

BABY WOLF LOOM™

ASSEMBLY INSTRUCTIONS FOR DISASSEMBLED LOOMS

FL3001E FL3013E
 FL3003E FL3021E
 FL3011E FL3023E

BEFORE YOU BEGIN

- Read through the directions before starting to assemble your loom.
- You'll find a complete labelled diagram of the Wolf loom in your Maintenance and Warranty manual and at schachtspindle.com.
- Wolf loom legs are called out by where they cross each other. The legs that touch the ground at the front of the loom are called "inside" legs because they are covered by the "outside" legs when they cross at the loom center.
- The beater is at the front of the loom. The brake is on the right side of loom.
- All wooden parts of the loom have been finely sanded and finished with hand-rubbed Danish oil. If at any time you wish to apply more finish to the loom, use a Danish oil (tung oil and polyurethane mixture) and hand-rub the wood with a soft lint-free cloth. **Be sure to follow the finish manufacturer's instructions.**

- Unpack the loom parts carefully and compare them to the drawings on pages 4 and 5. Do not throw away the carton or any of the packing material until you have checked to see that all of the parts and hardware bags have been included.
- Hardware for your loom has been packed into bags for different steps in the assembly process. **Open each bag only when you reach those steps, then identify the pieces included in that bag.**
 - Follow the exact order of assembly. Take care and work slowly. It will be easier to assemble your loom with a helper. Some steps may require two people.
 - When you finish assembling the loom, go back over all of the screws and bolts to make sure they are tight. For screws on parts that need to pivot, tighten the screw firmly, then unscrew just enough to allow free movement. It is a good idea to re-tighten all screws on your loom every few months.

TOOLS REQUIRED

#2 Phillips screwdriver
 slotted (flat) screwdriver
 adjustable wrench or wrenches in the following sizes:
 5/16", 7/16", 3/8", 1/2"

COMMON HARDWARE

These drawings are not to scale and hardware is not shown in every size listed.

- **Screws and bolts** are sized in inches, measured by **shaft length**. Measure the shafts of screws and bolts with a metal tape measure or the ruler on this page. First identify all the screws and bolts in a bag; then it will be easier to identify any nuts.
- **Nuts** attach to bolts and machine screws. They have to match the bolt or machine screw in **diameter** and **thread size**. Match the numbers at the beginning of the description (for instance, 10-24 or 1/4-20) to the corresponding bolt or machine screw.
- **Washer** sizes refer to the **diameter of the hole**; measure the hole with a metal tape measure or the ruler on this page. Different types of washers, all the same size, are shown at right. SAE washers have the smallest outside diameter, fender washers have the largest outside diameter, and USS washers are in the middle.

For more help identifying hardware, see our guide at www.schachtspindle.com/pdfs/schacht-hardware-guide.pdf.

IDENTIFYING SCREWS AND BOLTS

carriage bolt Phillips truss head machine screw

Phillips truss head sheet metal screw Phillips pan head sheet metal screw

IDENTIFYING NUTS

barrel nut washer wing nut cap nut

lock nut slim lock nut hex nut

IDENTIFYING WASHERS

SAE washer USS washer fender washer



Hardware bags may include parts that are not needed for your loom; there may also be extras included for some parts. Photos are not to scale.

HARDWARE BAG A—STEPS 1–3

- 4X fold bars
- 4X 10-24 x 1-1/4" carriage bolts
- 8X #8 SAE washers
- 4X 10-24 lock nuts
- 2X 1/4" USS washers
- 2X 5/16-18 lock nuts
- 2X plastic T-nut slides
- 2X fold knobs (plastic knobs with 1" threaded shafts)

HARDWARE BAG B—STEPS 4–8

- 6X 1/4-20 x 2" Phillips truss head machine screws
- 6X 1/4-20 barrel nuts
- 1X ratchet advance lever
- 2X 3/8" USS washers
- 4X #8 x 1-1/2" Phillips truss head sheet metal screws

HARDWARE BAG C—STEPS 9–10

- 2X #8 x 1-1/2" Phillips truss head sheet metal screws
- 2X 1/4-20 barrel nuts
- 2X 1/4-20 x 2" Phillips truss head machine screws
- 2X 1/4-20 x 2-1/2" carriage bolts
- 2X 1/4" USS washers
- 2X 1/4-20 washer wing nuts
- 2X 5/16-18 slim lock nuts

HARDWARE BAG D—STEPS 11–13

4-shaft looms:

- 2X 4-shaft jack pivot rods
- 10X 3/8" SAE washers
- 4X #8 x 1-1/2" Phillips truss head sheet metal screws
- 2X 1/4" USS washers
- 2X 1/4-20 lock nuts
- 2X 1/4-20 x 4-1/2" carriage bolts

8-shaft and 4 Now-4 Later looms:

- 2X 8-shaft jack pivot rods
- 22X 3/8" SAE washers
- 6X 3/4" nylon jack spacers (only installed on 4 Now-4 Later looms)
- 4X #8 x 1-1/2" Phillips truss head sheet metal screws
- 2X 1/4" USS washers
- 2X 1/4-20 lock nuts
- 2X 1/4-20 x 7" carriage bolts

HARDWARE BAG E—STEPS 15–17

4-shaft looms:

- 7X 8/32" hex nuts (includes extras)
- 7X rubber O-rings (includes extras)
- 2X #8 x 1-1/2" Phillips truss head sheet metal screws

8-shaft and 4 Now-4 Later looms:

- 11X 8/32" hex nuts (includes extras)
- 11X rubber O-rings (includes extras)
- 2X #8 x 1-1/2" Phillips truss head sheet metal screws
- 2X #8 x 1-1/4" Phillips pan head sheet metal screws

HARDWARE BAG F—STEPS 18–22

- 2X 3/8" USS washers
- 1X brake barrel nut
- 1X 1/4-20 x 1" Phillips pan head machine screw
- 1X brake bar and cable
- 2X 1/4" USS washers
- 1X 5/16-18 slim lock nut
- 1X brake S-hook
- 1X plastic arrow peg
- 1X brake eye bolt
- 1X #12 SAE washer
- 1X brake spring with insert



fold bar



plastic T-nut slide



fold knob



ratchet advance lever



jack pivot rod



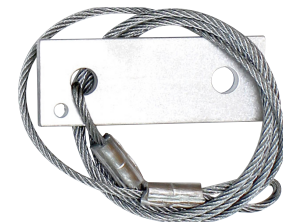
jack spacer



rubber O-ring



brake barrel nut



brake bar and cable



brake S-hook



plastic arrow peg



brake eye bolt



brake spring with insert

HARDWARE BAG G—STEPS 23–25

- 1X warp beam crank handle
- 1X 3/8" USS washer
- 1X 3/8" cap nut
- 2X 1/4-20 barrel nuts
- 2X 1/4" fender washer
- 2X back beam knobs (plastic knobs with 2-1/4" threaded shafts)
- 1X beater pin and chain
- 1X beater pin holder
- 1X #6 x 5/8" Phillips pan head sheet metal screw

CORDS BAG

4-shaft looms:

- 1X brake cord
- 24X tie-ups
- 10X 29" apron cords

8-shaft and 4 Now-4 Later looms:

- 10X treadle aid tie-ups
- 1X brake cord
- 80X tie-ups
- 10X 29" apron cords

ACCESSORIES PACK

4-shaft looms:

- 1X brass reed hook
- 400X inserted eye heddles

8-shaft and 4 Now-4 Later looms:

- 1X brass reed hook
- 800X inserted eye heddles



warp beam crank handle



back beam knob



beater pin holder



beater pin and chain



brake cord



apron cords



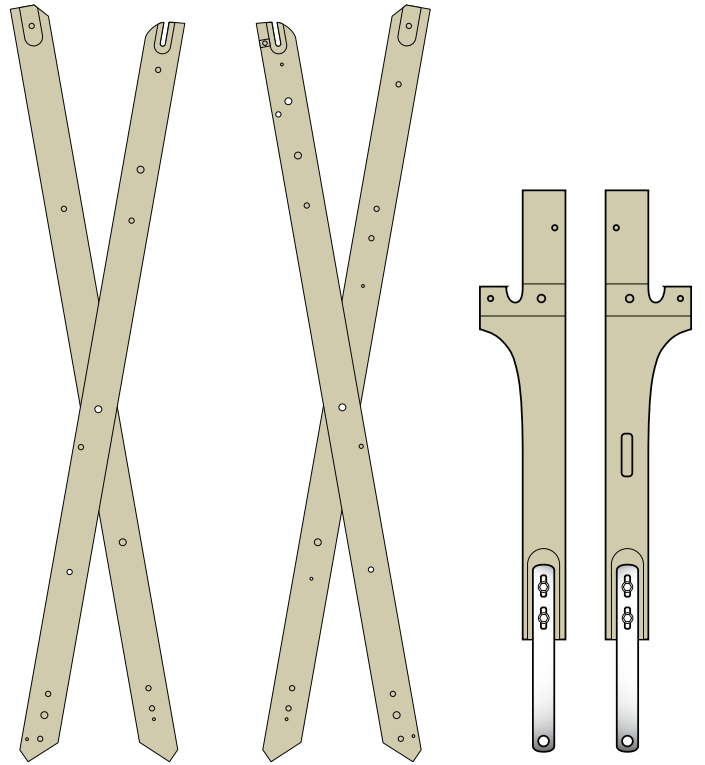
tie-up cords



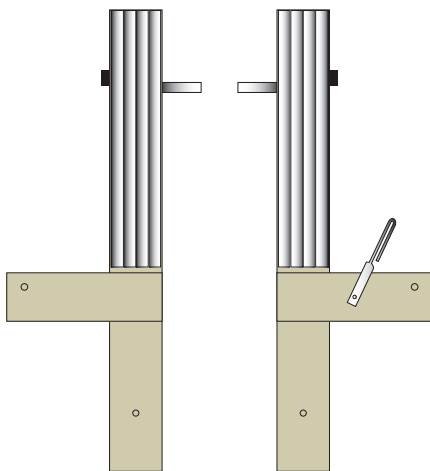
treadle aid cords

BABY WOLF PARTS

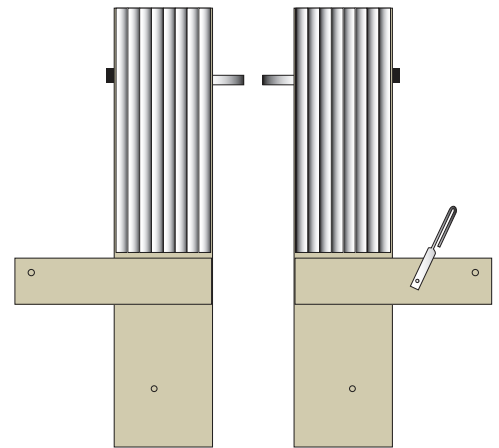
- left and right pairs of legs
- left and right castle sides
- treadle assembly
- rear leg brace
- cloth beam
- front castle cross brace
- front beam with front beam extension
- left and right beater sides
- beater race
- beater top
- jack assemblies—numbered on yellow stickers
 - 4-shaft looms: 2X #1 jack assemblies, 2X #3 jack assemblies
 - 8-shaft looms: 2X #1 jack assemblies, 2X #2 jack assemblies, 2X #3 jack assemblies, 2X #4 jack assemblies
 - 4 Now-4 Later looms: 2X #1 jack assemblies, 2X #2 jack assemblies
- rear castle cross brace
- shaft frames with heddle bars:
 - 4-shaft looms: 4X shaft frames, 8X heddle bars
 - 8-shaft looms: 8X shaft frames, 16X heddle bars
 - 4 Now-4 Later looms: 4X shaft frames, 8X heddle bars
- upper castle support
- treadle aid bar (8-shaft and 4 Now-4 Later looms only)
- treadle aid dowel (8-shaft and 4 Now-4 Later looms only)
- warp beam
- removable back beam
- 3X apron bars
- 2X lease sticks (with holes)



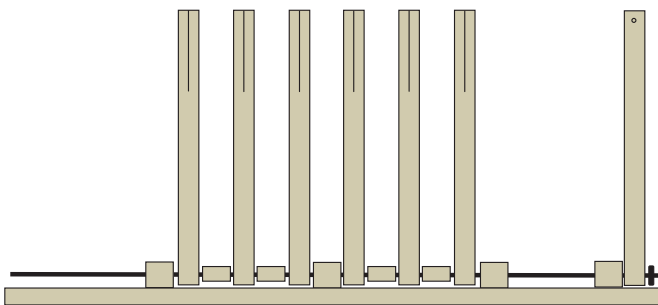
left pair of legs (inner side) right pair of legs (inner side) left and right beater sides (inner sides)



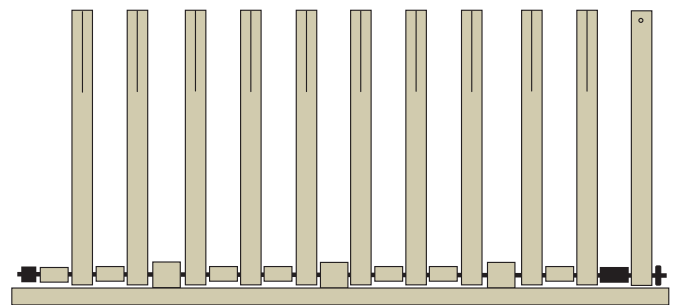
left and right castle sides (inner side), 4-shaft looms



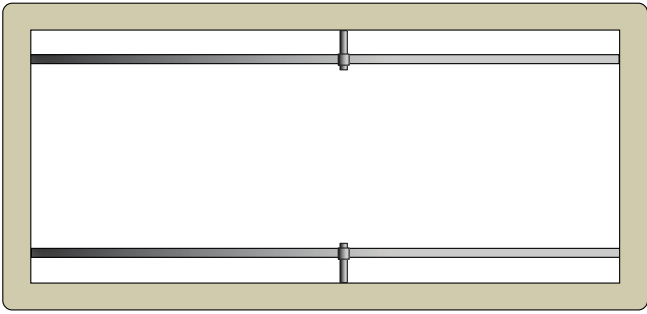
left and right castle sides (inner side), 8-shaft and 4 Now-4 Later looms



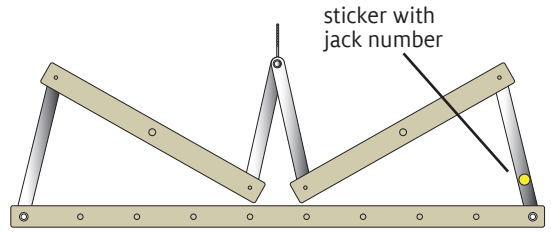
treadle assembly, 4-shaft looms



treadle assembly, 8-shaft and 4 Now-4 Later looms



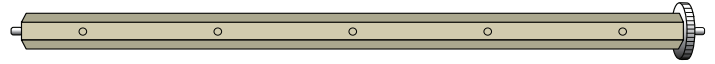
shaft frame with heddle bars and heddle hooks



jack assembly



rear leg brace (small pins on each end)



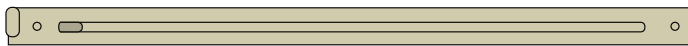
cloth beam



front castle cross brace
SERIAL NUMBER



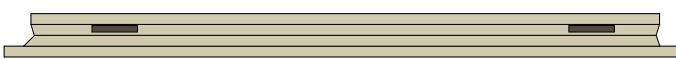
rear castle cross brace



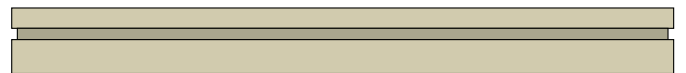
front beam & front extension



upper castle support



beater top (underside)



beater bottom



treadle aid bar & dowel
8-shaft and 4 Now-4 Later looms only



warp beam



removable back beam



apron bars



lease sticks

ASSEMBLY INSTRUCTIONS

1. Attach the fold bars to the legs.

Parts: left and right pairs of legs

Hardware bag A: 4X fold bars, 4X 10-24 x 1-1/4" carriage bolts, 8X #8 SAE washers, 4X 10-24 lock nuts

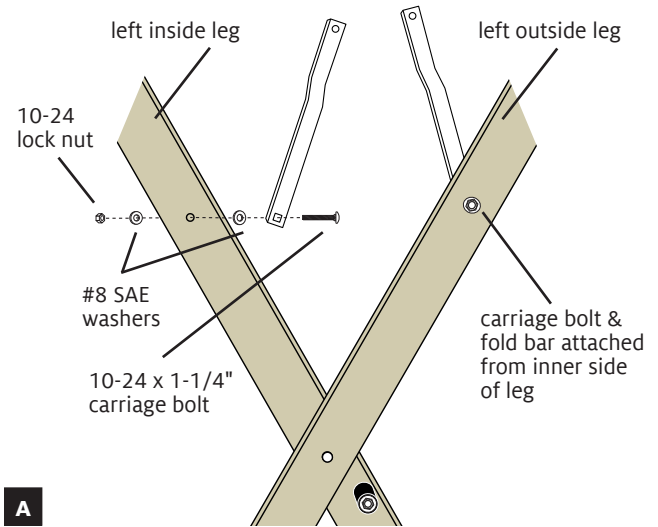
NOTE: Wolf loom legs are called out by where they cross each other. The legs that touch the ground at the front of the loom are called "inside" legs because they are covered by the "outside" legs when they cross at the loom center.

Lay the left pair of legs on the floor with the outside leg on top and pointing to the right, as shown in Figure 1A. Orient the fold bars as shown in Figure 1A, with round holes meeting between the legs and the jogs in the bars pointing toward the floor—in other words, the round holes should be closer to the floor than the square holes.

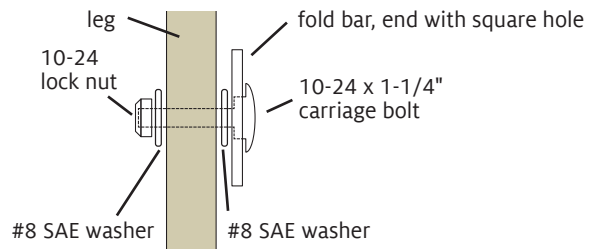
On the left inside leg, identify the **first** hole above the bolt where the legs meet. Insert a 10-24" x 1-1/4" carriage bolt through the square hole of the fold bar, then through a #8 SAE washer, then through the hole in the inside leg from above, then through another #8 SAE washer. Secure the carriage bolt with a 10-24 lock nut (Figure 1B); attach the lock nut just tightly enough to allow the fold bar to rotate.

On the left outside leg, identify the **first** hole above the bolt where the legs meet. Insert a 10-24 x 1-1/4" carriage bolt through the square hole of the fold bar, then through a #8 SAE washer, then through the hole in the outside leg from below, then through another #8 SAE washer. Secure the carriage bolt with a 10-24 lock nut (Figure 1B); attach the lock nut just tightly enough to allow the fold bar to rotate.

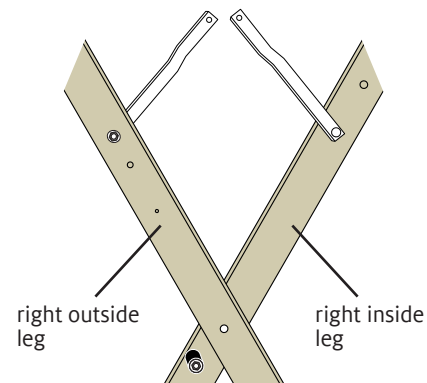
Repeat this step for the right pair of legs, orienting them as shown in Figure 1C. On the right inside leg, attach the fold bar at the **first** hole above the bolt where the legs meet. On the right outside leg, attach the fold bar at the **third** hole above the bolt where the legs meet.



A



B



C

FIGURE 1: ATTACH FOLD BARS TO LEGS

2. Attach the castle sides to the legs.

Parts: left and right castle sides

Hardware bag A: 2X 1/4" USS washers, 2X 5/16-18 lock nuts

Place one pair of legs on the floor with its inner side facing up, so that the bolt shaft connecting the legs points upwards. Orient the corresponding castle side as shown in Figure 2. Put the bolt through the hole in the castle side, place a 1/4" USS washer on the bolt, and secure with a 5/16-18 lock nut. Attach the lock nut firmly, but not so tightly that the legs cannot fold and unfold.

Repeat this step for the remaining pair of legs and castle side.

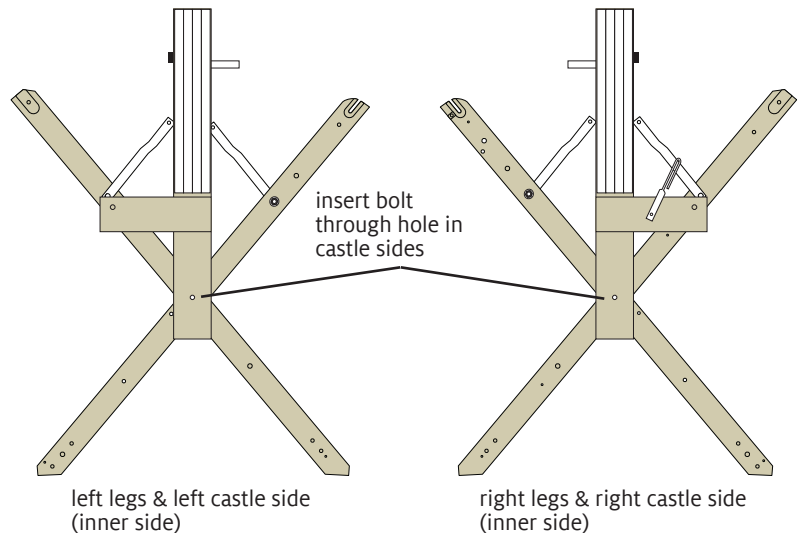


FIGURE 2: ATTACH CASTLE SIDES TO LEGS

3. Attach the fold bars to the castle.

Hardware bag A: 2X plastic T-nut slides, 2X fold knobs

Turn over the leg and castle side assemblies so the slot in the castle side faces up. Slide the metal T-nut at the bottom of the slot to the middle of the slot.

Set the plastic T-nut slide with its wide end up into the slot in the castle side. Align the holes in the plastic T-nut slide and the metal T-nut (Figure 3A). Place the ends of the fold bars over the T-nut slide—first the outside leg fold bar, then the inside leg fold bar (Figure 3B). Insert a fold knob through the fold bars and T-nut slide, then screw the knob into the metal T-nut. Slide the knob to the bottom of the slot, opening the legs as far as they will go, and tighten the knob.

Repeat this step for the other castle side.

Note: The fold bars must be stacked as shown in Figure 3B, with the outside leg fold bar below the inside leg fold bar.

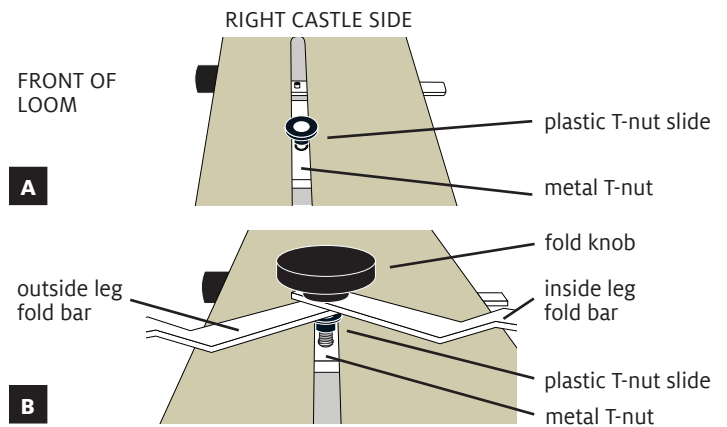


FIGURE 3: ATTACH THE FOLD BARS TO THE CASTLE SIDES

4. Attach the treadle assembly to the legs.

Parts: treadle assembly

Hardware Bag B: 2X 1/4-20 x 2" Phillips truss head machine screws, 2X 1/4-20 barrel nuts

Set the treadle assembly on the floor with the brake release pedal at the right, as shown in Figure 4A. If you can see the 1/2" round depressions on the underside of the treadles, the assembly is upside down and must be turned over. Stand the right leg and castle side assembly upright, leaning it against a wall or having a helper hold it in position. Be careful—until the treadle assembly has been attached at both ends, the leg and castle side assemblies can fall over easily.

Remove all packing material from the ends of the treadle bar, leaving any washers or nylon spacers in place. Line up the treadle assembly with the holes in the leg that do not go all the way through the legs. The treadle bar fits into the large hole and the pin at the end of the treadle support fits into the small hole. Insert the pin and treadle bar into their holes (Figure 4B).

From underneath the treadle support, place a barrel nut into its hole; hold it in place with masking tape and/or a slotted screwdriver. Insert a 1/4-20 x 2" Phillips truss head machine screw into the right inside leg from the outside, then tighten it firmly into the barrel nut (Figure 4C).

Repeat this step for the left leg and castle side assembly.

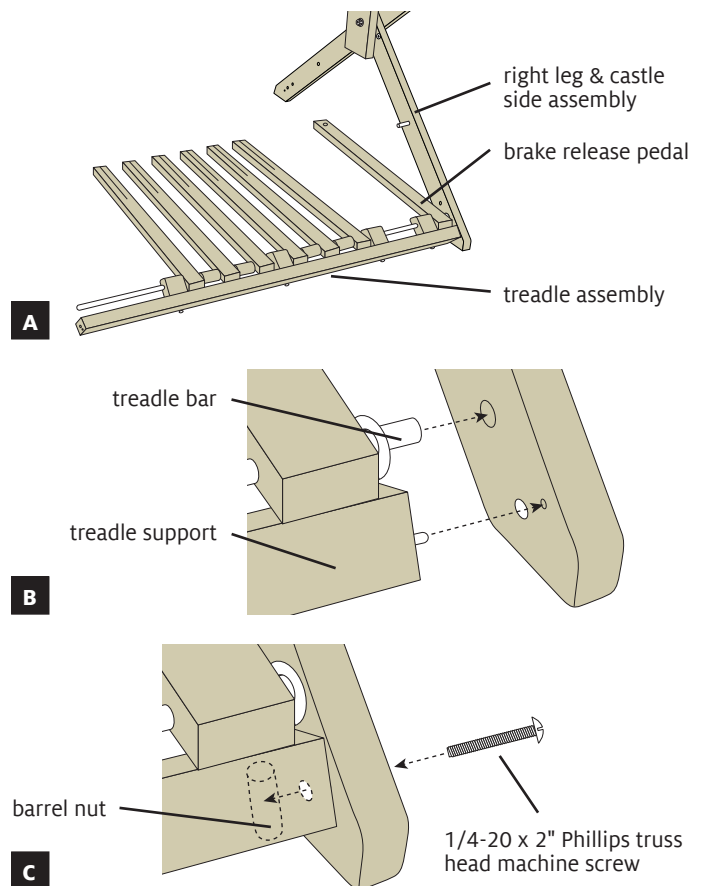


FIGURE 4: ATTACH THE TREADLE ASSEMBLY

5. Install the rear leg brace.

Parts: rear leg brace

Hardware Bag B: 2X 1/4-20 x 2" Phillips truss head machine screws, 2X 1/4-20 barrel nuts

Insert a 1/4-20 barrel nut into the hole at one end of the rear leg brace; hold it in place with masking tape or a slotted screwdriver. Insert a 1/4-20 x 2" Phillips truss head machine screw into an outside leg from the outside (Figure 5). Tighten the screw firmly into the barrel nut.

Repeat this step for the other end of the rear leg brace.

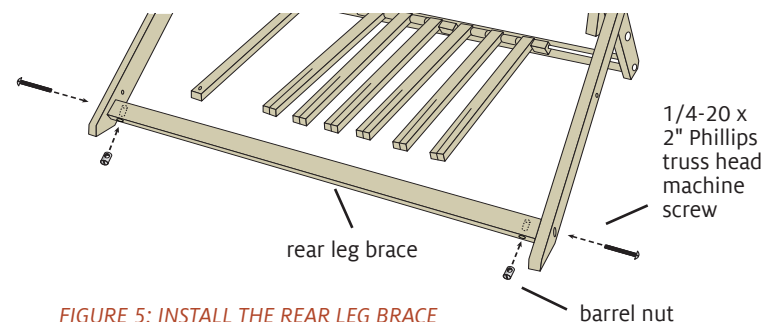


FIGURE 5: INSTALL THE REAR LEG BRACE

6. Install the cloth beam and ratchet advance lever.

Parts: cloth beam

Hardware Bag B: 1X ratchet advance lever, 2X 3/8" USS washers

Place the ratchet advance lever on the right axle of the cloth beam, next to the ratchet gear, orienting the lever as shown in Figure 6A. Place a 3/8" USS washer on each end of the cloth beam. Insert the cloth beam in the holes in the cloth beam supports (Figure 6B). You will have to spread apart the cloth beam supports to complete this step.

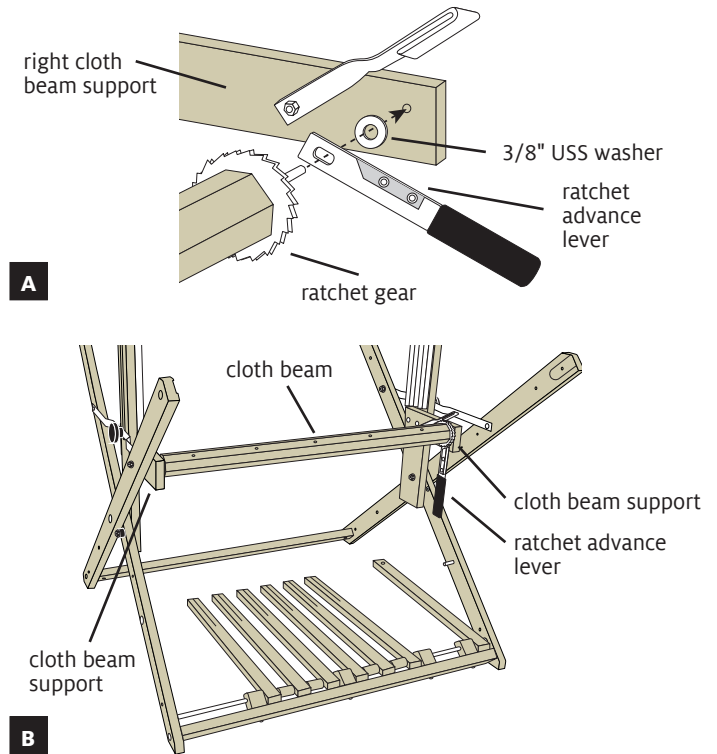


FIGURE 6: INSTALL THE CLOTH BEAM AND RATCHET ADVANCE LEVER

7. Attach the front castle cross brace.

Parts: front castle cross brace

Hardware Bag B: 4X #8 x 1-1/2" Phillips truss head sheet metal screws

Orient the front castle cross brace with square holes at the top, with the logo right side up and visible from the front of the loom (Figure 7). Attach the front castle cross brace to the front edge of the castle sides, just below the cloth beam supports, using two #8 x 1-1/2" Phillips truss head sheet metal screws at each end of the brace.

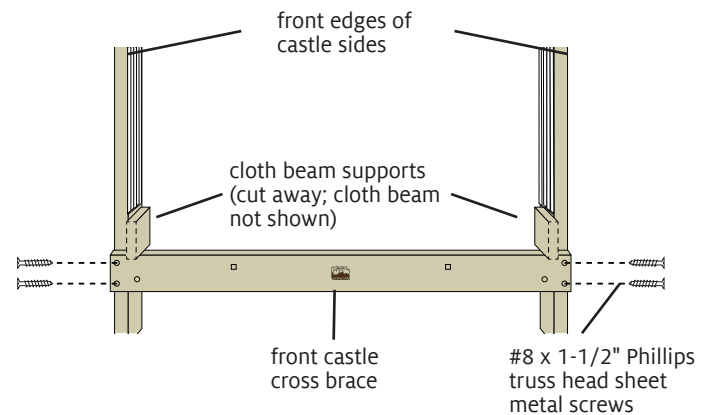


FIGURE 7: INSTALL FRONT CASTLE CROSS BRACE

8. Attach the front beam.

Parts: front beam with attached front beam extension

Hardware Bag B: 2X 1/4-20 x 2" Phillips truss head machine screws, 2X 1/4-20 barrel nuts

Orient the front beam with the extension facing the front of the loom, with the rounded long edge of the front beam facing up; position the front beam between the outside legs (Figure 8).

Insert a 1/4-20 barrel nut in the hole at one end of the front beam; use masking tape and/or a slotted screwdriver to hold it in place. Insert a 1/4-20 x 2" Phillips truss head machine screw through the leg from the outside and tighten it firmly into the barrel nut. Repeat for the other end of the front beam.

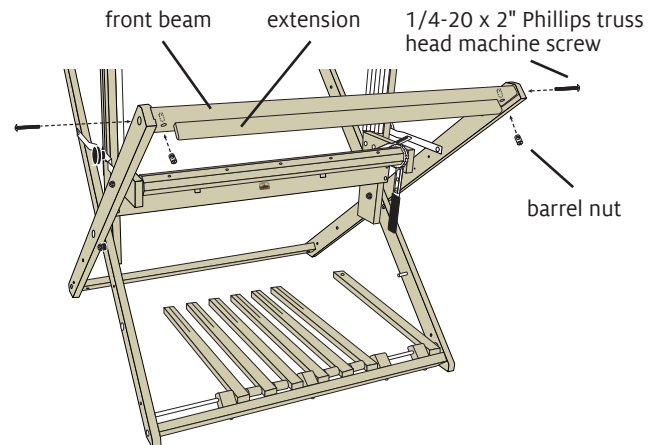


FIGURE 8: INSTALL FRONT BEAM WITH EXTENSION

9. Assemble the beater.

Parts: left and right beater sides, beater bottom, beater top
 Hardware Bag C: 2X #8 x 1-1/2" Phillips truss head sheet metal screws, 2X 1/4-20 barrel nuts, 2X 1/4-20 x 2" Phillips truss head machine screws, 2X 1/4-20 x 2" Phillips truss head machine screws, 2X 1/4-20 x 2-1/2" carriage bolts, 2X 1/4" USS washers, 2X 1/4-20 washer wing nuts

Attach the beater sides to the beater bottom: Orient the left and right beater sides with their fronts facing forward, as shown in Figure 9A. Set the beater bottom between the sides with its grooved wide side (the shuttle race) at the front. Insert a 1/4-20 barrel nut into the hole at one end of the beater bottom. Insert a 1/4" x 2" Phillips truss head machine screw through the back hole of a beater side and tighten it firmly into the barrel nut. Repeat for the other end of the beater bottom. Then screw the #8 x 1-1/2" Phillips truss head sheet metal screws into the front holes at each end of the beater bottom.

Attach the beater top to the sides (Figure 9B): If you wish, you can put the reed in the beater at this point. Place the beater top with its longer edge in front of the beater sides, so that the holes in the top line up with the slots in the sides. From the back of the beater top, insert a 1/4" x 2-1/2" carriage bolt through each hole. Secure each carriage bolt from the front of the beater with a 1/4" USS washer and a 1/4-20 washer wing nut.

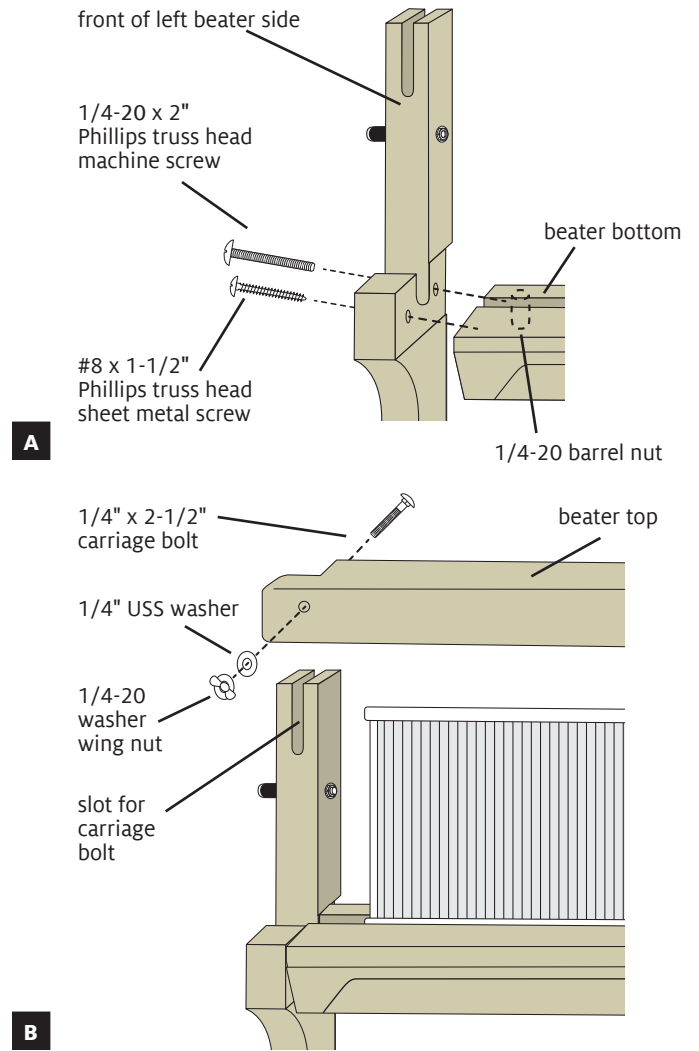


FIGURE 9: ASSEMBLE THE BEATER

10. Install the beater assembly.

Hardware Bag C: 2X 5/16-18 slim lock nuts

Orient the beater with its front side facing forward. Place the metal beater supports onto the bolts pre-installed on the inside legs (Figure 10A). Secure the beater with a 5/16-18 slim lock nut on each bolt (Figure 10B). Tighten the lock nuts all the way, then loosen one-half to one full turn to allow the beater to move freely.

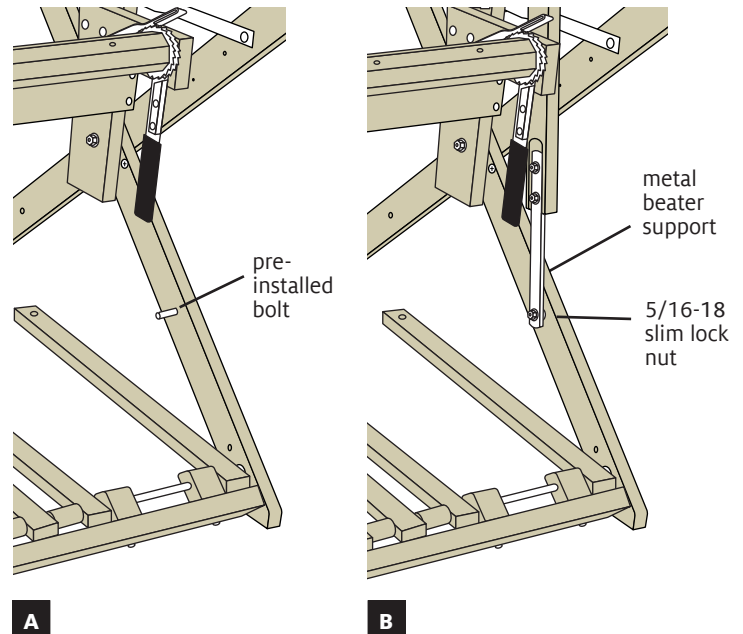


FIGURE 10: INSTALL THE BEATER ASSEMBLY

11. Install the jacks and lamms.

Parts: jack assemblies listed below for your loom
 Hardware Bag D: hardware listed below for your loom

4-shaft looms: 2X 3-1/2" jack pivot rods, 10X 3/8" SAE washers, 2X #1 jack assemblies, 2X #3 jack assemblies

8-shaft looms: 2X 5-5/8" jack pivot rods, 22X 3/8" SAE washers, 2X #1 jack assemblies, 2X #2 jack assemblies, 2X #3 jack assemblies, 2X #4 jack assemblies

4 Now-4 Later looms: 2X 5-5/8" jack pivot rods, 14X 3/8" SAE washers, 6X 3/4" nylon spacers, 2X #1 jack assemblies, 2X #2 jack assemblies

4-shaft Looms: From the rear of the loom, insert the jack pivot rods into the larger holes of the front castle cross brace. Place one 3/8" SAE washer on each of the rods (Figure 11A). Place a #1 jack assembly on the jack pivot rods, followed by a 3/8" SAE washer on each rod (Figure 11B). Place the second #1 jack assembly on the jack pivot rods, followed by 3/8" SAE washer on each rod. Place a #3 jack assembly on the jack pivot rods, followed by another 3/8" SAE washer on each rod. Place the second #3 jack assembly on the jack pivot rods, and finish with two more 3/8" SAE washers on each rod (Figure 11C).

8-shaft looms: From the rear of the loom, insert the jack pivot rods into the larger holes of the front castle cross brace. Place two 3/8" SAE washers on each of the rods (Figure 11A). Place a #1 jack assembly on the jack pivot rods, followed by a 3/8" SAE washer on each rod (Figure 11B). Place the second #1 jack assembly on the jack pivot rods, followed by 3/8" SAE washer on each rod. Place a #2 jack assembly on the jack pivot rods, followed by another 3/8" SAE washer on each rod. Place the second #2 jack assembly on the jack pivot rods, followed by another 3/8" SAE washer on each rod. Continue with a #3 jack assembly, a 3/8" SAE washer on each rod, the second #3 jack assembly, a 3/8" SAE washer on each rod, a #4 jack assembly, a 3/8" SAE washer on each rod, and the second #4 jack assembly. Finish by placing two more 3/8" SAE washers on each rod (Figure 11C).

4 Now-4 Later looms: From the rear of the loom, insert the jack pivot rods into the larger holes of the front castle cross brace. Place two 3/8" SAE washers on each of the rods (Figure 11A). Place a #1 jack assembly on the jack pivot rods, followed by a 3/8" SAE washer on each rod (Figure 11B). Place the second #1 jack assembly on the jack pivot rods, followed by 3/8" SAE washer on each rod. Place a #2 jack assembly on the pivot rods, followed by another 3/8" SAE washer on each rod. Place the second #2 jack assembly on the jack pivot rods, followed by another 3/8" SAE washer on each rod. Finish by placing two more 3/8" SAE washers on each rod (Figure 11C), followed by three nylon jack spacers on each rod.

12. Install the rear castle cross brace.

Parts: rear castle cross brace
 Hardware Bag D: 4X #8 x 1-1/2" Phillips truss head sheet metal screws

Place the rear castle cross brace behind the jacks so that the jack pivot rods fit into their holes—these holes do not go all the way through the brace (Figure 12). Using two #8 x 1-1/2" Phillips truss head sheet metal screws at each end, attach the rear castle cross brace to the castle.

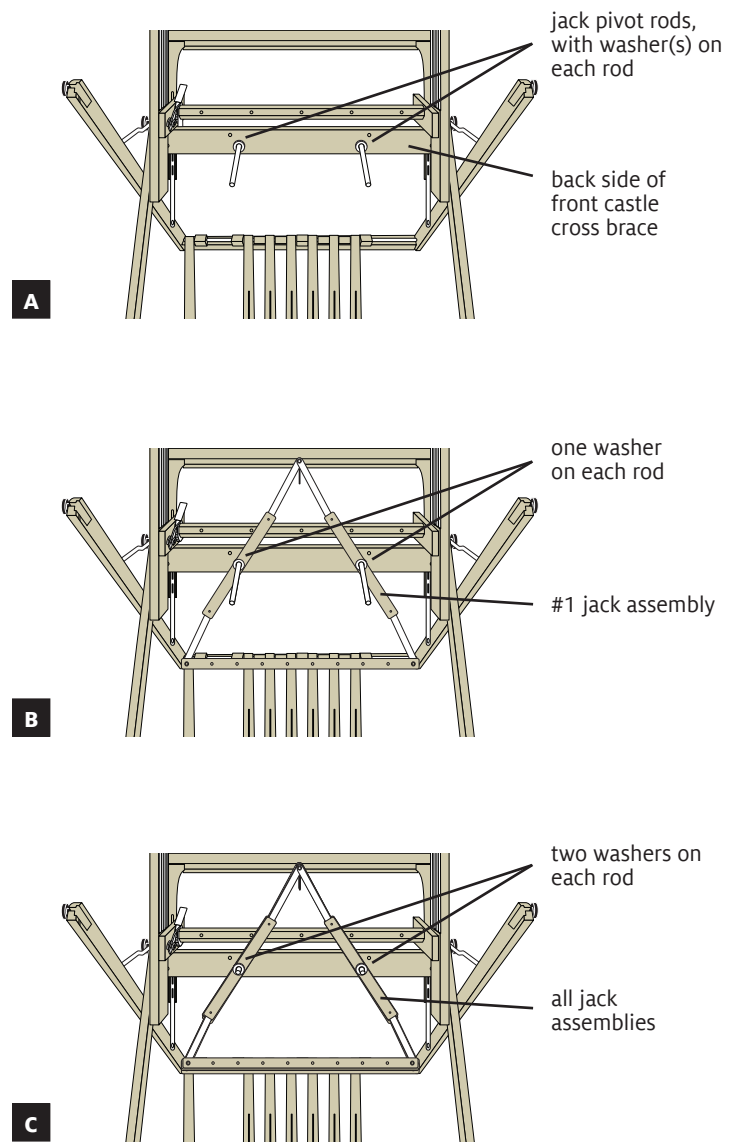


FIGURE 11: INSTALL THE JACK ASSEMBLIES

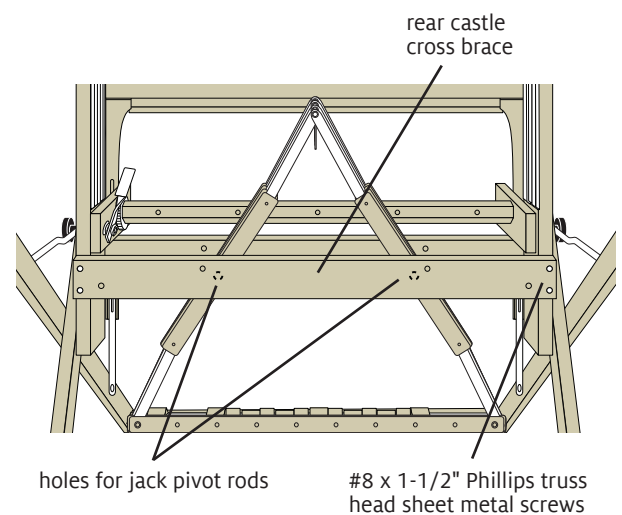


FIGURE 12: INSTALL THE REAR CASTLE CROSS BRACE

13. Install carriage bolts on the castle cross braces.

Hardware Bag D: 2X 1/4" USS washers, 2X 1/4-20 lock nuts, 2X 1/4-20 x 4-1/2" carriage bolts for 4-shaft looms or 2X 1/4-20 x 7" carriage bolts for 8-shaft and 4 Now-4 Later looms

Push the jacks down in the center. From the front of the loom, insert the carriage bolts through the square holes in the front castle cross brace, all the way through the holes in the rear castle cross braces (Figure 13).

From the front of the loom, turn the carriage bolts until their square parts fit into the square holes in the front castle cross brace. At the rear castle cross brace, place a 1/4" USS washer on each bolt and secure with a 1/4-20 lock nut. Tighten the lock nut all the way so that the carriage bolt fully engages in the hole. Then loosen the lock nut slightly so that the washer remains loose.

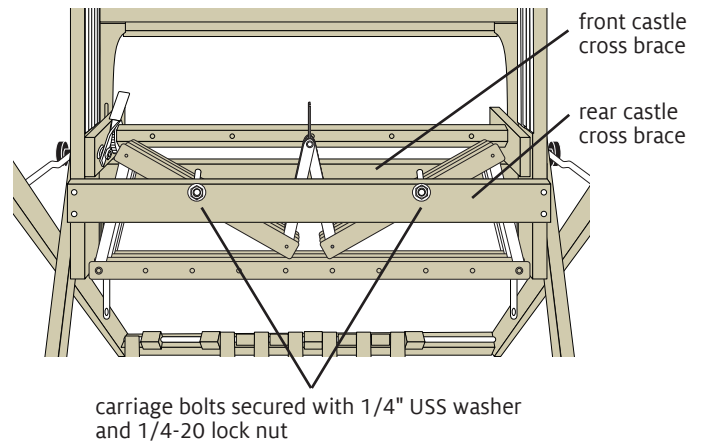


FIGURE 13: INSTALL CARRIAGE BOLTS ON CASTLE CROSS BRACE

14. Install heddles on the shafts.

Parts:

4-shaft looms: 4X shaft frames, 8X heddle bars, 400X inserted eye heddles

8-shaft looms: 8X shaft frames, 16X heddle bars, 800X inserted eye heddles

4 Now-4 Later looms: 4X shaft frames, 8X heddle bars, 800X inserted eye heddles

Lay a shaft frame on a flat surface. Push up on the slide lock on the heddle bar hook and pull the heddle bar out of the hook (Figure 14A). Release the slide lock. Flex the heddle bars enough to remove one end from the slot in the side of the frame. Remove the other end from the frame (Figure 14B).

Keep the heddles loosely tied until the heddle bars are installed in the shaft frame. Be sure to keep the heddles oriented in the same direction for easier threading. Lay the heddle bars next to the heddles. Carefully slide a group of heddles onto the heddle bars (Figure 14C).

Replace the heddle bars in the shaft frame. Insert one end of each heddle bar in the slot in the frame. Flex the heddle bar and insert the other end into its slot. Divide the heddles approximately in half and push them to either end of the heddle bar. Push up on the slide lock and place the heddle bar back on the hooks (Figure 14D).

Repeat this step for the other shafts. For 4 Now-4 Later looms, you can install all the heddles on shafts or set them aside them to install with the 4 Later kit.

Note: This process is covered in the video *Assembling the Baby Wolf Loom* at [youtube.com/user/schachtspindle](https://www.youtube.com/user/schachtspindle).

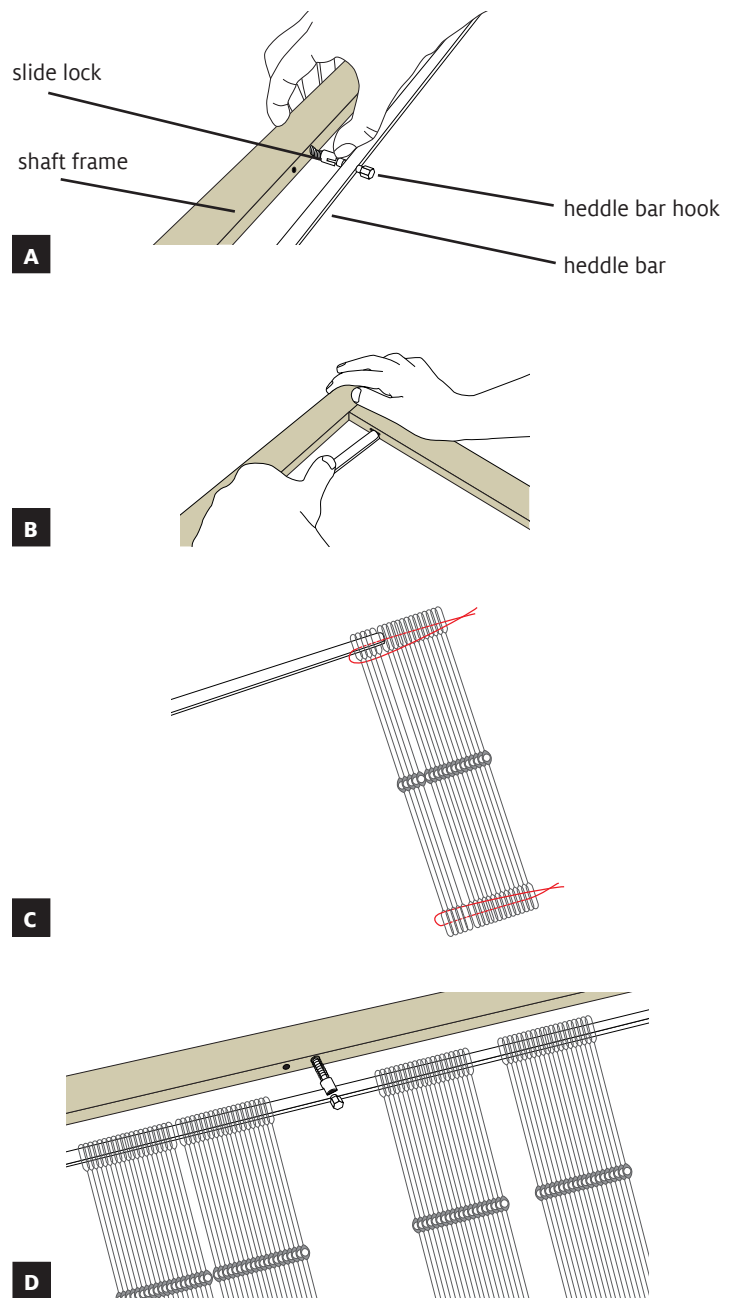


FIGURE 14: INSTALL HEDDLES

15. Install the shafts.

Hardware Bag E:

4-shaft looms and 4 Now-4 Later looms: 7X 8/32" hex nuts,

7X rubber O-rings

8-shaft looms: 11X 8/32" hex nuts, 11X rubber O-rings

Working from the rear of the loom, slide a shaft frame into the frontmost channel in the castle sides. Insert the jack pin into the hole in the center of the bottom of the frame (Figure 15). Secure the jack pin with an 8/32" hex nut, then push a rubber O-ring on top of the hex nut.

Install the remaining shaft frames into channels, working backwards from the front of the loom. The heddle bar hooks in each shaft frame are slightly off-center. The hooks should all line up when the shafts are installed in the loom—if they do not, remove any misaligned shaft frames, turn them around, and reinstall.

Note: This process is covered in the video *Assembling the Baby Wolf Loom* at [youtube.com/user/schachtspindle](https://www.youtube.com/user/schachtspindle).

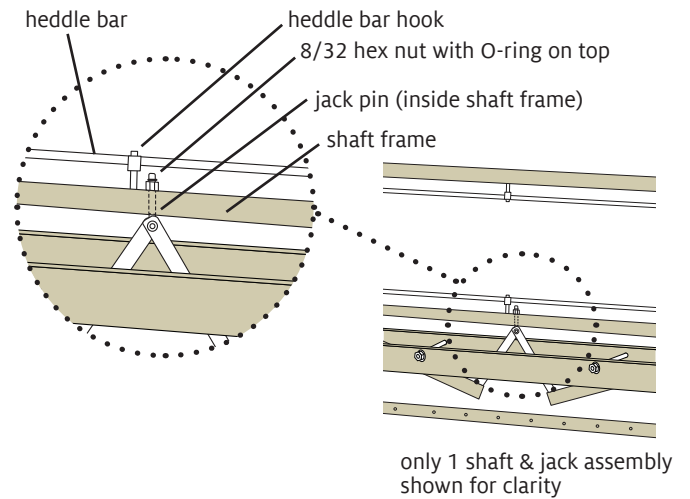


FIGURE 15: INSTALL THE SHAFTS

16. Install the upper castle support.

Parts: upper castle support

Hardware Bag E: 2X #8 x 1-1/2" Phillips truss head sheet metal screws

Orient the upper castle support with the logo right side up. Attach it to the rear of the castle with a #8 x 1-1/2" Phillips truss head sheet metal screw at each end (Figure 16).

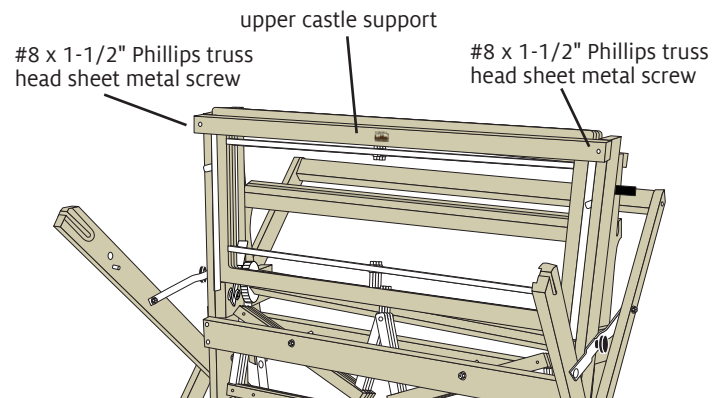


FIGURE 16: INSTALL THE UPPER CASTLE SUPPORT

17. Install the treadle aid (8-shaft and 4 Now-4 Later looms only).

Parts: treadle aid bar, treadle aid dowel

Hardware Bag E: 2X #8 x 1-1/4" Phillips pan head sheet metal screws

Cords Bag: 10X treadle aid tie-ups

Attach the treadle aid bar: from the back of the loom, attach the treadle aid bar to the rear castle cross brace with a #8 x 1-1/4" Phillips pan head sheet metal screw at each end (Figure 17).

Install the treadle aid tie-ups: start at one end of the treadle aid bar and push a treadle aid tie-up up through one of the holes (an opened paper clip can be most helpful) and then loop it over the 1/4" dowel. Install treadle aid tie-ups across the entire treadle aid bar. You will attach the treadle aid tie-ups to the ends of the treadles in the same manner as you will attach the tie-ups that control the lamms (Step 26). We recommend using a treadle aid tie-up on all of the treadles.

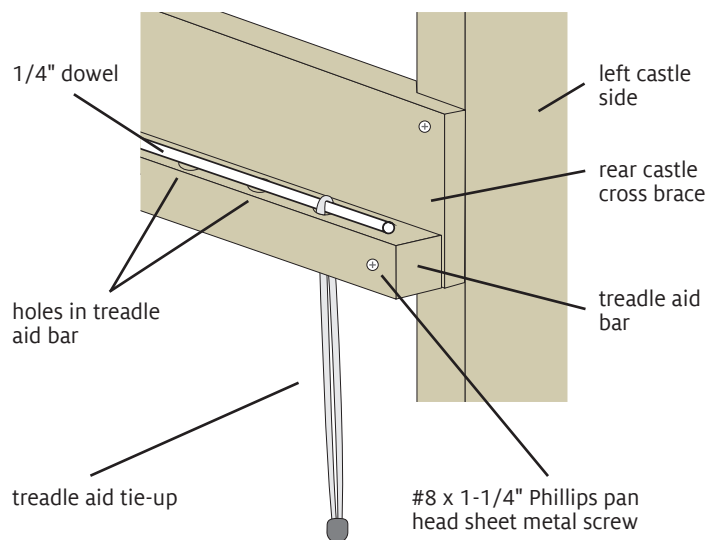


FIGURE 17: INSTALL THE TREADLE AID

18. Install the warp beam.

Parts: warp beam

Hardware Bag F: 2X 3/8" USS washers

Place a 3/8" USS washer on each end of the warp beam. Slip the threaded rod through the hole in the inside right leg as far as it will go. Fit the short rod in the other end into the hole in the inside left leg—this hole does not go all the way through the leg (Figure 18). You will have to spread the right and left inside legs apart to accomplish this.

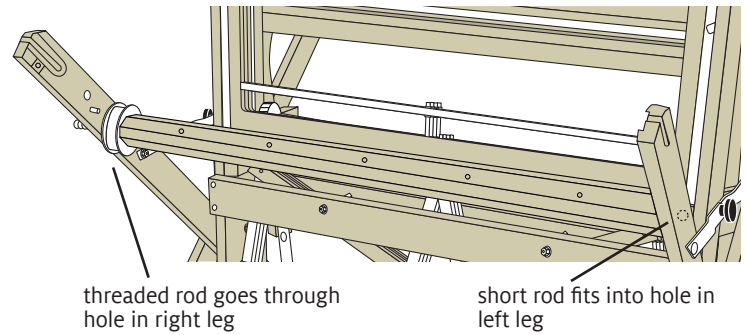


FIGURE 18: INSTALL THE WARP BEAM

19. Install the brake barrel nut.

Hardware Bag F: 1X brake barrel nut, 1X 1/4-20 x 1" Phillips pan head machine screw

Place the brake barrel nut in the groove on the inner side of the right inside leg. From the outer side of the right inside leg, insert the 1" Phillips pan head machine screw into the brake barrel nut and fasten securely (Figure 19).

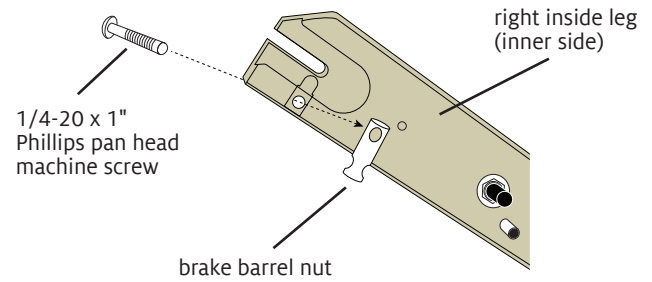


FIGURE 19: INSTALL THE BRAKE BARREL NUT

20. Install the brake bar and brake cable.

Hardware Bag F: 1X brake bar and cable, 2X 1/4" USS washers, 1X 5/16-18 slim lock nut

Remove all packing material from the pre-installed screw on the inside right leg, just above the roll pin (Figure 20A). Place the brake bar and a 1/4" USS washer on this screw, orienting the brake bar and cable as shown in Figure 20B.

Take the loose end of the brake cable and wrap it under and around the brake hub three times. Start next to the loom leg and wrap with loops moving towards the loom center, making sure not to overlap the cable (Figure 20C). Place the loop end of the cable on the pre-installed screw over the brake bar and place a 1/4" USS washer over the cable. Secure everything with a 5/16-20 slim lock nut (Figure 20C). Make sure that the brake bar can pivot freely—if it does not, slightly loosen the lock nut.

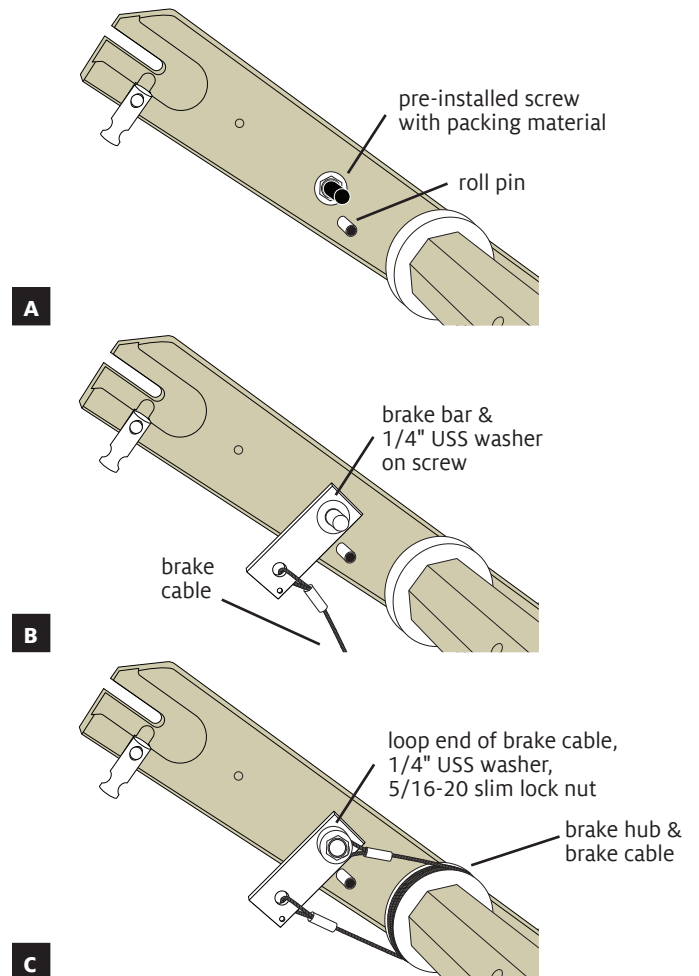


FIGURE 20: INSTALL BRAKE BAR AND BRAKE CABLE

21. Install the brake cord.

Hardware Bag F: 1X brake S-hook, 1X plastic arrow peg
Cords Bag: 1X brake cord

Hang the brake S-hook in the hole on the rear of the brake bar (Figure 21). Insert the other end of the S-hook through the loop in the brake cord. Slip the remaining end of the brake cord through the hole at the end of the brake release pedal. From underneath the brake release pedal, insert the plastic arrow peg into the fifth or sixth loop from the end of the brake cord.

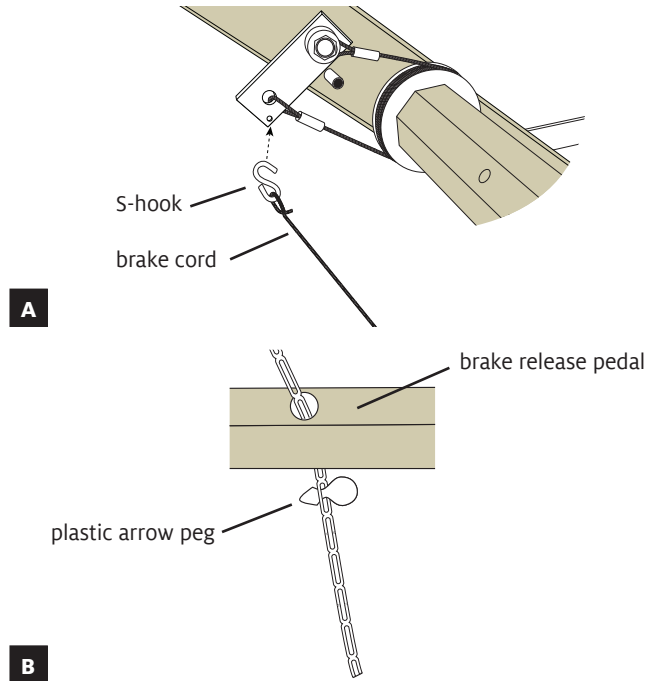


FIGURE 21: INSTALL BRAKE CORD

22. Install the brake eye bolt and brake spring.

Hardware Bag F: 1X brake eye bolt, 1X #12 SAE washer, 1X brake spring with insert

Hook the brake spring to the brake bar in the same hole as the brake cable (Figure 22). Insert the eye bolt through the #12 SAE washer, then through the hole in the brake barrel nut, and screw it into the spring insert.

Tighten the eye bolt until, when you stand at the rear of the loom, you cannot turn the warp beam away from you with both hands. When you hold the brake release pedal down, the warp beam should turn freely in either direction.

You can increase or decrease the tension on the friction brake by tightening or loosening the eye bolt. There should be small gaps between the coils of the brake spring once the proper tension is reached.

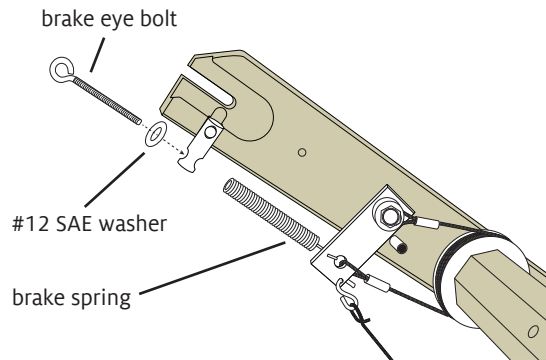


FIGURE 22: INSTALL BRAKE EYE BOLT AND BRAKE SPRING

23. Install the warp beam crank handle.

Hardware Bag G: 1X warp beam crank handle, 1X 3/8" USS washer, 1X 3/8" cap nut

Locate the threaded rod on the right end of the warp beam. Place the 3/8" USS washer and then the metal crank handle on the rod, with the wooden handle facing out. Secure with the the 3/8" cap nut (Figure 23).

When you're weaving, the crank should be pushed off of the cap nut. To engage the crank for turning the warp beam, pull the hexagonal hole in the crank onto the cap nut.

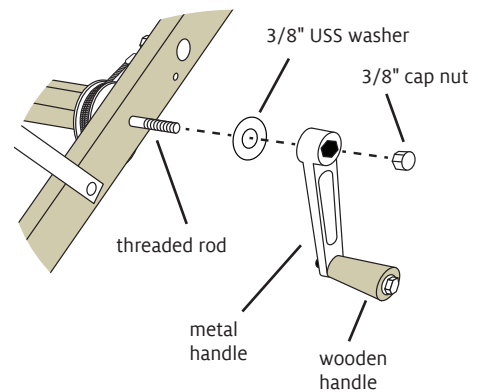


FIGURE 23: INSTALL THE WARP BEAM CRANK HANDLE

24. Install the removable back beam.

Parts: back beam

Hardware Bag G: 2X 1/4-20 barrel nuts, 2X 1/4" fender washers, 2X back beam knobs

Slide the back beam into the slots cut in the top of the inside legs. Insert a 1/4-20 barrel nut into the holes on each end of the back beam.

Place a 1/4" fender washer on a back beam knob and insert the knob through the inside leg into the back beam. Tighten the knob into the barrel nut (Figure 24). Repeat for the other end of the back beam.

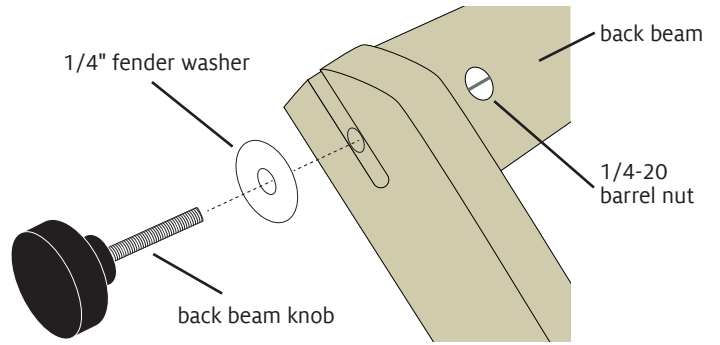


FIGURE 24: INSTALL THE REMOVABLE BACK BEAM

25. Install the beater pin.

Hardware Bag G: 1X beater pin and chain, 1X beater pin holder, 1X #6 x 5/8" Phillips pan head sheet metal screw

Insert the #6 x 5/8" Phillips pan head sheet metal screw through the hole in the end of the beater pin chain and through the hole in the beater pin holder (Figure 25A). Fasten the screw into the small pilot hole in the outside right leg (Figure 25B).

The beater pin holds the beater upright during warping. Hold the beater upright so the slot in its side aligns with the hole above the beater pin holder. Push the beater pin through this hole and into the slot in the beater side (Figure 25C).

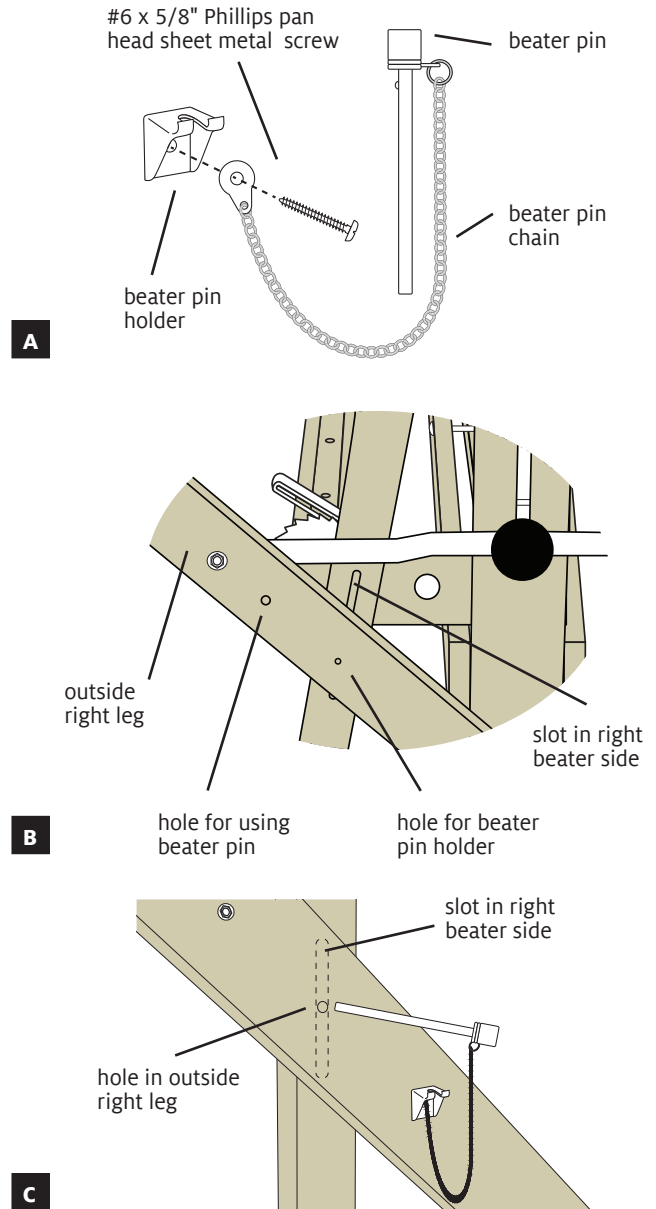


FIGURE 25: INSTALL THE BEATER PIN HOLDER

26. Install the tie-ups.

Cords Bag:

4-shaft looms: 24X tie-ups

8-shaft and 4 Now-4 Later looms: 80X tie-ups

Loop one end of each tie-up through a hole in the lamm (Figure 26). For 8-shaft and 4 Now-4 Later looms, there is one tie-up for every lamm hole. For 4-shaft looms, use only the six middle holes of each lamm.

Tie shafts to a treadle by slipping a tie-up into the slot in a treadle (Figure 26). Work from the front lamm to the rear lamm for each treadle. For 8-shaft and 4 Now-4 Later looms, attach treadle aid tie-ups to the treadles in the same way.

After you have completed your tie-up, check each treadle by pushing it all the way to the floor and releasing it, making sure that the button of each tie-up rests up against the treadle and that each tie-up hangs straight down to the treadle.

There is a 1/2" round depression on the underside of each treadle end to prevent the tie-ups from slipping off.

Note: This process is covered in the video *Assembling the Baby Wolf Loom* at [youtube.com/user/schachtspindle](https://www.youtube.com/user/schachtspindle).

27. Attach the apron bars.

Parts: 2X apron bars

Cords Bag: 10X 29" apron cords

For cherry Wolf looms, see the special instructions for attaching apron bars.

Attach the apron cords to the cloth and warp beams: there is one apron cord for each hole in the beams. Insert one end of a cord through a hole in the beam and pull the cord through. Then insert the other end through the second hole in the end of the cord that you just put through the beam. Pull firmly on the cord to tighten (Figure 27A). Repeat across the cloth beam and the warp beam.

Attach the apron cords to an apron bar: take a pinch of the cord about 4" from the end (Figure 27B). Insert the pinched cord through the second hole at the end of the cord. Pull on the pinched cord until a new loop forms that is large enough for the apron bar to slip through (Figure 27C). Slide the apron bar through the loop (Figure 27D) and pull tight. Repeat until all cords are attached to the apron bar. Attach the other apron bar to its beam in the same way. ■

Note: This process is covered in the video *Assembling the Baby Wolf Loom* at [youtube.com/user/schachtspindle](https://www.youtube.com/user/schachtspindle).

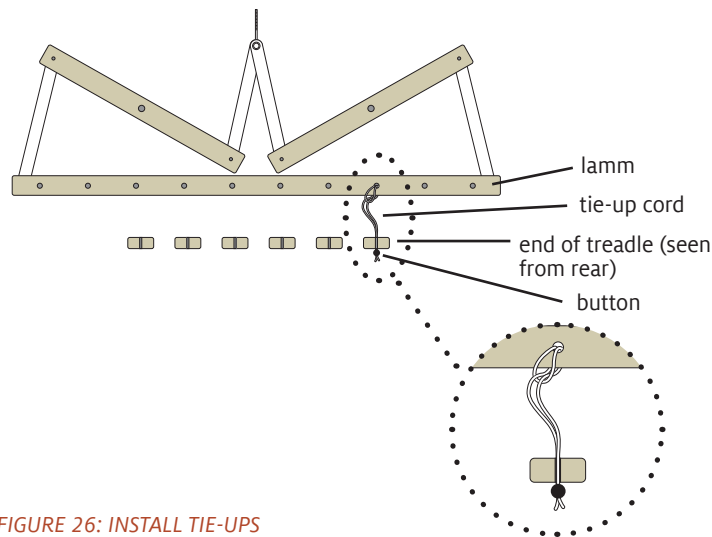


FIGURE 26: INSTALL TIE-UPS

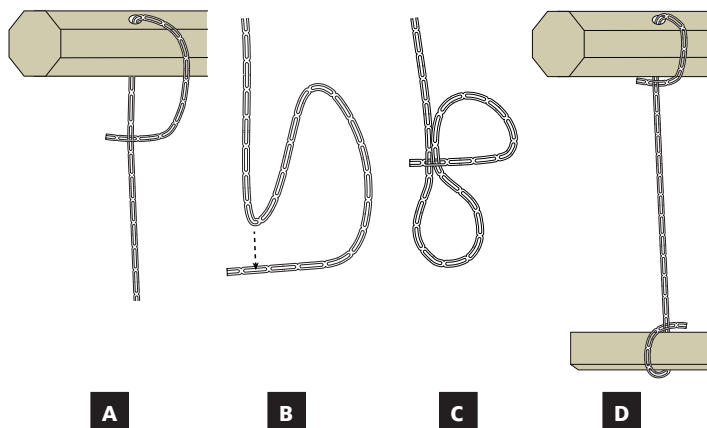
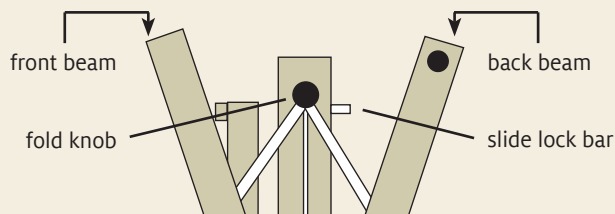


FIGURE 27: ATTACH APRON BARS

FOLDING THE LOOM

- To prevent treadles from dragging on the floor when the loom is folded, attach every treadle to at least one tie-up cord.
- Pull out the slide lock bars towards the back of the loom.
- Start folding the loom: loosen the fold knobs one full turn and pull them up in their slots.
- With one hand on the removable back beam and one hand on the front beam, push the loom together as far as it will go.
- Tighten the fold knobs. Push in the slide lock bars towards the front of the loom.



UNFOLDING THE LOOM

- Slightly loosen the fold knobs on each side of the loom. Generally, a single turn will do.
- Loosening the knobs all the way or removing them can cause the loom to collapse, which could result in injury.**
- Stand at the side of the loom. Push the front and removable back beams together slightly. Pull the slide lock bars out toward the back of the loom.
- Continue holding onto the front and back beams and allow the loom to unfold all the way. If there is a warp on the loom, you may need to hold down the brake release pedal with your foot to loosen the warp as you unfold the loom.
- When the loom has completely opened, push the fold knobs down to the bottom of the slots in the castle. Tighten the fold knobs.