

Cylinder Head Disassembly

Meets NATEF Task: (A1-B-1) Remove cylinder head(s); visually inspect for cracks; check gasket surface areas for leakage; check passage condition. (P-2)

Name _____ Date _____ Time on Task _____

Make/Model/Year _____ VIN _____ Evaluation: 4 3 2 1
 Engine _____ Displacement _____

- _____ 1. Remove the camshaft(s) if overhead camshaft design.
- _____ 2. Remove the rocker arm/cam followers and place them in order so that the parts can be assembled in the same location.

NOTE: All parts wear during operation and each part tends to wear slightly differently, so this is an important step that assures proper reassembly.

- _____ 3. Remove the hydraulic lifter/lash adjuster, if equipped, and place them so that they can be reinstalled in the same location.
- _____ 4. Use a dead blow (plastic shot-filled) hammer and tap the valve spring retainer to "break the taper" of the valve keepers (locks).
- _____ 5. Use a valve spring compressor to compress the valves and remove the keepers. Remove the valve from the cylinder head and place the valve, spring, retainer, and keepers together for inspection and reassembly.
- _____ 6. Are valve rotators used on this engine?

_____ Yes (If yes, where are they located?) _____

_____ No _____

- _____ 7. Remove the valve stem seals and spring seat (if aluminum head).

- _____ 8. Type of valve stem seals?
 - _____ positive (over guide)
 - _____ umbrella (on valve stem)
 - _____ O-ring (in groove of valve)
 - _____ part of the valve spring seat