

# OPERATING PROCEDURE FOR:

## 20” POWERMATIC® PLANER

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### SAFETY RULES:

**Warning: Willful violations of these safety rules, disruptive actions or horseplay may result in loss of the privilege to use the tools and machinery in the workshop.**

As with all machines, there is a certain amount of hazard involved with the use of this planer. Use the machine with the respect and caution demanded where safety precautions are concerned. **You are responsible for you own safety.**

Read and understand the operating procedures for this machine and the warnings posted on the machine before attempting operation.

**Personal Protective Equipment.** At a minimum eye protection and hearing protection must be worn when operating this machine. Eye protection must be safety glasses with side shields, goggles, or face shield, which meet ANSI Z87.1. Remove tie, watch, rings, and other jewelry. Button sleeves or roll up sleeves above the elbow. Remove loose outer clothing and confine long hair.

**Use the appropriate NIOSH approved respirator** in dusty work conditions (N95, N100, P95 or P100). Wood dust has been listed as a known carcinogen by the U.S. government.

**Guards.** Keep the machine guards in place. Do not operate the machine if the guards have been removed.

**Work Area.** Keep the floor around the machine clean to minimize the danger of tripping or slipping. Be sure the infeed and outfeed tables are free of scrap or foreign material. Make sure the dust collector is hooked up and operating.

**Operator Position.** Maintain a balanced stance and keep your body under control at all times. Stand to the side out of line with the table and make sure no one else is standing in line with the table.

**Careless Acts.** Give the work you are doing your undivided attention. Looking around, carrying on a conversation and “horseplay” are careless acts that can result in serious injury.

**Disconnect machine** before performing any service or maintenance. A machine under repair must be Locked Out to show it should not be used until the maintenance is complete.

**Maintain Tools In Top Condition.** Keep tools sharp and clean for safe and best performance. Dull tools increase noise levels and can cause kickback and glazed surfaces.

**Hand Safety.** Keep hands outside the machine. NEVER reach under the guards to try to clear stock that stops feeding. Do not clear chips and sawdust with hands; use a brush. Do not have

any part of the hands under that part of the board that is over the table when starting the cut; the infeed roller will engage the board and force it down against the table causing a pinching action.

**Material Condition.** Do not plane boards with loose knots or with nail or any foreign material on its surface. All stock should first be jointed on one face before attempting to plane a parallel surface on the planer. Serious stock flaws cannot be removed by use of a planer alone.

**Reclaimed or pressure treated wood is not to be planed on this machine.**

**Machine Adjustments.** Make all machine adjustments with power off, except feed rate and depth of cut adjustments.

**Job Completion.** If the operator leaves the machine area for any reason, the planer should be turned “off” and the cutterhead should come to a complete stop before his departure. In addition, if the operation is complete, the operator should clean the planer and the work area. Never clean the planer with the power “on” and never use the hands to clear sawdust and debris; use a brush.

**If you are not** thoroughly familiar with the operation of planer, obtain advice from an instructor or qualified person.

**Drugs, Alcohol, Medication.** Do not operate this machine while under the influence of drugs, alcohol, or any medication. Do not operate this machine if you are tired, sick, or distracted.

**Familiarize yourself** with all caution and warning decals used on this machine.

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**Specifications:**

Maximum planning width .....	20”
Maximum planning thickness .....	8”
Maximum full width cutting depth .....	3/32”
Minimum planning length .....	12”

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**OPERATION:**

The best results are usually obtained at the lower feed rate when machining hardwoods (knob pulled out.)

In order to minimize the difficulty of handling large pieces of stock, cut the stock into 2’ – 4’ lengths if longer lengths are not required.

If long stock is to be planed, get someone to help support the stock at the outfeed end.

Before planing a board, true one face on the jointer.

If possible, determine the grain direction of each piece and feed *with* the grain. If you are experiencing tearout, try feeding the boards in the other direction and/or reducing the depth of cut. Note that cuts less than 0.010” – 0.020” deep may not remove the indentations left by the feed roller.

Measure the thickness of the stock and adjust the machine to remove no more than 1/16" to 1/8." The depth of cut is limited to 1/8" for boards wider than 9" by a device mounted in the center of the infeed section of the cutter head assembly. For narrower stock feed to the side of this device. The maximum depth of cut is 3/16," however, cuts deeper than 1/32" (0.0313) – 1/16" (0.0625) should not be used when a smooth surface ready for sanding is desired.

The planer has two locking knobs that secure the table to the columns. The knobs should be tightened for, at a minimum, the final pass to minimize snipe and produce the best surface finish.

Turn on dust collection system. Failure to utilize the dust collector will result in a poor surface finish and plugged-up ductwork.

Turn on the power and allow the planer to come to full speed. To avoid injury from kickback, stand to one side, *never directly behind the stock*. Feed the stock into the infeed rollers and, as soon as it takes hold, remove your hands from the stock. Never let your fingers get under the edges.

If the wood starts into the machine crooked, a tap on the side will straighten it. If the stock sticks, turn off the machine immediately and lower the bed.

If very thin stock (3/8" or less) is to be planed, a backing board should be used. The backing board should be true, smooth, and at least 3/4" thick.

Use the full width of the planer bed so that the carbide inserts wear evenly.

When job is complete, shut off machine and dust collector and clean the area.