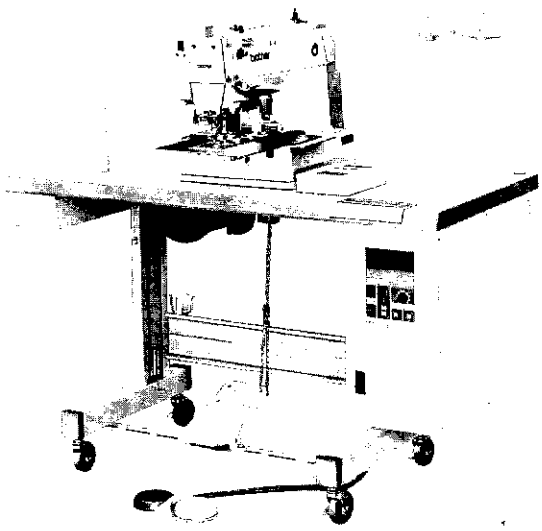
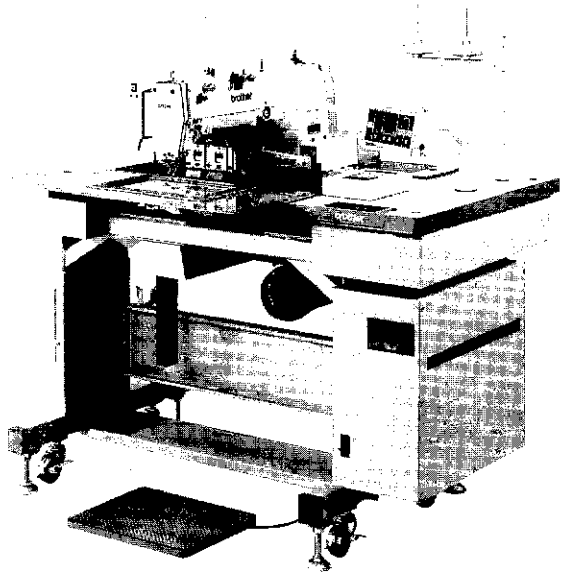
brother

# BAS-300 Series
# Programmable electronic pattern sewer with cylinder bed

# BAS-304·311
# BAS-326·340

## APPLICATION EXAMPLES





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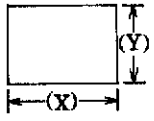
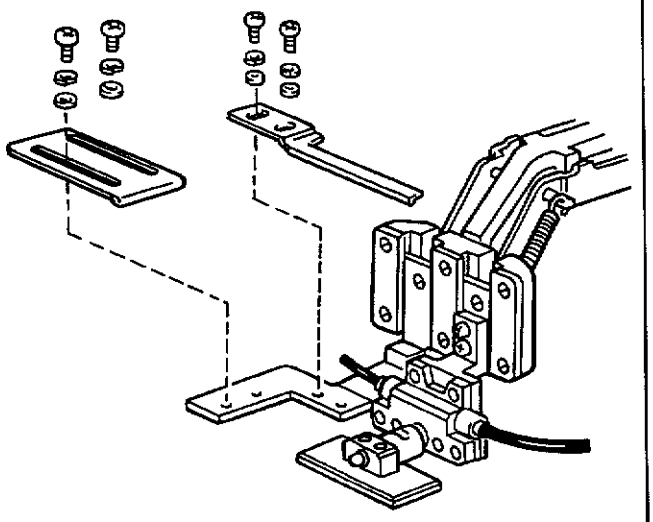
# Basic Specifications Table for the BAS-300 Series

| Specifications \ Model | BAS-304 | BAS-311 | BAS-326 | BAS-340 |
|---|---|---|---|---|
| Sewing range (mm)   | (X) (Y)<br>50 × 50 | (X) (Y)<br>100 × 60<br>· Uses inner clamping device<br>MAX 100 × 60<br>MIN 20 × 13 | (X) (Y)<br>150 × 100<br>※(L) 180 × 100<br>· Uses inner clamping device<br>MAX 150 × 90<br>MIN 20 × 13<br>※(L)<br>MAX 180 × 90<br>MIN 20 × 13 | (X) (Y)<br>250 × 150<br>· Uses inner clamping device<br>MAX 100 × 60<br>MIN 20 × 13 |
| Sewing speed (max. spm) | 2000 | | | |
| Stitch pitch and sewing speed | 1000-2000spm - 0.2-3.0mm<br>750-1500spm - 3.2-4.4mm<br>600-1200spm - 4.6-6.2mm<br>600- 800spm - 6.4-8.0mm | | | 1000-2000spm - 0.1-3.0mm<br>750-1500spm - 3.1-4.4mm<br>600-1000spm - 4.5-6.3mm<br>600spm - 6.4-12.7mm |
| Max. number of stitches | 2000 | | | 4000 |
| Presser lifting height (mm) | 18 | 18<br>(Air type: 20) | 20 | 30 |
| Rotary hook | Inner rotary hook (double size hook) | | | |
| Pattern data storage | 3.5" floppy disk | | | |
| Intermittent presser stroke (mm) | 0, 4, 7 can be selected | | | 0, 3, 8 |
| Feed method | X-Y intermittence<br>1 pulse 0.2 | | | X-Y intermittence<br>1 pulse 0.1 |
| Testing equipment | Built-in operation test function for low and high speeds; taking out stitches during sewing possible | | | |
| Safety equipment | Built-in stopping function, built-in automatic stopping mechanism for when safety circuit detects occurrence of a problem | | | |
| Power supply | 1-phase:100V 3-phase:200V | | | |
| Specifications | Solenoid-type<br>Air-type | Solenoid-type<br>Air-type<br>Compressor (optional) Y/N | | Air-type |
| Programmer | Programmer<br>Y/N | | | |

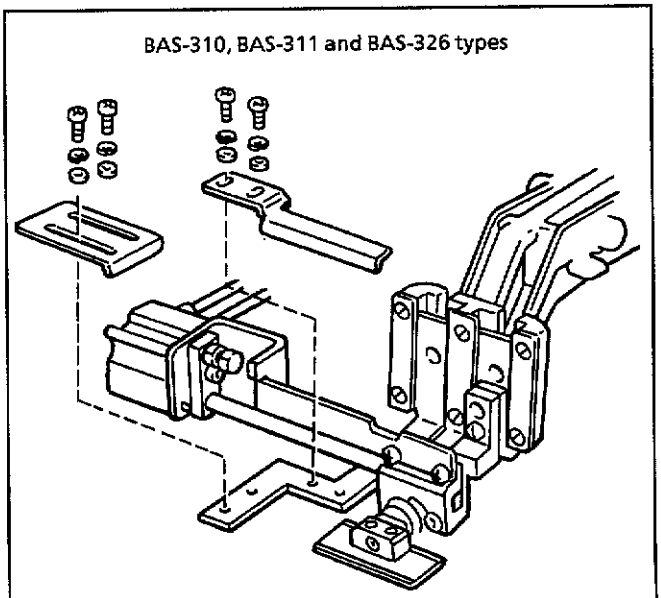
To perform label sewing, attach the inner clamp device to the sewing machine. The inner clamp device is available as an option for each model as follows:

## Inner clamping device (Option)

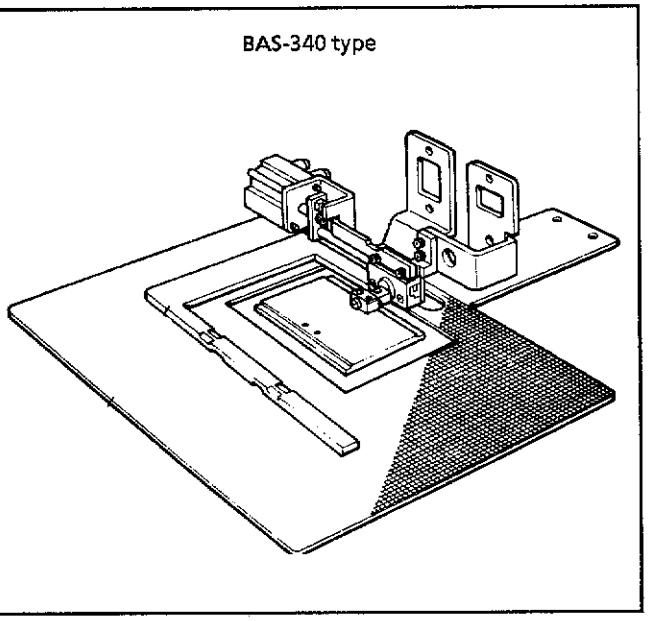
BAS-320 and BAS-325 types



BAS-310, BAS-311 and BAS-326 types

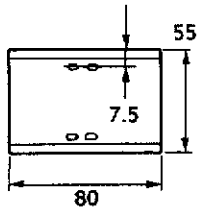
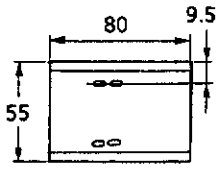
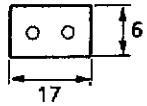
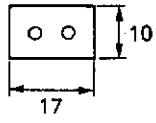
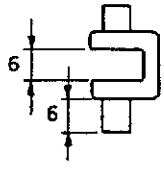
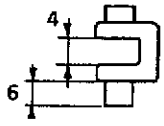
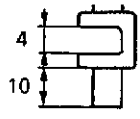
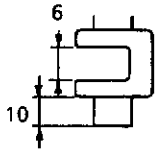
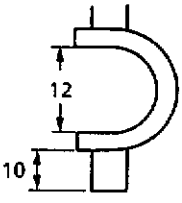


BAS-340 type



※ For BAS-310 S12651-001
For BAS-311 S12651-101
For BAS-320 S05650-001
For BAS-325 S09569-001
For BAS-326 S15522-001
For BAS-340 S19994-001

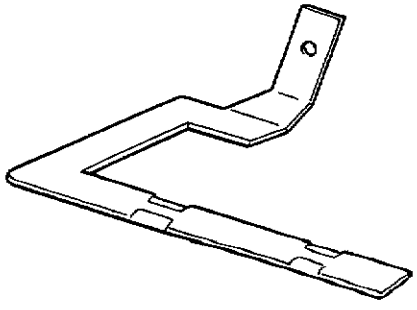
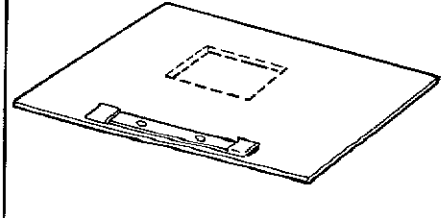
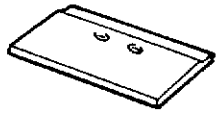
## Presser Plate Blank, Presser Plate Holder and Work Clamp Crank (Option)

| | | | | |
|---|---|---|---|---|
| Presser plate blank | 156492-000<br>  | 154256-001<br>  | | |
| Presser plate holder | S type 154291-001<br>  | L type 154237-001<br>  | ※ Presser plate holder screws<br>Screw: 2 pcs<br> <br>117291-001 | |
| Presser crank | SS type<br>S04516-001<br>  | S type<br>154297-001<br>  | L type<br>154234-001<br>  | LA type<br>S05665-001<br>  <br>Note 1 | LL type<br>S10541-001<br>  <br>Note 2 |

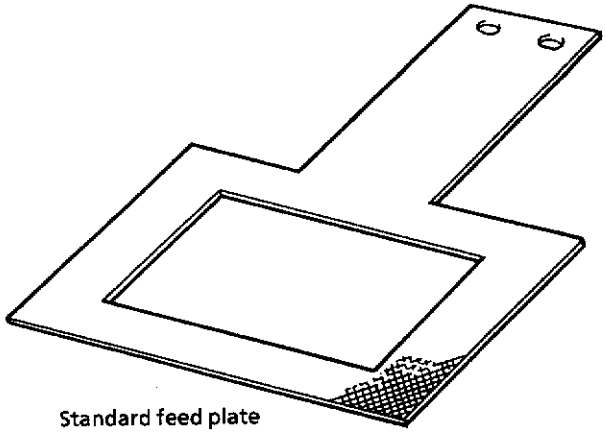
Notes

1. This is the standard crank for each inner clamp reverse device assembly.
2. This can be used for zigzag sewing using the presser foot.

## Other optional parts

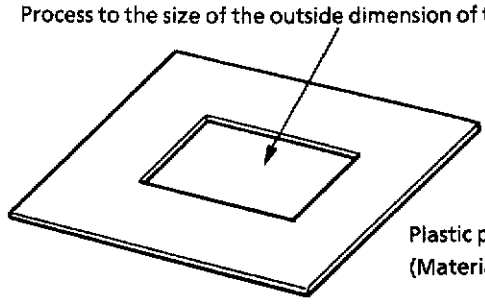
| External presser foot | OT presser plate assembly | Inner clamp LL |
|---|---|---|
| S12644-001 | 157251-001 (t = 2 mm) | S10542-001 |
|  <br>※ When sewing a label to a plain part, it is advisable to use this presser foot together with the OT presser plate for easier positioning. |  |  <br>Note: This inner clamp is made to the smallest size.<br>It is advisable to make an inner clamp from a plastic plate and paste it to the reverse surface of the inner clamp LL by means of tape or super glue, which is easier than using an iron plate. |

## Processing the feed plate



Standard feed plate

Process to the size of the outside dimension of the name.

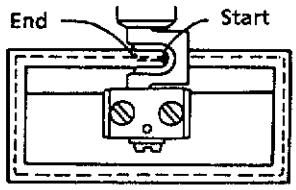


Plastic plate t = 1 mm
(Material: ABS)

Make the plastic plate so that the outside can fit in the inside of the feed plate.

## Sewing Examples

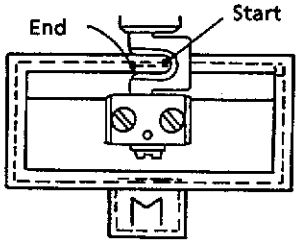
### Square label sewing



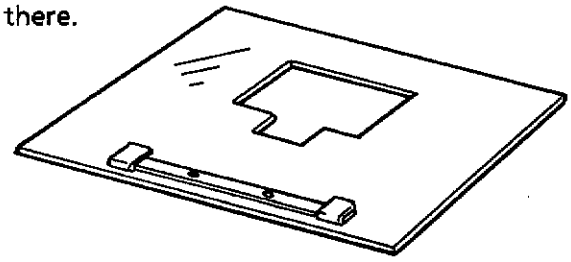

- Be sure to start programming from the start position as shown in the left-hand figure.
- It is advisable to use the [L] key on the programmer device for easier operation.
- Make a back stitch within the crank range as shown in the left-hand figure.

| Cycle time | 10 sec |
|---|---|
| Productivity | About 2,000 pcs/day |

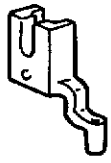
### Square label and sub-label sewing




- Process the OT presser plate so that the sub-label can fit there.



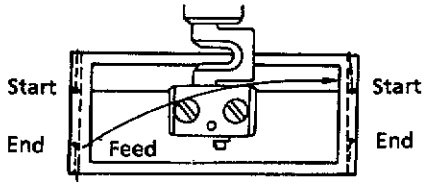
- Using the presser foot C prevents skipped stitches.



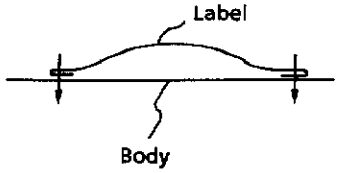
Presser foot C
152637-001

| Cycle time | 15 sec |
|---|---|
| Productivity | About 1,300 pcs/day |

### Vertical double label sewing



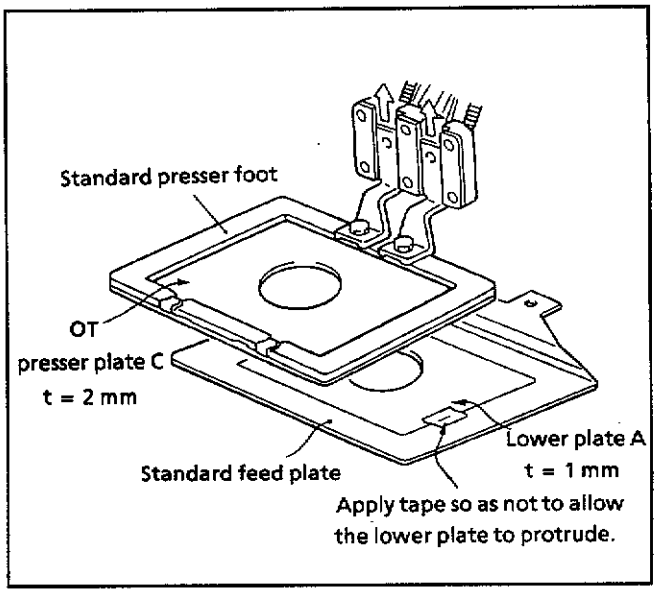

※ Floating label sewing




- After sewing the left side, cut the thread, feed the material and start sewing the right side.
- If there are too many bird's nests in the thread remainings on the reverse side of the material or if thread trimming is intended to be carried out later, the program (999L) that keeps the thread cutter inactive is available.
- To make a floating name sewing for knitted materials, keep pulling the material slightly while sewing.

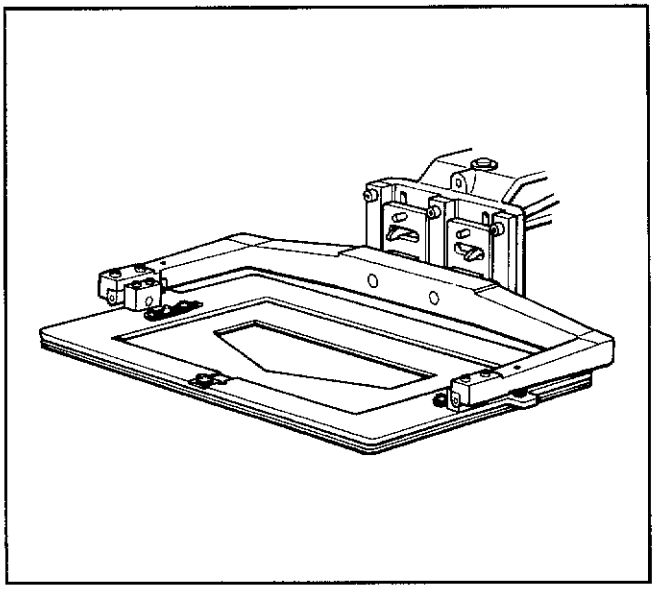
| Cycle time | 12 sec |
|---|---|
| Productivity | About 1,680 pcs/day |

## Sewing procedure



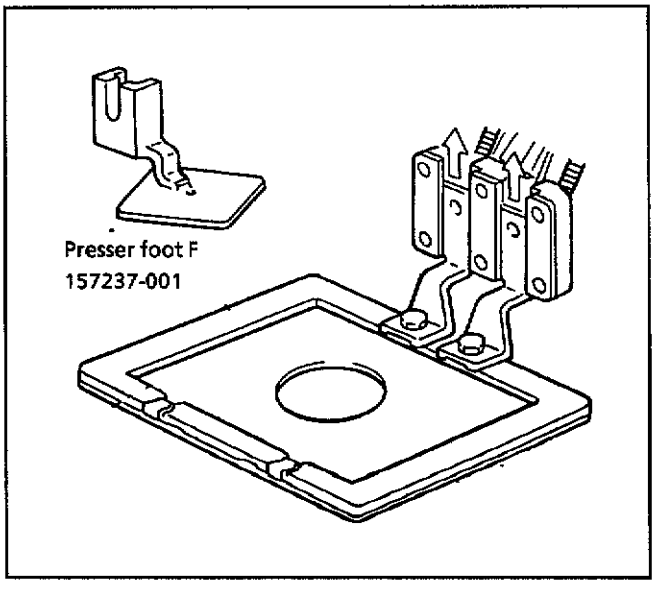

[Machining the OT clamp plate]

1. Process the OT presser plate to the same dimensions as the outside of the emblem to be sewn.
   ※ Use a punch cutter or a thread saw.
2. Make an lower plate with the same dimensions as the feed plate.
   ※ Process the lower plate so that its dimensions are the same as those of the OT presser plate which is to be positioned above the lower plate.



[Programming]

1. Attach presser foot A before programming.
2. If the stitching is programmed so that presser foot A can pass smoothly through the hole of the processed OT presser plate, the seam margin will be about 2 mm.

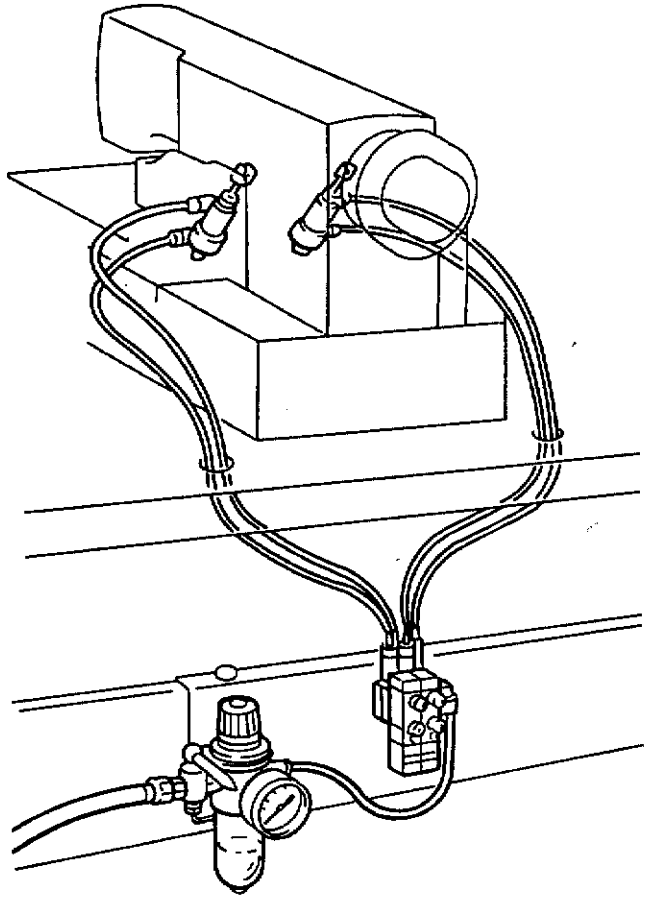
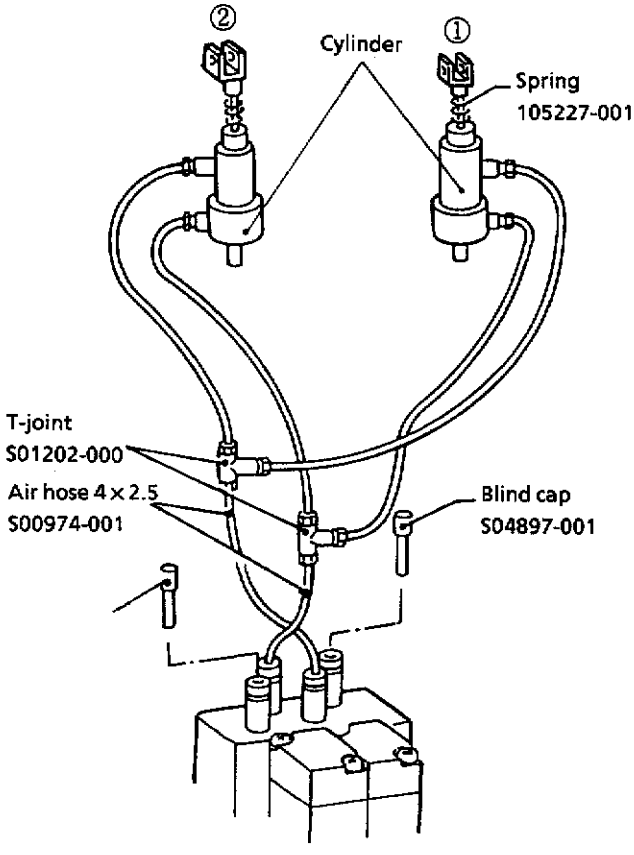



[Sewing]

1. When using the presser foot F, set the intermittent stroke to "0".
2. If presser foot F is used, a slight pressing can be applied while sewing.

## Two-stage positioning presser clamp

- If the emblem has already been pasted to the body, it is advisable to set the clamp in the two-stage positioning press for easier positioning and emblem sewing.
- This can be used for sewing large-sized materials for which the sewing position is hard to determine.

| Standard | Modified |
|---|---|
|  |  |
| | Note: Set the DIP switches Nos. 2 and 4 to the ON position. |

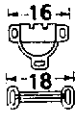
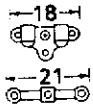
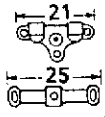
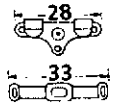
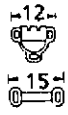
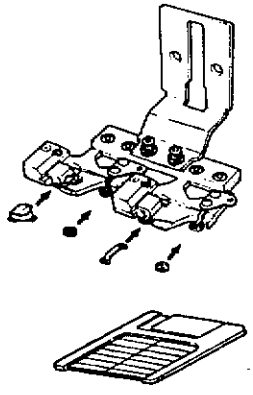
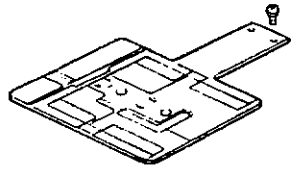
### [Operation Method]

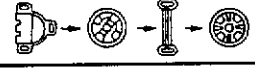
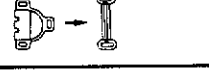
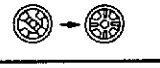
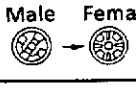
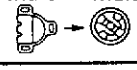
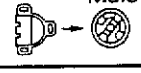
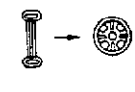
1) If the foot switch pedal is depressed to the first stage, the cylinder air will be released and the clamp will be lowered by the spring pressure.
   ※ The material is not yet pressed at this stage.
2) If the foot switch pedal is depressed to the second stage, air will enter the cylinder and both clamps will firmly press the material.
3) Then, if the foot switch pedal is depressed again, both clamps will be raised.

## BAS-304 and 311

BAS-311-04 is a snap and hook type.
For standard specifications, a M-580K hook and an OMø8.6 snap are used.

(Made by Oishi Kinzoku)

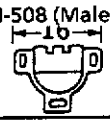
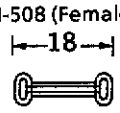
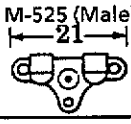
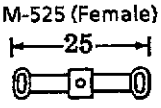
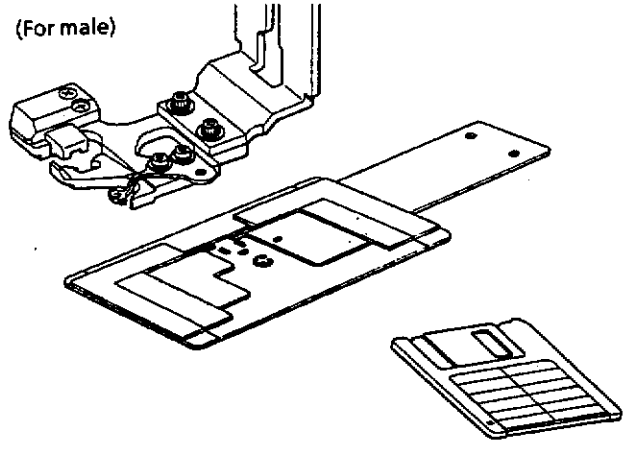
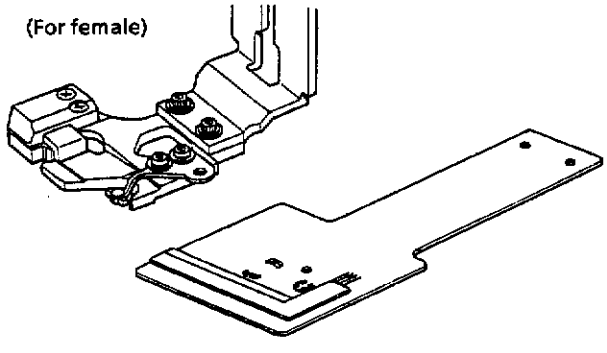
| Parts name | Snap and hook unit | | | | |
|---|---|---|---|---|---|
| | For M-508K | For M-520K | For M-525K | For M-533K | For M-528K |
| Parts code | S10477-001 | S12572-001 | S12573-001 | S13110-001 | S12571-001 |
| Hook size (mm) |   |   |   |   |   |
| Snap size (mm) | (OM ø8.6) | | | | (OM ø7.6) |
| |   | | | | |

| Program No. | Sewing order (Snap: 8.6ø) | Program No. | Sewing order (Snap: 7.6ø) |
|---|---|---|---|
| 1 |   | 6 | |
| 2 |   | 7 |   |
| 3 |   | 8 |   |
| 4 |   | 9 | |
| 5 |   | | |

Note: When changing or modifying the stitching, connect the programming machine provided as standard to the sewing machine.

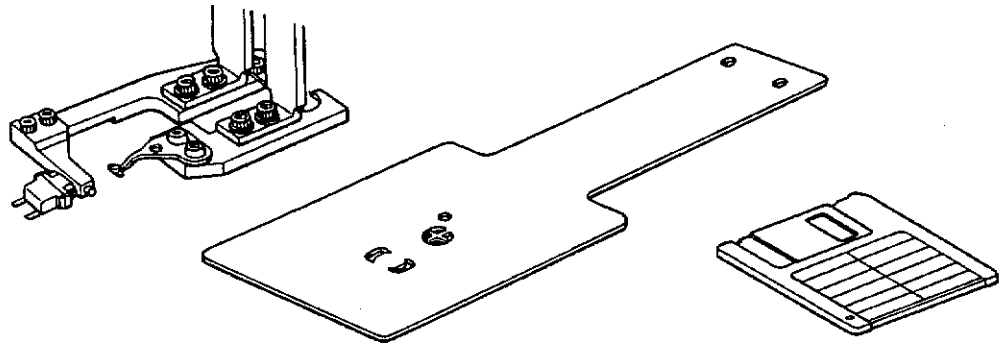
## BAS-304 and 311

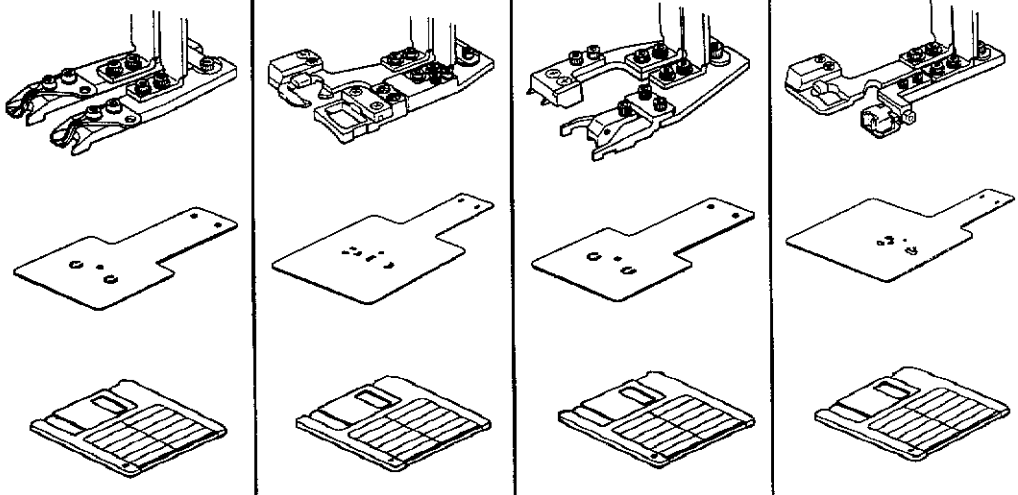
(Made by Oishi Kinzoku)

| Parts name | 310-HS unit | | | |
|---|---|---|---|---|
| Parts code | S18581-001 | S18590-001 | S18598-001 | S18606-001 |
| Hook size (mm) | M-508 (Male)  | M-508 (Female)  | M-525 (Male)  | M-525 (Female)  |
| Snap size (mm) | OMø7.6, ø8.6 (Male) | OMø7.6, ø8.6 (Female) | OMø7.6, ø8.6 (Male) | OMø7.6, ø8.6 (Female) |
| Shape | (For male)  (For female)  | | | |

## BAS-304 and 311

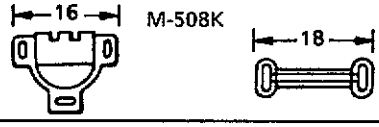
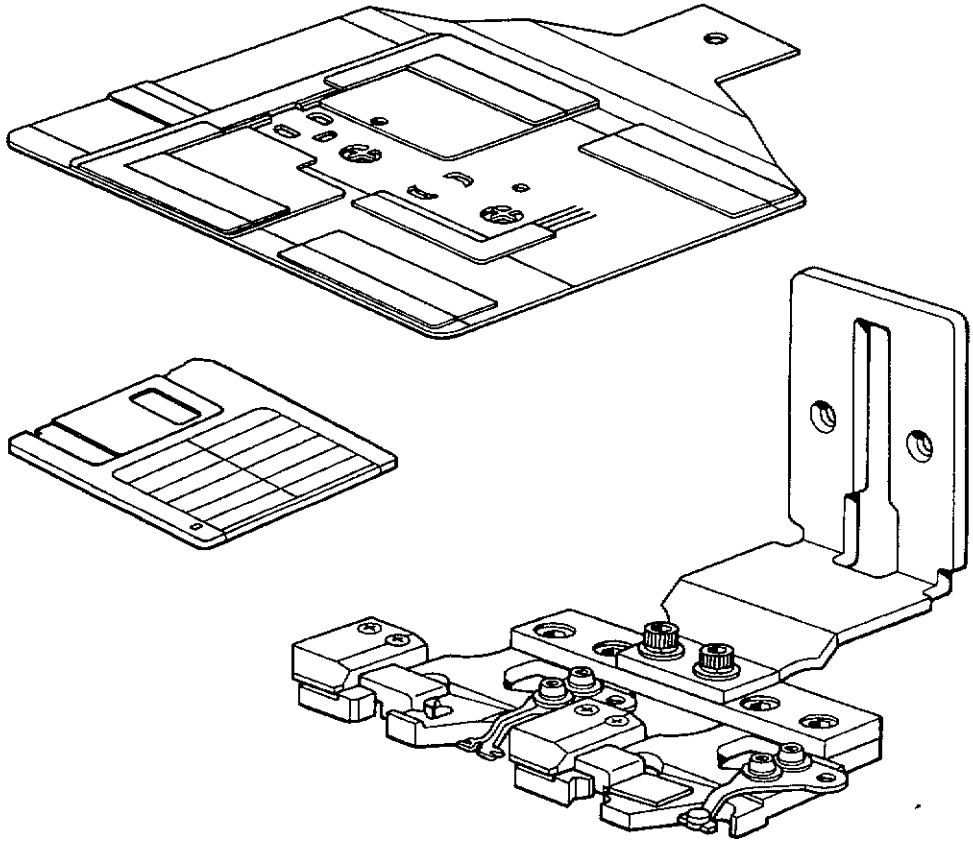
(Made by Oishi Kinzoku)

| Parts name | 310-AS unit | |
|---|---|---|
| Parts code | S18614-001 | S18621-001 |
| Hook size (mm) | M-508<br>18 | M-525<br>25 |
| Snap size (mm) | OMø7.6, ø8.6 (Female) | |
| Shape |  | |

| Parts name | 310-SW unit | 310-HE unit | | |
|---|---|---|---|---|
| Parts code | S21553-001 | S21559-001 | S21565-001 | S21591-001 |
| Hook size (mm) | ——— | M-510<br>14 12 | M-10<br>5.6 6.3 | M-521<br>9.5 8 |
| Snap size (mm) | OMø7.6, ø8.6 | ——— | ——— | ——— |
| Shape |  | | | |

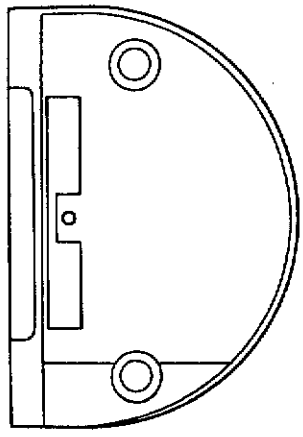
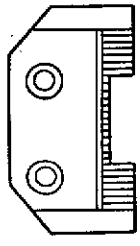
## BAS-311 and 326

(Made by Oishi Kinzoku)

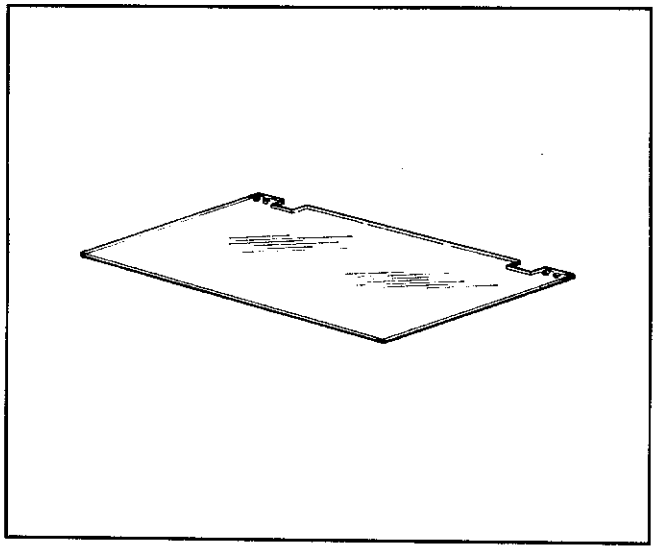
| Parts name | 326-SH unit |
|---|---|
| Parts code | S09645-001 |
| Hook size (mm) |   |
| Snap size (mm) | OMø7.6, ø8.6 (Female) |
| Shape |  |

## Reference

Belt part hook sewing attachments for plain sewer with automatic thread trimmer

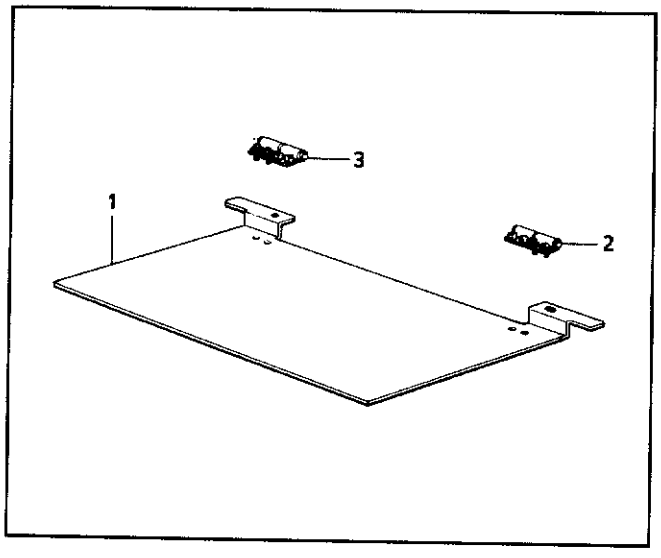
| Parts name | Parts code | Shape |
|---|---|---|
| Needle plate H | S13099-001 |  |
| Feed dog H | S13100-001 |  |

## Making the Clamp

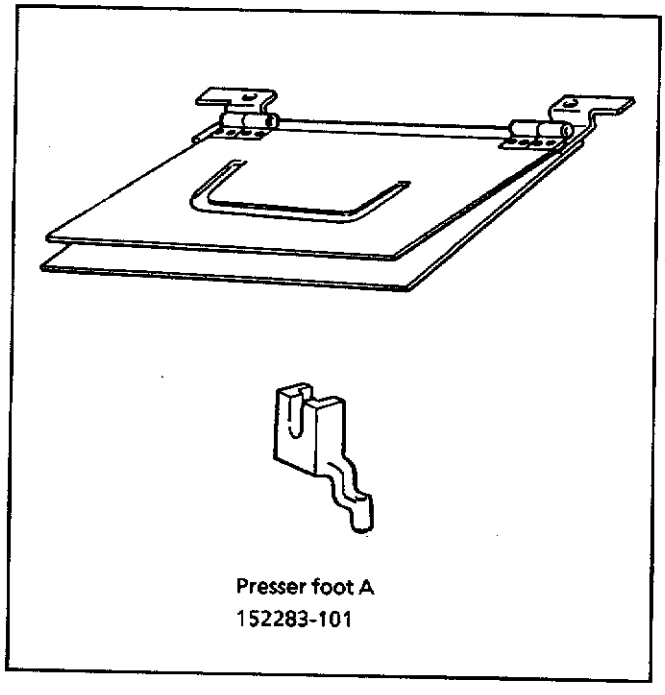


1) When making the clamp, use the parts provided as cassette-type optional parts.

- Cassette plate U-A (t = 1)
  S02968-001
- Cassette plate U-B (t = 2)
  S02971-001




1 Cassette plate D-A
S02966-001
2 Butterfly program (right)
152632-001
3 Butterfly program (left)
152633-001

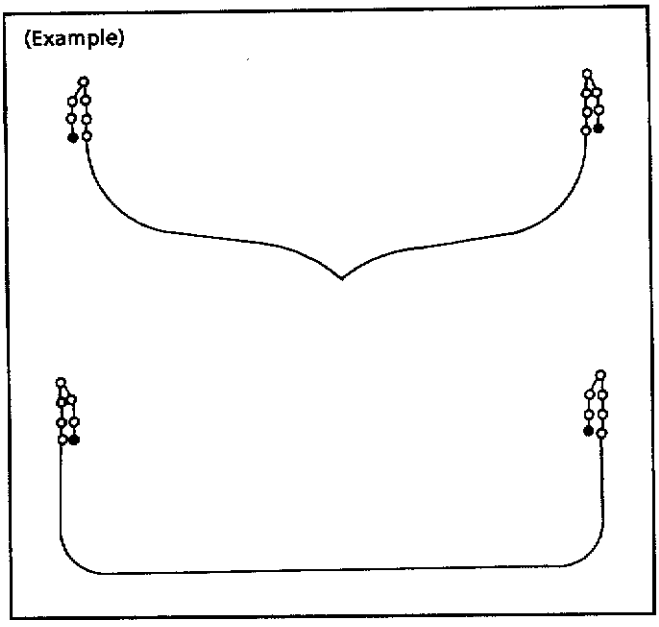


Presser foot A
152283-101

2) When using presser foot A for sewing, because the outside diameter of presser foot A is 4mm, process the width of the cassette plate groove to be 5mm.
NOTE: Use a punch cutter or a thread saw for processing.

3) If the material being sewn slips during sewing, sewing can be carried out more easily if sandpaper or thin rubber is stuck to the lower surface of the cassette plate U and the upper surface of the cassette plate D.

## Programming Procedure

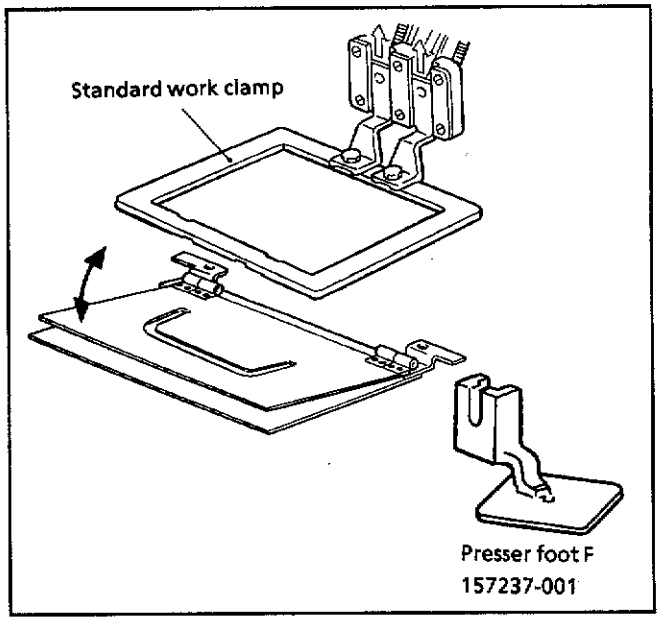



1) Set a stitch diagram such as the ones shown at left between the cassette plates U and D.
   NOTE: Secure the stitch diagram with tape, etc., so that it does not move.

2) Use the feed key on the programmer machine to program so that the end of the needle follows the stitch line.
   At this time, programming will be easier if the line key ( [LI]) is used along straight lines and the smoothing function is used along curved lines.
   NOTE: For the BAS-325, the trace function can be used for programming.

3) After programming, attach the presser foot A, and give a test run to the sewing machine to make sure that presser foot A passes smoothly along the center of the cassette plate groove.
   If any interference is found, adjust the cassette plate or the program to clear the interference.

## Sewing



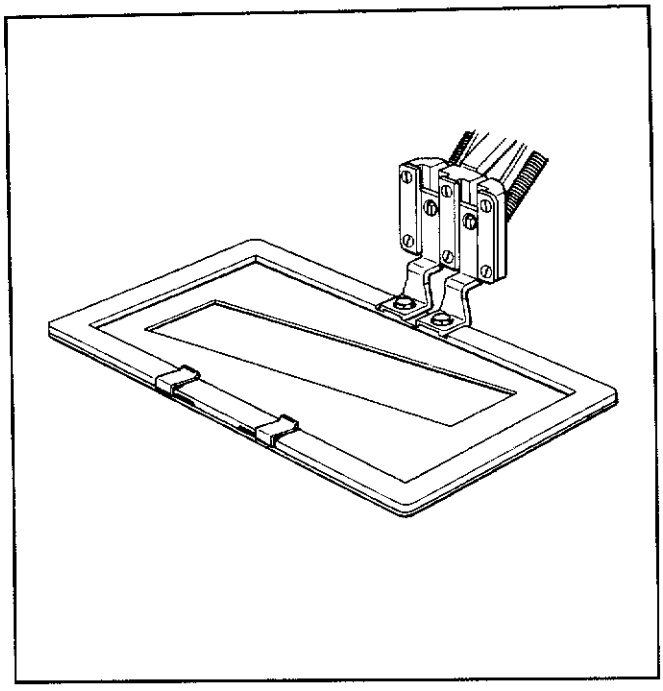

1) When sewing, press the cassette plate from the top with the standard work clamp.

2) When using the presser foot F, set the intermittent presser stroke at "0", and keep pressing the cassette plate during sewing.

# 5. Breast Pocket Trim Sewing

Before programming, make sure that the length, width and angle of the breast pocket have been finished to the specified dimensions.

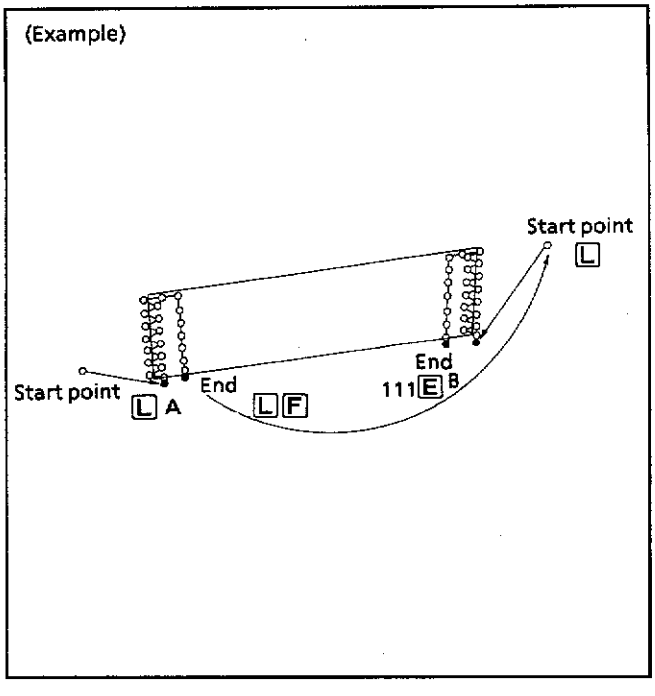
## If There Are No Dimension Differences



[Work Clamp]

1) Process the OT presser plate to match the length, width and angle of the breast pocket.

2) If the lower surface of the OT presser plate is positioned, sewing can be carried out easily.

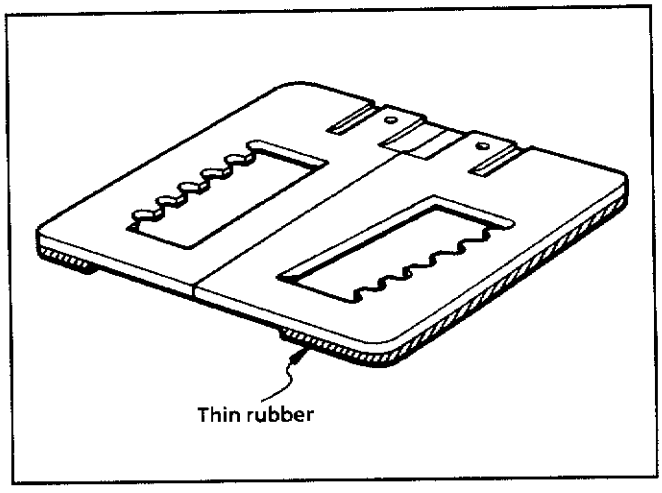



[Programming]

If there is no difference in the breast pocket dimensions (size) on sides A and B, both sides can be sewn in a single cycle.

To program this single cycle sequence, program a shunt feed (F) between points A and B.

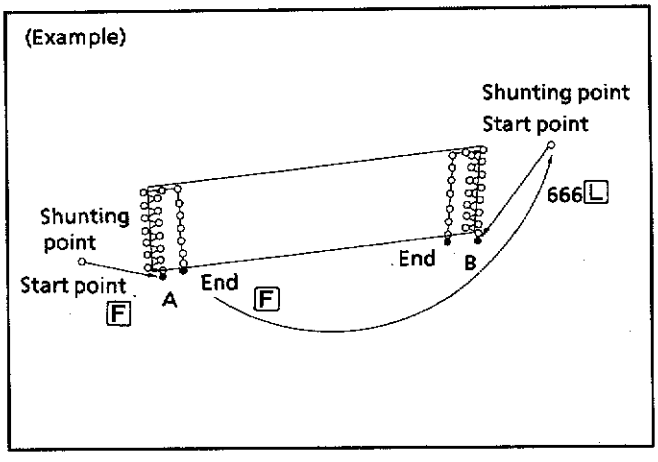
## If There Are Dimension Differences




### [Work Clamp]

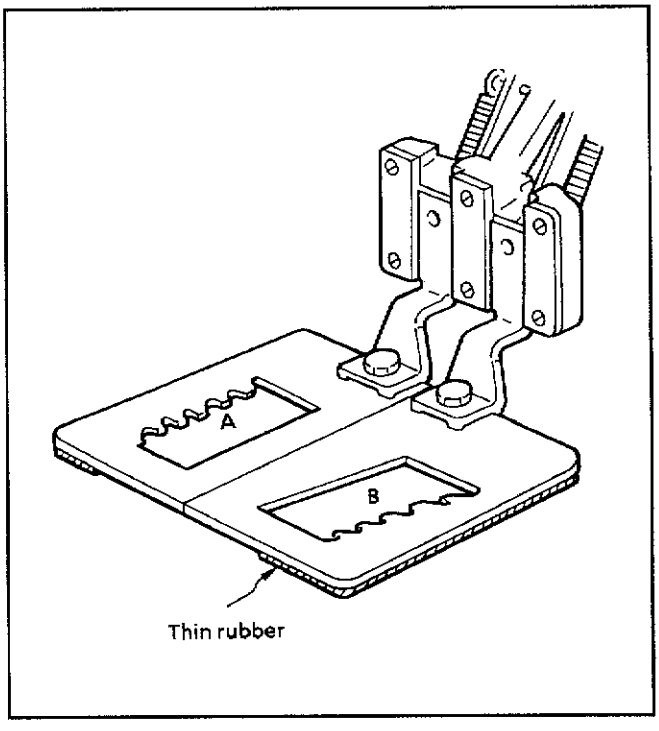
1) Process the work clamp plate to match the dimensions of the breast pocket.

2) If thin rubber or sand paper is stuck to the lower surface of the work clamp blank, then the material will be firmly clamped and sewing can be carried out easily.



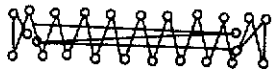
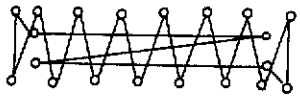
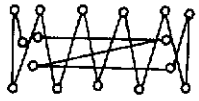

### [Programming]

Use a split program. Enter a shunt feed (F) from the final stitch position in seam A to the initial stitch position in seam B, and then enter 666 L at that start point.




### [Sewing]

1) This program enables the presser foot to be lifted at B to reconfirm the position of the material.
   The sewing procedure is sew A, move to the shunting point at B, and stop the sewing machine. Raise the clamp to check the material position and then restart the machine. Seam B will be sewn, and after the machine returns to the shunting point at A, it will stop and the clamp will be raised.
2) When setting the material, adjust the DIP switch located on the circuit board or modify the air tube so that the clamp can be provided with two-stage positioning.
   ※ Two-stage positioning unit
   - If the clamp foot switch (SW) is pressed to the first stage, air will be released from the clamp cylinder, and the clamp will be lowered by the spring force. Because the clamp does not press the material at this time (floating by 1 to 2 mm), the material can be moved freely and set in the specified position.
   - If the foot switch is pressed to the second stage, air enters the cylinder, and the clamp will press the material firmly. (Refer to p. 6)

| | | | |
|---|---|---|---|
| |  |  |  |
| Number of stitches: 42<br>Stitch size: 7 - 16 × 1 - 2 | Number of stitches: 35<br>Stitch size: 7 - 20 × 1.5 - 3 | Number of stitches: 28<br>Stitch size: 6.5 - 16 × 1 - 2 | Number of stitches: 21<br>Stitch size: 3 - 7 × 1 - 2 |

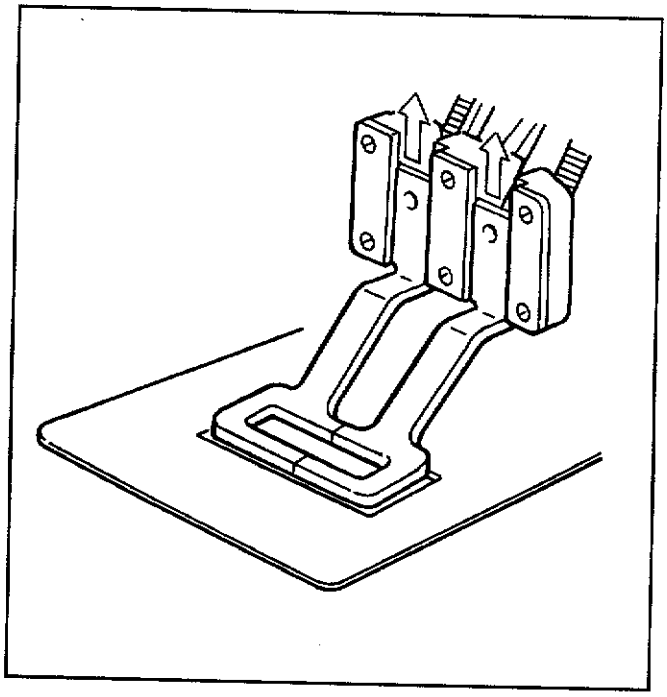
· The bar tacking as shown above can be programmed and sewn freely.

## Programming Procedure

Because the number of cross stitches is small, it is advisable to use the enlargement function to make programming easier.

1. Enlarge the stitching pattern by five or ten times the original size.
2. After the [P] key is pressed, "905" will be displayed in the STEP space for 5 times enlargement, and "910" will be displayed for 10 times enlargement.
3. Press the [M] key.
4. Use the jog key to set the program for each stitch.
5. After programming the final stitch, key in "111 [E]".
6. Save the program on the floppy disk.
7. Although the stitch pattern was enlarged, the program will be written in the original size on the floppy disk.

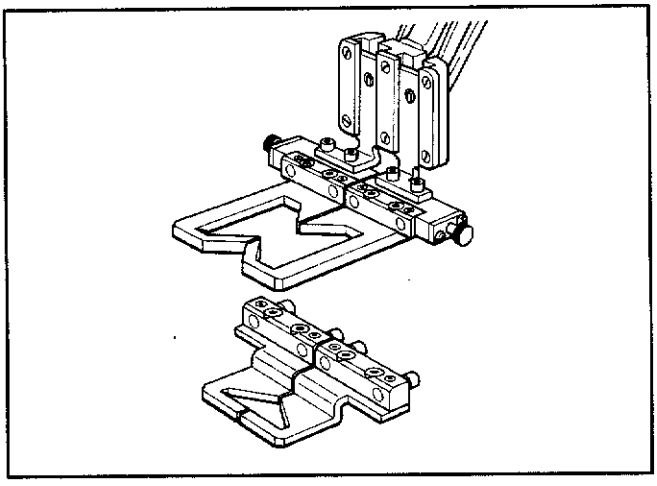
## Work clamp (Option)



| | | |
|---|---|---|
| · OT presser foot D assembly | S14846-001 | 2 |
| · Presser foot SL | S14255-001 | 1 |
| · Presser foot SR | S14254-001 | 1 |
| · OT feed plate bracket assembly | S14841-001 | 1 |
| · OT feed plate | S14252-001 | 1 |
| · Screw | 149168-001 | 2 |

## One-touch Work Clamp (Option)

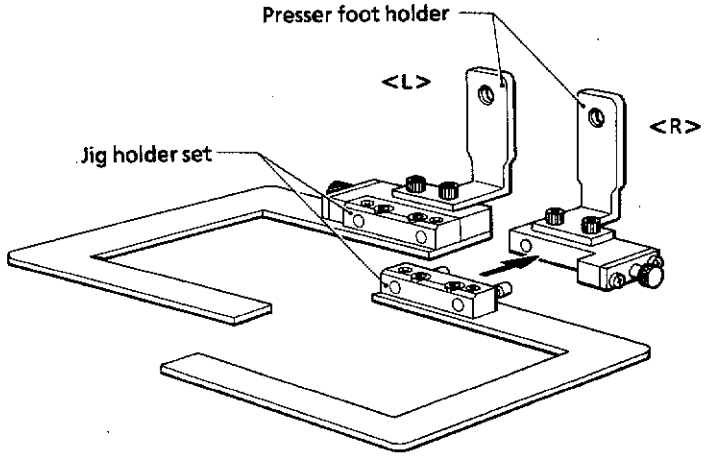
A one-touch work clamp (option) is provided to make conversion and positioning of the work clamp blank easier.



※ For BAS-311 ..... S20279-001
※ For BAS-326 ..... S20813-001

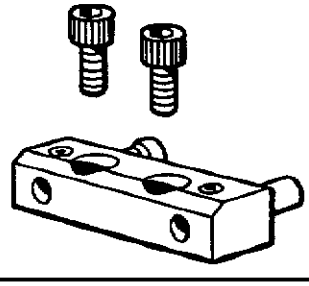
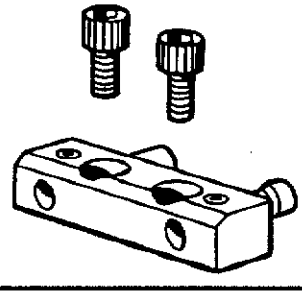
BAS-311 ..... Max. sewing thickness is 5mm (sewing area at this time is 100 x 60mm).
BAS-326 ..... Max. sewing thickness is 5.5mm (sewing area at this time is 150 x 100mm).
Note: If the sewing thickness is greater than the maximum, the range of use of the thread wiper will be limited.

Items included as a set:
* Presser foot holder L, R .. 1 each
* Jig holder set L, R ..... 2 each



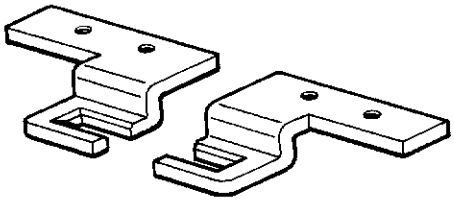
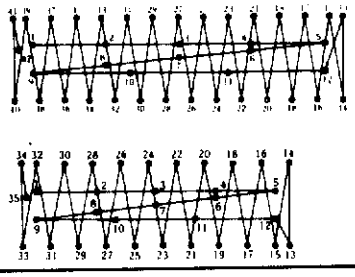
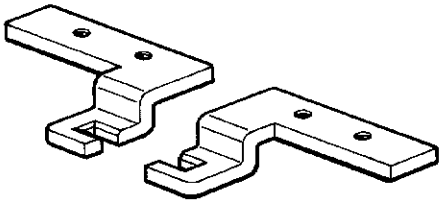
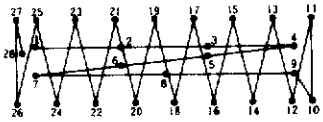
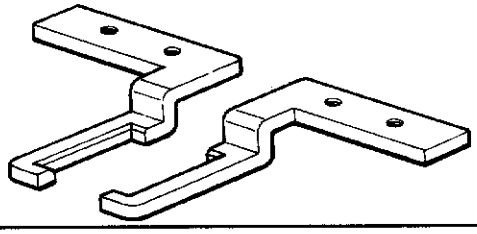
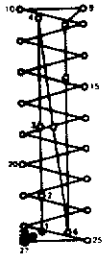
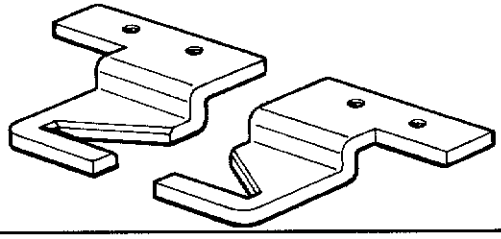
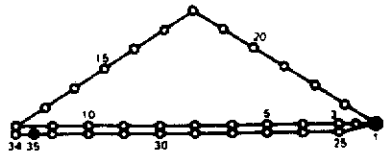
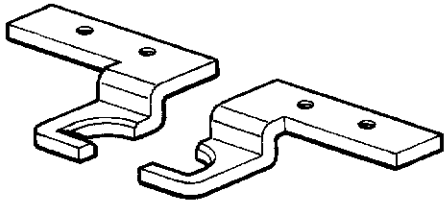
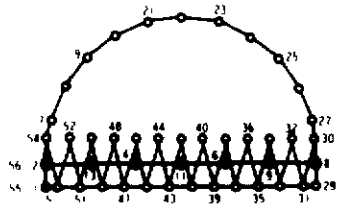
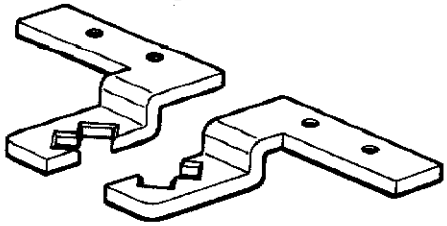
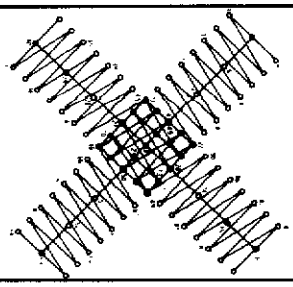

Screw holder set

<For both BAS-311 and BAS-326>

| Parts name | Jig holder L set | Jig holder R set |
|---|---|---|
| Parts code | S20822-001 | S20823-001 |
| Shape |  |  |

## One-touch Work Clamp (Option)

A work clamp for all types of bar tacking can be attached as the one-touch work clamp for the BAS-311.

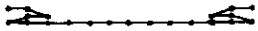
| Work Clamp | Stitch pattern (reference) | Parts code |
|---|---|---|
| [For large bar tacking] (L) (R)  |  | (R) S23818-001<br>(L) S23819-001<br><br>Feed plate:<br>S23820-001 |
| [For small bar tacking] (L) (R)  |  | (R) S23821-001<br>(L) S23822-001<br><br>Feed plate:<br>S23823-001 |
| [For vertical bar tacking] (L) (R)  |  | (R) S23827-001<br>(L) S23828-001<br><br>Feed plate:<br>S23829-001 |
| [For triangular bar tacking] (L) (R)  |  | (R) S23833-001<br>(L) S23834-001<br><br>Feed plate:<br>S23835-001 |
| [For half-moon bar tacking] (L) (R)  |  | (R) S23824-001<br>(L) S23825-001<br><br>Feed plate:<br>S23826-001 |
| [For cross bar tacking] (L) (R)  |  | (R) S23830-001<br>(L) S23831-001<br><br>Feed plate:<br>S23832-001 |

## Other Stitching Patterns

Butterfly pattern stitch

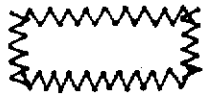
Number of stitches: 84/4
Stitch size: 5×5

Straight label stitch



Number of stitches: 84/4
Stitch size: 20 - 25×0

Trapezoidal zigzag stitch



Number of stitches: 70
Stitch size: 16×6

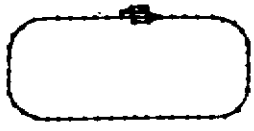
Half-moon tackstitch

Number of stitches: 56
Stitch size: 12×7

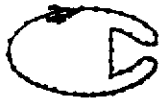
Label attaching stitch

Number of stitches: 70
Stitch size: 50×12

Label attaching stitch



Number of stitches: 84
Stitch size: 86×28

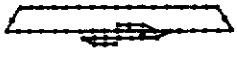


Number of stitches: 63
Stitch size: 31×20.5

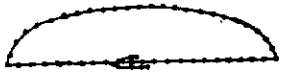
Trapezoidal pattern stitch

Number of stitches: 98
Stitch size: 50 - 60×20 - 30

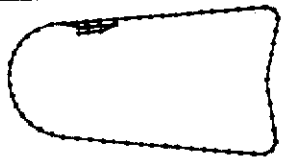
Shoehorn stitch



Number of stitches: 56
Stitch size: 60×3



Number of stitches: 35
Stitch size: 48×10



Number of stitches: 98
Stitch size: 92.5×55.5

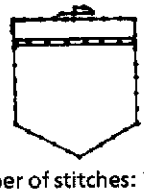
Pattern stitch

Number of stitches: 112
Stitch size: 50×54

Front hok attaching stitch

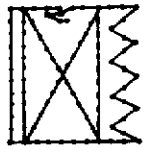
Number of stitches: 112/2
Stitch size: 20.5×15.9

Facing hem stitch



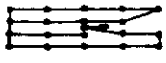
Number of stitches: 70
Stitch size: 20×29

Safety belt stitch

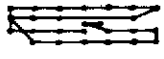


Number of stitches: 112
Stitch size: 35.1×40.3

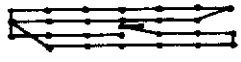
Hand loop stitch



Number of stitches: 42/2
Stitch size: 6 - 14×



Number of stitches: 28
Stitch size: 6 - 14×



Number of stitches: 28
Stitch size: 14 - 25×

Number of stitches: 56
Stitch size: 45×21

Button attaching stitch

Number of stitches: 9 or 18
Stitch size: 2.5 - 6.5×0 - 6.5

Number of stitches: 9 or 18
Stitch size: 2.5 - 6.5×0 - 6.5

Number of stitches: 9 or 18
Stitch size: 2.5 - 6.5×0 - 6.5

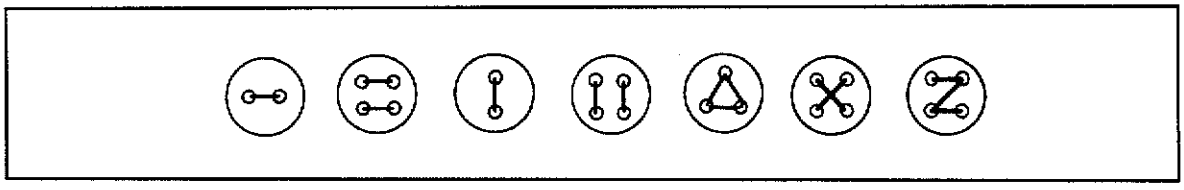
Number of stitches: 18
Stitch size: 2.7×2.7

If a three-hole button clamp and a special-purpose PROM are attached to the BAS-304 or BAS-311, they can be used as lock stitch button sewers.

## Features

1. Stitching can be quickly changed, requiring no trouble to replace the feed cam.
2. Sewing of three-hole buttons and various button sewing as shown in the below figure can be achieved.
3. Up to ten sewing patterns can be stored in the memory.
4. If the button clamp is removed, the machines can be used as electronic sewing machines.

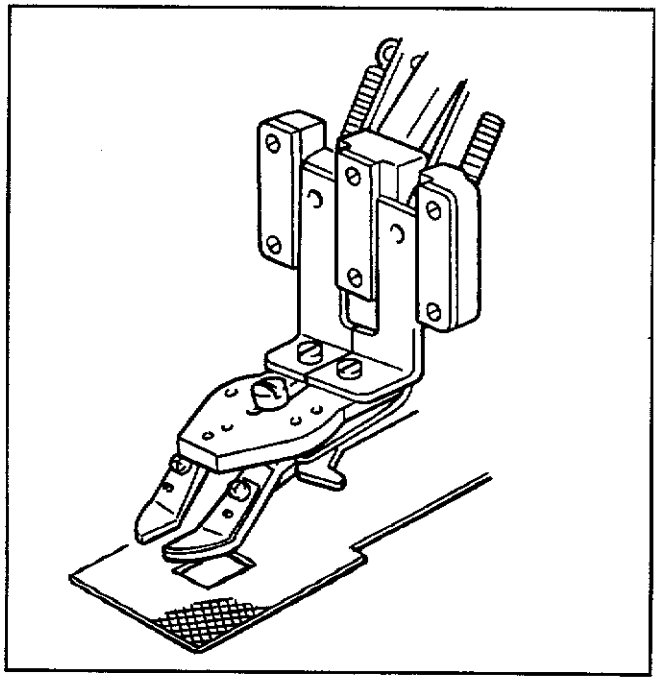
## Sewing Patterns



## Sewing Preparation

Attach the special-purpose PROM, and turn the DIP switch No. 5 located on the circuit board to ON. The button clamp and the needle will not touch each other because the machine origin point will come be at the front.
Before turning on the power, be sure to move the needle to the button position.

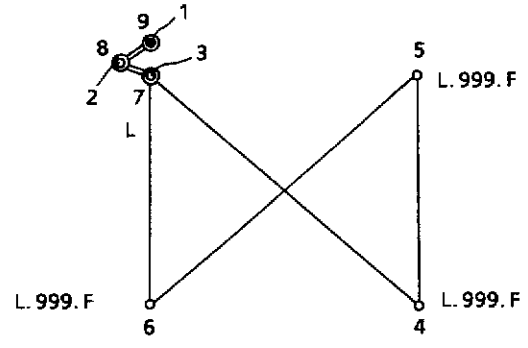
## Replacement Parts



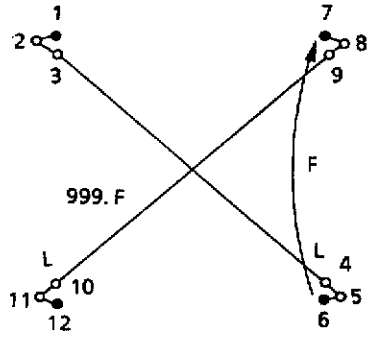
| | | | |
|---|---|---|---|
| 1. | BU presser foot UL | S14849-001 | 1 |
| 2. | BU presser foot UR | S14848-001 | 1 |
| 3. | Presser foot D assembly | S14846-001 | 2 |
| 4. | OT feed plate bracket assembly | S14841-001 | 1 |
| 5. | OT feed plate | S14069-001 | 1 |
| 6. | Button float spring | 153871-001 | 1 |
| 7. | Float spring presser plate | S14073-001 | 1 |
| 8. | PROM for button sewing (304) | Special order | 1 |
| | PROM for button sewing (311) | S15167-001 | 1 |
| 9. | Screw | 149168-001 | 2 |
| 10. | Screw | 062670-512 | 2 |
| 11. | Washer | 102707-002 | 2 |
| 12. | Bolt 4.76 | 117363-001 | 2 |
| 13. | Washer 4.76 | 025710-232 | 2 |
| 14. | Button clamp | S03463-001 | 1 |

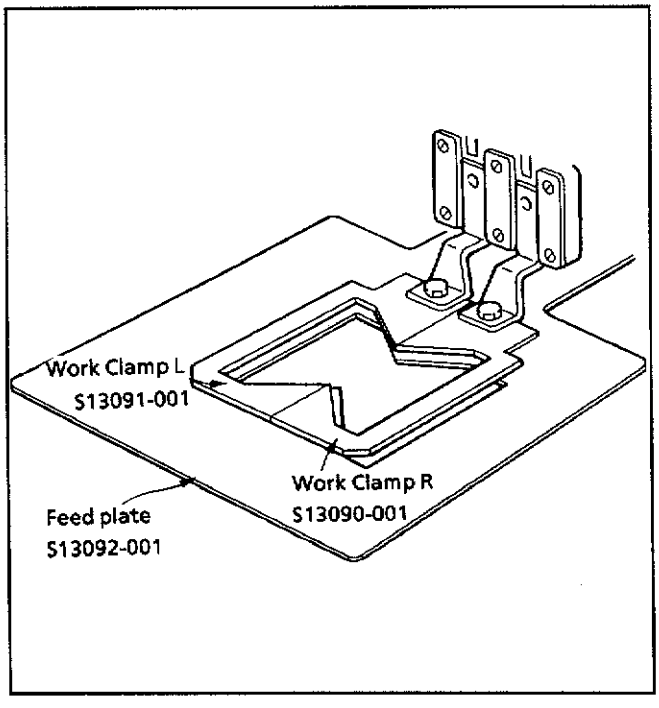
## Programming Procedure

(Example 1)



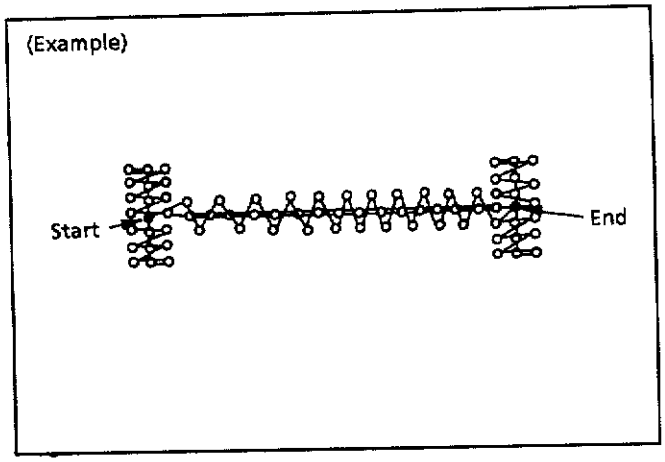

(Example 2)



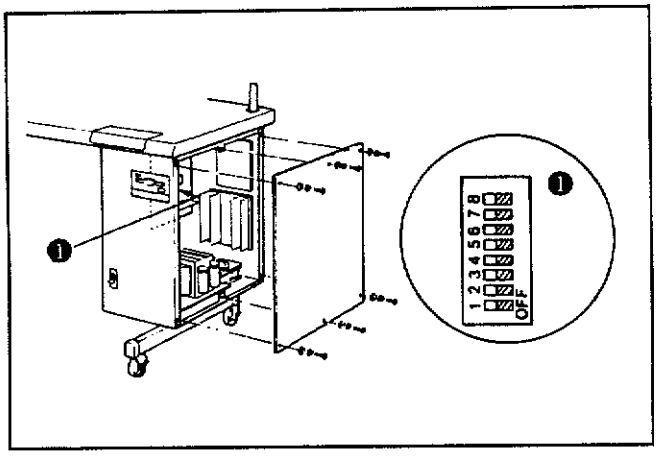

1. Press the [P] key. (The clamp will move to the machine origin point.)
2. Use the jog key to move the clamp to the sewing start position.
3. Program the first stitch by pressing the [L] key.
4. In the same way, program the second and third stitches by pressing the [L] key. Note, however, that movement should be made for two or more pulses.
5. After "999" is displayed in the third stitch position, press the [F] key, and move the needle to the fourth stitch by pressing the jog key.
6. Program by pressing the [L] key.
7. In the same way, program the movement from the fourth stitch to the fifth stitch, from the fifth stitch to the sixth stitch, and from the sixth stitch to the seventh stitch.
8. Program the eight and ninth stitches by using the jog key and the [L] key.
9. After programming the ninth stitch, key in "111 [E]".
10. Then, the clamp will return to the sewing start position.
11. Press the READ/WRITE switch to store the program in the floppy disk.
12. Press the [P] key to clear the display of the programming machine.

## Programming procedure

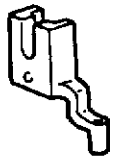



1. Prepare a stitching pattern, and program for each stitch.
   For the linear part, press the [L] key for easier programming.
2. The seam pitch for the linear part and the zigzag part covered by cross stitching should preferably be 3.0 to 4.0 mm.

## Sewing Preparation



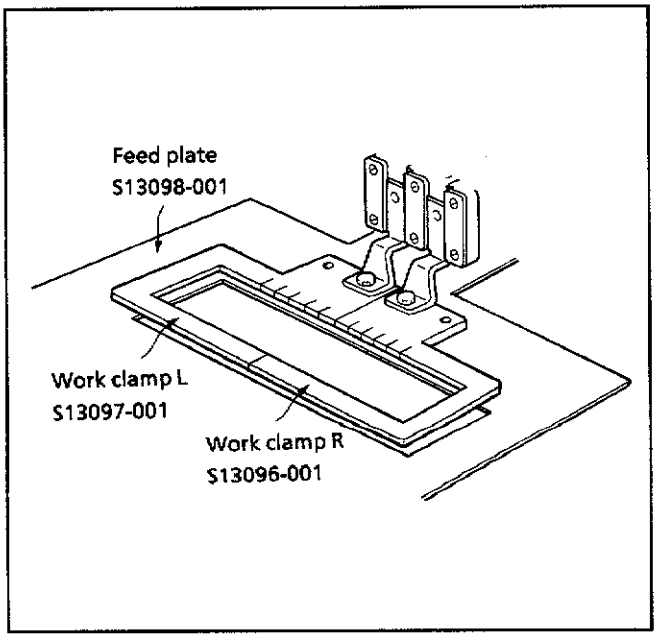

1. Use the presser foot A.



Presser foot A
152283-101

2. Turn the DIP switch No. 2 located on the circuit board to ON, and the clamp will operate in two stages for easier working.

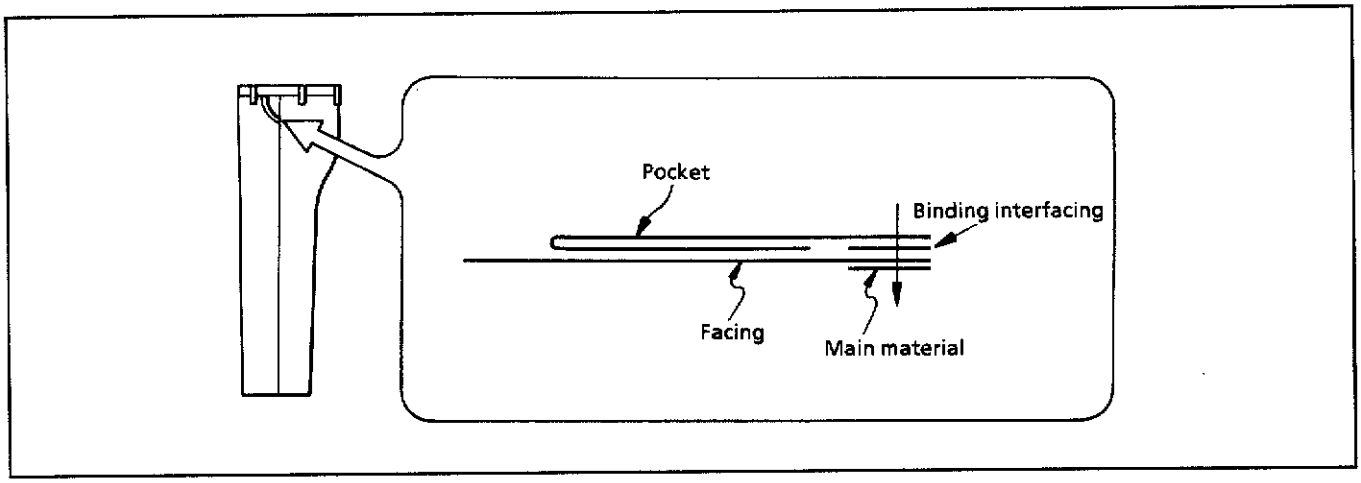
## Work Clamp




- Feed plate ..... S13098-001
- Work Clamp L .. S13097-001
- Work Clamp R .. S13096-001

# 10. Seaming for Slacks Pocket Brims BAS-326

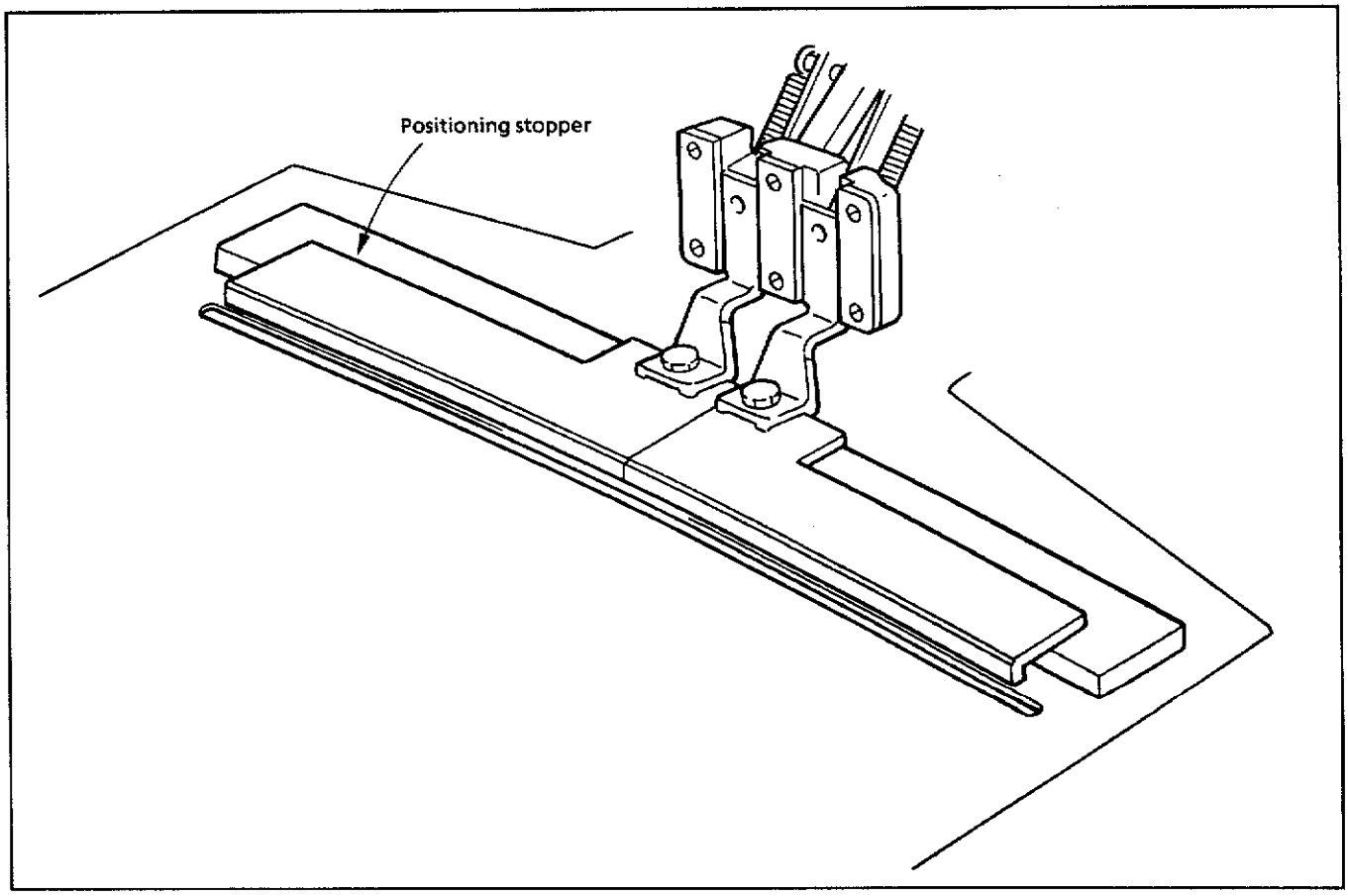
When sewing seams for slacks pocket brims, using the BAS-326 and BAS-373 (width 180mm x length 100mm) can provide symmetric curved lines.




## Programming procedure

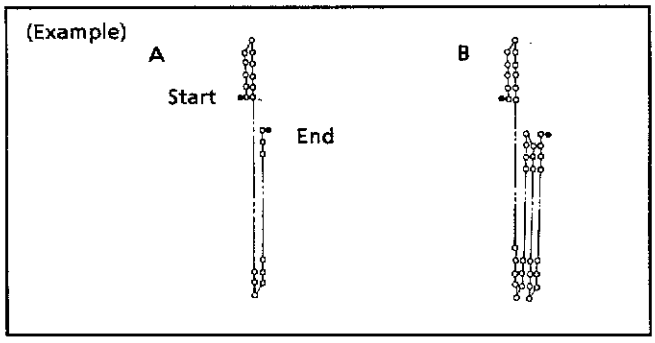
Program curved lines easily by using the smoothing program.
If the split program is used, the left start and the right start will be made alternately, improving sewing efficiency.

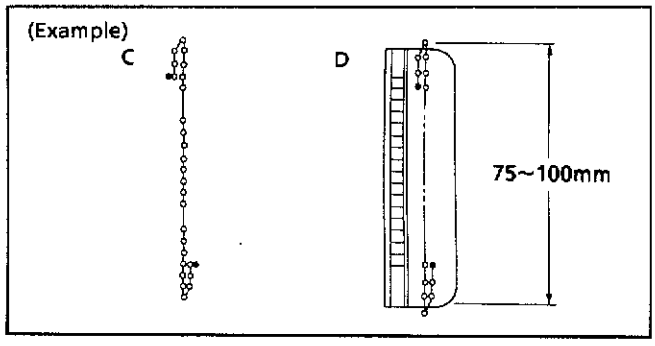
## Example of Using the Work Clamp



The BAS-311 can store up to 10 patterns for darts sewing, and a wide range of darts lengths from 75-100mm can also be used.

## Programming procedure




1. Patterns A and B are programmed by specifying the seam pitch and then pressing the [LI] key.
2. Pattern C is provided with a part with wide seam pitch (6 to 7 mm) for passing the wire hook.
3. For pattern D, the program can be set so that lap sewing at both ends for sewing the curtain height adjuster plastic plate is possible. This changes the machine speed to low speed during lap sewing and protects the needle from breakage.

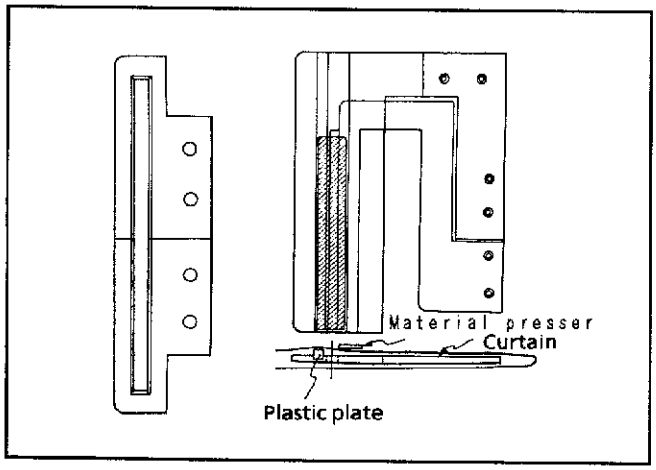
## Applicable sewing machine

- Use a air specifications type with strong pressing pressure because the materials to be sewed vary from thick materials to thin lace.
- A 100V compressor can also be provided.
- The BAS-311 is of horizontal head specifications.

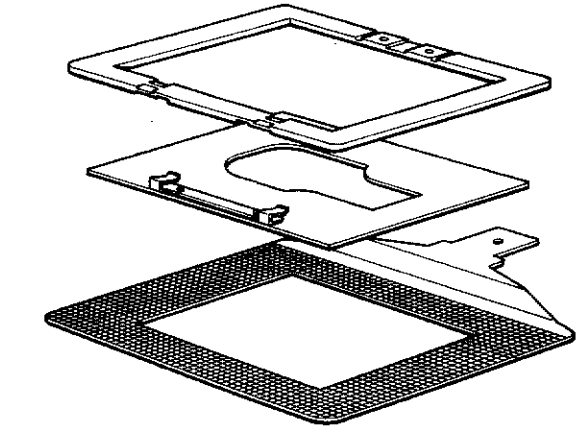
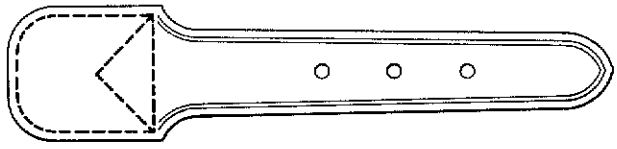
## Sewing Preparation

- Set the intermittent stroke at 7 mm.
- Use the presser foot A (152283-101).

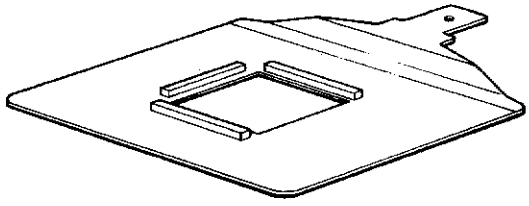
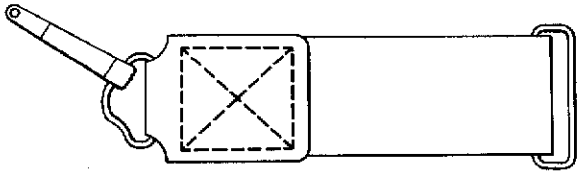
## Example of Using the Work Clamp



## 12. Bag Handle Sewing BAS-326

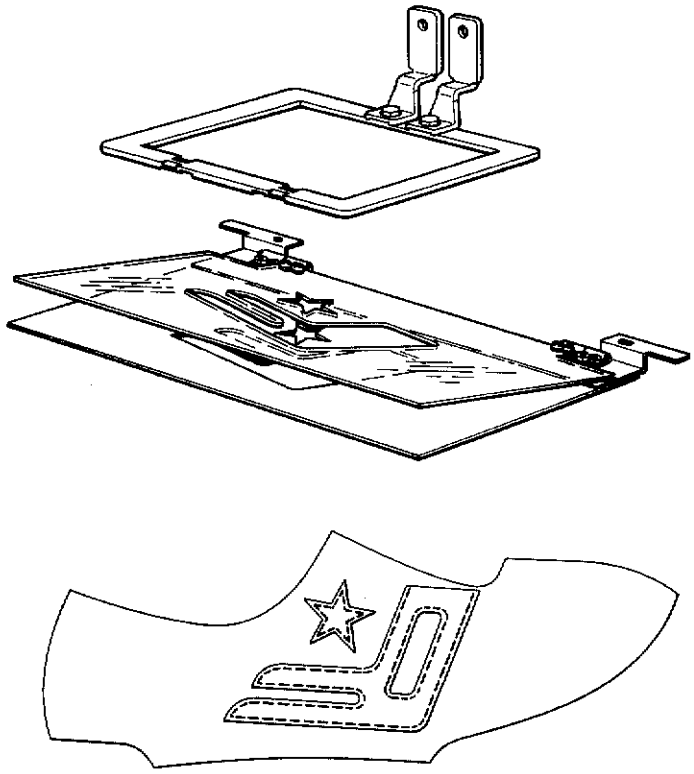
| Work clamp and sewing pattern | |
|---|---|
|   | · Sewing speed: 1,000spm<br>· Thread:<br>Nylon upper thread #20<br>lower thread #30<br>· Needle: DP x 5 #21<br>· Programming time: 10 min.<br>· Cycle time: 11 sec.<br>· Daily production output:<br>2,618 pieces |

## 13. Shoulder Bag Strap Sewing BAS-326

| Work clamp and sewing pattern | |
|---|---|
|   | · Sewing speed: 1,500spm<br>· Thread:<br>Tetron upper thread #20<br>lower thread #30<br>· Needle: DP x 5 #21<br>· Programming time: 10 min.<br>· Cycle time: 17 sec.<br>· Daily production output:<br>1,649 pieces |

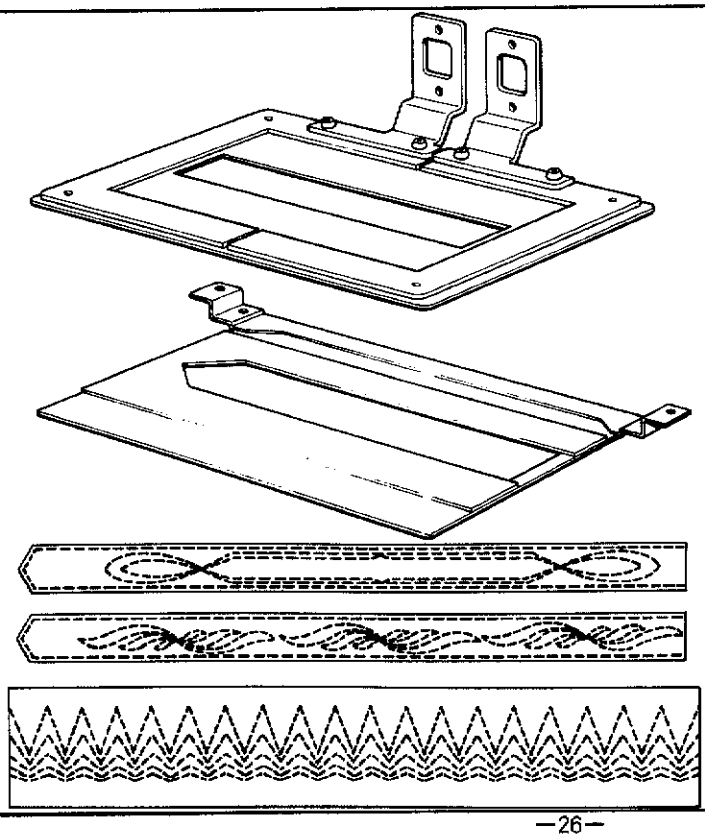
## 14. Sports Shoes Parts Sewing

BAS-340

| Work clamp and sewing pattern | |
|---|---|
|  | · Sewing speed: 1,250spm<br>· Thread:<br>Tetron upper thread #30<br>lower thread #50<br>· Needle: 134KKD #100<br>· Programming time: 20 min.<br>· Cycle time: 32 sec.<br>· Daily production output:<br>900 pieces |

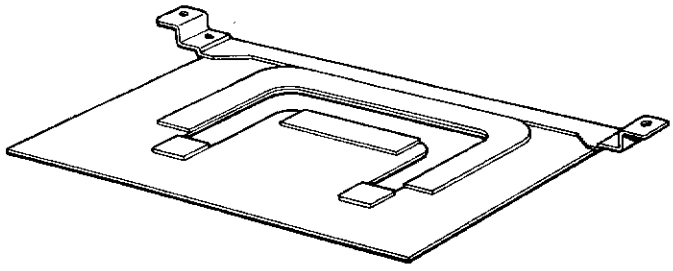
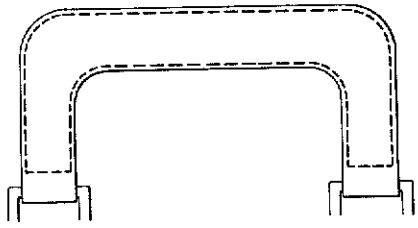
## 15. Belt Decoration Sewing

BAS-340

| Work clamp and sewing pattern | |
|---|---|
|  | · Sewing speed: 800spm<br>· Thread:<br>Nylon upper thread #20<br>lower thread #30<br>· Needle: DP x 17 #21<br>· Programming time: 20 min.<br>· Cycle time: 26 sec.<br>· Daily production output:<br>1,000 pieces |

# 16. Briefcase Handle Sewing

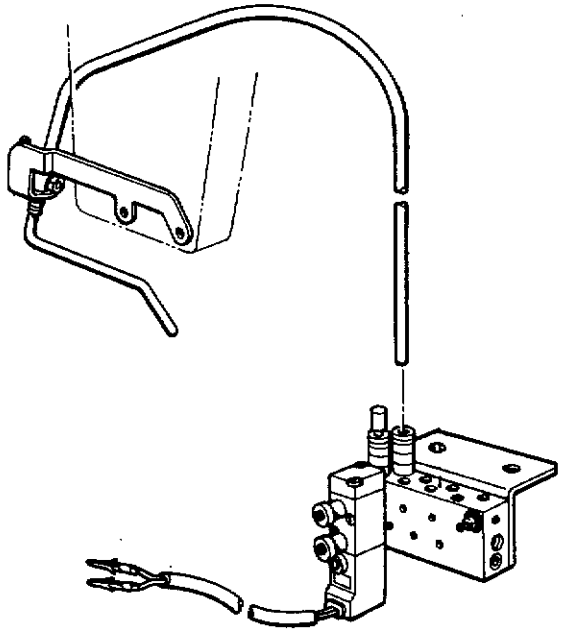
BAS-340

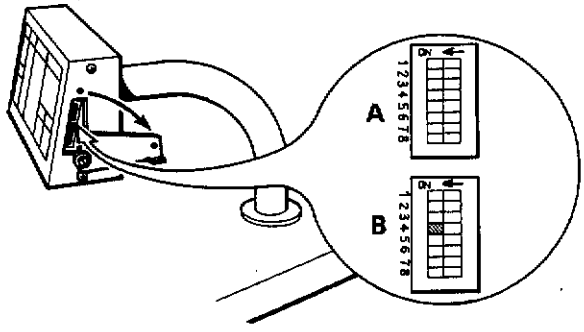
| Work clamp and sewing pattern | |
|---|---|
|   | · Sewing speed: 1,500spm<br>· Thread:<br>Tetron upper thread #20<br>lower thread #30<br>· Needle: DP×5 #8 - #21<br>· Material: Cushion<br>· Clamp method: Cassette type<br>· Presser foot: A-F<br>· Cycle time: 14 sec.<br>· Daily production output:<br>2,058 pieces (514 sets) |

# Optional Parts

## BAS-340

[Needle cooler assembly] S21110-009



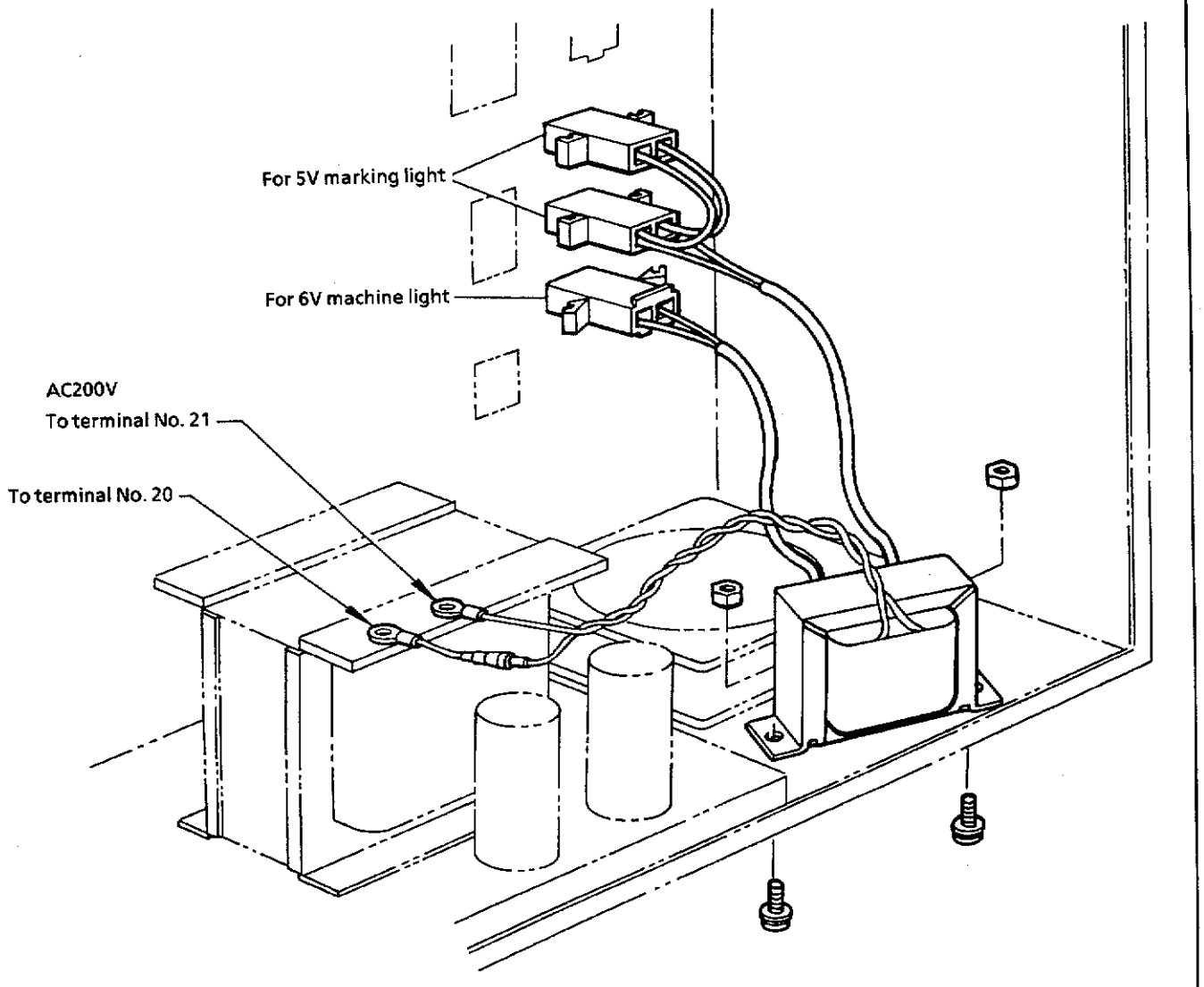



※ When the needle cooler assembly is attached, set the DIP switch B-4 to ON as shown above.

# Optional Parts

## BAS-311·326

[Light transformer assembly] S18465-000




※ Connect the following parts to the other ends of the respective connectors.

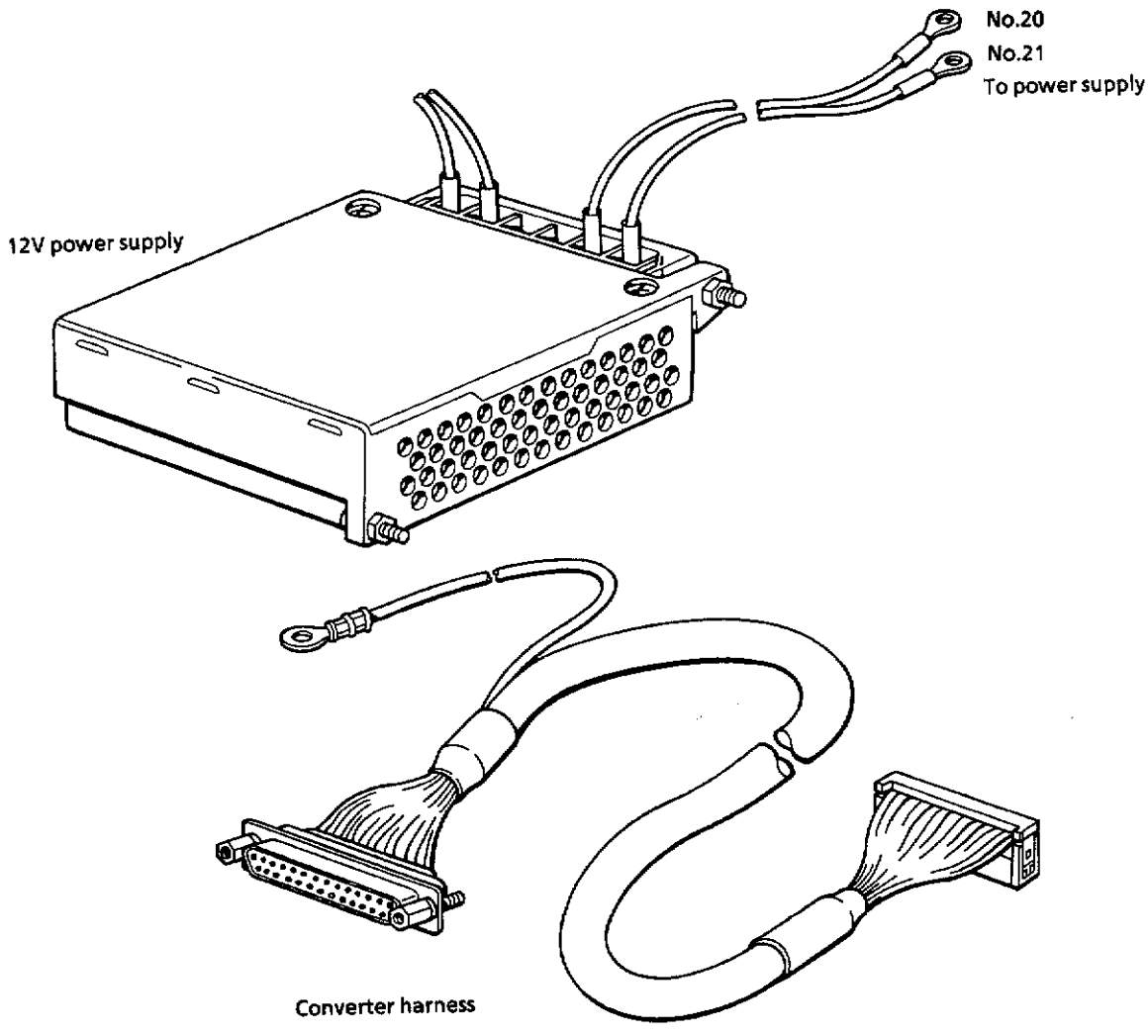
| | 6V machine light | 5V marking light |
|---|---|---|
| Connector pin | MOLEX Female pin 1381ATL (143548-000) 2 | MOLEX Male pin 1380TL (143549-000) 4 |
| Connectors | MOLEX 3191-02R1 (S18466-000) 1 | MOLEX 1545P (S05008-000) 2 |

# Optional Parts

## BAS-326

[Data Converter assembly] S18051-001

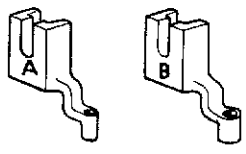
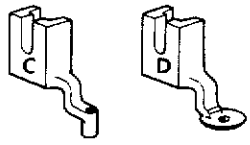
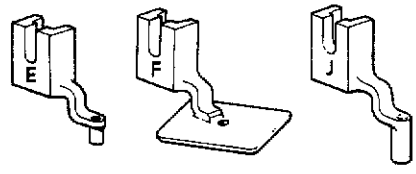
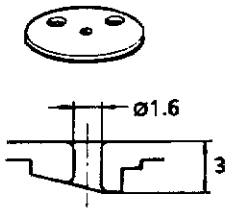
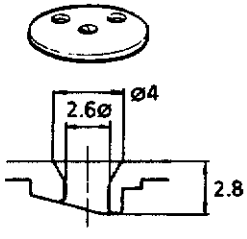
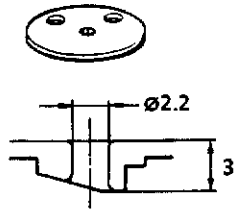
If this assembly is used, data in the BAS-320 and BAS-325 micro disk (2.5") and data in the BAS-326 floppy disk (3.5") can be interchanged.



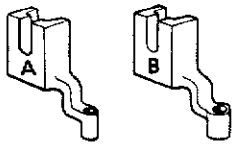
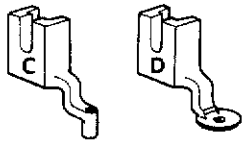
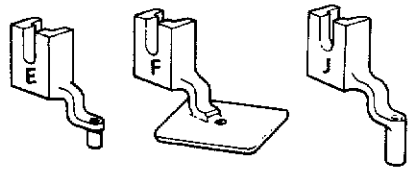

※ The BAS-320 has a different area size, so correct before making conversions.

# Optional Parts Table

## BAS-304

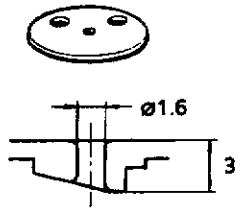
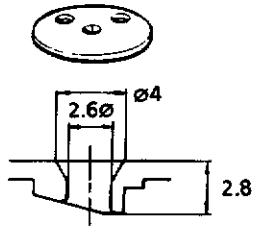
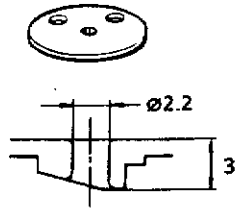
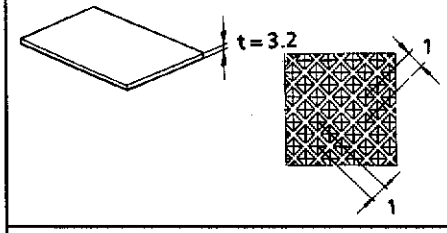
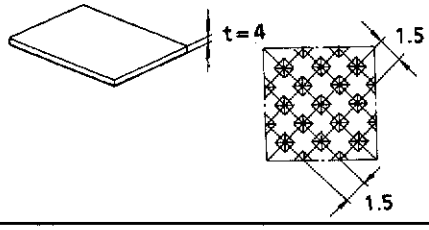
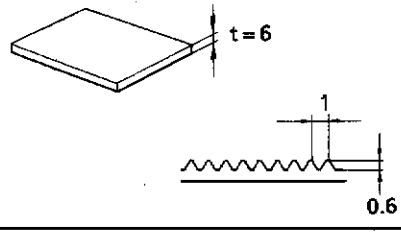
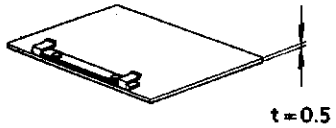
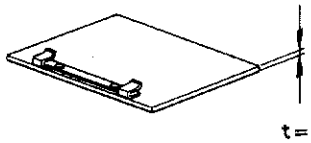
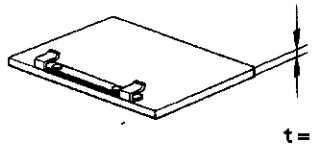
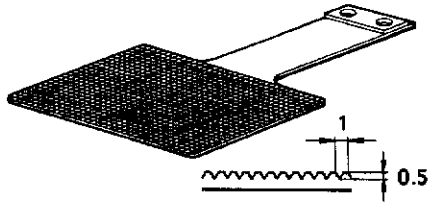
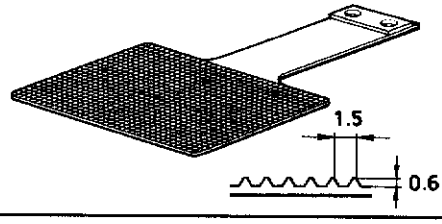
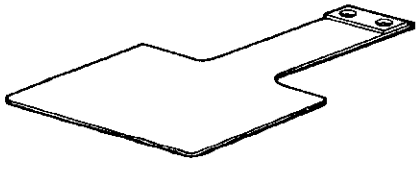
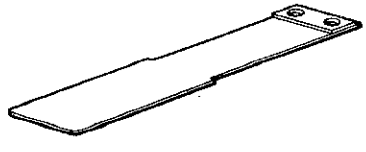
| Presser foot | | |
|---|---|---|
|  |  |  |
| A ø2.5 152283-101<br>B ø4 152636-001 | C ø2 152637-001<br>D ø3 154069-001 | E ø1.6 154089-001<br>F ø2 157237-001<br>J ø2.5 S13815-001 |
| **Needle hole plate** | | |
|  |  |  |
| A : S10211-001 | E : S10212-101 | F : S10213-001 |

## BAS-311

| Presser foot | | |
|---|---|---|
|  |  |  |
| A ø2.5 152283-101<br>B ø4 152636-001 | C ø2 152637-001<br>D ø3 154069-001 | E ø1.6 154089-001<br>F ø2 157237-001<br>J ø2.5 S13815-001 |

# Optional Parts Table

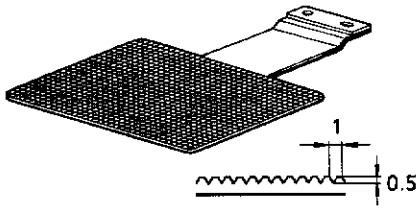
## BAS-311

| Needle hole plate | | |
|---|---|---|
|  |  |  |
| A : S10211-001 | E : S10212-101 | F : S10213-001 |
| **Work clamp blank** | | |
|  |  |  |
| E-1 : 153526-000 | E-3 : 154386-000 | E-4 : S10269-000 |
| **OT presser plate assembly** | | |
|  |  |  |
| A : 157248-001 | B : 157250-001 | C : 157251-001 |
| **Feed plate blank** | | |
|  |  | |
| A : S10265-000 | B : S10266-000 | |
|  |  | |
| E : S13566-000 | H : S19659-000 | |

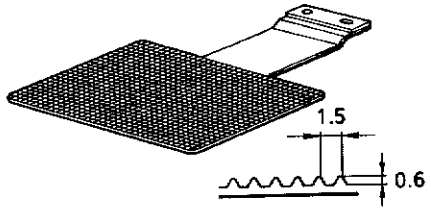
# Optional Parts Table

## BAS-311

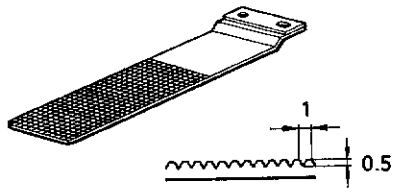
### OT feed plate blank (t = 1.2)



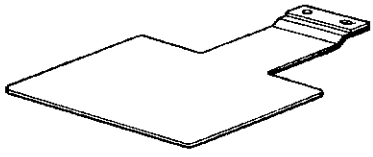

(C) S14844-001



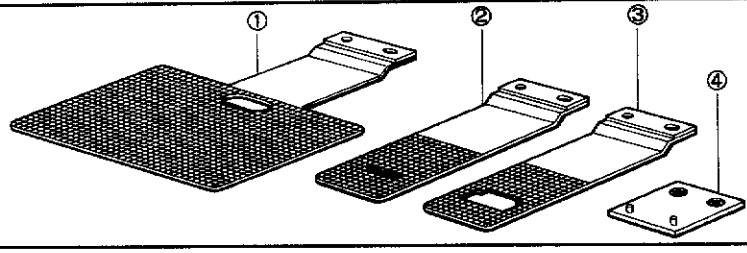

(D) S14845-001




(F) S14251-001

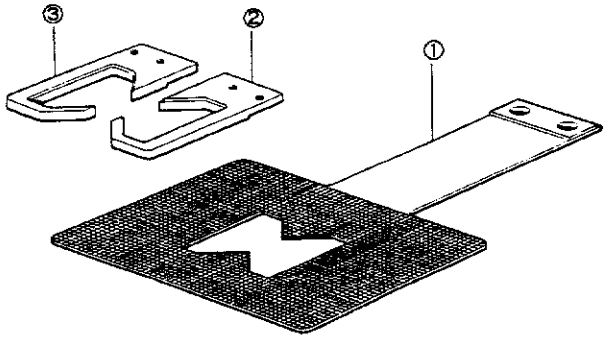


(G) S19666-001



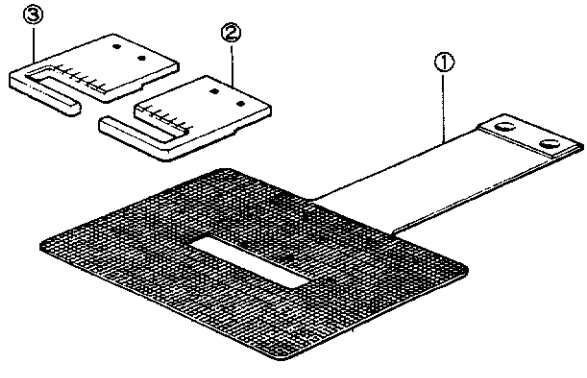

① (312) S14598-001
② (DE) S14253-001
③ (ST) S14252-001
④ Frame assembly for OT feed plate bracket S14841-001

### For basting




| | | |
|---|---|---|
| ① | Feed plate 310-2 | S13092-001 |
| ② | Work clamp (R) | S13090-001 |
| ③ | Work clamp (L) | S13091-001 |

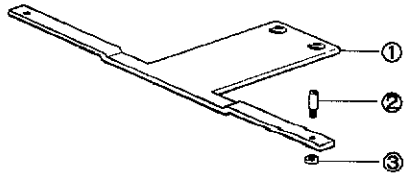
### For loop sewing



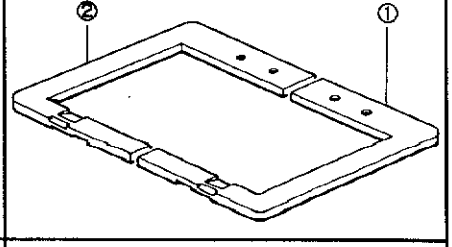

| | | |
|---|---|---|
| ① | Feed plate 310-3 | S13098-001 |
| ② | Work clamp (R) | S13096-001 |
| ③ | Work clamp (L) | S13097-001 |

### BAS-320/325 feed plate attachment

Feed plate attachment bracket: S12586-001



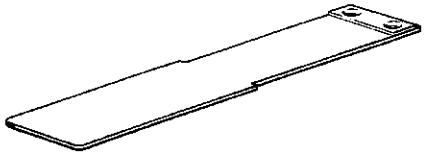
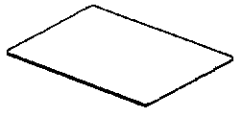
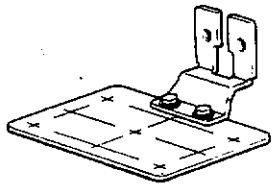

| | | |
|---|---|---|
| ① | Cassette supporter plate | S13006-001 |
| ② | Cassette supporter pin | S13007-001 |
| ③ | 3 types of nut | 021660-306 |




① Work clamp (R): S10411-001
② Work clamp (L): S10412-001

# Optional Parts Table

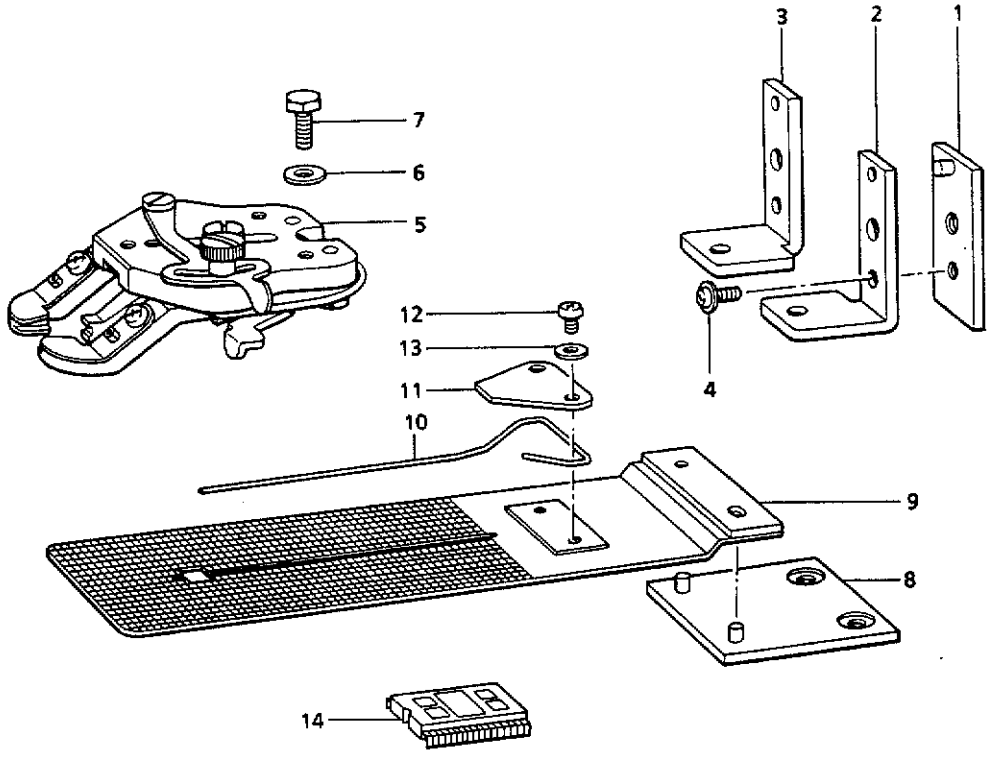
## BAS-311

| For cylinder bed | Feed plate lower plate (for C, D) | Home position reference plate assembly |
|---|---|---|
|  t = 1.2 |  |  |
| Feed plate blank E: S13566-001 | S13567-000 | S13046-001 |

# Optional Parts Table

## BAS-304·311

Attachment for button sewing



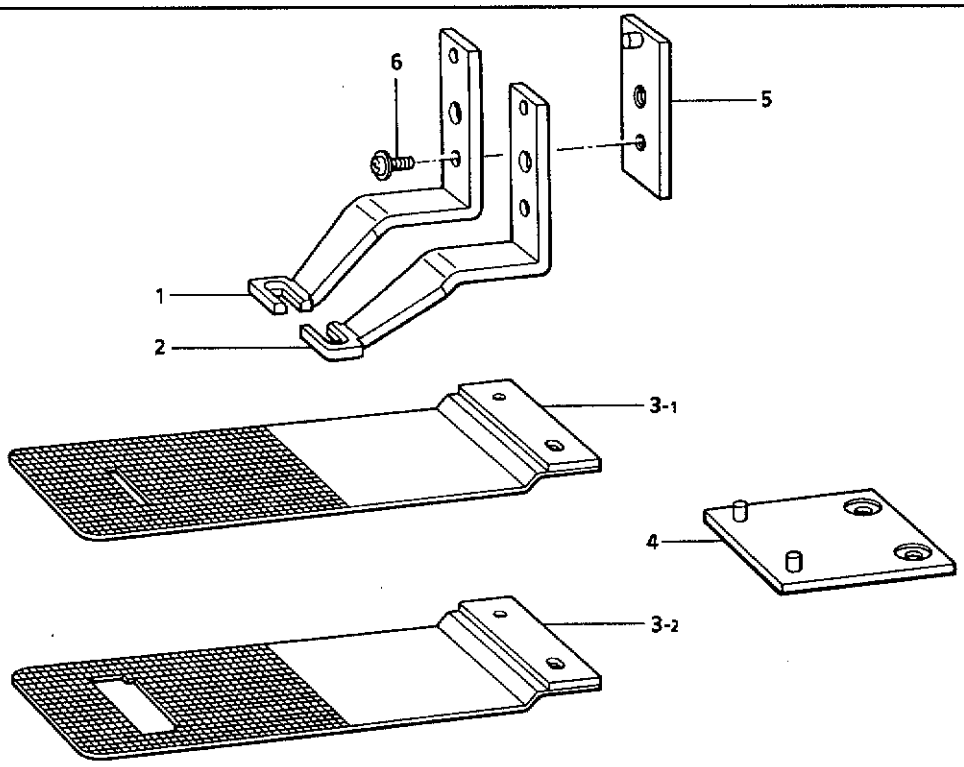

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | OT presser foot D assembly | 2 | S14846-001 | 8 | OT feed plate bracket assembly | 1 | S14841-001 |
| 2 | BU presser foot U-R | 1 | S14848-001 | 9 | OT feed plate 7 flat | 1 | S14069-001 |
| 3 | BU presser foot U-L | 1 | S14849-001 | 10 | Button float spring 1.2 | 1 | 153871-001 |
| 4 | Screw 4.37 | 2 | 149168-001 | 11 | Float spring presser plate | 1 | S14073-001 |
| 5 | Button clamp assembly | 1 | S03463-001 | 12 | Screw 357-40×5 | 2 | 062670-512 |
| 6 | Bolt 4.76 | 2 | 117363-001 | 13 | Washer | 2 | 102707-002 |
| 7 | Flat washer 4.76 | 2 | 025710-232 | 14 | PROM for button sewing | 1 | S15167-001 |

※ The PROM for button sewing in the BAS-304 is available by special order.

# Optional Parts Table

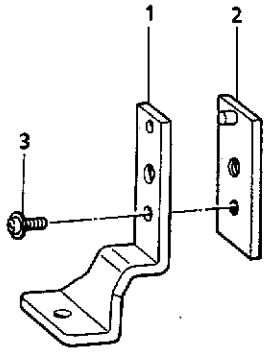
## BAS-311

### Attachment for bar tacking




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Presser foot SR | 1 | S14254-001 | 4 | OT feed plate bracket assembly | 1 | S14841-001 |
| 2 | Presser foot SL | 1 | S14255-001 | 5 | OT presser foot D assembly | 2 | S14846-001 |
| 3-1 | OT feed plate DE | 1 | S14253-001 | 6 | Screw 4.37 | 2 | 149168-001 |
| 3-2 | OT feed plate ST | 1 | S14252-001 | | | | |

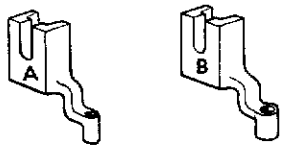
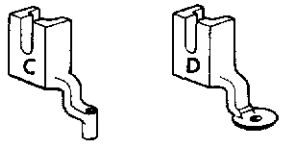
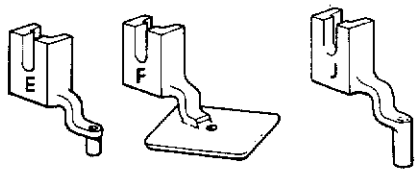
### Attachment for one-touch work clamp

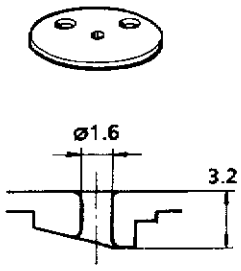
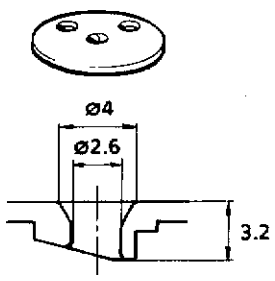
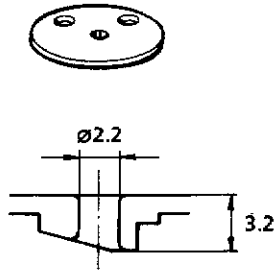
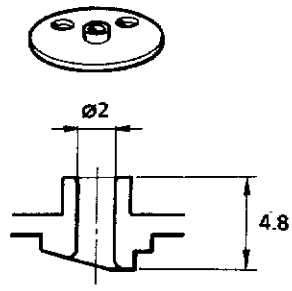


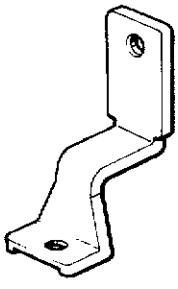
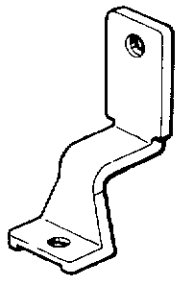
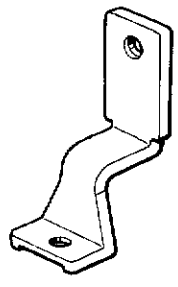
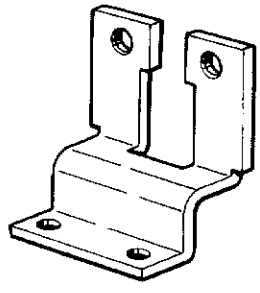

| | | | |
|---|---|---|---|
| 1 | OT presser foot | 1 | S14850-001 |
| 2 | OT presser foot D assembly | 1 | S14846-001 |
| 3 | Screw 4.37 | 1 | 149168-001 |

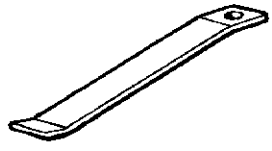
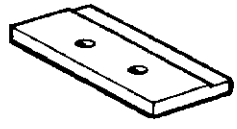
# Optional Parts Table

## BAS-326

| Presser foot | | |
|---|---|---|
|  |  |  |
| A ø2.5 152283-101<br>B ø4 152636-001 | C ø2 152637-001<br>D ø3 154069-001 | E ø1.6 154089-001<br>F ø2 157237-001<br>J ø2.5 S13815-001 |

| Needle plate hole | | | |
|---|---|---|---|
|  |  |  |  |
| A : S02371-001 | E : S02372-001 | F : S02373-001 | FH : S10690-001 |

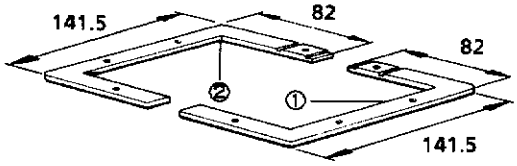
| Presser foot | | | |
|---|---|---|---|
|  |  |  |  |
| S : S02441-001 | M : S02288-001 | L : S02469-001 | MM : S05667-001 |

| Presser spring | | | Inner clamp LL |
|---|---|---|---|
| | |  |  |
| 1 : S02853-001 | 2 : S02854-001 | 3 : S02855-001 | LL : S10542-001 |

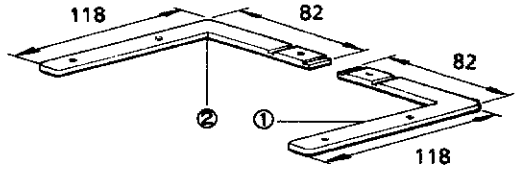
# Optional Parts Table

## BAS-326

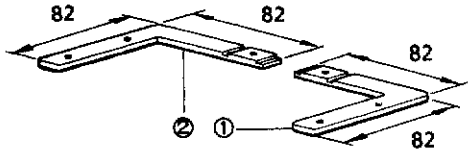
### Cassette work clamp



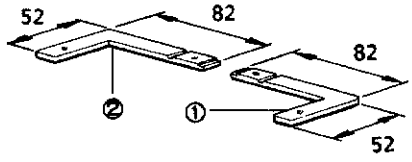

| | |
|---|---|
| ① Cassette work clamp 1R | S02845-001 |
| ② Cassette work clamp 1L | S02846-001 |



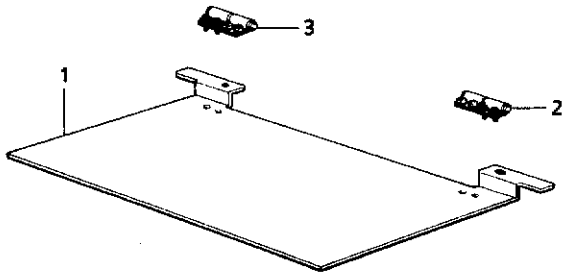

| | |
|---|---|
| ① Cassette work clamp 2R | S02847-001 |
| ② Cassette work clamp 2L | S02848-001 |



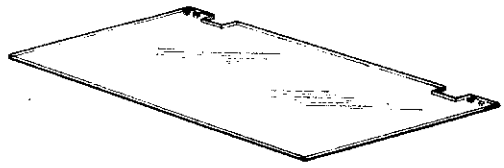

| | |
|---|---|
| ① Cassette work clamp 3R | S02849-001 |
| ② Cassette work clamp 3L | S02850-001 |



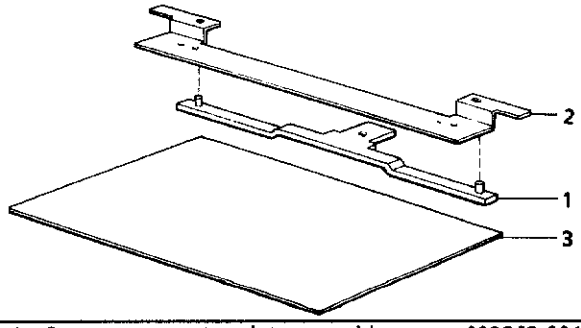

| | |
|---|---|
| ① Cassette work clamp 4R | S02851-001 |
| ② Cassette work clamp 4L | S02852-001 |



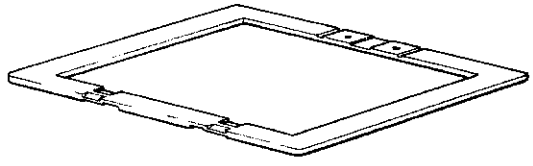

| | |
|---|---|
| 1. Cassette plate D-A | S02966-001 |
| 2. Butterfly program (right) | 152632-001 |
| 3. Butterfly program (left) | 152633-001 |



| | |
|---|---|
| 1. Cassette plate U-A (t = 1) | S02968-000 |
| 2. Cassette plate U-B (t = 2) | S02971-001 |




| | |
|---|---|
| 1. Cassette supporter plate assembly | S02963-001 |
| 1. Cassette supporter plate assembly 180 | S14384-001 |
| 2. Cassette plate D-B180 | S14388-001 |
| 3. Cassette lower plate A180 | S14386-000 |

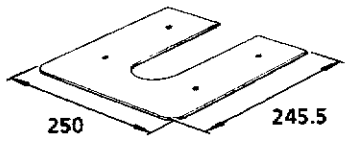


| | |
|---|---|
| Work clamp L | S02470-001 |

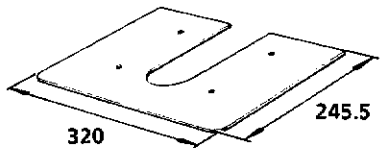
# Optional Parts Table

## BAS-326

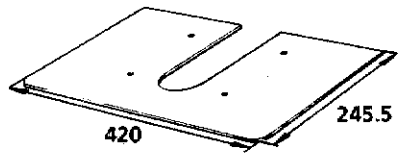
### Sub-plate




Sub-plate S
S02442-001

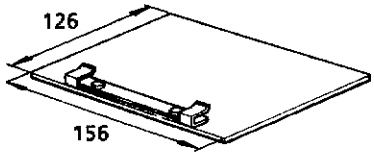



Sub-plate L
S02443-001

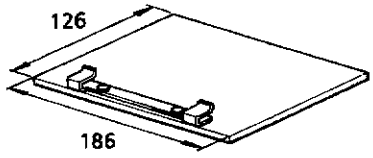



Sub-plate 180
S10682-001

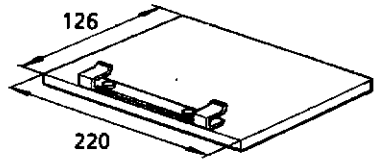
### OT presser plate




| | |
|---|---|
| OT presser plate A assembly | S03902-001 (t = 0.5) |
| OT presser plate B assembly | S03903-001 (t = 1) |
| OT presser plate C assembly | S03904-001 (t = 2) |




| | |
|---|---|
| OT presser plate A assembly 150 | S09378-001 (t = 0.5) |
| OT presser plate B assembly 150 | S09379-001 (t = 1) |
| OT presser plate C assembly 150 | S09380-001 (t = 2) |

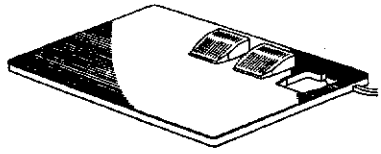



| | |
|---|---|
| OT presser plate A assembly 180 | S13695-001 (t = 0.5) |
| OT presser plate B assembly 180 | S13697-001 (t = 1) |
| OT presser plate C assembly 180 | S13698-001 (t = 2) |

### Work clamp crank

Work clamp plate LL
S10541-001

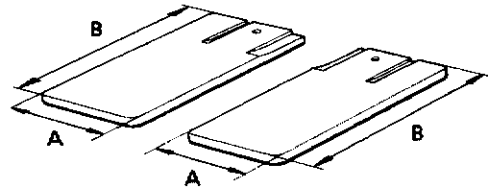
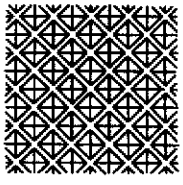
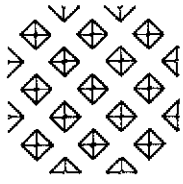
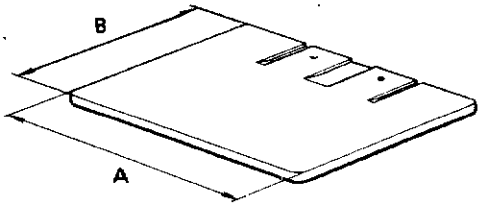
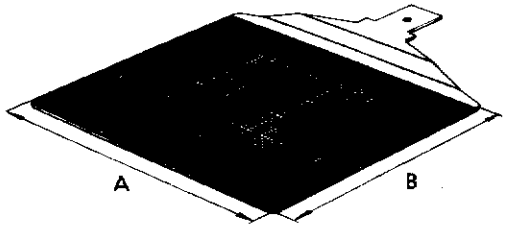
### Foot operation pedal plate



Foot operation switch plate L assembly
S02984-002

# Optional Parts Table

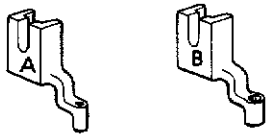
## BAS-326

| Part names | | Plate thickness | Size (A × B) | Lozenge | Parts code |
|---|---|---|---|---|---|
| Work clamp blank       | B-1R | 3.2 | 39×80 | S | 153448-000 |
| | B-1L | | | | 153449-000 |
| | B-3L | 4 | 39×80 | L | 153470-000 |
| | B-3R | | | | 153471-000 |
| | 1-3R | 3.2 | 50×110 | S | S02821-000 |
| | 1-3L | | | | S02822-000 |
| | 1-4R | 4 | 50×110 | L | S02823-000 |
| | 1-4L | | | | S02824-000 |
| | 1-5R | 5 | 50×110 | L | S02825-000 |
| | 1-5L | | | | S02826-000 |
| | 2-3R | 3.2 | 75×135 | S | S02827-000 |
| | 2-3L | | | | S02828-000 |
| | 2-4R | 4 | 75×135 | L | S02829-000 |
| | 2-4L | | | | S02830-000 |
| | 2-5R | 5 | 75×135 | L | S02831-000 |
| | 2-5L | | | | S02832-000 |
| | 150R-3 | 3.2 | 90×135 | S | S09370-000 |
| | 150L-3 | | | | S09371-000 |
| | 150R-5 | 5 | 90×135 | L | S09372-000 |
| | 150L-5 | | | | S09373-000 |
| | L-180 | 3.2 | 123×135 | S | S13694-000 |
| Work clamp blank   | 3-3 | 3.2 | 100×80 | S | S02833-000 |
| | 3-4 | 4 | | L | S02834-000 |
| | 3-5 | 5 | | | S02835-000 |
| | 4-3 | 3.2 | 125×110 | S | S02836-000 |
| | 4-4 | 4 | | L | S02837-000 |
| | 4-5 | 5 | | | S02838-000 |
| | 5-3 | 3.2 | 150×135 | S | S02839-000 |
| | 5-4 | 4 | | L | S02840-000 |
| | 5-5 | 5 | | | S02841-000 |
| | 5-3A | 3.2 | | —— | S02981-000 |
| | 5-4A | 4 | | | S02982-000 |
| | 5-5A | 5 | | | S02983-000 |
| | 150-3 | 3.2 | 180×135 | S | S09374-000 |
| | 150-5 | 5 | | L | S09375-000 |
| | 180 | 3.2 | 216×135 | S | S13693-000 |
| Feed plate blank   | 1 | 1 | 170×140 | Lozenge | S02234-000 |
| | 2 | 2 | | —— | S02843-000 |
| | 3 | 1 | | | S02844-000 |
| | 4 | 2 | | Hole | S02842-001 |
| | 5 | | 246×148 | | S03309-001 |
| | 150 | 1 | 200×140 | —— | S09376-000 |
| | 180 | | 230×140 | | S13692-000 |

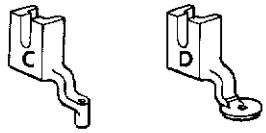
# Optional Parts Table

## BAS-340

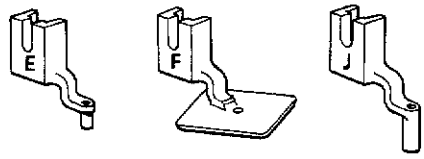
### Presser foot




| | | |
|---|---|---|
| A ø2.5 | 152283-101 | |
| B ø4 | 152636-001 | |

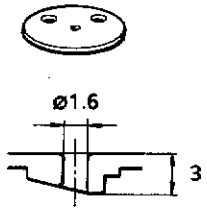



| | | |
|---|---|---|
| C ø2 | 152637-001 | |
| D ø3 | 154069-001 | |

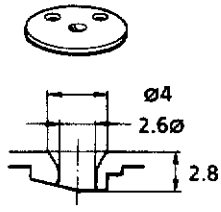



| | | |
|---|---|---|
| E ø1.6 | 154089-001 | |
| F ø2 | 157237-001 | |
| J ø2.5 | S13815-001 | |

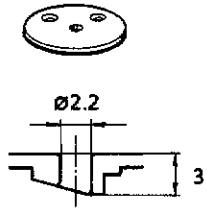
### Needle hole plate




A : S10211-001

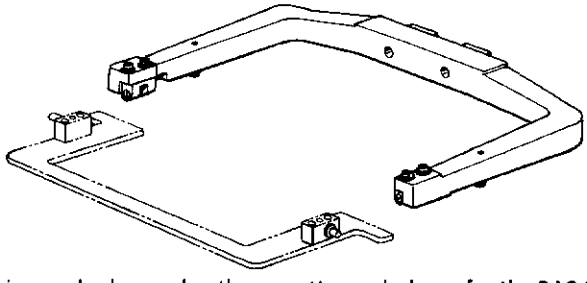



E : S10212-101




F : S10213-001

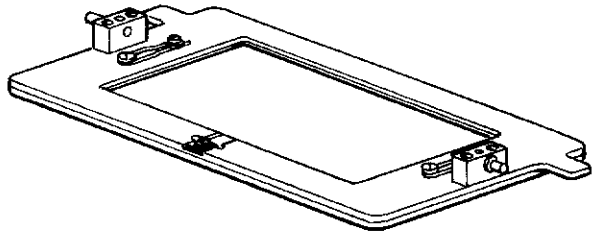
### Presser foot UNS assembly



※ This can also be used as the cassette work clamp for the BAS-326.

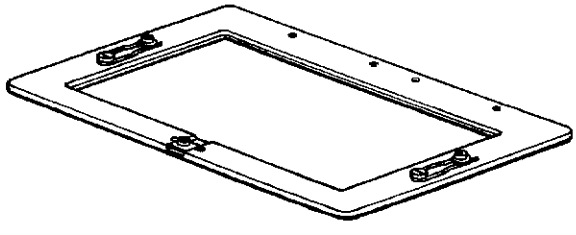
S19620-009 (180 × 100)

### Presser plate UNS assembly



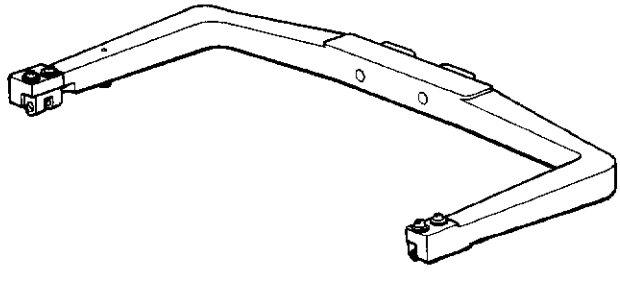
S19611-001 (180 × 100)

### Presser foot UNL assembly



S19635-001 (250 × 150)

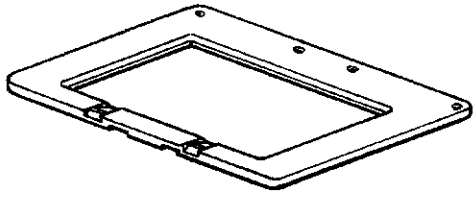
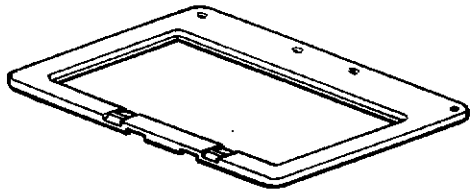
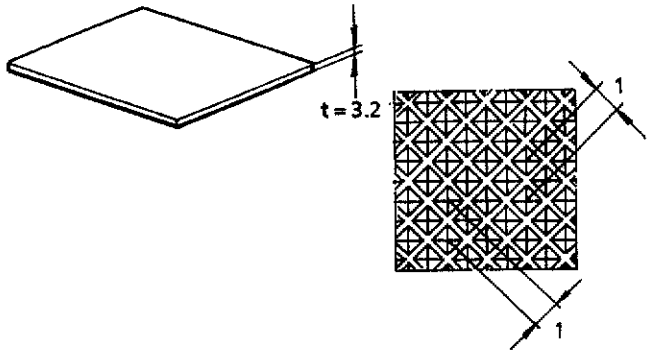
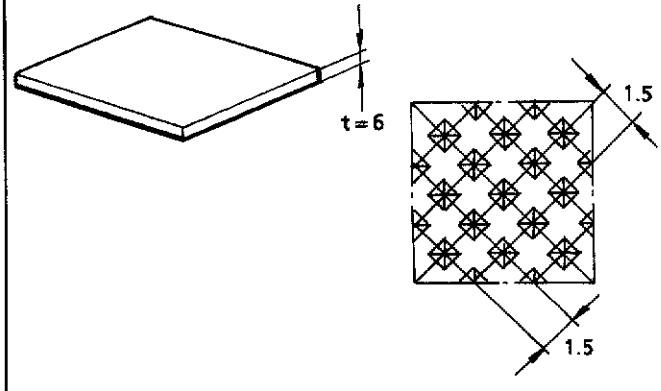
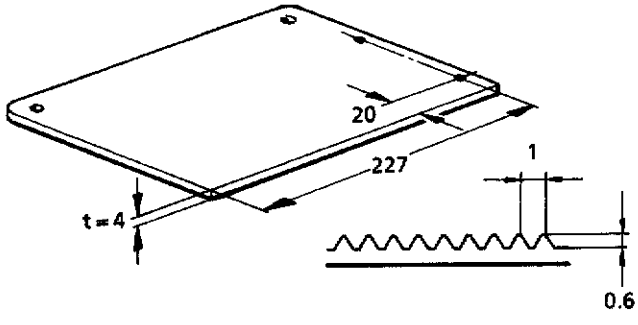
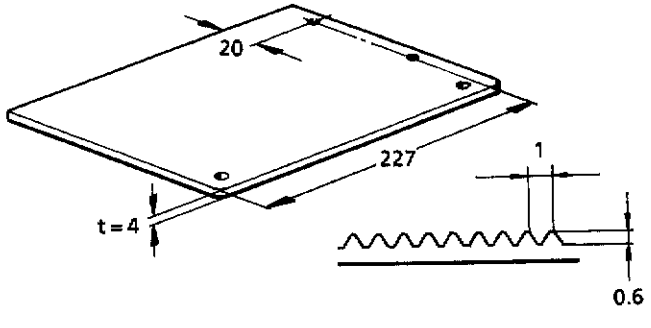
### Work clamp



S19609-009 (250 × 150)

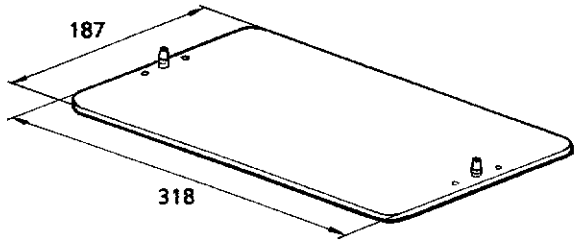
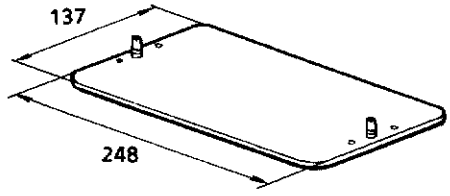
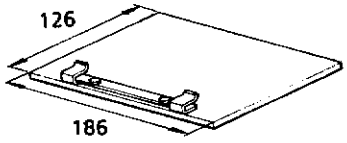
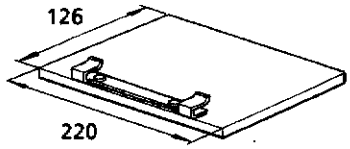
# Optional Parts Table

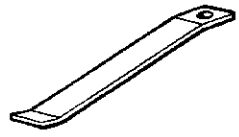
## BAS-340

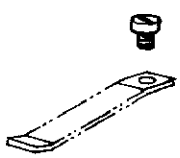
| Work clamp SEU | |
|---|---|
|  |  |
| S19637-001 (180×100) | S19638-001 (150×100) |
| **Work clamp blank** | |
|  |  |
| E1 : S17979-001 | E4 : S17981-001 |
|  |  |
| L : S19599-001 | R : S19600-001 |

# Optional Parts Table

## BAS-340

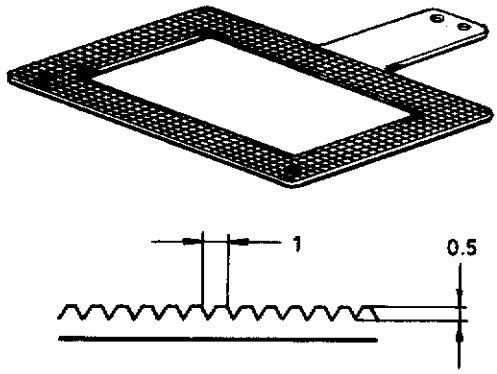
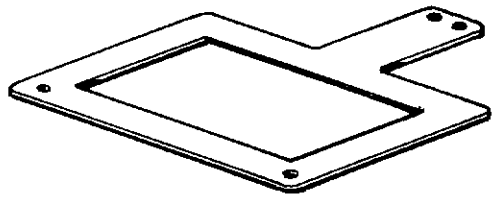
| OT work clamp assembly | | | |
|---|---|---|---|
|  | |  | |
| 2 | S19594-001 (T = 2, 250 × 150) | S2 | S19618-001 (T = 2, 180 × 100) |
| 3 | S19592-001 (T = 3, 250 × 150) | S3 | S19616-001 (T = 3, 180 × 100) |
| 4 | S17982-001 (T = 4, 250 × 150) | S4 | S19614-001 (T = 4, 180 × 100) |
|  | |  | |
| A-150 | S09378-001 (T = 0.5) | A-180 | S13695-001 (T = 0.5) |
| B-150 | S09379-001 (T = 1) | B-180 | S13697-001 (T = 1) |
| C-150 | S09380-001 (T = 2) | C-180 | S13698-001 (T = 2) |

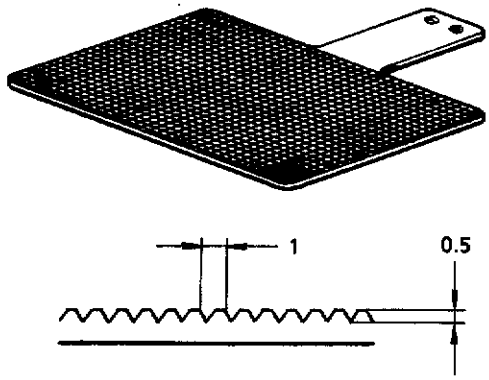
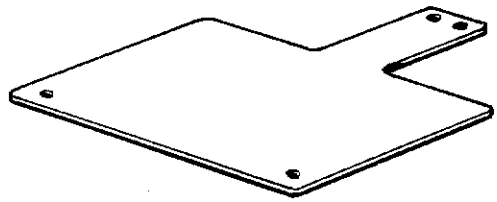
| Presser spring | | | | | |
|---|---|---|---|---|---|
| t = 0.4 | | t = 0.6 | |  t = 0.8 | |
| 1 | S02853-001 | 2 | S02854-001 | 3 | S02855-001 |

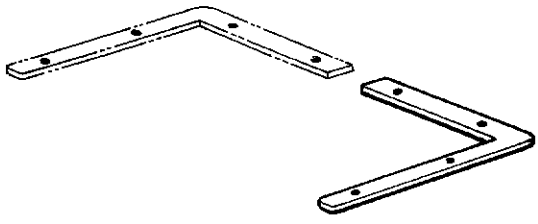
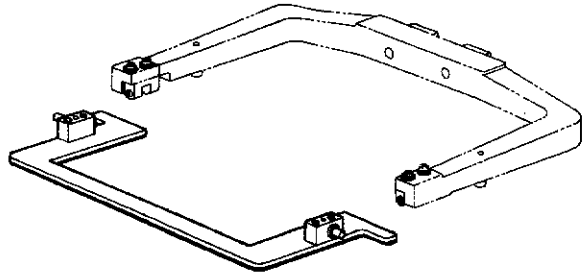
| Screw 4.37 | |
|---|---|
|  | 107419-002 |

# Optional Parts Table

## BAS-340

| Feed plate | | | |
|---|---|---|---|
|  | |  | |
| A | S17894-001 | C | S18543-001 |

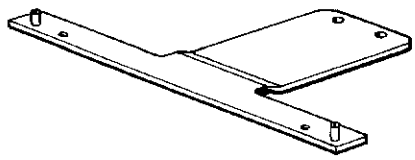
| Feed plate blank | | | |
|---|---|---|---|
|  | |  | |
| A | S17976-001 | C | S17978-001 |

| Presser plate | | | |
|---|---|---|---|
|  <br>※ This can also be used as the cassette work clamp for the BAS-326. | |  | |
| C-1 | S19634-001 | C-2 | S19914-001 |

# Optional Parts Table

## BAS-340

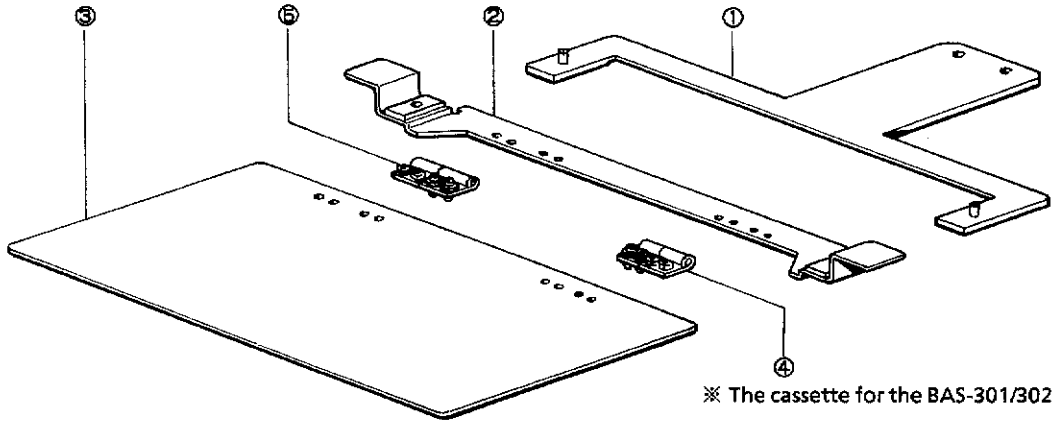
### Cassette supporter plate 326 assembly



※ The cassette for the BAS-326/326L can be used.

S19912-001

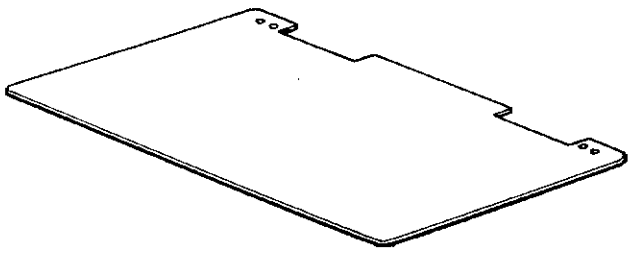
### Cassette supporter plate assembly




※ The cassette for the BAS-301/302 can be used.

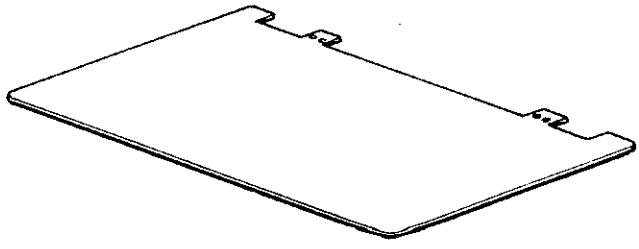
| | | | |
|---|---|---|---|
| ① | Cassette supporter plate S19627-001 | ④ | Butterfly program (right) 152632-001 |
| ② | Cassette body S19630-001 | ⑤ | Butterfly program (left) 152633-001 |
| ③ | Cassette lower plate S19631-001 | | |

### Cassette center plate



| | |
|---|---|
| 1 | (T = 1.0) S19643-000 |
| 2 | (T = 2.0) S19632-000 |

### Cassette upper plate

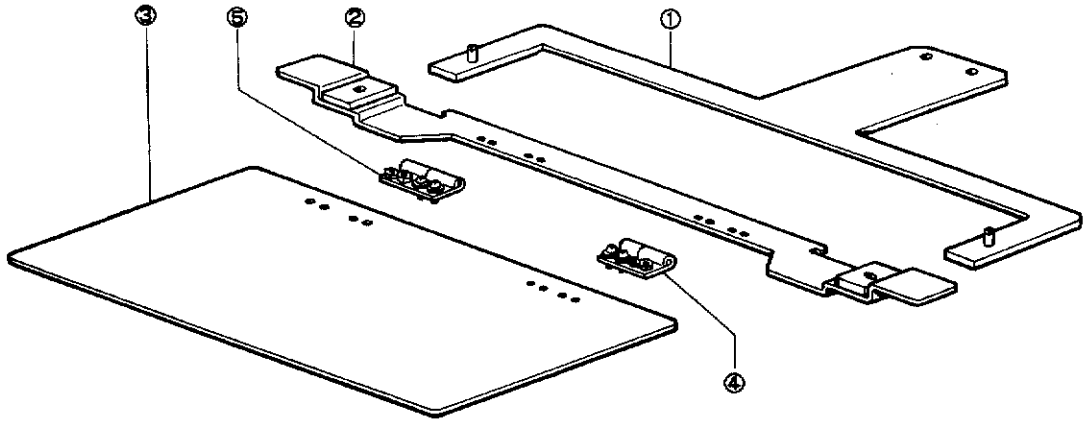


| | |
|---|---|
| 1 | (T = 1.0) S19644-000 |
| 2 | (T = 2.0) S19633-000 |

# Optional Parts Table

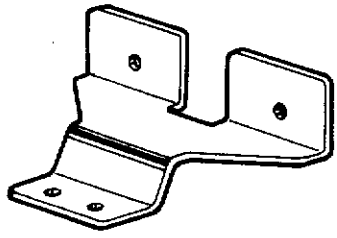
## BAS-340

Cassette supporter plate assembly




| | | | | | |
|---|---|---|---|---|---|
| ① | Cassette supporter plate 340L assembly | S20753-001 | ④ | Butterfly program (right) | 152632-001 |
| ② | Cassette body 340L | S20755-001 | ⑤ | Butterfly program (left) | 152633-001 |
| ③ | Cassette lower plate | S19631-001 | | | |

Presser foot (SEU)



※ The work clamp for the BAS-326 can be used.

S20756-001

# BAS-300 series programming functions table

· This is a guide list for using during programming. Please refer to this table for the correct instructions when you are programming.

| Function | Instruction code keys | BAS-304 | BAS-311 | BAS-326 | BAS-340 |
|---|---|---|---|---|---|
| Quit | 111 E | ○ | ○ | ○ | ○ |
| Clear data | 222 R | ○ | ○ | ○ | ○ |
| Low speed conversion | 666 L | ○ | ○ | ○ | ○ |
| Trace | 555 L | ○ | ○ | ○ | ○ |
| Repeat | 333 L | ○ | ○ | ○ | ○ |
| Point symmetry | 440 L | ○ | ○ | ○ | ○ |
| X axis symmetry | 441 L | ○ | ○ | ○ | ○ |
| Y axis symmetry | 442 L | ○ | ○ | ○ | ○ |
| Return | 443 L | ○ | ○ | ○ | ○ |
| Traced drawing K Mirror | 001 M | ○ | ○ | ○ | ○ |
| Traced drawing K Mirror | 011 M | ○ | ○ | ○ | ○ |
| Traced drawing K Mirror K | 010 M | ○ | ○ | ○ | ○ |
| Smoothing | When pitch is 3mm: 030M<br>When not set: 2mm 030 M | ○ | ○ | ○ | ○ |
| Smoothing end | Be sure to press the corner. 789 L | ○ | ○ | ○ | ○ |
| Double-row sewing width setting | For width 2mm 220 M | ○ | ○ | ○ | ○ |
| Split program | F 666 | ○ | ○ | ○ | ○ |
| Setting enlargement and reduction modes | 888 M | ○ | ○ | ○ | ○ |
| Setting X ratio for enlargement and reduction modes (□□□is 000 - 199%) | □□□ F | ○ | ○ | ○ | ○ |
| Setting Y ratio for enlargement and reduction modes (□□□is 000 - 199%) | □□□ M | ○ | ○ | ○ | ○ |
| Parallel movement during sewing | F 777 | ○ | ○ | ○ | ○ |
| Split program with no thread trimming | F 888 | ○ | ○ | ○ | ○ |
| Cross stitching (□ can be a numeral from 0- 9) | 77□ L | ○ | ○ | ○ | ○ |
| Basting program | F 999 | ○ | ○ | ○ | ○ |
| Setting enlargement input | For twofold input 902 M | ○ | ○ | ○ | ○ |

For instructions on operating the programming machine, refer to the operating instructions for each machine.

BROTHER INDUSTRIES, LTD. NAGOYA, JAPAN

BAS-304•311
BAS-326•340
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