



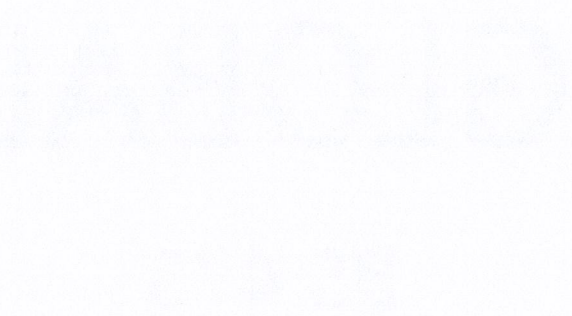
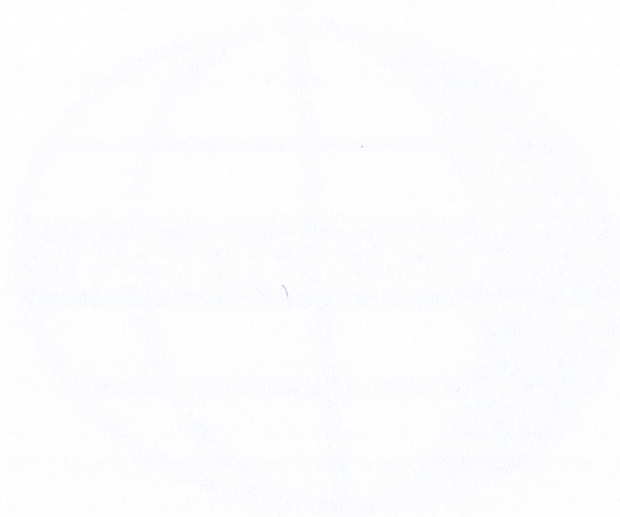
GLOBAL

BS 473

Instruction & parts Manual

www.globalsew.com

info@globalsew.com



Faint, illegible text or a stamp spanning across the middle of the page, possibly a header or a separator line.

Faint text or a stamp located in the lower right quadrant of the page.

Another faint text or stamp located in the lower right quadrant, slightly below the previous one.

SINGLE THREAD CHAINSTITCH BUTTON ATTACHING MACHINE

INSTRUCTION MANUAL

Before operating the machine, please read this Instruction Manual Carefully in order to operate it in the correct and efficient manners.

Thanks for your selection, wish you like it forever.

CAUTIONS BEFORE OPERATION

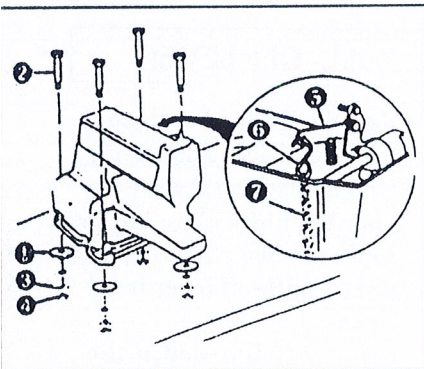
1. The machine has been determined in factory, but in the view of safety operating the machine, please remove the Side Cover. turn the pulley with hands. After a trial, connect the power.
2. The sewing speed should be 1200-1300s.p.m within the first month.
3. The pulley should rotate backwards as observed from the operator. Take care not to rotate the machine in the opposite direction.

CAUTIONS IN OPERATION

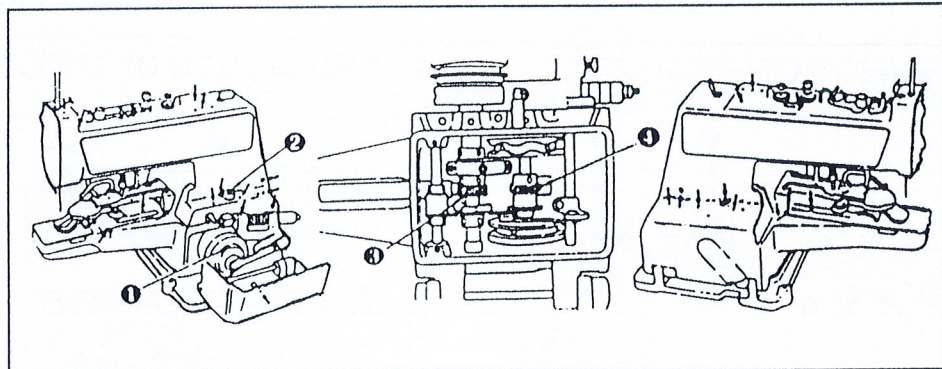
1. Never place your hands under the needle during operation.
2. Never put your hands into the side cover during operation.
3. When put down the machining head or removing the pulley, please disconnect power.
4. Never bring your fingers or hair close to, or place anything on the handwheel, V-belt, bobbin winder wheel or motor during operation. It may lead to serious personal injuries.
5. If your machine is provided with a belt cover, finger guard and eye guard, never operate your machine with any of them removed.

1.SETTING UP THE MACHINE HEAD

2.LUBRICATION

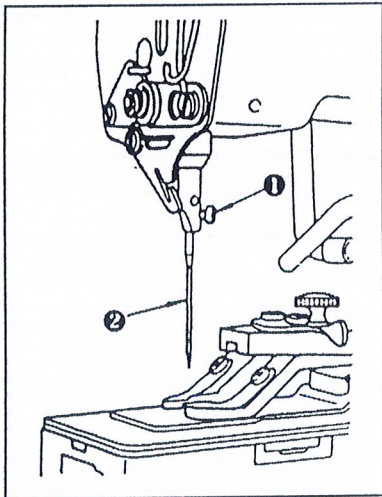


Putting the cushion ① on the table, place the machine head on the cushion ①, tighten it with screw ②, washer ③ and nut ④, then install the S-shaped book ⑥ and chain ⑦ on the stop-motion trip lever ⑤.



1. Apply the lubricating oil to the arrowed points.
2. Remove the Right Side Cover, screw out the screw ① of Needle Driving pulley, then apply grease.
3. Loosen the mounting screw ② push the machine head down, apply grease to the bevel gear ③ and shaft Driven Gear ④.
4. Check to see the oil felt in the sub-base, if the oil volume is deficiency, apply to it.

3.HOW TO INSTALL THE NEEDLE

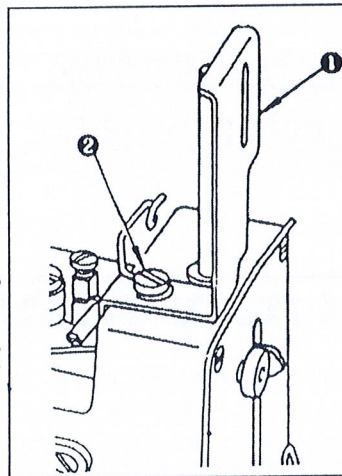


*Turn off the motor power.

Use a TQ × 7#20 needle.

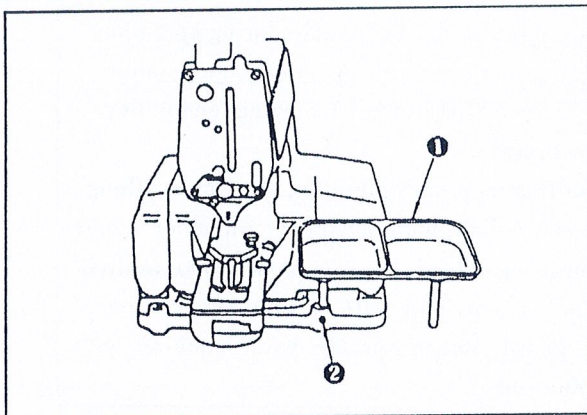
- 1.Loosening needle setscrew
① hold needle ② with its long groove part facing toward the operator.
2. Insert the needle fully into the needle clamping hole.
- 3.Securely tighten the needle setscrew ①.

4.HOW TO INSTALL THE NEEDLE BAR GUARD



- 1.Loosen setscrew ②
- 2.Install the needle bar guard ① under the thread guide NO. 2.
- 3.Retighten the setscrew ②.

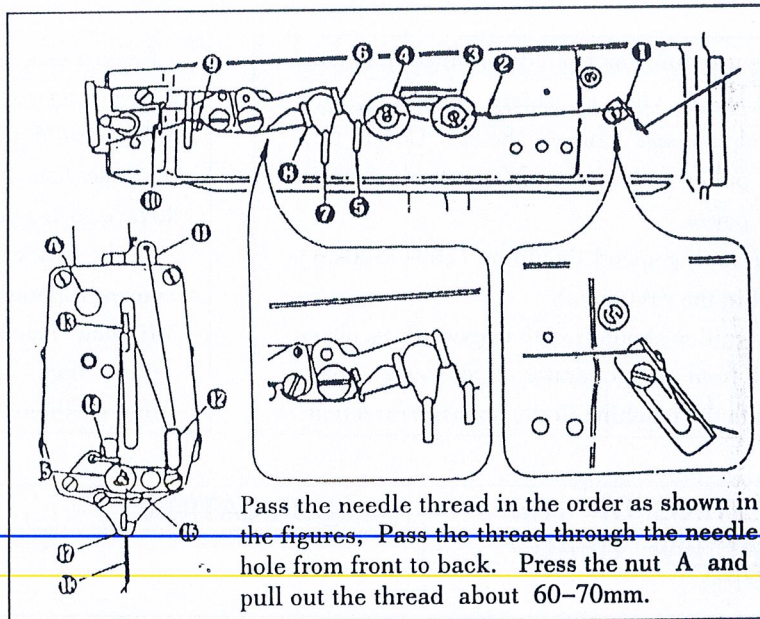
5.HOW TO INSTALL THE BUTTON TRAY



Insert the button tray into the hole at the front right side of the machine sub-base,tighten the setscrew ②

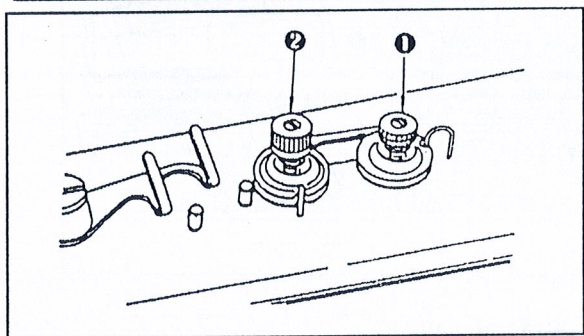
If it's inconvenient, you can also put it at left side.

6.THREADING THE NEEDLE-THREAD



Pass the needle thread in the order as shown in the figures, Pass the thread through the needle hole from front to back. Press the nut A and pull out the thread about 60-70mm.

7.TENSION CONTROLLER

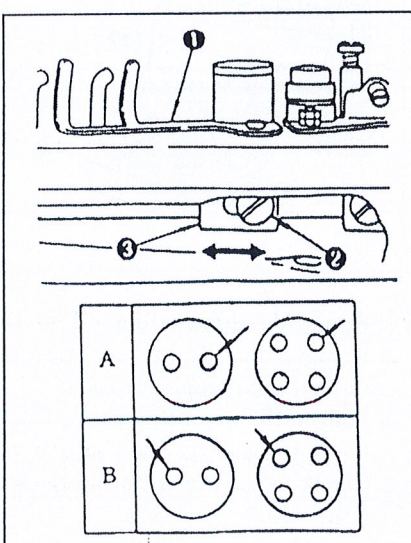


Tension controller NO.1 nut ② is used for adjusting the strength of sewn button, with low tension, so it's convenient in use.

Tension controller NO.2 nut ② is used for adjusting tensity of stitches. The tension is stronger than NO.1.

Change it according to different thread, cloth, button etc. The tension increases when the each nut is turned clockwise, and decreases when turned counterclockwise.

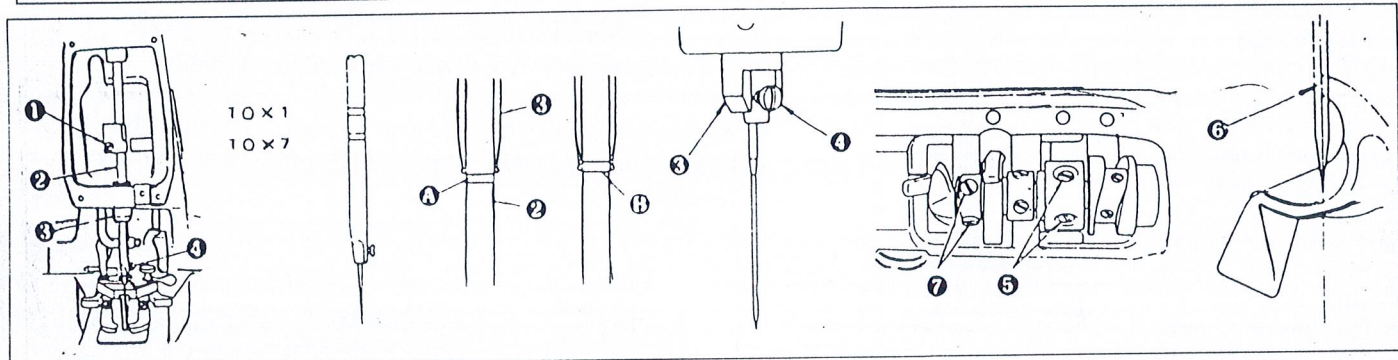
8.ADJUSTION OF THREAD PULL-OFF LEVER



- Pass the screwdriver through the hole of left side cover, loosen setscrew ②,move nipper bar block ③ to left or right, so the adjusting of thread pull-off lever is all right.

- As sewing finished,if the remaing thread comes out of the A arrowed holes; move the nipper bar block ③ to left; if the remaining thread comes out of the B arrowed holes, move the nipper bar block ③ to right.

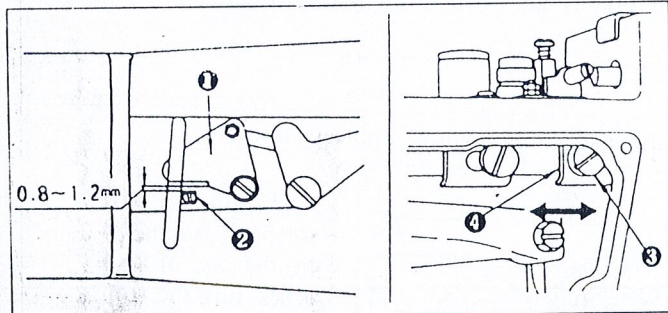
9. NEEDLE-TO-LOOPER RELATION



*Set the needle to looper relation in the following way:

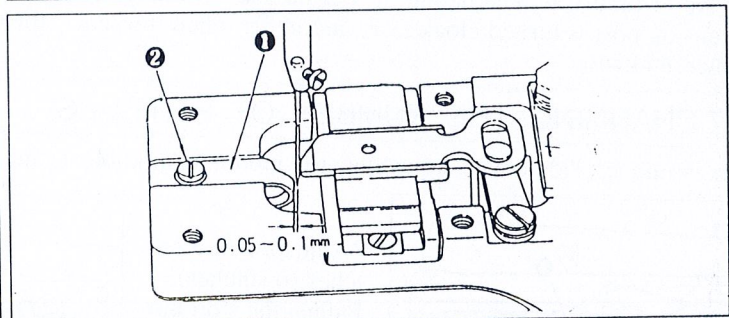
1. In the state of the pedal was fully treaded, turn the pulley in the direction of rotation, bring down the needle bar to the lowest point. Loosen needle bar setscrew ①.
2. (Setting the needle bar): When using needle $TQ \times 1$, select the two upper engrave lines. When using needle $TQ \times 7$, select the two lower engrave lines. Making their upper one align with the bottom end of needle bar bushing lower ③, then retighten the setscrew ①, turn the setscrew ④ into the concave groove of the needle bar bushing lower ③.
3. (Setting the looper): Loosen the setscrew ⑤, turn the pulley, Making the lower one B of a group of needle bar engrave lines align with the bottom end of needle bar bushing lower ③.
4. Align blade point ⑥ of the looper with the center of needle, then tighten the setscrew ⑤.
5. Loosen the setscrew ⑦, make adjustment so that a clearance of approx. 0.05 ~ 0.1mm is provided between the needle and the blade point of the looper, Then retighten the setscrew ⑦.

10. ADJUSTING THE THREAD NIPPER



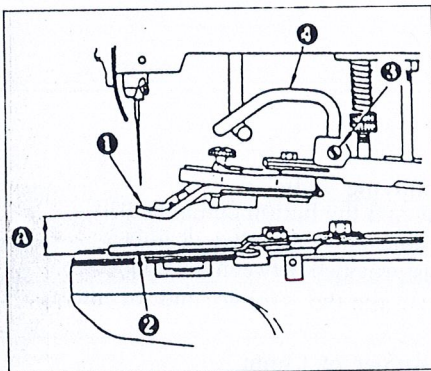
During running, made adjustment so that a clearance between thread nipper ① and nipper block ② becomes approx. 0.8-1.2mm to prevent the nipper touch thread. By this way: Loosen setscrew ③, move the nipper block ④ to left or right.

11. ADJUSTMENT OF THE NEEDLE GUARD



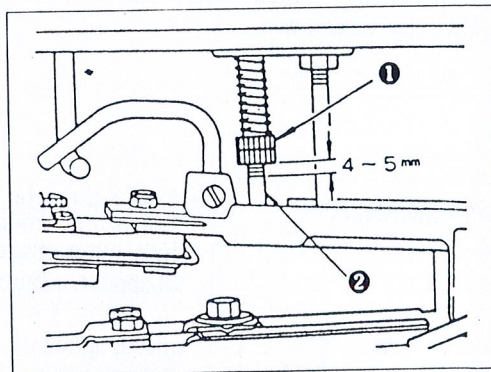
Loosen setscrew ②, when the needle bar at the lowest point, then moving the needle guard ① to left or right, make adjustment so that the clearance between the needle and the needle guard becomes approx. 0.05 ~ 0.1mm.

12. HEIGHT OF BUTTON CLAMP LEVER JAW COMPONENTS



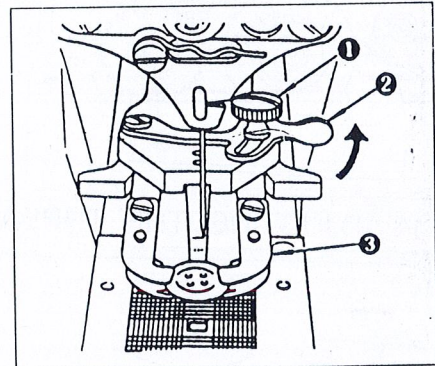
When stop running, the distance A between the button clamp lever jaw components ① and the feed plate ② should be 9mm. Adjust it by loosening setscrew ③, then moving button clamp lifting rod ④ up and down.

13. THE PRESSURE OF THE BUTTON CLAMP LEVER JAW COMPONENTS



Turning the nut ①, make adjustment so that a clearance of approx. 4-5mm is provided between the nut and the screw bottom of button clamp pressure adjusting rod ②. Now the pressure is standard.

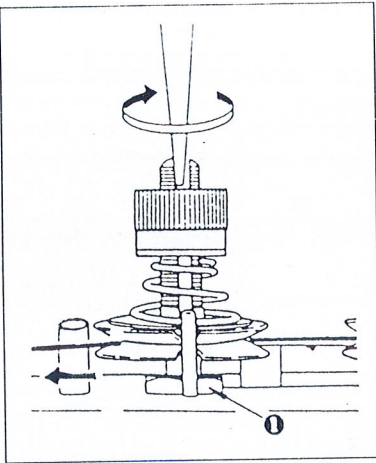
14. ADJUSTING THE SNAP FASTENER CLAMP STOP LEVER



As stop running, loosen the setscrew ①, turning snap fastener clamp stop lever to make the button clamp lever jaw open or close, so can make the button at right position where the button can be put and removed easily. Then tighten the setscrew ①.

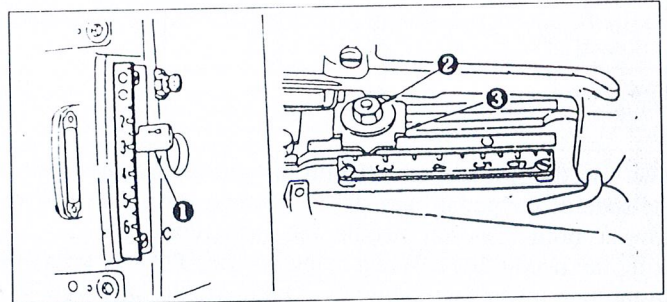
15. TIMING FOR THREAD TENSION RELEASE

Pulling the thread in the arrow direction, rotate the driving pulley, now the tension disc No. 2 was released. pass the thread through it. The height gauge from the top of needle bar bushing upper to the top of needle bar is about 54-56mm.



16. ADJUSTING THE CROSSWISE STITCH WIDTH AND THE LONGITUDE STITCH WIDTH FOR 2-HOLE OR 4-HOLE BUTTON

At first, please measure the hole distance. For the 4-hole button, the crosswise stitch width is the same as the longitude width.



*Adjusting the longitude stitch width
Press down the handle & indicator spring ①. For 2-hole button, make it at the position "0". For 4-hole button, set it to the value as same as measuring value.

*Adjusting the crosswise stitch width
Loosen nut ②, set crosswise feed indicator ③ to the value as same as measuring value. Then retighten nut ②
(Notice): Check to see the needle should be coming down through the center of the hole before running.

Trouble and remedy as follow:

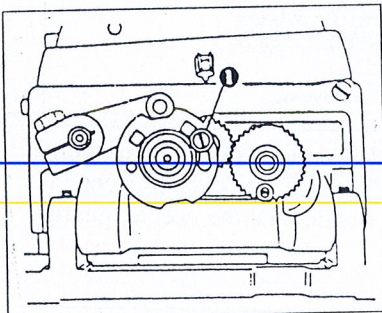
Trouble	Height of needle bar (Remedy)
1. Poor tensity of cloth stitch	Upper the needle bar.
2. Thread has been cut before stop motion.	Upper the needle bar.
3. Needle thread is often broken	Lower the needle bar.

Adjustment:

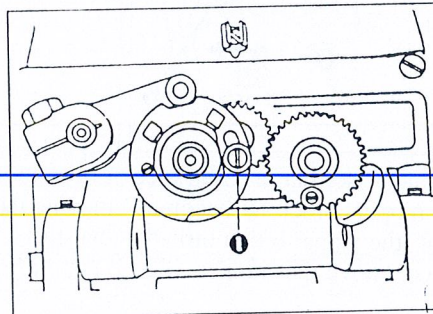
Loosen nut ①, insert a thin screwdriver into the slit of tension post No. 2 to turn it. The height of needle bar lower when the tension post is turned clockwise, and upper when turned counterclockwise.

17. CHANGING THE NUMBER OF STITCHES

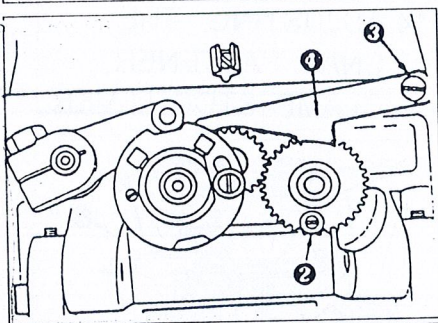
Remove the left side cover, adjusting stop motion cam knob ① and stitch selecting latch ④ and setscrew ③.



*Adjustion of 8 stitches (6 stitches)
Pulling the stop motion cam knob ①. make it close to yourself and at the position as figure shown.



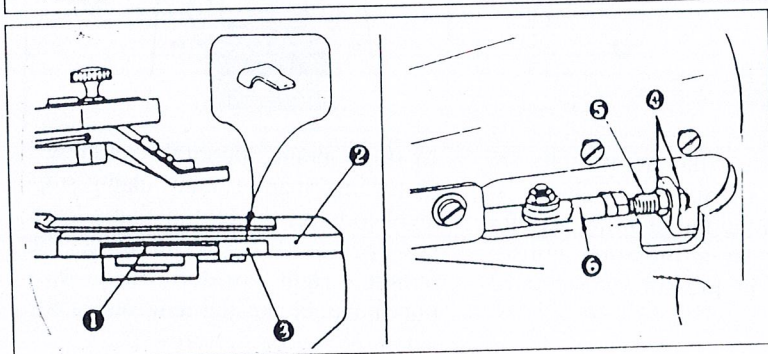
*Adjustion of 16 stitches (12 stitches).
In the case of 8 stitches, turn the stop motion cam knob ① at the position as figure shown.



*Adjustion of 32 stitches (24 stitches).

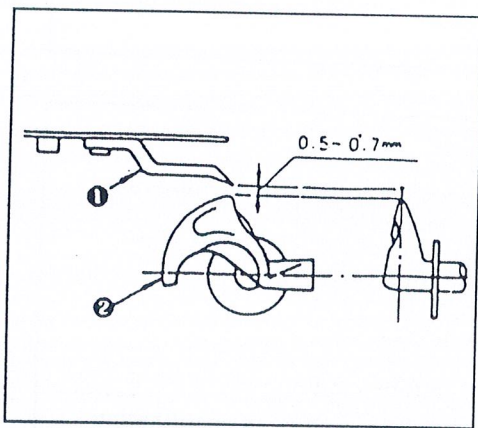
In the case of 16 stitches, when the roll ② turned at the below position as shown, make stitch selecting latch ④ at the position as figure shown by setscrew.

18. ADJUSTING THE THREAD TRIMMER

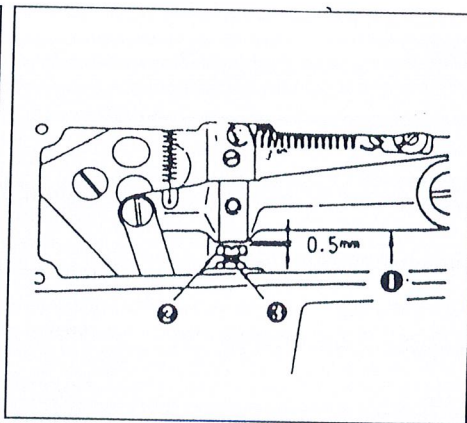


*Adjusting the moving knife
When stop running and the button clamp asm. is fully lifted, make adjustment so that a clearance of approx. 13mm is provided between the connecting link, Front ① and the groove end of the throat plate ②.

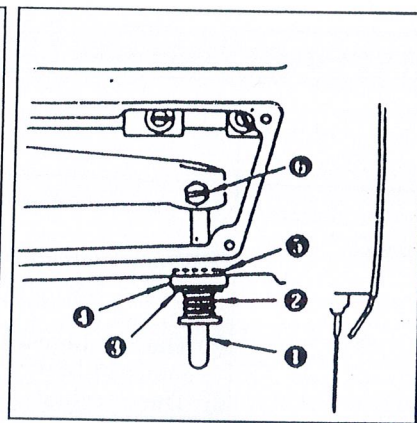
Adjusting the clearance of 13mm:
Use the gauge ③ supplied with the machine to check. Tilting the machine head, remove the cover, loosen the nut ④ (two nuts), screw in or out the connecting screw ⑤. when retighten the nut ④, pay attention to make the feed adjusting joint ⑥ at the horizontal position.



*Height of moving knife poke hook
The clearance between the moving knife ① and the looper ② is approx. 0.5-0.7 mm. If it isn't, make adjustment by bending the moving knife poke hook ①.



*The clearance between the button clamp lifting lever and the adjusting bolt. Make adjustment so that a clearance of 0.5mm is provided between the button clamp lifting lever ① and the adjusting bolt ②, then tighten the nut ③.



*How to install the button clamp lifting rod.
Mount the follow parts on the button clamp lifting rod ① in turn safety magnet ②, washer ③, ushion ④, and washer ⑤, when the machine stop runing, the washer should in touch with the jaw of machine body, with no gap there, then tighten the screw ⑥.

19. SPECIFICATIONS

Sewing speed	Max. 1,500s.p.m
Stitches number	8,16,32(6,12,23 are also can be sewn by changing the cam)
Feed coverage	Crosswise 2.5-6.5mm Longitude 0-6.5mm
Button size	Φ 10~ Φ 28mm
Needle	TQ × 7#18-#20(or TQ × 1#14-#16)
Lubricating oil	Sewing machinery oil

20. MOTOR PULLEY AND BELT

(1) Motors of single-phase 250W, YC7124R or three-phase 250W, YS7114R are used.

(2) Round belt 7 × 650mm are used.

* The effective diameter of motor pulley is equal with the diameter minus 1mm.

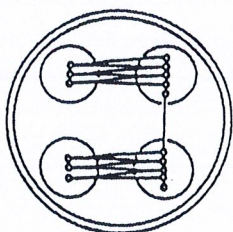
* The motor pulley should rotate counterclockwise as observed from the belt. Take care not to rotate the machine in the opposite direction.

21. TROUBLE, CAUSE AND REMEDY

T rouble	Cause	Remedy
1. Needle thread is broke	<ul style="list-style-type: none"> ① Yoke slide doesn't work well. ② Wrong timing for the tension release of tension disc No.2. ③ Thread nipper clamps thread. ④ The needle isn't coming down through the center of button. ⑤ The needle is too thick. 	<p>Making yoke slide working in coordination with timing tension close. Set the timing for the tension release of tension disc No.2 earlier. Adjust nipper bar block. Adjust jaw lever holder.</p> <p>Replace by a thin needle.</p>
2. Tensity of stitches isn't well.	<ul style="list-style-type: none"> ① Yoke slide doesn't work well. ② The No.2. tension controller doesn't close immediately. ③ Tension of the No.2 tension controller is weak. ④ The needle isn't coming down through the center of hole. ⑤ The pressure of button clamp lever jaw isn't enough. 	<p>Making yoke slide working in coordination with timing tension close. Delay the timing for the tension release of tension disc No.2.</p> <p>Adjust tension disc No.2. Adjust jaw lever holder.</p> <p>Adjust the pressure.</p>
3. The thread of first stitch is thrust out	The thread pull-off lever isn't adjusted well.	Adjust the thread pull-off lever.
4. Thread trimming isn't well caused by stop-motion.	<ul style="list-style-type: none"> ① The No. 2 tension disc doesn't close immediately. ② The needle touch with the hole wall. ③ Button clamp lever jaw components doesn't goes up enough. ④ Thread nipper doesn't close well. ⑤ The pressure of button clamp lever jaw is too large. 	<p>Delay the timing release, improve the tensity of stitches. Adjust to make the needle coming down at correct position. Adjust to make button clamp lever jaw components goes up 12mm from the feed plate. Adjust nipper bar block. Adjust the tension nut to decrease the pressure.</p>
5. Thread can't be cut.	<ul style="list-style-type: none"> ① Moving knife poke hook doesn't set thread aside. ② Needle isn't coming down through the center of hole. ③ The last stitch is skipped. ④ Height of moving knife poke hook isn't well. 	<p>Adjust the position of moving knife.</p> <p>Adjust the jaw lever holder.</p>
6. Two threads are cut simultaneously.	<ul style="list-style-type: none"> ① The position of moving knife isn't right. ② The height of moving knife poke hook isn't right. 	<p>Adjust the needle-to-looper relation. Adjust the height of moving knife poke hook.</p> <p>Adjust the height of moving knife when stop-motion. Adjust the height of moving knife poke hook.</p>
7. Remaining thread on the bottom of cloth is too long.	<ul style="list-style-type: none"> ① Moving knife doesn't cut thread immediately. ② Stroke of button clamp lever jaw components goes up is too large. 	<p>Adjust the position of moving knife.</p> <p>Make adjustment so that the stroke is 9mm.</p>

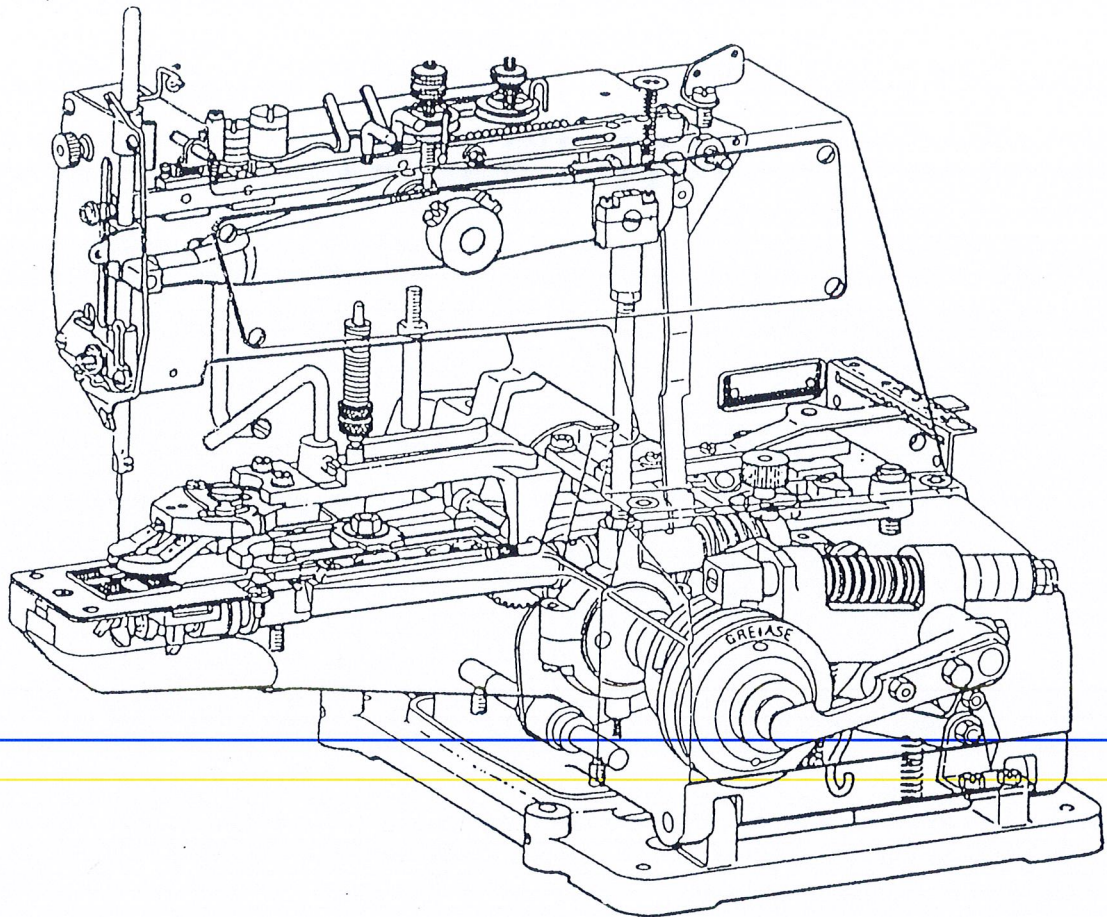
22. TYPE OF STITCHES

8.16.32



High-speed, Chainstitch, Button Sewing Machine
(with an Automatic Thread Trimmer)

PARTS LIST



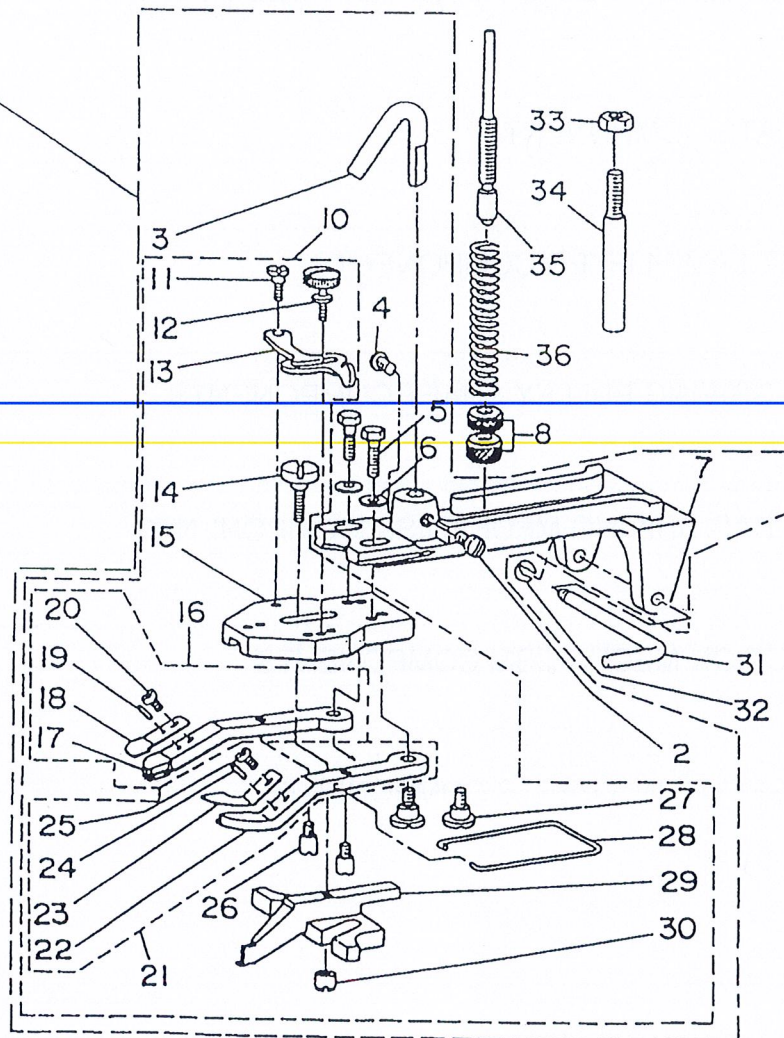
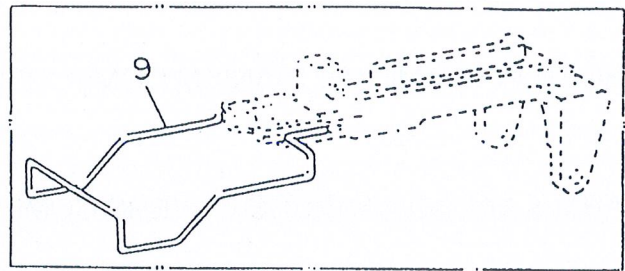
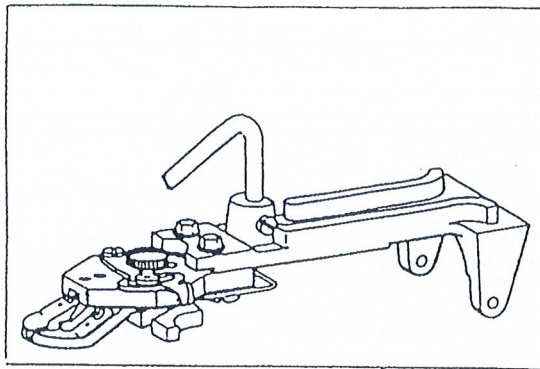
CONTENTS

1.
BUTTON CLAMP MECHANISM COMPONENTS
2.
ARM & MISCELLANEOUS COVERS COMPONENTS
3.
LOOPER SHAFT MECHANISM COMPONENTS
4.
NIPPER & THREAD TENSION PARTS COMPONENTS
5.
FEED PLATE COMPONENTS
6.
BUTTON CLAMP LIFTER COMPONENTS
7.
~~NEEDLE DRIVING PULLEY SHAFT COMPONENTS~~

- 8**
NEEDLE BAR DRIVING MECHANISM COMPONENTS
9.
STOP MOTION MECHANISM COMPONENTS
10.
STITCH SELECTING PARTS COMPONENTS

1.

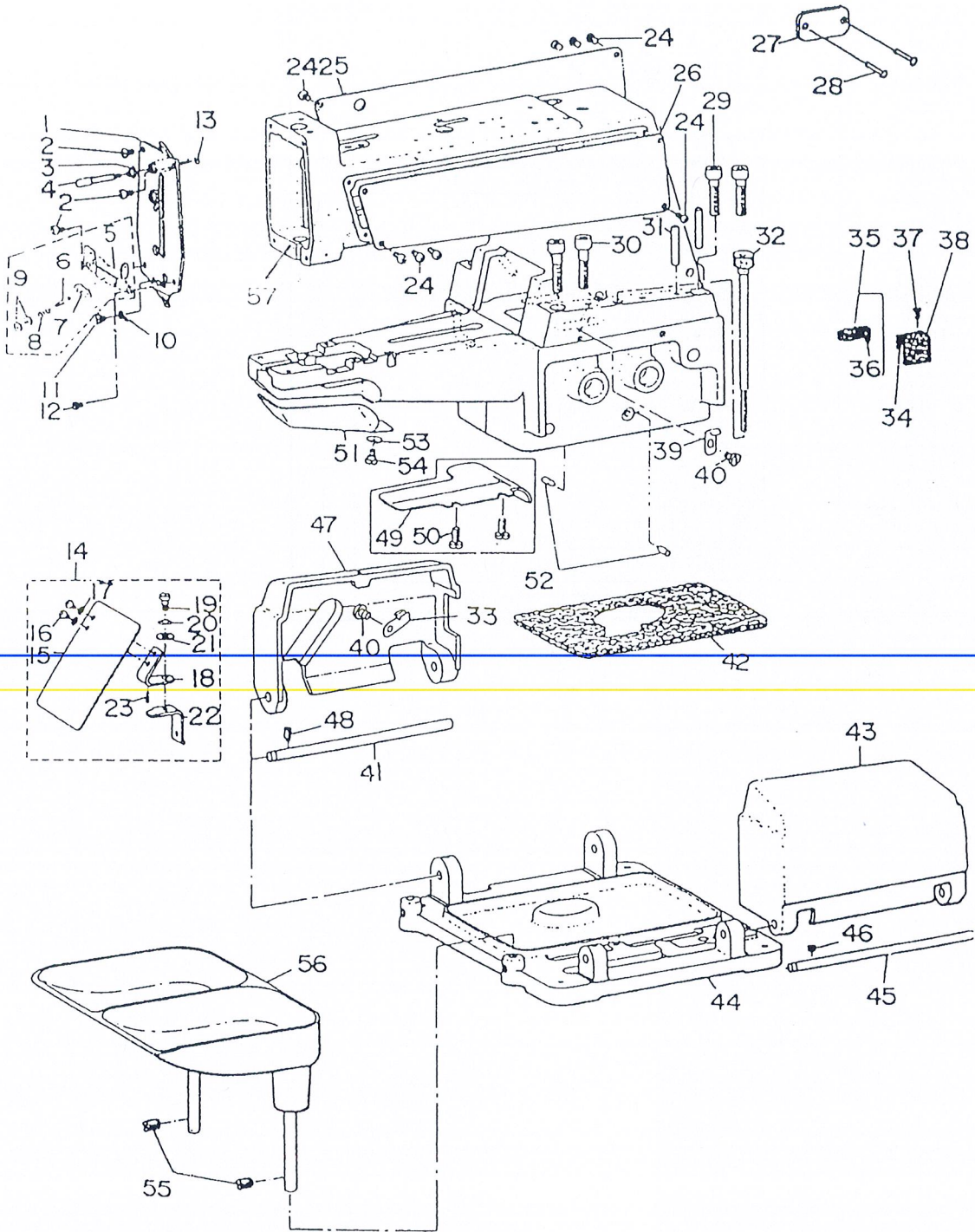
BUTTON CLAMP MECHANISM COMPONENTS



			Description	
1			FLAT BUTTON CLAMP ASM.	1
2	FJ65		SCREW 15/64-28 L=8	1
3	E90116		BUTTON CLAMP LIFTING ROD	1
4	FJ65		SCREW 15/64-28 L=8	1
5	FJ5783		SCREW 3/16-32 L=13.5	2
6	GB97.1		WASHER 5 x 10.5 x 1	2
7	E90117		BUTTON CLAMP HOLDER	1
8	E80119		BUTTON CLAMP NUT	2
9	E80115		FINGER GUARD	1
10			JAW LEVER HOLDER ASM.	1
11	E80113		HINGE SCREW D=5.50 H=1.8	1
12	E80110		CLAMP SCREW A	1
13	E80111		SNAP FASTENER CLAMP STOP LEVER	1
14	E80112		HINGE SCREW D=5.5 H=3	1
15	E80114		JAW LEVER HOLDER	1
16			BUTTON CLAMP JAW LEVER ASM	1
17	E80101		BUTTON CLAMP JAW LEVER (LEFT)	1
18	E80103		BUTTON HOLDING SPRING, LEFT	1
19	GB119		BUTTON CLAMP LOCATING PIN	1
20	FJ65		SCREW 9/64-40 L=3.5	1
21			BUTTON CLAMP JAW LEVER RIGHT	1
22	E80102		BUTTON CLAMP JAW LEVER RIGHT	1
23	E80104		BUTTON HOLDING SPRING, RIGHT	1
24	GB119		BUTTON CLAMP LOCATING PIN	1
25	FJ65		SCREW 9/64-40 L=3.5	1
26	E80107		BUTTON CLAMP STOP PIN	2
27	E80109		HINGE SCREW D=6.35 H=3.9	2
28	E80108		BUTTON CLAMP SPRING	1
29	E80106		BUTTON CLAMP SLIDE	1
30	E80105		NUT	1
31	E80118		HINGE PIN	1
32	GB896		SNAP RING	1
33	FJ6170		NUT 1/4-24	1
34	E80120		BUTTON CLAMP STOPPER PIN	1
35	E80121		BUTTON CLAMP PRESSURE ADJUSTING BAR	1
36	E80122		PRESSURE ADJUSTING SPRING	1

2.

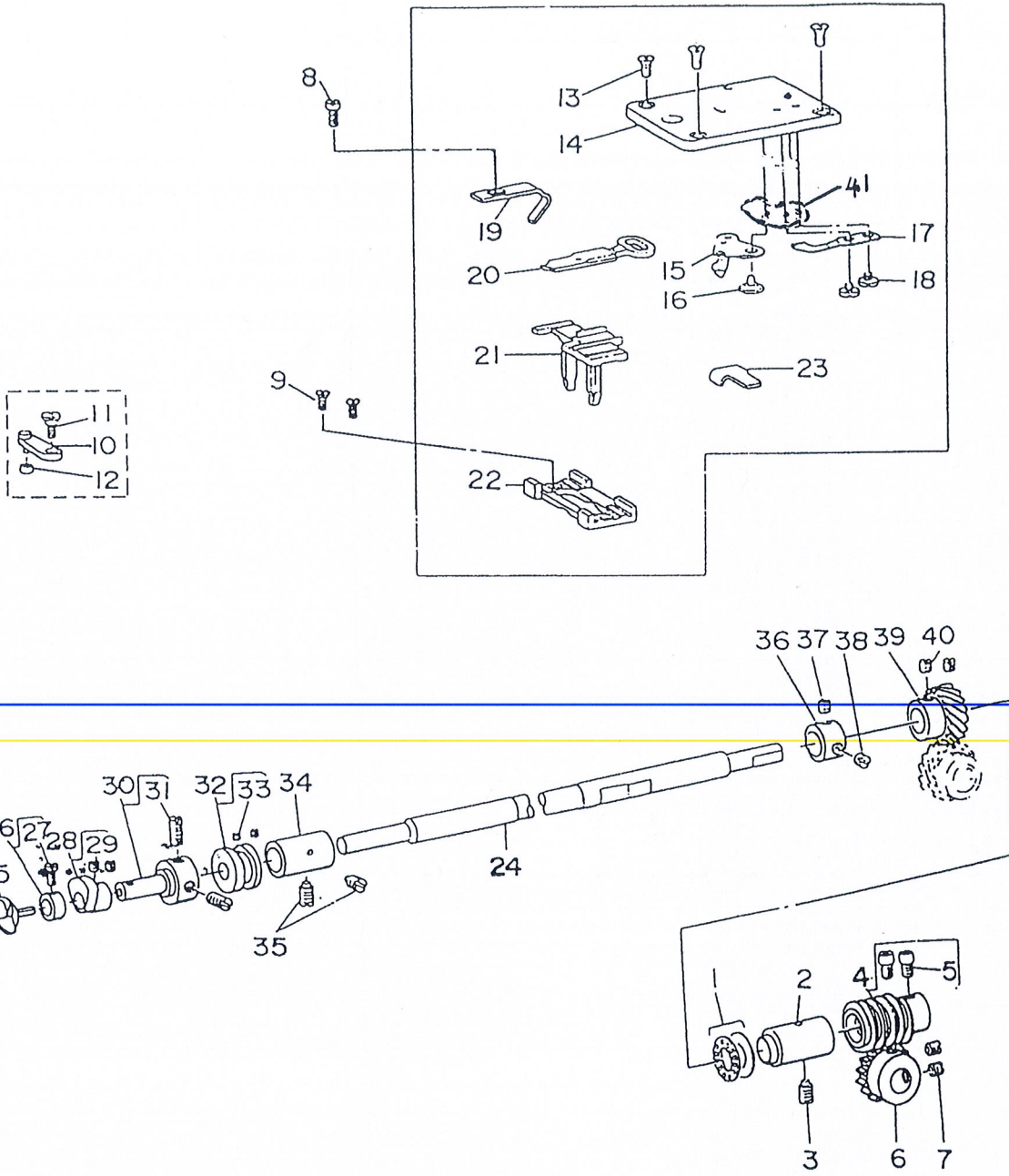
ARM & MISCELLANEOUS COVERS COMPONENTS



		Description	
1	E80217	FRONT COVER ASM.	1
2	FJ65	SCREW 11/64-40 L=8	3
3	E80201	TENSION SPRING	1
4	E90211	NIPPER RELEASING PLUNGER	1
5	E902201	TENSION ADJUSTING BASE NO. 3	1
6	E902202	THREAD TENSION STUD	1
7	E902203	THREAD PRESSER PLATE	1
8	E902204	TENSION SPRING	1
9	E902205	THREAD TENSION NUT	2
10	E80222	THREAD GUIDE NO. 4	1
11	FJ947	SCREW 11/64-40 L=3.2	1
12	FJ947	SCREW 11/64-40 L=8	1
13	GB896-86	SNAP RING	1
14		SAFETY PLATE ASM.	1
15	D8.19-1	SAFETY PLATE	1
16	FJ65	SCREW 11/64-40 L=7	2
17	GB95	WASHER 4.5 x 10.0 x 0.8	2
18	E80204	SAFETY PLATE INSTALLING PLATE	1
19	E80203	HINGE SCREW D=6 H=4	1
20	E80205	DISC SPRING	1
21	E80240	WASHER 6.5 x 13 x 0.8	1
22	E80207	SAFETY PLATE MOUNTING BASE	1
23	GB879	SPRING PIN 2 x 6	1
24	FJ65	SCREW 11/64-40 L=8	8
25	E80218	SIDE COVER, LEFT	1
26	E80212	SIDE COVER, RIGHT	1
27	E90235	MARK PLATE	1
28	E80236	RIVET 2 x 5	4
29	GB70	SCREW M8 L=30	2
30	GB70	SCREW M8 L=35	2
31	E80215	GUIDE PIN	2
32	E80214	SET SCREW ASM.	1
33	E90224	SIDE COVER SPRING, LEFT	1
34		OIL WICK	1
35	E80228	OIL FELT ASM., SMALL	1
36		OIL WICK	1
37	FJ67	SCREW 11/64-40 L=7.8	1
38	E80229	OIL SUPPLY FELT	1
39	E90239	SIDE COVER SPRING, RIGHT	1
40	FJ67	SCREW 3/16-28 L=6	2
41	E90238	SIDE COVER SHAFT, LEFT	1
42	E80233	OIL DRIP FELT (A) 5MM	1
43	E90234	SIDE COVER, RIGHT	1
44	E80230	MACHING SUB-BASE	1
45	E80232	SIDE COVER HINGE SHAFT	1
46	FJ74	SCREW 15/64-28 L=4	1
47	E90231	COVER, LEFT	1
48	FJ75	SCREW 15/64-28 L=10.5	1
49	E80213	BED OIL SHIELD	1
50	FJ67	SCREW 11/64-40 L=7.8	2
51	E80208	LOOPER COVER	1
52	E80227	CAM INDICATING PIN	2
53	E80209	SPRING WASHER 6.5 x 14.0 x 17	1
54	E80210	HINGE SCREW D=6 H=2.7	1
55	FJ74	SCREW 15/64-28 L=7	2
56	E80225	BUTTON TRAY ASM.	1
57	E90216	MACHING HEAD ASM	1

3.

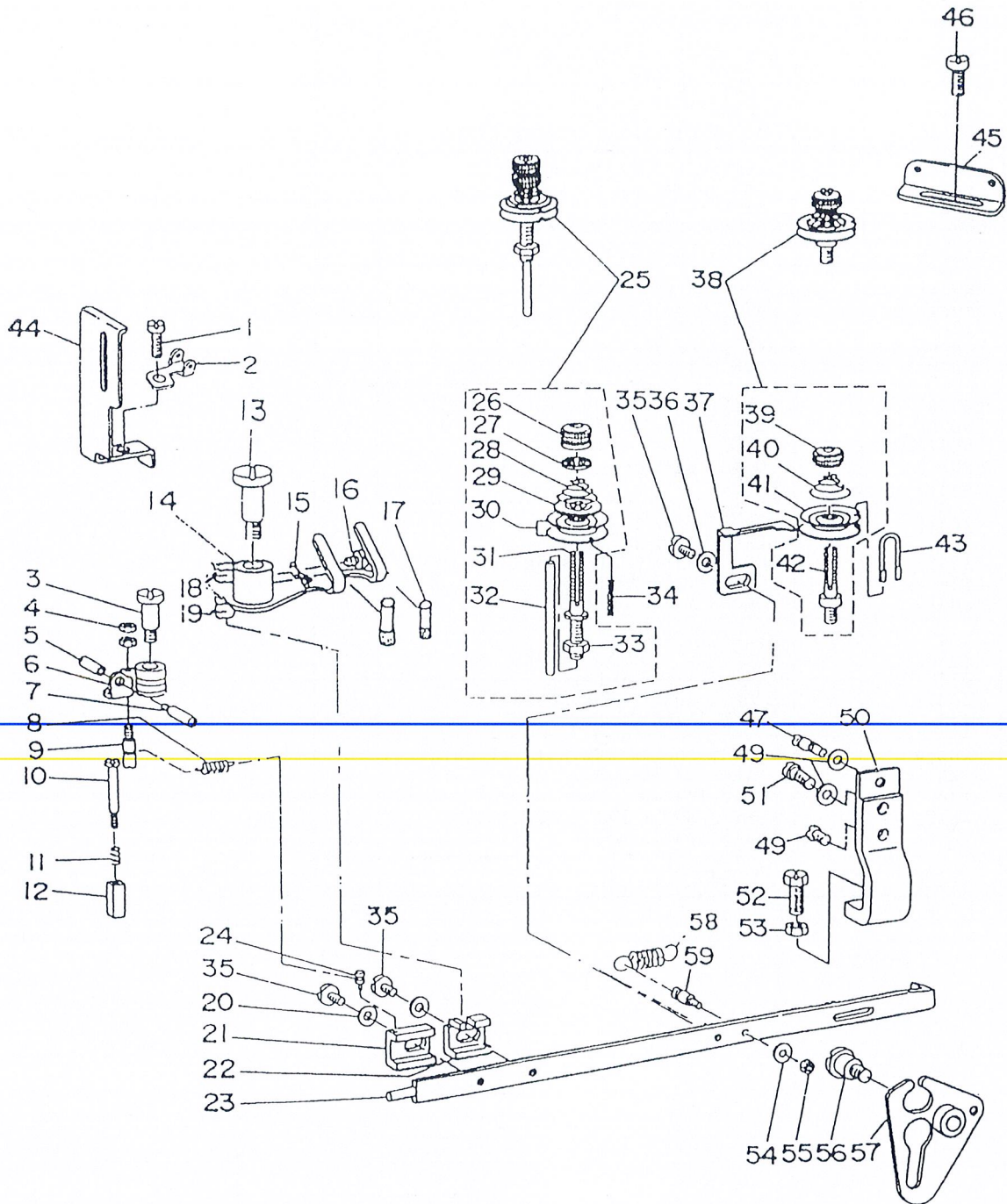
LOOPER SHAFT MECHANISM COMPONENTS



			Description	
1	E80322		THRUST BALL BEARING	1
2	E90323		LOOPER SHAFT BUSHING, REAR	1
3	FJ75		SCREW 15/64-28 L=10.5	1
4	E80324		DRIVEN WORM ASM.	1
5	FJ70.1		SCREW 1/4-40 L=7.0	2
6	E80325		CAM SHAFT DRIVEN GEAR ASM.	1
7	FJ80		SCREW 1/4-40 L=6.0	2
8	FJ67		SCREW 11/64-40 L=7	1
9	FJ68		SCREW 11/64-40 L=7	2
10	E80302		LOOP POSITIONING FINGER LEVER	1
11	E80301		HINGE SCREW D=6.35 H=2.4	1
12	E80304		LOOP POSITIONING FINGER LEVER	1
13	FJ69		SCREW 11/64-40 L=8.5	3
14	E90309		THROAT PLATE	1
15	E80310		MOVING KNIFE ASM.	1
16	E80311		HINGE SCREW D=6 H=0.85	1
17	E80312		COUNTER KNIFE	1
18	FJ947		SCREW 1/8-44 L=3.0	2
19	E80305		NEEDLE GUARD	1
20	E80308		YOKE SLIDE	1
21	E80307		POSITIONING FINGER YOKE SLIDE	1
22	E80306		YOKE SLIDE INSERT	1
23	E80326		GAUGE	1
24	E80320		LOOPER SHAFT	1
25	E80313		LOOPER	1
26	E80315		THRUST COLLAR ASM.	1
27	FJ67		SCREW 9/64-40 L=6.1	1
28	E80316		LOOP POSITIONING FINGER CAM ASM	1
29	FJ74		SCREW 11/64-40 L=3.5	2
30	E80317		LOOPER & CAM SLEEVE	1
31	FJ74		SCREW 15/64-28 L=4.0	2
32	E80303		LOOP POSITIONING FINGER ASM.	1
33	FJ74		SCREW 11/64-40 L=2.8	2
34	E90318		LOOPER SHAFT BUSHING, FRONT	1
35	FJ75		SCREW 15/64-28 L=10.5	2
36	E80319		THRUST COLLAR ASM. D=11.11 W=10	1
37	FJ80		SCREW 1/4-40 L=5	1
38	FJ74		SCREW 1/4-40 L=3.0	1
39	E80321		LOOPER SHAFT DRIVEN GEAR ASM.	1
40	FJ80		SCREW 1/4-40 L=6.0	2
41	E91102		BASE PLATE	

4.

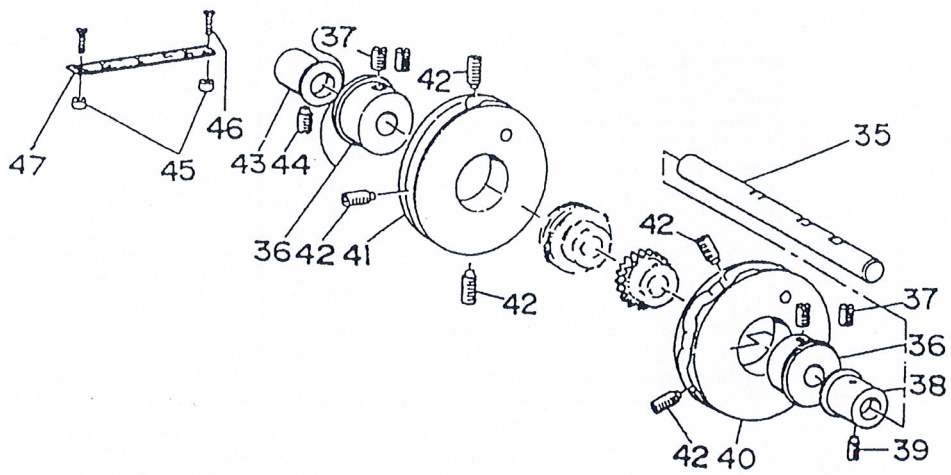
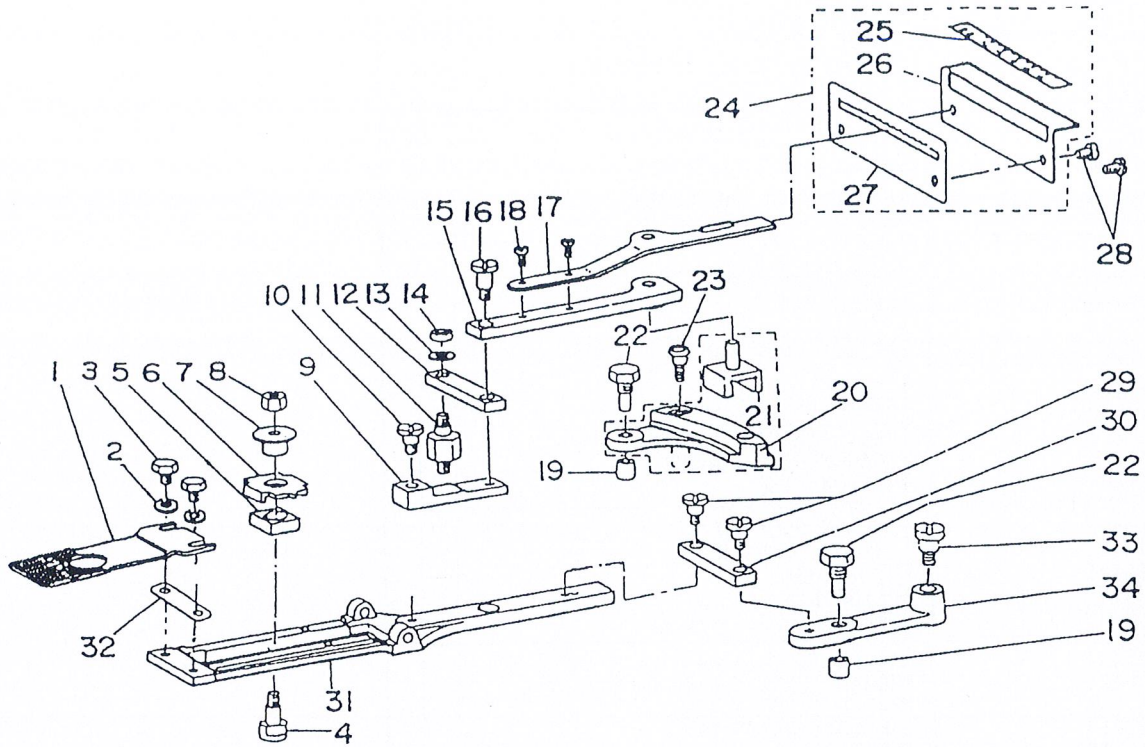
NIPPER & THREAD TENSION PARTS COMPONENTS



		Description	
1	FJ67	SCREW 15/64-28 L=12	1
2	E90401	THREAD GUIDE	1
3	E80405	HINGE SCREW D=7.94 H=12.7	1
4	FJ6170	NUT 1/8-44	2
5	E80403	NUT	1
6	E80404	THREAD NIPPER ASM.	1
7	E80402	THREAD RELEASING SCREW STUD	1
8	E80436	NIPPER BAR BLOCK SPRING	1
9	E80429	NIPPER BAR BLOCK SPRING SCREW	1
10	E80430	SCREW D=4 H=20	1
11	E80431	NIPPER BLOCK SPRING	1
12	E80432	NIPPER BLOCK	1
13	E80406	HINGE SCREW D=7.94 H=15.0	1
14	E80408	THREAD PULL-OFF LEVER ASM.	1
15	E80407	THREA GUIDE	1
16	FJ67	SCREW 9/64-40 L=4.6	1
17	E90409	SHAPED GUIDE	2
18	FJ6170	NUT 1/4-24	1
19	E80428	THREAD PULL-OFF LEVER	1
20	GB848	WASHER 5 x 10.5 x 1	2
21	E80437	NIPPER BAR BLOCK	1
22	E80438	NIPPER BAR BLOCK REAR	1
23	E80439	NIPPER BAR	1
24	E804371	NIPPER BAR BLOCK SPRING PIN	1
25		TENSION POST ASM.	1
26	E80423	TENSION NUT	1
27	SJ15-371	ROTATING STOPPER	1
28	E80425	THREAD TENSION SPRING	1
29	E80426	TENSION DISC HOLDER	1
30	E80420	TENSION DISC	2
31	E80427	TENSION POST NO. 2	1
32	E80422	TENSION RELEASE PIN	1
33	FJ6170	NUT 1/4-24	1
34	GB879	SPRING PIN	1
35	E80440	SCREW 3/16-28 L=9.0	3
36	GB848	WASHER 5 x 10.5 x 1	1
37	E80421	THREAD TENSION RELEASING LEVER	1
38		THREAD TENSION ASM.	1
39	E80419	THREAD TENSION NUT	1
40	E80418	TENSION SPRING NO. 1	1
41	E80420	TENSION DISC	2
42	E80417	THREAD TENSION STAFF NO. 1	1
43	E80416	THREAD GUIDE	1
44	E80433	NEEDLE BAR GUARD	1
45	E80411	THREAD GUIDE NO. 1	1
46	FJ67	SCREW 15/64-28 L=12	1
47	E80413	ADJUSTING SCREW	1
48	E80441	WASHER 4.8 x 8.4 x 0.8	2
49	FJ65	SCREW 3/16-28 L=9.5	1
50	E80415	NIPPER BAR BEARING BLOCK	1
51	FJ65	SCREW 3/16-28 L=15.5	1
52	FJ29.1	BOLT 15/64-28 L=14	1
53	FJ6170	NUT 15/64-28	1
54	GB848	WASHER 3.7 x 8 x 1	1
55	FJ6170	NUT 1/8-44	1
56	E80412	HINGE SCREW D=7.94 H=8.0	1
57	E80414	NIPPER BAR ACTUATING LEVER ASM	1
58	E80410	THREAD TENSION SPRING	1
59	E80434	NIPPER BAR SPRING SCREW	1

5.

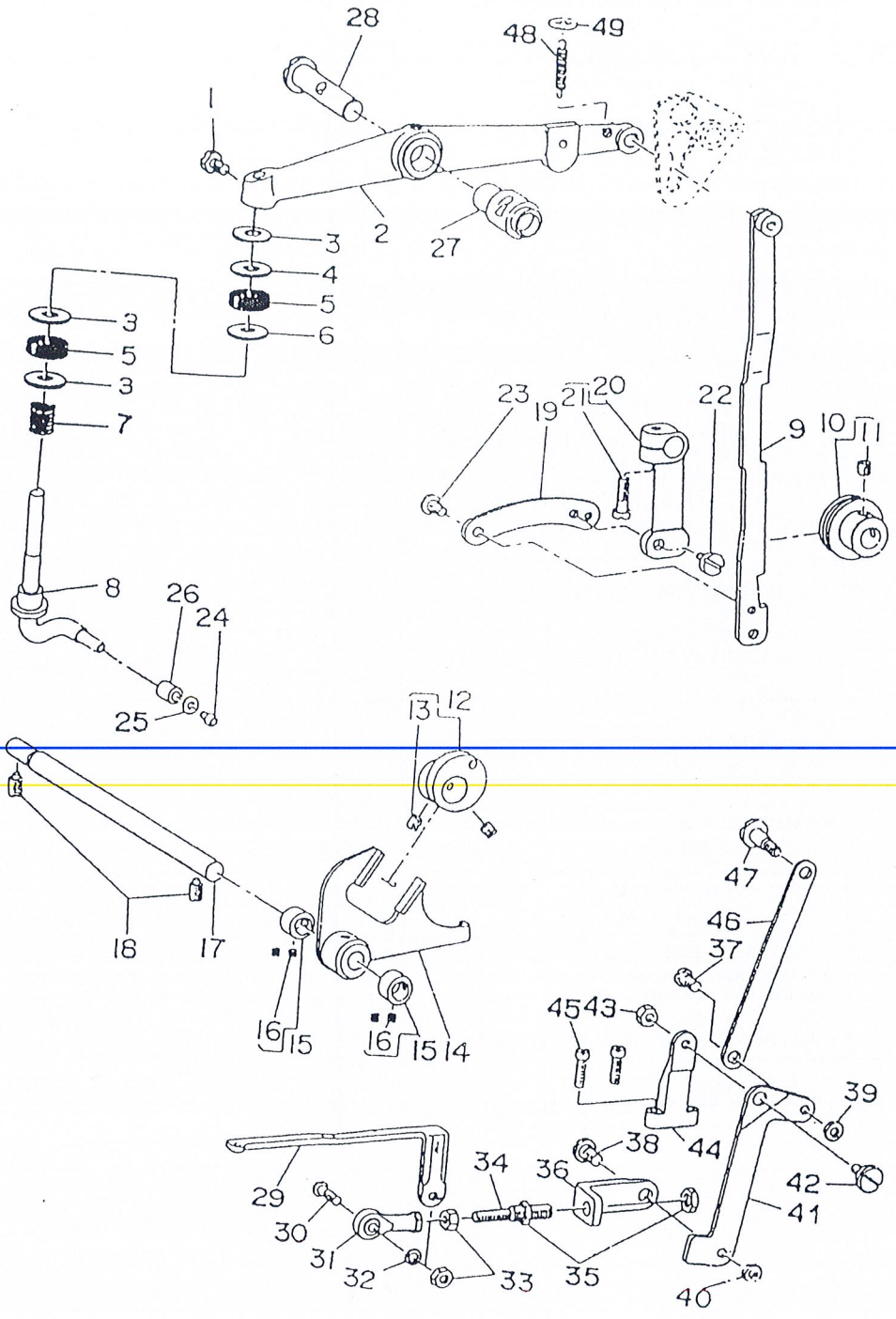
FEED PLATE COMPONENTS



		Description	
1	E80501	FEED PLATE,SMALL BUTTON	1
2	GB97.1	WASHER 5×10.5×1	2
3	FJ5783	SCREW 3/16-28 L=6	2
4	E80526	HINGE SCREW FOR CROSSWISE FEED	1
5	E80528	INDICATOR PIN BEARING BLOCK	1
6	E80529	CROSSWISE FEED INDICATOR	1
7	E80527	CROSSWISE FEED INDICATOR PIN	1
8	FJ6170	NUT 1/4-24	1
9	E80506	SLIDE PLATE CONNECTING LINK A	1
10	E80505	HINGE SCREW D=6.35 H=4.8	1
11	E80530	STUD	1
12	E80508	INTERMEDI CONNECTING LINK	1
13	GB848	WASHER 5×10.5×1	1
14	FJ6170	NUT 3/16-28	1
15	E80523G	INDICATOR SPRING CONNECTING LINK	1
16	E80507	HINGE SCREW D=6.35 H=9.6	1
17	E80522	HANDLE & INDICATOR SPRING	1
18	FJ67	SCREW 9/64-40 L=6	2
19	E80511	CAM ROLL	2
20	E80510	LENGTHWISE FEED LEVER	1
21	E80515	LENGTHWISE FEED LEVER SLIDE BLOCK	1
22	E80509	CAMROLL SCREW STUD	2
23	E90531	LENGTHWISE FEED STUD	1
24		LENGTHWISE FEED SCALE ASM.	1
25	E80514	LENGTHWISE FEED GRADUATE PLATE	1
26	E80520	PLATE BASE	1
27	E80521	FEED REGULATOR LEVER STOPPER	1
28	FJ67	SCREW 3/16-28 L=6	2
29	E80505	HINGE SCREW D=6.35 H=4.8	2
30	E80508	INTERMEDI CONNECTING LINK	1
31	E80502	FEED PLATE	1
32	E90532	SPACER	1
33	E90513	CROSSWISE FEED STUD	1
34	E80512	CROSSWISE FEED LEVER	1
35	E80517	CAM SHAFT	1
36	E80518	CAM BOSS	2
37	FJ74	SCREW 9/32-28 L=8.0	4
38	E90524	CAM SHAFT BUSHING,RIGHT	1
39	FJ75	SCREW 15/64-28 L=10.5	1
40	E80525	CROSSWISE FEED CAM	1
41	E80519	LENGTHWISE FEED CAM	1
42	FJ79	SCREW 9/32-28 L=13.5	5
43	E90516	CAM SHAFT BUSHING,LEFT	1
44	FJ75	SCREW 15/64-28 L=10.5	1
45	E80504	CROSSWISE FEED GRADUATED PLATE	2
46	FJ67	SCREW 3/32-56 L=10	2
47	E80503	CROSSWISE FEED GRADUATED PLATE	1

6.

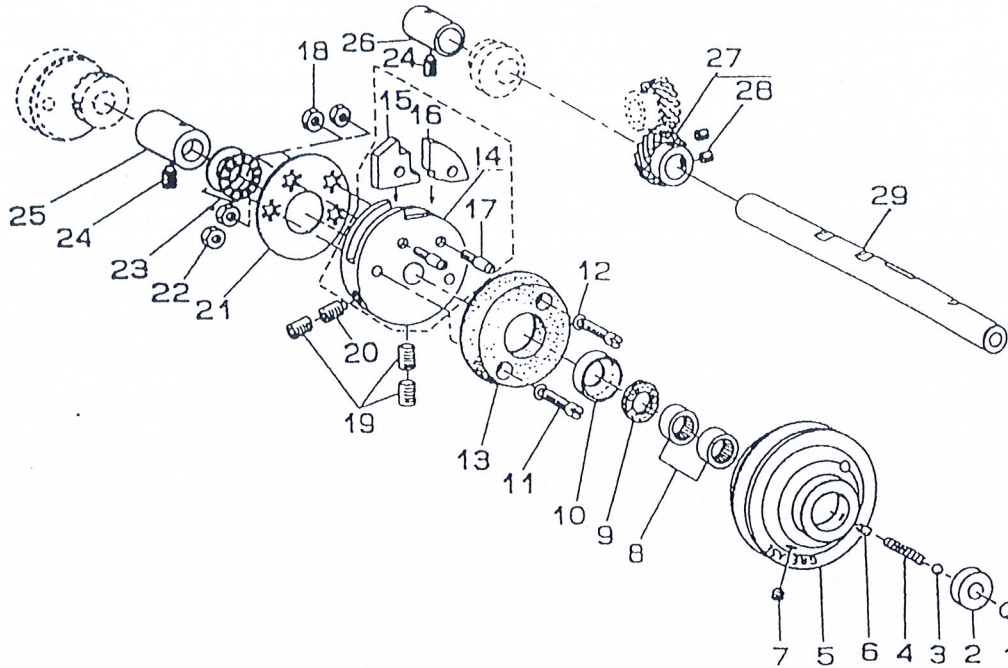
BUTTON CLAMP LIFTER COMPONENTS



		Description	
1	FJ29.1	SCREW 15/64-28 L=11	1
2	E80601	BUTTON CLAMP LIFTING LEVER	1
3	E80633	WASHER 7.5 × 19 × 1.5	4
4	E80608	WASHER 7 × 20 × (3.5; 4; 4.5)	1
5	E80607	CUSHION	2
6	E80634	WASHER 8.5 × 22.0 × 1.8	1
7	E80606	SAFETY MAGNET	1
8	E90602	BUTTON CLAMP LIFTING ROD ASM.	1
9	E80612	BUTTON CLAMP LIFTING LINK	1
10	E80623	SLIDING ROLLER ASM.	1
11	FJ80	SCREW 1/4-40 L=6.0	1
12	E80616	ECCENTRIC CAM ASM.	1
13	FJ80	SCREW 1/4-40 L=6.0	2
14	E80617	BUTTON CLAMP LIFTING LINK ASM.	1
15	E80618	THRUST COLLAR ASM. D=9.5 W=8	2
16	FJ74	SCREW 11/64-40 L=3.5	4
17	E80620	LEVER SHAFT	1
18	FJ75	SCREW 15/64-28 L=10.5	2
19	E80622	LIFTING LINK CONNECTING LINK	1
20	E80619	LIFTING LINK LEVER ASM.	1
21	FJ65	SCREW 3/16-28 L=15.5	1
22	E80621	HINGE SCREW D=6.35 H=4.7	1
23	E80624	HINGE SCREW D=6.35 H=2.1	1
24	GB65-85	SCREW M3 × 5	1
25	GB97.1-85	WASHER 3	1
26	E80601	BUTTON CLAMP LIFTING ROD ROLL	1
27	E80605	BUSHING	1
28	E80604	BUTTON CLAMP LIFTING LEVER SHAFT	1
29	E80631	CONNECTING LINK, FRONT	1
30	E80630	JOINT STUD	1
31	E80629	FEED ADJUSTING JOINT	1
32	E80635	WASHER 5.1 × 7.5 × 0.5	1
33	GB6170	NUT M5	2
34	E80628	CONNECTING SCREW	1
35	FJ6170	NUT 9/32-28	2
36	E80627	CONNECTING LINK, REAR	1
37	E80625	HINGE SCREW D=6.35 H=3.2	1
38	E80626	HINGE SCREW D=7.94 H=4	1
39	FJ6170	NUT 3/16-32	1
40	FJ6170	NUT 15/64-28	1
41	E80615	THREAD TRIMMING LEVER	1
42	E80613	HINGE SCREW D=7.94 H=3.1	1
43	FJ6170	NUT 11/64-40	1
44	E80614	THREAD TRIM LEVER BASE	1
45	FJ65	SCREW 11/64-40 L=14	2
46	E80611	THREAD TRIMMING LINK	1
47	E80610	HINGE SCREW D=6.35 H=13.2	1
48	E80609	NIPPER BAR ACTUATING LEVER SPRING	1
49	SJ15-371	WASHER	1

7.

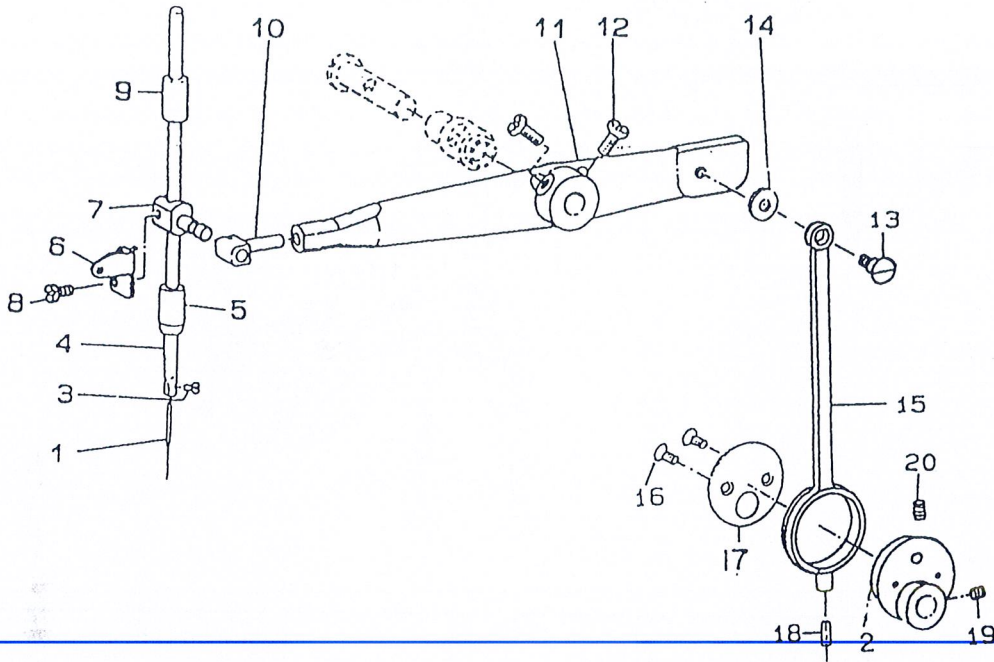
MEEDLE DRIVING PULLEY SHAFT COMPONENTS



			Description	
1	GB308		BALL LARGE	1
2	E80701		PULLEY INSERT	1
3	GB308		BALL SMALL	1
4	E80702		SPRING	1
5	E80703		NEEDLE DRIVING PULLEY	1
6	E80711		SCREW 11/64-40 L=6.5	1
7	FJ74		SCREW 15/64-28 L=4	1
8	E80710		NEEDLE BEARING	2
9	E80709		GREASE RETAINING WICK	1
10	E80708		RETAINING WASHER	1
11	E80716		SCREW 15/64-28 L=23.5	2
12	E80721		WASHER 6.2 x 9.5 x 1	2
13	E80704		NEEDLE DRIVING PULLEY CLUTCH DISC	1
14	E80712		STOP MOTION DISC	1
15	E80714		STOP MOTION DISC PAWL A	1
16	E80713		STOP MOTION DISC PAWL B	1
17	E80717		SCREW	2
18	FJ6170		NUT 15/64-28	2
19	FJ80		SCREW 5/16-24 L=10.0	3
20	E80715		SCREW 5/16-24 L=17.0	1
21	E80705		ECCENTRIC WASHER	1
22	FJ6170		NUT 15/64-28	2
23	E80707		THRUST BALL BEARING	1
24	FJ75		SCREW 15/64-28 L=10.5	2
25	E90706		PULLEY SHAFT BUSHING, RIGHT	1
26	E90718		PULLEY SHAFT BUSHING, LEFT	1
27	E80720		DRIVING GEAR ASM.	1
28	FJ80		SCREW 1/4-40 L=6.0	2
29	E80719		NEEDLE DRIVING PULLEY SHAFT	1

8.

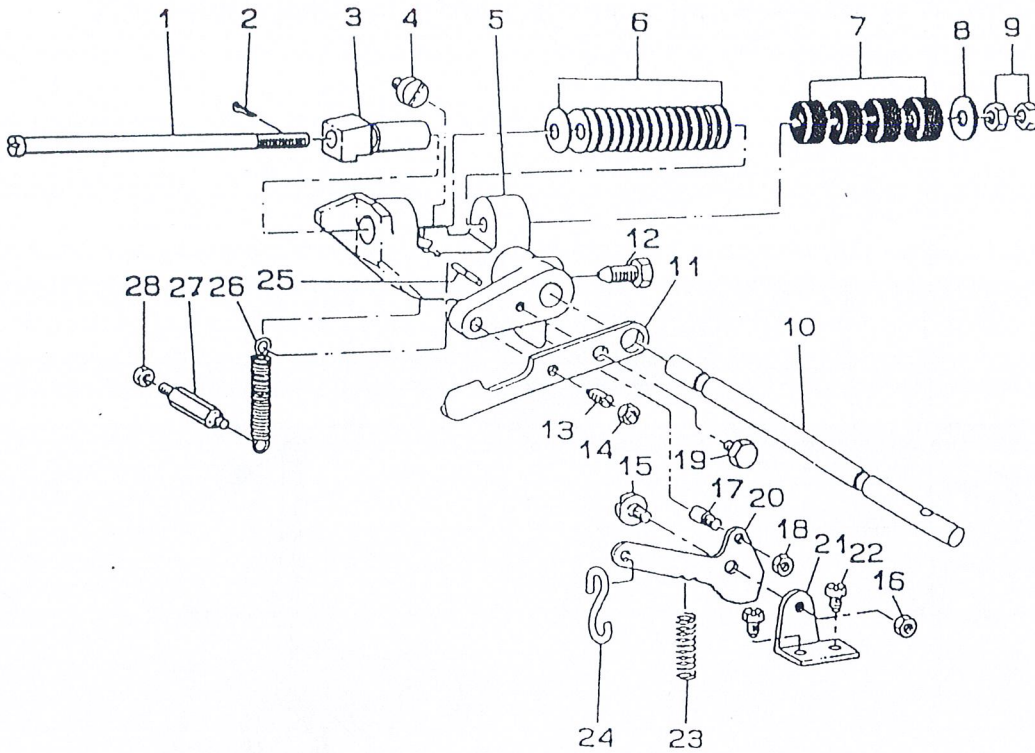
NEEDLE BAR DRIVING MECHANISM COMPONENTS



			Description	
1			NEEDLE TQ×7#18~#20,TQ×1 #14~ #16	1
2	E90807		ECCENTRIC CAM	1
3	FJ67		SCREW 1/8-44 L=4.5	1
4	E80801		NEEDLE BAR	1
5	E80802		NEEDLE BAR BUSHING LOWER	1
6	E80809		NEEDLE BAR BALANCE	1
7	E80808		NEEDLE BAR CLAMP	1
8	FJ65		SCREW 9/64-40 L=10	1
9	E80803		NEEDLE BAR BUSHING,UPPER	1
10	E80804		NEEDLE BAR BEARING,BLOCK	1
11	E90805		NEEDLE BAR LEVER	1
12	FJ29.1		SCREW 15/64-28 L=15.5	2
13	E90812		NEEDLE BAR LEVER SCREW	1
14	E90810		WASHER	1
15	E90806		ECCENTRIC LINK	1
16	FJ68		SCREW 11/64-40 L=8.5	2
17	E90811		THRUST HOLDER	1
18	E90813		OIL WICK	1
19	FJ78		SCREW 1/4-40 L=8.5	1
20	FJ80		SCREW 1/4-40 L=6	1

9.

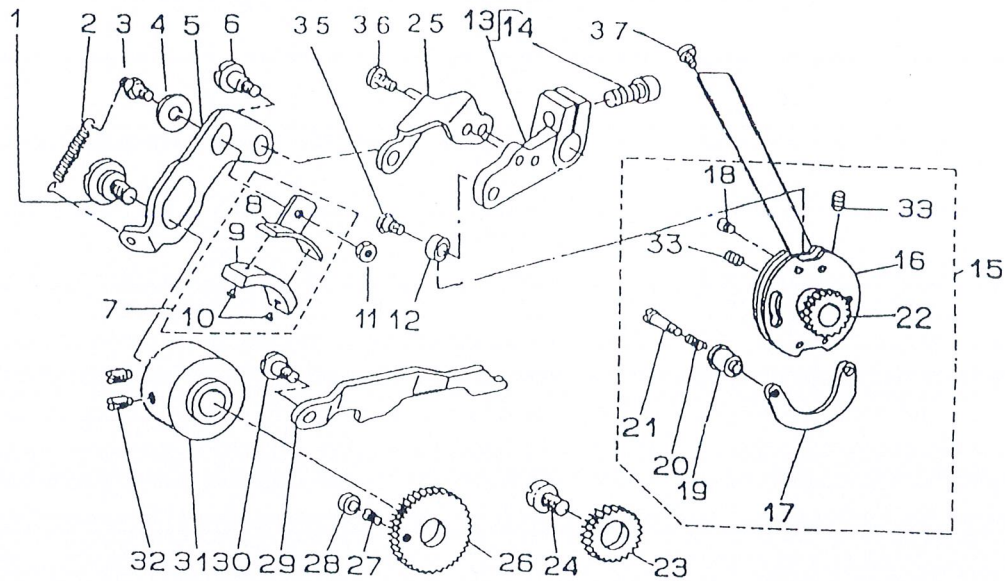
STOP MOTION MECHANISM COMPONENTS



		Description		
1	E80904		STOP MOTION PLUNGER ROD	1
2	GB91		SPLIT PIN 1.8 × 10	1
3	E80901		STOP MOTION PLUNGER	1
4	E80905		SCREW 15/64-28 L=10	1
5	E80902		STOP MOTION PLUNGER LEVER	1
6	E80903		STOP MOTION DISC SPRING	30
7	E80907		RUBBER CUSHION	4
8	E80920		WASHER	1
9	FJ6170		NUT 9/32-28	2
10	E90917		STOP MOTION LEVER SHAFT	1
11	E80909		STOP MOTION DISC PRESSURE LEVER	1
12	E80908		SCREW	1
13	E80912		SCREW	1
14	FJ6170		NUT 15/64-28	1
15	E80915		HINGE SCREW D=6.80 H=2.7	1
16	FJ6170		NUT 15/64-28	1
17	E80919		STOP SCREW	1
18	FJ6170		NUT 15/64-28	1
19	FJ29.1		SCREW 15/64-28 L=10.5	1
20	E80916		STOP MOTION TRIP LEVER	1
21	E80914		STOP MOTION TRIP LEVER BRACKET	1
22	FJ29.1		SCREW 15/64-28 L=8	2
23	E80913		SPRING	1
24	E80911		S SHAPED HOOK	1
25	E80906		STOP MOTION LEVER SPRING PIN	1
26	E80910		STOP MOTION LEVER SPRING	1
27	E80918		SCREW STUD	1
28	FJ6170		NUT 15/64-28	1

10.

STITCH SELECTING PARTS COMPONENTS



			Description	
1	E81007		HINGE SCREW D=12.70 H=3.2	1
2	E81006		SPRING FOR FRICTION PLATE	1
3	E91017		FRICTION PLATE ROTATING STUD	1
4	E91016		WASHER	1
5	E91004		SPEED SLOWING LEVER	1
6	E91003		HINGE SCREW D=8 H=3.3	1
7	E81018		FRICTION PLATE HOLDER ASM.	1
8	E810181		FRICTION PLATE HOLDER	1
9	E810182		SPEED SLOWING FRICTION PLATE	1
10	GB867		POSITIONING PIN	2
11	FJ6170		NUT 11/64-40	1
12	E91011		STOP MOTION TRIPPING LEVER CAM	1
13	E91001		STOP MOTION TRIPPING LEVER ASM	1
14	GB70-85		SCREW M6 x 16	1
15	E91002		STOP MOTION CAM ASM.	1
16	E910021		STOP MOTION CAM ASM.	1
17	E810022		STOP MOTION CAM SHOE	1
18	E810023		SCREW FOR STOP MOTION CAM SHOE	1
19	E810025		STOP MOTION CAM KNOB	1
20	E810026		SPRING	1
21	E810027		HINGE SCREW D=4.80 H=14.5	1
22	E810024		STITCH SELECTING SPUR GEAR, SMALL	1
23	E81005		STITCH SELECTING SPUR GEAR, MI	1
24	E81012		SCREW STUD	1
25	E91010		FITTING PLATE	1
26	E81015		GEAR LARGE	1
27	E81014		SCREW	1
28	E81013		ROLL	1
29	E91009		STITCH SELECTING LATCH	1
30	E91019		HINGE SCREW D=6 H=3.7	1
31	E81008		SPEED SLOWING FRICTION WHEEL	1
32	FJ75		SCREW 15/64-28 L=10.5	2
33	FJ80		SCREW 15/64-28 L=9	2
35	E91020		HINGE SCREW D=7.94 H=4.2	1
36	FJ87		SCREW 11/64-40 L=7.8	1

