

Sun Special

SSTC-6-7D

SSTC7-8-D

**HIGH SPEED MEDIUM AND HEAVY DUTY COMPOUND
FEED LOCKSTITCH SEWING MACHINE**

OPERATION INSTRUCTION / PARTS MANUAL

** Transporta Triple Power*

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Operation Instruction

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1. Main technical specifications

Application: medium and heavy-duty

Max sewing speed :3000 spm

Max stitch length: 0~8mm

Presser foot lift: hand 6.5mm, knee controlled ≥ 13 mm

Needle: Model DPX17#18~#22

Hook: big rotating hook

Lubrication:auto lubrication

Motor power 370W (clutch motor).

2. Preparation

(1) Cleaning machine

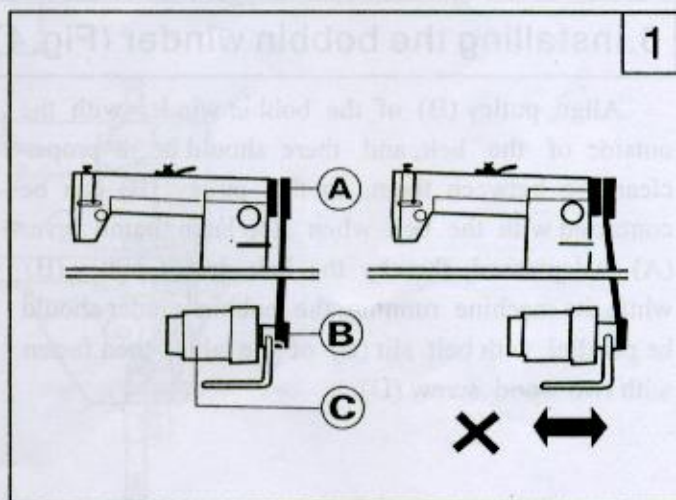
Clean off the grease and dusts on the surface of machine with gasoline and soft cloth.

(2) Inspection

Before use a thorough inspection should be done upon the machine. Turn balance wheel slowly to see if there is any obstruction, collision and uneven resistance between parts. If there is, adjustment should be done before operation.

3. Installing the motor(Fig.1)

Align machine balance wheel belt groove (A) with motor pulley belt groove (B) by moving the motor (C) leftward or rightward. Be sure the belt is not touch with table.



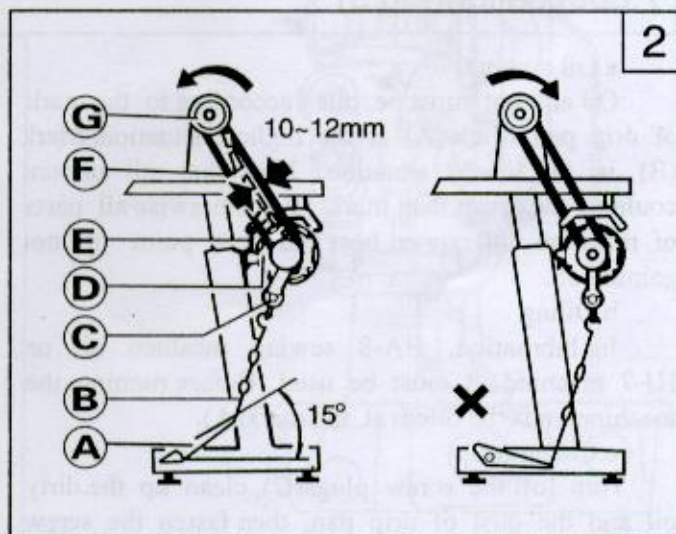
4. Connecting the clutch lever to the pedal (Fig.2)

a. The optimum tilt angle of pedal with floor is approx 15 degree.

b. Adjust the clutch of the motor so that clutch lever (C) and draw bar (B) run in line as Fig. 6, the machine would have stable motion and long using.

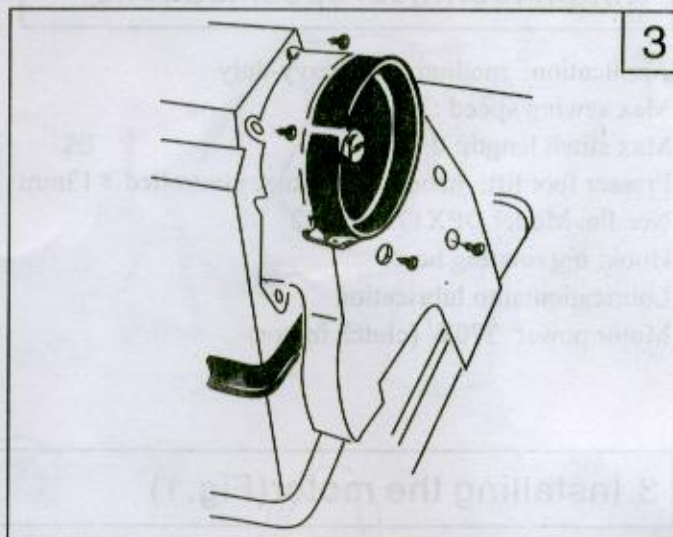
c. The machine balance wheel should rotate counter clockwise for normal sewing when view from opposite side of the balance wheel. The motor rotates in the same direction. The rotation can be reversed by reversing (turn over 180 deg.) the plug of the motor.

d. Adjust the tension of V-belt F by moving the motor vertically. The proper tension if V-belt is a slack of 10 ~ 12mm when the belt is depressed (at the belt pan) by finger.



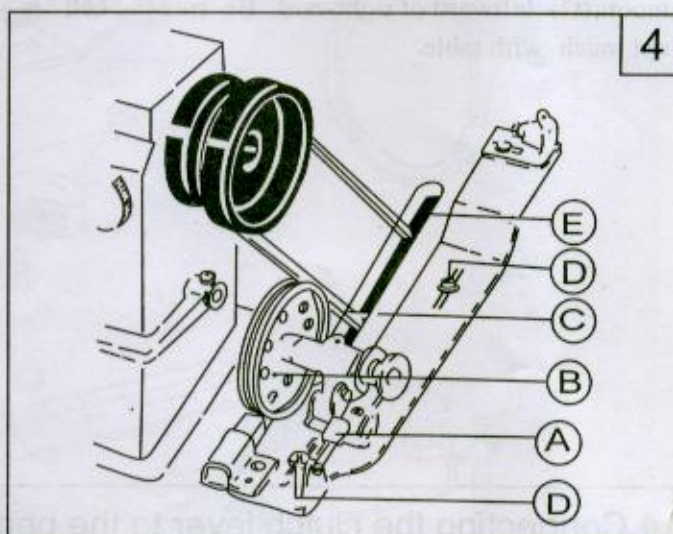
5. Installing belt guard(Fig.3)

The belt guard should be installed for safety.



6. Installing the bobbin winder (Fig.4)

Align pulley (B) of the bobbin winder with the outside of the belt, and there should be a proper clearance between them, so that pulley (B) can be contacted with the belt when stop latch thumb lever (A) is depressed, thereby the belt drives pulley (B) while the machine running, the bobbin winder should be parallel with belt slit (E) of the table, then fasten with two wood screw (D).



7. Lubrication(Fig.5)

a. Oil amount

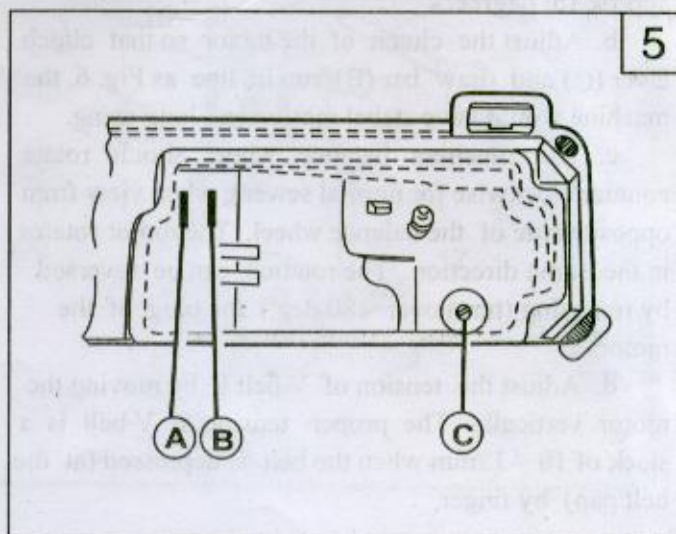
Oil amount must be oiled according to the mark of drip pan. Mark (A) is the highest situation, Mark (B) is the lowest situation, Note that oil amount couldn't be lower than mark (B), otherwise all parts of machine will apper heat and dead point for not gaining oil.

b. Oiling

In lubruation, HA-8 sewing mcchien oil or HJ-7 machine oil must be used. Before running, the machine must be oiled at the mark(A).

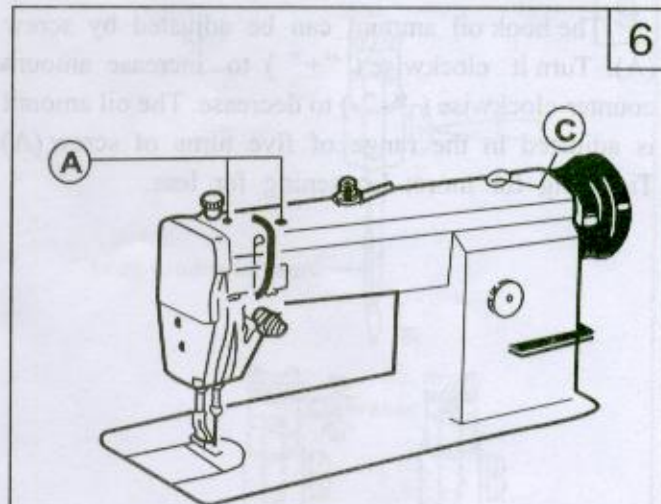
c. Changing

Turn off the screw plugs(C), clean up the dirty oil and the dust of drip pan, then fasten the screw plugs (C), add fresh oil

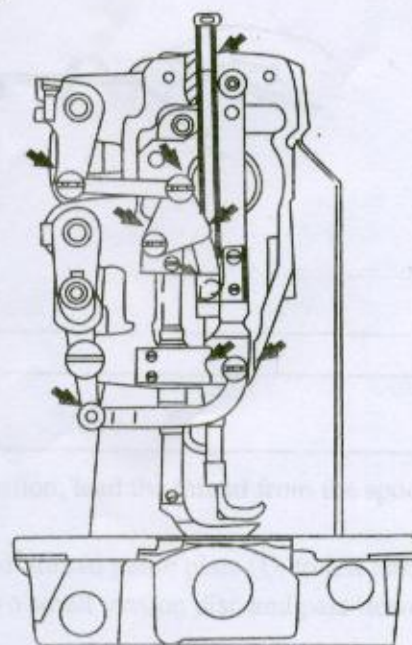
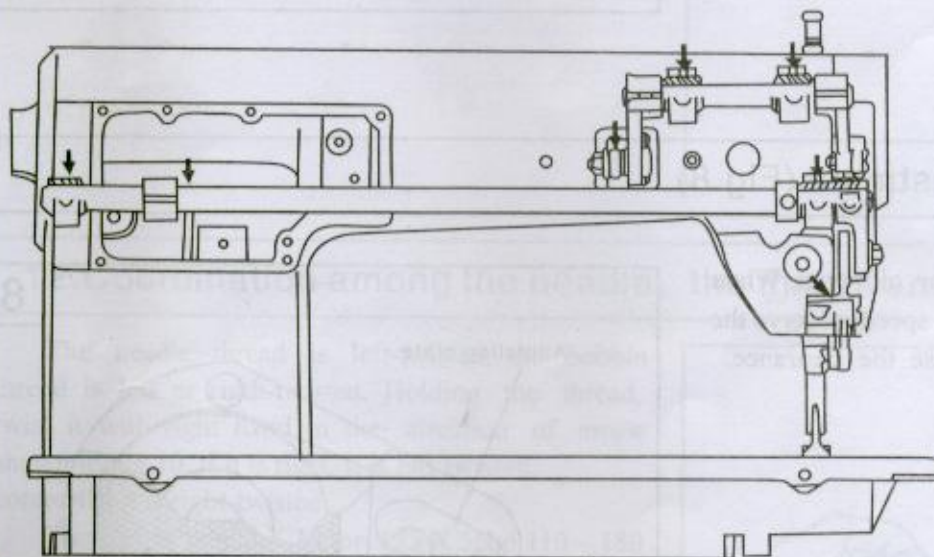


8. Trial run (Fig.6)

The machine is designed specially with plunger automatic lubricating system, so it can run with normal speed. In order to increase the using time of machine, when the machine left out of operation for a quite long time is used again. Turn off the rubber plug top of the machine head, oil it thoroughly, then lift the presser foot and run at a low speed with 1500 spm, observe the spurt through oil flow window, as the lubrication is well, keep the running test at the low speed about 20 minutes, increase the speed gradually, after month's running, according to the conditions which operate, then increase up to proper sewing speed.

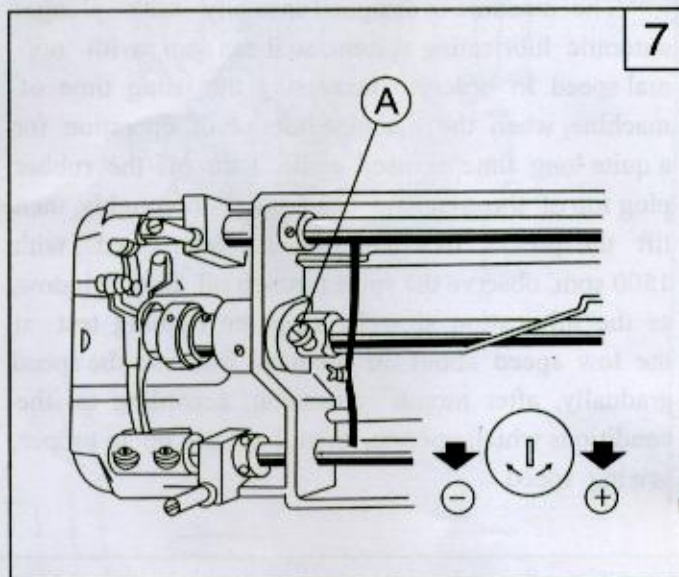


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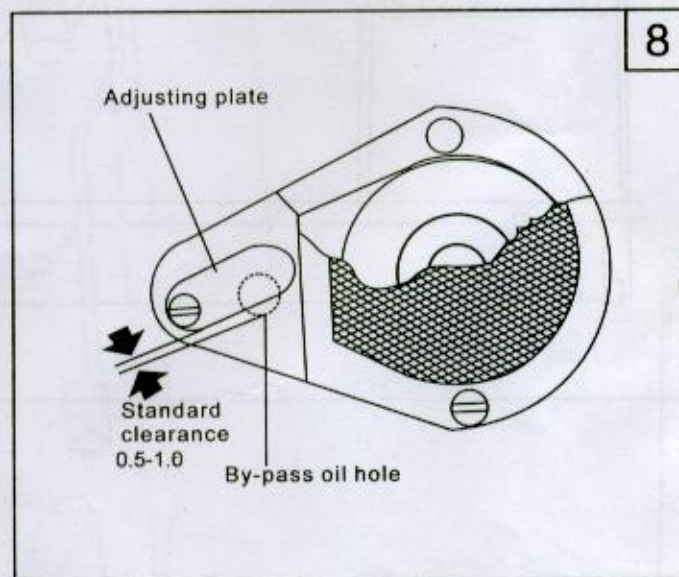
9. Rotating hook oil amount adjustment (Fig.7)

The hook oil amount can be adjusted by screw (A). Turn it clockwise ("+") to increase amount; counter-clockwise ("-") to decrease. The oil amount is adjusted in the range of five turns of screw (A): Tightning for more; Loosening for less.



10. Oil pump supply adjustment (Fig.8)

Generally no adjustment is for oil pump. When the machine is running at a low speed, observe the oil screen. If no oil splashing, close the clearance.

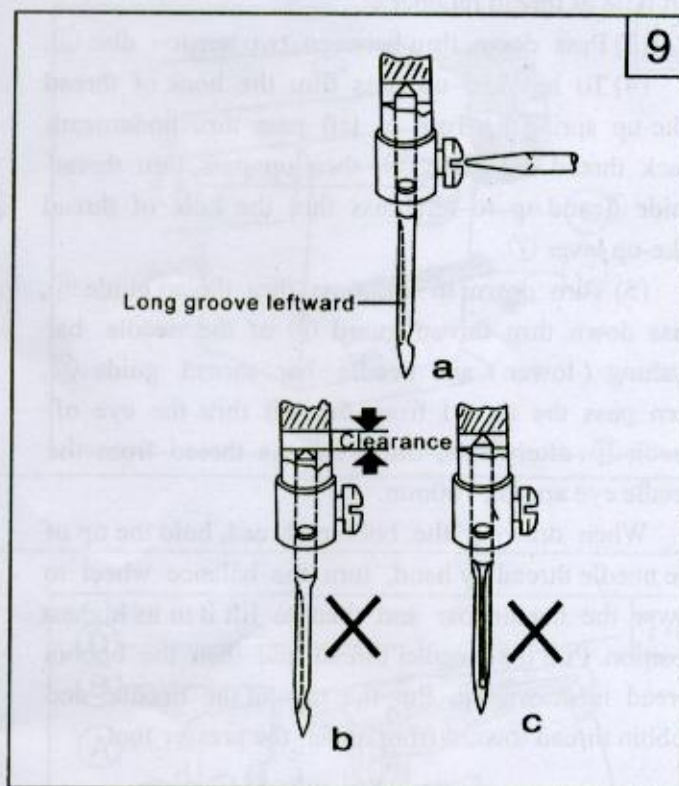


11. Installing the needle (Fig.9)

Turn the balance wheel to lift the needle bar to its highest point, loosen needle set screw 1, making the needle groove turn to the left side of an operator, fully insert the needle shank up to the bottom of needle socket, then tighten needle set screw 1.

Note: Fig.12 (b) insufficient insertion

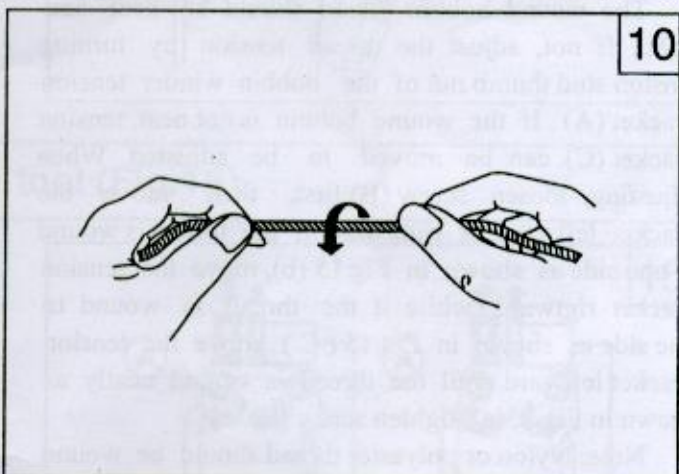
Fig.12 (c) Wrong direction of groove



12. Coordination among the needle, the thread and the material (Fig.10)

The needle thread is left-twisted, the bobbin thread is left or right-twisted. Holding the thread, twist it with right hand in the direction of arrow shown in Fig.10, if it is tight, it is left-twisted, contrarily, it is right-twisted.

The Needle is DP X 17 or 135 X 5Nm 110 ~ 180 the needle number must be fitted for the materials. Sewing too heavy the weight of materials. The needle would be breaking and skipping stitch and thread breaking for its too thin, if the needle is too thick, it would damage the clothes for its large needle hole. Therefore, the selection of needle and thread must be fitted for the materials.



13. Threading the needle thread (Fig.11)

When threading the needle thread, raise the needle bar to its highest position, lead the thread from the spool and pass it in the order instructed (Fig.11)

(1) Lead the thread from the spool, pass down through the right side of thread guide plate ①, to left pass up thru the middle hole of thread guide plate ①, to left pass thru between two small tension disc and pass down the left hole of thread guide plate ①.

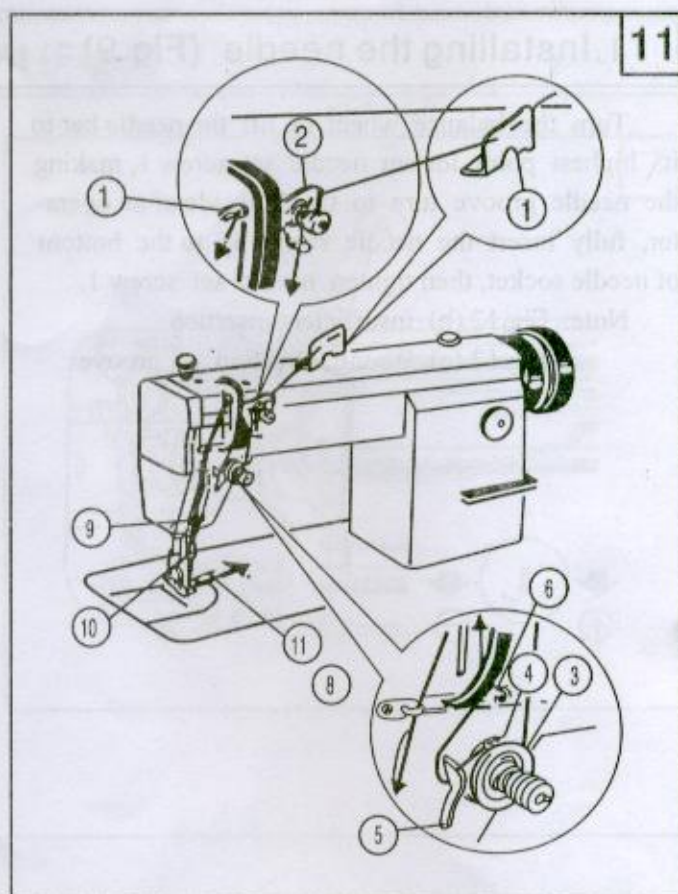
(2) To left pass down thru the right hole, to left up thru the middle hole and to left down thru the left hole of thread retainer ②.

(3) Pass down thru between two tension disc ③.

(4) To left and up pass thru the hook of thread take-up spring ④. Turn to left pass thru underneath slack thread regulator ⑤, then up pass thru thread guide ⑥ and up to left pass thru the hole of thread take-up lever ⑦.

(5) Turn down to left pass thru thread guide ⑧, pass down thru thread guard ⑨ of the needle bar bushing (lower) and needle bar thread guide ⑩, then pass the thread from the left thru the eye of needle ⑪, afterwards, draw out the thread from the needle eye approx 100mm.

When drawing the bobbin thread, hold the tip of the needle thread by hand, turn the balance wheel to lower the needle bar and then to lift it to its highest position. Pull the needle thread and then the bobbin thread is drawn up. Put the tips of the needle and bobbin thread toward front under the presser foot.



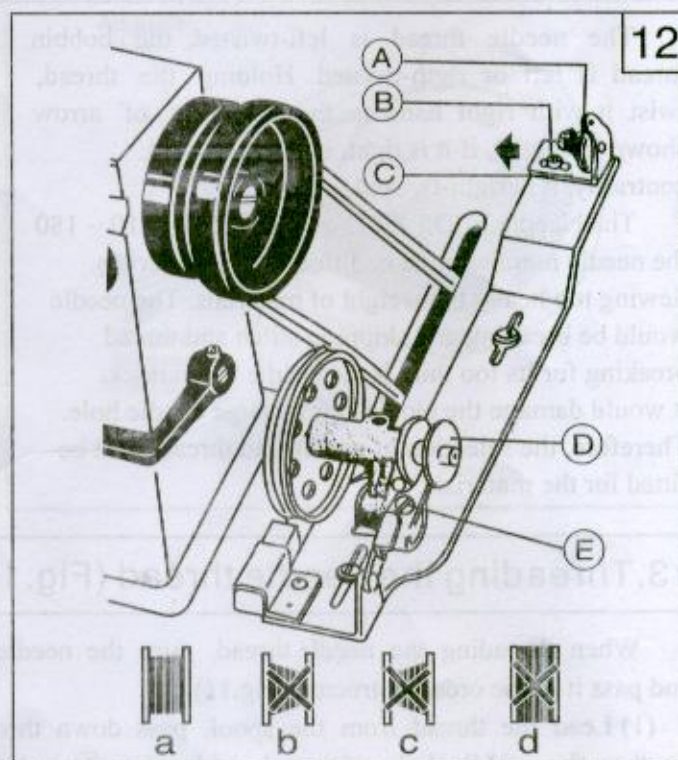
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14. Winding adjustment (Fig.12)

The wound bobbin thread should be neat and tight. If not, adjust the thread tension by turning tension stud thumb nut of the bobbin winder tension bracket (A). If the wound bobbin is not neat, tension bracket (C) can be moved to be adjusted. When adjusting, loosen screw (B) first, then move the bracket leftward or rightward if the thread is wound to one side as shown in Fig.15 (b), move the tension bracket rightward, while if the thread is wound to one side as shown in Fig.15 (C), move the tension bracket leftward until the thread is wound neatly as shown in Fig.15(a), tighten screw (B).

Note: Nylon or polyester thread should be wound with light tension. Otherwise bobbin (D) might be broken or deformed.

Don't overfill the bobbin, because it makes its thread loosening down from the bobbin. The optimum capacity of thread will fill about 80% of bobbin outside diameter, and this can be adjusted by stop latch screw (E).

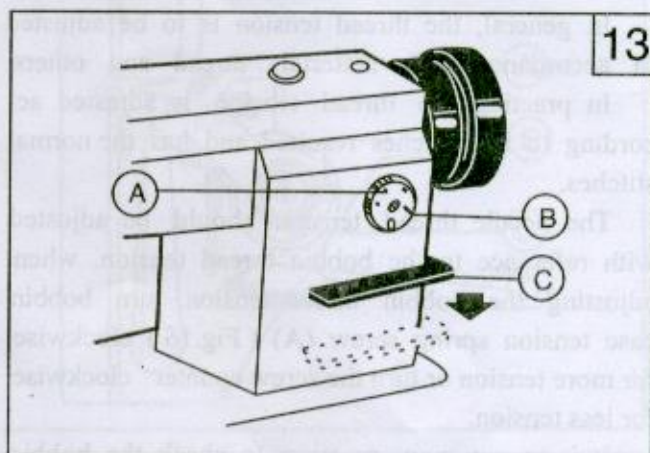


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15. Setting the stitch length and controlling the reverse sewing (Fig.13)

Stitch length can be set by turning stitch length regulating dial (A). The stitch length is longer when turning stitch length regulation dial (A) counter clockwise. And the stitch length is shorter when turning dial (A) clockwise. The figures on the stitch length regulation dial plane (B) indicate the stitch length.

Reverse sewing can be obtained when feed reverse lever (C) is depressed and forward sewing can be restored automatically when feed reverse lever (C) is released.



16. Thread take-up oiling (Fig.14)

Thread take-up area adopts woolen thread oiling. After long time of use, function lost, so replace with a new one.

Open the face plate, remove the pressure screw, lock nut and presser bar.

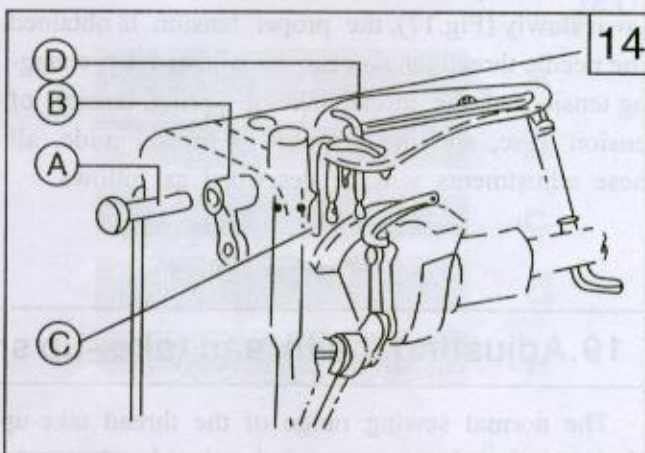
Remove Hinge (A) and lever (B).

Draw out Oil Wick (C).

Loosen the wick fix screw on the arm top, and take out Set Plate (D).

Replate with a new one.

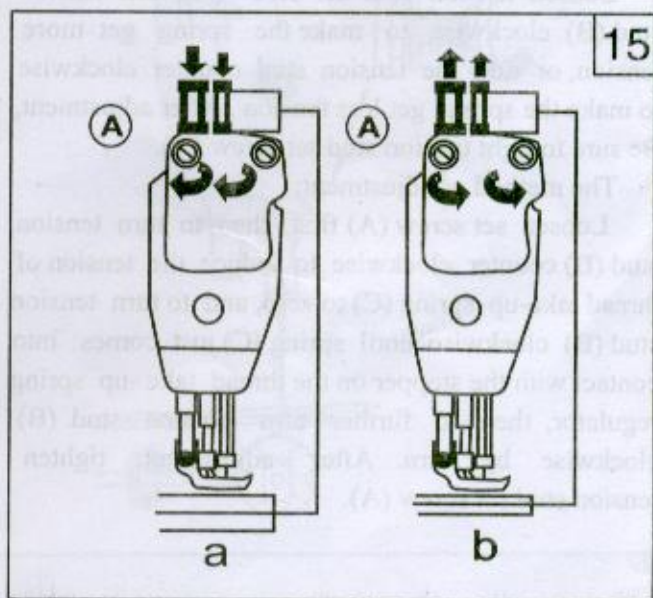
Installing is a reverse sequence.



17. Adjusting the pressure of presser foot (Fig.15)

Pressure on presser foot is to be adjusted in accordance with materials to be sewn. Loosen lock nut (A). If heavy materials to be sewn, turn pressure regulating thumb screw clockwise as shown Fig.20 (a) to increase the pressure. While light materials to be sewn, turn the pressure regulating thumb screw counter clockwise as shown in Fig.20 (b) to decrease the pressure on presser foot, then tighten lock nut (A).

The sewing materials must be feed normally with proper pressure of presser foot and the pressure should be decreased as possibly.



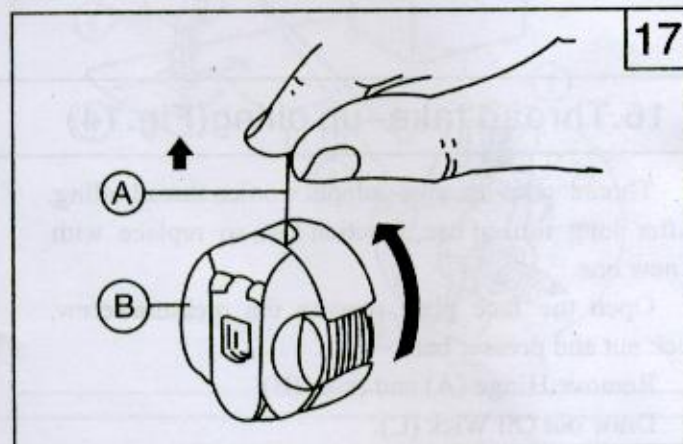
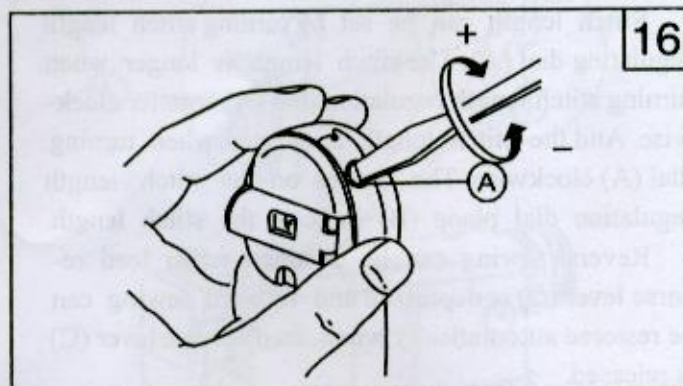
18. Adjusting the thread tension (Fig.16、 17)

In general, the thread tension is to be adjusted in accordance with materials thread and others.

In practice, the thread tension is adjusted according to the stitches resulted and has the normal stitches.

The needle thread tension should be adjusted with reference to the bobbin thread tension. when adjusting the bobbin thread tension, turn bobbin case tension spring screw (A) (Fig.16) clockwise for more tension or turn the screw counter clockwise for less tension.

It is a common practice to check the bobbin thread tension. In case of polyester thread 14 tex (42s), hold the end of the thread and vibrate the bobbin case up and down. If the bobbin case falls down slowly (Fig.17), the proper tension is obtained. The needle thread tension can be adjusted by changing tension of the thread take-up spring, tension of tension disc, and the position of thread guide, all these adjustments will be described as follows.



19. Adjusting the thread take-up spring (Fig.18、 19)

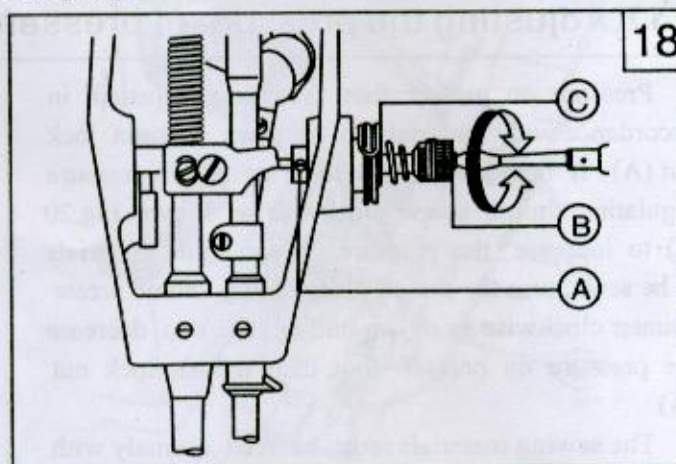
The normal sewing range of the thread take-up spring is 5~8 mm. For sewing light weight materials (short stitch), weaken the spring tension and widen the sewing range of spring, while for sewing heavy weight materials, strengthen the spring tension and shorten the sewing range of spring.

1) Adjusting the thread take-up spring tension(Fig.18)

Loosen tension stud set screw (A), turn tension stud (B) clockwise to make the spring get more tension, or turn the tension stud counter clockwise to make the spring get less tension . After adjustment, Be sure to tight tension stud set screw (A).

The method of adjustment:

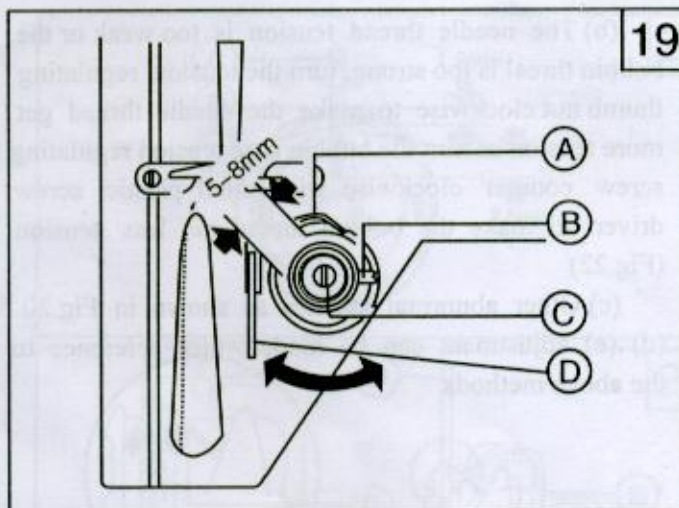
Loosen set screw (A) first, then to turn tension stud (B) counter clockwise to reduce the tension of thread take-up spring (C) to zero, and to turn tension stud (B) clockwise until spring (C) just comes into contact with the stopper on the thread take-up spring regulator, then to further turn tension stud (B) clockwise by turn. After adjustment, tighten tension stud set screw (A).



2) Adjusting the sewing range of thread take-up spring (Fig.19)

Loosen set screw (B), turn tension complete (C) clockwise to increase the sewing range or turn tension complete (C) counter clockwise to decrease the sewing range.

Before delivery, the thread take-up spring is properly adjusted, Readjustment is needed only in the case of sewing special materials or with special thread.



20. Adjusting the thread of needle thread & bobbin thread (Fig.20、21、22)

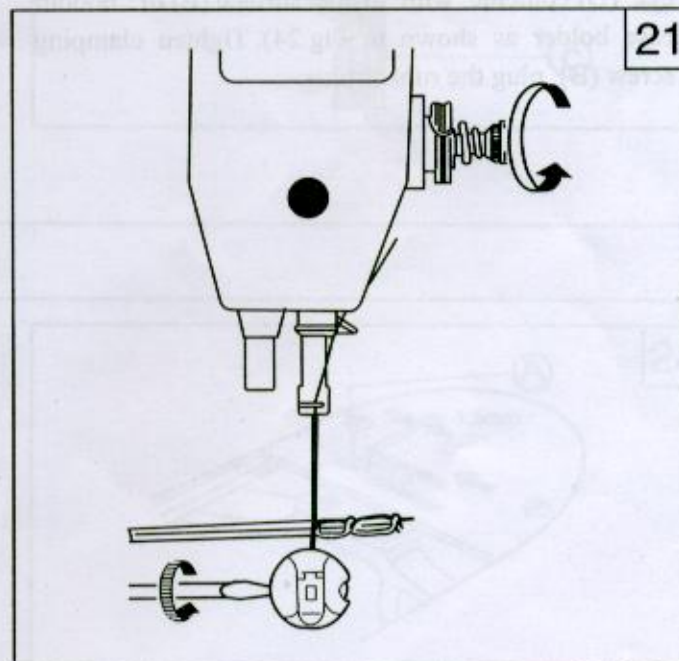
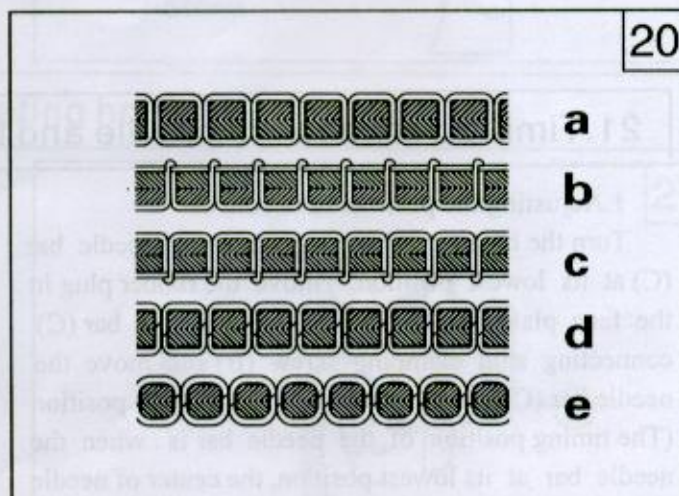
The position of the thread guide affects sewing quality, so it must be adjusted according to the materials to be sewn.

	Leftward	Center	Rightward
Thread guide position			
Material	Heavy	Medium	Light

Fig.20 shows the various type of stitch forms.

Normal stitch form should be as shown in Fig. 20(a). When abnormal stitches occur with pucker or thread breakage, the tension of needle thread and bobbin thread must be adjusted accordingly.

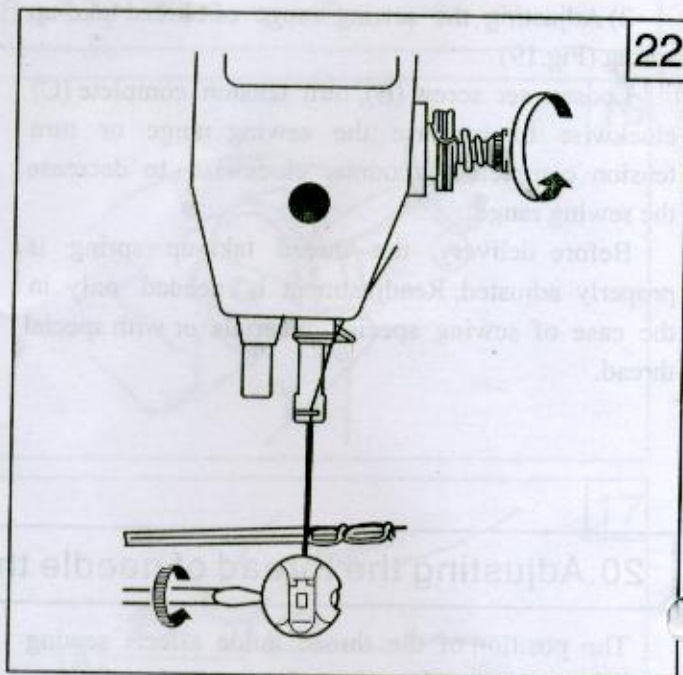
(a) The needle thread tension is too strong or the bobbin thread tension is too weak, turn the tension regulating thumb nut counter clockwise to make the needle thread get less tension or tighten the bobbin case tension regulating screw with small plastic screw driver to make the bobbin thread get more tension (Fig.21).



(b) The needle thread tension is too weak or the bobbin thread is too strong, turn the tension regulating thumb nut clockwise to make the needle thread get more tension or turn the bobbin case tension regulating screw counter clockwise with small plastic screw driver to make the bobbin thread get less tension (Fig.22)

(c) Other abnormal stitches as shown in Fig.20

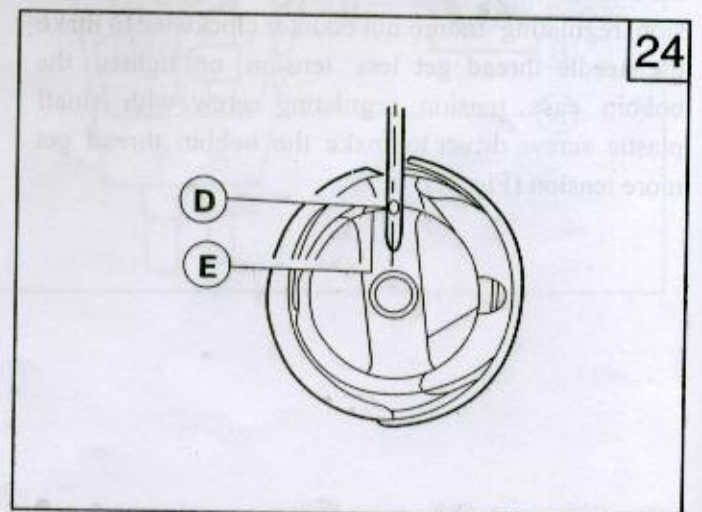
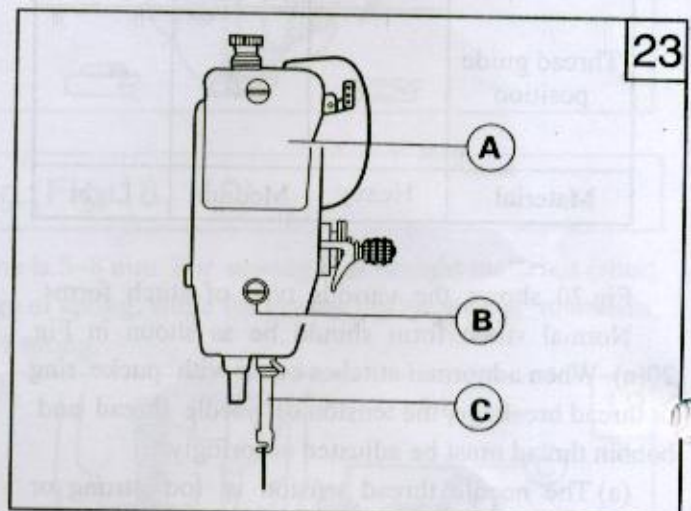
(d) .(e), adjustment can be made which reference to the above methods.



21. Timing between the needle and the rotating hook (Fig.23、 24、 25、 26)

1. Adjusting the position of needle bar

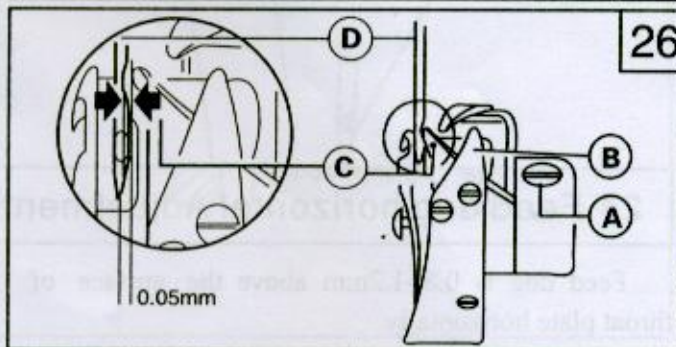
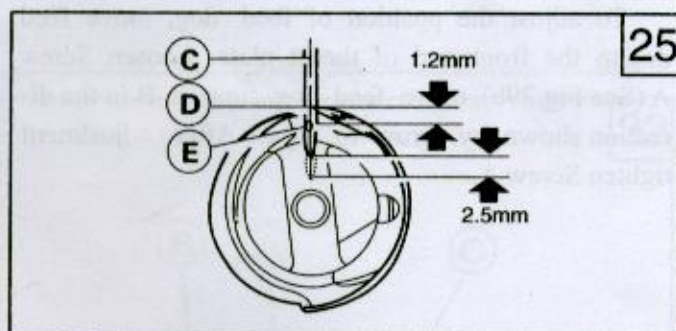
Turn the balance wheel to locate the needle bar (C) at its lowest position, remove the rubber plug in the face plate (A), then loosen the needle bar (C) connecting stud clamping screw (B) and move the needle bar (C) vertically to locate the timing position (The timing position of the needle bar is : when the needle bar at its lowest position, the center of needle eye (D) coincide with inside surface (E) of bobbin case bolder as shown in Fig.24). Tighten clamping screw (B), plug the rubber plug.



2 Adjusting rotating hook point timing with needle.

The motive relation between rotating hook and needle affects the sewing quality. Standard timing relation is : turn the balance wheel to locate needle bar to its lowest position, and lift back 2.5mm the rotating hook point (D) should be coincides with needle center line (C), and hook point (D) is 1.2mm above the upper edge (E) of needle eye.

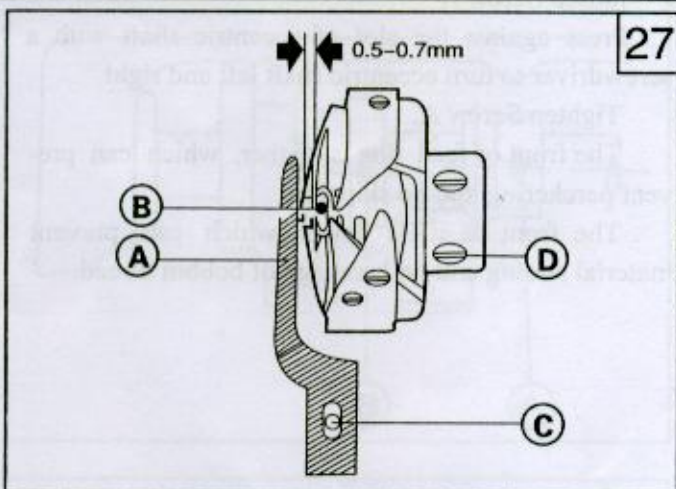
When adjusting the rotating hook point timing also to note the clearance between notch bottom of needle (D) and hook point (C) of approx 0.05mm must be maintained. (Fig.26)



22. Removing and installing the rotating hook (Fig.27)

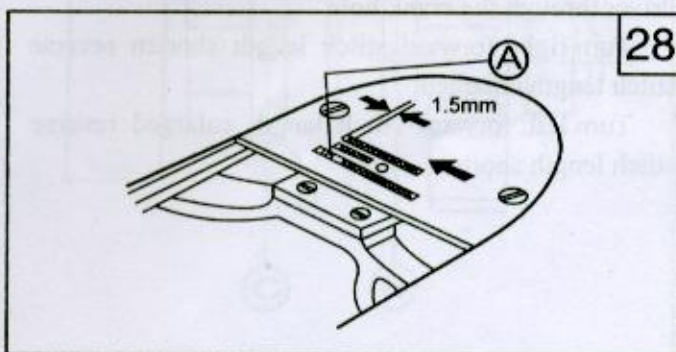
Lift the needle bar to its highest position, remove the throat plate, take down the needle and the bobbin case. Loosen rotating hook bobbin case holder position bracket screw (C) and take down position bracket (A), then loosen three set screws (D) of rotating hook. At this point, it took out the rotating hook, it would be obstructed by feed bar. So that turn the balance wheel first to raise the feed bar to its highest position, then take down the rotating hook slowly while to turn it to step aside of the feed bar, Installing the rotating hook can be done in reverse sequence.

The projecting flange of the position bracket (A) should be engaged in the notch (B) of the bobbin case holder, and maintain a clearance of 0.5~0.7mm between projecting flange top and the bottom of notch while installing.

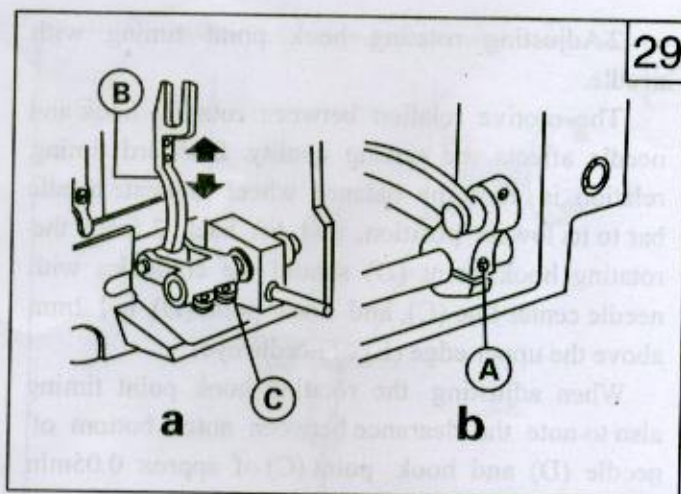


23. Installing feed dog (Fig.28、29)

When feed amount is at the max the front end of feed dog A is near the front of throat plate slot, the gauge between the two is 1.5mm this is the standard position of feed dog.



To adjust the position of feed dog, move feed dog to the front end of throat plate. Loosen Screw A (See Fig.29b), move feed dog support B in the direction shown by arrow to adjust. After adjustment tighten Screw A.



24. Feed dog horizontal Adjustment (Fig.30)

Feed dog is 0.8~1.2mm above the surface of throat plate horizontally.

When sewing condition requires tilting, adjust like this:

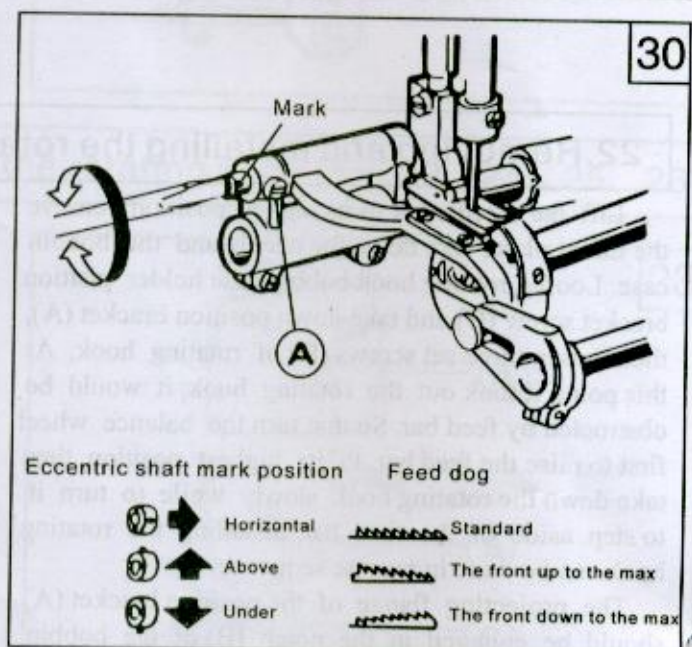
loosen Screw A

Press against the slot of eccentric shaft with a screwdriver to turn eccentric shaft left and right.

Tighten Screw A.

The front of feed dog is higher, which can prevent perckering and no skipping.

The front of it is lower, which can prevent material sliding and no breakage of bobbin thread.

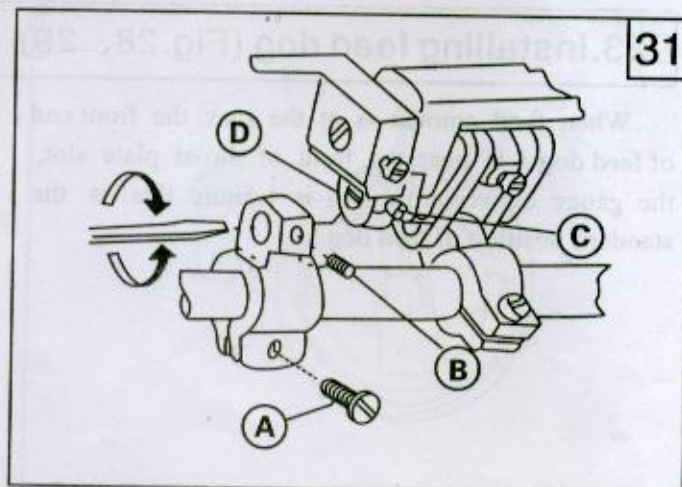


25. Stitch length error adjustment (Fig.31)

Loosen Screw (A) and (B), take out the link pin, and loosen Screw (C) to adjust Cam (D) with a screwdriver through the crank hole.

Turn right: forward stitch length shorten reverse stitch length enlarged;

Turn left: forward stitch length enlarged reverse stitch length shorten.

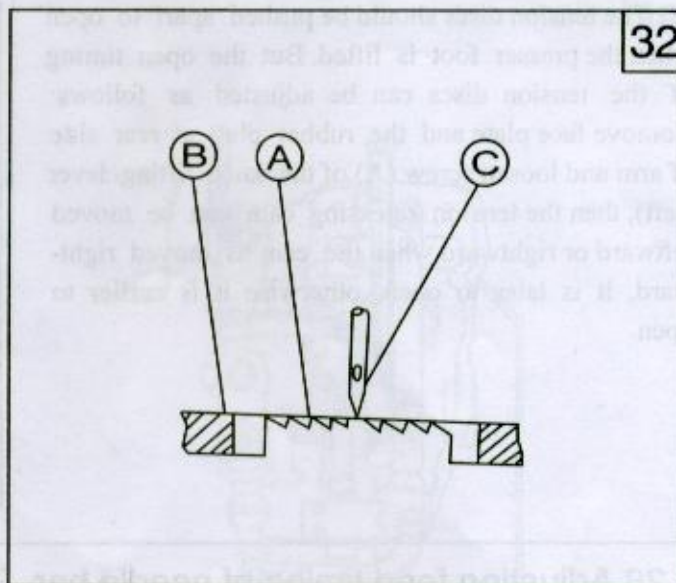


26.Feed timing (Fig.32、33、34)

1 Standard position

Turn balance wheel to lower Feed dog A till it is horizontal with the surface B of throat plate, at the moment, the tip of needle C should be horizontal with the surfaces of throat plate and feed dog.

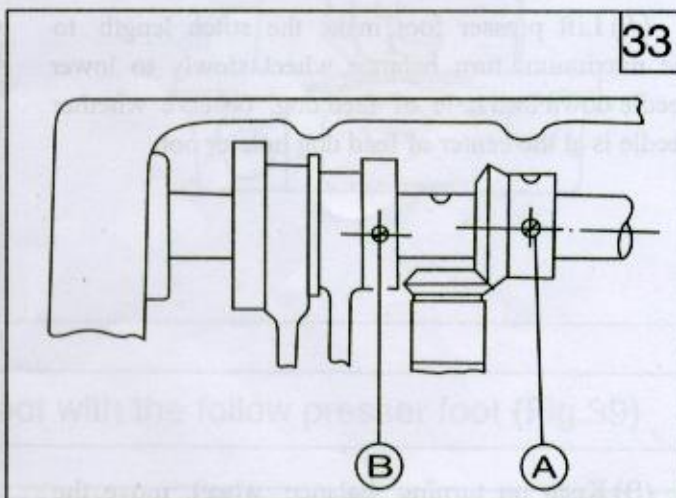
Adjustment can be done by adjusting the position of feed cam and feed dog lift cam.



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2 Installing feed dog lift cam (See Fig.33)

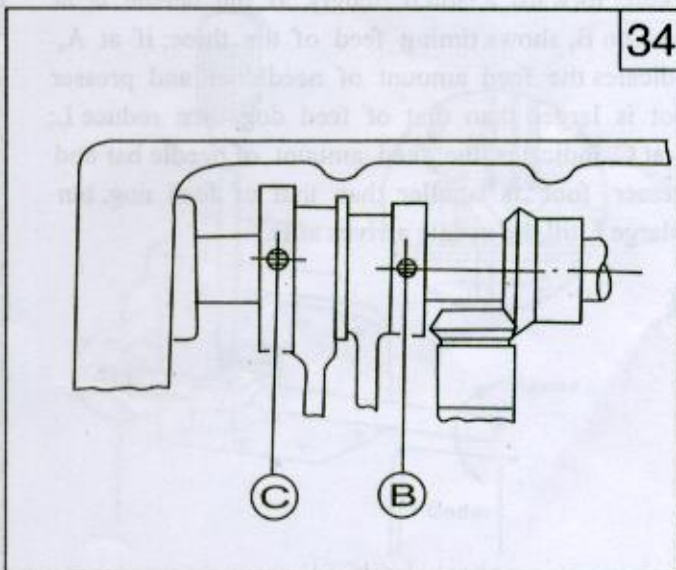
Open the back side cover, turn balance wheel by left hand counter-clockwise, take Screw A as for standard, the center of Screw B is slightly a little lower than the center of Screw A.



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3 Insatlling feed cam (See Fig.34)

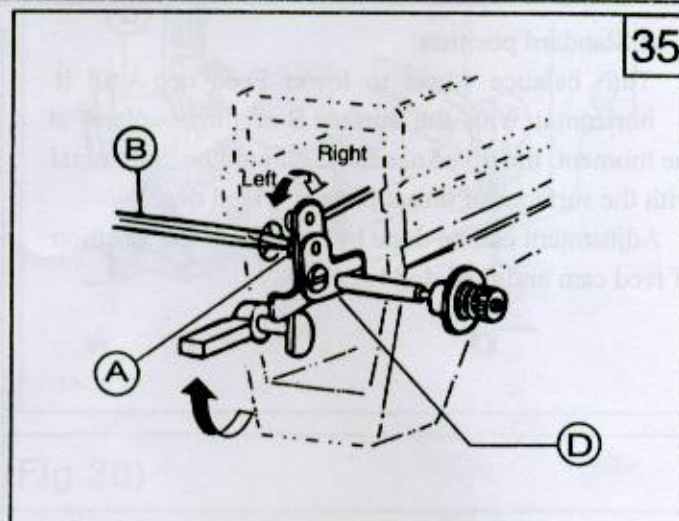
Continously turn balance wheel, take screw B as for standard, the center of Screw C is slightly a little higher than the center of Screw B.



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27. Adjusting the tension releasing mechanism (Fig.35)

The tension discs should be pushed apart to open when the presser foot is lifted. But the open timing of the tension discs can be adjusted as follows: Remove face plate and the rubber plug at rear side of arm and loosen screw (A) of the knee lifting lever (left), then the tension releasing cam can be moved leftward or rightward when the cam is moved rightward, it is later to open, otherwise it is earlier to open.

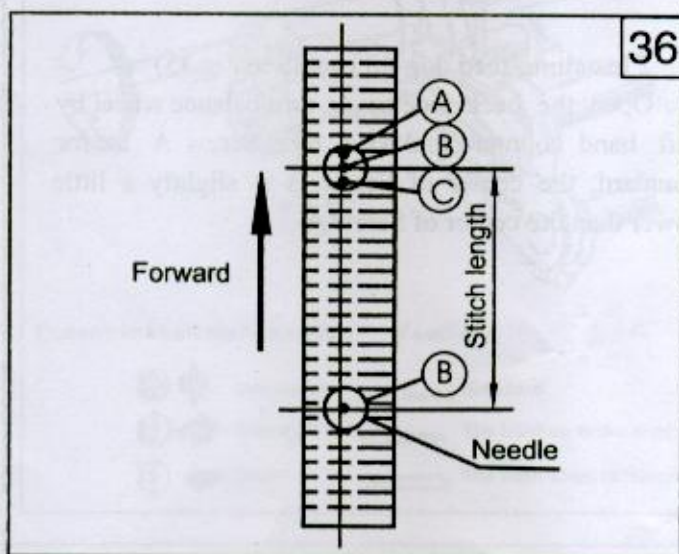


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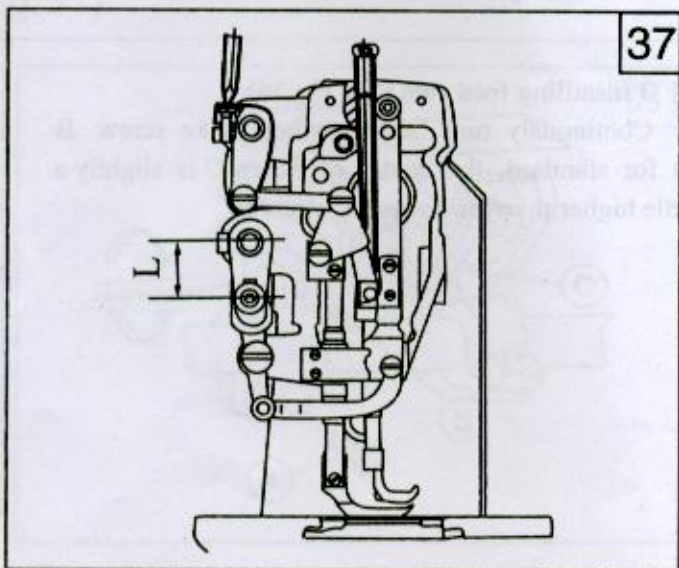
28. Adjusting feed timing of needle bar, Presser foot and feed dog (Fig.36、37)

(A) Lift presser foot, make the stitch length to the maximum, turn balance wheel slowly to lower needle down into hole of feed dog, observe whether needle is at the center of feed dog hole or not.

(B) Keep on turning balance wheel, move the needle forward a stitch length. If the needle is at position B, shows timing feed of the three; if at A, indicates the feed amount of needle bar and presser foot is larger than that of feed dog, then reduce L; if at C, indicates the feed amount of needle bar and presser foot is smaller than that of feed dog, then enlarge L till the needle arrives at B.



36

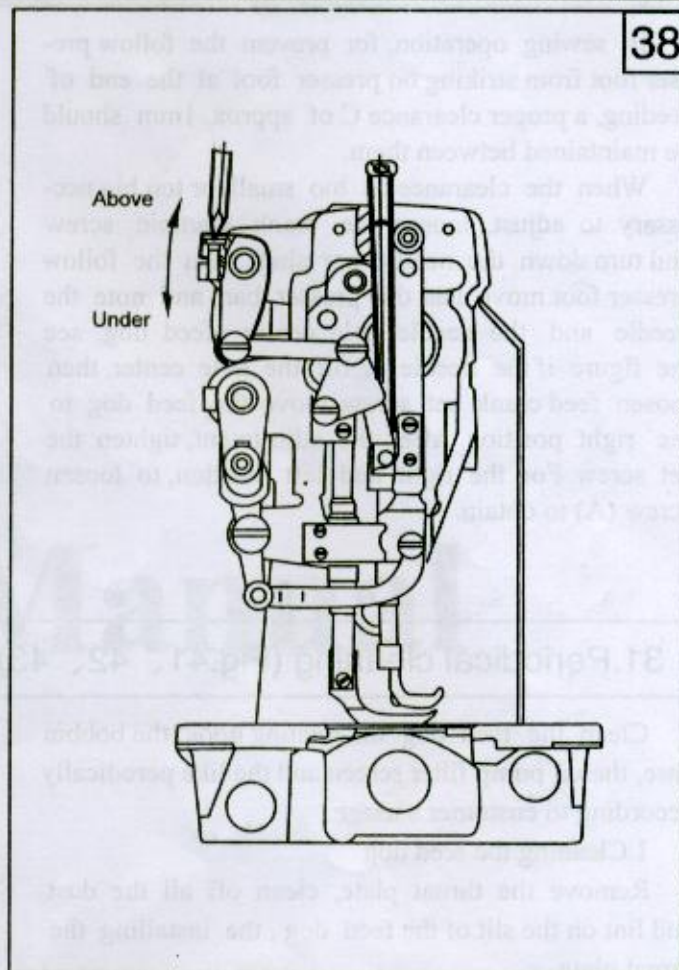


37

29. Adjusting presser foot alternate lift mechanism (Fig.38)

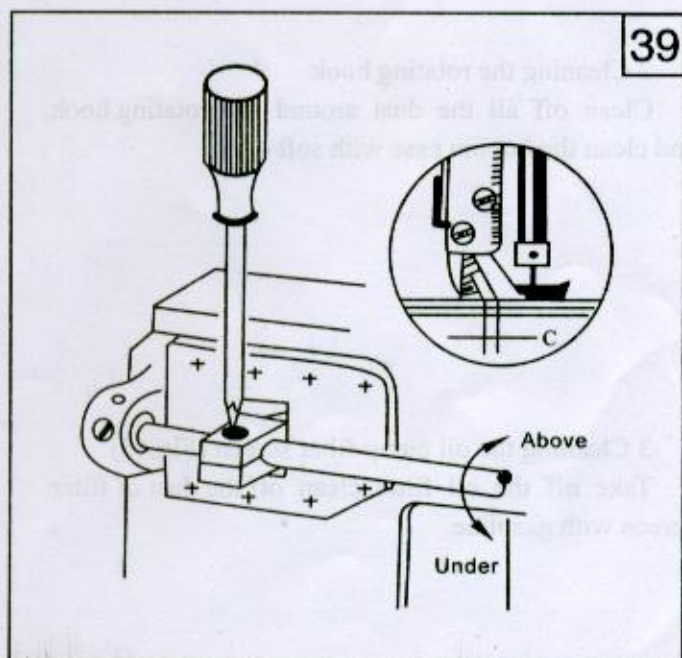
The alternate lift mechanism can be adjusted according to the nature of material in a certain range. Of common heavy and medium sewing machine, the presser foot lift amount is about 2.5mm and that of the follow presser foot is within 5mm. The presser foot lift amount increase then the follow foot amount reduce; the presser foot lift amount reduce, then the follow foot lift amount increase.

According to the sewing process, to increase the presser foot lift amount and reduce the follow foot lift amount, loosen the screw for crank and turn down the crank slot with reference to the presser foot lift shaft, otherwise turn up. The adjustment is limited in a range and not too.



30. Adjusting the lift amount of presser foot with the follow presser foot (Fig.39)

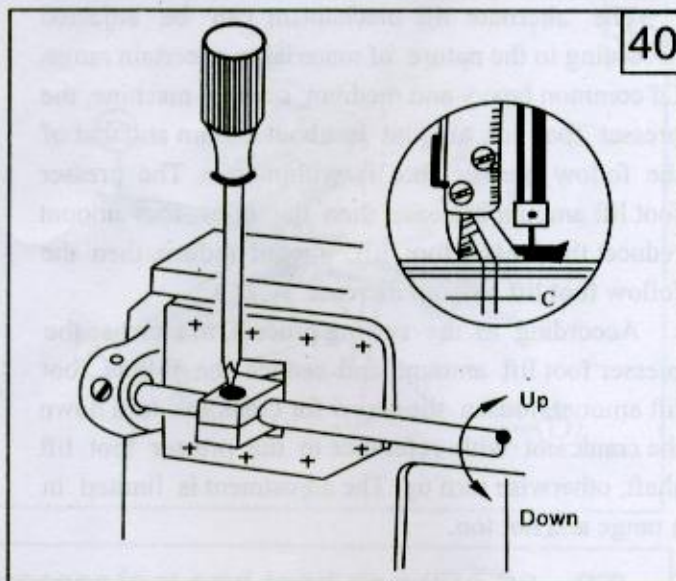
Loosen nut, then adjust the center distance B between the presser foot lift shaft and the screw of the nut. To increase the lift amount of the both feet, then reduce B; on the contrary, the lift amount will be reduced. The adjustment is limited in a range and not too large. After the adjustment, tighten the nut.



31.Adjusting the clearance between presser foot and follow presser foot (Fig.40)

In sewing operation, for prevent the follow presser foot from striking on presser foot at the end of feeding, a proper clearance C of approx. 1mm should be maintained between them.

When the clearance is too small or too big necessary to adjust, loosen the crank clampin screw and turn down the needle bar shaft, then the follow presser foot move near the presser bar, and note the needle and the needle hole center of feed dog, see the figure if the needle is off the hole center, then loosen feed crank set screw, move the feed dog to the right position. After the adjustment, tighten the set screw. For the right and left position, to loosen screw (A) to obtain.

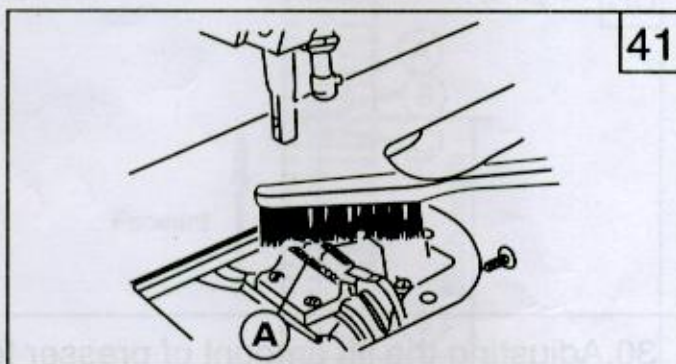


31.Periodical cleaning (Fig.41、 42、 43)

Clean the feed dog the rotating hook, the bobbin case, the oil pump filter screen and the like periodically according to customer s usage.

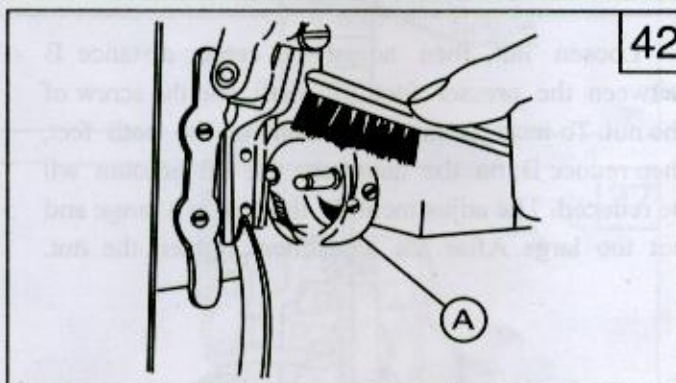
1.Cleaning the feed dog

Remove the throat plate, clean off all the dust and lint on the slit of the feed dog , the installing the throat plate.



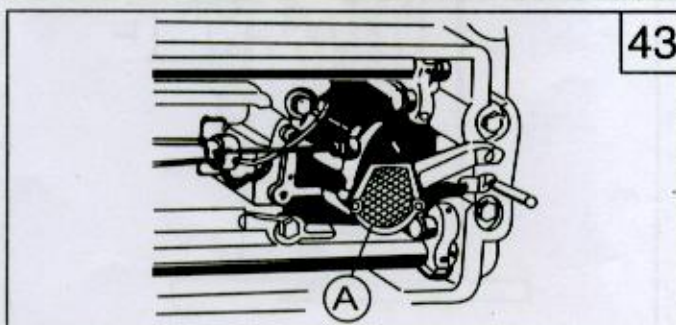
2 Cleaning the rotating hook

Clean off all the dust around the rotating hook, and clean the bobbin case with soft cloth.



3 Cleaning the oil pump filter screen (Fig.46)

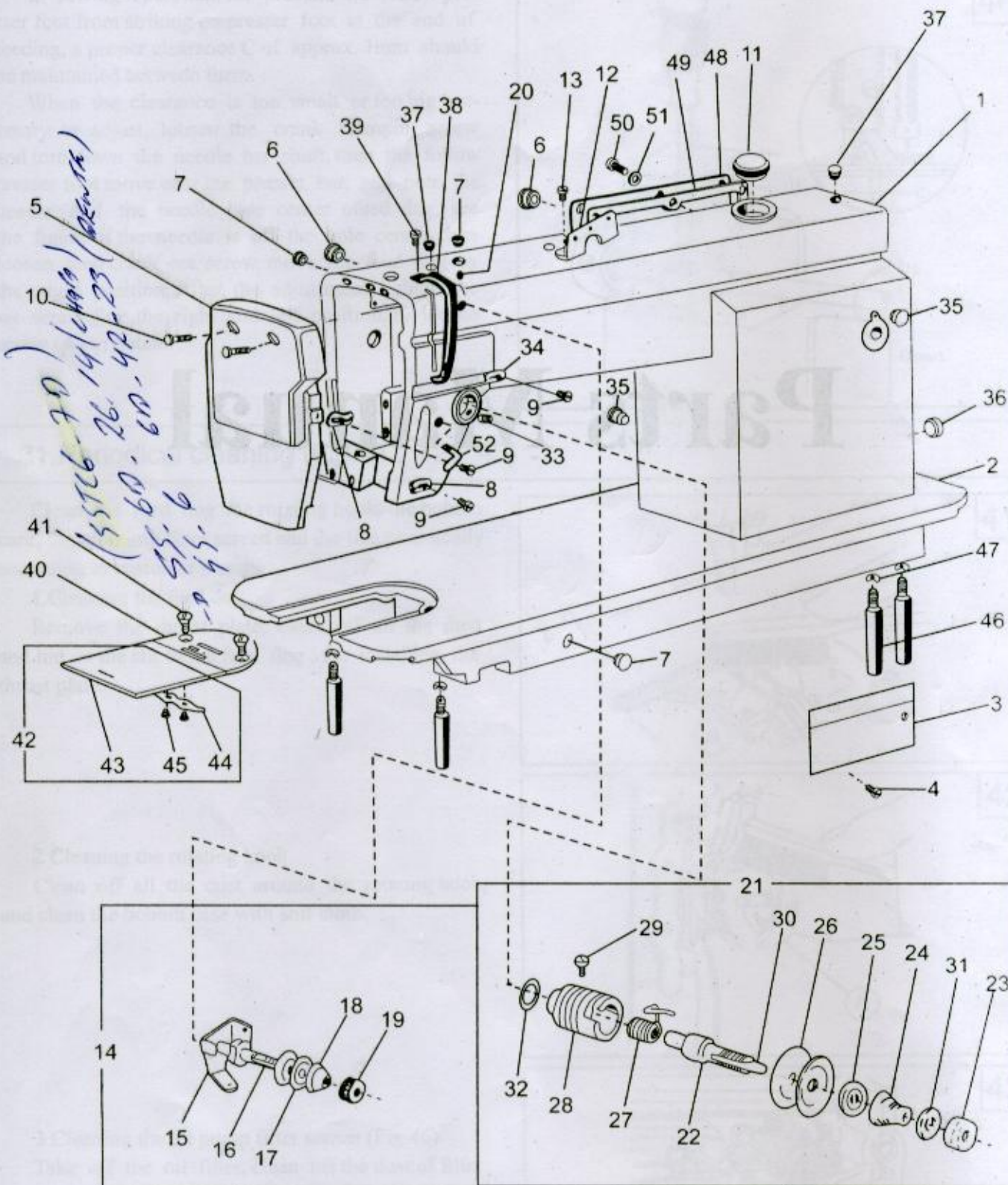
Take off the oil filter, clean off the dust of filter screen with gasoline.



Parts Manual

1. Machine arm and bed

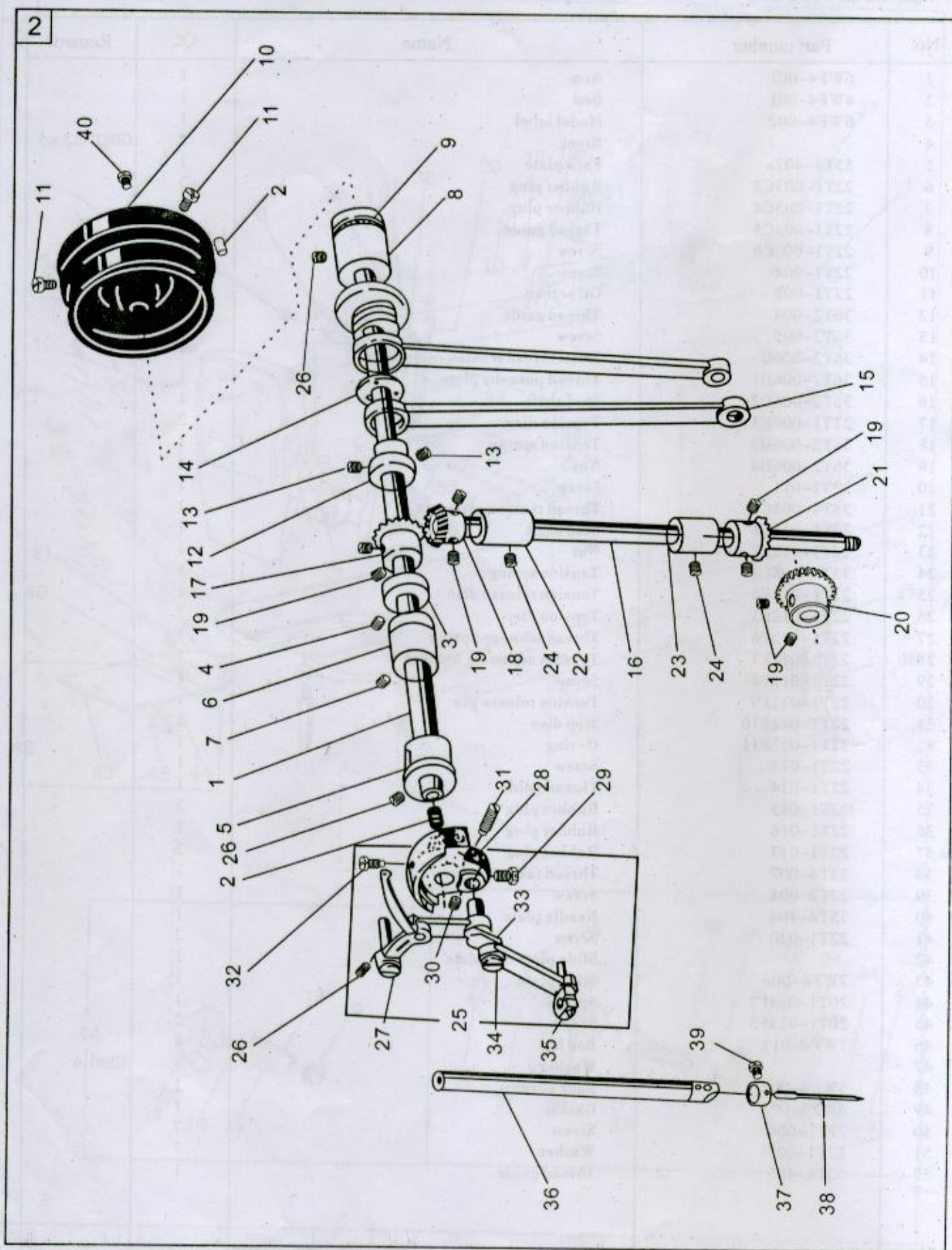
1



1. Machine arm and bed

No.	Part number	Name	Qt.	Remark
1	6WF4-001	Arm	1	GB827 2.5 × 5
2	4WF4-001	Bed	1	
3	6WF4-002	Model label	1	
4		Rivet	2	
5	35T4-402a	Face plate	1	
6	22T1-003C3	Rubber plug	3	
7	22T1-003C4	Rubber plug	3	
8	22T1-003C5	Thread guide	2	
9	22T1-003C6	Screw	3	
10	22T1-004	Screw	2	
11	22T1-008	Oil screen	1	
12	36T2-004	Thread guide	1	
13	36T2-005	Screw	1	
14	36T2-006D	Small thread tension complete	1	
15	36T2-006D1	Thread pass-by plate	1	
16	36T2-006D2	Stud shaft	1	
17	22T1-009E3	Tension disc	2	
18	36T2-006D3	Tension spring	1	
19	36T2-006D4	Nut	1	
20	22T1-011	Screw	1	
21	33T4-008C	Thread tension complete	1	
22	22T1-012F1	Stud shaft	1	
23	22T1-012F2	Nut	1	
24	33T4-008C1	Tension spring	1	
25	22T1-012F4	Tension release disc	1	
26	22T1-012F5	Tension disc	2	
27	22T1-012F6	Thread take-up spring	1	
28	22T1-012F7	Tension adjusting bracket	1	
29	22T1-012F8	Screw	1	
30	22T1-012F9	Tension release pin	1	
31	22T1-012F10	Stop disc	1	
32	22T1-012F11	O-ring	1	
33	22T1-013	Screw	1	
34	22T1-014	Thread guide	1	
35	22T1-015	Rubber plug	2	
36	22T1-016	Rubber plug	1	
37	22T1-017	Rubber plug	2	
38	33T4-007	Thread take-up cover	1	
39	22T2-004	Screw	1	
40	35T4-404	Needle plate	1	
41	22T1-020	Screw	2	GB93 6
42		Slide plate complete	1	
43	7WF4-006	Slide plate	1	
44	20T1-013F2	Spring	1	
45	20T1-013F3	Screw	2	
46	7WF4-013	Bed leg	4	
47		Washer	4	
48	5WF3-002	Back cover	1	
49	5WF3-003	Gasket	1	
50	22T1-006	Screw	7	
51	22T1-007	Washer	7	
52	35T4-405	Thread guide	1	

2. Arm and vertical shafts, needle bar and thread take-up parts

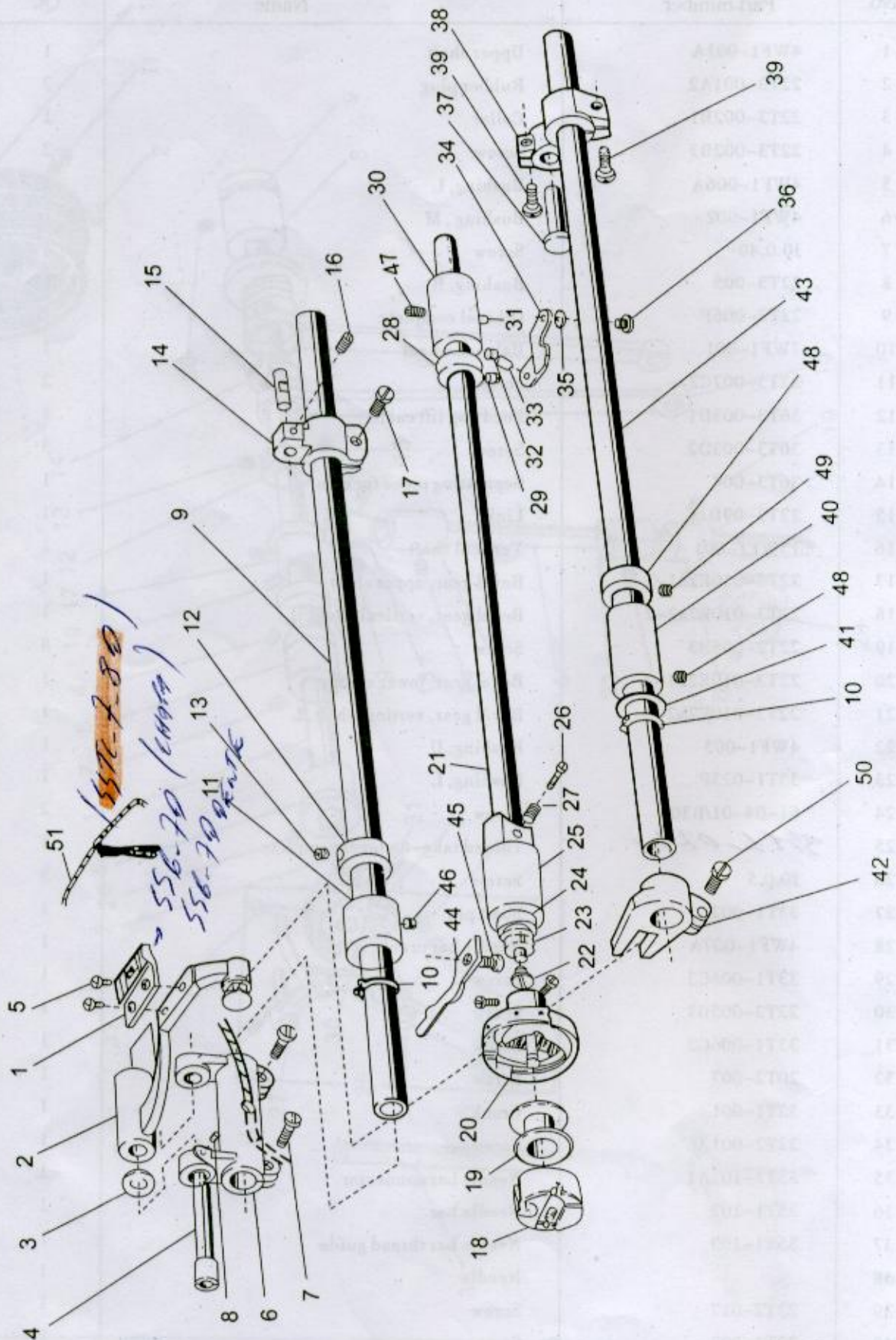


2. Arm and vertical shafts, needle bar and thread take-up parts

No.	Part number	Name	Qt.	Remark
1	4WF1-001A	Upper shaft	1	
2	22T3-001A2	Rubber plug	2	
3	22T3-002B1	Collar	1	
4	22T3-002B2	Screw	2	
5	4WF1-006A	Bushing, L	1	
6	4WF1-002	Bushing, M	1	
7	J0.0.40	Screw	1	
8	22T3-005	Bushing, R	1	
9	22T3-006F	Oil seal complete	1	
10	7WF1-001	Balance wheel	1	
11	22T3-007C2	Screw	2	
12	36T3-003D1	Feed dog lift cam	1	
13	36T3-003D2	Screw	3	
14	36T3-004	Separating piece for cam	1	
15	22T3-09D1C	Link	1	
16	15WF1-001	Vertical shaft	1	
17	22T3-010E2a1-2	Bevel gear, upper shaft	1	
18	22T3-010E2a2-2	Bevel gear, vertical shaft, U	1	
19	22T2-005B3	Screw	8	
20	22T3-010E2b1-2	Bevel gear, lower shaft	1	
21	22T3-010E2b2-2	Bevel gear, vertical shaft, L	1	
22	4WF1-003	Bushing, U	1	
23	33T1-023P	Bushing, L	1	
24	61-04-01/B308	Screw	2	
25	<i>33T1-023A</i>	Thread take-up lever complete	1	
26	J0.0.5	Screw	3	
27	33T1-002	Shaft pin	1	
28	4WF1-007A	Needle bar crank	1	
29	33T1-006C3	Screw	1	
30	22T2-005B3	Screw	1	
31	33T1-006C2	Screw	1	
32	20T2-007	Screw	1	
33	33T1-001	Crank	1	
34	22T2-001A6	Screw	1	
35	35T1-101A1	Needle bar connector	1	
36	35T1-102	Needle bar	1	
37	35T1-103	Needle bar thread guide	1	
38		Needle	1	DP x 17
39	22T2-017	Screw	1	
40	22T3-008	Screw	1	

3. Feed dog lifting, feeding and thread looping

3

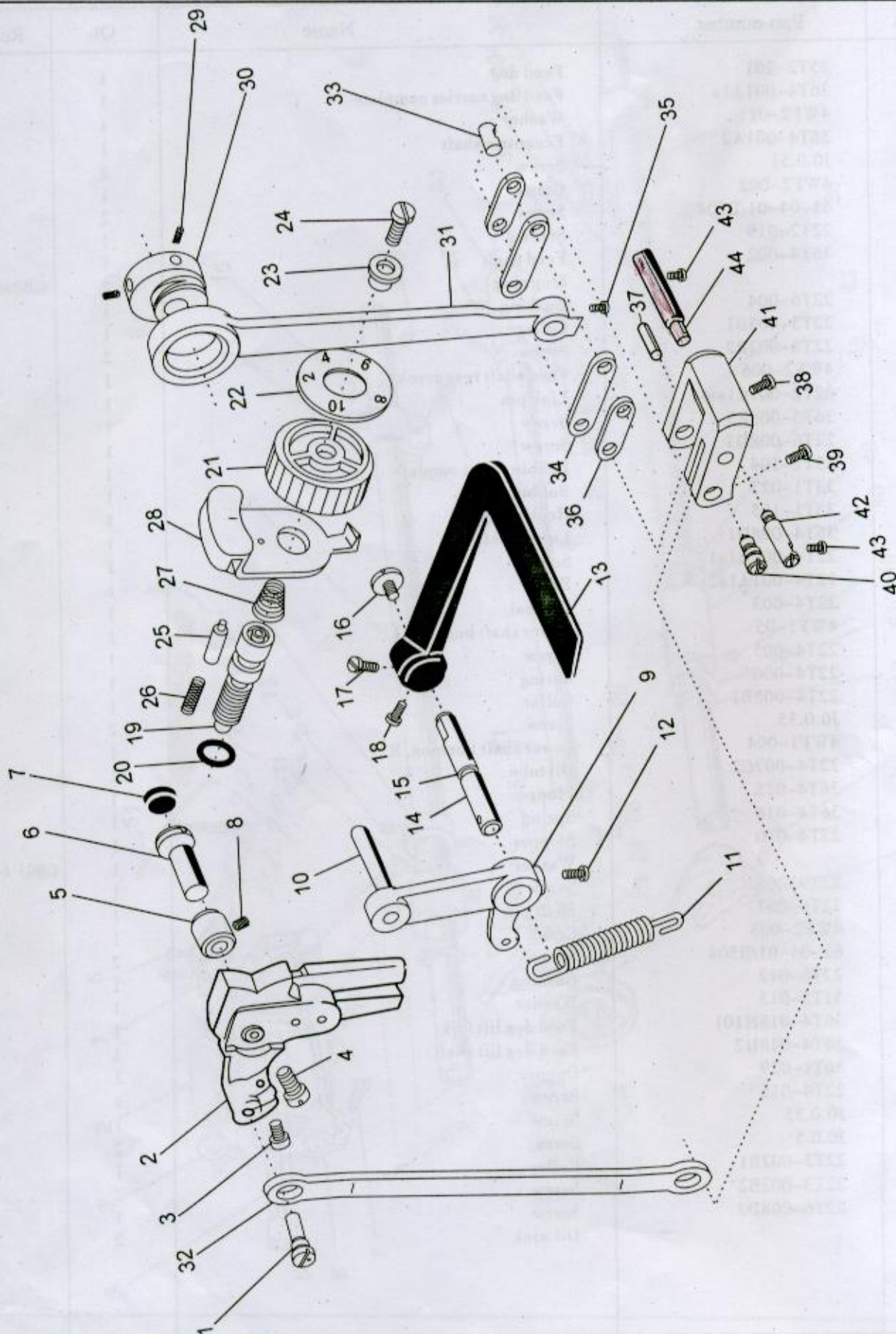


3. Feed dog lifting, feeding and thread looping

No.	Part number	Name	Qt.	Remark
1	35T2-201	Feed dog	1	
2	36T4-001A1a	Feed dog carrier complete	1	
3	4WF2-011	Washer	1	
4	36T4-001A2	Eccentric shaft	1	
5	J0.0.51	Screw	2	
6	4WF2-002	Crank	1	
7	61-04-01/B504	Screw	2	
8	22T2-019	Screw	1	
9	36T4-002	Feed shaft	1	
10		Stop ring	2	GB894.1 15
11	22T6-004	Bushing	1	
12	22T3-002B1	Collar	1	
13	22T3-002B2	Screw	2	
14	4WF2-006	Feed shaft rear crank	1	
15	82T2-003C1a10-2	Link pin	1	
16	36T5-008E5	Screw	1	
17	22T6-008D3	Screw	1	
18	35T1-104	Bobbin case complete	1	
19	33T1-027	Bobbin	1	
20	35T1-105	Hook complete	1	
21	36T4-008D1	Lower shaft	1	
22	22T4-001A1a1	Screw	1	
23	22T4-001A1a2	Plug	1	
24	22T4-003	Oil seal	1	
25	4WF1-05	Lower shaft bushing, L	1	
26	22T4-005	Screw	1	
27	22T4-006	Spring	1	
28	22T4-002B1	Collar	1	
29	J0.0.35	Screw	2	
30	4WF1-004	Lower shaft bushing, R	1	
31	22T4-007C2	Oil tube	1	
32	36T4-015	Plunge	1	
33	36T4-016	Spring	1	
34	22T4-010	Stopper	1	
35		Washer	1	GB93 6
36	22T9-006	Screw	1	
37	22T6-007	Shaft pin	1	
38	4WF2-003	Crank	1	
39	61-04-01/B504	Screw	2	
40	22T6-012	Bushing	1	
41	51T5-013	Washer	1	
42	36T4-018H101	Feed dog lift fork	1	
43	36T4-018H2	Feed dog lift shaft	1	
44	36T1-029	Opener	1	
45	22T4-015	Screw	1	
46	J0.0.35	Screw	1	
47	J0.0.5	Screw	2	
48	22T3-002B1	Collar	1	
49	22T3-002B2	Screw	2	
50	22T6-008D3	Screw	1	
51		Oil wick	2	

4. Feed mechanism

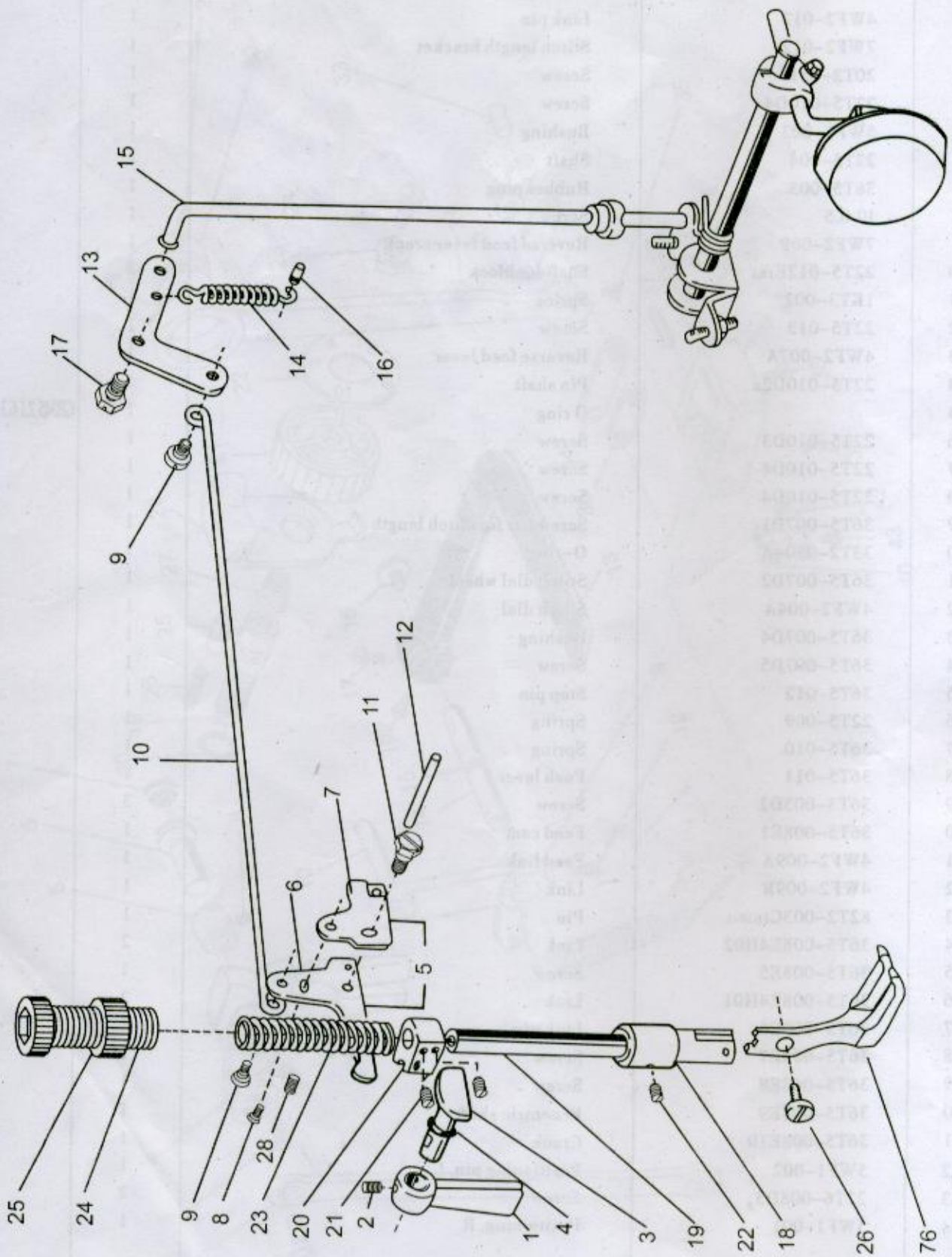
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4. Feed mechanism

No.	Part number	Name	Qt.	Remark
1	4WF2-012	Link pin	1	
2	7WF2-012	Stitch length bracket	1	
3	20T2-031	Screw	1	
4	22T5-010D4	Screw	1	
5	5WF1-003	Bushing	1	
6	22T5-004	Shaft	1	
7	36T5-003	Rubber plug	1	
8	J0.0.5	Screw	1	
9	7WF2-009	Reverse feed lever crank	1	
10	22T5-012E1a1	Shaft for block	1	
11	1KT3-002	Spring	1	
12	22T5-013	Screw	1	
13	4WF2-007A	Reverse feed lever	1	
14	22T5-010D2a	Pin shaft	1	
15		O ring	1	GB345 21 63 x 1.8G
16	22T5-010D3	Screw	1	
17	22T5-010D4	Screw	1	
18	22T5-010D4	Screw	1	
19	36T5-007D1	Screw bar for stitch length	1	
20	33T2-030-A	O-ring	1	
21	36T5-007D2	Stitch dial wheel	1	
22	4WF2-004A	Stitch dial	1	
23	36T5-007D4	Bushing	1	
24	36T5-007D5	Screw	1	
25	36T5-012	Stop pin	1	
26	22T5-009	Spring	1	
27	36T5-010	Spring	1	
28	36T5-011	Push lever	1	
29	36T3-003D2	Screw	3	
30	36T5-008E1	Feed cam	1	
31	4WF2-009A	Feed link	1	
32	4WF2-009B	Link	1	
33	82T2-003C1a10-1	Pin	1	
34	36T5-008E4H02	Link	2	
35	36T5-008E5	Screw	1	
36	36T5-008E4H01	Link	2	
37	36T5-008E6	Link pin	1	
38	36T5-008E7	Screw	1	
39	36T5-008E8	Screw	1	
40	36T5-008E9	Eccentric shaft	1	
41	36T5-008E10	Crank	1	
42	5WF1-002	Positioning pin, L	1	
43	22T6-008D3	Screw	2	
44	5WF1-001	Positioning, R	1	

5

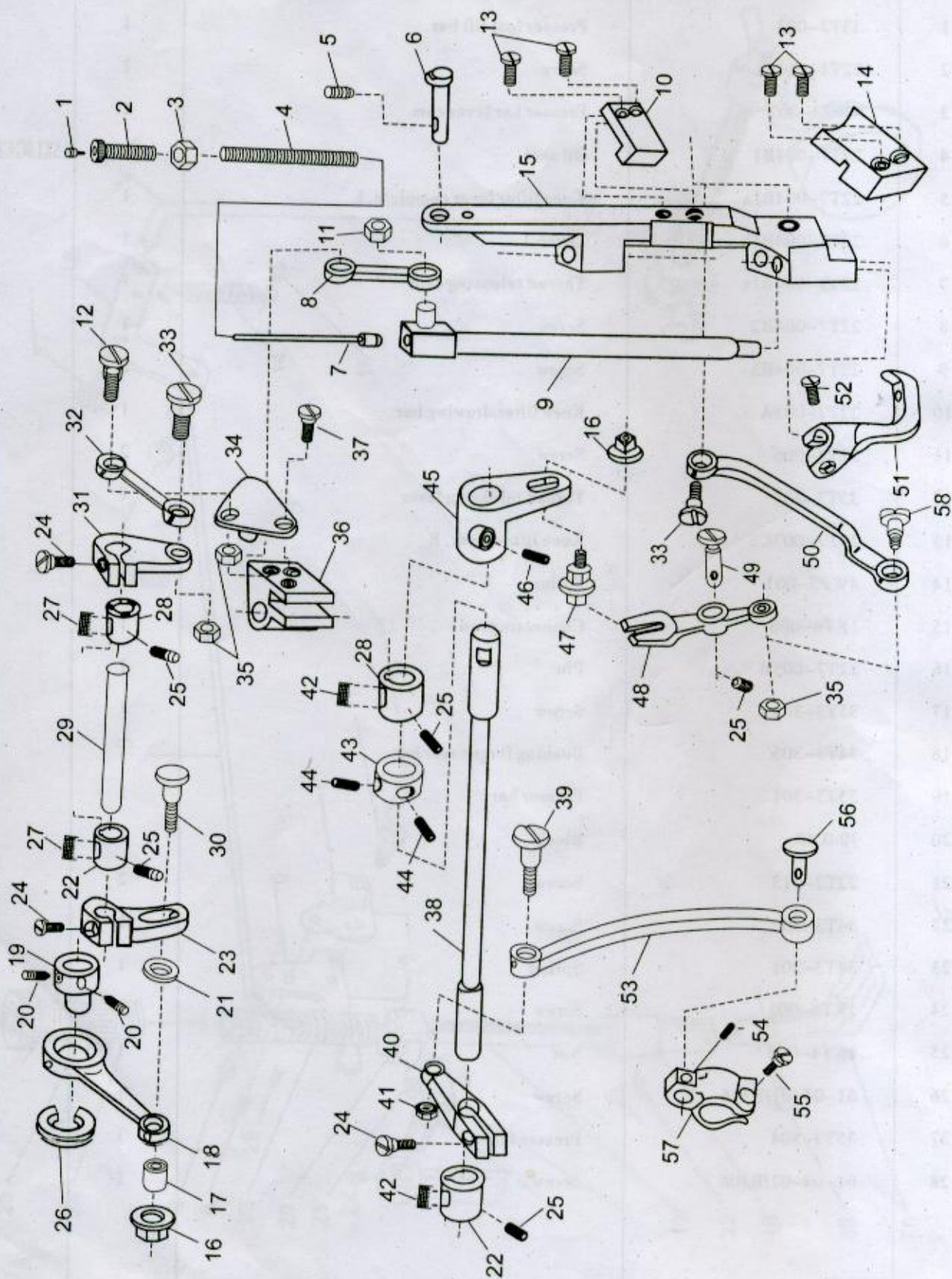


5. Presser foot

No.	Part number	Name	Qt.	Remark
1	33T3-003	Presser foot lift bar	1	
2	22T1-011	Screw	1	
3	4WF3-002	Presser bar lever cam	1	
4	22T7-004B1	Oil seal	1	4.5X1.8G GB3452.1
5	22T7-004B1a	Knee lifter lever complete, L	1	
6	22T7-004B1b	Lever, L	1	
7	22T7-004B1c	Thread releasing cam	1	
8	22T7-004B2	Screw	1	
9	22T7-004B3	Screw	2	
10	22T7-005A	Knee lifter drawing bar	1	
11	22T7-006	Screw	2	
12	35T3-305	Thread releasing lever	1	
13	22T7-007C2	Knee lifter lever, R	1	
14	4WF3-001	Spring	1	
15	1KT4-006	Connecting rod	1	
16	22T7-005B	Pin	1	
17	35T3-303	Screw	1	
18	34T3-305	Bushing for presser bar	1	
19	35T3-301	Presser bar	1	
20	J0.0.40	Block	1	
21	22T2-013	Screw	2	
22	34T3-302	Screw	1	
23	34T3-301	Spring	1	
24	1KT4-001	Screw	1	
25	1KT4-002	Nut	1	
26	61-04-01/B316	Screw	1	
27	35T3-304	Presser foot	1	
28	61-04-01/B308	Screw	1	

6. Upper feed parts

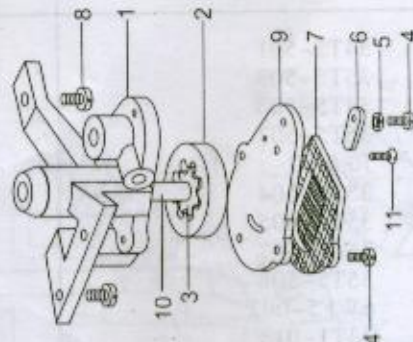
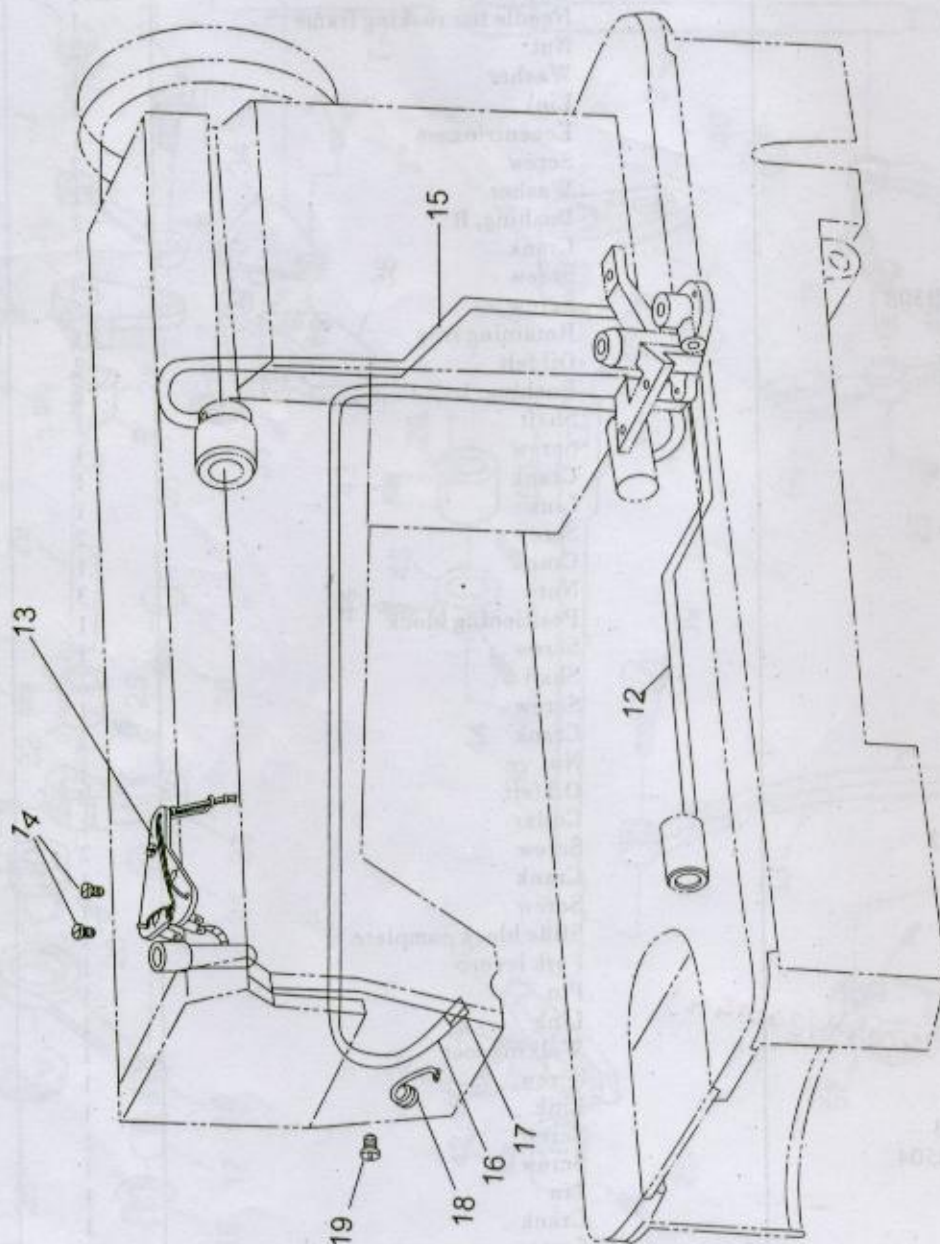
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6. Upper feed parts

No.	Part number	Name	Qt.	Remark
1	34T5-501	Oil felt	1	
2	35T5-503	Screw	1	
3	34T5-503	Nut	1	
4	35T5-501	Spring	1	
5	J0.0.40	Screw	1	
6	35T5-504	Shaft, needle bar rocking frame	1	
7	35T5-505	Bar	1	
8	35T5-507	Link	1	
9	35T5-508	Adaptor	1	
10	6WF5-002	Slot for slide block	1	
11	33T1-013	Slide block	1	
12	34T5-513b	Screw	1	
13	22T2-019	Screw	4	
14	35T5-511	Guide rail	1	
15	6WF5-001	Needle bar rocking frame	1	
16	34T5-518	Nut	2	
17	34T5-519	Washer	1	
18	34T5-520	Link	1	
19	34T5-516	Eccentric cam	1	
20	22T1-013	Screw	2	
21	34T5-521	Washer	1	
22	34T5-538a	Bushing, R	2	
23	34T5-517	Crank	1	
24	34T5-540	Screw	3	
25	61-04-01/B308	Screw	5	
26		Retaining ring	1	GB894.1 26
27	34T5-536b	Oil felt	2	
28	34T5-536a	Bushing, L	2	
29	34T5-537	Shaft	1	
30	34T5-522	Screw	1	
31	34T5-535	Crank	1	
32	34T5-534	Link	1	
33	34T5-507	Screw	2	
34	35T5-506	Crank	1	
35	34T5-508	Nut	3	
36	35T3-301	Positioning block	1	
37	34T5-527	Screw	1	
38	34T5-539	Shaft	1	
39	17T4-002	Screw	1	
40	5WF4-004	Crank	1	
41	J0.0.63	Nut	1	
42	34T5-538b	Oil felt	2	
43	34T5-532	Collar	1	
44	22T3-002B2	Screw	2	
45	34T5-533	Crank	1	
46	34T5-541	Screw	1	
47	34T5-531	Slide block complete	1	
48	34T5-529	Fork lever	1	
49	34T5-530	Pin	1	
50	35T5-512	Link	1	
51	35T5-502 (240148/240149)	Walking foot	1	
52	22T2-004	Screw	1	
53	5WF4-003	Link	1	
54	36T5-008E3	Screw	1	
55	61-04-01/B504	Screw	1	
56	5WF4-001	Pin	1	
57	5WF4-002	Crank	1	
58	34T5-513a	Screw	1	

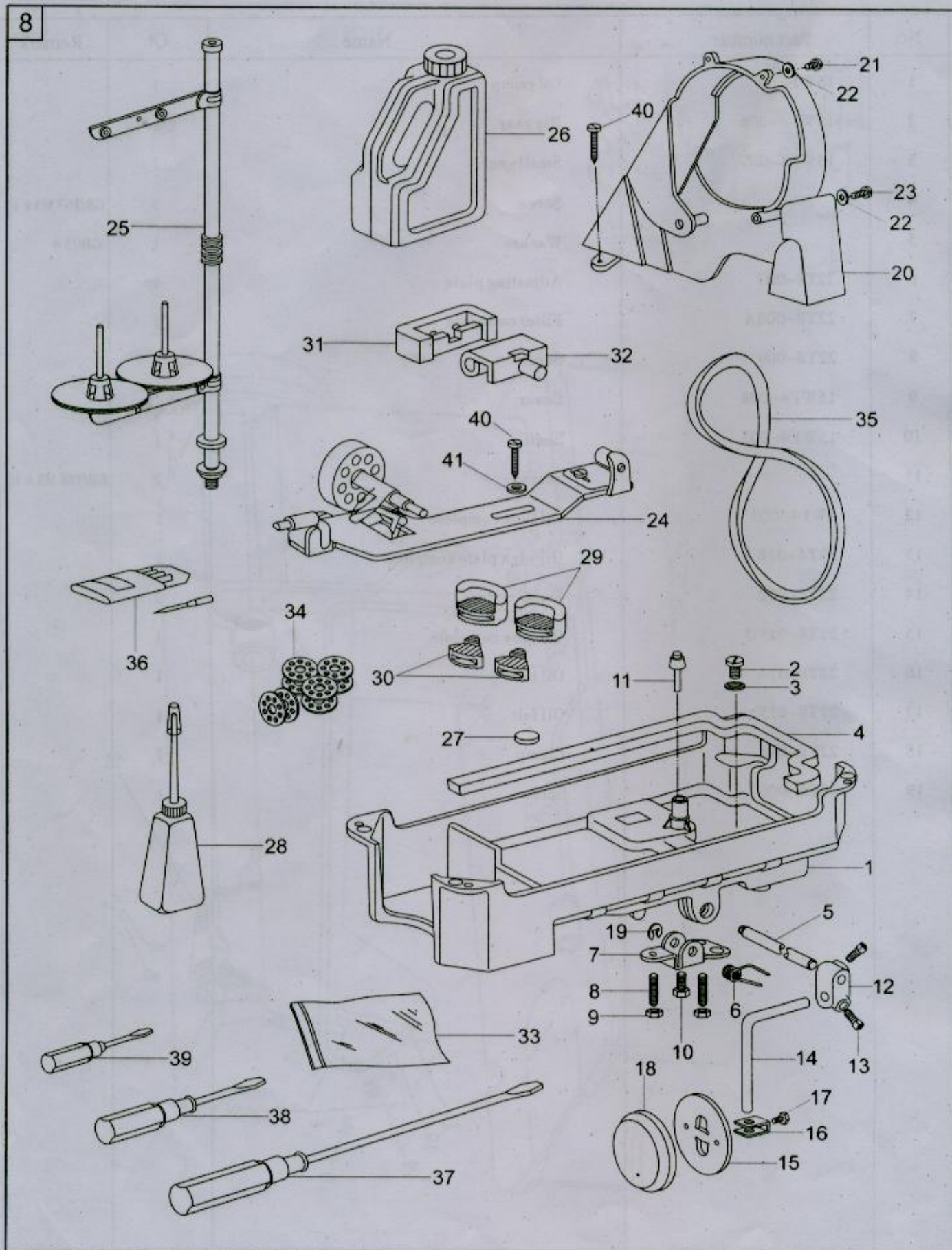
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7. Oil pump

No.	Part number	Name	Qt.	Remark
1	15WF4-003	Oil pump	1	
2	15WF4-006	Big gear	1	
3	15WF4-007	Small gear	1	
4		Screw	3	GB/T67 M3 × 10
5		Washer	1	GB93 4
6	22T8-007	Adjusting plate	1	
7	22T8-008A	Filter complete	1	
8	22T8-009	Screw	1	
9	15WF4-004	Cover	1	
10	15WF4-005	Shaft	1	
11		Screw	2	GB/T68 M3 × 10
12	4WF4-005	Oil tube complete	1	
13	33T4-018	Oil wick plate complete	1	
14	22T8-012	Screw	2	
15	22T8-013D	Oil tube complete	1	
16	22T8-014	Oil tube	1	
17	22T8-015	Oil felt	1	
18	22T8-016	Clamp	1	
19	20T4-006	Screw	1	

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8. Accessories

No.	Part number	Name	Qt.	Remark
1	4WF5-001	Oil pan	1	
2	22T9-001A ₂	Screw	1	
3	22T9-001A ₃	Washer	1	
4	2KT9-008	Gasket	1	
5	22T9-001A ₄	Hinge pin	1	
6	22T9-001A ₇	Spring	1	
7	22T9-001A ₈	Bracket	1	
8	22T9-001A ₉	Screw	2	
9	22T9-001A ₁₀	Nut	2	
10	22T9-036	Screw	1	
11	4WF5-002	Knee lifter prop bar	1	
12	22T9-003B ₁	Connector	1	
13		Screw	各1	GB/T5781 M6×12 M6×20
14	22T9-003B ₂	Bent rod	1	
15	22T9-003B ₃	Bell	1	
16	22T9-003B ₄	Bell bracket	1	
17	22T9-003B ₇	Screw	1	
18	22T9-003B ₈	Pad	1	
19		Stop ring	1	GB896 9
20	1KT6-001	Belt guard	1	
21	4F-004	Screw	2	GB/T67 M4×8
22		Washer	2	GB/T97.1 4
23	4F-005	Screw	2	GB/T67 M5×12
24	S14420020	Bobbin winder	1	
25	14F0-00	Thread stand	1	GXJ-2C
26	22T9-017	Oil tank	1	
27	22T9-012	Magnet	1	
28	33TF-011	Oil pot	1	
29	1KT5-004	Cushion	2	
30	1KT5-003	Cushion	2	
31	22T9-007F ₁	Hinge	2	
32	22T9-007F ₂	Rubber cushion	2	
33	33TF-010	Parts bag	1	
34	33T1-027	Bobbin	5	
35		V-belt	1	M44
36		Needle	1 bag	DP×17 23#
37	33TF-012	Screwdriver(big)	1	
38	33TF-013	Screwdriver (M)	1	
39	33TF-014	Screwdriver (S)	1	
40		Screw	4	GB5282 ST4.8×19
41		Washer	2	GB/T95 6