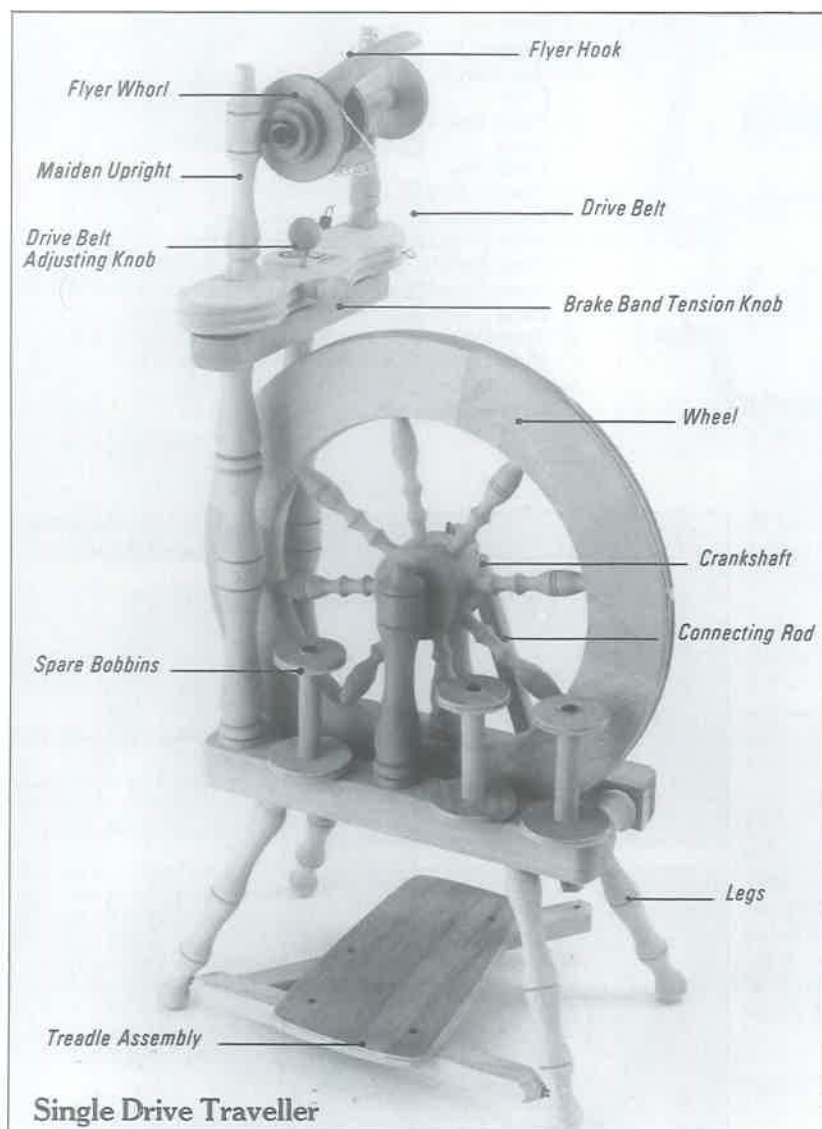


ASSEMBLY INSTRUCTIONS FOR ASHFORD TRAVELLER SPINNING WHEEL

Single and Double Drive Versions



TOOLS REQUIRED – ⊕ Screwdriver, Hammer and Candlewax (for wood screws).

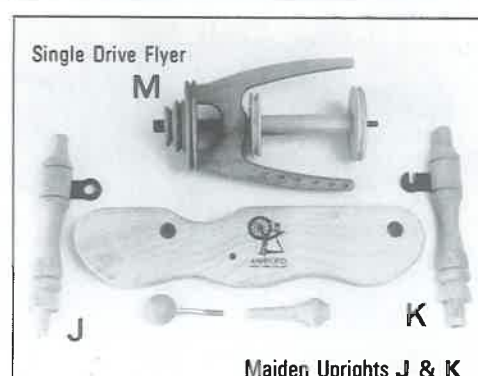
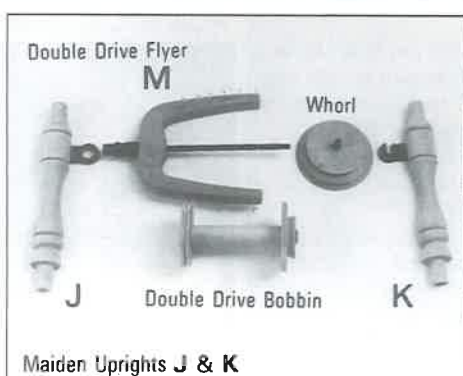
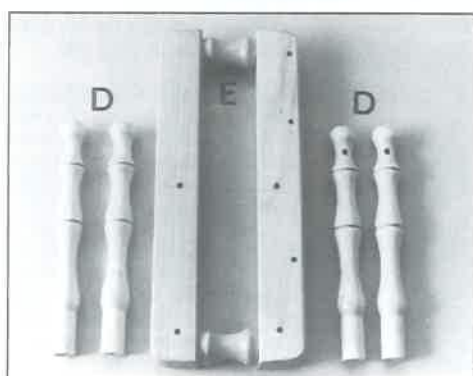
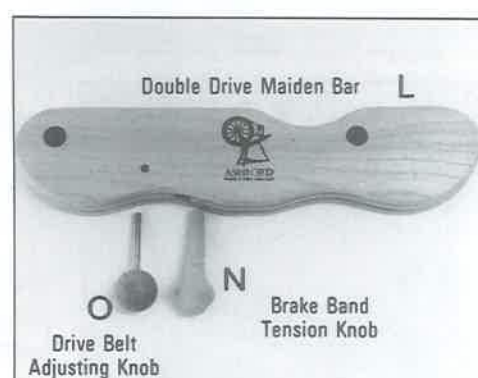
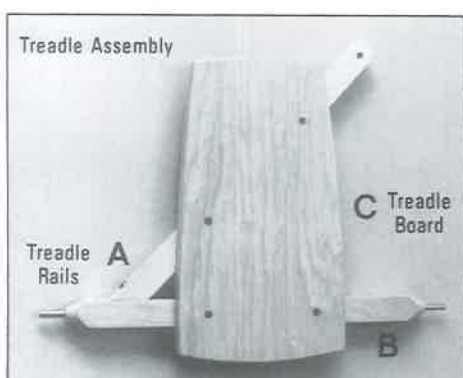
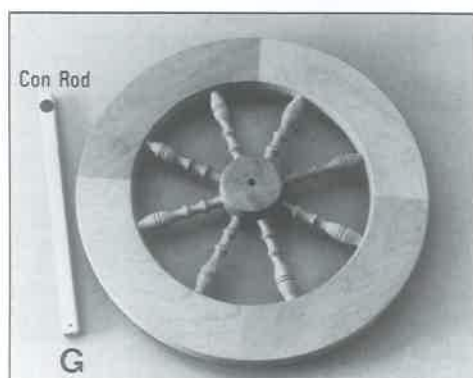
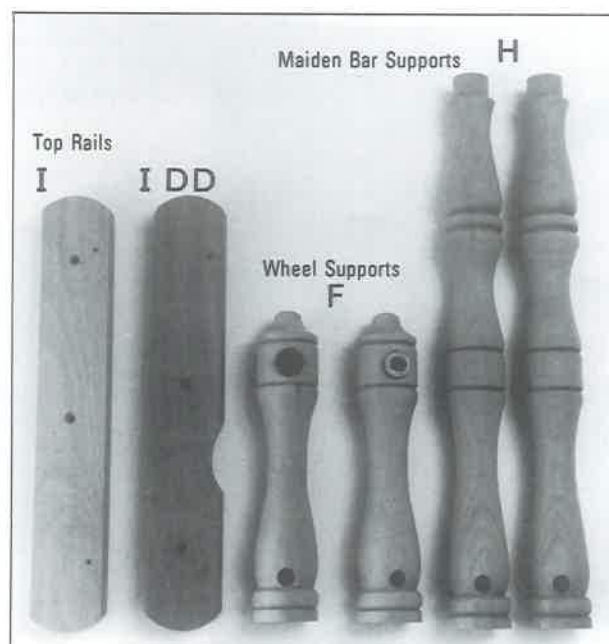
Before Commencing – Read the instructions completely, identify the parts and note the assembly sequence.

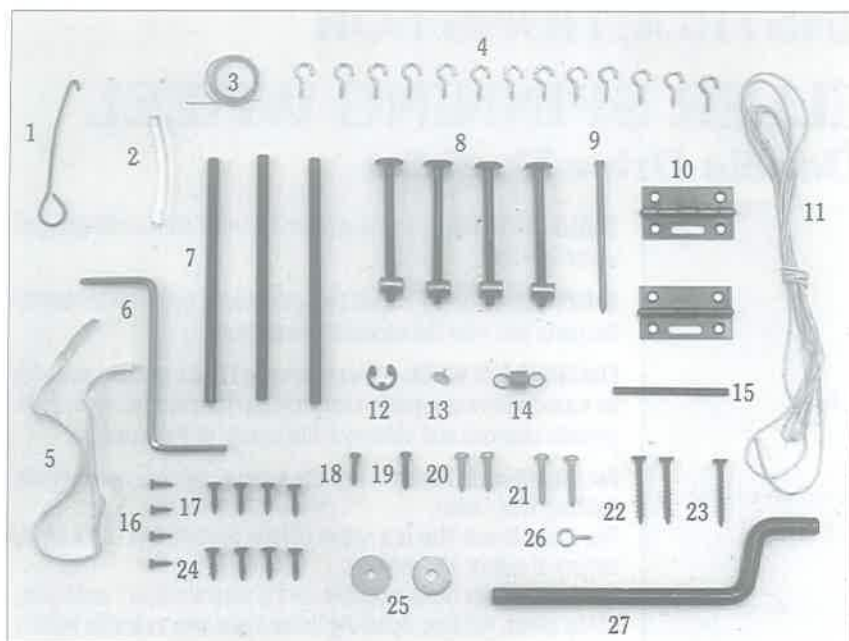
FINISHING THE WOOD – We recommend that the wood surfaces be waxed before assembly. This protects the kiln dried wood from climatic changes and enhances the beauty of the wood.

For the Ultimate Finish – Use the special, natural, new formula Ashford Wax Finish.

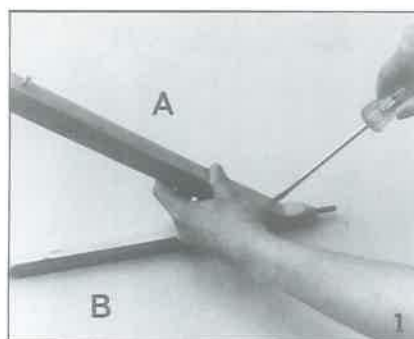
The Silver Beech Tree is a native of New Zealand and has a lovely variety of colour and grain.

The Ashford Wax Finish will enhance the natural colours and beauty of the wood. Ashford Spinning Wheels are also available factory finished in clear lacquer or walnut finish.

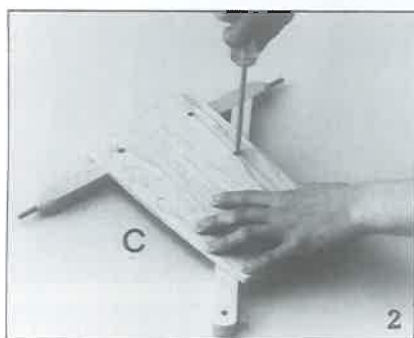




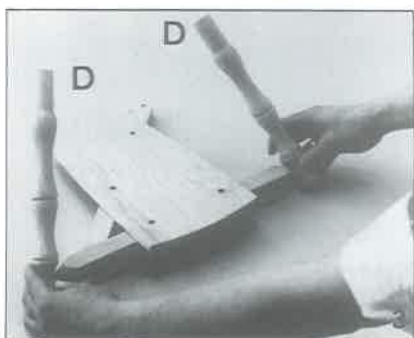
- 1 Threader Hook
- 2 Nylon Rod
- 3 Brake Band
- 4 Screw Hooks
- 5 Threader Hook Tape
- 6 Allen Key/Pozi
- 7 Steel Rods
- 8 Barrel Nuts with Bolts
- 9 Nail
- 10 Hinges
- 11 Drive Belt
- 12 E Clip
- 13 Thumb Tack
- 14 Spring
- 15 Tension Pin
- 16 12mm (1/2 inch) Countersunk Hinge Screw
- 17 20mm (3/4 inch) Screw for Treadle Board
- 18 16mm (5/8 inch) Panhead Screw for Con Rod
- 19 20mm (3/4 inch) Panhead Screw for Treadle Rail
- 20 20mm (3/4 inch) thick gauge Panhead Screw for Hinge to Top Rail
- 21 25mm (1 inch) Panhead Screw for Maiden Uprights
- 22 40mm (1 1/2 inch) Countersunk Screw for securing Top Rail
- 23 40mm (1 1/2 inch) Countersunk Screw for Treadle Rail
- 24 20mm (3/4 inch) Countersunk Screw for Legs
- 25 Large Washers
- 26 Screw Eye
- 27 Crank



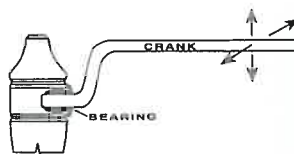
(1) Secure treadle rails 'A' and 'B' together with a 40mm (1 1/2 inch) countersunk screw.



(2) Position treadle board 'C' evenly on the treadle rails, keeping the bottom edge of 'C' parallel to rail 'B' and screwholes centred on the rails. Secure treadle board 'C' to rails 'A' and 'B' using four 20mm (3/4 inch) screws.



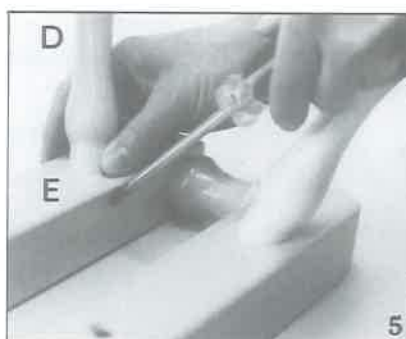
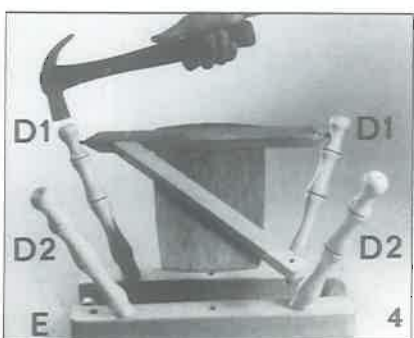
(3) Fit the treadle assembly into the holes in front legs 'D'.



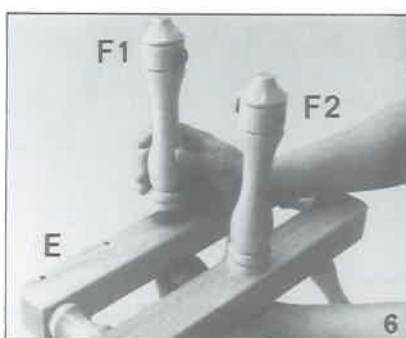
(4) Tap the two front legs into section 'E' **noting** that the front rail of 'E' has five holes on the upper surface.

Now tap the back legs in place.

Hammer all legs in firmly To ensure base stands level, sandpaper the ends of the longest legs.



(5) Secure all legs with four 20mm (3/4 inch) countersunk screws.



(6) Fixing Wheel Supports F1 & F2 to Base E:

Position a barrel nut in the base of the wheel support F1, which has the hole at the top part way through it.

Keeping the wheel bearing facing inwards, secure the wheel support F1 to the front rail of the base E by threading a bolt (8) through the base into the wheel support and barrel nut. Keep slotted ends of barrel nuts facing out of the hole in wheel support to enable a screwdriver to be used to assist in aligning up barrel nuts if needed.

Tighten the bolt with allen key provided, but do not overtighten at this stage. Secure back wheel support F2 as in step above. Note F2 has a hole right through top end for the crank.



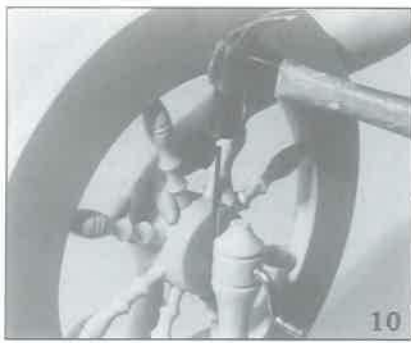
(7) Insert the crank through both wheel bearings. If the bearings are correctly aligned the crank should rotate freely. If the crank does not rotate freely insert the short end of the crank into one bearing and move it vertically or horizontally. Then repeat for the other bearing testing the alignment of the two bearings as you proceed. Refer to illustration.

(8) Remove crank, then position the wheel between the supports with the tension pin groove in the hub of the wheel towards the crank side.

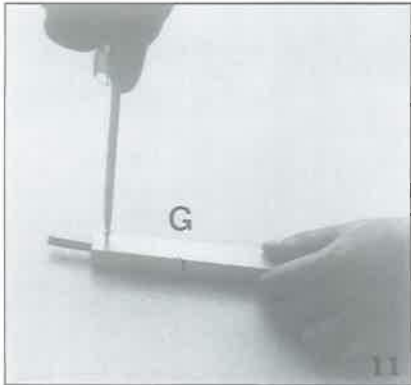
Insert the crank through the hub (this has deliberately been made a firm fit in the hole so do not ream out the hole. However a little wax or Ashford spinning wheel oil on the crank will make this easier.

(9) To secure wheel first locate the hole in the crank by pushing the nail supplied in the hardware, through the groove in the hub, and twisting the crank backwards and forwards until the hole is located.

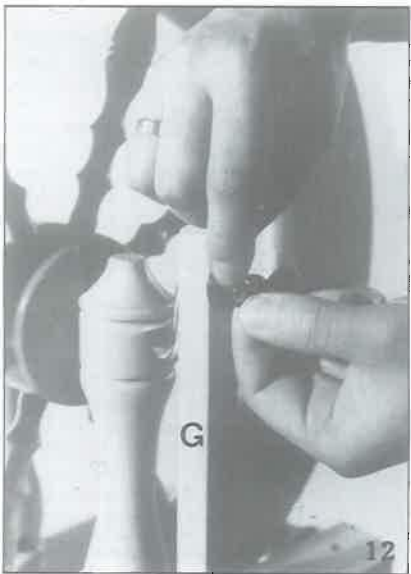




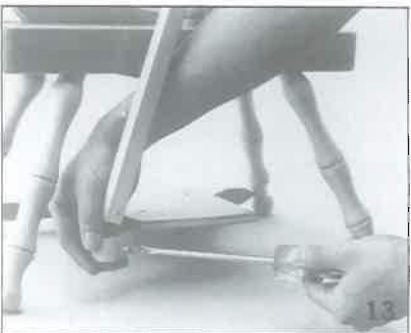
(10) Next remove nail and tap in tension pin through the hub and crank. Check that the wheel spins freely with approx. 1mm ($\frac{1}{16}$ inch) clearance between the uprights. If insufficient clearance for wheel, loosen the wheel supports F1 & F2. Spread slightly and re-tighten. If it is required to remove the pin, file off the point of the nail and punch the pin back through the hub.



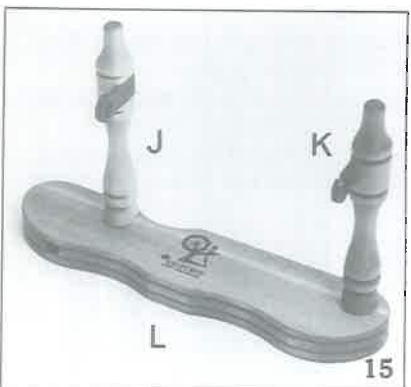
(11) Attach the nylon rod into the connecting rod G and secure with a 16mm ($\frac{5}{8}$ inch) pan head screw. Do not overtighten screw.



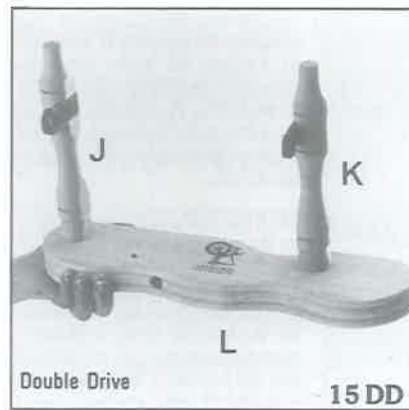
(12) Fit connecting rod G to the crank, keeping the bearing to the outside. Fit the E clip into the groove of the crank. To remove prise off with a screwdriver.



(13) Insert the other end of the nylon rod into treadle rail 'A' so end of rod is level with bottom. Secure with 20mm ($\frac{3}{4}$ inch) pan head screw. Do not overtighten.



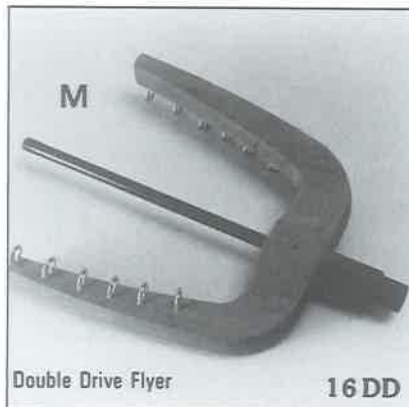
(15) **Flyer Unit**
Wax the dowel ends of both maiden uprights 'K' and 'J' before inserting in the maiden bar 'L' and secure with 25mm (1 inch) pan head screws and large washers. Tighten sufficiently so they can still be twisted to remove bobbin.



(15DD) **Double Drive Flyer Unit:**
Follow instructions 15.

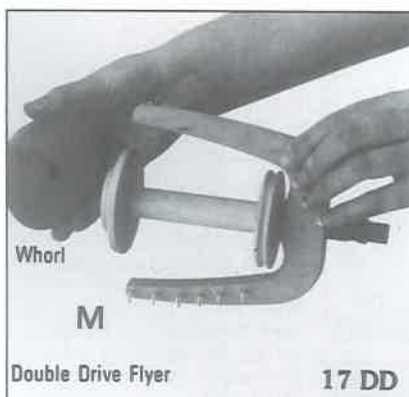


(16 & 16DD) Thread 12 screw hooks into the flyer. All holes are pre-drilled.



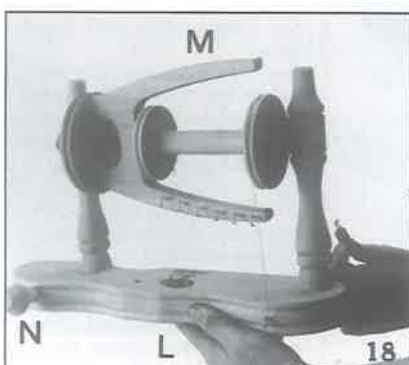
(17) Place a bobbin on the flyer spindle (large end of bobbin is positioned at the open end of flyer). Then fit the flyer and bobbin between the maiden uprights.

To remove bobbin, grasp large bobbin end and lift spindle out of click bearing. Twist upright 'J' sufficiently to allow bobbin to be removed from the flyer.



(17DD) **Double Drive:**
Place a bobbin on the flyer spindle. Push the flyer whorl onto the end of the flyer spindle. Now fit the flyer and bobbin between the maiden uprights.

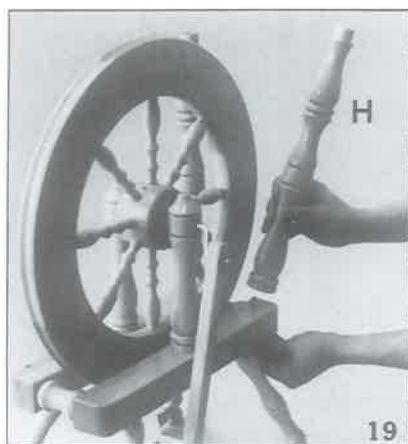
To remove bobbin, follow instruction 17 then remove flyer whorl.



(18) **Single Drive and Double Drive maiden bars:**
Fix one screw hook into the hinged side of maiden bar 'L' and the screw eye into the opposite side of 'L'. Holes are pre-drilled.

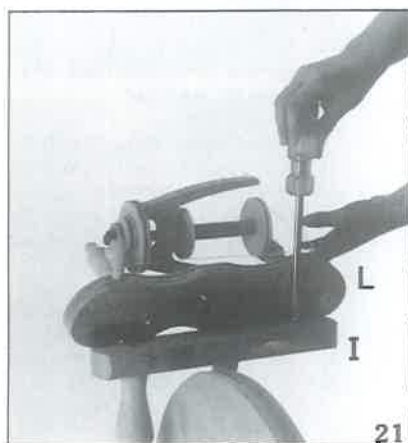
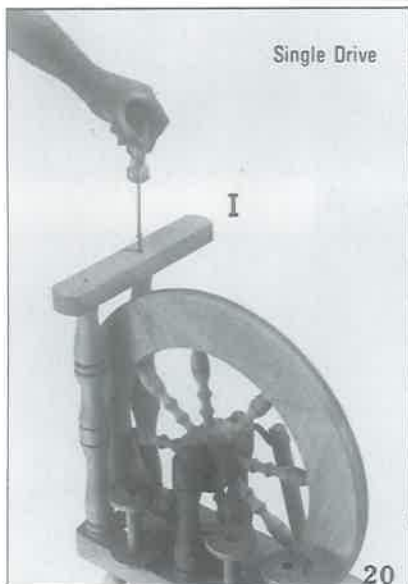
Thread the nylon line through the hole in the brake band tension knob 'N' and secure one end with a knot. Fit knob 'N' into large hole in the maiden bar 'L', do not wax or lubricate the spigot of knob 'N'.

Thread nylon line through screw eye, over grooved end of bobbin, then tie to spring. Hook spring onto screw hook. Adjust knob 'N' to obtain desired brake tension. Do not over stretch spring.



(19) Position barrel nuts in the base of maiden bar supports 'H' (refer step 6), keeping the barrel nut holes facing inwards. Secure the maiden bar supports through the base by threading bolts (8) through the base up into the maiden bar support barrel nuts.

(20 & 20DD) Position the top rail 'I' on the supports 'H' and secure with 40mm (1½ inch) countersunk screws. Note: the single drive top rail extends away from the spinner and for the double drive, it projects towards the spinner. We recommend that the top rail 'I' be glued to the supports 'H' with a reliable wood glue as this will help eliminate any vibration.

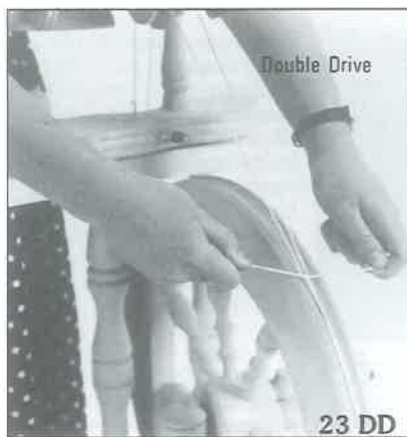


(21 & 21DD) Secure maiden bar 'L' to 'I' with two 20mm (¾ inch) thick gauge pan head screws through the slots in the hinges which allow for correct alignment of the driving belt. When correct alignment has been made the belt will run equally well on both the large (slow) and small (fast) pulleys. Do not tighten screws at this stage.

(22) Single Drive and Double Drive:

Knob 'O' screws into place on the maiden bar to tighten driving belt. To prevent bolt in knob 'O' marking the top rail, place thumb tack directly beneath it on top rail after step 23.

(23) Place driving belt around the wheel and large flyer pulley then tie the ends with a flat knot. Sight along the belt and move the maiden bar until the wheel and flyer are aligned. Slip drive belt off the wheel, tilt back maiden bar and tighten the two screws. Replace belt.



(23DD) Place drive belt around the wheel, around the flyer whorl, wrap around the wheel again and around the bobbin whorl, securing the ends with a flat knot. Sight along the drive belt and move the maiden bar until the wheel and the whorls are aligned. This centering position allows both whorls to be used at one setting. Use the large flyer whorl for soft yarns, when spinning coarse fibres or learning and the smaller whorl when spinning finer fibres or when more twist is required.



'Flat Knot'

(24) Adjust drive belt tension until drive belt is just tight enough so it doesn't slip when treadling.

(25) Threading Hook Assembly: Thread tape through looped end of threading hook then tie ends together. This may now be positioned over brake tension knob for easy location.

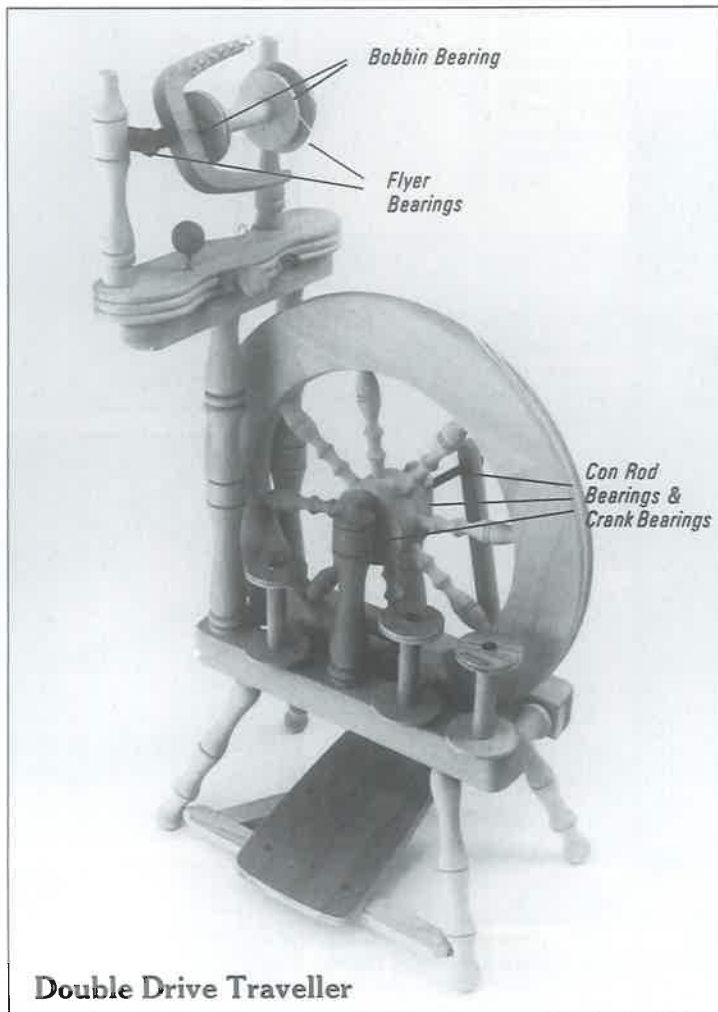
(26) Tap three steel rods onto front rail 'E' for bobbin holders. Place spare bobbins onto steel rods.

(27) Oil all bearings for the silent efficient running of your wheel. Repeat application every 3-4 hours of work. We recommend Ashford Spinning Oil for this purpose.

(28) Single Drive and Double Drive Conversion:

To convert the double drive to single drive (scotch tension) place both loops of the drive band over the large flyer whorl (loosen drive belt tension if necessary). Next place nylon brake band over large grooved end of bobbin, hooking the spring onto the screw hook on maiden bar. Re-adjust tension knob without over stretching spring.

To change to double band spinning, unhook spring from hook, remove nylon from around bobbin and wind up excess nylon with brake band tension knob.



ACCESSORIES:

BASIC JUMBO FLYER UNIT: The Traveller has been designed to take the jumbo flyer. Spinners interested in heavy bulky yarn will find this a useful accessory. The KIT consists of a large flyer with a 5/8 inch (16mm) orifice, a special maid and one large size bobbin.

HAND CARDS: (Curved backs): Prepares fleece for superior spinning and/or blends fibres. Fetting cloth 60 points to square inch. Sold in pairs. Size 203 x 127mm (8 x 5 in). Also cotton and leather back available.

FLICK CARDS: Used to tease wool by flicking against wood or leather surface. Single fetting cloth mounted on wood. Size 98 x 51mm (3¾ x 2 in).

NIDDY NODDY: A turned handpiece with tapered crossbars for skeins 1.5m (5ft) long. Makes quicker washing, drying, dyeing and calculations for warps.

SPINNING CHAIR: To complement spinning wheels. Made in N.Z. native silver beech. Carved back has slotted hand-hold. Comfortable seat height 430mm (17 in). Lathed legs firm and stable.

DESIGNED AND MANUFACTURED BY **ASHFORD HANDICRAFTS LTD.**
P.O. BOX 474, ASHBURTON, NEW ZEALAND.

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