

Valve Spring Specifications & Measurements

Meets NATEF Task: (A1-B-3) Inspect Valve Springs for Squareness and Free Height Comparison; Determine Necessary Action (P-3)

Name _____ Date _____ Time on Task _____

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

Engine _____ VIN _____

Check service information and determine the following:

- _____ 1. Are the intake and exhaust valve springs interchangeable?
(Some have different spring tension and some springs are wound in the opposite direction) Yes _____ No _____
- _____ 2. Check squareness (should be within 1/16"): _____ OK _____ NOT OK _____
- _____ 3. The free length (height) specification: _____
- _____ 4. The actual free length (height) (one intake and one exhaust spring):
_____ intake spring _____ exhaust spring
OK _____ NOT OK _____
- _____ 5. Valve closed load specification: _____ at _____ in. height.
- _____ 6. Measured valve spring closed load:
_____ intake spring _____ exhaust spring
OK _____ NOT OK _____
- _____ 7. Valve open load specification: _____ at _____ in. height.
- _____ 8. Measured valve spring closed load:
_____ intake valve _____ exhaust valve OK _____ NOT OK _____
- _____ 9. Installed height specification: _____
- _____ 10. Measured installed height: _____ intake valve _____ exhaust valve
OK _____ NOT OK _____
- _____ 11. Valve stem height specification: _____ in.
- _____ 12. Measured valve stem height:
_____ intake valve _____ exhaust valve
OK _____ NOT OK _____