

GM LS Engine Valve Spring Removal Tool #5462

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.

Important: **Wear eye protection when changing valve springs!**

When changing valve springs while the heads are still in the engine you **MUST** ensure the valves do not drop into the cylinder. This can be done a few ways.

- 1) Use compressed air to fill the cylinder and hold up the valve.
- 2) Ensure the piston is at TDC so the valve can not fall into the cylinder



Valve Spring Removal

- 1) Remove valve covers.
- 2) Remove rocker arms and leave the rocker stand on the cylinder head. LS7s have the rocker stands cast into the cylinder head already.
- 3) Pre-lube the threads of the bolt with the ball end and the pocket of the H-beam where the ball end of the bolt sits with the supplied cam lube (COMP# 103) to reduce friction.
- 4) Install the Comp Cams Valve Spring Removal Tool on the cylinder that you wish to remove the valve springs from. LS7 head applications (with cast-in rocker stands) will use the shorter pair of included M8 bolts, and LS1-6 heads (with removable rocker stands) will use the longer pair of included M8 bolts. Mount the tool to the cylinder heads using the rocker stands. Tighten the included metric bolts to 15-20 lb/ft to hold the tool firmly in place.

Note: The included bolts cover most applications but always check that 1/2" of threads are fully engaged before using this tool.

- 5) Make sure that the valves can not fall into the cylinder, see important note above.

- 6) Place the H-beam over the valve springs with the receiver cup facing up ensuring the valve stems and locks are centered with the window on the compressor facing up.
- 7) Thread in the included M10-1.5 X 50mm bolt through the arm and seat it in the receiver cup on the top of the H-beam. (See picture)
- 8) Before tightening the M10-1.5 bolt any further, you may need to adjust the positioning of the springs or compressor tool to ensure all components are angled properly.
- 9) Using a socket, tighten the M10-1.5 bolt to compress the valve springs until the valve locks can safely be removed from both springs.
- 10) Once the valve locks are removed you can release the load from the springs by turning the M10-1.5 bolt counterclockwise until the springs no longer held by the tool.
- 11) Remove the valves spring(s) you wish to change and install replacement spring in its place.
- 12) Reverse procedure to reinstall.
- 13) Repeat steps 1-10 for any other springs you wish to change.



**WARNING: Never loosen the hold down bolts while the tool is under spring load!
Always wear eye protection when changing valve springs!**

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.

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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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