Saber Saw

I. Competencies

Given a properly adjusted saber saw, accessories, instruction and use demonstration, each student will be able to:

A. Identify the major parts of the saber saw.

B. Pass a written test on safety and operating procedures of the saber saw with 100 percent accuracy.

C. Demonstrate ability to use the saber saw, following suggested safety rules and correct operation procedures.

II. Instructional Materials and Procedures

A. Identification of basic saber saw parts.

1. Cord Strain Reliever
2. Handle
3. Brush Holder
4. Base Tilt Adjustment
5. Tilting Base
6. Off/On Switch
7. Guide Knob
8. Aluminum Housing
9. Blade Screw
10. Toe
11. Blade
B. Saber Saw Safety

1. Wear safety glasses while using the saber saw.

2. Hold the saber saw firmly on the material being cut.

3. Do not back the saber saw out of an internal cut while it is running. Stop the saw and lift the blade from the cut.

4. Unplug the saw to change blades or to make adjustments.

5. Be sure blades are installed correctly.

6. Make sure the blade has stopped before laying the saber saw down.

7. Allow the blade to reach maximum speed before starting the cut.

8. When making internal cuts, turn the saw off and allow the blade to stop before removing it from the work.

9. Do not make curved cuts so sharp that the blade bends or cracks.

10. Hold the saw securely during the cutting operation; do not over-extend and get off-balance during the cut.

11. Make sure the work is well supported during the cut; be careful not to cut into the table or support while making the desired cut.

C. Operating Procedures

1. Select the blade for the cutting job to be performed. There are many types of blades available for ripping and crosscutting wood, light metals and plastic.

2. Set the saw on the material with the blade off the stock edge, turn the saber saw to on and allow it to come to full speed before starting the cut.

3. If the saw has a variable speed adjustment, set the blade speed for the type of material and finish desired.

4. Place a good mark on the material and guide the saw on the waste side of the mark. The mark line should still be visible after the cut.
5. Do not force the saber saw through the material quickly. Move the saw through the material at a moderate speed that does not reduce the RPM's of the blade.

6. Make curved cuts slowly and avoid binding the saw blade. Backing up short distances and making relief cuts will help prevent the blade from binding.

7. To make a plunge cut tilt the saber saw on the toe, turn the saw on and bring the blade down slowly on the material until the cut is made through the material. The saw must be held firmly when making a plunge cut.

8. Do not lift the saber saw out of a cut while it is running to avoid marring the wood, causing the saw to jump as the blade hits the wood, and possibly breaking the saw blade.
III. Written Test

Saber Saw Safety and Operation Test

Name________________________ Date___________________ Class________________

Multiple Choice - Place the letter of the most correct answer on the answer sheet.

1. To remove the saber saw blade from an internal cut the operator should ____________.
   a. back the saw out of the cut with it running.
   b. lift the saw straight up while it is running.
   c. stop the saw and lift the blade out of the cut.
   d. make a relief cut, turn the saw around and bring the saw out of the cut forward.

2. When starting a cut with the saber saw the operator should ____________.
   a. hold the blade against the wood, turn the saw on and start cutting.
   b. hold the saw blade away from the wood, turn on the saw let it come to full speed and start cutting.
   c. hold the saw over the wood, turn it on then begin the cut.
   d. either a or b.

3. The cut should be made ____________.
   a. on the waste side of the mark line.
   b. directly on the mark line.
   c. on the inside of the mark line away from the waste side.
   d. 1/8” away from the mark line on the waste side.

4. When cutting with the saber saw correct cutting speed can be identified when ____________.
   a. the saw dust is thrown out about 1/2 inch.
   b. the noise generated by the saw begins to decrease.
   c. the blade starts to get warm.
   d. the saw is moved at a moderate speed and the RPM's do not decrease.
5. If a saber saw is lifted from a cut while running, what will occur?
   
   a. The blade may break.
   b. The wood will be marred.
   c. The saw will jump as the blade hits the wood.
   d. All of these.

6. Plunge cutting can be done with the saber saw by ________________.
   
   a. plunging the saw blade into the material.
   b. placing the saw blade on the edge of the wood and making the cut.
   c. placing the toe of the saw on the material and slowly tilting the saw blade into the cut.
   d. place the heel of the saw base on the material and lower the blade into the cut.
IV. Performance Test for the Saber Saw

Name______________________     Date  _________     Class  ______________

The student performs the following while operating the saber saw.

1. Safety glasses are worn while the saber saw is being used.     Yes  No  N/A
   ___ ___ ___

2. The saber saw is held firmly in both hands while being turned on and used.     Yes  No  N/A
   ___ ___ ___

3. The blade has stopped moving before the saber saw is laid down.     Yes  No  N/A
   ___ ___ ___

4. The electrical and extension cords are positioned away from the work being performed.     Yes  No  N/A
   ___ ___ ___

5. When the blade is replaced on the saber saw the electric cord is unplugged.     Yes  No  N/A
   ___ ___ ___

6. The student can select, remove and replace blades on the saber saw.     Yes  No  N/A
   ___ ___ ___

7. The student can safely control the saber saw and perform satisfactory cuts.     Yes  No  N/A
   ___ ___ ___

Comments__________________________________________________________________
__________________________________________________________________

I do hereby certify that the student has satisfactorily demonstrated ability to operate the saber saw by passing this performance test.

_____________________ ______ _____________________ ______
Student          Date                Teacher     Date
Saber Saw Parts Identification Test

Name_______________________

Match the number of each Saber saw part with the correct name.

___ A. Aluminum Housing
___ B. Base Tilt Adjustment
___ C. Blade
___ D. Blade Screw
___ E. Brush Holder
___ F. Cord Strain Reliever
___ G. Guide Knob
___ H. Handle
___ I. Off/On Switch
___ J. Tilting Base
___ K. Toe