



INSTRUCTION BOOK

AUTOMATIC YARN CHANGER

YC 6

CONTENTS

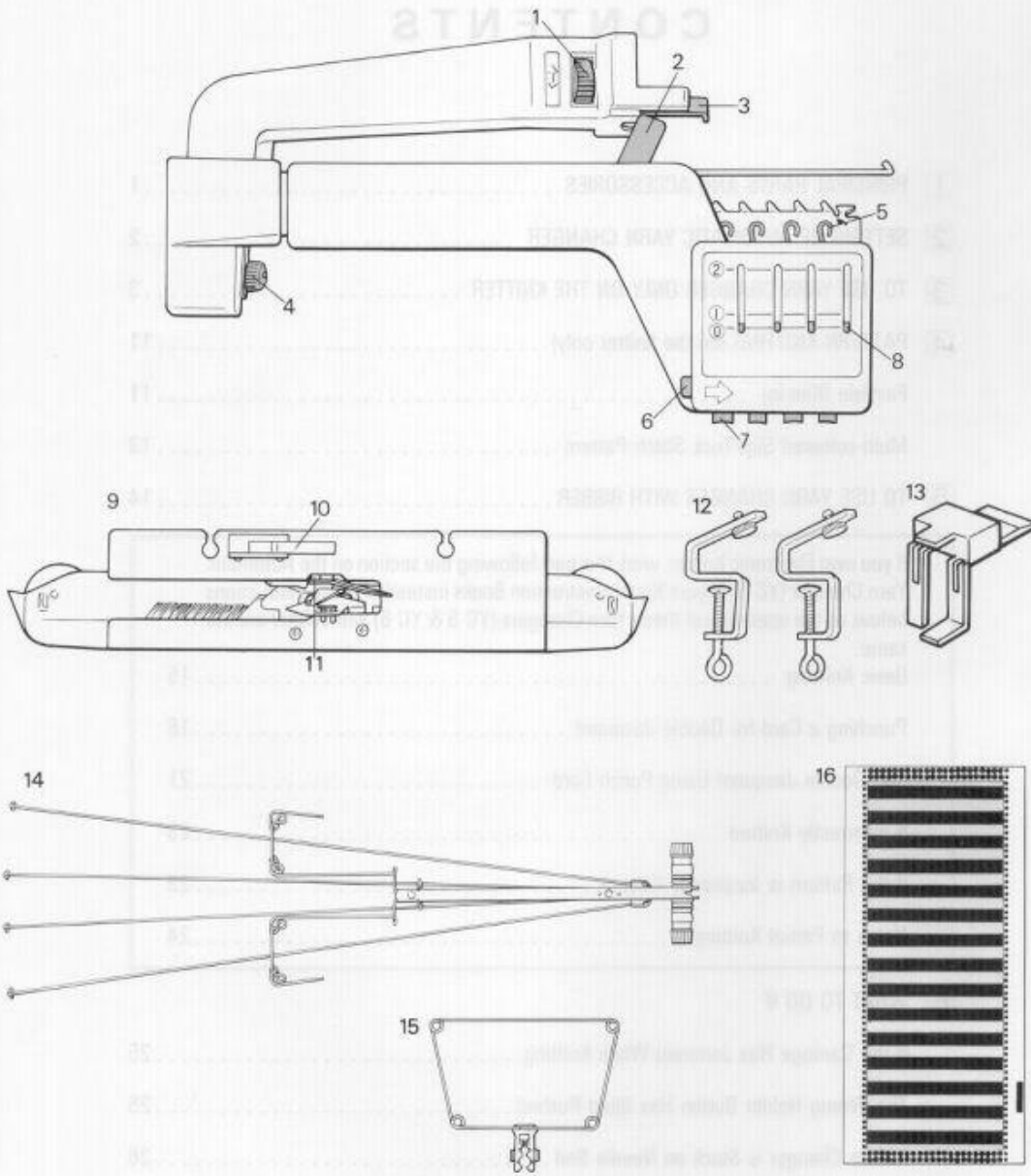
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If you own Electronic Knitter, work this part following the section on the Automatic Yarn Changer (YC 5) in your Knitter Instruction Books instead of these instructions below, as the operation of these Yarn Changers (YC 5 & YC 6) with Ribber are the same.

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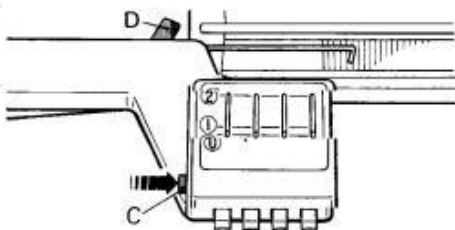
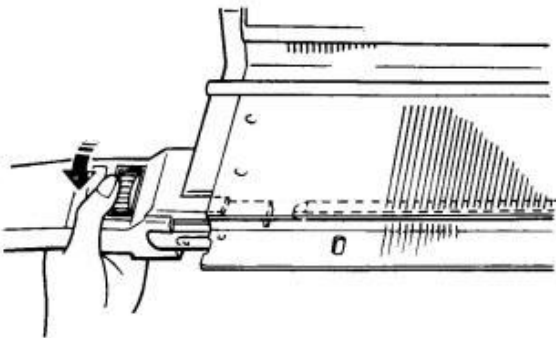
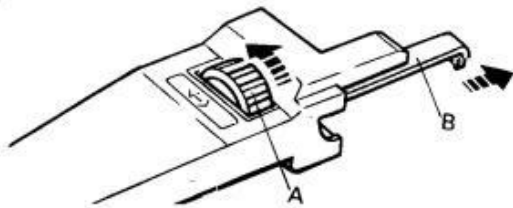
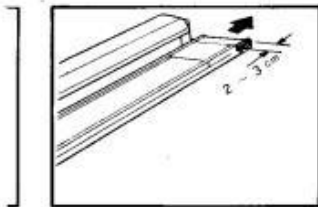
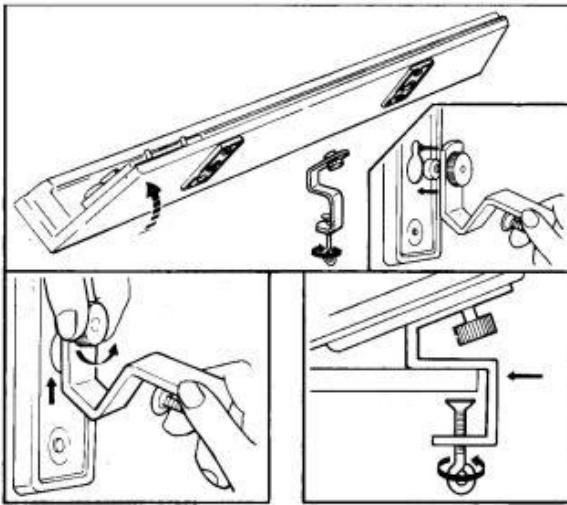
1 PRINCIPAL PARTS AND ACCESSORIES



- 1. Securing Wheel
- 2. Feeding Lever
- 3. Securing Plate
- 4. Change Screw
- 5. Holder Hook
- 6. Release Button
- 7. Holder Button
- 8. Holder Indicator
- 9. Yarn Changer Arm

- 10. Driving Lever
- 11. Yarn Feeder ①
- 12. Ribber Clamp
- 13. Separator Hook
- 14. 4-Colour Auto-Tension
- 15. Tension Guide
- 16. Check Card

2 SETTING UP AUTOMATIC YARN CHANGER



1. Fasten the Knitter on the table using Ribber Clamps.
 - ① Take Ribber Clamps and turn screws in arrow direction as far down as they go.
 - ② Raise front of Knitter and insert screw head of the Clamp into keyhole slot.
 - ③ Pull Clamps upwards and tighten screws.
 - ④ Place Clamps on table edge and push them back until they are flush with the edge of the table.
Tighten Clamps firmly by turning screws in arrow direction.
- * If you wish to use the Ribber, set it up now.

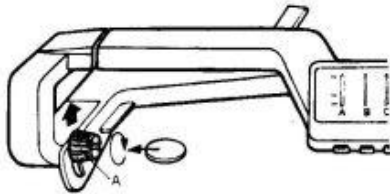
2. Using a screw driver or a pencil, push Needle Retainer from left side of Knitter Needle Bed until the right end of Needle retainer protrudes by 2—3cm.

3. Loosen Securing Wheel "A" of Yarn Changer in the direction shown until it stops. (As Securing Wheel is loosened, Securing Plate "B" moves forward.)

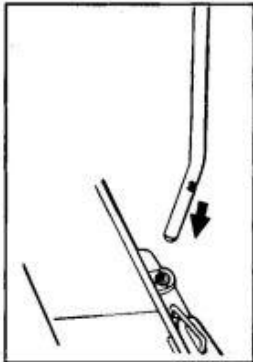
4. Insert Securing Plate into Guide Hole of Needle Retainer and turn Securing Wheel in the arrowed direction, as shown in the diagram until Securing Plate is firmly in place.
Make sure that the edge of Yarn Changer is firmly set against Side Cover. (While Yarn Changer is being used on the knitter, right end of Needle Retainer must remain protruded by 2—3cm.)

5. Push Release Button "C" to align for Holder Buttons in ① position.
If any Holder is positioned in the ② position, push Feeding Lever "D" to the left to bring back the Holder to ① position, then push Release Button. (In this position, Holders are out of action.)

3 TO USE YARN CHANGER ONLY ON THE KNITTER

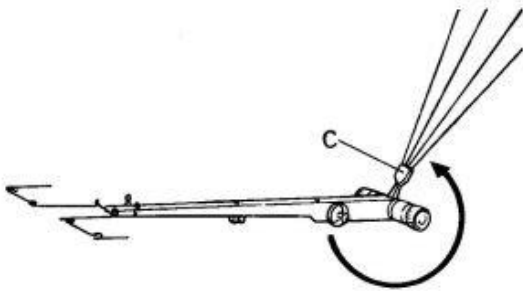


1. Loosen the Change Screw "A" and push it upwards, then tighten the Change Screw.

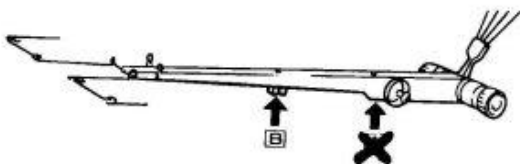


2. Install Yarn Rod into the hole at the left of Carrying Handle.

* Use the Yarn Rod which comes with the knitter.



3. Turn the Tension Springs "C" until they snap into position.

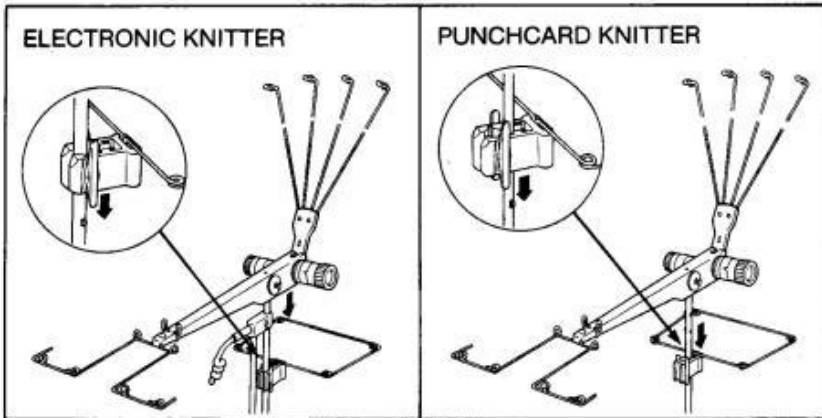


4. Fit the front slot of the Auto-Tension, marked **B**, onto the top of the Yarn Rod.

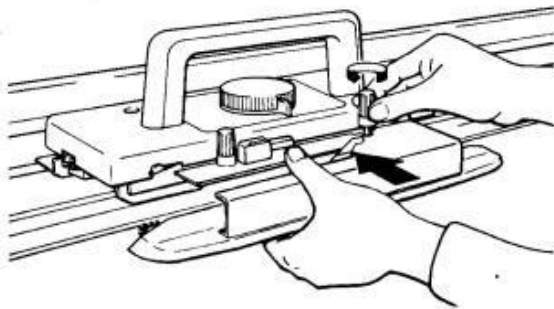
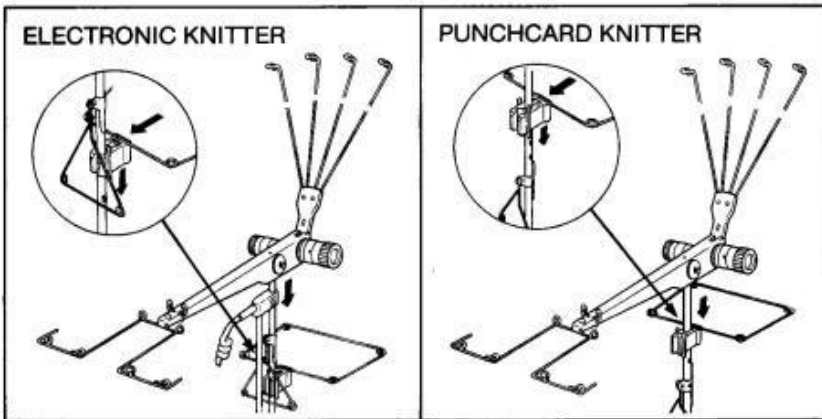
	(Electronic Knitter)	(Punch Card Knitter)
	<ol style="list-style-type: none"> 5. Insert the Yarn Rod into the groove ① of Tension Guide by pushing the guide in the arrowed direction and slide it down to the position. 	<ol style="list-style-type: none"> 6. Insert the Yarn Rod into the groove ② of Tension Guide by pushing the guide in the arrowed direction and slide it down to the position.

There are two types of Yarn Guide. Be sure which type of the Yarn Guide you have when it is installed.

(1) Tension Guide is detachable. Just replace it with the Four-Yarn Tension Guide.

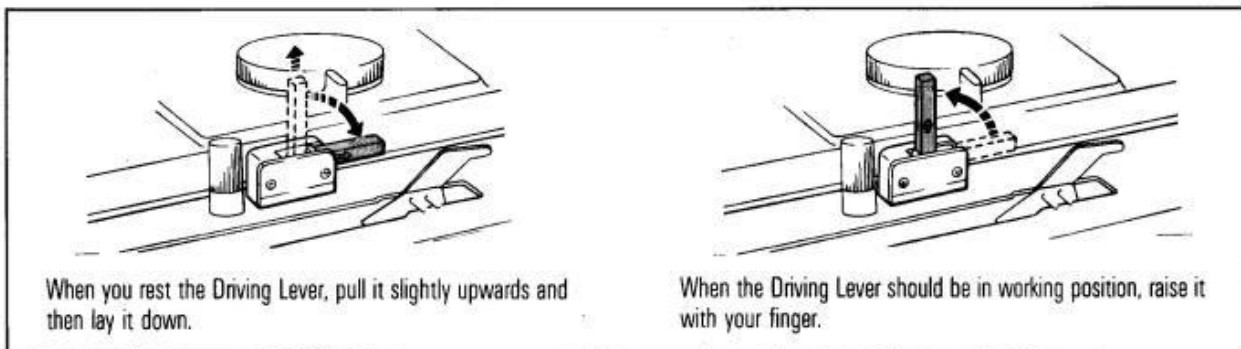


(2) Tension Guide is not detachable. Put the Four-Yarn Tension Guide on Yarn Rod, folding the Two-Yarn Tension Guide as shown below.



7. Exchange the Knitter Arm for the Yarn Changer Arm.

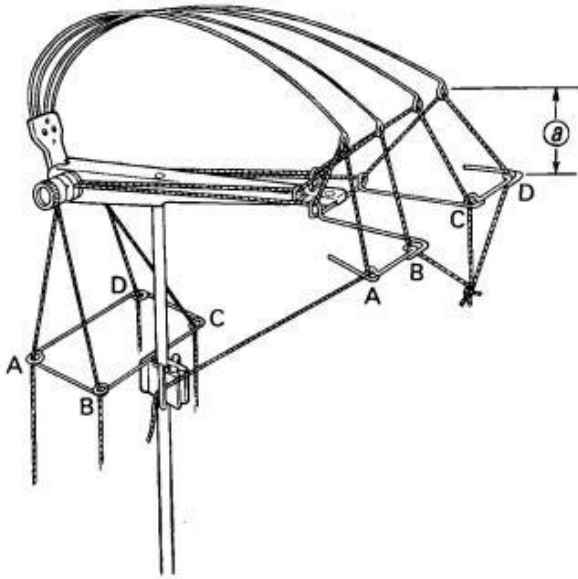
8. If Driving Lever is upright position, lay it down after pulling it up slightly.



When you rest the Driving Lever, pull it slightly upwards and then lay it down.

When the Driving Lever should be in working position, raise it with your finger.

9. Push working needles to D position and move Carriage 2 — 3 times to align needles in B position and leave Carriage at the right.

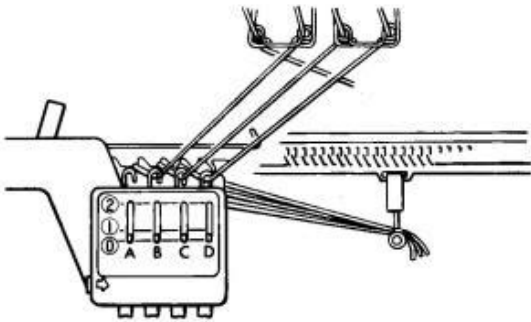


10. Thread four yarns of different colours into Auto-Tension.

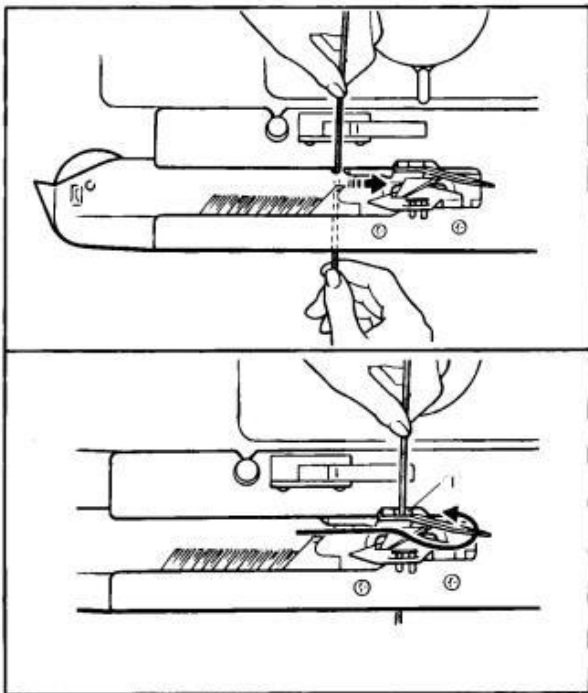
- * Thread the yarns as illustrated and designate the yarns A, B, C and D from the left.
- * Hook the yarn A in Yarn Clip. This yarn is to be threaded into Yarn Feeder.
- * Tie the ends of other yarns, B, C, and D as illustrated.
- * Adjust Tension Dial according to the thickness of yarn as shown in the diagram below.

Kind of yarns	Light yarn	Thin yarn
Tension Dial	4 — 5	5 — 6

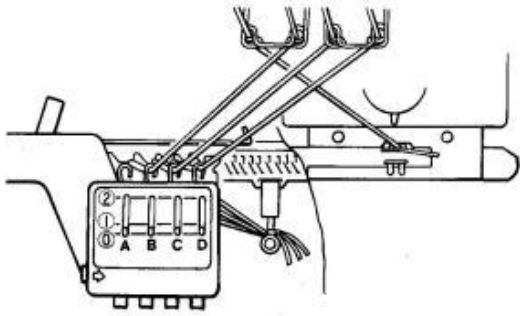
If different thickness of yarns are used together, adjust the Tension Dial to maintain the distance (a) between the tip of the Tension Spring and the Yarn Guide within 10—30cm.



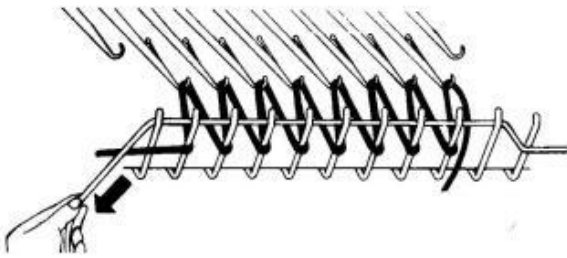
11. Tie the knotted yarns (B, C and D) onto the left Clamp Screw Grip. Hook yarn B on Holder B, yarn C on Holder C and yarn D on Holder D respectively pushing Holder Buttons to ① position. Return Holders to ② position after threading.



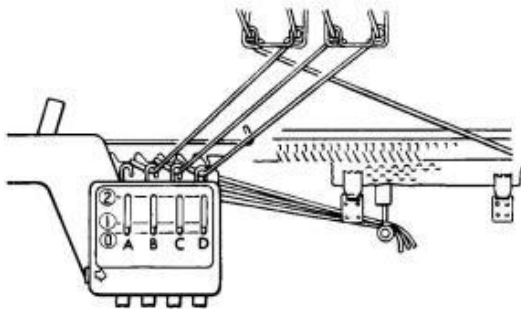
12. Remove yarn A from Yarn Clip and tie it around right Clamp Screw Grip. Moving the Carriage a little way to the left, guide the yarn along Yarn Guide "C" to thread it into Yarn Feeder ①.



13. Cast-on with yarn A using Ravel Cord.
 If you have Model 360/260 or 560 Knitter, work in the same manner as cast-on for Lace Carriage.

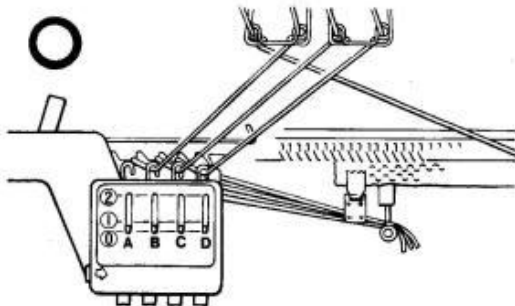


If you wish to cast-on using the Weaving method, use the Knitter Arm, then exchange it for YC Arm.



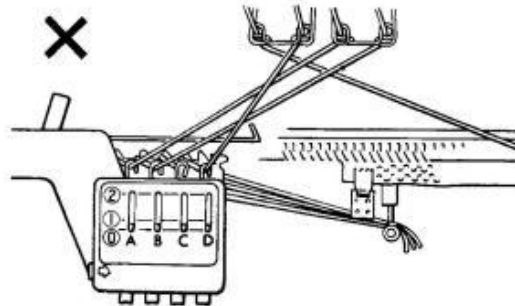
14. Knit 9~10 rows in Stockinet and hang the Claw Weights on the fabric.

The relation between the Auto-Tension and the Holders



Correct threading

Thread the yarns through Auto-Tension and Holder Hooks as shown in the diagram. Colour A yarn should be threaded behind the yarns B, C and D.



Incorrect threading

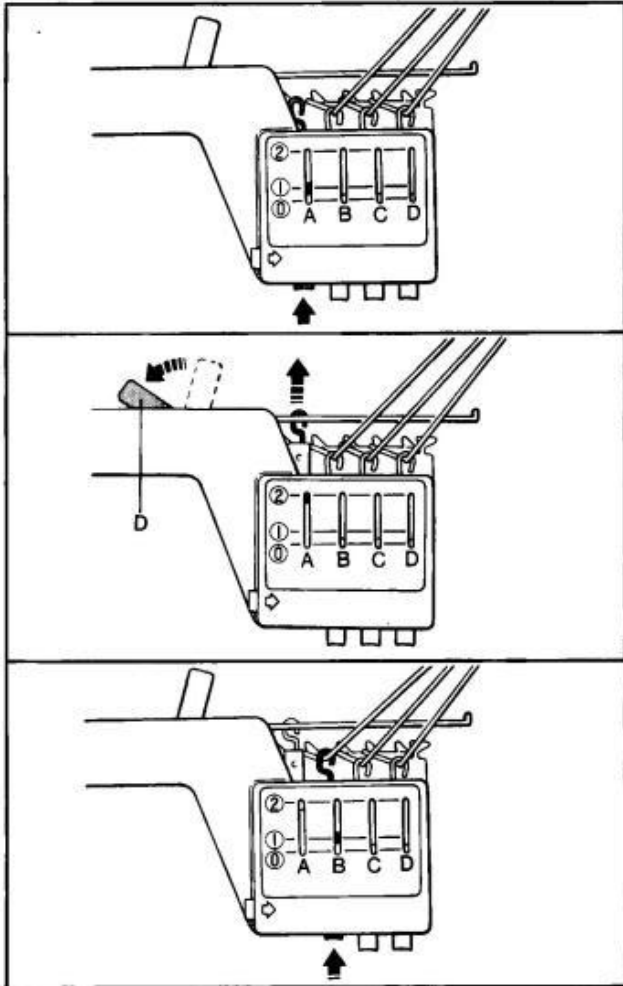
Crossed threading makes tangles the yarns, and makes knitting difficult.



Basic Knitting.

Knit the striped pattern following the procedure below.

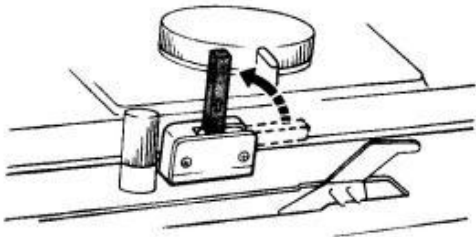
1. Leave the Carriage at the right side.
2. Push Holder Button A. The Holder is positioned in ① position.



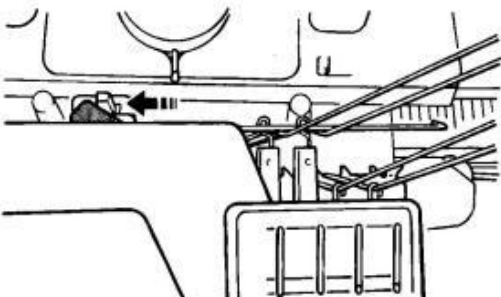
3. Push Feeding Lever "D" to the left to bring out Holder A to the ② position.

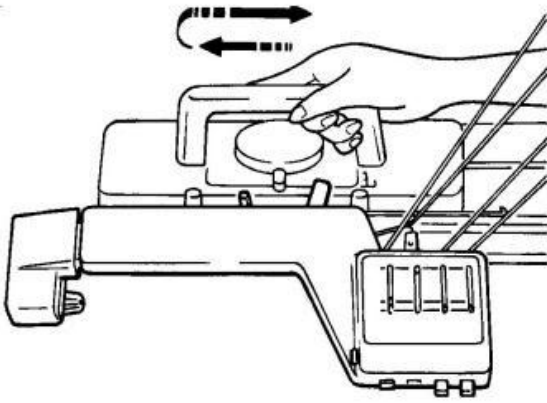
4. Push Holder Button B. The Holder is positioned in ③ position.

5. Raise the Driving Lever.



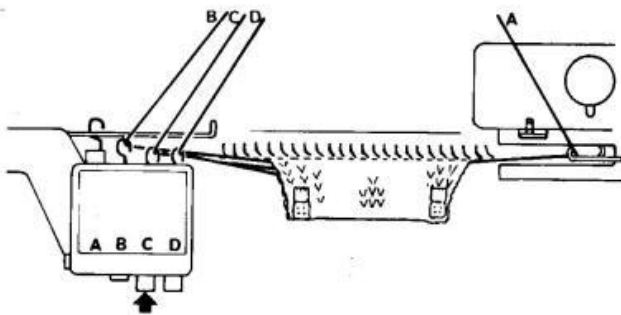
6. Move Carriage from the right to the left till Driving Lever moves Feeding Lever and the yarn in Feeder ① is changed. When yarn is changed, a click sound is heard.



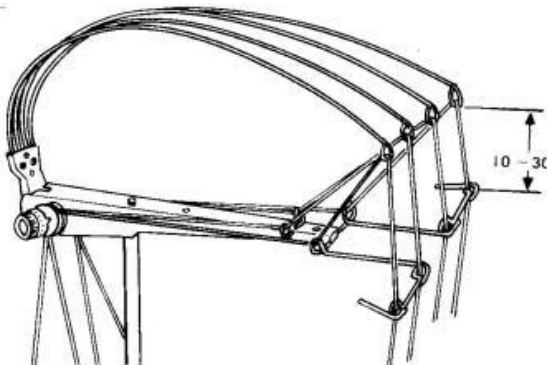


* Repeat this procedure until you knit desired number of rows changing yarns automatically. (Yarn A and yarn B are knitted alternately every two rows.)

* To knit without changing yarn, lay Driving Lever down.





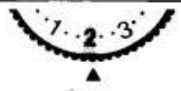

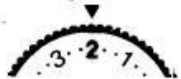

* To exchange yarn B for C, leave Carriage at right side with yarn A in Yarn Feeder and push Holder Button C. (Holder B will move to ① position.)



Tension Dial

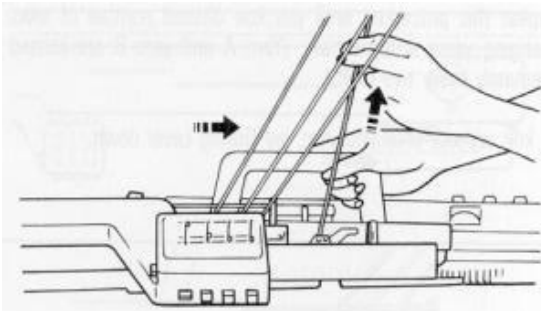
* Smaller the number, the looser the tension on the yarn, and larger the number, the tighter the tension on the yarn.

Adjust the Tension Dial according to the thickness of yarn. The distance between the tip of the Tension Spring and the Yarn Guide should be within 10 — 30cm.

Type of knitting	2-Colour Auto-Tension	4-Colour Auto-Tension
Stockinet (medium yarn)		
K1. P1. rib (medium yarn)		
		

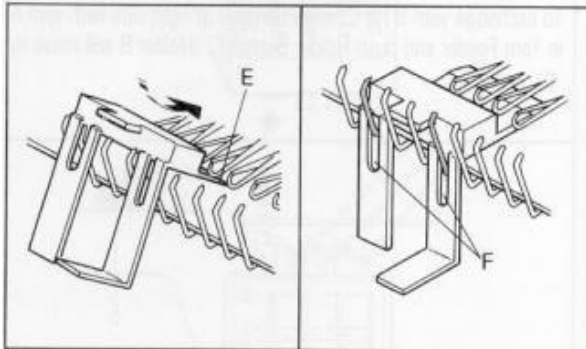
Stitch Dial

* The Tension Springs of the 4-Colour Auto-Tension are stronger than those of the 2-Colour Auto-Tension so set the Stitch Dial 1/3 — 2/3 number higher than that of 2-Colour Auto-Tension.



Tension Adjustment by Hand

- * The first row after changing yarns is sometimes not knitted well and the yarn is not guided smoothly into the Yarn Feeder. So, pull up the knitting yarn slightly to take the slack of yarn when the Carriage direction changes.

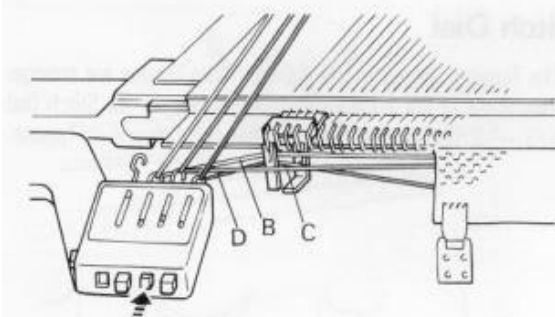
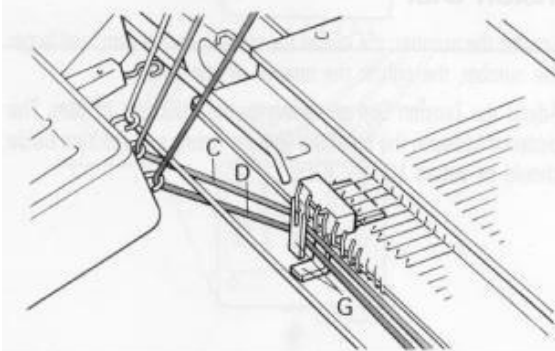


Use the Separator Hook in the following circumstances if you find it necessary.

- * Knitting textured or fluffy yarn.
- * Four colour knitting.
- * Fair Isle knitting (Knit-in)

1. Insert the Separator Hook "E" under the needles on the left end of Needle Bed, and pass Sinker Posts through two oblong holes "F" of Separator.

2. Hold resting yarns "C" & "D" (⊙ position on Holder Indicator) between the legs "G" of the Separator Hook as illustrated on the left.

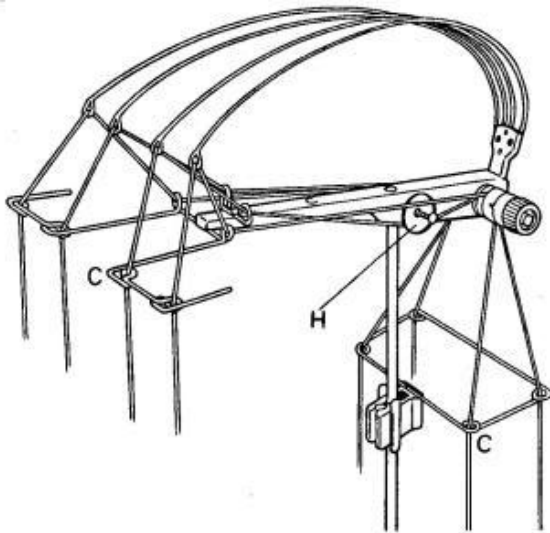


To use a yarn from the Separator Hook:—

Push the Holder Button while the Carriage at the right.

Remove the yarns "C" & "D" from the Separator Hook and hook the resting yarn "B" & "D" between the legs pulling the removed yarn "C" towards you.

Make sure that the removed yarn doesn't entangle with the other yarns.



Auxiliary Tension Disc

- * To avoid fine yarn being loose on the Tension Spring, pass the yarn under the Auxiliary Tension Disc "H" as illustrated. (Thread the yarn through Tension Guide C and Yarn Guide C.)

— WARNING

When the Electronic Knitting Machine is in use.

To release the Carriage from jamming, be sure to take off the Yarn Changer Arm from the Carriage before operating the Release Lever.

(If the Carriage is released from the jamming with the Yarn Changer Arm on, the needles will be damaged.)

4 PATTERN KNITTING (on the knitter only)

— Caution —

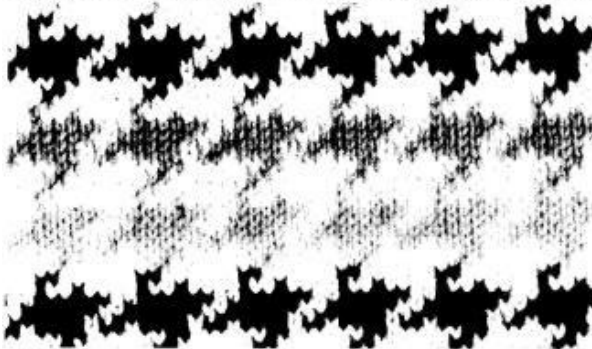
- * The YC 6 Arm will not knit Weaving, Punch Lace or Single Motif.
- * Knitting techniques are the same as ordinary pattern knitting but it is recommended to work increasing/decreasing multiple stitches instead of partial knitting.
- * Always start the Pattern Knitting from the left side except an ordinary case.

1	2	3	4	5
		① ②	A B C D	
1	↑	A B	① ②	⇌ 2
2				

How to Read the Chart

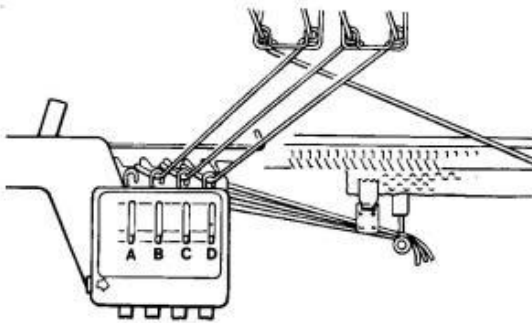
1. Knitting Order
2. Driving Lever
 - ↑active position
 -inactive position
3. Colour of yarn in Yarn Feeders ① and ② (Fair Isle only).
4. Holder Buttons
 - Push the Holder Button only at ① and others are changed automatically.
5. Knitting Direction.
 - Work the Chart in order of the number.

Card No.1—(7) Electronic Knitter
 Card No.13—A Punch Card Knitter

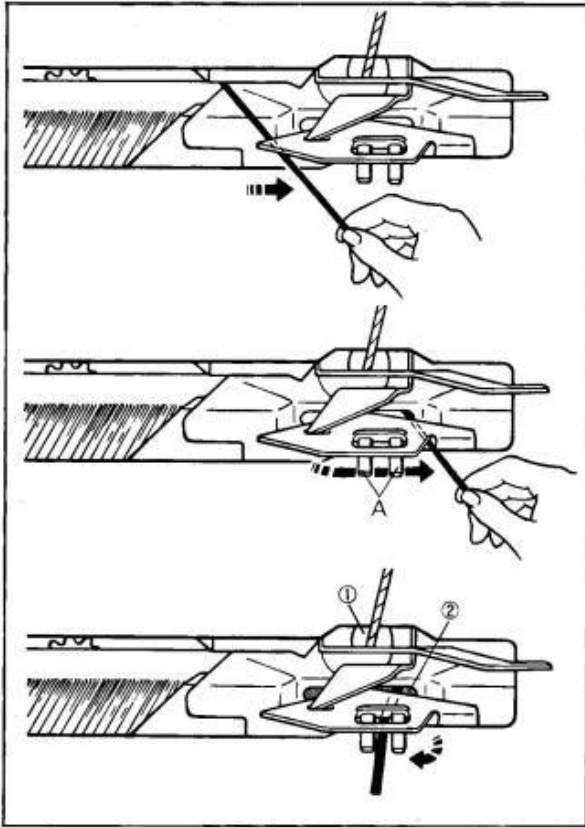


Fair Isle (Knit-in)

- * Fair Isle is knitted by changing the yarn in Yarn Feeder ①.



1. Referring to pages 3 — 6 steps 1 — 12, prepare for knitting.
 *Thread ground yarn D through Tension Spring D.
2. Attach Separator Hook if required. (see page 9)
3. Cast-on with Ravel Cord method. (If you have Model 360/260 or 560 Knitter, work in the same way as cast-on for Lace Carriage.)
 Knit 7 — 8 rows in Stockinet and leave the Carriage at the right.
 Hang Claw Weights.
 *In case of Punch Card Knitter, set the card and lock at CM1.



4. Thread ground yarn (colour D) into Yarn Feeder ② as illustrated on the left.

- ① Tie the yarn to left Clamp Screw Grip.
- ② Move the yarn to the right with your hands as shown.
- ③ Pass it under pins "A" and move it to the far right. The yarn is slid into Yarn Feeder ② "B".
- ④ Place the yarn between the pins.



5. Knit 1 row in Stockinet from the right to the left. (Ground yarn in Feeder ② is not knitted.)

- * In case of Electronic Knitter, set the card and Push Inspection Button.
- * In case of Punch Card Knitter, release the card.

		①	②	A	B	C	D	
1	→	A	D	②	①	①	①	→→→→→7
2	↑				①			←←←←←
3	→	B						→→→→→7
4	↑			①	②	①		←←←←←
5	→	C						→→→→→7
6	↑			①	①	②		←←←←←

Repeat Orders 1 ~ 6

6. Set the machine for Fair Isle (Knit-in) referring to the Instruction book of your Knitter and knit changing 4 different coloured yarns every 8 rows following the Chart on the left. (Colour D remain in Feeder ② throughout.)

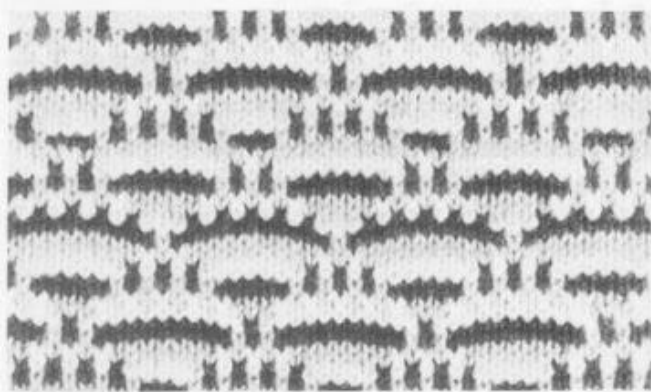
The above knits stripes on the blank areas of the card.

To change colour on the punched/coloured areas of the card:—

- * Electronic Knitter..... Push button 1. (Right light on)
- * Punch Card Knitter.....Punch Card reversing the blank and punched areas.

Slip Stitch

Card No.1—(6) Electronic Knitter
 Card No.10—A Punch Card Knitter

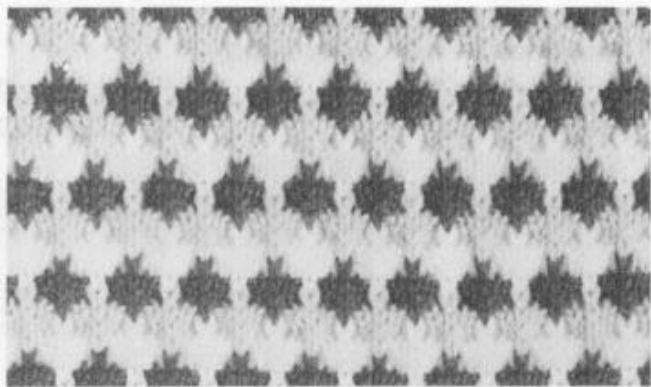


		①	②	A	B	C	D	
1	↑	A		②	①	①	①	⇐⇐⇐)2
2		B		①	②	①		⇐⇐⇐)2
3		C		①	①	②		⇐⇐⇐)2

*Repeat Orders 1 ~ 3

Tuck Stitch

Card No.1—(3) Electronic Knitter
 Card No.3—A Punch Card Knitter

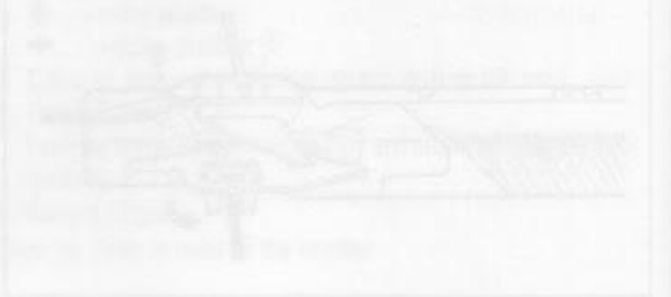


		①	②	A	B	C	D	
1	→	A		②	①	①	①	⇐⇐⇐)3
2	↑				①			⇐)1
3	→	B						⇐⇐⇐)3
4	↑			①	②	①		⇐)1
5	→	C						⇐⇐⇐)3
6	↑			①	①	②		⇐)1

*Repeat Orders 1 ~ 6

Multi-coloured Slip/Tuck Stitch Pattern

- Following pages 3 — 6 steps 1 — 12, prepare the machine and yarns for knitting.
- Cast-on with Ravel Cord method. (If you have model 360/260 or 560 Knitter, work in the same way as cast-on for Lace Carriage.)
- Set the machine for Slip/Tuck Stitch and memorize the pattern following the Instruction book of your Knitter.
- Thread yarn A through Yarn Feeder ① and leave the Carriage at the left side.
Note: You must take special care where you exchange the yarns, or the pattern will be altered.
- * Knit Slip Stitch changing three different coloured yarns every two rows following the chart on the left.



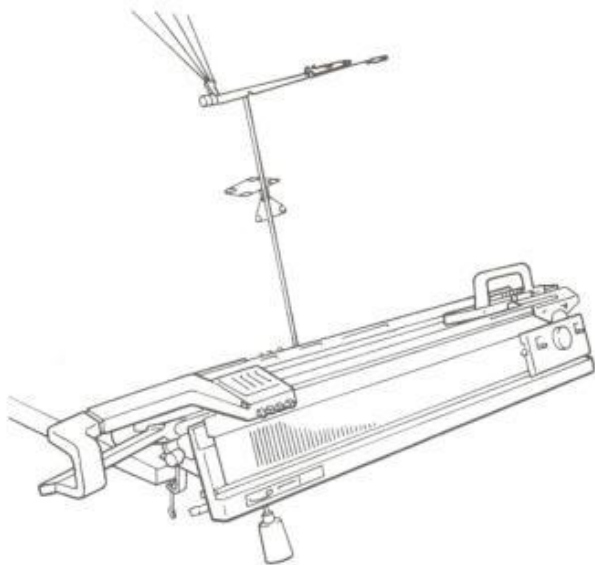
- * Knit Tuck Stitch changing three different coloured yarns every four rows following the chart on the left.



		①	②	A	B	C	D	
1	→	A		②	①	①	①	⇐⇐⇐)3
2	↑				①			⇐)1
3	→	B						⇐⇐⇐)3
4	↑			①	②	①		⇐)1
5	→	C						⇐⇐⇐)3
6	↑			①	①	②		⇐)1

Note: The chart is for 3 different colored yarns. If you use 4 different colored yarns, the pattern will be altered.

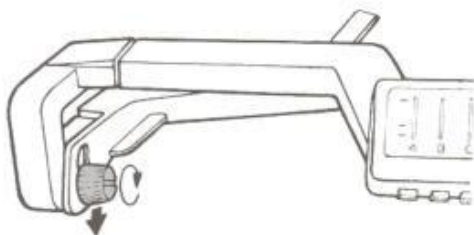
5 TO USE YARN CHANGER WITH RIBBER



1. Set up the Ribber as usual.
2. Fit slot **A** of 4-colour Auto-Tension onto the top of the Yarn Rod.



3. Fit Yarn Changer on the Knitter as shown on page 2.



4. Loosen Change Screw and push it down.
Tighten change screw.

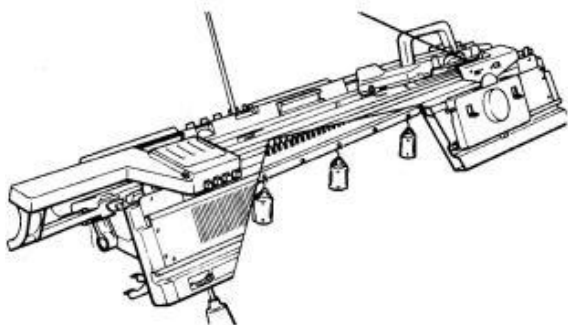
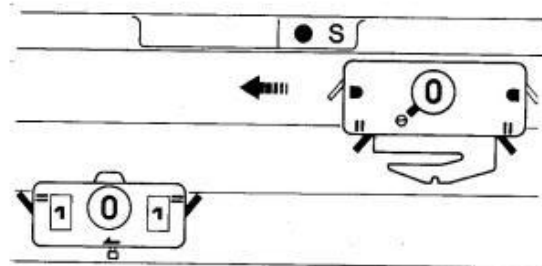
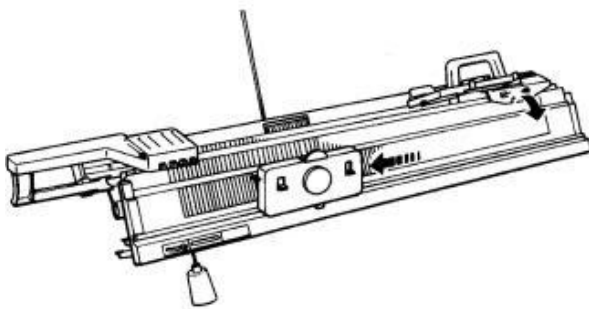
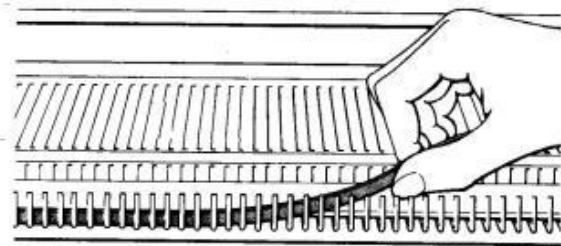
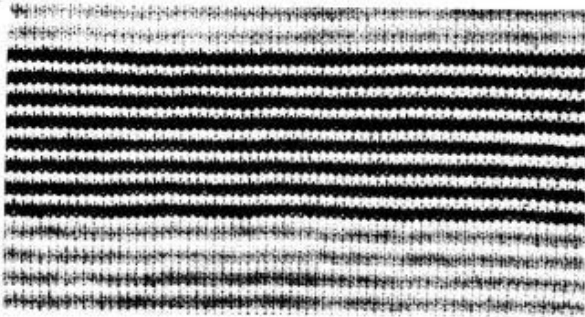


5. Attach Ribber Arm to Knitter Carriage.

* If you own Electronic Knitter, work Double Jacquard following the section of Automatic Yarn Changer (YC 5) in the Knitter Instruction Books. The method of using Yarn Changer with the Ribber is the same.

* If you own Punch Card Knitter, work Double Jacquard following this Instruction Book.

Basic knitting

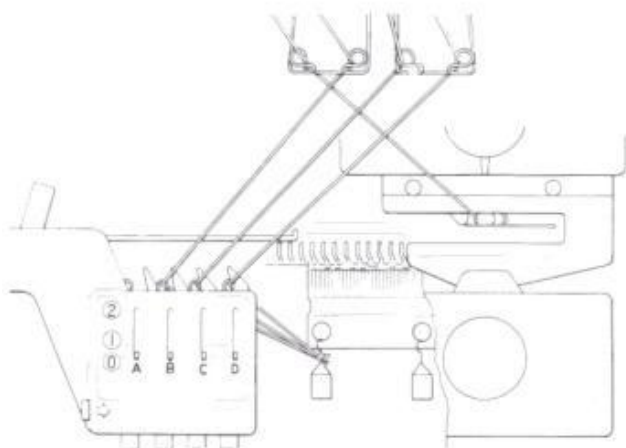
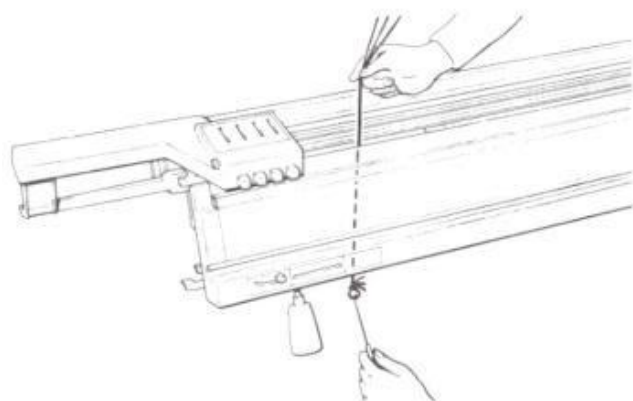
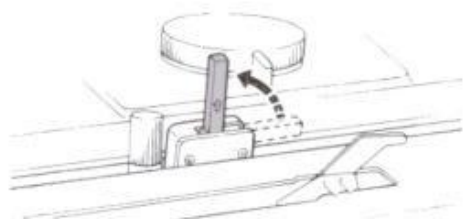
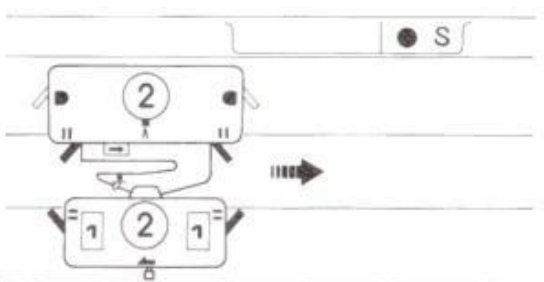
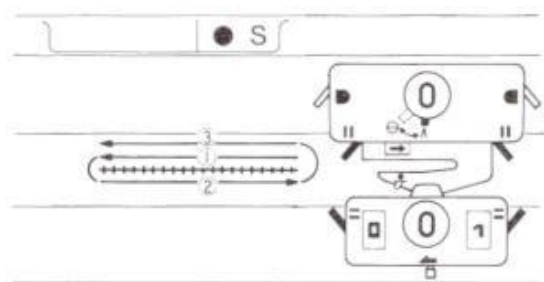


Using Yarn Changer in double rib without a Punch Card makes striped fabric.

The sample opposite is knitted changing four light yarns of different colours in Double Rib.

Knit a striped pattern following the procedure below.

1. Insert Close Knit Bar between Knitter sinker posts and front edge of needle bed.
2. Set the machine and needles for double rib following the Instruction Book for Double Rib.
3. Thread the yarn through the 4-colour Auto-Tension referring to page 5.
4. Disconnect Ribber Carriage from Arm and move it to the left tilting it towards you.
5. For Knitter Carriage, set Cam Lever to SLIP (S).
Remove yarn A from Yarn Clip and thread it into Yarn Feeder. Holding the yarn underneath the machine, move Knitter Carriage from the right to the left without knitting and connect it to the Ribber Carriage.
6. Re-set Cam Lever to STOCKINET (A . 0) and knit from the left to the right.
7. Suspend Cast-on Comb with Weights



8. Knit 3 row cast-on sequence as follows:—

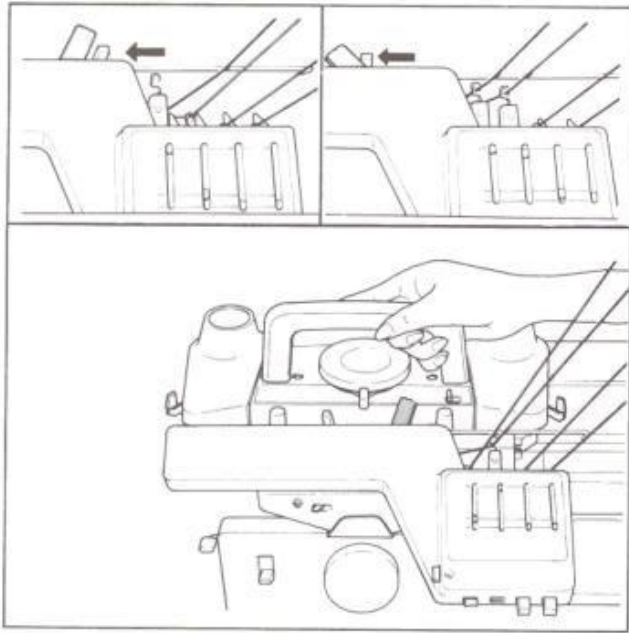
- ① Set left Set Lever to **0** and knit the 1st row from the right to the left.
 - ② Set Cam Lever to SLIP (⊖, S) and knit the 2nd row from left to right.
 - ③ Re-set Cam Lever to STOCKINET (Λ, 0) and knit the 3rd row from right to left.
9. Re-set left Set Lever to **1** and set Stitch Dials to 2, then knit Joining row from left to right.

Set the Driving Lever to the upright position.

10. Thread the remaining three yarns between the needle beds at the left side. Insert Hook Tool from underneath and catch the knot.
11. Tie the yarn to the Weight hanging on the Cast-on Comb. Hook yarn B in Holder B, yarn C in Holder C and yarn D in Holder D respectively. Make sure the yarn is not caught the Sinker Posts.

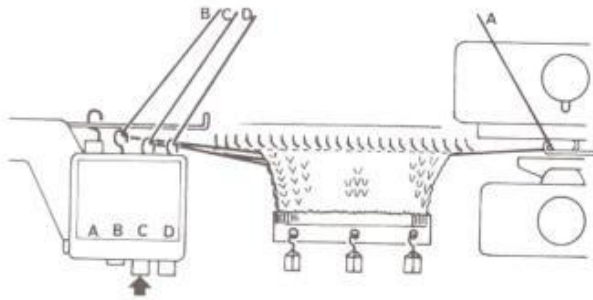
12. Arrange Holders as follows. (See page 7)

- ① Push Holder Button A. Holder A is in ① position.
- ② Push Feeding Lever to the left to bring Holder A to ② position.
- ③ Push Holder Button B. Holder B is in ① position.

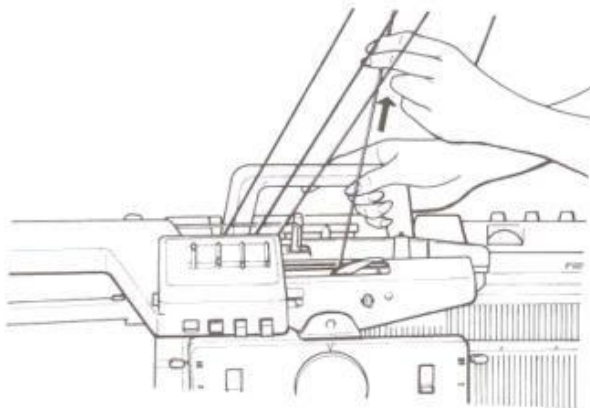


13. For main knitting set both Stitch Dials to 4 and move Carriage from the right to the left till Driving Lever moves Feeding Lever and yarn changing is completed. When yarn changed, a click is heard.

Repeat this procedure until you knit desired number of rows changing yarns automatically. (Yarn A and yarn B are knitted alternately every two rows.)



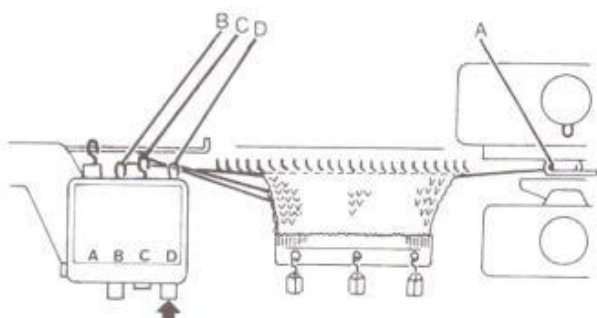
14. To exchange yarn B for C, leave Carriage at right side with yarn A in Yarn Feeder and push Holder Button C. (Holder B moves back to ① position.)



15. Knit desired number of rows changing yarns A and C.

When changing colour using 4 yarns, the Auto-Tension may not take up slack sufficiently. In this instance, pull up the knitting yarn slightly when carriage direction changes.

You must use the 4-colour Auto-Tension with this YC 6 Yarn Changer.



16. Change yarn C for D as in step 14.

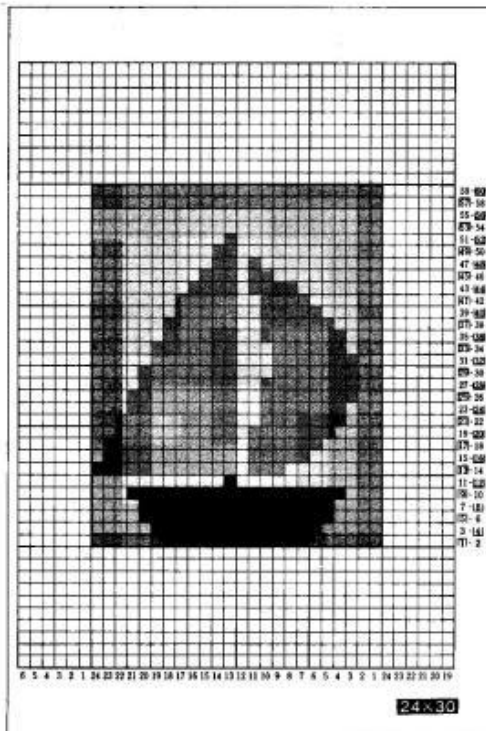
Repeat steps 13—16 to knit striped pattern in double nb.

Punching a Card for Double Jacquard

Double Jacquard is a fabric knitted using a Punch Card, without floats of yarn across the back.

Using the YC-6 and a Punch Card, Pattern is made on Knitter side, with Cam Lever at SLIP, and Ribber side knits every row.

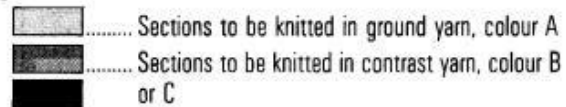
Single Motif can be knitted in Double Jacquard.



To punch a card for double jacquard using a blank card it is important to realise that each row of double jacquard pattern consists of two rows of slip stitch knitting. One is with ground yarn and the other is with contrast yarn.

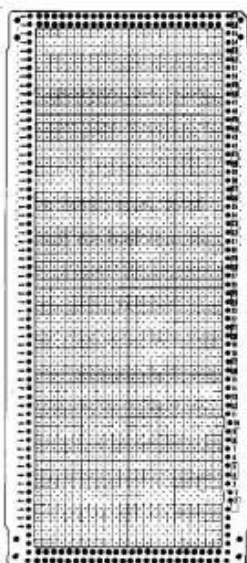
Follow the procedure below.

1. Draw your pattern on the graph paper supplied with the blank card set. Use the side marked **24 x 30**.
Maximum size of a pattern is 30 rows by 24 stitches to fit in a standard card, because one row of a pattern requires two rows of punching on the card.

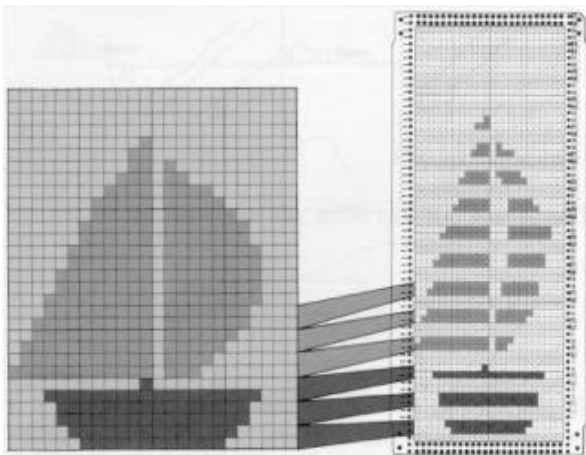


IMPORTANT:

Even numbers of rows must be knitted in each colour, so the total number of rows for the pattern must also be an even number.

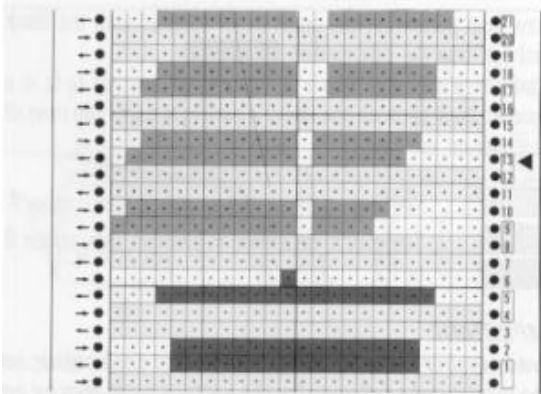


2. Mark the pattern from the graph paper onto the Card. Use the card with the rectangled numbers at the right edge.
(1) Colour the first row of the Card, then the 4th and 5th rows missing 2nd and 3rd rows. Repeat in the same way throughout so that 2 rows of ground yarn (coloured rows) alternate with 2 rows of contrast yarn. The division of coloured and plain rows is the same as the orange and blue rows on the check card.



- (2) Mark the parts of contrast yarn on the first and second rows of the pattern onto the second and third rows of the Card (non-coloured rows) respectively.

In the same manner mark the parts of contrast yarn of every 2 rows of the pattern onto non-coloured rows of the Card.

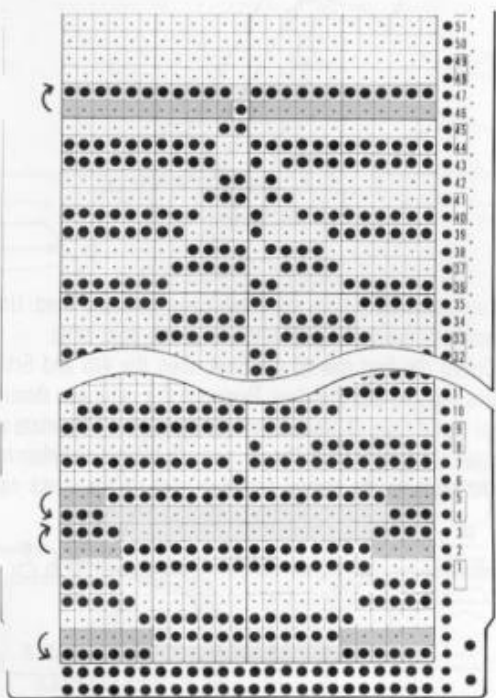


- (3) If more than two yarns are to be used for the pattern, mark the position to change the yarn (at the odd row number).

The row number to appear at the Pattern Panel while knitting corresponds to the row of five rows below.

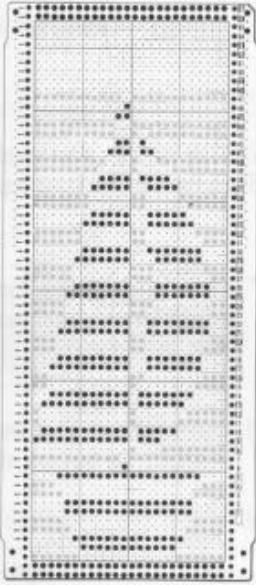
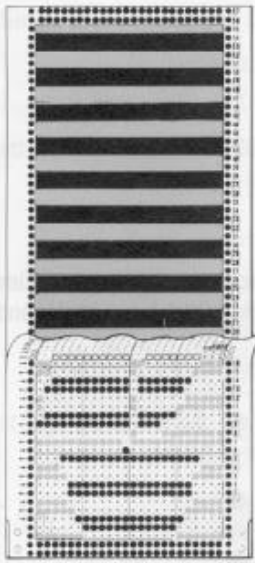
Holder button for the yarn to be selected next is pushed when the Carriage is at right side, so the yarn changing mark must be positioned one row before the yarn is knitted.

3. Punch the sections marked.



4. Punch the sections for ground yarn which correspond to the non-punched sections of the pattern rows in the following manner.

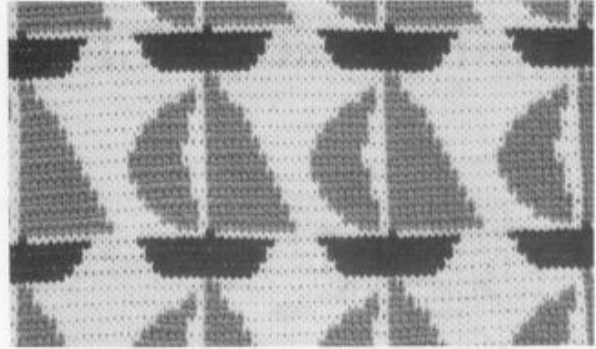
- (1) For the first row, punch the sections which correspond to the non-punched sections on the second row.
- (2) Of the two consecutive coloured rows of the NP Card, punch the lower row to match the non-punched section of the row below, and punch the upper row to match the non-punched section of the row above.
- (3) The last row of punching must be for the ground yarn so that it matches the first row punched on the card.



5. To check that the card is correctly punched, lay it over Check Card.

Make sure that the edges of punched card match the Check Card.

Punched holes in orange colour.....ground yarn
 Punched holes in blue colour.....contrast yarn



- 6
- 5
- 4
- 3
- 2
- 1

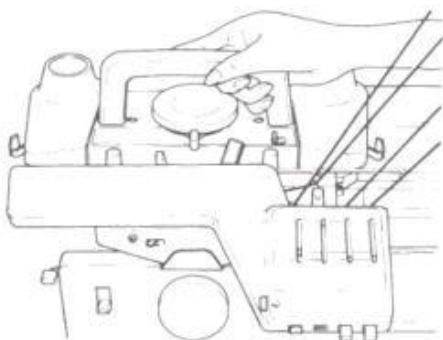
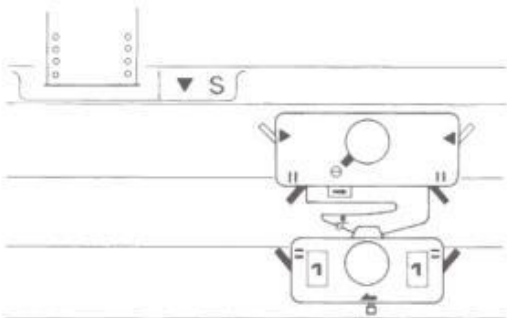
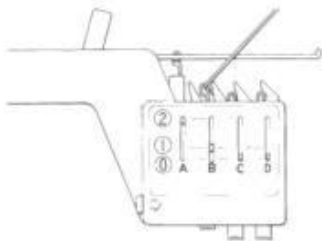
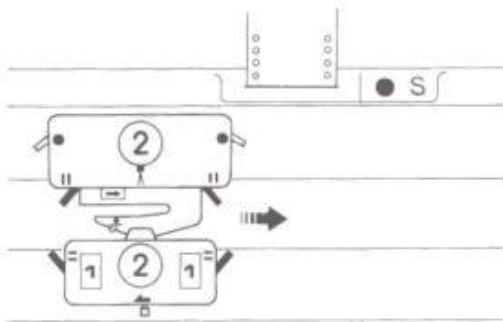
Row numbers rectangled Knit with ground yarn.

Row numbers not rectangled Knit with contrast yarn.

Extra Pre-Punched Card sets for Double Jacquard (Series 73 & 74) are also available.

Knit Double Jacquard using Punch Card

thickness of yarn	thin	light	medium
Stitch Dial (Knitter & Ribber)	2 — 3	3 — 5	5 — 7



2 & 3ply yarns are most suitable for DOUBLE JACQUARD. Use the Stitch Dial settings listed opposite as a guide.

* To knit double jacquard using thicker yarn, arrange needles as illustrated opposite with the Half-Pitch Lever at "H" and Swing Indicator at "5".

- (1) Insert a Punch Card and knit from the left to the right to memorize the first row of pattern as follows.

Stop Knob.....	●
Holders (A, B, C, D).....	⊙
Side Levers (left & right).....	●
Cam Lever.....	STOCKINET (A, D)
Set Levers (left & right).....	1
Driving Lever.....	resting position
Stitch Dials.....	refer to table above

- (2) Place yarns into Holders and set Holders A and B into position ⊙ and ⊙ respectively.

- (3) Change the other settings of machine as follows.

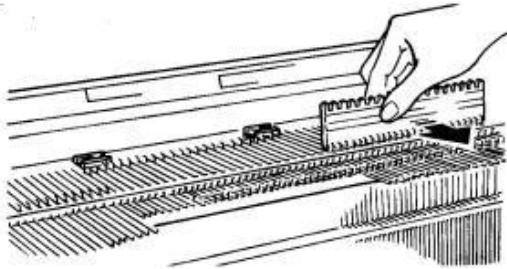
Stop Knob.....	▼
Side Levers (left & right).....	▼
Cam Lever.....	SLIP (⊖, S)
Driving Lever.....	upright position

- (4) Move Carriage from the right to the left until the yarn is changed.

- (5) From the next row, Yarn Changer changes colours A and B automatically when Carriage comes to the left side.

Single Motif Knitting in Double Jacquard

1. Cast-on as for Double Jacquard.
2. Attach Magic Cams to Knitter Carriage and place the Point Cams where the pattern is to be knitted. Continue to knit

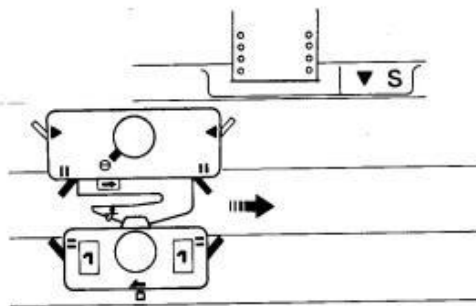


*Note: *When a rectangled row shows on the pattern panel push the needles outside the point cams to D position before knitting.*

**Push a Holder button corresponding to the colour guide marker.*

After Completing the motif, lower the Driving Lever, remove Magic Cams and Point Cams, and continue to knit with ground yarn.

To knit Double Rib which looks the same Double Jacquard

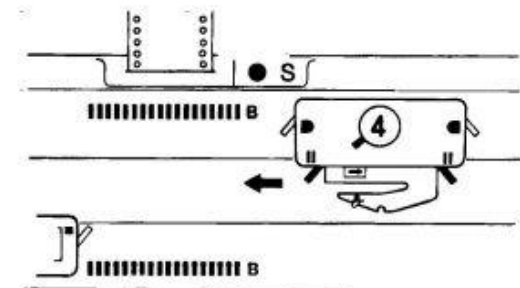
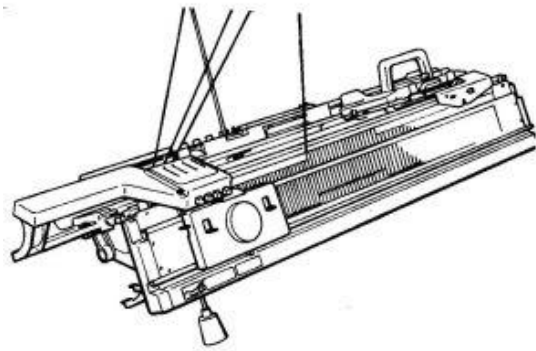
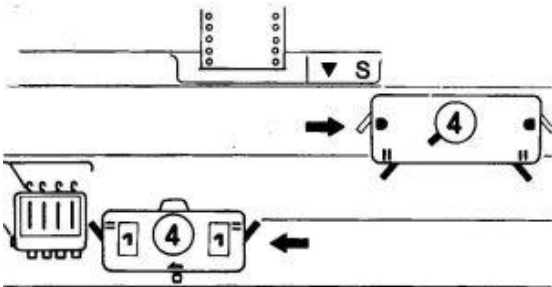


- * If you knit Double Jacquard in combination with double rib, the fabric effect is different.
- * If you want to knit double rib which looks the same as Double Jacquard, work as follows:—

After the Pattern in Double jacquard has been completed, lower the Driving Lever and continue knitting. (Finish with the carriage at the left side.)

2. Before knitting Double Jacquard again, set the Punch Card so that the row immediately before row 1 shows at the pattern panel. Knit one row from left to right. Lift the Driving Lever and continue in pattern.

If Incorrectly Knitted



Disconnect Ribber Carriage from Arm and move it to Yarn Changer side (left side) while tilting it forwards you.

2. Remove Arm from Knitter Carriage and set Cam Lever at SLIP (◯ . S) and Side Levers at ● mark. Lift Carriage Handle and move Carriage to the right side.

3. Unravel the required number of rows finishing with the yarn at the left. If the yarn is at the right unravel one more row. The yarn must always be on the side of Yarn Changer after unravelling and needles should be in B position.

4. Turn the Card back by the same number of rows that have been unravelled.

5. Place the yarns in the correct Holders and select the next yarn as shown on the Punch Card on the row at the pattern panel.

6. Replace Arm on Knitter Carriage, Stop Knob at ● mark and move Carriage to the left side to memorize the pattern.

7. Attach Ribber Carriage to Arm and thread yarn into Yarn Feeder.

8. Set Row Counter and Stop Knob at ▼ mark, and lift Driving Lever. With Carriage on original setting, continue to knit.

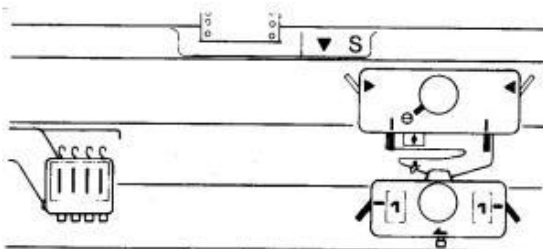
To knit the pattern correctly

* To knit Double Jacquard you must watch the Punch Card to see where to change the yarn. If you fail to change the yarns, at the indicated marks on the Punch Card, you will knit stripes instead of the correct pattern.

* Set the Punch Card so the Card row number $\boxed{1}$ appears above the ▲ mark on the pattern panel, and move the Carriage across the Needle Bed to memorize the pattern. Knit the first row from right to left. Follow the Punch Card carefully to knit a complete Double Jacquard pattern.

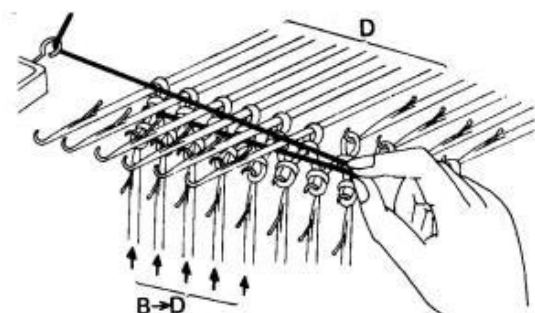
Notes to Partial Knitting

All the knitting techniques in double jacquard are the same as for the ordinary rib stitches, but special care is required for partial knitting when the Carriage comes to the right side of needle bed.



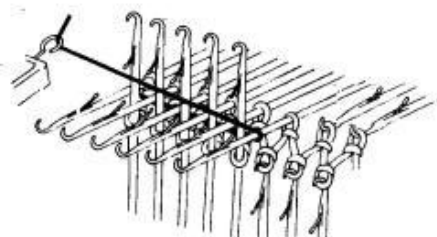
Leave Carriage at the right side and set Russel Levers as follows.

Knitter..... I (both)
Ribber..... - (both)



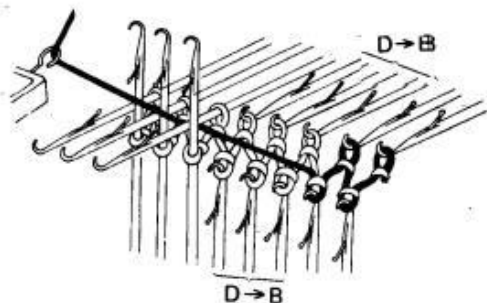
Decreasing stitches

- (1) Before knitting from right to left, hold the yarn to be knitted next as shown, and push the knitter needles to be decreased to D position.



- (2) Push up the same number of ribber needles to D position. (The yarn must be under those needles in D position.)
- (3) Knit from the right to the left.
Change the yarn and knit to the right

Repeat steps (1) — (3).



Increasing stitches

- (1) Using Transfer Tool, push the needles in D position to be increased back to B position.
- (2) Bring the yarn in Holder to be selected next under the first inside needles on Knitter and Ribber in D position.
- (3) Knit from the right to the left.
Change the yarn and knit to the right.

Repeat steps (1) — (3)

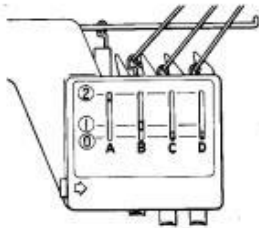
6 WHAT TO DO IF

If the Carriage Has Jammed While Knitting

- * When you are knitting only on the Knitter, remove the Yarn Changer Arm from the Carriage. Press the Release Lever, continue to push the Carriage in the same direction.
- * When you knit with Ribber, disconnect the Ribber Arm from the Knitter Carriage. Press the Release Lever, continue to push the Carriage in the same direction.

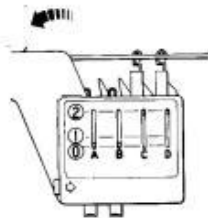
Note: If you move the Carriage without removing the Arm, the Yarn Feeder and needles may be damaged.

The Wrong Holder Button Has Been Pushed



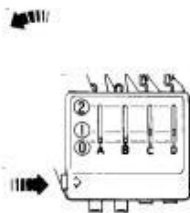
Correct positions of the Holders during knitting are:

- ②..... 1 Holder (Knitting yarn)
- ①..... 1 Holder (Yarn to be knitted next)
- ①..... 2 Holders (Resting yarns)

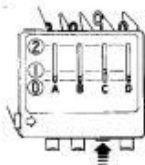


If two Holders are positioned in ②.

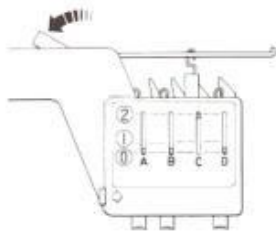
1. Push Feeding Lever to the left, and the Holders in ② move back into ①.



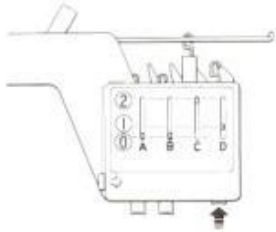
2. Push Release Button, and all the Holders align in ①.



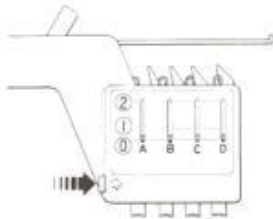
3. Push the empty Holder Button to set it to ①.



4. Push Feeding Lever to the left to move the Holder from ① into ②.



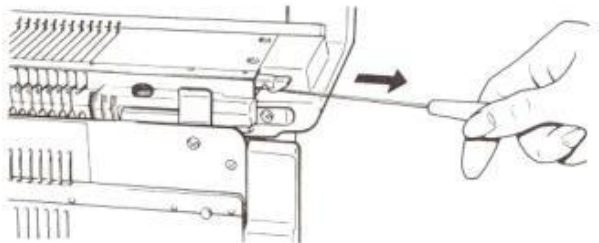
5. Push Holder Button holding the yarn to be knitted next, from ② into ①.
Check that all yarns are in their correct feeders, and are not tangled.



If more than two Holders are positioned in ①, follow the above steps 2 through 5.

To repack Yarn Changer, set all the Holders at ① as instructed in steps 1 — 2.

If Yarn Changer is Stuck on Needle Bed



Pull out Needle Retainer from the right by 2—3cm. using Hook Tool, then loosen securing Wheel.