On receiving the loom, unpack and lay out the loom components. Do NOT discard any packing material until all parts are inventoried.

Check the parts received against the parts list on pages #2 to #7 of the assembly instructions. Report any discrepancies to Leclerc immediately.

To assemble this loom, a minimum of 2 people are needed but it is recommended you use 3.
PARTS LIST

1 right-hand side

1 left-hand side

Note for Leclerc only:
- Faire les avant trous pour le frein d'ensouple
- Faire les petit trous dans les montants pour les baguettes d’encroix.
- Vérifier que les bagues entre bien dans les pattes et traverses
2 breast beams  
(43½", 52 5/8", 68 1/8")

1 left sword

1 right sword

1 cloth (front) beam  
(38½", 47 5/8", 62 9/16")

1 warp (back) beam  
(38½", 47 5/8", 62 9/16")

1 batten handtree  
(46¾", 55¾", 70¾")

1 batten sley with shuttle race  
(46¾", 55¾", 70¾")

1 Front cross-member  
(40½", 49", 64")

1 Middle set cross-member  
(40½", 49", 64")

1 Back cross-member connecting stabilizing posts

1 cross-board connecting the back posts  
(34½", 52 5/8½, 67 1/4")

1 apron

1 cloth take-up motion handle
8 shafts

10 treadles with extension

3 treadle supports

1 treadle set rod 28¾” with one pushnut

1 more Treadle set Pushnut

1 treadle separator

1 Crank

1 reed

2 lease sticks

4 warp rods
+ 2 Heavy rods for narrow fabric
3 screwdrivers (Black, Red and Green)

1 aluminum wrench

1 adjustable wrench

1 set of 10 treadle hooks 8 ¾”
10 pegs to lock the treadle hooks

1 boat shuttle

12 plastic bobbins

1 threading hook

2 pkg of cords (5 yds each)

1000 heddles (36” loom)
1200 heddles (45” loom)
1500 heddles (60” loom)
1x Front board with 10 screws across

60 x treadle cords 11¼" (Black) to join lams to treadles.
60 x treadle cords 19¼" (Red) to join bottom part of shaft frames to treadles
10 x rocking pieces loop cords 15"

1x warp beam advance control system

1x castle cover with pulleys and 1x castle top

8 lams with metal cables

Note pour Leclerc: 
Poser un petit bloc ½" sous la planche
Machine bolts
4X - 3/8” x 5”

Carriage Bolts
4X - ¼” x 2¼” (Back Post)
4X - 5/16 x 2½”
3X - 5/16” x 4”
2X - 5/16” x 2” (swords)

Machine bolts
4X - 3/8”
11X - 5/16”
4X - 9/16” (treadle set)

Carriage Bolts
4X - ¼” x 2¼” (Back Post)
4X - 5/16 x 2½”
3X - 5/16” x 4”
2X - 5/16” x 2” (swords)

HEXAGON NUTS
5X- Nylon auto lock 5/16”

SQUARE NUTS
4X - 3/8”
2X 5/16”

Wooden spacer
8X for a 8 shaft loom

1½”

Wing nuts
4 X - ¼” (6 mm)
5X - 5/16” (8 mm)

Round head screw
4X - #12 x 1½”
4X - #14 x 2” (front board)
2X - #8 x 1½” (Treadle separator)
4X - #8 x 1 ¼” (pulleys hinges)
4x - #14 x 3” (treadle cross-member)

Flat head screw
4X - #12 X 1½” (38 mm)
(castle top)

2X eye screws

Tacks for canvas

4 spare shaft frame ends

1 lam separator

2 heddles transfert bars

Instruction video in the USB key
Place right-hand side A of the loom on its front.

Insert a tenon of lower front cross-member B into the lower front mortise of right-hand side A. (Fig. 1)  
NOTE: The lower front cross-member B does not have holes drilled through it.

Using the wrench supplied with the loom, affix cross-member B with a 3/8” X 5” (10 mm X 125 mm) machine bolt, a 3/8” (10 mm) steel washer, and a square nut.

Insert a tenon of lower back cross-member C into the lower back mortise of right-hand side A. (Fig. 1)  
NOTE: The lower back cross-member C does have 2 small holes drilled through it.

Affix cross-member C with a 3/8” X 5” (10 mm X 125 mm) machine bolt, a 3/8” (10 mm) steel washer, and a square nut.
After having placed left-hand side D of the loom on its front, insert the tenons of cross-members B and C into the lower mortises of left-hand side D.

Use 3/8” X 5” (10 mm X 125 mm) machine bolts, 3/8” (10 mm) steel washers, and square nuts.
Using four 1½” (40 mm) round-headed screws No. 12, affix back cross-member E to back posts A and B.

Using four 3” round-headed screws No. 14, affix the treadle cross-member F.

ATTENTION: Application of soap to the screws will make their insertion easier.
Place the loom right side up.
Unfold the back section of the loom.

Insert a $\frac{1}{4}$" x 2$\frac{1}{4}$" carriage bolt into the holes of the uprights. The nylon washer is already installed in the upright. Affix the $\frac{1}{4}$" wing nuts.

Lock it in place with metal hooks A at the last notch.
Insert a ¼” X 2¼” carriage bolt into the holes of the stabilizing posts (inside to outside). The nylon washer is already installed in the posts. Affix the ¼” wing nuts.

Unfold the back section of the loom and lock it in place with metal hooks B.

TREADLE SET ASSEMBLY

Assemble the treadle set (in or out of the loom).

1 treadle rod 28¾” with one push nut already on one side.
10 treadles
8 wood spacers 1½”
3 treadle blocks
4 x 9/16” washers
1 push nut to be installed after the set is on the loom.
**TREADLE SEPARATOR**

Put the treadle separator in top of the loom middle cross-member and secure using 2 X 1½” round-headed screws #8.

Affix the treadle set to the treadle cross-member using: 3 carriage bolts 5/16” x 4”
3 washers 5/16” (inside of the loom)
3 Nylon autolock nuts 5/16”
Insert the bolt from outside to inside of the loom (hammer the carriage bolt "C" head)
Castle top Installation
Install the castle top on the castle sides. No hardware is necessary.
VERY IMPORTANT: Place this top as indicated by a sticker in the front.

Shaft installation
It is easier to install your heddles before this operation.
To remove or add later, please go the page 30 of this instruction.

Start installing the lams and shafts into the castle top, beginning with the #8 (back)
Place one lam assembly on the floor under the most forward shaft position.
Following the drawing of the next page, thread "B1" and "B2" passing by
the right pulleys. Attach to the white plastic shaft end on shaft #1.

Make sure to always pass the cable "B1" and "B2" in the back of the shaft frame.

Run the "C" cables around the lower pulleys and attach to the lower white
plastic shaft end of shaft #1.

Important: See the film supplied with the loom
Run those "B1" et "B2" cables in the back of each shaft frame.

All cable lengths have been pre-adjusted at the factory.

Put the lam 8 in the middle of the lam spacer.
After lam 5, reposition the spacer to have all lams at the right spot.
Finishing the shaft frame installation
A small amount of tension is needed on the cables. Make sure that all cables are in the right groove. Screw the pulleys hinges using 4 round head screw #8, 1". If the tension on the cable is too tight, the shaft frames will not move freely, unscrew the hinges slightly. Try to have an even tension on both side,
Keep this lam spacer "S" in place until all the treadles tie-ups are made. This loom work better with tie-ups on all the 10 treadles.

Affix the front board with 8 round head screw no 14, 2". Note: The 10 screws across must be at the bottom part of the board.

Using four 1½" flat-headed screws no. 12, affix the castle top to the loom. Make sure to screw in to the pre-drilled holes.
In this countermarche system, each shaft frame (Harness) should have a treadle tie-ups cord. If you want to lift a shaft frame, you have to put a short treadle cord to the lam. (BLACK)

If you want to lower a shaft frame, you have to put a long treadle cord to the bottom of the shaft frame. (RED)

**You have to have 8 treadle tie-ups cords per treadle.**

The short treadle cord (black) should be tied to the lam (that will raise the shaft).
The loop cord have to go around the lam **(do not use the holes of the lams)**. Thread the the loop (black mark). Let it hang (picture #1)

The long cord (red) have to go around the bottom of the shaft. Pass it through the loop (red mark). Let it hang. (picture #2)

**IMPORTANT: Always thread the red loop cord in front of the corresponding lam.**

**Red loop cord of shaft #1 in front of lam #1.**

In order to install the red loop cord to the bottom of the shaft frames, remove the front board (P)

With a 36" and 45" loom, you can install in advance 40 red and 40 black loop cords on each side.
Start the tie-ups from the middle treadle to the outside so you will be able to slide the necessary treadle cords.

With a 60" loom you can do the same with the black cords but have to figure out the number of treadle cords per sector.
There is still the left and right end sides but because there are 3 heddles support, you now have 4 different sectors.

Start the tie-ups from the middle treadle to the outside so you will be able to slide the necessary treadle cords.

After weaving as few inches and checking if the pattern is right, remove the left over tie-ups loop cords.
Install the Treadle Rocker Loop Cord on the front board screw at the black mark and it should stay at the black mark.

Thread the treadle hook following the order of the loop cords hanging.
Always use the color marks.
Secure the treadle hook with the beige peg.

This picture shows an open plain weave shed.
1- Blue loop cord for the rocker
2) Red loop cord to the bottom part of the shaft frame #1
3) Black loop cord to the countermarch #2
When all treadles are tied up, they should be at the same height. The top front part of each treadle should be app. at 8¾” to the floor.

As an example, let's try plain weave (2 treadles)
For treadle #1, tie short cord (black) to lam #1, #3, #5, #7
tie long cord (Red) to shaft #2, #4, #6, #8
This picture show the treadle #1 (down in order to show the action of the spring and the rocker piece).

For treadle #2, tie short cord to lam #2, #4, #6, #8
tie long cord to shaft #1, #3, #5, #7

Install take-up motion handle E on the axle end of cloth beam F (on the same side as the ratchet gear). Ratchet pawl G of the take-up motion handle must be lifted up.

Open beam latches H and place the beam ends in the slots J of the upper side cross-members K and L.

Note: Ratchet gear M must be on the right-hand side and ratchet pawls N must be lifted up.

In order to improve the rotation of the cloth beam, special bushings are supplied. Make sure to leave them in place when installing the cloth beam on the loom.
Place and center the batten "B" handtree on the loom in order to help the installation of the swords. See the film for clearer instruction.
Affix the batten swords C to the lower lateral cross-members D.
Insert the 5/16" x 2" carriage bolt to the LOWER HOLE.

Hammer these carriage bolt into the hole so it will lock while you will screw in the auto lock nut.

Insert a washer 5/16" washer between the loom frame and the sword.

Do not tighten the bolt too much as the batten must move freely.

Beater height:
With the shed in the open position the warp should rest in the shuttle race.

The adjustment is made by raising or lowering the beater with the lower Laysword metal plate (A).
Using two (2) 5/16" x 2½" (8 mm x 65 mm) carriage bolts, two 5/16" (8 mm) steel washers, and two square nuts, affix batten sley C to the lower holes of swords A and B. (Fig. 13)

NOTE: The batten sley does not have polyvinyl bumpers but it has a shuttle race.

Using two 5/16" X 2½" (8 mm X 65 mm) carriage bolts, two 5/16” (8 mm) steel washers, and two wing nuts, affix batten handtree D to swords A and B. (Fig. 14)

NOTE: The batten handtree has polyvinyl bumpers.

The slots of the batten sley and handtree must face each other.
Using metal rod E, join treadle C to lever D. First insert the double-cornered end of the metal rod into lever D; then insert the other end of the metal rod into treadle C while the treadle is depressed.

Raise (back part) treadle C as high as possible then hook spring F to lever D.

**BRAKE ADJUSTMENT:**
Release the brake by depressing treadle C and locking it down with the catch G. The warp beam should turn freely but the circular brake wire should not be too slack. If the tension is too great, unscrew the wing nut H slightly and then loosen the turnbuckle I. If the tension is too slack, tighten the turnbuckle I slightly and then the wing nut H.

Insert the black rubber ring J to the lower end of the rod E, to prevent the rod from slipping out.

**BEAMING**
Release the brake by depressing the brake treadle (C) and locking it down with catch (G).

**WEAVING**
To advance the warp, depress brake treadle (C) and turn cloth beam (H) at the same time. Then, release brake treadle (C) (engaging the brake) and advance the cloth beam until the desired tension is achieved.
WARP BEAM INSTALLATION

Hold the circular wire brake shoe A slightly to the rear of the loom, **but do not unroll it.**

Insert the brake drum B into the wire brake shoe A. Then, install the ends of the warp beam C into the grooves of the back posts.

In order to improve the rotation of the warp beam, special bushings are supplied. Make sure to leave them in place when installing the warp beam on the loom.

Hook turnbuckle I to flat wire circle A.

BRAKE ADJUSTMENT:
Release the brake by depressing the brake treadle and locking it down with the catch G.
The warp beam should turn freely but the brake circle should not be too slack. If the tension is too great, unscrew the wing nut H slightly and then loosen the turnbuckle I. If the tension is too slack or the beam is turning counterclockwise (while standing on the brake side of the loom), tighten the turnbuckle I slightly and then the wing nut H.
Place the reed between batten sley C and handtree D. When the wing nuts are loose, the batten handtree can slide vertically in the sword slots. The reed must then be secured between the batten sley and handtree by tightening the wing nuts. If the batten does not touch the two bumpers equally, loosen the bolts of the batten sley and handtree and exert pressure on the batten centering it in its proper place. Tighten the bolts again.

If the batten does not touch the two bumper equally, loosen the bolts of the batten sley and batten handtree and exert pressure on the batten centering it in its proper place. Tighten the bolts again while keeping pressure in the batten.
Affix one of the breast beams A on the top of the front posts B and C.

Affix the other breast beam on top of the back posts.

NOTE: To avoid splitting the front posts, slightly insert the breast beam onto the metal pin. Be sure that it is in the right position before inserting it completely.
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Install the Warp beam advance control system. This system will eliminate excessive warp yarn advance when releasing the brake system at cloth take-up. This friction system is adjustable and have to be released when winding the warp on. Just screw the handle in to increase the friction or unscrew it to release. Affix it to the back left side of the loom using 2 round head screws no 12 - 1” to the pre-drill holes.

FOLDING LOOM AND BEAMING:
Release the brake by depressing treadle C and by locking it down with catch G. Release the 4 metal hooks and fold the back of the loom.

WEAVING:
To advance the warp, depress brake treadle C and turn cloth beam H at the same time. Then release brake treadle C and advance the cloth beam until the next notch in the ratchet gear is reached. If this is too much tension, gently depress the brake treadle until the desired tension is obtained.

Note while winding a warp with a Leclerc Friction Brake
To maintain proper adjustment and operation of your Friction Brake, it is recommended that the Brake be disengaged while winding the Warp. On those looms designed with a Treadle or Lever Lock, the Brake should be locked open when winding.

MORE INFORMATION:
See “WARP AND WEAVE”
Affix screw eyes F to the holes inside middle posts G. Pass a string E through the holes at each side of the lease sticks D and tie them to the screw eyes and to the thread beam A. The lease sticks will be held at the right height and distance for easy threading.
TO CHANGE THE AMOUNT OF HEDDLE PER SHAFT FRAME:

1) In one side of the loom, unlock the heddles supports (top and bottom) Bend them a little to remove them from one side of the loom.

2) Join with a cord the heddles support to the small heddle transfer bars.

3) Slide the heddles in or out.

4) Disconnect the small heddles transfer bars and re-install the heddles supports to the loom.

5) Repeat this for all shaft frame. Frame 1, 2 3 and 4 have to be made from the front. Shaft frame 5, 6 7 and 8 from the back.
If the loom is equipped with a sectional warp beam, affix the rake-like pieces (following the instructions supplied with the sectional warp beam) and do the following instructions on the cloth beam only.

If the loom is not equipped with a sectional warp beam, affix the apron to the warp beam with tacks and do the following procedures on the warp and cloth beams.

Insert a warp rod into the apron border.

For 27”, 36” and 45” loom
(70cm, 90cm and 115cm)

Cut the 5 yard (4.5m) cord in half.
Use one half of the cord to lace the apron warp rod to a second warp rod. This second warp rod will be used to attach warp threads.

For 60” loom
(150cm)

Use a 5 yard (4.5m) cord to lace the apron warp rod to a second warp rod. This second warp rod will be used to attach warp threads.

We at Leclerc encourage Weaver feedback on this and all our products. Please send your comments to Leclerc Loom Co.
info@leclerclooms.com

HAPPY WEAVING