

**WS6503**    **WS6503C**  
**WS6505**    **WS6505C**

# MATCHLESS™ BULKY PLYER FLYER

## INSTALLATION

FOR WHEELS BUILT BEFORE AND AFTER 1/19/2012



Find out more at [schachtspindle.com](http://schachtspindle.com)  
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08.20

## PARTS

Matchless bulky front maiden & bearing  
Bulky flyer  
Bulky bobbin  
5 mm hex wrench

## TOOLS REQUIRED

hammer & scrap wood (older wheels only)  
#2 Phillips screwdriver (optional)

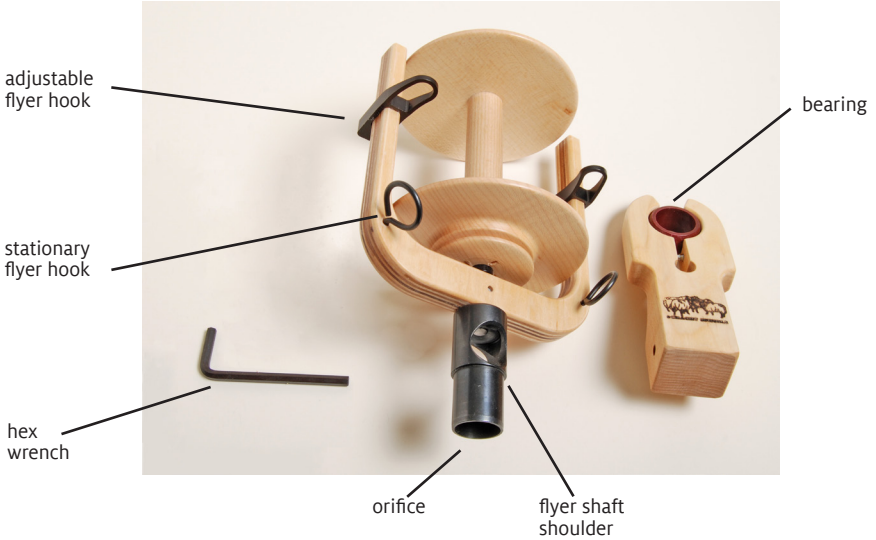


FIGURE 1: BULKY FLYER PLYER PARTS

**This manual has 3 sections: installation for wheels built before 1/19/12, installation for wheels built after 1/19/12, and notes for all wheels. Check your wheel's serial number, stamped into the wood on the rear of the mother-of-all, to determine when your wheel was built.**

## FOR WHEELS BUILT BEFORE 1/19/12

### REMOVING THE STANDARD FRONT MAIDEN

1. Slip the drive band and Scotch tension string off the bobbin. Remove the standard flyer, standard bobbin, and whorl from the spinning wheel.
2. Unscrew the T-knob (Figure 2) on the mother-of-all (MOA). Remove it and the two washers from the bolt.
3. Place a piece of scrap wood over the shaft of the bolt to protect it. Using a hammer, gently tap out the bolt until you can grasp its head.
4. Slide the bolt out of the MOA and front maiden just far enough to remove the front maiden. Do not fully remove the bolt from the MOA. Older Matchless wheels have an insert in the MOA—when you slide out the bolt, do not remove this insert.
5. Remove the front maiden. Store it safely with the standard flyer.

### INSTALLING THE BULKY FRONT MAIDEN

6. With the logo facing the front of the wheel, fit the bulky front maiden into the MOA so that all the holes line up.
7. Push the bolt all the way through the bulky front maiden and the MOA. Replace the two washers and secure the bolt with the T-knob (Figure 4).



FIGURE 2: REMOVE T-KNOB

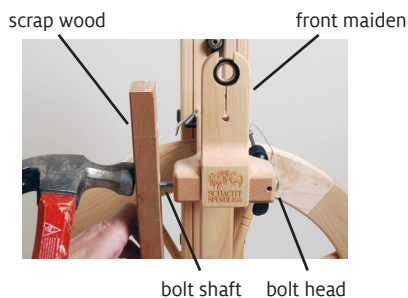


FIGURE 3: REMOVE STANDARD MAIDEN

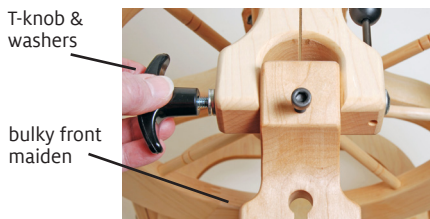


FIGURE 4: INSTALL BULKY FRONT MAIDEN

## INSTALLING THE BULKY FLYER

8. Loosen the T-knob so you can tilt the bulky maiden forward.

9. Put the bulky bobbin on the bulky flyer with the bobbin's large end at the back of the wheel. Put your desired whorl on the flyer.

10. Place the drive band into the whorl groove and the Scotch tension string on the bobbin. We recommend using the bulky flyer only in Scotch tension mode.

11. Insert the whorl end of the bulky flyer into the rear bearing. Insert the orifice end of the flyer into the bulky front maiden bearing (Figure 5). Tilt the bulky front maiden upright and secure with the T-knob.

12. There should be a small gap (about 1/16") between the front bearing and the shoulder of the flyer shaft (Figure 6). If there is no gap, adjust the bulky front maiden as described on page 7.

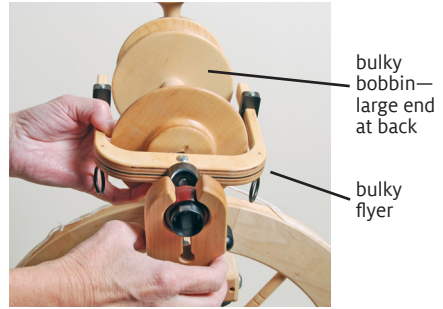


FIGURE 5: INSTALL BULKY FLYER

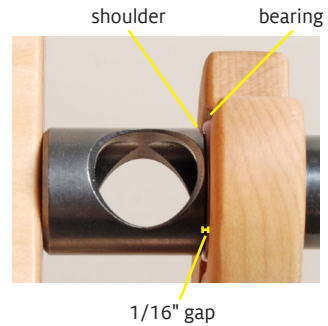


FIGURE 6: CHECK THE GAP

## SETTING UP SCOTCH TENSION

- Install the Scotch tension spring-and string: Hook the spring on the Scotch tension spring bar on the left side of the MOA (Figure 7).
- Place the string over the large end of the bobbin.
- Insert the end of the string in the hole in the Scotch tension rod on the right side of the wheel.
- Turn the Scotch tension rod to loosen or tighten tension (Figure 7).

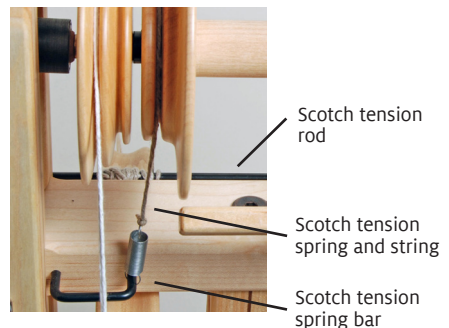


FIGURE 7: SET UP SCOTCH TENSION

## FOR WHEELS BUILT ON OR AFTER 1/19/12

### REMOVING THE STANDARD FRONT MAIDEN

1. Slip the drive band and Scotch tension string off the flyer and bobbin. Remove the standard flyer, standard bobbin, and whorl from the spinning wheel.
2. Open the quick-release lever and unscrew the knob (Figure 8). Remove the knob and washer.
3. Slide the shaft of the quick-release lever out of the mother-of-all (MOA) just far enough to remove the front maiden.
4. Remove the front maiden. Store it safely with the standard flyer.

### INSTALLING THE BULKY FRONT MAIDEN

5. With the logo facing the front of the wheel, fit the bulky front maiden into the MOA so that all the holes line up.
6. Push the quick-release lever shaft all the way through the bulky front maiden and the MOA. Replace the washer and knob onto the end of the shaft and tighten the knob until there is about 1/8" of space between the lever and the wheel side. Close the quick-release lever.

The knob should be just tight enough to need firm pressure to close the lever. If the lever closes loosely, open the lever, tighten the knob slightly, and close the lever again. If the lever requires a lot of pressure to close, loosen the knob slightly.

### INSTALLING THE BULKY FLYER

7. Loosen the quick-release lever so you can tilt the bulky maiden forward.
8. Put the bulky bobbin on the bulky flyer with the bobbin's large end at the back of the wheel. Put your desired whorl on the flyer (Figure 9).
9. Place the Scotch tension string on the bobbin and the drive band into the whorl groove.
10. Insert the whorl end of the flyer shaft into the rear bearing.

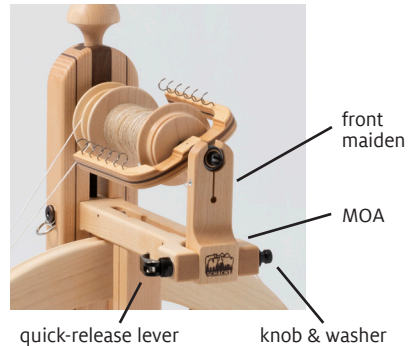


FIGURE 8: REMOVE STANDARD MAIDEN

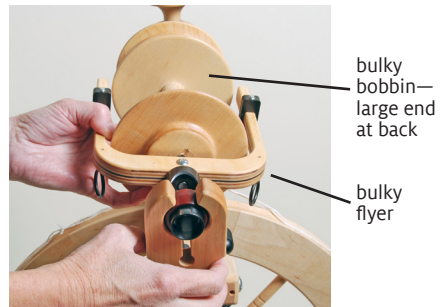


FIGURE 9: INSTALL BULKY FLYER

**11.** Insert the orifice into the front maiden.

**12.** There should be a small gap (about 1/16") between the front bearing and the shoulder of the flyer shaft (Figure 10).  
If there is no gap, adjust the bulky front maiden as described on page 7.

## USING SCOTCH TENSION

If you have not already installed the Scotch tension spring and string on your wheel, do so now.

- Slide the loop end of the Scotch tension spring and string under the rear bar, laying the loop to one side (Figure 11A). Use your orifice hook to pull the loop up if needed.
- Adjust the Scotch tension peg so that the hole in its shaft is visible (Figure 11B). Pull the straight end of the cord over the front bar and into the hole. Tie a double knot in the end of the cord to secure it.

To use Scotch tension, place the loop end of the Scotch tension spring and string over the large end of the bobbin. Turn the Scotch tension peg to take up the slack in the cord. ❏

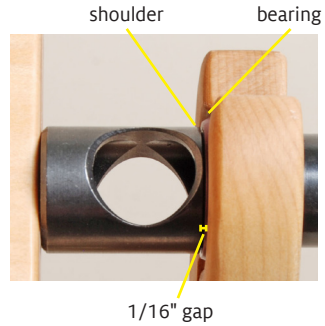


FIGURE 10: CHECK THE GAP

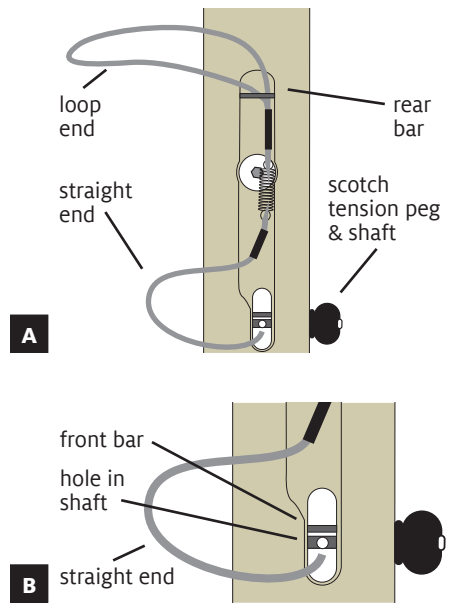


FIGURE 11: INSTALL SCOTCH TENSION SPRING AND STRING

## FOR ALL WHEELS

### ADJUSTING THE FRONT MAIDEN

1. If the bulky flyer does not appear to be spinning freely, remove the flyer and re-install it without the drive band or tension spring and string.
2. Make sure there is a 1/16" gap between the flyer shoulder and the orifice bearing (Figure 12). If there is no gap, fold down the bulky front maiden and use the 5 mm hex wrench to adjust the front maiden stop in or out as necessary (Figure 13). Fold the front maiden up and check the fit.
3. Spin the flyer by hand. If it does not spin freely, use a #2 Phillips screwdriver to loosen the bearing adjustment screw in the side of the bulky front maiden. Slide the flyer to the rear about 1/16" to create a space between the flyer shaft shoulder and the orifice bearing. Tighten the screw to secure the orifice bearing (Figure 12).

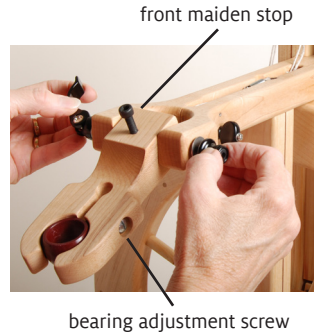


FIGURE 12: ADJUST FRONT MAIDEN

### MOVING THE FLYER HOOKS

The stationary flyer hooks should be turned so that they do not extend beyond the flyer arms.

The adjustable flyer hooks can be set at any position you choose. Hold a hook above and below the flyer and slide it into place (Figure 13).

To keep your flyer in balance, always leave both hooks on the flyer.

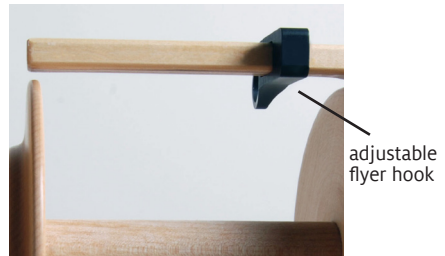


FIGURE 13: MOVE FLYER HOOKS

### A NOTE ABOUT TAKE-UP

As you spin or ply, the bulky bobbin will get heavier. You may need to tighten the Scotch tension string often. 🍷

SCHACHT SPINNING ACCESSORIES



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