BS 473 - DD - AUT / PARTS / INSTRUCTIONS ENGLISH

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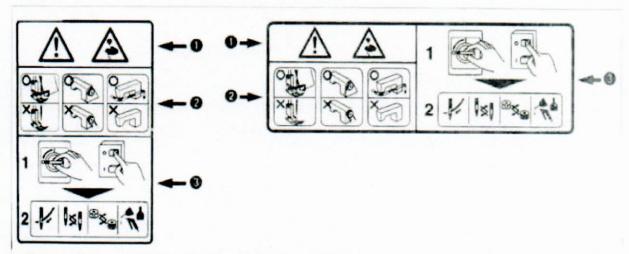


CONTENTS

- INSTRUCTION MANUAL
- PARTS LIST

- Observe the basic safety measures ,including,but not limited to the following ones ,whenever you use the machine.
- 2.Read all the instructions ,including ,but not limited to this instruction Manual before you use the machine In addition ,keep this Instructions Manual so that you may read it at anytime when necessary.
- Use the machine after it has been ascertained that it conforms with safty rules/standards valid in your country.
- 4.All safety devices must be in position when the machine is ready for work or in operation.
 The operation without the specified by safety devices is not allowed.
- This machine shall be operated by appropriately-trained operators.
- 6. For your personal protection we recommend that you wear safety glasses
- For the following ,turn off the power switch or disconnect the power plug of the machine from the receptacle.
 - 7-1 For threading needle ,looper ,spreader etc .and replacing bobbin.
 - 7–2 For replacing parts of needle ,presser foot ,throat plate ,looper ,spreader ,feed dog ,needle guard folder ,cloth guide ect.
 - 7-3 For repair work
 - 7-4 When leaving the working place or when the working place is unattended.
 - 7–5 When using clutch motors without applying brake , it has to be waited until the motor stopped totally .
- If you should allow oil ,grease ,ect .used with the machine and devices to come in contact with your eyes or skin or swallow any of such liquid by mistake ,immediately wash the contacted areas and consult a medical doctor.
- 9. Tampering with the live parts and devices , regardless of whether the machine is powered , is prohibited.

- Repair ,remodeling and adjustment works must only be done by appropriately trained technicians or specially skilled personnel .Only spare parts designated by JOYEE can be used for repairs.
- 11. General maintenance and inspection works have to be done by appropriately trained personnel.
- Repair and maintenance works of electrical compinents shall be conducted by qualified elecreic technicians or under the audit and guidance of specially skilled personnel.
- 13. Before making repair and maintenance works on te\he machine equipped with pneumatic parts such as an air cylinder, the air compressor has to be detached from the machine and the compressed air supply has to be cut off. Existingresidual air pressure after disconnecting the air compressor from the machine has to be expelled. Exceptions to this are only adjuustments and performance checks done by appropriately trained technicians or specially skilled persinnel.
- 14.Periodecally clean the machine throughout the period of use.
- 15.Grounding the machine is always nessary for the normal operation of the normal operation of the machine. The machine has to be operated in an environment that is free from strong noise sources such as high-frequency welder.
- 16. An appropriate power plug has to be attached to the machine by electric technicians. Power plug has to be connected to a grounded receptacle.
- 17. The machine is only allowed to be usd for the purpose intended .Other used are not allowed.
- 18. Remodel or modify the machine in accorance with the safety rules/standards while taking all the effective safety measures. JOYEE assumes no responsibility for damage caused by remodeling or modification of the machine.



These is the possibility that slight to serious injury or death may be caused .These is the possibility that injury may be caused by touching moving part .

To perform sewing work with safety guard : To perform sewing work with safety cover

To perform sewing work with safety protection device.

Turn off the power and perform "threading' ,replacement of bobbin or needle ,cleaning ,adjustment ,and lubrication."



To avoid personal Injury never put your fingers under the needle when you turn ON

the power switch or operate the sewing machine.

2. To avoid personal injury turn 0FF the power switch when you tilt the machine head.

3. To prevent possible personal Injury caused by being caught In the machine, keep

your tingers. head and clothes away from the handwheel and the thread take-up

while the sewing machine is in operation. In addition, place nothing around it.

4. Never operate the machine with the safety devices such as needle bar cover, finger

guard, eye guard cover,etc. removed.

To avoid personal Injury, be careful not to allow your fingers in the machine when tilting the machine head.



1. For the safety, never operate the sewing machine with the ground wire for the power supply removed.

Be sure to turn OFF the power switch in prior when connecting / disconnecting the power plug

When thunders occurs, stop the work for the safety and disconnect the power plug. 4. When the sewing machine is suddenly moved from a cold place to a warm place,

there is a case where dew condensation may occur. Turn ON the power after there is no worry of the drop of water.

To prevent fires, periodically draw out the, power plug from the plug socket and clean the root of the pins and the space between pins.

Use the oil adaptable to the machine specifications,

Clean the sewing machine thoroughly before using it for the first time.

Remove all dust collected on the sewing machine during the transportation.

Confirm that the voltage and phase are correct. Confirm that the power plug is properly connected.

Never use the sewing machine in the state where the voltage type is different from the designated one.

The direction of rotation of the sewing machine is clockwise as observed from the handwheel side. Be careful not to rotate It In reverse direction.

Before applying power, release the stop-motion mechanism and turn by hand the needle driving pulley in order to ensure that the machine is in order.

To install the machine, the frame support bar has to be firstly inserted into the table.

When operating the sewing machine, turn ON the power switCh after properly setting the head on the table.

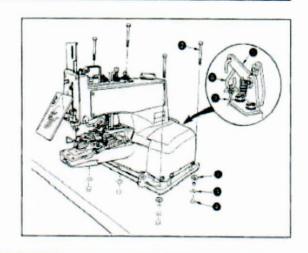
Operate the handwheel after the sewing machine has totally stopped.

SPECIFICATIONS

	JY-K777
Sewing speed	Normal 1300rpm (Max 1500rpm)
Number of stitches	8 ,16 and 32 stitches
Feed amount	Lateral feed 2.5 to 6.5mm
	Longitiudinal feed 0, 2.5 to 4.5mm
Button size	10 to 28mm
Needle used	Tqx7 #16(#14~#20)
Lubricating oil	Oil for sewing machine

PREPARATION OF THE SEWING MACHINE

Put rubber cushion on the table place the machine head on the rubber cushion and fix it to the table using screw 2, plain washers and nuts 4. Attach "S" chain hook and chain to stop motion trip lever 5.

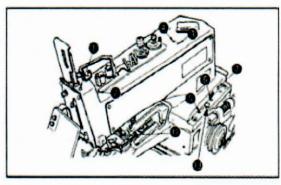


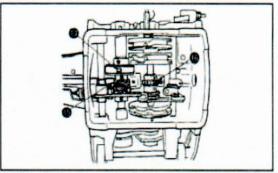
LUBRICATION

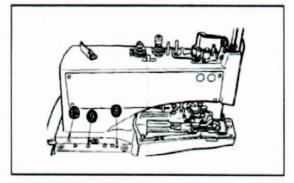
- 1) Open the side cover and apply oil to the portions shown by the red red marks 1 to 12 (Apply approximately 1 cc of oil to the respective lubricating places one to two times a week)
- Loosen connecting screw 13 tilt the machine head backward and apply grease to crossed helical gear 15 and worm gead 16
- 3)Check approximately once a week that oil amout is sufficient to reach the top of the oil felt placed inside the bed bed mounting base. If the amout of oil is insufficient, add an adequate amount of oil. At this time, also apply oil to crank rod 14

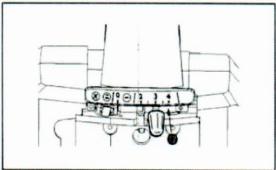
WARNING:

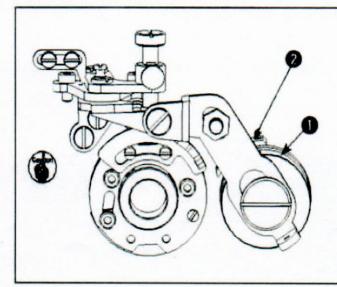
To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest







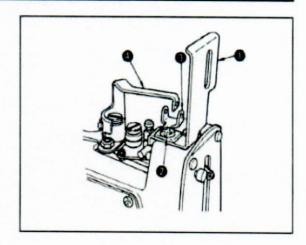




- Caution at the time of lubricating 1.Take care not to allow speed slowing friction wheel and friction plate to be clogged with oil to prevent them from the deterioration of retardation performance. In addition, when the components are clogged with oil wipe the oil from them
- 2. Take care not to allow the machine belt to be clogged with oil to prevent it from the deterioration.

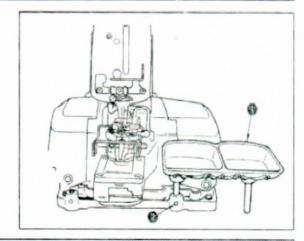
Attaching the needle

- 1)Loose screw 2 and remove thread guide 3 2)Place needle bar guard 1 under thread guide 3 and attach guide 3 so that lever 4 comes to the center of it at the start of the machine .
- 3) Fix the cover with screw 2



Attaching the needle bar cover

Insert the posts of button tray • in hole on the right of the machine sub-base and tighten each setscrew •.



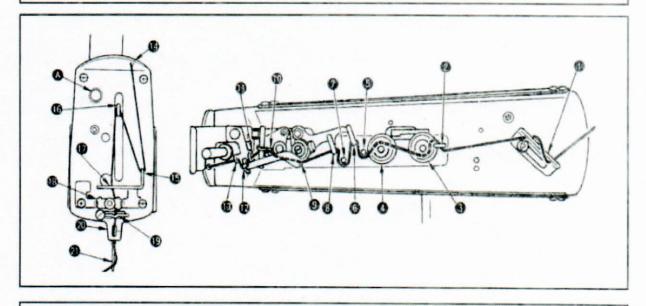
Threading the machine

Thread themachine head in the order of to as shown in the illustration given above ,then ,pass the thread through the needle eye from the front for approximately 60 to 70mm as you depress nipper releasing knurled thumb nut

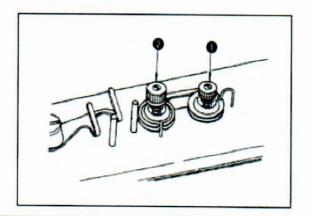
Standard needle is Tqx1 #16@

WARNING

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Thread tension adjustment

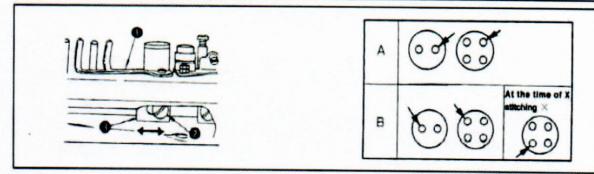


Adjustment of the thread pull-off lever

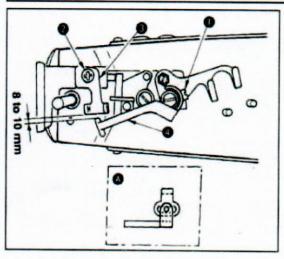
To adjust the thread pull-off lever—insert a screwdriver through an opening in the machinearm side cover (left),loosen screw—and adjust the position of nipper bre block(rear)—to the left or the right. If the end of thread is drawn from arrow hole A in the button after sewing, changethe position of nipper bar block (rear) to the left. Move the lever to the right when the thread endcomes out from arrow hole B.

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Adjustment of the thread pull-off lever



When the machine is in the stop-motion state, loosen screw Tighten setscrew that there is a clearance of 8 to 10 mm as a standard between the end ofthread tension guide 3 and 4 end of lever.

After the adjustiment,make sure that the thread path is within the slot as illustrated in fig . When the machine starts, if the thread paths do not coincide with each other, loosen screw in the tension thread guide and adjust it properly.

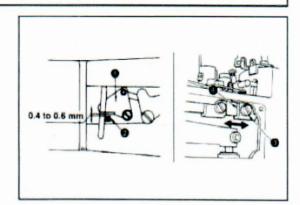
WARNING

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Adjustment of the thread pull-off lever

1)Provide a 0.4 to 0.6mm clearance between nipper block ② and nipper ● to prevent the nnipper ● from holding the thread while the machine is in operation

2)loosen screw and move nipper bar block to the right or the lift.



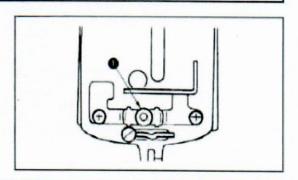
WARNING

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Adjusting the thread tension guide on the face plate

If the formation of seams at the start of sewing is failed and the seams are formedon the way even, when the thread pull-off lever is adjustied ,turn thumb nut

to decrease the thread tension.



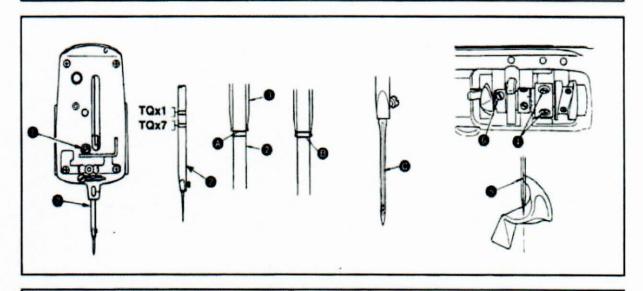
Need-to-looper relation

Adjust the needle-to-looper relation as follows:

- 1)Depress the pedal fully forward ,turn the needle driving pully in the normal sewing direction by hand to bring down the needle bar to the lowest position of its stroke and loosen screw (adjusting the needle bar height)
 2)Adjust the height of the needle bar using the top two lines engraved on the needle bar for the TQX1 needle and using the button two lines foe the TQX7needle ,Align the upper line with the buttom end face of needle bar bushing (lower) and tighten screw .At this time ,tighten the screw so that groove of the needle faces the front.
- 3)Loosen screw @ and turn by hand the needle driving pully until lower line@of two lines aligns with the bottom end face of needle bar bushing (lower) @
- 4)By keeping the Cachine in this state ,align looper blade Swith the center of the needle and tighten screws
 5)Loosen screws and provide a 0.01 to 0.1mm clearance between the looper and the needle tighten screws

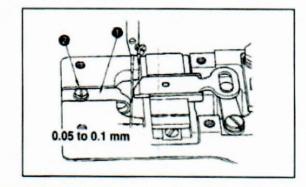
WARNING

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Position of needle guide

Loose screw and provide a 0.05 to 0.1mm clearance between the needle guide and the needle by moving the needle guide to the left or the right when the needle is in the lowest position.

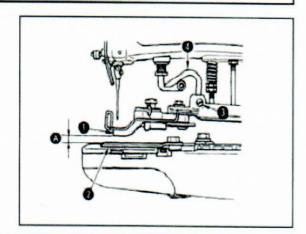


WARNING

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Height of the button clamp

1)The standard clearance between the rear side of the bottom face of button clamp jaw lever and the top surface of feed plate is 8mm at the position where the machine has stopped after sewing. 2)To adjust the height of the button clamp unit, loosen screw in the button clamp lifting hook and move button clamp lifting hook up or down.



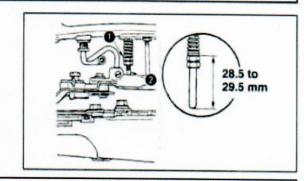
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Work pressing force

The standard work pressing force is by providing a 28.5 to 29.5 mm between the top end of nut and the bottom end of pressure adjusting bar .

Turn nut 1 to adjust it

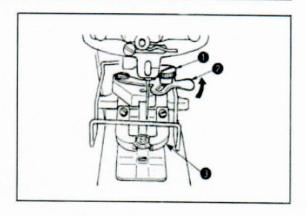


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Adjustment of the button clamp stop lever

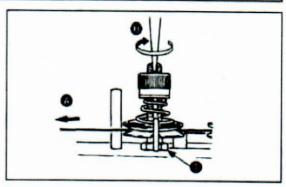
When clamp screw is loosened in the state of stop-motion, button clamp jaw levers opens/closes with button clamp stop lever , Set a button to the correct position and fix button clamp stop lever at the position where taking in and fix button clamp stop lever at the position where taking in and out of the button is easily performed with clamp screw



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Timing of thread tension release



Turn the needle driving pully as you draw the thread in the direction of arrow mark (a) and you will find a point at which the tension discs on the tension post No.2 release the thread. At this moment ,the standard distance from the top end of the needle bar bushing (upper) to the end of the needle bar is 44 to 47mm(in case of the needle of TQX7,54 to 57mm). Perform the following adjustments especially when the undermentioned troubles occur frequently, Loosen nut (a), insert the blade of a screwdriver to the top slot of the tension post No.2 and turn it in the direction of arrow mark (a) to the lower the height of the thread floating bar and in the opposite direction to raise the height.

Phenomenon	Height of thread floating bar	
When the stitch made on the wrong side of the workpiece is too loose	Make the needle bar slightly higher	
2. When the thread is broken at the time of stop-motion	Make the needle bar slightly lower	
3.When the thread is broken frequently	Make the needle bar slightly lower	

WARNING

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Setting for 2-or 4-hole buttons

Perform the adjustment after confirming that the sewing machine is located at the position of the stop-motion

Measure the distance between two holes in a button and set equally crosswise and lengthwisefeed regulators for 4-hole buttons.

Lengthwise feed

Push down lengthwise feed adjusting lever

and set it to "0"for 0−hole buttons or a corresponding amount for 4−for buttons.

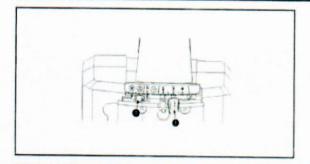
Crosswise feed

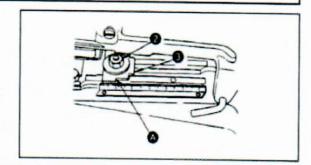
Loosen nut ② and set section ③ of pointer ⑥ to a corresponding amount. Then tighten nut ② a corresponding amount for 4-hole butto ns by the respective procedures below according to the sewing methods. The choice of pattern

When you need to sewing 4-hole buttons ,put down press foot ,

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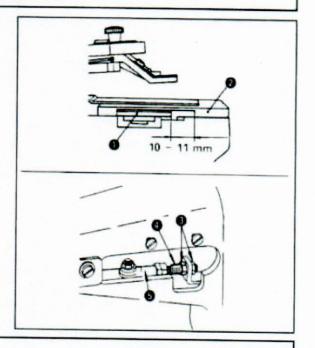




Automatic thread trimmer

When the presser has completely lifted at the stop motion position ,it is the standard that the clearance between thread trimming connecting plate (front)

• and the end face of the slit of throat plate is 10 to 11mm. To adjust the aforementioned clearance, tilt the machine herd, remove the oil shield, loosen two nuts • and move connecting screw back or forth. When you tighten nuts • ensure that joint • stays in the horizontal position.

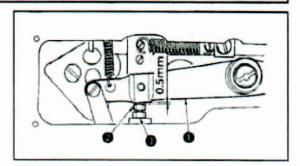


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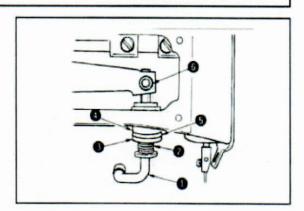
Clearance between the button clamp lifting lever and the adjusting screw

Provide a 0.5mm clearance between the end face of button clamp lifting lever
and adjustinf screw at the stop-motion position .



How to set the L-shaped lifting rod

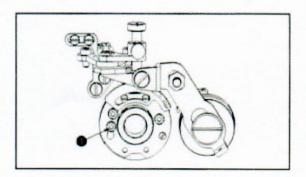
Put moving knife push-back spring stop-motion rubber cushion washer stop-motion rubber cushion and stop-motion rubber cushion washer stop-motion rubber cushion washer stop, in this order, to L-shaped lifting rod stop. Make the jaw of the machine arm come into close contact with the end face of the stop-motion rubber cushionwadher at the stop-motion position and set the L-shaped lifting rod without a play. Then tighten it with screw stop-motion.



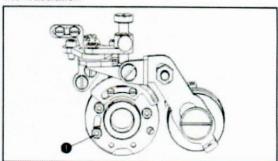
Setting a number of stitches

To change the number of stitches, open the left-hand side cover and change the number of stitches using stitch number adjusting screw and stitch number adjusting lever (optional)

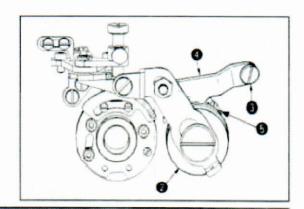
How to adjust 8 stitches: To make 8 stitches, loosen stitch number adjusting screw 1 and fix it to the position as shownin the illustration



How to adjust 16 stitches: When stitch number adjusting screw • being set for "8 stitches" has arrived at the left end ,loosen stitch number adjusting screw • and fix it to the position as shown in the illustration



How to adjust 32 stitches: In the state of 16 stitches, stitch number adjusting gear roller—which is attached to the large gear—comes to the lower side, assemble stitch number adjusting lever (supplied as accessories) using hinge screw (supplied as accessories)



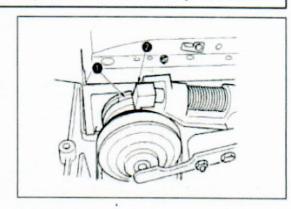
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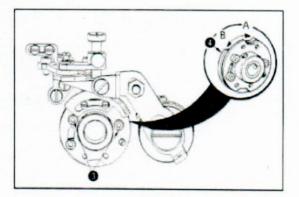
To protect against possible personal injure due to abrupt start of the machine ,be sure to the start the following work after turning the power off and ascertaining that the motor is at rest

Adjusting the position of the stop-motion

Adjust so that claw of the stop-motion cam comes in contact with stopmotion hook when the sewing machine completes the sewing and stops

Caution: When replacing the motor pulley and changing the sewing speed from 1300rpm to 1500rpm, and vice versa, be sure to readjust the position of the stop-motion.





Adjusting procedure: When the stop-motion hook comes in contact with the stop-motion cam and rebounds, (when there is a clearence between claw and stop-motion hook 2)

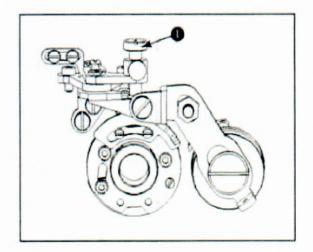
loose two stop-motion position adjusting screw 6 turn

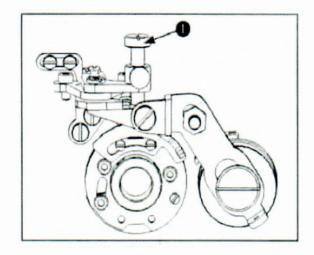
Stop-motion adjusting cam in the direction of A, and fix stop-motion position adjusting screws When the stop-motion hook stops before it comes in contact with the stop-motion cam claw Loose two stop-motion position adjusting screws turn stop-motion adjusting cam in the direction of B and fix stop-motion position adjusting screws

Changeover of with/without knot-tying

To make "with knot-tying ",pull knot-tying changeover knob toward the down

To make "with knot-tying ",pull knot-tying changeover knob ntoward the up



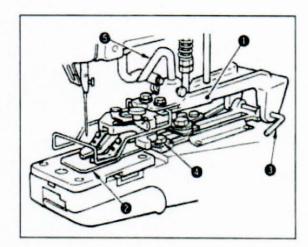


How to connect the metal fittings of the belt

Tighten connecting screws ● of the belt so that the screws protrude approximately 1.5 to 2mm from the reverse side as the standard.

- Caution: 1. When assembling the belt to the pully and rotating the motor after closing the side cover , confirm that the side cover dose not interfere with the metal fitting of the belt.
 - Take care not to allow the belt to be clogged with oil when assembling it
- 1.5 2mm

- 1) In order to install the attachment on the mac-
- hine ,you may have to remove button clamp mechanism or feed plate @
- Detach the snap ring from button clamp installing stud (a), and you will be able to move button clamp mechanism assembly (a) Remove screw
 - and you can remove feed plate 2



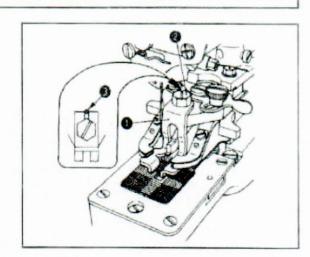
WARNING

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(ADJUSTMENT AND OPERATION)

- 1)Loosen screw € .let feed plate recede 0.5 to 1.0 mm from the left end of button clamp jaw lever and retighten screw .
- 2)Set a button in place, loosen screws and align shank button holding clamp with the center of the button.
- 3)Shank button holding clamp must give proper pressure to the button so that the buttonstays steadily in position while being sewn. Loosen a setscrew in thrust collar and potate the thrust collar until shank button holding clamp provides proper pressure.
- 4)You may fix button clamp block . in a convenient position for operation.
- CAUTION:1. When you fix the thrust collar, ensure that button ciamp rotating shaft @ does not play axially in its bracket.
 - 2.Adjust litting hook ♠ and stoppef pin ♠ so that L-shaped lifting rod roller ♠ does not come in contack with button clamp bracket ♠

Attachment for the first process of wrapped-aroud button



(INSTALLATION)

Altach wrapped-around button foot 1 to the ordinary button clamp jaw levers using screw 2 and guide pin screw 3Align foot 1 with the jaw levers so that they permit a button to rest in the middle.

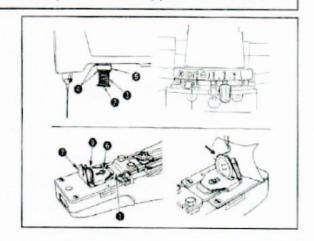
(ADJUSTMENT AND OPERATION)

Adjustment and operation are almost same as those for the flat buttons, but you mustadjust the thread pull-off lever to provide more amount of thread in order to make the thread loose below the button for thread shank formation. (refer to 3-2. Adjustment of the thread shread pull-off lever, P.4)

WARNING

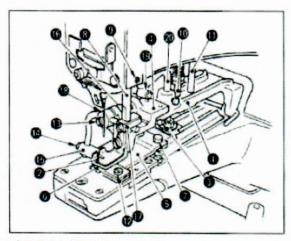
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Attachment for the second process of wrapped-around buttons



Use						
USE	Large-size	Medium-size		General	Snaps	
	A	A B C		D		
Schematic drawing	chematic drawing					
Remarks	Button size A;3 to 5 mm B: \$20 to \$28 mm	Button size A;3 to 5 mm B: \$ 12 to \$20 mm	Button diameter 6mm Thickness 6.5mm Width 3, 2.5mm		Snap size A:8mm	
Use	纽扣绕线用 Wrapped-around buttons		Metal buttons			
Use	Frist process	Second process	General	Stay button	Labels	
	E	F	G	Н	1	
Schematic drawing	\$		<u></u>	#		
Remarks	Thread shank height A:5.5 mm			Thread shank height A:5.5 mm	Stitch width 3 to 6.5mm	

Attachments for shank buttons(Pearl buttons)



(INSTLLATION)

Remove both the button clamp mechanism assem—bly and the feed plate from the machine and install attachment in place. Loosen screws and adjust button clamp bracket to permitthe needle to come down in the middle of the needle slot in shank button adaptor. Attach button clamp feed plate using screws in the way that it permits the needle to come down in the middle of the needle slot in feed plate. Insert the top end of button clamp stud into an opening in the jaw of the machine arm and tasten it by screw.

WARNING

To protect against possible personal injure due to abrupt start of the machine ,be sure to the start the following work after turning the power off and ascertaining that the motor is at rest

(INSTALLATION)

Remove the button clamp mechanism assembly,button clamp pressure adjusting bar and feed plate from the machine and install attachment for the second processof wrapped-around buttons

.When you install a Z035 attachment,you must

Remove also the L-shaped lifting rod. Lnsert moving knife push-back spring ♠, washer ♠, cushion ♠ and washer ♠ in Spring Guide shaft ♠ in this order. Make certain that the stop-motion Mechanism has completely engaged and install The attachment assembly in place in the way that cush-ion comes in close contact with the surface of the machine arm without play.

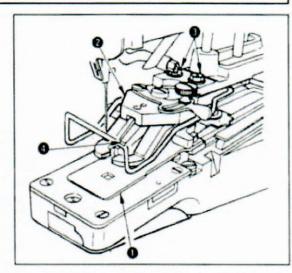
(ADJUSTMENT AND OPERATION)

- 1)Loosen screw (and adjust the thread shank length by moving guide (large) (and guide(small) (and line with the point of needle entry.
- 2)Set a button (tilt it slightly for easy insertion)and pass the thread as the arrow shows.
- 3)Set the lengthwise feed to "0".

WARNING

To protect against possible personal injure due to abrupt start of the machine ,be sure to the start the following work after turning the power off and ascertaining that the motor is at rest

Attachment for snaps



(INSTALLATON)

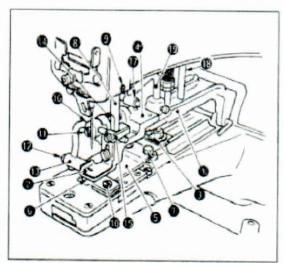
Remove the button clamp mechanism assembly and the feed plate. Set both the crosswise feed and lengthwise feed graduated plates to "4mm". Install snap clamp feed plate • in the way that the

needle drops evenly at four corners of its square opening. Install snap attachment assembly ② on the machine, place a snap on the snap clamp jaw levers and make sure that the needle drops accurately in each hole in the snap if necessary. Loosen hex head screws ③ and Adjust the position accurately. Lastly, make sure that the concave section on the bottom face of snap clamp slide guide ④ accurately matches the convex section on snap clamp feed plate ①.

WARNING

To protect against possible personal injure due to abrupt start of the machine ,be sure to the start the following work after turning the power off and ascertaining that the motor is at rest

Attachment for metal buttons



(INSTALLATION)

Remove both the button clamp mechanism assem—bly and the feed plate from the machine and install attachment in place. Loosen screws and adjust button clamp bracket to permit the needle to come down in the middle of the needle slot in metal button adaptor. Attach button clamp feed plate using screws in the way that it permits the needle to come down in the middle of the needle so in feed plate. Insert the top end of button clamp stud into an opening in the jaw of the machine arm and fasten it by screw.

(ADJUSTMENT AND OPERATION)

- Looen screw n, let feed plate recede 1.0 to 1.5mm form the left end of button clamp jaw lever and retighten screw n.
- 2)Set a button in piace, loosen screws and align metal button holding clamp with the center of the button.
- 3)metal button holding clamp must give proper pressure to the button so that the button stays steadily in position while being sewn. Loosen a setscrew in thrust coolar and rotate the thrust collar until metal button holding clamp provides proper pressure.
- 4)You may fix button clamp block in a convenient position for operation.
- CAUTION: 1. When you fix the thrust collar, ensure that button clamp rotating shaft to does not play axially in its bracket.
 - 2.Adjust lifting hook @ and stopper pin @ so that L-shaped liting rod roller @ does not come in contact with button clamp bracket @ .

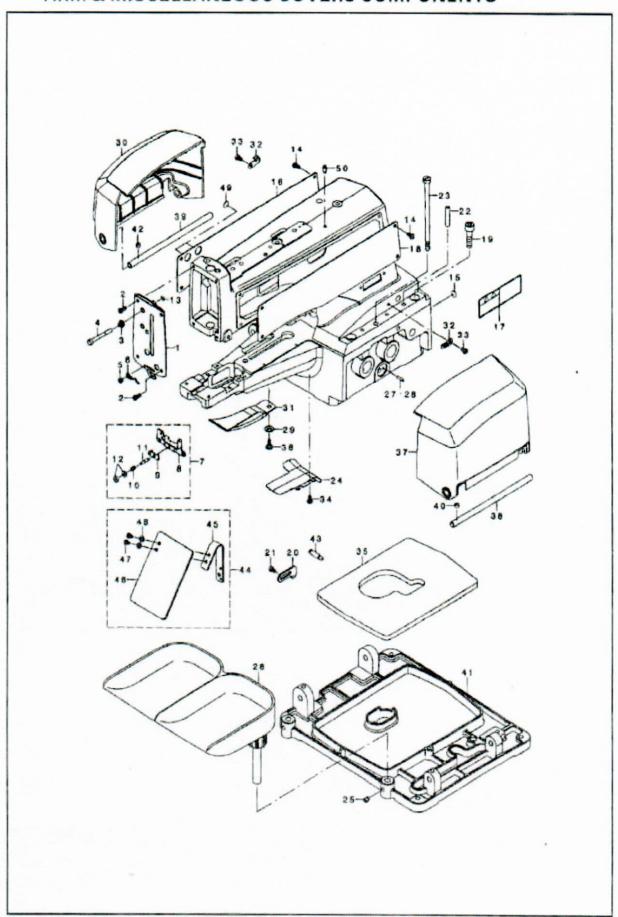
WARNING

To protect against possible personal injure due to abrupt start of the machine ,be sure to the start the following work after turning the power off and ascertaining that the motor is at rest

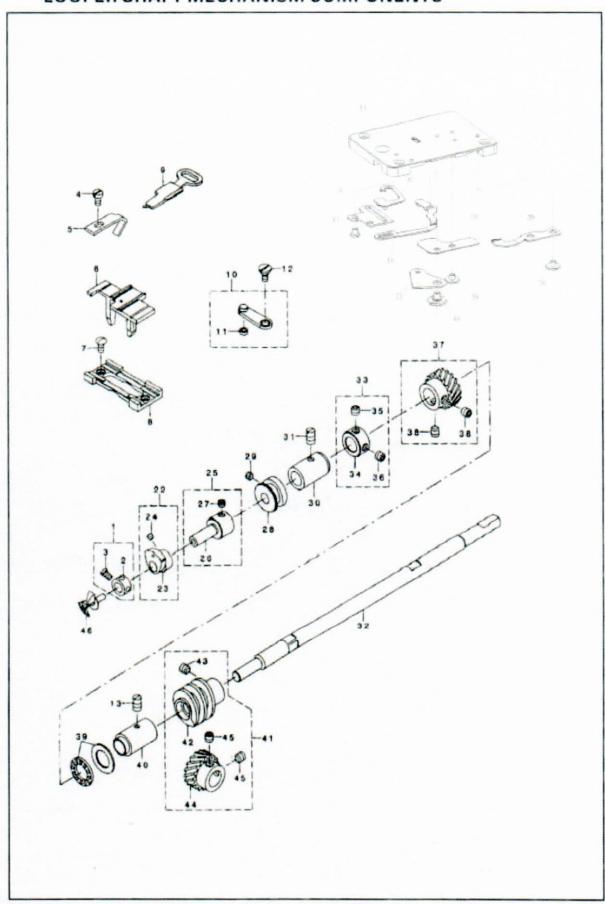
Motor pully and belt

HZ	Rpm	Motor pully part Number	E CO
50	1500		ф 76
50	1300		ф 64.5
	_ 1500		φ 64.5
60	1300		ф57

ARM & MISCELLANEOUS COVERS COMPONENTS

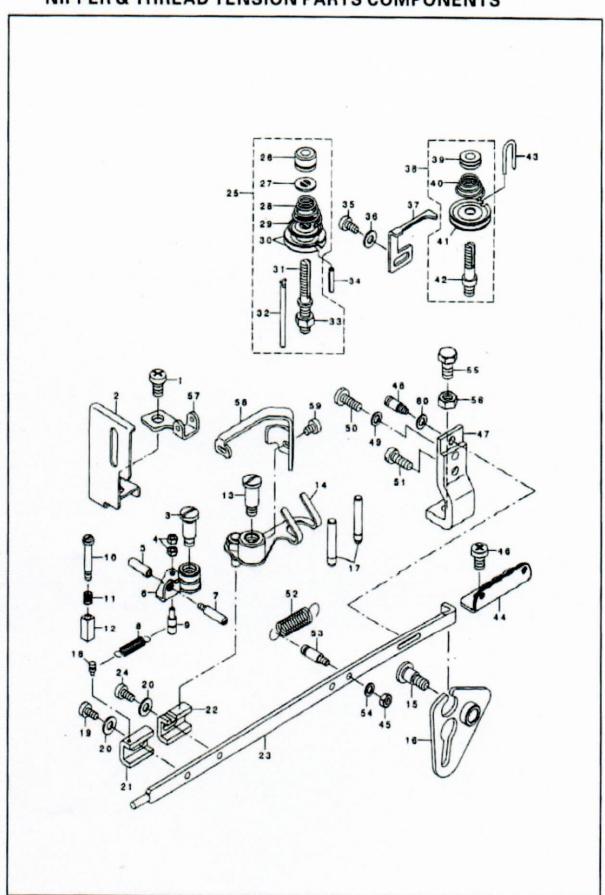


LOOPER SHAFT MECHANISM COMPONENTS



REF No	RART NO	DESCRIPTION	Q'TY
1	85.3-1-00	THRUST COLLAR ASM	1
2	85.3-1	THRUST COLLAR D=7.94 W=7	1
3	90.4-14	SCREW 9/64"X40 L=6.1	1
4	85.3-2	SCREW	1
5	85.3-3	NEEDLE GUARD	1
6	85.3-4	POSITIONING FINGER YOKE SLIDE	1
7	85.3-5	SCREW M4 L=9	2
8	85.3-6	YOKE SLIDE INSERT	1
9	85.3-7	YOKE SLIDE	1
10	85.3-8	ASSY LOOP POSITIONING FINGER L	1
11	85.3-8-2	LOOP POSITIONING FINGER CAM RO	1
12	85.3-10	HINGE SCREW D=6.35 H=2.4	1
13	85.3-11	SCREW	1
14	85.3-12-1	THROAT PLATE	1
15	85.3-12-8	THREAD BIND PLATE GUIDE	1
16	85.3-12-3	THREAD BIND PLATE ASM	1
17	85.3-12-9	SCREW	1
18	85.3-12-10	LINK	1. 1
19	85.3-12-3	THREAD BIND SUPPORT PLATE	2
20	85.3-12-4	COUNTER KNIFE	1
21	85.3-12-6	MOVING KNIFE	1
22	85.3-13-00	ASSY LOOP POSITIONING FINGER C	1 ;
23	85.3-13	LOOP POSITIONING FINGER CAM	1
24	40.3-30	SCREW 11/64"X40 L=3.5	2
25	85.3-14-00	ASSY CAM AND LOOPER SLEEVE	1
26	853-14	CAM AND LOOPER SLEEVE	1
27	43.5-26	SCREW 15/64"X28 L=4.0	2
28	85.3-15	LOOP POSITIONING FINGER CAM RE	1
29	40.2-34	SCREW 11/64"X40L=2.8	2
30	85.3–16	LOOPER SHAFT BUSHING FRONT	1
31	85.3-11	SCREW	1
32	85.3-17	LOOPER SHAFT	1
33	85.3-18-00	THRUST COLLER ASM	1
34	85.3-18	THRUST COLLER D=11.11 W=10	1
35	95.3-13	SCREW 1/4"X40 L=5	1
36	85.3-19-00	SCREW 1/4°X40 L≡5	1
37	85.3-19	LOOPER SHAFT DRIVEN GEAR ASM	1
38	90.2-36	SCRE 1/4"X40 L=6	2
39	85.3-20	THRUST BALL BEARING	1
40	85.3-21	LOOPER SHAFT BUSHING REAR	1
41	85.3-22-00	WORM WHEEL ASM	1
42	85.3-22	WORM	1
43	85.3-23	SCREW 1/4"X40 L=7.0	2
44	85.3-24	CAM SHAFT DRIVEN GEAR	1
45	90.2-36	SCREW 1/4"X40 L=6	2
46	85.3-25	LOOPER	1
47	85.3-26	SCREW M4 L=9	3
48	85.3-12-7	HINGE SCREW D=6 H=0.85	1
49	85.3-12-5	SCREW D=0 H=0.85	3

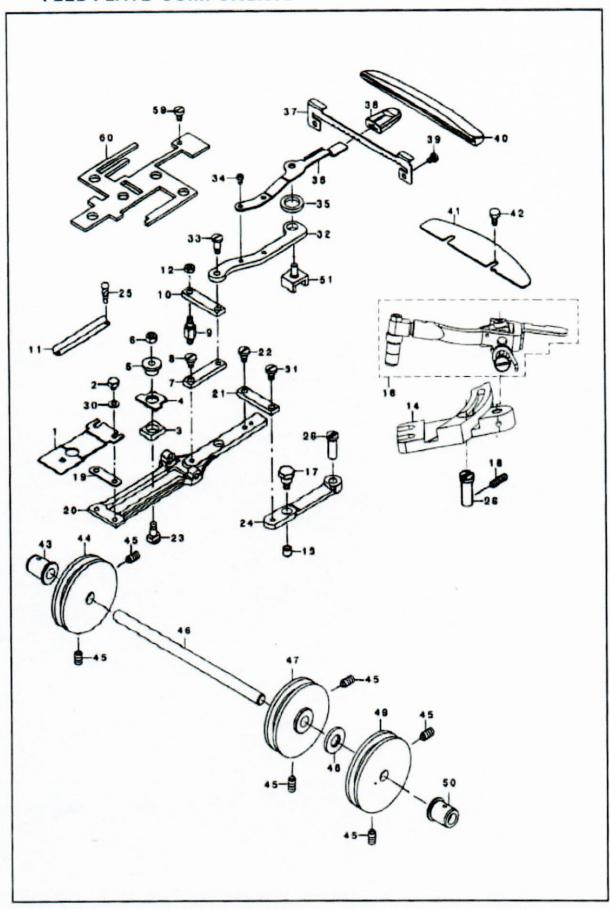
NIPPER & THREAD TENSION PARTS COMPONENTS



REF No	RART NO	DESCRIPTION	Q'TY
1	85.4–1	SCREW M6 L=12	1
2	85.14-5	NEEDLE BAR GUARD	1
3	85.4-3	SHOULDER SCREW	1
4	85.4-4	NUT	2
5	85.4-5	NUT	1
6	85.4-6	NIPPER COMPL	1
7	85.4-7	LOOPER SHAFT BUSHING REAR	1
8	85.4-8	NIPPER BAR BLOCK SPRING	1
9	85.4-9	NIPPER BAR BAR BLOCK SPRING SCREW	,
10	85.4-10	HINGE SCREW D=4 H=20	1
11	85.4-11	NIPPER SLIDE BLOCK SPRING	1
12	85.4-12	NIPPER BLOCK	,
13	85.4-13	SHOULDER SCREW D=7.94 H=15	
14	85.4-14	THREAD PULL OFF LEVER ASM	
15	85.4-15	SHOULDER SCREW D=7.94 H=8	+
16	85.4-16	NIPPER BAR ACTUATING LEVER ASM	
17	85.4-17		2
	85.4–18	THREAD GUIDE PIN	2
18		NIPPER BAR BLOCK SPRING PIN	1
19	85.3-2	SCREW	1
20	90.1-26	WASHER	2
21	85.4-19	NIPPER BAR BLOCK	1
22	85.4-20	TENSION LEVER ROCKING PIECE	1
23	85.4-21	NIPPER BAR	1
24	85.3-2	SCREW	1
25	85.4-22	TENSION POST ASM NO.2	1
26	85.4-22-1	TENSION NUT	1
27	30.1-28-2	ROTATION STOPPER	1
28	85.4-22-2	THREAD TENSION SPRING	1
29	85.4-22-3	THREAD TENSION DISK PRESSER	1
30	85.4-22-4	THREAD TENSION DISK NO.1	2
31	85.4-22-5	TENSION POST NO.2	1
32	85.4-22-6	TENSION RELEASE PIN	1
33	95.13-6	NUT M6	1
34		SPRING PIN 3X16	1
35	85.4-38	SCREW	1
36	90.1-46-2	WASHER	1
37	85.4-23	THREAD TENSION RELEASING LEVER	1
38	85.4-24	ASSY THREAD TENSION NO.1	1
39	85.4-24-1	THREAD TENSION NUT	1
40	85.4-24-2	FIRST THREAD TENSION SPRING	1
41	85.4-22-4	THREAD TENSION DISK NO.1	2
42	85.4-24-3	THREAD TENSION POST NO.1	1
43	85.4-25	THREAD GUIDE	1
44	85.4-26	THREAD GUIDE NO.1	1
45	85.4-27	NUT M4	1
46	85.4-1	SCREW M6 L=12	1
47	85.4-28	NIPPER BAR BEARING BLOCK	

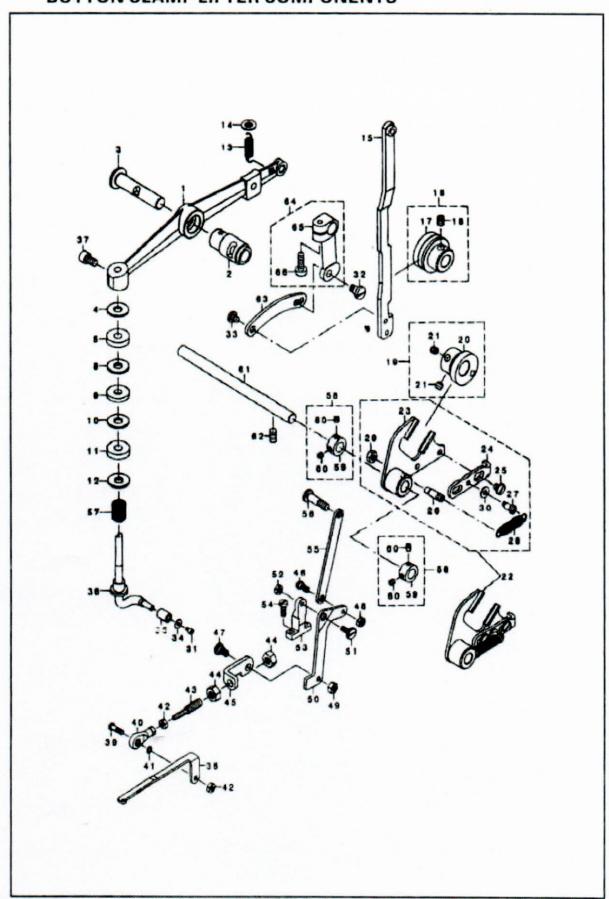
EF No	RART NO	DESCRIPTION	Q'T'
48	85.4-29	ADJUSTING SCREW	1
49	85.4-30	WASHER 5.5X10X0.8	1
50	85.4-31	SCREW M5 L=14	1
51	85.4~32	SCREW	1
52	85.4-33	THREAD TENSION SPRING	1
53	85.4-34	NIPPER BAR SPRING SCREW	1
54	90.3-13-11	WASHER	1
55	85.4-35	SCREW M6 L=14	1
56	95.13-6	NUT M6	1
57	85.4-36	THREAD GUIDE	1
58	85.4-37	LEVER	1
59	85.4-24	SCREW M4 L=6	1
60	95.10-7	WASHER 5X10.5X1	1
100			
			1

FEED PLATE COMPONENTS



REF No	RART NO	DESCRIPTION	Q'T
1	85.5-1	FEED PLATE SMALL BUTTON	1
2	85.5-2	SCREW 3/16"X28 L=6	2
3	85.5-3	LNDICATOR PIN BEARING BLOCK	1
4	85.5-4	CROSSWISE FEED INDICATION	1
5	85.5-5	CROSSWISE FEED INDICATION PIN	1
6	95.13-6	NUT M6	1
7	85.5-6	SLIDE PLATE CONNECTING LINK	1
8	85.5-7	HINGE SCREW D=6.35 H=4.8	1
9	85.5-8	STUD	
10	85.5-9	INTERMEDI CONNETING LINK	
11	85.5-10	CROSSWISE FEED GRADVATED PLATE	!
	1	NUT M5	1
12	85.5-11	CAM ROLL	1
13	85.5-12	FEED LEVER	
14	85.5-58	,	
16	85.5-60	CAM ROLL SCREW STUD	
17	85.5-13	SCREW M6X12	2
18	85.5-14	SPACER PLATE	2
19	85.5-15	FEED PLATE	1
20	85.5–16	INTERMEDI CONNECTING LINK	1
21	85.5-9	HINGE SCREW D=6.35 H=4.8	1
22	85.5-7	HINGE SCREW FOR CROSSWISE FEED	1
23	85.5-18	CROSSWISE FEED LEVER	1
24	85.5-19	RIVET	i
25		FEED STUD	,
26	85.5-20	SHOULDER SCREW	3
31	85.5-40	FEED LEVER	3
32	85.5-58	SHOULDER SCREW	
33	85.5-34	SCREW	1
34	85.2-33-3	OIL RETAINING FELT	1
35	85.5-44	HANDLE AND INDICATOR SPRING	1
36	85.5-30	PLATE BASE	1
37	85.5-28	KNOB	1
38	85.5-32	SCREW	2
39	85.5-31	GRADATE PLATE	1
40	85.5-29	FEED KNOB GUIDE PLATE	1
41	85.5-26	SCREW	
42	85.5–27	CAM SHAFT BUSHING LEFT	
43	85.5-37	FEED CAM (X)	
44	85.5-38	SCREW	
45	85.5-41	CAM SHAFT	
46	85.5-35	FEED CAM A(Y)	
47	85.5-39	WASHER	
48	85.5-42	FEED CAM (Y)	
49	85.5-36	CAM SHAFT BUSHING RIGHT	
50	85.5-43	LENGTHWISE FEED LEVER SLIDE	
51	85.5-23		1

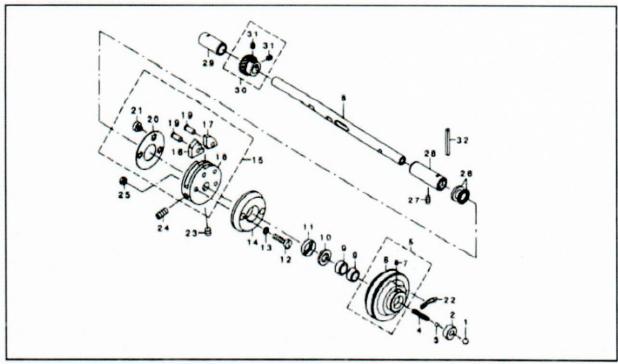
BUTTON CLAMP LIFTER COMPONENTS



REF No	RART NO	DESCRIPTION	Q'TY
1	85.6-1	LIFTING LEVER	1
2	85.6-2	BUSHING	1
3	85.6-3	NEEDLE BAR LEVER	1
4	85.6-4	WASHER 8.5X18X1.2	1
5	85.6-5	CUSHION	1
8	85.6-4	WASHER	1
9	90.9-20	WASHER 7.5X19X1.5	1
10	90.9-20	WASHER 7.5X19X1.5	1
11	85.6-5	CUSHION	1
12	85.6-7	WASHER 7X20X3.5	1
13	85.6-8	SPRING	1
14	85.6-9	WASHER	1
15	85.6-10	BUTTON CLAMP LIFTING LINK	1
16	85.6-11-00	ASSY SLIDING ROLLER	
17	85.6-11	SLIDING ROLLER	1
18	85.2-30	SCREW M6 L=6	1
19	85.6-12-00	ECCENTRIC CAM	1
20	85.6-12	ECCENTRIC CAM	1
21	85.6-13	SCREW	1
22	85.6-14	BUTTON CLAMP LIFTING LINK SET	2
23	85.6-14-1	BUTTON CLAMP LIFTING LINK	1
24	85.6-14-2	LIFTING HOOK	1
25	85.6-14-3	SHOULDER SCREW D=6.35 H=2.7	1
26	85.6-14-4	TENSION SPRING RACK B	2
27	85.6-14-5	SHOULDER SCREW D=5 H=7.2	1
28	85.6-14-6	LIFTING HOOK SPRING	1
29	85.5-11	NUT M5	1
30	85.6-14-7	WASHER	1
31	85.6-15	SCREW M3X0.5 L=4	1
32	85.5-7	HINGE SCREW D=6.35 H=4.8	1
33	90.4-31	HINGE SCREW D=6.35 H=2.1	1
34	85.6-16	WASHER M3	1
35	85.6-17	L TYPE LIFTING BAR ROLLER	1
36	85.6-18	BUTTON CLAMP LIFTING ROD A	1
37	90.8-16	SCREW M6 L=10	1
38	85.6-19	CONNECTING LINK FRONT	1
39	85.6-20	JOINT STUD	1
40	85.6-21	FEED ADJUSTING JOINT	1
41	85.6-22	WASHER 5.1X7.5X0.5	1
42	85.5-11	NUT M5	.1
43	85.6-23	CONNECTING SCREW	2
44	85.6-24	NUT M8 TYPE	1
45	85.6-25	CONNECTING LINK REAR	2
46	85.6-26	HINGE SCREW D=6.35 H=3.2	1
47	90.7-19-2	HINGE SCREW D=7.94 H=4	1
48	40.6-32	NUT 13/16X32	1
49	43.5-12	NUT 15/64*X28	1
50	85.6-27	THREAD TRIMMING LEVER	1

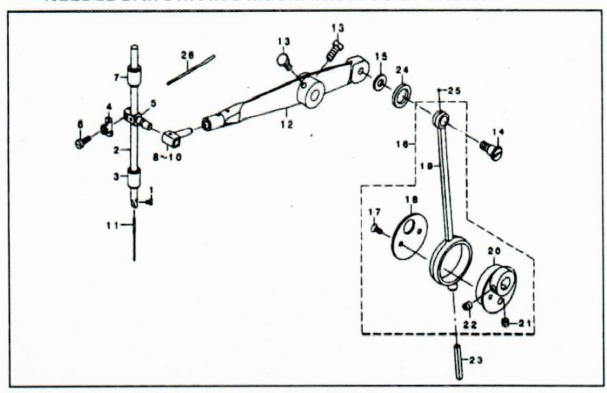
REF No	RART NO	DESCRIPTION	Q'T
51	85.6-28	SHOULDER SCREW D=6.35 H=3.1	1
52	35.5-11	NUT M5	1
53	85.6-29	THREAD TRIM LEVER BASE	1
54	85.4-31	SCREW M5 L=14	2
55	85.6-30	THREAD TRIMMING LINK	1
56	85.6-31	HINGE SCREW D=6.35 H=13.2	1
57	85.6-32	SPRING	1
		THRUST COLLAR ASM D=9.5 W=8	2
58	85.6-33-00		1
59	85.6-33	THRUST COLLAR D=9.5 W=8	2
60	40.3-30	SCREW 11/64"X40 L=3.5	1
61	85.6-34	LEVER SHAFT	2
62	85.3-11	SCREW	1
63	85.6-35	LIFTING LINK	1
64	85.6-36-00	LIFTING PLATE GUIDE ROD ASM	1
65	85.6-36	LIFTING PLATE GUIDE ROD	1
66	85.6-37	SCREW M5 L=16	1
	1		1

NEEDLE DRIVING PULLEY SHAFT COMPONENTS



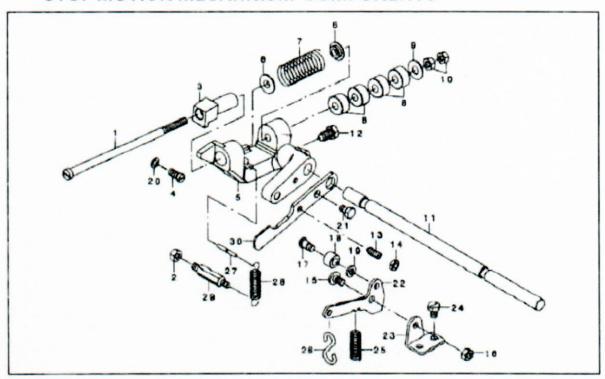
REF No	RART NO	DESCRIPTION	Q'TY
1		BALL LARGE	1
2	85.7-1	PULLEY INSERT	1
3		BALL SMALL	1
4	85.7-2	SPRING	1
5	85.7-3-00	DRIVING PULLEY ASM.	1
6 7	85.7-3	DRIVING PULLEY	1
7	85.7-4	SCREW M4 L=6	2
8	85.7-5	NEEDLE DRIVING PULLEY SHAFT	2
9		NEEDLE BEARING	2
10	85.7-6	GREASE RTETAINING WICK	1
11	85.7-7	RETAINING WASHER	1
12	85.7-8	SCREW M6 L=23.5	
13	85.7-9	WASHER 6.2X9.5X1	2 2
14	85.7-10	NEEDLE DRIVING PULLEY CLUTCH D	1
15	85.7-13-00	STOP MOTION DISC ASM	1
16	85.7-11	STOP MOTION DISC LATCH A	1
17	85.7-12	STOP MOTION DISC LATCH B	1
18	85.7-13	STOP MOTION DISC	1
19	85.7-14	STOP MOTION PAWL SHAFT	2
20	85.7-15	STOP MOTION DISC WASHER	1 1
21	85.7-16	SCREW M6 L=4.5	1
22	85.7-17	DIRECTION LABEL	1
23	85.7-18	SCREW M8X8	1
24	85.7-19	SCREW M8 L=17	1
25	85.7-20	NUT M6	2
26	85.7-21	THRUST BALL BEARING	1
27	85.3-11	SCREW	1
28	85.7-22	PULLEY SHAFT BUSHING RIGHT	1
29	85.7-23	PULLEY SHAFT BUSHING LEFT	1
30	85.7-24	DRIVING GEAR	1
31	85.7-25	SCREW 1/4 "X40 L=6	1

NEEDLE BAR DRIVING MECHANISM COMPONENTS



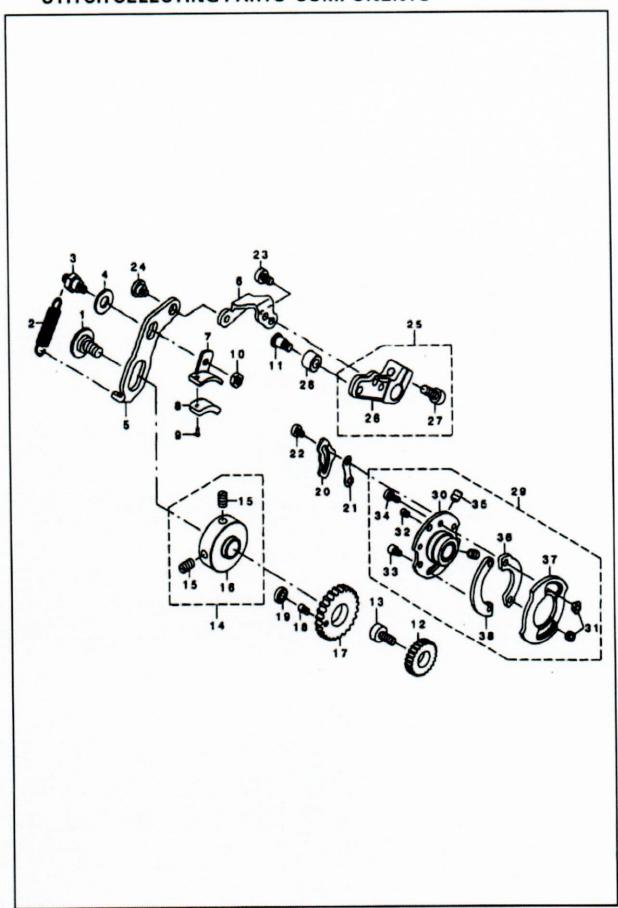
REFNo	RART NO	DESCRIPTION	Q'TY
1	10.2-44	SCREW 1/8" X44 L=4.5	1
2	85.8-1	NEEDLE ROD	1
3	85.8-2	NEEDLE BAR BUSHING LOWER	1
4	85.8-3	NEEDLE BAR BALANCE	1 '
5	85.8-4	NEEDLE BAR CLAMP	1
6	85.8-5	SCREW M4 L=12	1
7	85.8-6	NEEDLE BAR BUSHING UPPER	1
10	85.8-7	NEEDLE BAR SLIDE BLOCK	1
11		NEEDLE TQX1 16#	1
12	85.8-8	NEEDLE BAR DRIVING LEVER	1
13	85.4-35	SCREW M6 L=14	2
14	85.8-9	SHOULDER SCREW D=9.53 H=8	1
15	85.8-10	WASHER	1
16	85.8-13-00	CRANK ROD ASM	1
17	30.1-32	SCREW 11/64 "X40 L=8.5	2
18	85.8-11	THRUST HOLDER	1
19	85.8-12	CRANK ROD	1
20	85.8-13	ECCENTRIC CAM	1
21	90.2-36	SCREW 1/4" X40 L=6	1
22	85.8-14	SCREW 1/4 "X40 L=8.5	1
23 -	85.8-15	OIL WICK	1
24	85.5-44	OIL RETAINING FELT	. 1
25	85.8-17	OIL WICK	1
26	85.8-18	OIL WICK	1

STOP MOTION MECAHNISM COMPONENTS



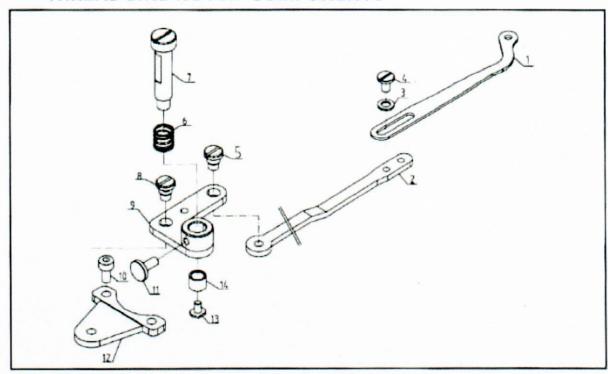
REFNo	RART NO	DESCRIPTION	
1	90.9-15	STOP MOTION PLUNGER	1
2	85.7-20	NUT M6	1
3	85.9-1	CROSSING HOOK	1
4	85.9-2	SCREW M6 L=11	1
5	85.9-3	STOP MOTION PLUNGER LEVER	1
6	90.9-19	WASHER	2
7	85.9-4	STOP MOTION SPRING	1
8	90.9-17	RUBBER CUSHION	4
9	85.9-5	WASHER -	1
10	40.3-14	NUT 9/32" X28	2
11	85.9-6	STOP MOTION SHAFT	1
12	85.9-7	SCREW	1
13	85.9-8	SCREW 15/64X28 L=15	1
14	43.5-12	NUT 15/64X28	1
15	85.9-9	SHOULDER SCREW D=6.8 H=2.7	1
16	95.13-6	NUT M6	1
17	85.9-10	SHOULDER SCREW D=7.14 H=4	1
18	85.9-11	STITCH ADJUSTING ROLLER	1
19	85.9-12	WASHER 6.1X11X2	- 1
20	85.9-13	WASHER	1
21	85.9-14	SCREW M6 L=10	1
22	85.9-15	STOP MOTION TRIP LEVER	1
23	85.9-16	STOP MOTION TRIP LEVER BARACKET	1
24	85.9-17	SCREW M6 L≡12	2
25	85.9-18	SPRING	1
26	43.8-10	S SHAPED HOOK	1
27	85.9-20	STOP MOTION LEVER SPRING PIN	1
28	85.9-21	STOP MOTION LEVER SPRING	1
29	85.9-22	SCREW STUD	1
30	85.9-23	PRESSURE APPLYING LEVER	1

STITCH SELECTING PARTS COMPONENTS



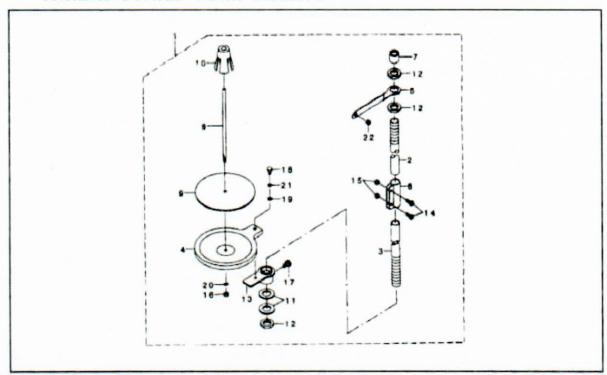
-	RART NO	DESCRIPTION	Q'T'
1	85.10-1	SHOULDER SCREW D=12.7 H=3.4	1
2	85.10-2	SPRING FOR FRICTION PLATE	1
3	85.10-3	FRICTION PLATE ROTATING SHAFT	
4	85.10-4	WASHER 8.5X18X1.6	1
5	85.10-5	SPEED SLOWER LEVER	1
6	85.10-6	FITING PLATE	
7	85.10-7	FRICTION PLATE HOLDER	1
8	85.10-8	SPEER SLOWER FRICTION PLATE	1
9		POSITIONING PIN	2
10	40.7-7	NUT 11/64"X40	1
11	85.9-10	SHOULDER SCREW D=7.14 H=7	1
12	85.10-9	STITCH SELECTING SPUR GEAR	1
13	85.10-10	INTERMEDIATE GEAR SHAFT	1
14	85.10-11-00	ASSY SPEED SLOWER FRICTION	1
15	85.3-11	SCREW	2
16	85.10-11	SPEED SLOWER FRICTION WHEEL	1
17	85.10-12	GEAR LAGER	
18	85.10-13	SCREW	
19	85.10-14	ROLLER	
20	85.10-15	THREAD BIND NOTCH	1
21	85.10-16	SPACER	1
22	85.10-17	SCREW M4X0.5 L=4.5	2
23	85.2-15	SCREW M5 L=8	2
24	90.1-29-5	HINGE SCREW D=8 H=3.4	1
25	85.10-18-00	STITCH ADJUSTING ARM ASM	1
26	85.10-18	STITCH ADJUSTING ARM	1
27	85.10-19	SCREW M6 L=16	1
28	85.9-11	STITCH ADJUST ROLLER	1
29	85.10-20-00	STITCH ADJUST CAM ASSY	1
30	85.10-20	STITCH ADJUST CAM	1
31	85.10-21	NUT	2
32	85.10-22	SCREW	1
33	85.10-23	SCREW M4X0.7 L=5	1
34	40.4-30	SCREW	2
35	85.10-24	SCREW	1
36	85.10-25	SOACER	1
37	85.10-26	STITCH CAM	1
	85.10-27	STOP MOTION CAM SHOE	1

THREAD BIND NOTCH COMPONENTS



REF No RART NO		DESCRIPTION		
1	85.11-1	THREAD BIND LEVER	1	
2	85.11-2	CONNECTING PLATE LARGE	1	
3	85.2-33-3	WASHER	2	
4	85.2-7	SCREW	2	
5	85.11-10	SCREW	2	
6	85.1-9	SPRING	2	
7	85.11-4	PIN	1	
8	85.11-10	SCREW	1	
9	85.11-3	THREAD BIND ARM	1	
10	85.4-38	SCREW	2	
11	85.11-5	SCREW	1	
12	85.11-6	THREAD BIND SUPPORT PLATE	- 1	
13	85.11-8	SCREW	1	
14	85.11-7	ROLLER	1	

THREAD STAND COMPONENTS



REFNo	RART NO	DESCRIPTION	O'T'
1	85.12-1	THREAD STAND ASM	1
2	85.12-1-2	SPOOL REST ROD, UPPER	1
3	20.8-6-1	SPOOL REST ROD, LOWER	1
4	85.12-1-4	THREAD STAND HOLDER PLATE	1
5	85.12-1-3	THREAD RAISING THREAD GUIDE A	2
6	20.8-6-5	SPOOL REST ROD JOINT	2
7	20.8-6-4	SPOOL REST ROD RUBBER CAP	1
8	20.8-6-6	SPOOL PIN	1
9	20.8-6-9	SPOOL REST CUSHION	2
10	20.8-6-7	SPOOL RETAINER	2
11	20.8-6-2	WASHER 16X30X2.6	2
12		NUT M16X1.5	3
13	85.12-1-1	SPOOL REST BRACKET ASM	1
14		SCREW M5 L=14	2
15		NUT M5	2
16		NUT M5	1
17		SCREW M6 L=10	1
18		SCREW M5X0.8 L=8	1
19		WASHER 5.2X9.5X0.6	1
20		SPRING WASHER	1
21		SPRING WASHER 5.2X8.2X1	1
22	20.8-6-11	THREAD GUIDE	1
			1
			1

060	Foot-lifter Maintain power	6%	0 ~ 100%	Power for foot-lifter quite stay	Parameter is not good too large, easy to heat, affecting time
061	After the release of the presser foot, the time of delay needle down	1	1 ~ 900	When the presser foot down, operation of the motor required delay time	When parameter No. 63 open, the protection switch function open, no need delay
062	Time to maintain foot-lifter the power of time	180	0 ~ 900	After motor running, foot-lifter Residence time	
063	Foot-lifter protection needle sensor switch	1	0: OFF 1: ON		When parameter 63 is closed, you need to set parameters No. 61 to 350 or more, otherwise easy to break the needle
065	Delay time presser foot	0	0 ~ 900		
071	Running speed	1500	200 ~ 1800		

046	Wiper action delayed start time	40	10 ~ 2000	
047	Wiper action time	70	10 ~ 2000	
048	Wiper action time at full power time	70	10 ~ 990	
050	Wiper action time at maintain power	50	1 ~ 100	
051	Wiper action to release the protect time power	50	20 ~ 800	
055	Wiper function on off switch	000 (OFF)	0001 (ON)	
058	Foot-lifter action time at full power time	160	0 ~ 900	Not good too big effect of electromagnets time
059	Foot-lifter full-power power	100%	0 ~ 100%	Opinions parameter values 80 ~ 100

2: How to enter parameters and how to modify the parameters

Together touch P and enter into "System parameters" list, screen
display 0000, after input password, then touch (OK) enter into. After entering
the system, the parameters number can be seen, then you can use () () () key to switch the parameter number, when you find the need modify number,
then touch (P) key enter the current parameters, last touch (OK)button
to save and Esc

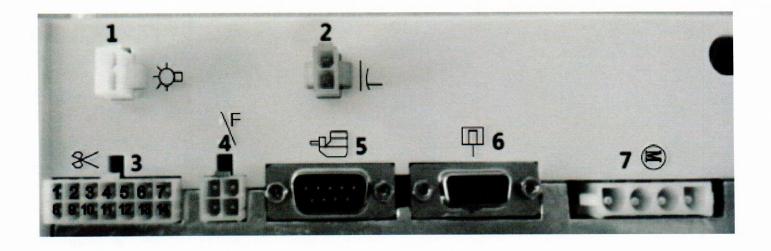
Note: the up entry method, specific parameters No. on behalf of the parameters meaning as follows:

373D System parameter list

System parameter list	Function Description	Function parameter default values	Function parameter ranges	Parameter Description	Precautions
002	Reset speed	200	150 ~800		
021	Restore the system password	000	000 ~ 003	This parameter is adjusted to 003 long press OK button	Restoring the factory password
023	Display speed		200 ~ 1800	Click the (P) key	Display motor speed
024	Governor detected	About 200 (Midpoint)		Detection governor normal	Detection Should before reset, otherwise affect safety
025	Automatic Running	0	0: close , 1:open	Machine Running run	Turn the power on again to close the parameter
031	Presser foot advance angle	80	10 ~ 90	Advance angle more bigger the sensitivity more stronger	Opinions parameter values 40 ~ 80

Display error code	Error code meaning	: Various possible for the erro	Solution
ER-01	No find needle position	1: Hand wheel and motor 2: Hand wheel magnet off 3: Hand wheel magnet polarity reversal 4: Nine-pin terminal head Poor contact 5: Motor hall damaged, with the change motor	
ER-02	Pedals velometer signal wrong	1: Not plugged velometer into box 2: velometer Inserted upside 3: velometer line broken 4: velometer damage	
ER-03	Motor phase error signal	1: Nine-pin terminal head Poor contact 2: Hall and rotor has large deviations when the motor is mounted 3: Motor hall damage	

4: The control box Port Description



Port Number	Port device name for the connection
1	373D button sewing machine head LED socket
2	Presser foot control port, connect the presser foot solenoid or solenoid valve (30V)
3	14P multifunction port (Needle-protect switch and start the machine position sensor socket)
4	Foot pedals port , connection governor
5	connecting 373D the control panel display
6	Connect the motor phase signal line
7	connection motor No.4 drive line

No.3 14p multifunction port

The 3rd multifunction port label	Function
1, 8, 11	1: GND 8: Signal 1 11:5V
2, 9, 12	2: GND 9: Signal 2 12:5V
3, 10	3: Presser foot output 10:30V
4, 2	4: Protection signal input 2: GND
5	5: Ground
6, 13	6: wiper output 13:30V
7, 14	7: Scissors output 14:30V