

Jack Loom

8 Shaft - 97cm (38ins)



JL90ES260117

ASSEMBLY INSTRUCTIONS FOR THE ASHFORD JACK LOOM

Finishing the wood

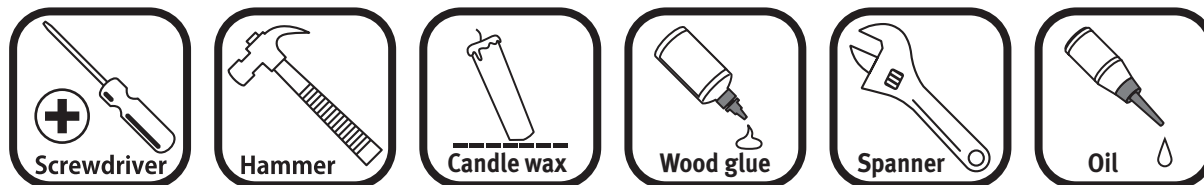
The Sliver Beech tree is a native of New Zealand and has a lovely variety of colour and grain.

This Jack Loom has been finished with a water based lacquer to protect the kiln dried timber from climatic changes and enhance its natural character. To repair and restore the finish use Ashford Wax Polish to enhance the natural beauty of the wood.

Before Assembly

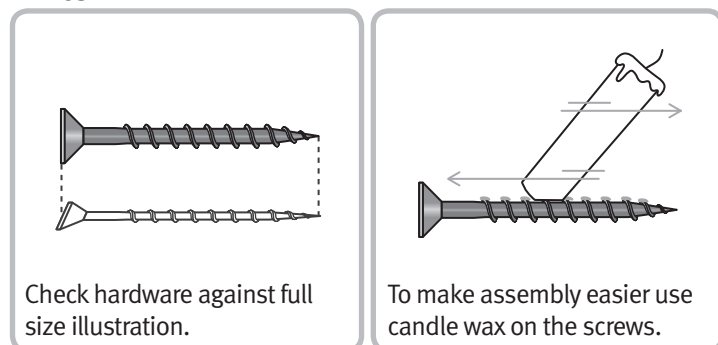
- Please read these instructions completely, identify all parts and hardware and note the assembly sequence.
- **BOLTS.** Check and sort the sizes and quantities against the full-size drawing on page 4.
- Rub candlewax on the threads of the woodscrews to make assembly easier.

Tools Required



Screwdriver, hammer, candlewax, wood glue, light lubrication oil, adjustable spanner and a ruler.

Hints



More Information



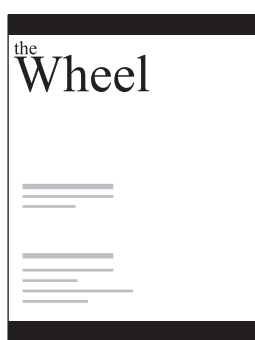
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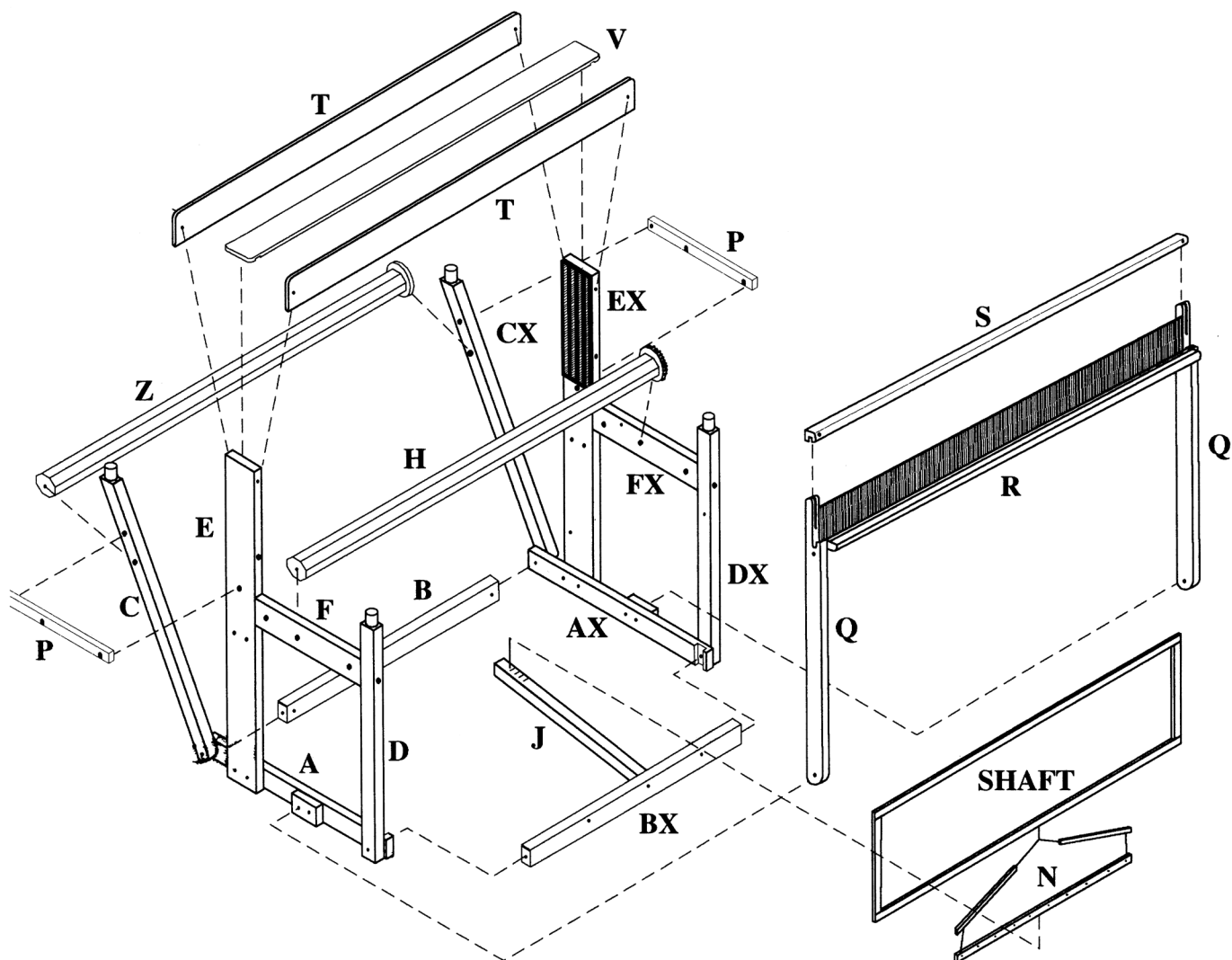
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The Wheel Magazine

Ashford's annual fibrecraft 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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OVERVIEW



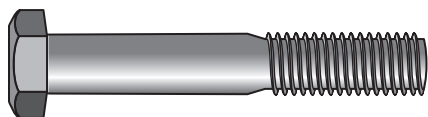
HARDWARE CHECKLIST

1 – M8 x 50 Hex Head Bolt
 6 – M6 x 80 Hex Head Bolt
 2 – M6 x 100 Hex Head Bolt
 2 – M6 x 65 Hex Head Bolt
 1 – M8 x 100 Cup Head Bolt
 4 – M6 x 50 Cup Head Bolt
 1 – M6 x 40 Cup Head Bolt
 9 – M6 x 65 Cup Head Bolt
 2 – M6 x 75 Cup Head Bolt
 3 – M6 x 70 Cup Head Bolt
 29 – M6 X 16 Washer
 6 – M6 x 22 Washer
 1 – M8 x 19 Washer
 48 – M8 x 25 Washer
 8 – 8 x 2 Screw

4 – 8 x 1 1/2 Screw
 1 – 12 x 1 Pan Head Screw
 2 – 6 x 1/2 Pan Head Screw
 1 – M11 x 4 Brass Spacer
 1 – 6.5 x 40 Cotter Pin
 3 – Screw Hook
 13 – M6 Hex Nut
 1 – M8 Hex Nut
 1 – M10 Hex Nut
 1 – M8 Nylock Nut
 3 – M6 Nylock Nut
 16 – M11 Rubber Buffer
 2 – M16 Rubber Buffer
 16 – 3/32 Dome Caps
 10 – M6 Barrel Nut

2 – M10 Spanner
 1 – M13 Spanner
 6 – M6 Nylon Knob
 21 – Texsolv Straight Peg
 16 – Harness Hook
 1 – Heddle Hook - Double ended
 1 – Heddle Hook - Metal
 40 – Nylon Cord 60cm
 14 – Texsolv Cord 80cm
 8 – Texsolv Heddles 268, bundles of 100
 6 – M8 x 170 Steel Rods - Lever Assembly
 2 – 5/8 x 75 Steel Shaft - Cloth beam and Warp Roller
 2 – M6 x 180 Threaded Rod with Dome Nut

REAL SCALE HARDWARE



1 – M8 x 50 Hex Head Bolt



1 – M10 Hex Nut



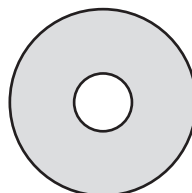
1 – M8 Hex Nut



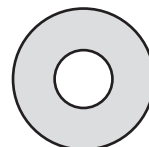
13 – M6 Hex Nut



2 – M6 x 100 Hex Head Bolt



48 – M8 x 25 Washer



1 – M8 x 19 Washer



6 – M6 x 80 Hex Head Bolt



6 – M6 x 22 Washer



29 – M6 X 16 Washer



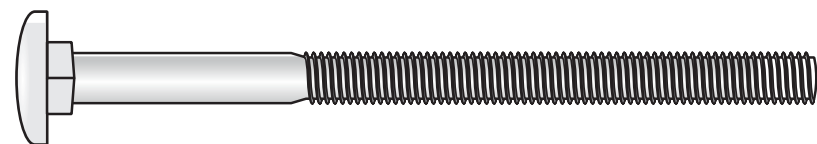
2 – M6 x 65 Hex Head Bolt



1 – M8 Nylock Nut



3 – M6 Nylock Nut



1 – M8 x 100 Cup Head Bolt



2 – M6 x 75 Cup Head Bolt



2 – M16 Rubber Buffer



16 – M11 Rubber Buffer



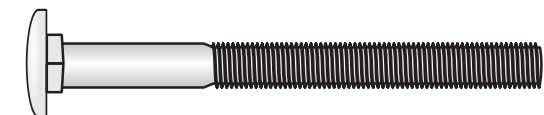
3 – M6 x 70 Cup Head Bolt



16 – 3/32 Dome Cap



10 – M6 Barrel Nut



9 – M6 x 65 Cup Head Bolt



4 – 8 x 1½ Screw



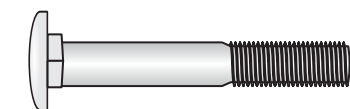
1 – M11 x 4 Brass Spacer



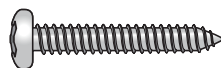
4 – M6 x 50 Cup Head Bolt



8 – 8 x 2 Screw



1 – M6 x 40 Cup Head Bolt



1 – 12 x 1 Pan Head Screw



21 – Texsolv Straight Peg

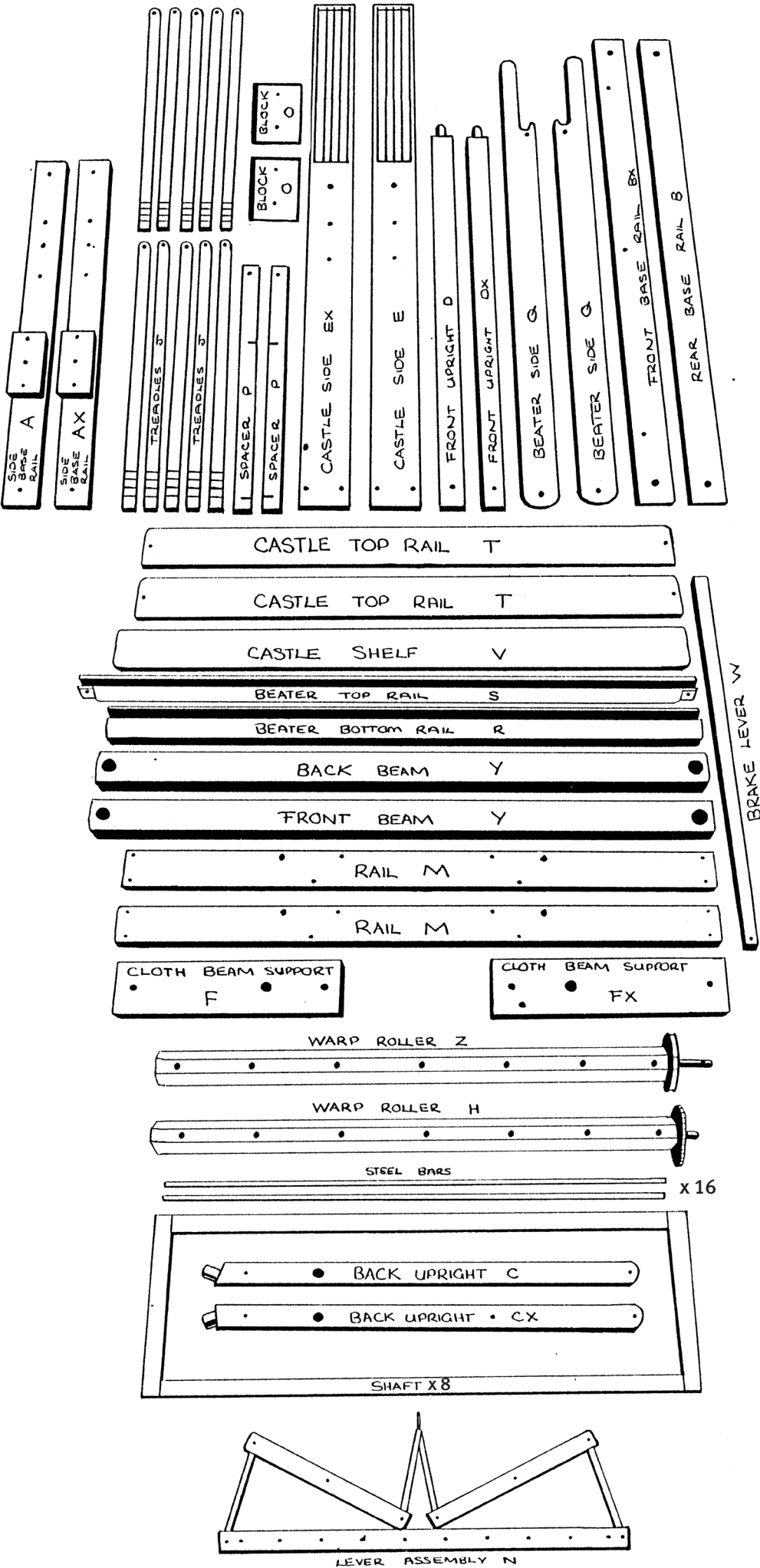


2 – 6 x ½ Pan Head Screw

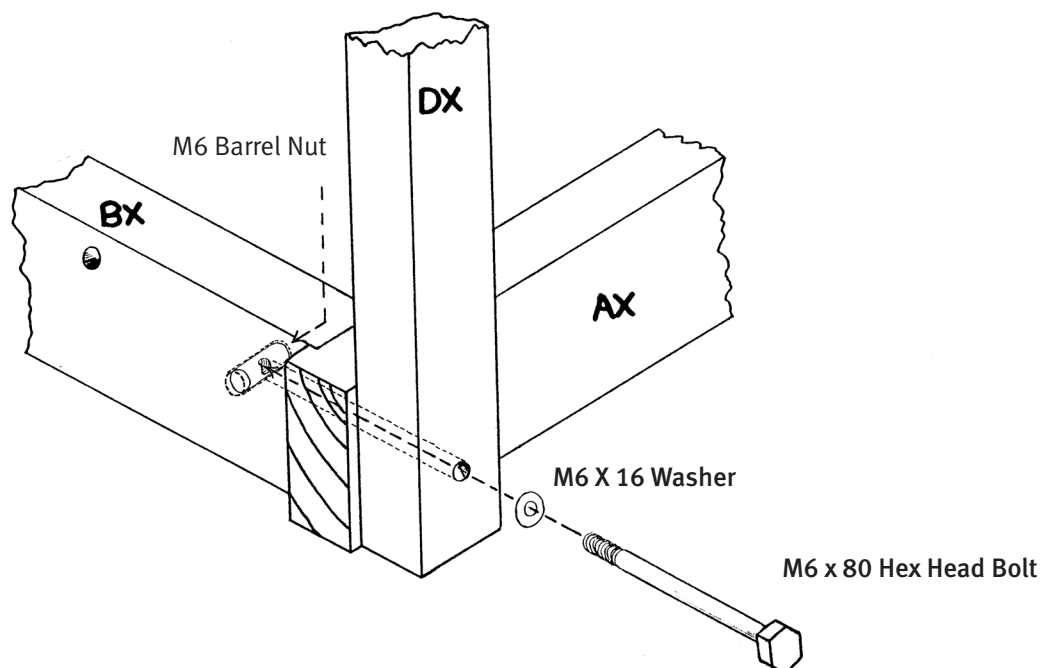


1 – 6.5 x 40 Cotter Pin

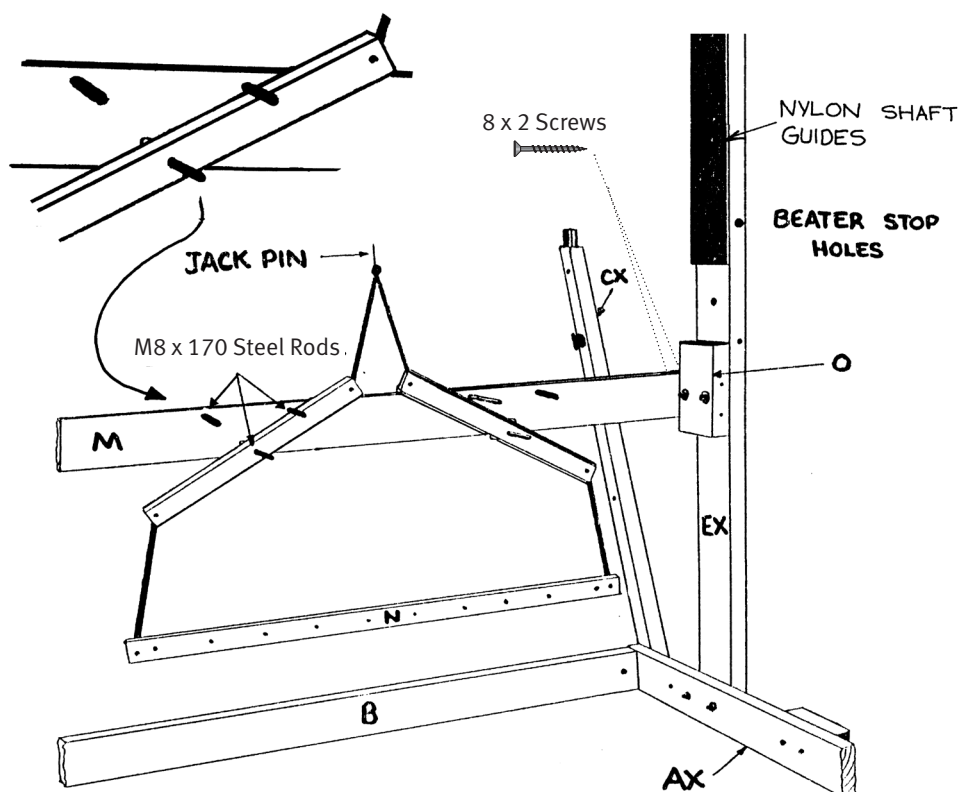
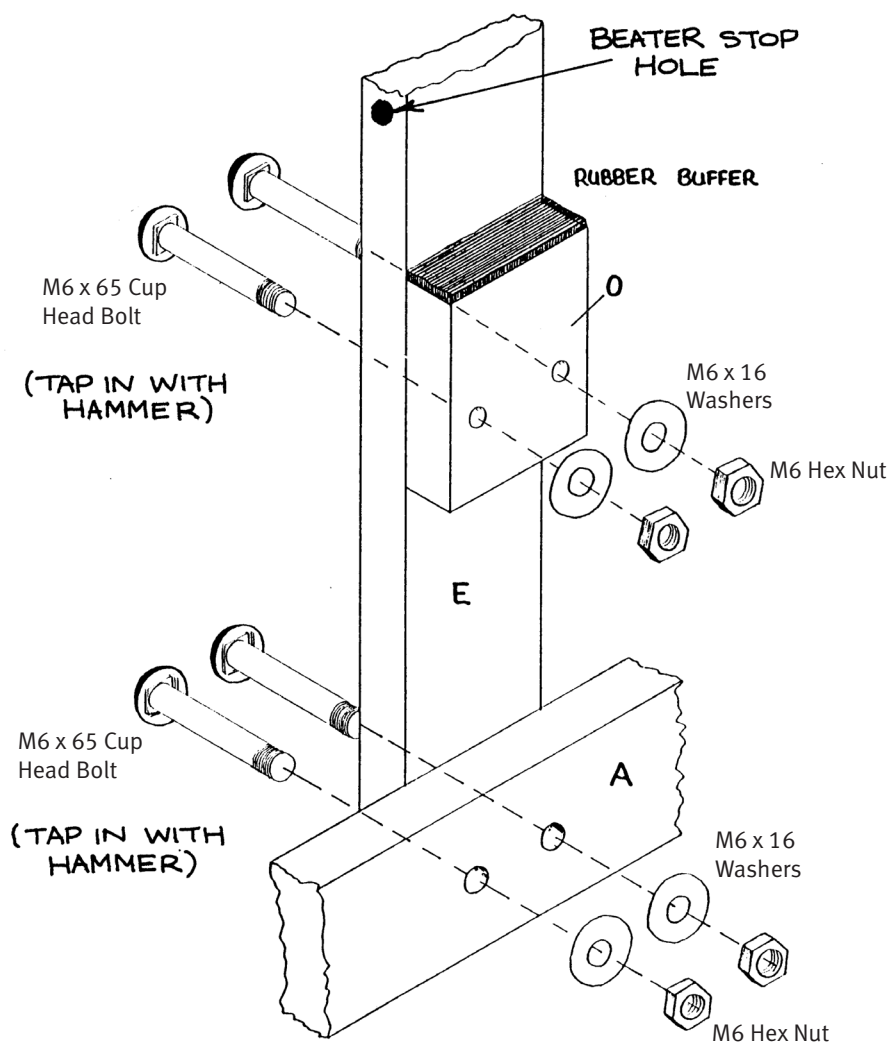
PARTS



1. Assemble the base using M6 x 80 Hex Head Bolt, M6 X 16 Washer and M6 Barrel Nut. Note the holes in rail **BX** are to the top. Nylon bushes in parts **C** and **CX** are on the inside.

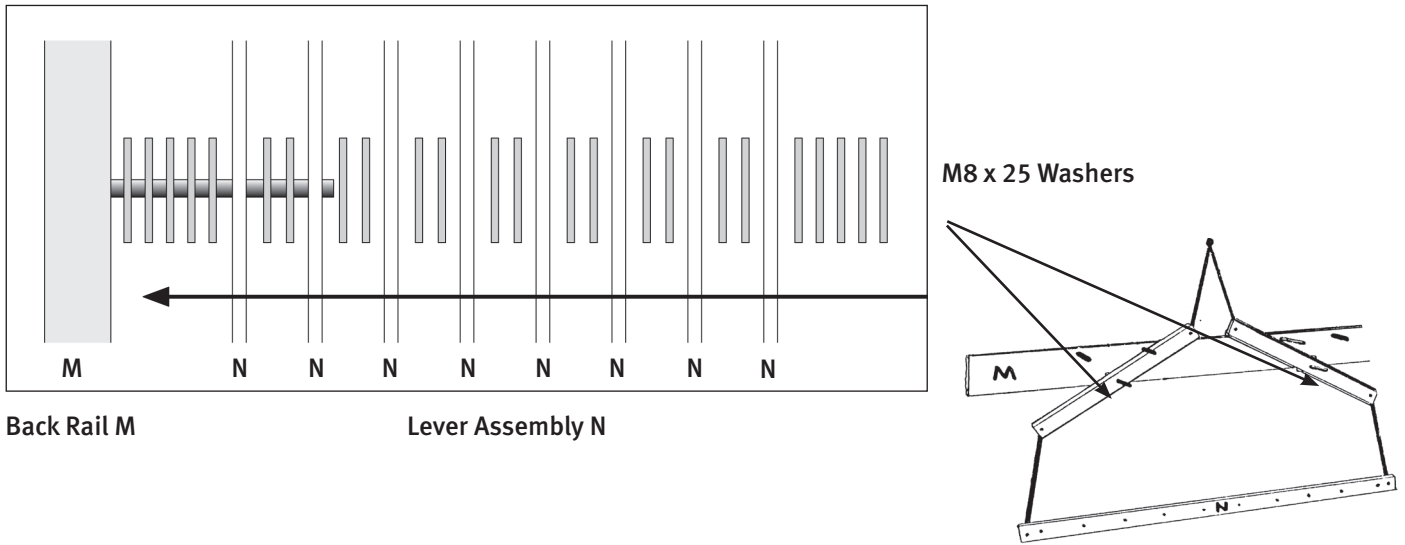


2. Bolt castle side **E** to the outside of base rail **A**, and the castle side **EX** to the base rail **AX** using M6 x 65 Cup Head Bolts, M6 X 16 Washer and M6 Hex Nut. **Note** the nylon shaft guides are to the inside of the frame and holes for the beater stops face forward.
3. Secure the blocks **O** to the inside of the castle sides **E** and **EX** with M6 x 65 Cup Head Bolts, M6 X 16 Washer and M6 Hex Nut

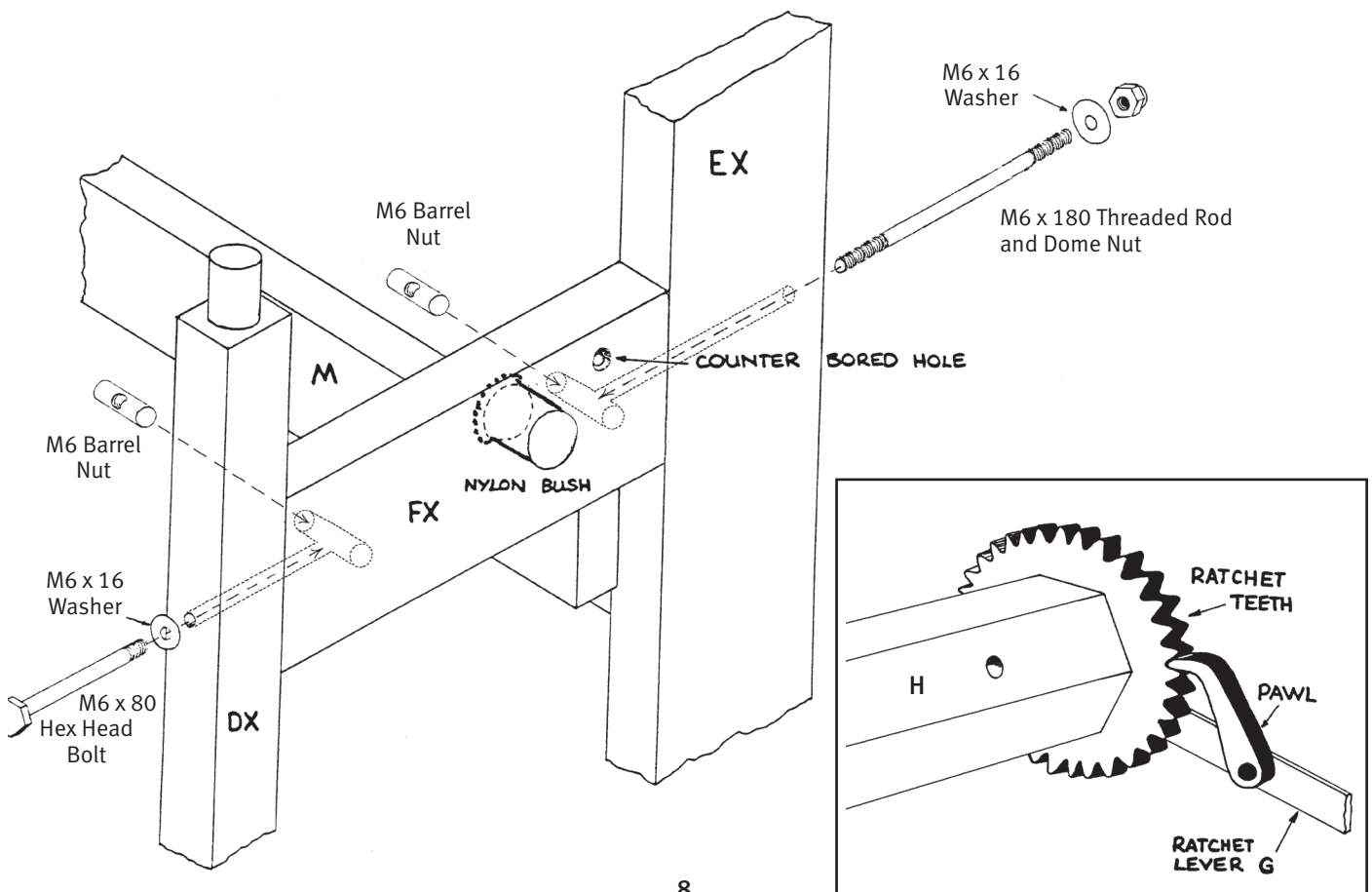


4. Secure one rail **M** to blocks **O** using two 8 x 2 Screws at each end. Note the position of the holes for the steel rods **x**.
5. Place the six M8 x 170 Steel Rods into the rail **M**.

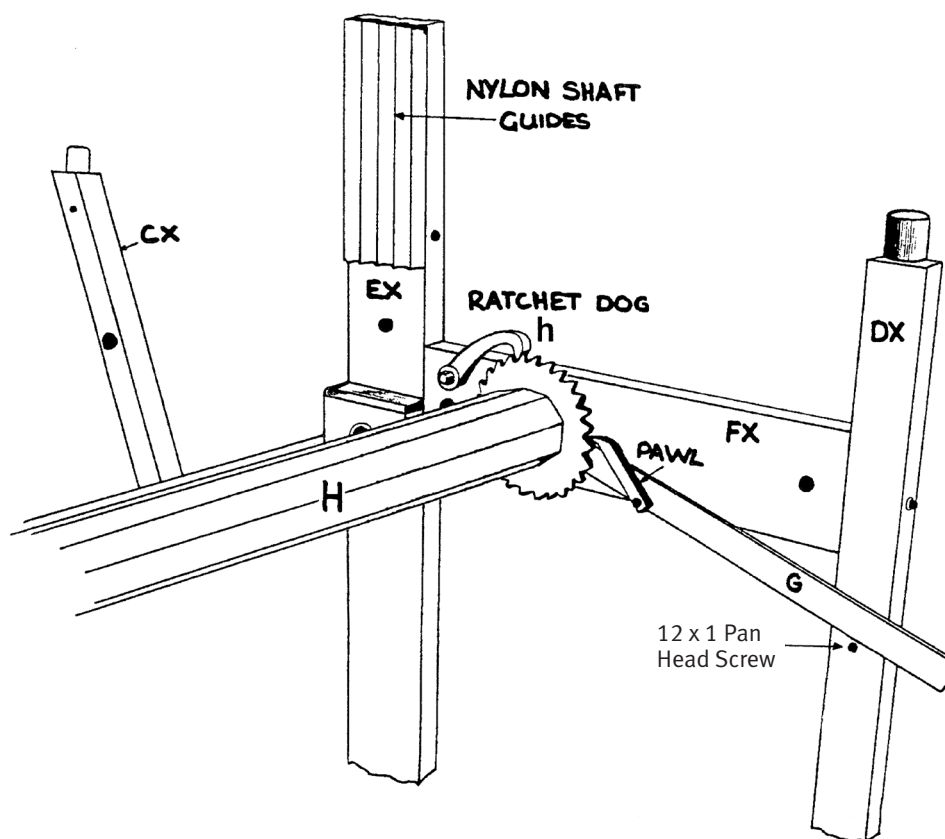
6. Using M8 x 25 Washers, place 5 washers onto the two lower steel rods followed by a lever assembly **N**. Place two washers onto each lower steel rod followed by another lever assembly **N**. Repeat this procedure until all the lever assemblies are in position, finishing with 5 washers. A drop of light oil on the rods will help make treading easier.



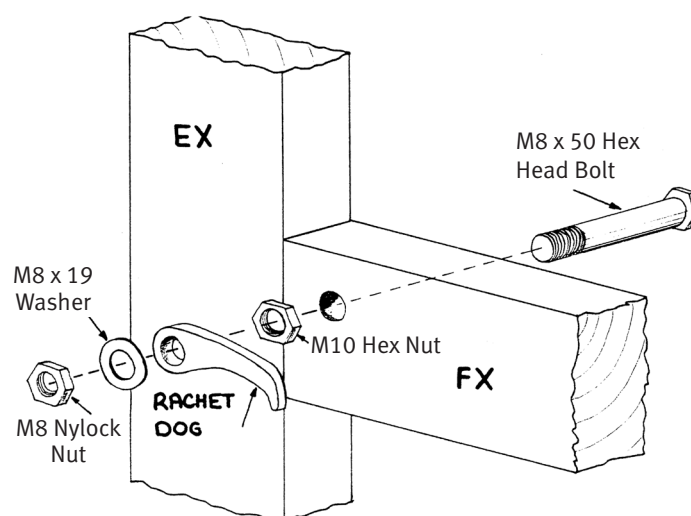
7. Locate the second rail **M** onto the steel rods and secure to blocks **O** using two 8 x 2 Screws at each end.
8. Identify the cloth beam supports **F** (left) and **FX** (right). **FX** has a counter-bored hole on the outside.
9. Attach **but do not tighten FX** to **DX** with a M6 x 80 Hex Head Bolt, M6 X 16 Washer and M6 Barrel Nut and attach to **EX** with the M6 x 180 Threaded Rod with Dome Nut and M6 X 16 Washer. Repeat for the opposite side with **F**, **D** and **E**. Keeping the nylon bushes to the inside.
10. Slide the ratchet lever **G** onto the steel shaft on the cloth beam **H** and ensure the pawl engages the ratchet teeth.
11. Twist the cloth beam support **FX** up slightly and locate the cloth beam **H** into the nylon bush. Lower **H** so the holes in **H** and **F** line up and then tap a 5/8 x 75 Steel Shaft through the nylon bush and into **H**. Then tighten the bolts securing **F** and **FX**.

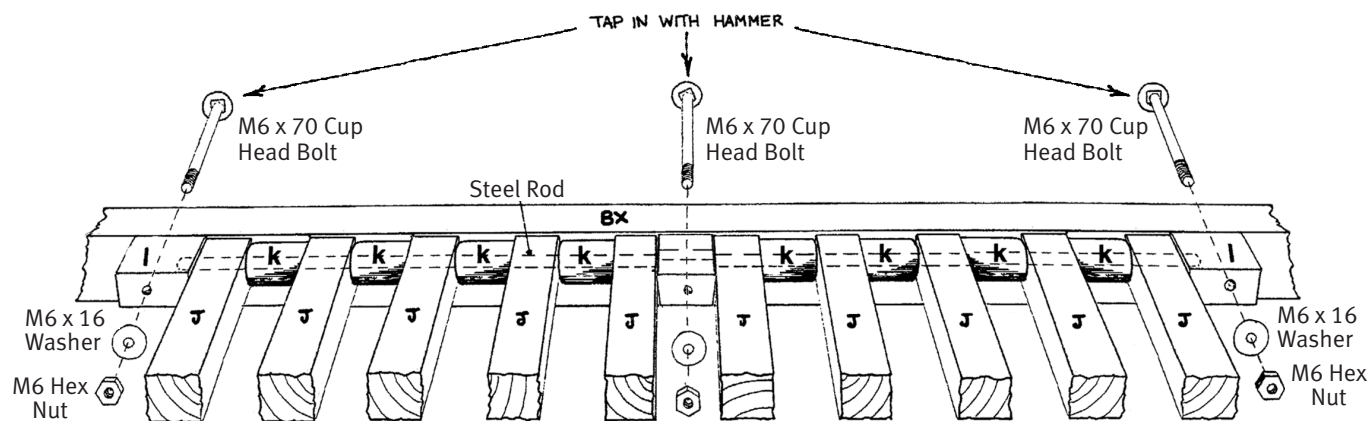


12. Insert the 12 x 1 Pan Head Screw into the inside of the front upright DX for a ratchet lever stop. When transporting the loom lift and pull the lever sideways, then let it hang down.

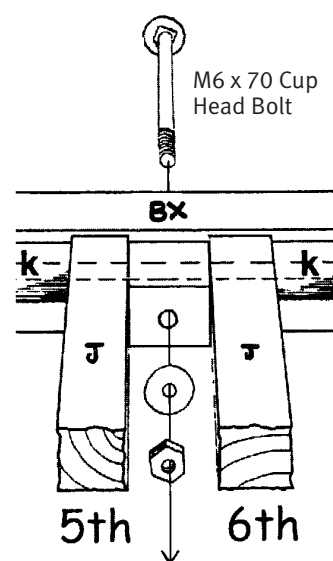


13. Attach the ratchet dog **h** to the right cloth beam support **FX** using a M8 x 50 Hex Head Bolt, M10 Hex Nut, M8 x 19 Washer and M8 Nylock Nut. Tap the head of the bolt into the counter-bored hole. Do not overtighten as the dog should move freely after tightening the nut.



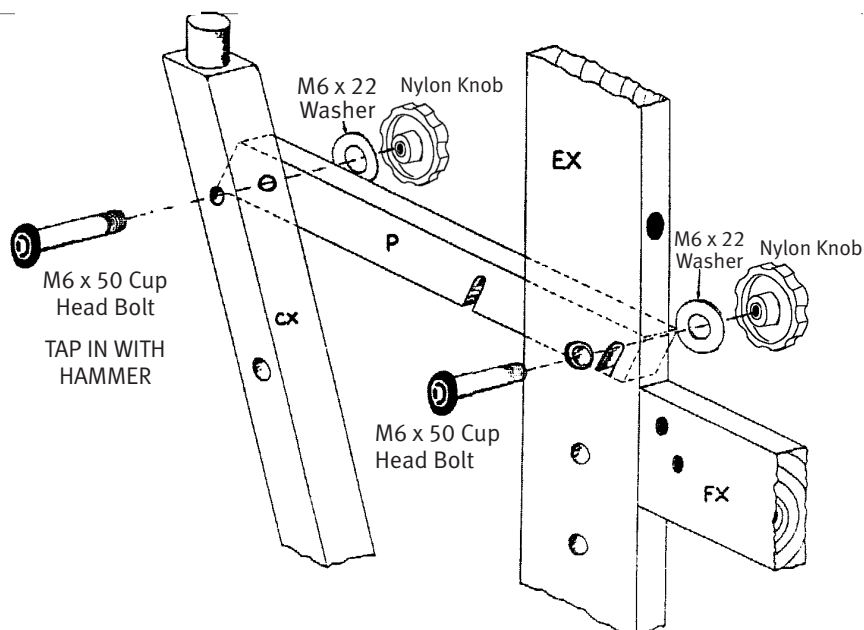


14. Slide 5 treadles J onto the long steel rod with a round wooden spacers k between. Add the centre block. Then add the next 5 treadles and round wooden spacers followed by the treadle blocks l at either end. **Note** that the rod holes in the treadle blocks must be towards the top. Then bolt all 3 blocks to BX with M6 x 70 Cup Head Bolt, M6 X 16 Washer, and M6 Hex Nut.

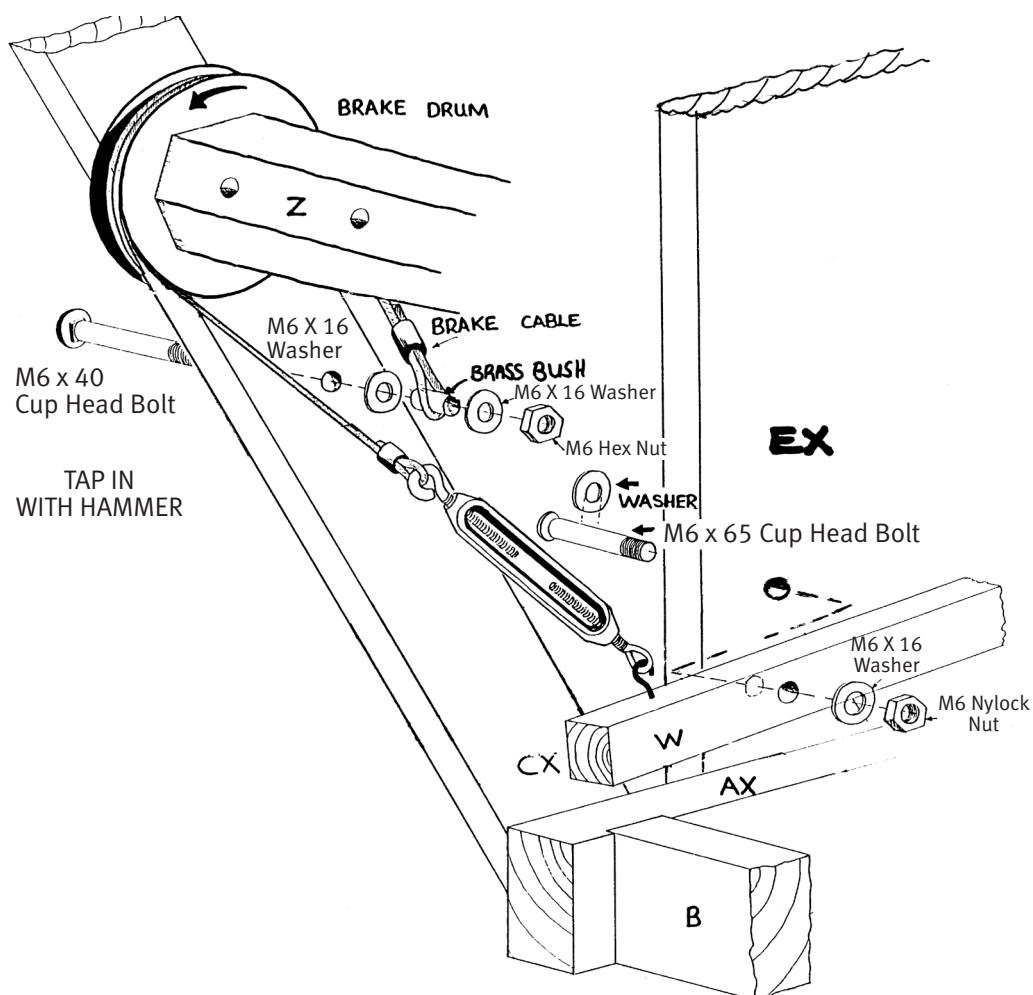


15. Tap a M6 x 50 Cup Head Bolt through the inside of back upright CX and then attach spacer P through the hole with a M6 x 22 Washer and nylon knob. **Note** the middle slot is used to hold the back beam in the closed position. Repeat for the other side.

16. Tap a M6 x 50 Cup Head Bolt through the inside of castle side EX. **Locate the slot** in spacer P onto the bolt and secure with a M6 x 22 Washer and nylon knob. Repeat for the other side.



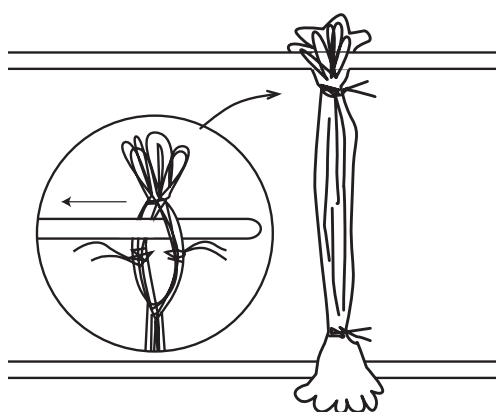
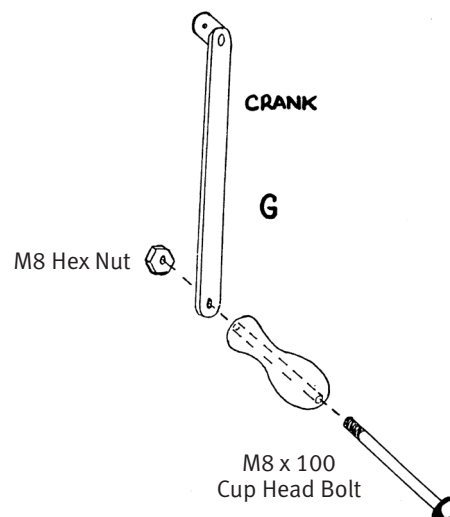
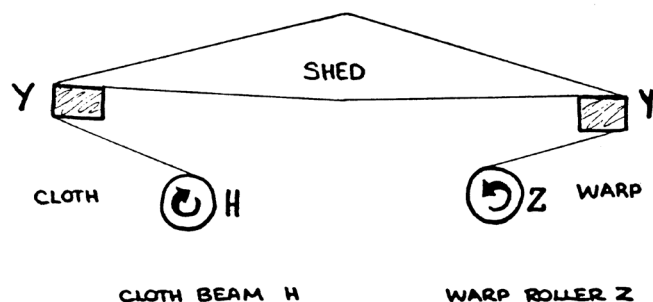
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- Diagram illustrating the measurement of weight using a beam balance. The setup includes a vertical stand, a horizontal beam, and two pans. A weight W is placed on the left pan, and an external weight EX is placed on the right pan. A spring scale is attached to the right end of the beam, with a **SCREW HOOK** at the top and bottom. A force FX is applied upwards at the top hook.



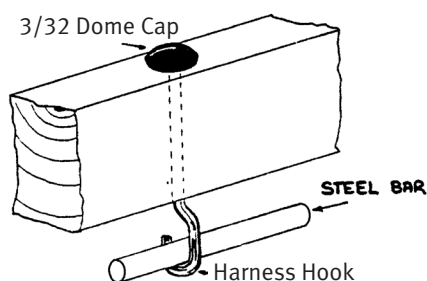
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22. Attach the handle to the crank with a M8 x 100 Cup Head Bolt by threading the bolt through the handle and crank and locking it with a M8 Hex Nut. Then locate crank onto the shaft of warp roller Z and lock in place with 6.5 x 40 Cotter Pin. Spread the ends of the pin slightly to prevent it falling out.

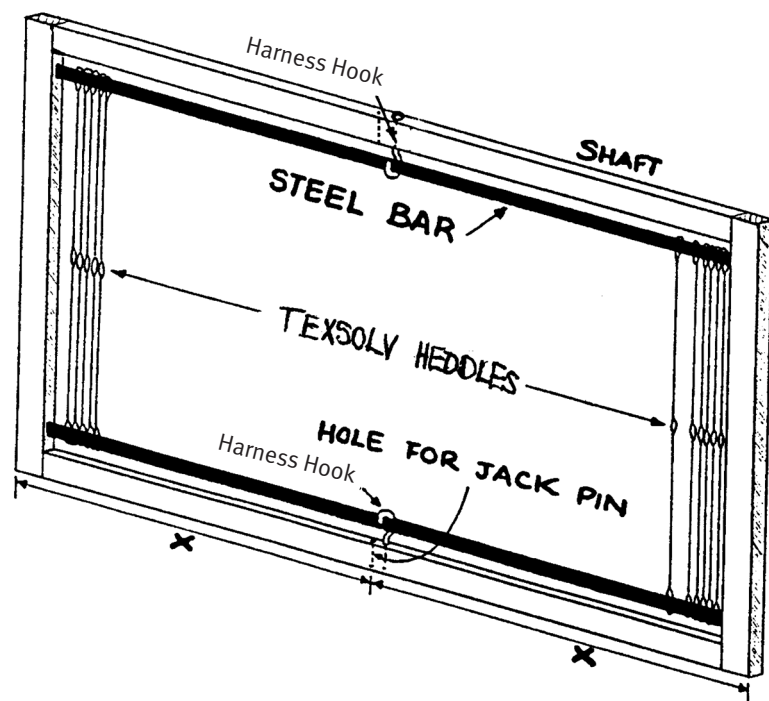
NOTE: The cloth and warp roller must rotate in the direction shown.



23. Your Ashford 8 Shaft Jack Loom has been supplied with Texsolv Heddles. Each bundle contains 100 heddles which enable you to use 100 per shaft.
Take a bundle of heddles (**DO NOT REMOVE THE PINK TIES**). Thread 2 round steel bars through the holes in a shafts, through the gaps in the top and bottom of the bundles and into the holes in the other end of the shaft. Then push M11 Rubber Buffer into the oval hole in the outside of the shaft to lock the steel rod in place.
NOTE: ensure the M11 Rubber Buffer are pushed right to the bottom of the holes so they do not protrude or drag on the nylon guides.
THEN remove the ties and spread the heddles evenly either side of the centre hole.
The heddles can be used as is or can be cut with sharp scissors. Only cut after the heddles have been loaded onto the steel rods.



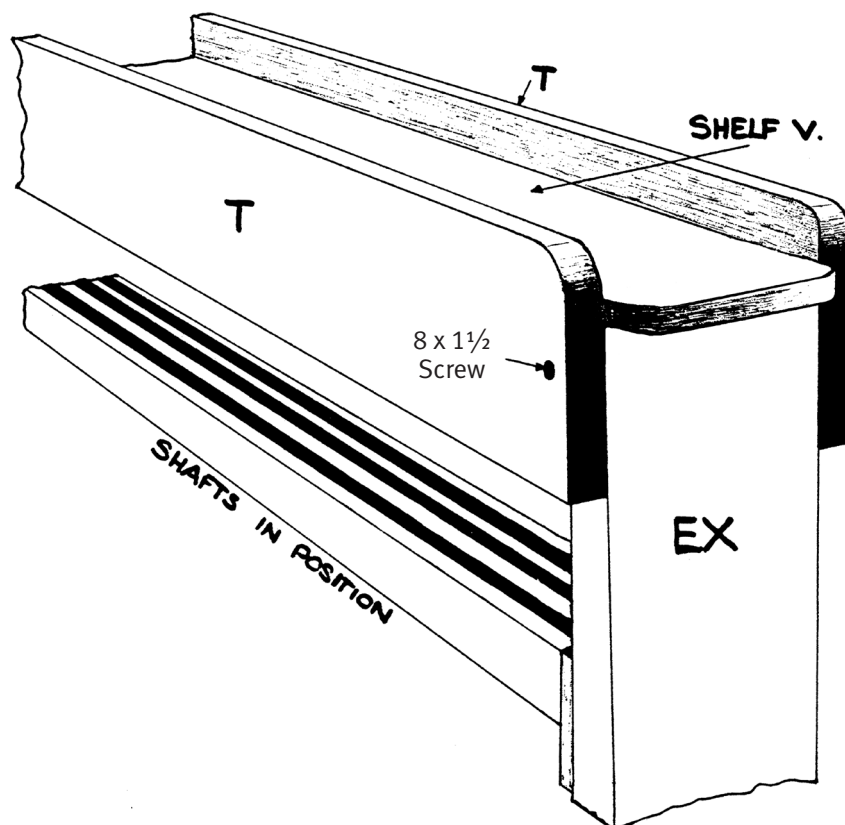
24. Each shaft has holes on both edges of top and bottom rails. The hole for the jack pin is exactly in the centre of the bottom rail to ensure it lifts evenly and is marked with a small hole on the front of the shaft.
Do not use this hole for a hook.
Fit one Harness Hook into the top rail and the bottom rail of each shaft and secure by pressing a 3/32 Dome Cap onto the hook. It is easier to do this by supporting the hook on a corner of a table and pressing firmly on the dome cap.



Spread the heddles evenly either side of the Harness Hook and then clip the stainless steel rods over the hooks. The hooks prevent the bars from sagging when being raised or pulling out when the warp is being advanced.

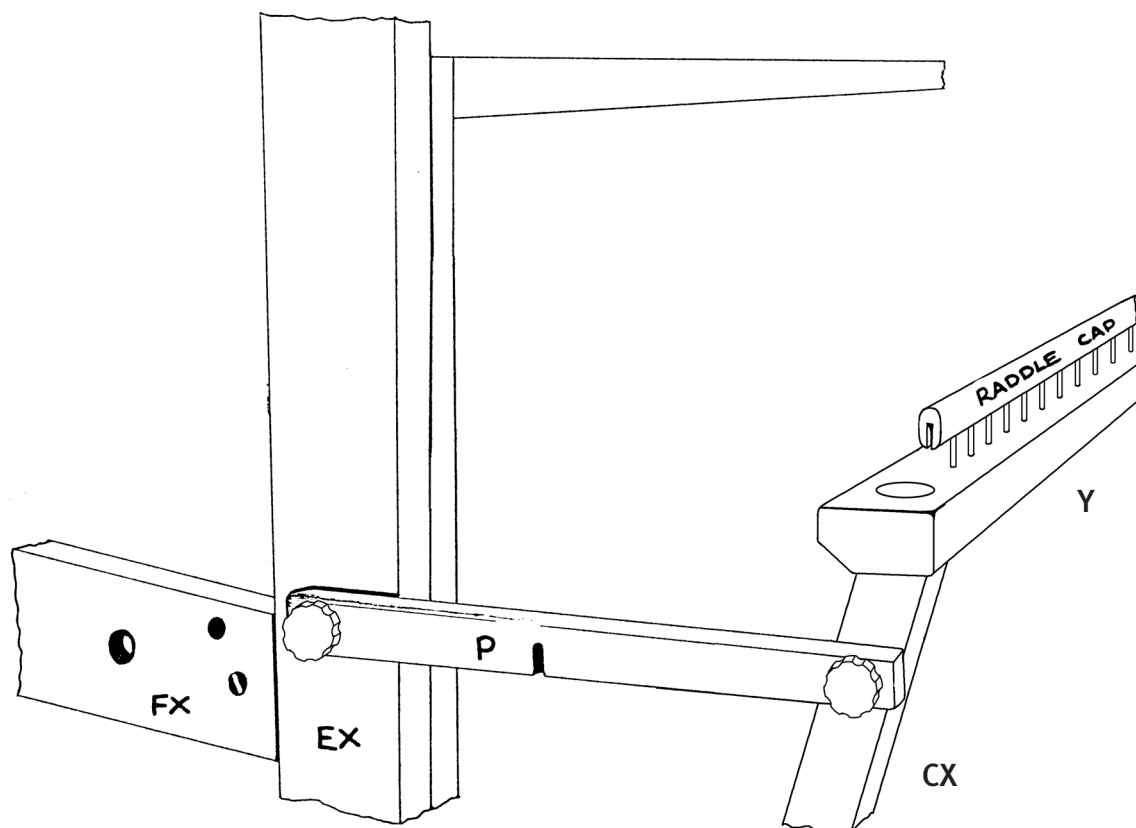
25. Rub candlewax on the ends of the shafts before loading them into the nylon guides. Load the shafts and locate the jack pin into the centre hole in the shaft. If any of the shafts are curved, to avoid them touching, load them so that the curves are all in the same direction.

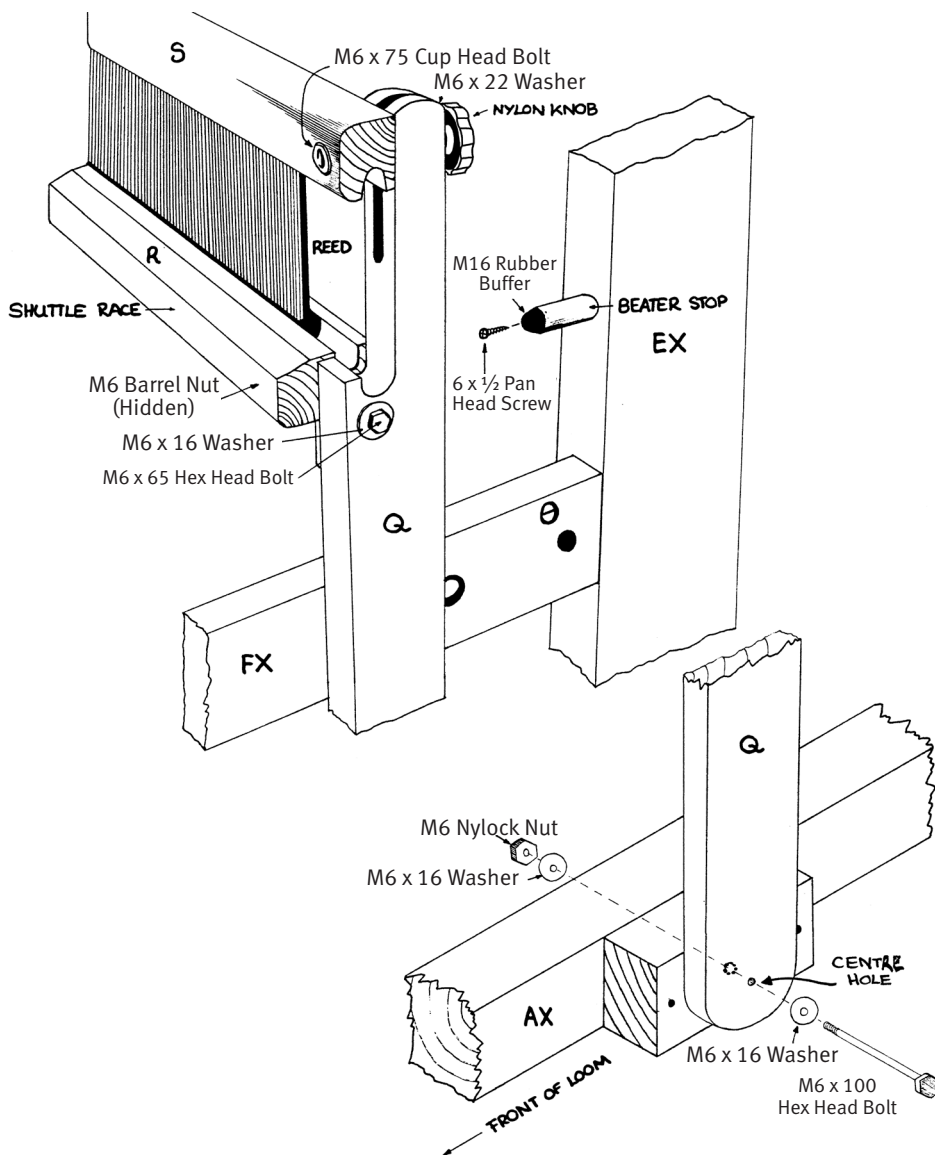
26. Attach the castle top rails T to the castle sides E and EX with 8 x 1½ Screws. Locate the shelf V onto the castle. It is easily removable for access to the shafts.



27. Locate the front and back beams Y onto the tenons of uprights C, CX and D, DX. The beams are easily removable to allow access to the shafts when warping.

NOTE: The back beam has a built in raddle with 10mm spacing. Fit the beam with the raddle pins facing up when warping, otherwise fit it with the raddle facing down. Use the wooden cover strip to keep your warp in place.



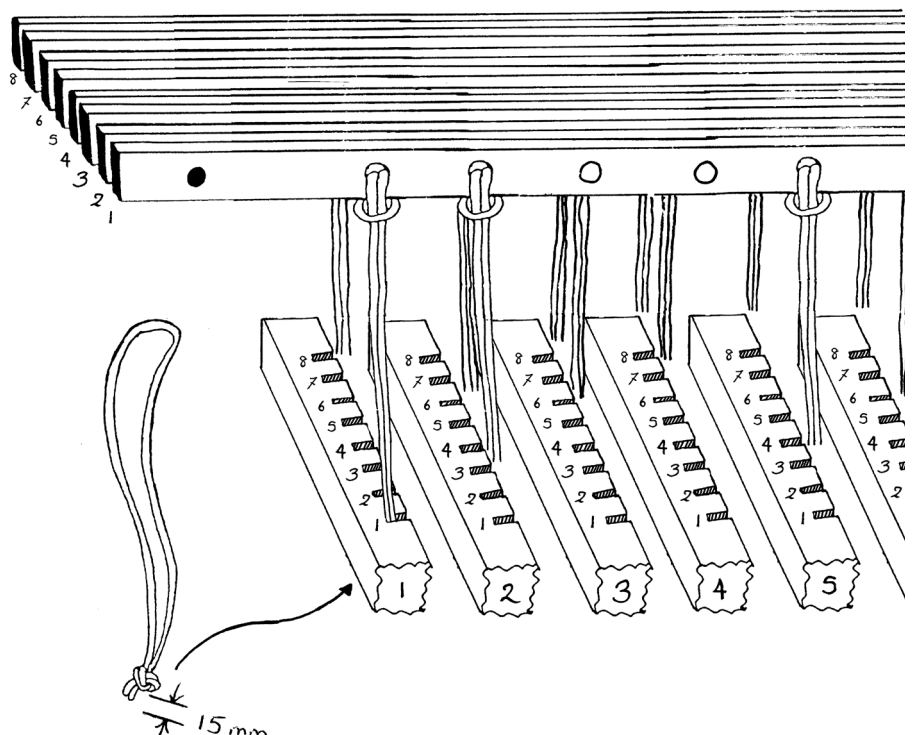


28. Tap the beater stops into the castle sides E and EX. **Note the lead holes for the screws face out.** Use wood glue if necessary. Then attach the M16 Rubber Buffer to the stops with 6 x 1/2 Pan Head Screws.
29. Assemble the beater by joining the sides Q to the bottom rail R with M6 x 65 Hex Head Bolts, M6 X 16 Washers and M6 Barrel Nut. Note the shuttle race faces forward.
30. Place the reed into the groove in the bottom rail R. Secure the top beater rail S to the sides with M6 x 75 Cup Head Bolts, M6 x 22 Washers and nylon knobs.
31. Place the beater in position on the loom frame and push a M6 x 100 Hex Head Bolt and M6 X 16 Washer through the beater side Q, through the hole in the spacer block attached to the side A and secure with M6 X 16 Washer and M6 Nylock Nut. Repeat for side AX

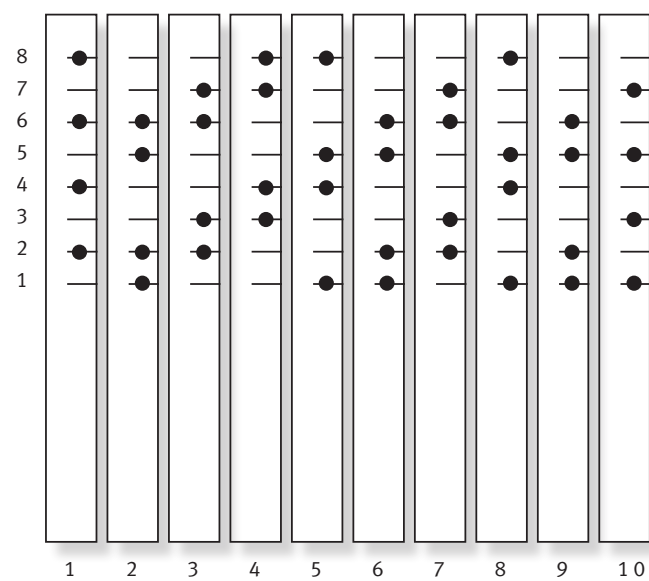
NOTE: Do not tighten bolts, the beater must move freely.

32. Tie a knot in the Nylon Cords leaving approx. 15mm at the end.

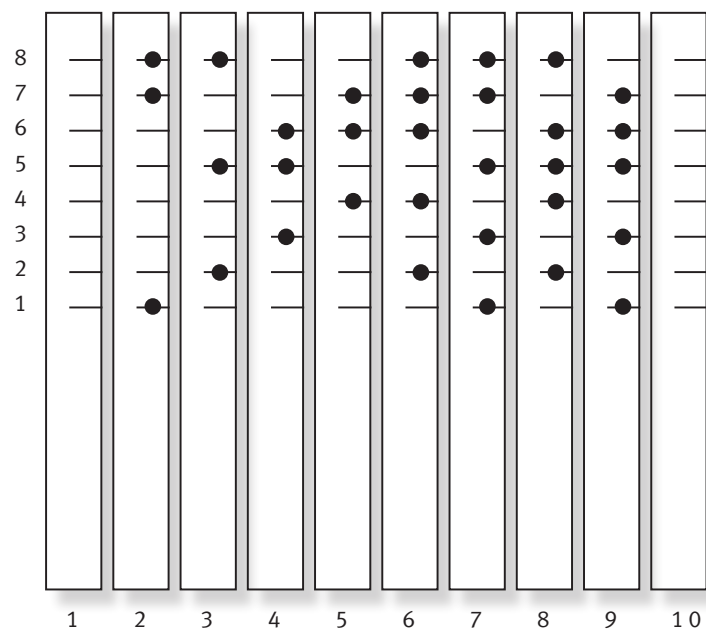
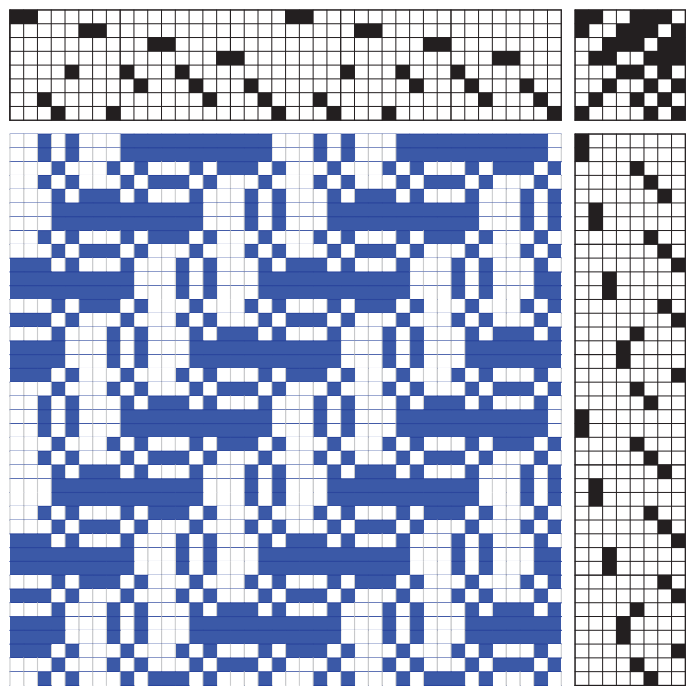
NOTE: There are 8 parallel lams and 8 slots in each treadle. After determining the pattern required, connect the cord from each lam to the slot in the treadle directly beneath it. The knots in the cords locate into the holes in the underside of the treadles.



Examples of tie ups



Two x Two Twill with Tabby on treadles 1 and 10

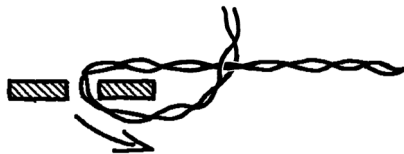


Backed Twill

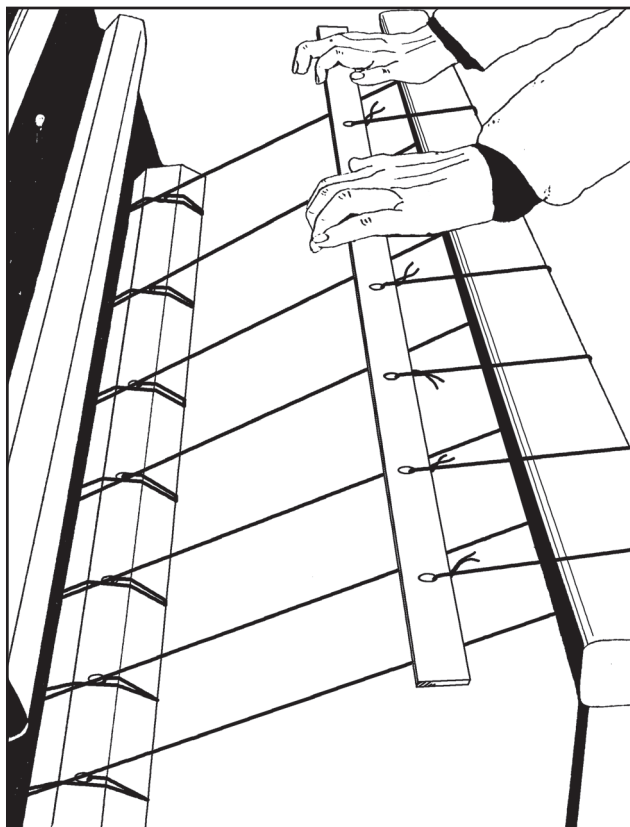
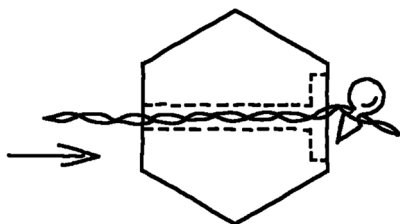
There are 5 warp sticks included with your Jack Loom.

FRONT ROLLER

To attach a warp stick to the front roller, thread 1 texsolv cord through the first hole in the warp stick and back through the second to end loop in the cord.

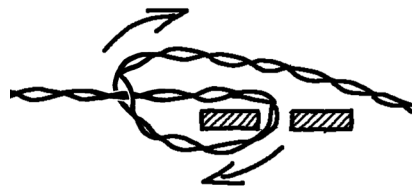


Then take the long end of the cord through the small hole in the warp roller and out the large hole. Then push a texsolv peg through the cord. The peg pulls down flat into the large hole.

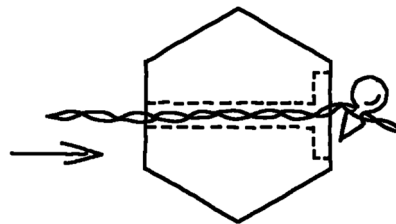


BACK ROLLER

Thread 1 texsolv cord through the first hole in the warp stick but leave 8 holes leaving approx. 10cm of Texsolv cord.



Then take the long end of the cord through the small hole in the warp roller and out the large hole. Then push a texsolv peg through the cord. The peg pulls down flat into the large hole.



Use the third warp stick for your end warp stick (refer to warp instructions) and attach to the end of the Texsolv cord with a Texsolv peg.

