

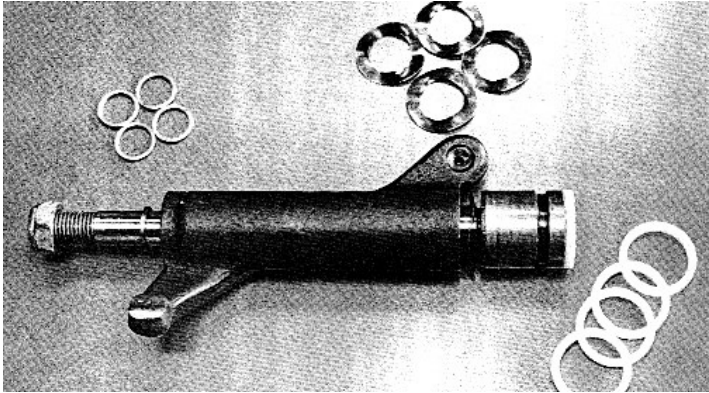
**V-Twin Mfg.
Sifton Rocker Arm Adjuster Kit
VT Part No. 11-0517**

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

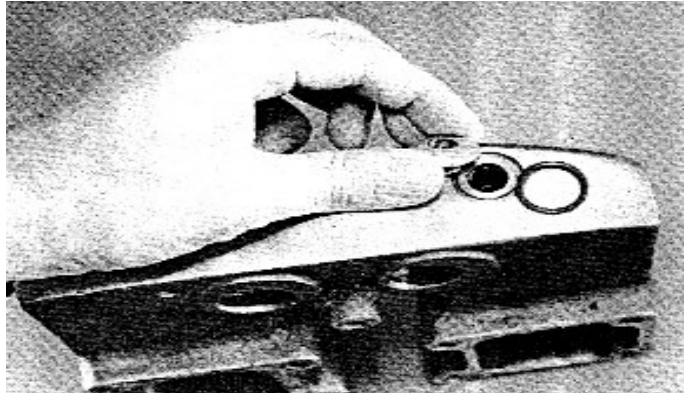
The Sifton Rocker Arm Adjuster Kit contains enough heat-treated pre-loaded spacers and seals to rebuild all four rocker shafts on either a solid lifter or hydraulic lifter Shovelhead by design, this kit holds the pushrod end of the rocker arm in constant adjustment with the use of a firm, springy, pre-loaded spacer. kit eliminates the guess work of rocker shaft shims forever, and provides a clatter-free rocker arm assembly regardless of how hot the engine is run. included are four Ram Jett rocker seals which will completely seal the rocker shaft end plugs against leaks. each seal is designed to form fit to the hole in the rocker box for a perfect, leak-proof installation. they work!

The Sifton Rocker Arm Adjuster Kit may be installed without removing the rocker boxes from the engine but to present clear photos for you to follow, we will rebuild a rocker box which has been removed. You will need a 6 inch long, 3/8 diameter punch and a hammer, along with your regular hand tools. Allow at east 1 hour for installation on solid lifter engines, a little more time for engines with hydraulic lifters.

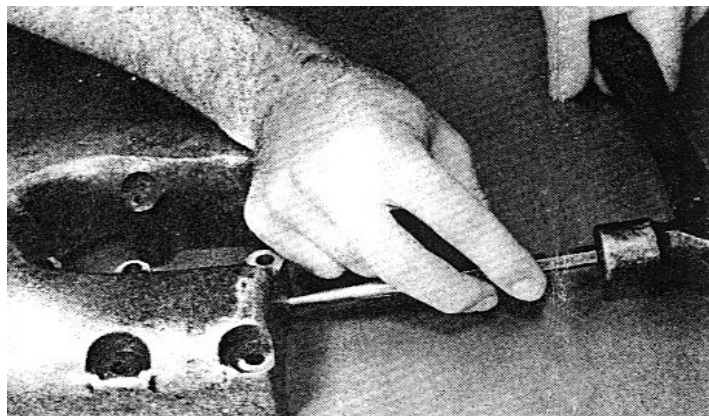
Installation Instructions:



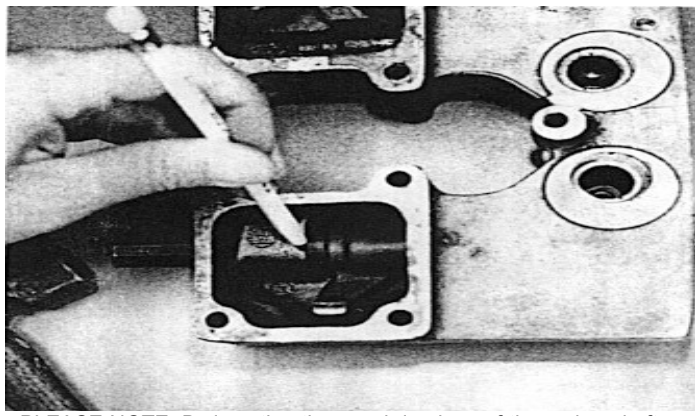
1. Every kit should contain 4 small steel spacers, 4 black spring like pre-load spacers, and 4 white rocker plug seals.



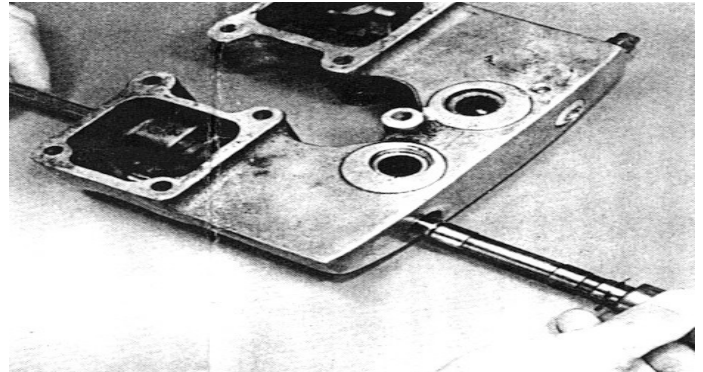
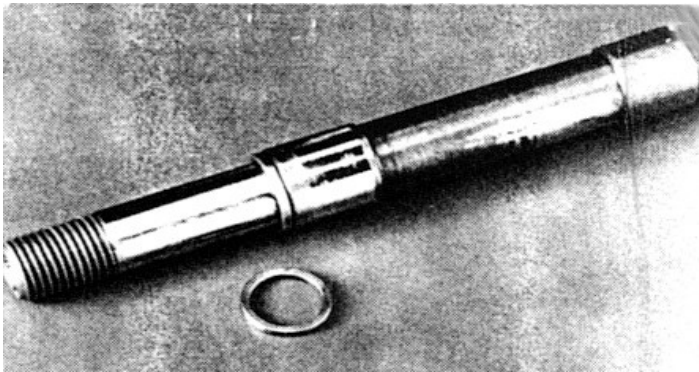
2. We suggest you rebuild each shaft completely, one at a time. If the rocker boxes are still assembled to the engine, please remove all pushrods so the rocker arms and shafts will have no tension applied from the cam or lifters. Then unscrew the rocker shaft end plug and discard that leaky black O-ring. Remove the hex nut on the back side of the rocker box which holds the rocker shaft in place.



3. To correctly remove the rocker shaft you **MUST** use a 6 inch by 3/8 diameter punch (or "drift") and a hammer to gently tap out the shaft. Center the punch on the threaded end of the rocker shaft and care-fully drive the shaft out of the pushrod side of the rocker box. It is **VERY IMPORTANT** to allow the punch to follow the end of the shaft inside the rocker box about 5 inches.

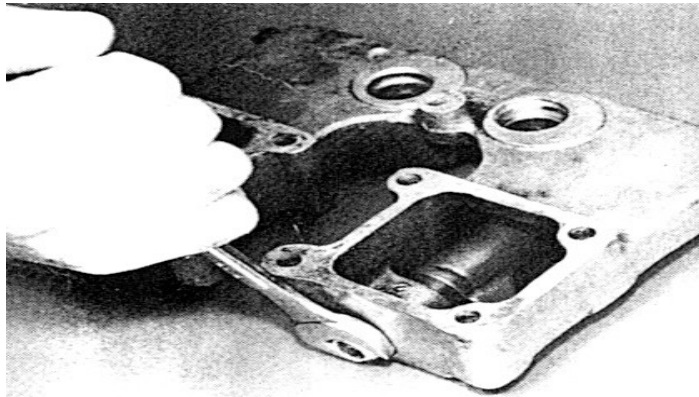


4. **PLEASE NOTE:** By inserting the punch in place of the rocker shaft, you will hold both the rocker arm and the thick rocker arm spacer in position while the shaft is removed. If you don't keep the punch in place inside the rocker box, the rocker arm will be very difficult to re-position for the replacement of the rocker shaft, and the large spacer (see pointer) may fall down into the top of the head. We suggest you make sure this doesn't happen.

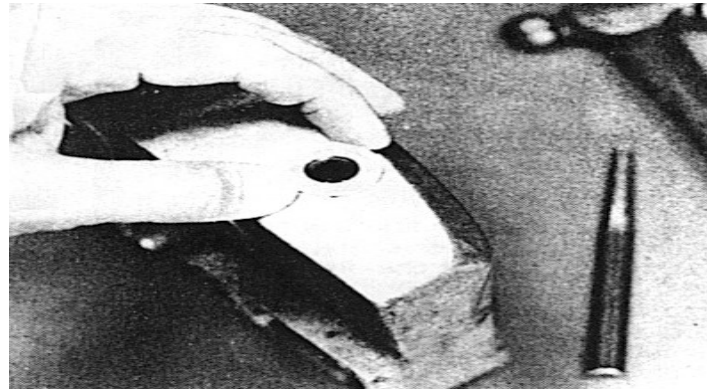


5. Once the rocker shaft is removed, you MUST discard any other shims other shims you might find between the large end of the shaft and the rocker arm. These are usually very thin and you must look carefully to make sure know no shims remain stuck to either the shaft or the rocker arm. Once the shaft has been inspected, install one small steel spacer onto the small end of the rocker shaft just past the threads (see pictures #5). This spacer is very important because it provides a little extra room for your rocker arm to work and prevents your rocker arm assembly from ever binding up. Then install one black pre-load spacer up against the large end of the rocker shaft (where the shims normally go). This black spring like spacer will constantly fill the gap between the end of the rocker arm and the large end of the rocker shaft, thus eliminating the loud clatter heard in Shovelhead engines. Once both the small steel spacer and the large black spacer are in position, the shaft is ready to install.

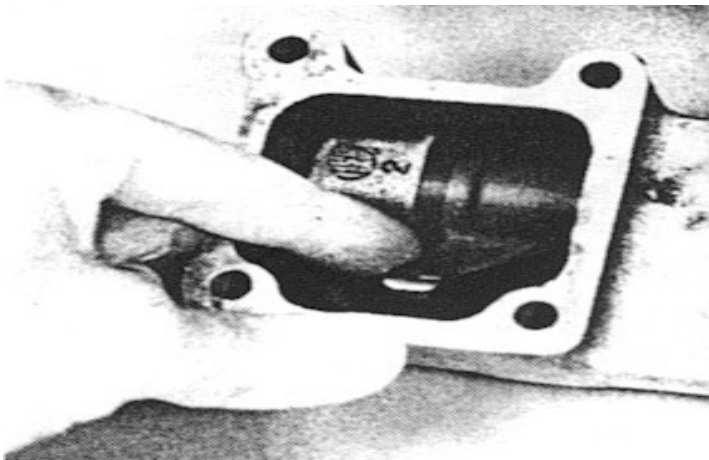
6. Carefully guide the shaft back into the rocker box while push in the punch out the backside. Remember, you don't want to allow either the rocker arm or the large spacer to fall down out of position! Once most of the shaft is inserted back into the rocker box, you might have to tap the last. Inch of the shaft back into place. Usually the large end of the shaft fits the rocker box very snugly.



7. Once you have some threads showing through the backside, install the hex nut on the end of the shaft and draw the rest of the shaft into position, then tighten to factory specs. There is no need to over tighten this hex nut. DO NOT USE AIR TOOLS.



8. Install a white Sifton Rocker Arm Adjuster Seal on the large end of the rocker shaft and firmly tighten the rocker shaft end plugs into place. DO NOT USE AIR TOOLS. DO NOT OVER TIGHTEN about 15 lbs. torque is plenty. Do NOT remove the white seal once it's installed because it is designed to "cold flow" into the exact shape of the rocker box opening. By prying out the seal, the edge will usually be damaged and thus the sealing properties might be destroyed.



9. When correctly assembled the rocker arm should rotate freely on the rocker shaft and offer a stiff, springy resistance when forced toward the pushrod side of the rocker box. The Sifton Rocker Arm Adjuster Kit allows your rocker arms to stay in constant, noise-free adjustment regardless of the normal heat expansion of the rocker boxes while the engine is running. Throw away your extra shims; your engine will be clatter free and dripless from the rocker boxes no matter how hard you ride or how hot the engine runs. For best performance we suggest those kits be replaced with every valve job.

