

ASSEMBLY INSTRUCTIONS

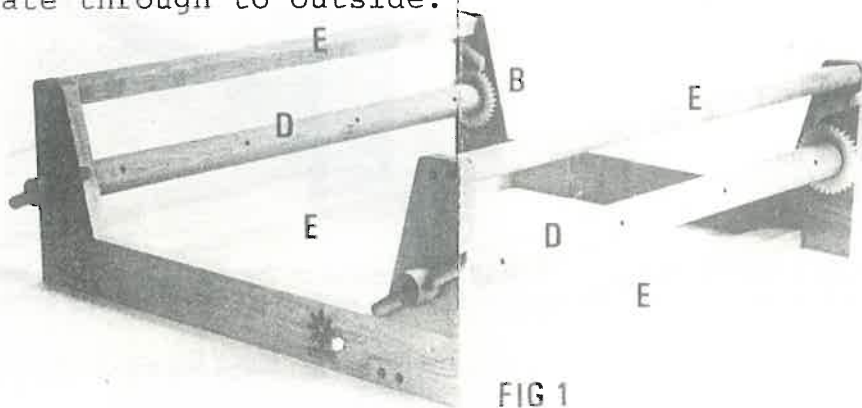
ASHFORDS FOUR SHAFT WEAVING LOOMS

Check all parts and identify them with positions in the diagrams. Sandpaper all parts, paying particular attention to the shuttles, cross sticks and warp sticks. We recommend a coat of furniture oil to protect the timber, but you may prefer to give the loom a coat of stain and/or finish with a hard varnish.

Please note: There is very little difference in the length of some of the screws, please measure before using. Soap or wax rubbed on the screws will make assembling easier.

STEP 1: Ratchet Pawls. Secure to side B with 25mm (1") pan head screws.

- 1a: Secure ratchets to rollers with 30mm (1.25") countersunk screws with the teeth on the ratchets facing opposite directions. Note the ratchets have two sets of holes. Use the widest spaced holes.
- 1b: Four 50mm (2") heavy gauge screws for beater pivot are fitted into predrilled holes on the inside of both sides "B", taking care not to penetrate through to outside.

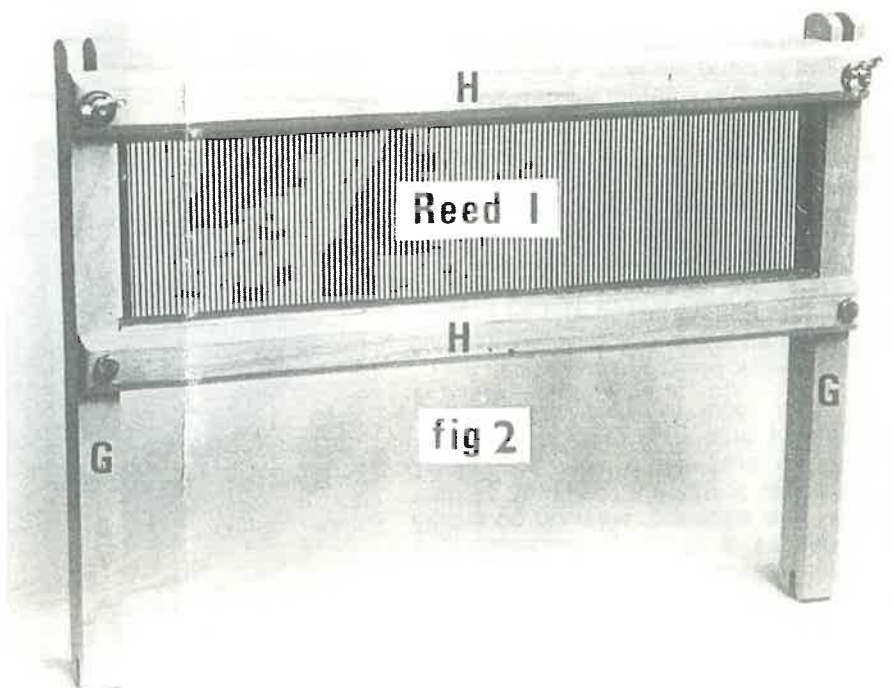


STEP 2: Four rails E are made up of two with one edge rounded and two without. Locate the round edge to the outside in the top beam position.

Secure rails E to one loom side with 45mm (1.75") countersunk screws keeping the two rails with rounded edges to the top outside. Place the two rollers between the two sides taking particular note of the teeth on the ratchets and how they are controlled by pawls. Secure the other loom side in position.

Use 60mm (2.5") round head screws to secure the rollers to the loom side. Do not over tighten as these revolve. Locate the 16mm (5/8") dowel handles into the ends of the rollers and secure with 25mm (1") countersunk screws.

STEP 3 BEATER FIG. 2. The beater consists of 2 ends G, 2 grooved rails H and reed I. Secure the lower rail H in place with 55mm (2 1/4") bolts. Use washers under nuts only. Locate the reed in place. Now secure top rail H in position with 55mm (2 1/4") bolts, washers on both sides and wingnuts. The slots simplify the changing of reeds.



(4) **CASTLE FIG. 3.** The four shafts move up and down in a frame known as a castle. Make up the castle as follows: Take the two castle sides "J" and the four rails "K". Top rails "K" have extra holes to take lever bolts. Use 30mm (1 1/4") screws to fix the rails "K" between the two plywood sides "J".

(5) **LEVERS. FIG. 3.** The four levers "O" which move the shafts up and down are fitted in place between the top rails "K" and project through L shaped slots in the sides "J". The lower part of the L shaped slots must be toward the front of the loom. The levers pivot on the 100mm (4") bolts with small wooden rods used as spacers. Place bolt through front rail "K", then short-spacer, short-lever, long-spacer, long-lever, short-spacer back rail "K" and fix with 6mm (1/4") nut.

(6) **SHAFTS FIG. 3.** Each shaft consists of two side pieces "M" and two steel bars "N" on which the heald wires are strung. Fix bars "N" into the slots of one of the wooden pieces "M" using 12mm (1/2") screws. Before adding the opposite end, the heald wires are threaded onto the bars.

The steel rods supplied with the 800mm loom are located at the top of the shafts through the holes in the sides in "M" and provide additional weight and strength to the shaft.

NOTE: The number of heald wires required for each shaft will depend on the weaving pattern which can be varied from time to time. Meanwhile we suggest you place an equal number on each shaft. The wires are coloured, keep all coloured ends on the same rod.

(7) **FINAL ASSEMBLY.** Turn the castle on its side and wax insides of "J". Place the four shafts through the space at the bottom, all facing the same direction. Fig. 4 shows one shaft in place.

Non skid feet secured into bottom rails "B" will help prevent the loom moving on the table when weaving.

(8) Place castle into body of loom in grooves provided and hold in place through "J" with 40mm (1 1/2") bolts and washers on both sides. Tighten up with wing nuts.

(9) **TYING THE SHAFTS TO LEVERS.** Slide half the heald wires to each end of the shafts. Cut four lengths of string each 690mm (27") long and tie a small loop on one end. Thread through lever, twice around shaft, back up through loop and finish with slip knot. This allows for adjustment later.

When tying the shafts to the levers on the 800mm loom, form a figure of 8 around the top steel bar "N" and the steel rod. This spreads the lift evenly between the rod and the bar.

Tie shafts to levers as follows:

- Front shaft to righthand front lever.
- 2nd shaft to lefthand front lever.
- 3rd shaft to righthand back lever.
- 4th shaft to lefthand back lever.

(10) Take 900mm (36") string, fold in half and thread loop through out side hole in roller, bring the tails through the loop over the top rail "E" and through the corresponding hole in warp stick. Separate the two ends and take one end around each side of the double thread and tie in front. Repeat on all holes in both rollers keeping the warp stick parallel with rollers.

(11) Your loom is now complete and is capable of producing a large variety of cloths. To produce a very fine or very coarse cloth a different reed may be necessary. The enclosed weaving book may be used as a guide for preparing your loom for weaving.

STEP 12. A COTTERPIN (split pin) has been added to your kitset.

It is used ONLY to hold the beater in an upright position to facilitate warping-up. The pin is pushed through the holes provided in parts B and G. REMOVE THE PIN before commencing to weave.

When the Cotter pin is not in use it should be hung on the screw eye hook provided, which may be screwed onto the side of the loom where convenient.

