GLOBAL

ZZ 509

Instruction manual

CONTENTS

1.Application 1
2.Notes on safety 1
3.Commissioning 1
4.Installing the belt guard 2
5.Lubrication 2
6.Needle and thread 3
7.Inserting the bobbin case 3
8.To remove the bobbin case 3
9.To wind the bobbin 4
10.Threading the bobbin case 4
11.To replace the bibbin case 5
12.Threading the needle 5
13.To adjust stitch length 5
14.To adjust presser foot pressure 6
15.To adjust needle thread tension 6
16.Regulating the take-up spring 6
17.To adjust bobbin thread tension 6
18.Needle position selector 6
19.Stitch width regulator 7
20.How to control the width of zigzag stitch 7
21.Needle bar frame clamping device 7
22.Fittings for straight and zigzag stitching 8
23.Changing the throat plate and feed dog 8
24.To mount thread unwinder 8
25.To use the spool cap 9
26.To use the anti-spill sleeve 9
27.Knee lifter 9
To mount knee lifter 9
Knee operating presser foot lift 10
Knee operating stitch width control 10
28.Fittings for buttonhole stitching 11
29.Fittings for hem sewing 11
30.Fittings for zipper and cord sewing 11
31.Caring for your machine 11
32.Troubleshooting chart 12
33.Specifications 13

1. APPLICATION

This kind of Artisan Zigzag Machine is for;

-Zigzag and ornamental stitching in a variety of width and stutch length.
-Perfect straight stitching
-Superfine control of stitch length insures perfect satin stitching.

This machine is manufactured for artisan zigzag sewing and is suited for sewing light weight and medium weight materials.

2. NOTES ON SAFETY

The machine must only be commissioned in full knowledge of the instruction manual and operated by persons with appropriate training.

Before putting into service, also read the safety notes and the instruction manual of the motor supplier.

The machine must be used only for the purpose intended. Use of the machine without the safety devices belonging to it is not permitted.

When gauge parts are exchanged (e.g. needle,presser foot, needle plate, feed dog and bobbin), during threading, when the workplace is left unattended, and during service work,the machine must be isolated from the mains by switching off the main switch or disconnecting the mains plug.

On mechanically operated clutch motors without start inhibitor, it is necessary to wait until the motor has stopped.

General servicing work must be carried out only by appropriately trained persons.

Repairs, conversion and special maintenance work must only be carried out by technicians or persons with appropriate training.

Work om the electrical epuipment must be carried out only by electricians or appropriately trained persons.

Conversions or changes to the machine must be made only on adherence to all safety regulations.

For repairs, only replacement parts approved by us must be used.

Meanings of the symbols:

Danger spot!
Items requiring special attention

Danger of injury to operative or service staff.
Be sure to observe and adhere to these safety notes!

Earth

3. COMMISSIONING

To avoid disturbances or damages, it is absolutely necessary to observe the following instructions:

Before you put the machine into operation for the first time. clean it thoroughly and oil it well (see page 2).

Have the mechanic check whether the motor can be used with existing mains voltage or not,and that junction box is correctly connected. Do not start the machine if the voltage is not correct!

When the machine runs , the balance wheel must rotate toward the operator. If it does not, have the electrician change the wires on the motor.

4. INSTALLING THE BELT GUARD

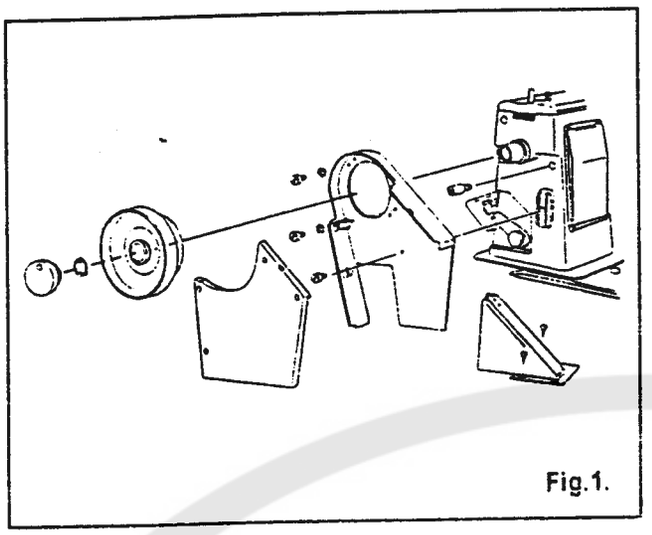


Fig.1.

CAUTION

Switch off the machine.
Set sewing head upright again using both hands.
Danger of crushing between sewing head and table top.
Do not run machine without belt guard! Danger of accidents!

Above table surface

Aligh the belt guard so that hand wheel and V-belt move freely, then screw it down in this position.(See Fig.1)

Below table surface

Install belt guard so that motor pulley and V-belt will rotate freely without interference.

5. LUBRICATION

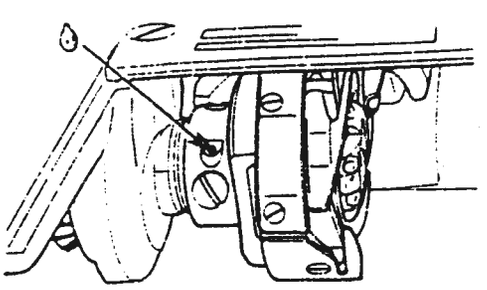


Fig.4.

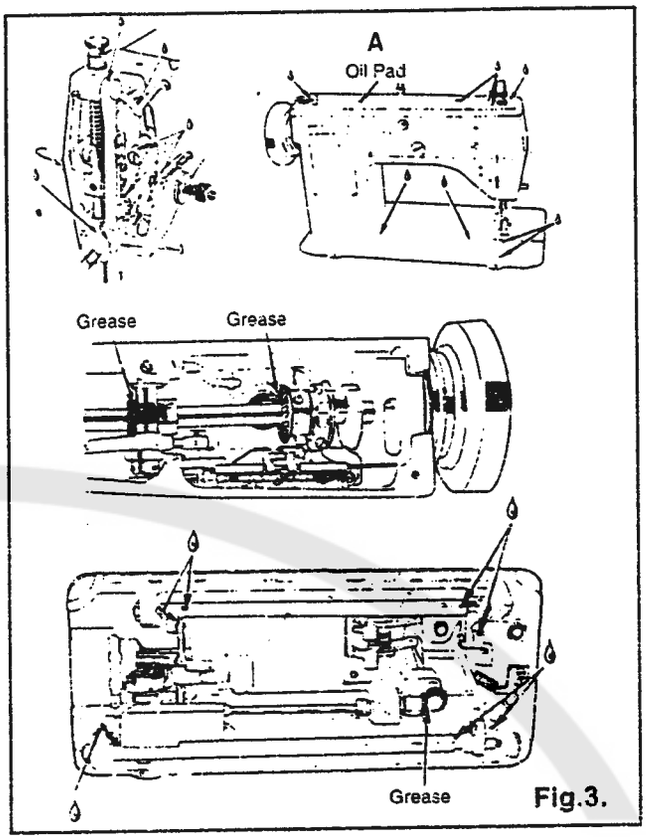


Fig.3.

CAUTION

Switch off the machine.
Set sewing head upring again using both hands.
Danger of crushing between sewing head and table top.

- Rotating hook and area under throat plate.
Turn hand wheel over toward you until oil hole in rotating hook appears in sight.
Apply one or two drops of oil to the oil hole. (See Fig.2)

Loosen and remove screws and remove face plate by sliding it downward.

Remove screws and lift off arm top cover.
Clean and oil the places indicated.

Apply sufficient oil to all oil felt shown in Fig.3.
Apply a small amount of grease to gear teeth indicated with word 'Grease' in Fig.3.

Also apply a drop of oil to all other oiling points shown with marks

Keep oil pad (A) under arm top cover saturated with oil.

CHOICE OF OIL

No.2 White Lubricant or HJ-7 Mechanical oil must be used.

6. NEEDLE AND THREAD

Selection of the proper needle depends not only on the machine model, but also on the material and thread usde. For selection of proper needle and thread sizes to be used on the various machine models please refer to the table below.

Machine class	ZZ 509		
Application of class	For light-weight materials	For medium-weight materials	For medium-heavy weight materials
Max. thread size(Nm)-Synthetic*	120	60	30
Needle size (1/100 mm)	10	12~16 (80~100)	18~19 (110~120)
Needle catalog (Needle system)	1910-05 (135 x 9)		
*or an equivalent size of other types of thread			

7. INSERTING THE NEEDLE

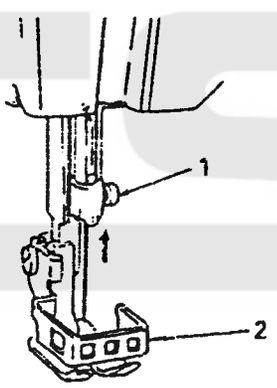


Fig.4.

CAUTION

Switch off the machine.
Do not operate without finger guard (2). (See Fig.4)
Danger of injury

Use needle cat. No. 1910-05 needle system (135 X 9) only.

Raise needle bar to its highest position by turning hand wheel toward you.

Loosen needle set screw (1), Fig. 4 Inset 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

8. TO REMOVE THE BOBBIN CASE

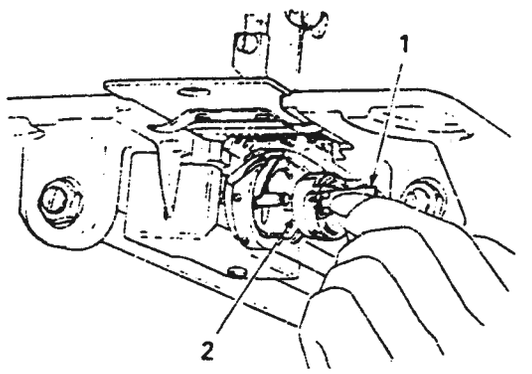


Fig.5.

CAUTION

Switch off the machine.
Do not operate machine with throat plate left open.

1. Open bed slide.
2. Raise latch (1), Fig.5.
3. Lift out bobbin case (2), Fig.5.

9. TO WIND THE BOBBIN

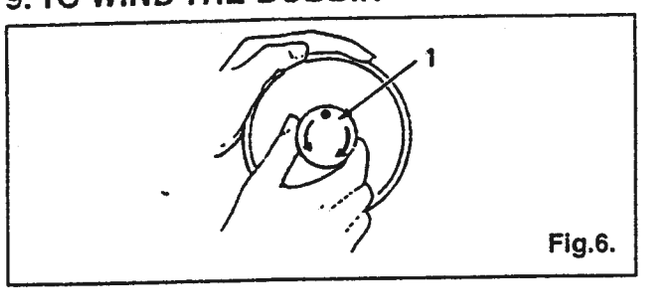


Fig.6.

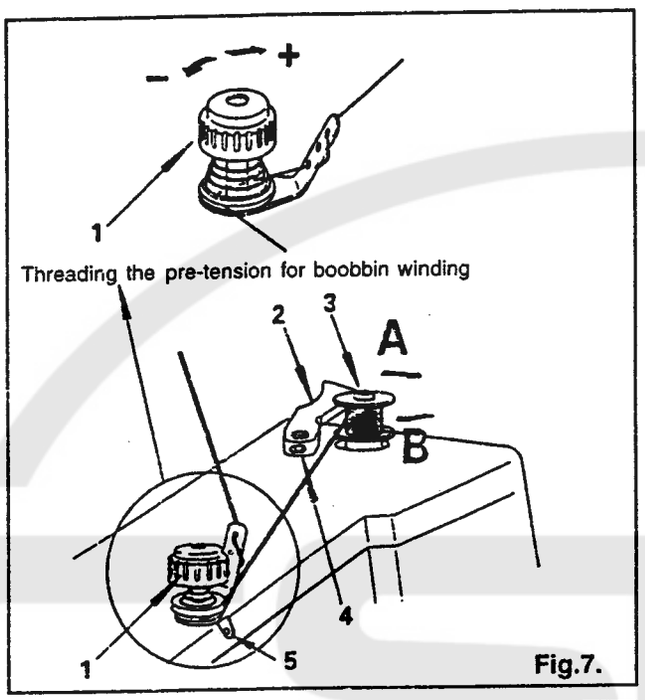


Fig.7.

CAUTION

Do not guide or hold thread when winding the bobbin.

1. Stop motion needle by loosening stop-motion screw (1),Fig.6.Hold hand wheel with left hand and turn stow-motion screw toward you with right hand.

2. Place bobbin on bobbin winder spindle (3), Fig.7, pushing it on as far as it will go.
   Pre-tension (1) (See Fig.7)
   +....More tension.
   -....Less tension.

3. Push latch (2) in the direction indicated by arrow (A), then start the machine.(See Fig.7)

   Bobbin winder spindle (3) rotates in the direction indicated by arrow (B).(See Fig.7)

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

   For more thread on bobbin,swing latch (2) away from you or toward you,as required.

   For less thread on bobbin,swing latch (2)toward you. If thread winds unevenly on bobbin,loosen screw (5) and move pre-tension (1) up or down, as required,and tighten scrow (5).

10. THREADING THE BOBBIN CASE

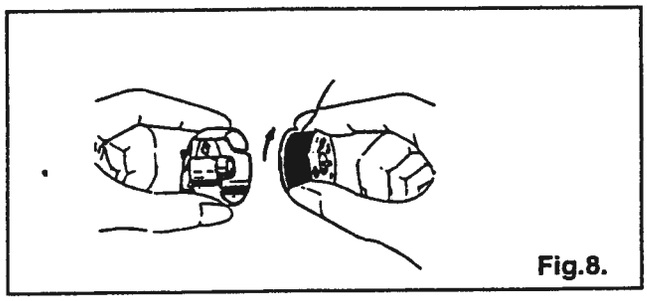


Fig.8.

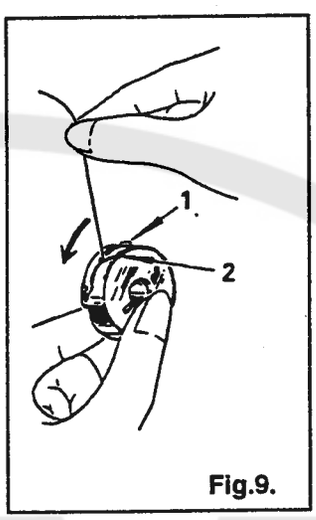


Fig.9.

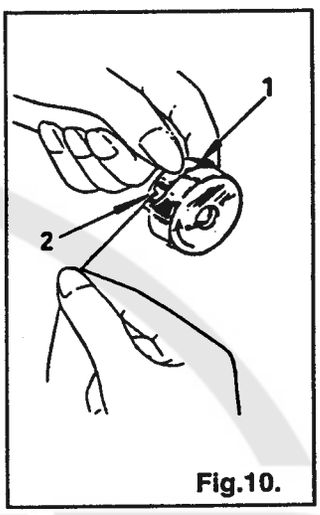


Fig.10.

1. Hold bobbin case so that thread unwinds in the diraction shown in Fig.8.and put bobbin in bobbin case.

2. Pull thread into notch (1),and draw it under tension spring(2),Fig.9.

3. Draw thread out from slot(2) on end of spring(1),Fig.10 and pass it through bobbin case thread guide (1), Fig,11.Allow about 4 inches of thread to hand freely from bobbin.

NOTE:When streight stitching, a better result can be obtained if bobbin thread is not threaded through bobbin case thtead guide (1),Fig.11.

11. TO REPLACE THE BOBBIN CASE

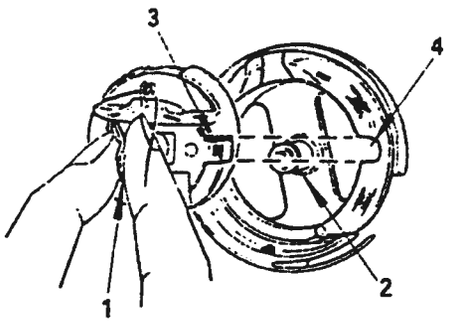


Fig.12.

CAUTION

Switch off the machine.
Do not run machine without closing bed slide. Danger of injury!

hold bobbin case by latch (1) and place it on spindle of boobin case holder (2) so that position finger (3) enters notch (4) at right of bobbin case holder.(See Fig.12) Release latch and press bobbin case firmly in place to assure proper positon. Close beb slide.

12. THREADING THE NEEDLE

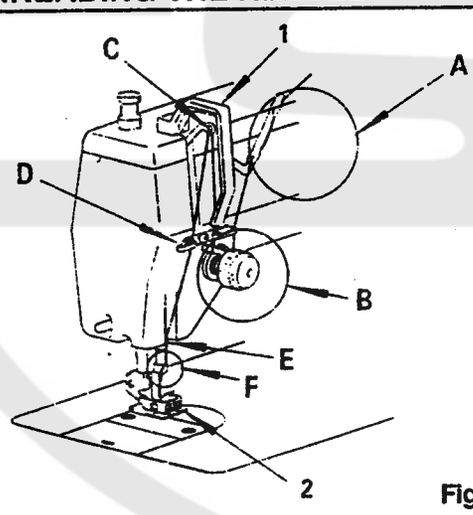


Fig.13.

Fig.14.

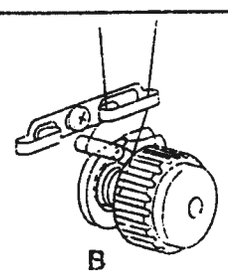


Fig.15.

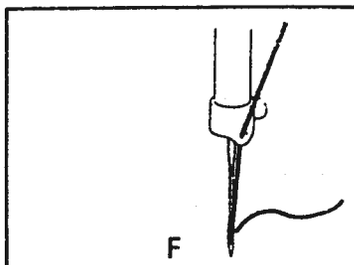


Fig.16.

CAUTION

Switch off the machine.
Do not operate without thread take-up guard.
Do not operate without finger guard Danger of injury!

1. Lead thread from the thread unwinder through all the threading points A (Fig.14), B (Fig.15), C(Fig.13),D (Fig.13),E(Fig.13) and F(Fig.15) in the oredr shown.
2. Thread the needle from front to back, as shown in Fig.16
3. Draw about 3 inches of thread through eye of needle.

13. TO ADJUST STITCH LENGTH

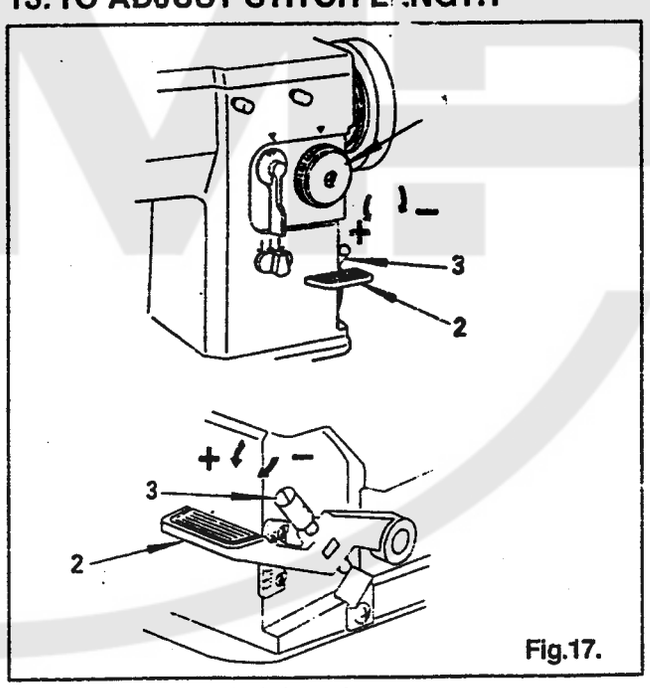


Fig.17.

Regulating the stitch length:

To regulate the stitch length,turn feed regulating dial(1). Fig.17.toware left or right as required.

+....To lengthen
-....To shorten

Changing to reverse feed:

Push lever (2), Fig.17,down for reverse feed and release for forward feed.

To regulate the reverse stitch length,turn thumb screw (3),Fig.17 toward left or right as required.

+....To lengthen
-....To shorten

14. TO ADJUST PRESSER FOOT PRESSURE

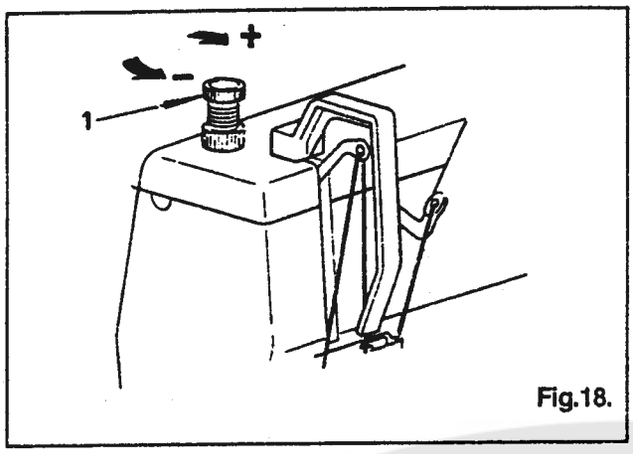


Fig.18.

To regulate the presser foot pressure,turn knurled thumb screw(1),Fig.18,toward left of right as requirde.

+....More pressure

-....Less pressure

15. TO ADJUST NEEDLE THREAD TENSION

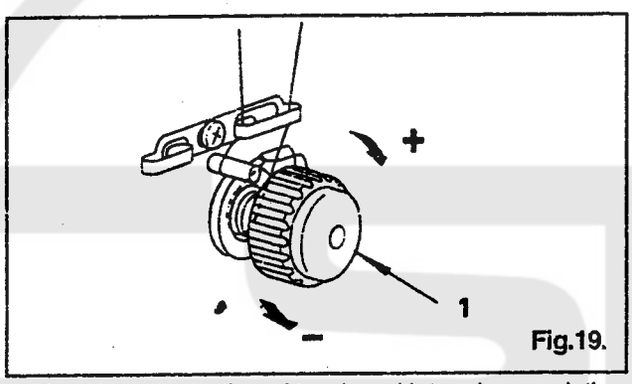


Fig.19.

Regulate needle thread tension with tension regulating knob(1),Fig.19.

+....More tension

-....Less tension

16. REGULATING THE TAKE-UP SPRING

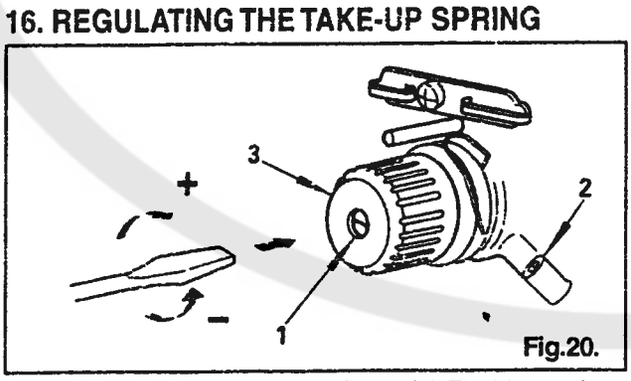


Fig.20.

Using a screwdriver in slot of stud (1),Fig.20, regulate take-up spring tension by turning stud (1),as required.

+....More tension

-....Less tension

To adjust the amount of take-up spring movement,loosen screw (2),Fig.20.and set take-up spring height by turning the entire tension assembly (3) toward left or right, as required.Securely tighten screw (2).

17. TO ADJUST BOBBIN THREAD TENSION

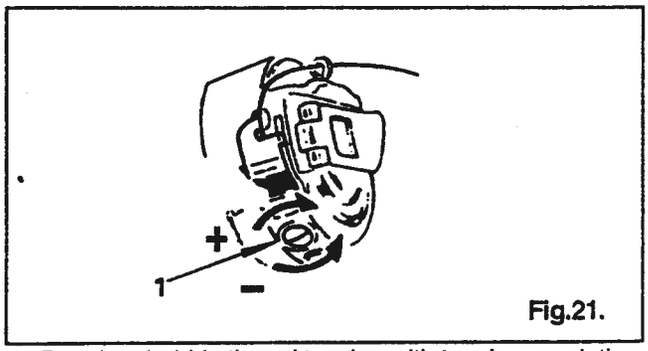


Fig.21.

Regulate bobbin thread tension with tension regulating screw (1),Fig.19.

+....More tension

-....Less tension

18. NEEDLE POSITON SELECTOR

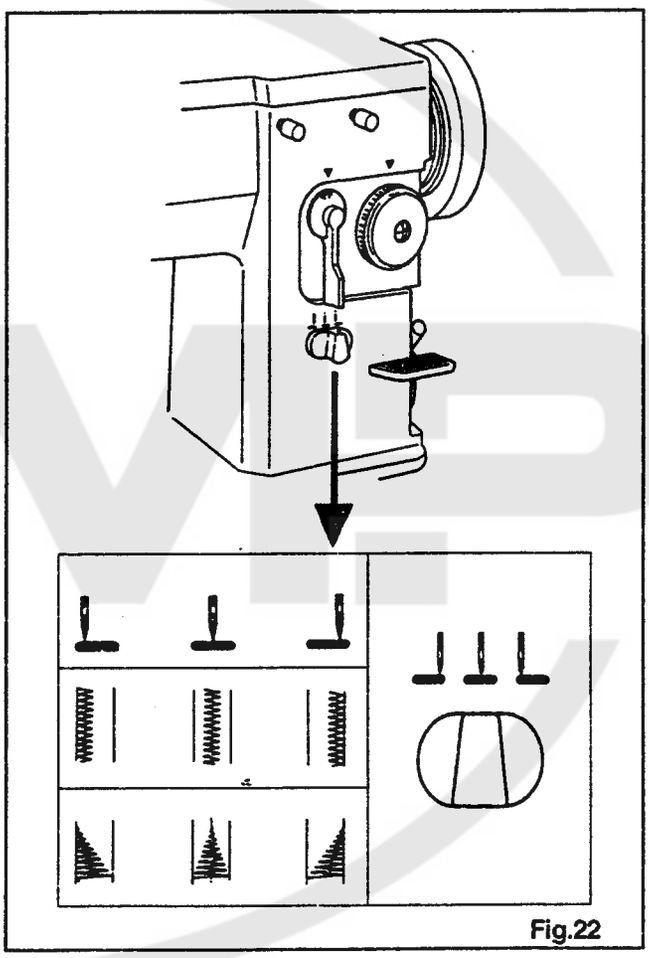


Fig.22

CAUTION

Switch off the machine.

Left, Center and Right needle position. settings are available for placement of both straight and zigzag stitching. (See Fig.22)

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

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

19. STITCH WIDTH REGULATOR

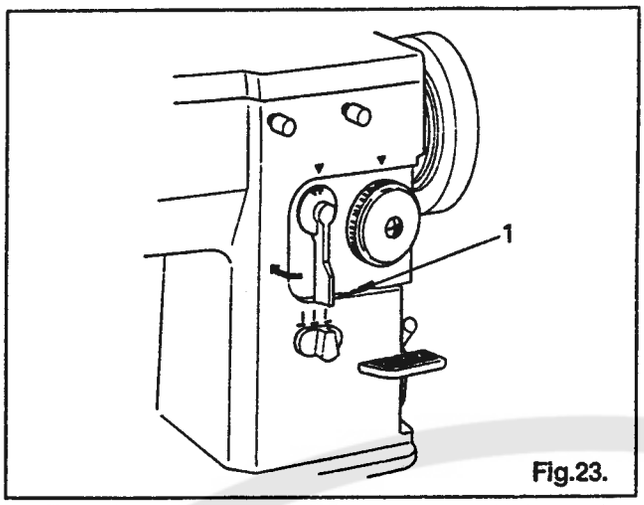


Fig.23.

The width of zigzag stitch is controlled with the spring biased stitch width regulating lever(1), Fig.23.

Maximum zigzag width: 0-9 mm

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

20.HOW TO CONTROL THE WIDTH OF ZIGZAG STITCH

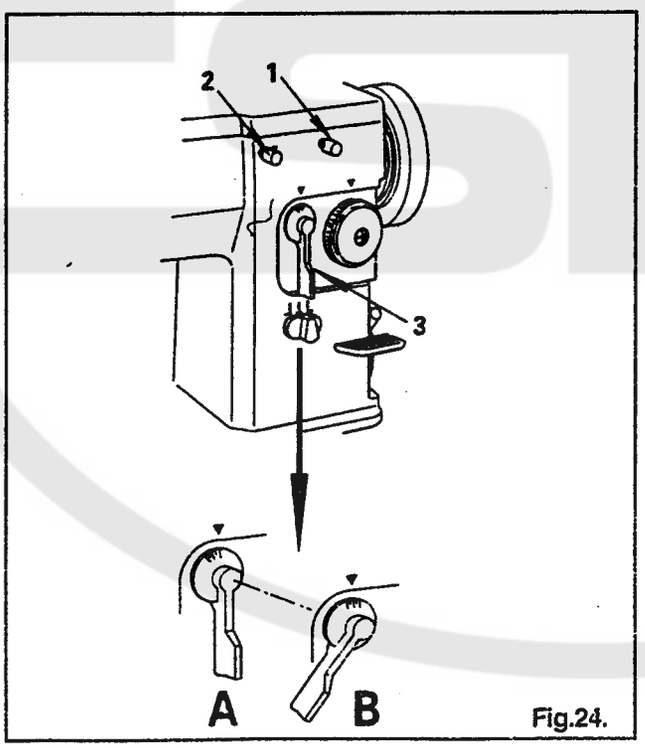


Fig.24.

To obtain minimum to maximum width zigzag stitches, first loosen thumb screw (2) ,Fig.24, to permit the stitch width regulator (3), Fig.24 to return to its zero position (see A, Fig.24) and retighten thumb screw (2).

Then loosen thumb screw (1), Fig.24. turn stitch width regulator (3) clockwise as far as it will go and while holding the regulator (3) in this position (see B. Fig.24),retighten thumd screw (1).

You can now regulate the stitch width regulator within the range of zero to maximum.

21.NEEDLE BAR FRAME CLAMPING DEVICE

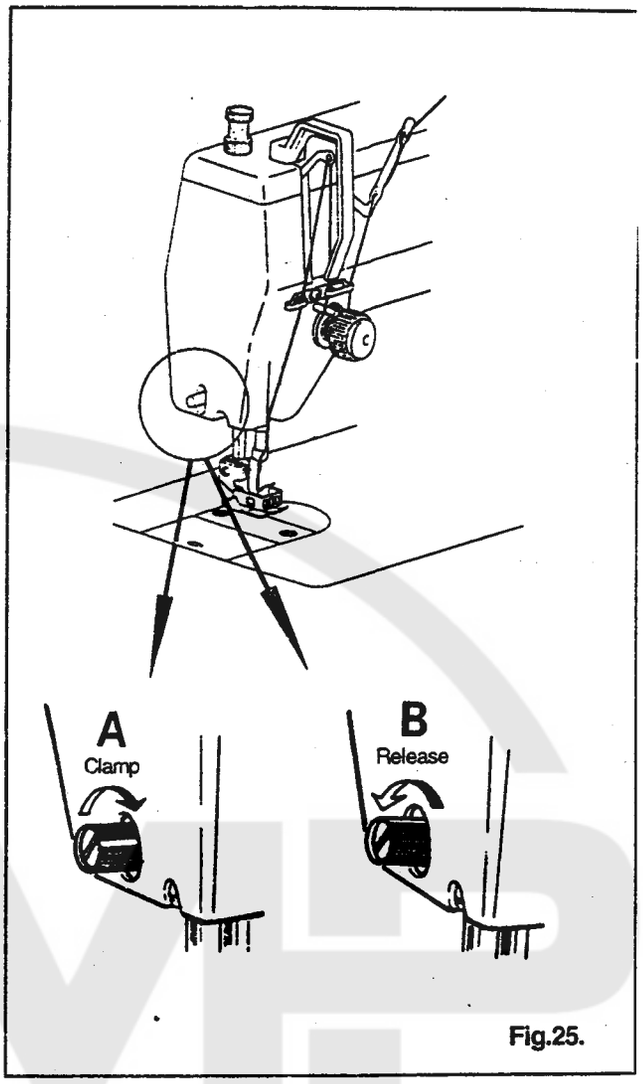


Fig.25.

CAUTION

Switch off the machine.

When straight stitching. a better sewing. result can be obtained by locking the needle bar frame immovable with the clamping device. (See Fig.25)

A:Clamp
B:Release

22.FITTINGS FOR STRAIGHT AND ZIGZAG STITCHING

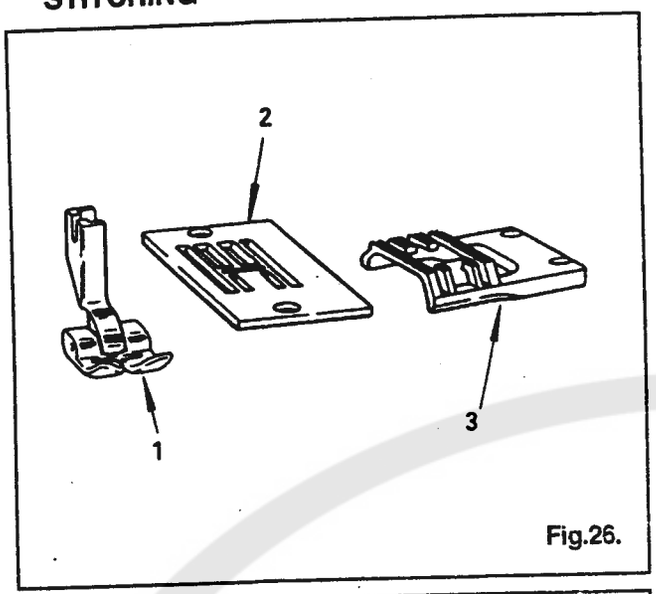


Fig.26.

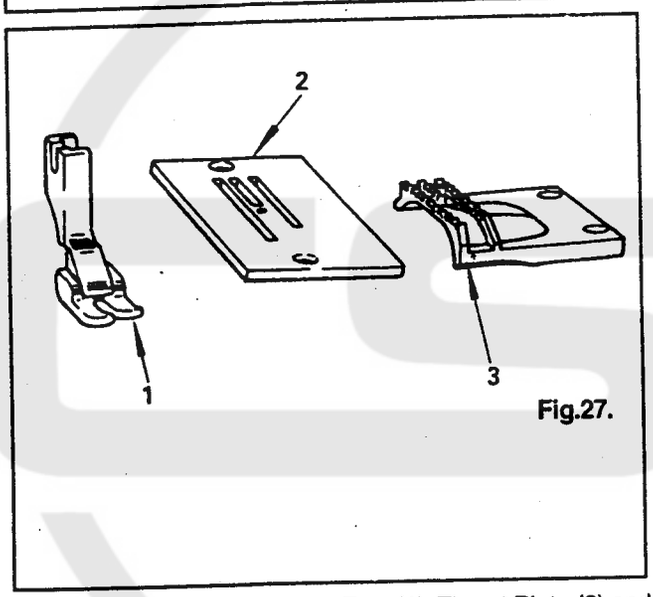


Fig.27.

General Purpose Presser Foot (1), Throat Plate (2) and Feed Dog (3) as shown in Fig.26.are used for straight and zigzag stitchiing.

Straight Stitch Presser Foot (1), Throat Plate (2) and Feed Dog (3) as shown in Fig.27, are used for straight stitching only.

23.CHANGING THE THROAT PLATE AND FEED DOG

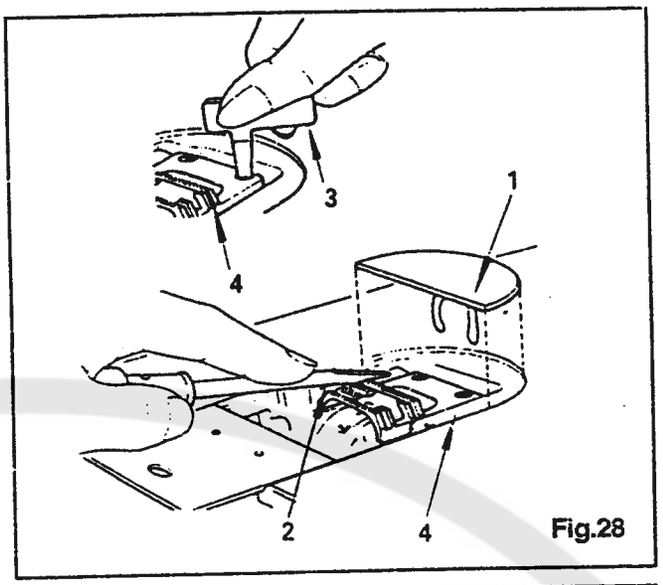


Fig.28

CAUTION

Switch off the machine.

1. Open bed slide, then remove throat plate . (Use screwdriver (3), Fig.28. furnished with machine for removal and replacement of throat plate and feed dog.)

2. Using a screwdriver (2), remove bed plate (1) and remove feed dog (4). (See Fig.28.)

3. To replace general purpose or straight stitch feed dog. fasten feed dog to machine temporarily and replace general purpose or straight stitch throat plate. Set feed dog correctly in position so that it will not hit the edgse of feed dog slots in the throat plate.

4. Replace bed piate and press it firmly in place.

24. TO MOUNT THREAD UNWINDER

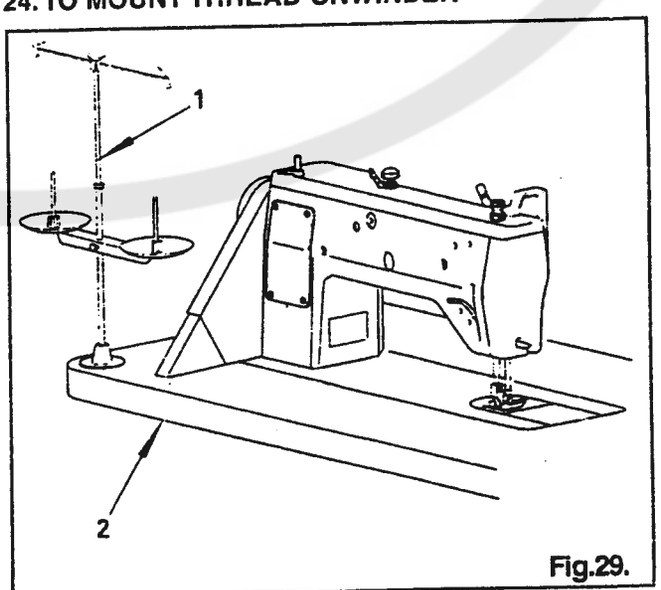
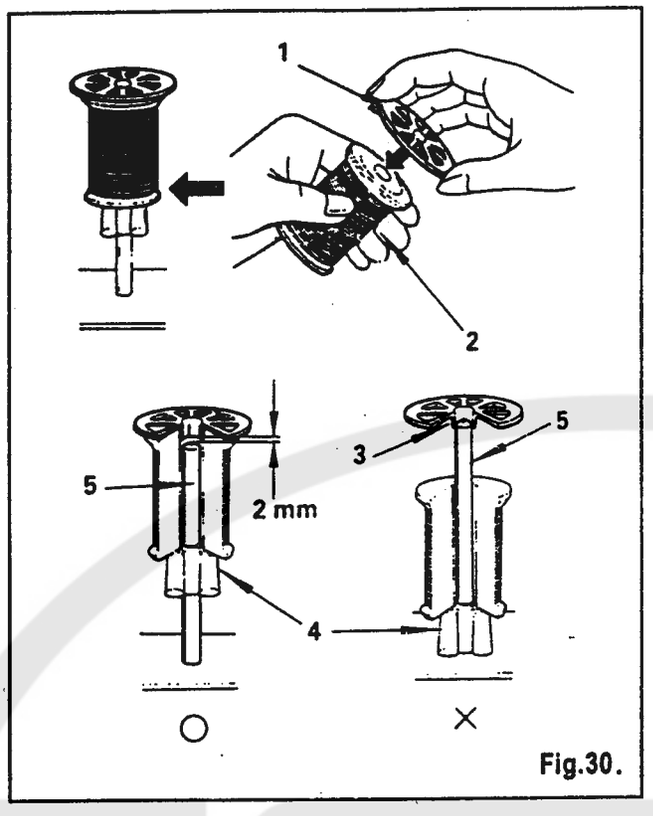


Fig.29.

Fix the thread (1) guide stand on table (2) plate.

25. TO USE THE SPOOL CAP

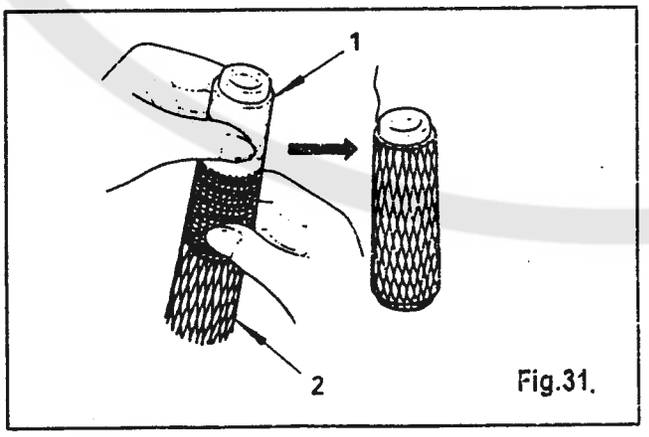


When using a reel type thread spool, fit the spool cap (1) supplied with the machine onto the thread spool (2). Fig.30.

Set height of spool rest (4) so there is approximately 2mm clearance between top end of spool pin (5) and the tip of the slotted spigot (3) of the spool cap. (See Fug.30)

The spool cap should never be fitted on the spool pin. Forcing if onto the spool pin may result in breaking the slotted spigot of the spool cap. (See Fig.30)

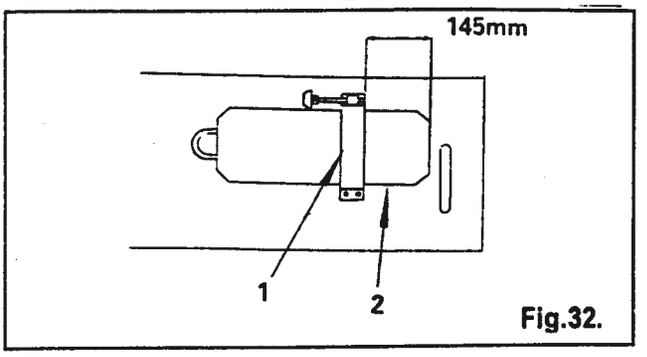
26. TO USE THE ANTI-SPILL SLEEVE



When using synthetic threads that easily spill off the cone (1),slip the anti-spill sleeve (2) furnished with the machine over the thread from the bottom of cone (1) leaving the thread end to hang free at the top of anti-spill sleeve (2) as shown in Fig.31.

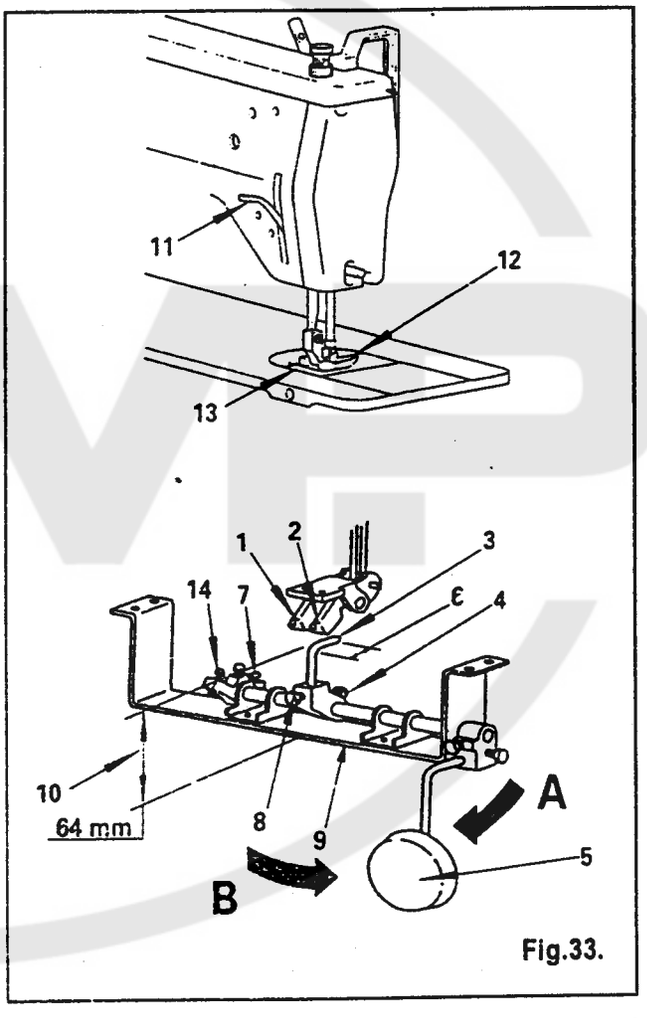
27. KNEE LIFTER

TO MOUNT KNEE LIFTER



Fasten knee lifter bracket (1) to underside of table (2) 145 mm from table cut-out as shown in Fig.32.

KNEE OPERATING PRESSER FOOT LIFT



CAUTION

Switch off the machine.
Set sewing head upright again using both hands.
Danger of crushing between sewing head and table top.

Bell cranks (1) and (2) shown in Fig.33 are fastened to the underside of the bed. Bell crank (1) is used for lifting and lowering the presser foot with knee, and bell crank (2) is used for controlling the stitch width. (See Fig.33)

To raise or lower the presser foot with knee, loosen screw (4) hdlding the knee lifter shaft arm (3) and move knee lifter shaft arm (3) ujst umder the bell crank (1),and firmly tighten screw (4), (See Fig.33)

Loosen the lock nut holding screw (7) and turn screw (7) as required, so that the bent end (6) of knee lifter shaft arm (3) will be almost horizontal when knee lifter knee plate (5) is pushed as far as it will go in the direction indicated with arrow (A),then firmly tighten the lock nut. (See Fig.33)

With knee lifter shaft arm (3) set in position as described above, loosen screw (8) and move knee lifter shaft arm (3) up or down as required, so that height (10) from its bent end (6) to bracket (9) is 64 mm. (See Fig.33)

Raise presser foot (12) with presser foot lifter (11).Then loosen the lock nut holding screw (14) and turn screw (14) as required,so that knee lifter knee plate (5) when pushed in the direction indicated with arrow (B),will stop at a point (presser foot (12) raised approx. 9 mm from throat plate (13) surface) where presser bar lifter (11) will drop down from its raised position when presser bar is lifted a little higher than its normal up position.Then firmly tighten the lock nut.(See Fig.33)

When knee lifter knee plate (5) is pushed in the direction indicated with arrow (B),the presser foot (12) will rise and when knee plate (5) is released, presser foot (12) will be lowered.(See Fig.33)

KNEE OPERATING STITCH WIDTH CONTROL

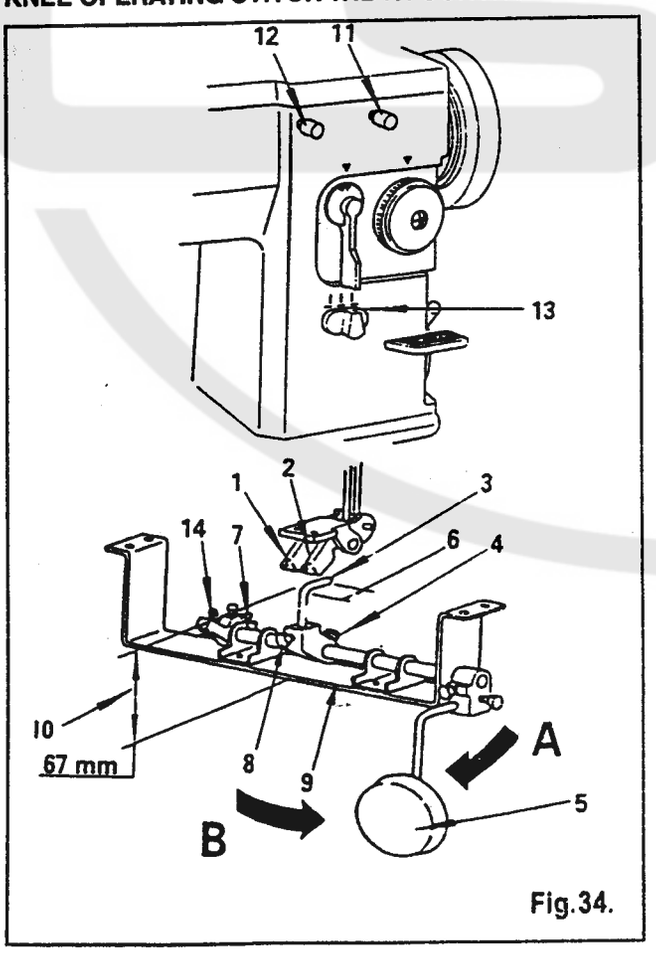


Fig.34.

CAUTION

Switch off the machine.
Set sewing head upright again using both hands.
Danger of crushing between sewing head and table top.

Bell cranks (1) and (2) shown in Fig.34 are fastened to the underside of the bed. Bell crank (1) is used for lifting and lowering the presser foot with knee and lell crank (2) is used for controlling the stitch width.

To control the stitch width with knee, loosen screw (4) holding the knee lifter shaft arm (3) and move knee lifter shaft arm (3) just under the bell crank (2) and firmly tighten screw (4).(See Fig.34)

Loosen the lock nut holding screw (7) and turn screw (7) as required, so that the bent end (6) of knee lifter shaft arm will be almost honzontal when knee lifter knee plate (5) is pushed as far as it will go in the direction indicated with arrow (A). Then firmly tighten the lock mut.(See Fig.34)

With knee lifter shaft arm (3) setin postiton as described above, loosen screw (8) and move knee lifter shaft arm (3) upor down as required, so that height (10). from its bent end (6) to bracket is 67 mm. (See Fig.34)

Loosen stitch width regulating plate thumb screws (11) and (12) so that stitch width regulator (13) can be moved from zero to maximum stitch width.(See Fig.34) Loosen the lock nut holding screw (14) and turn screw (14) as required, so that knee lifter knee plate (5) when pushed in the direction indicated with arrow (B), will stop at the maximum stitch width position of stitch width regulator (13). Then firmly tighten the lock nut. (See Fig.34)

Stitch width will become wider when knee lifter knee plate (5) is pushed in the direction indicated with arrow (B) and will become smaller when knee plate is released, (See Fig.34)

28. FITTINGS FOR BUTTONHOLE STITCHING

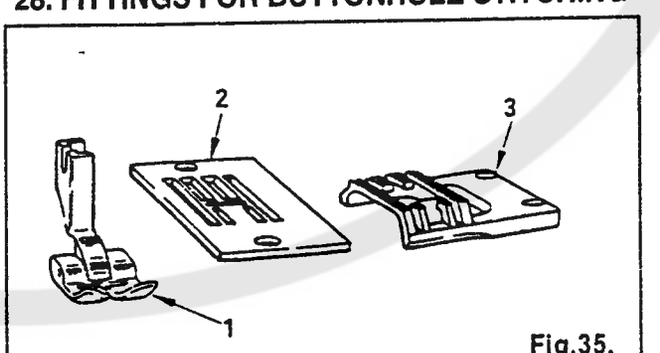


Fig.35.

CAUTION

Switch off the machine.

Buttonhole Foot (1). General Purpose Throat Plate (2) and Feed Dog (3) as shown in Fig.35 are used for buttonhole stitching.

29.FITTINGS FOR HEM SEWING

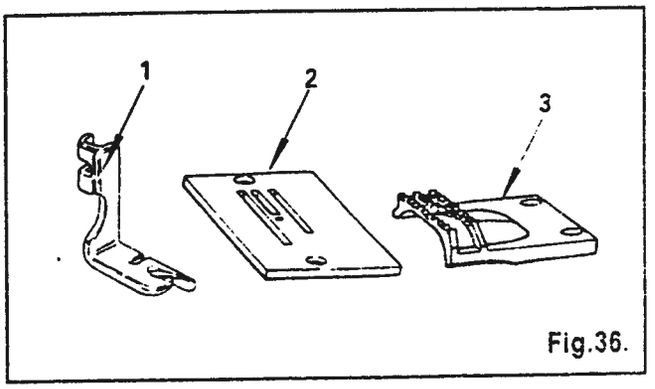


Fig.36.

CAUTION

Switch off the machine.

Hemmer Foot(1),Straight Stitch Throat Piate (2) and Feed Dog (3) as shown in Fig.36 are used for hem sewing.

30.FITTINGS FOR ZIPPER AND CORD SEWING

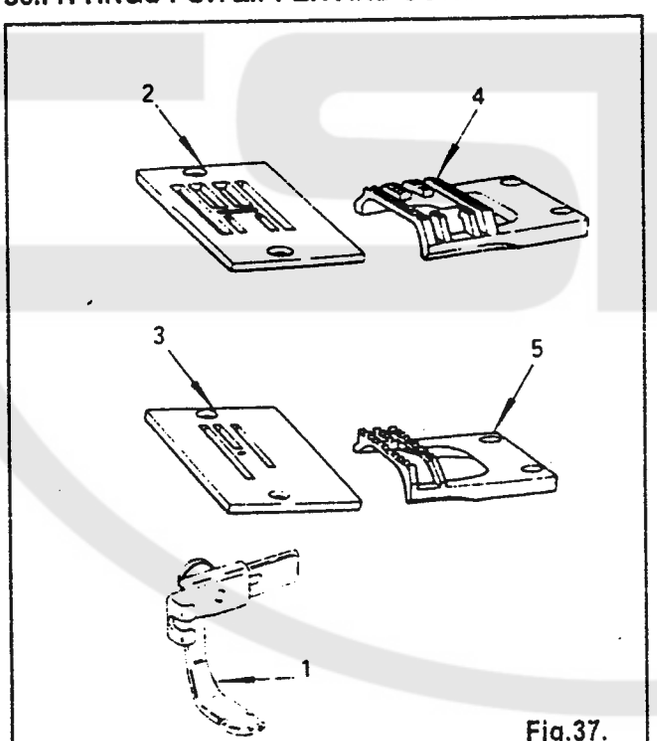


Fig.37.

CAUTION

Switch off the machine.

Zipper Foot (1), General Purpose (2) or Straight Stitch (3) Throat Plate and General Purpose (4) or Straight Stitch(5) Feed Dog as shown in Fig.37 are used for zipper and cord sewing.

31. CARING FOR YOUR MACHINE

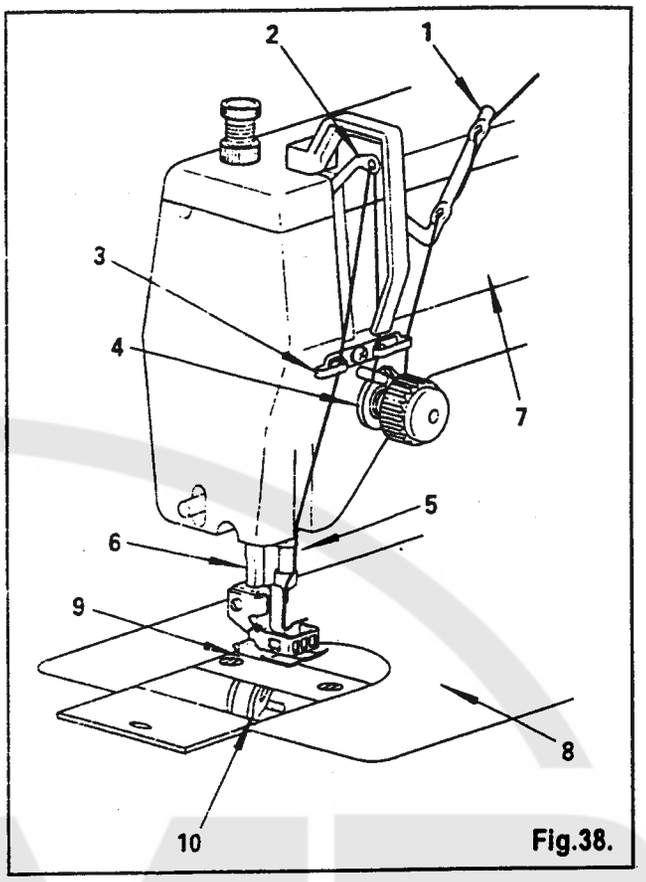


Fig.38.

CAUTION

Switch off the machine.
Set sewing head upright again using both hands.
Danger of crushing between sewing head and table top.

The machine will serve you perfectly for many years if you take a few moments of your time to keep if clean. How often you will need to clean and lubricate the machine will depend on how often you will use it.

When in regular use, 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, especially when the machine is operated at maximum recommended speed.

With a soft cloth, clean; (See Fig.38)
- (1) Thread retainer
- (2) Take-up lever
- (3) Thread guard
- (4) Tension discs
- (5) Needle bar
- (6) Presser bar
- (7) Machine arm and bed

With a lint brush, clean; (See Fig.38)
- (9) Feed dog
- (10) Rotaing hook and area under throat plate.
  Turn hand wheel over toward you until oil hole in rotating hook appears in sight.
  Apply one or two drops of oil to the oil hole.

32. TROUBLESHOOTING CHART

Whenever sewing difficulty is encountered, check and make adjustments as follows.

Problem	Cause	Solution
Needle thread breaks	1. Is machine properly threaded?	1. Correct needle threading
	2. Are thread guides or tension disc area lint-free?	2. Remove lint and fluff in bobbin case and hook
	3. Is needle-thread tension too tight?	3. Adujst needle thread tension
	4. Is needle bent or have a blunt point?	4. Insert new needle
	5. Is needle inserted correctly?	5. Isert needle correctly
	6. Isneedle the correct size for theread and fabric?	6. Select proper needle size and thread
	7. Is thread free of slubs and knots?	7. Remove slubs and knots
Bobbin thread breaks	8. Is bobbin threading correct?	8. Correct bobbin threading
	9. Is thread tangled or caught?	9. Untangle thread from bobbin case and hook
	10. Is thread tension correct?	10. Adjust needle and bobbin case thread tension
	11. Does bobbin rotate smoothly?	11. Check whether bobbin thread is wound correctly
Stitches skip	12. Is meedle inserted correctly?	12. Insert needle correctly
	13. Is meedle bent or have blunt needle point?	13. Insert new needle
	14. Is size of needle and thread suitable for fabric?	14. Select proper needle size and thread
	15. Is threading correct?	15. Correct needle threading
Needle breaks	16. Is needle properly inserted?	16. Insert needle correctly
	17. Is needle bent?	17. Insert new needle
	18. Is needle the correct size for the fabric?	18. Select proper needle and thread for fabric
	19. Is needle clamping screw loose?	19. Tighten needle set screw
	20. Is the fabric pulled while sewing?	20. Do not pull fabric while sewing
Fabirc fails to feed	21. Is feed regulating dial properly adjusted?	21. Lengthen stitch length by feed regulating dial
	22. Is presser foot pressure adjusted properly?	22. Increase presser foot pressure
Fabric puskers	23. Is needle threading correct?	23. Correct needle threading
	24. Is needle point blunt?	24. msert new needle
	25. Is thread tension too tight?	25. Adjust neeble tension properly
Rotating heaw Noisy	26. Is there any lint or fluff on feed dog?	26. Remove lint and fluff from feed dog
	27. Is there any lint in rotating hook?	27. Remove lint and fluff from rotating hook
Machine fails to srart	28. Are electrical plugs properly connected?	28. Turn on power switch
	29. Is power and light switch turned on?	29. Connect plug to power source

If you still have difficulty in sewing even after making adjustments. contact your mearest Service Center.

33. SPECIFICATIONS

Machine class	ZZ 509
For sewing	Light medium
Stitch type	301 Lockstitch, 304 (Zigzag lockstitch)
Max. speed*	2,500r.p.m
Max. stitch length	9.0 mm
Needle bar stroke	5.0 mm
Presser bar lift (manual)	34.8 mm
presser bar lift	6.35 mm
Presser bar lift (knee lifter)	9.0 mm
Needle catalog (needle system)	CAT.1910-05(135X9)
Needle size	See page 3 for table on "NEEDLE AND THREAD"
Machine pulley	Effective dia. for V-belt 74 mm
Workspace width	211 mm
Workspace height	130 mm
Bedplate dimensions	399 mm x 178 mm
Net weight (head only)	19.5 kg
Gross weight (with accessories)	21.0 kg

* Maximum speed will vary depending on fabric, threads and sewing condition.

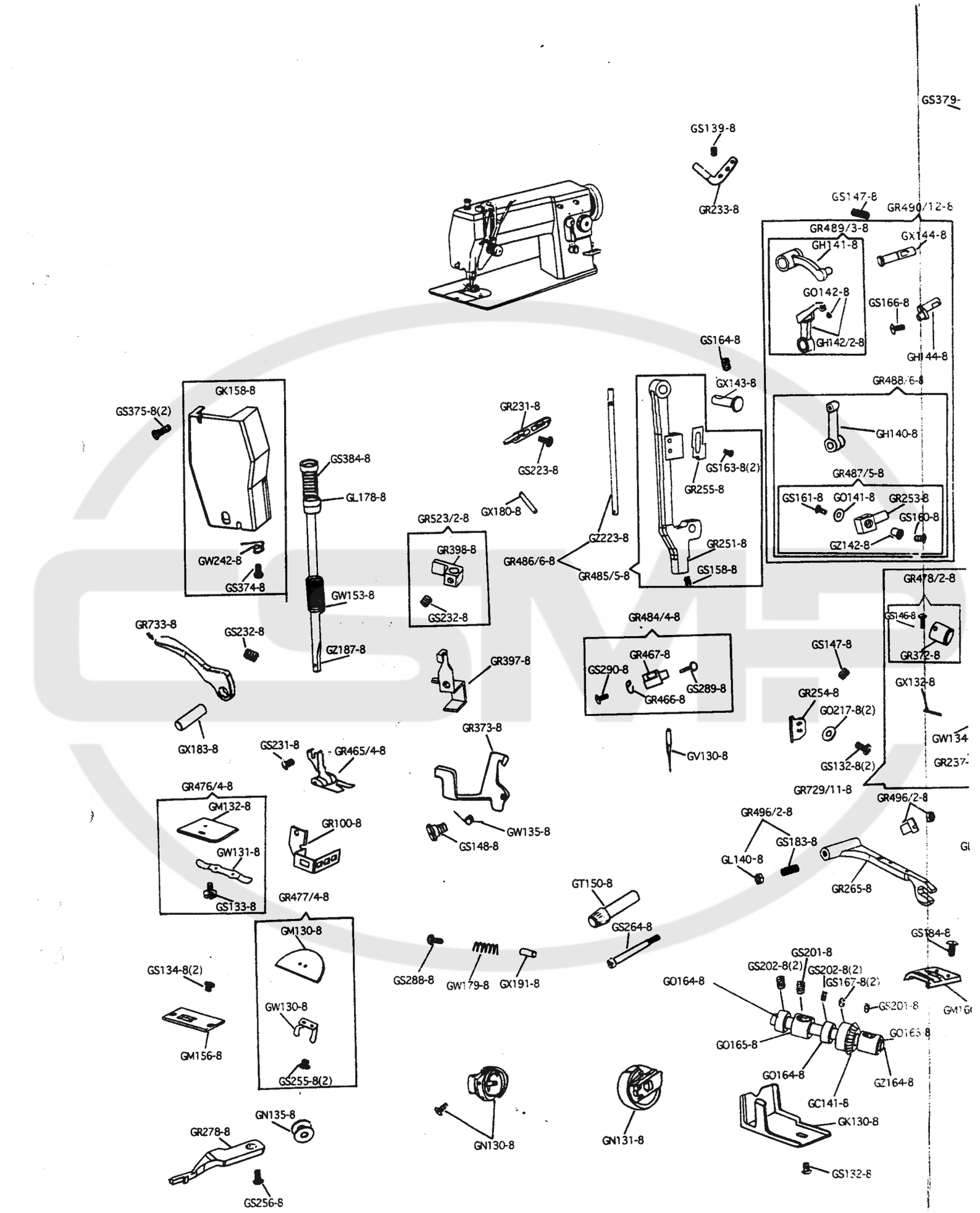
Relationship between zigzag bight and maximum speed

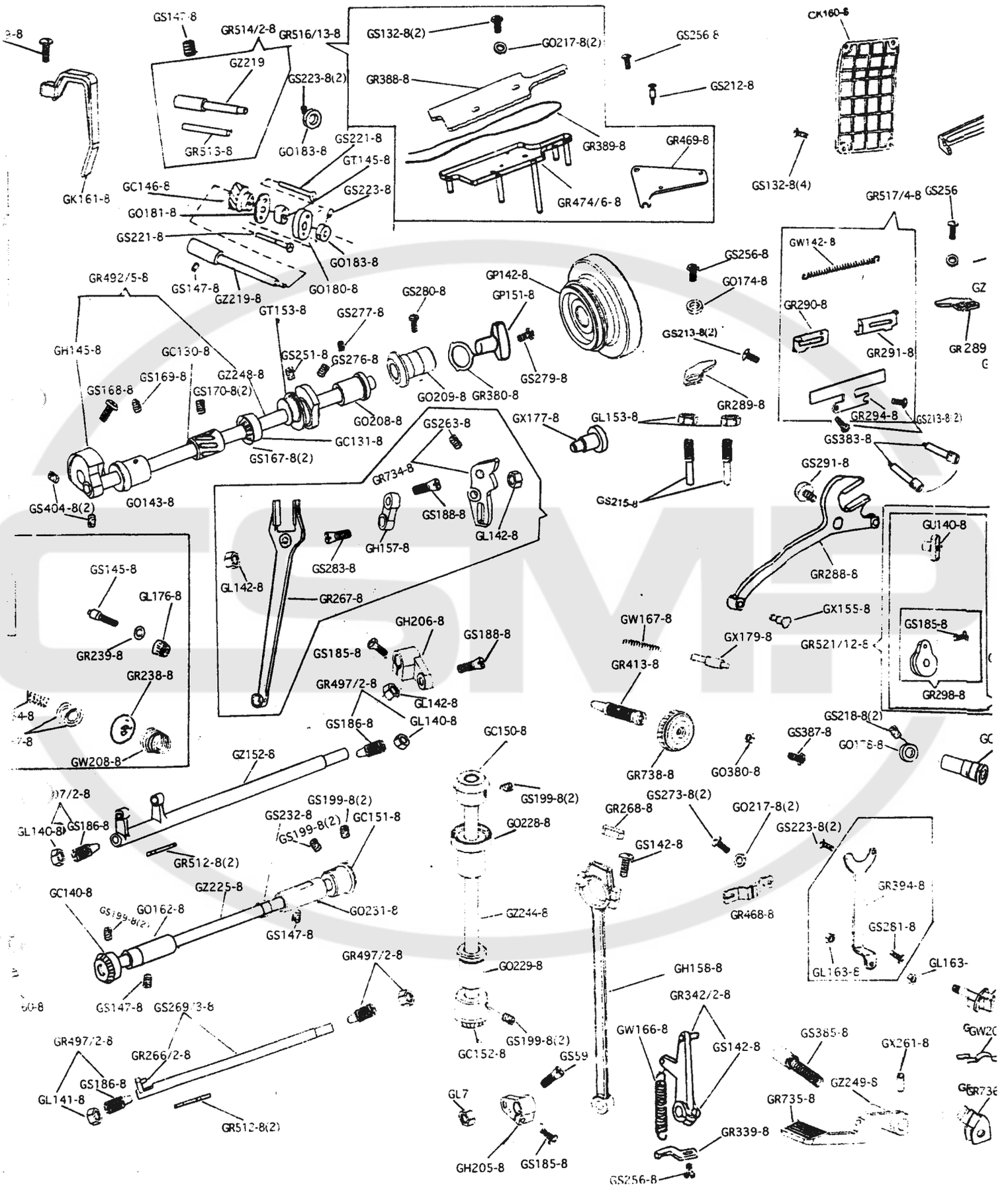
Machine class	ZZ 509	
Zigzag bight	0 mm ~ 5 mm	5 mm ~ 9 mm
Max. speed	2,500 r.p.m	2,000 r.p.m

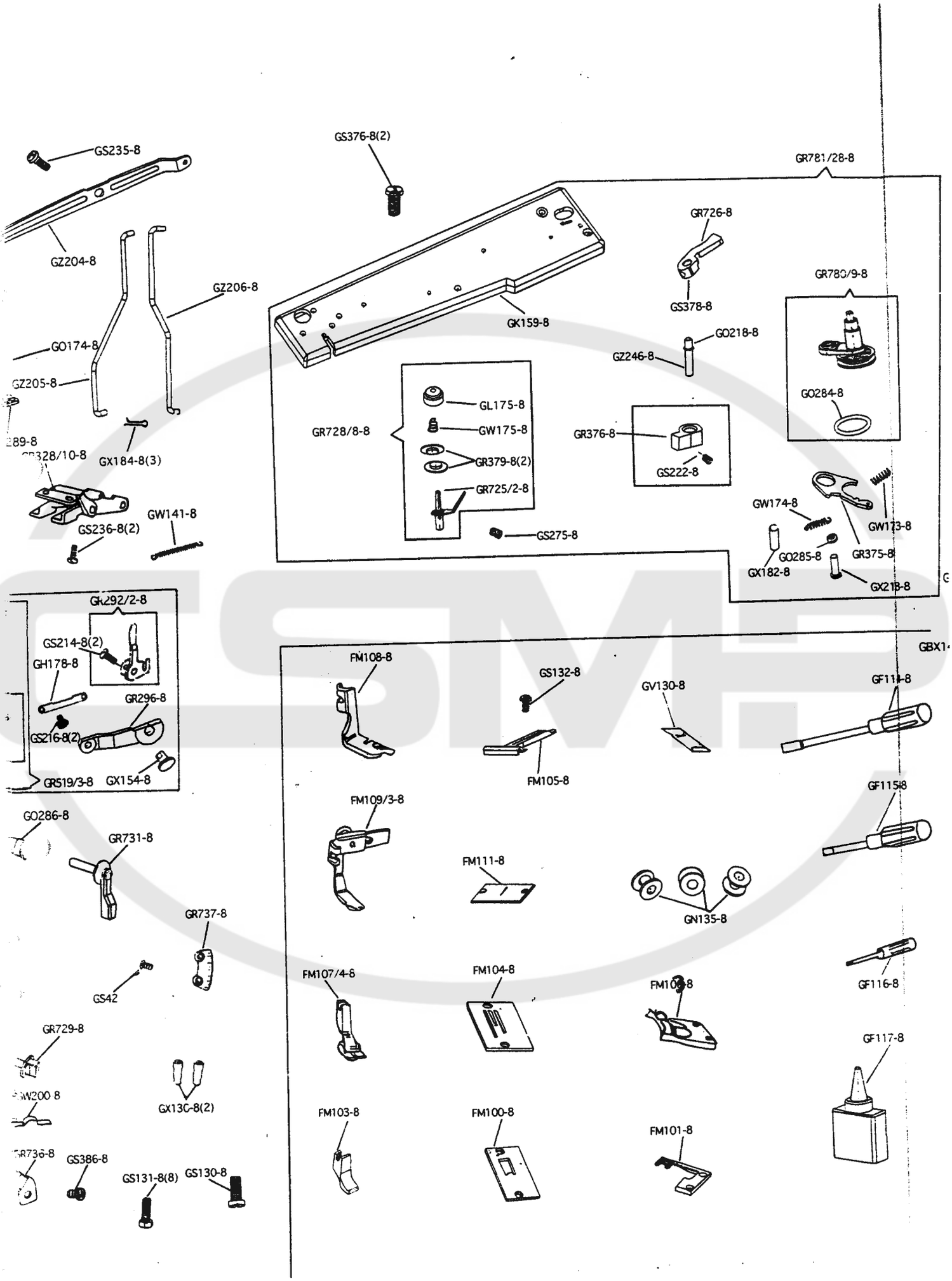
GLOBAL

ZZ 509

Parts list


GS379-
GS139-8
GR233-8
GS147-8
GR490/12-8
GR489/3-8
GH141-8
GX144-8
GO142-8
GS166-8
GH142/2-8
GH144-8
GS164-8
GX143-8
GR488/6-8
GH140-8
GK158-8
GS375-8(2)
GR231-8
GS223-8
GS384-8
GL178-8
GX180-8
GS163-8(2)
GR255-8
GR487/5-8
GS161-8
GO141-8
GR253-8
GS160-8
GZ142-8
GR523/2-8
GR398-8
GZ223-8
GR486/6-8
GR485/5-8
GR251-8
GS158-8
GW242-8
GS374-8
GW153-8
GS232-8
GR478/2-8
GS146-8
GR372-8
GR733-8
GS232-8
GZ187-8
GR397-8
GR484/4-8
GR467-8
GS290-8
GS289-8
GR466-8
GS147-8
GR254-8
GO217-8(2)
GX132-8
GW134
GR237-
GX183-8
GS231-8
GR465/4-8
GV130-8
GS132-8(2)
GR729/11-8
GR373-8
GR476/4-8
GM132-8
GR100-8
GW131-8
GW135-8
GS148-8
GR496/2-8
GR496/2-8
GS183-8
GL140-8
GR265-8
GS133-8
GR477/4-8
GT150-8
GS264-8
GM130-8
GS184-8
GS201-8
GS134-8(2)
GS202-8(2)
GS202-8(2)
GS167-8(2)
GO164-8
GS201-8
GW130-8
GM156-8
GS288-8
GW179-8
GX191-8
GO165-8
GO165-8
GO164-8
GZ164-8
GC141-8
GS255-8(2)
GK130-8
GN135-8
GR278-8
GN130-8
GN131-8
GS132-8
GS256-8


GS147-8
GR514/2-8
GR516/13-8
GZ219
GR513-8
GS223-8(2)
GO183-8
GS132-8(2)
GO217-8(2)
GR388-8
GR389-8
GR469-8
GR474/6-8
GS256-8
GS212-8
CK160-8
GS132-8(4)
GR517/4-8
GS256
GK161-8
GS221-8
GT145-8
GC146-8
GS223-8
GO181-8
GS221-8
GO183-8
GS147-8
GZ219-8
GO180-8
GR492/5-8
GH145-8
GC130-8
GS169-8
GZ248-8
GS168-8
GS170-8(2)
GT153-8
GS277-8
GS251-8
GS276-8
GS280-8
GP142-8
GP151-8
GS279-8
GO209-8
GR380-8
GO208-8
GC131-8
GS167-8(2)
GS404-8(2)
GO143-8
GS256-8
GO174-8
GW142-8
GR290-8
GR291-8
GS213-8(2)
GR289-8
GR294-8
GS383-8
GX177-8
GL153-8
GS215-8
GS263-8
GR734-8
GS188-8
GH157-8
GL142-8
GS283-8
GR267-8
GS291-8
GR288-8
GU140-8
GX155-8
GS185-8
GR521/12-8
GR298-8
GS145-8
GL176-8
GR239-8
GR238-8
GW208-8
GH206-8
GS188-8
GS185-8
GR497/2-8
GL142-8
GS186-8
GL140-8
GW167-8
GR413-8
GX179-8
GR738-8
GO380-8
GS218-8(2)
GS387-8
GO178-8
GC150-8
GZ152-8
GS199-8(2)
GO228-8
GS232-8
GC151-8
GR512-8(2)
GR268-8
GS273-8(2)
GO217-8(2)
GS223-8(2)
GS142-8
GR468-8
GR394-8
GS261-8
GL163-8
GL163-
GC140-8
GZ225-8
GO162-8
GO231-8
GS147-8
GZ244-8
GO229-8
GR497/2-8
GH158-8
GR342/2-8
GW166-8
GS142-8
GS385-8
GX261-8
GZ249-8
GR735-8
GR339-8
GS256-8
GC152-8
GS199-8(2)
GS59
GL7
GH205-8
GS185-8
GR497/2-8
GR266/2-8
GS186-8
GL141-8
GR512-8(2)


GS235-8
GZ204-8
GZ206-8
GO174-8
GZ205-8
GX184-8(3)
GW141-8
GS236-8(2)
GS376-8(2)
GR781/28-8
GK159-8
GR726-8
GS378-8
GR780/9-8
GO218-8
GZ246-8
GO284-8
GR728/8-8
GL175-8
GW175-8
GR379-8(2)
GR725/2-8
GS275-8
GR376-8
GS222-8
GW174-8
GW173-8
GR375-8
GO285-8
GX182-8
GX213-8
GR292/2-8
GS214-8(2)
GH178-8
GR296-8
GS216-8(2)
GR519/3-8
GX154-8
GO286-8
GR731-8
GR737-8
GS42
GR729-8
GW200-8
GX130-8(2)
GR736-8
GS386-8
GS131-8(8)
GS130-8
FM108-8
GS132-8
GV130-8
GF114-8
FM105-8
FM109/3-8
GF115-8
FM111-8
GN135-8
FM107/4-8
FM104-8
FM106-8
GF116-8
GF117-8
FM103-8
FM100-8
FM101-8

NUMERICAL LIST OF PARTS

Part NO.	Description
GS276-8	Feed cam position screw
GO208-8	Upper shaft back bushing
GZ248-8	Upper shaft
GO209-8	Hand wheel shaft bushing
GS280-8	hand wheel shaft bushing screw
GP142-8	Hand wheel
GR380-8	Clutch wash
GP151-8	Clutch hand wheel
GS279-8	Small clutch screw
GV130-8	Needle
GS277-8	Upper shaft back bushing
GS200-8	Hand wheel set screw (2)
GS142-8	Feed bar lifting link screw
GR268-8	Oil felt
GH158-8	Feed bar lifting link
GS59-8	Small cone nut
GH157-8	Stich regulator block connecting link
GL142-8	Small cone nut
GL141-8	Feed rock shaft centre nut
GS186-8	Feed rock shaft centre screw
GH206-8	Feed rock shaft crank
GS185-8	Feed crank screw
GS184-8	Feed dog screw
GM160-8	Feed dog
GL140-8	Feed bar centre nut
GS183-8	Feed bar centre screw
GZ152-8	Feed rock shaft
GR265-8	Feed bar
GR269/3-8	Feek bar lifting crank assembly
GS185-8	Feek bar lifting crank screw
GH205-8	Feed bar lifting crank
GR512-8(2)	Oil braid
GR267-8	Feed fork
GS283-8	Feed fork centre screw
	Thread unwinder complete
GR1315/18-8	Knee lifter complete
GR527-8	Hand wheel cover
GBS204-8	Back cover of hand wheel
GS293-8	Back cover of hand wheel screw
GS360-8	Hand wheel cover screw
GBR204-8	Machine head cushion
GBR205-8	Machine head cushion
GBS202-8	Machine head cushion nail
GBS201-8	Oil reservoir nail
GR413-8	Oil reservoir
GBR203-8	Machine head pole
GR353-8	Machine head hinge cushion rubber
GBX140-8	Machine head hinge cushion rubber nail
GR352/2-8	Machine head hinge complete
FM108-8	Hemmer foot
GS132-8	Hwm edge guide screw
FM105-8	Hem edge guide
FM109/3-8	Zipper foot complete

Part NO.	Description
FM111-8	Emboidery plate
FM107/4-8	Straight stitch foot
FM104-8	Straight stitch throat plate
FM103-8	Straight stitch feed dog
GV130-8	Needle
GN135-8	Bobbin
GF114-8	Screwdriver (L)
GF115-8	Screwdriver (M)
GF116-8	Screwdriver (S)
GF117-8	Oiler
GR788-8	T-type open knife
GR790-8	Ati-spill sleeve
GR789-8	Spool cap
GM172-8	Buttonhole foot
GS256-8	Rotating hook position plate screw
GR278-8	Rotating hook position plate
GN131-8	Bobbin case
GN135-8	Bobbin
GN130-8	Rotating hook
GO163-8	Front bushing of rotating hook shaft
GS201-8	Front bushing screw of rotating hook shaft
GO164-8	Retainer of rotating hook shaft(2)
GS202-8	Retainer screw of rotating hook shaft(4)
GO165-8	Back bushing of rotating hook shaft
GS201-8	Back bushing screw of rotating hook shaft
GZ164-8	Rotating hook shaft
GS167-8	Rotating hook shaft bevel gear screw (2)
GC141-8	Rotating hook shaft bevel gear
GC140-8	Lower shaft bevel gear
GS199-8	Lower shaft bevel gear screw (2)
GO162-8	Front bushing of lower shaft
GS147-8	Front bushing screw of lower shaft
GZ225-8	Lower shaft
GO232-8	Retainer of lower shaft
GS199-8	Retainer screw of lower shaft(2)
GO231-8	Back bushing of lower shaft
GS147-8	Back bushing screw of lower shaft
GC151-8	Lower shaft bevel gear
GS199-8	Lower shaft bevel gear screw (2)
GS199-8	Bevel gear screw of vertical shaft(2)
GC152-8	Vertical shaft Bevel gear
GO229-8	Lower bushing of vertical shaft
GZ224-8	Vrtical shaft
GO228-8	Upper bushing of vertical shaft
GS199-8	Bevel gear screw of vertical shaft(2)
GC150-8	Vertical shaft Bevel gear
GR288-8	Zigzag stitch regulator fork
GZ219-8	Zigzag triangular cam shaft
GS147-8	Screw of zigzag triangular cam shaft
GC146-8	Zigzag triangular camgear
GO181-8	Eccentric stop ring
GS221-8	Zigzag eccentric cam connecting screw(2)
GT145-8	Zigzag eccentric cam

NUMERICAL LIST OF PARTS

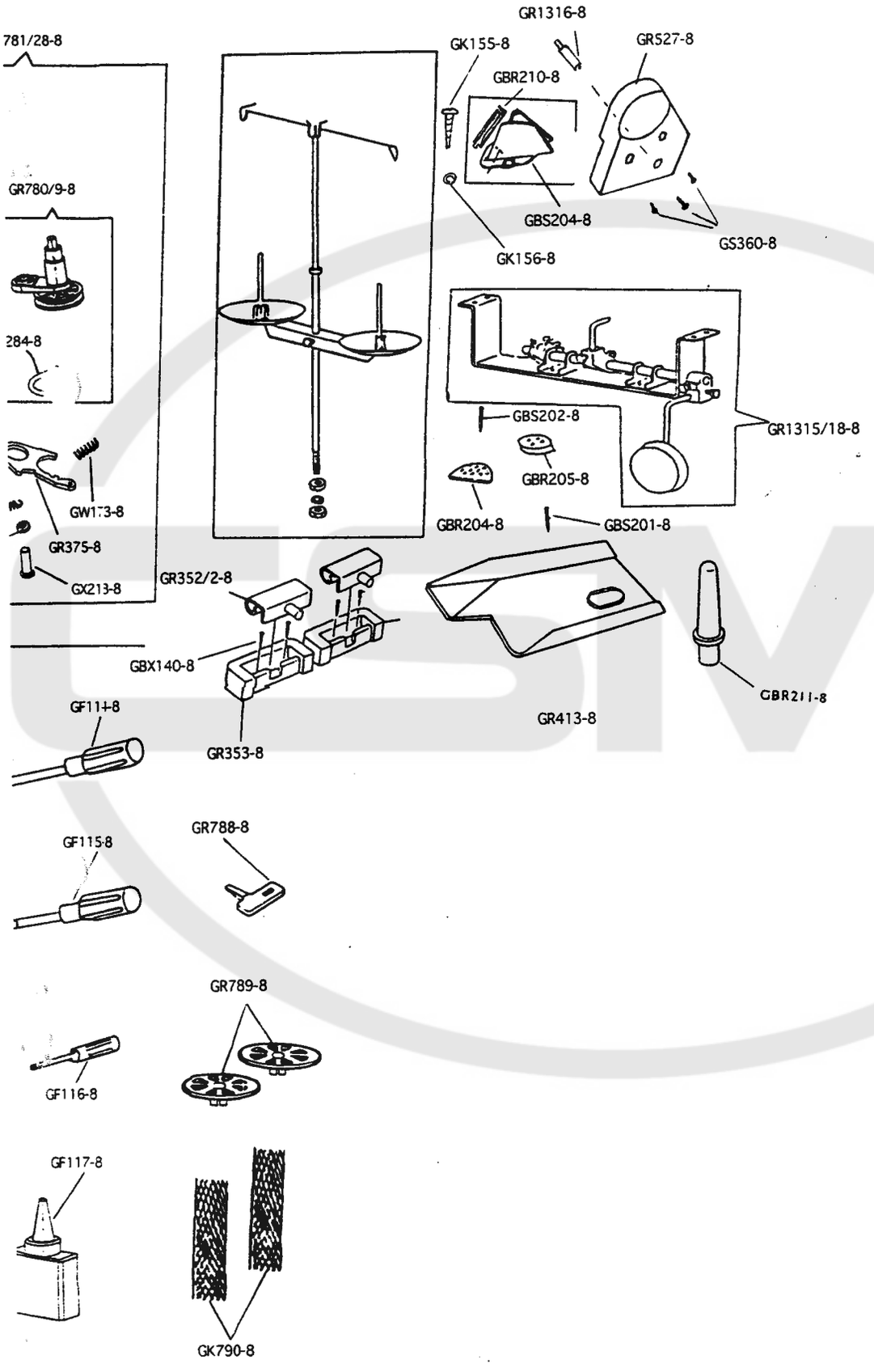
Part NO.	Description
GK158-8	Face plate
GR242-8	Face plate thread guard
GS374-8	Face plate thread guard screw
GS375-8	Face plate screw (2)
GK161-8	Thread take-up guard
GS379-8	Thread take-up guard screw
GK160-8	Back cover
GS132-8	Back cover screw (4)
GR233-8	Thread retainer
GS139-8	Thread retainer screw
GR231-8	Thread guard
GS223-8	Thread guard screw
GX180-8	Thread sliding shell
GT150-8	Linear lock eccentric cover
GS264-8	Linear lock eccentric cover screw
GK130-8	Rotating hook guard plate
GS132-8	Rotating hook guard plate screw
GM156-8	Throat plate
GS338-8	Throat plate screw (2)
GR476/4-8	Slide plate assembly
GM132-8	Slide plate
GW131-8	Slide plate spring
GS133-8	Slide plate spring screw (2)
GR477/4-8	Bed plate assembly
GM130-8	Bed plate
GW130-8	Bed plate spring
GS255-8	Bed plate spring screw (2)
GR373-8	Thread tension releasing lever
GW135-8	Thread tension releasing lever spring
GS148-8	Thread tension releasing lever screw
GR729/11-8	Thread tension assembly
GL176-8	Thread tension nut
GR239-8	Thread holding brake
GW208-8	Thread tension spring
GR238-8	Thread tension releasing disc
GR237-8	Thread tension disc(2)
GS145-8	Thread tension post
GW134-8	Thread take-up spring
GR372-8	Thread take-up spring adjusting base
GS146-8	Thread tension post set screw
GS147-8	Thread tension assembly set screw
GX132-8	Thread tension releasing pin
GX191-8	Eccentric cover supporting pole
GW179-8	Eccentric cover pressing spring
GS288-8	Pressing spring screw
GK159-8	Upper cover
GS376-8	Upper cover screw
GR728/8-8	Upper thread tension retainer
GR725/2-8	Upper thread retaining plate
GR379-8	Upper thread tension disc(2)
GW175-8	Upper thread tension spring
GL175-8	Upper thread tension nut
GS275-8	Upper thread tension post set screw

Part NO.	Description
GR780/9-8	Thread winding shaft assembly
GO284-8	Rubber ring
GR375-8	Thread winding swaying handle
GX218-8	Thread winding crank pin
GS275-8	Thread winding crank pin screw
GW173-8	Thread winding swaying handle pressing spring
GW174-8	Thread winding swaying handle extension spring
GX182-8	Extension spring pin
GR376-8	Thread winding locating block
GS222-8	Thread winding locating block set screw
GO285-8	Thread winding swaying handle cushion
GR726-8	Volumn-adjusting plate
GS378-8	Volumn-adjusting plate screw
GZ246-8	Thread winding shaft
GO218-8	Thread winding shaft stop ring
GS164-8	Pin screw of needle bar vibrating lever
GR251-8	Needle bar vibrating lever
GS158-8	Eccentric pin screw of needle bar
GR255-8	Needle bar position plate
GS163-8	Needle bar position plate screw (2)
GX143-8	Pin of needle bar vibrating lever
GZ223-8	Needle bar
GR467-8	Needle clamp
GS290-8	Screw of thread guard
GR466-8	Needle bar thread guard
GS289-8	Needle set screw
GS161-8	Pin screw of needle bar clamp
GO141-8	Pin washer of needle bar clamp
GR253-8	Needle bar clamp
GZ142-8	Pin of meedle bar clamp
GS160-8	Pin set screw of needle bar clamp
GR254-8	Needle bar connecting link guide
GO217-8	Needle bar connecting link guide washer(2)
GS132-8	Needle bar connecting link guide screw
GS166-8	Left-hand thread screw
GH140-8	Needle bar connecting link
GH144-8	Needle bar crank
GH142/2-8	Thread take-up lever assembly
GO142-8	Thread guide ring
GH141-8	Thread take-up rocker
GX144-8	Thread take-up rocker pin
GS147-8	Thread take-up rocker pin screw
GS168-8	Thread take-up crank screw
GH145-8	Thread take-up crank
GS404-8	Needle bar crank set screw (2)
GO143-8	Upper shaft
GS277-8	Upper shaft set screw
GC130-8	Upper shaft spiral gear
GS170-8	Upper shaft spiral gear screw (2)
GC131-8	Upper shaft bevel gear
GS167-8	Upper shaft bevel gear screw (2)
GT153-8	Feed cam
GS251-8	Feed cam set screw

NUMERICAL LIST OF PARTS

Part NO.	Description
GO180-8	Back stop ring of Zigzag eccentric cam
GS223-8	Stop ring screw of Zigzag triangular cam shaft (2)
GO183-8	Stop ring of Zigzag triangular cam shaft
GW142-8	Bight amplitude regulating plate spring
GR469-8	Oil pan plate
GX155-8	Zigzag stitch regulator fork eccentric
GU140-8	Bight amplitude slide block
GR298-8	Bight amplitude slide block guide
GS185-8	Bight amplitude slide block guide stud set screw
GH178-8	Bight amplitude slide block crank link
GS216-8	Bight amplitude shide block crank link hinge(2)
GR296-8	Brght and L-C-R position lever arm
GX154-8	Bight amplitude slide block guide stud
GS215-8	Bight and L-C-R position lever arm regulating screw(2)
GL153-8	Bight and L-C-R position lever arm regulating nut(2)
GS214-8	Bight amplitude slide block crank set screw(2)
GW141-8	Bight amplitude slide block crank return spring
GR292/2-8	Bight amplitude slide block crank complete
GS218-8	Bight amplitude slide block crank shaft bushing collar set screw(2)
GO178-8	Bight amplitude slide block crank shaft bushing collar
GS291-8	Bight amplitude slide block cap screw
GO286-8	Bight amplitude slide block crank shaft bushing
GR731-8	Bight amplitude slide block crank shaft knob
GR468-8	Bight and L-C-R position block
GS273-8	Bight and L-C-R position block set screw(2)
GR729-8	Bight and L-C-R position lever complete
GS281-8	Bight and L-C-R position lever screw pin
GR394-8	Bight and L-C-R position lever
GS223-8	Bight and L-C-R position lever set screw (2)
GL163-8	Bight and L-C-R position lever screw pin nut (2)
GR289-8	Bight amplitude stop plate (left)
GR289-8	Bight amplitude stop plate (right)
GO174-8	Bight amplitude stop plate washer(2)
GS256-8	Bight amplitude stop plate screw (2)
GS383-8	Bight amplitude regulating plate thumb screw(2)
GS213-8	Bight amplitude regulating plate holder set screw(2)
GR294-8	Bight amplitude regulating plate holder
GR290-8	Bight amplitude regulating plate (A)
GR291-8	Bight amplitude regulating plate (B)
GS212-8	Oil reservoir plate set screw(front)
GS256-8	Oil reservoir plate set screw (back)
GR474/6-8	Oil reservoir complete
GR389-8	Oil wick
GR388-8	Oil reservoir felt
GO217-8	Oil reservoir set screw washer (2)
GS132-8	oil reservoir set screw (2)
GS384-8	Presser regulating thumb screw
GL178-8	Presser regulating nut

	Description
GW153-8	Presser bar spring
GZ187-8	Presser bar
GS231-8	Presser foot screw
GR465/4-8	Presser foot complete
GR733-8	Presser foot lifter
GS232-8	Presser foot lifter pin screw
GX183-8	Presser foot lifter pin
GS232-8	Presser bar guide bracket set screw
GR398-8	Presser bar guide bracket
GR397-8	Presser bar lifting and releasing lever bracket
GR328/10-8	Bell crank complete
GS236-8	Knee lifter lever bracket screw
GX184-8	Open pin
GZ205-8	Lifting lever connecting rod
GZ206-8	Bight amplitude slide block crank knee oparating connection
GS235-8	Lifting lever hinge screw
GZ204-8	Lifting lever
GR1000-8	Needle guard
GS413-8	Feed regulating stud
GX177-8	Feed regulator hinge stud
GS263-8	Feed regulator hinge stud set screw
GR734-8	Feed regulator
GW166-8	Feed reverse lever return spring
GS256-8	Feed reverse lever retum spring bracket screw
GR339-8	Feed reverse lever return spring bracket
GR342/2-8	Feed reverse lever crank complete
GS142-8	Feed reverse lever crank screw
GZ249-8	Feed reverse lever hinge stud
GR735-8	Feed reverse lever
GS385-8	Feed reverse adjusting screw
GS387-8	Feed regulating dial stud
	Feed regulating dial stud washer
GR738-8	Feed regulating dial
GX179-8	Feed regulating stud lock pin
GW167-8	Feed regulating stud lock pin spring
GS42	Feed reverse regulating indicating-dial screw(2)
GR737-8	Feed revese regulating indicating-dial
GW200-8	Feed revese regulating screw clamping spring
GR736-8	Feed revese regulating plate
GS386-8	Feed reverse regulating plate screw
GX261-8	Feed reverse lever hinge stud
GR789-8	Thread Unwinder spool cap (2)
GR790-8	Thread Unwinder spool Net (2)
GR788-8	Screw Drlver (for throat plate)


781/28-8
GR780/9-8
284-8
GW173-8
GR375-8
GX213-8
GR1316-8
GK155-8
GR527-8
GBR210-8
GBS204-8
GS360-8
GK156-8
GBS202-8
GR1315/18-8
GBR205-8
GBR204-8
GBS201-8
GR352/2-8
GBX140-8
GR353-8
GR413-8
GBR211-8
GF114-8
GF115-8
GR788-8
GR789-8
GF116-8
GF117-8
GK790-8