

## Metal Cutting Bandsaw

### I. Competencies

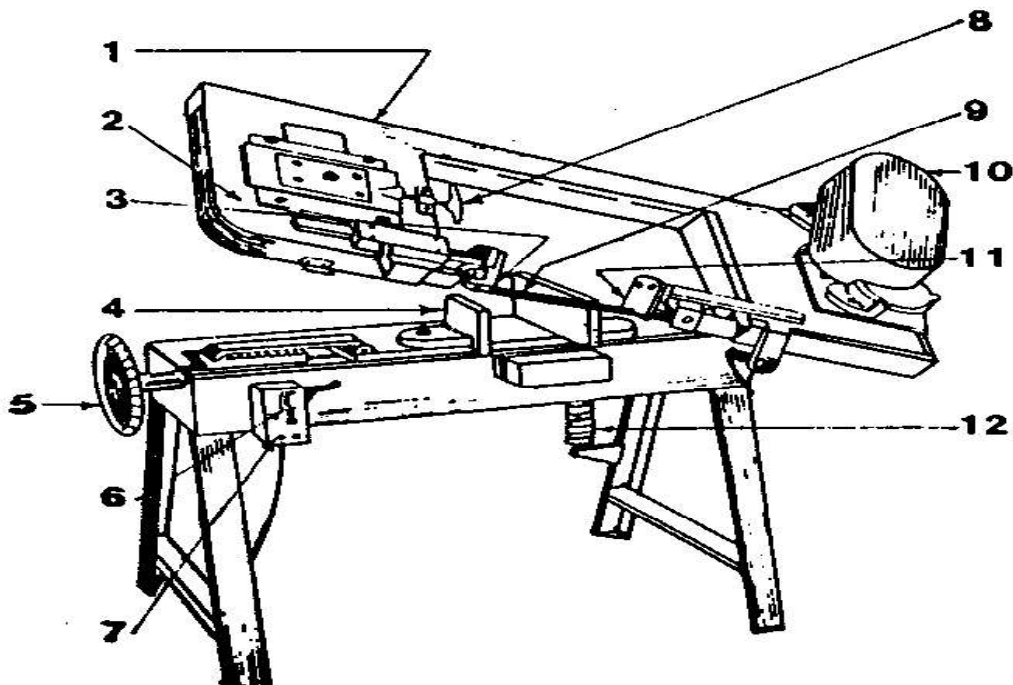
Given a properly adjusted metal cutting bandsaw, instruction and demonstration of use, each student will be able to:

- A. Identify the major parts of the metal cutting bandsaw.
- B. Pass a written test on safety and operating procedures of the metal cutting bandsaw with 100 percent accuracy
- C. Demonstrate, on a performance test, acceptable ability to cut metal using the metal cutting bandsaw.

### II. Instructional Materials and Procedures

#### A. Identification of Basic Metal Cutting Bandsaw Parts

- |                              |                            |
|------------------------------|----------------------------|
| 1. Head                      | 7. Motor switch            |
| 2. Blade guard               | 8. Blade tightening screw  |
| 3. Adjustable blade guide    | 9. Blade                   |
| 4. Vise                      | 10. Blade pulley guide     |
| 5. Vise adjusting handwheel  | 11. Stationary blade guard |
| 6. Automatic shut off switch | 12. Hydraulic feed control |



## B. Metal Cutting Bandsaw Safety

1. Wear safety glasses when operating the metal cutting bandsaw.
2. Never wear loose clothing, or jewelry when operating the metal cutting bandsaw.
3. Keep the blade cover in place at all times.
4. Disconnect the electrical power when servicing the saw or replacing blades.
5. Never adjust the metal cutting bandsaw while it is in operation.
6. Use a support when cutting heavy or long stock.
7. Clamp metal securely before sawing.
8. Keep the floor free of coolant-water and metal.
9. Never leave the saw unattended while in operation.

## C. Metal Cutting Band Saw Operating Procedures

1. Adjust the arm guide rollers as close as possible to the stock.
2. If the metal cutting saw is equipped with a coolant/lubricant system, be sure the coolant is flowing over the stock.
3. Place stock in the vise:
  - a. Clamp firmly
  - b. When cutting several pieces of flat iron, stand the stock on edge and clamp together in vise.
  - c. When cutting rectangular stock, clamp widest side of stock toward blade.
  - d. Clamp angle iron with legs down in vise.
  - e. Cut round stock separately.
4. After starting the saw, lower the blade head by hand until the blade makes contact with stock. This will prevent damaging the blade teeth.
5. Supports for long stock should be no higher than the vise to prevent pinching the blade.
6. If the saw cuts too slowly or binds, replace the blade; do not apply pressure to the blade head.
7. Remove unused stock from the saw to prevent others from walking into it.
8. Keep proper feed pressure on the hydraulic feed control.