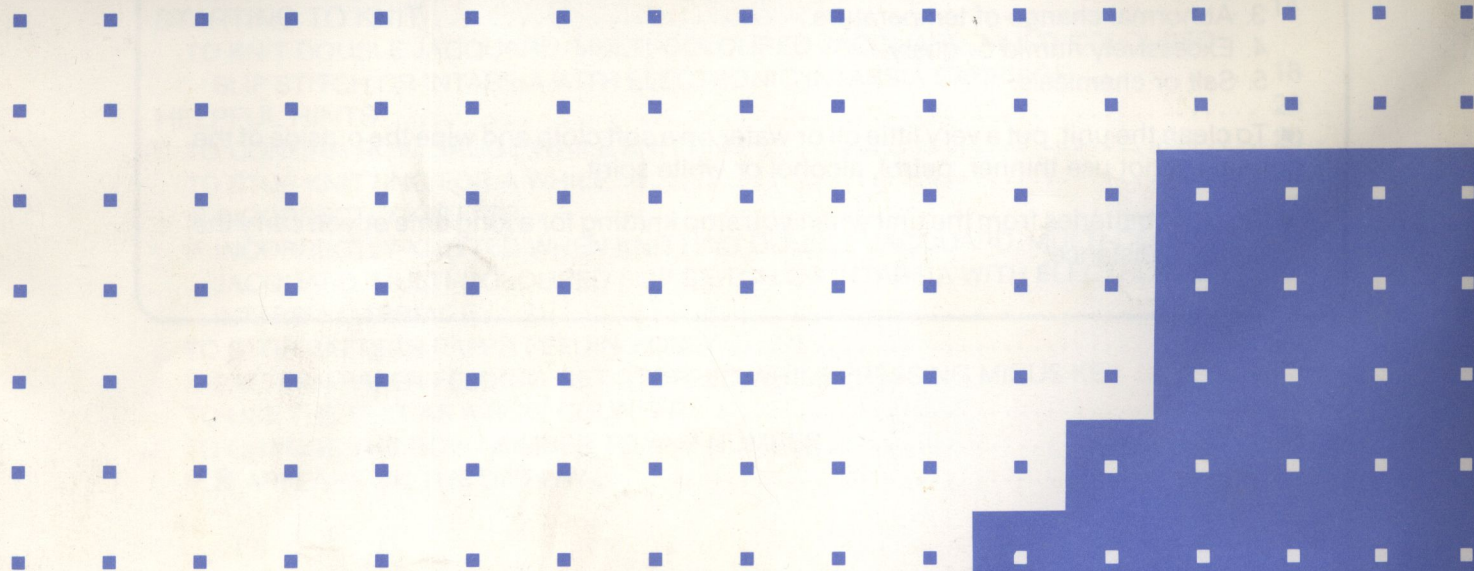


INSTRUCTION BOOK

ELECTRONIC KNIT CONTOUR KR 11



PRECAUTION

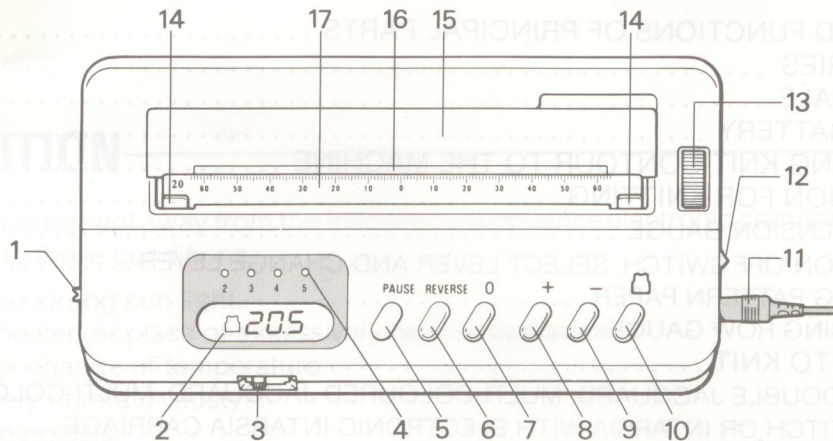
- This unit must be kept away from the following places since electronic components are vulnerable to those conditions.
 1. Direct and strong sun light.
 2. Near to heater, or place of excessively high temperature.
 3. Abnormal change of temperature.
 4. Excessively humid or dusty.
 5. Salt or chemicals.
- To clean the unit, put a very little oil or water on a soft cloth and wipe the outside of the unit. Do not use thinner, petrol, alcohol or white spirit.
- Take out batteries from the unit when you stop knitting for a long time or you carry the unit to a distance.





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NAMES AND FUNCTIONS OF PRINCIPAL PARTS

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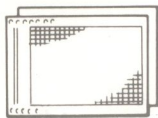
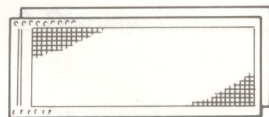
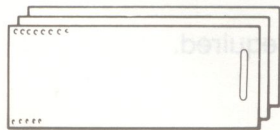
1. Select Lever..... To set for 1/2 or 1/4 scale depending on the pattern used.
2. Display.....   Indicates row gauge.
 Indicates rows knitted and covers up to 999 rows.
 Indicates battery must be changed.
3. Change Lever..... To set the selected number corresponding with the number of rows to move the Carriage for one row of finished knitting. This function is used to knit Double Jacquard, Multi-coloured Jacquard, Multi-coloured Slip Stitch or Intarsia with Electronic Intarsia Carriage. Usually set at 1.
4. Step Light..... Blinks when setting Change Lever at 2 ~ 5 and shows a step of the Carriage movement to knit one row of finished knitting.

- 5. Pause Key..... To lock pattern paper feeding. (Number on display disappears)
To unlock pattern paper feeding. (Number appears on display)
- 6. Reverse Key..... To blink Step Light in the reverse order.
- 7. Reset Key..... To reset row number to "0".
- 8. Plus Key..... a) To set number of rows measured on the tension switch.
Every time key is pressed, number increases by 0.5 points
e.g. 10.0, 10.5, 11.0, 11.5.
b) To transport pattern paper forward.
- 9. Minus Key..... a) To reduce number of rows by 0.5 points if necessary.
b) To transport pattern paper backwards.
- 10. Set Key..... For setting and memorising number of rows required.
- 11. Connecting Cord..... To connect Knit Contour to machine.
- 12. ON/OFF Switch..... To switch unit ON or OFF.
If unit is switched on, display shows "0".
- 13. Feeding Dial..... To move pattern paper manually forward or backwards.
- 14. Clip..... To hold stitch scale in position.
- 15. Paper Stand..... To hold pattern paper in position.
- 16. Paper Slot..... To insert pattern paper.
- 17. Stitch Scale

ACCESSORIES



Connecting Cord: To connect Knit Contour to the machine.



Knit Pattern Set: The following pattern styles are supplied.

- 1) Lady's pullover 1/2 scale — use stitch scale h4 ~ h14.
- 2) Lady's cardigan 1/2 scale — use stitch scale h4 ~ h14.
- 3) Man's pullover 1/4 scale — use stitch scale Q1 ~ Q6.
- 4) Child's cardigan 1/2 scale — use stitch scale h4 ~ h14.

Blank Pattern Paper Set (1/2 scale, 3 pieces): To draw your own patterns.

Note: a) One small square on pattern paper equals 5mm. in actual size.

b) Use stitch scale h4 ~ h14.

Blank Pattern Paper Set (1/4 scale, 3 pieces): To draw your own patterns.

Note: a) One small square on pattern paper equals 1cm. in actual size.

b) Use stitch scale Q1 ~ Q6.

STITCH SCALE



h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14
15	17	19	21	23	27	31	35	39	43	47
15.5	17.5	19.5	21.5	24	28	32	36	40	44	48
16	18	20	22	25	29	33	37	41	45	49
16.5	18.5	20.5	22.5	26	30	34	38	42	46	50

Q1	Q2	Q3	Q4	Q5	Q6
9	11	13	15	17	19
9.5	11.5	13.5	15.5	17.5	19.5
10	12	14	16	18	20
10.5	12.5	14.5	16.5	18.5	20.5

1/2 Stitch Scale Set (11 pieces)

Scale marking h4 ~ h14.
("0" position on left side)

Stitch gauge between 15 ~ 50 stitches.

Note: These scales can only be used with 1/2 scale patterns and are mostly used when knitting with fine yarns.

1/4 Stitch Scale Set (6 pieces)

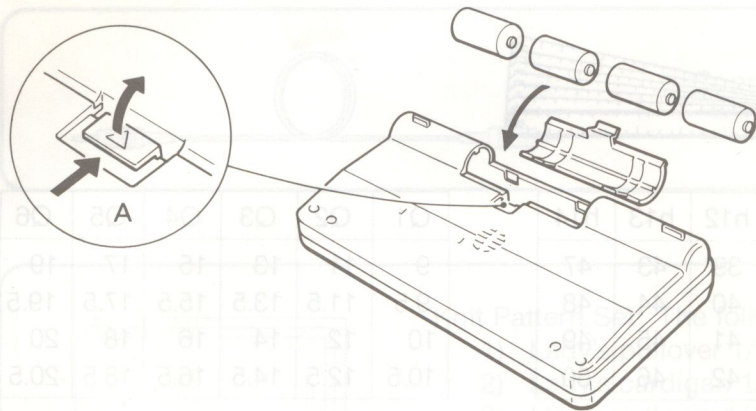
Scale marking Q1 ~ Q6.
("0" position at centre of scale)

Stitch gauge between 9 ~ 20.5 stitches.

Note: these scales can only be used with 1/4 scale patterns and are mostly used when knitting with thicker yarns.

PLACING BATTERY

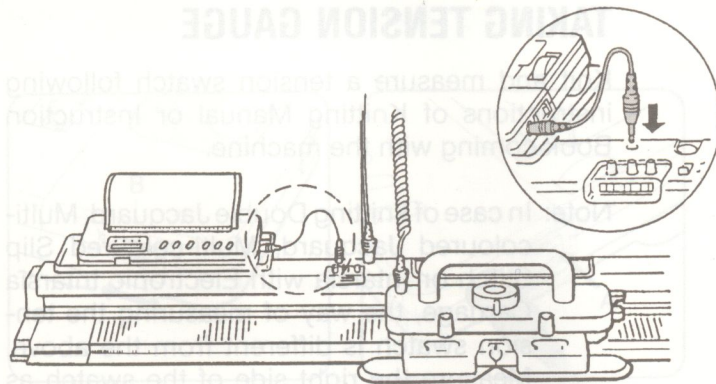
STITCH SCALE



1. Turn Knit Contour upside down.
2. Remove battery lid by pushing lock "A" in arrow direction.
3. Place 4 batteries in battery compartment. Ensure + sign on battery faces correct way.
4. Replace and lock battery lid.

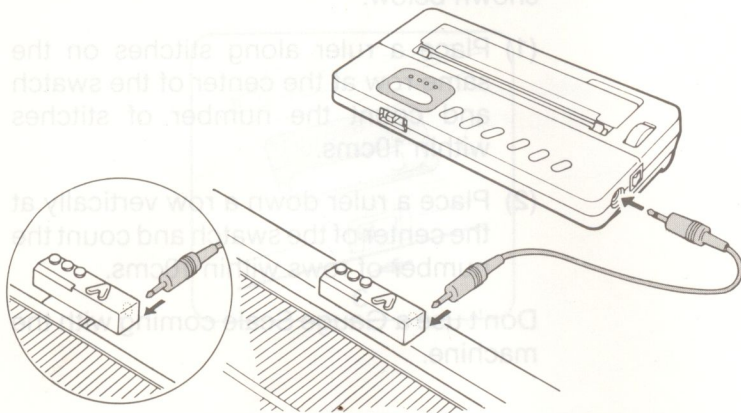
Note: Take out batteries from the unit when you stop knitting for a long time or you carry the unit to a distance.

CONNECTING KNIT CONTOUR TO THE MACHINE

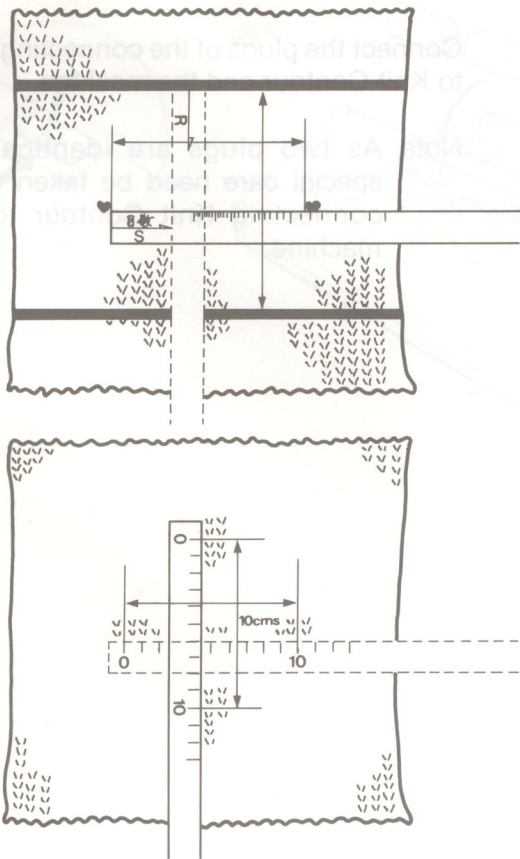


Connect the plugs of the connecting cord to Knit Contour and the machine.

Note: As two plugs are identical, no special care need be taken when connecting Knit Contour to the machine.



PREPARATION FOR KNITTING



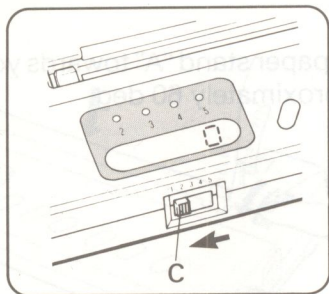
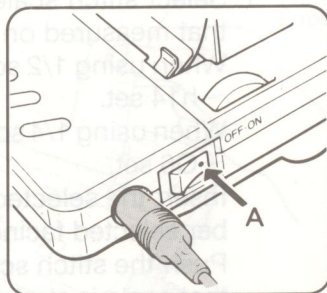
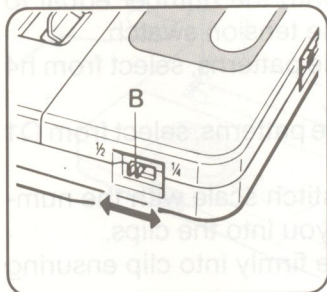
TAKING TENSION GAUGE

Knit and measure a tension swatch following instructions of Knitting Manual or Instruction Book coming with the machine.

Note: In case of knitting Double Jacquard, Multi-coloured Jacquard, Multi-coloured Slip Stitch or Intarsia with Electronic Intarsia Carriage, the way of measuring the tension swatch is different from the above. Measure the right side of the swatch as shown below.

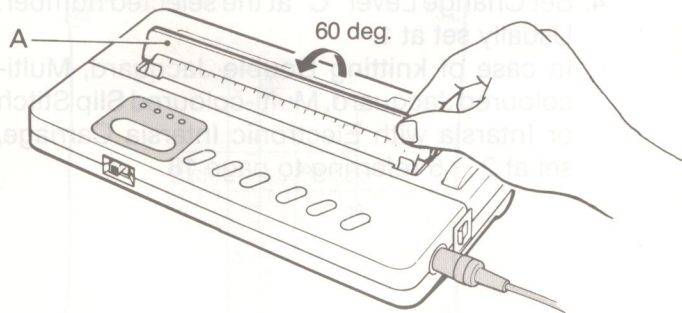
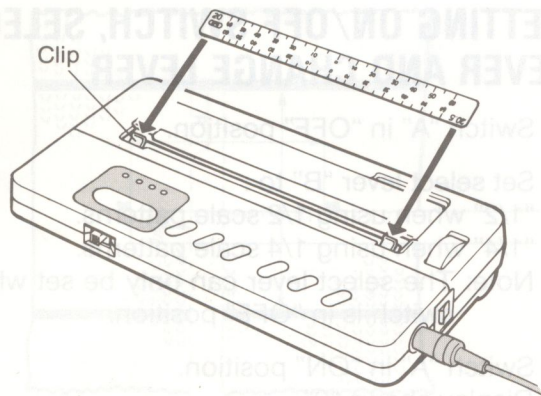
- (1) Place a ruler along stitches on the same row at the center of the swatch and count the number of stitches within 10cms.
- (2) Place a ruler down a row vertically at the center of the swatch and count the number of rows within 10cms.

Don't use a Gauge Scale coming with the machine.



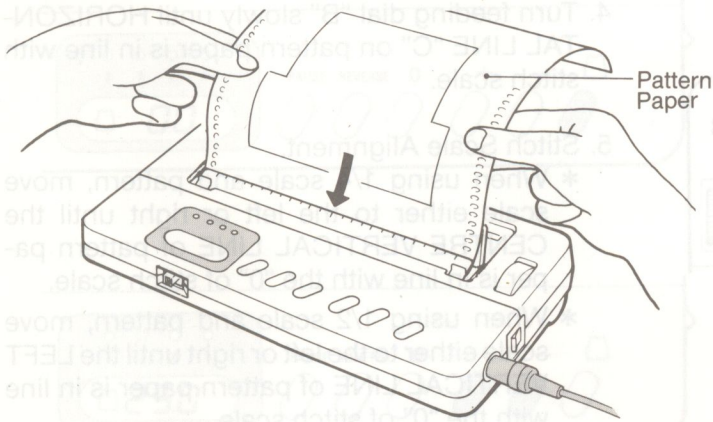
SETTING ON/OFF SWITCH, SELECT LEVER AND CHANGE LEVER

1. Switch "A" in "OFF" position.
2. Set select lever "B" to :
 "1/2" when using 1/2 scale patterns.
 "1/4" when using 1/4 scale patterns.
 Note: The select lever can only be set when switch is in "OFF" position.
3. Switch "A" in "ON" position.
 Display shows "0".
4. Set Change Lever "C" at the selected number.
 Usually set at 1.
 In case of knitting Double Jacquard, Multi-coloured Jacquard, Multi-coloured Slip Stitch or Intarsia with Electronic Intarsia Carriage, set at 2 ~ 5 referring to page 18.

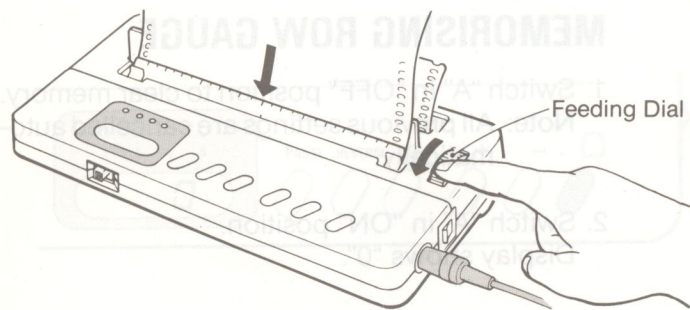


INSERTING PATTERN PAPER

1. Select stitch scale with the number equal to that measured on the tension swatch.
When using 1/2 scale patterns, select from h4 ~ h14 set.
When using 1/4 scale patterns, select from Q1 ~ Q6 set.
Insert the selected stitch scale with the number selected facing you into the clips.
Push the stitch scale firmly into clip ensuring that scale is straight.
2. Raise paper stand "A" towards you at an angle of approximately 60 deg.

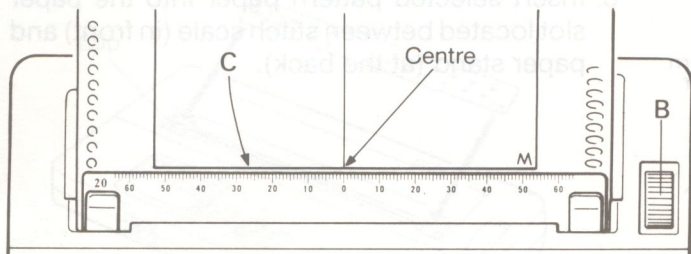


3. Insert selected pattern paper into the paper slot located between stitch scale (in front) and paper stand (at the back).



Turn feeding dial slowly towards you (in arrow direction) ensuring that the horizontal lines on pattern paper are parallel to the stitch scale. If horizontal lines are not parallel to the stitch scale, check

- * that stitch scale is inserted correctly.
- * that pattern paper is inserted correctly.

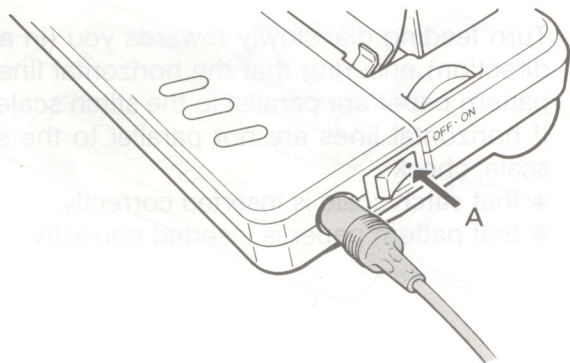


4. Turn feeding dial "B" slowly until HORIZONTAL LINE "C" on pattern paper is in line with stitch scale.

5. Stitch Scale Alignment.

- * When using 1/4 scale and pattern, move scale either to the left or right until the CENTRE VERTICAL LINE of pattern paper is in line with the "0" of stitch scale.

- * When using 1/2 scale and pattern, move scale either to the left or right until the LEFT VERTICAL LINE of pattern paper is in line with the "0" of stitch scale.



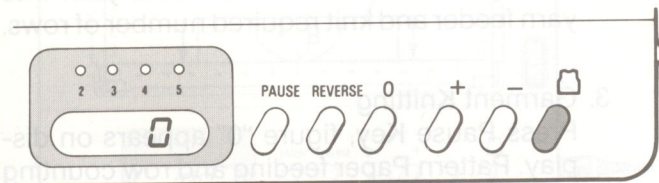
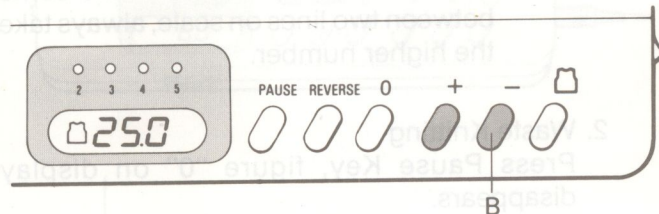
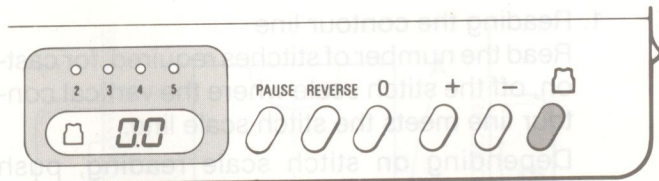
MEMORISING ROW GAUGE

1. Switch "A" in "OFF" position to clear memory.

Note: All previous settings are cancelled automatically.

2. Switch "A" in "ON" position.

Display shows "0".



3. Press Set Key once, display shows:

- left side garment.
- right side figure "0.0".

4. Press Plus Key once, display shows figure "10.0".

To set required row gauge you either press key.

- as many times as required until you reach correct figure.
- continuously until you reach correct figure.

Note: With the Minus Key "B" you can reduce number of rows.

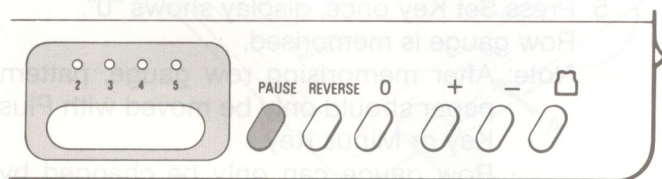
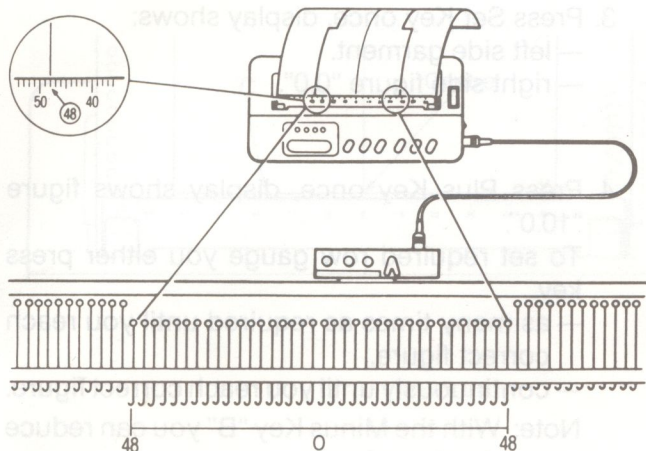
5. Press Set Key once, display shows "0".

Row gauge is memorised.

Note: After memorising row gauge, pattern paper should only be moved with Plus Key or Minus Key.

Row gauge can only be changed by switching unit off and reprogramming starting from step 1.

STARTING TO KNIT



1. Reading the contour line

Read the number of stitches required, for cast-on, off the stitch scale where the vertical contour line meets the stitch scale line.

Depending on stitch scale reading, push required number of needles on both sides of centre "0" on Needle Bed to B position.

Note: Should the vertical contour line come between two lines on scale, always take the higher number.

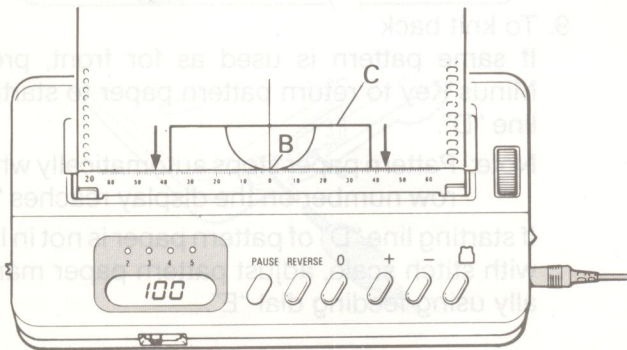
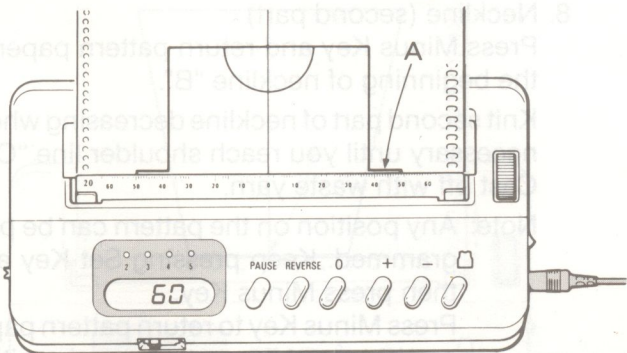
2. Waste Knitting

Press Pause Key, figure "0" on display disappears.

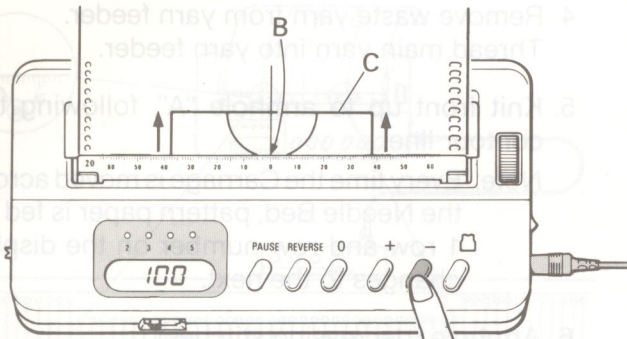
Pattern Paper feeding and row counting on display are locked. Thread waste yarn into yarn feeder and knit required number of rows.

3. Garment Knitting

Press Pause Key, figure "0" appears on display. Pattern Paper feeding and row counting are unlocked.



4. Remove waste yarn from yarn feeder.
Thread main yarn into yarn feeder.
5. Knit front up to armhole "A", following the contour line.
Note: Every time the Carriage is moved across the Needle Bed, pattern paper is fed by 1 row and row number on the display changes to the next.
6. Armhole (decreasing stitches)
Knit 1 row, check stitch scale, decrease required number of stitches on the Carriage side. Continue to knit and decrease where necessary until you reach neckline "B".
7. Neckline (first part)
Divide neckline into left and right side. Starting from centre, push all needles opposite the Carriage from B to D position. Set the Russel Lever of the Carriage to I.
Continue to knit first part of neckline and decrease where necessary until you reach shoulder line "C".
Cast off with waste yarn.



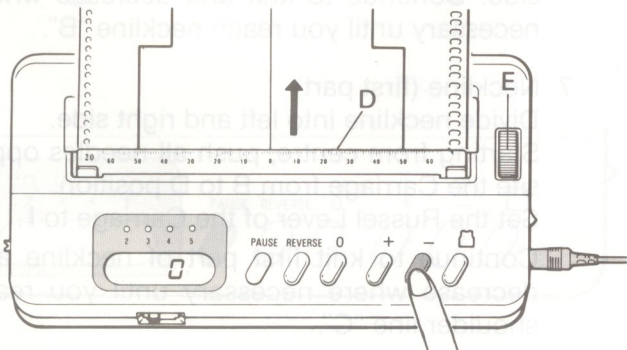
8. Neckline (second part)

Press Minus Key and return pattern paper to the beginning of neckline "B".

Knit second part of neckline decreasing where necessary until you reach shoulder line "C". Cast off with waste yarn.

Note: Any position on the pattern can be programmed. Keep pressing Set Key and then press Minus Key.

Press Minus Key to return pattern paper and it stops at the programmed position automatically.

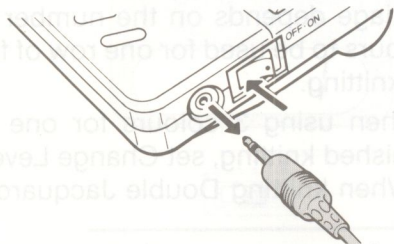
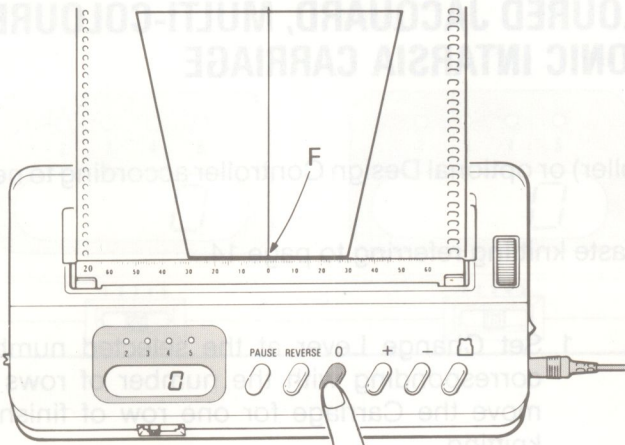


9. To knit back

If same pattern is used as for front, press Minus Key to return pattern paper to starting line "D".

Note: Pattern paper stops automatically when row number on the display reaches "0".

If starting line "D" of pattern paper is not in line with stitch scale, adjust pattern paper manually using feeding dial "E".



10. To knit sleeve
Insert pattern paper for sleeve into the paper slot and turn feeding dial slowly until starting line "F" of pattern paper is in line with stitch scale.

Press Reset Key to reset row number to "0".

Press Pause Key, figure "0" on display disappears.

Knit several rows with waste yarn.

Press Pause Key, figure "0" appears on display.

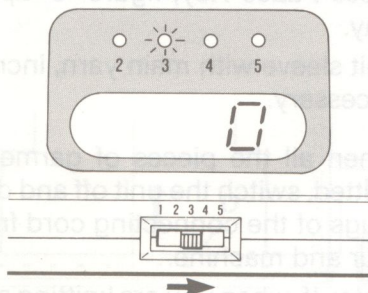
Knit sleeve with main yarn, increasing where necessary.

11. When all the pieces of garment have been knitted, switch the unit off and disconnect the plugs of the connecting cord from Knit Contour and machine.

Note: If, when you are knitting a garment, you have to stop knitting for, say, a month or you have to carry the unit to a distance, switch the unit off to prevent a battery from wasting.

TO KNIT DOUBLE JACQUARD, MULTI-COLOURED JACQUARD, MULTI-COLOURED SLIP STITCH OR INTARSIA WITH ELECTRONIC INTARSIA CARRIAGE

- * Prepare for knitting referring to pages 8 ~ 13.
- * Set each part of the machine (optional Pattern Controller) or optional Design Controller according to need for the above type of knittings.
- * Arrange the required number of needles and work waste knitting referring to page 14.



1. Set Change Lever at the selected number corresponding with the number of rows to move the Carriage for one row of finished knitting.

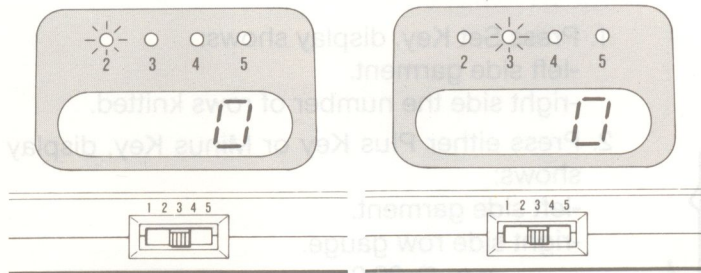
Note: The number of rows to move the Carriage depends on the number of colours to be used for one row of finished knitting.

- e.g. When using 3 colours for one row of finished knitting, set Change Lever at 3.
(When knitting Double Jacquard, set at 2.)

Step Light at the same number as Change Lever blinks the instant Change Lever is set.

TO CONFIRM ROW GAUGE WHILE

KNITTING



Press Set Key displays the number of rows knitted.

Note: While pressing

Set Key, the position will be pro-

grammed to stop the pattern paper.

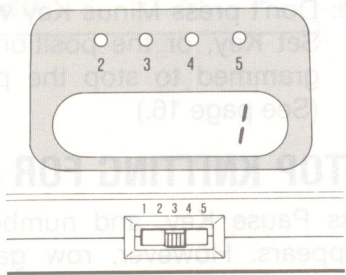
TO STOP KNITTING FOR A WHILE

1. Press Pause key number on display disappears.

number of rows knitted is still memorised.

2. To start knitting again, press Pause Key.

Display shows the number of rows knitted.



2. Start to knit changing yarns. In case of using Design Controller, change yarns following the colour number displayed on the Controller.

- (1) Knit 1 row, and Step Light 2 blinks. Pattern paper isn't fed and row number on the display remains "0".
- (2) Knit 1 row, and Step Light 3 blinks. Pattern paper isn't fed and row number on the display remains "0".
- (3) Knit 1 row, and pattern paper is fed by 1 row without Step Light blinking. Row number on the display changes to "1".

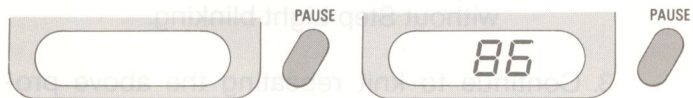
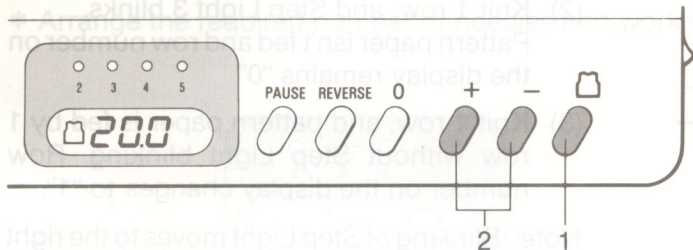
Note: Blinking of Step Light moves to the right responding to the Carriage movement. After knitting the same number of rows as the number of Change Lever, pattern paper is fed by 1 row and row number on the display changes to the next without Step Light blinking.

3. Continue to knit repeating the above procedure.

HELPFUL HINTS

TO KNIT DOUBLE JACQUARD MULTI-COLOUR
STEP 10 CHOOSE A CARRIAGE
Design Controller changes as follows:
Colour number displayed on the Controller.

* Press **PAUSE** and **Step Light** 2 blinks
Pattern paper is fed and row number on
the display remains 0.



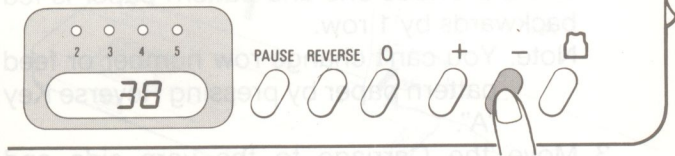
TO CONFIRM ROW GAUGE WHILE KNITTING

1. Press Set Key, display shows:
 - left side garment.
 - right side the number of rows knitted.
2. Press either Plus Key or Minus Key, display shows:
 - left side garment.
 - right side row gauge.
 - e.g. □ 20.0.
3. Press Set Key, display shows the number of rows knitted.

Note: Don't press Minus Key while pressing Set Key, or the position will be programmed to stop the pattern paper. (See page 16.)

TO STOP KNITTING FOR A WHILE

1. Press Pause Key, and number on display disappears. However, row gauge and the number of rows knitted are still memorised.
2. To start knitting again, press Pause Key. Display shows the number of rows knitted.



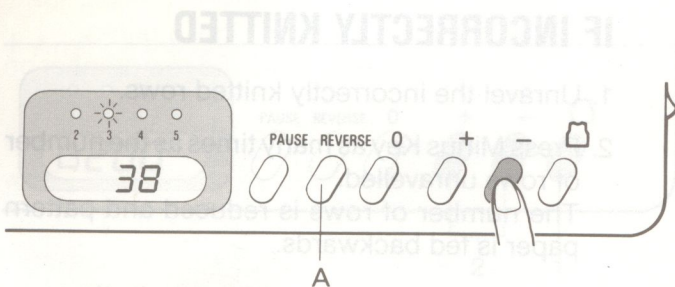
Note: If you have to carry the unit while knitting, disconnect the plugs of connecting cord from Knit Contour and the machine. Row gauge and the number of rows knitted are memorised.

IF INCORRECTLY KNITTED

1. Unravel the incorrectly knitted rows.
2. Press Minus Key as many times as the number of rows unravelled.
The number of rows is reduced and pattern paper is fed backwards.
3. If the Carriage is on the side opposite the yarn, move the Carriage to the yarn side using the Release Lever. (If the Carriage has a Feeding Tripper, turn the Tripper to the side to disengage it from the Row Counter of the Machine.)
In case of knitting with LK100, LK140 or LK150, place the Carriage on the yarn side.
4. Pull the yarn down towards the ball or cone to remove any slack and continue knitting.

HELPFUL HINTS

Note: If you have to carry the unit while knitting, disconnect the plugs of connecting cord from Knit Contour and the machine. Row gauge and the number of rows knitted are memorised.



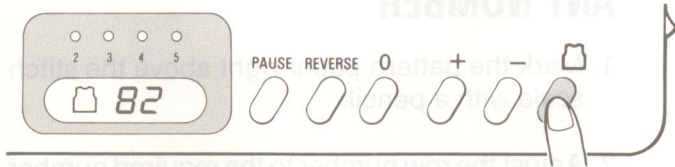
N.B. In case of knitting with the Pattern Switch No.3, unravel the doubled number of rows as the number of Change Lever, and press Minus Key twice.

IF INCORRECTLY KNITTED WHEN KNITTING DOUBLE JACQUARD, MULTI-COLOURED JACQUARD, MULTI-COLOURED SLIP STITCH OR INTARSIA WITH ELECTRONIC INTARSIA CARRIAGE

1. Unravel the same number of rows as the number of Change Lever.
e.g. In case of setting Change Lever at 3, unravel 3 rows.
2. Press Minus Key once. Row number changes to the previous one and pattern paper is fed backwards by 1 row.
Note: You can't change row number or feed pattern paper by pressing Reverse Key "A".
3. Move the Carriage to the yarn side and remove slack of yarn referring to the previous page.
4. Continue to knit with the same colour yarn as used before unravelling.

Note: Make sure Step Light at the same number keeps blinking throughout the above procedure. If it doesn't, press Reverse Key until the same Step Light blinks.

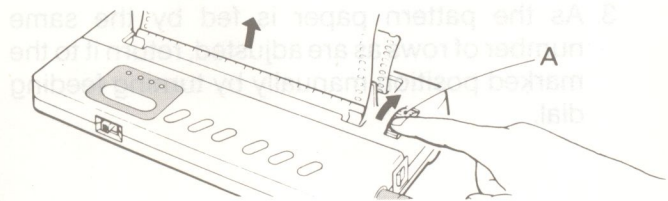
TO CHANGE THE ROW NUMBER TO ANY NUMBER



TO STOP PATTERN PAPER FEEDING ONLY

Press Set Key, display shows:

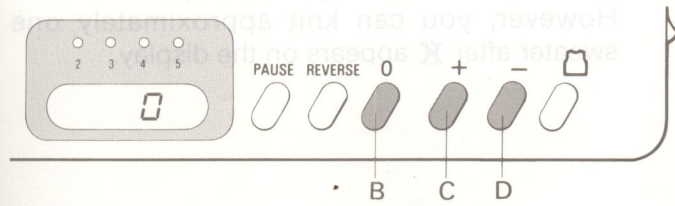
- left side garment
 - right side the number of rows knitted
- Pattern paper feeding is locked while row number can be changed.



IF PATTERN PAPER FEEDING GET STOPPED WHILE PRESSING MINUS KEY

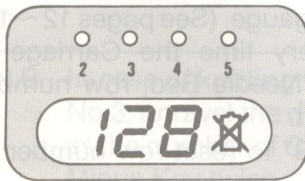
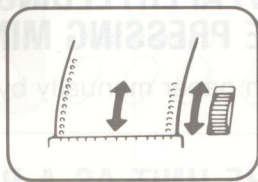
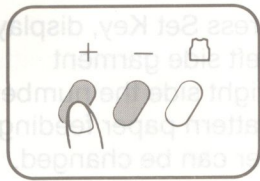
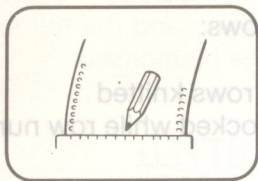
Adjust pattern paper manually by turning feeding dial "A".

IF X APPEARS ON THE DISPLAY



TO USE THE UNIT AS A ROW COUNTER

1. Set Change Lever at 1.
 2. Memorise any row gauge. (See pages 12 ~ 13)
 3. Start knitting. Every time the Carriage is moved across the Needle Bed, row number changes to the next.
- Press Reset Key "B" to reset row number to "0".
Press Plus Key "C" to increase row number.
Press Minus Key "D" to reduce row number.





PAUSE REVERSE 0



TO CHANGE THE ROW NUMBER TO ANY NUMBER

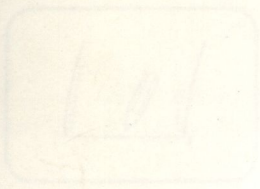
1. Mark the pattern paper right above the stitch scale with a pencil.
2. Adjust the row number to the required number by pressing Plus Key or Minus Key.
3. As the pattern paper is fed by the same number of rows as are adjusted, return it to the marked position manually by turning feeding dial.

IF APPEARS ON THE DISPLAY

 indicates that battery is used up. However, you can knit approximately one sweater after  appears on the display.



TO CHANGE THE ROW NUMBER TO
ANY NUMBER



TO CHANGE THE ROW NUMBER TO
ANY NUMBER



TO CHANGE THE ROW NUMBER TO
ANY NUMBER



TO CHANGE THE ROW NUMBER TO
ANY NUMBER