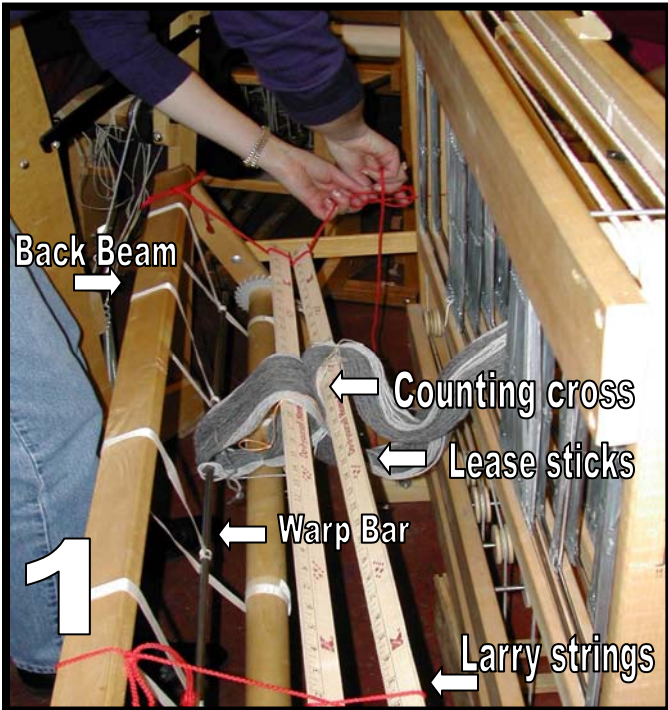
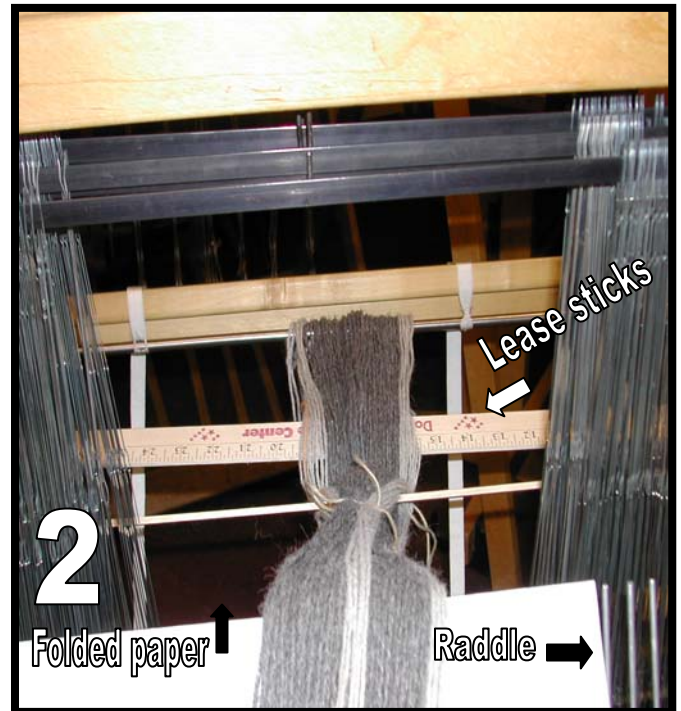


Warping from A to Z

Created by Penny Wakefield for ART 127



RAISE SHAFTS & hold up with a dowel or a board
 Bring warp bar up over the back beam. Slip warp end onto warp bar & center. Insert lease sticks into counting cross & secure with larry strings. Go over & around on one side, under & around on the opposite side & tie to back & front beams.



With the LEASE STICKS SECURE, place **RADDLE in the beater's reed groove**. If using romex raddle, tie to the beater, top of castle or front beam.. Place a folded paper over the raddle spikes or brads. Place warp on the paper.



Remove the END WARP TIE & all bowties or saddles around the counting cross.
DO NOT REMOVE THE COUNTING CROSS TIES
 The counting cross is now the **SPREADING CROSS**. Each bundle represents 1 inch of warp width.



As you Remove counting ties, one at a time & place each warp bundle in either 1/2 or 1" raddle spaces. This depends on warp ends per inch (36/40 EPI, use 1/2 inch spaces). Warp ends should come straight from the warp bar to each respective raddle space. Check for crossed threads, twisted or split pairs.



Guide string →

5

CENTER RADDLE IN THE BEATER. Each warp bundle can be separated again to fill each 1/2 inch space. (18 EPI separates to 10 & 8 ends per space, do not split pairs). Guide string winds on with warp & gives a measurement of warp that is remaining.



Remove the
Lease sticks →

Beater top →

6

Place BEATER TOP over the raddle & secure. Carefully **REMOVE LEASE STICKS** & straighten any threads on the warp bar. Using romex raddle, place knitting needles under the brads to hold the warp in place.



Hold the bar in the middle

7

BEAM WARP by **HOLDING WARP BAR IN THE MIDDLE** as you **WIND THE WARP** over the back beam & down to the warp beam. **HOLD ON & DO NOT LET THE BAR DROP.** The bar's weight will go straight to the floor pulling the warp with it. Check for heavy cords that hold warp rod on the beam, **IF SO** select 3-4 sticks to insert over the heavy cords to make a hard beam as you wind the warp on.

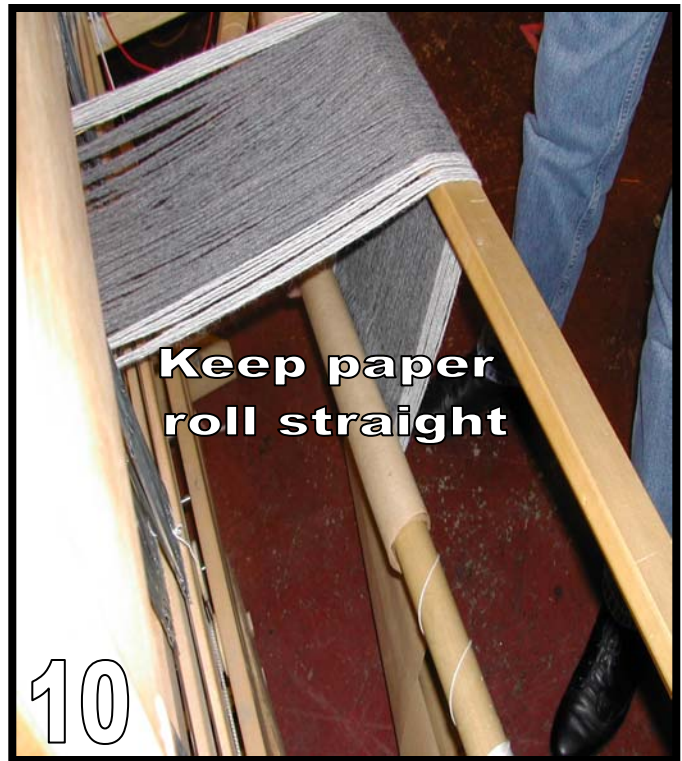


8

INSERT STICKS if needed. **INSERT A PAPER ROLL** after the sticks have been inserted. **GO TO THE FRONT OF THE LOOM & GRAB CHOKE TIE.** **PULL HARD** to straighten & tighten the warp around the back beam. Any warp threads pulled out of position in spreading will move back into place because it is a continuous warp.



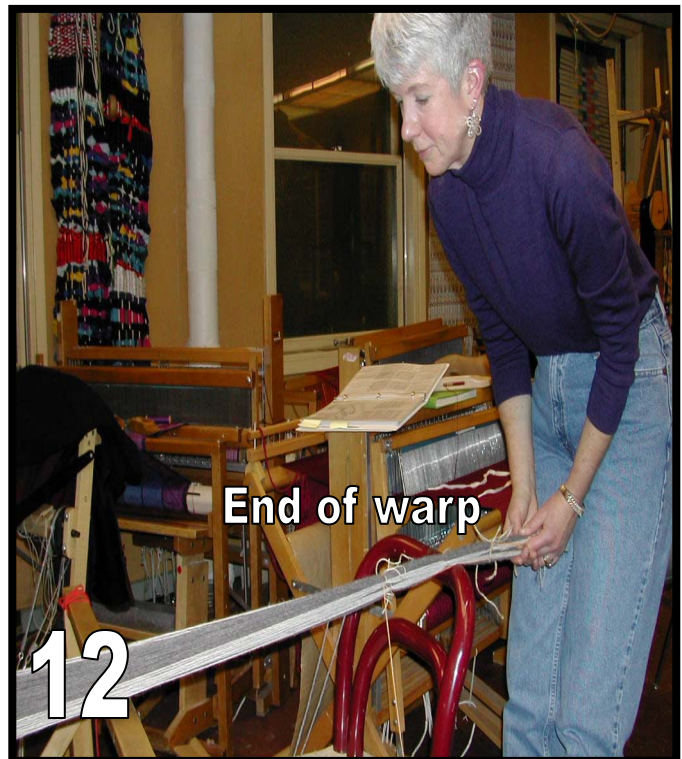
Wind a couple of turns, then **GRIP CHOKE TIE AGAIN & PULL** really hard on warp to straighten & tighten the warp around the back bar. Pat the warp to untangle & straighten any threads. **LAY THE WARP DOWN & RETURN TO WINDING** a couple turns.



KEEP THE PAPER STRAIGHT as you wind on a couple of turns. Grip only the **CHOKE TIE** & pull tight. You will feel the warp slip & tighten around the beam. You may have to brace against the breast beam to pull really tight.



Continue to **WIND & PULL on the WARP**. Pull only on the Choke ties. Use only a single finger to separate any clinging threads or small tangles. Keep an eye on the yarns as they go through the raddle. Lay the warp down & wind. Watch as the **CHOKE TIE** approaches the raddle. At 10 inches from the raddle, **STOP & DO A FINAL PULL**.



REMOVE CHOKE TIE - Grip the warp at the very end, pull hard then continue to **WIND ON** the rest of the warp until the **THREADING CROSS TIES** are up to the raddle.. Give a final tug & finish winding on. **DO NOT REMOVE any TIES AROUND THE THREADING CROSS** or any saddles.



Once the **THREADING CROSS** reaches the raddle, it is time to **REMOVE THE WARP** from the raddle. **DO NOT REMOVE ANY TIES AROUND THE CROSS.**



REMOVE THE BEATER TOP from the raddle. If using the romax raddle, take the needles out from under the romex brads to release the warp.



LIFT WARP OUT OF THE RADDLE Remove raddle. **You will be threading the loom from a cross in front of the heddles.** Take the warp behind the heddles, now slide all the heddles to the right or to the left depending on if you are Right or left handed.



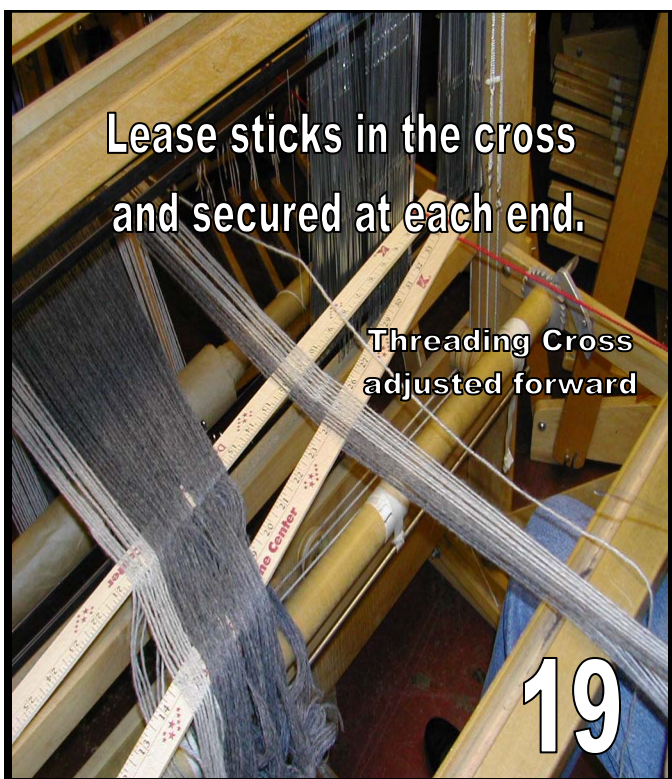
RIGHT HANDED WEAVERS: slide heddles to **RIGHT** & bring warp through to the front on the **LEFT** side of the heddles. Insert lease sticks & secure tightly with larry strings to back & front beams



LEFT HANDED WEAVERS will move heddles to the left & place warp through to the front on the right side of heddles. Secure cross with lease sticks & tie with larry strings to front beam.



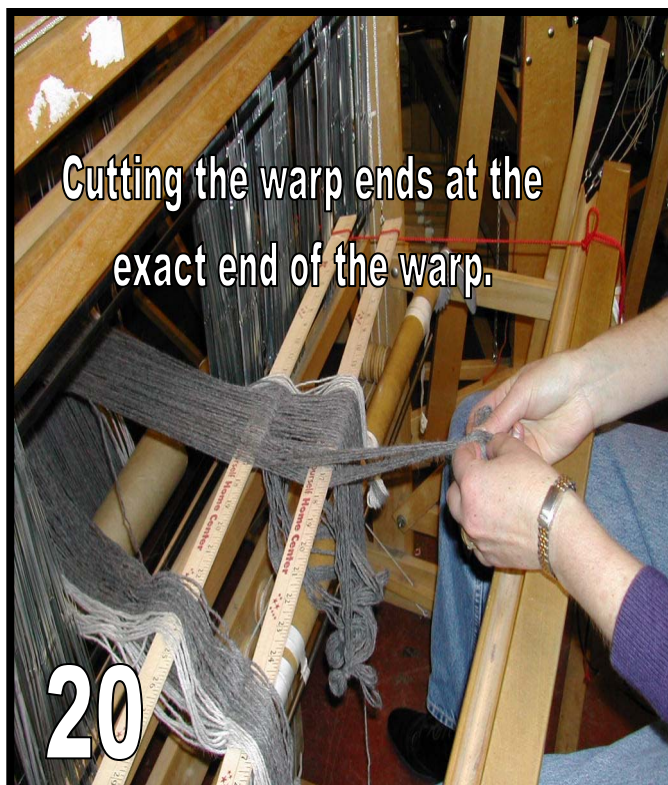
INSERT THE LEASE STICKS IN THE CROSS & secure. (Larry strings go over & around on one side, under & around on the opposite side.) **REMOVE THREADING CROSS TIES & WARP END TIE.**



Lease sticks in the cross
and secured at each end.

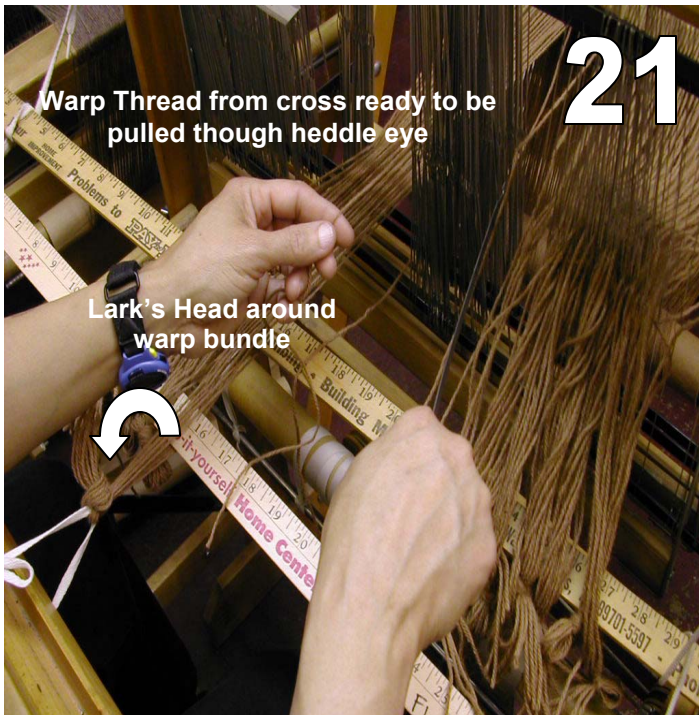
Threading Cross
adjusted forward

ADJUST THE CROSS by spreading the warp out in small bundles & gently slide the cross either forward or back before cutting the ends. Wind excess warp on warp beam. You should be in a comfortable position now with the **THREADING CROSS** visible in front of heddles.



Cutting the warp ends at the
exact end of the warp.

CUT WARP BUNDLE EXACTLY AT THE END. Secure threading bundle by slipping a **LARK'S HEAD** shoestring or cord over the cut warp ends to maintain the cross. **LARK'S HEAD:** Fold shoestring in half to make a loop, fold loop over to make rabbit's ears. Slip warp bundle into the rabbit ear loops, tighten & tie shoestring to the breast beam.



Warp Thread from cross ready to be pulled through heddle eye

21

Lark's Head around warp bundle

THREADING THE LOOM: The LARK'S HEAD TIE will maintain the cross & will keep warp threads tight while you thread each end from the cross. After the heddles are threaded, now thread the reed. Check threading pattern for errors.



22 Shaft 3
Shaft 1

Insert a lease stick in next to the heddles, 1/2 of the cross.

REMOVE DOWEL OR BOARD holding up the shafts, Grip all the warp ends & pull tight, Create a cross for threading the reed by stepping on **TREADLES 1 & 3** for 1/2 of the cross. Insert a lease stick in the shed created. Treadle 2 & 4, stick in the next lease stick. Use larry strings to hold in place. Tie larry strings to back & front beams..



Shaft 4
Shaft 2

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Raise shafts 2 & 4, Insert a lease stick for the last 1/2 of the cross.

SLEYNG THE REED Check the reed size, Determine the SETT, EPI (ends per Inch) & SLEYING ORDER for the REED. See the SETT CHART for reed sett. Sley the reed as indicated to achieve the sett. Check threading pattern for threading errors, like doubled ends. **REMOVE LEASE STICKS.**

SLEYING THE REED: Determine the width of the warp & the warp SETT. Select a reed that closely matches the sett of the project. Reed sizes: 6, 8, 10, 12, 15 Measure from the middle out, 1/2 the warp width & begin to sley the reed. Right handed: start on the right & work to the left. Left handed: start on the left & work to the right.

Pulling warp ends through reed with reed hook, and group of ends tied in a slipknot. (Left)

Method of tying warp ends to front apron.

- Take group of warp ends, put over apron rod, separate underneath, and bring to top.
- Tie ends in overhand knot. To tighten tension, pull ends forward.
- Tie half bowknot.
- Tighten knot to finish.

REMEMBER YOU CUT AT THE EXACT END OF WARP. Take a 3/4 inch bundle of warp threads, even out the cut ends, making bundle all the same length. **DO NOT CUT TO MAKE EVEN.** Divide the bundle, going over the bar & split into two bundles & bring to the top & tie together. Pull tight & tie a half bow for even tension. Continue across warp.