

Lathe Safety Guidelines (updated Jan. 2012)

Safe, effective use of a wood lathe requires study and knowledge of procedures for using this tool. Read, thoroughly understand, and follow the label warnings on the lathe and in the owner/operator's manual. Safety guidelines from an instructor, video or book are also a source of important safety procedures.

- 1. Always wear safety goggles or safety glasses that include side protectors. Use a full face shield for bowl, vessel or any turning involving chucks and faceplates.**
- 2. Fine particles from a grinder and wood dust are harmful to your respiratory system. Use a dust mask, air filtration helmet, proper ventilation, dust collection system or a combination of these to deal with this serious issue. Be especially mindful of dust from many exotic woods, spalted woods or any wood from which you notice a skin or respiratory reaction.**
3. Wear hearing protection during extended periods of time.
- 4. Always check the speed of the lathe before turning it on.** Use slower speeds for larger diameters or rough pieces, and higher speeds for smaller diameters and pieces that are balanced. Always start a piece at a slower speed until the work piece is balanced. If the lathe is shaking or vibrating, lower the speed. If the work piece vibrates, always stop the machine to check the reason. As a starting point, consult your operator's manual for recommended speeds for a particular lathe. Make sure the lathe speed is compatible with the size of the blank.
- 5. Turn the lathe "off" before adjusting the tool rest or tool rest base (banjo).**
6. Remove chuck keys, adjusting wrenches and knockout bars. Form a habit of checking for these before turning on the lathe.
7. Tie back long hair, do not wear gloves, and avoid loose clothing, jewelry or any dangling objects that may catch on rotating parts or accessories.
8. When using a faceplate, be certain the work piece is solidly mounted with stout screws (#10 or #12 sheet metal screws as a minimum). Do not use dry wall or deck screws. When turning between centers, be certain the work piece is firmly mounted between the headstock driving center and tailstock center.
9. Make certain that the belt guard or cover is in place.
10. Check that all locking devices on the tailstock and tool rest assembly (rest and base) are tight before operating the lathe.
11. Make sure the blank is securely fastened.
12. Rotate your work piece by hand to make sure it clears the tool rest and bed before turning the lathe "on". Be certain that the work piece turns freely and is firmly mounted. A hand wheel on the headstock simplifies this process of spinning the lathe by hand before turning on the switch.

13. Be aware of what turners call the “red zone” or “firing zone.” This is the area directly behind and in front of the work piece—the areas most likely for a piece to travel as it comes off the lathe. A good safety habit is to step out of this zone when turning on the lathe, keeping your hand on the switch in case you need to turn the machine off. When observing someone else turn, stay out of this zone.
14. Exercise extra caution when using stock with cracks, splits, checks, bark pockets, knots, irregular shapes, or protuberances. Beginners should avoid these types of stock until they have greater knowledge of working such wood.
15. Hold turning tools securely on the tool rest, holding the tool in a controlled but comfortable manner. Always contact the tool rest with the tool before contacting the wood.
16. When running a lathe in reverse, it is possible for a chuck or faceplate to unscrew unless it is securely tightened or locked on the lathe spindle.
17. Know your capabilities and limitations. An experienced wood turner is capable of lathe speeds, techniques and procedures not recommended for beginning turners.
18. Always remove the tool rest before sanding, finishing or polishing operations.
19. Don't overreach, keep proper footing and balance at all times.
20. Keep lathe in good repair. Check for damaged parts, alignment, binding of moving parts and other conditions that may affect its operation.
21. Keep tools sharp and clean for better and safer performance. Don't force a dull tool. Don't use a tool for a purpose it was not designed or intended.
22. Consider your work environment. Don't use a lathe in damp or wet locations. Do not use in presence of flammable liquids or gases. Keep work area well lit.
23. Stay alert. Watch what you are doing, pay close attention to unusual sounds or vibrations - stop the lathe to investigate the cause. Don't operate machines when you are tired or under the influence of drugs or alcohol.
24. Guard against electric shock. Inspect electric cords for damage. Avoid the use of extension cords.
25. **Never leave the lathe running unattended. Turn power off.** Don't leave lathe until it comes to a complete stop.
26. A significant number of accidents to woodturners occur while using saws, especially band and chain saws. Learn and follow the safety guidelines for these machines before operation.