



Tool Steel Lifters

Available Part #s: 89842H-1, 89842H-12, 89842H-16, 89842-1, 89842-12, 89842-16, 89842C-1, 89842C-12, 89842C-16, 89904H-1, 89904H-12, 89904H-16, 89904-1, 89904-12, 89904-16, 89904C-1, 89904C-12, 89904C-16, 89875H-1, 89875H-12, 89875H-16, 89875-1, 89875-12, 89875-16, 89875C-1, 89875C-12, 89875C-16

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.

Part #s 89842, 89875, and 89904 are non-coated tool steel lifters for use with cast camshafts that may or may not be nitrided.

Part #s 89842C, 89875C, and 89904C are DLC coated tool steel lifters for use with steel camshafts.

Part #s 89842H, 89875H, and 89904H are non-coated tool steel lifters with a 0.012" oil hole in the face of the lifter for use with cast camshafts that may or may not be nitrided.

Proper Camshaft Break-In

Proper flat tappet camshaft set-up and break-in, as any engine builder knows, are keys to the life of a camshaft, both short and long term. The correct procedure allows the lifters to establish rotation and develop a good wear pattern.

Pre-Installation

Remove the camshaft from the box, and clean it with mineral spirits or a parts washing solvent, then perform a visual inspection immediately. Look carefully for dings, dents, deep scratches, or any other defect that may be detrimental to the break-in or long-term life of the camshaft. Pay special attention to the lobe and journal contact surfaces and distributor gear. Before installing the camshaft apply an ample amount of the supplied camshaft and lifter installation lube (COMP Cams® Part #153) to the lobes, journals, distributor gear, and lifters.

Break-In Preparation

Always remove the inner spring during break-in when using dual valve springs, or if you have a high load single spring, use a lighter spring. An alternative solution that addresses this same concern is using a set of low-ratio break-in rocker arms. Both of these solutions provide your best chance of proper camshaft break-in and long term durability. While these tips may be a slight inconvenience, a little time and effort on the front-end is much better than destroying your new engine. **NOTE: Many engine builders omit this step when using DLC coated lifters without expecting increased failure rates.**



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Part #COMP4-139
 Revised 1/21/11

Proper Procedure

As soon as the engine fires, bring the RPM up to 2000 to 2500 during the first 30 minutes of operation. Slower engine speeds will not supply the camshaft with an adequate amount of oil for the break-in period. The engine RPM may be varied periodically from 2000 to 2500 to direct oil splash to different areas of the camshaft. After the 30 minute break-in period, change the oil and filter again to be sure all contaminants and break-in lube are removed from the engine. The inner valve springs should now be replaced and/or the correct rocker arms installed.

Helpful Hints and Tools

1. Double check your camshaft and lifter set-up using COMP Cams® Lifter Centerline Tool (0.842" diameter – Part #5019; 0.875" – Part #5020; 0.904" – Part #5021) prior to the break-in process, and use an ample amount of the supplied assembly lube on all lobes, distributor gear and the bottom face of each lifter. For more COMP Cams® Assembly Lube (Part #153) call us at 1-800-999-0853.
2. Nitride your new flat tappet cam to increase the case hardness and lobe surface lubricity; available as an added service for any COMP Cams® flat tappet camshaft (COMP Cams® Part #1-111-1).
3. Use high-lubricity, high-ZDDP COMP Cams® Break-In Oil (Part #1590 or #1591) to help during the break-in process and while running, or use COMP Cams® Camshaft Break-In Oil Additive (Part #159).

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 of 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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