

## 512 - Subaru Valve Spring Compressor Tool Instructions



### SPECIAL NOTES:

- The use of a factory service manual is highly recommended. These can be purchased at the dealer, or downloaded online at <http://techinfo.subaru.com>
- Company23 is not responsible for damage done to your vehicle as a result of misuse of this product.
- Company23 does its best to ensure the accuracy of this manual but is not responsible for errors.
- **WARNING:** Never use the camlock tool to remove the camshaft sprocket bolt.

### VALVE SPRING TOOL OPERATING INSTRUCTIONS:

Step 1) You can use the Company23 valve spring compressor tool with the cylinder head on the engine (in the car or on the engine stand) or with the head on the bench. In order to remove the valve springs, you must remove the valve cover, the cam caps, the cams, and the buckets and shims (if applicable). Your head should look like the below image.



Step 2) Using the cam cap bolts from your engine, install the Company23 valve spring tool block on the head. Make sure the head and tool surface is clean. Tighten bolts to 7 ft-lb (1 kgf-m, 10 N-m). You will be able to compress two valves in each location you install the valve spring tool block.



Step 3) Thread the tool stud into the threaded hole with the internal 5mm hex on top. Install the spring cage under the stud as shown.



Step 4) Using a 5mm hex wrench or socket, turn the stud clockwise to compress the valve spring. Ensure the spring cage window is pointing outwards. Only compress the spring enough to free the keepers.

**Pro tip:** If you are doing this work with the cylinder head still installed on the engine, it is important to prevent the valve from dropping into the cylinder. Two common techniques are to insert clean rope and fill the cylinder via the spark plug hole or to pressurize the cylinder with an air compressor and an air fitting via the spark plug hole. If you use the rope technique, make sure to leave enough rope out of the spark plug hole to allow removal.



Step 5) Using the Company23 magnetic screwdriver's magnet, remove the valve spring keepers.



Step 6) Using a 5mm hex w rench or socket, turn the stud counter clockw ise to relieve the valve spring tension. Unthread the stud all the w ay to allow the valve spring compressor cage to be removed.



Step 7) You can now remove the spring and retainer. This will allow the valve and/or the valve stem seal to be removed and installed.



Step 8) Use the screwdriver end of the Company23 magnetic screw driver to reinstall the valve spring keepers.



For Questions & comments please contact [sales@company23.com](mailto:sales@company23.com)