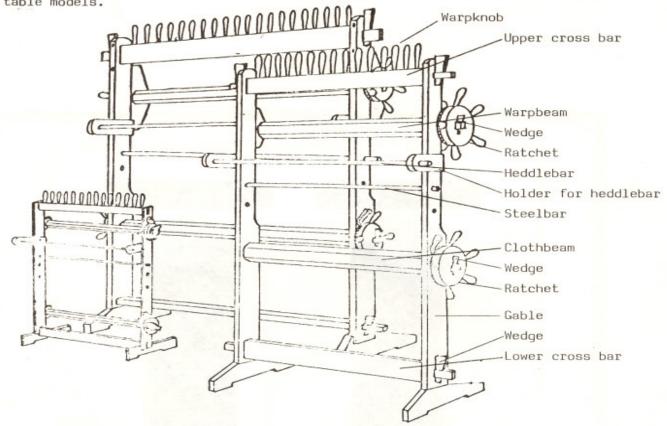
#### The Glimåkra tapestry looms

Assembling and warping instructions for up right tapestry looms, floor and table models.



Text in brachets applies to size 150 and 200 cm.
Fasten the pawls on the gable, the upper one backwards and the lower one opposite.
(Fasten the feet on the gables with the four bolts). (See picture above)
Put the ends of the cross bars, the warpbeam and the clothbeam into the holes
of the right hand gable. Then put the opposite ends of the bars and beams into
the holes of the second gable. Place and knock down the bigger wedges. NOTE
WHEN PLACING THE WEDGES, DO IT FROM THE CORRECT SIDE OF THE BARS AND BEAMS AS
THE WEDGEHOLES ARE LEANING. Fasten the holders for the heddle bar by using the
two bolts. Place the heddle bar, the steel bar and the knobs at top, all in
accordance to the sketch.

Accessories: (2 feet)

2 crossbars

1 clothbeam

2 holders for heddlebar

4 wedges for crossbars warpknobs

2 tying sticks, wood (metal)

2 bolts

(4 bolts feet)

2 gables

1 warpbeam

2 wheels (2 extra wheels)

2 heddle bars, 1 wood, 1 metal (metal)

2 wedges for wheels (2 extra wedges)

2 pattern holders

1 lease stick

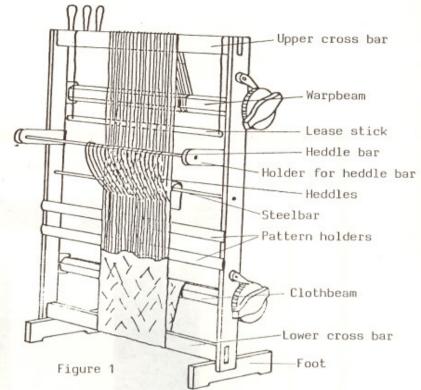
2 pawls

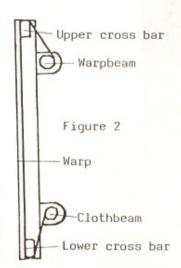
PROTECT LOOM FOR DAMP AND HEAT!



#### Parts included:

- 1 Frame
- 2 Feet
- 2 Heddle bar holders
- 1 Heddle bar (steel)
- 1 Steel bar
- 4 Plastic knobs
- 2 Loom sticks
- 2 Pattern holders
- 1 Lease stick Warpknobs
- 2 Bolts and nuts and washers for feet

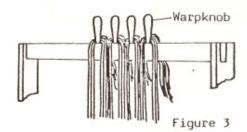




Mount the heddle bar holders to the inside of the frame according to figure 1. Insert the bolt from the inside so the nut and washer end up on the outside. Insert the heddle bar through the holes in the heddle bar holders and secure it by mounting the plastic knobs at the ends. The other steel bar is put through the holes in the sides of the frame and is secured in the same way.

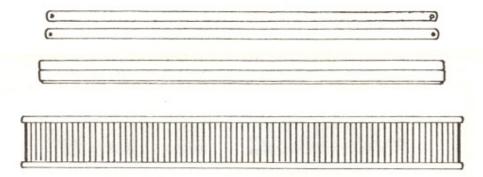
When assembling the feet, insert the bolts from below through the stretch beam. Assemble washers and nuts. The pattern holders keep the pattern against the warp. Tie the heddles to the heddle bar. Use the steel bar to separate the different warp threads in the shed when the warp is put on and the heddles are tied. It is also used as an extra support for the pattern. Tie the lease stick as shown in figure 1 so it does not fall out.

Place the warp as shown in figure 2.



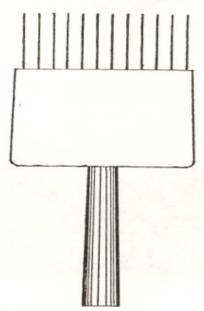
When weaving a short textile, you can tie the warp around the warp knobs instead of using the warp beam.

Extra accessories that can be bought separately

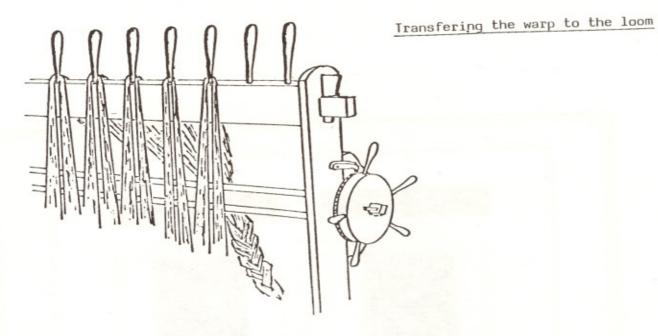


If the warp beam is to be used 2 ordinary lease sticks, 1 bundle of beam sticks (24) and a reed, preferably 25/10, will be needed. All in such a length that they will be able to pass in between the gables of the loom.

Tapestry fork, 10,5 cm wide. Used for beating the weft when weaving with thicker yarns.

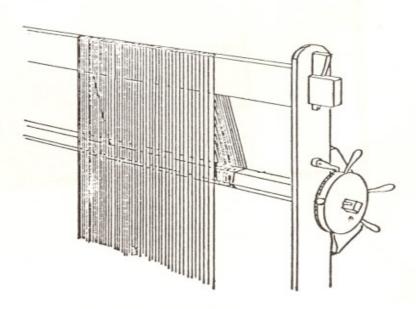


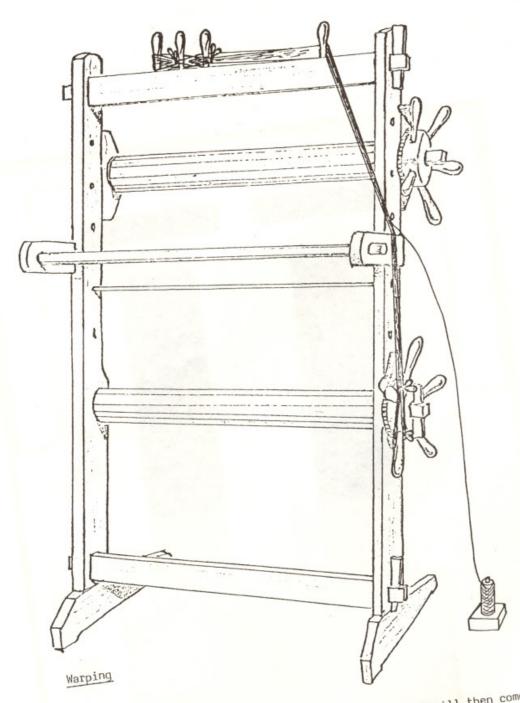
For finer qualities a tapestry bobbin or an ordinary table fork with long pronges can be used.



All the Glimåkra tapestry looms are traditionally equipped with warp knobs on the upper cross bar. These can be used for stretching the warp which then will hang as a plait behind the loom. When using this system individual warp threads can be tightened during the weaving which is a great advantage.

Nowadays the tapestry looms have also got a warpbeam and can be warped just like an ordinary horizontal loom.

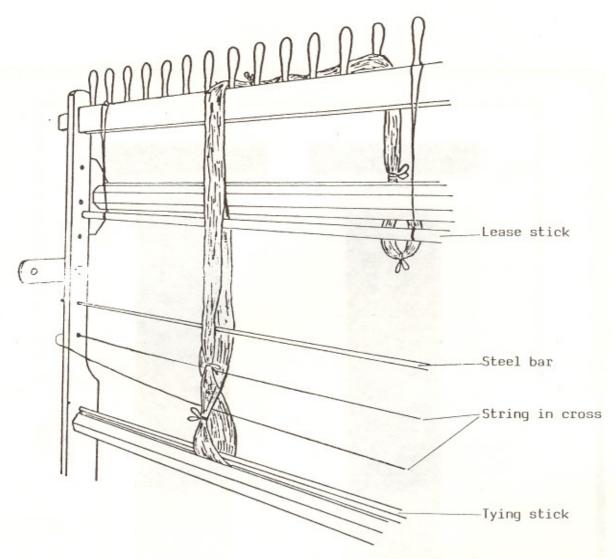




Warp with a single thread. Every second thread will then come behind and every second in front of the lease stick. This makes it easier when making the chains and the heddles.

A short warp can be laid on the loom. Make a loop at the end of the thread. Fasten it around one of the handles of the lower wheel. Take the thread up along the side of the loom and make the cross around some of the warp warp. The in cross and all the end. Make a plait of the warp. A long warp must be laid on a warping mill. up along the side of the loom and make the cross around some of knobs. Tie in cross and all the end. Make a plait of the warp.

Warping the loom by using the warp knobs.



When calculating the warp length at least 100 cm have to be added for waste, 20 cm at the beginning and 80 cm at the end of the warp.

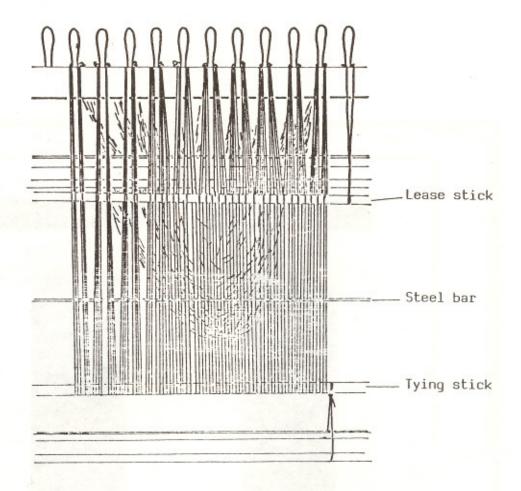
Hang the warp around one of the warp knobs with the tied cross down. Put the tying stick in the lower shed. Tie the stick to the clothbeam with a string in each side so that the stick will be placed horizontal 10 cm above the beam. Tighten the warp.

The steel bar and the hanging lease stick shall now be put into the upper shed. The steel bar will be used when making the heddles and shall be placed in the hole below the heddle bar holders. Hang the lease stick in strings on the warp knobs.

Tie a long string to the right gable. Thread it through the lower shed and through a hole in the left gable and then back again to the right side through the upper shed. Tie the ends together. - Instead of lease sticks.

Untie the knots around the cross on the warp.

Now it is time to divide the warp threads on the warp knobs.



# Dividing the threads on the warp knobs.

#### Example:

Warp: Linen thread 8/4
Inlay: Ryayarn or cowhair
Warpspace: 2.5 threads/om

Warpspace: 2,5 threads/cm

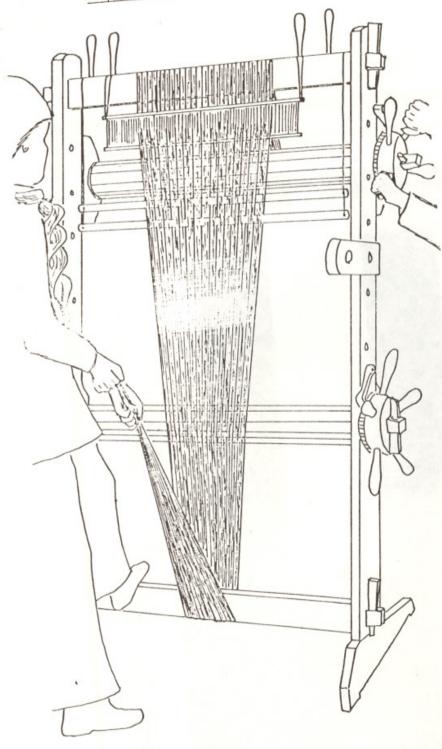
Width: 62 cm

Threads:  $62 \times 2,5 = 155 + 4 \text{ (edges)} = (159) \frac{160 \text{ cm}}{100 \text{ cm}}$ 

Work the threads in pairs. We have got 80 pairs, which are to be divided evenly on the warp knobs. On the 100 cm wide loom we have got 10 warp knobs in 62 cm. 80:10 = 8 pairs to every knob.

Try if possible to place the warp in the centre of the loom. In this case it will not be in the centre. The warp is allowed to be a bit wider at the top but never the opposite.

Mark the weaving width on the cloth beam under those knobs that are to be used. Spread the warp. Take the amount of threads (8) which will be tied to the same knob. Make a slip knot on the threads just above the upper cross bar. Remove the knob. Put it n the warp under the knot and tighten the warp by pressing the knob back in its position. Start from the centre and work out to both sides. Adjust until all threads are equally tightened.

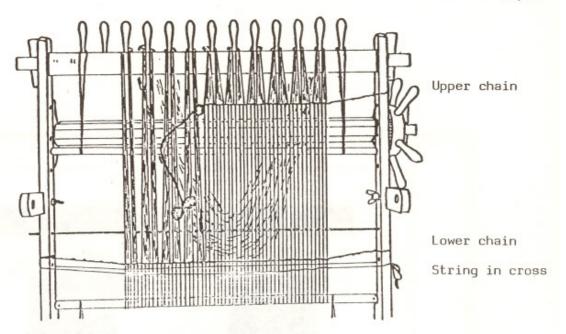


If the warp is to be wound on the warp beam it has to be pre-threaded in a reed in order to keep the width and to spread the threads evenly. Width at reed could be slightly wider than the weaving width.

Place the tying stick in the incision on the warp beam when the threads are spread out to the required width. Tie a string in each side and one in the middle to hold the stick in position. Hang the reed in strings on the warp knobs. Stretch the warp down around the lower cross bar. Put beam sticks on the warp beam when winding the warp. It is very important that the warp will be tight and evenly beamed.

The reed can be left in the warp and will then replace the upper chain. If the reed is going to be removed the lease sticks must be moved above the reed and tied so they will not fall down when the warp is cut open. Remove the reed and make slipknots on the warp.

The warp should now be tied to the clothbeam. Tie a string in each side and one in the middle around the tying stick and the beam in order to keep the stick horizontal 10 cm above the beam. Tie the warp around the stick. Adjust until the warp is evenly stretched.



### The lower and upper chain

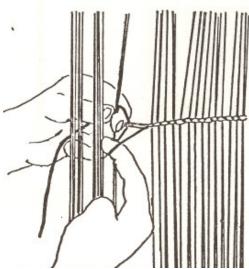
In order to get the warp evenly spread one chain is made at the bottom, just above the string in the cross. Another one above the hanging lease stick at the top of the loom.

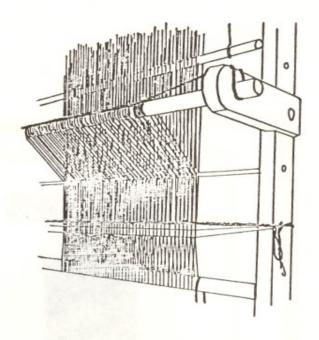
Make a boll of the yarn used for warp. Start to crochet a chain with the fingers. Tie it on the side of the loom. Continue to crochet until the chain is just infront of the first pair of threads. Now keep the boll behind the warp and make one stick around every pair of threads. For spaced warp like this example one stitch is made inbetween the pairs to keep the required distance. Make sure that the chain will be evenly made. If not you will have a bad weaving result. In our example with 2,5 threads/cm there will be 5 spaces in 4 cm. Stretch and measure and undo until it is correct.

The string in the corss keeps the pairs in order. Continue to crochet on the other side of the warp and tie the chain to the left side of the loom.

Make the upper chain in the same way above the hanging lease stick. Make sure the pairs are equal to those in the lower chain. The width of the warp could be sligtly wider at the upper chain.

N.B. Special edge threads must be doubled both in the chains and when the heddles are made.





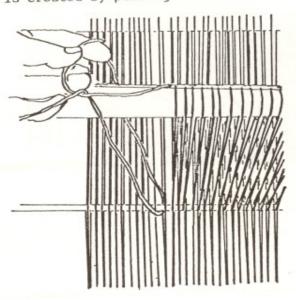
## Making the heddles

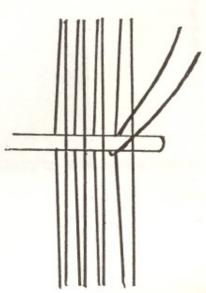
Work from right to left. Make a ball of the warp yarn. Fish yarn or linen. Start with a big loop. Fasten it on the right end of the heddle bar. Lay the yarn 8 times across the heddle bar from end to end. Continue with the same yarn and start to make blanket stitches around the heddle bar 2,5 cm before starting with the heddles.

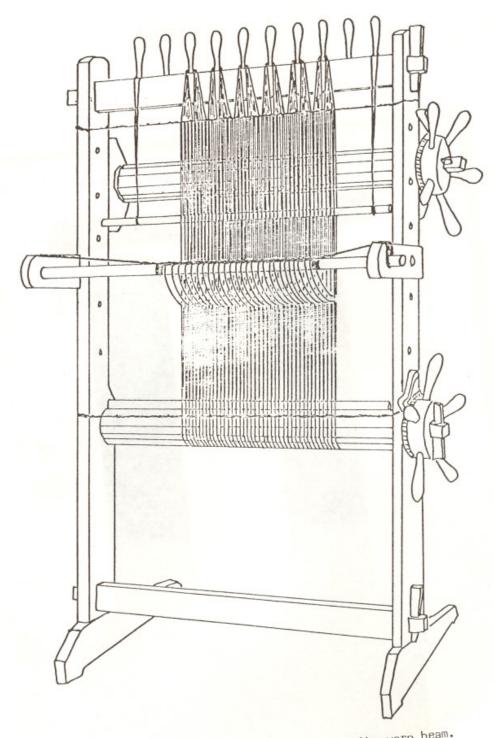
When the stitches are opposite the first pair in the chain the first heddle should be made. Move the thread in front of the steel bar to the right. Thread the ball from above behind the next thread and around the steel bar. Let the ball come up under the heddle bar and complete the blanket stitch now only around the strings. Before the next heddle is made, some more blanket stitches must be made around the strings to keep the correct distance between the heddles. Make a few heddles and measure. Continue all over the warp to the left side. Any joinings have to be made close to the heddle bar.

Every second warp thread has now got a heddle. Check that no threads have been left out before you remove the steel bar. Cut the string in the cross.

Now you have got one open shed due to the hanging lease stick. The second shed is created by pulling the heddles.







The tying stick should now be placed in the slot of the warp beam.

Loosen the lower chain and the knots on the warp knobs respectively unwind some of the warp on the warp beam. Press down the tying stick in the and tie in the centre and on both sides. Wind on until the stick is

Retie the chain to the sides again as low as possible. Put a beam stick in the open shed above the chain to get a level start. Weave about 2 cm with warp yarn before starting the tapestry.