The LACIS TAPESTRY TABLE LOOM incorporates a novel shed changing device which automatically changes the position of warp threads to form either of two sheds or a no-shed position. Any of these selected positions is automatically held in place once set. The large open shed permits the feeding of weft threads either by hand or shuttle. The loom also incorporates in integral warping frame for the preparation of the warp and a tension control system for easy adjustment of warp tension. The loom is of finished hardwood, yet light in weight, easily assembled and disassembled, and sturdy enough for projects from rugs to lace weaves using yarns from heavy cords to the finest threads. Any single piece can be made up to 20” wide by 58” long using the standard warping procedure described herein. Longer pieces can be worked using more advanced techniques. The loom is designed so it can be used with the accessory LACIS “Sit-or-Stand” Floor Stand which permits weaving in any inclined position, sitting or standing.

**PARTS SUPPLIED**

- 2 30” SIDE FRAME BARS with PEGS
- 2 24” BACK/FRONT FRAME BARS
- 2 Long HEDDLE RODS
- 2 Short WARP RODS
- 4 Wood KNOBS for securing frame
- 2 Hexagonal HEDDLE ROD SUPPORTS
- 2 Notched LEG BARS
- 4 Size 64, Industrial Grade ELASTICS

**USER SUPPLIED**

In addition to the parts supplied with the loom you will need a strong thread for the warp, heddles and chain spacer. In tapestry weaves the warp thread is usually not visible in the finished piece. In 2-harness tabby weaves it is seen and should be selected for color and appearance. A standard #20 crochet cotton such as DMC “Baroque” is a good general
thread for all three purposes.

Approximately 10’ of a strong lacing cord as might be used for a shoe lace.
2 small rubber bands
2 pieces of thin cardboard approximately 4” wide. One 5” and one 5-1/2” long
2 strips of thin cardboard 20” long by approximately 1-1/2” wide.
A thin sheet of thin cardboard approximately 18” x 18”

ASSEMBLY

Join the four FRAME BARS together using the four KNOBS following illustration. Be sure the position of the PEGS on both side bars correspond. Set the BACK and FRONT bars so they are vertical.

WARPING

Give yourself time and go slow. The technique described is a simple technique but you must follow the directions carefully. To determine the number of warp threads that will be required, multiply the number of threads per inch that the project requires by the width in inches and add 2. Thus if you want to make a 12” scarf having 6 warp threads per inch, 74 threads will be required. This will allow a double warp thread along both edges of the weaving. The pegs on the underside of the loom, serve as a warping frame.

1. Turn the FRAME upside down, the pegs pointing up. The warp will wrap around selected pegs as determined by the warp length desired. The warp should be at least 12” longer then your finished project as a weaving shed is not easily formed when the weaving nears the end of the warp. Determine which pegs to use by cutting a cord twice the desired warp length and, starting at Peg “A”, wrap it around different pegs, so the other end returns to the starting peg. A figure “8” must be formed on the end adjacent to the starting peg. Following the path in the diagram will give you a 58” warp and is suggested for your initial warp.

2. Tie a large loop on the end of your warp cord and slip it over Peg “A”. Wrap the threads around the selected pegs so each consecutive thread goes to the right and then to the left of the peg adjacent to Peg “A”, forming the necessary figure “8”. Each time you return to Starting Peg “A”, 2 warps will be formed. In winding, keep uniform tension in your thread and avoid overlapping. When the correct number of threads have been wound, cut the end, allowing enough thread to tie a large loop and slip this loop onto the starting peg. The figure “8” crossing at the end is to keep the warp threads in sequential order until transferring to the loom.

3. Place one short and one long rod through all the threads at starting peg “A” including the two end loops of the warp. Place the other long rod on the other side of the crossing by the adjacent peg. Using the small rubber bands, bind the 3 rods together at each end so they don’t slip out when removing the warp from the pegs. Place the remaining short rod though the other end of your looped threads.
4. Lift the warp off the frame by the rods at each end and lay straight out on a table, centering it on these rods. You can now remove the small rubber bands.

5. To align all the threads, you will need to draw the two long rods through the length of the warp while holding on to the short end rod. If you don’t have help you can use the frame to hold this rod. Secure each end of the short rod to a side frame member using two of the heavy elastics by placing each rod end into the elastic, running it around the frame bar and then back on the rod. Hook the frame onto the table by letting the pegs on the opposite bar fall off the edge of the table. Spread the warp out across the short bar. Slide the adjacent long rod out from the loops at the warp ends, one end at a time so it is free to move through the warp with the adjacent long rod. Take the two long rods and draw them through the warp to the opposite end rod, automatically aligning all the threads. Spread the threads out on this end rod as you dis on the other. Release the warp from the frame and lay it stretched on the table. Lay the frame over these threads, pegs pointed down, the end with the 3-peg near the end with the 3-rods.

6. Bring the end of the warp with the 3-rods around the frame laying the long rods on top of the frame and secure these rods to the frame using the heavy elastics, placing an elastic on the end of two rods, pulling it under the frame and then back onto the rods. Do the same on the opposite end. Keep the short rod adjacent to these rods.

7. Take the other end of your warp, and with the rod wrap it around the frame and secure the two short rods together, near each end with the remaining heavy elastics.

8. Using the lacing cord, tie one end onto one of the WARP RODS and lace the two WARP RODS together, with approximately 2” between each wrap. Tie off this lacing cord to either warp rod and readjust lacing so WARP RODS are straight and parallel to the FRAME and the warp is taut. Retie the lacing cord if necessary. Be sure to leave a good length extending from the end of this lacing cord as this cord will generally need to be readjusted as the work proceeds. The elastics can now be removed.

9. Loosen the tension by rotating the end frame bars from their vertical position so they face inward. Release the long rods from the frame by removing the elastics and pull the entire warp to the end bar at the single post end, pulling on these rods so the short rod is against the frame bar and the other short rod is under the loom. This will be
the starting position of your weaving.

10. Place one of the long strips of cardboard adjacent to each of the long rods and then pull these rods out, the strips replacing them. To focus on the threads which you will be working with, place the large sheet of cardboard on top of the lower threads so only the top layer is visible. This sheet can also serve as a platform for the cartoon of your weaving design.

11. To uniformly space the warp you will make a chain spacer just above the starting warp rod. Run your chaining thread under all the warp threads and tie it to the side bar. Working across all the warp threads, which alternate between the top and bottom of the adjacent end rod, pull up the chaining thread from below between each warp thread, forming a loop. Pull each successive loop through the previous loop. Note that the first and last warp threads are doubled and are treated as a single thread. Control the tension so you have the desired number of threads per inch. When you reach the last warp thread pull the end of your thread through the last loop and secure it to the opposite side frame bar.

HARNESS ASSEMBLY

Prior to your initial weaving you will need to make string loops, referred to as heddles, one for each warp thread. These can be used over and over again for succeeding projects. Half the heddles will be made from 10” lengths of thread and half will be made from 11” lengths of string. Using your 5” cardboard wrap your heddle thread around the board, so the wraps don’t overlap, a minimum of turns equal to half the number of warp threads. With a scissor cut through the coil so you have 10” threads. Do the same with the 5-1/2” cardboard so you have 11” threads. Tie the ends of each thread together, near the ends, creating your heddle loops.

1. Working over the cardboard strip nearest the front of the loom you will pick up one warp thread at a time with a 11” heddle loop. Starting at the first warp, this will be a pair of threads, place a heddle loop under the warp thread, pull up both ends and then feed one of the long rods through these ends. Proceed across the warp picking up every warp thread laying on the cardboard strip. This will be the front heddle rod. In a similar manner, using the second long rod, and the 10” loops, pick up the threads laying on the other cardboard strip. The 2 cardboard strips can now be removed.

2. Place one of the heavy elastics on the end of one of the heddle rods and place the other heavy elastic on the opposite end of the other heddle rod. On each side, place the rod ends through the two holes of the hexagonal heddle rod supports, the supports resting against the same side of each side bar, the rods extending equally on each end. Lift the assembly and place these supports on top of the side bars. On each end, pull the elastic from the rod, go under the frame and place it on the alternate extending rod. Adjust the elastics so they are adjacent to the rod support. Locate the heddle assembly near the middle of the frame.
WORKING POSITION

Attach the two leg bars near the back of each side bar with the remaining 2 elastics. This is the end with the 3 pegs. The angle of the loom can be adjusted by the position of the legs.

Place the loom on your table, the front pegs extending over the edge and against the edge of the table. This is the suggested working position.

OPERATION

Tension Adjustment. To weave, clear open sheds are important. Warp tension is critical. There are two methods for tension adjustment. The lacing between the 2 warp end bars should be tightened first. Fine tension adjustment is achieved by rotating the two end bars. Tension is increased by rotating them outward from the initial vertical position and likewise tension can be reduced by rotating them inward. When not weaving reducing tension on the warp is recommended.

If, with a tensioned warp, the shed is not clear, check the individual heddle loops, making sure the correct size loops were used. Replace any as necessary.

WEAVING

All weaving is done in the lower third of the frame. As weaving proceeds, the entire warp is rotated around the frame. This is accomplished by rotating the end bars to reduce the tension and then pulling on either warp rod.

After several rows of weaving are completed the chain spacer can be removed.

In straight or tabby weaving, threads are passed, back and forth through alternate sheds. By rotating the heddle rod supports so they sit alternately sit on the near and far flats, the alternate sheds are formed.

For tapestry weaving, the rod supports need to sit on the middle flat, all threads now aligned.

The most comfortable method of rotating the rod support is grasp the two heddle rode adjacent to and inside the supports.

When weaving is finished, remove the heddle rod supports, pull out the heddle rods, releasing all the heddles and finally remove the lacing tie and warp end rods.

TOOLS AND ACCESSORIES

A TAPESTRY COMB or BEATER is used to push or beat the weft threads into place after they are passed through the warp threads.

A SHUTTLE will speed the process considerably, especially for plain or tabby weaves where the yarn is passed through the open shed. These are available in various lengths. Each color will require its own shuttle.

TAPESTRY BOBBINS are usually of wood with a pointed end and a recessed end onto which the yarn is wound. These are popular for tapestry weaving when small amounts of lots of different colors are used in small areas. Plastic or cardboard thread winders can be used to manage the threads for this type of work.