

ASHFORD SPINNING WHEEL MAINTENANCE 2012

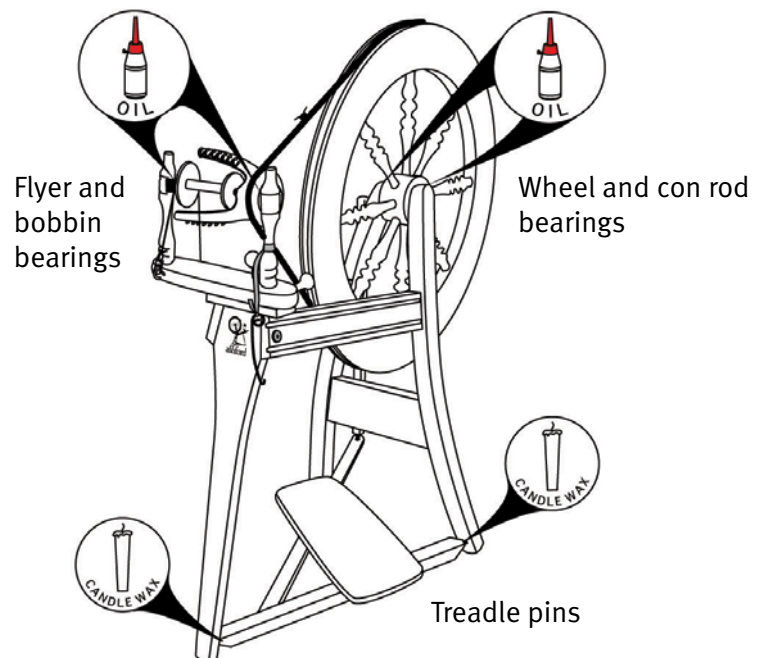
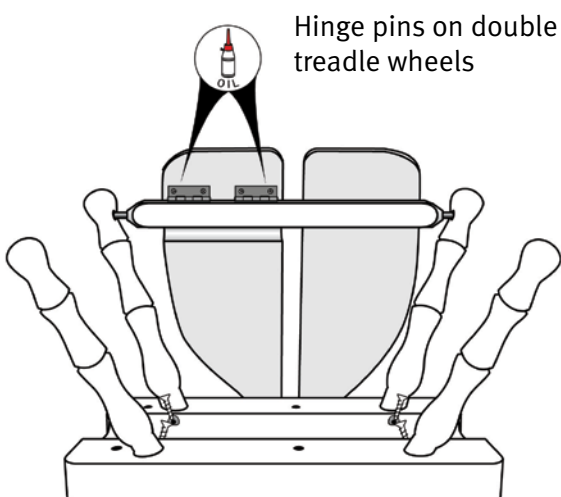
The most important aspect of spinning wheel maintenance is to ensure the 3 main elements of the spinning wheel are free to rotate. Please use the following check list to ensure your wheel is smooth & light to treadle.

Start by removing the drive & brake bands. Use Ashford spinning wheel oil or 30# grade motor oil on all the nylon bearings. Wipe off any surplus oil.

Wheel

Spin the wheel. It should rotate freely for 20+ revolutions on nylon bearings & 100+ on ball bearings. All our spinning wheels are now supplied with ball bearings which are sealed for life & do not need any lubrication. If necessary:

- To lubricate the nylon wheel bearings, prise the wheel supports apart and let the oil drop onto the crank between the hub and the bearings.
- Check the con rod (pitman) bearing to ensure it isn't binding as it rotates. Apply a drop of oil.
- Treadle rail pins. Use either candle wax or a drop of oil to reduce noise and friction.
- On double treadle wheels turn the wheel upside down & apply a drop of oil to each treadle hinge pin.
- On the Traditional, if the wheel appears to be pinched between the wheel supports loosen the bolts or screws holding the frame, spin the wheel until it is free & then gradually retighten the bolts or screws.
- On the Traveller & Elizabeth wheels this can be altered by loosening the 2 bolts holding the wheel supports & moving them until correct.
- On very old Traditional wheels, loosen the 2 nuts (1/4" Whitworth) either side of the crank, adjust the bolt until the con rod bearing has clearance & retighten. Apply a drop of oil.
- Check that the gap between the bottom of the con rod (pitman) and the treadle rail is 10 - 18mm (1/2 - 3/4"). If greater than this it can cause ankle strain & if closer, the two can bind thus stretching the joint. If necessary, replace the joint & cut off any surplus underneath.
- If your wheel has a leather con rod joint which has become soft, replace it with a new leather joint.
- If you Traditional wheel is very old & has a clunk in the crank, it is most likely the hole in the crank & hub pin have worn. We recommend replacing the crank, hub pin & con rod which are all included in the Clunky Wheel Kit or take this opportunity & fit a Double Treadle Kit.
- If the drive band is worn, replace it with a medium soft cotton cord or Turbo Kit.



Flyer

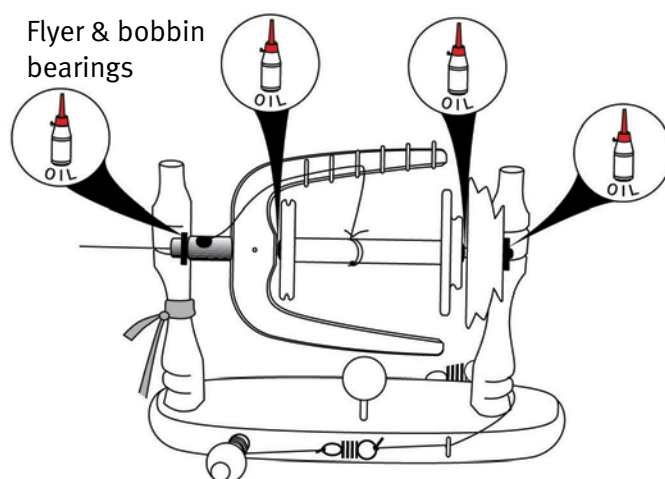
Spin the flyer. It should spin freely. If necessary:

- Ensure the flyer bearings are at right angles to the flyer shaft. If not, loosen the screws holding the maiden upright to the maiden bar, realign the bearings & retighten the screws.
- Check that there are large washers between the screw heads & maiden bar.
- Check there is approx. $\frac{1}{8}$ " (2-3mm) end-float between the flyer, bobbin & flyer bearings. If the bobbin is tight, use a craft knife to pare a little wood away where the bobbin bearing rubs against the flyer.
- Apply a drop of oil to the flyer bearings.
- If the wheel has been finished with lacquer or wax, check there isn't any lacquer or wax on the spindle, flyer or bobbin bearings. It may be necessary to scrape this off with a craft knife or rag.
- Check the alignment of the wheel & flyer whorl. If necessary, loosen the screws holding the maiden bar, align the wheel with the whorl you use & tighten.
- All our wheels now have 2 tension springs, 1 attached to the brake band either side of the bobbin whorl. These allow the brake band to work freely when both spinning & plying. If your wheel only has 1 tension spring, add a second on the opposite side.

Bobbin

Spin the bobbin. It should rotate freely. If necessary:

- Apply a drop of oil to the bobbin bearings.
- If the bobbin is still tight on the flyer shaft, ream the bearings with a $\frac{1}{4}$ " (6.25mm) round fine chain saw file or fine sandpaper wrapped around a pencil.
- Check there is approx. $\frac{1}{8}$ " (2-3mm) end float between the flyer, bobbin & flyer bearings.
- Check the bobbin doesn't touch the flyer arms. This can happen when a new bobbin is fitted to an older flyer. If necessary use a file or sandpaper to remove a little wood where the bobbin touches.
- On double drive wheels the flyer whorls have "V" grooves. The bobbin whorl is smaller & "U" shaped. This difference enables the wheel to drive the flyer at a constant speed and allows the bobbin to accelerate or slow down when drafting. Check the bobbin whorl is smooth and "U" shaped. If necessary sand it smooth with fine sandpaper.



Timber

Our spinning wheels are made from native New Zealand Silver Beech hardwood. To enhance the natural beauty of the timber, restore, nourish, protect & give your wheel a rich smooth luster, apply a coat of Ashford Wax Polish.

For more hints & tutorials visit our web site www.ashford.co.nz