

**► TASK** Replace valve stem seals on an assembled engine; inspect valve spring retainers, locks/keepers, and valve lock/keeper grooves; determine needed action.

**MAST**  
1B8

**CDX Tasksheet Number: C675**

Time off	_____
Time on	_____
Total time	_____

1. Research the procedures and specifications for replacing the valve stem seals while the engine is installed in the vehicle in the appropriate service information.
  - a. List, or print off and attach to this sheet, the precautions for performing this task:

- b. List the type of valve seals this engine is equipped with: \_\_\_\_\_
    - c. List the flat rate time to perform this task: \_\_\_\_\_ hr
    - d. List the special tools required to perform this task:

2. Have your supervisor/instructor verify your answers and initial. Supervisor/instructor's initials: \_\_\_\_\_
3. Following the specified procedure, prepare the engine for removal of the valve spring keepers and retainer by removing the valve cover and rocker arm or cam follower (some engines may require removal of the cam).
4. With the valve firmly held in place with compressed air, tap the valve retainer with a hammer and socket to break the bond between the retainer and keepers. Tap in line with the valve stem; do not tap sideways because that could bend the valve stem.
5. Install the valve spring compressor and compress the valve spring. Remove the keepers; be sure not to let them fall into the engine. Remove the valve spring and retainer.
6. Check to see if there is a burr on the valve stem near the keeper groove. File it smooth if necessary. Remove the old valve seal. Install the new valve seal according to the specified procedure. This may include using a sleeve that fits over the valve stem to protect the valve seal during installation. Also lubricate the seal before installation. And make sure it is fully seated if it is of the positive seal type.

7. Reinstall the valve spring, retainer, and keepers. Be sure to seat the keepers fully in the valve stem groove.
8. Have your supervisor/instructor verify correct installation of the valve seals and springs. Supervisor/instructor's initials: \_\_\_\_\_
9. Reinstall the removed valve cover(s) and other parts.
10. Start the engine and verify correct operation.
11. Have your supervisor/instructor verify satisfactory completion of this procedure, any observations found, and any necessary action(s) recommended.

**Performance Rating**

**CDX Tasksheet Number: C675**

**0**

**1**

**2**

**3**

**4**

Supervisor/instructor signature \_\_\_\_\_ Date \_\_\_\_\_