



12" THICKNESS PLANER WITH THE *Shopsmith PowerPro* HEADSTOCK

Procedures for setting up and running the 12" Thickness Planer with the PowerPro Headstock are new. The electronics that control the PowerPro Headstock must stay on to avoid resetting the Headstock speed setting each time the Planer is turned off. Because of this, there are several changes in the set-up and operation of this machine.

- ▶ Where the Planer is positioned on the Mark-V or the Mark-7
- ▶ How the Planer is coupled to the PowerPro Headstock.
- ▶ How and where the power cords of both machines are plugged in.
- ▶ The direction the motor rotates.
- ▶ How your Dust Collector can be turned on using the Planer Switch Box.
- ▶ The 12" Thickness Planer can work faster to surface your wood.
- ▶ Please read and follow the procedures detailed in this product literature.

Safety

WARNING

- ◆ **Read, understand and follow all SAFETY warnings in the Planer Owners Manual that came with your SHOPSMITH 12" Thickness Planer.**
- ◆ **Read, understand and follow all WARNINGS, CAUTIONS and NOTES in this Product Literature.**



Tool Required

- 5/32" Allen Wrench

Installing the Planer on the Way Tubes

1. Remove all tables and accessories. Strip the machine down to the point where only the Headstock and the Carriage are on the Way Tubes.
2. Use the 5/32" Allen Wrench. Loosen and remove the Hub from the upper auxiliary drive spindle. Install this Hub on the Quill. See Figure 1a (which shows old drive hub) and 1b (which shows new drive hub).



Figure 1a

Figure 1b



- Slide the Headstock and Carriage all the way to the left end of the Way Tubes. See Figure 2.

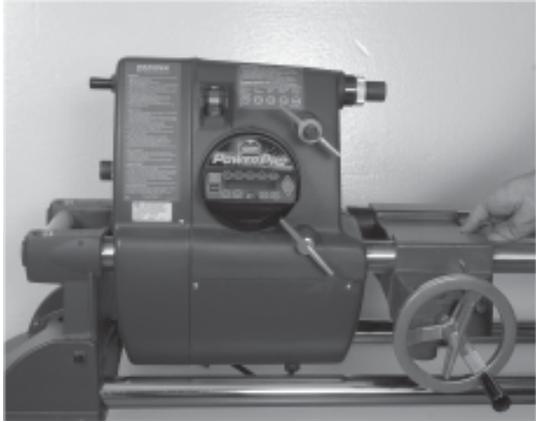


Figure 2

- Set the 12" Thickness Planer on the Way Tubes. The planer's switch box should be on the far right end of your machine. The infeed side of the Planer will be on the front side (switch side) of the Headstock. The Planer's Drive Hub, attached to the Cutterhead, will be near the hub installed on the Quill. See Figure 3



Figure 3

- Slide the Planer to the far right end of the Way Tubes. Use the two Way Tube Clamps to secure the Planer to the Way Tubes. See Figure 4.
- Slip the Coupler on the Planer's Drive Hub.



Figure 4

- Slide the Headstock and Carriage toward the Planer. Position the end of the Quill so it is within $\frac{1}{2}$ " from the Coupler on the end of the Planer's Cutterhead shaft.
- Extend the Quill. Use the Quill Feed lever to extend the Quill until the drive hub, mounted on the Quill, slips into the Coupler. Secure the Quill in position with the Quill Lock. See Figure 5.

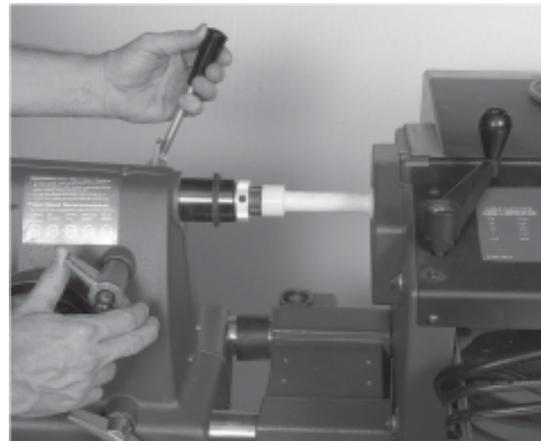


Figure 5

Plugging in the Headstock and the Planer

The electronics in the PowerPro Headstock must be kept electrified at all times while using the Planer. The main Power Switch used to energize the PowerPro Headstock must be kept on. To accomplish this, the PowerPro Headstock and the Planer must be plugged into separate outlets. Follow the steps below.

NOTE

The outlets used to power both the planer and the PowerPro Headstock can be on the same circuit. If you are also going to use a Dust Collector, it is recommended to use outlets on two different circuits.

1. Plug the PowerPro Headstock into a 15-amp wall outlet.
2. Plug the Control Box for the Planer into a separate wall outlet.

NOTE

If you want to use the Dust Collector to collect the chips from the Planer, plug the Dust Collector into the outlet on the bottom of the Planer's Control Box. See Figure 6. By turning on the Planer Control Box you will be starting the Dust Collector every time you turn on the Planer's feed motor.

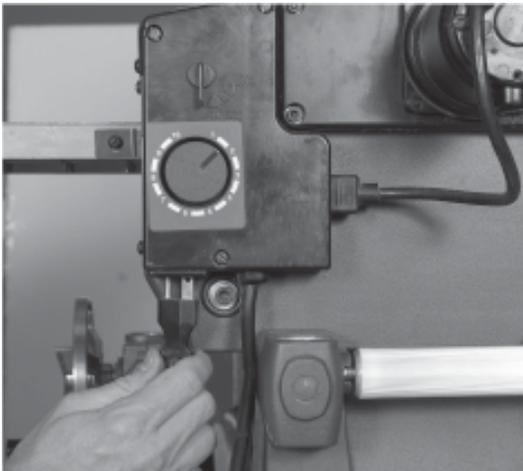


Figure 6

Using the PowerPro Headstock to run the Planer

Because the PowerPro Headstock and Planer are plugged into two separate outlets they must be turned ON and turned OFF sepa-

ately. Also, because the Quill drives the Planer, the PowerPro Headstock **MUST** run in "REVERSE" direction. Follow the steps below.

WARNING

- ◆ **Failure to follow the operating procedures below will cause damage to your planer, to your wood or cause bodily injury.**

1. First, turn ON the main Power Switch of the PowerPro Headstock. Allow it to run through the safety warnings. When complete the panel will say, "500 RPM READYTORUN." See Figure 7.



Figure 7

2. For General Planing. Set the speed to 4000 rpm. Press the 3450RPM button then use the UP/RPM button to set the speed to 4000 RPM. See Figure 8.



Figure 8

3. Press the FWD/REV button. This selects the REVERSE motor direction so the cutterhead is running in the correct rotational direction. See Figure 9.



Figure 9

WARNING

- ◆ **Failure to set the motor direction to REVERSE will result in major damage to your planer and probable personal injury to yourself. Always be sure the motor direction is set to REVERSE when running the thickness Planer.**

NOTE

You can also use the CHART button on the Control Panel to set the correct planing speed and rotation direction for the PowerPro Headstock. Within this CHART function you will also find speed settings for heavy planing and finish planing.

4. If you plan to use the Dust Collector to collect the chips and dust made by the planer, plug it into the bottom outlet of the Planer's Control Box. Turn the Dust Collector's power switch to the ON position.

Planing Lumber using the PowerPro Headstock

1. Measure the thickness of the board. Set the Planer Table to the board thickness.
2. Set the Planer feed rate to #1. This is the slowest setting and the best way to make the first cut. See Figure 10.



Figure 10

3. Press the ON button on the Control Panel. See Figure 11. Then press the CONFIRM button, once for the speed, See Figure 12 then a second time for the REVERSE direction. See Figure 13 The PowerPro Headstock will start the Planer immediately after the CONFIRM button is pressed the second time.



Figure 11

Figure 12



Figure 13

4. Lift the switch actuator on the Planer Switch Box. See Figure 14. This will turn on the Feed Motor for the Planer and Dust Collector (if you have it connected).



Figure 14



Figure 15

5. Operate the Planer as usual, as shown in Figure 15. Follow proper safety and planing procedures described in your 12" Thickness Planer Owners Manual. The Planer is a high-load machining accessory. Making deep cuts, taking large amounts of stock from a wide workpiece will cause the motor of the PowerPro to slow. This is normal. If you notice the motor slowing more than 150rpm, you are working it too hard. You must either slow the feed rate or reduce your depth-of-cut to avoid overheating the Power Pro motor and/or electronics.

NOTES

Because of the increased power and speed of the PowerPro Headstock, the feed rate and/or the depth-of-cut of the Planer can be increased. Refer to the Maximum Feed Rate Guide included with these instructions for new, maximum feed rates.

Depth-of-cut and feed rate settings on this chart are based on averages, collected from tests conducted with sharp planer knives surfacing clear Red Oak and clear white pine. Actual feed rate may vary depending on condition of the knives, type of wood, grain direction and other factors.

CAUTION

Failure to follow the guidelines in the Maximum Feed Rate Guide will cause the PowerPro Headstock to overheat and shut down. You will see a warning on the Control Panel screen that says "SYSTEMERRORINVERT.OVERHEAT". The PowerPro Headstock has a built-in, high temperature sensor, to protect the electronics. This sensor shuts down the electronics and turns off the motor just before the heat causes damage. Overheating the PowerPro electronics is never a good idea, but if this happens, you must allow the motor and electronics to cool down before you continue planing. This usually takes a minimum of one hour. Follow the steps below for best results:

- a. Turn OFF the Main Power switch and unplug the PowerPro Headstock.
- b. Turn OFF and unplug the Planer Switch Box.
- c. Open the Shopsmith Logo Cover on the backside of the Headstock to allow heat to exit.
- d. Remove the Thickness Planer from your machine and slide the Headstock to the right.
- e. Use a 5/32" Allen Wrench to remove the Hub on the Idler Shaft (if installed).
- f. Loosen and remove the two screws that secure the belt cover to the Headstock.
- g. Slide the Belt Cover away from the Headstock to allow cool air to enter the Headstock.

To turn OFF the Planer when surfacing is complete:

1. Press the OFF button on the Control Panel on the PowerPro Headstock to stop the Cutterhead. See Figure 16.



Figure 16

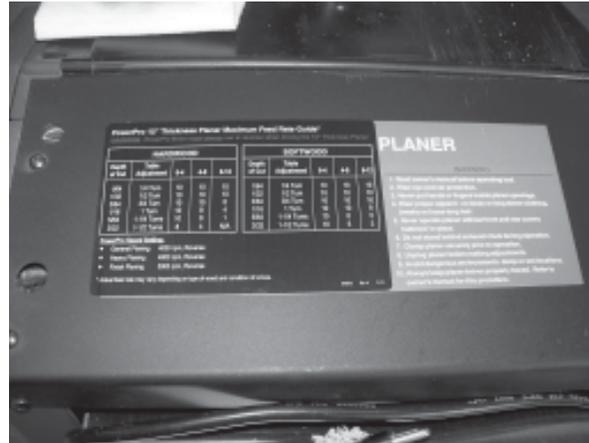
2. Push down the switch actuator on the Planer Switch Box to turn off the Feed Motor and Dust Collector. See Figure 17.



Figure 17

New Speed Chart Label

We have provided a new speed chart label for your Planer, wipe old speed chart label clean with alcohol and place new label over the speed chart side, see Figure 18.



NOTES

WARNING

- ◆ **In case of an emergency while planing, FIRST turn off the Main Power Switch on the PowerPro Headstock to stop the cutterhead. Then turn off the Planer Switch Box.**

