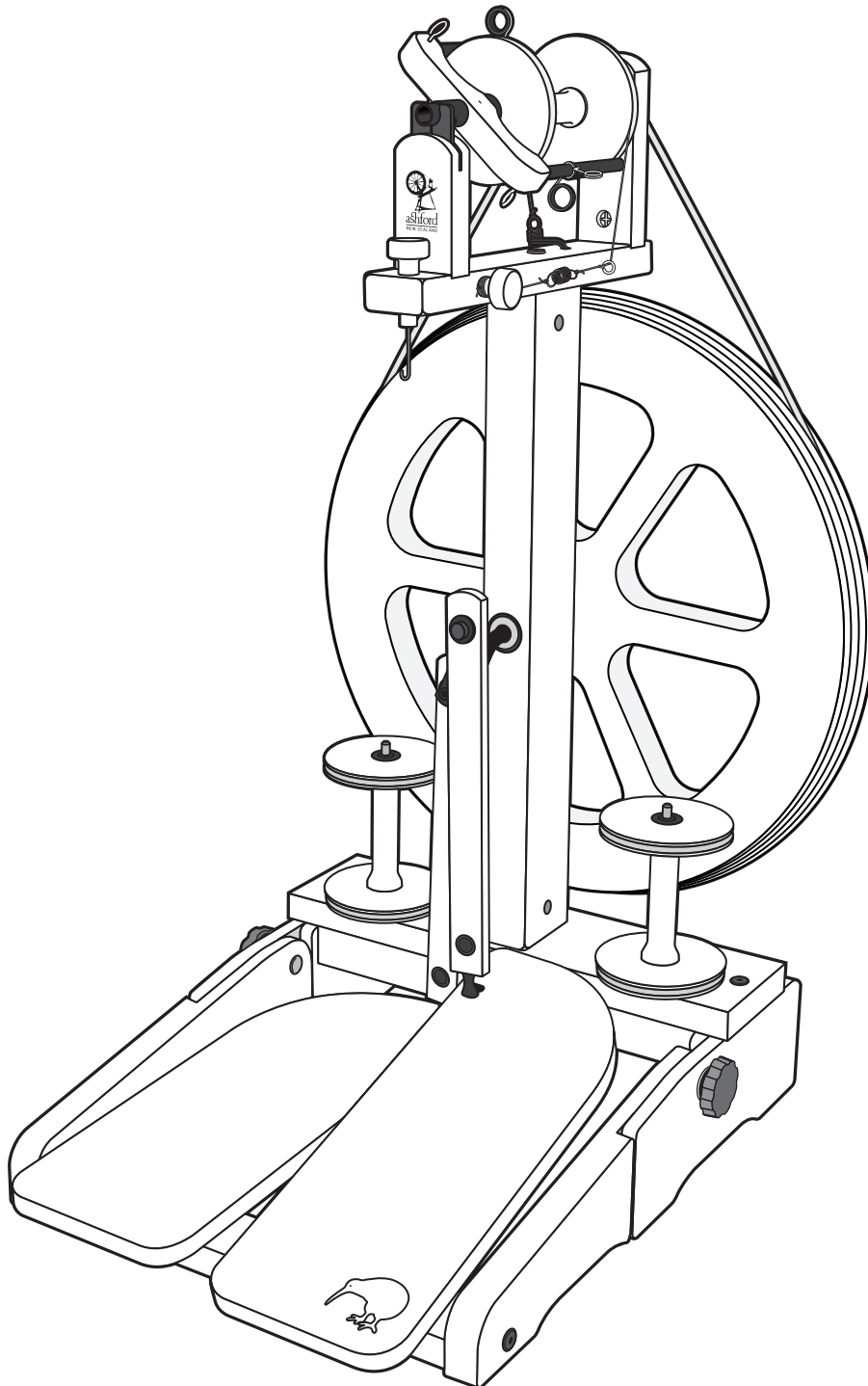


## KIWI 3 SPINNING WHEEL



KSW3-250220V12



# ASSEMBLY INSTRUCTIONS FOR THE ASHFORD KIWI 3 SPINNING WHEEL

Before commencing, please read the instructions completely, identify the parts and note the assembly sequence. Remove any sharp corners or edges and smooth the surface of the wood with the sand paper provided.

## Timber

We recommend that the wood surfaces be waxed or sealed before assembly. This protects the kiln dried wood from climatic changes and prevents it getting dirty or stained. The Silver Beech tree is a native of New Zealand and has a lovely variety of colour and grain. For a silky smooth matt finish, use the Ashford Wax Finish to enhance the natural colours and character of this timber.

## MDF

The Kiwi3 wheel is made from timber veneered, New Zealand manufactured, MDF (Medium Density Fibre board). MDF is an engineered wood-based product made by bonding wood fibres with a synthetic resin adhesive. This resin has been known, in very rare cases, to cause irritation if dust is inhaled or comes in contact with the skin. We recommend wiping away any dust with a moist rag and then sealing the surfaces with a 3 coat application of wax or polyurethane. MDF is an extremely versatile material that can be machined and finished to a high standard and has been used to make furniture for over 50 years. The Kiwi 3 Spinning Wheel is also available factory finished in clear lacquer.

## Tools Required



Screwdriver



Hammer



Allen Key

(included)

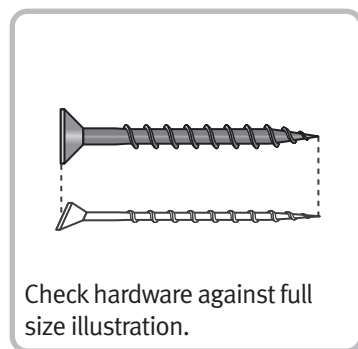


Scissors

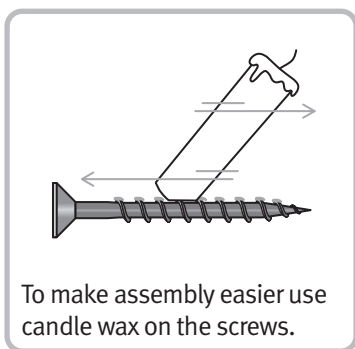


CANDLE WAX

## Hints



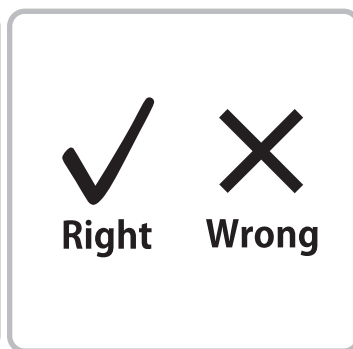
Check hardware against full size illustration.



To make assembly easier use candle wax on the screws.

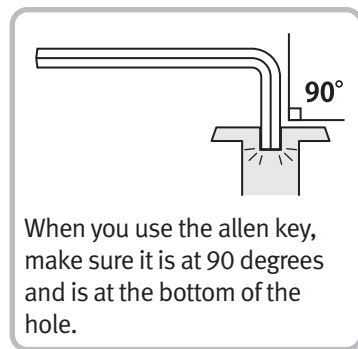


Check the directions carefully.

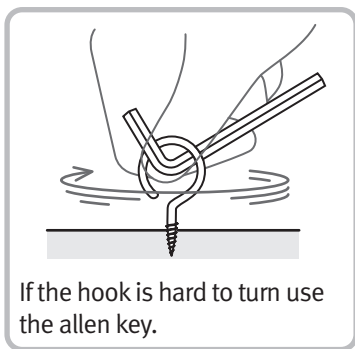


Right

Wrong



When you use the allen key, make sure it is at 90 degrees and is at the bottom of the hole.



If the hook is hard to turn use the allen key.

## More Information



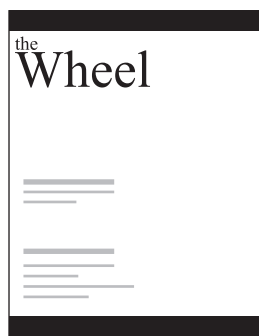
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[www.youtube.com/user/AshfordHandicrafts](http://www.youtube.com/user/AshfordHandicrafts)



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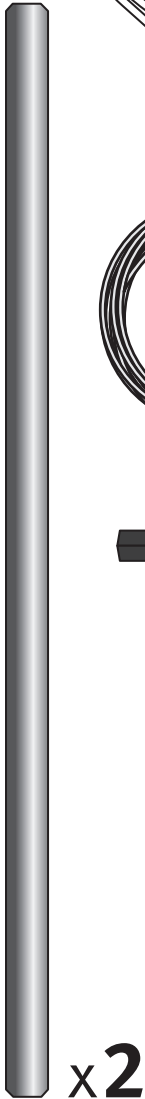
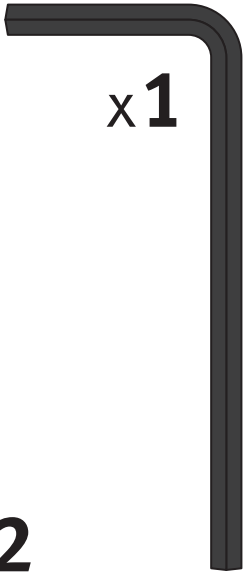
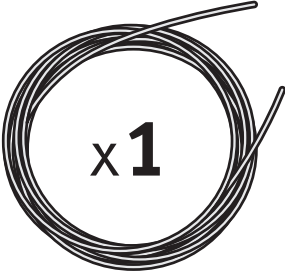
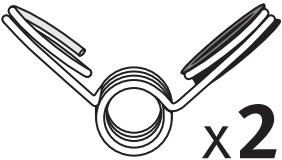
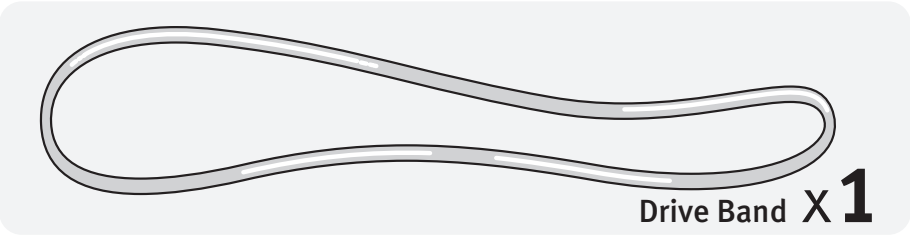
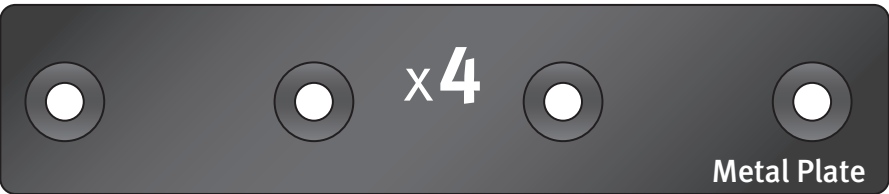
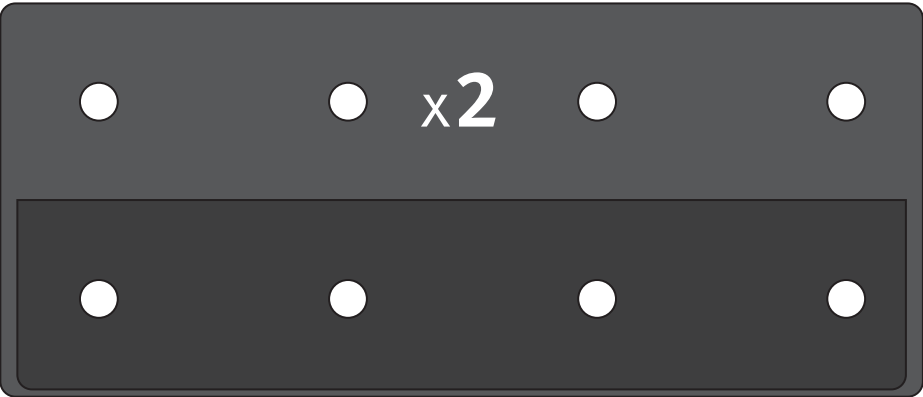
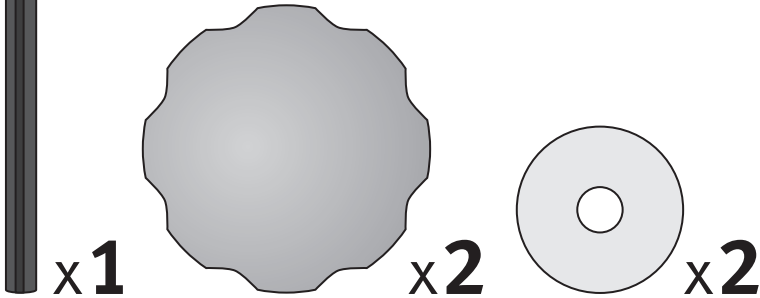
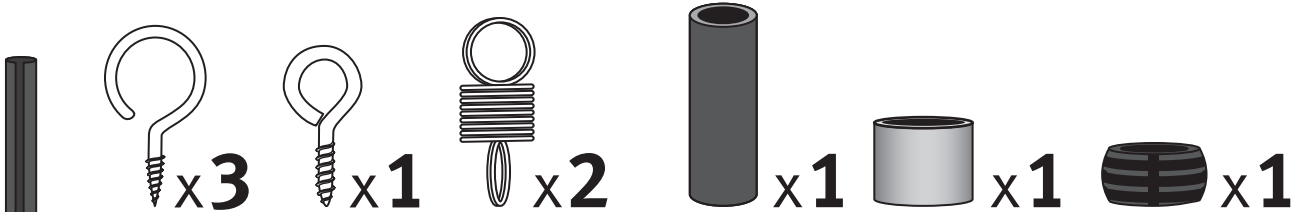
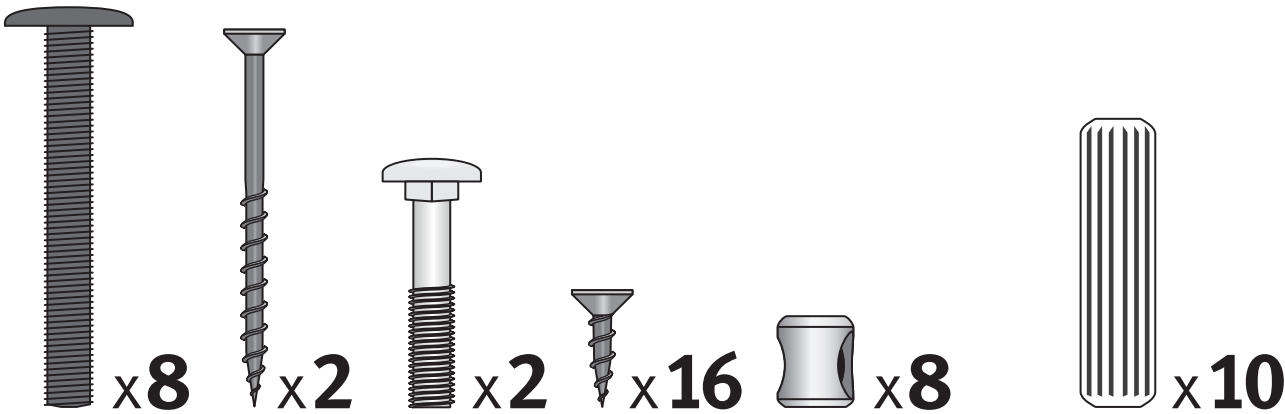


### The Wheel Magazine

Ashford's annual fibre craft magazine. Spinning, weaving, felting, dyeing and knitting projects, patterns and articles from around the world. To receive the glossy version delivered to you, subscribe at:  
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Real Scale Hardware List

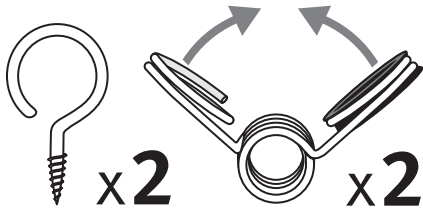




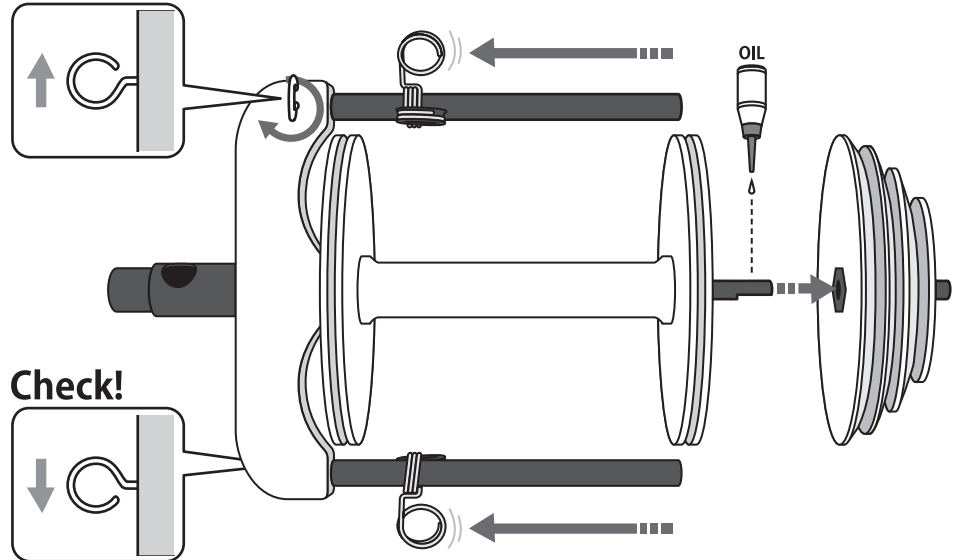


Thread 2 hooks into the flyer base. Squeeze and slide the yarn guides onto the flyer arms.

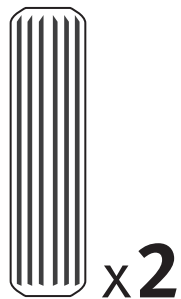
Apply a drop of oil to the flyer shaft and slide a bobbin and flyer whorl into position.



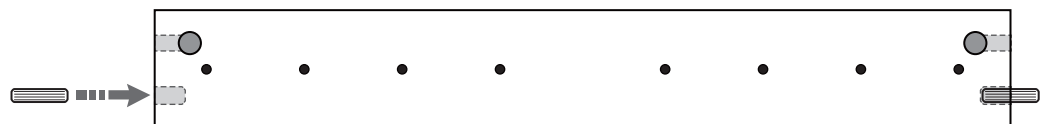
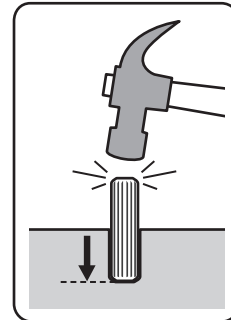
**Check!**



Tap wooden dowels to the bottom of the holes in either end of the treadle rail.



**Check!**

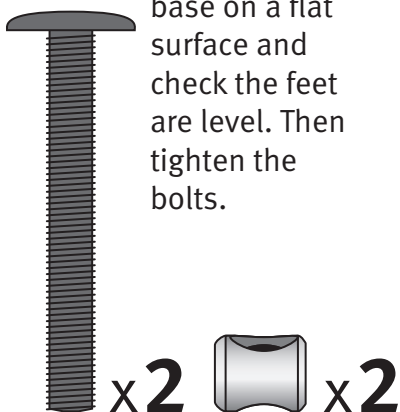


**FRONT**

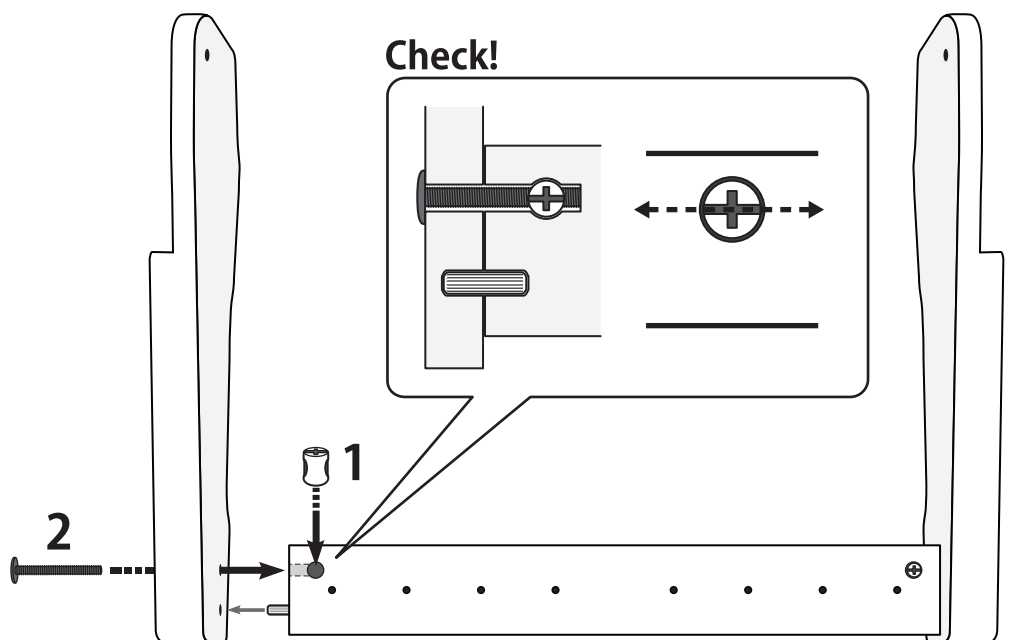
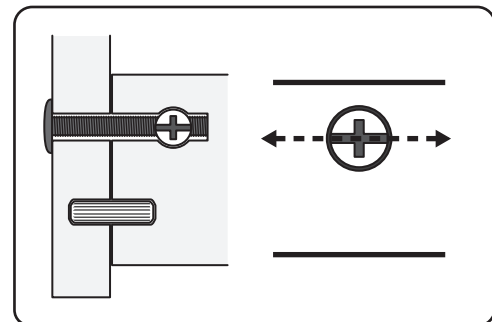


Loosely attach the front feet to the treadle rail with 50mm (2") bolts and barrel nuts. Sit the

base on a flat surface and check the feet are level. Then tighten the bolts.



**Check!**

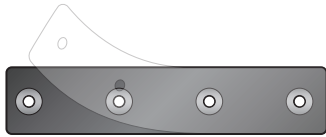




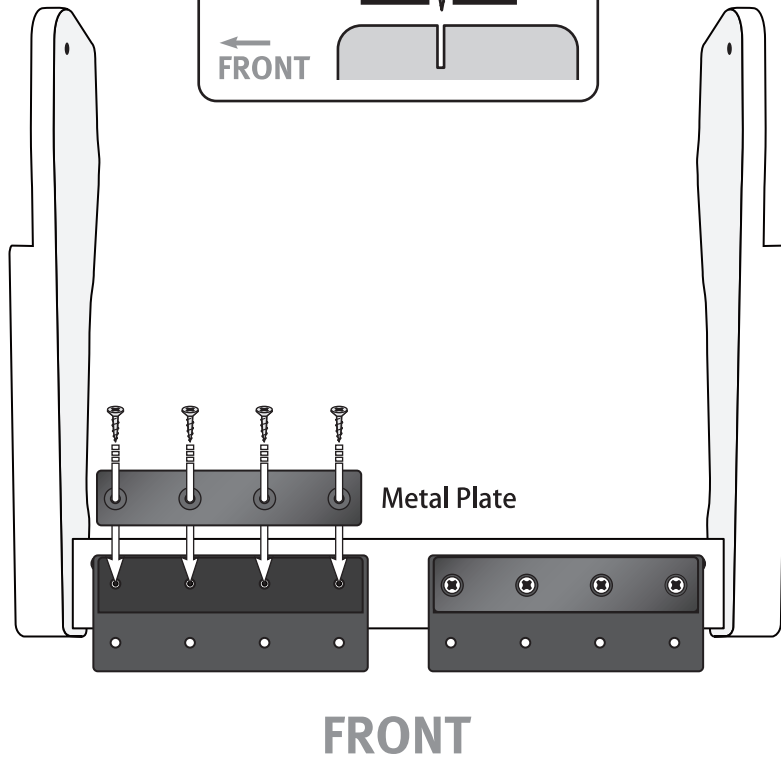
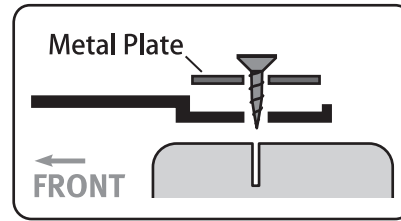
4



Remove the protective film and locate the metal cover plates into the polyurethane hinges. Then attach the hinges to the treadle rail with 16mm ( $\frac{5}{8}$ ") screws.



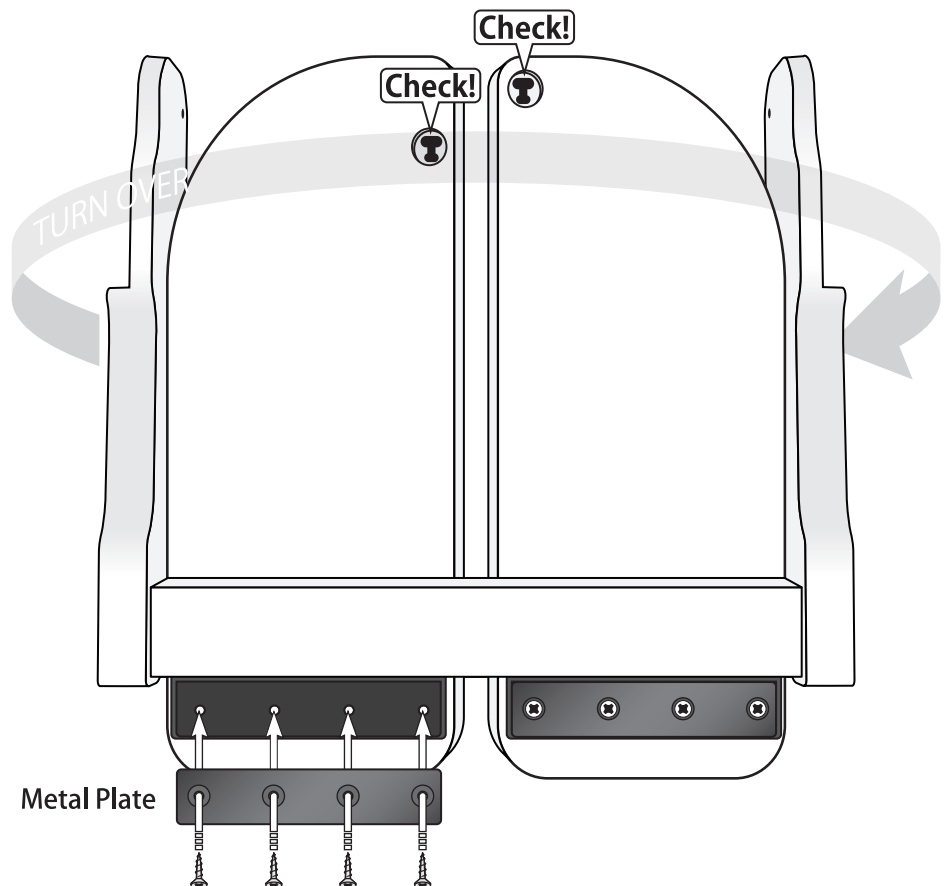
Check!



5



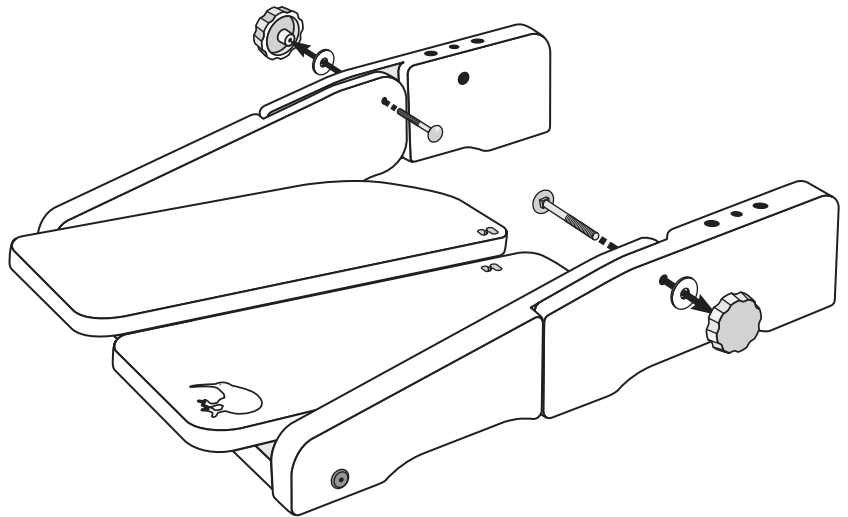
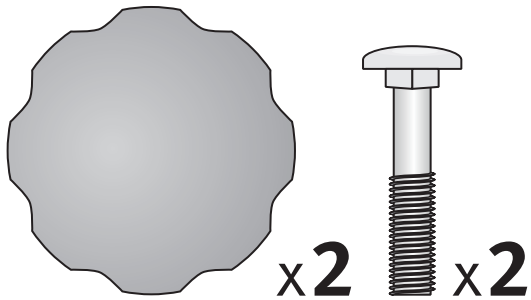
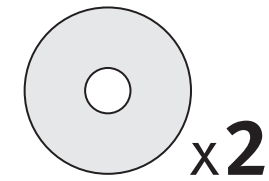
Lay the base on its back. Remove the protective film and locate the metal cover plates into the polyurethane hinges. Then attach the treadle boards to the hinges with 16mm ( $\frac{5}{8}$ ") screws.





6

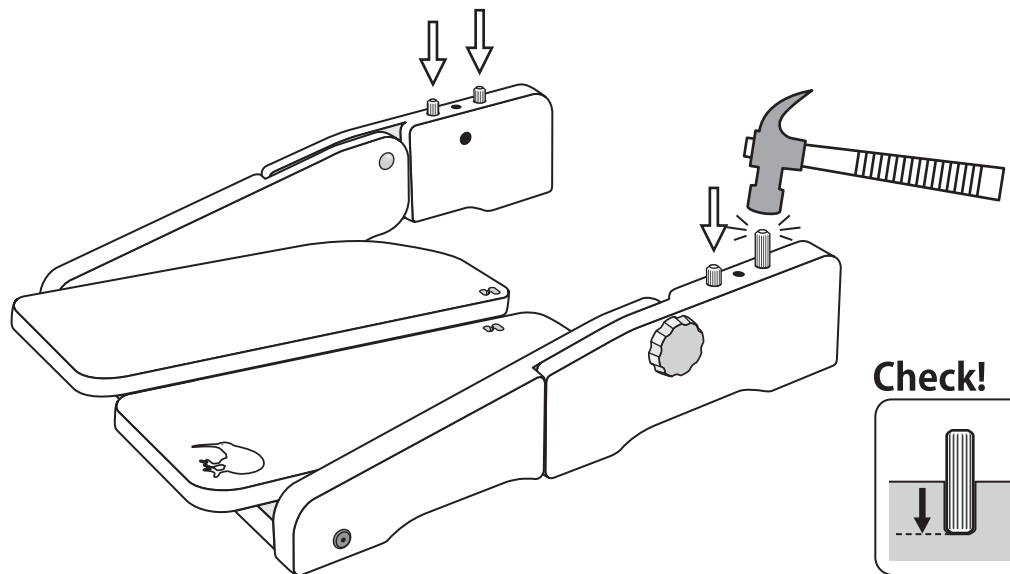
Attach the back feet to the front feet with 30mm (1¼") bolts, washers and knobs.



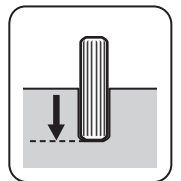
7



Tap wooden dowels down to the bottom of the holes in the back feet.



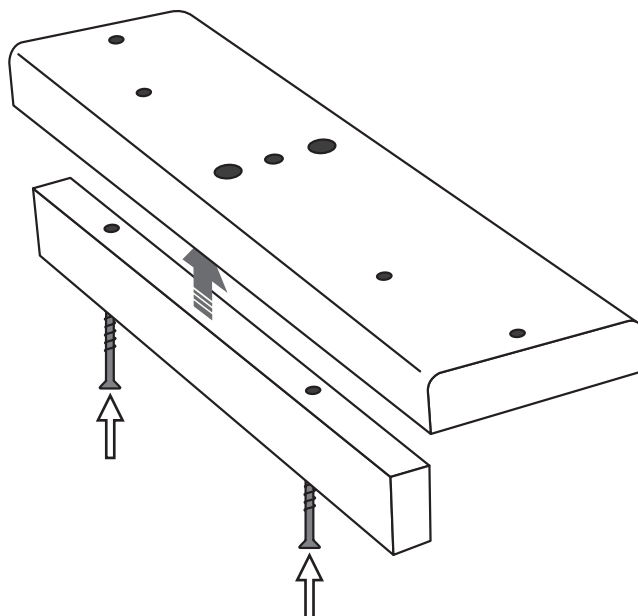
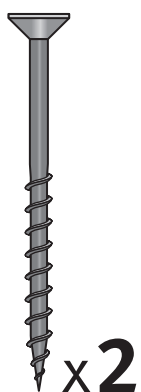
Check!



8



Attach the "toe saver" to the base with 50mm (2") screws.

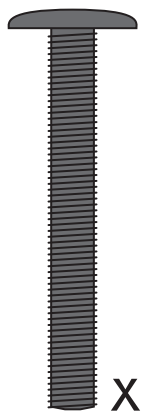




9



Locate the base onto the dowels and secure the base to the back feet with 50mm (2") bolt and barrel nuts. Note the "toe saver" is towards the front.

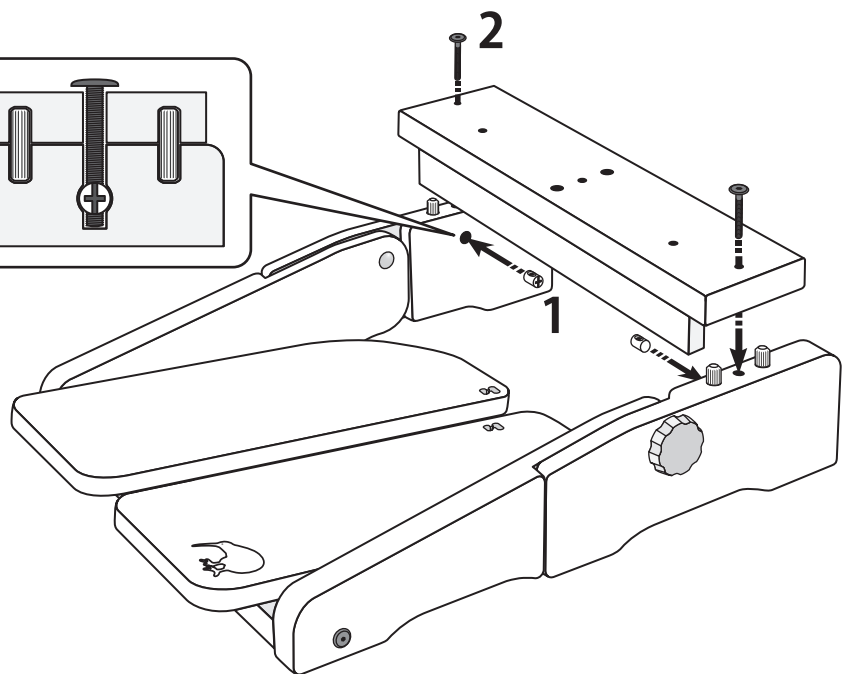
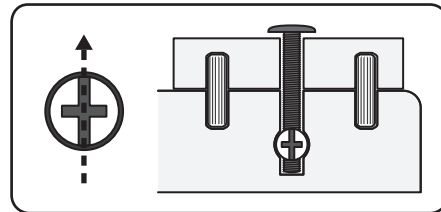


x2



x2

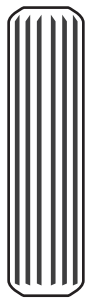
Check!



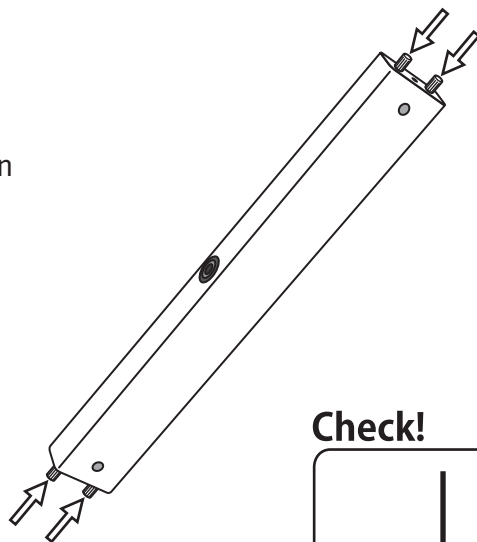
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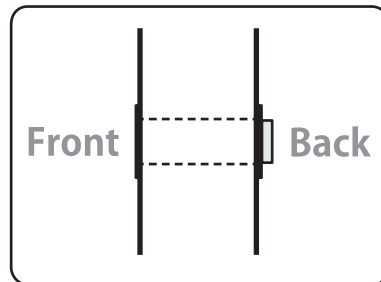
Tap wooden dowels to the bottom of the holes in both ends of the main upright.



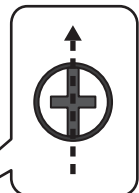
x4



Check!



Check!

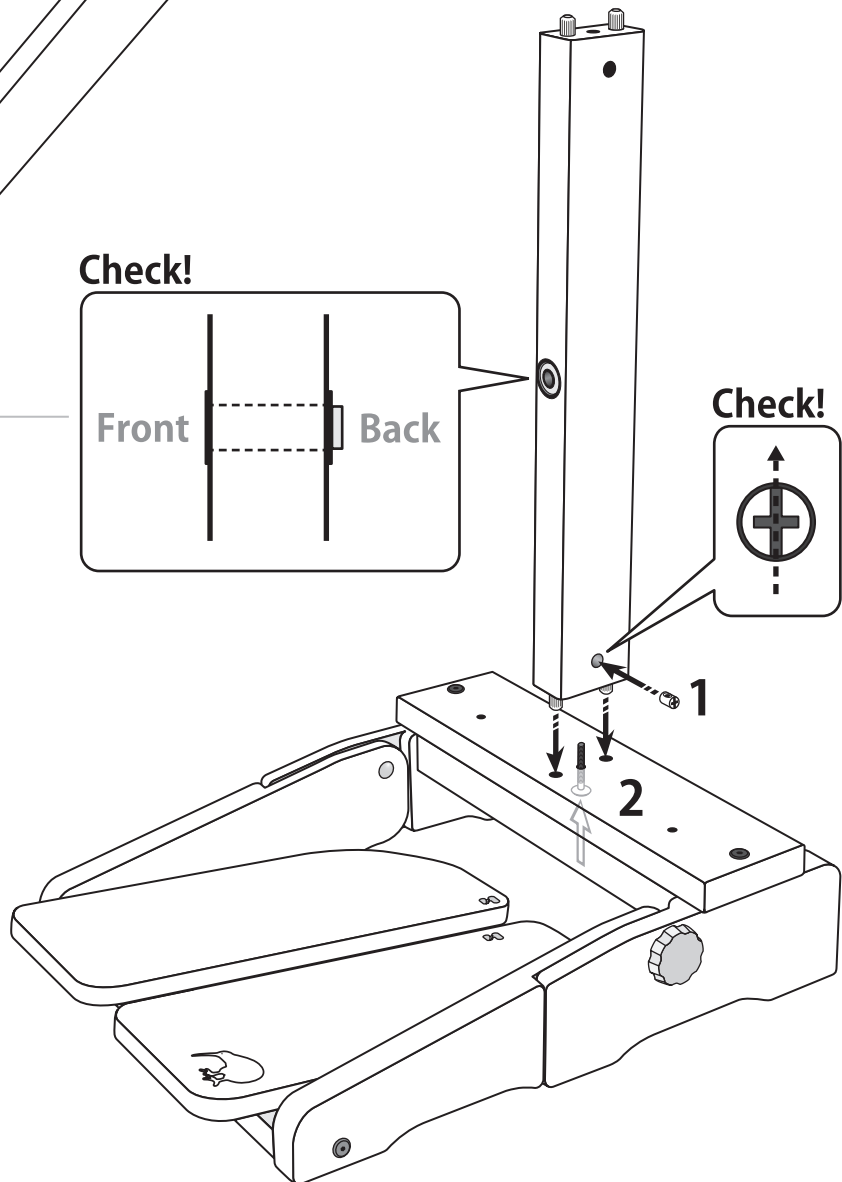


11

Position the main upright onto the holes in the base. Check that the ball bearing with the extension faces the back.



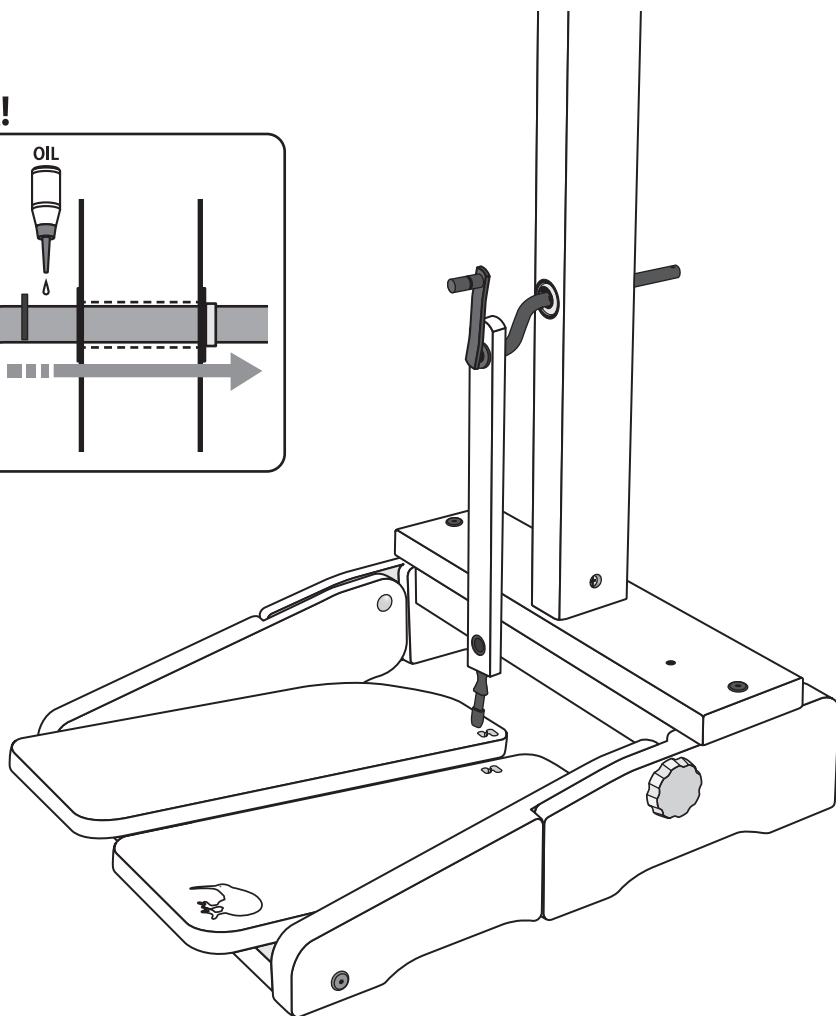
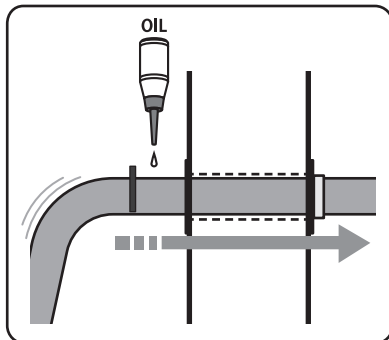
Secure main upright in place with a 50mm (2") bolt and barrel nut.



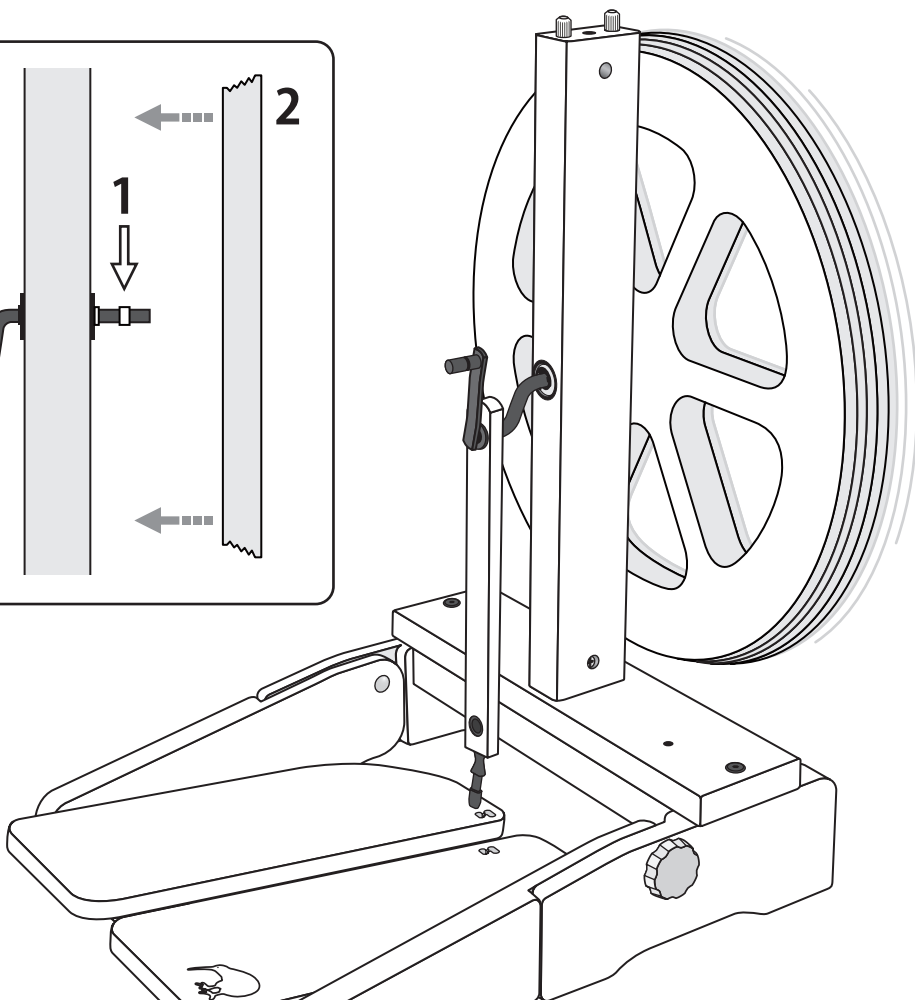
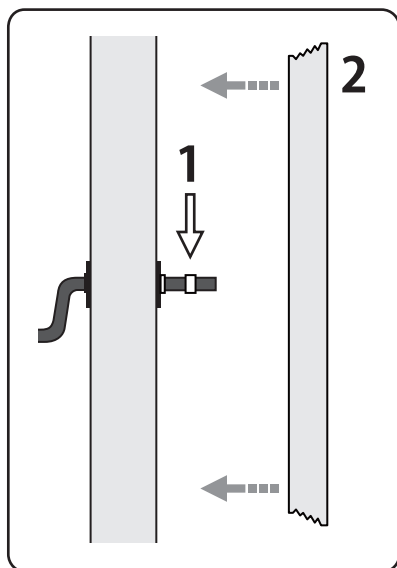
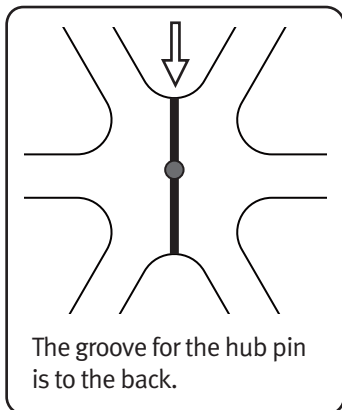


**12**

Slide the crank through the ball bearings. If necessary apply a drop of oil to the crank.

**Check!****13**

Slide the brass spacer onto the crank. Then slide the wheel on.

**Check!**



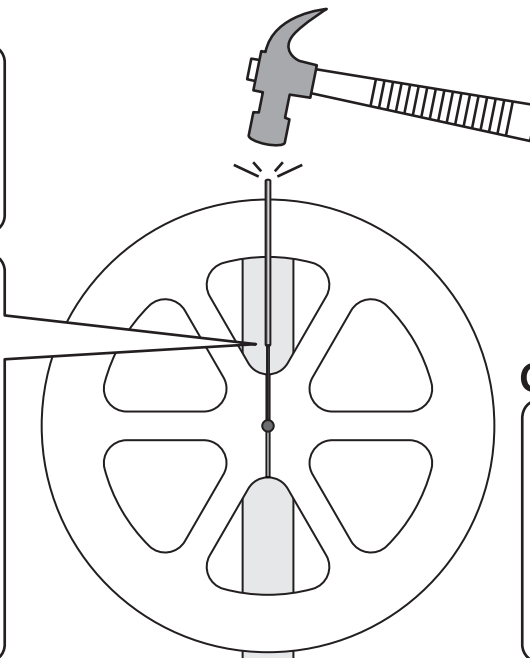
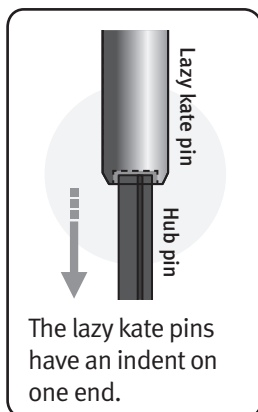
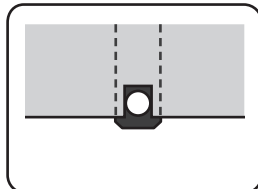
14



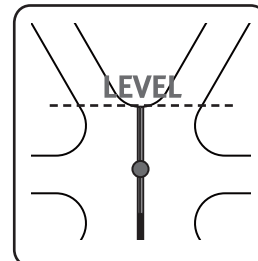
Align the groove in the wheel with the hole in crank. Locate the hub pin into the groove and tap partially into the hole in the crank. Place the indented end of a lazy kate pin over the hub pin and carefully tap until level with the wheel.



Check!



Check!



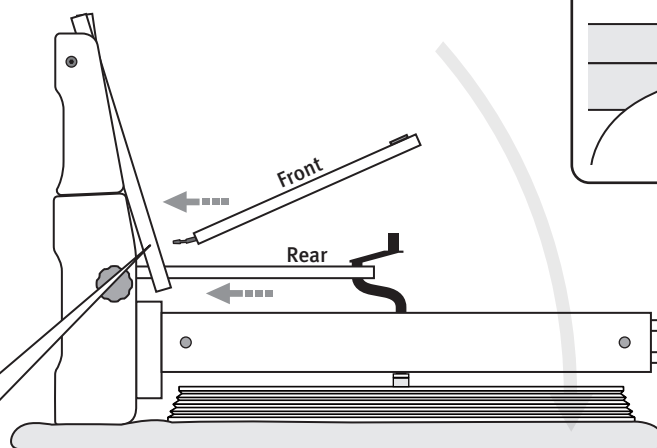
15

Lay the wheel on it's back. (protect your table with a towel or piece of cardboard)

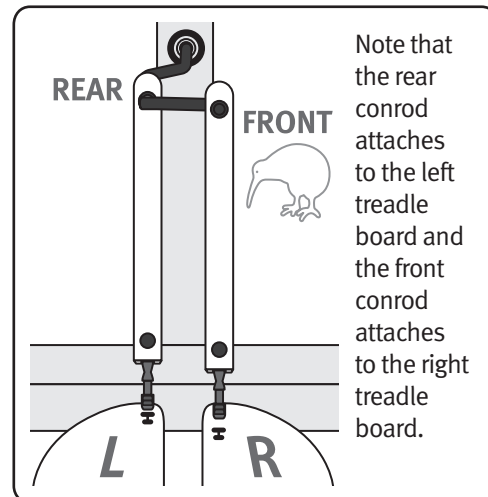
Insert the **front** conrod joint into the **right** treadle board.

Then repeat this sequence for the **rear** conrod and the **left** treadle board.

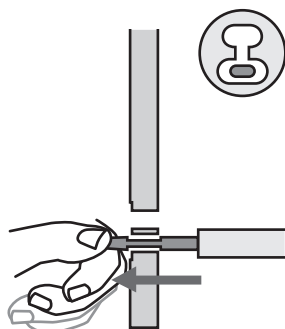
**NOTE:** It easier to insert the rear conrod joint into the treadle board when the treadle board is at the lowest point - turn the wheel until the rear conrod is in the lowest position.



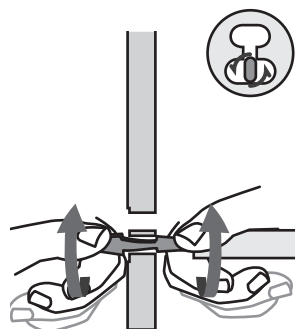
Check!



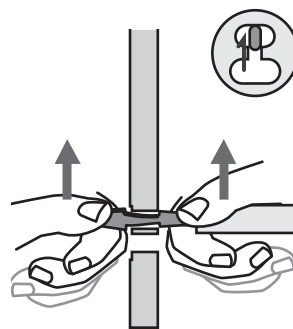
1 Hold the conrod joint with one hand on either side of the treadle board.



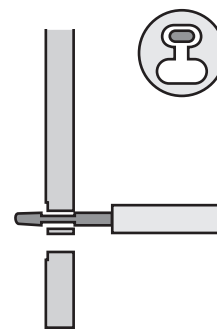
2 With both hands turn the conrod joint a 1/4 turn towards you.



3 Slide it up into the small slot and turn it back a 1/4 turn until it clicks into place.



4

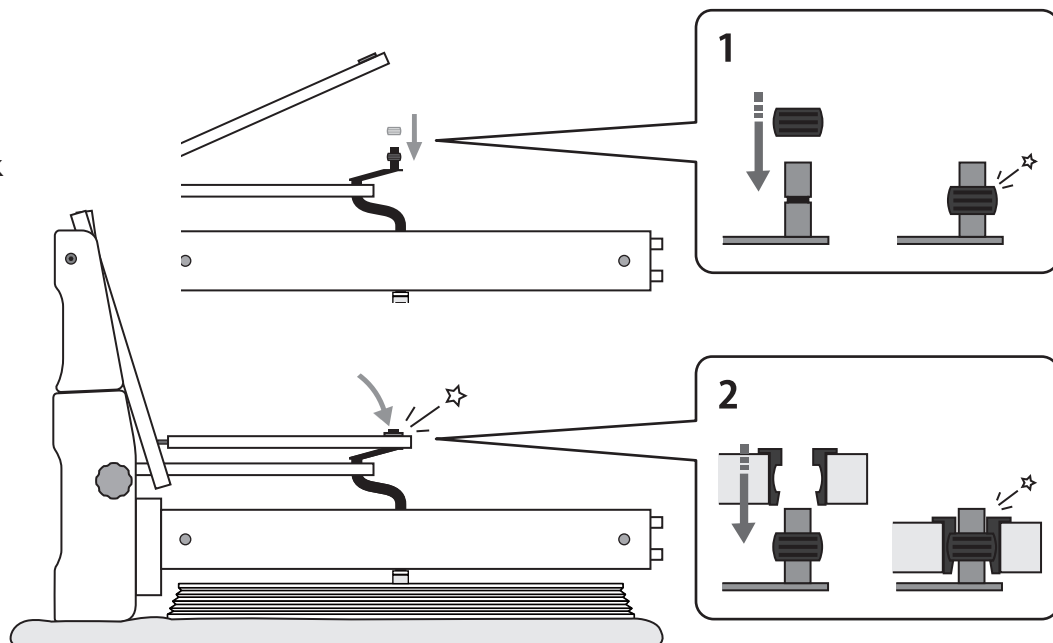




16



Slide the inner shell of the conrod universal joint onto the front crank until it clicks into the groove. Apply a drop of oil to the inner shell. Then click the front conrod onto the universal joint on the crank.

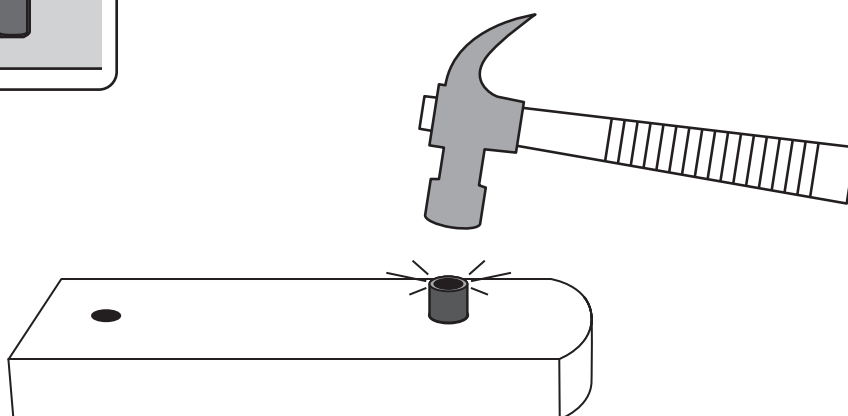
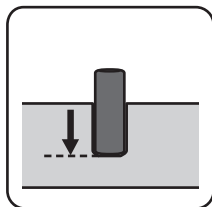


17



Tap the nylon bearing down to the bottom of the hole in the rear flyer support.

**Check!**

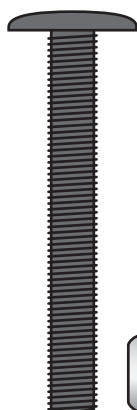


18

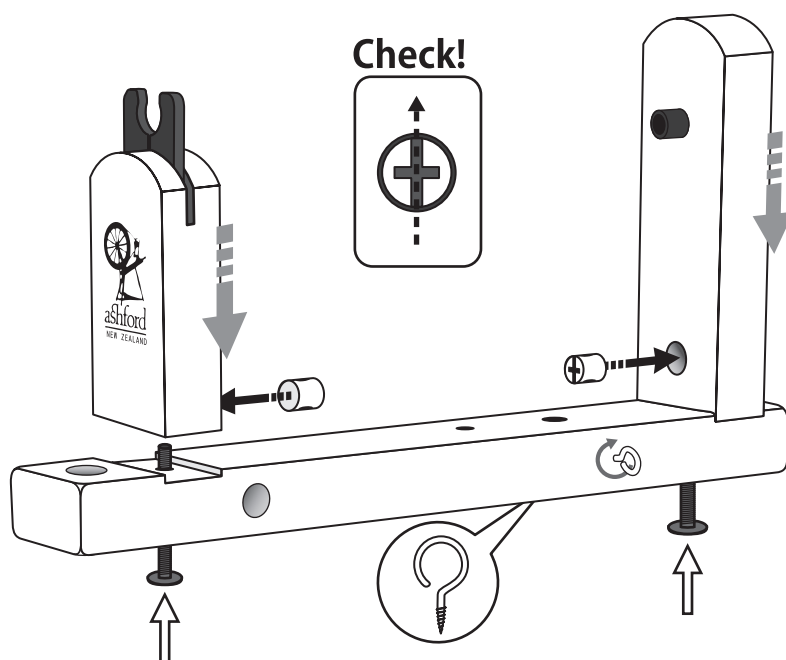
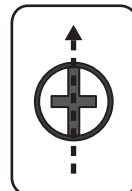


Secure the front and back flyer supports to the maiden bar with 50mm (2") bolt and barrel nuts. Check the supports are level with the edges of the maiden bar, then tighten.

Screw the hook and eye into the maiden bar.



**Check!**

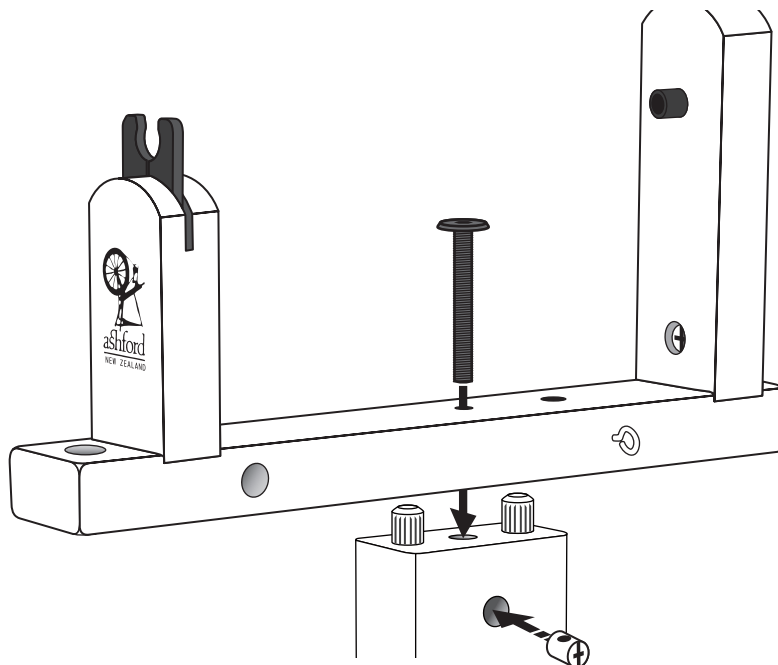
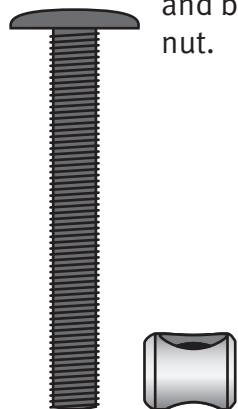




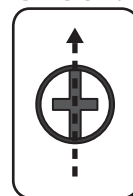
19



Place the maiden bar onto the dowels in the main upright and secure with a 50mm (2") bolt and barrel nut.



Check!



20

Insert the end of the flyer shaft into the rear flyer bearing and click the flyer orifice into the front flyer bearing.

Tie the nylon brake band to spring ①. Thread the nylon brake band through the eye and tie spring ② 35cm (13 3/4") from spring ①, then cut the surplus nylon off and tie it to the other end of spring ②.

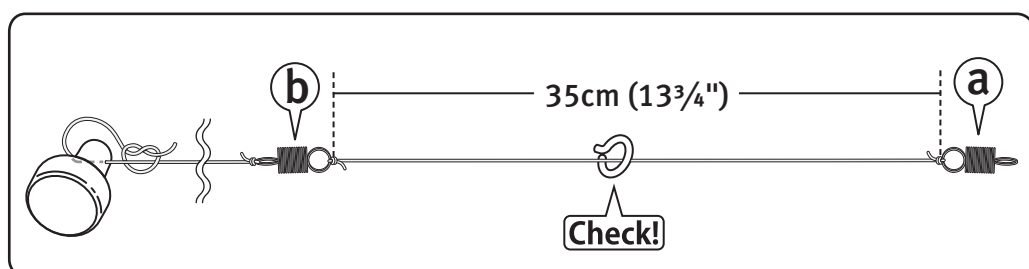
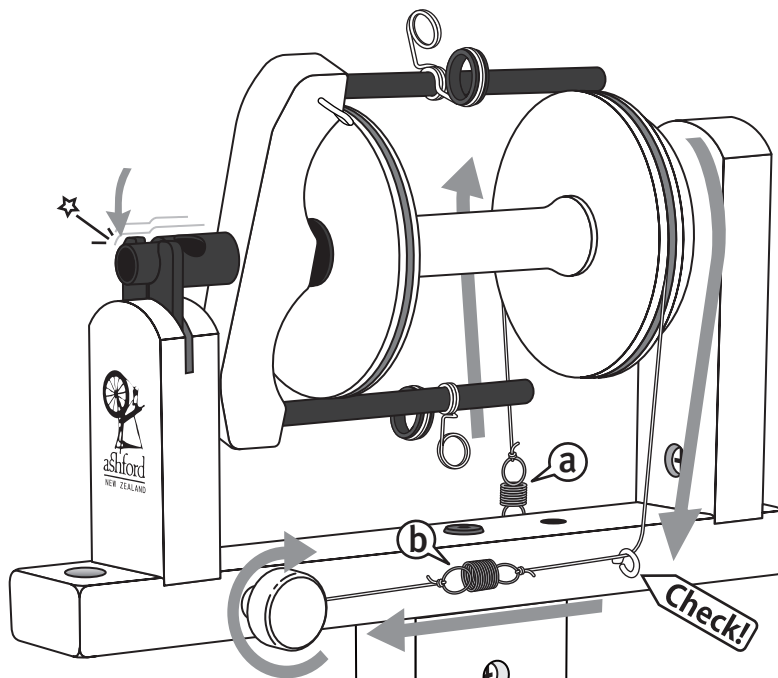
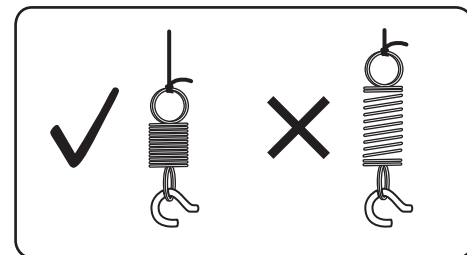
Take the nylon brake band up and over the groove in the bobbin and place spring ① onto the hook. Insert the tension knob into the maiden bar, thread the end of the nylon brake band through the hole in the tension knob and tie a knot. Turn the tension knob to wind on excess nylon.



Take care not to over-stretch the springs.

x2

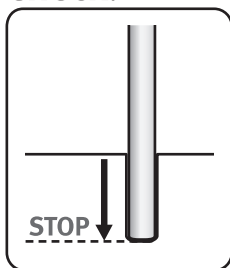
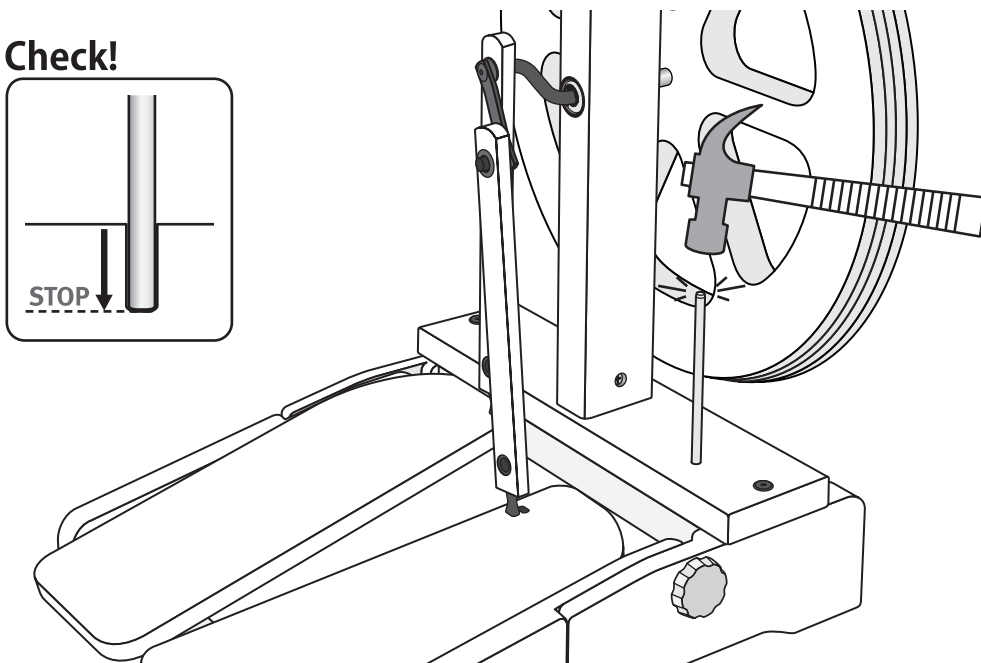
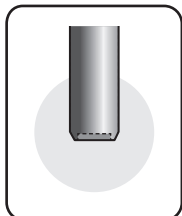
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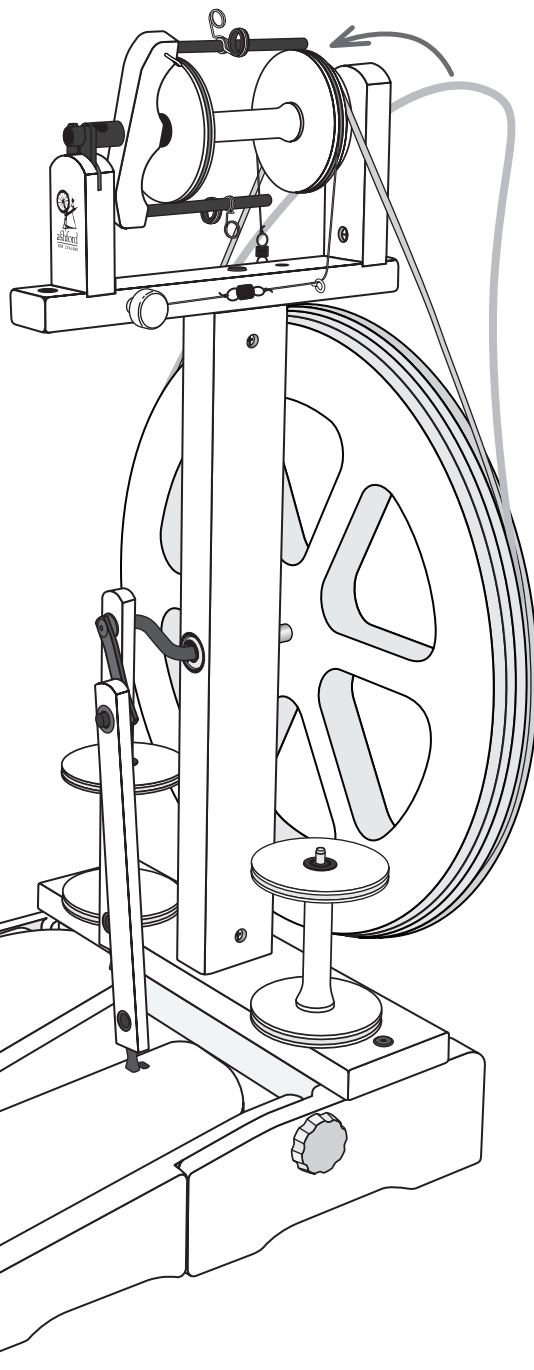


**21**

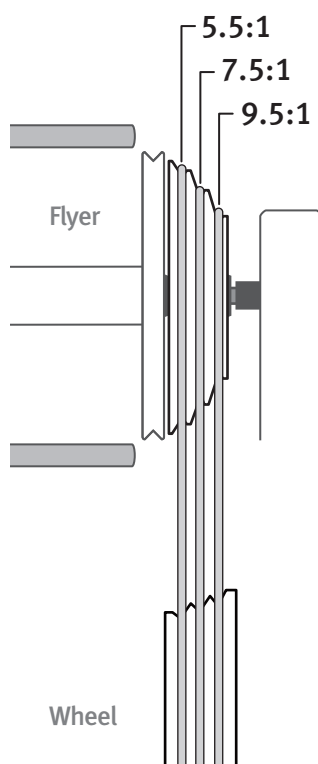
Gently tap the indented end of the lazy kate pins into the base and locate the bobbins on them for storage and plying. Stop tapping when the pins reach the bottom of the holes.

**Check!****Check!****22**

Locate the drive band around the large flyer whorl and small groove in the wheel. This gives a flyer to wheel ratio of 5.5:1. For higher flyer speeds, locate the drive band on the middle or small flyer whorl and corresponding grooves in the wheel. These give flyer to wheel ratios of 7.5 and 9.5:1



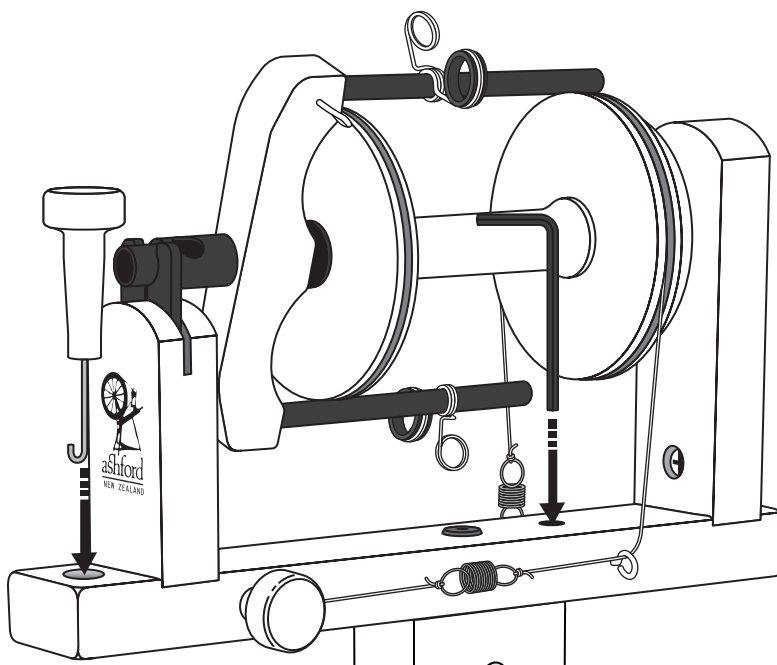
## Ratios





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Locate the threading hook and Allen key into the holes in the maiden bar.

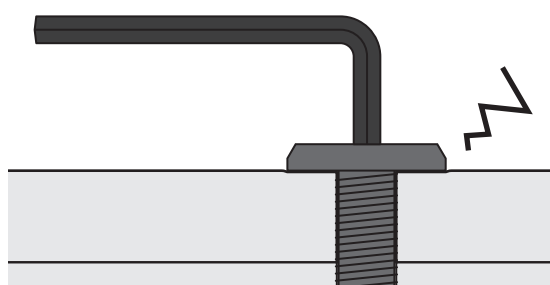
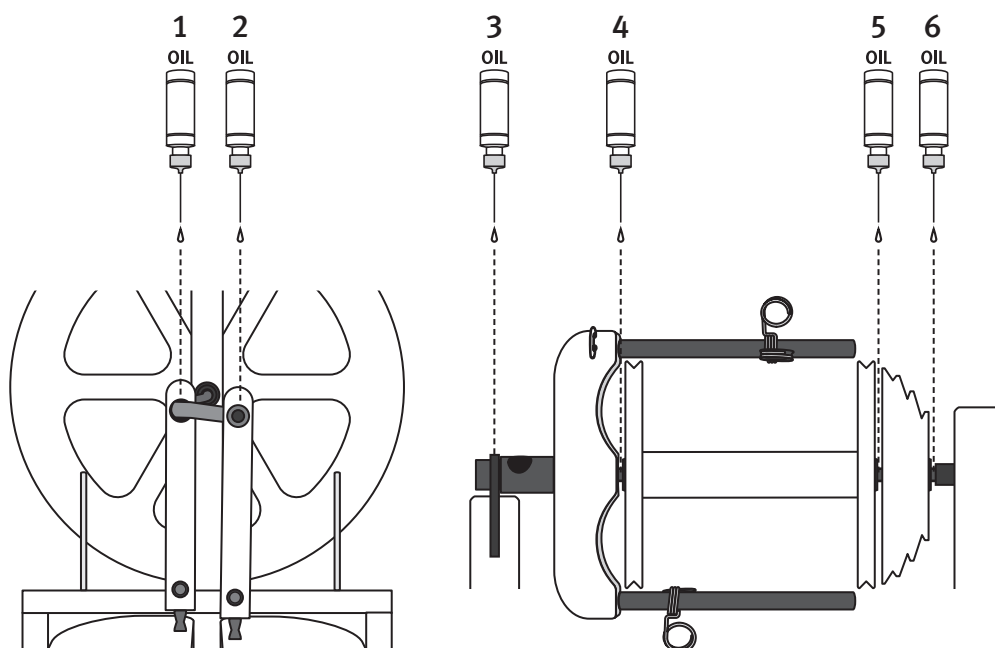


## Maintenance

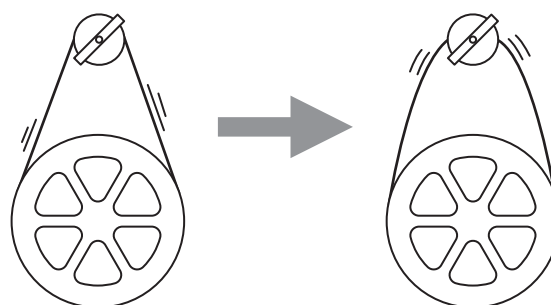
To make spinning easier apply a drop of Ashford Spinning Wheel



Oil to the flyer, bobbin and conrod bearings.  
Note: The ball bearings are sealed for life and do not require oiling.



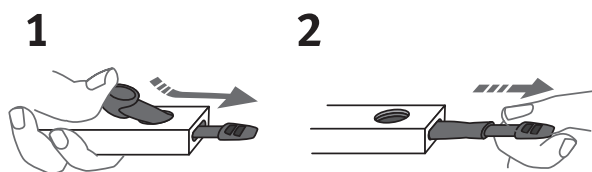
Use the Allen key to occasionally tighten the bolts.



When not using your spinning wheel please loosen the drive belt to avoid it stretching.

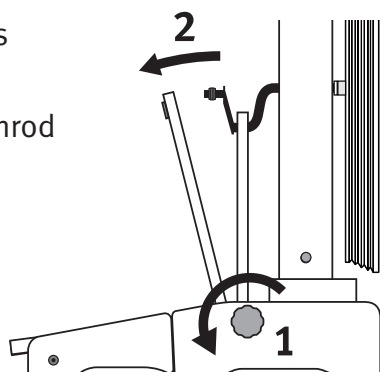


*How to insert the polyurethane conrod joints into the conrod. \*This has been pre-assembled in the factory.*

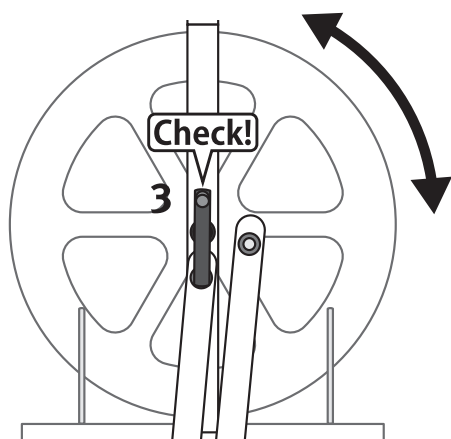


## How to fold your spinning wheel

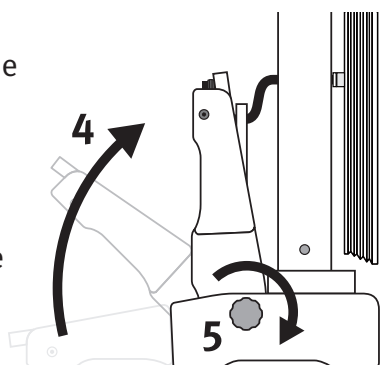
1. Loosen the knobs locking the feet.
2. Click the front conrod off the crank.



3. Rotate the wheel until the front crank is at the top.

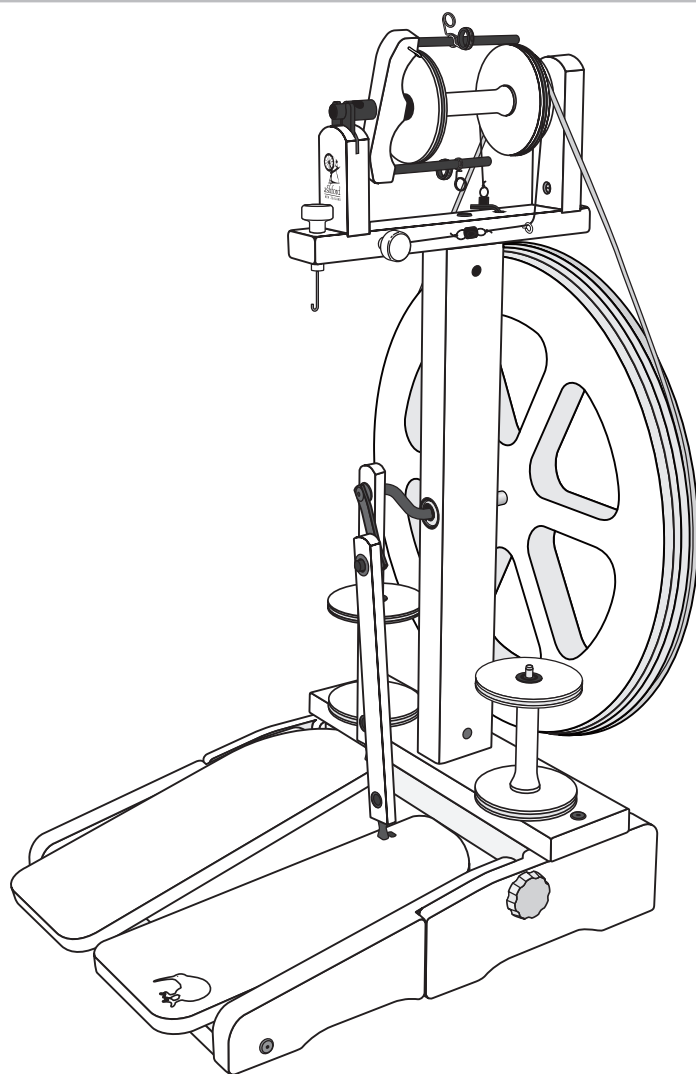


4. Place the front conrod in front of the rear conrod while folding the treadles taking care to position the crank between the treadle boards.



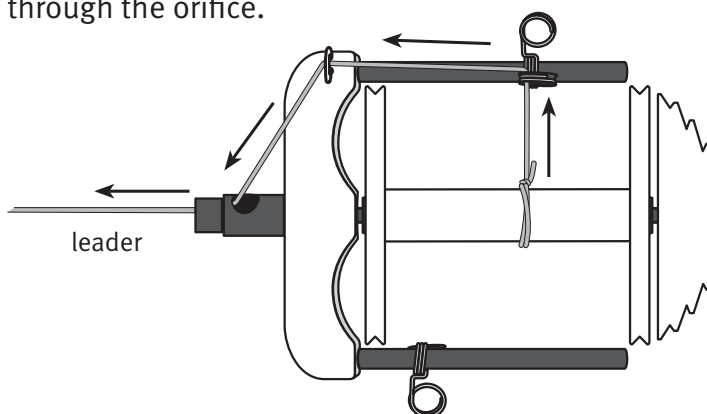
5. Then tighten the knobs to lock in the upright position.

Carry your Kiwi 3 either by the main upright, wheel or maiden bar.



## Spinning

Before you begin spinning you need to tie a piece of yarn called a leader, approx. 1.5m (5') long, on to the bobbin. Thread it through the yarn guide, around the flyer hook on the **left-hand side of the flyer** and out through the orifice.



\* For further spinning and plying information refer to "The Ashford Book of Hand Spinning" by Jo Reeve, a 116 page book full of ideas and inspirations for spinners or visit our website [www.ashford.co.nz](http://www.ashford.co.nz)