

**SUPPLEMENTARY INSTRUCTIONS**

**FOR**

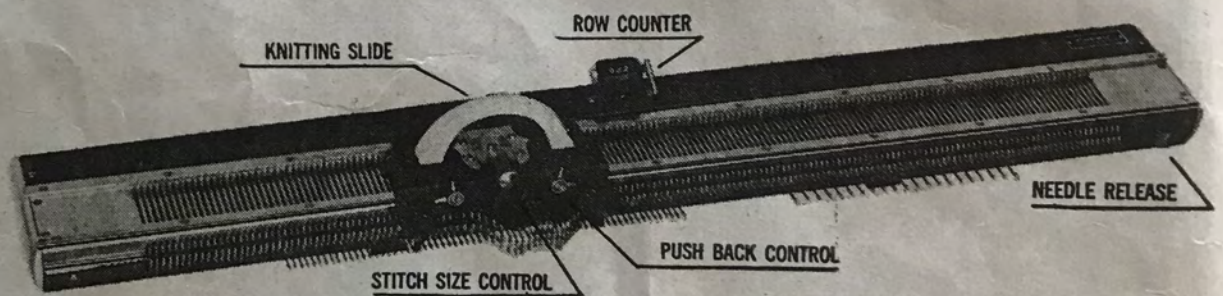
*Knitomat*

**CUSTOM 180 MODEL**



**KNITOMAT DIVISION  
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This instruction booklet is to be used in conjunction with the regular KNITOMAT instruction booklet. All instructions contained in the regular manual are valid for the Custom model as well. This booklet will explain the special features of the Custom model.



## **SPECIAL OPERATING FEATURES**

**MOVABLE NEEDLES.** The release lever allows needles to be pushed in and out. For easier operation, only needles to be used should be pulled out. In addition for heavy yarns or special patterns use only every second or third needle. To push needles in, unlock needle release by pushing it to the right. All needles can now be pushed in. Use slotted comb to push back every second needle. To pull needles out, move needle release to the left until it snaps into place. **DO NOT FORCE TO EXTREME LEFT**, but let it snap into its natural resting place. Using any transfer needle, pull out needles to be used. Be sure needle is pulled out until you hear a click which signifies that the needle is locked in place. **ALWAYS HAVE NEEDLE RELEASE IN LOCKED POSITION (left) WHEN PULLING OUT NEEDLES.** Before you start working, and after every time you unlock needle release, test the stability of needles by trying to push them in. If they move all the way back, they must be pulled out until the click is heard which signifies that they are locked.

**CAUTION:** If needles do not lock in place:

1. Check if needle release is in locked position, to the left and in the spot where it comes to rest naturally, do not force to the extreme left.
2. Check that all needles are pulled out all the way, otherwise they will not lock.
3. If some needles still do not lock, the oil may have stiffened during the shipment or longer period of non-use. Pull out all needles several times with release lever in locked position.

## **SLIDE.**

**ALL MOVABLE PRONGS MUST BE PUSHED BACK BEFORE YOU START KNITTING SO THE SLIDE CAN MOVE FREELY.**

The removable slide is used whenever the instruction booklet calls for the use of magic buttons. Slide it off one end and put it on the other end. **BE SURE** slide is in its proper place between the two guide rails.

**PUSH BACK CONTROL BUTTONS.** When the arrows on the push back control buttons point upward (vertical position) the work is automatically pushed back behind the latches to the frame as the slide moves across. When the arrow on the push back control button points toward the center (horizontal position) your work will remain in front of the latches and must be pushed back by hand. The right button controls the push back action when the slide moves from the right to left. The left button controls the push back action when the slide moves from left to right. If your design calls for making a pattern stitch every other row which requires your work to remain in front of the latches, you can achieve this automatically by having one button in the horizontal position and one button in the vertical position. These buttons are turned easiest when the slide is at either extreme end of the **KNITOMAT**.

**CAUTION.** It is possible to turn the push back control buttons to the **horizontal** position in the middle of a row. However they should be turned to the vertical position only at the end of a row. It will be found that the tension is usually a little tighter when your work is pushed back automatically (vertical position). You may compensate for this by holding the yarn a little tighter when the work is **not** pushed back automatically (horizontal position). However such difference in tension should disappear after the garment is blocked.

Following is a guide for the use of the push back control buttons:

It is necessary to have the buttons in the horizontal position for the following as the work must be in front of the latches:

Bind off for shoulder shaping

Short rows

Slip stitch

Turning the heel of a sock

Rope trim

It is easier to have the buttons in the horizontal position for the following:

Picking up a dropped stitch

Increasing at side edge

Binding off stitches

Floral pattern

Yarn over stitch

Horizontal buttonholes

Zig zag stitch

Crossed dropped stitch

Hem

Rip out knitting

Decreasing at side edge

Rib or purl stitch

Butterfly pattern

Cable stitch

Chain stitch

Yarn over dropped stitch

Fringe

Picot Hem

### **HOLDING THE YARN AND USING THE SLIDE**

Pull your first stitch a little forward until it is under the latch of the first needle. Then lay your yarn over the latches in the hollow of all needles in use including the last needle, holding the yarn toward the center of your work as the slide moves across. The slide should be pushed easily across **without pressing down**, and in a rhythmic way. **DO NOT JERK OR FORCE YOUR SLIDE.**

**CAUTION:** If last stitch does not knit, there is not enough tension on the last stitch. The proper tension is obtained by holding the yarn toward the center of your work. This is especially important on short pieces of work.

BEFORE YOU BEGIN KNITTING READ CAREFULLY THE HELPFUL HINTS ON PAGE 8 OF THE INSTRUCTION BOOKLET.

**HOW TO RIP OUT KNITTING IF WORK IS BACK OF THE LATCHES.** Put control buttons in horizontal position. Knit another row. Stitches will be in front of latches. With the left hand, hold work firmly below. With right hand pull yarn up, slipping last completed stitch onto the needles. Continue across (see Fig. No. 4, Page 13, instruction booklet). Rip another row.

**TILTING POSITION FOR PATTERN WORK.** To tilt frame, hold each end of the KNITOMAT at the forward part of the side plate and lift up. To put back in level position hold each end of the KNITOMAT on the side plate and pull forward.

**WORKING WITH DIFFICULT YARNS,** such as heavy, coarse, thick, large nubbs, straws, etc. (Can also be used by beginners who have difficulty dropping stitches). To facilitate the feeding of difficult yarns, close the latches before moving the slide across in the following manner: After the yarn is laid across, pull work downward and forward, thereby closing the latches over the yarn. You may now push your slide across without holding on to the yarn.

**WORKING ON EVERY SECOND OR THIRD NEEDLE.** For four ply worsted yarn or to get a large stitch gauge for the bulky look, it is recommended that you use every other needle or every third needle. After you have made the swatch be sure to stretch lengthwise to get the true gauge.

1. When **casting on**, using every second or third needle, your work should be pushed back automatically by having the control buttons in the vertical position, at least for the first row. Casting on without a starting cloth makes the first row quite loose. To avoid this use the starting cloth.

2. **Casting on with a starting cloth.** Use instruction booklet except in step 2, when pushing the cloth back, it must be done on one needle at a time, pulling the starting cloth down firmly, so that it does not catch on the needles not being used.

3. When you have used the starting cloth to cast on and you are making pattern stitches which require reversing the stitches (such as rib stitch), do not count the first row of knitting with your yarn. Do not reverse the stitches on the first row. This row will be ripped out when you finish the garment.

4. **Binding off.** Follow instruction booklet except steps 2 and 3. Take first stitch off the needle and put it on the adjoining needle, instead of looping it over both needles. Push both loops back of latch. Do not let third stitch go back of latch. Continue with step No. 4.

**ROW COUNTER.** If you make a mistake and have to rip some rows, hold the counting bar of the row counter up with an elastic band so it will not register until you have knitted the number of rows ripped, PLUS ONE MORE ROW. (The row counter will register one more row when you take off the elastic band and it falls into position).

#### **SPECIAL PATTERNS ON CUSTOM MODEL.**

**MOCK RIB STITCH.** The mock rib stitch can be used only if no elasticity is desired and your pattern calls for one purl stitch at a time. It is recommended for skirts. Whenever your pattern calls for a purl stitch, push in a needle.

#### **HAIR PIN LACE.**

1. To set up the KNITOMAT for hairpin lace, working in the center, pull out 1 needle, push in 8 needles, pull out 3 needles, push in 8 needles, pull out 1 needle.
2. Starting from the left side, cast on all needles set up for operation.
3. Put push back control buttons in vertical position. Lay yarn across, move slide across.
4. Lay yarn across first needle, cast on (counter clockwise) over center 3 needles leaving cast on stitches in front of latches. Lay yarn over last needle. Move slide across. Repeat from step No. 3.

When you wish to put strips together let the end stitches rip out to separate the loops.

#### **MAINTENANCE.**

**OILING:** As the custom model has no removable knob as shown in the instruction manual, oiling is done in the following manner: Remove the slide, turn it upside down, using fine sewing machine oil or graphite, oil the cam plates which push the prongs in and out. Also oil the sides which slide on the rails. This is only necessary when your KNITOMAT has become dry and hard to move.

**NEEDLE EXCHANGE.** Remove the bottom cover plate. After removal it will be found that the steel needle bed is covered with sectional metal strips. Remove the metal strip which covers the damaged needle. Lift the needle out and replace with a new needle, which is included with your tools. Replace metal strip. Replace cover plate.

**LOOSE NEEDLES:** If needles should become loose or have too much up and down play. Remove bottom cover plate. Tighten the screws on the sectional metal strip which covers the loose needles. Replace bottom cover plate.  
**CAUTION:** If screws are too tight, needles will be hard to move in and out. If screws are too loose, needles will be too loose.

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