

Lingenfelter LSx Valve Spring Compressor Tool Operating Instructions



PN: L950025297

Parts List

LSx Valve Spring Compressor Tool, L950025297

#	Description	Part number
1	LSx valve spring compressor tool	L950025297
1	LPE decal	
1	Instructions	

Tools & Materials Required

- 3/8" ratchet
- Magnet tool or screwdriver with magnet
- Cylinder leak tester or other compressed air source

LS7, LS3, L99, L92, LSA, LS9 and other offset rocker engine applications notice: on these engines the intake rocker arm is offset because of the intake valves position. Care must be taken when using the this tool to compress the intake valve springs on these engines.

Depending on your vehicle's engine and engine modifications, such as valve covers, coil packs, etc., your steps leading up to removing the valve covers could be different. Use these steps simply as guidelines to using your LPE valve spring removal kit. Some pictures will show the valve spring being removed on an engine on an engine stand; however, this tool is designed for removing the valve springs while the engine remains in the vehicle or on an engine stand.

This valve spring compression tool works on all Gen III and IV GM V8 engines including LS1, LS6, LS2, LS3, LS7, LSA and LS9. The main body is made of hard coat anodized billet aluminum and incorporates a steel bearing trunnion for ease of operation. This tool is designed to work with any 3/8" hand ratchet, simply add a 3/8" extension for valve springs which are difficult to reach (under cowl). Will work on factory conical valve spring along with aftermarket 1.25" OD spring/retainer sets.

Read the entire instruction manual before beginning installation. Some stock parts will be used in reassembly.

If you have been driving the vehicle, allow the vehicle to cool down for a few hours before starting this installation.



1. Remove the engine covers, coil packs, fuel lines (if necessary to get to the valve covers), and anything else necessary to remove the valve covers from the vehicle. Remove the spark plugs so you can pressurize the cylinders with air.



2. Remove the valve covers from the vehicle. Inspect the valve cover gasket for damage or wear and replace if necessary.



3. Remove the rockers from the valves and valve springs.



4. Remove the pushrods.

5. On LS7 and LS9 applications, remove the lash caps from the intake valves.



6. Install the cylinder leak tester into the cylinder and fill the cylinder with air.

CAUTION: The cylinder that you are removing the valve springs from *must* be pressurized prior to removal of the springs and retainers. This will prevent the valve from falling into the cylinder.



7. Using one of the production rocker arm bolts, install the valve spring compressor into the rocker arm support.

NOTE: LS7, LS3, L92, LSA, LS9 and some other Gen IV engines have offset intake rockers. On these engines do not tighten the bolt all the way. Hold the valve spring compressor centered over the retainer and finger tighten the bolt.



8. Using a 3/8" ratchet, insert the ratchet into the square hole located on the end of the compressor tool. Compress the spring and remove the valve spring locks (keepers) and retainers. A small screwdriver with a magnet or other magnetic retrieval tool may help.

NOTE: On LS7, LS3, L92, LSA, LS9 offset rocker applications, hold the spring compressor tool centered over the retainer while compressing the spring.



9. DO NOT RELEASE AIR FROM THE CYLINDER UNTIL YOU FINISH REPLACING THE SPRING.

10. Install the new parts (springs, retainers, locks etc.) onto the cylinder head and compress the spring to insert the locks onto the retainers and springs.

NOTE: The retainers must be installed prior to using the valve spring compressor tool.

11. Repeat this process for the remaining springs, retainers, etc. that you are replacing or removing.



12. Re-install the pushrods into the motor.



13. If applicable, re-install the lash caps onto the valve tips.



14. Re-install the rockers onto the engine using your engine's recommended torque setting.



Following your vehicle's specific re-assembly procedures, re-install your valve covers, spark plugs, coil packs, spark plug wires, fuel lines etc.

Congratulations, the installation process is now complete.

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

<http://www.lingenfelter.com/LPEforumfiles>

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