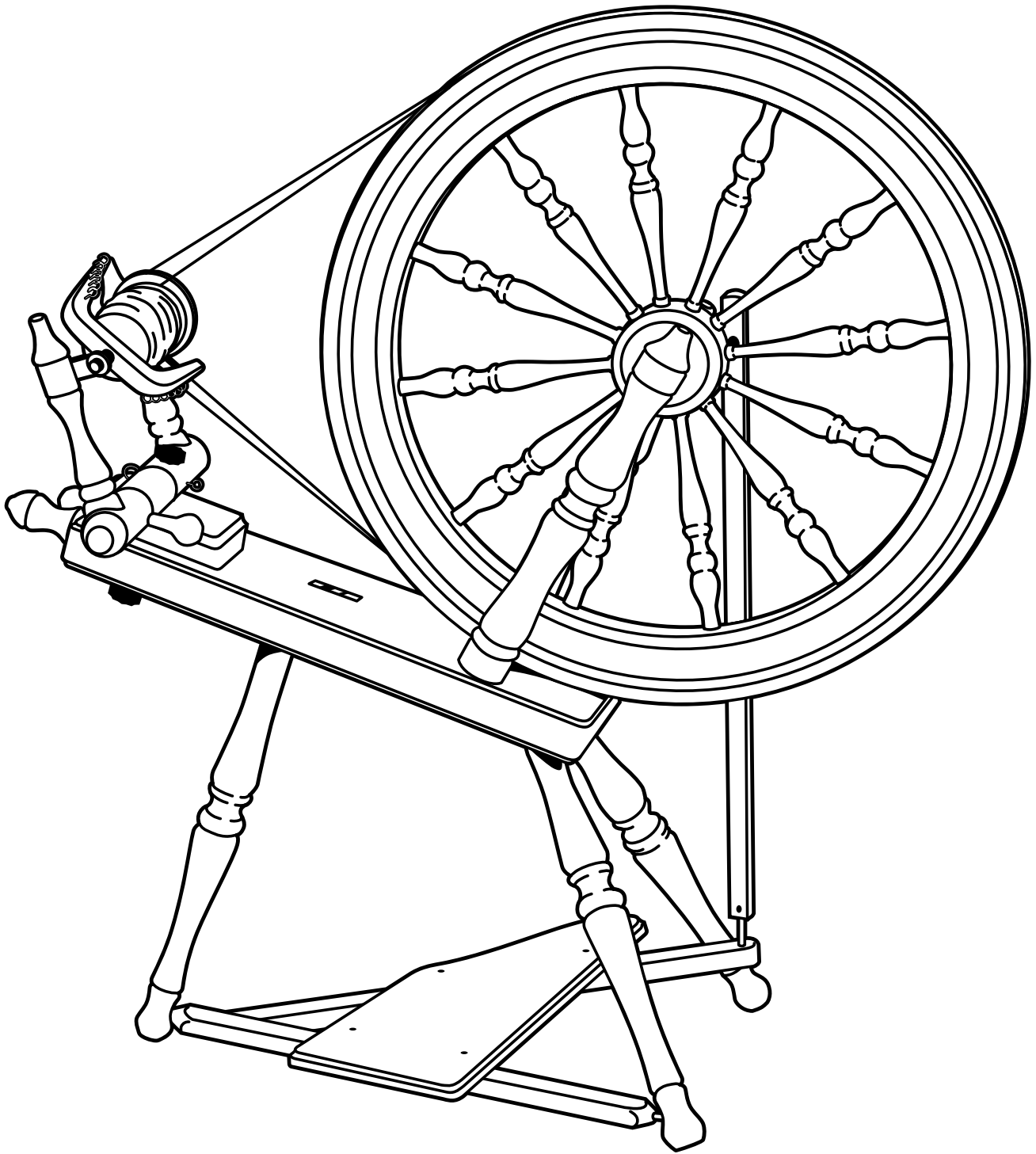


# ashford

INSTRUCTIONS

## ELIZABETH 2 SPINNING WHEEL



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Ashford Guarantee  
Thank you for purchasing this Ashford product. In the unlikely event there is any fault in manufacture we will replace the item. To validate our guarantee please visit our website or write to us.  
Please also join our Ashford Club for the Wheel Magazine, competitions and more at [www.ashfordclub.co.nz](http://www.ashfordclub.co.nz)

ESW230102009V1

## TOOLS REQUIRED

⊕Screwdriver, Hammer and Candlewax (for wood screws and dowel ends).

## BEFORE COMMENCING:

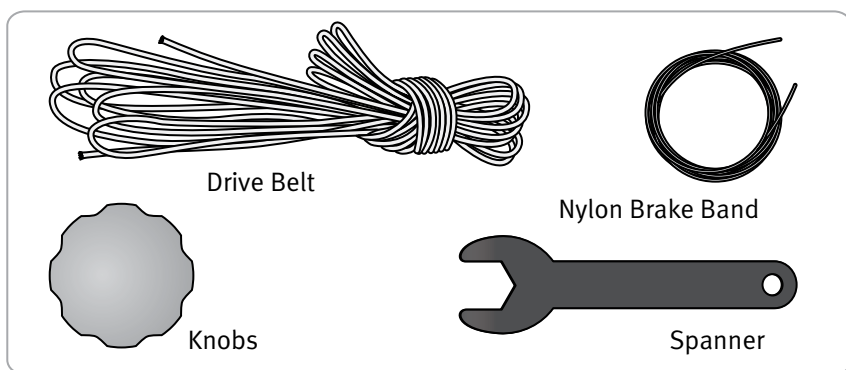
Read the instructions completely, identify the parts and note the assembly sequence.

## FINISH THE WOOD:

We recommend that the wood surfaces be waxed before assembly. This protects the kiln dried wood from climatic changes and enhances the beauty of the wood. Use the sand paper provided to remove any sharp corners or smooth the wood where necessary.

## FOR THE ULTIMATE FINISH:

Use our natural, Ashford Wax Finish. The Silver Beech tree is a native of New Zealand and has a lovely variety of colour and grain. The Ashford Wax Finish will enhance the natural colours and beauty of the wood. Ashford Spinning Wheels are also available factory finish in clear lacquer.



45mm (1<sup>3</sup>/<sub>4</sub>" ) Tension Pin



62mm (2<sup>1</sup>/<sub>2</sub>" ) Hub Pin



16mm (5/8" ) Pan Head Screws



19mm (3/4" ) Pan Head Screws



25mm (1" ) Pan Head Screws



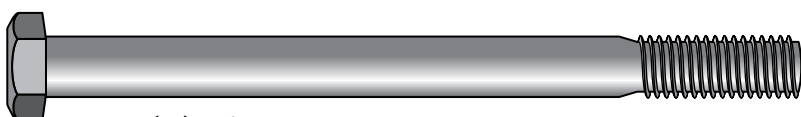
25mm (1" ) Countersunk Screws



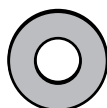
32mm (1<sup>1</sup>/<sub>4</sub>" ) Countersunk Screws



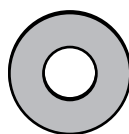
38mm (1<sup>1</sup>/<sub>2</sub>" ) Countersunk Screw



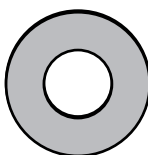
100mm (4" ) Bolts



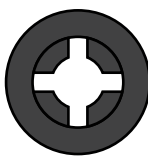
12mm (1/2" ) Washers



16mm (5/8" ) Washer



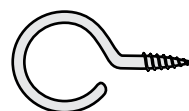
19mm (3/4" ) Washers



Nylon Retaining Washer



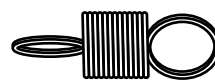
Conrod Joint



Flyer Hooks



Screw Eye



Tension Springs



Small Barrel Nut



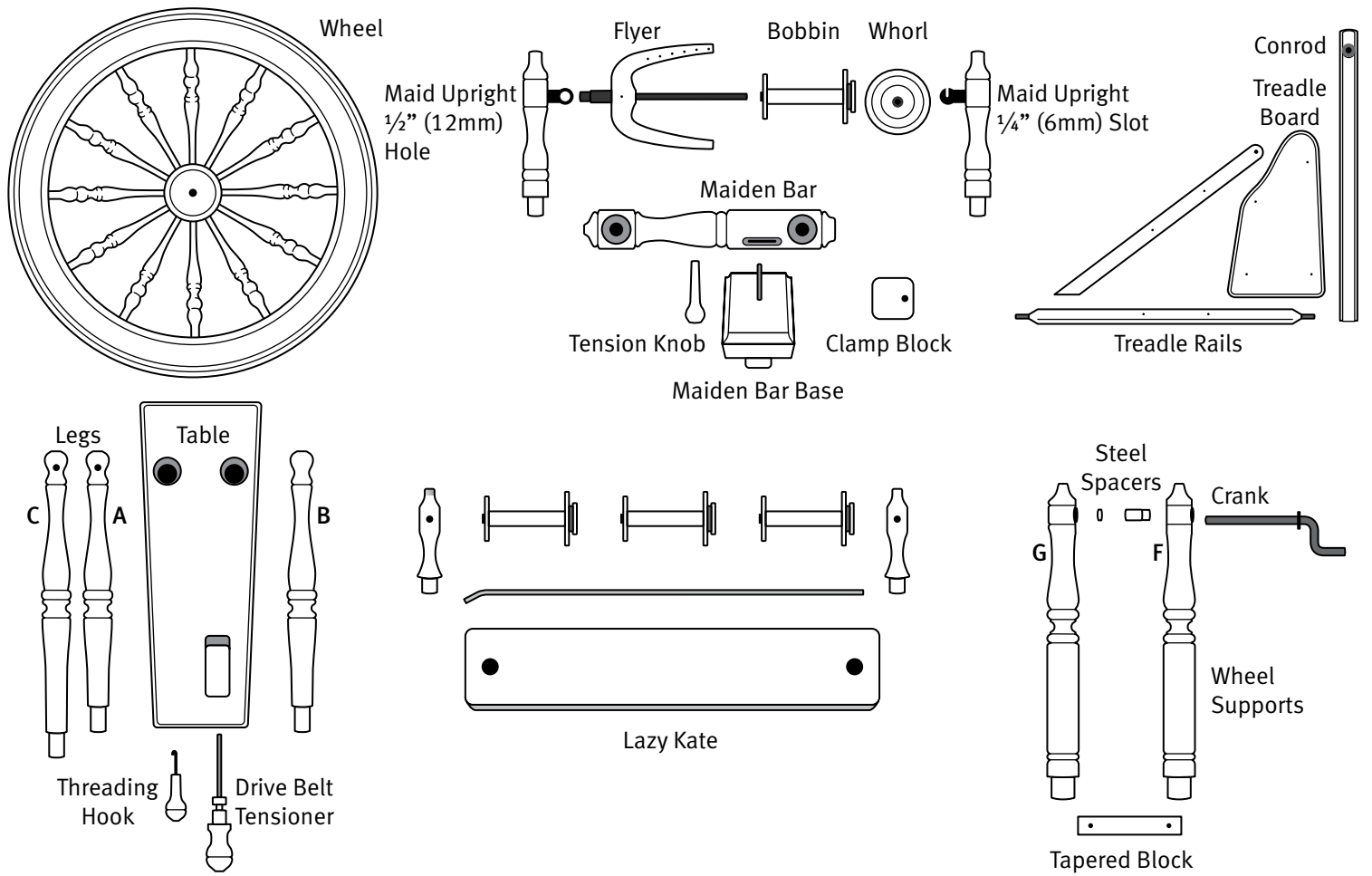
Large Barrel Nut



Short Crank Spacer



Large Crank Spacer

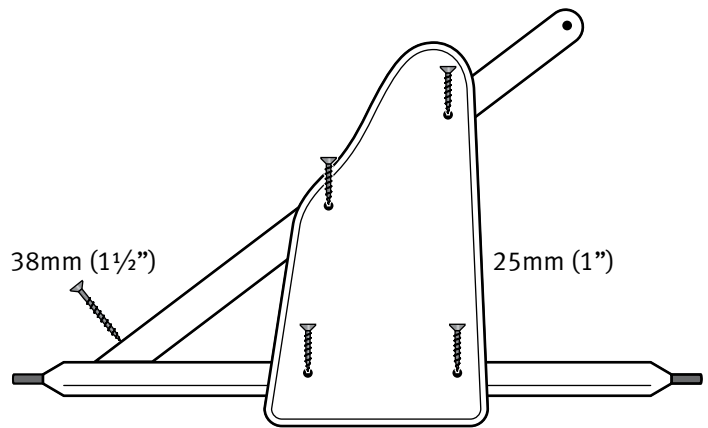


### STEP 1

Join the two treadle rails with a 38mm ( $1\frac{1}{2}$ ") countersunk screw. Secure the treadle board to the treadle rails with four 25mm (1") countersunk screws.

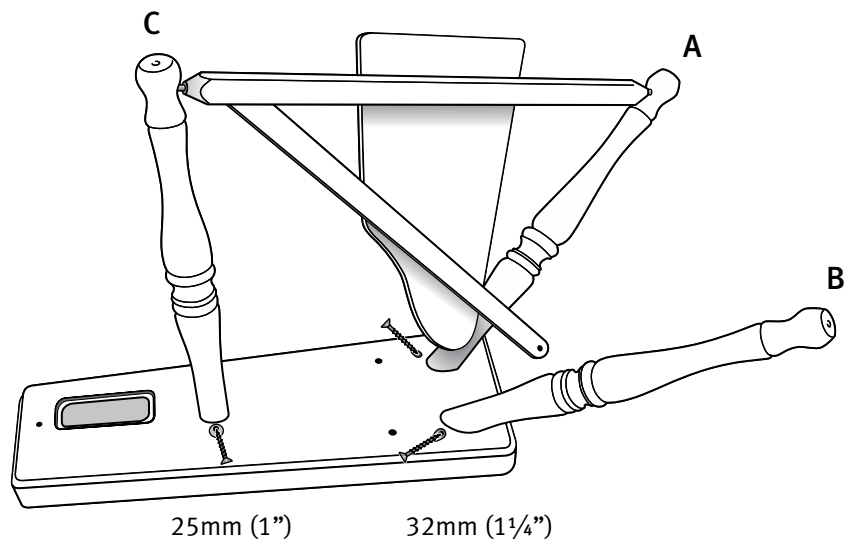
### STEP 2

Lie the table face down on a flat clean surface. Place a towel under the table to protect it from damage. Wax the dowel ends of the legs so they can be twisted. Note the position of the holes for the treadle pins. Insert the short leg **A** with the hole for a treadle pin into the hole in the table as illustrated. Partially insert long leg **C** also with a hole for a treadle pin into the table. Insert the pins in the end of the treadle rail into the holes in the short leg **A** and long leg **C**. Twist the legs until the treadle assembly moves freely. Then tap both legs fully into the base.



### STEP 3

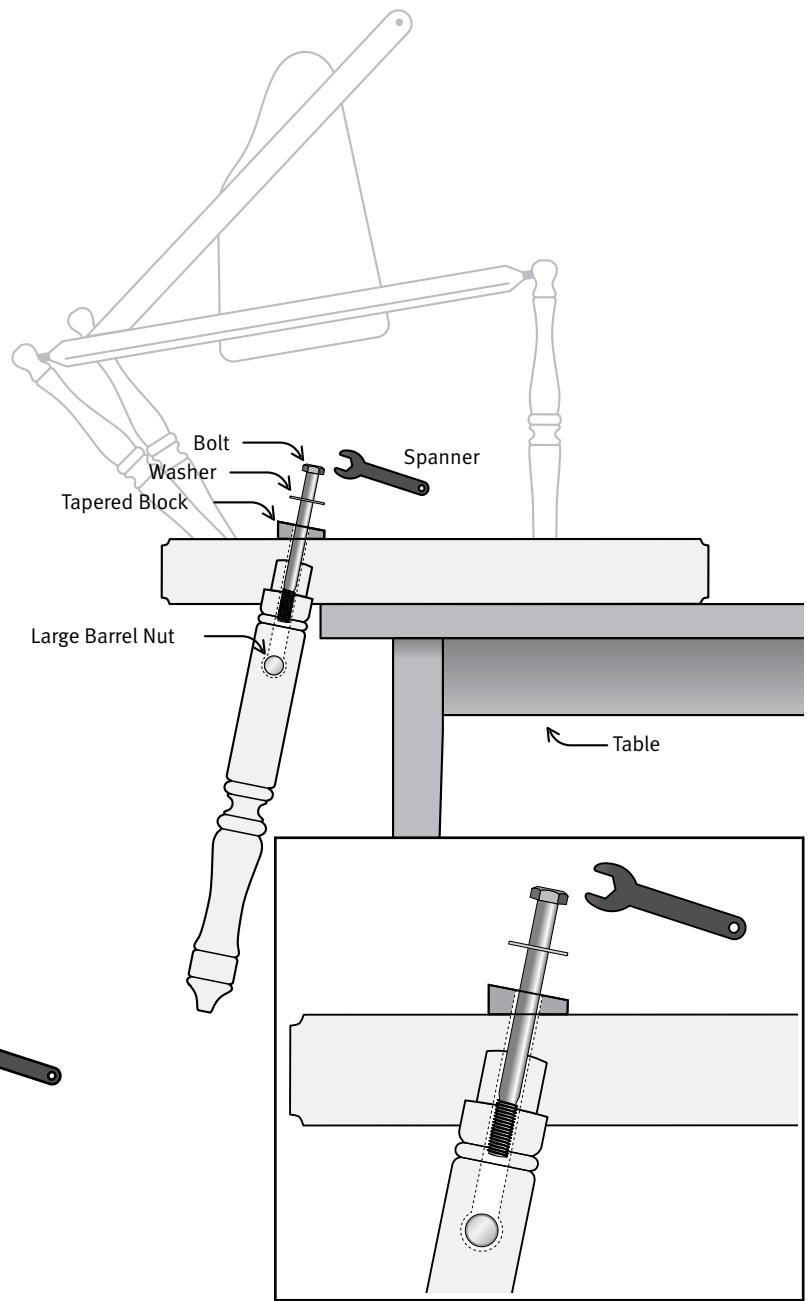
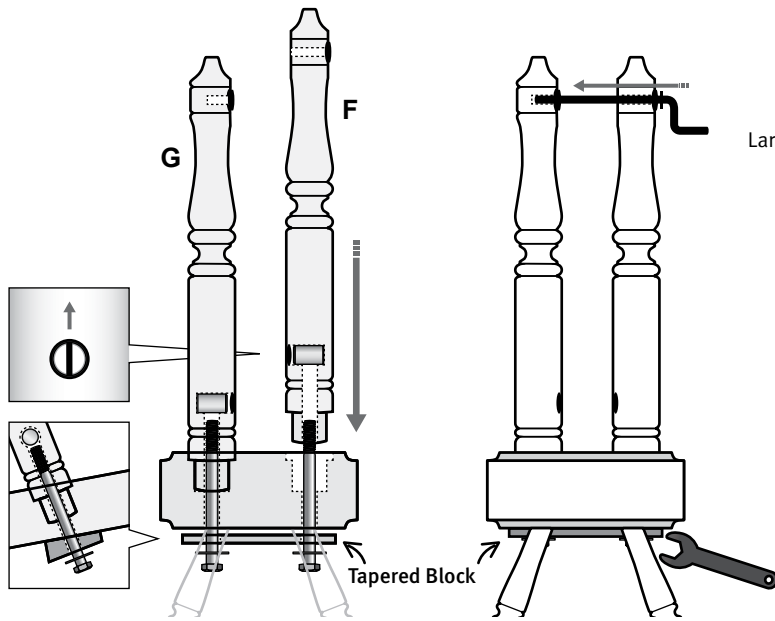
Insert the other short leg **B** into the table & tap all legs home. Secure the short legs with 32mm ( $1\frac{1}{4}$ ") screws and the long leg with a 25mm (1") screw.



#### STEP 4

Sit the table on its legs. Insert the wheel support **G** into the hole in the table on the side closest to the spinner. Note the ball bearing is to the inside. Position a large barrel nut into the hole in wheel support **G**. Note the slot in the nut is in line with the hole.

Place a 19mm ( $\frac{3}{4}$ " ) washer onto a 100mm (4" ) bolt and insert the bolt through the tapered block, table, support **G** and into the barrel nut as illustrated. Repeat with wheel support **F**. Note the bearing faces out.



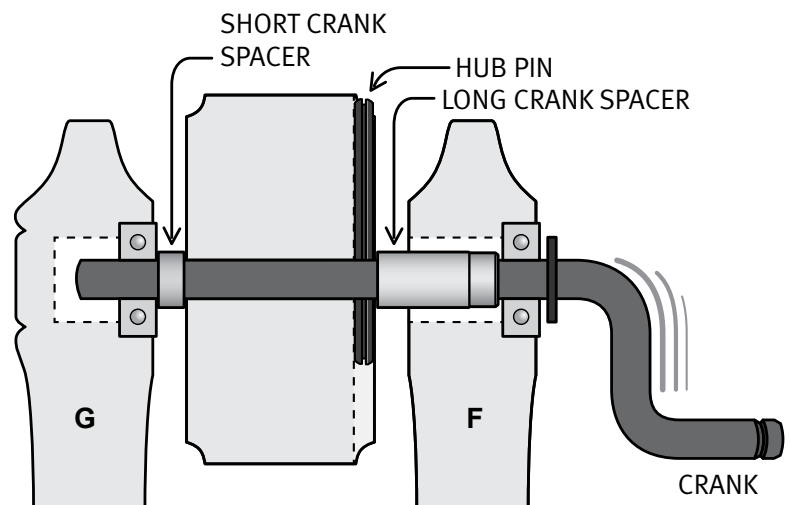
#### STEP 5

Push the crank through both ball bearings and check it turns freely. Tighten the bolts with the spanner provided. If the bearings are correctly aligned the crank will rotate freely.

#### STEP 6

Insert the crank through the bearing in wheel support **F**. Slide the long crank spacer onto the crank as shown. Rub a little candle wax onto the crank. Then place the wheel into position with the groove for the hub pin away from the spinner and push the crank through the hub. Turning the wheel as you push will make this easier. Stop when the crank protrudes about 3mm ( $\frac{1}{8}$ " ) through the hub.

Then slide the short crank spacer onto the crank. It is easier if you hold the spacer with a pair of fine pliers or scissors. Then push the crank through the hub and into the ball bearing until the hole for the hub pin aligns with the slot in the hub.

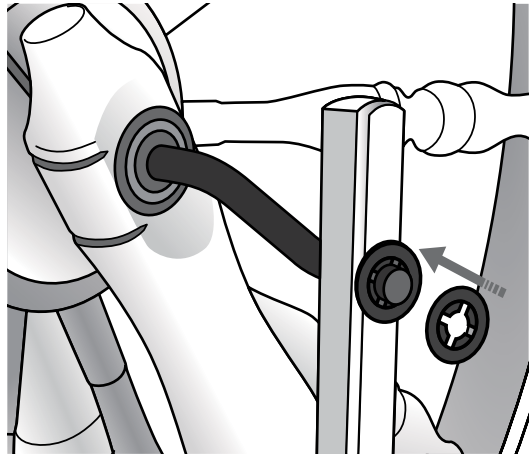
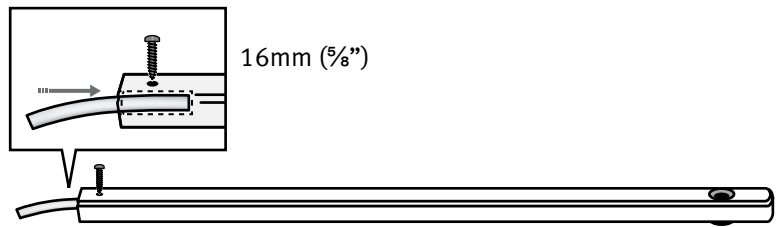


#### STEP 7

Once the hole in the crank aligns with the slot in the hub, carefully tap the 62mm ( $2\frac{1}{2}$ " ) hub pin through the hub and hole in the crank.

### STEP 8

Insert the nylon conrod joint into the hole in the end of the conrod and secure with a 16mm ( $\frac{5}{8}$ " ) pan head screw.

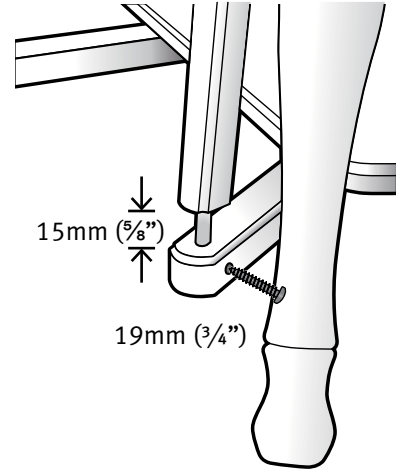


### STEP 9

Place the conrod onto the crank with the bearing to the outside and secure with the nylon retaining clip.

### STEP 10

Position the flexible con rod joint into the hole in the treadle rail. Check the gap is approx. 15mm ( $\frac{5}{8}$ " ) and secure with a 19mm ( $\frac{3}{4}$ " ) pan head screw.



### STEP 11

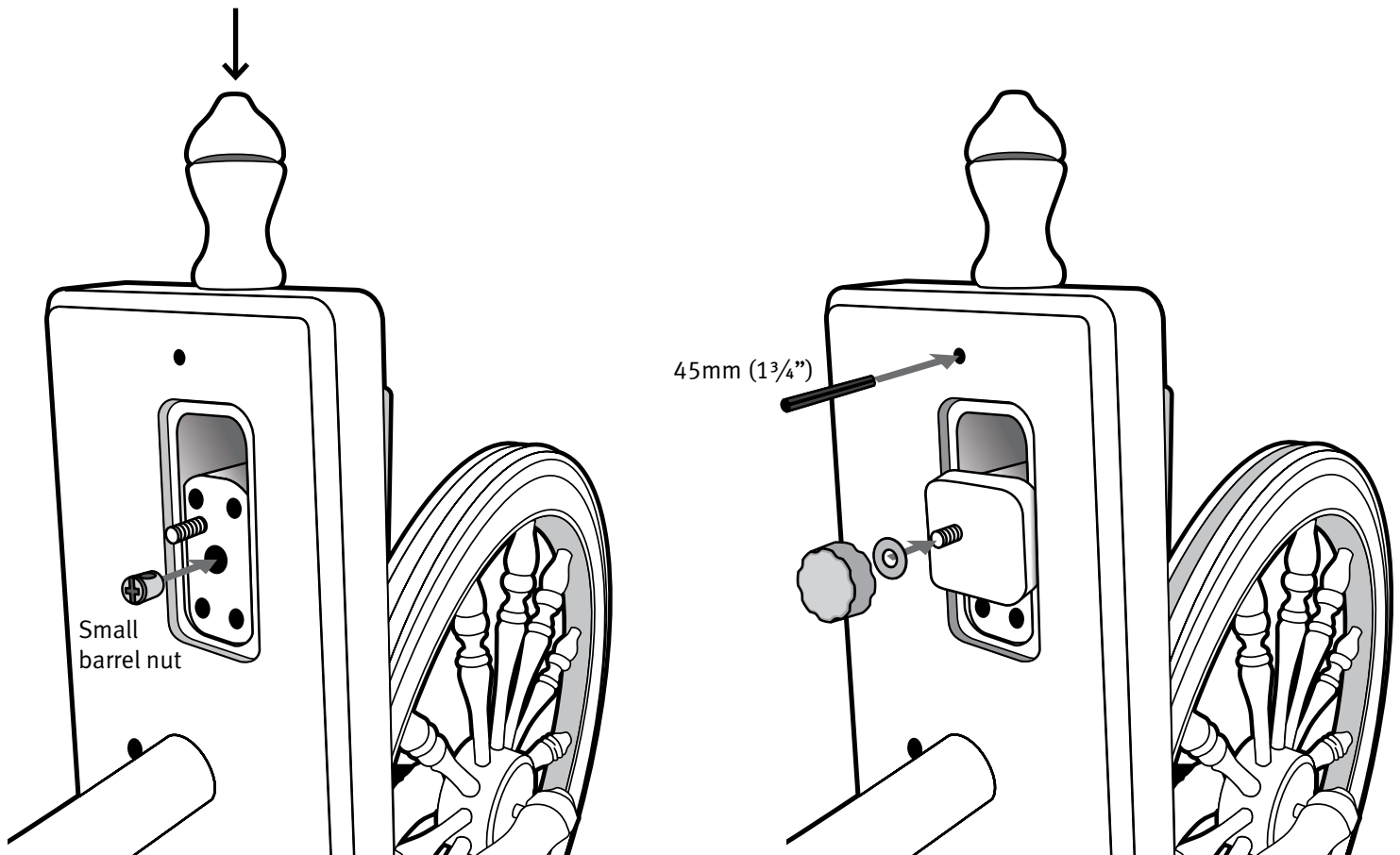
Sit the spinning wheel onto its front legs and wheel. Place the maiden bar base into the slot in the table. Slide the small barrel nut into the hole in the lower block, then thread the drive belt tensioner into the barrel nut.

### STEP 12

Place the wooden clamp block onto the bolt in the base of the maiden bar and secure with a 16mm ( $\frac{5}{8}$ " ) washer and knob. Before adjusting the drive belt tension, loosen the knob. Retighten to hold the maiden bar firm.

### STEP 13

Wax the 45mm ( $1\frac{3}{4}$ " ) tension pin and softly tap it into the hole in the underside of the table to lock the drive belt tensioner in position. Important - leave 12mm ( $\frac{1}{2}$ " ) protruding so it can be removed if necessary.



#### STEP 14

Wax the dowel ends of the two maid uprights and push into the holes in the maiden bar. Note the upright with the 12mm (1/2") hole is closest to the spinner and the upright with the 6mm (1/4") slot is on the opposite side. Check the bearings are at 90 degrees to the maiden bar and secure with 25mm (1") pan head screws and small washer. Do not over tighten as you may need to twist them later.

#### STEP 15

Thread a flyer hook into the pilot hole in the back and screw eye into the pilot holes in the front of the maiden bar.

#### STEP 16

Position the maiden bar onto the maiden bar base and secure with a 16mm (5/8") washer and knob.

#### STEP 17

Thread the flyer hooks into the pilot holes in the flyer.

#### STEP 18

Apply a drop of oil to the flyer spindle and slide a bobbin on. Note the flat surface on the end of the spindle. Place the flyer whorl onto the end of the spindle and rotate it until it pushes on easily. A drop of Vaseline on this joint will make it easier to change bobbins.

#### STEP 19

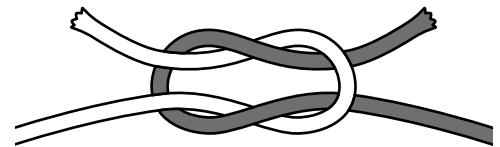
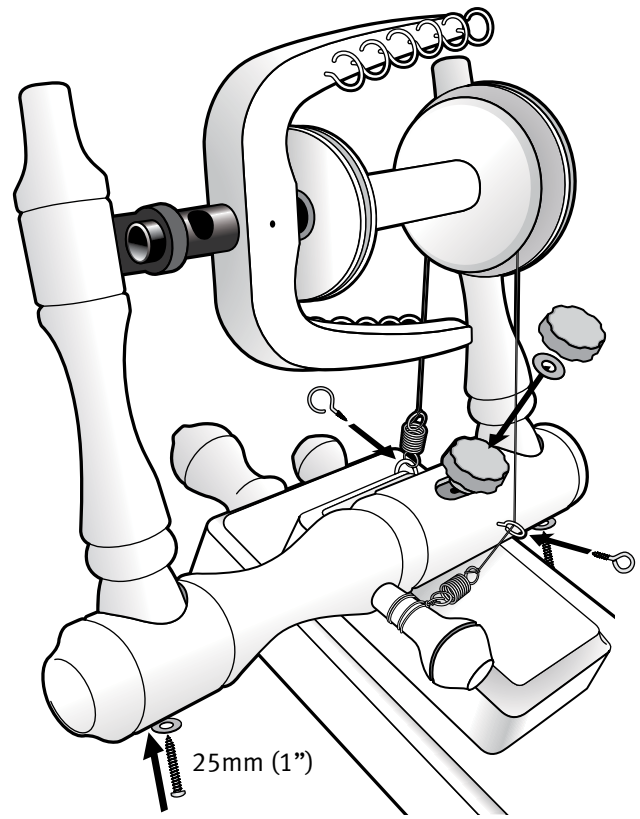
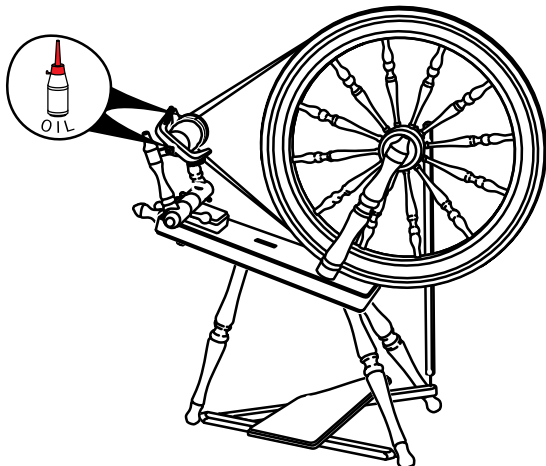
Place the flyer and bobbin into the bearings in the maid uprights. Push the tension knob into the tapered hole in the maiden bar. Tie a spring to one end of the nylon brake band and hook it over the cup hook. Position the brake band over the bobbin whorl, through the screw eye and cut it where it touches the tension knob. Tie both ends of the nylon brake band to the second spring half way between the screw eye and tension knob, thread the brake band through the hole in the tension knob and tie a knot. Trim off any surplus. When spinning with double drive remove the brake band and wrap it around the tension knob.

#### STEP 20

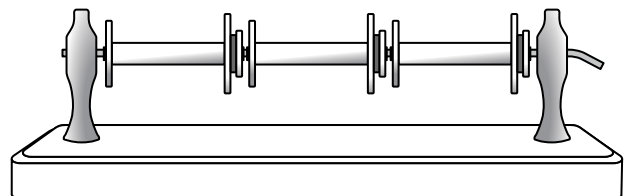
Place the threading hook into the hole in the end of the table.

#### STEP 21

Loosen the clamp block and unwind the belt tensioner to the end of its travel so the maiden bar is closest to the wheel. Place the drive belt over the wheel and wrap it in one continuous band around the bobbin over the wheel again, around the large flyer whorl and tie the two ends with a flat knot. Tighten the belt tensioner until both flyer and bobbin rotate and retighten the clamp block. Check the alignment of the wheel with the flyer and bobbin whorls. If necessary, loosen the knob, move the maiden bar horizontally until correct and then retighten.



Flat Knot



Lazy Kate

#### STEP 22

Assemble the Lazy Kate by placing the stainless steel rod through the two uprights and then gently tap them into the base.

#### STEP 23

Your Ashford Elizabeth 2 Spinning Wheel is now ready to use. Refer to the "Learn to Spin Booklet" for detailed spinning instructions. For silent efficient spinning, regularly lubricate the flyer, bobbin, conrod and treadle bearings with Ashford Spinning Wheel Oil. The wheel is supported on sealed for life ball bearings and does not need oiling.