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STANDARD FLOOR LOOM™ DOUBLE BACK BEAM

ASSEMBLY



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DOUBLE BACK BEAM FOR STANDARD FLOOR LOOMS

ASSEMBLY

PARTS

- 2X double warp beam mounts
- 1X double warp beam (36" or 45")
- 2X double back beam braces
- 1X double square beam (36" or 45")
- 1X double warp beam brake release pedal
- 1X double warp beam brake assembly (brake bar, brake cable, turnbuckle, brake release upright with machine screw, washer, and lock nut attached)
- 1X double warp beam brake hold
- 2X apron bars (36" or 45")
- 2X lease sticks (36" or 45")

HARDWARE

- 4X #12 x 3-1/2" Phillips flat head sheet metal screws
- 8X 1/2" USS washers
- 1X warp beam crank handle
- 1X 1/2" cap nut (with hole for pin)
- 1X pin for cap nut
- 1X small wood block for assembling warp beam crank handle
- 2X #14 x 1-3/4" Phillips flat head sheet metal screws
- 2X double back beam fold knobs (w/ longer threaded shafts)
- 1X brake spring
- 1X 1/2-13 x 2-1/2" hex bolt
- 1X 1/2-13 lock nut
- 2X 5/16-18 x 2-1/4" carriage bolt
- 1X 5/16-18 x 2-1/2" carriage bolt
- 11X 1/4" USS washers
- 2X 5/16" hex nut
- 3X 5/16-18 lock nut

apron cords:

- 7X 48" cords for 36"
- 9X 48" cords for 45"

REQUIRED TOOLS

- #2 Phillips screwdriver
- slotted (flat) screwdriver
- hammer
- 7/16" wrench
- two 3/4" wrenches
- drill and 3/16" drill bit
- 5/16" drill bit (optional)

If your loom was made before January 1, 1990, please see page 8 for drilling instructions.

Screws will be easier to turn if you rub a little wax or bar soap on the threads.

If you put a sectional beam on the double back beam, be sure to let us know when you order the sectional beam that it will go on the double back beam.



carriage bolt



hex bolt



Phillips flat head sheet metal screw



lock nut



hex nut



cap nut



washer—sized by hole diameter



fold knob

INSTALL THE DOUBLE WARP BEAM MOUNTS AND THE DOUBLE WARP BEAM

1. Orient the double warp beam mounts with the larger hole towards the floor (Figure 1). Using #12 x 3-1/2" Phillips flat head sheet metal screws, attach one mount to the right rear leg of the loom (on the side with the warp beam crank handle) at the top and the bottom. Attach the other mount to the left rear leg of the loom using a #12 x 3-1/2" Phillips flat head sheet metal screw at the top only—do not tighten this screw all the way and do not secure the bottom hole of the mount.

2. Orient the double warp beam as shown in Figure 1, with the threaded axle at the right rear leg and the non-threaded axle at the left rear leg. Place a 1/2" washer on the threaded axle of the double warp beam. Install the threaded axle into the bottom hole in the right mount. The new warp beam crank handle will be mounted on the threaded axle, on the same side as the handle for the original warp beam. There are 2 extra washers provided; if the beam is loose, add another washer to this axle and/or to the axle at the other end in step 3.

3. Place a 1/2" washer on the non-threaded axle of the double warp beam and insert it into the larger hole of the left mount. Swing the mount outward slightly to accomplish this. Secure the bottom of the mount with the remaining #12 x 3-1/2" Phillips flat head sheet metal screw. Tighten both screws on the left mount. The double warp beam should spin freely. If it is too tight, loosen all four screws slightly, rotate the warp beam a few times, then retighten the screws.

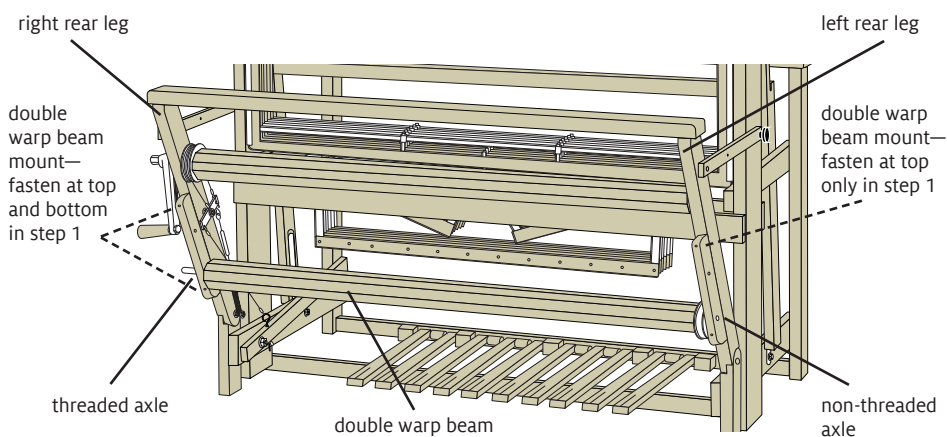
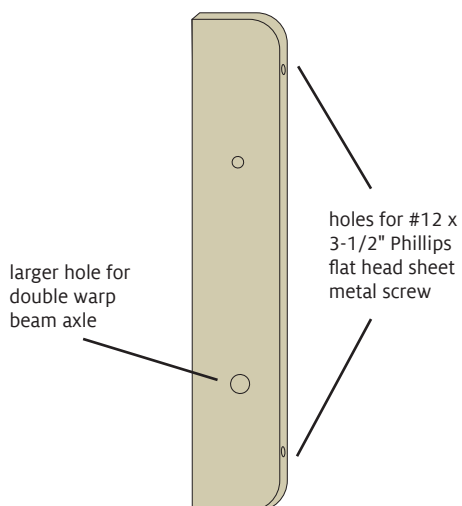


FIGURE 1: INSTALL DOUBLE WARP BEAM MOUNTS AND DOUBLE WARP BEAM

INSTALL THE WARP BEAM CRANK HANDLE

4. Place a 1/2" washer on the threaded axle of the double warp beam on the outside of the right double warp beam mount. Slip the warp beam crank handle onto the threaded axle with its larger hex opening facing out (Figure 2A).

5. Screw the cap nut onto the threaded axle and tighten about 6 turns, stopping when the hole in the cap nut lines up with the hole in the axle. Hold the wood block under the cap nut and, with a hammer, tap the pin through the cap nut and the axle until it is flush with the bottom side of the cap nut (Figure 2B).

INSTALL THE DOUBLE BACK BEAM BRACES AND DOUBLE SQUARE BEAM

6. Remove the original back beam braces by detaching the fold knobs and the nylon washers, then removing the screws connecting them to the rear legs. Orient the double back beam braces with the angled legs on the inner side and pointing upward (Figure 3). Using a #14 x 1-3/4" Phillips flat head sheet metal screw, attach each brace to the rear leg. Remove the nylon washers from the old fold knobs and install them on the new fold knobs. Insert the new knobs through the braces and screw them into the castle sides.

7. Place the double square beam on the angled legs (Figure 3).

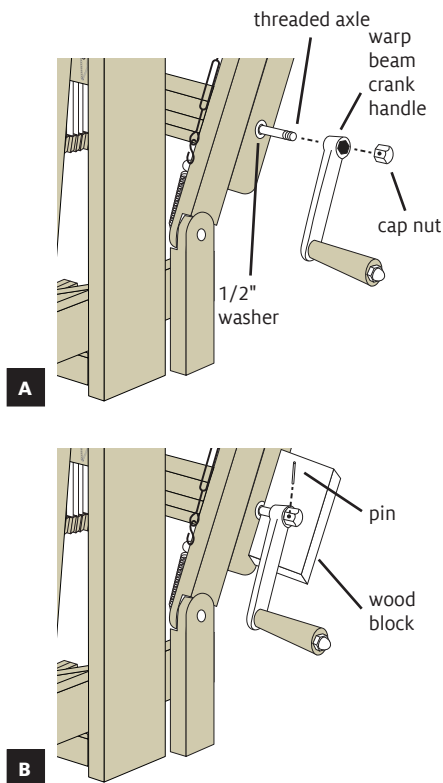


FIGURE 2: INSTALL WARP BEAM CRANK HANDLE

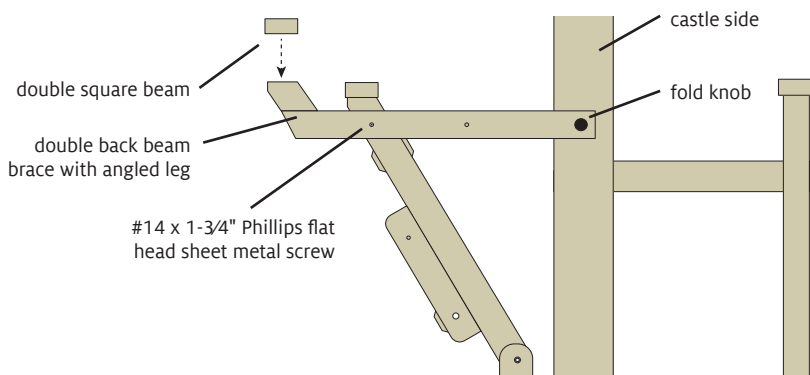


FIGURE 3: INSTALL DOUBLE BACK BEAM BRACES AND DOUBLE SQUARE BEAM

INSTALL THE BRAKE RELEASE ASSEMBLY

For steps 8 through 20, you will work on the left side of the loom (your left as you look at the front of the loom).

8. Place a 1/2" washer on the 1/2" x 2-1/2" hex bolt, and insert the bolt through hole [A] in Figure 4 in the left lower side brace from the outside to the inside of the loom. From inside the loom, install another 1/2" washer on the hex bolt.

9. Remove the carriage bolt at hole [B] in the left lower leg. Insert a new 5/16" x 2-1/4" carriage bolt in this hole from the outside to the inside. Tap the new bolt into place, aligning the square shaft of the carriage bolt with the square hole in the wood. From inside the loom, install a 1/4" washer and a 5/16" hex nut on the carriage bolt. Tighten the nut until the carriage bolt head is drawn into the wood, then loosen the nut three-quarters of a turn so the rear leg can pivot easily.

10. From the outside to the inside of the loom, insert the 5/16" x 2-1/2" carriage bolt in the upper hole [C] on the left double warp beam mount. From the inside of the loom, install a 1/4" washer and a 5/16" hex nut on the carriage bolt. Tighten the nut until the carriage bolt head is drawn into the wood on the outside of the mount. Install three 1/4" washers on the bolt over the tightened hex nut.

11. Lay the brake release pedal and the double warp beam brake assembly on the floor with all parts aligned as in Figure 5.

12. Remove the lock nut and washer from the brake release upright at [D], leaving the attached 1-1/8" slotted flat head screw in place.

13. Place the brake release pedal on top of the brake release upright, with the screw going through hole [D]. Replace the washer and the lock nut on the screw, then tighten the lock nut using a slotted screwdriver and a 7/16" wrench. Tighten then slightly loosen the lock nut so the brake release pedal can pivot freely.

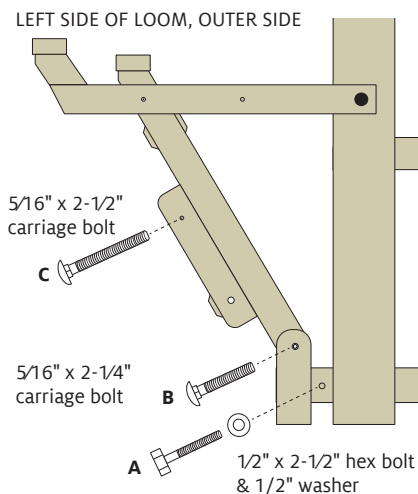


FIGURE 4: INSTALL HARDWARE

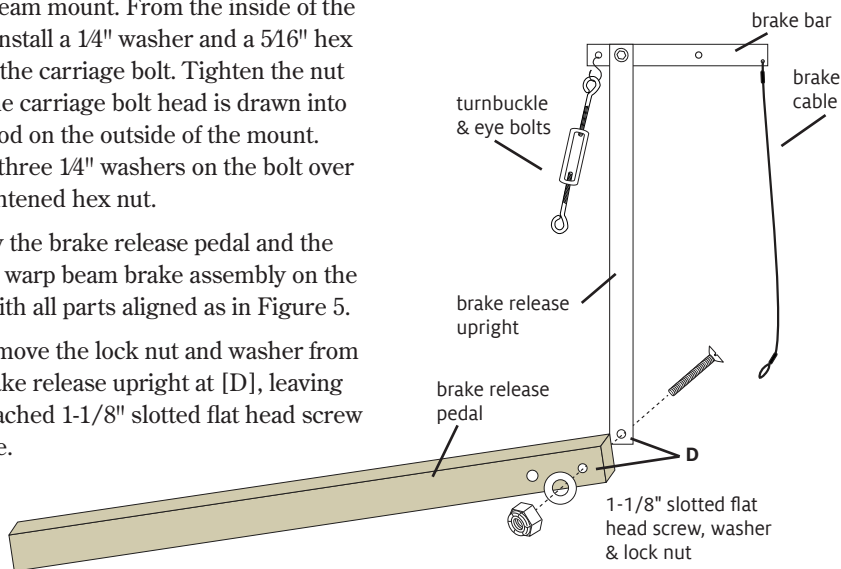


FIGURE 5: ASSEMBLE BRAKE RELEASE PEDAL AND DOUBLE WARP BEAM BRAKE ASSEMBLY

14. From the inner side of the loom, place the brake bar on the bolt at [C], on the double warp beam mount, and the brake release pedal on the bolt at [A], on the lower left side brace. Let the brake cable and turnbuckle hang loose for now. Put a 1/2" washer and the 1/2-13 lock nut on the bolt at [A]; tighten the lock nut firmly.

CONNECT THE BRAKE CABLE

15. Put another 1/4" washer on the carriage bolt at [C]. Sitting on the floor in back of your loom, wrap the brake cable around the brake hub three times, wrapping under to over from the outside of the loom towards the inside. Place the loop on the end of the cable over the carriage bolt at [C] and secure it with another 1/4" washer and a 5/16-18 lock nut (Figure 7). Make sure that the brake bar can pivot freely.

16. Put a 1/4" washer on the carriage bolt at [B] in Figure 6, on the left lower rear leg. Place the bottom loop of the brake spring over the washer, then add another 1/4" washer and a 5/16-18 lock nut. Tighten the lock nut enough to hold

the spring in place while still allowing it to pivot freely.

17. Reach under the double warp beam to grasp the top of the brake spring. Hook the brake spring to the eye bolt on the bottom of the turnbuckle (Figure 7).

18. Tighten the turnbuckle so that the spring just begins to stretch. You can adjust the tension of the warp beam by turning the turnbuckle one way or the other. Lengthening the spring increases the tension on the brake cable.

INSTALL THE BRAKE HOLD

The brake hold allows you to depress the double back beam brake release pedal on the left side of your loom while you are winding on or advancing your warp on the right side of your loom.

19. Locate the hole in the left upper side brace for the brake hold bolt. If you purchased your loom before June 2019, enlarge the hole with a drill and a 5/16" drill bit.

20. From the outside of the loom, insert a 5/16-18 x 2-1/4" carriage bolt through

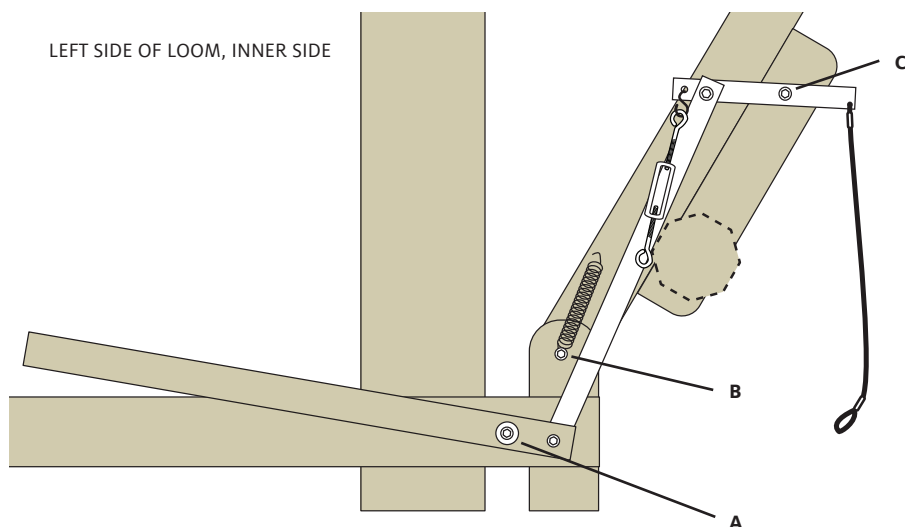


FIGURE 6: INSTALL BRAKE RELEASE PEDAL AND DOUBLE WARP BEAM BRAKE ASSEMBLY

this hole, then use a hammer to tap the carriage bolt firmly into the wood, until the square part of the head makes an indentation that prevents the carriage bolt from turning. From inside the loom, install the following onto the bolt: a 1/4" washer, the brake hold, a second 1/4" washer, and a 5/16-18 lock nut. Use a wrench to tighten this lock nut all the way, then loosen it just enough to allow the brake hold to pivot freely.

INSTALL APRON CORDS

21. Install apron cords in each hole on the double warp beam, then attach apron cords to the apron bar as described in the loom manual. ■

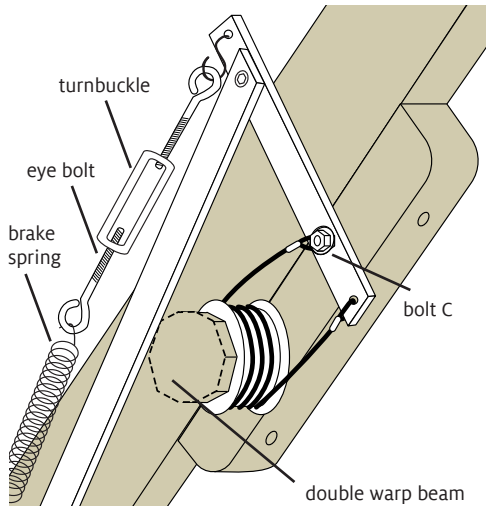


FIGURE 7: CONNECT BRAKE

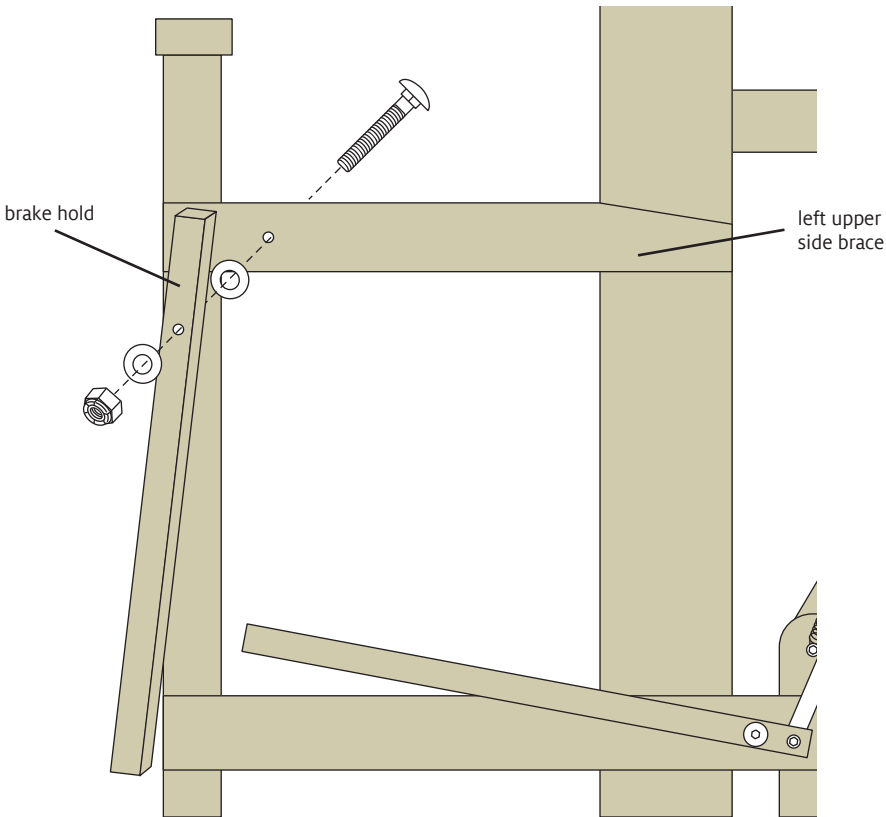


FIGURE 8: INSTALL BRAKE HOLD

STANDARD FLOOR LOOM DOUBLE BACK BEAM

DRILLING INSTRUCTIONS

For looms manufactured before January 1, 1990, you will have to drill holes in the rear legs of your loom. If your loom already has these holes, proceed to the installation instructions.

PARTS

drill guides X and Y

TOOLS

drill
3/16" drill bit
1/2" drill bit

1. Fold up the back beam and secure it with the back beam braces.
2. Place drill guide X over the back of a rear leg as shown in Figure 9. Rest the drill guide on the lower side brace and be sure the end marked TOP is facing up.
3. Using a 3/16" drill bit, drill a hole 1-1/2" deep in the rear leg through each hole in the drill guide.
4. Repeat steps 2 and 3 for the other rear leg.

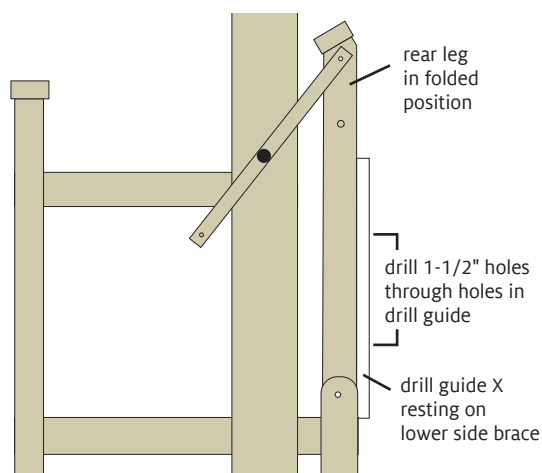


FIGURE 9: DRILL GUIDE X

5. Place drill guide Y on the lower left side brace as shown in Figure 10. Position the drill guide so that it butts up against the rear leg.
6. Using a 1/2" bit, drill a hole through the lower side brace. Please note: It is very important that the hole is drilled as straight and as cleanly as possible. To accomplish this, drill from the outside of the loom until the drill bit just starts to come through the inside of the lower side brace. Then remove the drill and drill the rest of the hole out from the inside of the loom. Be sure to hold the drill level and square to the left lower side brace.

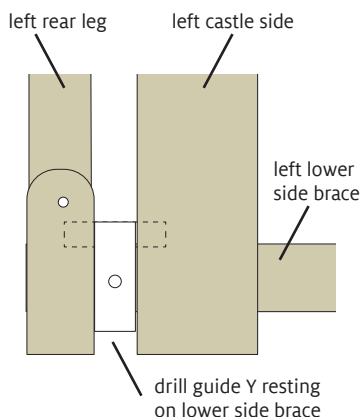


FIGURE 10: DRILL GUIDE Y