Reciprocating Saw

I. Competencies

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

A. Identify the major parts of the reciprocating saw.

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

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

II. Instructional Materials and Procedures

A. Identification of basic reciprocating saw parts.

1. Blade
2. Blade Set Screw
3. Brushes
4. Switch Lock
5. Off/On Switch
6. Handle
7. Cord Strain Reliever
8. Electrical Cord
9. Rocker Shoe
B. Reciprocating Saw Safety

1. Wear eye protection at all times when using the reciprocating saw.

2. Keep the electrical cord out of the way of the cut being made.

3. Hold the saw firmly with both hands when making cuts. This saw will vibrate a lot during operation and must be held tightly to keep the cut on line and to avoid being dropped during operation.

4. Do not operate close to other workers since the saw vibrates a lot and because the blade on this saw is unguarded.

5. Secure the material being cut with the reciprocating saw.

6. Do not bind or pinch the blade when making cuts with the reciprocating saw. Binding the blade may cause the blade to break or possibly jerk the saw from the user's hands.

C. Operating Procedures

1. Locate yourself in a good steady position prior to making cuts with the reciprocating saw.

2. If the reciprocating saw has a variable speed control, set on fast speed for cutting wood and on slow speed for cutting metals.

3. Select the correct blade for the type of material being cut with the reciprocating saw.

4. Place the rocker shoe against the work when cutting with the reciprocating saw.

5. Do not place excessive pressure on the saw while cutting and become over balanced.

6. If the saw requires excessive pressure to cut, it is in need of a new blade. Change the blade before continuing to use the saw.

7. To make a plunge cut (internal cut) with the reciprocating saw place the rocker shoe on the material and tilt the saw forward slowly until the blade cuts through the material. Too much forward pressure will usually cause the blade to break prematurely.
8. Keep a good supply of blades on hand for the reciprocating saw as it will break blades frequently.
III. Written Test

Reciprocating Saw Safety and Operation Test

Name_______________________  Date___________________  Class_______________

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

1. When cutting with the reciprocating saw, why must the saw be held firmly?
   a. The shape of the saw makes it easy to slip out of the hands.
   b. The material being cut is not secured and causes the saw to vibrate a lot.
   c. Cutting positions are awkward and can easily cause the operator to drop the saw.
   d. The saw vibrates a lot which can lead to the saw being dropped by the operator.

2. The reciprocating saw should not be operated close to other workers because ________________.
   a. it is noisy.
   b. it vibrates a lot and blade is unguarded.
   c. the saw runs at excessively high speed.
   d. all of these.

3. Binding the blade on the reciprocating saw may cause ________________.
   a. the blade to break.
   b. the blade to bend.
   c. the saw motor to overheat and burn out.
   d. damage to the material being cut.

4. The rocker shoe on the reciprocating saw should be placed ________________ when cutting.
   a. close to the work
   b. away from the work
   c. against the work
   d. below the work
5. If the reciprocating saw requires a lot of pressure to get it to cut in should _____________.
   a. be held in a different position.
   b. have the blade changed.
   c. be adjusted to a higher cutting speed.
   d. have the cutting position changed.

6. To make a plunge cut with the reciprocating saw the operator should _____________.
   a. push the blade straight into the material.
   b. put the rocker shoe on the material and tilt the blade forward at a slow pace.
   c. move the blade into the material from a vertical position.
   d. push the saw at a slow speed and move the blade into the material.
IV. Performance Test for the Reciprocating Saw

The student performs the following while operating the reciprocating saw.

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

2. The reciprocating 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 reciprocating saw is laid down.  
   Yes  No  N/A

4. The reciprocating saw is positioned so the saw dust is thrown away from the operator during operation.  
   Yes  No  N/A

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

6. When the blade is replaced on the reciprocating saw the electric cord is unplugged.  
   Yes  No  N/A

7. The student can remove and replace the blade on the reciprocating saw.  
   Yes  No  N/A

8. The student can safely control the reciprocating saw and perform satisfactory cuts.  
   Yes  No  N/A

Comments: __________________________________________________________

____________________________________________________________________

____________________________________________________________________

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

_________________________________________  __________________________  
Student                                         Date                        Teacher                 Date
Reciprocating Saw Parts Identification Test

Name_____________________

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

___ A. Switch Lock
___ B. Blade Set Screw
___ C. Rocker Shoe
___ D. Handle
___ E. Electrical Cord
___ F. Cord Strain Reliever
___ G. Brushes
___ H. Off/On Switch
___ I. Blade

[Diagram showing numbered parts corresponding to the list provided]
Reciprocating Saw

1. Blade
2. Blade Set Screw
3. Brushes
4. Switch Lock
5. Off/On Switch
6. Handle
7. Cord Strain Reliever
8. Electrical Cord
9. Rocker Shoe
Reciprocating Saw