or SRPAL8-1)</u>. You will be installing the rockers one cylinder at a time. You must rotate the engine <u>in the normal direction of rotation</u> on #1 cylinder until the intake pushrod goes completely up and just starts to return. This will ensure you are on the heel of the exhaust lobe of the cam and are ready to install your exhaust rocker arm. Lube the pushrod seat in the rocker with <u>Scorpion Cam & Lifter Installation Lubricant</u> or oil. Next, place the ARP washer provided on the factory bolt with the flat side of the washer facing down. Lube the washer and threads with oil only. Place the rocker stand on the head with a bolt only (do not tighten) in the intake side of the stand

Page 1 of 2 Controlled Document just to help locate it. Place the exhaust rocker arm (the flat of the trunnion must face up) on the stand and screw in the bolt with the washer. Screw the bolt down until no lash is felt. Spin pushrod to make sure you're in the pushrod seat. Now torque to factory specifications.

*Note:* The last 1/2 to full turn will be snug on lifters that are pumped up with oil. This is very common and of no concern, torque to factory specifications.

Next rotate the engine *in the normal direction of rotation* until exhaust rocker starts to open the exhaust valve - this means the intake rocker is ready to be installed. Remove the bolt used to locate the stand and repeat same procedure as you did with exhaust. Place the intake rocker arm (the flat of the trunnion must face up) on the stand and screw in the bolt with the washer. Screw the bolt down until no lash is felt. Spin pushrod to make sure you're in the pushrod seat. Now torque to factory specifications.

*Note:* The last 1/2 to full turn will be snug on lifters that are pumped up with oil. This is very common and of no concern, torque to factory specifications.

These rockers are designed for the correct lifter preload if all components in the valvetrain are stock for that year model engine and no machine work has been performed.

## Checking lifter preload with a non-stock valvetrain:

With the engine in the proper position, install the rocker and lightly tighten the attaching screw with your fingers. Once you're at zero lash, set your torque wrench to the specified torque and tighten the attaching screw. The screw should turn another 1/4 to 3/4 turn until the torque wrench clicks. If it is less than 1/4 turn, a longer pushrod is needed. If it is more than 3/4 turn, a shorter pushrod is needed.

**Note:** Due to tighter clearances (spring travel, piston to valve, retainer to seal) the lesser preload is recommended. If your engine's RPM level is raised high enough so that the lifters go into a pump-up situation, it is better to limit the amount of preload to help prevent mechanical interference. For example, if you have .050" lifter preload and have lifter pump-up at higher RPM with a 1.7 ratio rocker, this equates to .085" more valve lift (.050" at the lifter x 1.7 = .085" at the valve). <u>This could cause momentary mechanical interference and component failure</u>.

# **IMPORTANT:**

- Rocker arm to valve cover clearance must be checked.
- Pushrod wall thickness must be .080" minimum. The added pushrod stiffness will produce power gains and increase stability and durability throughout the remainder of the valvetrain.
- Scorpion does not recommend going higher than the factory RPM limit with stock valve spring pressures.
- When using a camshaft other than stock, you must check for mechanical interference and follow the camshaft manufacturer's valve spring pressure, lifter preload and maximum RPM recommendations.
- Maximum allowable valve spring open pressure is 420 lbs.