Portable Power Plane

I. Competencies

Given a properly adjusted portable power plane, accessories, instruction and demonstration of use, each student will be able to:

A. Identify the major parts of the portable power plane.

B. Pass a written test on safety and operating procedures of the portable power plane with 100 percent accuracy.

C. Demonstrate ability to use the portable power plane, following suggested safety rules and correct operation procedures.

II. Instructional Materials and Procedures

A. Identification of basic portable power plane parts.

1. Handle
2. Off/On Switch
3. Motor
4. Bevel Scale
5. Front Shoe
6. Tilting Fence
7. Cutterhead
8. Rear Shoe
9. Electrical Cord
B. Portable Power Plane Safety

1. Wear eye and hearing protection and dust mask when planing.

2. Hold the portable power plane with both hands during operation.

3. After the cut is finished wait till the blade has stopped rotating before laying the plane down.

4. Clamp the work securely for planing operations.

5. Disconnect the electric cord before making any adjustments on the plane.

6. Position the electric cord so it will not become entangled in the work or be cut during the planing operation.

7. If the portable power plane is used outside or in damp locations it should be connected to a ground fault circuit interrupter.

C. Operating Procedures

1. Hold the portable power plane with both hands and move it in long, smooth, strokes along the edge of material being planed.

2. Do not let the front of the portable power plane drop down when the front shoe passes over the edge of material being planed. If the shoe is allowed to drop the amount of material being removed will increase causing an uneven edge on the stock.

3. Adjust the tilting fence to the desired bevel angle needed on the material. Check the angle with a protractor for accuracy before making the final cut.

4. Do not apply pressure to the portable power plane when using. The weight of the tool creates sufficient pressure to obtain quality cuts.

5. Adjust the depth of cut on the portable power plane by lowering or raising the front shoe.
III. Written Test

Portable Power Plane Safety and Operation Test

Name_______________________ Date_____________________ Class____________________

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

1. What personal protective equipment should be worn when using the portable power plane?
   a. Safety glasses.
   b. Safety glasses and hearing protection.
   c. Safety glasses, hearing protection and dust mask.
   d. Safety glasses, hearing protection, dust mask, and gloves.

2. Which part of the portable power plane is adjusted to get desired bevel angle on the material?
   a. Front shoe.
   b. Tilting fence.
   c. Rear shoe.
   d. Cutterhead.

3. Which of the following should not be done when using the Portable power plane?
   a. Position the electric cord away from the work.
   b. Clamp material securely.
   c. Hold the tool with both hands.
   d. Apply light feed pressure.

4. Which part of the portable power plane is adjusted to get the correct depth of cut?
   a. Front Shoe
   b. Tilting Fence
   c. Rear shoe
   d. Cutterhead
5. When making adjustments on the portable power plane which of the following should be observed?

a. Clamp the plane securely.
b. Wear a dust mask.
c. Disconnect the electric cord.
d. Make sure the tool is protected by a GFCI
IV. Performance Test for the Portable Power Plane

The student performs the following while operating the portable power plane.

1. Safety glasses are worn while the plane is being used. ___ ___ ___
2. The portable power plane is held firmly in both hands before the switch is turned on. ___ ___ ___
3. The portable power plane has stopped rotating before the plane is laid down. ___ ___ ___
4. The portable power plane is moved with smooth even strokes without downward pressure. ___ ___ ___
5. The power cord is positioned away from the work being performed. ___ ___ ___
6. When adjustments are being made to the portable power plane the electric cord is unplugged. ___ ___ ___
7. A respirator or good quality dust mask is worn during the sanding operation. ___ ___ ___
8. Hearing protection is worn while the portable power plane is being operated. ___ ___ ___

Comments
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I do hereby certify that the student has satisfactorily demonstrated ability to operate the portable power plane by passing this performance test.

_____________________ ______ _____________________ ______
Student    Date                Teacher     Date
Portable Power Plane Parts Identification Test

Name____________________

Match the number of each portable power plane part with the correct part name.

___ A. Bevel Scale
___ B. Cutterhead
___ C. Electrical Cord
___ D. Front Shoe
___ E. Handle

___ F. Motor
___ G. Off/On Switch
___ H. Rear Shoe
___ I. Tilting Fence
Portable Power Plane

1. Handle
2. Off/On Switch
3. Motor
4. Bevel Scale
5. Front Shoe
6. Tilting Fence
7. Cutterhead
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9. Electrical Cord
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