Lesson #2: Band Saw I.D. and Safety Packet

Objectives

Students will be able to…

- Identify each of the major components of the Band Saw and their purpose.
- Describe the use and operation of the Band Saw.
- Demonstrate the safe operation of the Band Saw.

Common Core Standards

RSIT 11-12.2
RLST 11-12.2
Demonstration and Application 11.1
Problem Solving 5.1 & 5.4
Health and Safety 6.2 & 6.10
Responsibility and Flexibility 7.4
Technical Knowledge Skills 10.0
Cabinetmaking and Wood Products A 4.1, A4.3, A4.4, & A 6.1
Residential and Commercial Pathway D2.1, D2.3, D3.1, & D 5.2

Materials

Band Saw
Band Saw I.D. and Safety Packet

Lesson Sequence

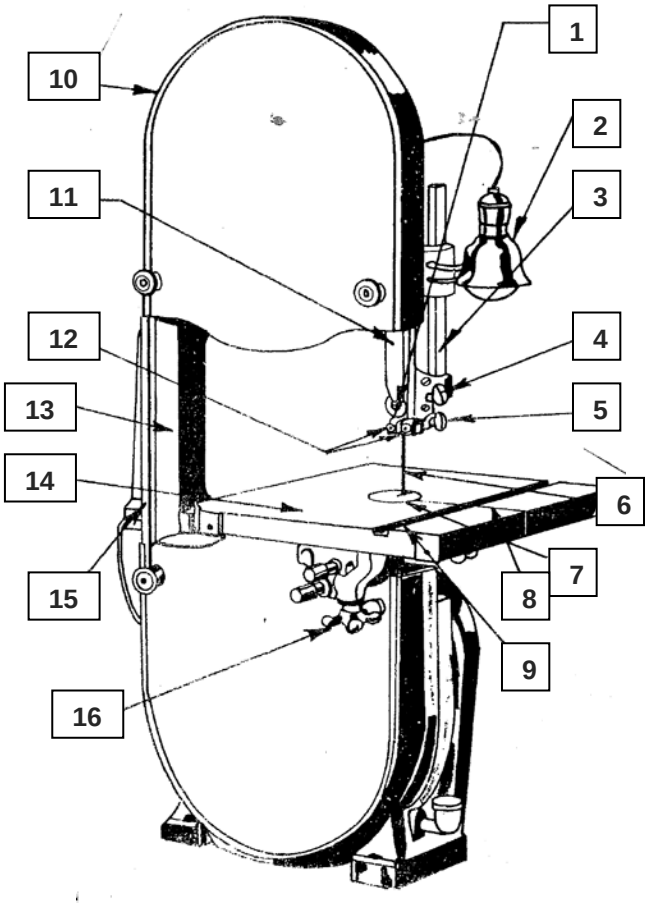
- Pass out the Band Saw I.D. and Safety Packet. Complete the band saw component I.D. portion with students gathered around the band saw. As you name the parts of the saw, not only discuss what their function is, but also demonstrate how they function.
- When done with the I.D. lecture/discussion, return to the classroom and complete the safety questions as a class. Answer any questions along the way as students have them.

Assessment
Check for student understanding by questioning throughout the whole class discussion. Call on random students to answer questions.

Accommodations / Modifications
Check for Understanding One on One Support High Light Important Information Visuals

Band Saw Identification and Safety Packet

Part 1: Identify the numbered parts on the saw illustrated below.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

Part 2: Safe Operational Procedure

1. Adjust the upper guard and guide about 1/8" to 1/4" above material to be cut.
2. Select proper blade width. No cutting radius should be too small for the blade. General rules regarding minimum radius cuts by blade width:

Blade width	Minimum Radius
3/4"	1 ¾"
1/2"	1 ¼"
3/8"	1"
1/4"	¾"
3/16"	½"
1/8"	¼"

3. Keep blades sharp and properly set. If blade leads or wanders to one side, it may be dull, unevenly set, or a guide may be improperly set. Blade guides should be 1/32" from the blade on each side.
4. Keep floor and surrounding area free of scrap that might cause tripping.
5. Be sure saw is properly grounded.
6. Keep all guards in place at all times.
7. Get someone to assist in operations, which are not safely handled alone.
8. Make all adjustments with the power off and blade stopped.
9. Keep hands a safe distance from moving parts, never closer than 2 inches from the blade.
10. Give undivided attention to the job. The operator should be the only one inside the safety zone area.
11. Use a push block when sawing small stock.
12. Never reach around a moving blade.
13. When making a cut, do not place hands in line with the cutting edge.
14. Never attempt to remove small pieces of wood from near the blade while the saw is running.
15. Never leave a running saw unattended.
16. When finished cutting, shut off the switch and disconnect machine from power source. Do not leave the safety zone until the blade comes to a complete stop.
17. Blade tracking should be adjusted so that the blade runs on the center of the wheel.

Part 3: Completion Questions

1. Use only a sharp blade with proper _____for the radius being cut.
2. When the blade is properly installed, the teeth should point _____.
3. The blade support guide should be adjusted so it runs _____ of an inch from the blade.
4. Keep hands at least _____ inches from the blade.
5. Use a _____ _____ when sawing small stock.
6. Adjust the upper guide about _____ inches above the material being cut.
7. Properly adjust the blade tracking so it will run in the _____ of the upper wheel.
8. Move the upper guide only while the saw is _____.
9. The smallest radius that can be safely cut with a 1/2” wide blade is _____ inches.
10. A dull or improperly set blade will cause the blade to _____ one side on the work piece.

Band Saw Identification and Safety Packet – *Answer Key*

Part 1:

1. Ball bearing blade support
2. Lamp attachment
3. Guide post
4. Blade support lock screw
5. Blade guide lock srew
6. Blade
7. Table insert
8. Blade slot
9. Miter gage groove
10. Upper wheel guard
11. Blade guard
12. Blade guides
13. Arm
14. Table
15. Rear blade guard
16. Table clamp

Part 3:

1. Width
2. Downward
3. 1/32”
4. Two
5. Push block
6. 1/8
7. Center
8. Off
9. 1 and ¼
10. Lead