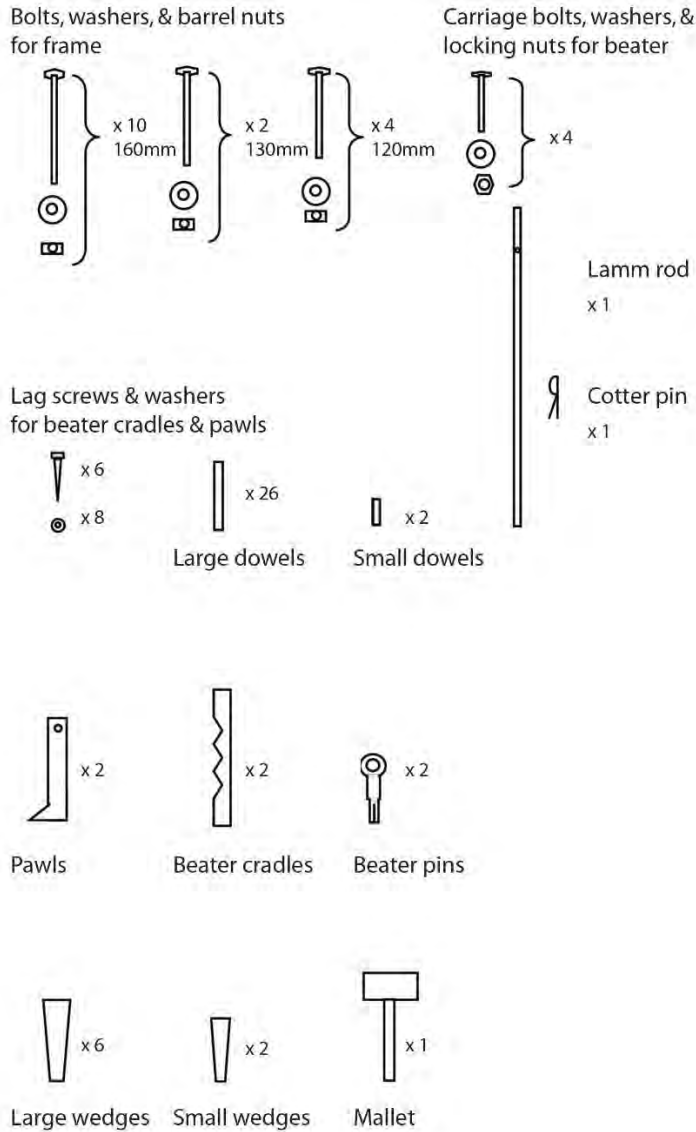


Instructions for Standard Loom Assembly

Begin

1. Open Box 1a
2. Remove the bag with assembly accessories and instructions
3. Separate the accessories by use in the following sections:
 - a. Assemble the Left Side and Assemble the Right Side
 - All of the bolts (3 sizes)
 - 16 large washers
 - Barrel nuts
 - Large and small dowels
 - a. Attach the Beater Cradle
 - Beater cradles
 - 4 lag screws
 - 4 small washers
 - b. Add the Wedge Beams, Treadle Beam, and Warp and Cloth Beams to the Right Side
 - Large wedges
 - Mallet
 - c. Add the Left Side
 - Large wedges
 - Mallet
 - d. Attach the Pawls
 - Pawls
 - 2 lag screws
 - 4 small washers
 - e. Attach the Ratchet Wheels
 - Ratchets
 - Small wedges
 - Mallet
4. Set aside for later steps:
 - a. Assemble the Beater
 - Carriage bolts
 - 4 large washers
 - Locking nuts
 - Beater pins
 - b. Add the Lamms
 - Lamm rod
 - Cotter pin



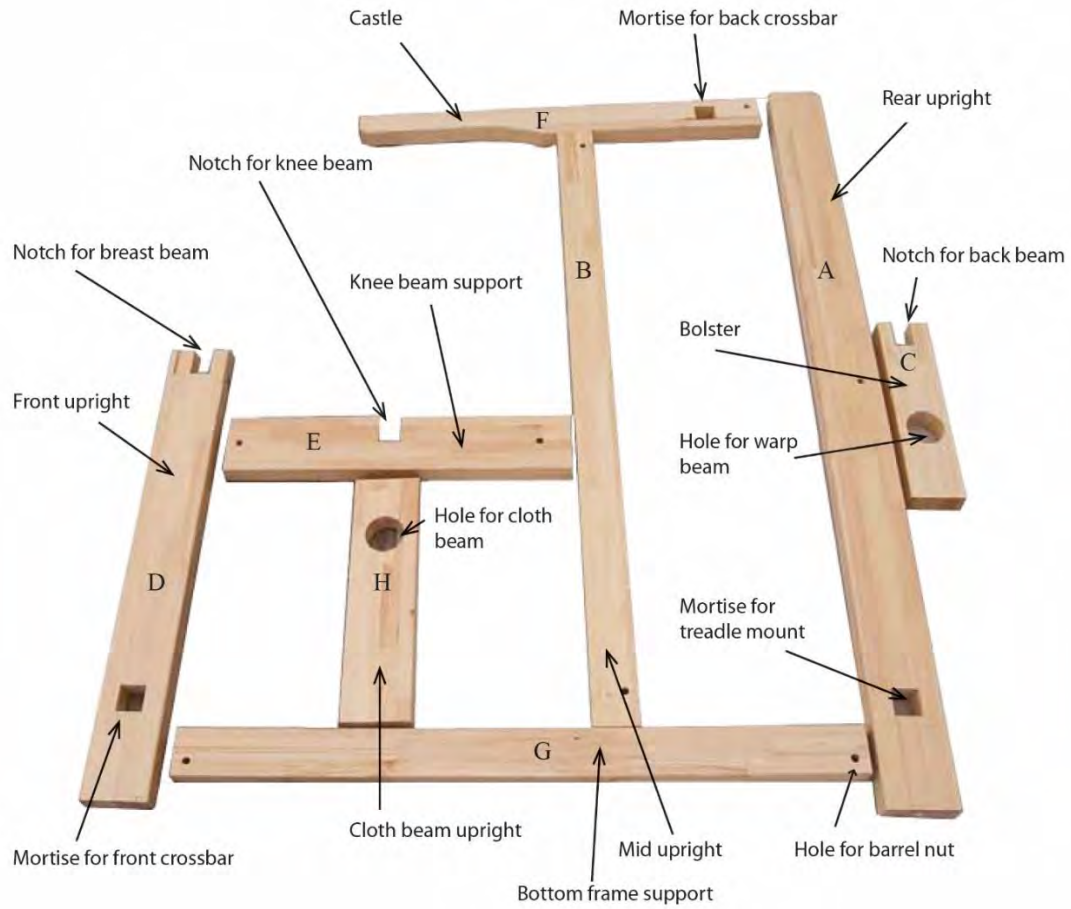
5. Remove the frame parts from the box, separating the left-side parts from the right-side parts

Notes:

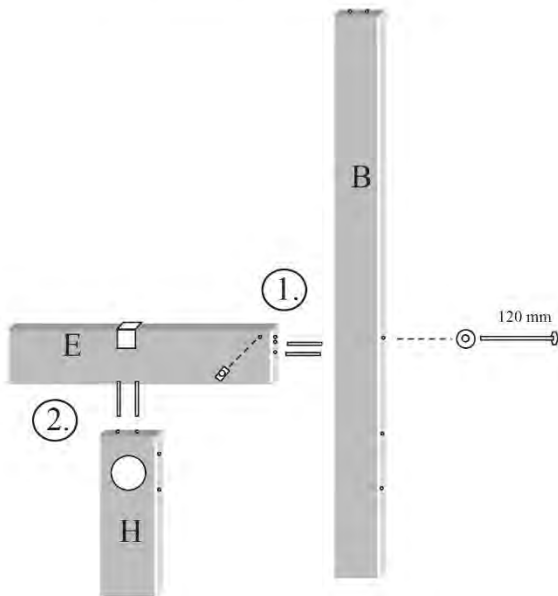
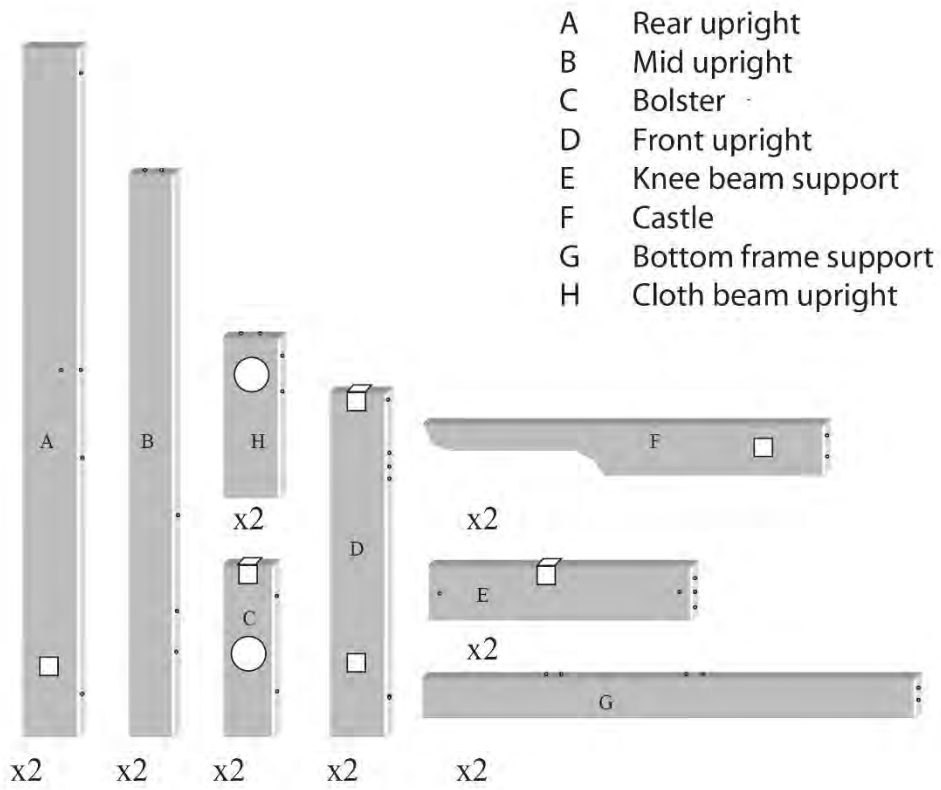
- There are two of each frame part: one for the right and one for the left side of the frame
- Every frame part should have a factory-applied label with the part's letter and "right" or "left"
- All of the left-side parts are the same as the right-side parts except for the right mid upright (B), which has holes for lamm rods

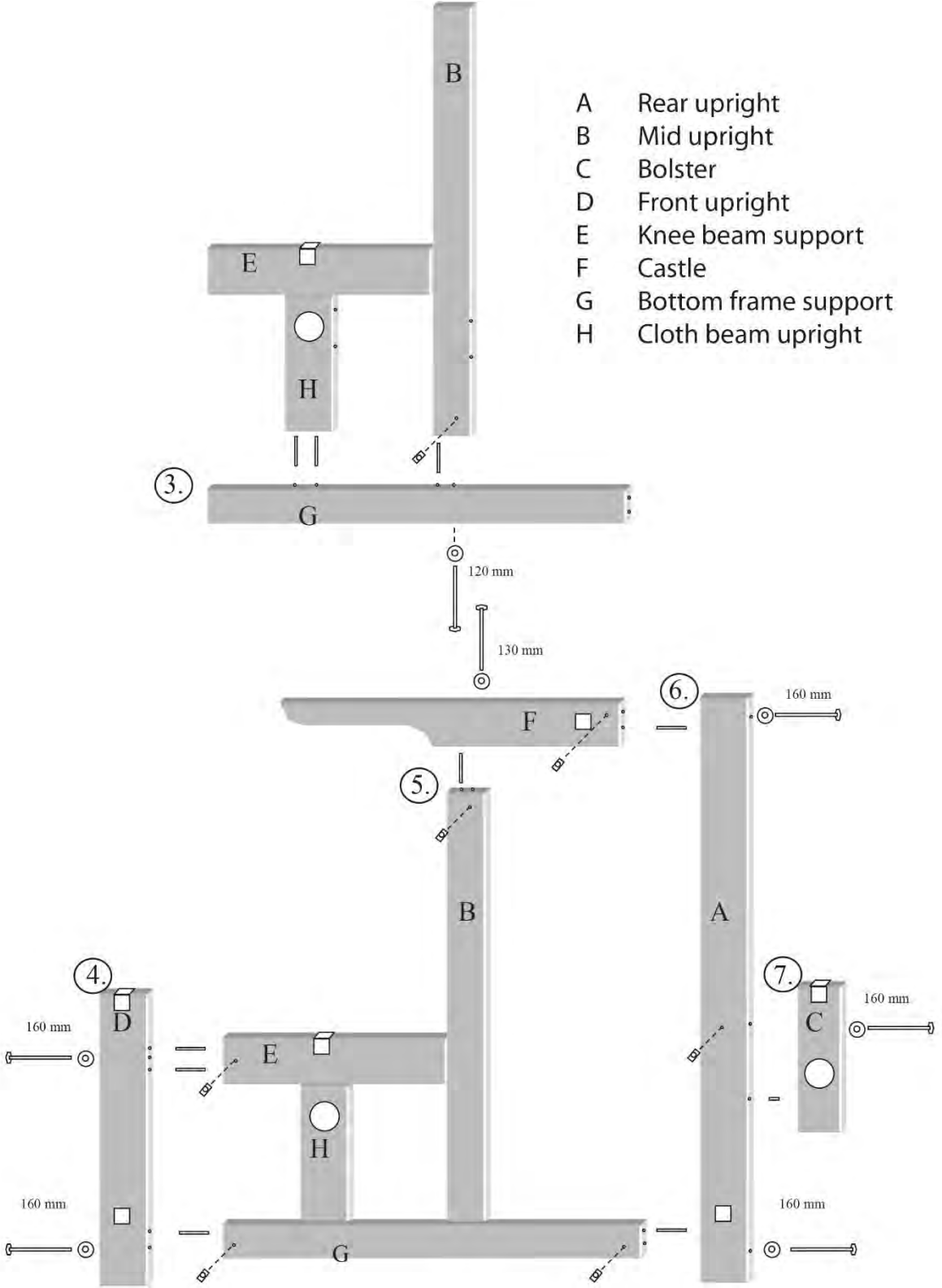
6. Create a large, clean space on the floor for laying out and assembling the left-side parts

Note: Once assembled, the left side will resemble the diagram below



Below is a copy of the pictorial instructions enclosed in the accessory bag in Box 1a. The circled steps are explained in the sections that follow.

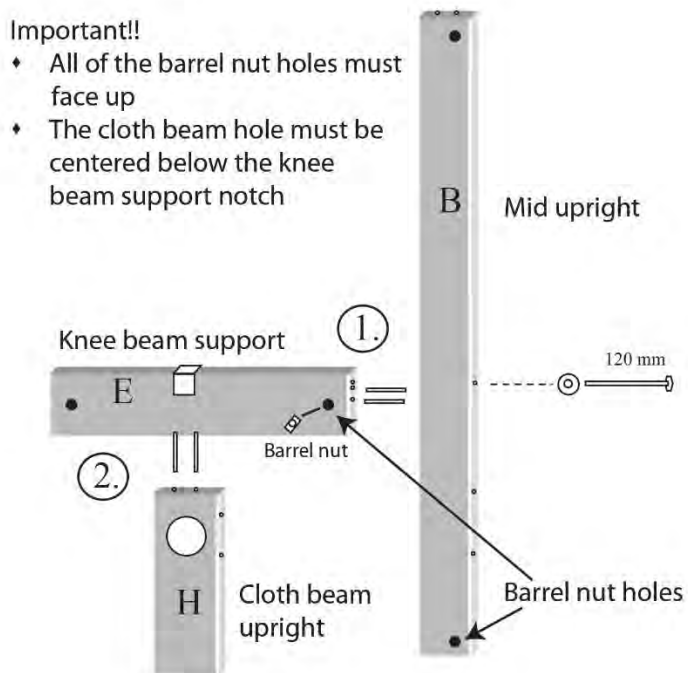




Assemble the Left Side

These steps explain the instructions included with the loom packaging

Important!! The rubber feet from box 1b are added to the rear upright and front upright after assembling each side of the loom. This step is not included in the pictorial instructions



1. Find the left-side parts B, E, and H
2. Attach the knee beam support (E) to the mid upright (B), using 2 large dowels and a 120 mm bolt, large washer, and barrel nut

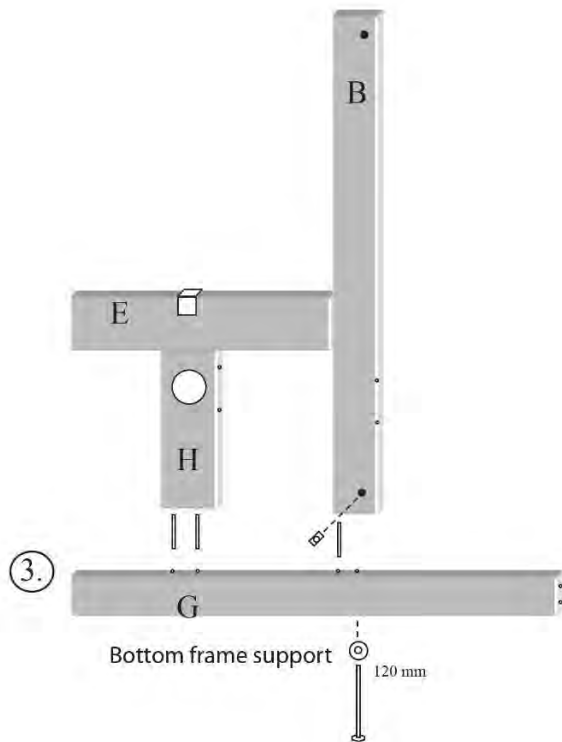
Important!! All of the holes for the barrel nuts must be on the upward-facing side!

Note: These holes will be on the *inside* of the loom when it is assembled

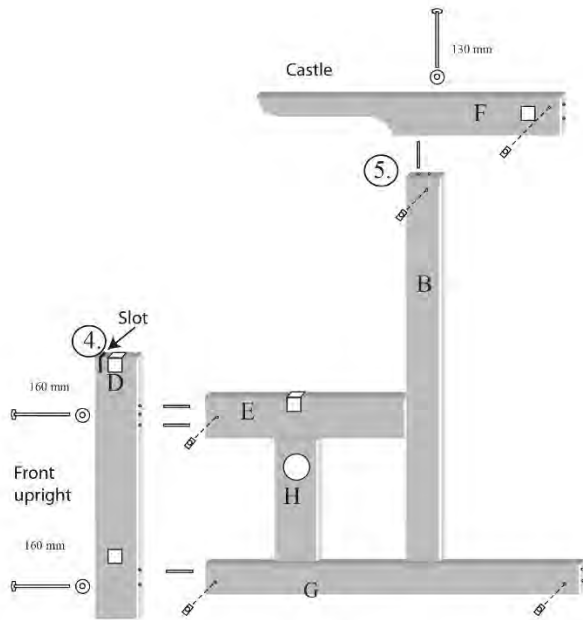
3. Add the cloth beam upright (H) to the knee beam support (E) using 2 large dowels

Important!! **Center** the hole of the cloth beam upright with the notch of the knee beam support! Check to make sure it is centered, as:

- the cloth beam can easily be added incorrectly
- the error may not be apparent until the loom is assembled



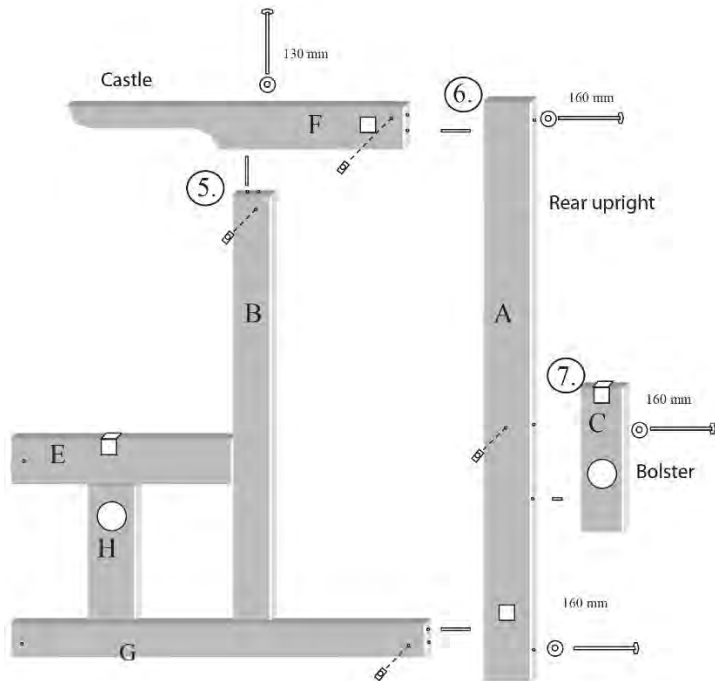
4. Add the bottom frame support (G):
 - a. to the cloth beam upright (H), using 2 large dowels
 - b. to the mid upright (B), using 1 large dowel and a 120 mm bolt, large washer, and barrel nut



5. Add the front upright (D):
 - a. to the knee beam support (E), using 2 large dowels and a 160 mm bolt, large washer, and barrel nut
 - b. to the bottom frame support (G), using 1 large dowel and a 160 mm bolt, large washer, and barrel nut

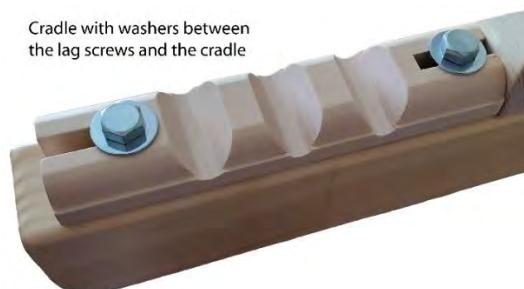
Important!! Make sure the **slot** (for the fabric protection board) on the front upright (D) is **toward the front of the loom** (away from the knee beam)

6. Add the castle (F) to the top of the mid upright (B), using 1 large dowel and a 130 mm bolt, large washer, and barrel nut



7. Attach the rear upright (A)
 - a. to the castle (F), using 1 large dowel, a 160 mm bolt, large washer, and barrel nut
 - b. to the bottom frame support (G), using 1 large dowel and a 160 mm bolt, large washer, and barrel nut
8. Add the bolster (C) to the rear upright (A), using 1 **small** dowel and a 160 mm bolt, large washer, and barrel nut
9. Slide the rubber feet to the bottoms of the rear upright (A) and the front upright (D)

Attach the Beater Cradle



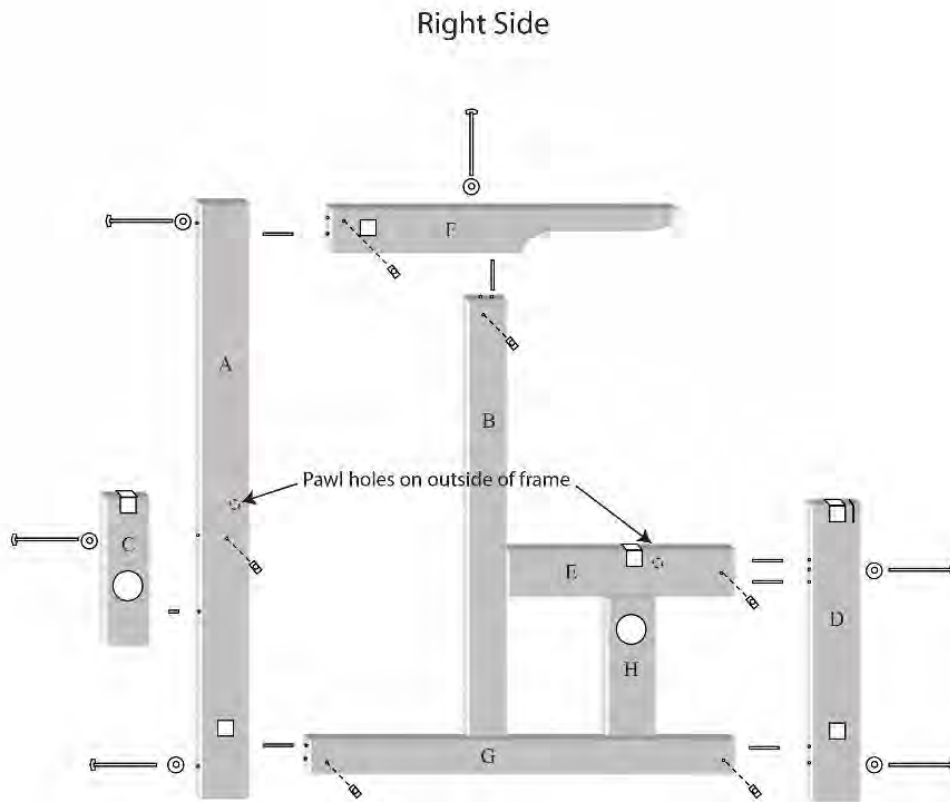
1. Attach the beater cradle to the castle, using 2 lag screws and 2 **small** washers, with the washers between the cradle and the lag screws
2. Leave the lag screws loose and do not tighten

Important!! The lag screws will be tightened when the beater is aligned

3. Clear the working area by moving the assembled left side to a nearby wall

Assemble the Right Side

1. Lay out the right-side parts as a *mirror image* of the left side
2. Make sure that all holes for the barrel nuts are facing upward

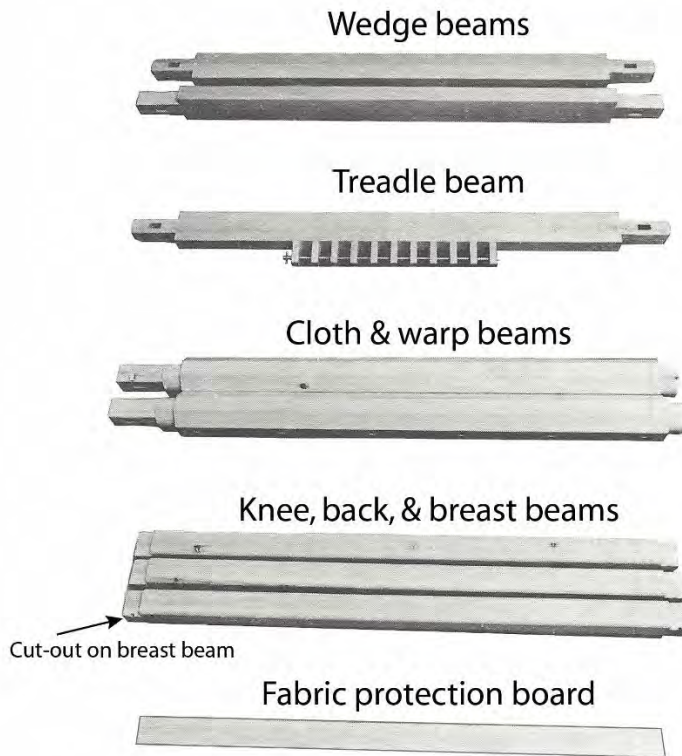


3. Follow the left-side steps 1 through 9
4. Attach the beater cradle, as on the left side

Add the Wedge Beams, Treadle Beam, and Warp and Cloth Beams to the Right Side

The steps in this section and in the next section are more easily performed with the help of another person

Note: These instructions use parts from Box 1a, Box 1b, and Box 2



1. Move the assembled right side to the area where the loom will be used

Important!! Make sure there will be adequate space to accommodate:

- The bench (front)
- Warping (back)
- Using the shuttle (right and left sides)
- Using the ratchet wheels (right side)

Important!! When the right side is upright:

- the **inside** of the side should face **inward**
- this side will be on the **right** when viewed from the front

Important!! Another person may be required to hold the side upright until a wedge beam and the treadle beam are added

Note: Once the front wedge beam and treadle beam are added, the right side may be propped up by itself

2. Find the arrow on one of the wedge beams

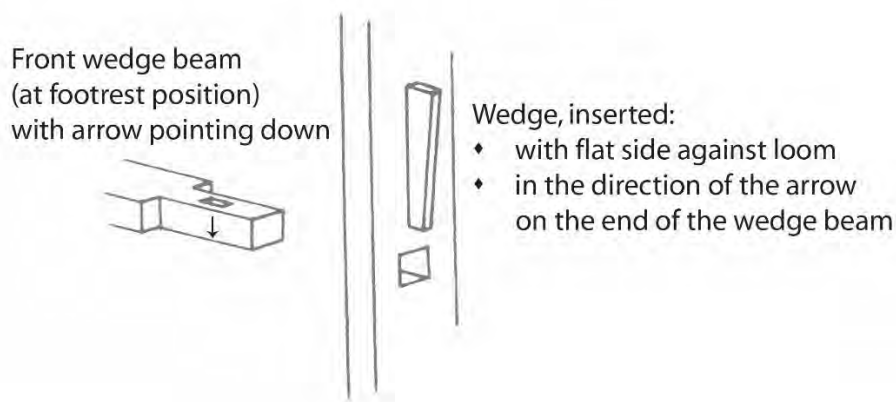


The arrow points in the direction the wedges are inserted (here, from top to bottom)

3. Insert this wedge beam, **with its arrow pointing down**, into the mortise (square hole) of the front upright

Note: This wedge beam will become the footrest

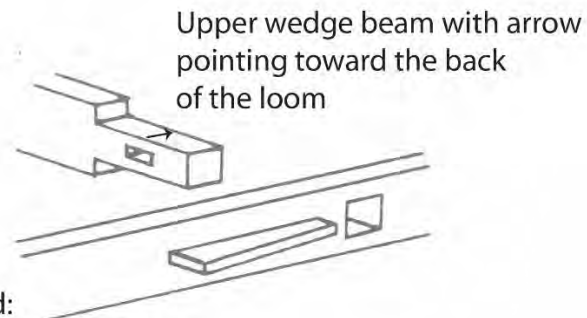
Important!! The arrow on the wedge beam indicates the direction to insert the wedge



4. Add a **large** wedge (included in the bag in Box 1a):
 - from top to bottom
 - with its flat edge next to the loom
5. Using the wooden mallet (from Box 1a), tamp the wedge in slightly

Notes:

- The larger wedges are used for steps 2, 5, and 8 on both sides of the loom
 - The wedges will be tamped in securely after the loom is completely assembled
6. Insert the treadle beam into the mortise of the back upright, with the metal rod facing the front of the loom
 7. Add a large wedge (from top to bottom), and tamp in slightly
 8. Rest the loom at a slight angle to the floor, using the wedge beam and treadle beam for support
 9. Insert the other wedge beam, **with its arrow pointing toward the back of the loom**, into the mortise of the castle



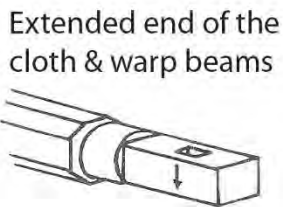
Wedge, inserted:

- ♦ with flat side against loom
- ♦ in the direction of the arrow on the wedge beam

10. Add a large wedge, and tamp in slightly

Important!! Before proceeding, have the left side readily available!

Important!! The next steps, inserting the warp and cloth beams, are easier if a second person holds them in place until the left side of the loom is added



11. Insert the **extended end** of the warp beam, **with its arrow pointing down**, into the round hole of the bolster

Note: Do *not* insert a wedge at this point

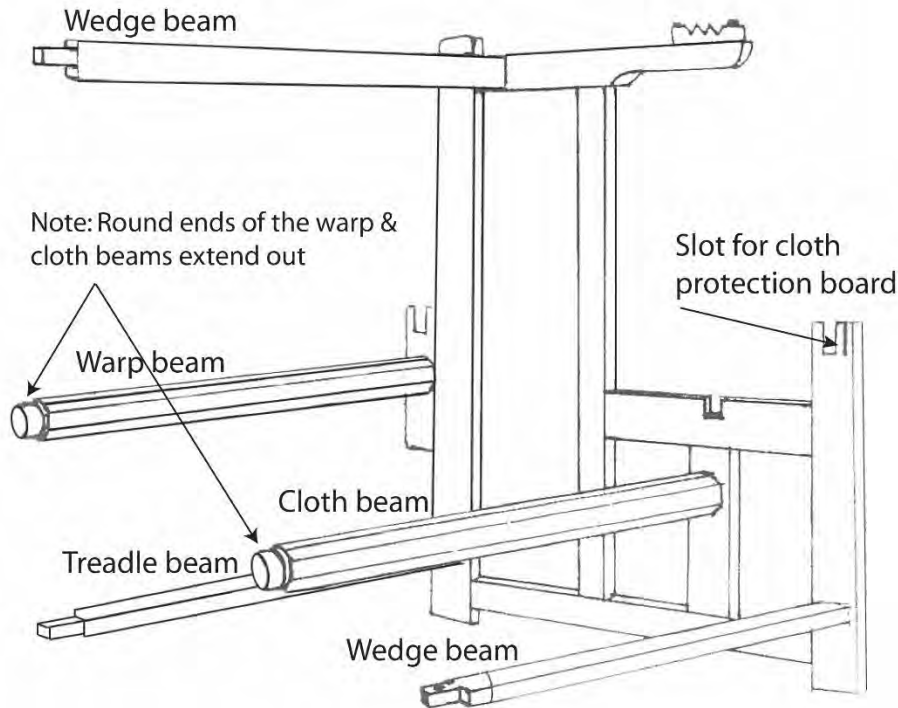
Important!! The warp beam will not stay in place without someone / something holding it up

12. Insert the **extended end** of the cloth beam, **with its arrow pointing down**, into the round hole of the cloth beam upright

Note: Do *not* insert a wedge at this point

Important!! The warp beam will not stay in place without someone / something holding it up

13. Check that the right side resembles the diagram below

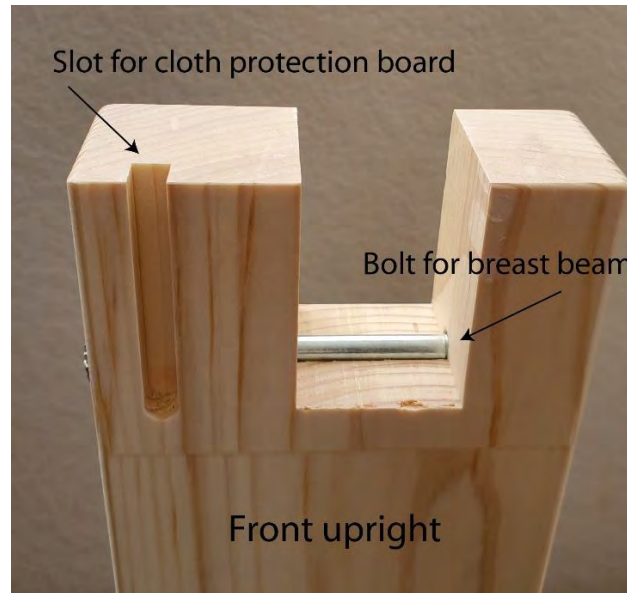
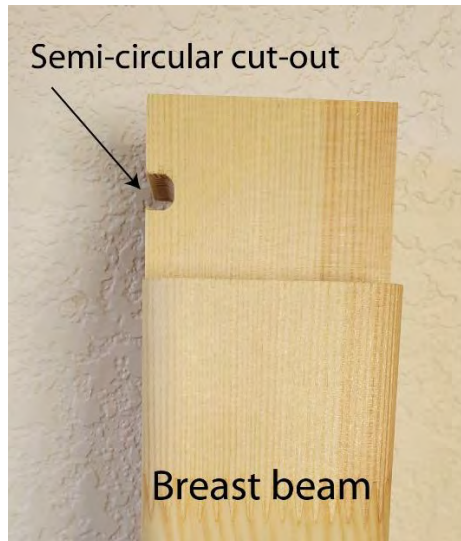


Add the Left Side

1. Bring the left side into position with its inside facing inward
2. Line up the free ends of the wedge beams and treadle beam with the mortises on the left side
3. Ease into place
4. Insert the small, round ends of the warp and cloth beams into the holes of the bolster and cloth upright
5. Nudge the left side toward the right side until the wedge beams, treadle beam, and warp and cloth beams are fully seated in the left side
6. Add the large wedges to the wedge beam and treadle beam slots:
 - With their flat sides against the loom
 - In the same directions as in the right side (top to bottom for the front wedge beam and treadle beam; front to back for the upper wedge beam)
7. Using the wooden mallet, tamp the wedges into the wedge beam and treadle beam slots **securely**
8. Using the wooden mallet, tamp all of the wedges (on both sides) in **securely**

Add the Breast, Knee, and Back Beams

In the next steps, the breast, knee, and back beams are added to the loom



1. Identify the breast beam by noting its semi-circular cut-out

Note: The cut-out:

- is unique to the breast beam
- fits over the bolt in the front upright

Note: The knee and back beams are identical

2. Place the breast beam, knee beam, and back beam in their respective notches in the front upright, knee beam support, and bolster (back beam)

Add the Pawls



1. Identify the pawl holes on the right side

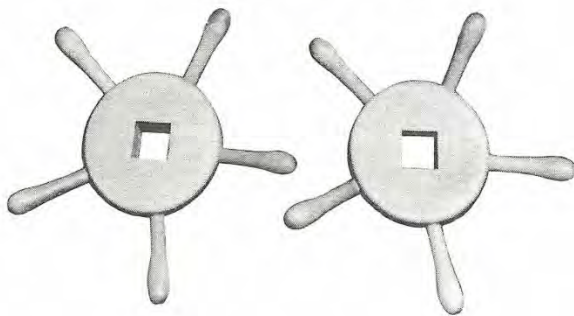
Note: These are on the knee beam support and rear upright, above and slightly to the left of the cloth and warp beam ends

2. Attach the pawls, using the lag screw and small washers on both sides of the pawls, as in the diagram

Important!! Tighten the lag screws so that the pawls are secure but move freely

Add the Ratchet Wheels

Ratchet Wheels



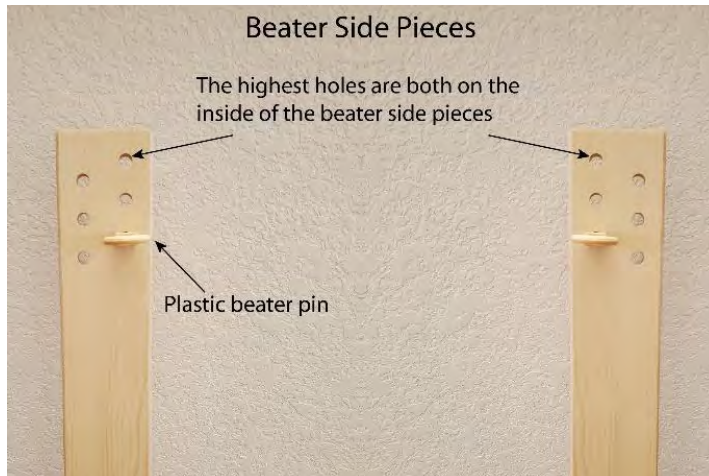
1. Note the direction of the arrow on the right-side end of the cloth beam before adding the ratchet wheel
2. Center the ratchet wheel on the cloth beam end so that the beam protrudes between two of the wheel spokes

Note: The area between the wheel spokes provides the most space for tamping in the wedges

3. Insert a **small** wedge into the beam:
 - **in the same direction as the arrow**
 - with the wide end of the wedge centered between two of the wheel spokes
4. Tamp the wedge in **securely**, using the wooden mallet
5. Repeat for the adding the ratchet wheel to the end of the warp beam

Assemble the Beater

1. Remove all parts from Box 3
2. Using your floor as a work area, lay down the 2 beater side pieces so that the uppermost holes for both pieces are on the inside edges



Important!! The holes at the top of beater side pieces allow six different heights for the beater. Make sure the holes on the right beater piece mirror the holes on the left beater side piece!

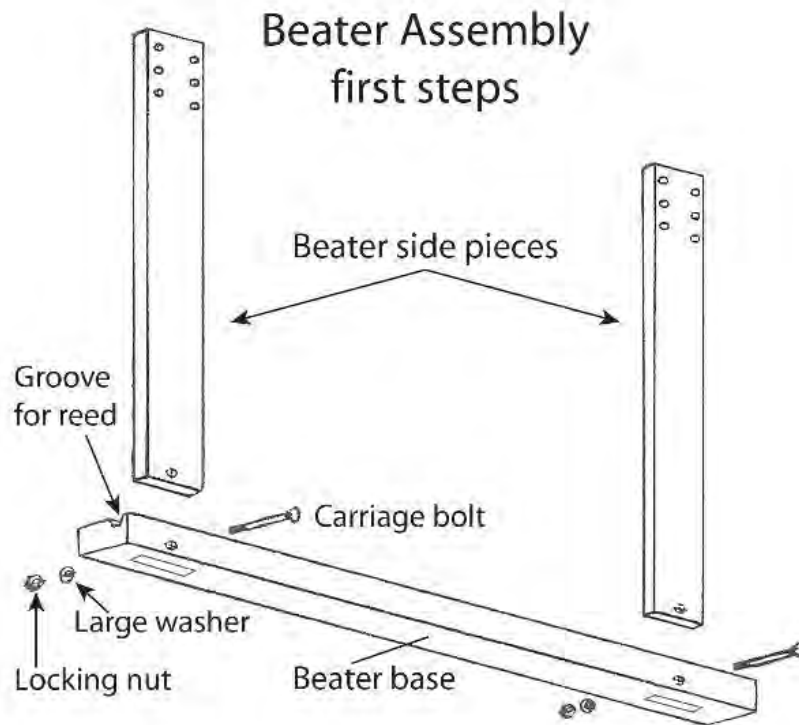
Note: The height of the beater is adjustable:

- so that warps can go through the center of the reed
- to accommodate different reeds

Note: The beater pins will be added later

3. Lay the beater base on the floor so that the groove for the reed faces the front





Important!!
The carriage bolts and groove for the reed are both on the front of the beater base!

4. Slide the beater side pieces into the slots at the ends of the beater base
5. Insert the carriage bolts (included in the package of parts from Box 1a) into the holes on the beater base
6. Using a rubber mallet, tamp in the carriage bolts until their heads are flush with the wood

Important!! This is necessary to hold the bolts in place while screwing on the locking nuts

7. Add large washers to the carriage bolts
8. Screw on the locking nuts, with the blue ring of the nut pointing out (not next to the washer)

Note: The washer should be between the beater base and the locking nut

9. Tighten the nuts with the provided wrench

Important!! The nuts may be very difficult to tighten completely! This is characteristic of locking nuts and is as designed

Important!! The blue ring of the nut should be pointing up (not next to the washer)



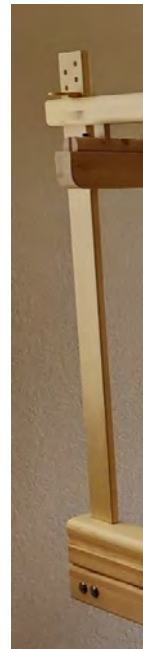
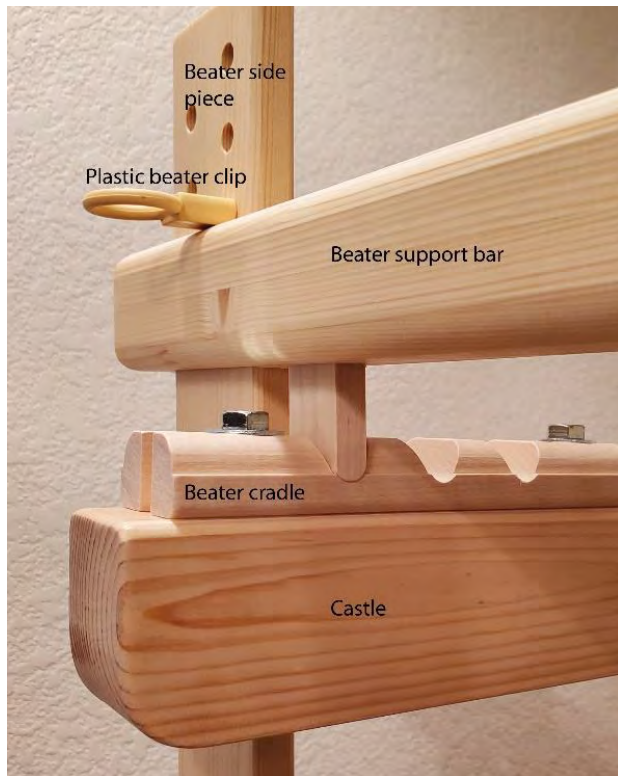
10. Lower the beater handle over the side pieces, with the groove for the reed facing downward directly over the groove in the beater base

Note: The reed will sit in the groove, in front of the beater side pieces



11. Slide the beater support bar (with the Glimakra label) onto the beater assembly

Important!! Make sure the Glimakra label faces the front of the loom!



11. Insert the plastic beater pins at the same position on both of the beater side pieces

Note: The positions of beater pins can be adjusted after the reed and warp are added

12. Place the beater in the *front* notches of the beater cradles

Important!! The beater must hang from the same notch on both sides of the frame

Align the Beater

The following steps are performed to make sure the beater strikes the corner posts of the loom frame evenly

1. Make certain the bolts holding the beater cradles are screwed in loosely
2. Gently push both of the beater cradles all the way forward on the castles
3. Grasp the **center** of the beater handle with one hand, and pull it forward toward the breast beam
4. Check that it strikes both corner posts at the same time
5. If the beater touches one corner post before the other, adjust the beater cradles by:
 - noting which corner post is touched first
 - gently nudging the beater cradle on that side slightly *backward*
6. Repeat steps 3 through 6 until the beater strikes the corner posts at the same time
7. Tighten the screws on both beater cradles with the provided wrench