

Roller Rocker Arms for AMC and Jeep Inline Six Cylinder

These rocker arms have been specifically designed with the correct geometry for the AMC/Jeep inline six cylinder engine family, including the 232, 258, and 4.0L. These are designed to provide an actual 1.6:1 ratio, eliminating the loss of lift resulting from flexure of the stock weak rocker arms. They have been designed to fit to the '91 and newer 4.0L head, and with the correct rocker studs are the only known roller rocker that will fit under the stock valve cover with no additional spacers required (internal valve cover PCV baffles must be removed).

Maximum valve spring pressure with this combination is 350 lb open force, which is the limit of the 5/16"x3/8" rocker stud used in this installation. Although a 3/8"x3/8" rocker stud would allow higher spring pressures to be used, there have been numerous reports of cylinder head stud boss cracking when drilled and tapped to the 3/8" size. The use of a high-strength 5/16"x3/8" stud with radiused shoulder (no built in hex for tightening) minimizes the possibility of such stud boss cracking occurring and keeps the rocker as low as possible in relation to the cylinder head, allowing the use of the stock valve cover.

The installation shown in the pictures above is on Mark Heinson's '93 4.0L HO stroker. This engine uses a Crane HMV-272 cam, Manley stainless steel 11/32" stem valves, and Crane springs, retainers, and locks.

To duplicate Mark's setup, you'll need the following parts:

Harland Sharp Roller Rockers (12), Part # S40096

Crane Rocker Studs (12), Part # 99146B (Special Order)
Comp Cams Guide plates (V8 set, use 12), Part # 4842-8
Comp Cams Spring Seat Cups (12), Part # 4704-16
Crane Dual Valve Springs (12), Part # 99838-12
Crane Valve Spring Retainers (12), Part # 99943-12
Crane Valve Locks (V8 set), Part # 99095-1
Manley 1.94" Stainless Intake Valve, Part # 10722
Manley 1.50" Stainless Exhaust Valve, Part # 10721

For off-road and mild street applications where the engine speed typically stays below 5000 RPM, the following single springs may be used with no other changes in the above listed parts: Crane Single Valve Springs (12), Part # 99833-12

We have seen these springs used on engines that exceed 6000 RPM with no problems, but Crane does not recommend it.

The following machining operations are required to install the rocker arms:
Mill stud bosses 0.400" Drill and tap stud holes deeper (to match studs) and chamfer

Other parts of interest used in Mark's engine:
Mopar Performance timing chain, Part # P2549519
Crane Cam, Part # HMV-272-2 (Also listed as H-272)
Crane Hydraulic Lifters, Part # 99278-12
Clifford Intake Manifold (water heated), Part # 47-4520WH

