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User Guide for the Double Treadle Journey Wheel™

Introduction.

Your **Journey Wheel** is a flyer spinning wheel. The **Journey Wheel** has some special features which are different from other wheels you may have used. If you are a new spinner, we suggest that you read a good book on hand-spinning and take a couple of spinning lessons. If your spinning teacher has not seen a **Journey Wheel**, s/he may want to read this also. The accompanying diagram explains terms like “lock pin” and “gate,” part of our unique design; these appear on no other diagrams of spinning wheels.

Each spinning wheel has its own personality. You will get to know your **Journey Wheel**’s “character” as you use it. Take it to your spinning guild meetings (your **Journey Wheel** likes to travel). Spin just a half-hour each day, and you and your **Journey Wheel** will come to terms in a most companionable way.

We test each **Journey Wheel** before shipping to be sure that everything works properly. Should you have any questions, problems, or suggestions, please do not hesitate to contact us.

Opening and closing the box...

Set the closed **Journey Wheel** on its feet. Remove the lock pins from the brackets on the side of the box and lift the narrow half up. Re-insert the lock pins through the brackets and into the box to be sure the **Journey Wheel** stands upright. Lower the treadle. Lock the treadle brackets into open position. Lengthen

the tension spring by turning the tension adjustment key clockwise. We recommend that belt tension be at the minimum needed to avoid belt slipping. Over-tightening the belts will cause excessive belt stretching.

To close the box, the right treadle must be ALL THE WAY DOWN, so that you do not wrench the footman. Release the treadle brackets and gently fold up the treadle base. Be sure to *slightly* loosen the tension by a turn or two (but don’t take off the belts). The flyer fits into a particular place in the treadle base; rotate it so that the gate points to 2 o'clock. Remove the lock pins and gently close the box; if the box does not easily close all the way, re-check the position of the flyer. There is no need to turn the **Journey Wheel** upside down, just fold the top half down. **Make sure that the drive belt slips into the “T” slot in the box.** Re-insert the lock pins in the closed position. The **Journey Wheel** is easiest to carry with the brackets close to your side.

Treading...

Once the box is locked open and the tension is adjusted, you are ready to spin. If you are accustomed to spinning on other wheels you may feel the urge to rotate one of the wheels to get started. Resist that urge! If you sit at the **Journey Wheel** as you do with other wheels, you may discover that you are too close to the orifice to pedal comfortably—we recommend sitting a little further back than usual. Place your feet on the treadles a little

further away from the **Journey Wheel** than may be your habit with other wheels. Some of your heel should overhang the near end of the treadle. Final adjustment will find a place where your foot is most comfortable with the rocking heel-and-toe motion. You'll find it is also possible to treadle with only one foot.

The **Journey Wheel** is pedaled heel-and-toe, like a treadle sewing machine. That means that you lift the footman to the top of the cycle by pressing with your heel, then press with your toe to carry the footman to the bottom of the cycle. To get the treadle past dead center, rotate the main wheel slightly with your toe. Suddenly changing direction while treadling may cause the double belt to pop off. The **Journey Wheel** is designed to treadle easily with gentle effort. If your treadling is not smooth and comfortable, try shifting your foot position (usually moving away from the main wheel) for an even heel-and-toe pace. With just a little practice you will be able to stop the main wheel in mid-stroke (not at dead center) and start it again using *only* your foot.

Flyer...

Our **Journey Wheel** flyer design is unique. Guide your yarn over the hooks and follow the groove to the "U"-shaped orifice. Only the **Journey Wheel** has this open-orifice flyer. Simply lay the yarn in the "U" and spin. The flyer runs smoothly and is balanced for the weight of the hooks. Choose your row of hooks so that the moving air blows the yarn into the hook: left side for clockwise, right side for counterclockwise.

Removing the bobbin...

The whole front of the flyer is hinged to open like a gate. The bobbin just slips off. A pin positions the gate correctly and a lock holds the gate closed. The bobbins have a "key" end which fits onto the back of the flyer.

Spare bobbin holder...

The built-in lazy kate is used to store bobbins, to ply, and to unwind yarn. To access your spare bobbins, push the accelerator wheel arm to the left (*see drawing*) as far as needed to release the long bobbin shaft from the notch in the accelerator wheel arm. This will allow you to swing the lazy kate out to exchange bobbins. You will never need to remove a belt to unwind yarn if you use the lazy kate.

Tensioning...

Both drive belts are tensioned by one spring and adjusted with one tensioning device (*see drawing*). (*See other instructions for Scotch tensioning.*) Use minimum tension to stop slipping; we do not recommend belt dressing.

For double belt drive, there is a quick tension release if you want to unwind just a little yarn from the flyer bobbin without "twiddling" it. Push on the accelerator wheel arm slightly as if releasing the lazy kate, while pulling the end of the yarn. This works only with the double flyer belt.

Treadling ratio...

The **Journey Wheel** may be set up to treadle at a ratio of either 8:1 or 16:1. The change is made by the way the main drive belt is placed in the groove in the main wheel and accelerator wheel; it is not necessary to retie your main drive belt to change back and forth between these two ratios.

16:1 place the drive belt in the smaller diameter groove in the accelerator wheel and the bigger diameter groove in the drive wheel (*the grooves nearest you*).

8:1 place the drive belt on the larger groove in the accelerator wheel and the deeper groove in the main wheel (*the grooves furthest from you*).

You may also choose these two intermediate ratios by changing the main drive belt length.

10:1 place the drive belt in the **larger** groove in both the accelerator wheel and the main wheel.

14:1 place the drive belt in the **smaller** groove in both the accelerator wheel and the main wheel.

Belts...

The **Journey Wheel** uses two belts: the main drive belt (60", *allows ease for fitting and tying*) and the flyer belt (56" double drive or 29" Scotch tension, *allows ease for fitting and tying*). The belts should never need to be removed. Candlewicking may stretch with time; adjust the length if needed and retie with a square knot. If you break a belt, use round candle-wicking to make a new one. Measure the old one against the new one. Tie the belt in a firm square knot.

The **drive belt** must be threaded down through the right "T"-shaped hole in the box, under the footman, up through the left "T"-shaped hole, behind the accelerator wheel arm but in front of the arm that holds the spring. We suggest that you tie the belt in a firm square knot. The drive belt goes around the main wheel and the smaller pulley of the accelerator wheel.

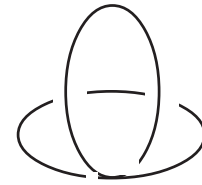
Double flyer belt instructions: put a cross in the double belt (for "Z" twist; do the opposite for "S"-twist or plying "Z"-twisted yarn).



Fold in half the other way

Double Treadle Journey Wheel Instructions

3.



Now take the doubled belt, put it over the whole flyer and rest both strands in the groove of the *larger* of the two pulleys behind the flyer.

With your right hand, take the right side of the doubled loop behind the whole accelerator wheel. The accelerator wheel is not attached to the back of the box, although you will need to avoid the screw on the back of the wheel by rotating it gradually onto the circumference.

Finally, slip one loop of the doubled belt off the larger pulley and onto the smaller one, with just one finger behind the flyer.

The cross in the belt should be on the bottom of the accelerator wheel, between the accelerator wheel and flyer (*top of the accelerator wheel for "S" twist*). NOTE: Treadling should be clockwise for "Z"-twist, counter-clockwise for "S"-twist.

If your yarn is not pulling onto the flyer, please check to see that the double belt is on *both* pulleys behind the flyer.

New belts often stretch and need to be re-tied after a day or two. If the accelerator wheel is hitting or nearly touching the top of the box, re-tie the drive belt. If it is hitting the sides of the box, re-tie the flyer belt. A gap of about 3/4" between the accelerator wheel and both the side and the top of the box is recommended. *The box will fold without undue strain on the belts if you remember to slightly loosen the tension and you make sure the drive belt slips into the "T"-slot when the box is closed.*

Distaff Arm...

The distaff arm cannot be stored inside the Double Treadle **Journey Wheel's** box. The peg on the distaff fits into the distaff mount. You can make a "bird cage" for flax from the top of a pine tree (including the top four branches). Select a small tree with four sturdy top branches and cut off the top plus 8-10 inches. Strip off the bark, and tie the branch tips to the center spike, making them arch. Carve the larger end of the tree trunk to fit into the hole on the distaff. Allow the bird cage to dry for several days before arranging your flax on it.

Bearings...

All Journey Wheel bearings are plastic or sealed ball bearings and need no additional special care. **Please do not oil them.** You ***may*** oil the bearing at the near end of the flyer (remove the bobbin first) and the pivot points on the treadles.

Leather...

Occasionally a leather footman will develop a "new leather squeak." You may lubricate the footman with light (*sewing machine*) oil and just keep working it. It will eventually stop squeaking.

To keep your leather shoulder strap in good condition, we recommend any leather conditioner that you are now using.

Wood...

Your **Journey Wheel** is made of cherry, finished with highly-refined linseed oil and paste furniture wax. You may use any fine furniture polish on your **Journey Wheel**; we recommend *Wood Beams* from Goodies Unlimited, *Clapham's Furniture Polish* or *Butchers Bowling Alley Wax*. Your **Journey Wheel** and its case are sturdily constructed, but wood can be inadvertently nicked or dinged with use over time; please treat it carefully.

Traveling...

We don't recommend sending your **Journey Wheel** as cargo on airplanes unless adequately boxed—rough handling may cause damage. Your **Journey Wheel** has been designed to meet current carry-on restrictions for most airlines; yes, it will fit under the seat, but might be best stored flat in the overhead compartment. If you do store it under the seat ahead of you, please have a sturdy bag to protect that beautiful cherry finish.

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Instructions for Using Scotch Tension***Introduction.***

The Scotch tension spinning system – that is, the braked bobbin, driven flyer – offers an infinite adjustment (within its range) for the amount of twist relative to the speed of the draw. You do treadle against the “brake” on the bobbin pulley, so it is wise to keep as little tension as possible on the bobbin brake, to keep treadling easier. Remember with Scotch tension you need to adjust **BOTH** tensioning devices. If the belts slip while you are spinning with Scotch tension you need to tighten the drive belt tension key – don’t overdo it or, once again, it becomes harder to treadle...and the belts stretch. It has been noted that overstretched belts may act like a guitar string, causing an annoying noise.

As you open your Journey Wheel the Scotch tension is on the upper box, lower **LEFT** corner. There will be a separate belt and a nylon cord and rubber band. A separate belt is supplied for Scotch tension.

Only the Scotch tension needs to be adjusted while spinning. The drag will have to be increased as the bobbin fills. It is best to keep the tension at a minimum, as the spinner has to treadle harder to overcome the increased drag.

To set up for spinning with Scotch tension....

Take off the double band; it will slip off the back of the accelerator wheel (*refer to the diagram in the **User Guide for the Journey Wheel***), and then around the whole flyer.

Now thread the nylon cord and rubber band (*fastened on the other end to the tensioning device*) around the smaller of the two pulleys behind the flyer (from right to left), and hook the rubber band onto the hook next to the tensioning device. Slip the single band over the whole flyer, rest the left side of the band in the pulley on the flyer. With your right hand, slip the rest of the band behind the accelerator wheel and then rotate it onto the rim of the wheel. Gently tighten the rubber band; you are now ready to go.

Going back to double band...

Remove the single band and the nylon cord from the flyer. Now see **the Journey Wheel User Guide** for help putting the double band back on.

Yarn will wind onto the bobbins in the opposite direction for double band spinning than for Scotch tension spinning.

If your wheel does not have Scotch Tension, a kit is available to add this feature.

DOUBLE TREADLE JOURNEY WHEEL

