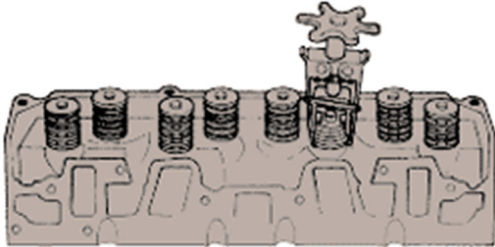


## Valve Stem Seal – DIY from Autozone Website - Repair Information

### Inspect/Replace

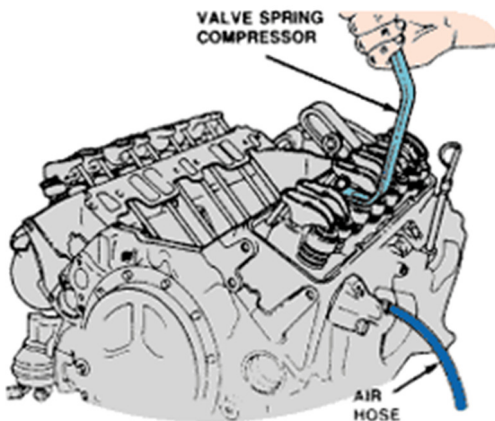
- Remove the spark plugs from the engine and store them in the order they were in the engine.
- Look over the engine and determine what electrical connectors and hoses must be disconnected in order to gain access to the valve cover(s). Then disconnect those that need to be disconnected.
- Remove the valve covers.
- Install the compressor air adapter into the first cylinder spark plug hole.
- Rotate the engine to top dead center (TDC) on the same cylinder that you installed the adapter.



This valve spring compressor can be used with the heads on or off the car. Courtesy of K-D Tools.

- Hook a compressed air hose to the adapter.
- With compressed air holding the valves closed, use the valve spring compressor to compress the valve spring. Remove the retainer locks with the magnet.

Air is put into the cylinder to hold the valve while the spring is compressed.



The valve is held closed with air pressure while the spring is compressed. Courtesy of General Motors Corporation, Service Technology Group.

- Remove the retainer, spring, and old valve stem seal.
- Install the new valve stem seal being careful not to cut the seal on the end of the valve stem. Install the guide seals before installing the springs on all but O-ring seals.

### **WARNING**

O-ring valve guide seals must be installed after the spring is compressed, or they will be ruined during assembly.

- Oil the seals before installation so that they will slip easily into the spring retainer and not be accidentally torn.
- Reverse the procedure to reinstall the valve spring, retainer, and locks.
- Repeat the preceding procedures for the valves on each cylinder.
- Remember to always put compressed air in the cylinders before removing the locks.
- When all of the valve stems are replaced, reinstall the rocker arms or cam followers.
- Clean, gap, replace all spark plugs.
- Adjust the valves to the manufacturer's specifications. Then install the valve cover(s).
- Reinstall all of the vacuum hoses and the wires that were previously disconnected.