

Valve Face Grinding

Meets NATEF Task: Not specified by NATEF

Name _____ Date _____ Time on Task _____

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

- _____ 1. Set up the dressing tool and dress the wheel. Make sure the lubricant is running over the diamond; remove no more than one thousandth of an inch at a pass.
- _____ 2. Remove the carbon and dirt from the valve.
- _____ 3. Set the chuck fixture to the proper valve face angle.
- _____ 4. Remove the valve stem and install the chamfer tool so the end almost touches the wheel.
- _____ 5. Start the machine and slide the stem into the chamfer tool. While slowly rotating the valve, grind a slight chamfer on the stem.
- _____ 6. Adjust the chuck to hold the valve tightly in the chuck about 1-2 in.
- _____ 7. Start the machine and rotate the valve checking for a bent stem.
- _____ 8. Start the machine and bring the valve face to the center of the grinding wheel.
- _____ 9. Slowly turn the crossfeed knob to just touch the valve face. Adjust the lubricant to flow over the face.
- _____ 10. Note and record the reading on the crossfeed shaft.
- _____ 11. Grind the valve face, removing only as much material as necessary to get a smooth uniform finish. While grinding, move the valve back and forth across the face of the stone while turning the crossfeed.
- _____ 12. Check the valve face for a good finish before removing it from the chuck.
- _____ 13. Record the final reading on the crossfeed shaft and subtract the initial reading from it.
- _____ 14. Insert the valve stem in the holder and zero the graduation ring and start the machine. Grind the valve stem **one-half the amount you ground off the face** in one thousandths increments.

