

Belt/Disc Sander

I. Competencies

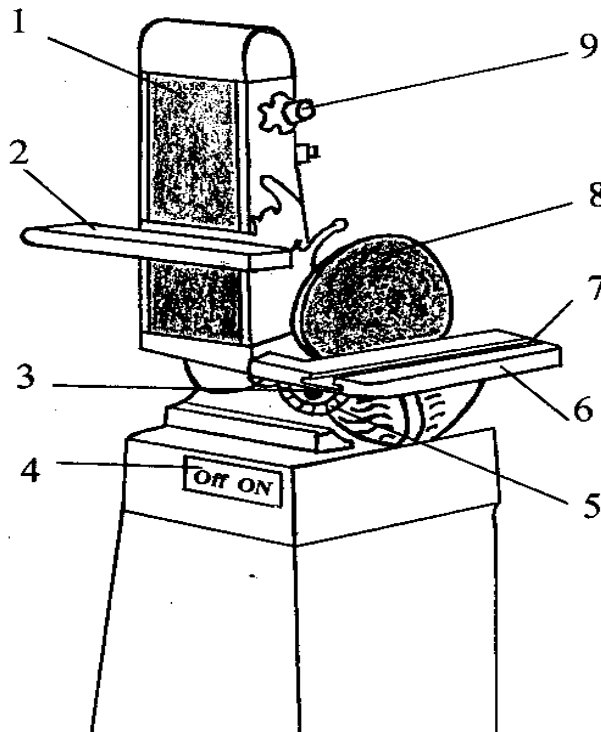
Given a properly adjusted belt/disc sander, accessories, instruction and demonstration of use, each student will be able to:

- A. Identify the major parts of the belt/disc sander.
- B. Pass a written test on safety and operating procedures of the belt/disc sander with 100 percent accuracy.
- C. Demonstrate ability to use the belt/disc sander, following suggested safety rules and correct operation procedures.

II. Instructional Materials and Procedures

A. Identification of Basic Belt/Disc Sander Parts.

- | | |
|--------------------------|-------------------------------|
| 1. Sanding Belt | 6. Disc Table |
| 2. Belt Table | 7. Miter Head Slot |
| 3. Table Adjusting Screw | 8. Sanding Disc |
| 4. Off/On Switch | 9. Belt Track Adjusting Screw |
| 5. Bevel Scale | |



B. Belt/Disc Sander Safety

1. Wear safety glasses at all times when operating the belt/disc sander.
2. Wear a dust mask or respirator when using the belt/disc sander for prolonged periods of time.
3. Keep the sanding disc well glued to the disc plate at all times.
4. If the sanding disc rotates in a counterclockwise direction, position the material to be sanded from the center of the disc to the left edge. If positioned in this manner the sanding action will help to hold the stock down on the table. If the stock is positioned from the center of the disc to the right edge of the disc the sanding action will pick the edge of the stock up and created an unsafe condition.
5. Do not reach across the sanding disc to turn the sander on or off. Your arm or hand may touch the edge of the rotating disc and cause a serious cut or entanglement. Move to the front of the sander and turn the machine off.
6. Never wear loose, or baggy clothes when operating the belt/disc sander.
7. Disconnect the electrical power to the sander when changing the belt or disc or making major adjustments.
8. Try to position yourself so that sanding dust will not be thrown toward the breathing zone.
9. Hold stock steady as it is being sanded, but do not put so much pressure on the sanding disc or belt that the sander slows down.
10. Do not allow hands or fingers to touch the belt or disc when sanding.

C. Belt/Disc Sander Operating Procedures

1. Adjust the disc table to achieve the desired angle on the stock being sanded. The table can be adjusted up to 45 degrees on most sanders.
2. Use the miter head to hold and move stock when a precise angle must be sanded on the material.
3. Apply firm, but not excessive pressure to stock being sanded on the belt/disc sander.
4. The belt sanding attachment can be adjusted from a horizontal to vertical position on most sanders. Adjust to best fit the sanding job being performed.
5. Adjust the belt tracking mechanism so the sanding belt does not touch the machine housing when rotating.
6. Do not become over-balanced when operating the belt/disc sander.
7. Keep the floor area around the sander clear of sawdust to reduce the possibility of slipping on a slick floor.

8. Always turn the belt/disc sander off when leaving the work area.
9. To change the sanding disc the old disc is pulled off the disc plate, a new coating of adhesive is applied to the plate and the new sanding disc is then attached to the plate.
10. To change the sanding belt, the belt tension is left off, the old belt is slipped off the pulleys and the new belt is installed. Be sure the arrows on the new belt point in the same direction as the arrows on the old belt pointed.

III. Written Test

Belt/Disc Sander Safety and Operation Test

Name _____ Date _____ Class _____

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

1. What personal protection equipment should be worn when using the belt/disc sander?
 - a. Safety glasses, dust mask, hearing protection and gloves.
 - b. Safety glasses, dust mask, and gloves.
 - c. Safety glasses, dust mask and hearing protection.
 - d. Safety glasses and dust mask.

2. Where should the stock being sanded be held if the sanding disc rotates in a counterclockwise direction?
 - a. Center to right edge of the disc.
 - b. Center to left edge of the disc.
 - c. Center to top edge of the disc.
 - d. Center to bottom edge of the disc.

3. What may happen to an operator who reaches across the rotating sanding disc to turn the sander off?
 - a. Nothing, this is a relatively safe move.
 - b. Saw dust will likely be thrown toward your face.
 - c. May receive a serious cut on the hand or arm from the rotating sanding disc.
 - d. The sander may throw a disc off and hit your hand or arm.

4. When changing sanding belts or discs, what should be done to the belt/disc sander?
 - a. Lock it down so it cannot be started.
 - b. Disconnect the machine from the electrical service.
 - c. Clean the floor around the sander.
 - d. Adjust the disc table so it is always 90 degrees to the sanding disc.

5. On most disc sanders the table can be adjusted _____ degrees.
- a. 25
 - b. 35
 - c. 45
 - d. 60
6. When a precise angle is needed on the stock, what accessory can be used with the belt/disc sander to achieve the desired angle?
- a. Protractor head.
 - b. Sliding tee bevel square.
 - c. Table stop.
 - d. Miter head.

IV. Performance Test for the Belt/Disc Sander

Name _____

The student performs the following while operating the belt/disc sander.

| | Yes | No | N/A |
|---|------------|-----------|------------|
| 1. Safety glasses are worn while the sander is being used. | ___ | ___ | ___ |
| 2. The material is held firmly in both hands as the sanding operation is being performed. | ___ | ___ | ___ |
| 3. The belt/disc sander has stopped rotating before the operator leaves the work area. | ___ | ___ | ___ |
| 4. The operator does not reach across the sanding disc with the hand and/or arm to turn the sander off. | ___ | ___ | ___ |
| 5. The stock is held in the correct location on the sanding disc when sanding. | ___ | ___ | ___ |
| 6. The student can remove and replace the sanding belt and disc on the belt/disc sander. | ___ | ___ | ___ |
| 7. The student can safely control the belt/disc sander and perform satisfactory sanding work. | ___ | ___ | ___ |

I do hereby certify that the student has satisfactorily demonstrated ability to operate the belt/disc sander by passing this performance test.

Student

Date

Teacher

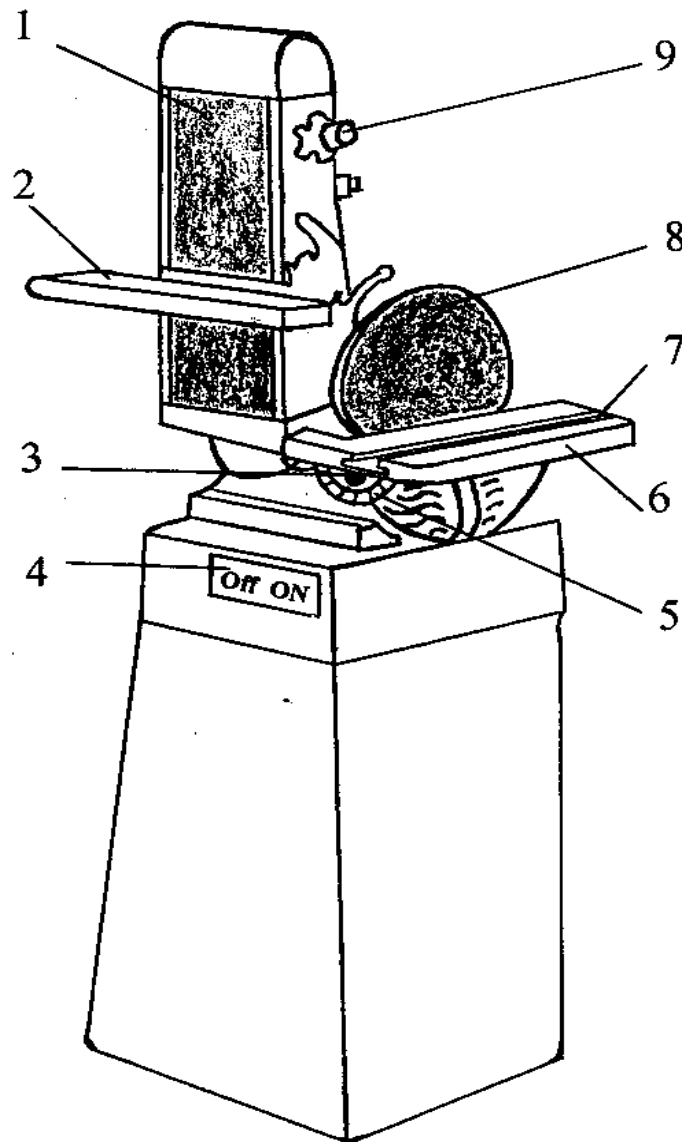
Date

Belt/Disc Sander Parts Identification Test

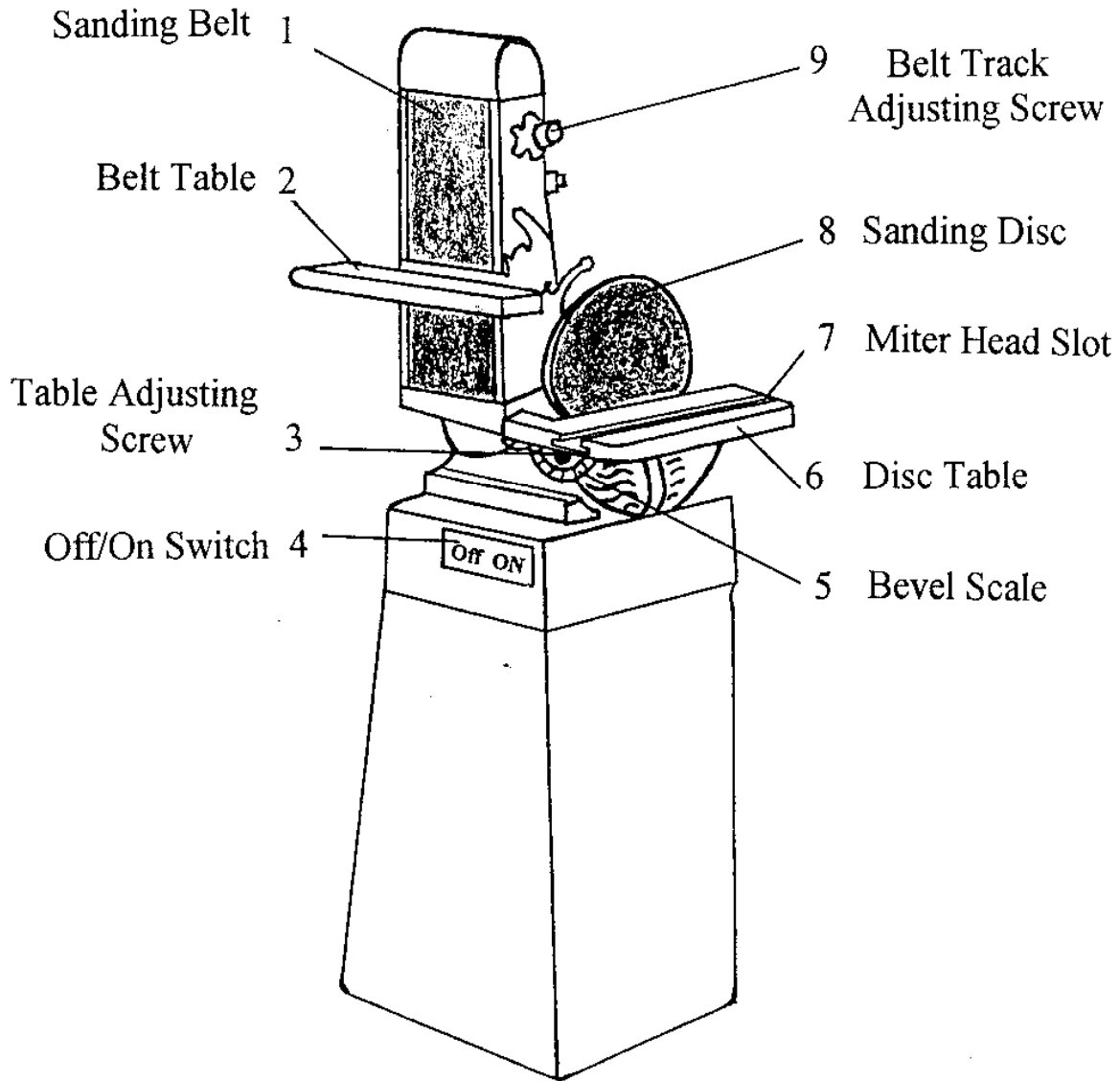
Name _____

Match the number of each belt/disc sander part with the correct part name.

- | | |
|-----------------------------------|------------------------------|
| ___ 1. Miter Head Slot | ___ 6. Sanding Belt |
| ___ 2. Disc Table | ___ 7. Sanding Disc |
| ___ 3. Bevel Scale | ___ 8. Table Adjusting Screw |
| ___ 4. Belt Track Adjusting Screw | ___ 9. Belt Table |
| ___ 5. Off/On Switch | |



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