

FOR SS5-820

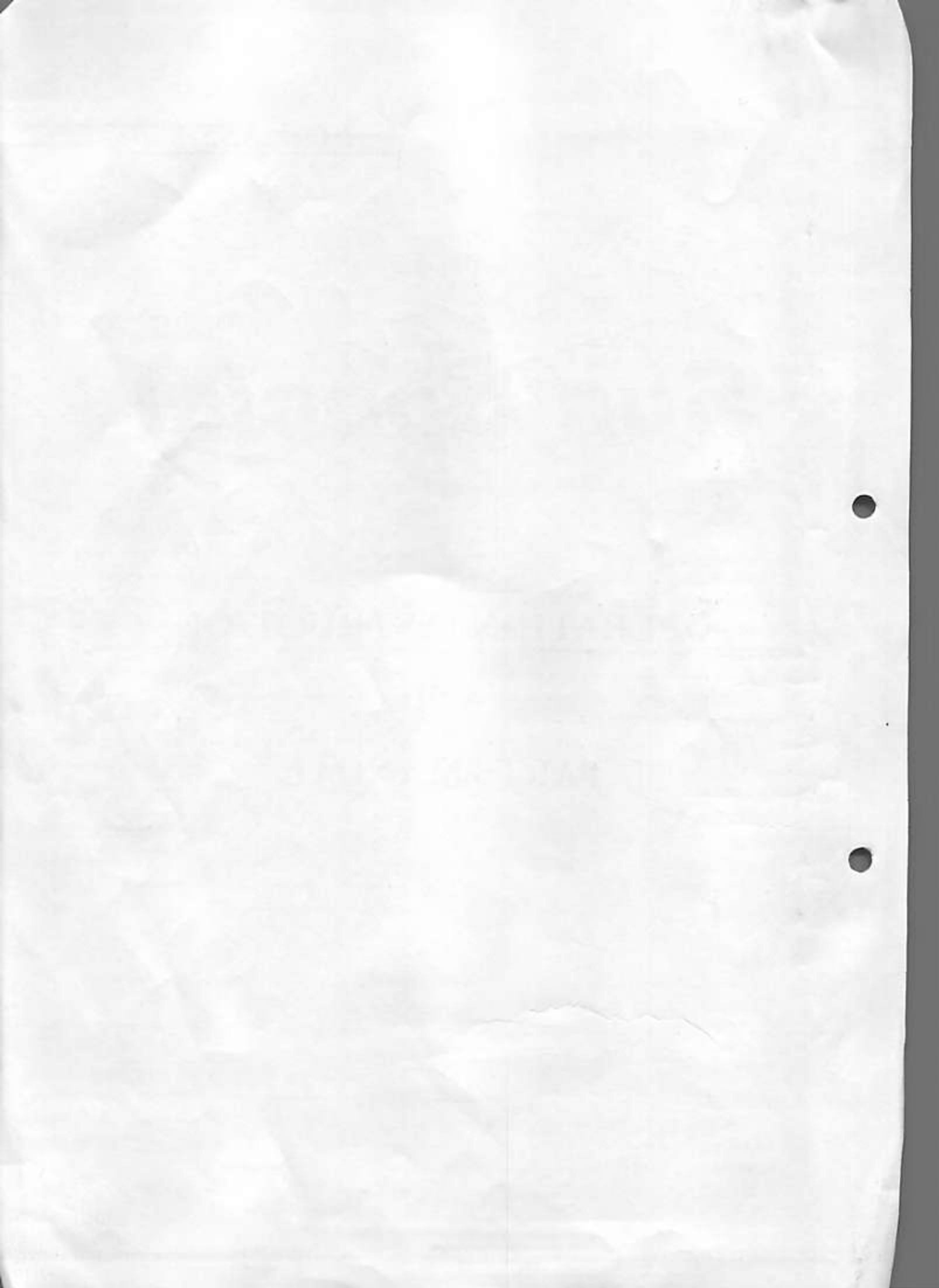
IVAN

Sun Special

OPERATION INSTRUCTION

AND

PARTS MANUAL



CONTENT

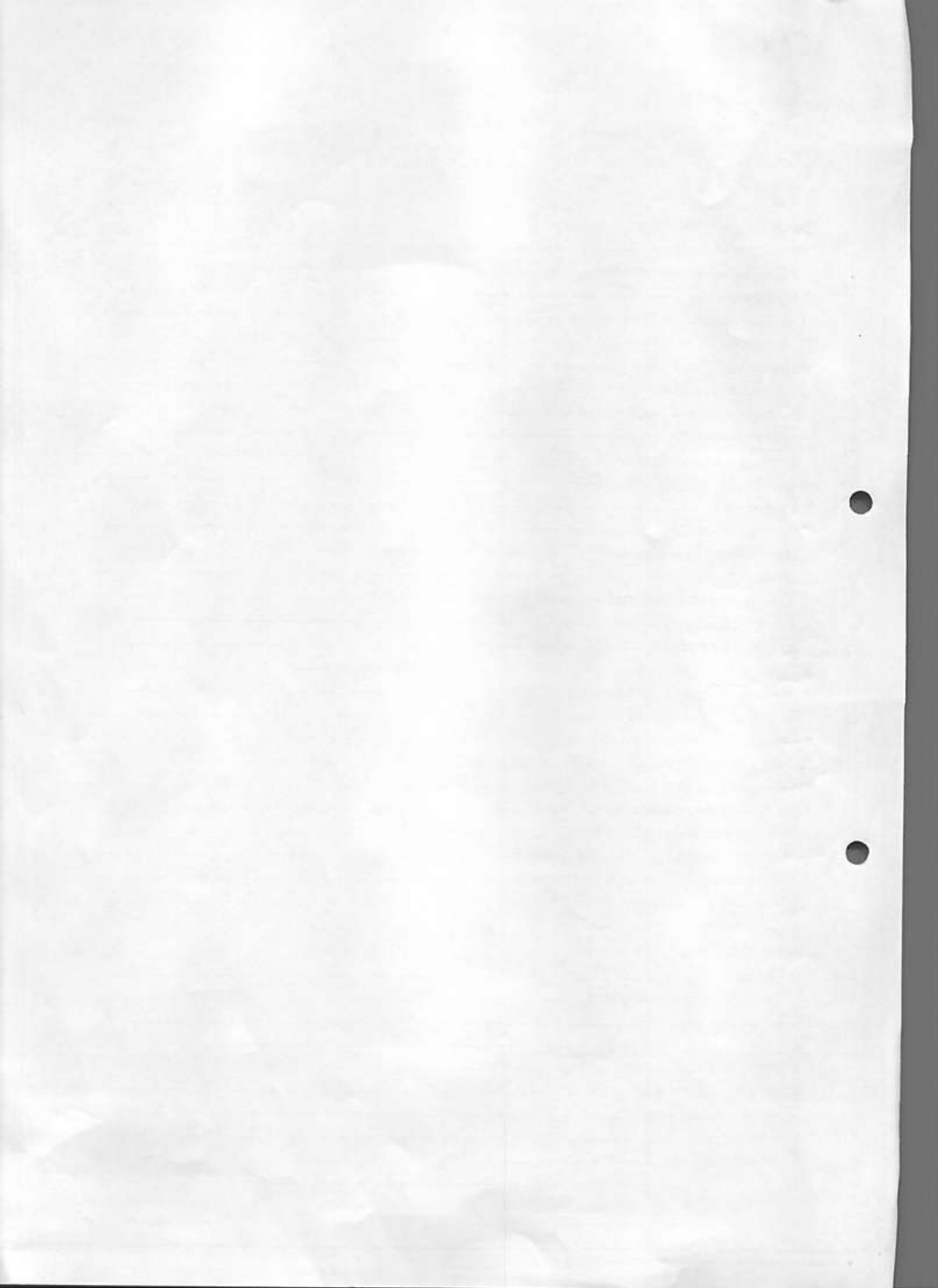
I V A N

Operation instruction

I Brief introduction	1
II Main technical specification	1
III Installation	1
1. Installing the machine head	1
2. Installing motor	1
3. Installing the thread winder	2
4. Connection the clutch lever with pedal	2
5. The installation and adjustment of knee lifter device	2
6. Installing the oil pan	3
7. Installing the spool stand	3
8. Installing the cushion	4
IV Preparation	4
1. Cleaning the machine	4
2. Lubrication	5
3. Trial run	5
V Operation and adjustment	5
1. Choosing the thread	5
2. Installing the thread	6
3. Passing the thread	6
4. Winding the bobbin thread and adjustment	6
5. Installing the bobbin into the hook	7
6. Adjusting the stitch length and reverse feed	7
7. Adjusting the tension of bobbin thread and needle thread	8
(1) Adjusting the tension of bobbin thread	8
(2) Adjusting the tension of needle thread	8
8. Adjusting the height of feed dog and the pressure presser bar	9
9. Adjusting the position of hook and needle	9
10. The relation between the hook and hook thread separator	10
11. Adjusting the position of the feed dog and needle	11

Parts Manual

1. Bed parts	12~13
2. Thread tension assembly parts	14~15
3. Lubrication parts	16~17
4. Thread take-up assembly parts	18~19
5. Upper shaft and vertical shaft parts	20~21
6. Feed drive lower shaft parts	22~23
7. Stitch regulator parts	24~25
8. Post-bed parts	26~27
9. Presser foot parts	28~29
10. Accessories	30~31



Operation instruction

Notice:

1. Parts design is subject to change without notice.
2. Only the professional can adjust and repair the machine except adjusting stitch length.

I Bref introduction

This machine adopts sliding lever thread take-up vertical rotating hook, precise gear for driving arm shaft and bed shaft. And it is easy to operate with knob type stitch regulator and reverse lever. And it is also has a wide workspace and easy to operate with 178mm post bed 13mm height of presser foot lift by knee. The machine has big needle bar stroke, good sewing heavy-duty ability, smooth running, small noise simple structure and easy maintenance. It is widely used on sewing leather shoes, sports shoes, bag, glove, cap and other similar articles.

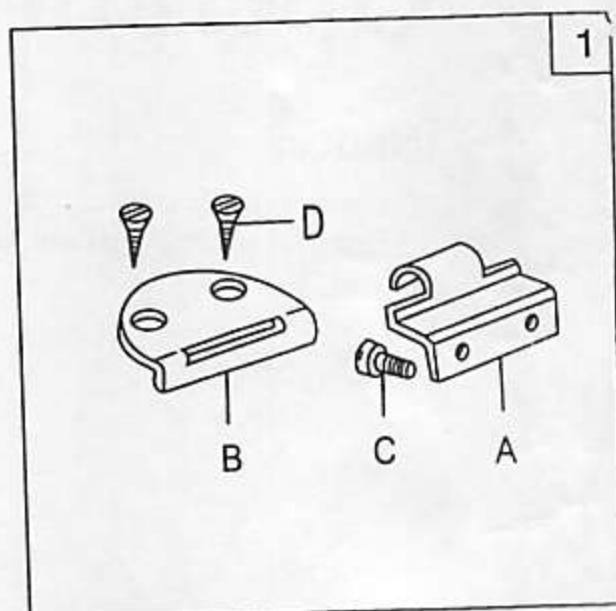
III Installation

1. Installing the machine head

Install the hinge (A) onto the bed of machine head and tighten it by screw (C). Then install the hinge (B) into the groove of the table and tighten the screw (D). After that, install the machine head into the table properly.

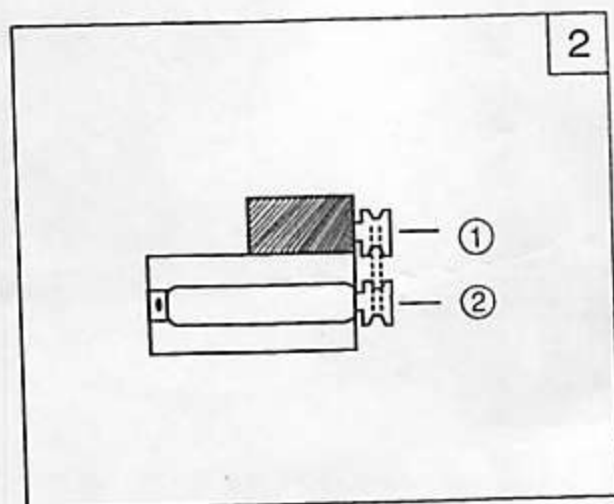
II Main specification

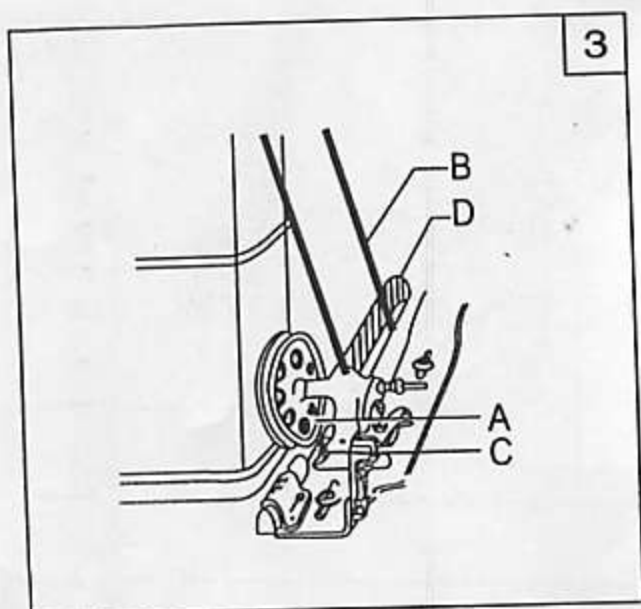
Max.speed	2000s.p.m.	
Max.stitch length	4mm	
Presser foot lift height	By hand	7mm
	By knee	13mm
Needle bar stroke	33.4mm	
Thread take-up lever stroke	61.5mm	
Hook	Vertical axis hook	
Needle	DP×5 12#~20#	
Lubrication system	Oiled by hand	
Needle gauge	1.2,1.6,2,2.4mm	



2. Installing the motor

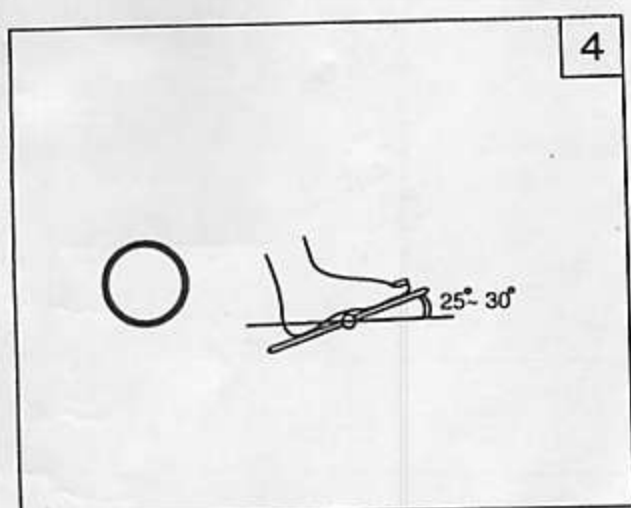
- (1) Fix the motor on the bottom of the table by screw, washer and nut.
- (2) Align the groove of the machine balance wheel and the motor, then tighten the screw.
- (3) Install the power switch, and put through the power to confirm the forward running of machine.
- (4) The tension of belt can be adjusted by moving the motor upward or downward. The proper tension of belt is slack of 10 ~ 20mm when the belt is depressed by finger.





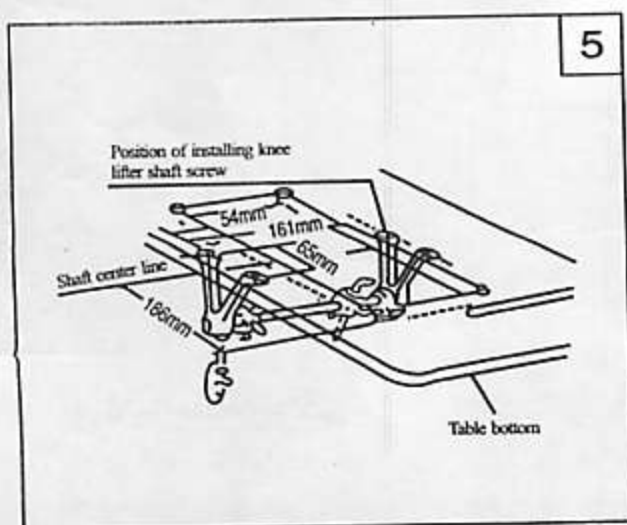
3. Installing the thread winder

Align pulley (A) of the thread winder with outside of the belt (B), and there should be a proper clearance between them. And be sure there is a proper pressure between pulley of thread winder and belt when press the winder vibrating lever (C) down. Meantime, the thread winder should be parallel to belt slid (D) of the table.



4. Connecting the clutch lever with pedal

- (1) Align the draw bar of the pedal and clutch lever by adjusting the position of pedal.
- (2) The optimum tilt angle of pedal with floor is 25~30 degree.



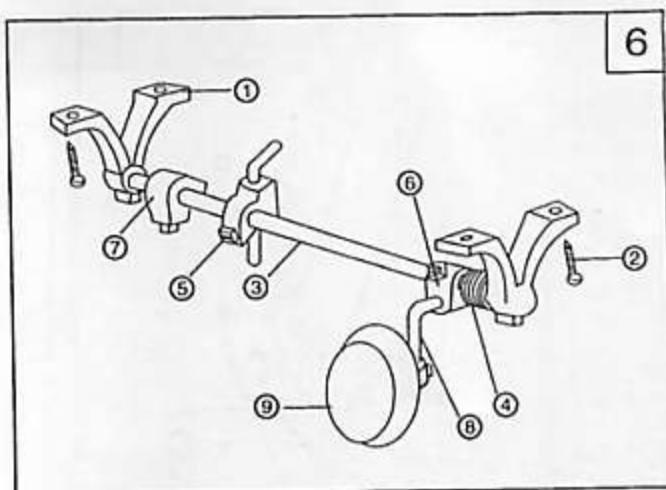
5. The installation and adjustment of knee lifter device

Install the knee lifter correctly at the mark of gable bottom shown as Fig.5.

- (1) Put the support ① on the mark of table bottom.
- (2) Fix the support on the table with the wood-screw ②.
- (3) Install the knee lifter lever ③ and then put the spring ④, knee lifter crank ⑤, connecting rod joint ⑥, knee lifter position assemble ⑦ on to the knee lifter lever orderly ⑧.
- (4) Ensure every parts be on their own position, and then tighten the screw.
- (5) Insert the knee lifter bar ⑧ into the connecting rod joint ⑥. Then put the pat assembly on the knee lifter bar.
- (6) Insert one side of the spring into the hole of the support ①, another side of the spring be putted on the knee lifter lever.

(7) Ensure the knee lifter device could work freely after installation.

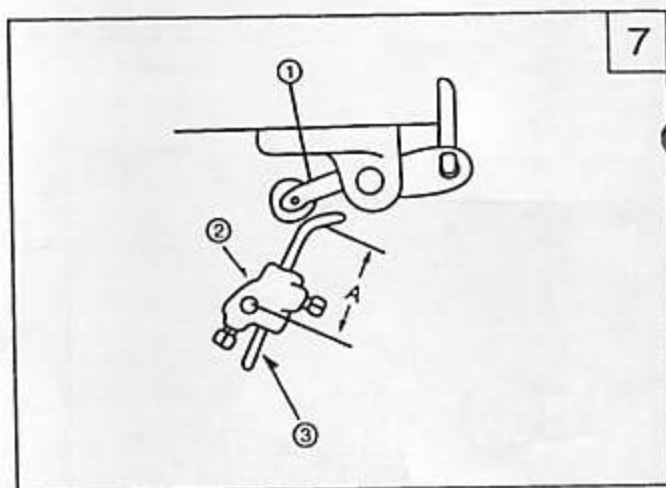
(8) Put the machine head on the table. Install the knee lifter connecting rod and adjust the parts according to the position of connecting rod joint.



Adjust the position of knee lifter bend lever (3) and crank roller (1) as shown in Fig.7. Then tighten the screw.

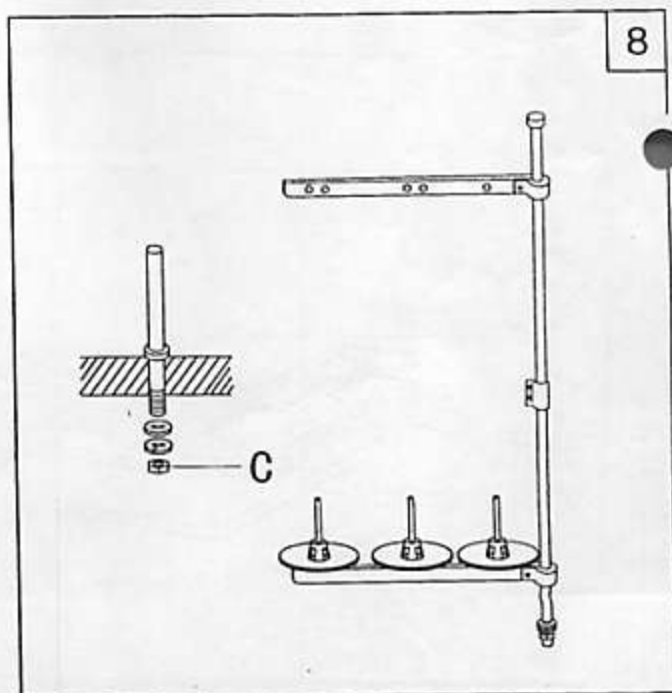
6. Installing the oil pan

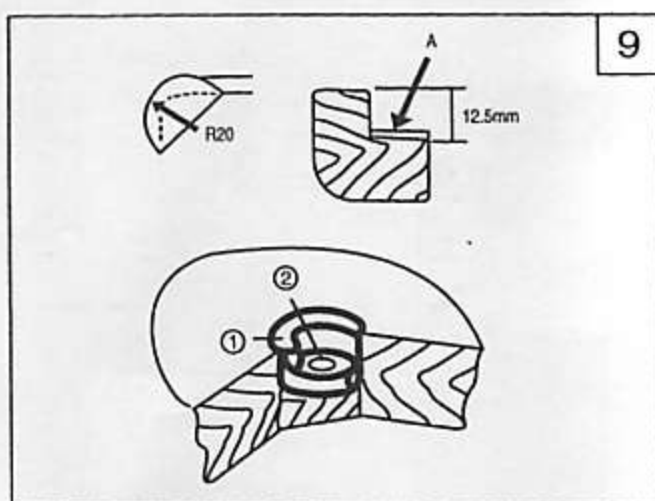
Fix the oil pan on the table with the screw and ensure the oil pan doesn't touch with the knee lifter device.



7. Installing the spool stand

Spool stand must be located at the right back of the table. Push machine head over and ensure machine head doesn't touch with the spool stand. Then tighten the nut (C).





9

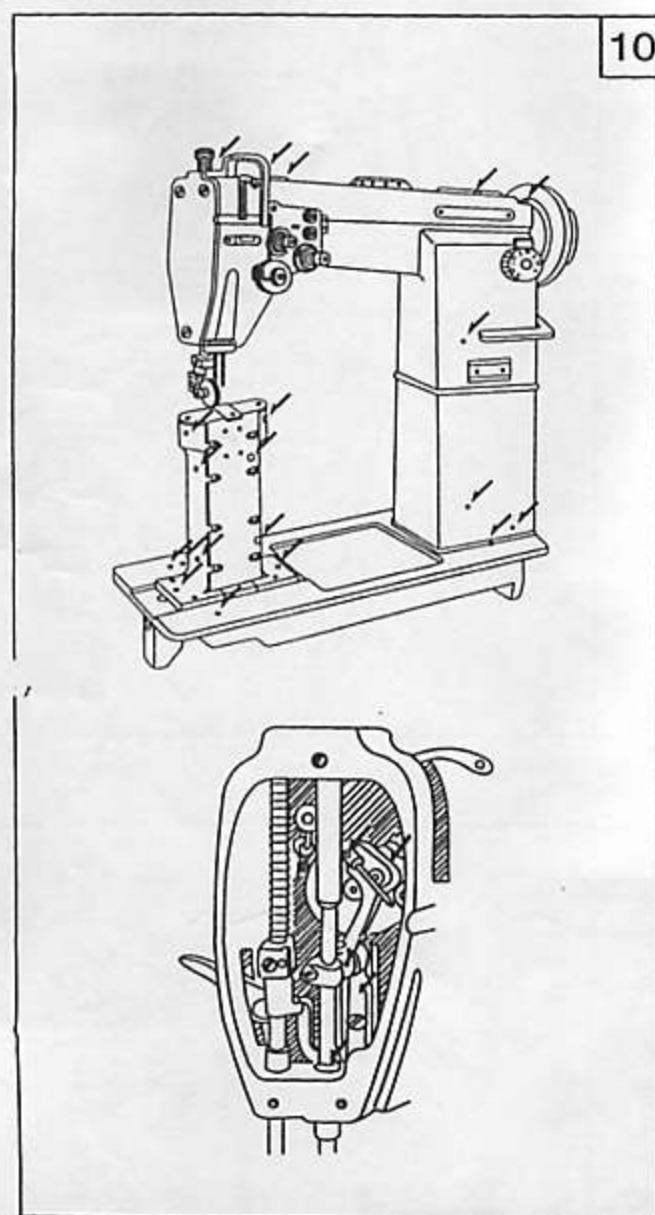
8. Installing the cushion

Ensure a smooth running, so the cushions should be fixed on four installation position correctly.

(1) There are four installation positions on the table.

(Radius=20mm, Height=13mm)

(2) Fix the four cushions on the installation position by screw.



10

IV Preparation

1. Cleaning the machine

(1) Remove the grease and dust coated on the machine head with clean soft cloth.

(2) Turn the balance wheel by hand to see if there is running abrasion parts collision, uneven resistance and abnormal noise. If any those situations exist, adjustment must be made accordingly before trial run.

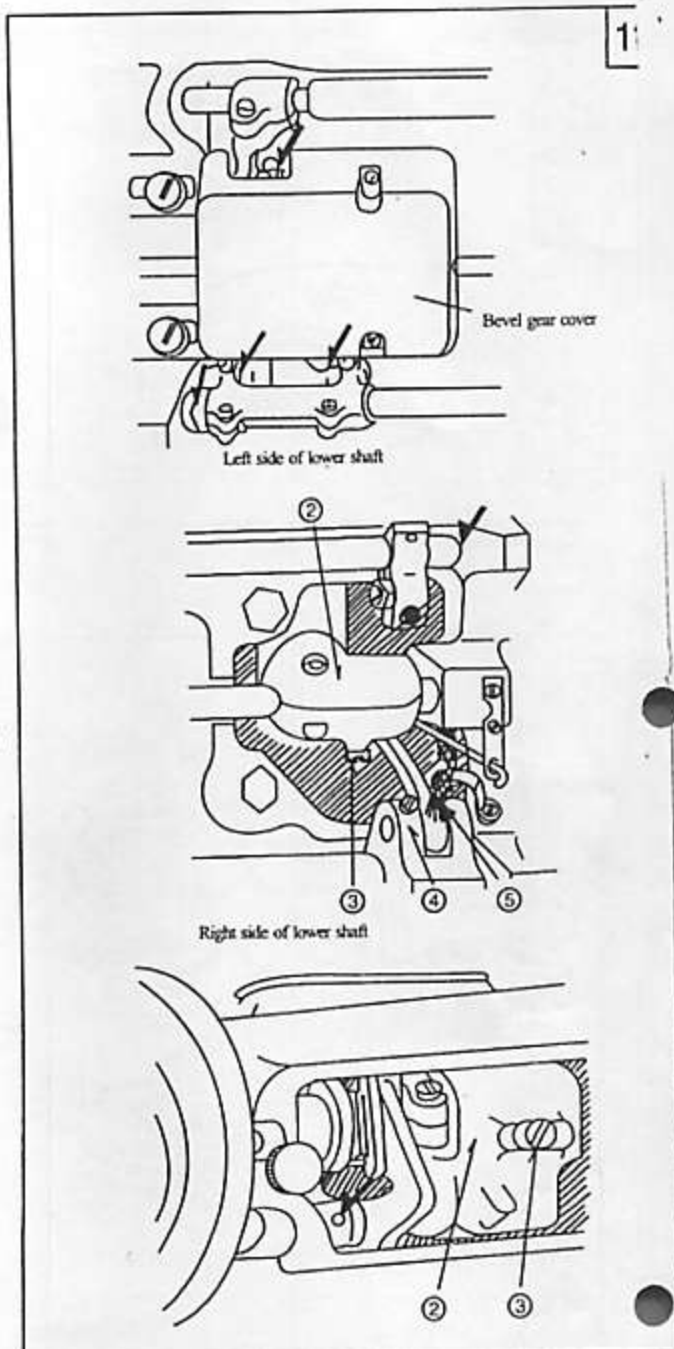
2. Lubrication

Add some oil into the oil hole of the machine head

- (1) Take down the rubber plug of the bevel gear cover
- (2) Then add some grease into it from the hole.
- (2) Take down the bevel gear cover at the left of the bed shaft and add some grease into it.
- (3) Saturate the wick (5) with oil because the wick can add oil for the feed crank (4).

3. Trail run

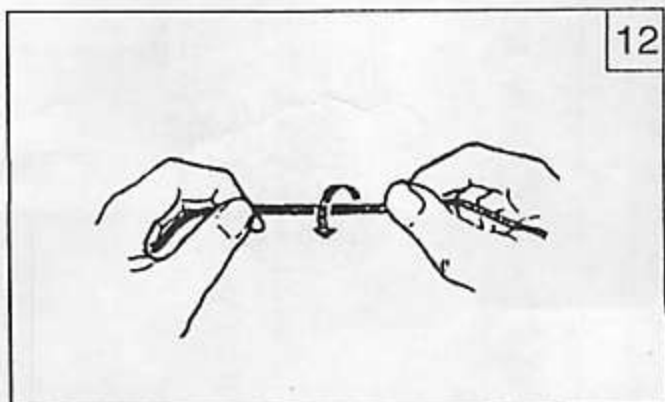
Please lift the roller presser foot and run the machine at a lower speed of 1200~1500s.p.m when machine is put into use or use again after operation for a long time. After running 30 minutes, increase up the sewing speed gradually.

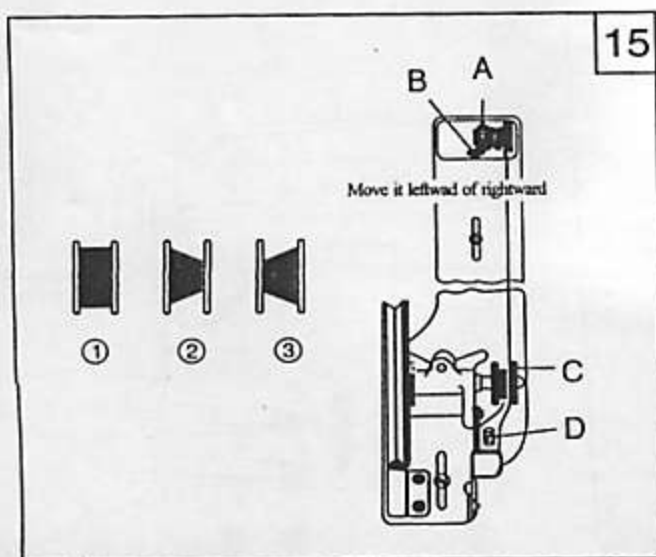
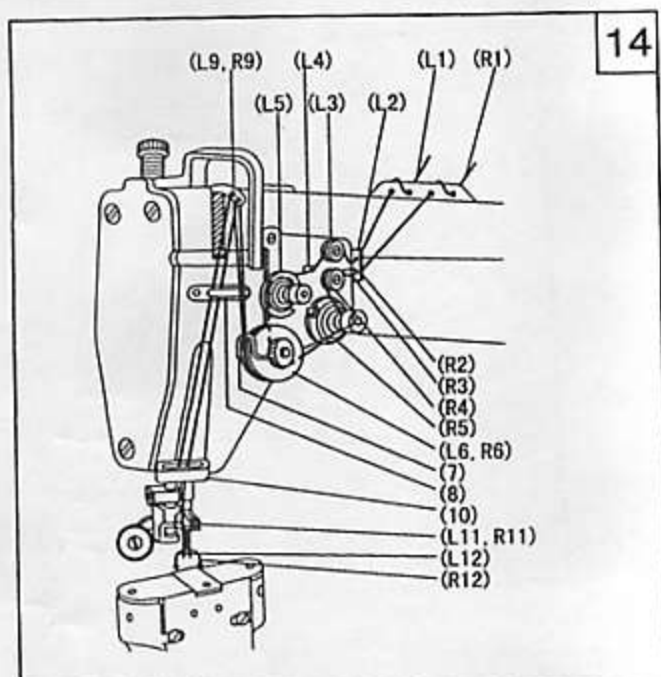
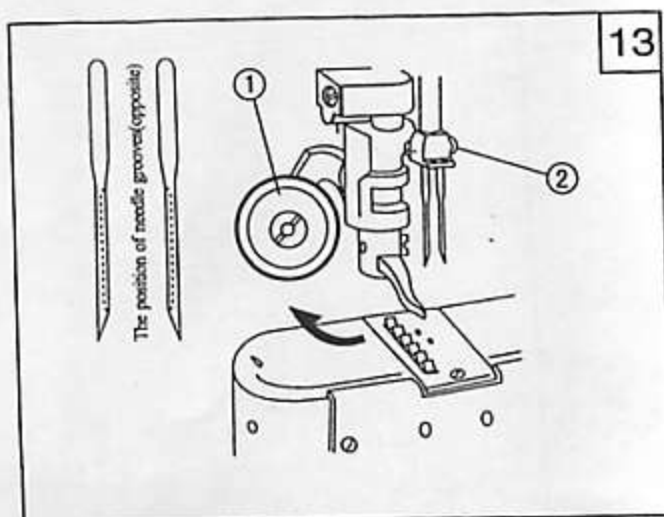


V Operation and adjustment

1. Choosing the thread (Fig.12)

- (1) The thread should be in good quality.
- (2) The thread should be left-twisted thread.
- (3) Identify the twist direction of the thread: hold the thread (shown in Fig.9), twist it upward by right hand. If it changes into twice, it is right-twisted. Contrary, it is left-twisted.





2. Installing the needle(Fig.13)

The needle is DP×5 12#~20#. Select needle depend on the thread.

Installation:

- (1) Lift the presser foot lifter, turn the balance wheel by the hand to lift the thread take-up lever to its highest position.
- (2) Open the roller presser foot(1)(Fig 13)
- (3) Loosen the screw(2).
- (4) Make the grooves of the two needles opposite, and then fully insert the needle shank up to the bottom of the needle bar.
- (5) Tighten the screw(2).

3. Passing the thread(Fig.14)

- (1) Turn the wheel by the hand to lift the thread take-up lever to its highest position.
- (2) Lift the presser foot lifter and open the roller presser foot.

(3) The order of passing the thread (fig 14)

Left: thread passing plate(L1)→thread tension position plate(upper)(L2)→thread tension disc(right)(L2')→thread passing pin(upper)(L3)→thread tension position guide(upper)(L3')→thread tension regulating disc(upper)(L4)→thread passing disc(inside)(L5)→spring (6)→thread guide(7)→thread take-up lever hole(upper)(L8)→thread guide(7)→lower thread guide(9)→needle guide(inside)(L10)→needle hole(left)(L11)

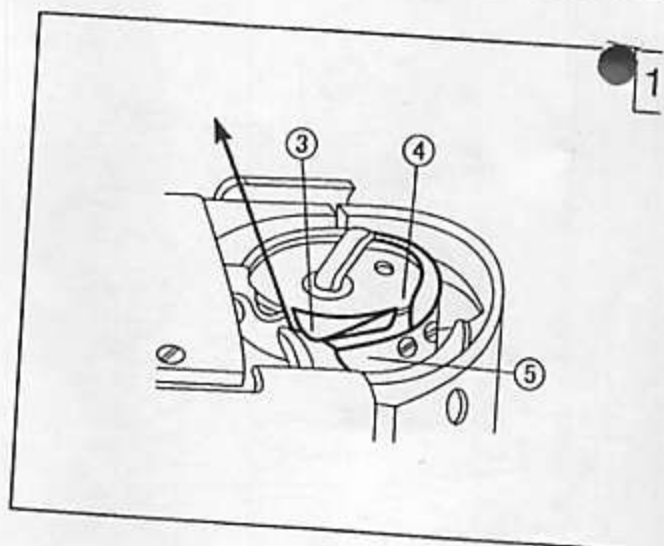
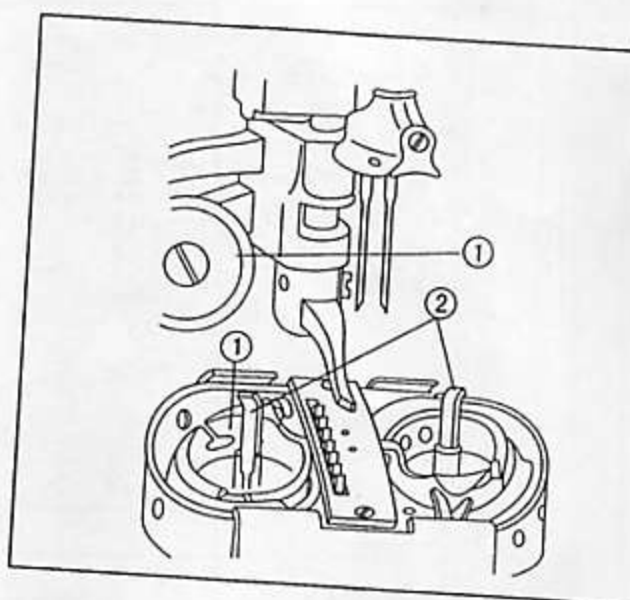
Right: thread passing plate(R1)→thread tension position plate(lower)(R2)→thread passing pin(lower)(R3)→thread tension regulating disc (lower)(R4)→thread passing disc(inside)(R5)→spring (6)→thread guide(7)→thread take-up lever hole(lower) (R8)→thread guide (7)→lower thread guide(9)→needle guide(outside) (R10)→needle hole(right)(R11)

4. Winding the bobbin thread and adjustment(Fig.15)

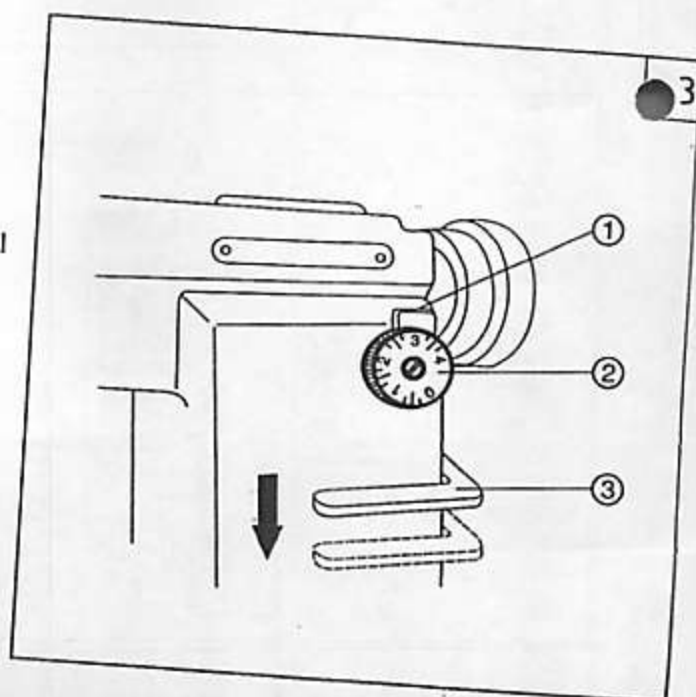
The bobbin thread should be neat and tight. If the thread is not tight, please enlarge the pressure of thread tension disc A. If the thread is not neat, please move the bracket to adjust it. First loosen the screw(B), if the thread is wound to one side show as Fig(2), please move the bracket rightward, if the thread is wound to one side shown as Fig.15(3), please move the bracket leftward. Move the bracket until the thread is neat shown as Fig.15(1), then tighten the screw. Don't from the bobbin thread, of thread will loosen down from the bobbin. The optimum capacity of bobbin thread, or thread will loosen down from the bobbin. The optimum capacity of bobbin thread is fill about 80% of bobbin outside diameter and this can be adjusted by screw. Notice: Nylon or polyester thread should be wound with light tension in particular. Otherwise, the bobbin (C) may be broken or deformed.

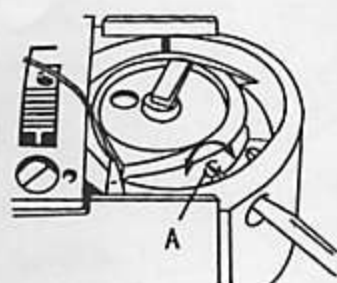
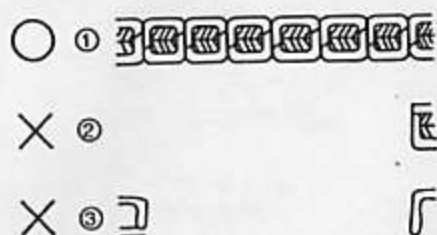
5. Installing the bobbin into the hook(Fig.16,17)

- (1) Turn the balance wheel by hand to lift the needle bar up to its highest position. Open the roller presser foot leftward.
- (2) Take down the left and right sliding plates
- (3) Open the bobbin lock②
- (4) Draw out the bobbin thread 50mm
- (5) Put the left and right bobbin into the hooks①
- (6) Close the bobbin lock②
- (7) Passing the 50mm thread through the hook groove④, then draw out the thread from the bottom of ③
- (8) Put the bobbin thread outside and nearby
- (9) Hold the left and needle threads by the left hand, and turn the balance wheel by the right hand.
- (10) Put the bobbin thread be drawn by the needle nearby.
- (11) Close the left and right sliding plates

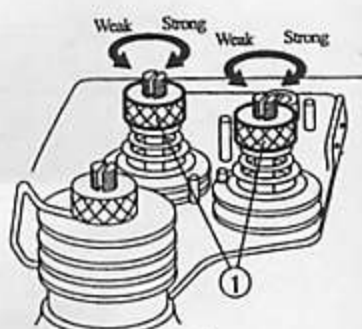


6. Adjusting the stitch length and reverse feed Push the plate and then turn the dial(②) to adjust the stitch length. The unit of measure is mm. It is normal feed when reverse lever(③) is at its natural status. Press the reverse lever to get the revers feed.

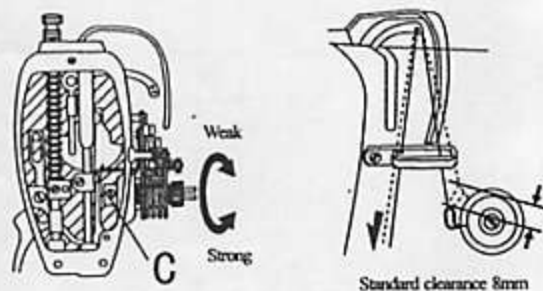




(1)

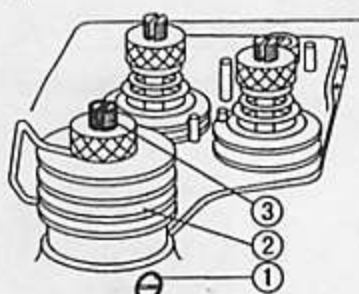


(2)



(3)

(3)



(4)

7. Adjusting the tension of bobbin thread and needle thread.(Fig.19)

The tension of needle thread and bobbin thread should be suitable. The stitch form shown as Fig.19(1) is the best. The abnormal stitch form shown as Fig.19(2) will occur when the tension is tight or loosen.

(1) Adjusting the tension of bobbin thread

The tension of bobbin thread should be adjusted according to the material.

① Turn the balance wheel by hand to lift the thread take-up lever to its highest position.

② Take down the sliding plate, the adjusting screw will be seen shown as Fig.(1)

③ Put the screw-driver in the hold(B), then turn the setscrew (A) clockwise. The tension of bobbin thread will be strong.

④ If turn the adjusting screw(A) counter-clockwise, the tension of bobbin thread will be weak.

(2) Adjusting the tension of needle thread

① Adjusting the pressure of thread tension disc

a. Generally, adjust the pressure of thread tension disc to change the tension of needle thread as Fig.(2)

b. Turn the nut ① clockwise to increase the pressure of thread tension disc. Contrary, reduce the pressure.

② Adjusting the tension of thread take-up spring.

Light material 20g

Common material 25g

Heavy material 30g

Adjustment:(Fig.(3))

a. Put down the presser foot lift

b. Loosen the thread take-up spring shaft screw(C).

c. The tension becomes weak by turning the thread take-up spring shaft clockwise. Contrary, it becomes strong.

d. Tighten the screw (C) after adjustment.

③ The swing range of thread take-up spring

The thread take-up spring should be able to swing when the thread take-up lever is at its highest position.

The range of thread take-up spring should be:

Light material over 8mm

Common material approx.8mm

Heavy material less 8mm

The method of adjusting swing range(Fig.(4))

a. Put down the presser foot lifter

b. Loosen the screw (1)

c. Turn the thread take-up spring limited disc (3) counter-clockwise, the swing range will increase. Contrary, the swing range will reduce.

D. Tighten the screw(1)

8. Adjusting the height of feed dog and the pressure presser bar

In order to fit sewing on different material, the height of feed dog and pressure of presser bar should be adjusted. Sewing on light material, if the height of feed dog is too high or pressure of presser bar is too strong, the material, if the height of feed dog is too low or pressure bar is too weak, the stitch will not be regular.

Light material	0.8mm
Common material	1.0mm
Heavy material	1.2mm

(1) The height of feed dog is the height between feed dog and needle plate when the feed dog is lifted up to its highest position.

- Push over the machine head
- Take down the bevel gearing grease cover
- Turn the balance wheel to lift the feed dog to its highest position
- Loosen the left crank (⑥) screw (⑤)
- Change the height of feed dog by adjusting left crank (⑥)
- Tighten the screw after adjustment.

(1) Adjusting the pressure of presser bar

Turn the setscrew (A) clockwise to increase the pressure of presser bar. Contrary, turn the screw counter-clockwise to reduce the pressure of presser bar. If it isn't satisfy with forward requirement after adjusting screw (A), fine adjustment can be done.

9. Adjusting the position of hook and needle (Fig. 21)

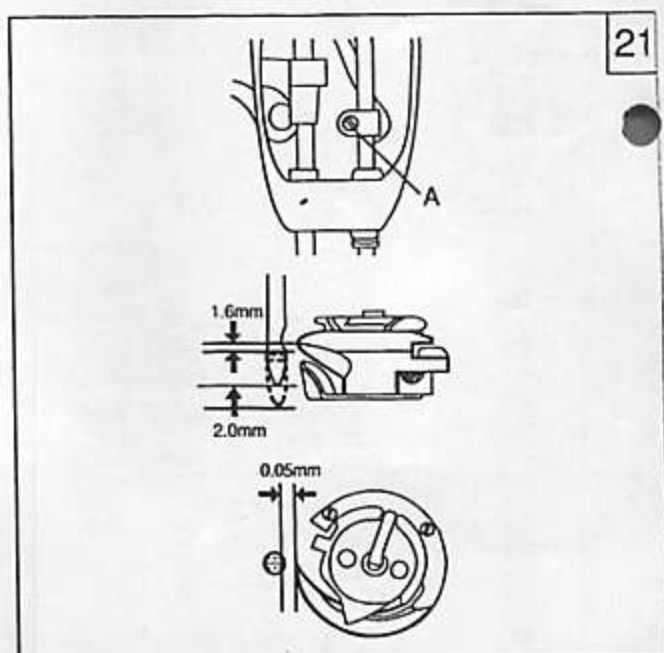
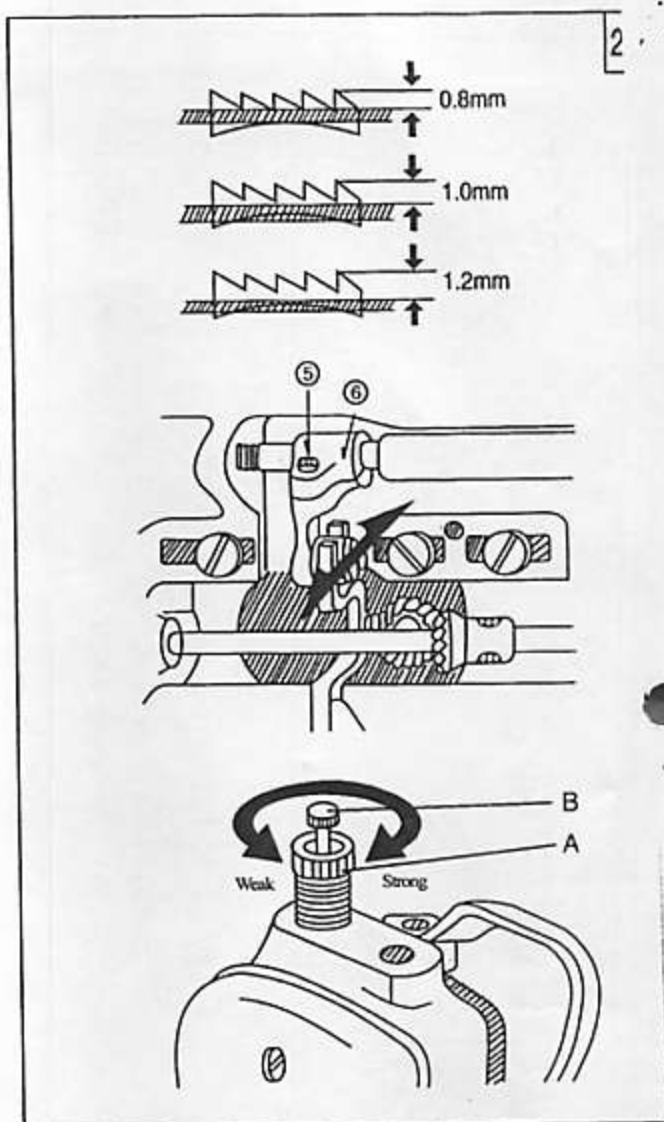
(1) Adjusting the position of hook and needle

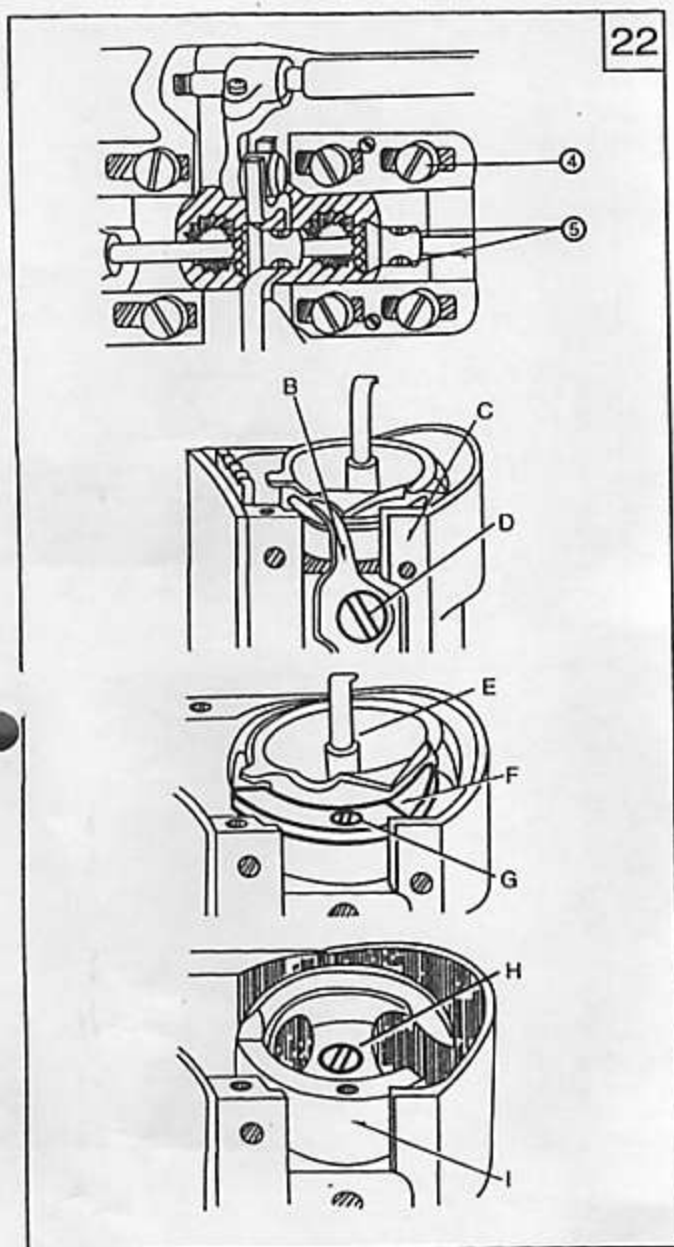
Lift the needle up to 2mm away from its lowest position. The correct position between the hook and needle: The needle eye is 1.6mm lower than the tip of hook. The tip of hook is opposite to the needle groove. There is a 0.05mm clearance between the tip of the hook and the needle groove.

The method of adjustment:

Adjusting the position of needle bar

- Turn the balance wheel to lift needle bar up to 2mm height away from its lowest position.
- Loosen the needle connector screw (A)
- Move the needle bar upward and downward to make the needle eye 1.6mm lower than the tip of hook.
- Tighten the needle bar connector screw (A) after adjustment.





22

② Adjusting the position of hook tip

- Take down the sliding plate and needle plate
- Push over the machine head
- Take down the small oil pan
- Loosen the bevel gear screw ⑤
- Turn the balance wheel to lift the needle up to 2mm away from its lowest position
- Turn the bevel gearing to make the tip of hook opposite to the center of needle groove
- Tighten the bevel gear screw ⑤ after adjustment
- Fix the bevel gearing grease cover

(2) Installation and uninstal of the hook

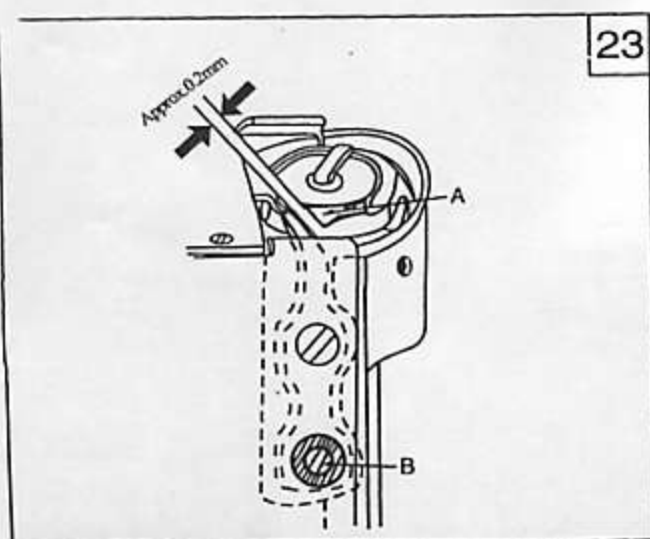
Please follow the steps to install and uninstal the hook of hook is damaged when operation

① Uninstalling the hook

- Turn the balance wheel to lift the needle bar to is highest position
- Take down the sliding plate, needle plate and bobbin
- Take down the front cover plate of hook shaft (C)
- Loosen the screw (D) and take out the thread separator (B)
- Take down the screw (G) and take out the presser plate (F)
- Take out the hook head (E) lightly
- Loosen the setscrew (H) and take out hook (I)

② Installing the hook

- Install the hook in the reverse order of uninstalling
- Pay attention to the hook installing direction is same as uninstalling direction.



23

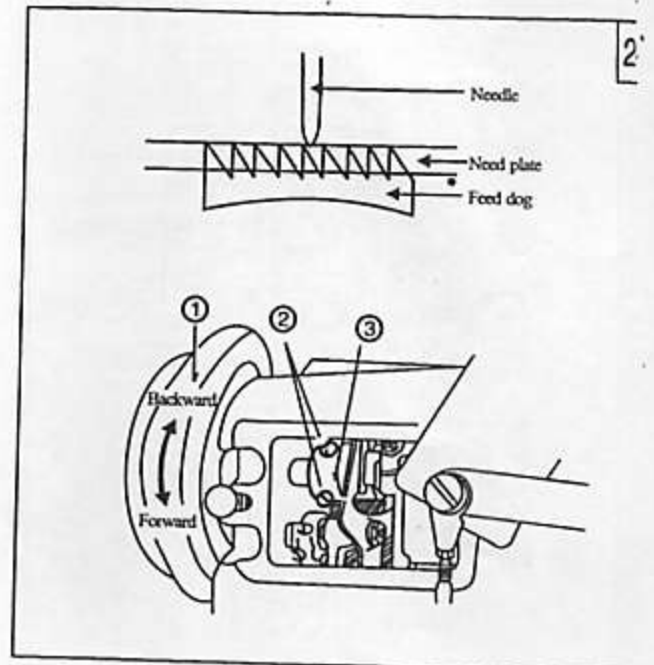
10. The relation between the hook and hook thread separator (Fig.23)

- Take down the sliding plate and front cover of post bed
- Turn the balance wheel to make the clearance between the hook and thread separator be the largest
- Loosen the screw (B) to make the clearance be 0.2mm. Different clearance depends on different thread.
- Tighten the screw (B) after adjustment.

11. Adjusting the position of the feed dog and needle (Fig.24)

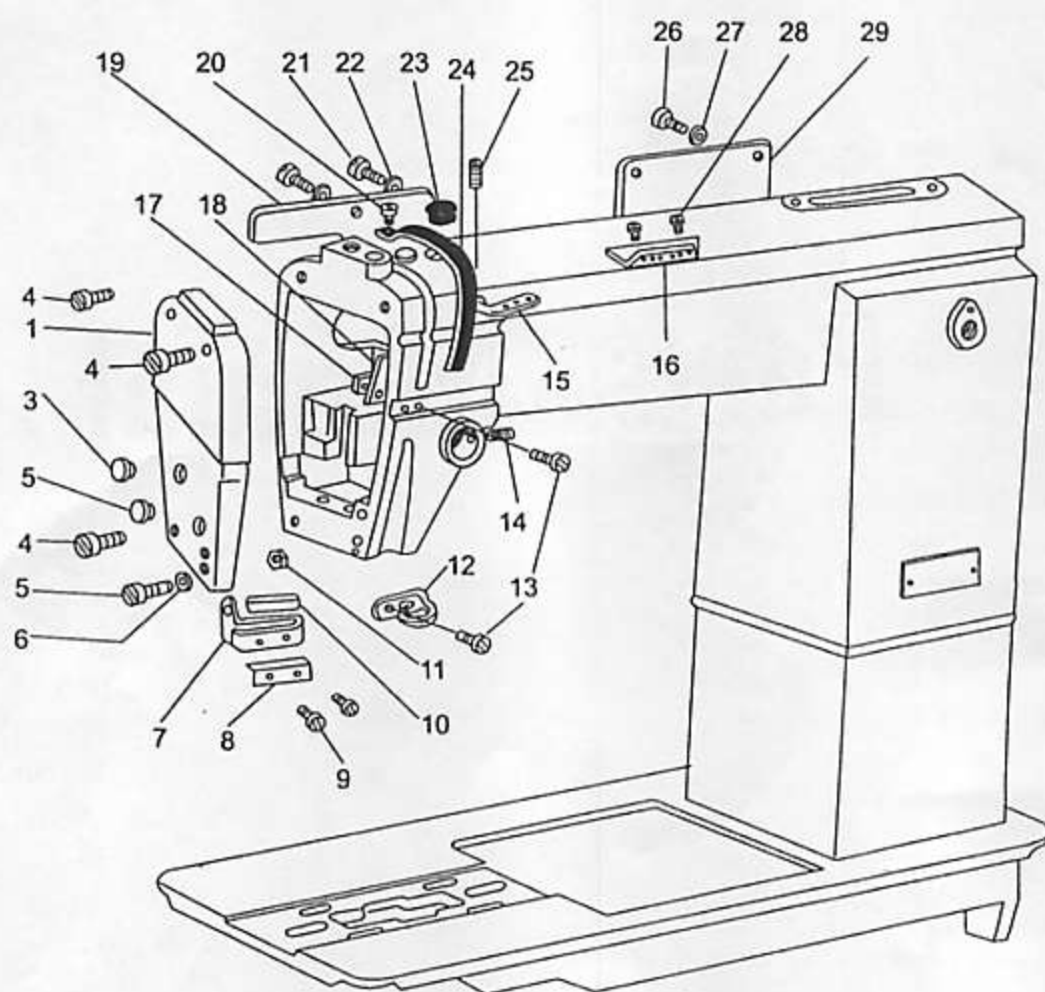
Fig.24 shows the position of feed dog and needle. When the feed dog go down to the flat of needle plate after finishing feeding, the needle point also go down to the flat of needle plate at this time.

- a. Take down the rear cover (②).
- b. Loosen the feed cam screw (③).
- c. Fixed the feed cam by one hand, turn the balance wheel to adjusting the timing of feed.
- d. Turn the balance wheel counter direction to reduce the timing of fee.
- e. Tighten the screw (②) after adjusting.



Parts Manual

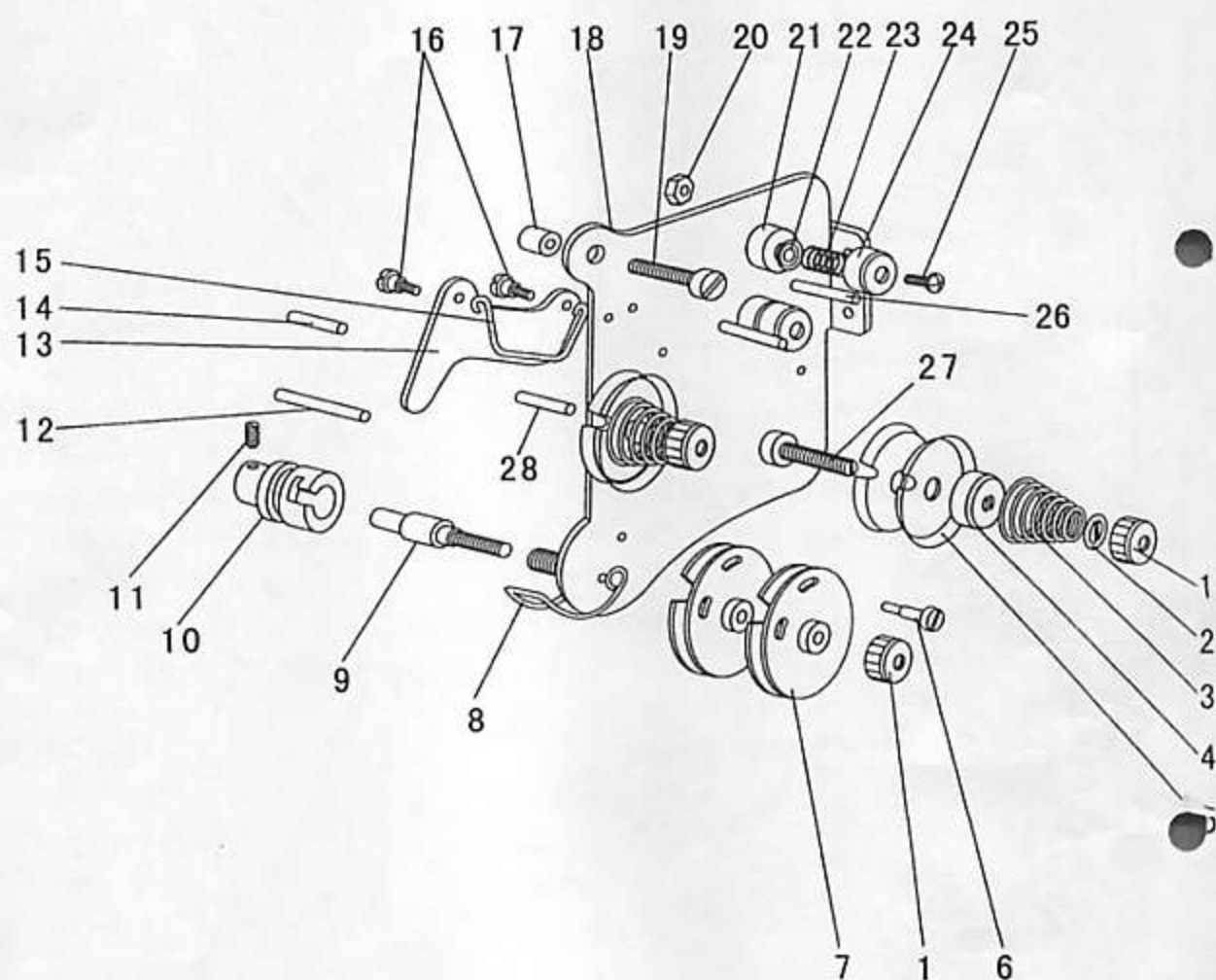
1. Bed Parts



1. Bed Parts

No.	Name	Parts No.	Qt.
1	Face plate	27WF2-005A	1
2	Plug (big)	22T1-003C3	1
3	Plug (small)	22T1-003C4	1
4	Screw	1WF5-042	3
5	Screw	1WF1-011	1
6	Washer	22T1-007	1
7	Lower thread guide	27WF2-005B	1
8	Presser plate	27WF2-005D	1
9	Screw	20T1-013F3	2
10	Oil felt	27WF2-005C	1
11	Nut	27WF2-005E	1
12	Upper thread guide	1WF1-008	1
13	Screw	1WF1-009	2
14	Screw	22T1-013	1
15	Three-eye thread guide	22T1-010	1
16	Upper thread retainer	1WF1-015	1
17	Block	1WF1-021	1
18	Oil stopper cover plate	1WF1-020	1
19	Oil stopper plate	27WF2-006	
20	Screw	1WF5-042	1
21	Screw	1WF1-011	2
22	Washer	22T1-007	2
23	Oil felt	27WF2-013	1
24	Safety device for thread take-up lever	27WF2-015	1
25	Screw	22T1-011	1
26	Screw	1WF1-011	3
27	Washer	22T1-007	3
28	Screw	1WF1-011	2
29	Rear cover	27WF2-007	3

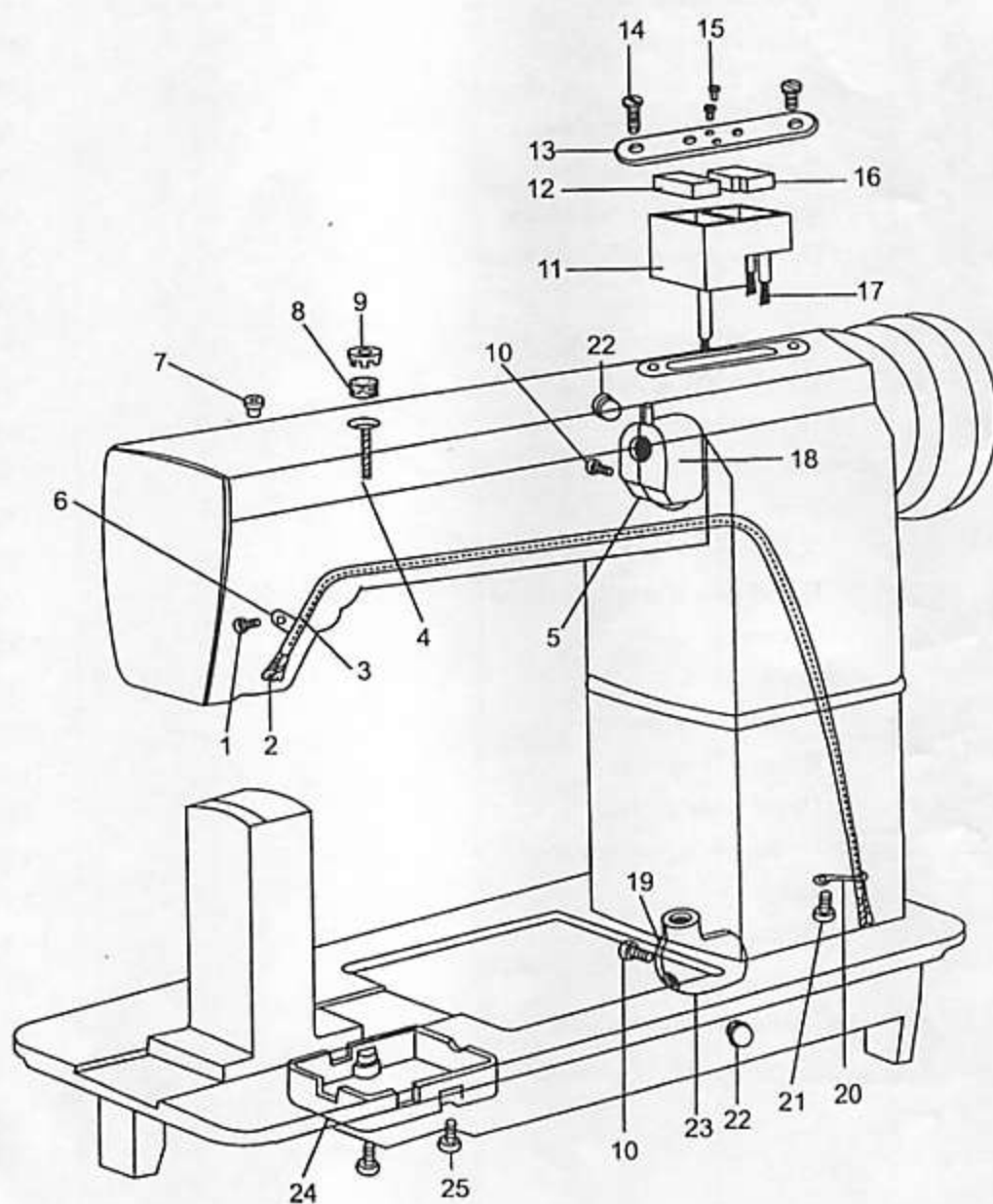
2.Thread tension assembly parts



2.Thread tension assembly parts

No.	Name	Parts No.	Qt.
1	Tension nut	27WF2-008A	2
2	Tension not stopper	22T1-012F10	2
3	Thread tension spring	27WF2-008B	2
4	Thread releasing plate	1WF1-010S	4
5	Thread tension disc	1WF1-010F	1
6	Screw	29WF-004	1
7	Thread controller complete	1WF1-010J	2
8	Thread take-up spring	19WF2-014	1
9	Shaft for thread take-up spring	29WF-005	1
10	Thread tension regulating bracket	29WF-006	1
11	Screw	22T1-012F8	1
12	Thread releasing pin(long)	1WF1-010L	1
13	Thread releasing plate	29WF-007	1
14	Thread releasing pin	29WF-020	1
15	Thread releasing spring	1WF1-010D	1
16	Screw	1WF1-010Q	2
17	Cushion	29WF-003	1
18	Thread tension assembling plate	1WF1-010A1	1
19	Screw	29WF-002	1
20	Nut	1WF1-010E3	2
21	Thread guiding bracket	1WF1-010B	2
22	Thread guiding plate	1WF1-010C	2
23	Thread guiding spring	1WF1-010D	2
24	Thread guiding bracket cover	1WF1-010E2	2
25	Screw	1WF1-010E1	2
26	Thread guiding rob	1WF1-010A2	2
27	Thread tension stud	1WF1-010A3	1
28	Thread releasing pin(short)	1WF1-010M	1

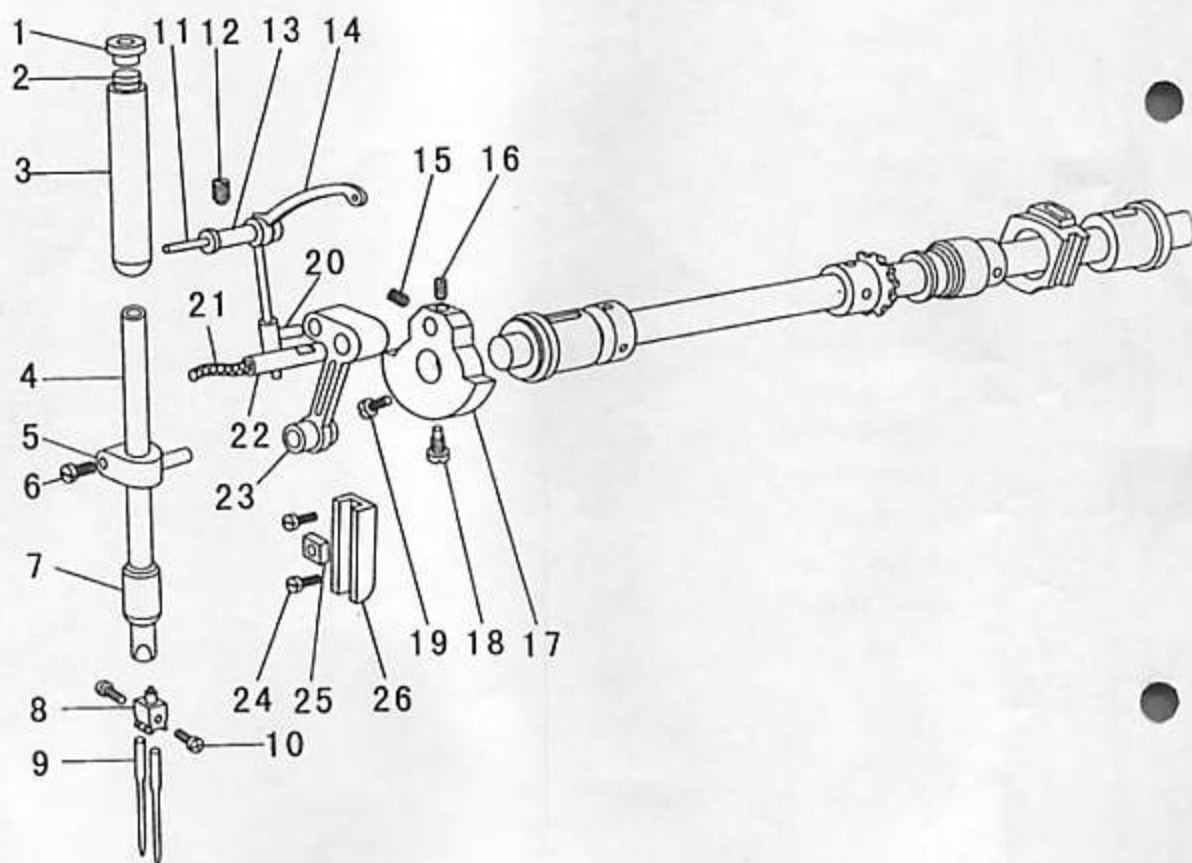
3. Lubrication parts



3. Lubrication parts

No.	Name	Parts No.	Qt.
1	Screw	16WF1-059	1
2	Oil wick		3
3	Oil pipe	27WF2-009A	1
4	Oil wick		1
5	Oil bag (front)	27WF2-016	1
6	Upper oil pipe clamp	1WF6-042	1
7	Oil out-let pad	27WF2-012	1
8	Oil felt	27WF2-013	1
9	Oil pad	27WF2-011	2
10	Screw		2
11	Oil box	27WF2-014B	1
12	Big oil felt	27WF2-014C	1
13	Upper cover	27WF2-014A	1
14	Screw	21WF4-055	2
15	Screw		2
16	Small oil felt	27WF4-014D	2
17	Long oil wick		1
	Short oil wick		1
18	Oil bag (rear)	27WF2-017	1
19	Oil bag (front)	27WF2-018	1
20	Lower oil pipe clamp	27WF2-010	1
21	Screw	21WF4-055	1
22	Rubble plug	22T1-017	2
23	Oil bag (rear)	27WF2-019	1
24	Oil box	27WF2-020	1
25	Screw	1WF3-009	2

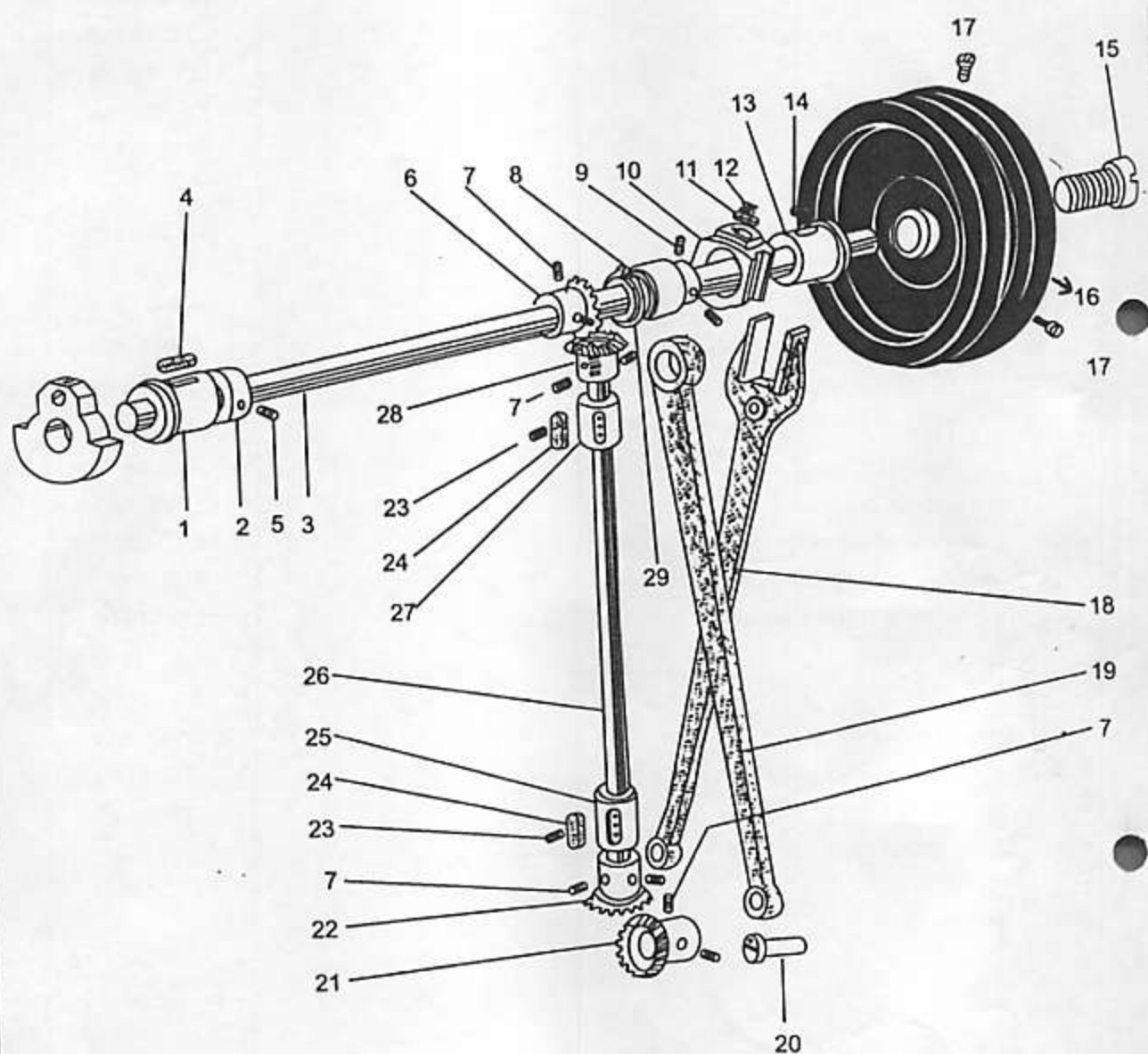
4.Thread take-up assembly parts



4.Thread take-up assembly parts

No.	Name	Parts No.	Qt.
1	Oil pad	22WF2-011	1
2	Oil felt	22T2-010	1
3	Needle bar upper bushing	27WF1-003	1
4	Needle bar	29WF1-001	1
5	Needle bar connector	22T2-001A8	1
6	Screw	22T2-001A9	1
7	Needle bar lower bushing	27WF1-004	1
8	Thread ring	27T2-015	1
9	Needle		2
10	Screw	22T2-017	1
11	Oil wick		1
12	Screw	JO.0.5	1
13	Thread take-up lever shaft	27WF1-007	1
14	Thread take-up lever	29WF1-015	1
15	Position screw for needle bar crank pin	22T3-002B2	1
16	Set screw	22T2-030	1
17	Needle bar crank	27WF1-005	1
18	Position screw for needle bar crank	22T2-007	1
19	Set screw for needle bar crank	22T2-006	1
20	Sliding bushing assembly	27WF1-008	1
21	Oil wick		1
22	Pin	27WF1-030	1
23	Needle bar link	27WF1-009	1
24	Sliding block guide rail screw	22T2-019	2
25	Sliding block	22T2-020	1
26	Sliding block guide rail	22T2-018	1

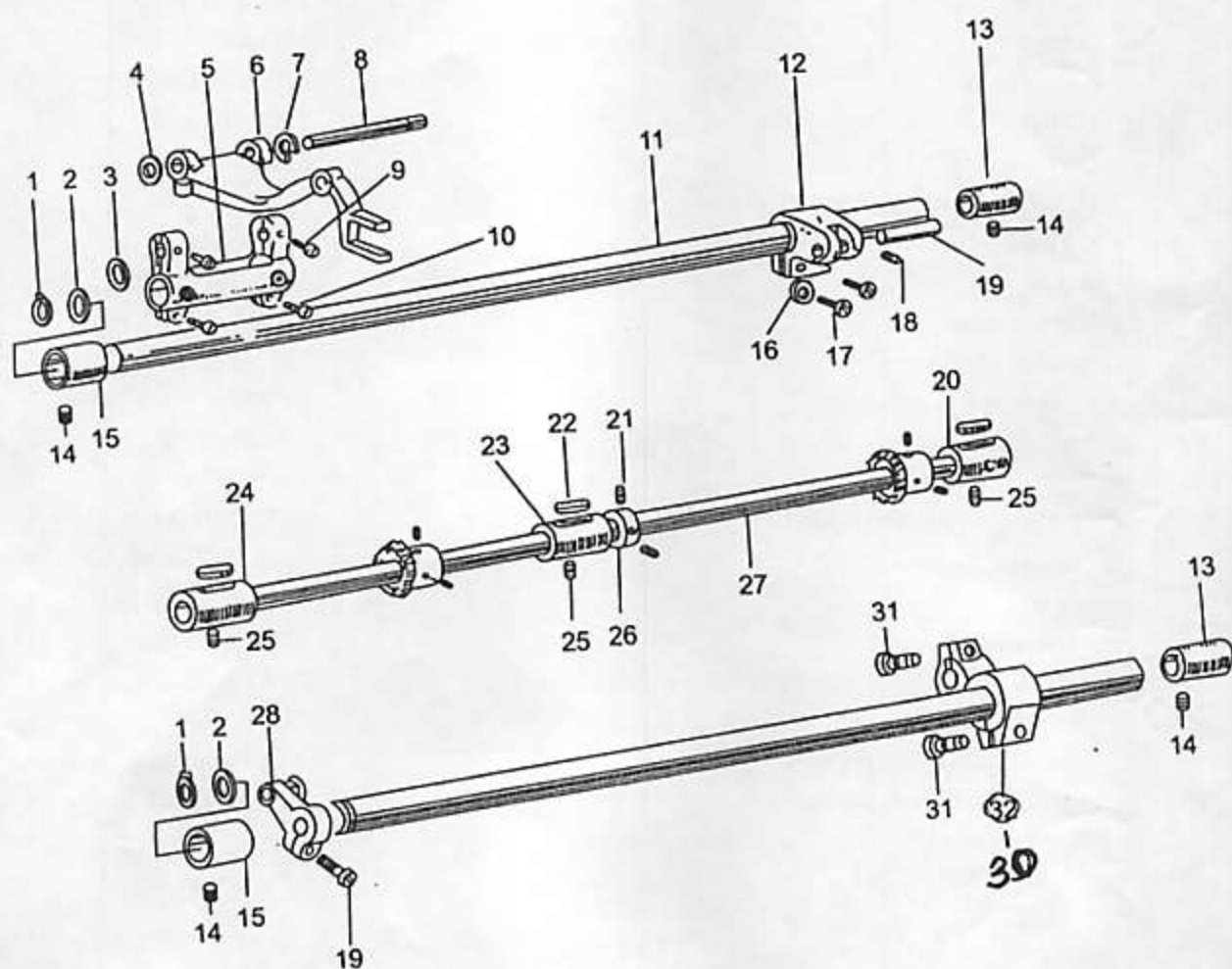
5. Upper shaft and vertical shaft parts



5.Upper shaft and vertical shaft parts

No.	Name	Parts No.	Qt.
1	Upper shaft bushing (left)	22WF1-011	1
2	Upper shaft collar	22T3-002B1	1
3	Upper shaft	27WF1-010	1
4	Oil felt	27WF1-012	1
5	Screw	22T3-002B2	2
6	Upper shaft bevel gear	22T3-010E2a1-2	1
7	Set screw	22T2-005B3	8
8	Feed cam	27WF3-013A	1
9	Screw	22T1-013	2
10	Sliding block	22T3-009D1a-2	1
11	Oil felt	33T2-015	1
12	Oil felt spring	33T2-016	1
13	Upper shaft bushing (right)	27WF1-013	1
14	Oil felt	22WF1-014	1
15	Screw	22T3-008	1
16	Balance wheel	27WF1-015A	1
17	Balance wheel screw	22T3-007C2	2
18	Feed drive fork connection	27WF3-014	1
19	Feed drive link	27WF3-013B	1
20	Pin	22T6-007	1
21	Upper shaft right bevel gear	22T3-010E2b1-2	1
22	Vertical shaft bevel gear (lower)	22T3-010E2b2-2	1
23	Screw	JO.0.40	2
24	Oil felt	27WF1-017B	1
25	Vertical shaft bushing (upper)	27WF1-018	1
26	Vertical shaft	27WF1-016	1
27	Vertical shaft bushing(upper)	27WF1-017A	1
28	Vertical shaft bevel gear (upper)	22T3-010E2a2-2	1
29	Retaining ring	6B894 31-66-20	1

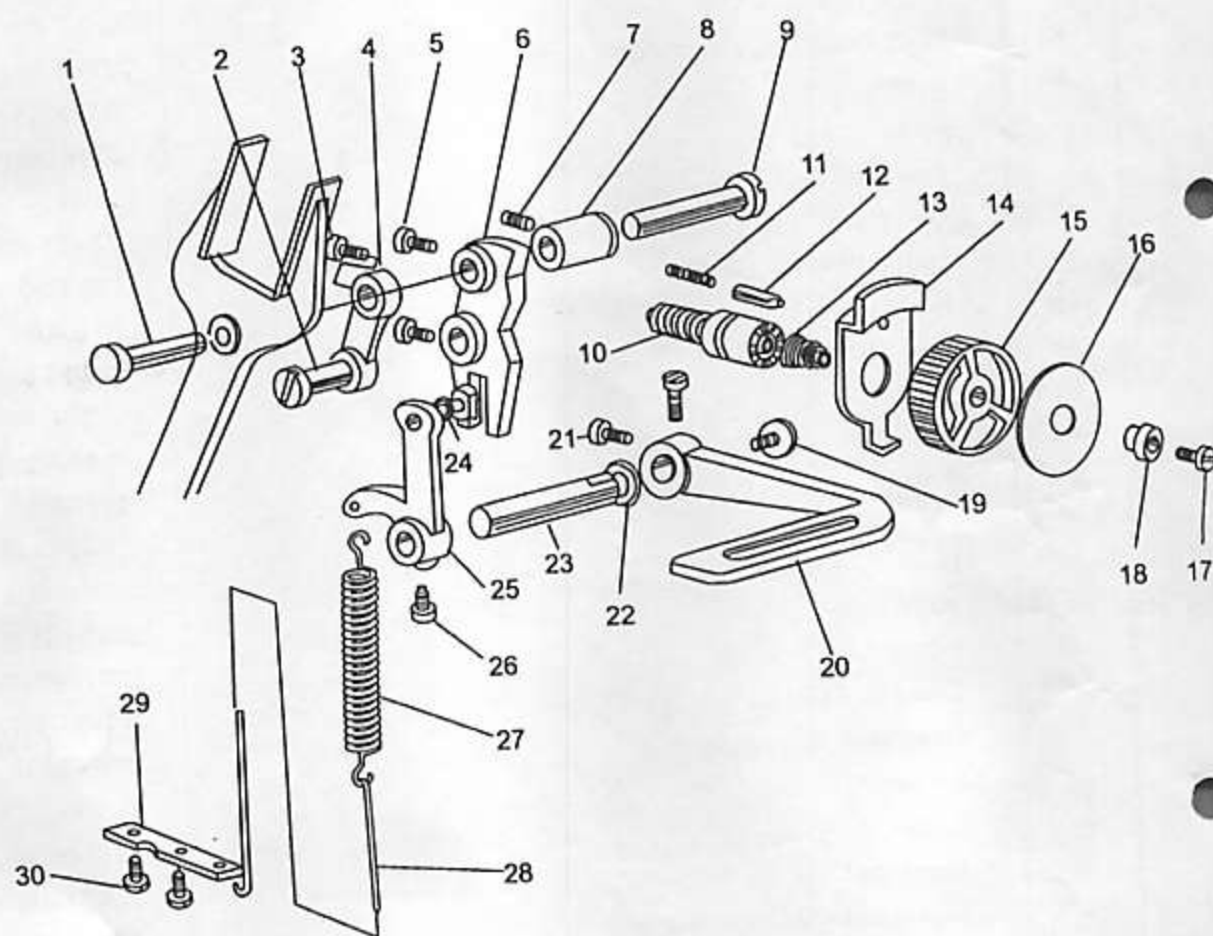
6.Feed drive lower shaft parts



6.Feed drive lower shaft parts

No.	Name	Parts No.	Qt.
1	Retaining ring for shaft.		
2	Washer		2
3	Washer	51T5-013	2
4	Washer	27WF3-006	1
5	Feed crank(left)	27WF3-007	1
6	Feed dog support	27WF3-021A	1
7	E-type retainer	27WF3-021C	1
8	Shaft for feed dog support crank		1
9	Screw	27WF3-021B	1
10	Screw	22T2-019	2
11	Feed drive shaft	22T6-008D3	2
12	Feed crank	27WF3-010	2
13	Feed shaft bushing (right)	27WF3-019A	1
14	Screw	27WF3-002	2
15	Feed shaft bushing(left)	JO.0.40	4
16	Washer	27WF3-001	2
17	Screw		1
18	Screw	22T6-008D3	2
19	Pin	22T1-011	1
20	Lower shaft bushing (left)	27WF3-020	1
21	Screw	27WF1-020A	1
22	Oil felt	20T2-018	2
23	Lower shaft bushing (middle)	27WF1-017B	1
24	Lower shaft bushing (right)	27WF1-017A	1
25	Set screw	27WF1-018	1
26	Collar	01/B308	3
27	Upper shaft	22T4-002B1	1
28	Feed drive crank (left)assembly	27WF1-019	1
29	Screw	27WF3-023	1
30	Feed drive crank	22T6-008D3	1
31	Screw	27WF3-022A	1
		22T6-001A1b	2

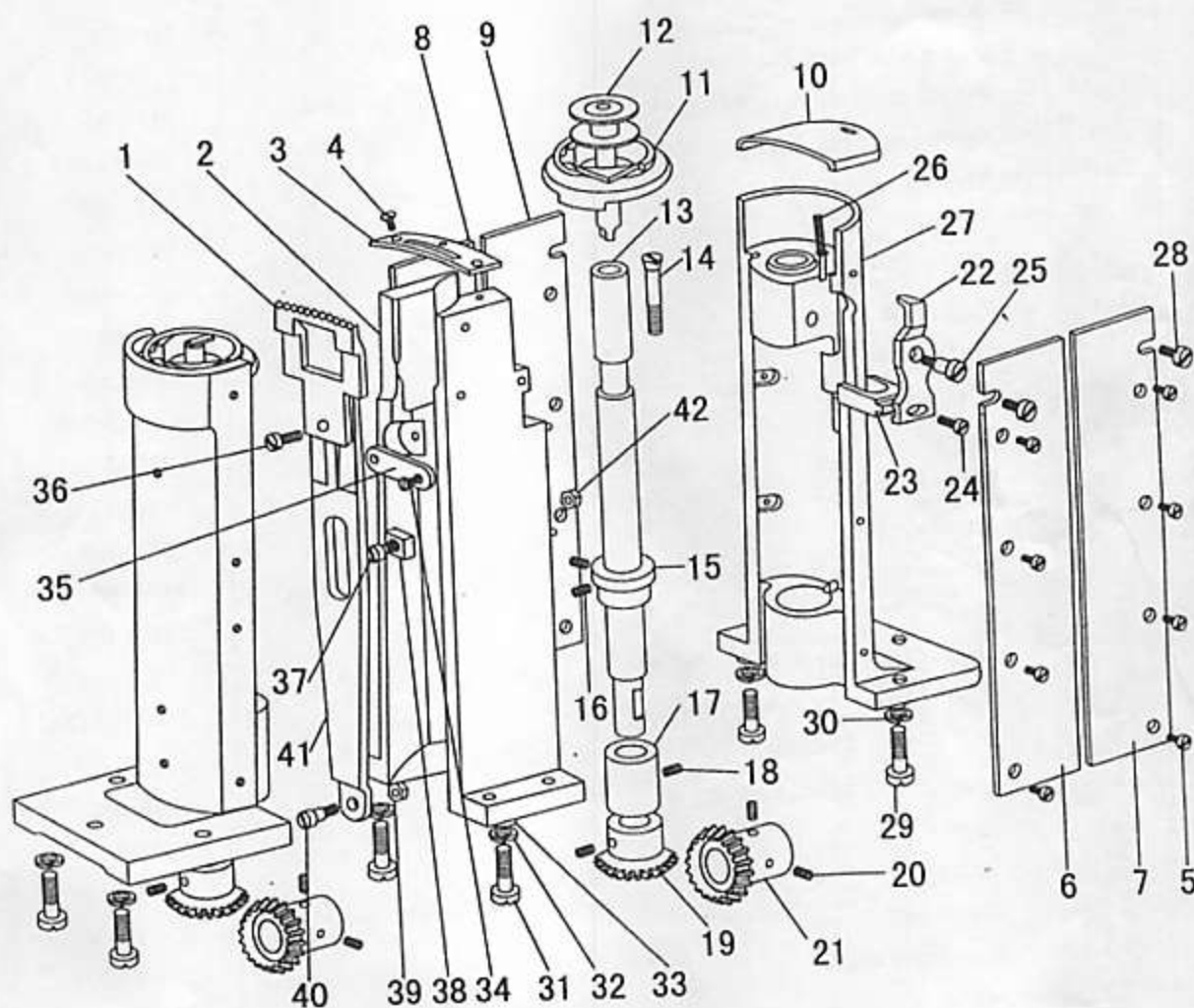
7. Stitch regulator parts



7. Stitch regulator parts

No.	Name	Parts No.	Qt.
1	Pin for feed drive fork connection	27WF3-011	1
2	Pin for stitch length connection	33T2-024-A	1
3	Screw	1WF2-038	1
4	Stitch regulator connecting link	22T5-001A2	1
5	Screw	1WF2-038	2
6	Swing lever for stitch regulator	22WF3-015A	1
7	Screw	JO.0.40	1
8	Swing lever hinge shaft bushing	27WF3-016	1
9	Pin for stitch regulator swing lever	22T5-004	1
10	Stitch length regulator screw	27WF3-018	1
11	Stop pin spring	22T5-009	1
12	Stop pin	36T5-012	1
13	Spring	36T5-011	1
14	Push plate	36T5-010	1
15	Dial cup	27WF3-004	1
16	Dial face	27WF3-003	1
17	Screw	27WF3-005	1
18	Screw bushing	36T5-007D4	1
19	Screw	22T5-010D3	1
20	Reverse feed control lever	27WF3-012B	1
21	Screw	1WF2-038	2
22	Reverse feed control lever washer	27WF3-012C	1
23	Short shaft for reverse feed control lever	27WF3-012A	1
24	Sliding block assembly	22T5-012E1a	1
25	Reverse feed control lever crank	22T5-012E1	1
26	Screw	22T5-013	1
27	Spring	27WF3-008A	1
28	Draw lever	27WF3-009	1
29	Draw lever bracket	27WF3-018	1
30	Screw	22T2-019	2

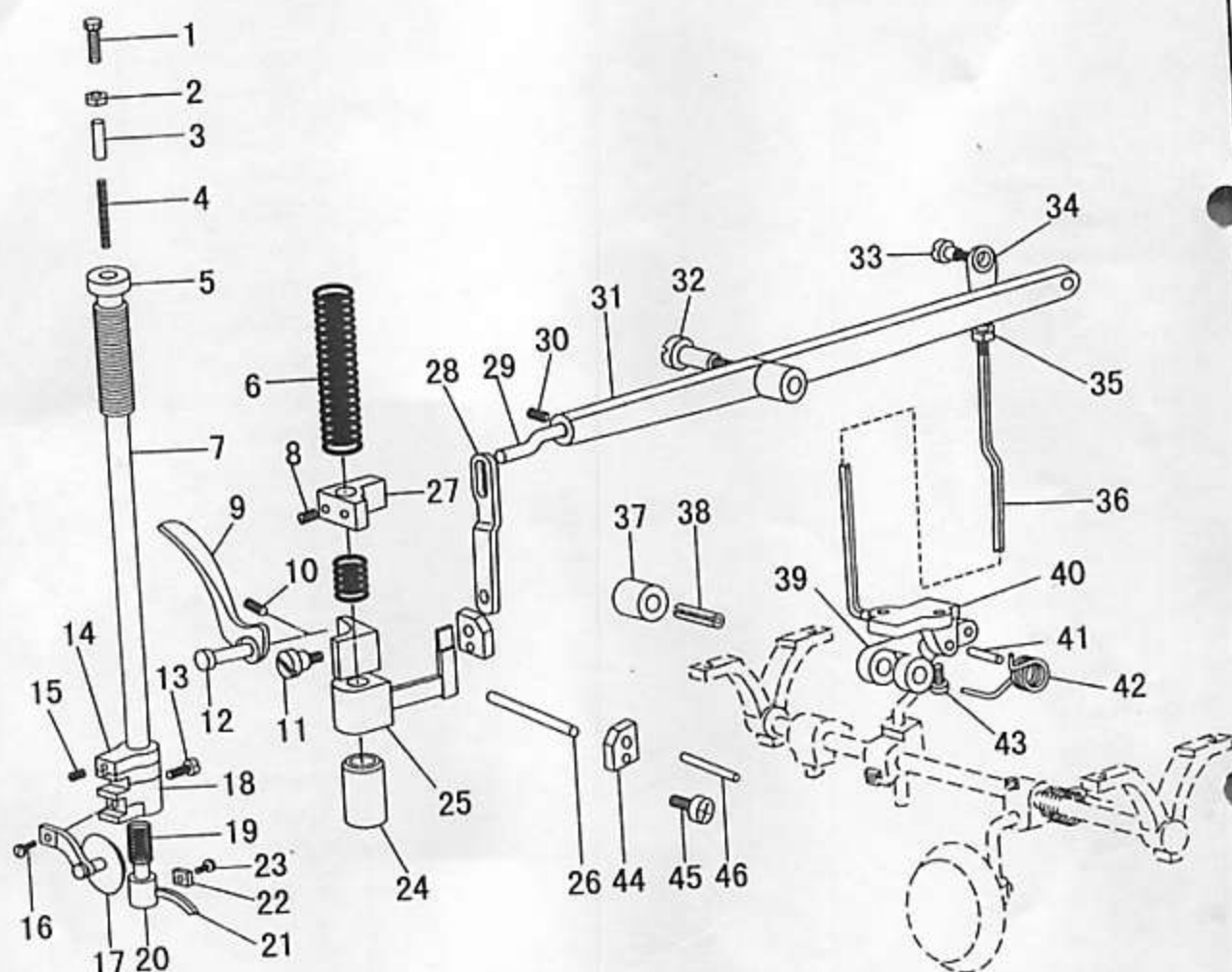
8. Post-bed parts



8.Post-bed parts

No.	Name	Parts No.	Qt.
1	Feed dog	25WF3-001	1
2	Post-bed	29WF-013	1
3	Needle plate	25WF-002	1
4	Screw	16WF2-027	2
5	Screw	16WF2-044	16
6	Cover of left post bed(front)	29WF-009	1
7	Cover of right post bed(front)	29WF-010	1
8	Cover of left post bed(rear)	29WF-011	1
9	Cover of right post bed(rear)	29WF-012	1
10	Retaining plate	16WF2-028	2
11	Rotary hook complete		2
12	Bobbin		2
13	Hook shaft	16WF1-063	2
14	Screw	27WF1-025	2
15	Collar	27WF1-027	2
16	Screw	27WF1-026A	2
17	Hook shaft bushing	22T3-002B2	4
18	Screw	27WF1-024	2
19	Gear(lower) of hook shaft	16WF1-032	2
20	Screw	27WF1-023A	2
21	Gear of lower shaft	22T3-002B2	8
22	Hook positioning bracket	27WF1-022A	2
23	Swing fork	27WF1-028A	2
24	Position fork	27WF1-028B	2
25	Screw	7WF5-008	2
26	Oil wick	27WF1-029	2
27	Post bed		2
28	Screw	27WF2-023	2
29	Screw	27WF2-030	2
30	Washer	16WF3-031	4
31	Screw		4
32	Spring washer	7WF5-039	2
33	Washer		2
34	Screw		2
35	Retaining plate	22T1-020	2
36	Screw	27WF3-024	1
37	Screw	22T2-004	1
38	Sliding block	27WF2-026	1
39	Nut	27WF3-025	1
40	Screw	27WF3-021F	1
41	Feed plate	27WF3-021E	1
42	Nut	27WF3-021D	1
		1WF2-074	1

9. Presser foot parts



9. Presser foot parts

No.	Name	Parts No.	Qt.
1	Fine adjusting screw		
2	Nut		
3	Column	27WF4-007	1
4	Fine adjusting spring	27WF4-008	1
5	Screw for adjusting pressure	27WF4-002	1
6	Spring	7WF5-027	1
7	Presser bar	27WF4-006	1
8	Screw for guide bracket	27WF4-005	1
9	Presser foot lifter bar	27WF4-001A	1
10	Screw	17T5-016	1
11	Screw	27WF4-009	1
12	Pin	17T5-016	1
13	Screw	27WF4-010C	1
14	Position block	27WF4-004	1
15	Screw	27WF4-001F	2
16	Screw	27WF4-001C	1
17	Roller presser foot complete	22T1-013	1
18	Roller presser foot clamp	27WF4-020	1
19	Spring	29WF2-016	1
20	Aided presser foot bracket	27WF4-001B	1
21	Aided presser foot	27WF4-001D	1
22	Washer	25WF4-001	1
23	Screw	25WF4-002	1
24	Bushing	25WF4-003	1
25	Lifting block	25WF4-004	1
26	Thread releasing rob	22T7-009	1
27	Guide bracket	27WF4-010A	1
28	Connecting lever	27WF4-011	1
29	Pin	27WF4-003	1
30	Screw	27WF4-010B	1
31	Knee lifter cutting lever	27WF4-014B	1
32	Screw	01/B602	1
33	Connecting screw	27WF4-014A	1
34	Connector	27WF4-015	1
35	Nut	27WF4-018	1
36	Knee lifter drawing lever	27WF4-017	1
37	Gyro roller	1WF2-074	1
38	Elastic pin	27WF4-016	1
39	Crank	27WF4-019A	1
40	Crank bracket		1
41	Pin	27WF4-019B	1
42	Spring	27WF4-019C	1
43	Screw		1
44	Connecting block	27WF4-019D	1
45	Screw	28WF4-005	2
46	Pin	29WF-019	1
		J0.0.50	1
		29WF-019	1

10. Accessories

