Thank you for choosing the Ladybug Spinning Wheel. We hope you will have many pleasurable years together creating wonderful yarn. Please DO read the instructions, even if you usually don’t. Happy Spinning!

WHERE’S MY LADYBUG?

Somewhere on your Ladybug Spinning Wheel you’ll find your very own ladybug. She’s there cheering you on, going to spin-ins with you, or just keeping you company as you spin quietly at home. Because we’ve put the ladybug in a different place on every wheel, you can be assured that there is not another wheel in the world that will be exactly like yours.

UNPACKING YOUR WHEEL

- Remove the accessory box.
- Remove the treadle assembly by tipping the wheel back to allow the treadle assembly to slide past. Remove packing materials.
- Lift the wheel straight up and out of the box.
- Remove any remaining packing material.

Be careful not to cut the drive band or Scotch tension brake band when removing plastic wrap from the wheel.

CONTENTS

- 1 flyer assembly (1 bobbin and medium whorl attached)
- 2 bobbins
- 1 fast whorl (attached to back of wheel)
- 1 threading hook
- 1 plastic drive band (attached)
- 1 Scotch tension brake band (attached)
- 1 Scotch tension knob
- 1 cotton drive band for double-drive spinning

HARDWARE FOR ATTACHING TREADLE BAR TO FRONT LEG:
1 - 2" trusshead machine screw

HARDWARE FOR ATTACHING THE FOOTMEN:
2 - bolts (5/16" fine)
2 - 1/4" lock nuts
4 - 1/4" washers

REQUIRED TOOLS

- Phillips screwdriver
- regular screwdriver
- 1/2" wrench
ASSEMBLING YOUR LADYBUG

It will be easiest to assemble your wheel on a table. Cover the table to protect it from scratches.

**STEP 1: INSTALL THE TREADLE BAR WITH ATTACHED TREADLES**
- Place the mortise (hole) in the treadle bar onto the tenon of the center brace (1A).
- Insert the 2" machine screw into the front treadle bar and hand tighten until you feel it engage with the barrel nut (1B).
- Use a Phillips screwdriver to finish tightening the screw.

**STEP 2: ATTACH THE FOOTMEN TO THE TREADLES**
- Turn the wheel around so that you are working from the back.
- Position the crank as shown in the diagram.
- Attach the interior footman to the shortest treadle.
- Insert the bolt with a lock washer and one washer into the hole from the bottom of the treadle (see inset at right). Add a second washer on top of the treadle.
- Line up the threads of the footman linkage with the bolt and hand tighten.
- To secure, place the Phillips screwdriver into the linkage hole to keep it from turning and tighten the bolt with a ½" wrench.
- Repeat for the other footman.

**STEP 3: INSTALL THE SCOTCH TENSION BRAKE ASSEMBLY AND FLYER ASSEMBLY**
- Place the black drive band on the rear maiden.
- Loosen the front maiden knob and slide the front maiden as far forward as it will go (3A).
- Slide the flyer orifice shaft into the front bearing.
- Place the brake band loop over the large end of the bobbin.
- Place the black drive band around the drive wheel and one of the grooves in the whorl.
- Locate the rear bearing and slide the front maiden forward so that the flyer shaft end is inserted into the rear bearing (3B).
- Slide the front maiden back as far as it will go and tighten the front maiden knob. There should be a little play in the back-front flyer movement.
- Turn the Scotch tension knob to take up the slack in the cord, allowing the cord to wind around the shaft of the peg.
- To increase the amount of take-up of your yarn onto the bobbin, adjust the Scotch tension knob.
- To decrease the amount of take-up, adjust the peg in the other direction.

**Note:** The large end of the bobbin should be next to the whorl when using Scotch tension.
STEP 4: ATTACH YARN LEADER TO THE BOBBIN CORE
- Cut a 24" length of strong yarn and fold it in half.
- Place the folded yarn under the bobbin core (4A).
- Thread the cut ends through the loop, encircling the core (4B).
- Pull the cut ends to tighten (4C).

CHANGING BOBBINS AND WHORLS
- Place the drive band on top of the rear maiden.
- Unscrew the front maiden knob and slide the front maiden forward as far as it will go.
- Holding the flyer assembly firmly in the front maiden, remove the flyer shaft from the rear bearing.
- Lift the Scotch tension brake band off the bobbin and lay it to one side.
- Remove the flyer orifice from the front maiden.
- Remove the whorl and then slide off the bobbin.

DRIVE BAND TENSIONER
You will rarely need to tension the drive band when spinning in Scotch tension mode.

Your drive band has a memory and can be used for a wide range of whorls.

When using the high speed whorl, if you find that your drive band is slipping, you can apply tension to the drive band by engaging the tensioner (5). Simply slide the drive band into the groove of the pulley and pull up on the handle to increase the tension on the drive band.
INSTALLING A NEW DRIVE BAND
- Remove the flyer assembly (see instructions for changing bobbins and whorls).
- Remove the two Phillips head screws from the lower side of the front leg (6A).
- Separate the leg slightly and slip the new drive band through the space (6B).
- Check the alignment of the overlap, and while pressing on the inserts on the other side with your finger, replace the screws, making sure that the fit is tight (6C).

INSTALLING A NEW SCOTCH TENSION BRAKE BAND
- Remove the flyer and old Scotch tension brake band, if any.
- Slide the loop end of the new Scotch tension brake band under the rear bar, laying the loop to one side (7A). Use your threading hook to pull the loop up if needed.
- Adjust the Scotch tension knob so that the hole in the shaft is visible (7B). 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.
- Turn the Scotch tension knob to take up the slack in the cord, allowing the cord to wind around the shaft of the peg.

SPINNING IN DOUBLE DRIVE
- You can set your wheel up in double drive mode (8).
- Take off the plastic drive band and either remove it from the wheel or wind it around the front leg.
- Turn the bobbin around so that the small pulley is next to the whorl.
- Place the cotton drive band string around the whorl, drive wheel, and small end of the bobbin. Place the drive band segment on the whorl over the pulley wheel of the drive band tensioner. The drive band segment on the bobbin should run underneath the drive band tensioner. Secure the drive band string with a square knot.
- To increase tension (for faster draw-on) on the drive band, pull up on the tensioner. To decrease the tension on the drive band, push down on the tensioner.
- When using double drive the yarn will wind onto the bobbin in the opposite direction than when using Scotch tension mode. This does not affect your spinning, but it is good to know this in case you should change spinning modes in the middle of a bobbin.

**ADJUSTING THE FRONT FEET**

We have set the front feet height at the factory, but if you find that your wheel is unstable or rocking during spinning you can adjust the front feet (9). Simply loosen the lock nut and screw the foot up or down as needed, then retighten the lock nut.

**CARRYING HANDLES**

Your Ladybug features three carrying handles: one on the front leg and one on each rear leg. Simply pick up your Ladybug by whichever handle is most comfortable and carry the wheel as you would a briefcase.
OILING YOUR WHEEL

Your spinning wheel is a machine with moving parts. For maximum performance and longevity, it is important to lubricate these parts. Use 20- or 30-weight motor oil sparingly (a few drops is usually sufficient) on the flyer shaft every time you sit down to spin and about every hour thereafter.

Obenauf’s Heavy Duty Leather Protector can be used to lubricate the leather treadle hinges.

No oil or lubricant should be used in the spinning wheel hub or on the plastic drive wheel.

If a squeak develops elsewhere on the wheel, try a few drops of oil in this area.

MAINTENANCE

Your wheel will work best if it is maintained. We suggest you follow a regular schedule of care to ensure your Ladybug lives a long life.

- Clean excess fibers from all parts of your wheel.
- Periodically lubricate the moving parts.
- Touch up and refinish worn areas of your wheel.
- Periodically check the screws for tightness.

STORAGE

Try to keep your wheel in a dry, moderate climate and avoid extreme temperatures—store away from direct sunlight.

CLEANING

For the wood parts, we do not recommend furniture oils or other water-based cleaning products. Generally, all that is needed to clean your wheel is a clean cloth and paint thinner or similar non-water-based product to wipe off the dirt (once a year should do it). You can re-oil as needed with Deft or Watco Danish oil (be sure to follow the directions on the can). Steel wool, grade 00, may also be used to clean your wheel.

For the plastic drive wheel, a damp cloth will take care of most dust and dirt.

RECOMMENDED FLYER WHORLS

You may use any of the available whorls with your Ladybug. The high speed bobbin is needed when you use the high or super high whorls in double drive.

<table>
<thead>
<tr>
<th>Whorl</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>Extra Slow</td>
<td>3.2:1 &amp; 3.6:1</td>
</tr>
<tr>
<td>Slow</td>
<td>4.7:1 &amp; 5.5:1</td>
</tr>
<tr>
<td>Medium</td>
<td>6.5:1 &amp; 8:1</td>
</tr>
<tr>
<td>Fast</td>
<td>9:1 &amp; 10.5:1</td>
</tr>
<tr>
<td>High</td>
<td>11.5:1 &amp; 14:1</td>
</tr>
<tr>
<td>Super High</td>
<td>12:1 &amp; 14.5:1</td>
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</tbody>
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WHICH FLYER WHORL SHOULD I USE?

The type of fiber you are spinning and the kind of yarn you want to produce will determine which flyer whorl to use. Choosing a compatible whorl for the task at hand will go a long way towards helping you comfortably create the yarn you want. If you feel that your wheel is tugging the fiber out of your hand or not drawing on fast enough, then you need to either change whorls, adjust the take-up, or treadle slower. The goal is to make your wheel do what you want it to do. Paying attention to your spinning comfort will help you make the neces-
Sary adjustments. When everything is in harmony, you will be able to spin comfortably for long periods of time and spin the yarn you want to create.

Your spinning wheel comes with two flyer whorls: medium and fast. The general rules to remember are: the larger (slower) the whorl, the thicker the yarn, the less the twist and take-up.

In Scotch tension mode, the amount of take-up is controlled by the amount of tension you put on the brake band spring and string. The greater the tension, the greater (faster) the take-up.

In double drive mode you do not use the Scotch tension brake band. All of the drive band tension adjustments are made by moving the drive band tensioner up or down.

TENSIONED LAZY KATE

We offer a tensioned Lazy Kate as a separate accessory (shown at right). Rods are placed through holes in the sides of the front leg and tensioned with pulleys. The Lazy Kate accommodates up to four bobbins. Because our Lazy Kate attaches to the wheel, it is easy to take with you.

SPINNING RESOURCES

Books

The Intentional Spinner by Judith MacKenzie

Spin Control: Techniques for Spinning the Yarn You Want by Amy King

Start Spinning by Maggie Casey

DVDs

The Gentle Art of Plying by Judith MacKenzie

Popular Wheel Mechanics by Judith MacKenzie

Start Spinning: The Video by Maggie Casey

Know Your Wheel by Alden Amos and Cindy Lair with Linda Ligon
LADYBUG BULKY PLYER FLYER
Add plying and bulky yarn capabilities to your Schacht Ladybug Spinning Wheel. Features include a generously-sized 7/8" orifice, large capacity bobbin (about 8 oz), sliding flyer hooks with incremental stops, and large round guide hooks. The Bulky Plyer Flyer comes with its own special front maiden, bulky flyer, and bulky bobbin.

SCHACHT NIDDY NODDY
Our niddy noddy is not only unique and handsome in style, but also gives superior functionality. Here are the features we know you as a handspinner will love and appreciate:
- Balanced and lightweight for smooth winding
- Quick and easy to remove full skeins
- Adjusts to 2 yard or 1 ½ yard skeins
- Folds flat for storage or transport
- Comfortable soft hand grip
- Beautifully designed in maple or cherry

SCHACHT COLLAPSIBLE KATE
Some spinners prefer a freestanding lazy kate. Our tensioned lazy kate is easy to disassemble to take with you and can hold both regular and bulky bobbins.
TWO YEAR LIMITED WARRANTY

Your new Schacht Spindle Company Ladybug Spinning Wheel is warranted to the original consumer purchaser by Schacht Spindle Company, Inc. to be free of defects in material and workmanship. Schacht Spindle Company’s obligation under this Warranty shall be limited to the repair or replacement of any part or parts that may prove defective within two (2) years following the date of the original new purchase by the consumer, and that Schacht Spindle Company’s examination shall disclose to our satisfaction to be thus defective.

If a problem with this product develops during the warranty period, first contact the dealer from whom you made the purchase. If you need further assistance, please contact our Customer Service Department at Schacht Spindle Co., Inc. At our option, it may be required that the product be returned to our factory freight prepaid for inspection and repair and/or replacement.

This Warranty covers normal consumer use and does not cover damage that occurs in shipment or damage that results from alteration, accident, misuse, abuse, or neglect.

This Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

This Warranty is not valid for products that have served as dealer floor models that have outlived the term of this Warranty.

WHERE’S MY SERIAL NUMBER?

The serial number of your wheel is stamped on the end of the mother-of-all that extends through the back legs and is secured by the wood wedge.

The first six digits of the serial number are the date of assembly. The remaining digits are a sequence number.