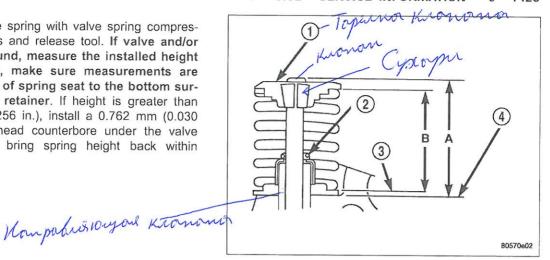
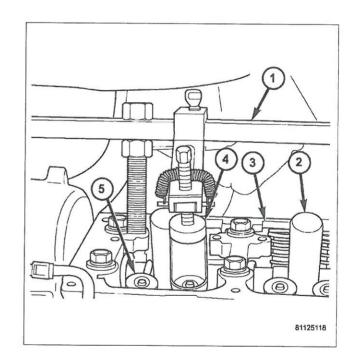
4. Compress valve spring with valve spring compressor. Install locks and release tool. If valve and/or seat are reground, measure the installed height of springs (B), make sure measurements are taken from top of spring seat to the bottom surface of spring retainer. If height is greater than 38.75 mm (1.5256 in.), install a 0.762 mm (0.030 in.) spacer in head counterbore under the valve spring seat to bring spring height back within specification.



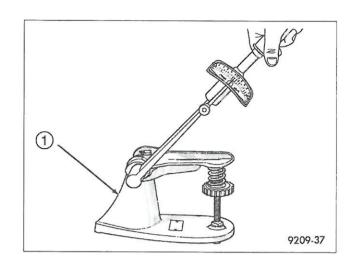
INSTALLATION - CYLINDER HEAD ON

- 1. Install new valve seal(s) if required (Refer to 9 -ENGINE/CYLINDER HEAD/VALVE STEM SEALS -INSTALLATION).
- 2. Place valve spring (color-coded end facing up) and valve retainer into position.
- 3. Compress valve spring using Special Tool MD 998772A (1) with Adaptor 6527 (4) only enough to install locks (5).
- 4. After installing locks, release tension on valve spring and verify proper installation.
- 5. Remove Special Tool MD 998772A (1) and spark plug adapter tool.
- 6. Install rocker arm and shaft assembly. (Refer to 9 -ENGINE/CYLINDER HEAD/ROCKER ARM / ADJUSTER ASSY - INSTALLATION)
- 7. Install cylinder head cover(s) (Refer to 9 ENGINE/ CYLINDER HEAD/CYLINDER HEAD COVER(S) -INSTALLATION).
- 8. Install spark plugs.
- 9. Install upper intake manifold (Refer to 9 ENGINE/ MANIFOLDS/INTAKE MANIFOLD - INSTALLA-TION).
- 10. Connect negative battery cable.



INSPECTION

When valves have been removed for inspection, reconditioning or replacement, valve springs should be tested. As an example; the compression length of the spring to be tested is 38.00 mm (1.496 in.). Turn table of Tool C-647 until surface is in line with the 38.00 mm (1.496 inches.) mark on the threaded stud and the zero mark on the front. Place spring over stud on the table and lift compressing lever to set tone device. Pull on torque wrench until ping is heard. Take reading on torque wrench at this instant. Multiply this reading by two. This will give the spring load at test length. Fractional measurements are indicated on the table for finer adjustments. Refer to Engine Specifications to obtain specified height and allowable tensions (Refer to 9 - ENGINE - SPECIFICATIONS). Replace springs that do not meet specifications.



INSTALLATION

INSTALLATION - CYLINDER HEAD OFF

- 1. Install valves if removed.
- Install valve stem seal/spring seat assembly (5) over valve guides on all valve stems. Ensure that the garter spring is intact around the top of the rubber seal.
- 3. Place valve spring (color-coded end facing up) (4) and valve retainer into position.

