



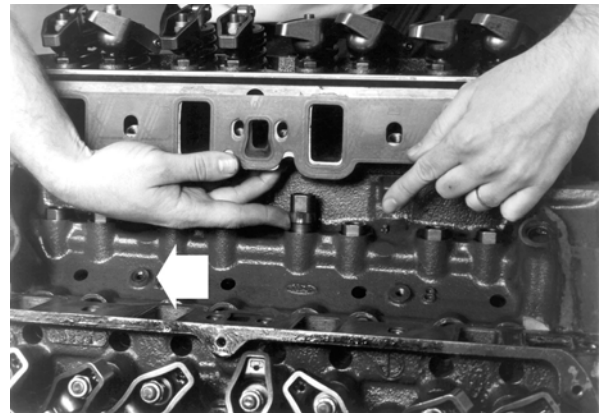
INSTRUCTIONS

#35-1001 Ford 302 HO Hydraulic Roller Lifter Kit

Thank you for choosing COMP Cams® products; we are proud to be your manufacturer of choice. Please read this instruction sheet carefully before beginning installation, and also take a moment to review the included limited warranty information.

Before You Start

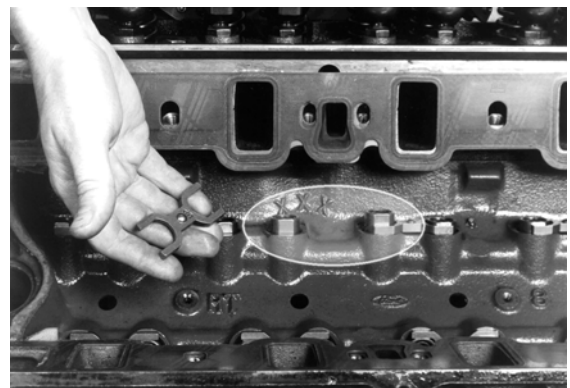
This kit is designed to allow the installation of hydraulic roller cams in standard Ford 302 HO V8 engines originally equipped with hydraulic roller cams. In order to use this kit, your engine must have two bosses cast into the block (fig. 1) in the lifter valley area. These bosses may or may not be drilled and tapped for 1/4"-20 bolts. If yours are not drilled and tapped, then you must be prepared to do so during this installation process. Once you have installed your COMP Cams® Magnum Hydraulic Roller Camshaft per the camshaft installation and degreasing instructions supplied with the cam, you are ready to install the hydraulic roller lifters.



Installation Instructions:

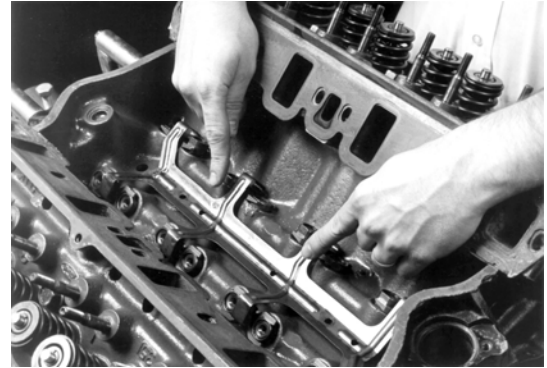
1. Installing the lifters - Slide the lifters into the lifter bores just like a regular lifter, and then rotate them until the flat surfaces on the sides of each lifter all face inward toward the lifter valley. Each lifter has two flats, one on each side. It does not matter which flat faces the valley and which faces the cylinders. You may encounter some difficulty in trying to install the end lifters in each bank due to interference from an ear on each end of the head gaskets. Gently bend this ear out of the way, install the lifters, and bend the ear back into place. The purpose of this ear is to help locate the intake gasket during manifold assembly, so do not bend or remove it permanently.

2. Installing the lifter guides - The purpose of the guides is to prevent the lifters from rotating, therefore keeping the lifter wheels rolling over the cam lobes as opposed to sliding. With all the flats on the lifter in line, install one of the eight lifter guides over each pair of lifters in the valley. They should be installed with the word "UP" that is stamped into each guide facing up. It does not matter whether the "UP" stamp is toward the front or the rear of the block. The forks on each end of the guides should nest over the top of the flats on either side of each lifter. Also,



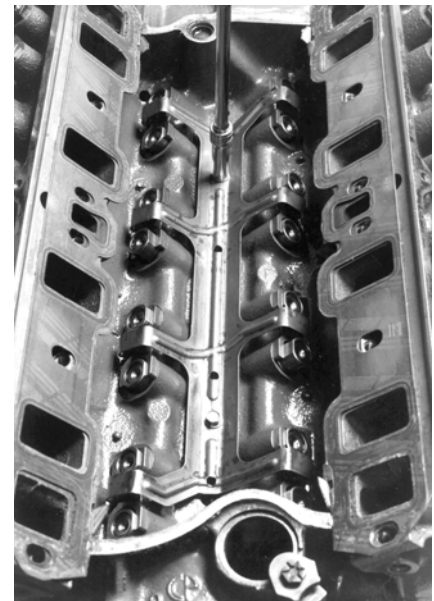
the lifter guides should sit perfectly flat on the milled top surface of the lifter bore pairs. If they do not, stop and figure out why before proceeding. Failure to do so may result in significant engine damage.

3. Installing the lifter retention hardware - Place the stamped steel lifter retainer in the valley of the block and see which of the two holes in the retainer line up with the tapped holes in the cast bosses in the valley. The fingers of the retainer should be between the pairs of lifters and riding on the raised ball area of the lifter guides. It may be necessary to rotate the retainer end for the end to get the holes to line up. If your bosses are not drilled and tapped, use the lifter retainer as a guide for marking the proper location of the future holes. Be sure that the retainer fingers are centered between the lifter pairs and riding on the raised ball area of the lifter guides before marking the hole locations. Mark the holes with a center punch, remove the retainer, and drill and tap the holes as necessary. Do not allow any metal shavings created during the drilling and tapping process to remain in the engine. Severe engine damage may result.



4. Final assembly of lifter retainer - Lower the retainer into the valley, centering the correct holes over the bosses and making sure once again that the fingers of the retainer are between pairs of lifters and riding on the raised ball area of the lifter guides. Start both of the retainer bolts supplied in the kit by hand and torque to 20 ft lbs.

5. Final check - Spin the engine over by hand at the crankshaft with a wrench (or COMP Cams® Part #4798 crank socket) and watch closely the movement of the lifters. As the lifters move up and down, the lifter guides should remain perfectly flat on the tops of the lifter bores. They should not be pushed up at all by the up and down motion of the lifters. If they do, the camshaft does not have the correct base circle size to be used with these lifters. Stop here and replace the cam with the proper one before proceeding, running the engine with this condition in existence will result in major engine damage.



The installation of your COMP Cams® Ford 302 HO Hydraulic Roller Lifter Kit is now complete. Refer to the camshaft installation and degreasing instructions that came with your cam for further instructions on pushrod installation and valve adjustment that are needed to complete your project. Order COMP Cams® Camshaft Degree Kit (Part #4796) to make these adjustments easier.

Limited Warranty

Competition Cams, Inc. warrants that all of its products are free from defects in material and workmanship, and against excessive wear for a period of (1) one year from the date of purchase. This **limited warranty** shall cover the original purchaser.

Competition Cams, Inc.'s obligation under this warranty is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned within (1) one year of purchase to the address listed below, freight prepaid. Items covered under warranty will be returned to you freight collect.

It is the responsibility of the installer to ensure that all of the components are correct before installation. We assume no liability for any errors made in tolerances, component selection, or installation.

There is absolutely no warranty on the following:

- A) Any parts used in racing applications;**
- B) Any product that has been physically altered, improperly installed or maintained;**
- C) Any product used in improper applications, abused, or not used in conjunction with the proper parts.**

There are no implied warranties of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description of the face hereof. Competition Cams, Inc. will not be responsible for incidental and consequential damages, property damage or personal injury damages to the extent permitted by law. Where required by law, implied warranties or merchantability and fitness are limited for a term of (1) one year from the date of original purchase.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state.



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Part #178
Revised 7/17/06