



8.2 Litre Performance Parts
Albuquerque, New Mexico
www.cad500parts.com

STAGE I SHAFT ROCKER ASSEMBLY - VT71110

Congratulations ... You are the proud owner of one of the best rocker arm assemblies available for the Cadillac 472/500/425 engine family. Though 'bulletproof' by design, special precautions should be taken to ensure a long and trouble free life. For reference, these rockers are 1.6:1 ratio, compared to the stock 1.65:1. Due to superior accuracy, they make about the same power as stock rockers.

Please read all instruction thoroughly before installation - aluminum components and other parts may be damaged due to improper installation!

- ⊕ These instructions are for the version with a full girdle under the shafts, Jan. 2020 and newer.
- ⊕ Pre-oil rocker assemblies before installation.
- ⊕ Take special care to seat all of the pushrod balls into the cups as you tighten the mounting fasteners.
- ⊕ Torque nuts to 55 Ft-Lbs. Torque bolts at the end of the shafts to 25 Ft-Lbs.
DO NOT OVER TORQUE!
- ⊕ Be sure to follow the firing order as you check the lifter preload (15634278), and check them when the lifter is on the base circle of the cam (all the way down).
- ⊕ Rocker geometry is optimized by changing the installed height of the rocker shaft (via shimming or milling the supports) and checking the contact pattern of the rocker on the valve stem tip. This is generally not necessary to worry about, as (in most cases), it will be within acceptable range with stock valve stem height.
- ⊕ On hydraulic cams, adjust for a lifter preload of $\pm .040$ "-.080". Lifter preload is the distance the piston inside the lifter is pushed down away from the retaining clip. Accurate measurement can be difficult, but a good rule of thumb on a street motor is that it should look about like a spark plug gap. This can be adjusted via shimming / milling the shaft supports, different length pushrods, or adjusting the valve stem height by grinding the seats or valve stem tips. In most cases, you can get the correct pre-load by shimming the whole rocker assembly, with no machine work, and without causing a significant change in geometry.
- ⊕ The pushrods supplied are PN PR345, which are ~ 9.990" long. The stock Cadillac pushrods are ~10.200". We also stock pushrods in lengths of 10.140" (usually close enough to the right thing, if you got the wrong lifters with your cam kit, among other things) and 10.200" and 10.230" (usually the right thing if you have valves for small chamber heads, in your large chamber heads, and spaced the rocker support up 1/4" to get your rocker geometry back in line) if needed. If ordering your own custom pushrods, be sure to use 5/16" balls with oil holes. Other sizes may damage the rocker arms.
- ⊕ Check for pushrod to head clearance - we generally drill out the pushrod holes in the head to 9/16" or 5/8" before assembly, to eliminate the potential clearance problem ahead of time. This is generally not an issue, but it is something that should be checked during assembly.
- ⊕ To use these rockers with head studs, you will have to clearance the bottom of the girdle for clearance. If you need head studs, these rockers are probably not suitable for your application.
- ⊕ **Are your rocker arms binding up?** If you are checking the rocker function on the bench, note that the rockers are tapered top to bottom. Installed, the force of the pushrod and valve at either end will push the rocker arms up against the bottom of the shaft. Without this, gravity will pull them down (and so might your hands), which will cause them to bind up and not move smoothly. If you encounter binding when checking them out, go back and check again while holding the rocker up against the bottom of the shaft, and you will generally see that they work smoothly in that position.
- ⊕ Thank you for choosing Cad Company's Best Engineered Parts for the Cadillac 472", 500, and 425" engines.