

FL3070
FL3071
FL3072

WOLF LOOM DOUBLE BACK BEAM

ASSEMBLY



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DOUBLE BACK BEAM FOR WOLF LOOMS

PARTS

- 1X left double back beam support
- 1X right double back beam support (with installed brake barrel nut and bolt for brake bar)
- 2X metal fold bars
- 1X brake handle and tab
- 1X warp beam (with installed brake hub and axles)
- 1X removable back beam
- 2X apron bars
- 2X lease sticks
- 1X 61" Texsolv brake cord
- 42" apron cords (maple looms):
 - 7X Mighty Wolf, 5X Baby Wolf,
 - 4X Wolf Pup, LT & 8.10
- 1X 360" apron cord + 37" dowel (cherry MW)
- 1X 252" apron cord + 27" dowel (cherry BW)
- 1X 144" apron cord + 18" dowel (cherry WP)

HARDWARE

- 2X 10-24 x 1-1/4" carriage bolts
- 7X 1/4" USS washers
- 2X 10-24 lock nuts
- 2X 5/16-18 x 2" carriage bolts
- 1X 5/16-18 hex nut
- 3X 5/16-18 lock nuts
- 2X 1/4-20 x 1-1/4" Phillips truss head machine screws
- 1X 1/4-20 x 2" Phillips truss head machine screw



barrel nut



cap nut



hex nut



lock nut



slim lock nut

- 3X 1/4" nylon washers
- 1X 1/4-20 lock nut
- 1X brake S-hook
- 1X 1/8" x 1-3/8" eye screw
- 1X 60" Texsolv brake cord
- 1X plastic arrow peg
- 3X 3/8" SAE washers
- 1X brake bar and cable
- 4X #12 SAE washer (with hole about 1/4" in diameter)
- 1X 5/16-18 slim lock nut
- 1X brake eye bolt
- 1X brake spring with insert
- 1X warp beam crank handle
- 1X 3/8" cap nut
- 2X back beam knobs with 2-1/4" threaded shafts
- 2X 1/4" fender washers
- 2X 1/4-20 barrel nuts

TOOLS

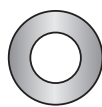
- hammer
- 3/16", 1/4", and 5/16" wrenches or adjustable wrench
- drill (older looms only)
- 1/8", 3/16", 1/4", and 5/16" drill bits (older looms only)



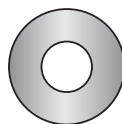
Phillips truss head machine screw



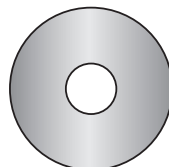
carriage bolt



SAE washer



USS washer



fender washer

Washers are sized by hole diameter and type. These washers are the same size but different types, from smallest outside diameter (SAE) to largest (fender).

BEFORE YOU BEGIN

- 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 Wolf Looms are built with similar basic frame designs, so while your loom may appear different from illustrations here, the inside legs will be virtually the same.

DRILLING HOLES ON OLDER WOLF LOOMS

1. Locate the serial number of your loom on the upper right castle side or under the harnesses on the cross brace. The first six digits are the manufacture date; for example, #110586-1 means a date of 11/05/86.

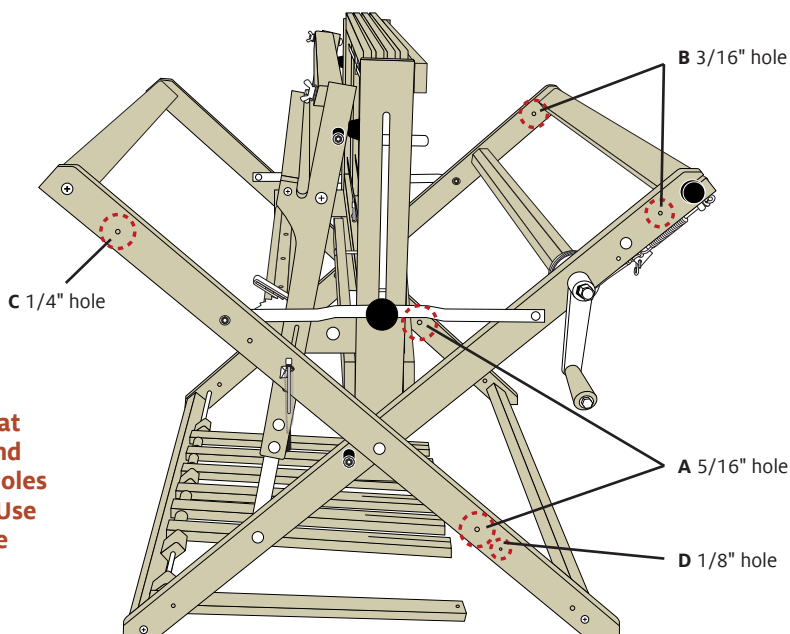
- If your serial number starts with a 4- or an 8-, or is earlier than 100189-1, go to step 2 in this section.
- If your serial number is 100189-1 through 021090-1, go to step 4 in this section. If holes [C] and [D] have already been drilled, skip to the next section.
- If your serial number is 020790-1 or later, skip to the next section.

2. Drill $\frac{5}{16}$ " holes at [A] through each outside leg of the loom. Place these holes in the center of the legs and $30\text{--}7\frac{7}{8}$ " down from the top edge of the leg (Figure 1).

3. Drill $\frac{3}{16}$ " holes at [B] through each inside leg of the loom. Place these holes in the center of the legs and 3" from the top edge of the legs (Figure 1). *If your serial number is earlier than 4-2287 or 8-742, place this hole $2\text{--}7\frac{7}{8}$ " from the top of the rear oval beam.*

4. Drill a $\frac{1}{4}$ " hole [C] through the right outside leg, $4\text{--}1\frac{1}{2}$ " from the top edge of the leg and centered on the leg (Figure 1).

5. Drill a $\frac{1}{8}$ " hole [D], $\frac{5}{8}$ " deep, centered in the right outside leg, and $32\text{--}7\frac{7}{8}$ " from the top edge of the leg (Figure 1).



NOTE: It is essential that you mark and drill these holes accurately. Use a metal tape measure.

FIGURE 1: HOLES ON OLDER WOLF LOOMS

INSTALLING THE DOUBLE BACK BEAM SUPPORTS

1. Insert a 10-24 x 1-1/4" carriage bolt through the square hole in a metal fold bar, then install a 1/4" USS washer on the carriage bolt. Insert the carriage bolt through hole [B] in each inside leg from the outer side of the loom (Figure 2). The fold bar will hang straight down behind the loom's warp beam. Install another 1/4" USS washer and a 10-24 lock nut on the carriage bolt from inside the loom. Tighten the lock nut so that the metal support pivots freely, but not loosely. Repeat on the other inside leg.

2. From the outside to the inside of the loom, insert a 5/16-18 x 2" carriage bolt through hole [A] in each outside leg (Figure 2).

3. Orient the double back beam supports with the recessed cutouts for the rear oval beam at the top and to the inside of the loom (Figure 3).

4. Place the double back beam supports on the carriage bolts at [A]. Fasten each double back beam support with a 1/4" USS washer and a 5/16" hex nut. Tighten the nut to draw the head of the carriage bolt all the way into the wood.

5. Remove the hex nut you have just tightened and install a 5/16" lock nut in its place. Tighten the lock nut just enough to allow the double back beam supports to pivot freely, but not loosely.

6. Insert a 1/4-20 x 1-1/4" Phillips truss head machine screw through the round hole in each metal fold bar. Screw them into the propeller nuts on each double back beam support at [E].

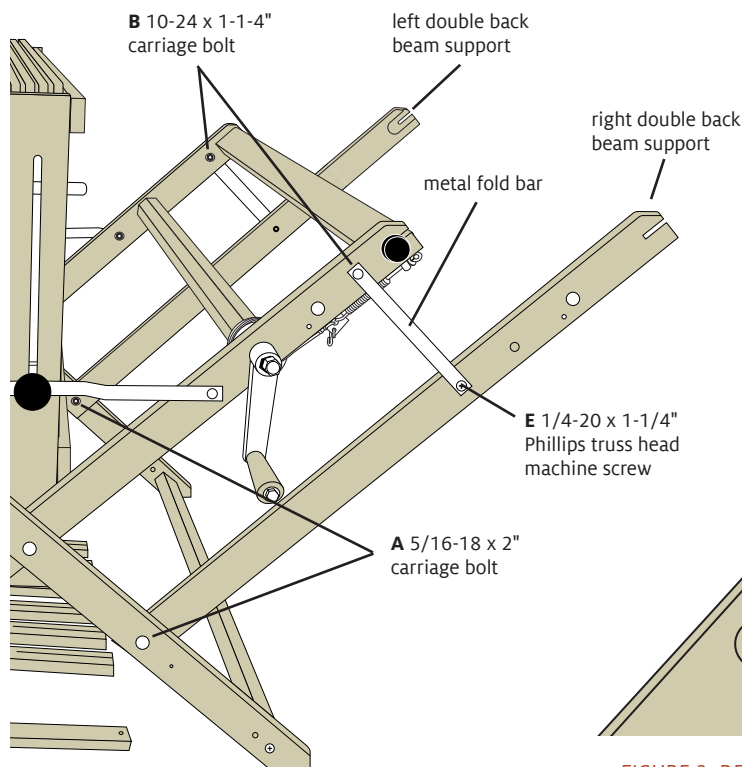


FIGURE 2: DOUBLE BACK BEAM SUPPORTS

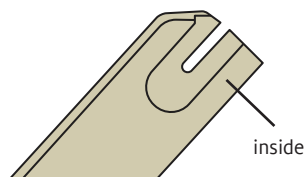


FIGURE 3: DETAIL OF DOUBLE BACK BEAM SUPPORTS

INSTALLING THE BRAKE HANDLE

- 7.** Insert the 1/4-20 x 2" Phillips truss head machine screw into the brake handle. Install three 1/4" nylon washers on the screw and insert into hole [C], on the right outside leg, from the outer side of the loom with the tab toward the front of the loom (Figure 4). Secure from inside the loom with 1/4" USS washer and the 1/4-20 lock nut.
- 8.** Insert one end of the brake cord through the closed loop of the S-hook. Thread the other end of the cord through the second hole from the end to form a loop. Tighten until the loop is snug around the S-hook (Figure 5).

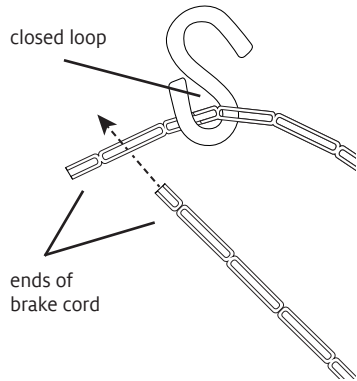
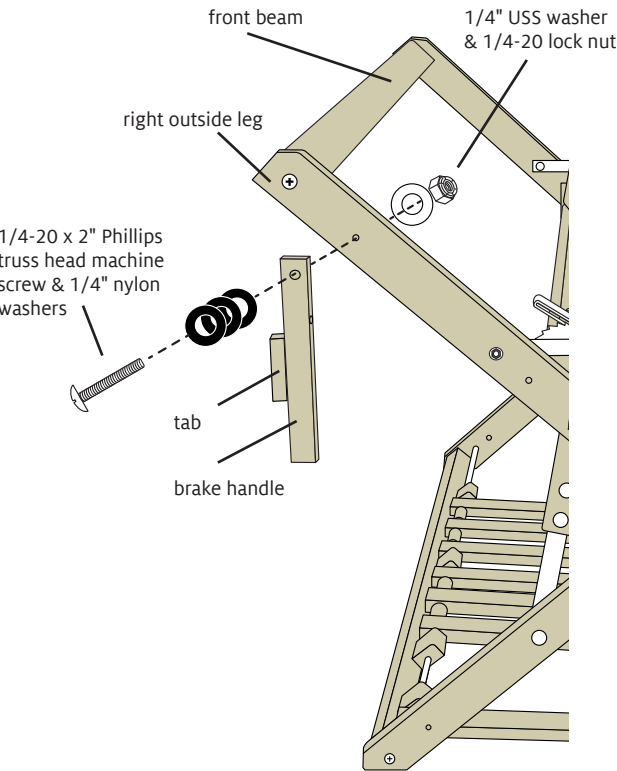


FIGURE 5: BRAKE CORD AND S-HOOK



NOTE: When you pull up the brake handle to release the friction brake, you can lock it in the release position: rotate the tab and hook it behind the right outer leg. Locking is useful when you are winding on a warp or winding fabric onto the cloth beam.

FIGURE 4: BRAKE HANDLE

9. Screw the 1/8" x 1-3/8" eye screw into hole [D] in the right outside leg (Figure 6). Be sure that the break in the eye screw is pointed down (Figure 7). Thread the free end of the cord through the eye screw, then up through the hole in the brake handle (Figure 8). Insert the plastic arrow peg through the tenth hole from the end of the brake cord to secure the cord. The end attached to the S-hook will be attached in step 15.

INSTALLING THE DOUBLE WARP BEAM

10. Place a 3/8" SAE washer over each axle on the double warp beam. Insert the threaded brake axle into hole [F] on the right double back beam support—this hole goes all the way through the support (Figure 6). Gently spread the double back beam supports apart just enough to fit the non-threaded axle into hole [F] on the left double back beam support—this hole does not go all the way through the support.

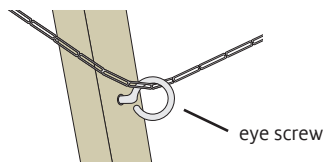


FIGURE 7: EYE SCREW DETAIL

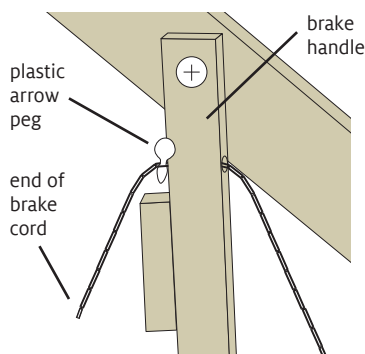


FIGURE 8: BRAKE CORD DETAIL

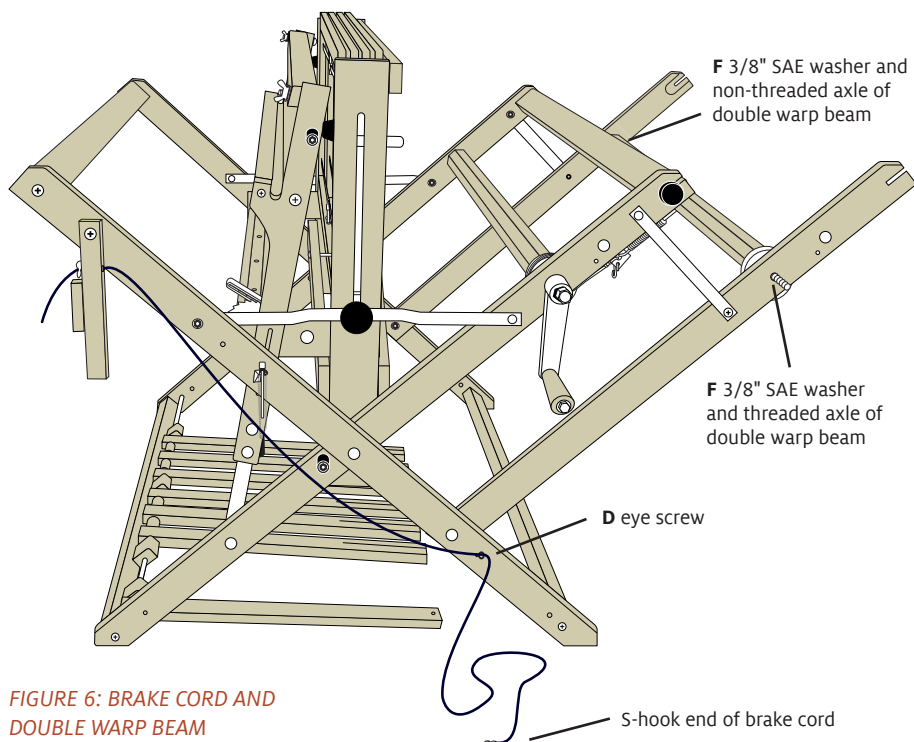


FIGURE 6: BRAKE CORD AND DOUBLE WARP BEAM

INSTALLING THE BRAKE BAR AND CABLE

11. Place the brake barrel nut into position on the right double back beam support, as shown in Figure 9. Secure it using the 1/4-20 x 1" Phillips pan head machine screw, inserted from the outer side of the leg.

12. Locate the pre-installed bolt for the brake bar on the right double back beam support. Remove any packing material. Place a #12 SAE washer and a 5/16-18 lock nut on this bolt and tighten the lock nut with a wrench. Next, install the brake bar and cable on this bolt, orienting it as shown in Figure 9. Add another #12 SAE washer.

13. Take the loose end of the brake cable and wrap it under and around the brake drum three times. Start next to the double back beam support and wrap with loops moving towards the loom center, making sure not to overlap the cable (Figure 10). Place the loop end of the cable over the pre-installed bolt, then place another #12 SAE washer over the loop. Secure with a 5/16-18 slim lock nut. Be sure that the brake bar can pivot freely—if it does not, slightly loosen the lock nut.

14. Hook the brake spring to the brake bar, in the hole shown in Figure 11. Insert the eye bolt through a #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 can't turn the warp beam away from you with both hands.

15. Hang the brake S-hook, with brake cord already attached in step 8, in the hole shown in Figure 11. Adjust the tension in the brake cord from the brake handle at the front of the loom: move the plastic arrow peg to a different hole in the brake cord.

16. On the outer side of the right double back beam support, install the final 3/8" SAE washer on the threaded axle of the warp beam (Figure 11). Place the warp

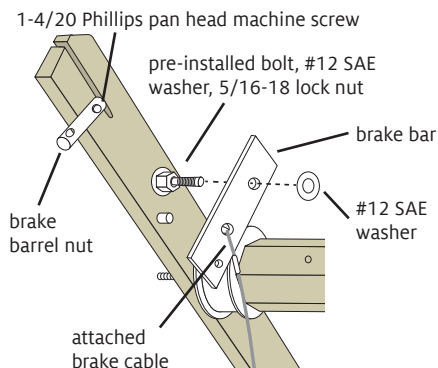


FIGURE 9: BRAKE BARREL NUT AND BRAKE BAR

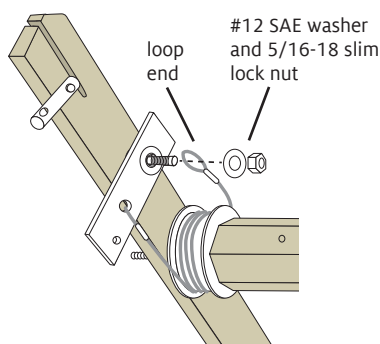


FIGURE 10: BRAKE CABLE

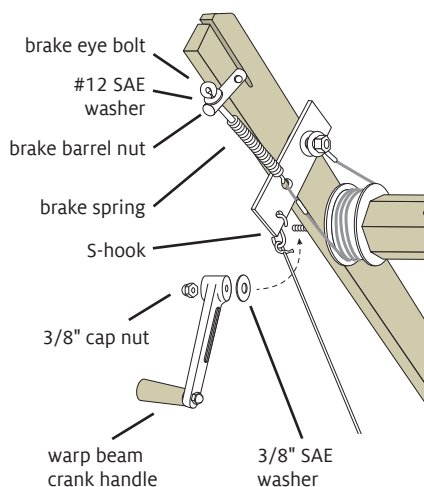


FIGURE 11: BRAKE EYE BOLT, BRAKE SPRING, AND WARP BEAM CRANK HANDLE

beam crank handle over the threaded brake axle, with the wood handle pointing outward. Secure the handle with the cap nut: hold the second warp beam in place and use the crank as a wrench to tighten the cap nut.

INSTALLING THE REMOVABLE BACK BEAM

17. Place the rear oval beam, rounded edge up, in the slots in the top of the double back beam supports. Place a 1/4" fender washer on a back beam knob. Hold a 1/4-20 barrel nut in the hole at one end of the removable back beam and screw the knob into it (Figure 12). Repeat on the other end of the removable back beam.

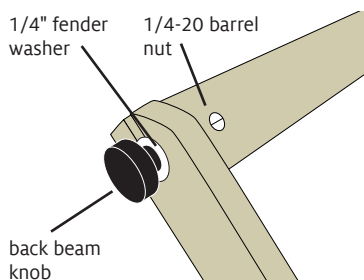


FIGURE 12: REMOVABLE BACK BEAM

ATTACHING THE APRON BARS

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

18. For maple looms, there is one cord for each hole in the warp beam. Insert one end of a cord through a hole 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 13A). Repeat across the warp beam.

19. To attach the apron cords to the apron bar, take a pinch of the cord about 4" from the end (Figure 13B). Insert the pinched cord through the second hole in the cord. Pull on the pinched cord until a new loop forms that is large enough for the apron bar to slip through (Figure 13C). Slide the apron bar through the loop (Figure 13D) and pull tight. Repeat until all cords are attached to the apron bar. The extra apron bar can be used for warping methods that require an extra rod through warp loops.

Your double back beam is now ready to use. After you warp the loom, you may need to adjust each friction brake to be sure it is holding. The warp that needs to vary the most should be on the double warp beam. This beam's brake is controlled by a hand lever, which provides greater control over the tension on the threads. ■

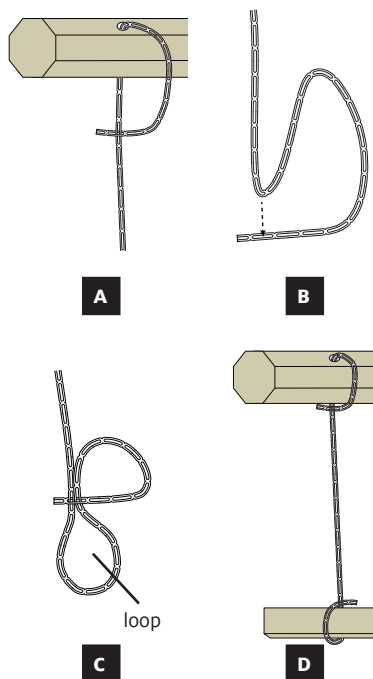


FIGURE 13: APRON CORDS

Visit [youtube.com/user/schachtspindle](https://www.youtube.com/user/schachtspindle) for an apron cord installation video.