Planer

I. Competencies

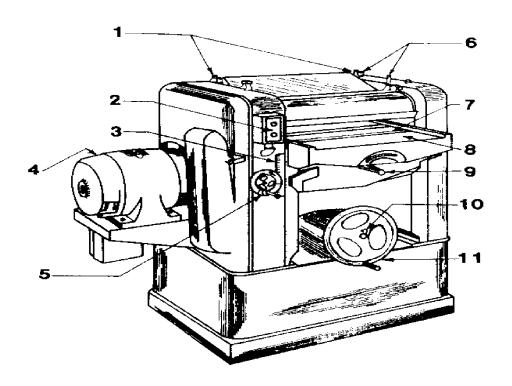
Given a properly adjusted planer, instruction and demonstration of use, each student will be able to:

- A. Identify the major parts of the planer.
- B. Pass a written test on safety and operating procedures of the planer with a minimum of 100% accuracy.
- C. Demonstrate, on a performance test acceptable, ability to surface lumber with the thickness planer.

II. Instructional Material and Procedures

- A. Identification of Basic Planer Parts:
 - 1. Pressure bar adjusting screws screws
 - 2. Off/On Switch
 - 3. Depth of cut scale
 - 4. Motor
 - 5. Variable speed control

- 6. Infeed and outfeed roll adjusting
- 7. Bed roll
 - 8. Bed
- 9. Bed roll adjusting lever
- 10. Handwheel lock
- 11. Bed elevating handwheel



B. Planer Safety

- 1. Use industrial quality eye protection, ear protectors, and footwear.
- 2. Keep the work area around the planer free from scraps, sawdust, oil or grease. The use of anti-skid floor strips is recommended for the floor area around the planer.
- 3. Before starting the planer, clear the machine and table area of chips, tools, or other matter.
- 4. Keep hands away from any moving parts.
- 5. Never look around, carry on a conversation, or "horseplay" while using the planer.
- 6. Use a helper or a support stand to off-bear the lumber when planing. An off-bearer only supports and moves with the stock as it comes through the planer.
- 7. Disconnect the electrical service in the circuit breaker before making any service adjustments to the planer or before changing blades.
- 8. Remove jewelry such as finger rings, bracelets, and watches. These items have the potential to get caught in the machine or on the material while planing.

C. Planer Operating Procedures

- 1. Make certain all guards are in place and securely fastened.
- 2. Never stand or walk directly behind the machine when it is in operation.
- 3. Do not overload the planer by trying to cut more than the capacity of the machine. The depth of cut will depend upon the width of the lumber, rate of feed and the kind of lumber.
- 4. The depth of cut should never be set at more than 1/16 inch.
- 5. Make sure the board to be planed is free of knots, paint, varnish, nails, dirt, and grease.
- 6. Feed lumber into the planer with the grain of the wood.

- 7. When feeding material into the machine, stand to he side nearest the switch. Never stand behind a piece of lumber being planed, as kickbacks can cause serious injury.
- 8. If the planer becomes overloaded during the cut stop the machine, wait until the cutter head completely stops, then lower the table to clear the work. Kickbacks may occur if the stock is removed from the planer before the cutter head stops.
- 9. Never force material through the planer. If the lumber does not feed properly, stop the machine and have the instructor help you correct the feed problem.
- 10. Feed only one board through the planer at a time. Kickbacks can occur while attempting to surface more than one board at a time.
- 11. Pass lumber around the planer, not over it, when running lumber through the planer a second time.
- 12. Never attempt to surface lumber that is shorter than the distance between the infeed and outfeed rollers.
- 13. Never plane lumber less then ¼" thick unless a slave board is used.
- 14. When finished planing turn the machine off and wait until all moving parts have stopped before leaving the work area.
- 15. Bed rollers should be adjusted at maximum height when surfacing rough lumber and at minimum height after the lumber has been smoothed on both sides.
- 16. The variable speed control should be set at maximum feet per minute when only a rough finish is desired and at low feet per minute when a fine finish is desired on the board.