



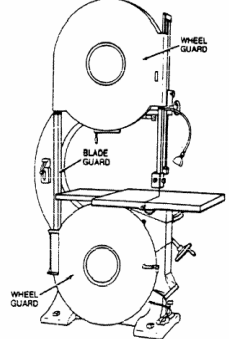
Company Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 416: Band Saw Safety

Introduction: The bandsaw is useful for cutting stock to size and roughing out shapes. It contains a serrated blade that forms one continuous loop. The blade is stretched over two pulleys, the upper one idle, the lower one driven by a variable speed electric motor. Bandsaws can be dangerous. Follow these guidelines for safety when operating bandsaws:

- **Employers must ensure** that only personnel trained in the safe operation of a band saw are allowed to use the saw.
- **Band saw operators** must wear safety glasses. If the material being sawn chips severely, a face shield should be used in addition to safety glasses.
- **Wear a dust mask** if the sawing operations create excessive dust.
- **The bandsaw blade** should be checked for tightness, and any cracks.
- **Before starting the bandsaw**, adjust the blade guide/guard to the appropriate height. The less blade that is exposed, the safer the operator will be. Always set the blade guide just high enough to clear the part you're cutting.
- **Ensure that** the table is clear of materials, tools, and debris.
- **The material to be cut** with the bandsaw should be at least three tooth widths in thickness, or use shears or a hand saw instead.
- **When cutting with a bandsaw**, do not lean excessively into the work, and keep your hands braced against the table.
- **All portions of the saw blade** must be enclosed or guarded except the portion between the bottom of the guide rolls and the table.
- **The blade guard** should be kept adjusted as close as possible to the table without interfering with movement of the stock.
- **The down travel guard** from the upper wheel to the guide rolls must be adjusted so that the blade will travel within the angle or channel.
- **The wheels** of the band saw (upper and lower) must be fully enclosed.
- **Each bandsaw** must have a tension control device to indicate proper tension for the standard saws used on the machine. this tension control device will assist in the elimination of saw breakage due to improper tension.
- **Feed rolls** of band re-saws must be protected with a guard to prevent the hands of the operator from coming in contact with the in-running rolls.
- **Band saws** must not be run at speeds in excess of the manufacturer's recommended speed. The *job selector dial* may help you choose the right motor speed for your task.
- **When making a long or deep cut**, lubricate the blade with stick wax. Carefully push the tube briefly into the running blade. Do not apply wax with your fingers.



Selecting and installing a blade: There are many different types of blades that can be installed in a band saw. They vary in tooth size, tooth shape, blade material, etc. If you're unsure of what type of blade to use for a particular task, the *job selector dial* may provide guidance, or refer to a handbook or the manufacturer's manual. Follow these guidelines for safety when changing blades:

1. Position the blade - With the saw unplugged, pull back the guides and the thrust bearings and place the new blade on the wheels. Raise the upper guide assembly to clear the stock you'll be cutting by 1/4 in. to 1/2 in.
2. Tension and track - Rotate the upper wheel by hand while alternately increasing the tension and adjusting the tracking to keep the blade centered on the upper wheel. Turning the tracking adjustment in adjusts the blade toward the back of the wheel.
3. Adjust the guide assemblies - Move the upper and lower guide assemblies forward or backward to align the leading edge of the guide blocks or bearings with or just behind the back of the saw blade's gullets.
4. Adjust the guide blocks - Move one of the guide blocks or bearings in each assembly so that it just touches the side of the blade. Lock it in place. Double-check that the block or bearing doesn't reach beyond the back of the blade's gullets. Bring the second block of each assembly against the blade. A soft block can be locked in place touching the blade. Hard blocks or ball-bearing guides should be spaced away from the blade with a single piece of paper. Rotate the blade by hand to check that a bad weld or kink in the blade won't cause problems.
5. Position the thrust bearing - Bring the upper and lower thrust bearings forward to just barely touch the back of the blade. Rotate the blade by hand to make sure everything turns smoothly.
6. Align the fence for drift - Begin by drawing a straight line parallel to the edge of a test board. Rip the board freehand, adjusting your feed angle until the blade naturally follows the line. Once the blade is following the line, hold the stock in place and turn off the saw. Use a marker to draw a line on the tabletop along the edge of the stock. Reinstall the fence and adjust its angle parallel with the mark on the table.

When changing the blade or servicing the saw, the power disconnect must be locked in the "off" position. For saws with a cord and plug, the saw must be unplugged. The saw must be tested after disconnecting power and before beginning service.

Conclusion: Keep work areas around bandsaws, and all power tools, clean and free of debris and trip hazards. Wear hearing protection if the operation is creating excessive noise. Always be aware of the position of your hands in relation to the bandsaw blade.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures: _____

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

Foreman/Supervisor's Signature: _____

These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.