

WOLF PUP & PUP LT LOOM

ASSEMBLY INSTRUCTIONS FOR KNOCKED-DOWN LOOMS WITH ASSEMBLED CASTLE

BEFORE YOU BEGIN

- Please read through the directions before beginning to assemble your loom.
 - Unpack the loom parts carefully. 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 have been received
 - All hardware is sized in inches. Illustrations of the various hardware and an inch scale are provided to aid you in determining the correct piece of hardware to use.
 - Before starting the assembly, read the instructions completely and familiarize yourself with the drawings and parts.
 - Follow the exact order of assembly. Take care and work slowly. If you have someone to help you, the assembly will be easier.
- The wood parts have a removable label on them to identify each part. We recommend that you leave the labels in place until the loom is fully assembled.
 - When you finish assembling the Wolf loom, go back over all of the screws and make sure they are tight. It is a good idea to retighten the screws every few months. Remember not to tighten those screws and bolts which are supposed to allow their parts to pivot.
 - All wooden parts of the loom have been finely sanded and finished with hand-rubbed Danish oil. From time to time you may 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 all the manufacturer's instructions.

TOOLS

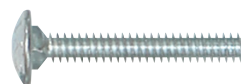
#2 Phillips screwdriver
5/8" and 7/16" (or adjustable) wrench
Flat screwdriver
Hammer or mallet

HARDWARE LIST

Note: Parts pictures are not all to scale. Listed part quantities are what is needed for assembly. There may be extras of some parts.

HARDWARE BAG #1:

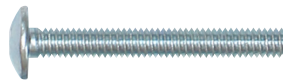
4 – Fold bars
2 – Black fold knobs w/ 1" shaft
2 – Plastic bearings
4 – 3/16" x 1-1/4" carriage bolts
4 – 3/16" lock nuts
8 – 3/16" washers
2 – 5/16" lock nuts
6 – 1/4" washers
6 – 1/4" x 2" machine screws
2 – 1/4" x 3" machine screws
8 – 1/4" barrel nuts
2 – 1/4" wing nuts
2 – 1/4" x 2-1/2" carriage bolts
2 – 5/16" slim lock nuts



1-1/4" carriage bolt



1-1/2" machine screw



2" machine screw



2-1/2" carriage bolt



1-1/2" screw



Black fold knob
w/ 1" shaft



Plastic bearing



Wing nut



Barrel nut



Lock nut (from top)



Lock nut



Slim lock nut



Fold bar



Find out more at schachtspindle.com
Schacht Spindle Company 6101 Ben Place Boulder, CO 80301
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HARDWARE BAG #2:

2 – 3/8" washers

1 – Brake bar and cable

1 – Brake cord

1 – S-hook

Anchor peg(s): 1 – Pup LT; 5 – Pup

3 – 1/4" washers

1 – Brake eye bolt

1 – Brake spring with insert

1 – Brake barrel nut (long)

1 – 5/16" slim locknuts

1 – 3/16" washer

2 – 1/4" x 2" machine screws

2 – 1/4" barrel nut

1 – 1/4" x 1" machine screw

HARDWARE BAG #3:

1 – Beater pin and chain

1 – Beater pin holder

1 – #6 x 1/2" round head screw

2 – 1/4" fender washers

2 – Black knobs with 2-1/4" threaded shafts



Brake bar and cable



Brake spring with insert



Brake eyebolt



Brake cord



Brake S-hook



Brake barrel nut



Anchor peg



Beater pin and chain



Beater pin holder



1/2" round head screw



Black knob w/ 2-1/4" shaft



Beater peg



Tie-up cords



Apron cords



Warp beam crank handle



3/4" screw



Cap nut



3/16"



1/4"



3/8" SAE



1/4" fender



3/8" USS

Note: Washer sizes are measured by the diameter of the hole. 3/8" USS washers have a larger outside diameter than 3/8" SAE washers.

ASSEMBLY INSTRUCTIONS

1. Attach the fold bars to the legs.

Parts: two pairs of legs, 4 – fold bars, 4 – 3/16" x 1-1/4" carriage bolts, 8 – 3/16" washers, 8 – 3/16" lock nuts.

NOTE: Right and Left leg designations are based on a front view of the loom.

On the outside legs, the fold bar is installed on the side of the leg that faces the inside of the loom, in the upper hole. On the inside legs, the bar is installed on the side of the leg that faces the outside of the loom. Make sure to orient the fold bars as shown in figure 1A.

Insert the carriage bolt into the square hole on the fold bar. Align the square part just under the head of the carriage bolt with the square hole in the fold bar. Place a washer on the bolt, insert the bolt into the leg, place another washer on the bolt, and secure with a lock nut (figure 1B). Repeat this process for all legs.

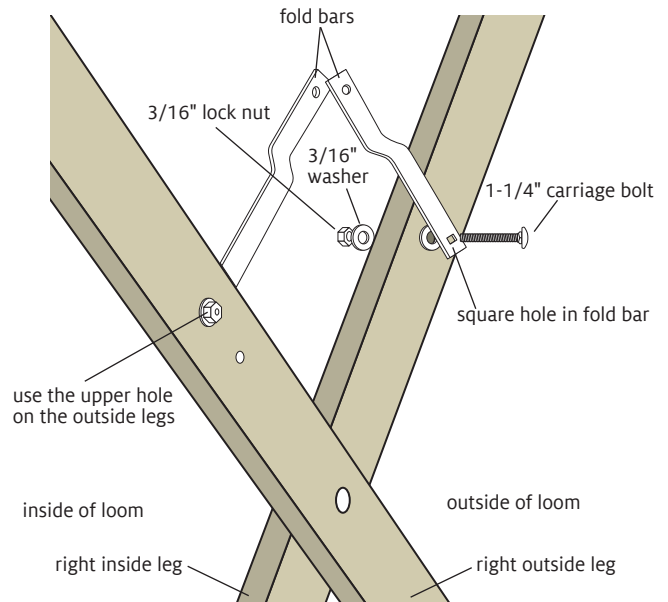


FIGURE 1A - ATTACH FOLD BARS TO INSIDE AND OUTSIDE RIGHT LEGS

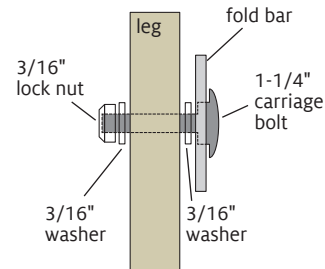


FIGURE 1B - HARDWARE TO ATTACH THE FOLD BARS

2. Attach the treadle assembly to the inside legs.

Parts: treadle assembly, 2 – barrel nuts, 2 – 1/4" x 2" machine screws.

Orient the treadle assembly with the brake pedal at the right side of the loom. Line up the pins at the end of the treadle support with the small holes on the inside of the legs. Line up the treadle bar with the 3/8" hole in the legs.

Insert a 2" machine screw into each leg from the outside. From underneath the treadle support, place a barrel nut into the hole on each end of the treadle support. Tighten the screws firmly into the barrel nuts.

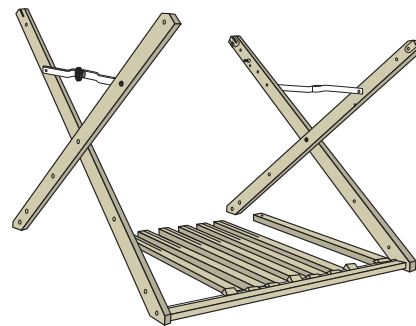


FIGURE 2A - ATTACH THE TREADLE ASSEMBLY

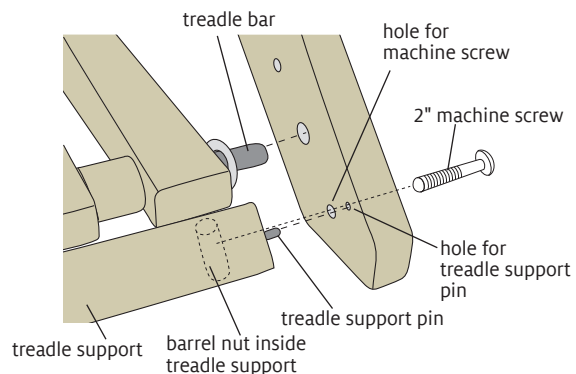


FIGURE 2B - TREADLE ASSEMBLY HARDWARE

3. Attach the castle assembly to the legs.

Parts: Castle assembly, 2 – black fold knobs, 2 – plastic bearings, 2 – 1/4" washers, 2 – 5/16" lock nuts.

NOTE: THIS STEP REQUIRES TWO PEOPLE.

Remove any packing material from the carriage bolts installed in the leg assemblies.

Insert the castle assembly inside the leg assemblies with the metal treadle rods down and the cloth beam supports pointing to the front. Line up the pre-installed carriage bolts with the lower hole in the right and left castle sides. Secure the carriage bolts with 1/4" washers and lock nuts, leaving the lock nuts loosen enough to allow the castle side to move slightly.

Insert the black fold knob through the fold bars (figure 3B) and into a plastic bearing. The cylindrical part of the plastic bearing fits into the slot. Tighten the knob into the nut inside the slot at the bottom. Repeat for the other side.

Go back and tighten the lock nuts on the pre-installed carriage bolts.

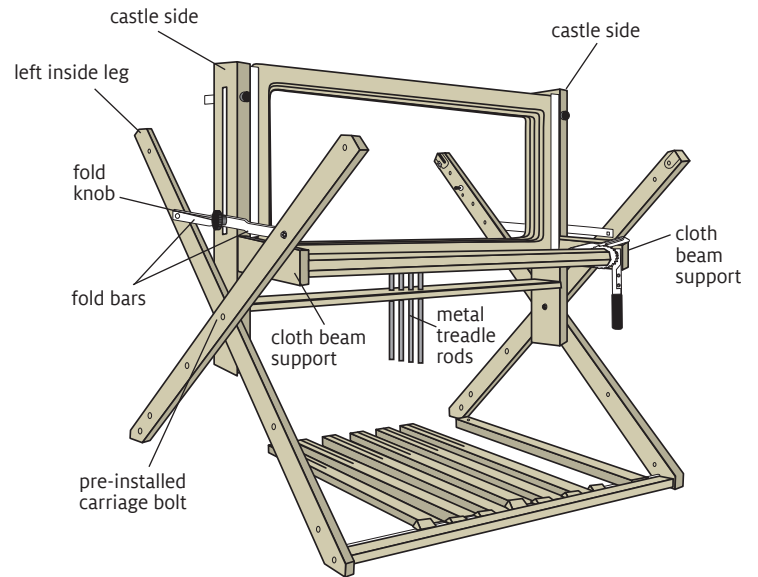


FIGURE 3A - ATTACH CASTLE ASSEMBLY

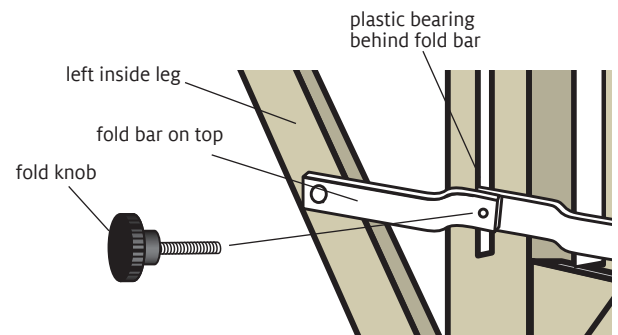


FIGURE 3B - INSTALL FOLD KNOBS

4. Connect treadles to shafts (Wolf Pup).

Parts: 4 – anchor pegs.

Untie the treadle cords from the two bundles beneath the castle and thread each cord through the hole in its corresponding treadle. Fasten the cord by inserting an anchor peg through a hole in the cord under the treadle. Adjust the placement of the anchor pegs so that the ends of the treadles are all at the same height, approximately 6" from the floor.

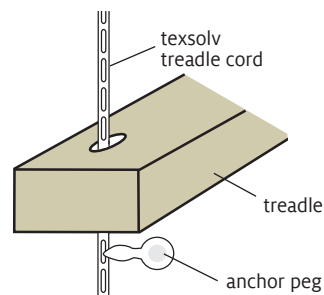


FIGURE 4 - CONNECT TREADLES TO SHAFTS

Install tie-up cords (Wolf Pup LT).

24 – tie-up cords.

Remove the tape around the cross brace and lamms underneath the shafts. Allow the lamms to hang underneath the shafts.

There is one tie-up cord for each hole in the lamms. Put the loop end of a tie-up cord through each hole and pull the button end through the loop until the cord is secure against the lamm (figure 5A).

Tie the shafts to the treadle by slipping a tie-up cord into the slot in the treadle (figure 5B). Work from the front lamm to the rear lamm for each treadle. 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 knob of each tie-up cord is up against the treadle and that each cord hangs straight down to the treadle.

There is a 1/2" diameter indentation on the underside of the top end of each treadle to prevent the tie-ups from slipping off when the loom is folded (figure 5C). The tie-ups should not be in this hole when weaving.

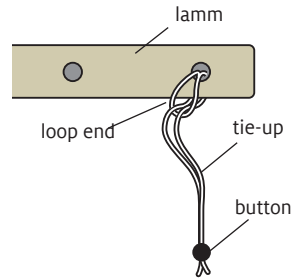


FIGURE 5A - INSTALL TIE-UP CORDS ON LAMMS

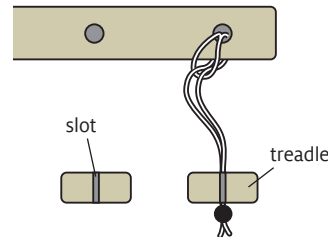


FIGURE 5B - INSTALL TIE-UP CORDS ON TREADLES

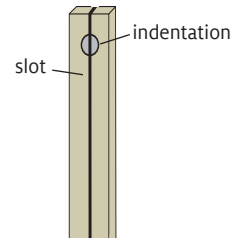


FIGURE 5C - INDENTATION ON BOTTOM OF TREADLES

5. Install the beater assembly.

Remove any packing material on the screws installed in the legs. Orient the beater assembly with the wing nuts on the top bar facing the front of the loom (figure 6A). Insert the beater assembly between the loom legs. Place the beater sides on the bolts in the legs and secure with 1/4" washers and 5/16" slim lock nuts. Tighten the nuts, making sure the beater assembly pivots freely on the bolts.

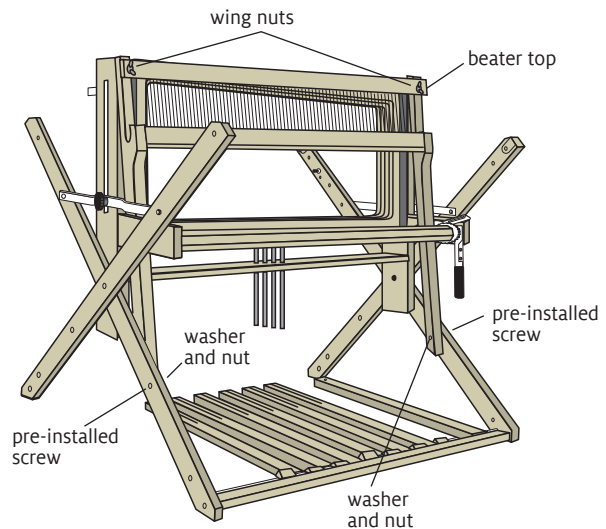


FIGURE 6A - INSTALL BEATER ASSEMBLY

6. Install the front beam and front beam extension.

Parts: front beam, front beam extension, 2 – 1/4" x 2" machine screws, 2 – 1/4" barrel nuts, 3 – 1-1/2" flat head screws.

Insert the 1-1/2" flat head screws through the front beam and begin screwing them into the front beam extension. Leave the screws slightly loose until all three are started into the extension, then go back and tighten all the screws (figure 7A).

Orient the front beam between the loom legs, with the extension to the front and downward (figure 7B). Hold a barrel nut in the hole at one end of the front beam. From the outside of the leg, insert a screw through the leg and into the barrel nut in the front beam. Repeat for the other side.

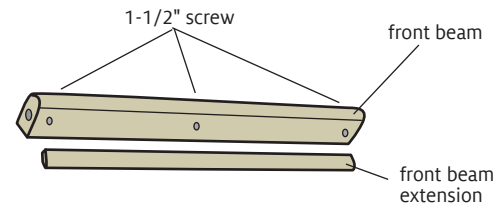


FIGURE 7A - ATTACH FRONT BEAM EXTENSION

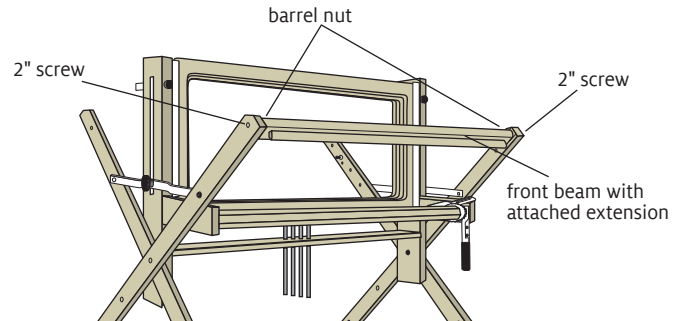


FIGURE 7B - INSTALL FRONT BEAM

7. Install the warp beam.

Parts: Warp beam, 2 – 3/8" USS washers.

Take the warp beam and place a 3/8" USS washer on each end. Slip the threaded rod through the hole in the right inside leg as far as it will go. Fit the pin in the other end into the hole in the inside leg – this hole does not go all the way through the leg. You will have to slightly spread apart the right and left inside legs to accomplish this.

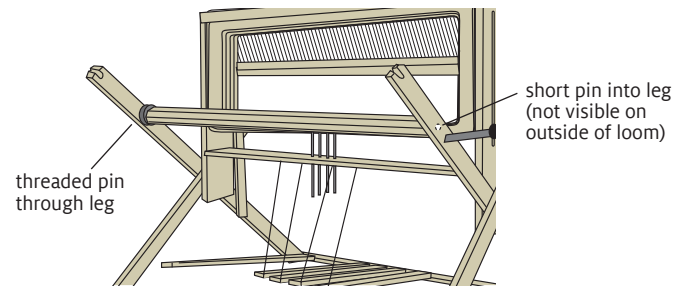


FIGURE 8 - INSTALL WARP BEAM

8. Install the brake barrel nut.

Parts: 1 – 1/4" x 1" machine screw, 1 – long brake barrel nut.

From the outside of the right inside leg, push the screw through the leg, and tighten into the brake barrel nut.

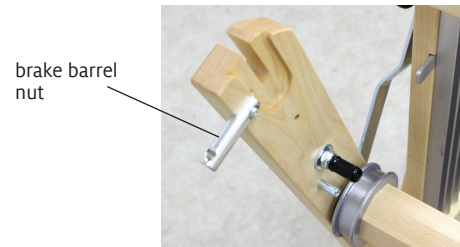


FIGURE 9 - INSTALL BRAKE BARREL NUT

9. Install the brake bar and brake cable.

Parts: 2 – 1/4" washers, 1 – slim 5/16" lock nut.

Remove any packing material attached to the screw pre-installed on the right inside leg.

Put the brake bar and a 1/4" washer on the pre-installed screw. Take the loose end of the brake cable attached to the brake bar and wrap it under and around the brake drum. Start next to the loom leg and wrap going away from the legs, making sure not to overlap the cable. Place the loop end of the cable over the pre-installed screw. Secure with another 1/4" washer and a slim 5/16" lock nut. Check to see that the brake bar can pivot freely. If it does not, slightly loosen the lock nut.

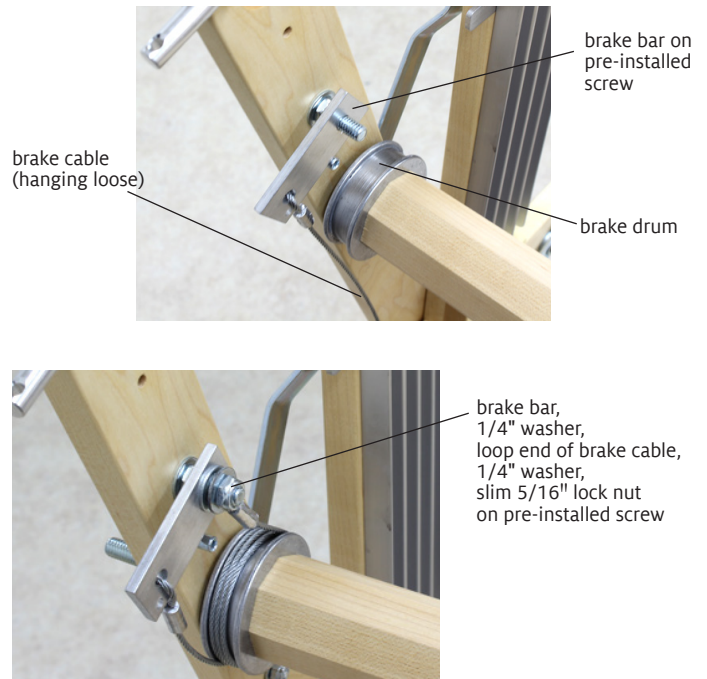


FIGURE 10 - INSTALL BRAKE BAR AND BRAKE CABLE

10. Install the brake cord.

Parts: 1 – anchor peg, 1 – S-hook, Texsolv brake cord.

Attach the S-hook to the hole on the rear of the brake bar. Loop the Texsolv brake cord through the S-hook on the brake cable bar. Slip the other end of the cord through the hole at the end of the brake pedal. Secure the brake cord by inserting the anchor peg into the 4th or 5th loop from the end of the brake cord.

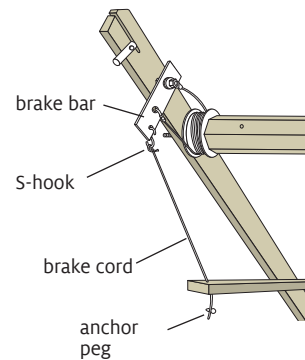


FIGURE 11 - INSTALL BRAKE CORD

11. Install the brake eyebolt and brake spring.

Parts: 1 – eyebolt, 1 – brake spring, 1 – 3/16" washer

Attach the brake spring to the brake bar. Insert the eyebolt through a 3/16" washer, through the hole in the long barrel nut, and screw it into the spring.

Tighten the eyebolt until you can't turn the warp beam away from you when you twist the beam with both hands. When you hold the brake release pedal down, the warp beam should turn freely in either direction.

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

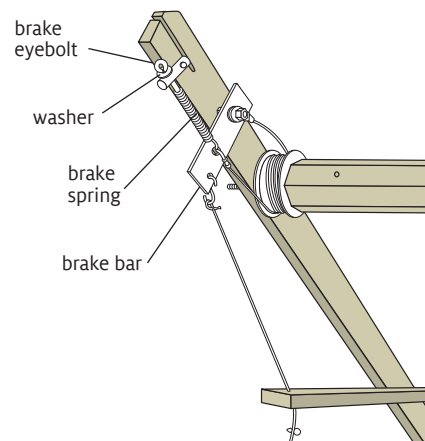


FIGURE 12 - INSTALL BRAKE EYEBOLT AND SPRING

To avoid damage to the brake drum when beaming your warp or advancing your warp while weaving, be sure to press down on the brake pedal to release tension on the brake.

12. Install the warp beam crank handle.

Parts: 1 – warp beam crank handle, 1 – 3/8" washer, 1 – 3/8" cap nut.

Place the 3/8" washer and then the metal crank handle on the threaded shaft extending through the leg from the brake end of the warp beam. The wood crank handle faces away from the loom. Secure with the 3/8" cap nut. Tighten the nut by placing the handle over it and turning clockwise. To engage the crank for turning the warp beam, pull the hexagonal hole in the crank onto the cap nut.

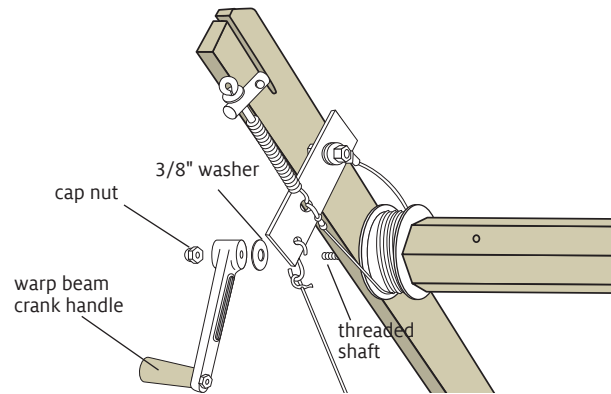


FIGURE 13 - INSTALL WARP BEAM CRANK HANDLE

13. Install the removable back beam.

Parts: Back beam, 2 – 1/4" black knobs, 2 – fender washers, 2 – 1/4" barrel nuts.

Slide the back beam into the slots in the inside legs. Put a fender washer on a knob, and insert the knob through the leg, into the back beam, and tighten it into a barrel nut in the back beam. Repeat for the other side.

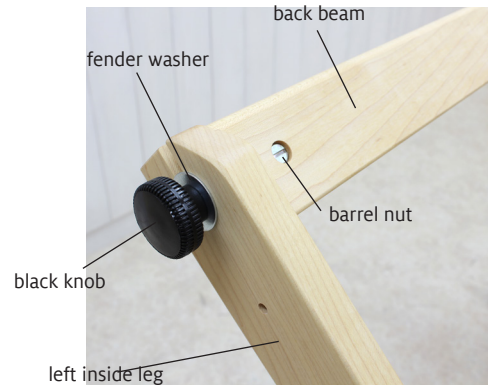


FIGURE 14 - INSTALL THE REMOVABLE BACK BEAM

14. Install the rear leg brace.

Parts: Rear leg brace, 2 – 1/4" x 3" machine screws, 2 – barrel nuts.

Insert a barrel nut in the hole at the end of the rear leg brace and secure with a 3" machine screw. Repeat for the other end.

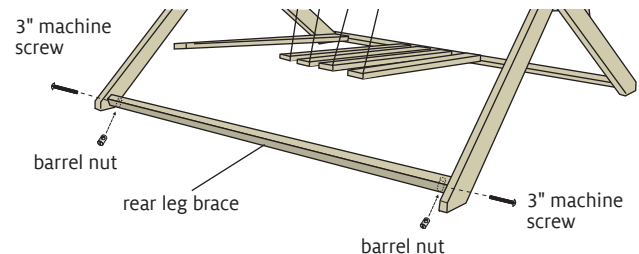


FIGURE 15 - INSTALL THE REAR LEG BRACE

15. Install the beater pin.

Parts: Beater pin with chain, beater pin holder, 1 – #6 x 1/2" screw.

Put the screw through the hole in the end of the beater pin chain and through the hole in the beater pin holder. Fasten it to the small pilot hole in the right outside leg. There will be a hole between the pilot hole and the screw holding the fold support bar.

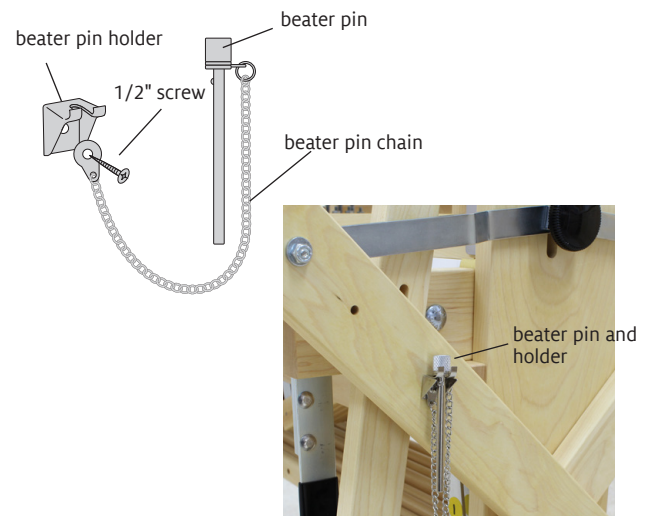


FIGURE 16 - INSTALL THE BEATER PIN HOLDER

16. Place the heddles and heddle bars in the shafts.

Parts: 8 – heddle bars; 3 – packages of 100 heddles; string or yarn.

Open your heddle packages and divide the heddles into four groups of 75 (or other number as needed). It is easiest to do this if you keep the heddles on the string and slide them onto the heddle bars (figure 17A). Make sure that your heddles are all oriented in the same way since this makes it easier to thread your loom. Once the heddles are on the heddle bars, tie them into a group.

Note: For Right-handed threading, place the red end of the heddles at the top. For Left-handed threading, place them at the bottom.

Lift the first shaft and prop it up using a book or small block of wood. The bottom of the shaft should be 3-4 inches up from the other shafts. Insert a set of heddles on heddle bars into the castle in front of the raised shaft. Insert one end of each heddle bar into the slots in the side of the shaft. Bend the heddle bar and insert the end into the slot in the other side of the shaft. Repeat this process for the other shafts.

17. Attach the apron cords and apron bars.

2 – apron bars; 8 – apron cords.

There is one cord for each hole in the cloth and warp beams.

- Insert one end of a cord through a hole in either the cloth or warp 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 (18A).
- Repeat across the entire cloth and warp beams.
- To attach the apron bar to the apron cords, take a pinch of the cord about 4" from the end (18B).
- Insert the pinched cord through the second hole from the end of the cord. Pull on the pinched bit until a loop forms that is large enough for the apron bar to slip through (18C).
- Slide the apron bar through the loop (18D) and pull tightly.
- Repeat until cords on a beam are attached to the apron bar. and attach the other apron bar to its beam in the same manner.

18. Install the wheels.

2 – wheel assemblies, 4 – 1/4" x 1-1/2" machine bolts, 4 – 1/4" lock nuts.

With the loom unfolded, install the wheels. as per the illustration. Use a Phillips head screwdriver to hold the 1 1/2" machine bolts in place while using a 7/16" wrench to tighten the lock nuts.



FIGURE 17A - SLIDE HEDDLES ONTO HEDDLE BARS

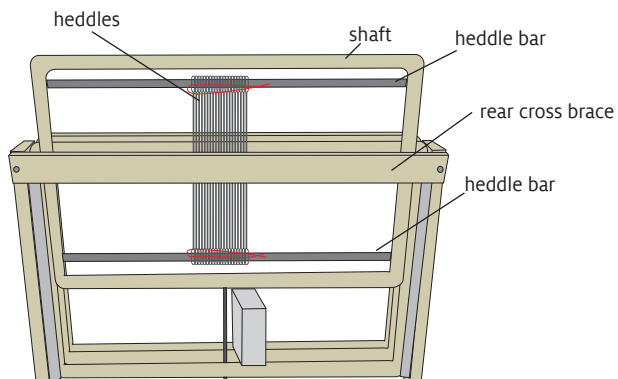


FIGURE 17B - INSTALL HEDDLE BARS IN SHAFTS

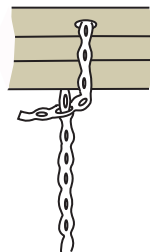


FIGURE 18A

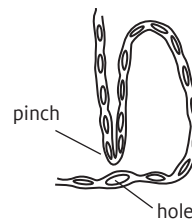


FIGURE 18B

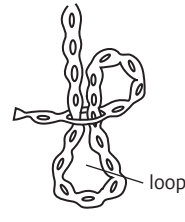


FIGURE 18C

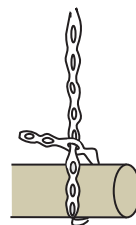


FIGURE 18D

FIGURE 18 - INSTALLING APRON CORDS

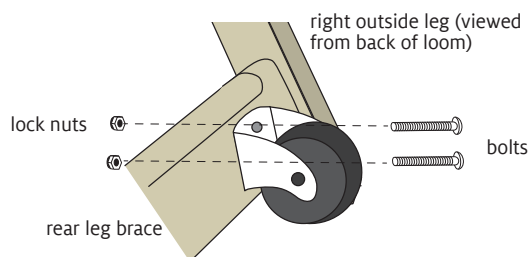


FIGURE 19 - WHEEL INSTALLATION

19. Install the treadle tracker.

1 – treadle tracker.

With the clip on the treadle tracker facing the front of the loom, insert the treadle tracker into the slot in the top of the rear castle cross brace.

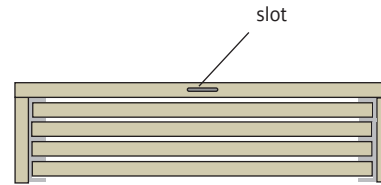


FIGURE 20 - TREADLE TRACKER INSTALLATION - LOOKING DOWN AT CASTLE

UNFOLDING THE LOOM

- Stand at the side of the loom. Slightly loosen the two black plastic fold knobs on both sides 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.
- Hold the front and rear beams and allow the loom to unfold all the way. When there is a warp on the loom, you may need to step on the brake release pedal while unfolding the loom to loosen the warp.
- When the loom is all the way down in the open position, push the knobs down to the bottom of the slots and tighten.

FOLDING THE LOOM

- For the Wolf Pup LT,. to prevent treadles from dragging on the floor when the loom is folded, attach every treadle to at least one tie-up cord.
- Make sure the beater pin is in its holder.
- Loosen the black fold knobs on either side one full turn and pull them up to start folding the loom.
- With one hand on the rear beam and one hand on the front beam, pull the loom together as far as it will go.
- Tighten the knobs.