

TYPICAL

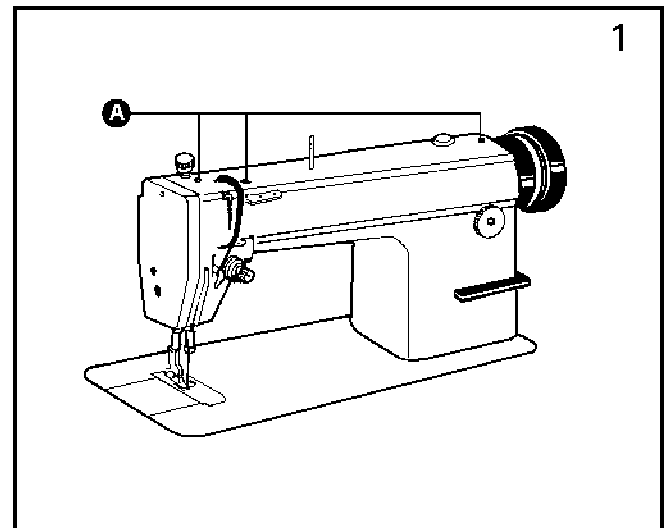
GC6170D2

HIGH SPEED LOCKSTITCH SEWING MACHINE WITH VERTICAL
EDGE TRIMMER AND AUTOMATIC THREAD TRIMMER
INSTRUCTION BOOK \ PARTS CATALOGUE

XI'AN TYPICAL INDUSTRIES CO., LTD.

※NOTE (Fig. 1)

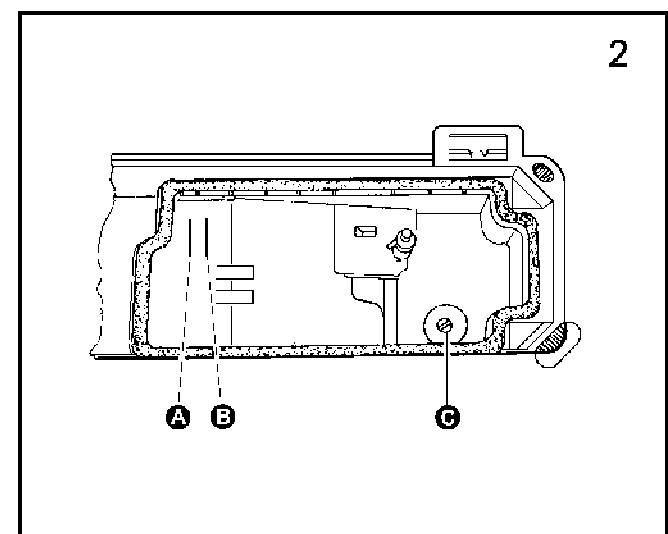
Before putting a new machine into operation, remove the plugs(A) on the top of the arm and replenish sufficient amount of oil, then lift the presser foot and run the machine at a low speed of 2000 spm to check oil distributing condition through oil check window. When lubricating is normal, keep the machine run in at this speed for 30 minutes, then increase the running speed gradually. After one month run - in operation, the machine can be run at the Max speed under normal working condition.



1. OIL FILLING (Fig. 2)

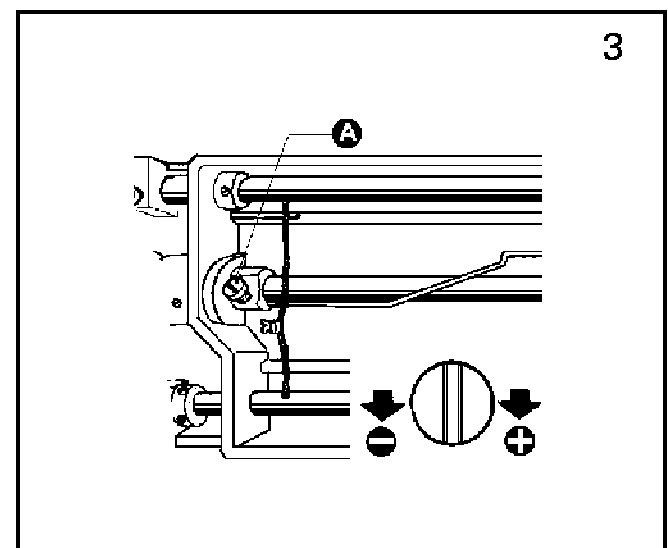
(1) The oil amount in the oil reservoir is controlled through the reference marks A and B shown in Fig2. The mark A indicates the max oil amount level, the mark B for the min. oil amount level. If the oil amount level is under the mark B replenish the oil reservoir with oil in time.

(2) When filling oil, loosen the oil draining screw (C), drain off the remaining oil in the oil reservoir completely, clean the oil reservoir and tighten the oil draining screw(C), then fill the oil reservoir with fresh oil.



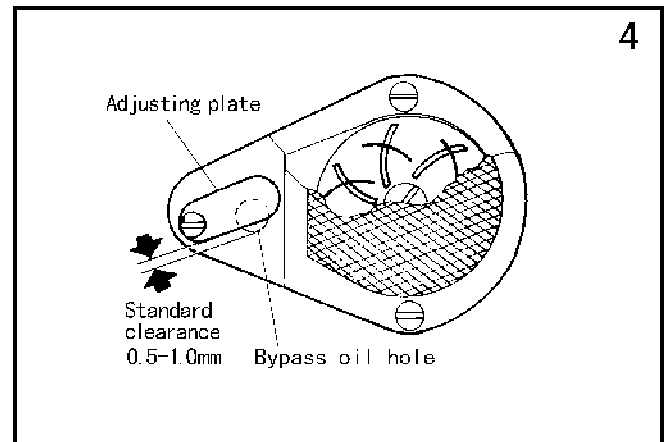
2. ROTATING HOOK OIL AMOUNT ADJUSTMENT (Fig. 3)

Adjust the oil amount of the rotating hook by turning the oil amount adjusting screw (A). Turn the screw(A) clockwise (in the "+" direction) to increase the oil amount; turn it counter-clockwise (in the "-" direction) to decrease the oil amount.



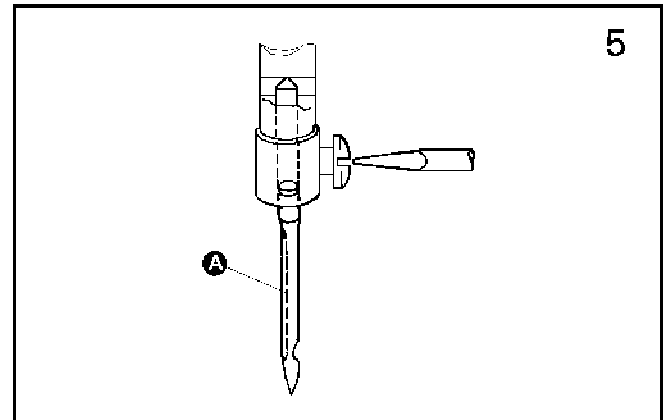
3. OIL PUMP ADJUSTMENT (Fig. 4)

In ordinary operation, adjustment is not required for the oil pump. If oil splashing does not occur in the oil check window when the machine runs at a low speed, close the clearance of the bypass oil hole.



4. NEEDLE INSTALLATION (Fig. 5)

Turning the balance wheel to lift the needle bar to the upper end of its stroke. Loosen the needle clamp screw while keeping the long groove of the needle leftward, fully insert the needle shank up to the bottom of the needle socket, then tighten the needle clamp screw.



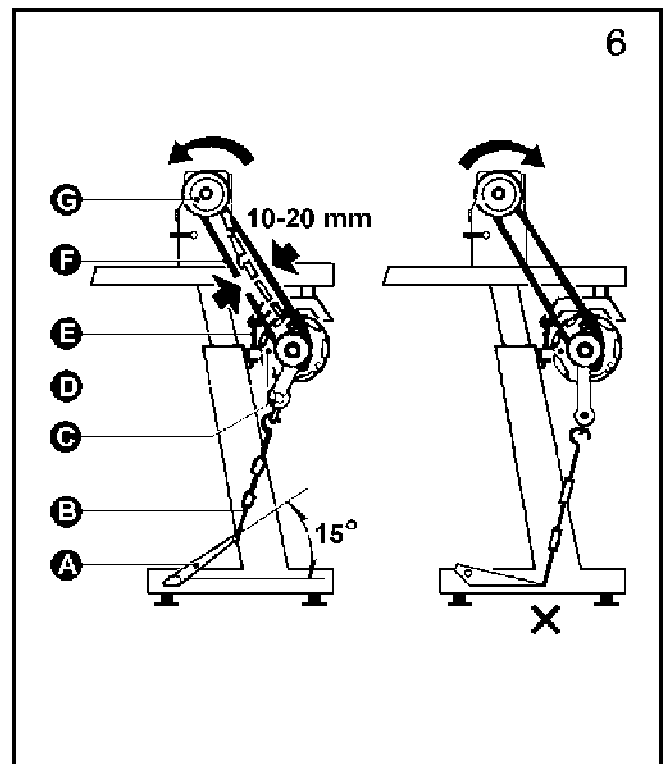
5. CONNECTION OF THE CLUTCH LEVER WITH THE PEDAL (Fig. 6)

(1) The optimum tilt angle of pedal is approximately 15 deg.

(2) Adjust the clutch so that the clutch lever (C) align with the draw bar (B) as shown in Fig. 6

(3) The machine pulley should rotate counter clockwise when viewed from the outside of it. The rotating direction of motor pulley can be reversed by turning the plug of the motor at 180 deg.

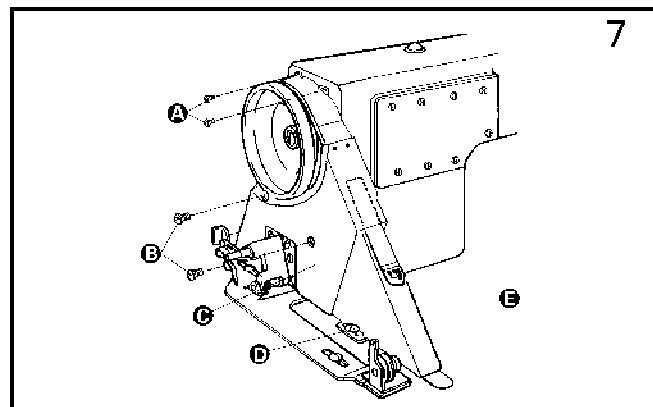
(4) Adjust the tension of O-Belt (F) by moving the motor up and down, the proper tension of the O-belt is a slack of 10-20 mm when the belt is depressed at the center of the belt by finger.



6. BELT COVER INSTALLATION (Fig. 7)

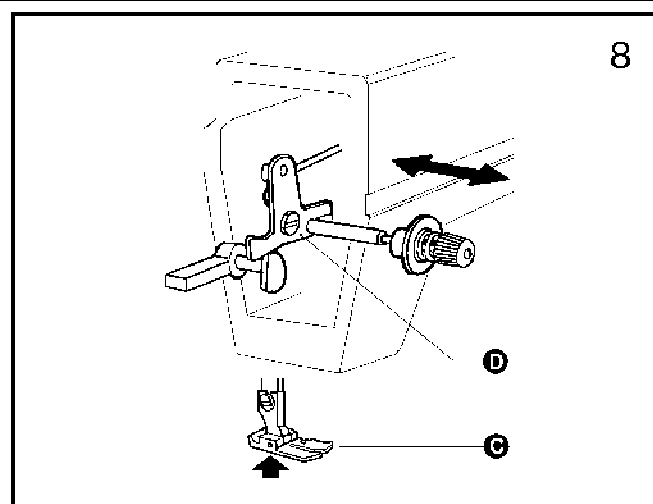
Install the belt cover for the sake of safety.

Install belt cover (C) to arm with screw (A) and screw (B), and install belt cover (E) on board with screw (D).



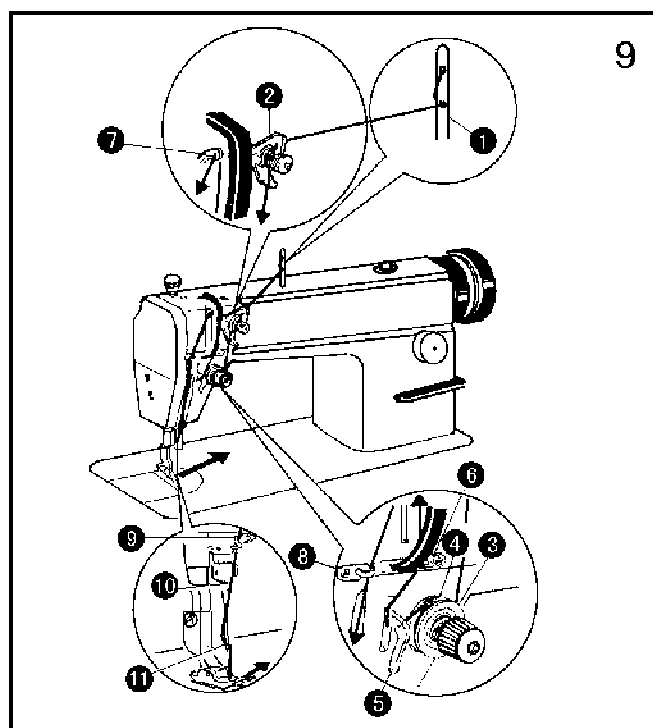
7. ADJUST THE OPENING TIME OF THE TENSION DISCS (Fig. 8)

Loosen the thread tension asm when presser foot lift 2.5mm, then the thread tension disc began to loose.



8. THREADING (Fig. 9)

To thread the needle thread, raise the needle bar to the upper end of its stroke, lead the thread from the spool and perform threading as shown in Fig 9. To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then lift it to its highest position. Pull the ends of needle thread and bobbin thread frontward under presser foot.

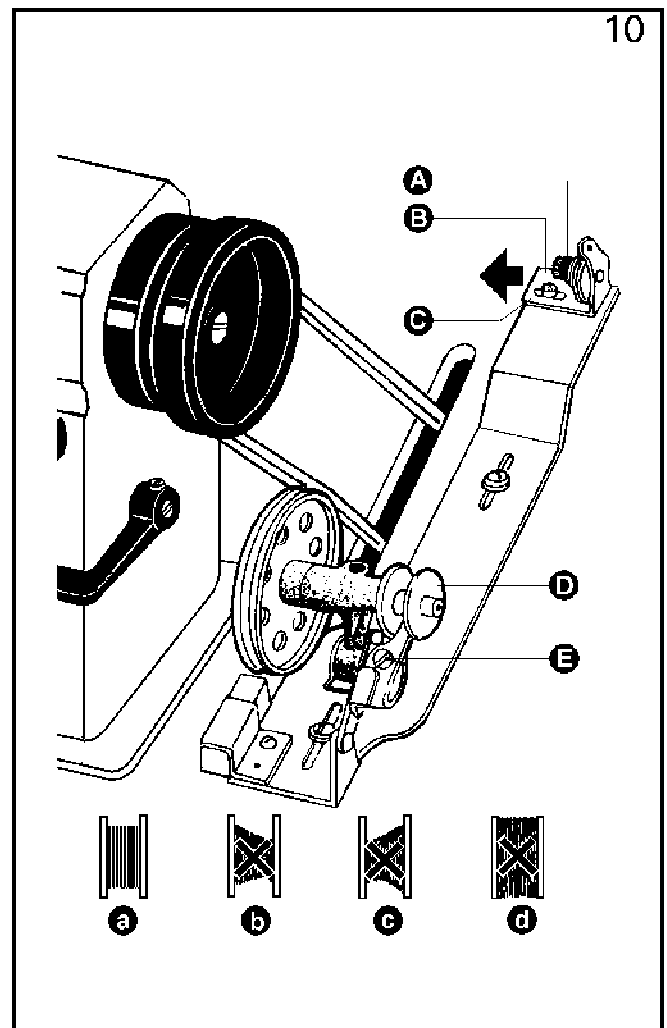


9. WINDING INSTALLATION AND ADJUSTMENT (Fig. 10)

The bobbin winder pulley should align with the V-belt and there should be some clearance between them. When the bobbin winder stop latch lever is depressed, the V-belt should be in touch with the bobbin winder pulley in order that the bobbin winder pulley can be driven by the V-belt.

The thread wound on the bobbin should be neat and tight. If not tight, adjust the winding tension by turning the tension stud nut (A) of the bobbin winder tension bracket, when the thread wound on the bobbin does not present a cylindrical shape as shown in Fig. 10 (a), Loosen the set screw (B) of the bobbin winder tension bracket and move the bracket (C) leftward or rightward, if the thread is wound as shown in the figure (b), move the bracket leftward or rightward of wound as shown in the figure (c), move it leftward. After positioning the bracket adequately, tighten the set screw (B).

Do not overfill the bobbin. The optimum wound length of the thread will fill about 80% of the bobbin capacity. This can be adjusted by the screw (E) of the bobbin winder stop latch.



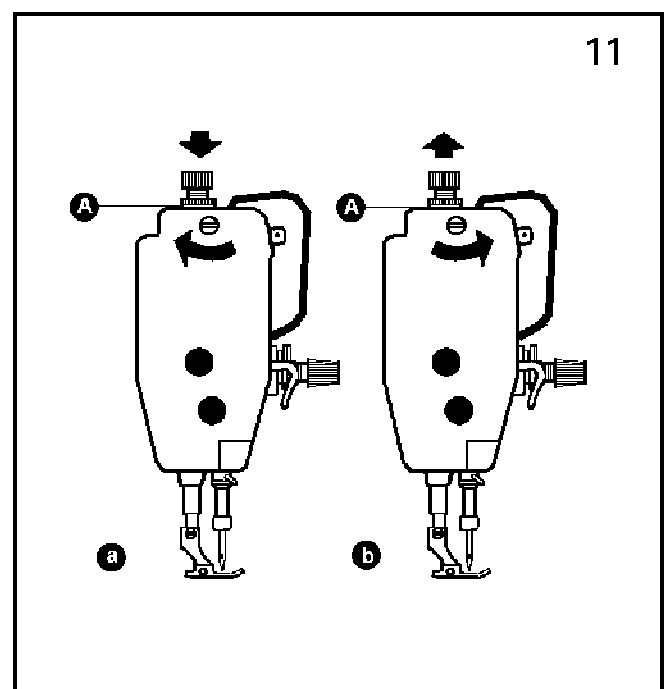
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10. ADJUST THE PRESSURE OF PRESSER FOOT (Fig. 11)

Pressure of the presser foot is adjusted in accordance with thickness of materials to be sewn.

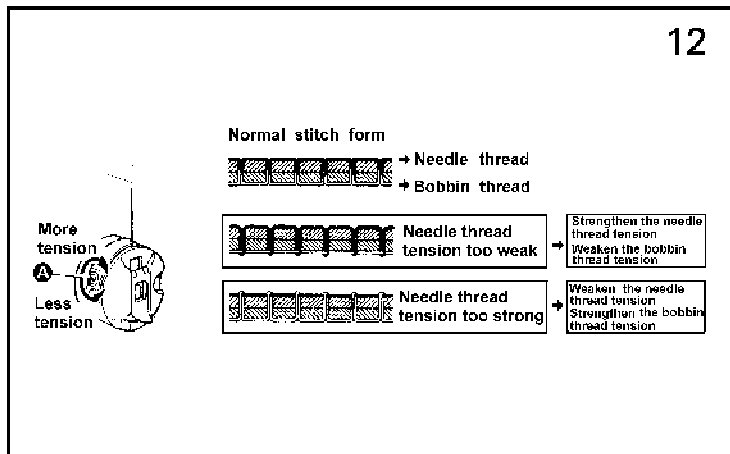
First loosen the lock nut (A), for heavy materials, turn the pressure regulating thumb screw as shown in Fig. 11 (a) to increase the pressure, while for light materials, turn the pressure regulating thumb screw as shown in Fig. 11 (b) to decrease the pressure, then tighten the lock nut (A).

The pressure of the presser foot is recommended to be less as long as normal feeding is ensured.



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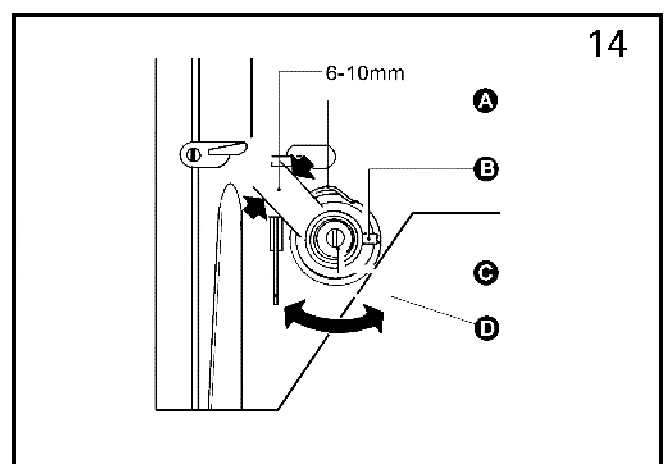
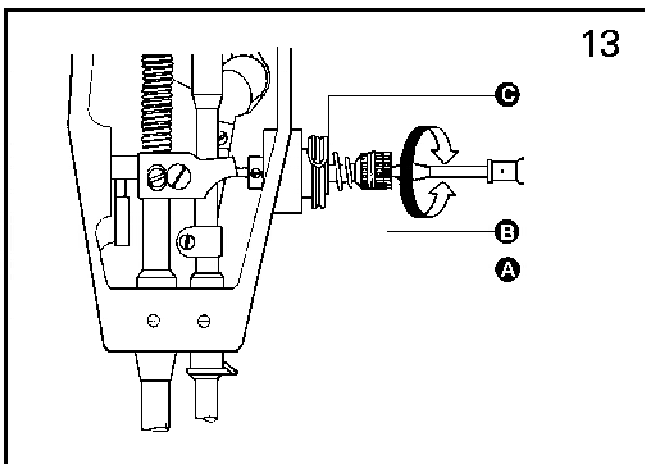
11. THREAD TENSION ADJUSTMENT (Fig. 12, 13, 14)



Thread tension should be determined in accordance with the stitch obtained by adjusting the tension of the bobbin thread and needle thread (Fig.12).

The tension of the bobbin thread: to be adjusted by turning the tension spring regulating screw of the bobbin case, After adjusting, insert the bobbin into the bobbin case and hold the end of the thread from the bobbin case to hang the bobbin case, if the bobbin case falls slowly and evenly, the proper tension of the bobbin thread is obtained.

The tension of needle thread: to be adjusted by turning the thumb nut.



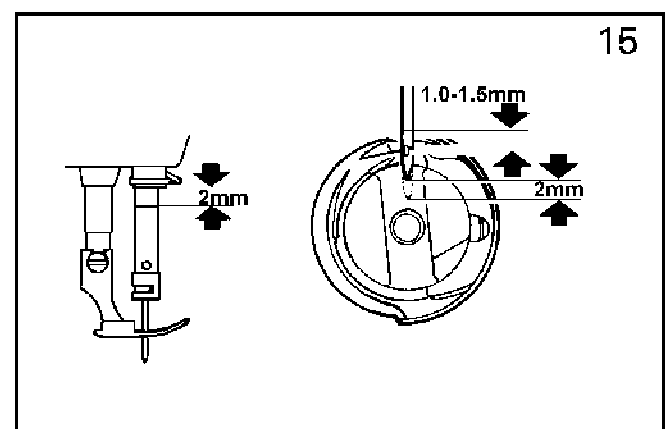
The stroke of the thread take-up spring runs from 6mm to 10mm, when sewing very thin fabrics, reduce the thread take-up spring tension and increase the thread take-up spring stroke, where as increase the thread take-up spring tension and reduce the thread take-up stroke when sewing very thick fabrics.

Adjusting the thread take-up spring tension : (Fig.13) First loosen the set screw (A), Turn the tension stud (B) counter-clockwise to decrease the tension of the thread take-up spring (C) to zero. then turn the tension stud (B) clockwise till the spring (C) comes to the notch of the tension regulating bushing, and again turn the tension stud (B) halfway back (counter clockwise), After the adjustment, tighten the set screw (A).

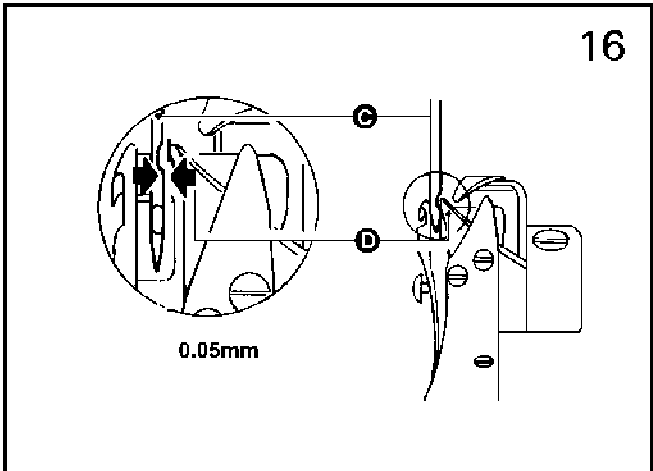
Adjusting the thread take-up spring stroke: (Fig.14) loosen the set screw (B) turn the stud (C) clockwise to increase the stroke or turn stud (C) counter-clockwise to decrease the stroke After the adjustment. tighten the set screw (B).

12. ADJUST THE SYNCHRONILATION OF THE NEEDLE WITH ROTATING HOOK (Fig. 15, 16)

When lifting the needle bar from its lowest position of the stroke to the distance 2mm, the hook point of the bobbin should align with the center line of the needle and be 1.0 - 1.5 mm above upper end of the needle eye (Fig. 15)

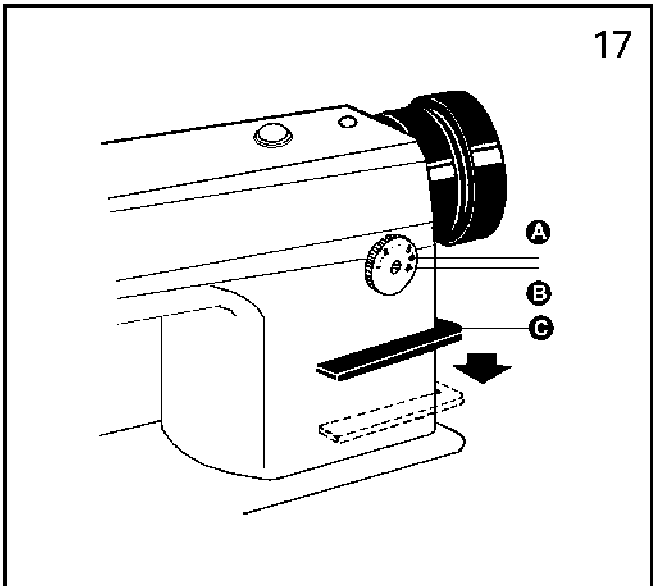


The clearance between the bottom of the needle notch and the hook point should be approx 0.05 mm (Fig.16).



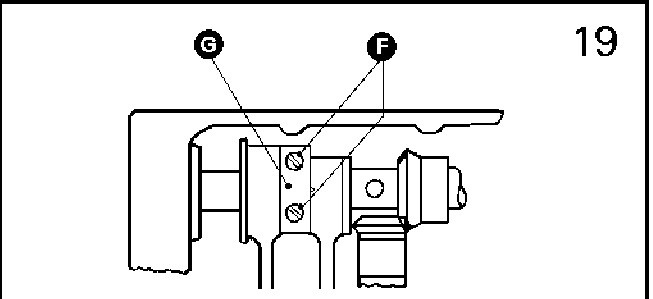
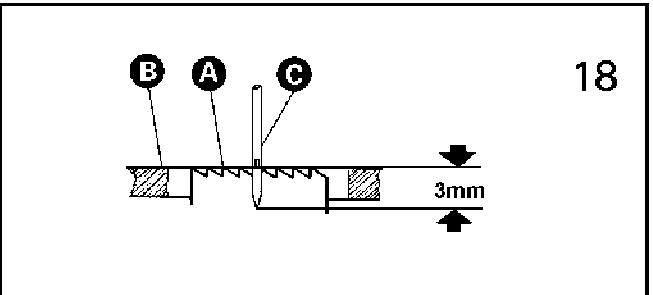
13. ADJUSTMENT OF STITCH LENGTH AND REVERSE FEEDING (Fig. 17)

The stitch length can be adjusted by turning the dial (A). The figures on the face (B) of the dial show the stitch length in mm. the reverser feed lever must be depressed by another while adjusting the stitch length. The reverse feeding starts when the reverse feed lever (C) is depressed, the machine will feed forward again if the reverse feed lever is released.



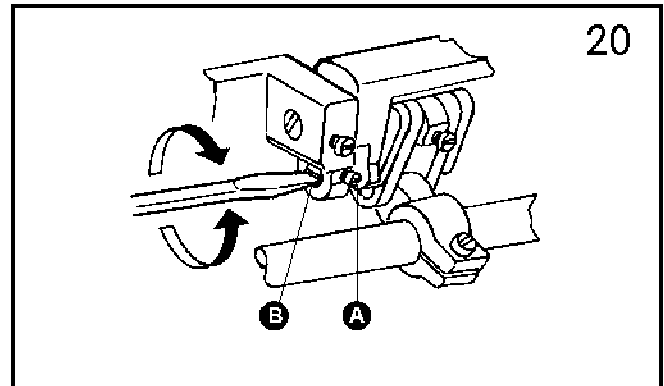
14. ADJUSTING THE POSITION OF FEED DOG AND NEEDLE (Fig. 18. 19)

To adjust the feed dog position (G), first should release the two set screw (F) and turn around the balance wheel by hand. when the needle (C) point reaches the surface of the throat plate (B). the top of the feed dog(A) should be flush with the throat plate surface. After the adjustment . tighten the set screws (F).



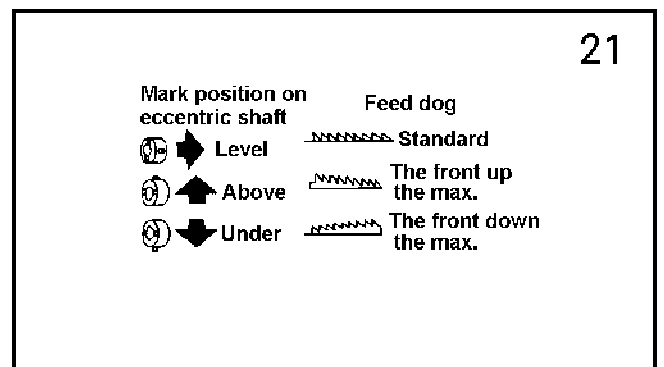
15. STITCH LENGTH ERROR ADJUSTMENT (Fig. 20)

Loosen screw (A) to adjust stitch length adjusting cam (B). Turn it rightward to narrow the stitch length as forward sewing, and widen it as reverse sewing; turn it leftward to widen the stitch length as forward sewing, and narrow it as reverse sewing.



16. FEED DOG HORIZONTALITY ADJUSTMENT (Fig. 21)

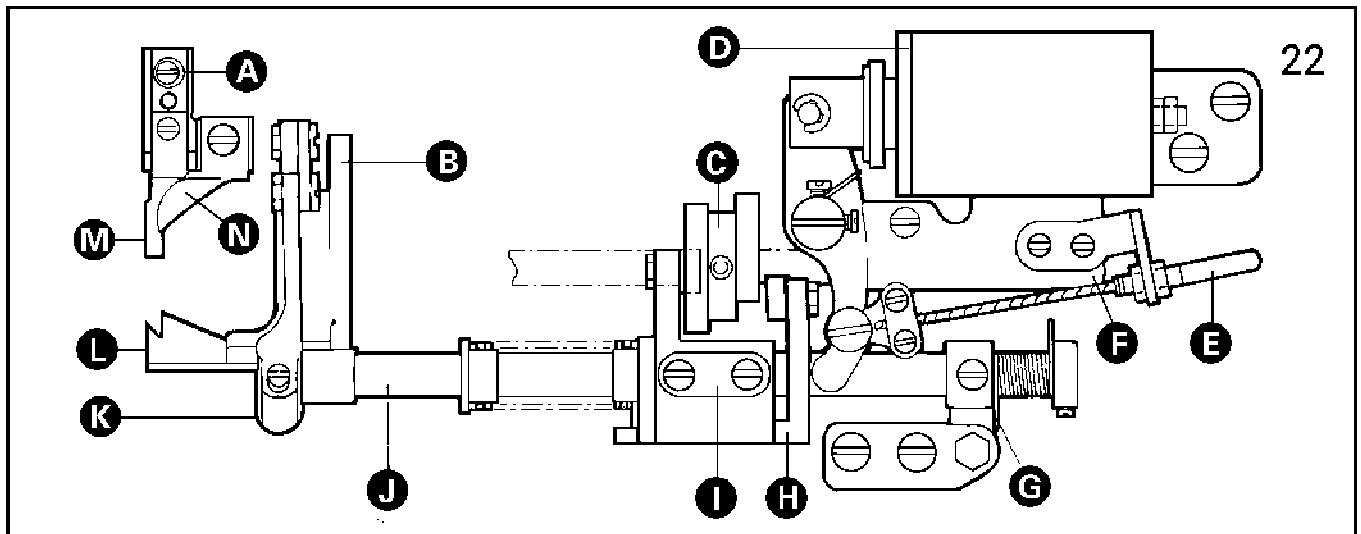
To lift the front of feed dog to prevent fabric from wrinkling. To lower the front of feed dog to prevent fabric from defection, breaking of bobbin thread.



17. THREAD CUTTING MECHANISM (Fig. 22)

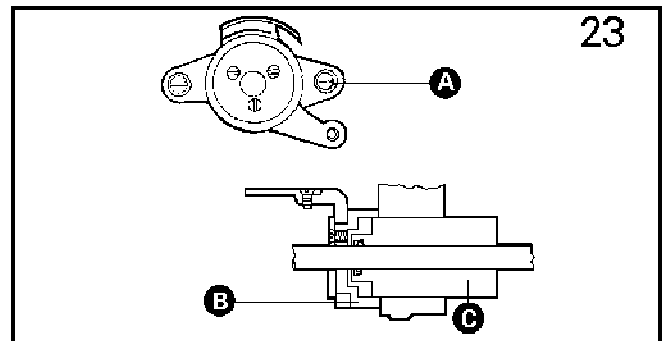
It adopts hook shaft cam driving for thread cutting. If thread cutting electromagnet works, and after finish thread trimming, reset thread cutting cam crank at once, otherwise may cause the movable knife and needle into collision, and damage them.

- A – fixed knife support asm.
- B – knife support asm. (left)
- C – thread cutting cam.
- D – thread cutting electromagnet.
- E – soft thread.
- F – electromagnet asm.
- G – stopper.
- H, I – thread cutting cam crank.
- J – cutter driving shaft.
- K – cutter driving crank.
- L – knife (left).
- M – fixed knife.
- N – thread retainer.



18. KNIFE SUPPORT ASM(left) (Fig. 23)

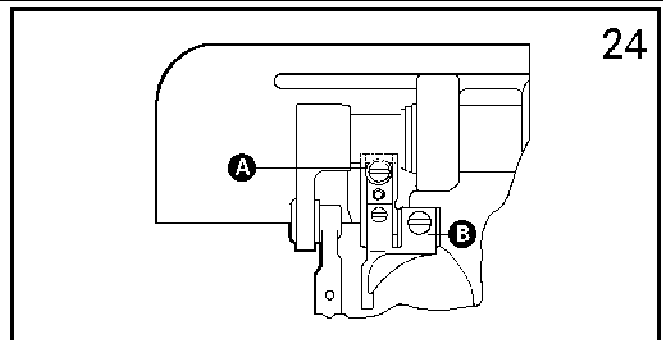
Insert the left knife support asm. (left) (B) into hook shaft bushing (C) as the figure shows, then tighten screw (A).



19. FIXED KNIFE SUPPORT ASM (Fig. 24)

Remove the hook positioner, then set it with screw (A) shown in Fig 24.

B – fixed knife support asm.



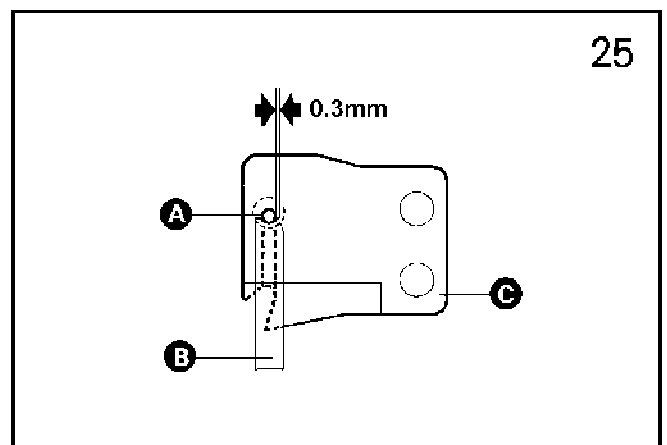
20. POSITION OF THE FIXED KNIFE AND LEFT KNIFE POINT(Fig. 25)

(1) The standard position is shown in the figure.

(2) If the size is larger than the standard, the knife will cut the 3 threads in the meantime or draw the thread out of the needle eye; if smaller, will cause cutting damage, so make sure to avoid that.

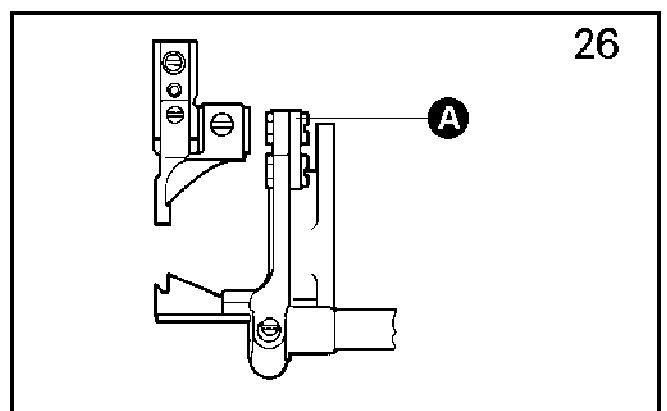
(3) As things mentioned above occur, adjustment is done by setting the fixed knife support or the fixed knife (B).

A – the blade C – the knife (left)



21. CONNECTION OF THE KNIFE (LEFT) SUPPORT AND CUTTER DRIVING CRANK(Fig. 26)

Connect them as the figure shows and notice the position of cutter link lever (A).



22. POSITION OF THE CUTTER DRIVING SHAFT (Fig. 27)

(1) The Standard position is shown in the figure.

(2) When assemble it, cutter driving shaft (G) should be first put in cutter driving crank (A).

(3) Set Thread cutting cam crank 1 (D) on the cutter driving shaft with reference to the standard position.

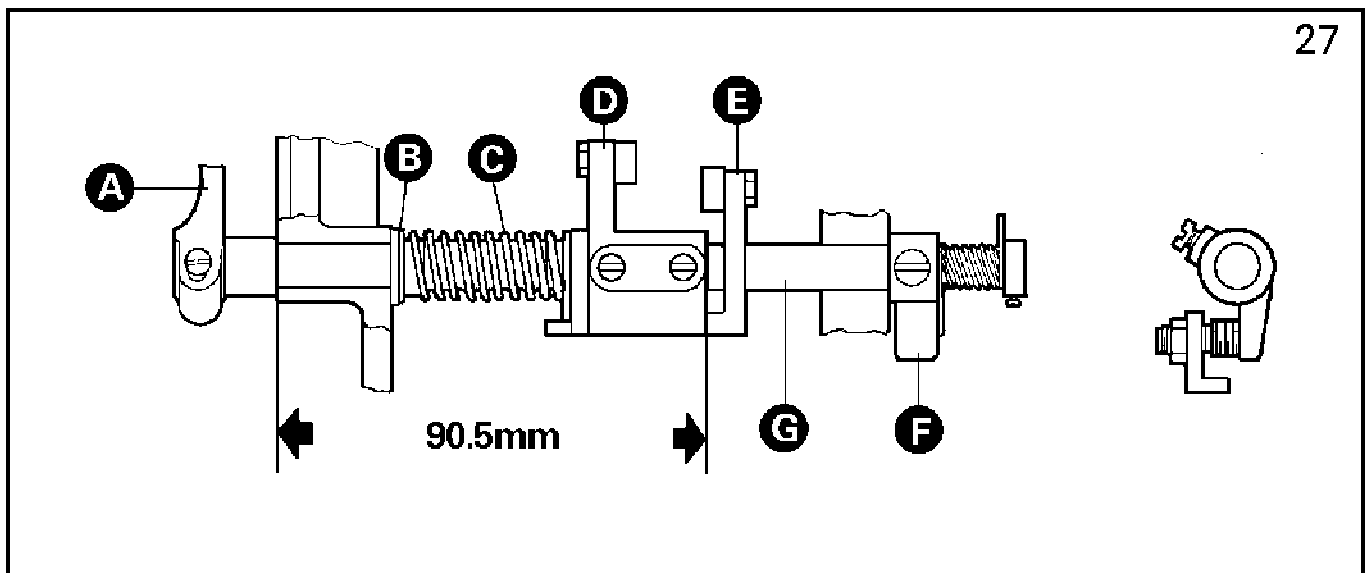
(4) Set stopper (F), make sure that there is no clearance between parts around the cutter driving shaft, and rotate steadily.

B – spring end cover

C – spring

E – thread cutting cam crank 2

(1) The standard stroke of the electromagnet core is 6mm.



23. THE ELECTROMAGNET CORE STROKE (Fig. 28)

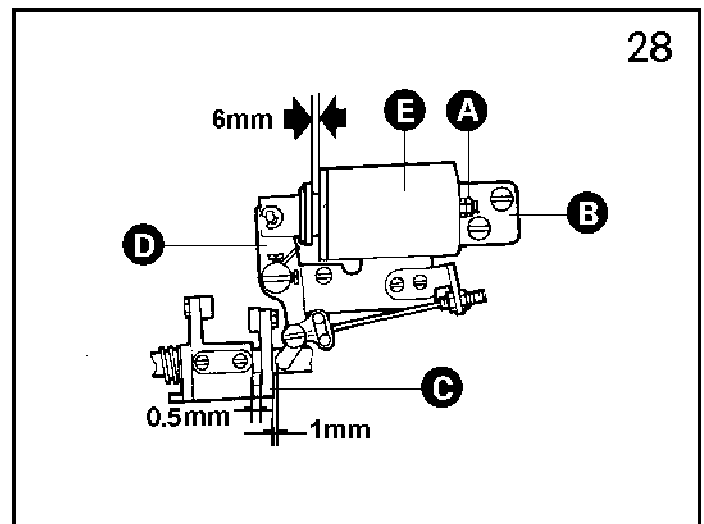
(2) The stroke can be adjusted with Positioning screw (A)

B – thread cutting electromagnet holder

C – thread cutting cam crank 2

D – driving bar

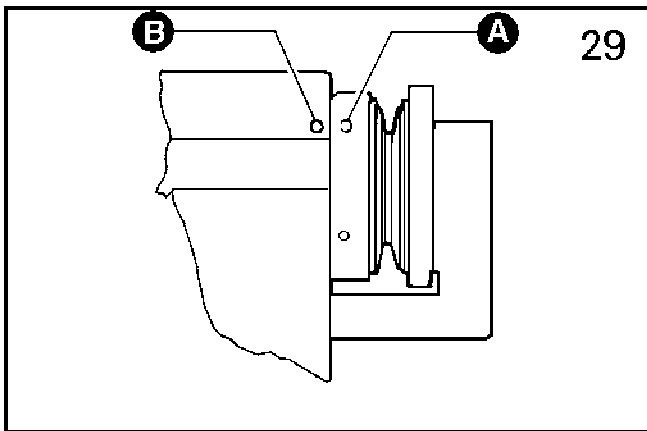
E – thread cutting electromagnet



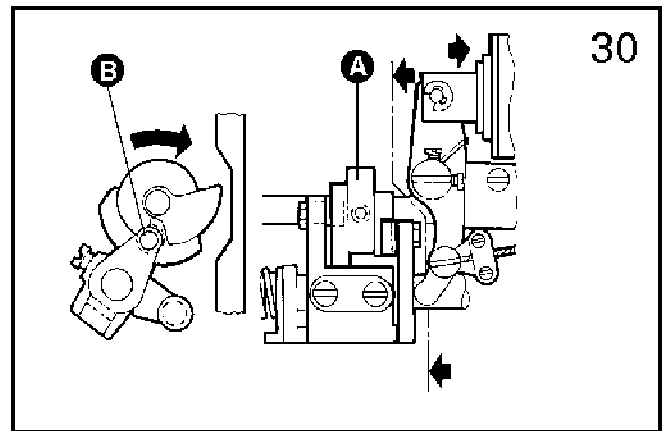
24. INSTALLING THE ELECTROMAGNET ASM (Fig. 28)

The installing parameter is shown in Fig. 28.

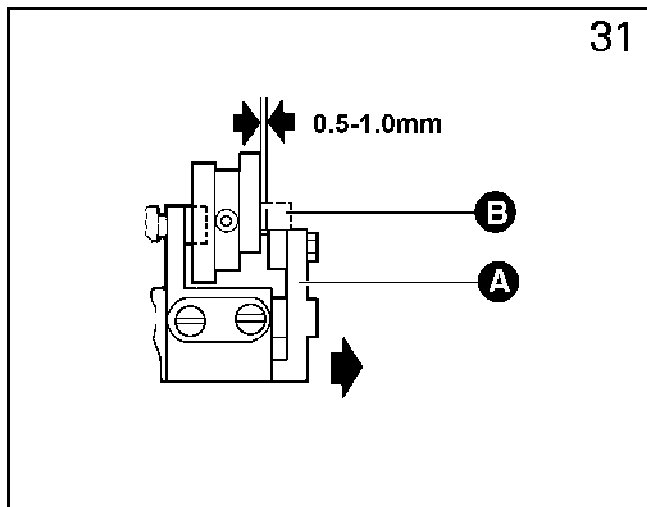
25. INSTALLING THREAD CUTTING CAM (Fig. 29. 30. 31. 32. 33)



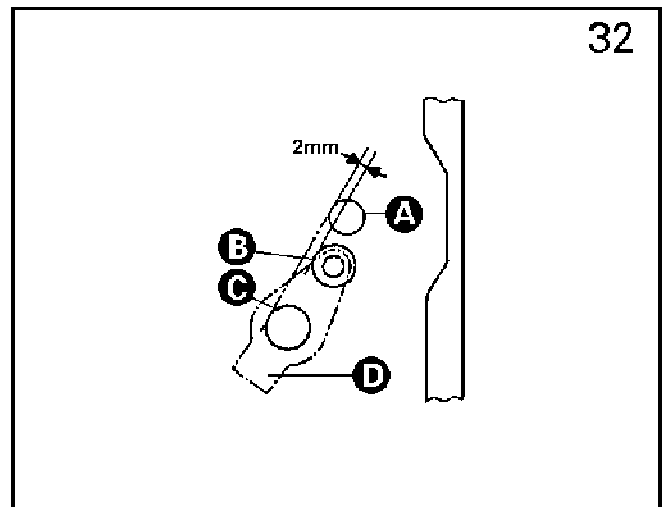
(1) Align No. 2 positioning mark (A) on the balance wheel with positioning mark (B) on the machine arm.



(2) As the thread cutting electromagnet works, thread cutting cam (A) run in normal rotating direction. Fix the cam when cam (A) is engaged with roller (B).

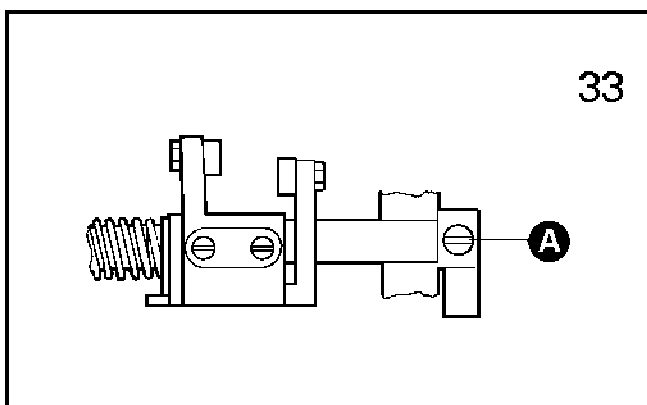


(3) Stop the operation of the electromagnet, reset cam driving crank (A), cam (B) is separated from the engagement with the roller, the standard clearance is 0.5 - 1.0mm.



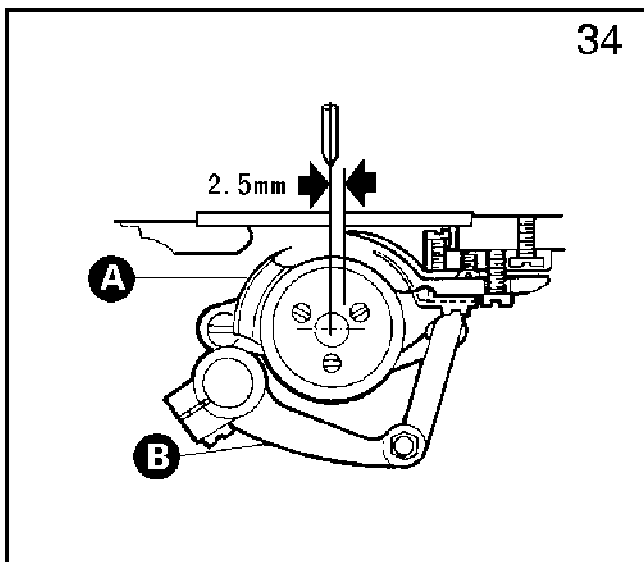
Note: the figure shows the standard position of cam driving crank (D) before operation.

A - hook shaft B - roller C - cutter driving shaft



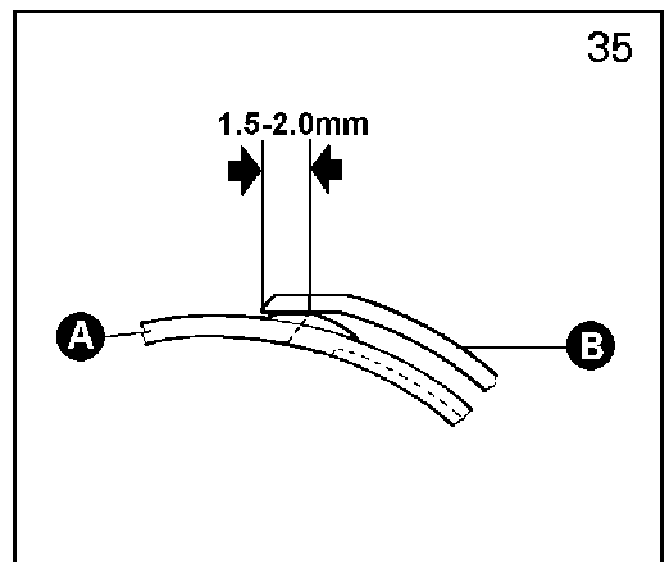
It may change the positions mentioned above to remove the stopper, then adjust with screw (A), and readjust the above (1) - (3)

26. ADJUSTING KNIFE CUTTING ENGAGEMENT (Fig. 34. 35)



(1) The figure shows the standard positions of the left knife and the fixed knife.

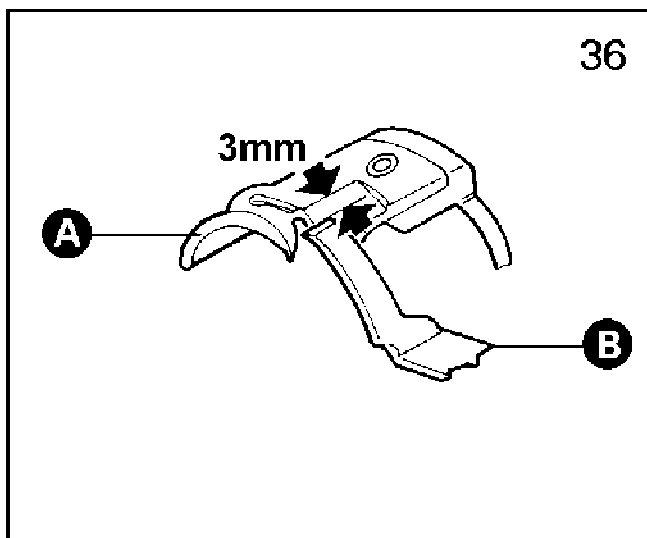
A – knife (right) B – cutter driving shaft



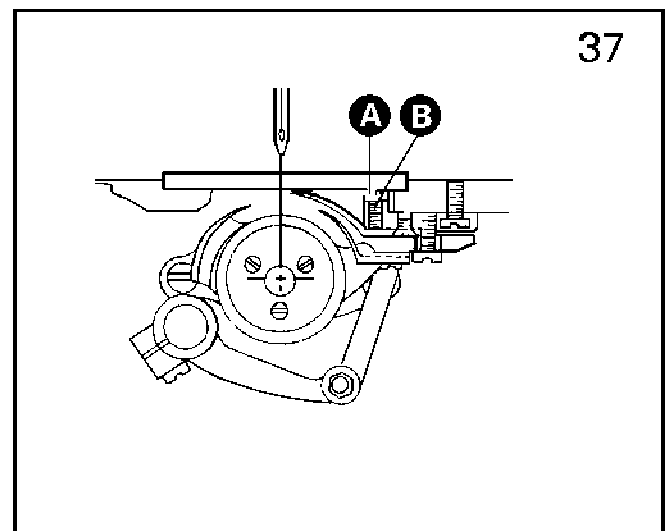
(2) Adjust the degree of knife cutting engagement:

- ① When the electromagnet works, turn the machine, the left knife (A) follows the motion of the thread cutting cam. The maximum degree of cutting engagement is 1.5 – 2.0mm B – the fixed knife
- ② Adjust the cutter driving crank if necessary.

27. ADJUSTING CUTTING PRESSURE (Fig. 36. 37)



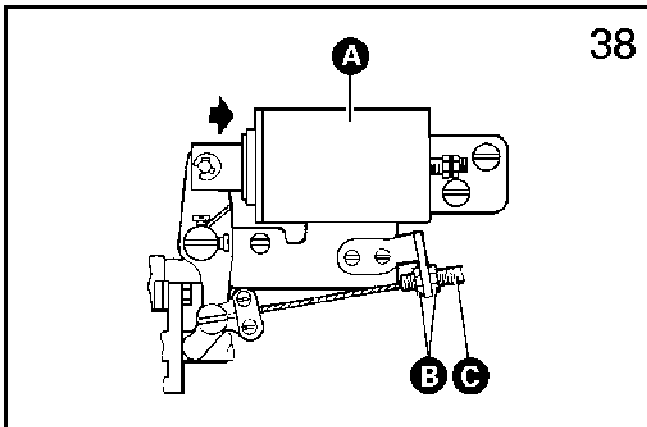
(1) The figure shows the standard position that left knife (A) begins to touch fixed knife (B).



(2) When cutting thick thread, increase the cutting force.

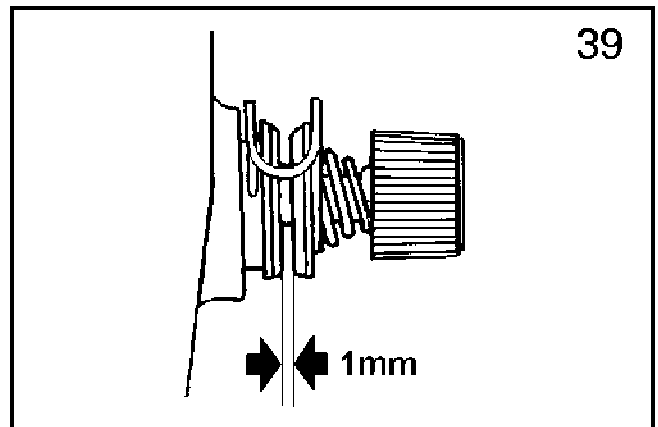
(3) For adjusting cutting force, loosen set nut (A), and adjust screw (B).

28. ADJUSTING NEEDLE THREAD TENSION (Fig.38. 39)



There should be a clearance of 1mm between the two discs while the thread cutting electromagnet (A) is working.

For adjustment, loosen nut (B), and move soft thread (C).



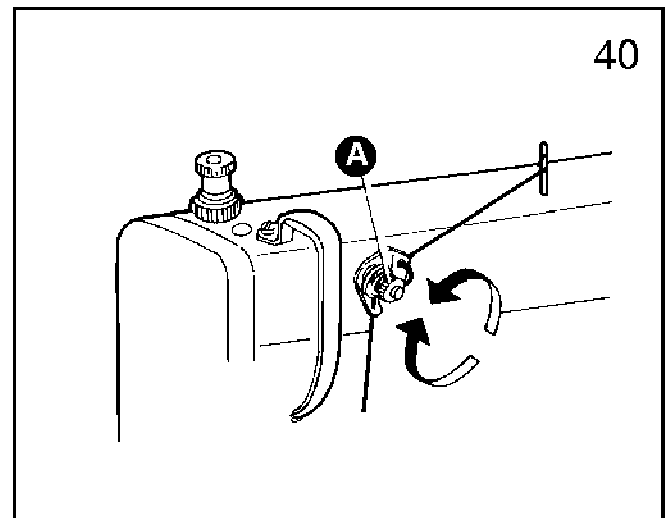
Note: If the clearance is too small, the thread end left after cutting is too short and may easily go away from the needle eye; otherwise the tension is poor and affect the needle thread tension.

29. THREAD END REMAINS ADJUSTMENT (Fig. 40)

To get the needle thread end remains properly, adjust nut (A).

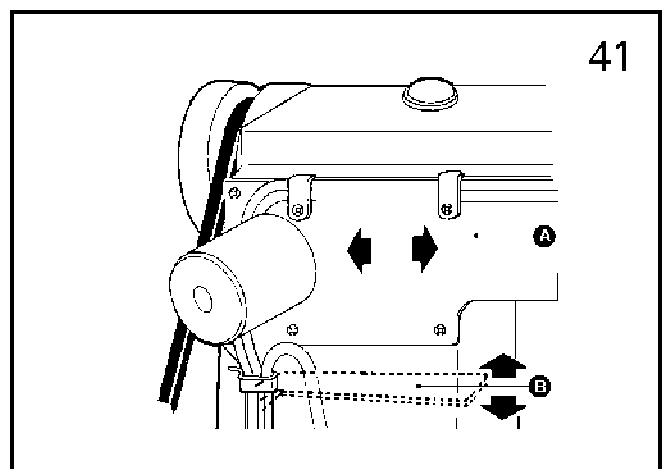
Turn rightward: get short

Turn leftward: get long



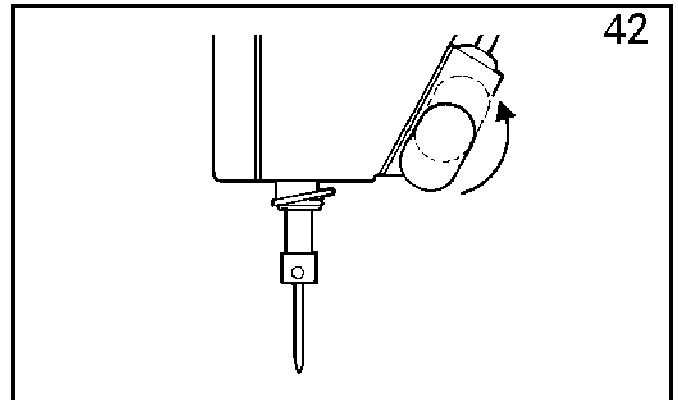
30. INSTALLING REVERSE STITCH ELECTROMAGNET (Fig. 41)

Adjust the position of electromagnet (A) properly to guarantee the flexible connection of the magnet with the link lever and the convenient operation of reverse stitch bar (B), then set with a screw.

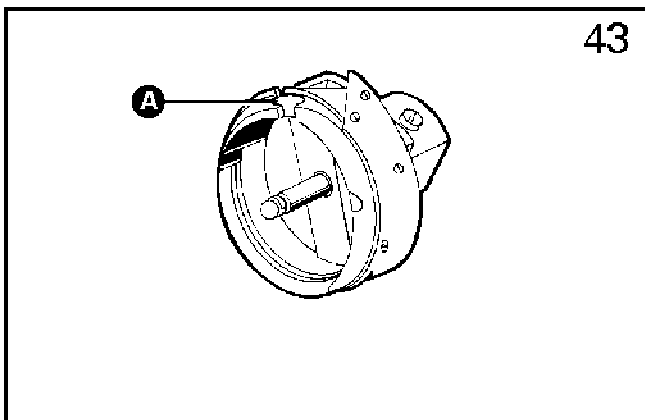


31. REVERSE STITCH SWITCH (Fig. 42)

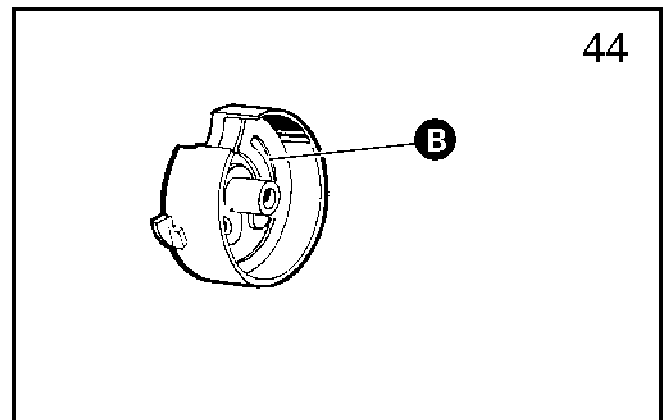
The figure shows the normal state. It can perform reverse sewing to switch on. If move the switch to the dotted line shown in the figure, and switch on, the reverse sewing can not be performed.



32. HOOK, BOBBIN CASE AND BOBBIN (Fig. 43, 44)



1. There is a thread groove(A) in the special hook for thread cutting sewing machine.



2. The bobbin case used in the machine should be with a spring(B) in its bottom, which prevents the bobbin from running without loading.

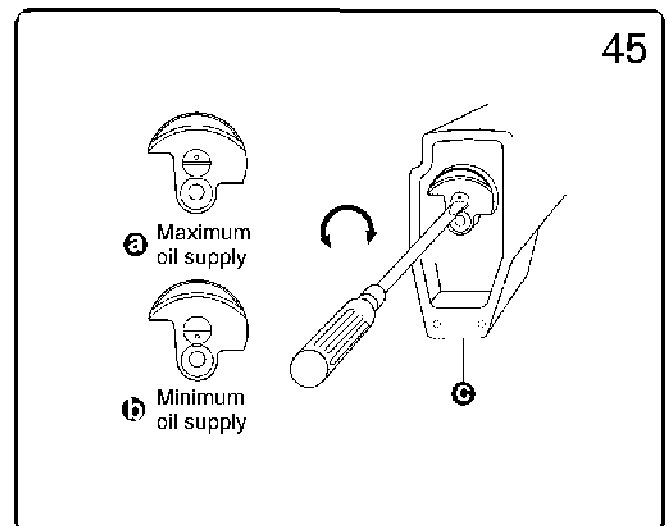
33. THREAD TAKE - UP LEVER OIL SUPPLY ADJUSTMENT (Fig. 45)

Before the machine is carried away from the factory, the thread take-up lever oil supply adjusting pin has already been adjusted in the proper state and the user doesn't need the adjustment. As the oil supply amount of the thread take-up lever is too large or too small, the adjustment is needed.

Adjust as the followings: when the dot mark on the oil adjusting pin is upper position, the oil is the maximum (Fig. a)

When the dot mark on the oil adjusting pin is the lower position, the oil is the minimum. (Fig. b)

Turn the adjusting pin to a certain degree with a screwdriver to make it reach the necessary oil amount position (Fig. c).



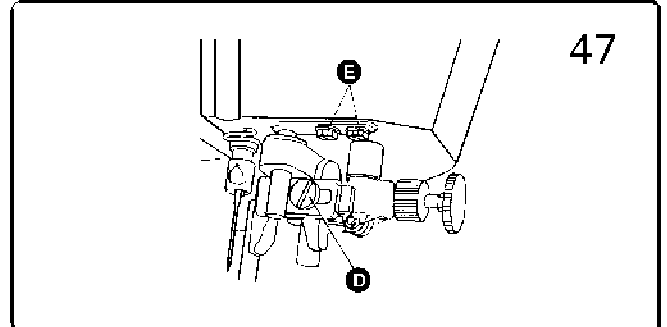
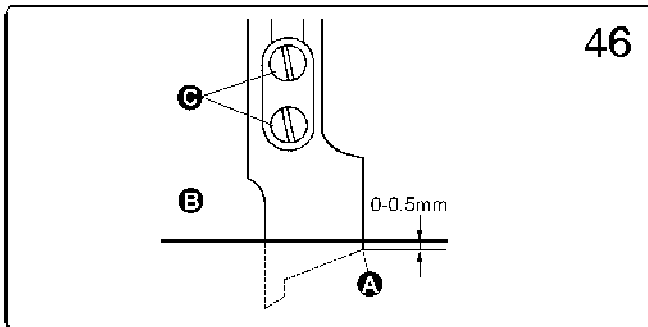
34. ADJUST KNIFE (Fig. 46, 47)

(1) Adjust knife

Adjust knife as illustrated: move knife to the lowest point, Adjust the distance between point (A) of knife to needle plate (B) to 0–0.5mm, release the screw (C) for replating knife.

(2) Adjust trimedge width

The trimedge width depend on the specification of needle plate, when adjust trimedge width release screw (D), make knife edge touch the edge of needle plate, Then tighter the screw, Release the screw (E) to aligne knife edge till knife work well.



35. PERIODICAL CLEANING (Fig. 48. 49. 50.)

1. Machine

- 1) remove the throat plate and clean the feed dog.
- 2) Assembling is to be made by screwing in the screw by 2 to 3 rotations by hand at first, then tightening them evenly by use of a long size screw driver.
- 3) Lay down the machine head and clean the hook and inner bobbin case and filter.

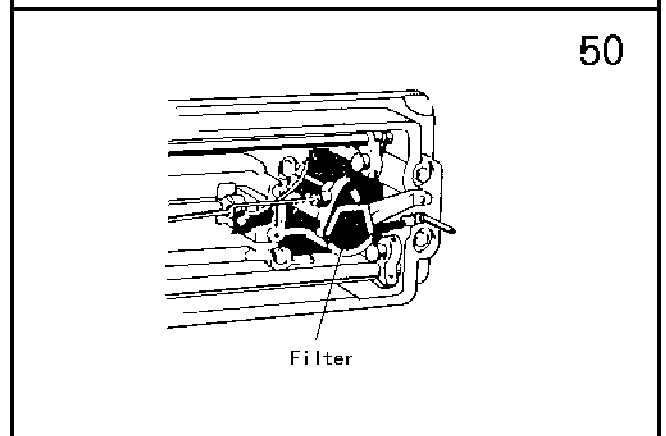
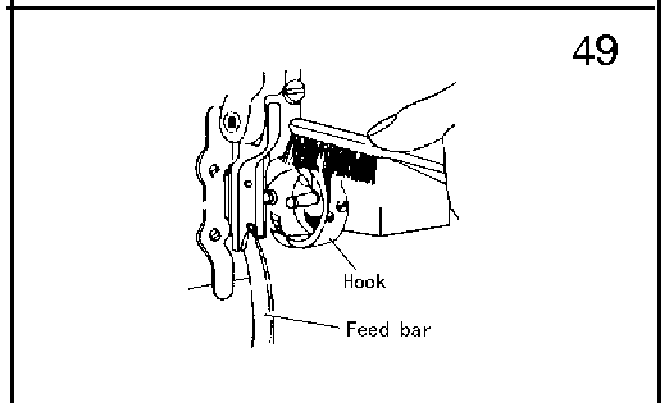
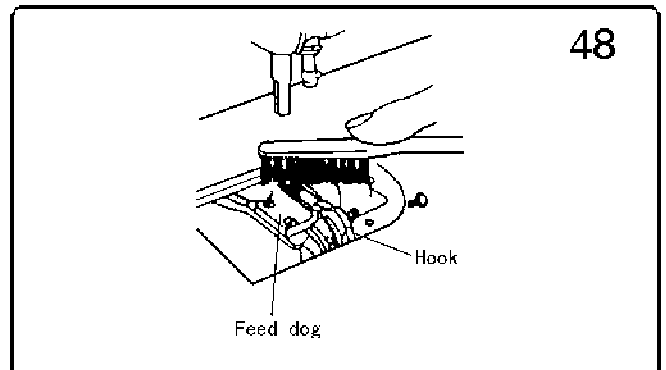
2. Maintenance of motor Remove dust from the motor filter every one or two month. (If operation is continued with the filter clogged with lint or dust, the motor might overheat)

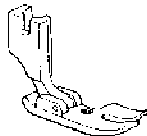

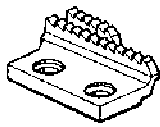
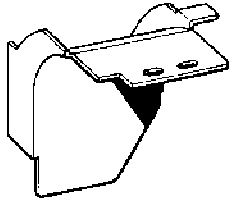

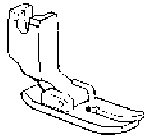


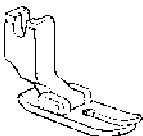

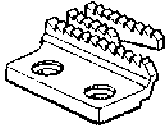
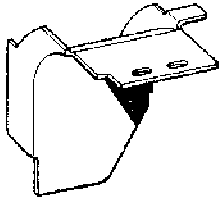
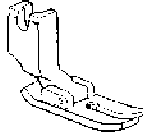


3. Control box

Remove dust from the connector (if the connector covered with dust, machine might misoperated.)

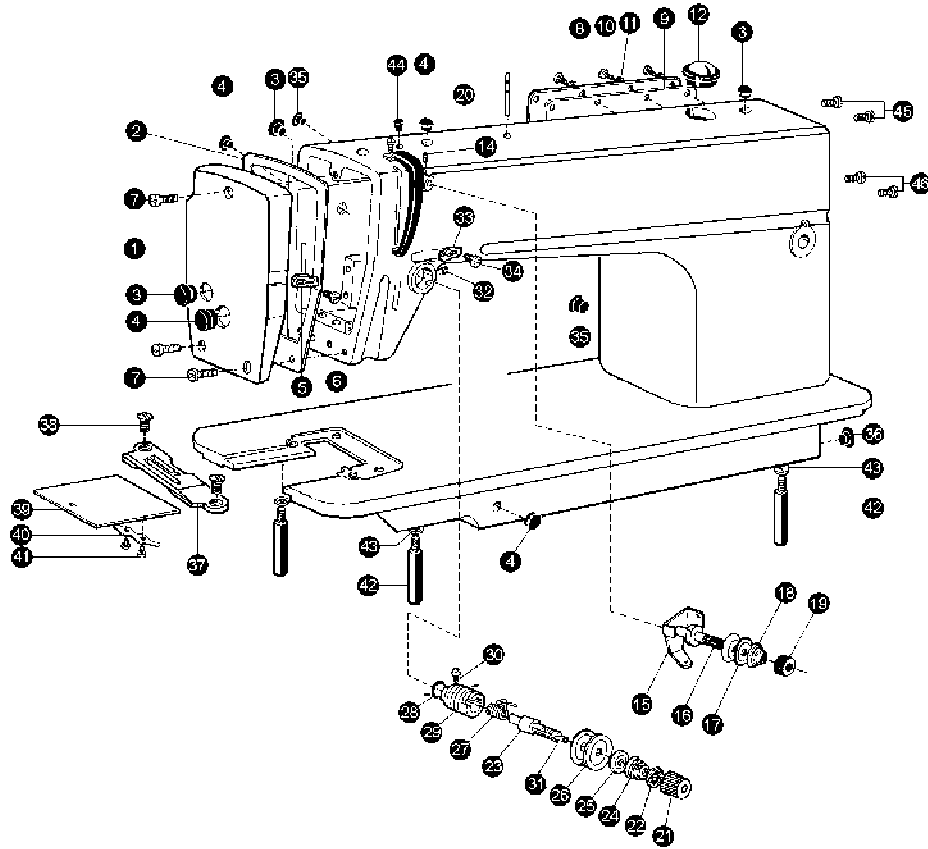
4. Precaution for position detector

- 1) A light type detection element is used in the detector. Thus, take care not to adhere dust or oil on the detector plate when the sewing machine pulley is removed for adjustments, etc. If dust or oil dose adhere, wipe off with a soft cloth while taking care not to scratch the detector plate. Do not allow oil to seep into the clearances of the detector plate.
- 2) If the position detector connector has been disconnected, the belt had been removed, or the machine had locked completely, the motor is automatically switched off in a predetermined period of time to prevent the motor from burning. (The motor may not be switched off if incomplete lock – up or overload had occurred.) The operation is restored to normal by switching the power off, and then on after the fault has been repaired. The above also takes place when the detector has become faulty or any wire has been broken.



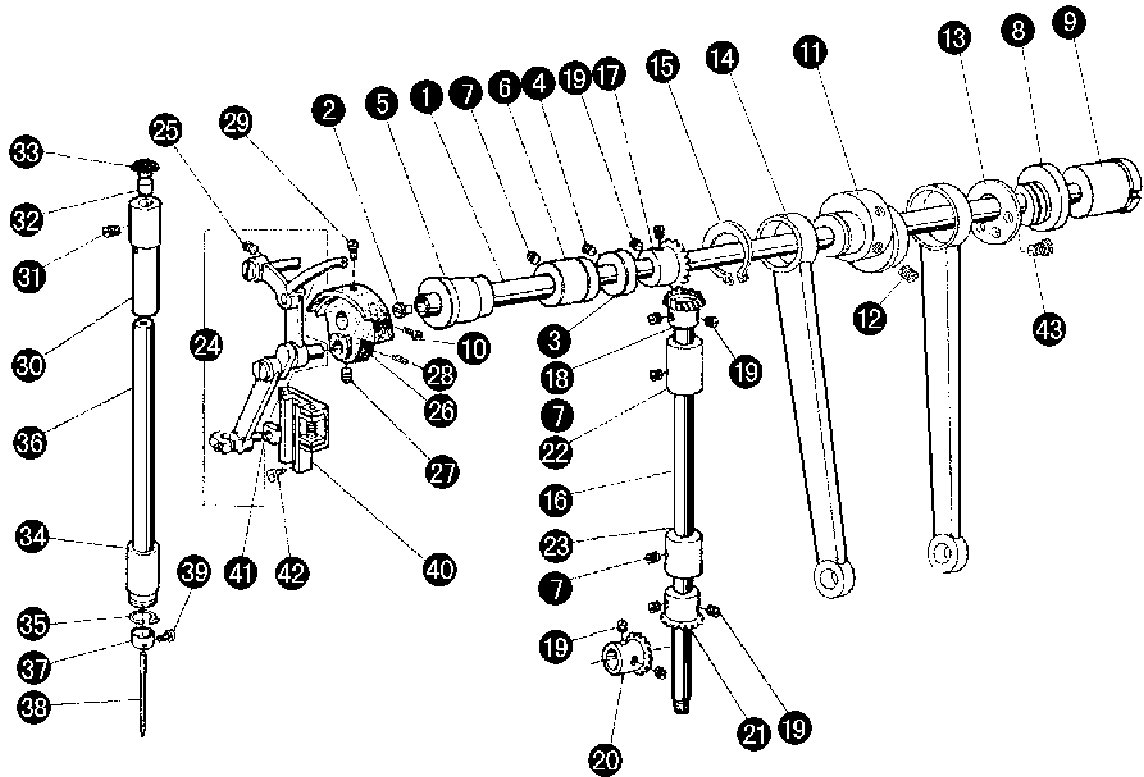
NAME OF PARTS INCH	PRESSER FOOT ASSY	NEEDLE PLATE	FEED DOG	MATERIAL GUIDE		
3/32	 029701000	 029100002 2.5mm	 029600001	 029800101		
1/8		 029100003 3.2mm				
5/32	 029702000	 029100004 4.0mm				
3/16		 029100005 4.8mm				
1/4	 22T7-017F	 029100006 6.4mm			 029600002	 029800102
5/16	 02701100	 029100007 7.9mm				
3/8		 029100008 9.5mm				

These parts are optional, additional order required if you need them.



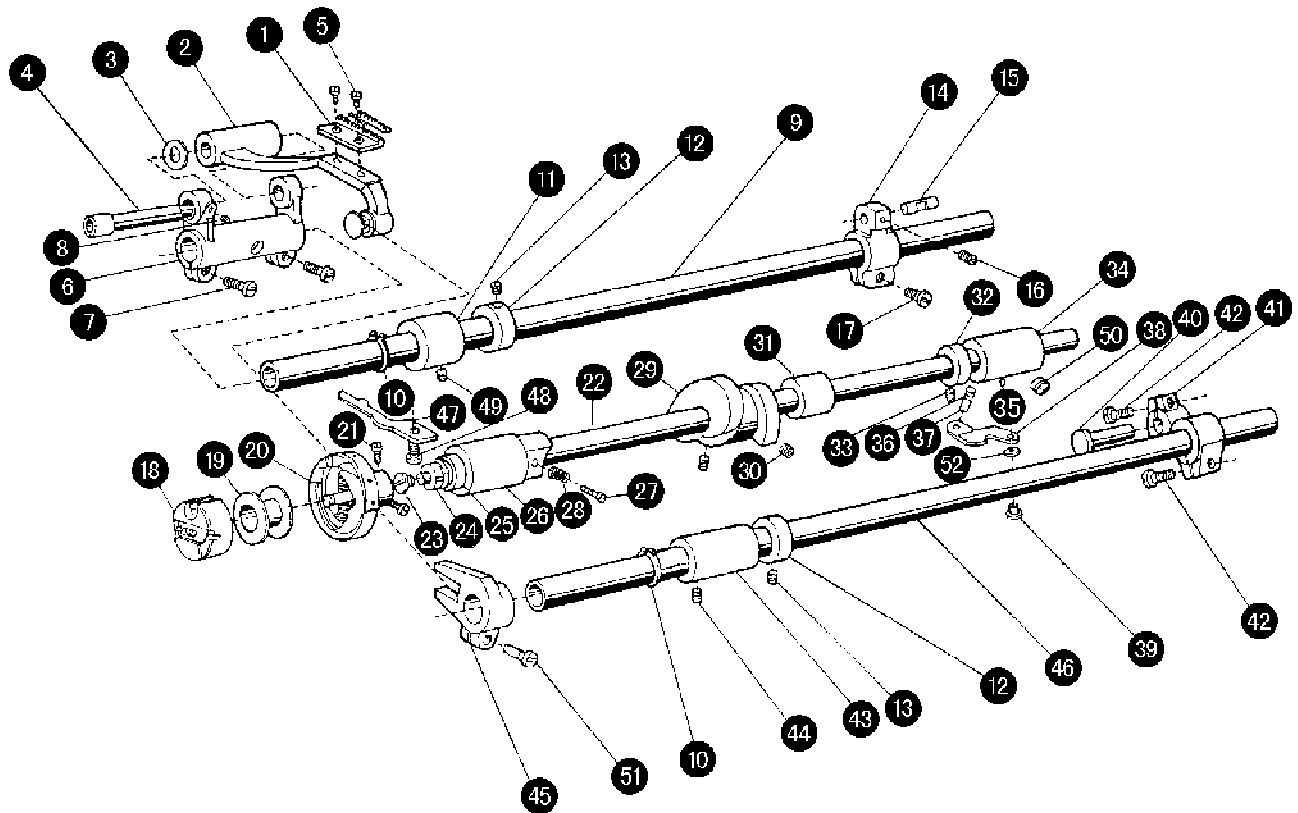
1. ARM AND BED MECHANISM

No.	Ref. No.	Description	Qt.	No.	Ref. No.	Description	Qt.
1	124T1-002B1	Face plate	1	28	22T1-012F11	Rubber ring	1
2	124T1-002B2	Gasket for face plate	1	29	22T1-012F7	Thread tension regulating	1
3	22T1-003C3	Rubber plug	2	30	22T1-012F8	Set screw	1
4	22T1-003C4	Rubber plug	4	31	22T1-012F9	Thread guider releasing pin	1
5	22T1-003C5	Thread guide on face plate	1	32	22T1-013	Set screw	1
6	22T1-003C6	Thread guide screw	1	33	22T1-014	Thread guide for arm center	1
7	22T1-004	Face plate screw	3	34	22T1-003C6	Set screw	1
8	165820001	Back plate	1	35	22T1-015	Rubber plug(Ø8.8)	2
9	36T8-008E1	Gasket for back plate	1	36	22T1-016	Rubber plug(Ø27)	1
10	22T1-006	Set screw	6	37	029100003	Needle plate(1/8")	1
11	22T1-007	Washer	6	38	029800100	Needle plate screw	2
12	22T1-008H	Oil check window	1	39	22T1-021G1	Slide plate	1
14	28T4-083	Set screw	1	40	22T1-021G2	Spring for slide plate	1
15	36T2-008D1	Pretension thread guide	1	41	22T1-021G3	Screw	2
18	36T2-008D2	Thread tension stud	1	42	48T1-005	Leg	3
17	22T1-009E3	Thread tension disc	2	43	GB93-87	Washer	3
18	36T1-008D3	Tension spring for pretension	1	44	22T1-017	Runner plug(Ø5.7)	1
19	36T2-008D4	Thread tension nut	1	45	22T1-006	Screw	2
20	108200009	Thread guide	1	46	22T8-009	Screw	2
21	124T1-003C1	Knumb nut stoper	1				
22	22T1-012F10	Thumb nut stoper	1				
23	22T1-012F1	Thread twnsion stud	1				
24	124T1-003C2	Thread tension spring	1				
25	22T1-012F4	Thread tension releasing disc	1				
26	22T1-012F5	Thread tension disc	2				
27	22T1-012F6	Thread take-up spring	1				



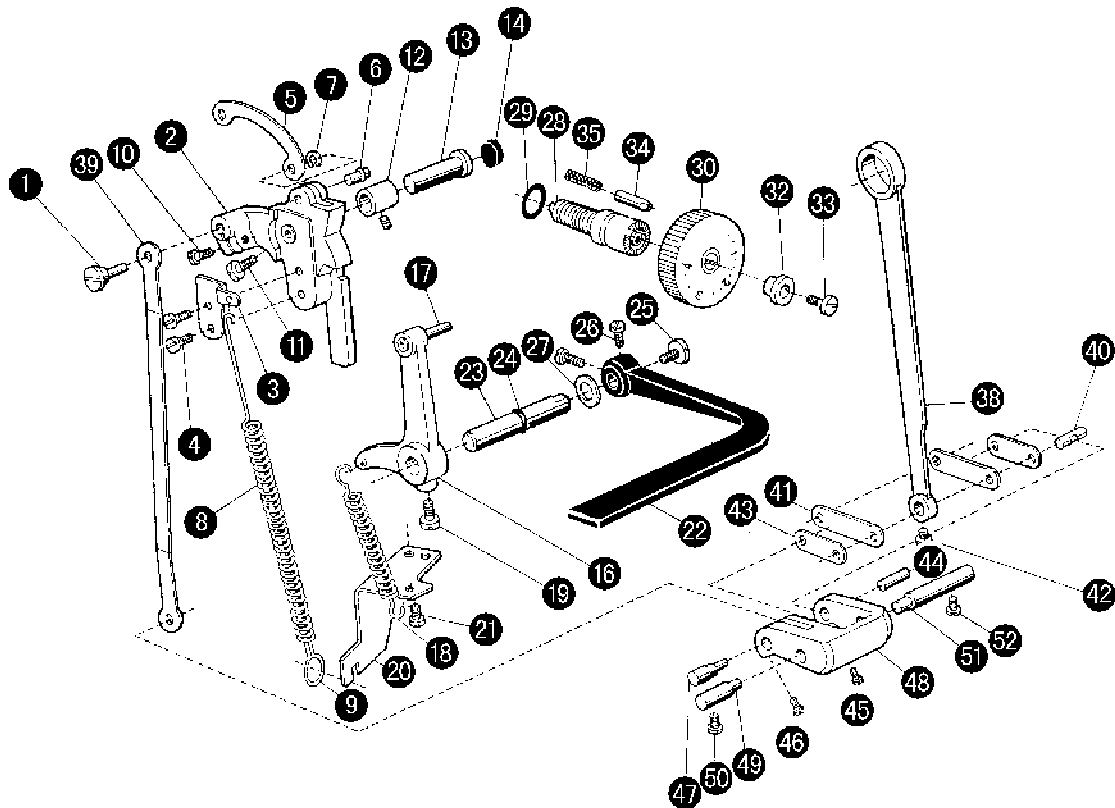
2. ARM SHAFT AND VERTICAL SHAFT AND THREAD TAKE -UP MECHANISM

No.	Ref. No.	Description	No.	Ref. No.	Description	
1	029300001	Arm shaft	1	25	22T2 -002	Screw
2	124T3 -001A2	Rubber plug	2	26	22T2 -005B1	Needle bar crank
3	22T3 -002B1	Collar for arm shaft	1	27	22T2 -005B2	Screw
4	22T2 -005B3	Screw	2	28	22T2 -006	Screw
5	22T3 -003	Arm shaft bushing (left)	1	29	22T2 -007	Set screw
6	22T3 -004	Arm shaft bushing (middle)	1	30	124200001	Needle bar bushing(upper)
7	22T2 -002	Screw	3	31	22T2 -009	Screw
8	165310001	Arm shaft bushing(right)	1	32	22T2 -010	Felt plug
9	124T3 -003C2	Oil seal	1	33	22T2 -011	Rubber plug
10	22T2 -006	Screw	1	34	22T2 -012C1	Needle bushing(lower)
11	36T3 -003	Eccentric wheel	1	35	22T2 -012C2	Thread guide
12	22T1 -013	Eccentric wheel screw	2	36	029200002	Needle bar
13	36T3 -004	Spacer	1	37	029200003	Thread guide for needle bar
14	22T3 -009D1 c	Crank rod for lifting rock shaft	1	38	DB x1 14#	Needle
15	36T3 -004	Spacer	1	39	22T2 -017	Screw
16	22T3 -010E1	Vertical shaft	1	40	029201000	Guide rail for slide block
17	22T3 -010E2a1 -2	Bevel gear for arm shaft	1	41	22T2 -020	Slide block
18	22T3 -010E2a2 -2	Bevel gear for vertical shaft(upper)	1	42	22T2 -019	Set screw
19	22T2 -005B3	Set screw	8	43	165330001	Screw
20	22T3 -010E2b1 -2	Bevel gear for hook shaft	1			
21	22T3 -010E2b2 -2	Bevel gear for vertical shaft (lower)	1			
22	22T3 -011	Vertical shaft bushing (upper)	1			
23	22T3 -011	Vertical shaft bushing (lower)	1			
24	029210000	Needle bar link asm	1			



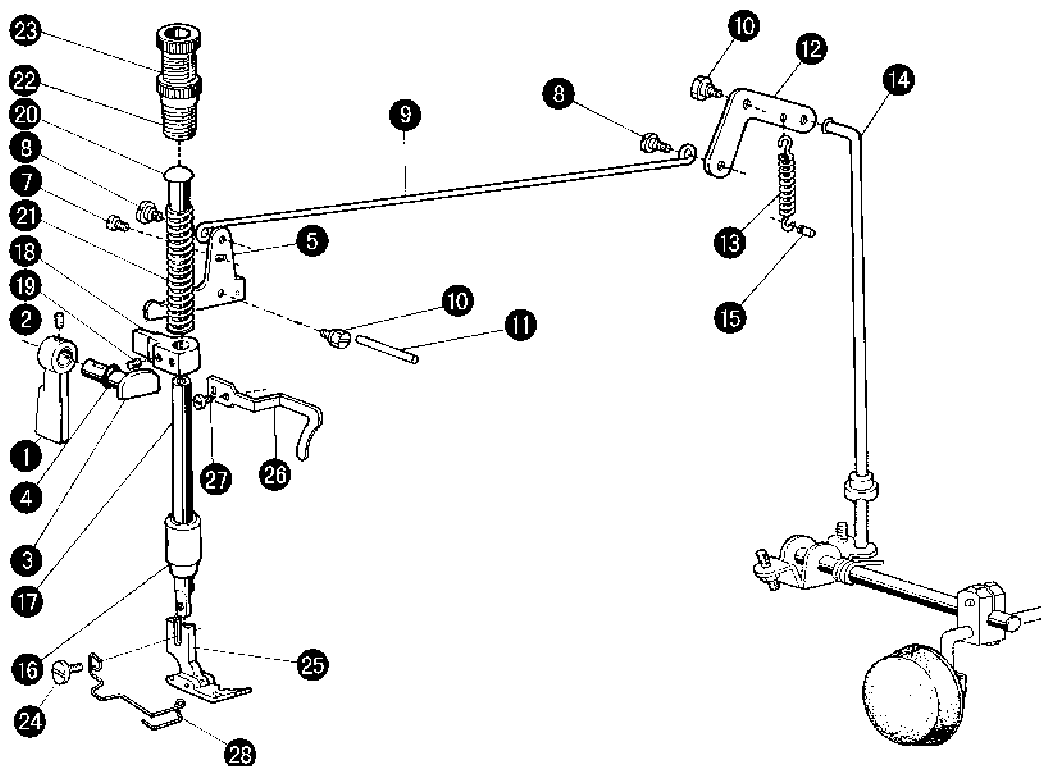
3. FEEDING AND FEED LIFTING AND ROTATING HOOK MECHANISM

No.	Ref. No.	Description	Qt.	No.	Ref. No.	Description	Qt.
1	029600001	Feed dog	1	28	36T4 - 010	Hook shaft bushing (left)	1
2	36T4 - 001A1a	Feed bar	1	27	22T4 - 005	Oil adjusting screw	1
3	22T6 - 001A6	Washer	1	28	22T4 - 006	Coil spring	1
4	36T4 - 001A2	Shaft for feed bar	1	29	36T4 - 011E1	Thread cutting cam	1
5	22T6 - 001A4	Screw	2	30	36T4 - 011E2	Screw	2
6	22T6 - 001A1a	Feed rock shaft crank	1	31	36T4 - 012	Hook shaft bushing (middle)	1
7	22T6 - 001A1b	Screw	2	32	22T4 - 002B1	Collar for hook shaft	1
8	22T2 - 019	Screw	1	33	22T2 - 009	Screw	2
9	36T4 - 002	Feed rock shaft	1	34	36T4 - 014F1	Hook shaft bushing (right)	1
10	GB894 - 76	C - type stop ring	2	35	22T4 - 007C2	Oil pipe for hook shaft bushing	1
11	22T6 - 004	Bushing for feed rock shaft	1	36	36T4 - 015	Plunger	1
12	22T6 - 005B1	Collar for feed rock shaft	2	37	36T4 - 016	Plunger spring	1
13	22T3 - 002B2	Screw	4	38	22T4 - 010	Guide plate	1
14	36T4 - 003	Feed rock shaft crank (right)	1	39	22T8 - 009	Screw	1
15	36T4 - 004H01	Pin	1	40	22T6 - 007	Hinge pin	1
16	36T5 - 008E5	Screw	1	41	36T4 - 017	Feed lifting rock shaft crank (right)	1
17	22T6 - 008D3	Screw	1	42	J0. 0. 71	Screw	2
18	36T4 - 005B	Bobbin case complete	1	43	22T6 - 012	Bushing for feed lifting shaft (left)	1
19	36T4 - 006	Bobbin	1	44	22T2 - 002	Screw	1
20	36T4 - 007C	Rotating hook complete	1	45	36T4 - 018H1D1	Feed lifting fork	1
21	36T4 - 007C4	Screw	2	46	36T4 - 018H2	Feed lifting rock shaft	1
22	36T4 - 008D1	Hook shaft	1	47	22T4 - 013	Hook positioner	1
23	22T4 - 001A1a1	Filter screw	1	48	22T4 - 015	Screw	1
24	22T4 - 001A1a2	Filter	1	49	22T2 - 009	Screw	1
25	36T4 - 009G	Oil seal	1	50	22T1 - 013	Screw	1
				51	22T6 - 008D3	Screw	1
				52	GB93 - 87 - 6	Washer	1



4. STITCH LENGTH REGULATING MECHANISM

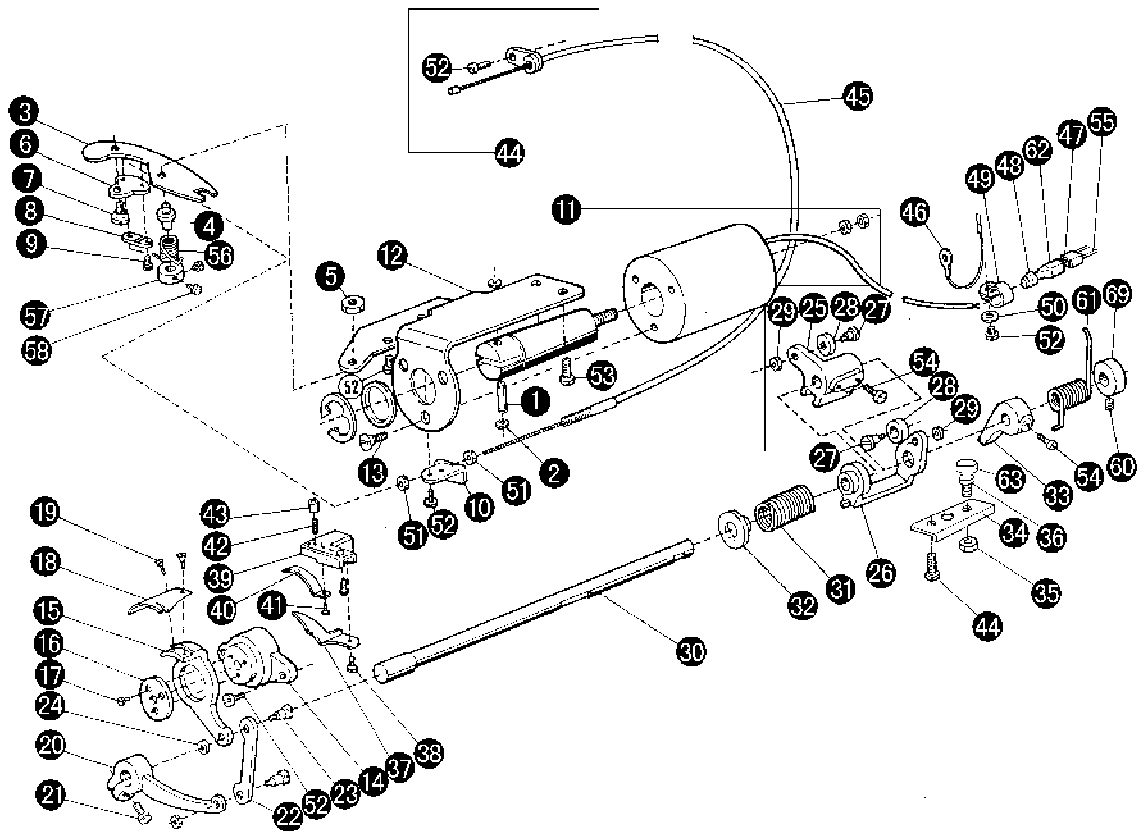
No.	Ref. No.	Description	Qt.	No.	Ref. No.	Description	Qt.
1	36T5 - 001	Set pin	1	26	22T5 - 010D4	Screw	2
2	36T5 - 002A1	Feed regulator	1	27	22T5 - 011	Washer	1
3	36T5 - 002A2	Spring retainer	1	28	124T5 - 001A2	Screw bar	1
4	22T2 - 019	Screw	2	29	124T5 - 001A3	O - type rubber ring	1
5	36T5 - 002A3	Link	1	30	124T5 - 001A1 - 1	Dial	1
6	36T5 - 002A4	Pin	1	32	38T5 - 007D4	Bushing	1
7	GB896 - 85 - 4	Split retaining ring	1	33	38T5 - 007D5	Screw	1
8	36T5 - 002A5	Coil spring	1	34	22T5 - 008	Thrust pin	1
9	36T5 - 002A6	Spring holder	1	35	22T5 - 009	Coil spring	1
10	22T6 - 008D3	Screw	1	38	38T5 - 008E2	Feed link	1
11	22T5 - 010D4	Screw	1	39	38T5 - 008E3	Stitch length regulating link	1
12	22T5 - 003	Bushing for feed regulator	1	40	38T4 - 004H02	Pin	1
13	22T5 - 004	Pin shaft	1	41	38T5 - 008E4H02	Link	2
14	36T5 - 003	Rubber plug	1	42	38T5 - 008E5	Screw	1
15	22T2 - 002	Set screw	1	43	38T5 - 008E4H01	Link	2
16	36T5 - 004B1	Reverse sewing crank	1	44	38T5 - 008E6	pin	1
17	36T5 - 004B2	Reverse sewing crank shaft	1	45	38T5 - 008E7	Screw	1
18	36T5 - 004B3	Coil spring	1	46	38T5 - 008E8	Screw	1
19	22T5 - 013	Screw	1	47	38T5 - 008E9	Eccentric shaft	1
20	36T5 - 005	Spring holder	1	48	38T5 - 008E10	Stitch length adjusting crank	1
21	22T5 - 001A4	Screw	1	49	38T5 - 009H02	Set pin(left)	1
22	22T5 - 010D1	Reverse sewing lever	1	50	22T6 - 008D3	Screw	1
23	36T5 - 008C1a1	Shaft for reverse sewing lever	1	51	38T5 - 009H01	Set pin(right)	1
24	GB3452.1 - 92	O - type ring (6.3 x 1.8G)	1	52	22T6 - 008D3	Screw	1
25	22T5 - 010D3	Screw	1				



5. PRESSER FOOT MECHANISM

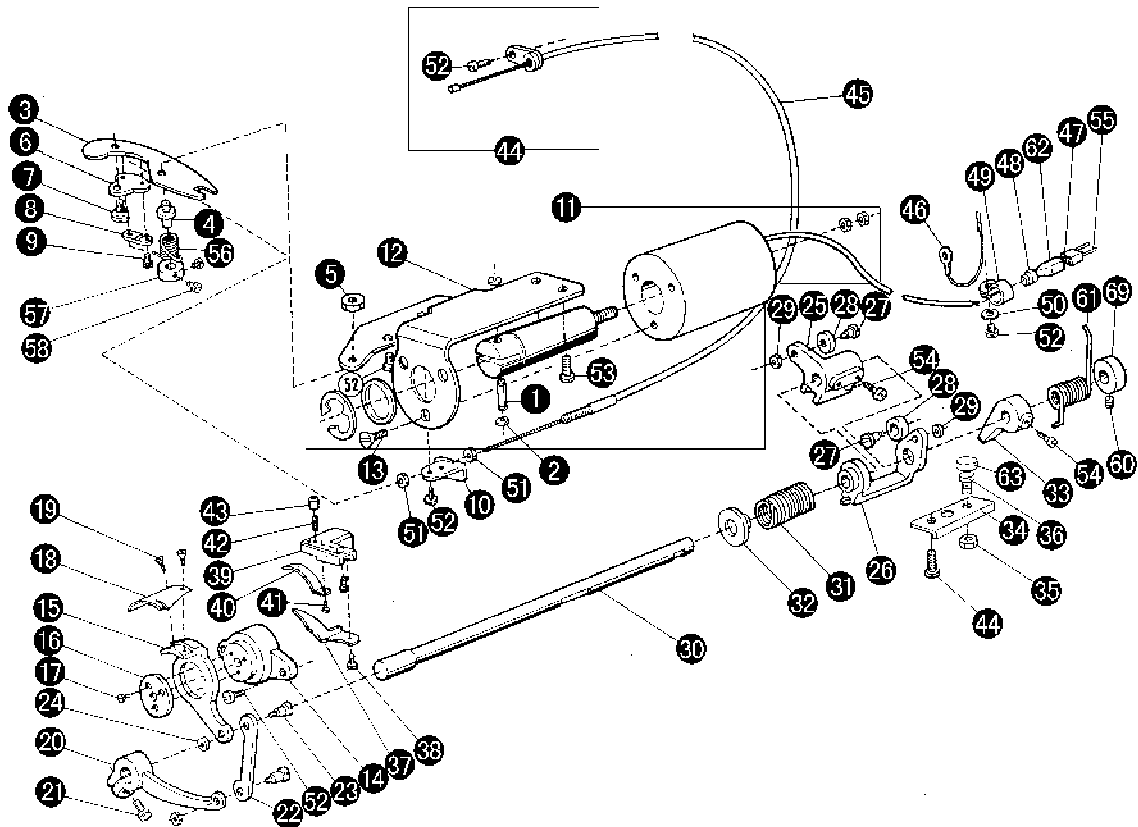
No.	Ref. No.	Description	Qty.
1	36T6 - 001A1	Presser bar lifter	1
2	58T6 - 001A1a6	Screw	1
3	36T6 - 002B1	Presser bar lifting cam	1
4	GB3452.1 - 92	Oil seal (4.5 × 1.8G)	1
5	029500100	Knee lifter lever (left)	1
7	22T7 - 004B1c	Screw	1
8	22T7 - 004B2	Screw	2
9	22T7 - 004B3	Knee lifter rod	1
10	22T7 - 005	Screw	1
11	029500101	Thread releasing pin	1
12	22T7 - 007C1	Knee lifter lever (right)	1
13	22T7 - 007C2	Coil spring	1
14	22T7 - 007C3	Knee lifter connecting rod	1
15	22T7 - 008	Pin for spring	1
18	22T7 - 009	Bushing for presser bar	1
17	029700001	Presser bar	1
18	22T7 - 011D1	Presser bar guide bracket	1
19	36T6 - 007	Screw	1
20	22T7 - 012	Presser spring guide	1
21	48T7 - 002	Presser spring	1
22	22T7 - 014E1	Thumb screw	1
23	22T7 - 014E2	Lock nut	1

No.	Ref. No.	Description	Qty.
24	22T7 - 015	Screw	1
25	029701000	Presser foot asm	1
26	36T6 - 009	Thread guide	1
27	22T2 - 004	Screw	1
28	57T7 - 002	Presser foot spring	1



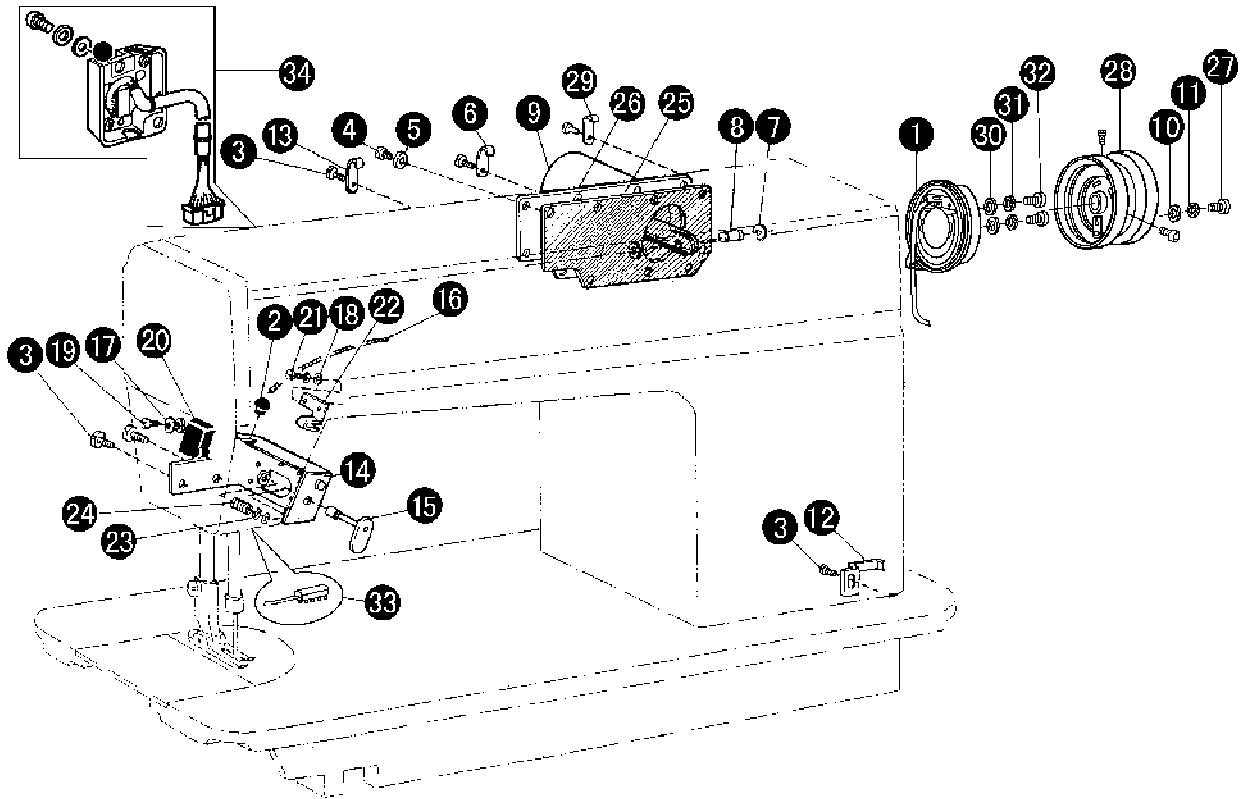
6. KNIFE ACTUATING MECHANISM

No.	Ref. No.	Description	Qty.
1	36T8 - 009	Pin	1
2	GB96 - 85	Split retaining ring	2
3	36T7 - 001A1	Flexible driving lever	1
4	36T7 - 001A2	Screw	1
5	36T7 - 003C5	Nut	1
6	36T7 - 001A3	Bracket for flexible wire	1
7	36T7 - 001A4	Screw	1
8	36T7 - 001A5	Flexible wire connecting bracket	1
9	36T7 - 001A6	Screw	2
10	36T7 - 001A7	Holder for flexible wire	1
11	185710000	Solenoid assy for threaded trimmer	1
12	36T7 - 001A8b	Solenoid mounting bracket	1
13	GB68 - 85 - M4x6	Screw	3
14	36T7 - 002B1a1	Knife holding saddle	1
15	36T7 - 002B1a2	knife base (left)	1
16	36T7 - 002B1a3	Washer	1
17	36T7 - 002B1a4	Screw	3
18	36T7 - 002B2	Blade (left)	1
19	36T7 - 002B3	Set screw	2



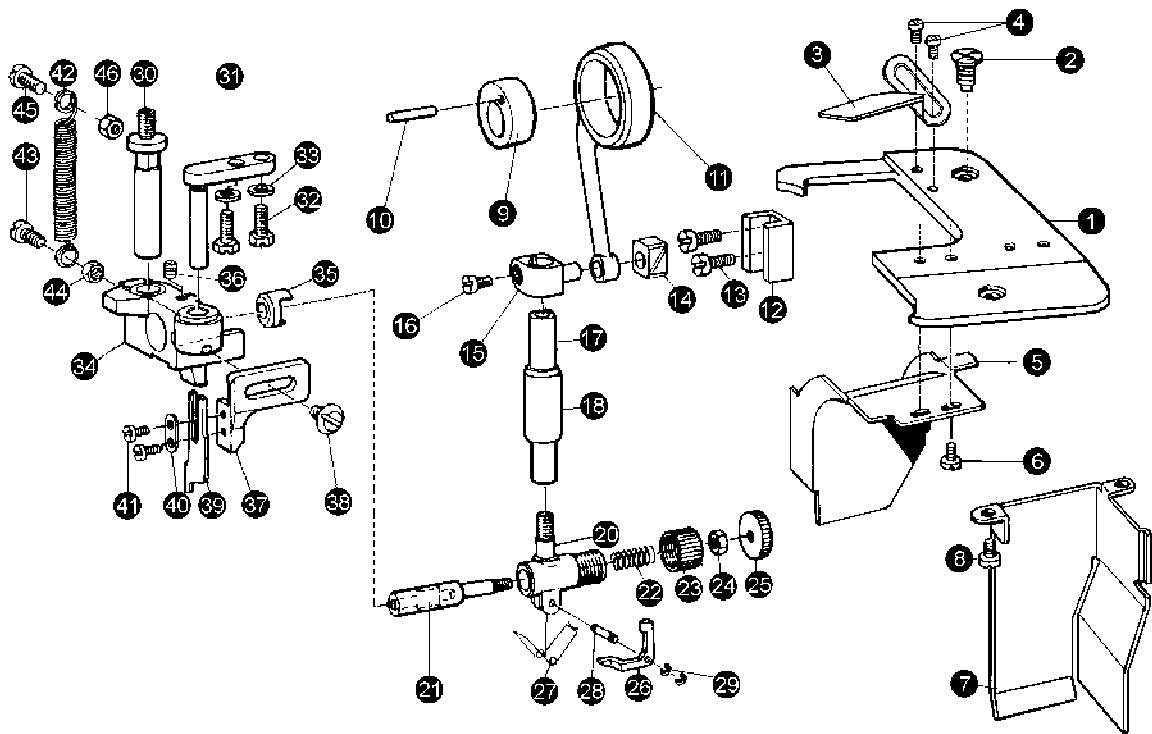
6. KNIFE ACTUATING MECHANISM

No.	Ref. No.	Description	Qt.	No.	Ref. No.	Description	Qt.
20	36T7 - 002B4	Knife driving crank	1	41	36T7 - 009E4	Set screw	1
21	61 - 04 - 01/B6	Screw	1	42	36T7 - 009E5	Adjusting screw	1
22	36T7 - 002B5	Link	1	43	36T7 - 009E6	Adjusting nut	1
23	36T7 - 002B6	Screw	2	44	36T8 - 002	Screw	2
24	36T7 - 002B7	Nut	2	45	36T7 - 010F	Flexible wire asm	1
25	36T7 - 003C1	Cam follower crank(1)	1	46	36T7 - 011G	Earth wire asm	1
26	36T7 - 003C2	Cam follower crank(2)	1	47	36T2 - 012	Plug	1
27	36T7 - 003C3	Roller stud	2	48	36T7 - 013	Rubber sleeve	1
28	36T7 - 003C4	Roller	2	49	36T7 - 014	Wire clamp	1
29	36T7 - 003C5	Nut	2	50	GB848 - 86 - 4	Washer	1
30	36T7 - 004	Knife driving shaft	1	51	GB54 - 86 - M5	Nut	2
31	36T7 - 005	Coil spring	1	52	22T2 - 019	Screw 4. 37 x 40/8	8
32	36T7 - 006	Bushing	1	53	36T8 - 002	Screw	2
33	185720004	Stopper	1	54	22T5 - 010D4	Screw	3
34	185720001	Stopper plate	1	55	36T9 - 001A2a2	Pin	2
35	GB6172 - 86 - M6	Nut	1	56	36T7 - 001A9	Coil spring	1
36	185720002	Screw	1	57	36T7 - 001A10	Collar for driving lever	1
37	36T7 - 009E1	Thead guide	1	58	36T5 - 008E8	Screw	2
38	J0. 0. 72	Screw	1	59	36T7 - 015H1	Collar for knife driving shaft	1
39	36T7 - 009E2	Bracket for fixed blade	1	60	22T3 - 002B1	Screw	1
40	36T7 - 009E3	Fixed knife	1	61	36T7 - 016	Coil spring	1
				62	36T7 - 017	Guard for plug	1
				63	185720003	Rubber washer	1



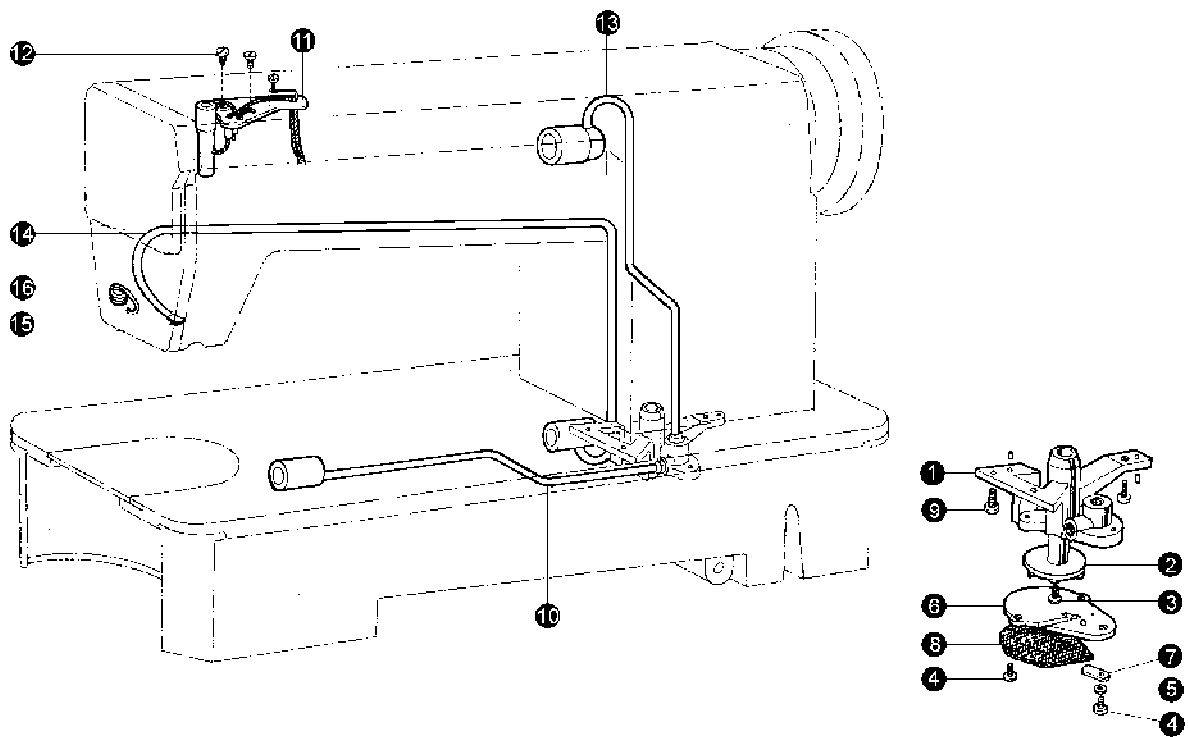
7. REVERSE SEWING AND DETECTOR MECHANISM

No.	Ref. No.	Description	qt.
1	165A20000	Detector componts	1
2	36T7 - 014	Rubber plug	1
3	22T2 - 019	Screw	6
4	22T1 - 006	Screw	8
5	22T1 - 007	Washer	8
6	165A20001	Detector presser plate	1
7	GB896 - 86	Split washer 4	2
8	36T8 - 009	Pin	1
9	165820002	Electric - magnet for reverse sewing	1
10	GB97. 1 - 85	Washer	2
11	GB859 - 87	Spring washer 3	2
12	36T8 - 005	Cord holder	1
13	36T8 - 006	Wire clamp	1
14	029700100	Switch bracket	1
15	36T8 - 007C2a	Button asm	1
16	36T8 - 007C3b	Cable for switch at reverse sewing	1
17	GB859 - 86	Spring washer 2	2
18	GB848 - 86	Washer 2	2
19	GB818 - 85	Screw	2
20	36T8 - 007C4	Micro switch	1
21	GB818 - 85	Screw	2
22	36T8 - 007C5	Leaf spring	1
23	GB896 - 86	Split retaining ring 3	2
24	36T8 - 007C6	Coil spring	1
26	36T8 - 008E1	Gasket	1
27	165820001	Side cover	1
28		Screw	2
29	165320001	Balance wheel asm	1



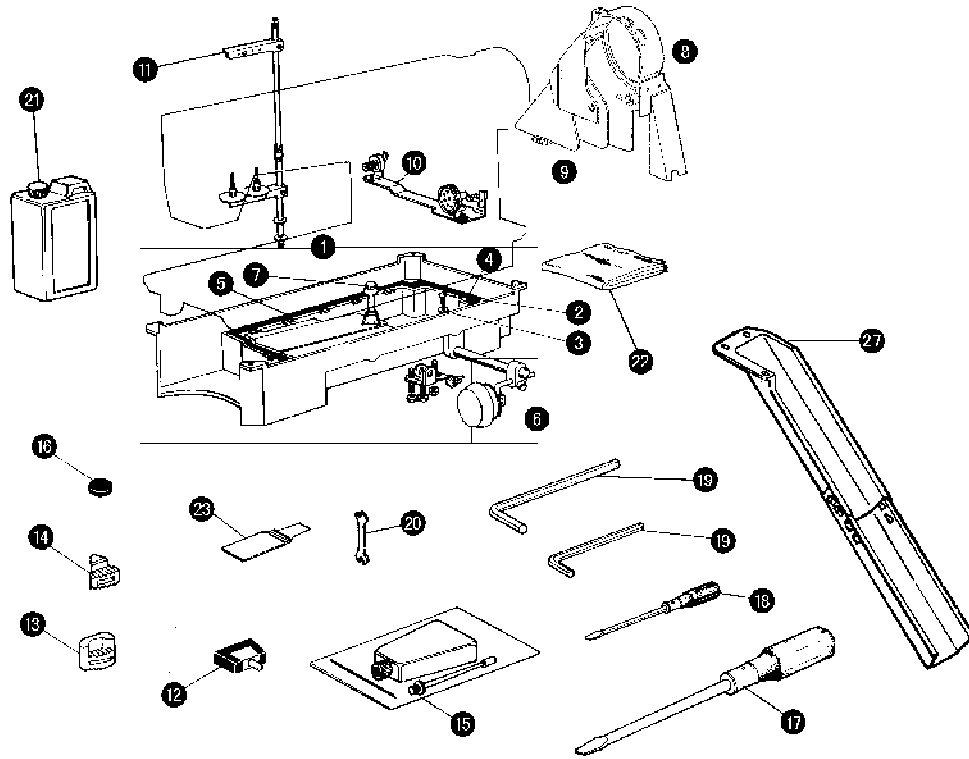
8. KNIFE COMPONTS

No.	Ref. No.	Description	Qt.	No.	Ref. No.	Description	Qt.
1	029800001	Throat plate	1	26	029800017	Knife release lever	1
2	029800100	Screw	2	27	029800018	Spring	1
3	029800002	Waste material guide	1	28	029800019	Pin	1
4	22T8 - 011C4	Screw	2	29	GB896 - 86 - 2	Snap ring	2
5	029800101	Waste material chute	1	30	029800020	Knife driving block stud	1
6	28T3 - 034	Screw	2	31	029800021	Guide stud for knife driving block	1
7	029800104	Waste material guard	1	32	GB29. 1 - 88	Bolt M4 x8	2
8	22T2 - 001A9	Screw	2	33	22T1 - 007	Washer	2
9	029800006	Knife driving eccentric cam	1	34	029801000	Knife driving block asm	1
10	GB119 - 86	Knife driving eccentric cam pin	1	35	029801004	Clutch pin bushing	1
11	029800007	Knife driving rod	1	36	28T7 - 004	Screw	1
12	029800008	Slide block guide	1	37	029800022	Knife holder	1
13	22T2 - 019	Screw	2	38	029800023	Screw	1
14	22T9 - 020	Crank slide block	1	39	029800024	Knife	1
15	029800009	Knife driving stud connection asm	1	40	029800025	Washer	1
16	36T5 - 008E8	Screw	1	41	36T7 - 001A6	Screw	2
17	029800010	Knife driving stud	1	42	029800026	Tension spring	1
18	029800011	Bushing	1	43	22T1 - 006	Screw	1
20	029800012	Knife driving rod clutch retainer	1	44	28T1 - 035	Nut	1
21	029800013	Knife driving rod clutch pin	1	45	22T5 - 001A4	Screw	1
22	029800014	Spring	1	46	22T9 - 001A10	Nut	1
23	029800015	Cap	1	47	029700004	Wrench for knife driving blk	1
24	28T1 - 035	Nut	1	48	029700005	Screw	1
25	029800016	Knob	1	49	029700006	Spring	1



9. OIL PUMP MECHANISM

No.	Ref. No.	Description	Qt.
1	22T8 - 001	Oil pump	1
2	22T8 - 002	Oil pump impeller	1
3	22T8 - 003	Screw	1
4	22T8 - 004	Screw	3
5	GB93 - 87 - 3	Springee washer	1
6	22T8 - 006	Oil pump fitting plate	1
7	22T8 - 007	Oil adjusting plate	1
8	22T8 - 008A	Oil pump screen asm	1
9	22T8 - 009	Screw	3
10	36T10 - 001A	Oil pump for hook shaft	1
11	029910000	Oil braid fitting plate	1
12	22T8 - 012	Screw	2
13	22T8 - 013D	Oil pump for arm shaft	1
14	22T8 - 014	Oil return pipe	1
15	22T8 - 015	Felt pouch for return oil filter	1
16	36T10 - 002	Oil filter holder	1



10. OIL RESERVOIR AND ACCESSORIES

No.	Ref. No.	Description	Qt.
1	029F00000	Oil reservoir asm	1
2	22T9 - 001A2	Screw	1
3	22T9 - 001A3	Washer	1
14	22T9 - 001A4	Oil gasket (S)	1
5	22T9 - 001A5	Oil gasket (B)	1
6	22T9 - 003B	Knee lifter asm	1
7	22T9 - 003B1	knee lifter lifting pin	1
8	124T9 - 003B	Belt cover	1
9	124T9 - 004C	Belt cover (S)	1
10	6F0 - 000	Thread winder asm (large hook)	1
11	GXJ - 2	Thread spool asm	1
12	22T9 - 007F	Hinge with rubber cushion	2
13	22T9 - 009	Cushion (B)	2
14	22T9 - 010	Cushion (S)	2
15	22T9 - 011	Oil pot	1
16	22T9 - 012	Magnet block	1
17	22T9 - 013	Screw drive (long)	1
18	22T9 - 015	Screw drive (short)	1
19	36T11 - 006	Allen wrench M4 M6	each 1
20	22T9 - 016	Double open - end wrench	1
21	22T9 - 017	Oil tank	1
22	22T9 - 018	Machine head cover	1
23	22T9 - 024	Needle bag	1
24	029600002	Feed dog	1
25	029100005	Needle plate	1
26	029800021	Knife	1
27	029F00002	Waste material chute	1
28	029102003	Presser foot complete	1
29	029800102	Material guide	1
30	029100006	Needle plate	1

GC6170D2 series machine's main technical data

Item		Plain seaming
Application		Common materials
Sewing speed		4000 S. P. M.
Max. stitch length		4mm
Presser foot lift	By hand	6 mm
	By knee	10 mm
Needle		DB×1 -2 9#—16#
Rotating shuttle		Standard automatic oiling
Trimedge width		Normal 3.2mm
		Special 2.4 4.0 4.8 6.4 9.5 (mm)
Detector		Inside
Operation panel		Outside
Motor		400W motor with speed adjusting section
Other		Can select automatic foot lifter system

- Besides adjusting stitch, please laypeople don't debug or maintain machine.
- Parts are subject to changes in design without prior notice.

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