

ZOJE

ZJ20U-Series

Single needle
lockstitch zig-zag sewing machine

Instruction manual

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1. APPLICATION

This series of zigzag sewing machine is used to zigzag, embroidery and lockstitch on thin, medium and thick material for garment, bed articles, shoes, towels and wall carpet.

Extra accurate mechanical transmission and knee-control swing range unit assure many kinds of perfect embroidery stitch.

2. SECURE OPERATION

1) The operator should be retained, and understand this manual very well before operating.

2) All security equipments should be fixed very well while running the machine.

3) Turn off the power or draw the power off, while unfixing sew accessories (like needle, presser foot, needle plate, feed dog and bobbin case), winding thread and no operator is at the workplace the machine.

4) Maintenance and adjustment of the machine should be carried by professional technician.

5) The electricity equipment should be managed by wireman or professional technician.

3. CAUTION BEFORE OPERATION

To avoid the damage of machine, do care of the following:

1) Please clean the machine thoroughly, add enough oil before first usage.

2) Check the normalcy of voltage connecting oil before first usage.

3) The upper wheel should rotate in the direction facing the operator.

4. LUBRICATION(Fig.1, 2)

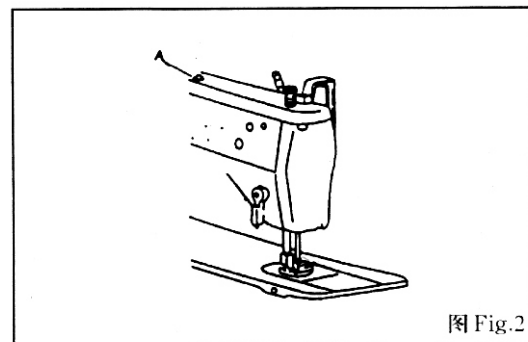
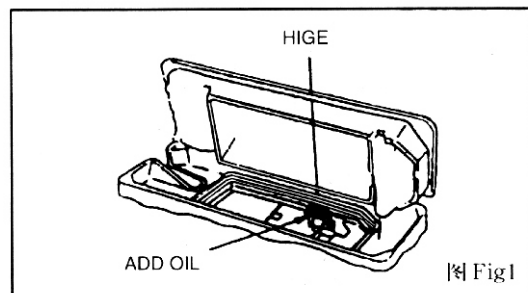
1) Turn Over the machine head, Pout the oil into the oil pan tu the "HIGH" marks.

2).While the oil is lower than "ADD OIL", please pour the new oil into the oil pan.

3).Tun on the machine after pouting oil,if the oil splash on the oil window A. freaumently ,the lubrication is goodorder.

4).The viscosity the used oil of should be 20.00mm/s when the oil temperature is 38 The density of the used oil should be 0.888g/m when the oil temperature is 15.

We suggest that you should use No.18 white oil.

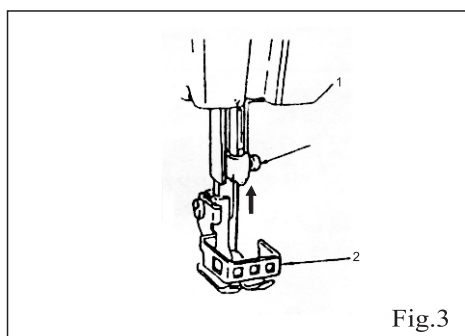


5. SELECTION OF NEEDLE AND THREAD

Select the appropriate thread and needle according to the different sewing material as following:

Applicable kind of material	Thin	Medium heavy material	Heavy material
Max size of thread	120	60	30
Needle size (1/100mm)	#10	#12-#16 (80-100)	#18-#19 (110-120)
Needle type	1910-05(135x9)		
Other equal suitable size thread usable.			

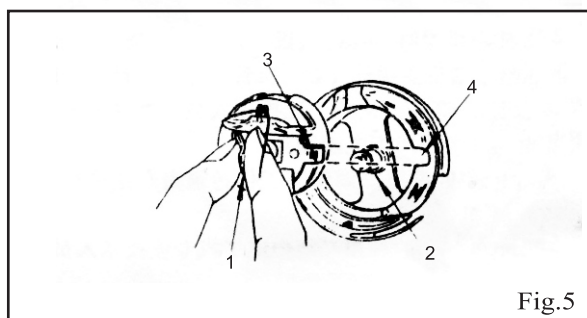
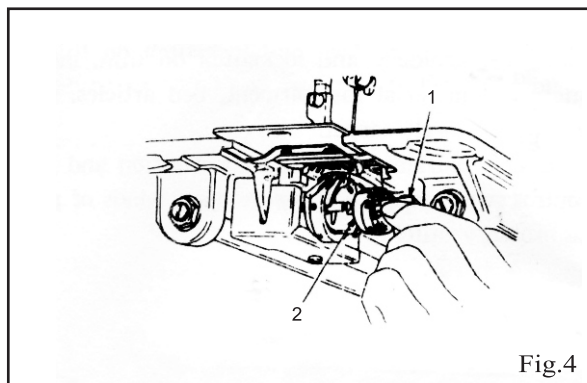
6. INSERTING OF NEEDLE(Fig.3)



Turning the hand wheel and raise the needle bar to the highest position, then loose the needle rightening screw 1. Insert the needle in the needle bar and push it up as far as it will go.

Make sure its long groove faces toward the front. Tighten needle set screw 1 securely.

7.REPLACING BOBBIN CASE (Fig.4,5)



Raise latch 1. then pick out the bobbin case 2.

Open bed slide 1 and lay the case on the case shaft 2, while the case book 3 fit location channel 4, then down the bed slide and press the case and push the plate

8. THREAD THE BOBBIN CASE

1) Stop motion of needle by loosening stop-motion screw (1). Hold hand wheel with left hand and turn stop-motion screw toward you with right hand.

2) Place bobbin on bobbin winder spindle (3), pushing it on as far as it will go.

Pre--tension (1)

+.....More tension.

-.....Less tension.

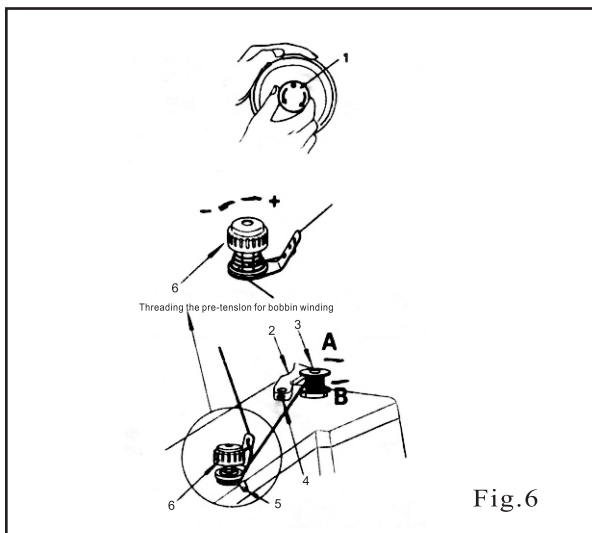
3) Push latch (2) in the direction indicated by arrow (A), then start the machine.

Bobbin winder spindle (3) rotates in the direction indicated by arrow(B).

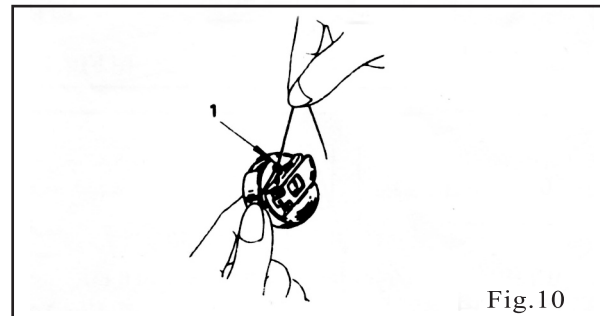
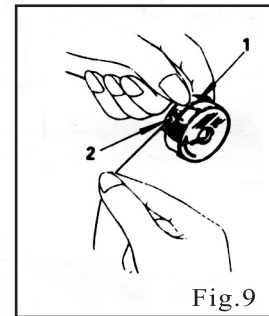
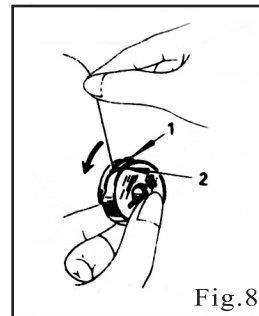
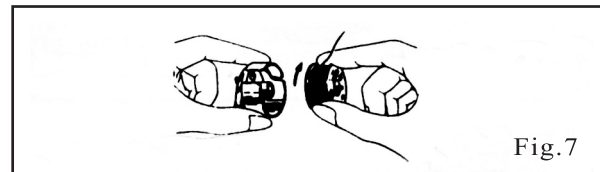
To adjust the amount of thread on bobbin, loosen screw (4) on latch (2) and swing the latch (2) and swing the latch (2) away from you or toward you, as required.

4). For more thread on bobbin, swing latch (2) away from you.

For less thread on bobbin, swing latch (2) toward you, if thread winds unevenly on bobbin, loosen screw (5) and move pre-tension (6) up or down, as required, and tighten screw (5).



9. THE INSTALLATION OF THE BOBBIN (Fig. 7,8,9,10)

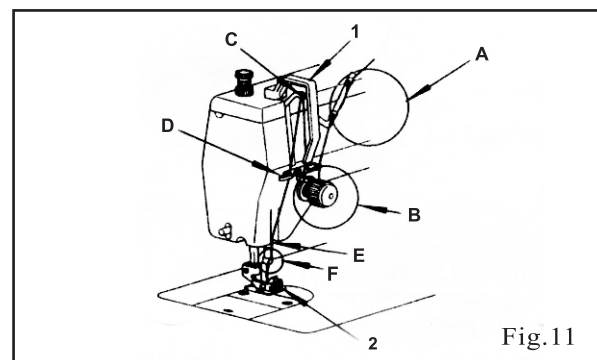


1). Put the bobbin into bobbin case. Pull thread into notch 1 and draw it under tension spring 2.(Fig.7)

2). Draw thread out from slot 2 on end of spring 1.(Fig.9)

3). Pass it through bobbin case thread guide (1), allow about 60mm of thread out of the bobbin. (Fig.10)

10. THREAD SURFACE STITCHES (Fig. 11, 12, 13, 14)



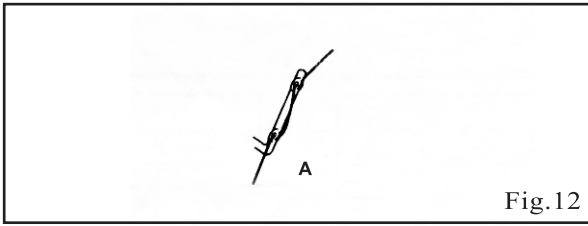


Fig.12

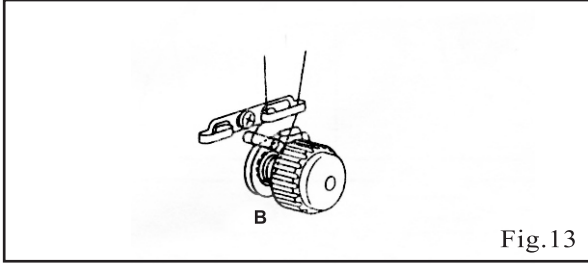


Fig.13

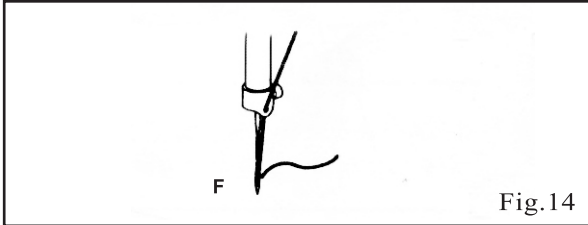


Fig.14

- 1). Raise needle bar to the highest position, then pull the thread out and through A,B,C,D,E and F.
- 2). As Fig.14, thread form forward to back.
- 3). Pull about 100mm of thread out.

11. ADJUSTING STITCH LENGTH (Fig.15)

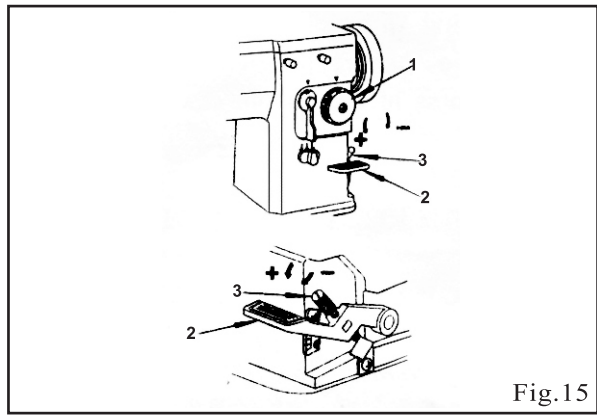


Fig.15

Regulating the stitch length

To regulate the stitch length, turn feed regulating dial 1 toward left right as required,
 +.....to lengthen
 -.....to shorten

Changing the reverse feed

Push lever 2, release for forward feed and down for reverse feed.

To regulate the reverse stitch length, turn thumb screw 3 toward left or right as required.

+.....to lengthen
 -.....to shorten

12. ADJUSTING PRESSER FOOT PRESSURE (Fig. 16)

To regulate the presser foot pressure, turn pressure regulating screw 1, toward left to strengthen or right to reduce pressure.

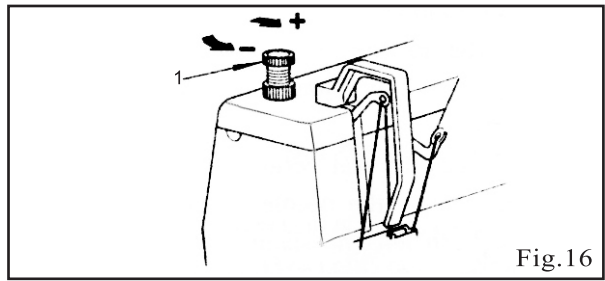


Fig.16

13. ADJUSTING NEEDLE THREAD TENSION (Fig.17)

Regulate needle thread tension with tension regulating knob 1. toward left to strengthen or right to reduce pressure.

- +..... more tension
- less tension

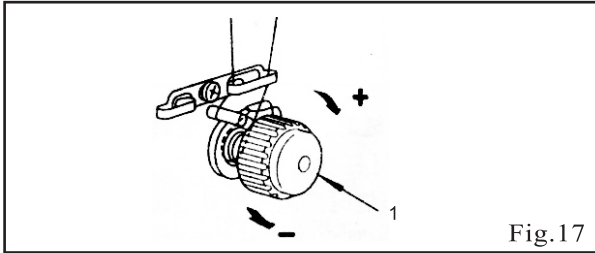


Fig.17

14. REGULATE THE LENGTH AND TENSION OF TAKE-UP SPRING (Fig.18)

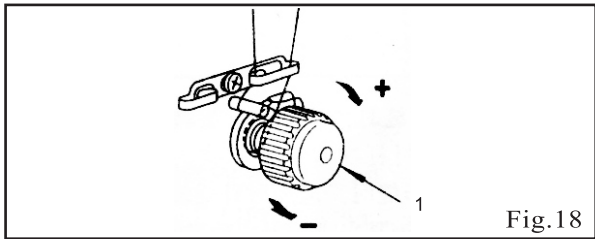


Fig.18

1). Regulate the tension of take-up spring

Using a screwdriver in slot to regulate take-up spring tension by turning stud (1) as required.

- +.....more tension
-less tension

2). Regulate the length of take-up spring

To adjust the amount of take-up spring movement, loosen screw 2 and set take-up spring height by turning the entire tension assembly 3 toward left or right, Then securely tighten screw 2.

15. ADJUST BOBBIN THREAD TENSION (Fig. 19)

Regulate bobbin thread tension regulating screw 1.

- +.....more tension
-less tension

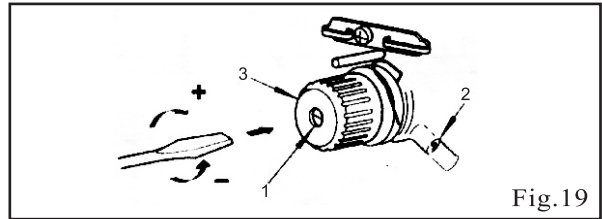


Fig.19

16. ADJUST NEEDLE POSITION (Fig.20)

Left, Center and Right needle position settings are available for placement of both straight and zigzag stitching.(Fig20)

To position, push lever in and move to desired setting.

Do not make any needle position adjustment while the needle is in the fabric.

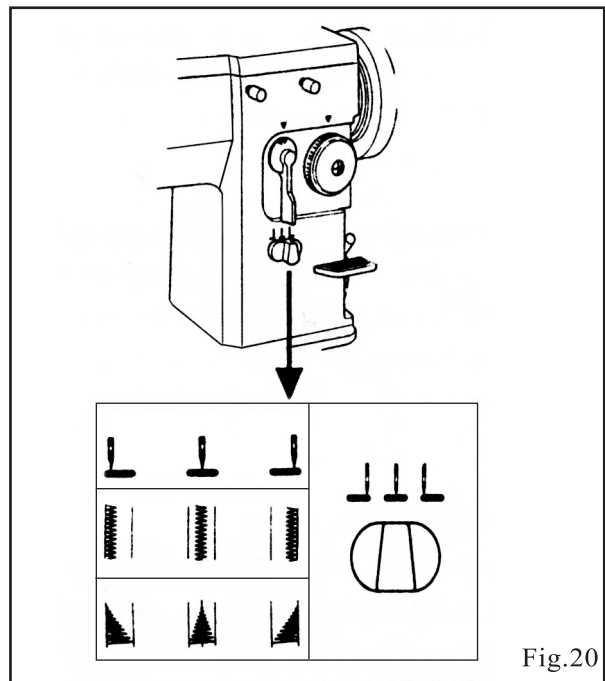


Fig.20

17. THE ADJUSTMENT OF HORIZONTAL DISTANCE (Fig.21)

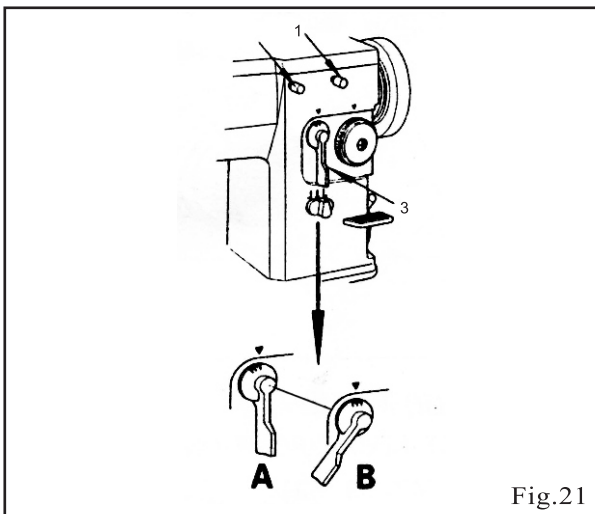


Fig.21

If one fixed value between the min-max of curvilinear stitch is needed, the adjustment can be made as follows:

- 1). Release the horizontal needle set screw 2;
- 2). Turn the spanner 3 to Oposition (i.e. A position);
- 3). Lock the set screw 2;
- 4). Release the needle set screw 1;
- 5). Turn left the spanner 3 to B position;
- 6). Then lock the set screw 1.

18. TO MOUNT THREAD UNWINDER (Fig.22)

While adjusting the oil amount of the machine head, please take out the rubber cap 3 ("2") is oil pipe). Turn A by screw driver to adjust the position of "1". While the position is shown in the oil amount is max. If you want to decrease the oil amount. Please turn "1" around 90°.

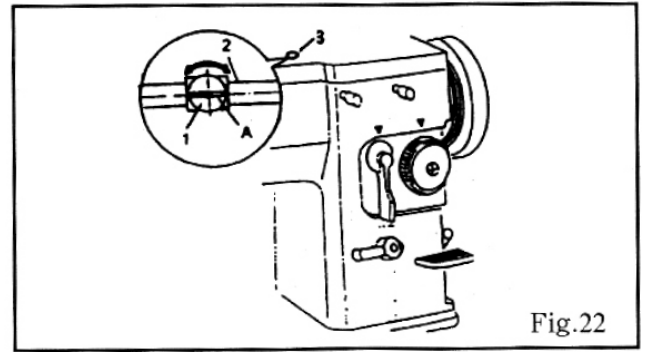


Fig.22

19. ASSEMBLAGE OF BELT COVER (Fig.23)

On the table: while the V type belt is line with belt cover, tighten the screw.

Under the table: after the assemblage of belt cover the wheel and belt should rotate freely.

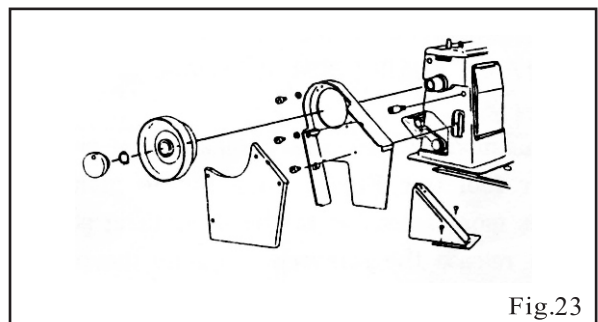


Fig.23

20. MOUNT KNEE LIFTER (Fig.24)

(1) To adjust presser lifter

Lift the presser foot ⑥ by presser lifter ⑤ and then adjust ③ and ① to push the knee lifter controller to the end, the lifting height is up to 9mm.

(2) To adjust width stitch

Adjust the knee lifter under the oil pan by ④ and ②, then loosen the adjusting screw ⑦、⑧

Push the knee lifter controller to the end, the width stitch is up to Max.

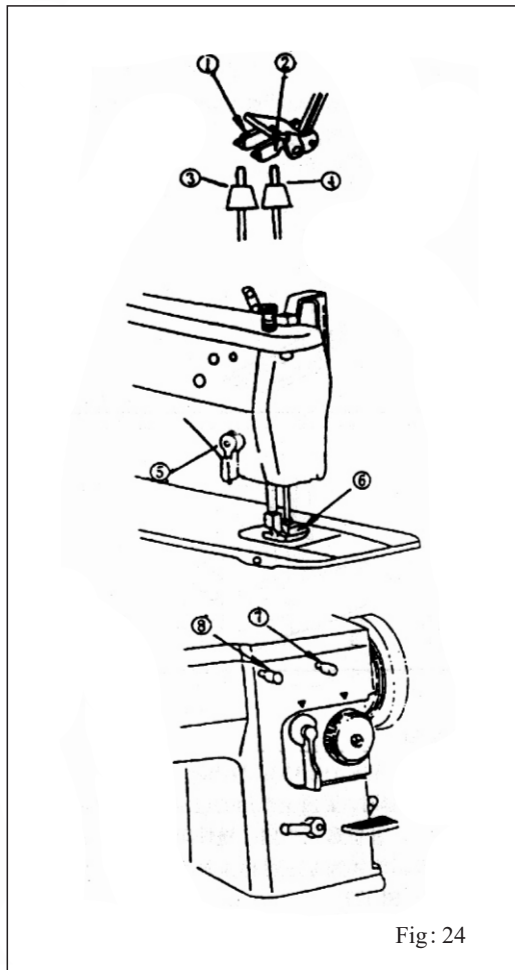


Fig: 24

20. MODES OF SEVERAL SEWING STITCH AND APPLICATION OF ACCESSORY (20U33/43/53/63)

1. Linear sewing

In case of linear sewing, using the linear sewing presser foot, needle and feeding dog is better than using multi-function ones.(Fig.28)

While do linear sewing, the horizontal width

should be adjust to O position, the linear locking unit with swaying rack of locking needle shaft can be used in combination with swaying rack of locking needle shaft can be used in combination with special presser foot, needle plate and material feeding tooth.

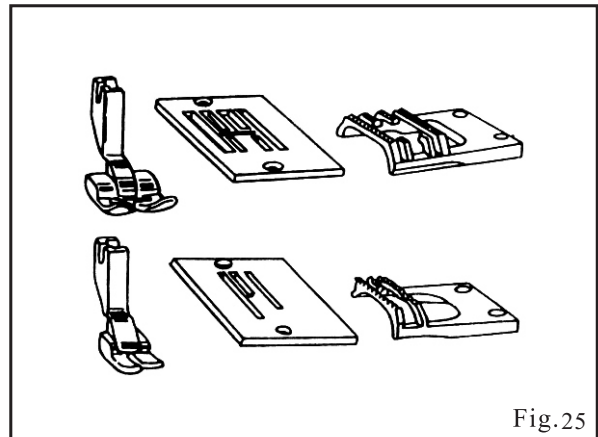


Fig.25

2.Embroidery

Preparation before embroidery

1). It should be noted that any free regulation can be made at the horizontal needle distance between min-max, set the vertical needle distance to O position and will adjust the knee-control parts to make-the component control the movement of the sway of needle.(Fig. 24)

2). Discharge the presser for and needle plate and feeding dog, then change if with embroidering plate.

3). Hold firmly the end of the surface stitches with your left hand, turn the out from the holes of the needle plate.

4). To make sure to stretchtightly the material between the internal and external embroidering frames, otherwise, maybe cause skipping and stitches breaking or material creased.(Fig. 26)

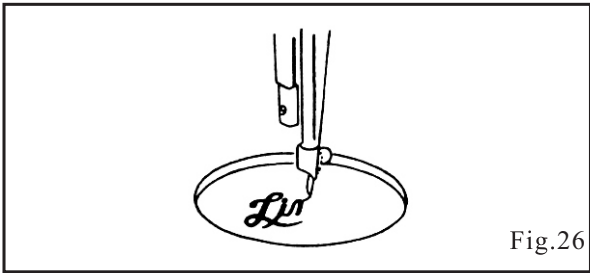


Fig.26

3. ZIPPERED SEWING

This mode is preferable to make use of zippered presser foot (see Fig.32) in a bid to make the stitches more accessible to the projecting stitches, then release the screw B, regulate the presser foot and set the needle to the presser foot and set the needle to left and right grooves A of the presser foot. The mode is expected to suit for the following sewing.(Fig.37)

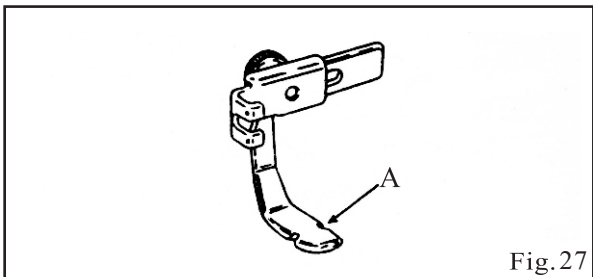


Fig.27

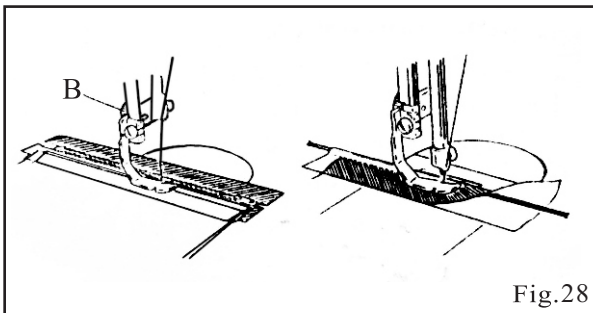


Fig.28

4. HEM- WRAPPING MODE

In this mode, the hem- wrapping presser foot can be used as we wish (fig.29)

Remove the multi - functional presser foot and replace it with the hem- wrapping one. This is also a mode of linear sewing with the needle set to the central position; the hem- wrapping operation can be effected.(Fig.30)

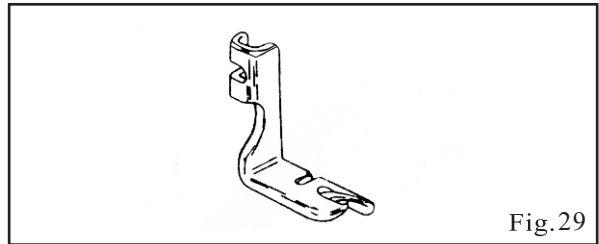


Fig.29

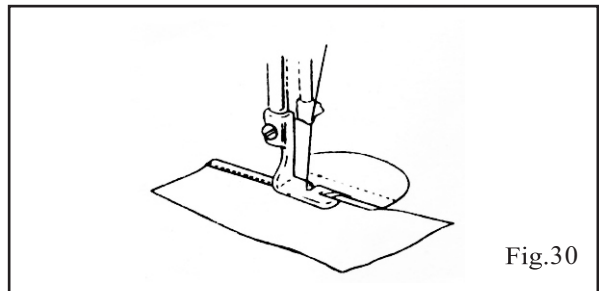


Fig.30

5. STEM- WRAPPING MODE

During the sewing with the stem- wrapping mode, the special stem- wrapping presser foot, needle plate and material feeding tooth should be put into use(fig.31), the needle is set to the central position and the horizontal needle distance set to 3mm, and then run the rougher thread through the small groove A on the stem- wrapping presser foot so that the sewing of this mode will be smoothly conducted.,

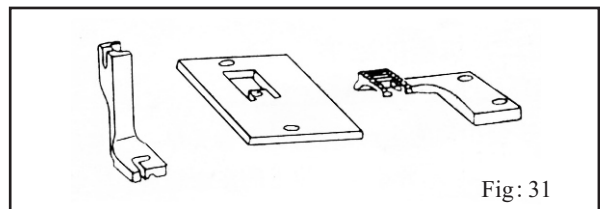


Fig: 31

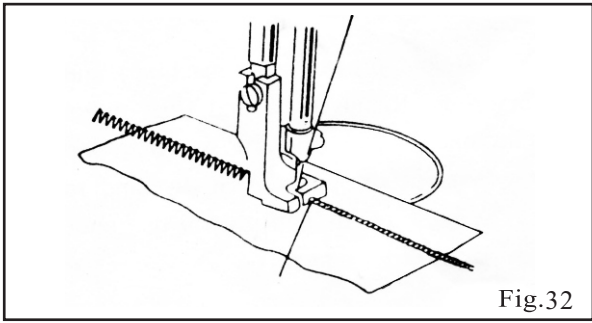


Fig.32

33

6. DECORATION SEWING(Fig.36)

If the left, central and right needle positions can be freely changeable and the horizontal needle distance skillfully controlled, the patterns of the decoration sewing will be well achieved.

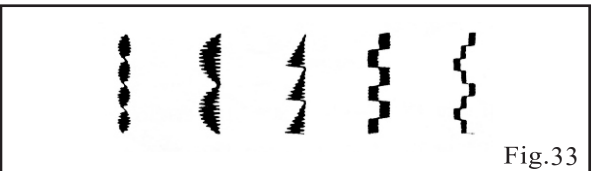


Fig.33

7. OTHER MODES OF PRACTICAL SEWING (Fig.34)

The machine should be cleaned periodically to remove lint and fluff, which may have accumulated around the working parts. A machine in continuous use should be oiled frequently.

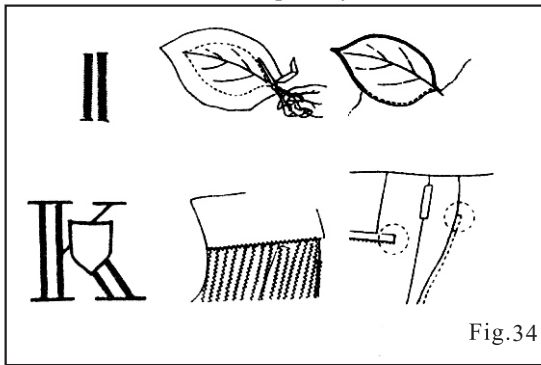


Fig.34

ENCLOSED FIGURE:

Model	Stitch modes	Max.of speed	Max.horizontal needle distance	Length of stitches	Height of lifter
ZJ20U93	W	2000 针 / 分 2000.r.p.m	9mm	5mm	9mm

22. MAINTAIN OF MACHINE

You should protect your machine, and clean it every day. Remove lint and fluff which may have accumulated around the working parts like presser foot, needle plate, feed dog and rotating hook. A machine in continuous use should be oiled and cleaned frequently.

23. MAIN SPECIFICATION

The mode of stitches:see the enclosed

The mode of machine:see the enclosed

The specification of needle:see upper figure

The height of hand lifter presser foot:6.35mm

Upper wheel:model V belt wheel 74mm

The height of work:130mm

The max of needle distance:see the enclosed

The highest sewing speed:see the enclosed