



**TYPICAL**

# **GC6-7-D**

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

**OPERATION INSTRUCTION / PARTS MANUAL**

## 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 $\geq$ 13mm  
Needle: Model DPX17#18~#22  
Hook: big rotating hook  
Lubrication:auto lubrication  
Motor power 370W (clutch motor).

## 2. Preparation

### (1)Cleaning machine

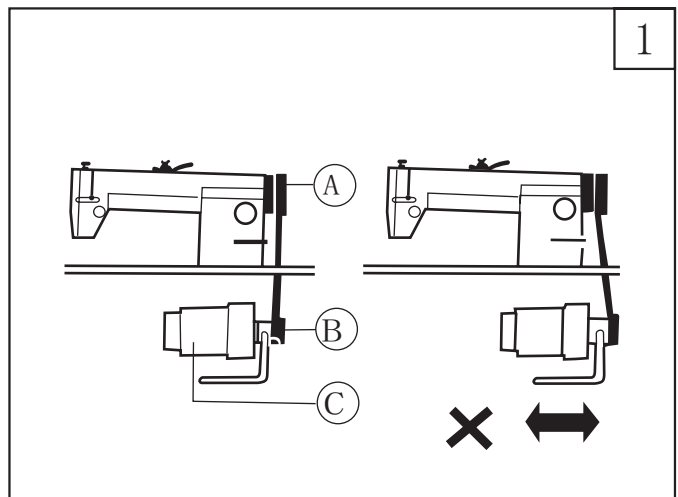
Clean off the grease and dusts on the surface of machine with gasoline and soft cloth.

### (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 touching the table.



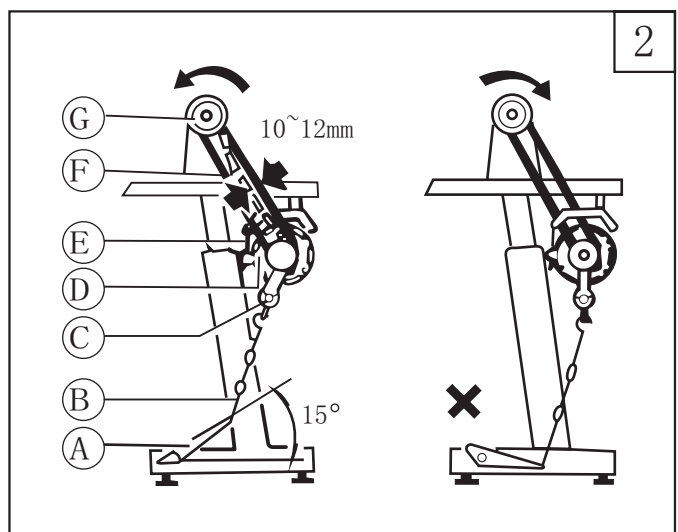
## 4. Connecting the clutch lever to the pedal (Fig. 2)

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.

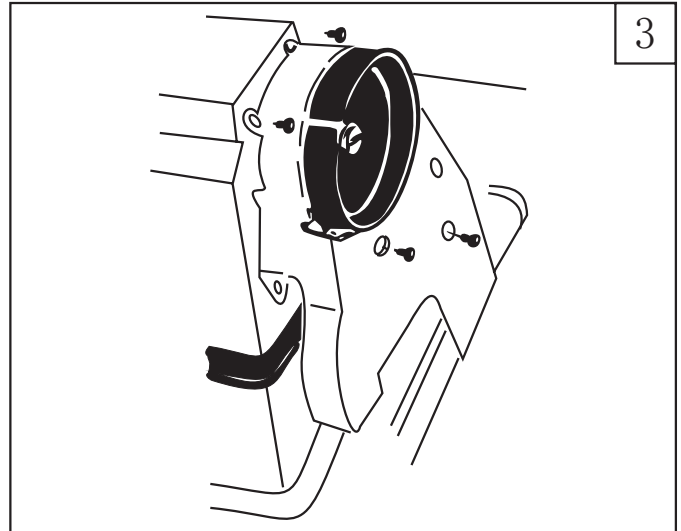
c. The machine balance wheel should rotate counter clockwise for normal sewing when viewed from the opposite side of the balance wheel. The motor rotates in the same direction. The rotation can be reversed by reversing (turn over 180 deg.) the plug of the motor.

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.



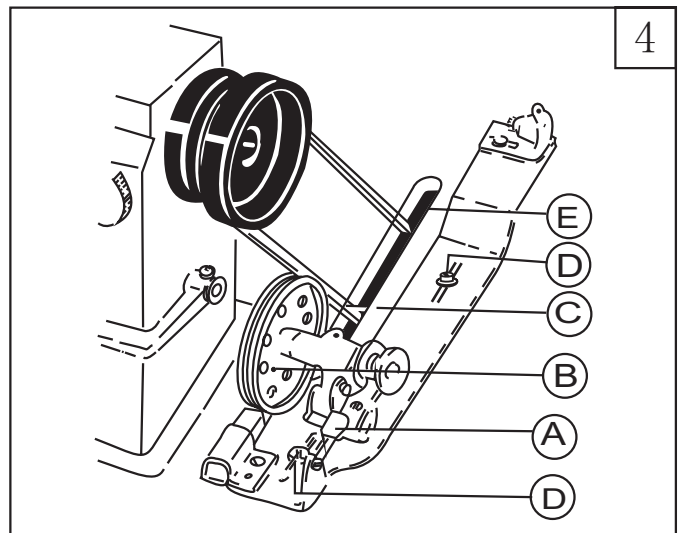
## 5. Installing belt guard (Fig. 3)

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

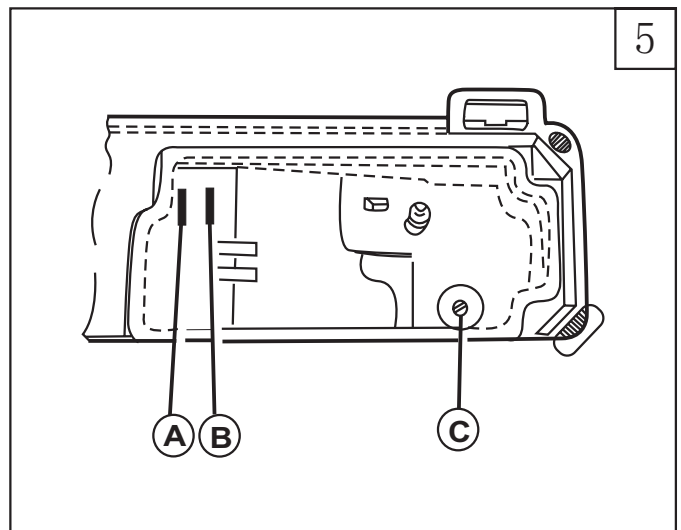
Oil amount must be oiled according to the mark of drip pan. Mark (A) is the highest situation, Mark (B) is the lowest situation, Note that oil amount couldn't be lower than mark (B), otherwise all parts of machine will appear heat and dead point for not gaining oil.

### b. Oiling

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

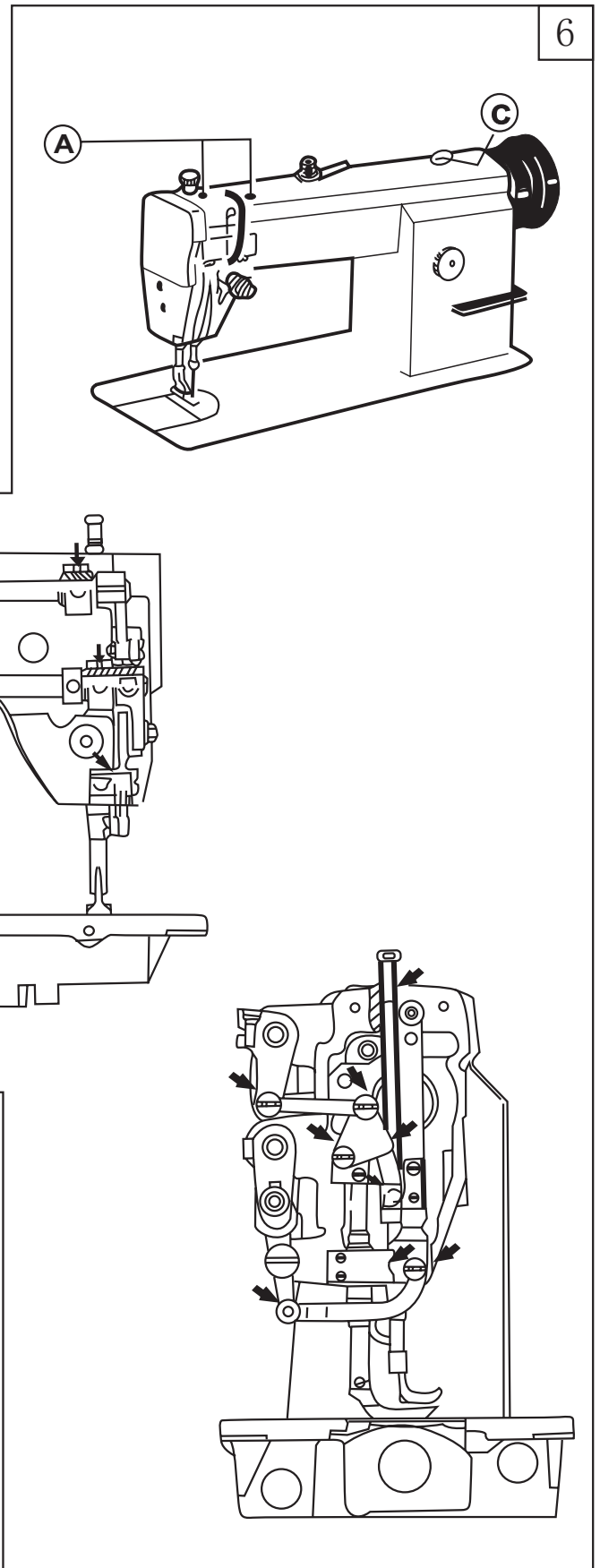
### c. Changing

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



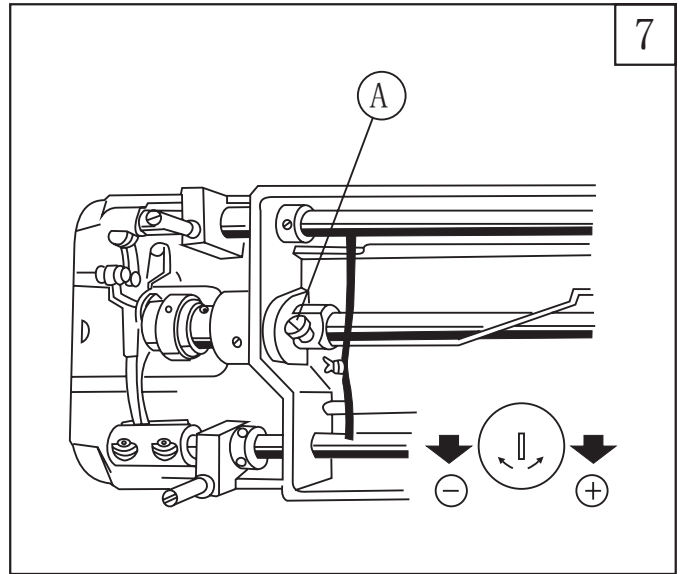
## 8. Trial run (Fig. 6)

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.



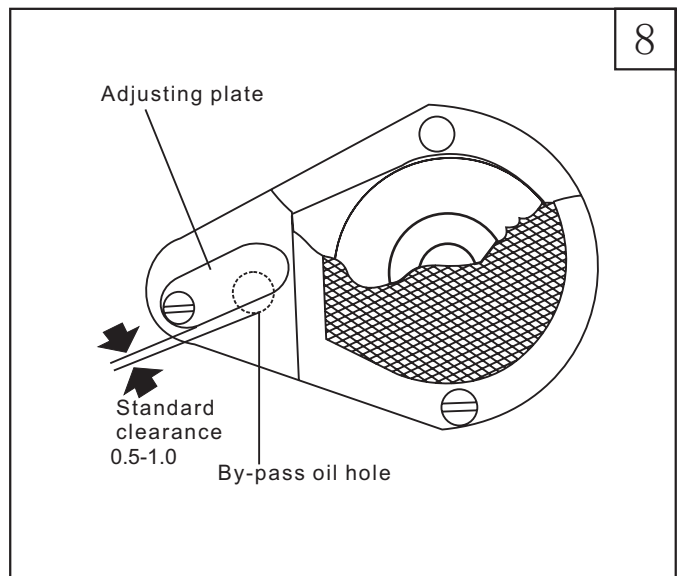
## 9. Rotating hook oil amount adjustment (Fig. 7)

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.

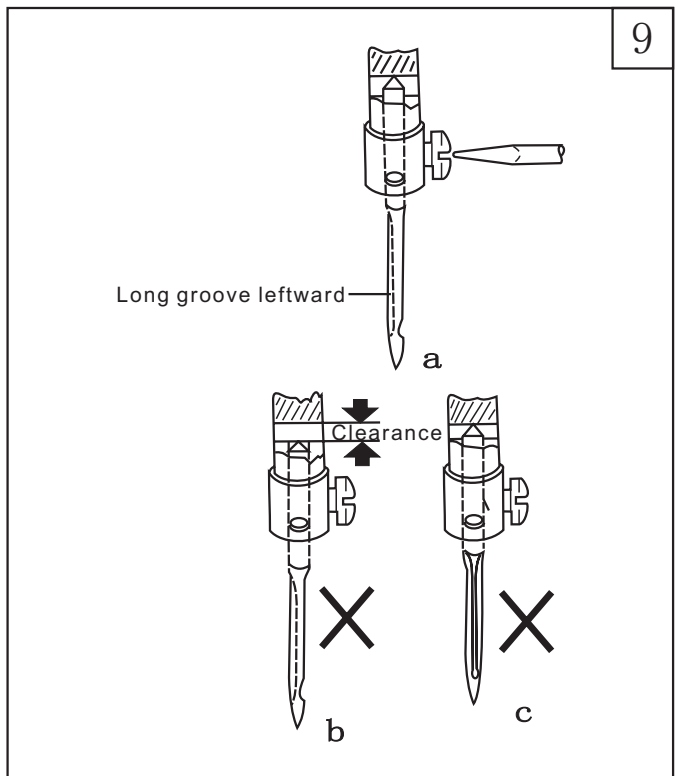


## 11. Installing the needle (Fig. 9)

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

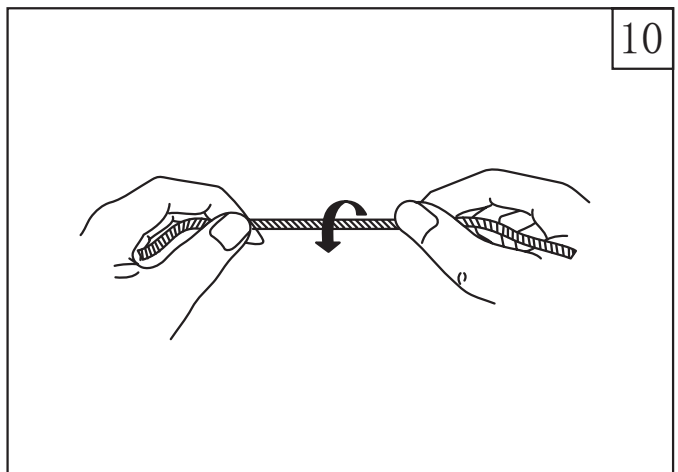
Fig.12 (c) Wrong direction of groove



## 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.

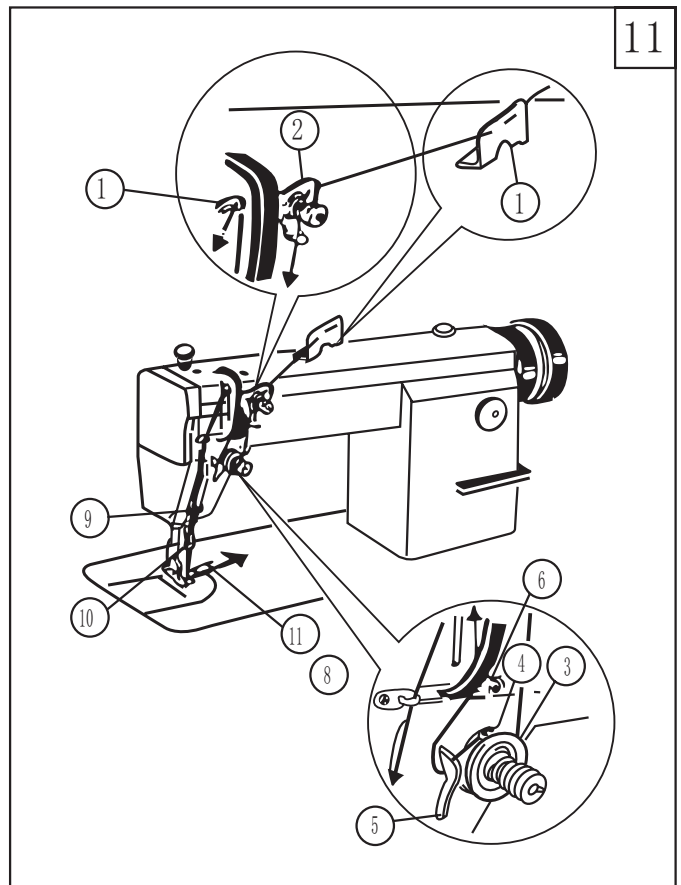
(2) To left pass down thru the right hole, to left up thru the middle hole and to left down thru the left hole of thread retainer ②.

(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.

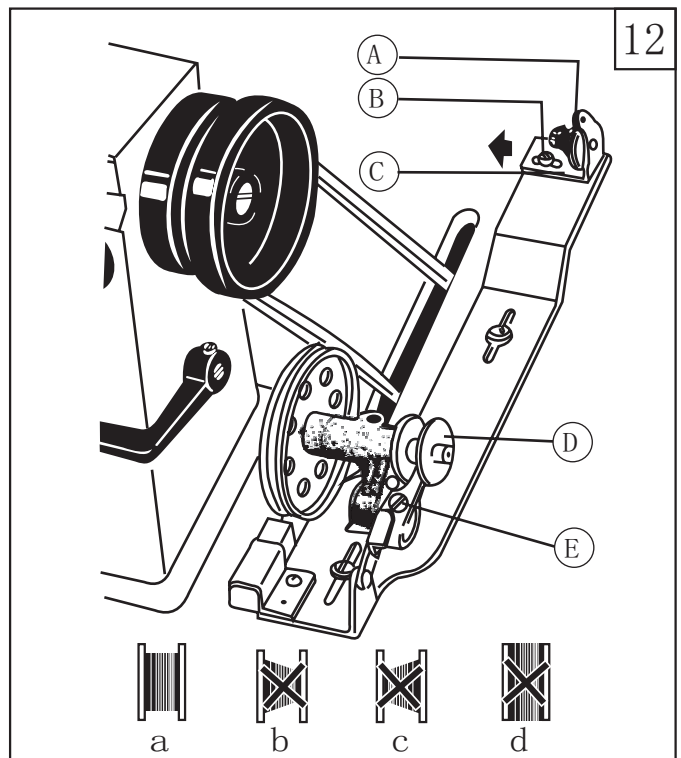


#### 14. Winding adjustment (Fig. 12)

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.

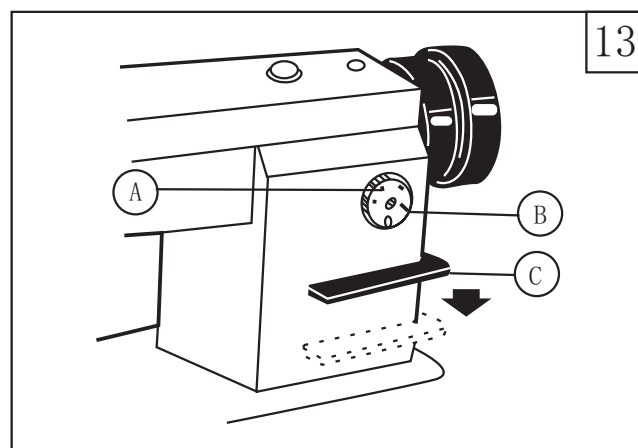
Don't overfill the bobbin, because it make its thread loosening down from the bobbin. The optimum capacity of thread will fill about 80% of bobbin outside diameter, and this can be adjusted by stop latch screw (E).



## 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.

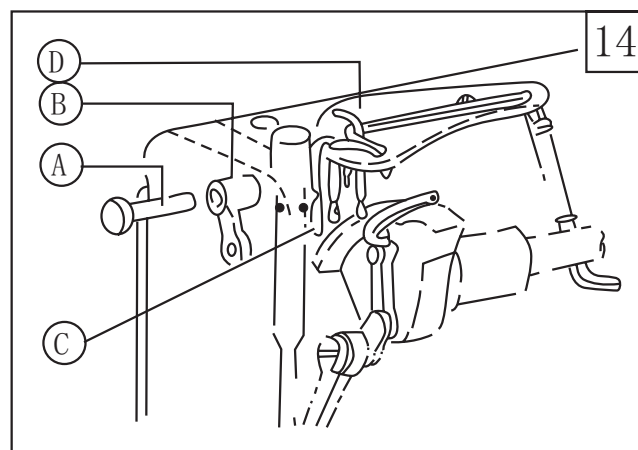
Remove Hinge (A) and lever (B).

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.

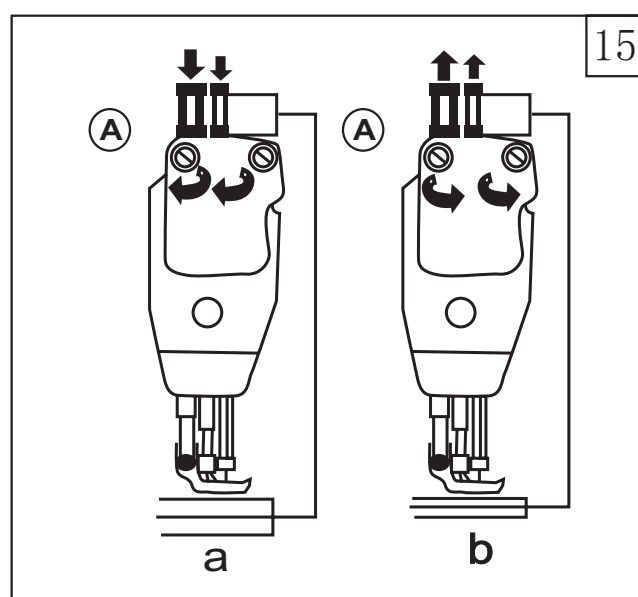
Installing is a reverse sequence.



## 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.





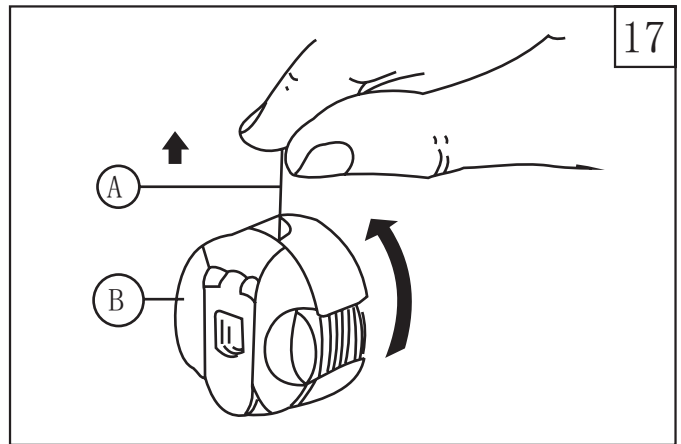
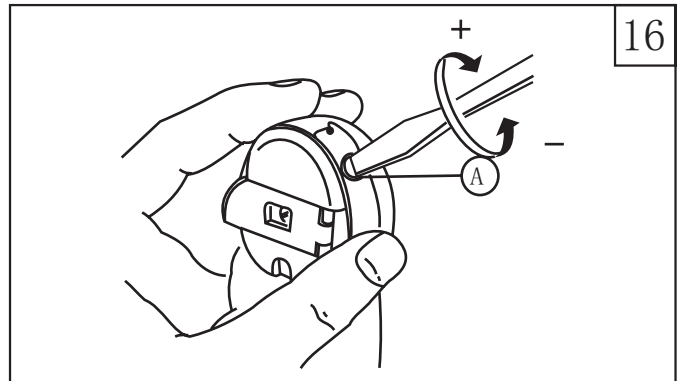
### 18. Adjusting the thread tension (Fig.16' 17)

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)

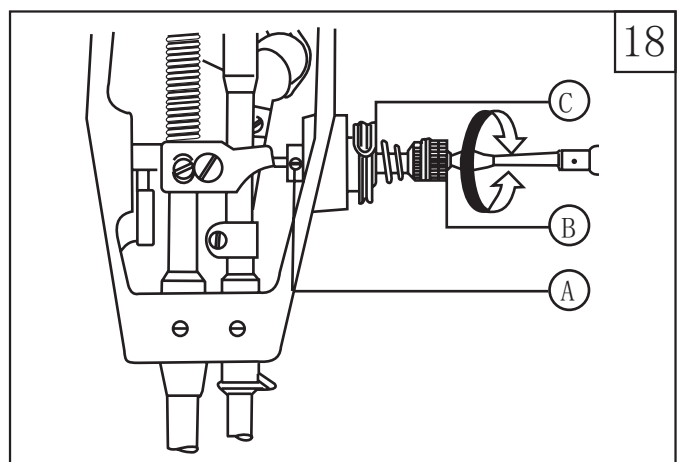
The normal sewing range of the thread take-up spring is 5~8 mm. For sewing light weight materials (short stitch), weaken the spring tension and widen the sewing range of spring, while for sewing heavy weight materials, strengthen the spring tension and shorten the sewing range of spring.

#### 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:

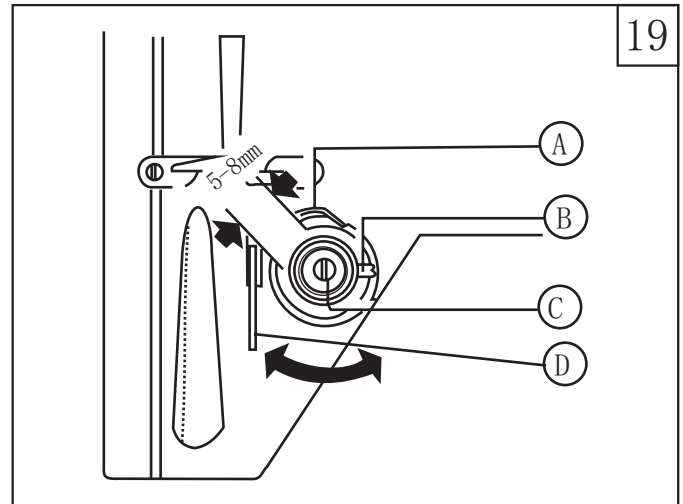
Loosen set screw (A) first, then to turn tension stud (B) counter clockwise to reduce the tension of thread take-up spring (C) to zero, and to turn tension stud (B) clockwise until spring (C) just comes into contact with the stopper on the thread take-up spring regulator, then to further turn tension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



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

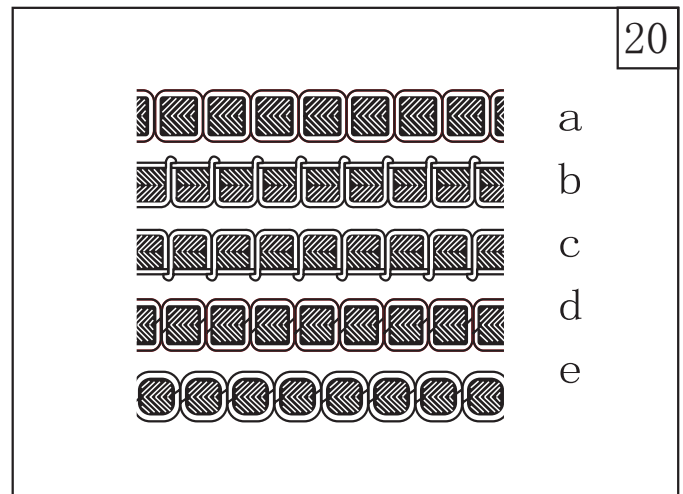
The position of the thread guide affects sewing quality, so it must be adjusted according to the materials to be sewn.

	Leftward	Center	Rightward
Thread guide position			
Material	Heavy	Medium	Light

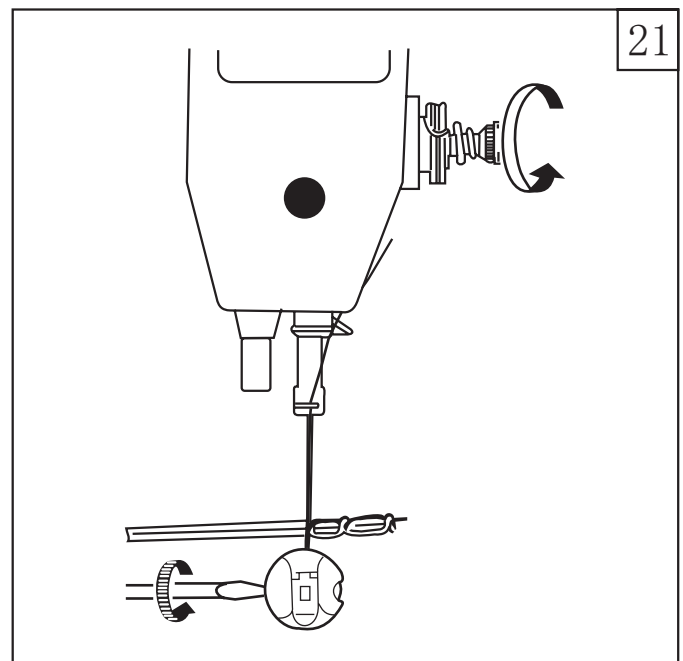
Fig.20 shows the various type of stitch forms.

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).



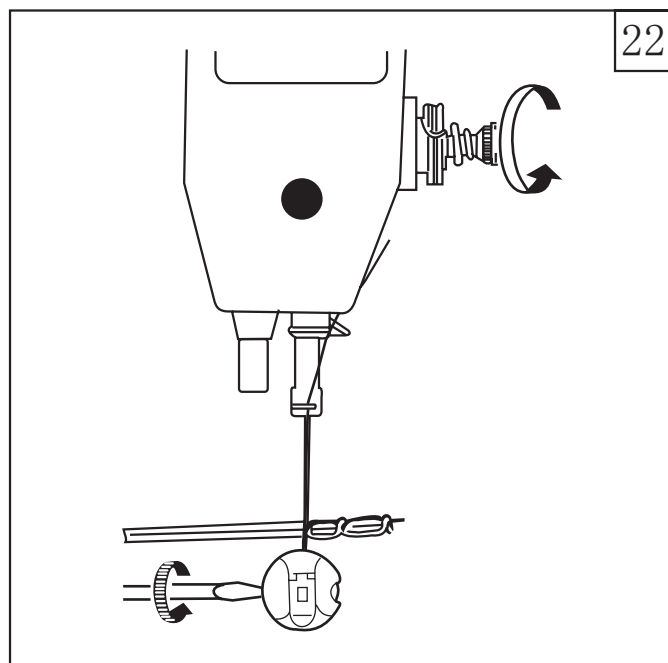
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(b) The needle thread tension is too weak or the bobbin thread is too strong, turn the tension regulating thumb nut clockwise to make the needle thread get more tension or turn the bobbin case tension regulating screw counter clockwise with small plastic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

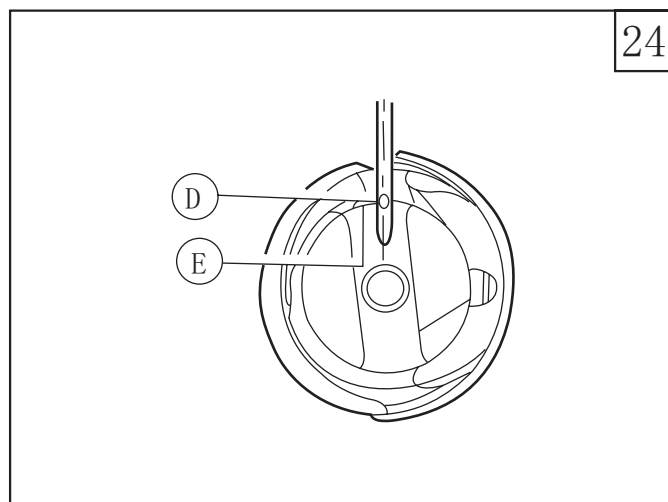
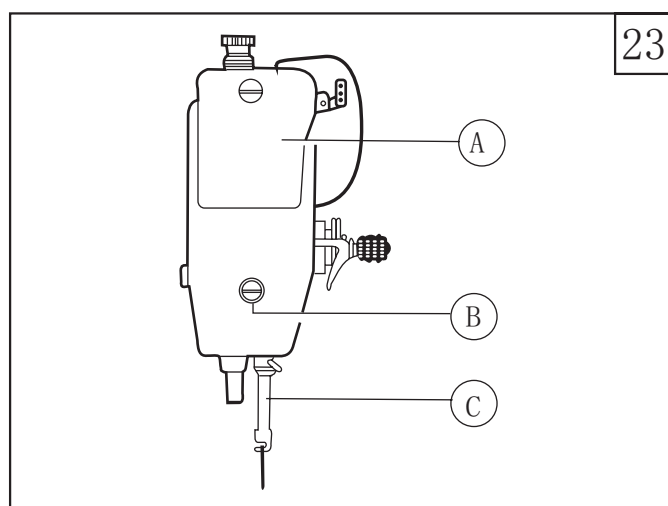
(c) Other abnormal stitches as shown in Fig.20  
 (d) .(e), adjustment can be made which reference to the above methods.



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

1. Adjusting the position of needle bar

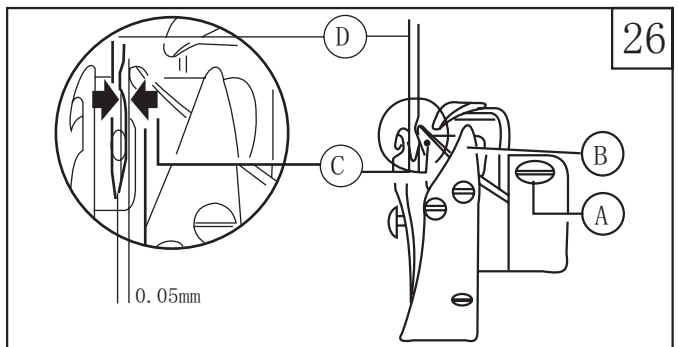
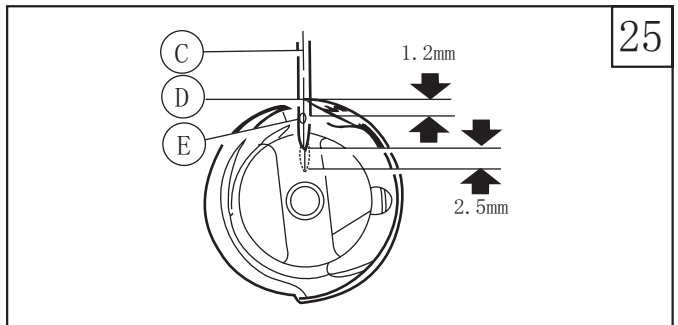
Turn the balance wheel to locate the needle bar (C) at its lowest position, remove the rubber plug in the face plate (A), then loosen the needle bar (C) connecting stud clamping screw (B) and move the needle bar (C) vertically to locate the timing position (The timing position of the needle bar is : 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.

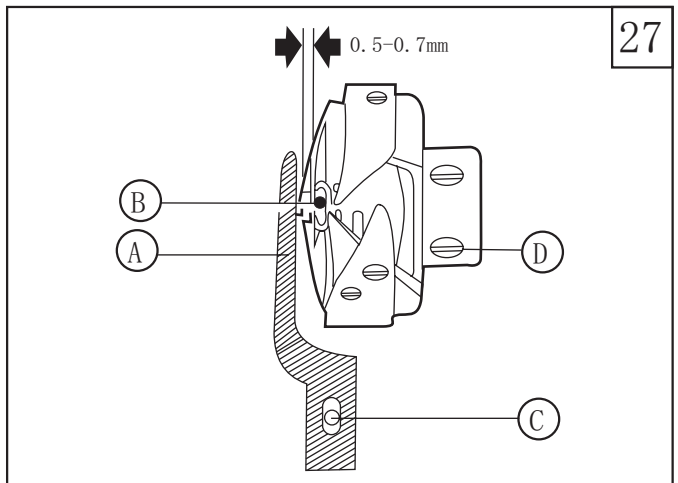
When adjusting the rotating hook point timing also to note the clearance between notch bottom of needle (D) and hook point (C) of approx 0.05mm must be maintained. (Fig.26)



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

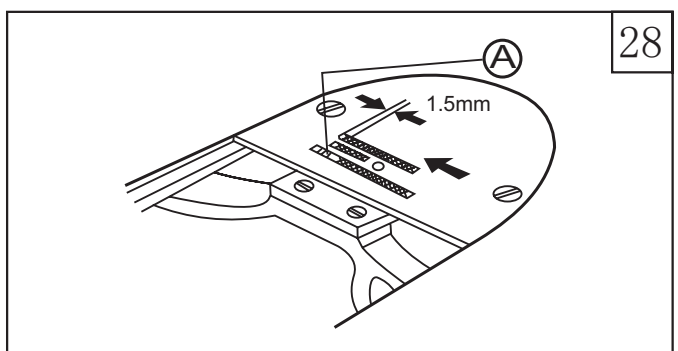
Lift the needle bar to its highest position, remove the throat plate, take down the needle and the bobbin case. Loosen rotating hook bobbin case holder position bracket screw (C) and take down position bracket (A), then loosen three set screws (D) of rotating hook, At this point, it took out the rotating 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.

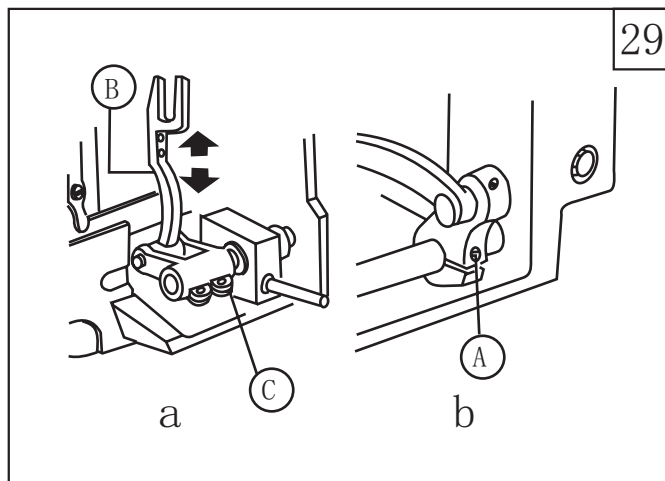


## 23. Installing feed dog (Fig. 28' 29)

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:

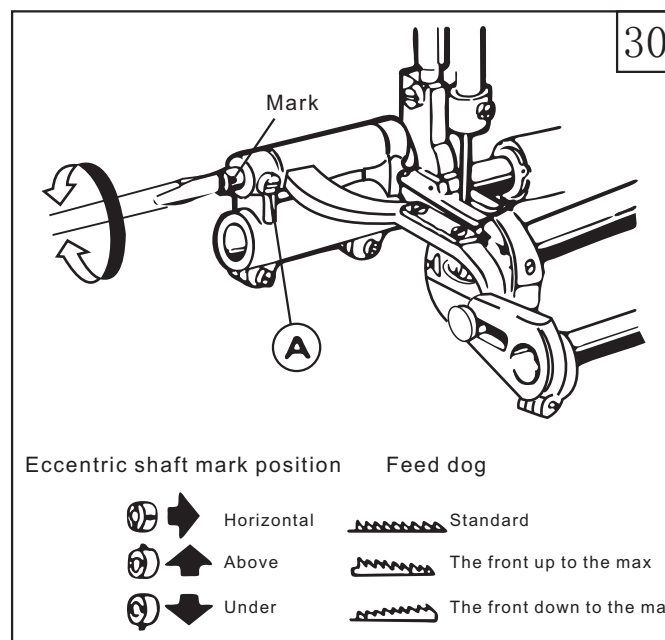
loosen Screw A

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 percker and no skipping.

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

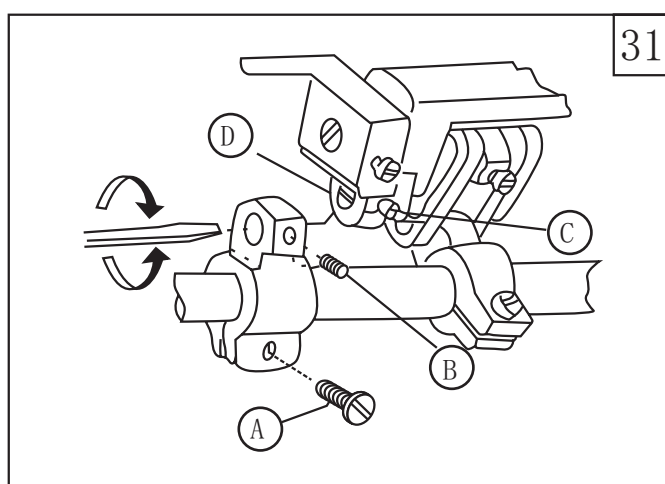


25. Stitch length error adjustment (Fig. 31)

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.

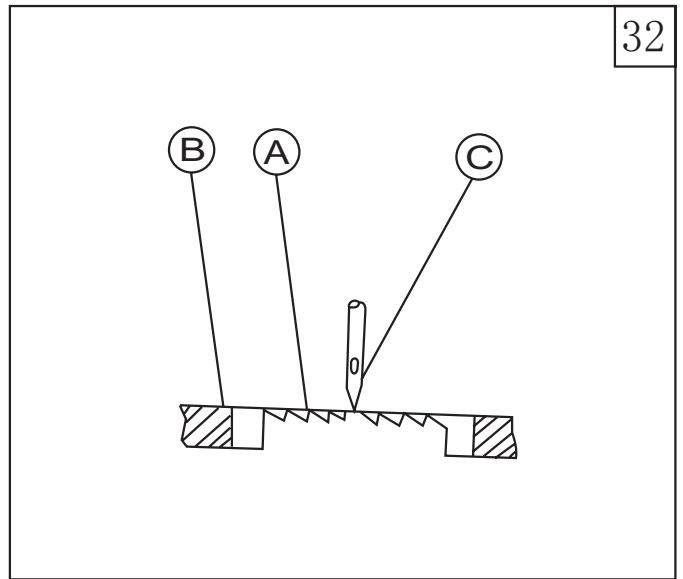


26. Feed timing (Fig. 32' 33' 34)

1 Standard position

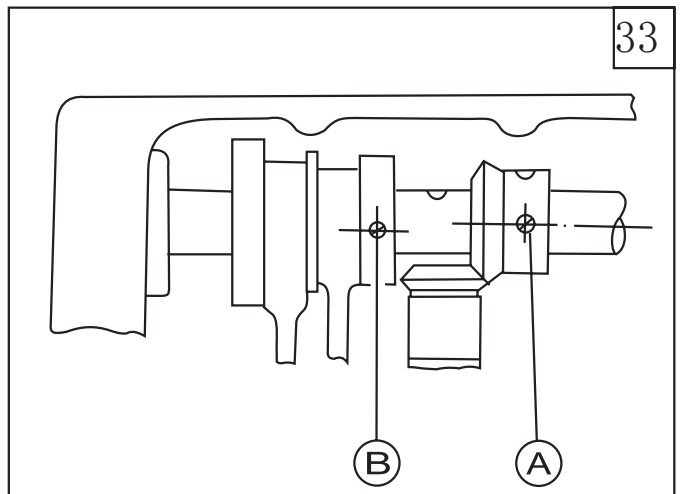
Turn balance wheel to lower Feed dog A till it is horizontal with the surface B of throat plate, at the moment, the tip of needle C should be horizontal with the surfaces of throat plate and feed dog.

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



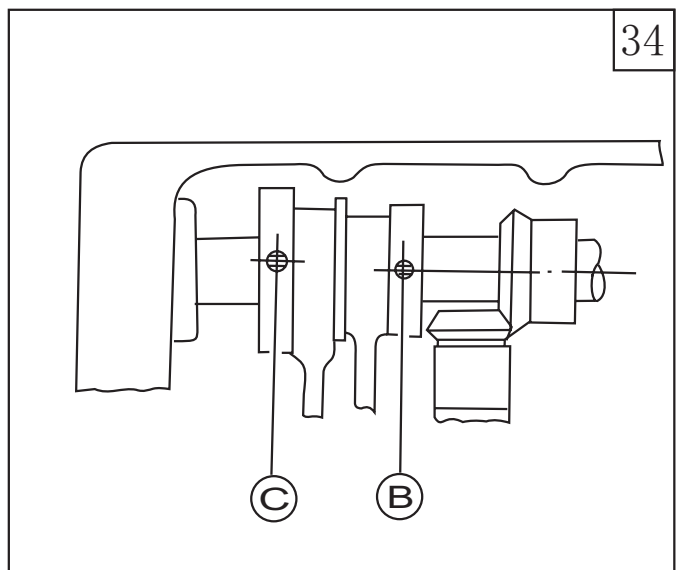
2 Installing feed dog lift cam (See Fig.33)

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.



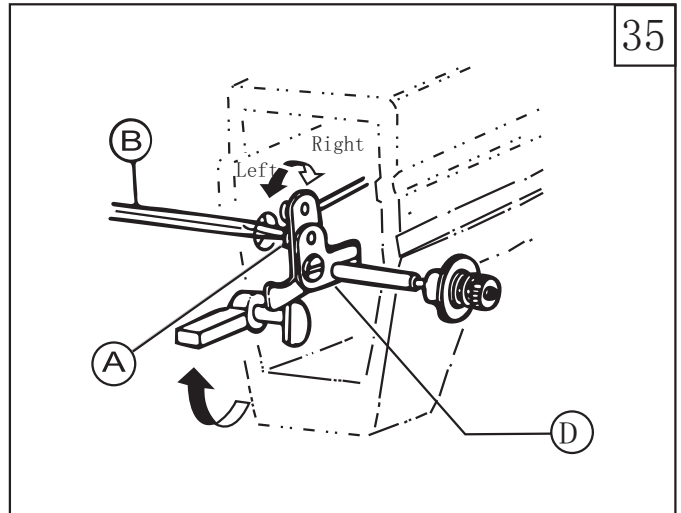
3 Insatlling feed cam (See Fig.34)

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.



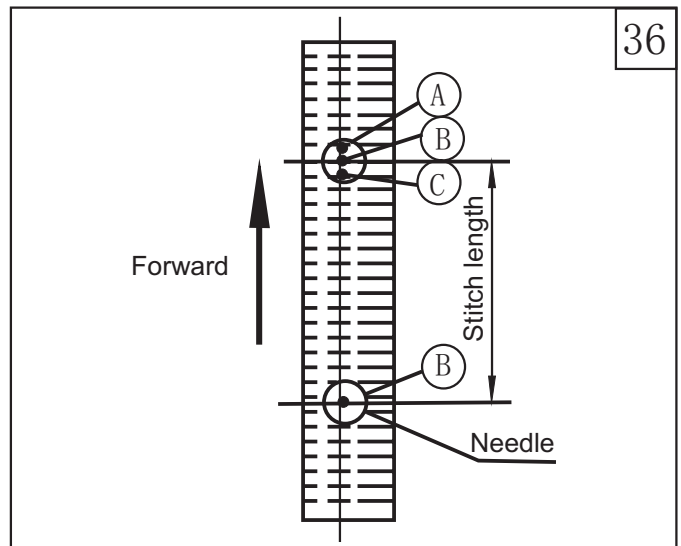
## 27. Adjusting the tension releasing mechanism (Fig. 35)

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.

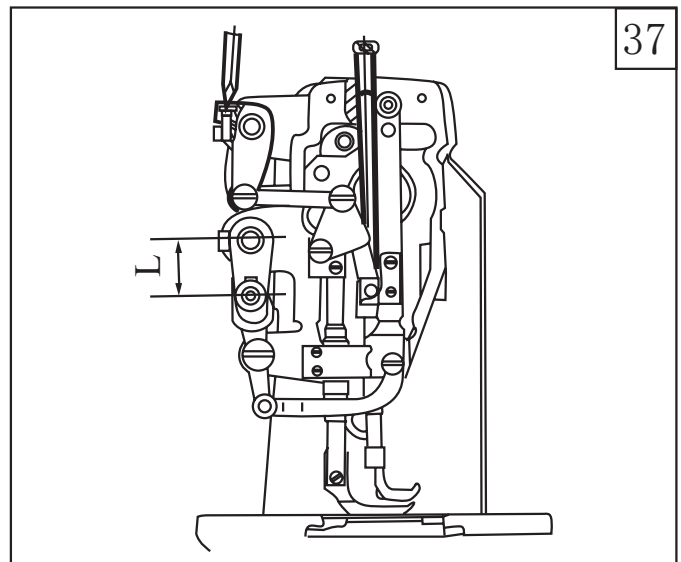


## 28. Adjusting feed timing of needle bar, Presser foot and feed dog (Fig. 36' 37)

(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.



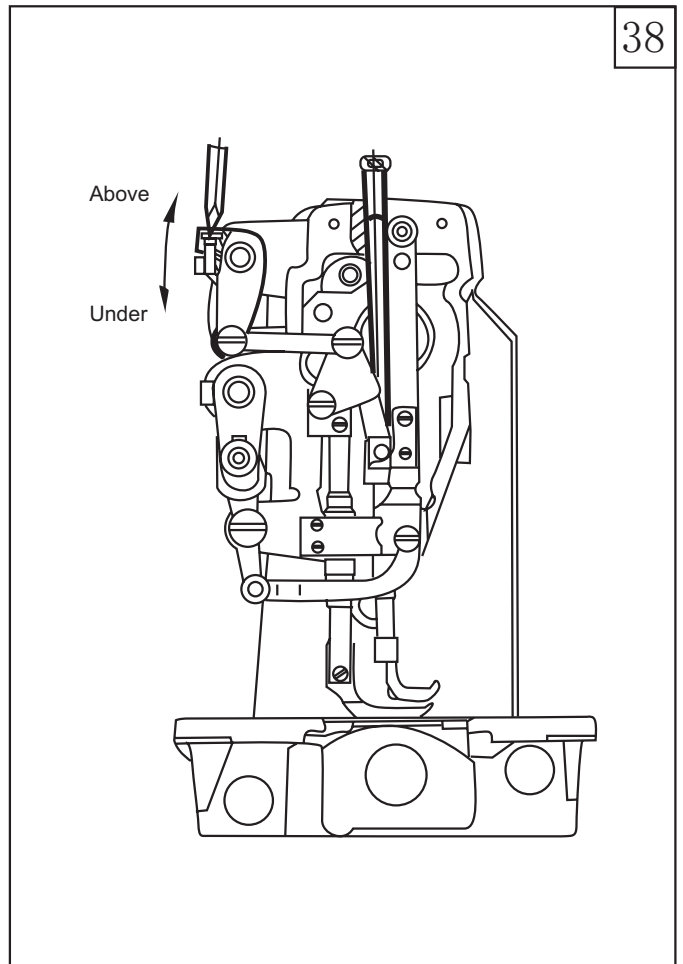
(B) Keep on turning balance wheel, move the needle forward a stitch length. If the needle is at position B, shows timing feed of the three; if at A, indicates the feed amount of needle bar and presser foot is larger than that of feed dog, then reduce L; if at C, indicates the feed amount of needle bar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



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

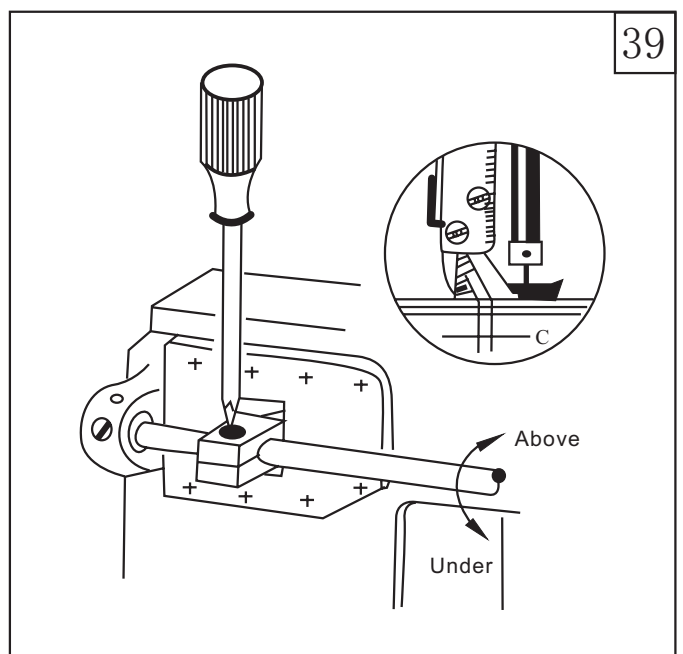
The alternate lift mechanism can be adjusted according to the nature of material in a certain range. Of common heavy and medium sewing machine, the presser foot lift amount is about 2.5mm and that of the follow presser foot is within 5mm. The presser foot lift amount increase then the follow foot amount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

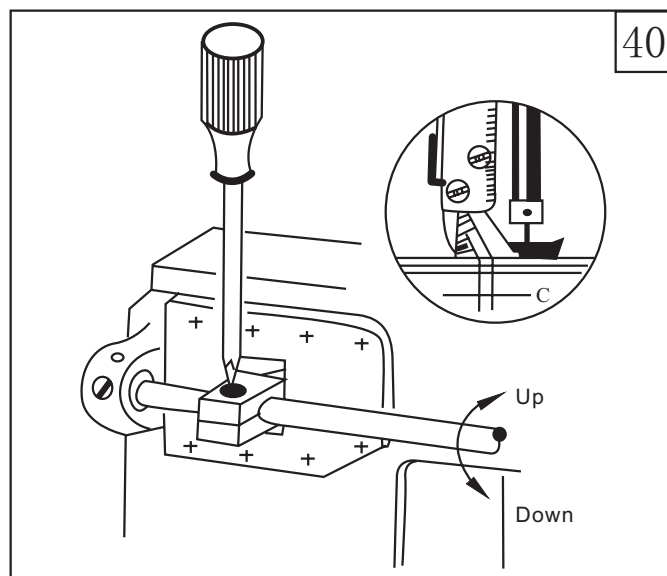




### 31. Adjusting the clearance between presser foot and follow presser foot (Fig. 40)

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.

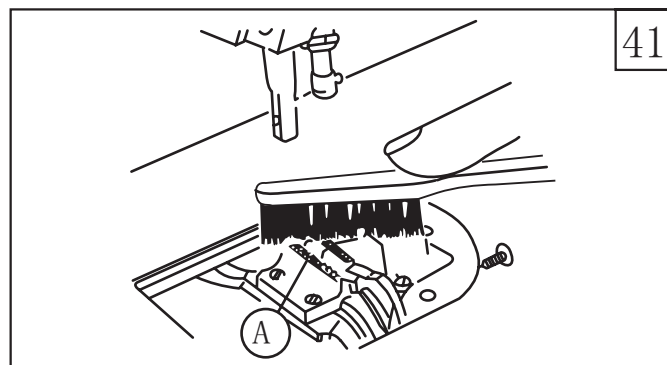


### 31. Periodical cleaning (Fig. 41' 42' 43)

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

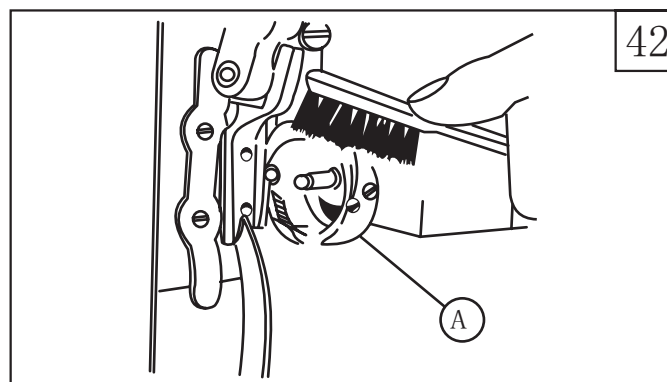
#### 1. Cleaning the feed dog

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



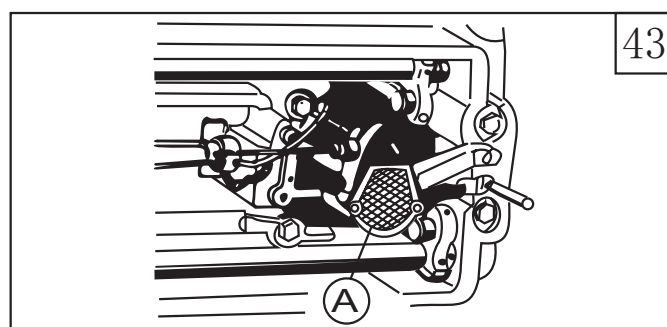
#### 2 Cleaning the rotating hook

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

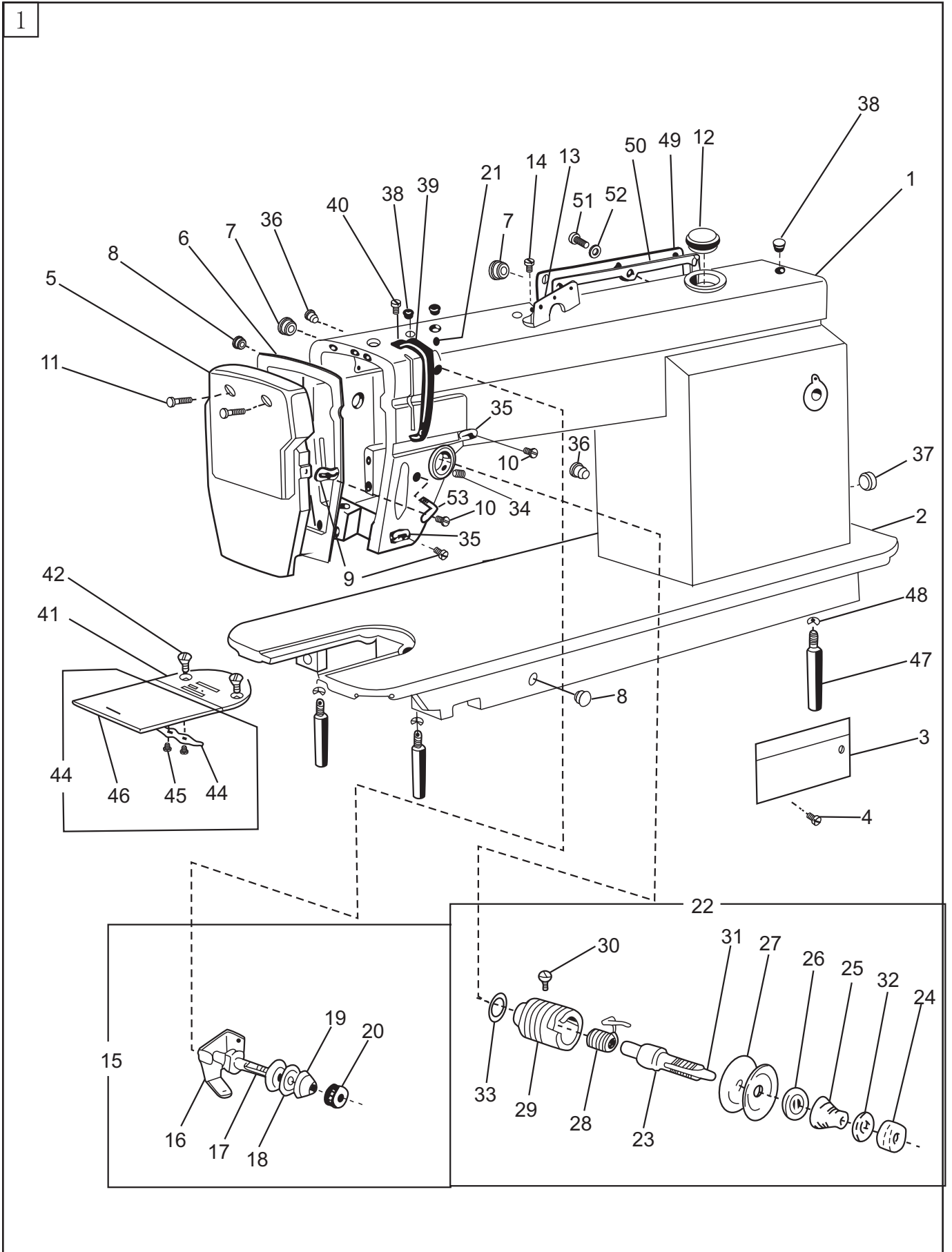


#### 3 Cleaning the oil pump filter screen (Fig.46)

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



1. Arm and bed

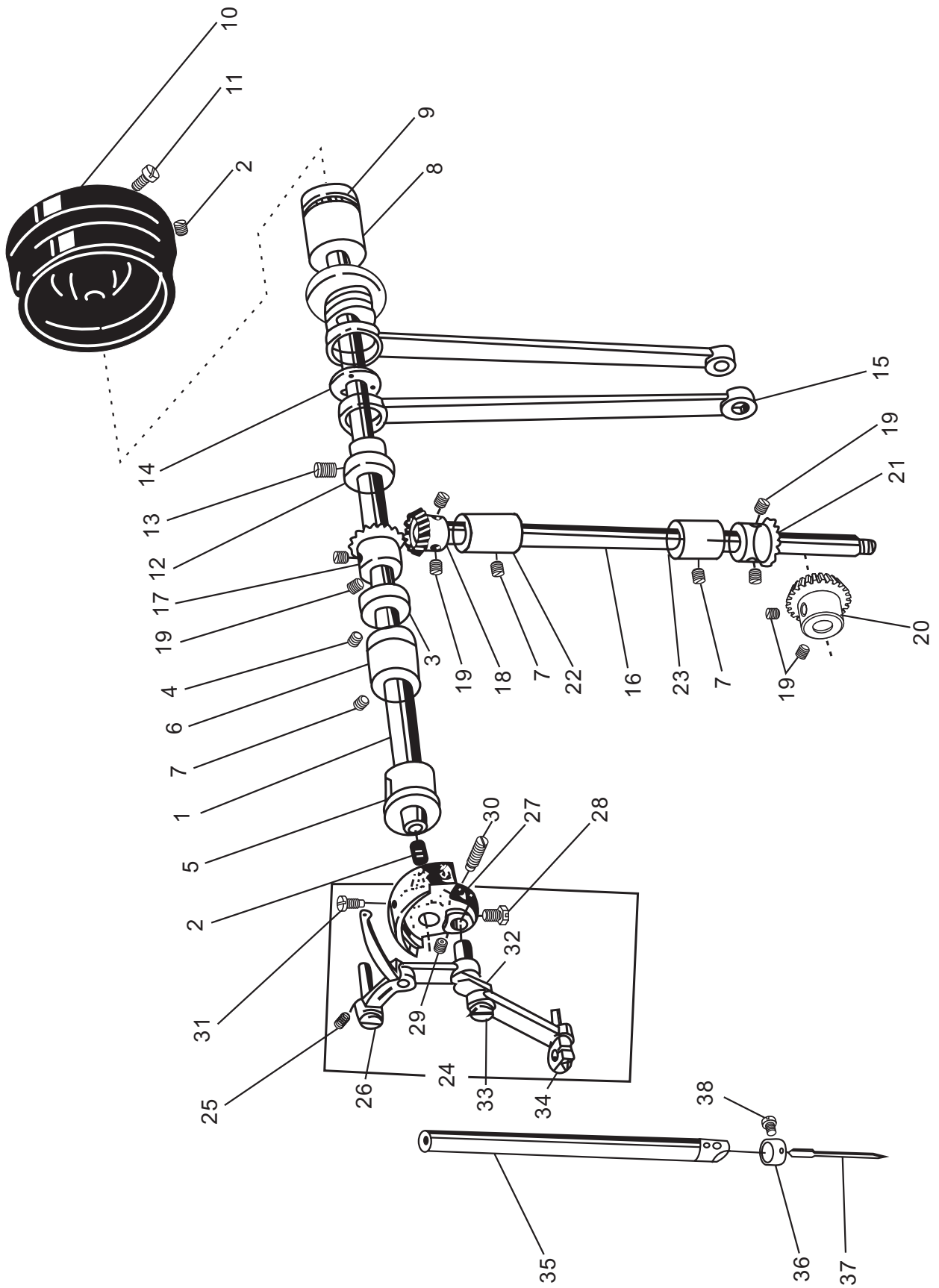


11. Machine Arm And Bed

No.	Part number	Name	Qt.	Remark
1	6WF4-001	Arm	1	
2	4WF1-001	Bed	1	
3	6WF1-002	Trade Mark	1	
4		Rivet	2	
5	35T4-402a	Face Plate	1	
6	22T1-003C2	Gasket For Face Plate	1	
7	22T1-003C3	Rubber Plug (Φ19)	3	
8	22T1-003C4	Rubber Plug	1	
		Rubber Plug	1	
9	22T1-003C5	Thread Finger	3	
10	22T1-003C6	Screw	2	
11	22T1-004	Screw	1	
12	22T1-004H	Oil Screen Complete	1	
13	36T2-004	Tree-eye Finger	1	
14	36T2-005	Screw	1	
15	36T2-006D	Thread Tension Complete	1	
16	36T2-006D1	Thread Pass-by Plate	2	
17	36T2-006D2	Screw	1	
18	22T1-009E3	Tension Disc	1	
19	36T2-006D3	Spring	1	
20	36T2-006D4	Nut	1	
21	22T1-011	Set Screw	1	
22	22T1-012F	Thread Tension Complete	1	
23	22T1-012F1	Screw	1	
24	22T1-012F2	Nut	1	
25	22T1-012F3	Spring	2	
26	22T1-012F4	Thread Releasing Plate	1	
27	22T1-012F5	Thread Tension Disc	1	
28	22T1-012F6	Thread Take-up Spring	1	
29	22T1-012F7	Thread Tension Adjusting Bracket	1	
30	22T1-012F8	Screw	1	
31	22T1-012F9	Thread Releasing Pin	1	
32	22T1-012F10	Stopping plate	2	
33	22T1-012F11	O-type Ring	2	
34	22T1-013	Set Screw	1	
35	22T1-014	Thread Finger	2	
36	22T1-015	Thread Finger	1	
37	22T1-015	Rubber Plug (Φ8.8)	1	
38	22T1-016	Rubber Plug (Φ2.7)	1	
39	22T1-017	Rubber Plug (Φ5.7)	2	
40	33T4-007	Thread Take-up Lever Guard	1	
41	22T2-004	Screw	1	
42	4WF-006	Throat Plate	2	
43	22T2-020	Screw	1	
44	61-04-01/B7/Z1	Sliding Plate Complete	3	
45	61-04-01/B7/Z102	Spring	3	
46	61-04-01/B7/Z103	Screw	1	
47	22T1-021G1	Sliding Plate	7	
48	4WF4-007	Bed Leg	7	
49		Washer	1	
50	5WF3-002A	Back Side Cover Complete		
51	22T1-005D2	Seal Gasket		
52	22T1-006	Screw		
53	22T1-007	Washer		
	35T4-405	Thread Finger		

2. Needle bar and thread take-up Arm shaft and vertical shaft

2

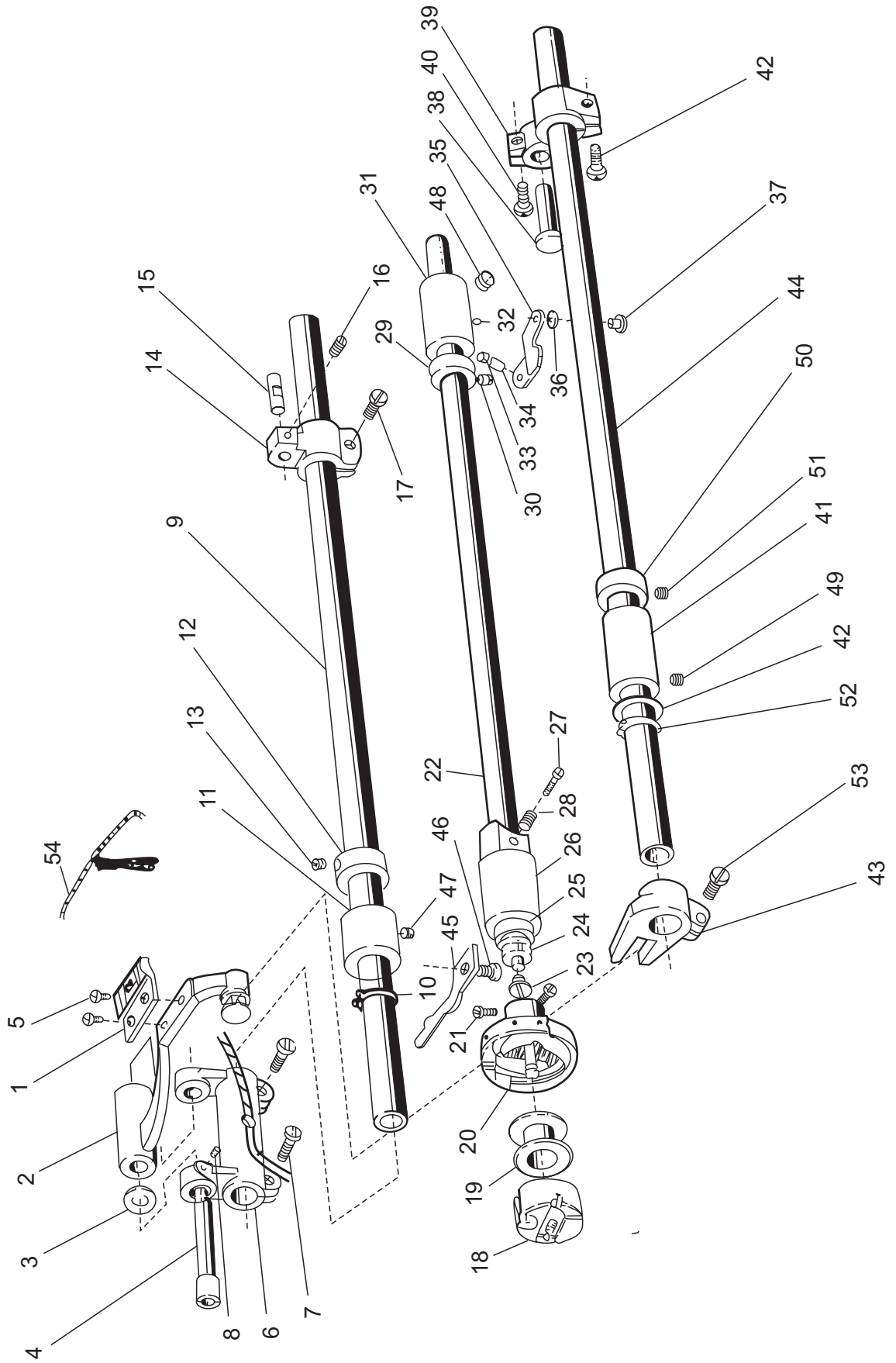


2. Needle and Vertical Shafts, Needle Bar Thread Take up Parts

No.	Part number	Name	Qt.	Remark
1	4WF1-001A	Arm Shaft	1	
2	22T3-001A2	Rubber Plug $\Phi 7.4\sim 10$	2	
3	22T3-002B1	Collar	1	
4	22T3-002B2	Screw	2	
5	33T1-007D1	Front Bushing	1	
6	4WF1-002	Middle Bushing	1	
7	J0.0.40	Screw	3	
8	22T3-005	Rear Bushing	1	
9	22T3-006F	Oil Seal Complete	1	
10	22T3-007C1	Balance Wheel	1	
11	22T3-007C2	Screw	2	
12	36T3-003D1	Feed Dog Lift Cam	1	
13	36T3-003D2	Screw	3	
14	36T3-004	Seperating Piece For Cam	1	
15	22T3-09D1C	Link	1	
16	22T3-010E1	Vertical Shaft	1	
17	22T3-010E2a1-2	Bever Gear	1	
18	22T3-010E2a2-2	Vertical Shaft Bevel Gear (upper)	1	
19	22T2-005B3	Screw	8	
20	22T3-010E2b1-2	Rock Shaft Bever Gear	1	
21	22T3-010E2b2-2	Vertical Shaft Bevel Gear (lower)	1	
22	4WF1-003A	Vertical Shaft Bushing (upper) Complete	1	
23	33T1-023P	Vertical Shaft Bushing (lower) Complete	1	
24	33T1-023A	Tread Take Lever Complete	1	
25	J0.0.40	Screw	1	
26	33T1-002	Hinge Pin	1	
27	33T1-006C1	Needle Bar Crank	1	
28	33T1-006C3	Screw	1	
29	22T2-005B3	Set Screw	1	
30	33T1-006C2	Screw	1	
31	61-04-01/B2	Set Screw	1	
32	33T1-001	Thread Take-up Crank	1	
33	22T2-001A6	Screw	1	
34	130032	Needle Bar Adaptor	1	
35	33T1-017	Needle Bar	1	
36	22T2-015	Thread Finger	1	
37	22T2-016	Needle	1	
38	22T2-017	Screw	1	

3.Feed dog lift and feed and thread looping

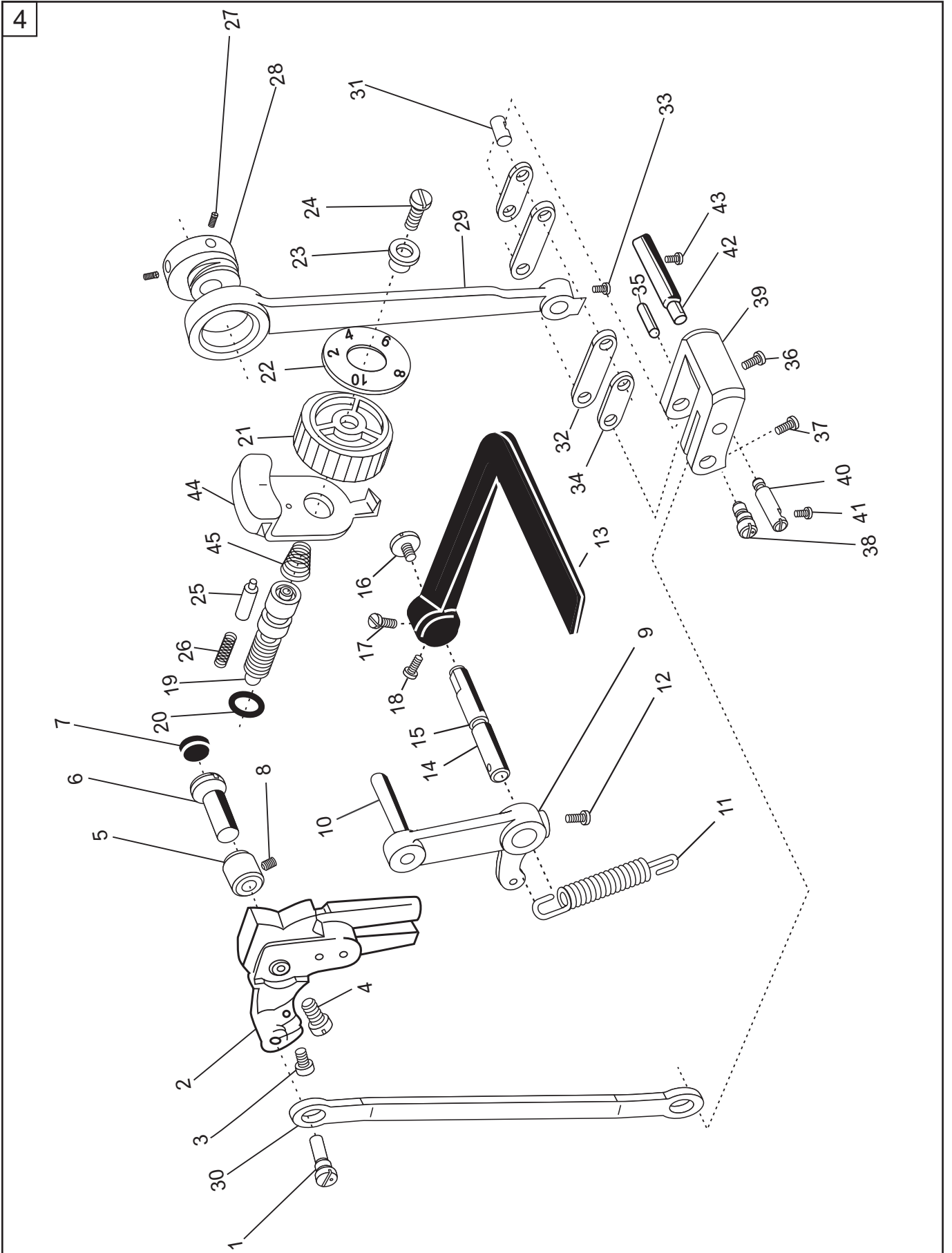
3



3. Feed Dog Lift And Feed And Thread Locking

No.	Part number	Name	Qt.	Remark
1	35T2-201	Feed Dog	1	
2	36T4-001A1a	Feed Dog Support Complete	1	
3	51T5-001A1b	Washer	1	
4	36T4-001A2	Eccentric Shaft	1	
5	J0.051	Screw	2	
6	4WF2-002	Feed Dog Support Crank	1	
7	J0.0.71	Screw	2	
8	22T2-019	Screw	1	
9	36T4-002	Feed Shaft	1	
10		Stop Ring	1	
11	22T6-004	Bushing	1	
12	22T6-005B1	Collar	1	
13	22T3-002B2	Screw	2	
14	4WF2-006	Feed Shaft Rear Crank	1	
15	36T5-004H01	Link Pin	1	
16	36T5-008E5	Screw	1	
17	22T6-08D3	Tension Screw	1	
18	33T1-028R	Bobbin Case Complete	1	
19	33T1-028R	Bobbin	1	
20	33T1-027	Hook Complete	1	
21	33T1-018J	Hook Screw	3	
22	33T1-018J3	Rock Shaft	1	
23	36T4-008D1	Screw	1	
24	22T4-001A1a1	Plug	1	
25	22T4-001A1a2	Oil Seal	1	
26	22T4-003	Front Bushing	1	
27	4WF1-05	Screw	1	
28	22T4-005	Spring	1	
29	22T4-006	Collar	1	
30	22T4-002B1	Screw	2	
31	J0.0.35	Rear Bushing	1	
32	4WF1-004	Oil Tube	1	
33	22T4-007C2	Plunge	1	
34	36T4-015	Spring	1	
35	36T4-016	Stopper	1	
36	36T4-010	Washer	1	
37		Screw	1	
38	22T8-009	Hinge Pin	1	
39	22T6-007	Feed Dog Lift Near Crank	1	
40	4WF2-003	Screw	2	
41	J0.0.71	Feed Dog Lift Shaft Front Bushing	1	
42	22T6-012	Washer	1	
43	22T6-013	Feed Dog Lift Fork	1	
44	36T4-018H101	Feed Dog Lift Shaft	1	
45	36T4-018H2	Hook Set Bracket	1	
46	36T1-029	Screw	1	
47	22T4-015	Screw	1	
48	J0.0.35	Screw	1	
49	22T1-013	Screw	1	
50	J0.0.40	Collar	1	
51	22T6-005B1	Screw	1	
52	22T3-002B2	Stop Ring	1	
53		Screw	1	
54	22T6-008D4	Oil Wick	1	

4. Feed adjustment

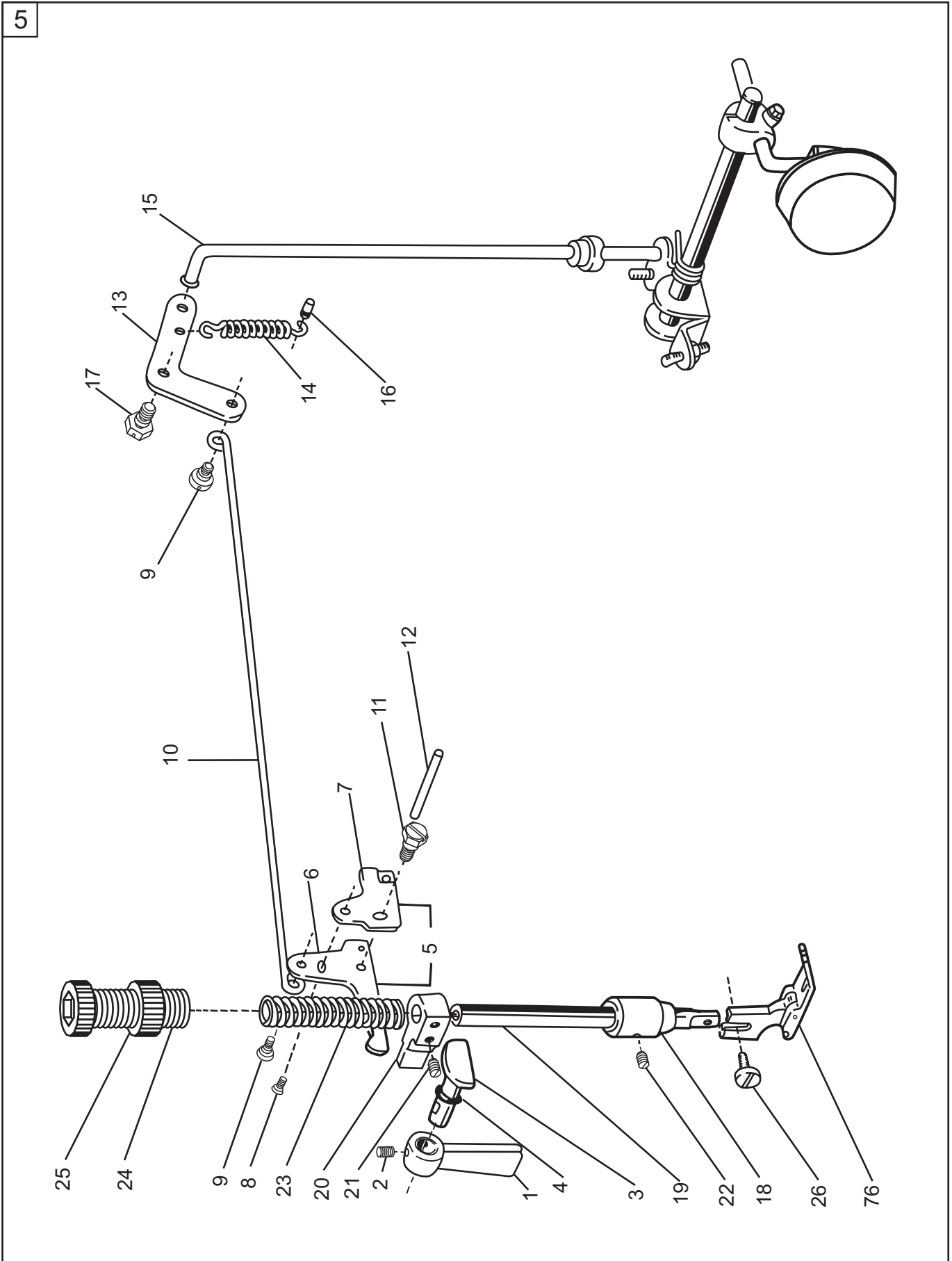




4. Feed Mechanism

No.	Part number	Name	Qt.	Remark
1	36T5-001	Link Pin	1	
2	4WF2-005	Stitch Length Bracket	1	
3	22T6-008D3	Screw	1	
4	22T5-010D4	Screw	1	
5	5WF1-003	Bushing	1	
6	22T5-004	Shaft For Stitch Length Bracket	1	
7	36T5-003	Rubber Plug	1	
8	J0.0.40	Set Screw	1	
9	36T5-004B1	Reverse Feed Lever Crank	1	
10	22T5-012E10	Shaft For Block	1	
11	22T5-012E2	Spring	1	
12	22T5-013	Screw	1	
13	4WF2-007A	Reverse Feed Lever	1	
14	22T5-010D2a	Pin Shaft	1	
15	22T2-010D2b	O-type Ring	1	
16	22T-010D3	Tension Screw	1	
17	17T5-016	Set Screw	1	
18	17T5-017	Screw	1	
19	36T5-007D1	Screw Bolt For Stitch Length	1	
20	22T5-006C4	O-type Rubber Ring	1	
21	36T5-007D2	Dial Cup	1	
22	4WF2-004A	Dial Face	1	
23	36T5-007D4	Screw Bushing	1	
24	36T5-007D5	Screw	1	
25	36T5-012	Stop Pin	1	
26	22T5-009	SD Pring	3	
27	36T3-003D2	Screw	1	
28	36T5-008E1	Feed Cam	1	
29	4WF2-009A	Feed Link	1	
30	4WF2-009B	Stitch Adjusting Link	1	
31	36T4-004H02	Pin	2	
32	36T5-008E4H02	Link	1	
33	36T5-008E5	Screw	2	
34	36T5-008E4H01	Link	1	
35	36T5-008E6	Pin For Link	1	
36	36T5-008E7	Screw	1	
37	36T5-008E8	Screw	1	
38	36T5-008E9	Link Eccentric Shaft	1	
39	36T5-008E10	Stitch Length Adjusting Crank	1	
40	5WF1-002	Set Pin (left)	1	
41	22T6-008D3	Screw	1	
42	5WF1-001	Set Pin (right)	1	
43	22T5-008D3	Screw	1	
44	36T5-010	Push Lever	1	
45	36T5-011	Spring	1	

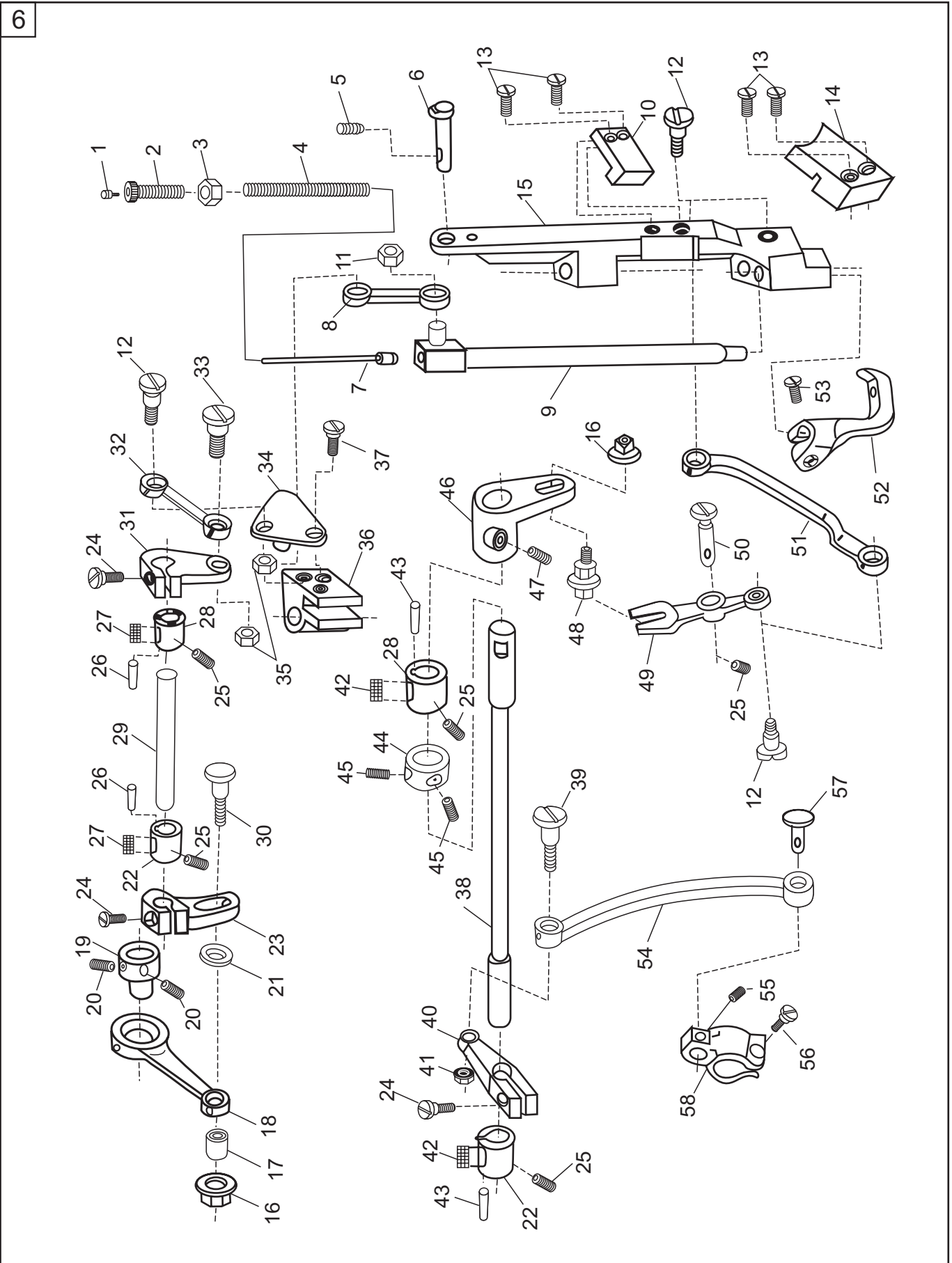
5. Presser foot



5. Presser Foot

No.	Part number	Name	Qt.	Remark
1	33T3-003	Presser Foot Lift Bar	1	
2	22T7-001A2	Screw	1	
3	4WF3-001	Presser Bar Lever Cam	1	
4		Oil Seal	1	
5	22T7-004B1	Knee Lifter Lever (left) Complete	1	
6	22T7-004B1a	Lever (left)	1	
7	22T7-004B1b	Thread Releasing Cam	1	
8	22T7-004B1c	Screw	1	
9	22T7-004B2	Screw	2	
10	22T7-004B3	Knee Lifter Drawing Bar	1	
11	22T7-005A	Screw	2	
12	22T7-006	Tread Releasing Lever	1	
13	22T7-007C1	Knee Lifter Lever (right)	1	
14	22T7-007C2	Spring	1	
15	4WF3-001	Connecting Rod	1	
16	22T7-008	Pin	1	
17	22T7-005B	Screw	1	
18	35T3-303	Bushing For Presser Bar	1	
19	35T3-302	Presser Bar	1	
20	35T3-301	Presser Block For Presser Bar	1	
21	J0.0.40	Screw	2	
22	22T2-013	Screw	1	
23	34T3-302	Spring	1	
24	34T3-301	Screw	1	
25	22T7-014E2	Nut	1	
26	22T7-015	Screw	1	
27	35T3-304	Presser Foot	1	

6. Upper feed

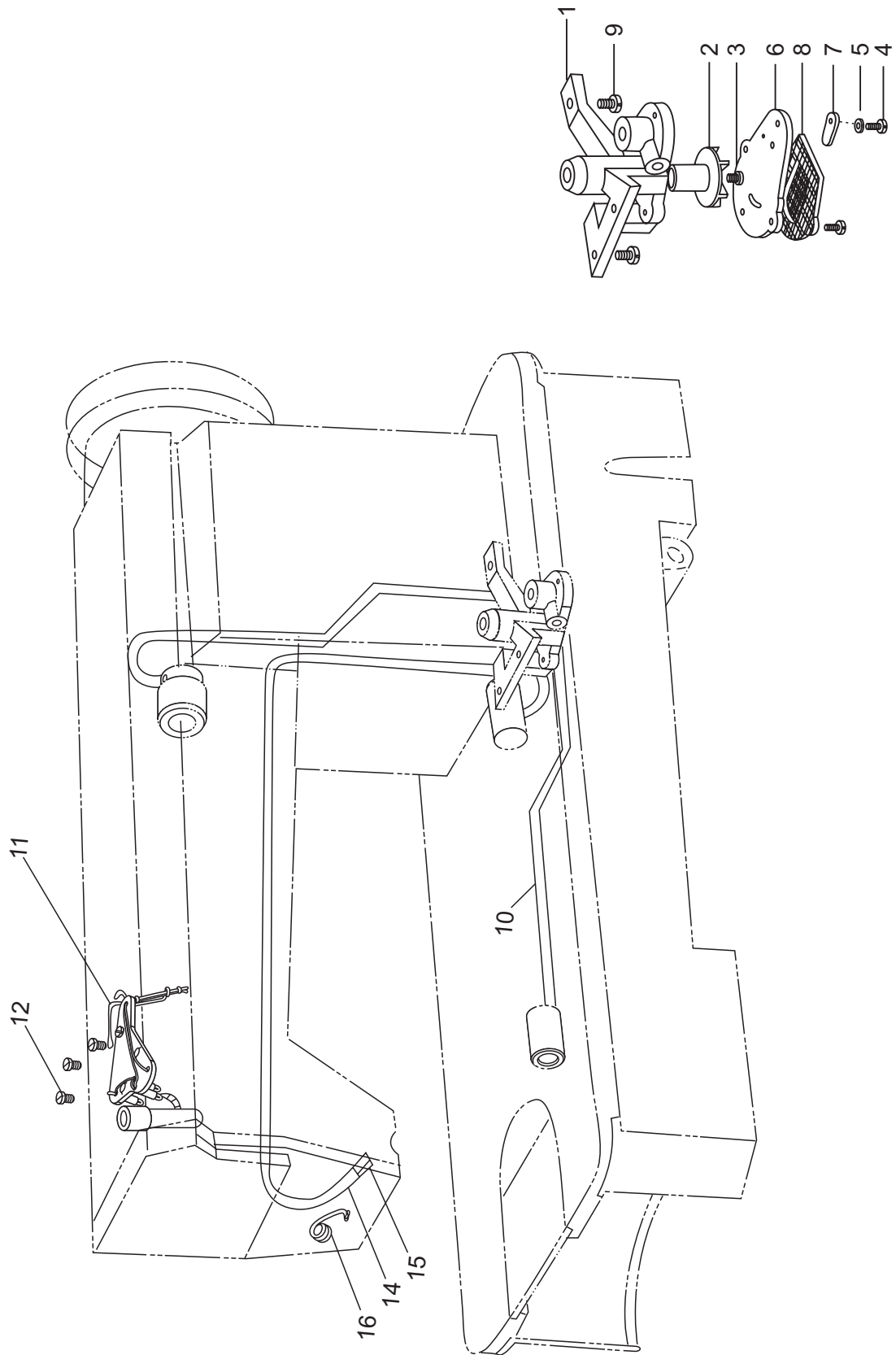


## 6. Upper Feed Parts

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 For Needle Bar Motion Bracket	1	
7	35T5-505	Reel For Spring	1	
8	35T5-507	Link	1	
9	35T5-508	Adaptor	1	
10	6WF5-002	Slot For Sliding Block	1	
11	33T1-013	Sliding Block	1	
12	34T5-507	Screw	3	
13	22T2-019	Screw	4	
14	35T5-511	Guide Rail	1	
15	6WF5-001	Needle Bar Motion Bracket	1	
16	34T5-518	Nut	2	
17	34T5-519	Washer	1	
18	34T5-520	Link For Eccentric	1	
19	34T5-516	Presser Foot Lift Eccentric	1	
20	01/B602	Screw	2	
21	34T5-521	Washer	1	
22	34T5-538a	Rear Bushing	2	
23	34T5-517	Rear Crank	1	
24	34T5-540	Screw	3	
25	J0.0.35	Screw	5	
26	34T5-536c	Cotton Rope	2	
27	34T5-536b	Oil Felt	2	
18	34T5-536a	Front Bushing	2	
19	34T5-537	Shaft	1	
30	34T5-522	Screw	1	
31	34T5-535	Front Crank	1	
32	34T5-534	Link	1	
33	34T5-513b	Screw	1	
34	34T5-506	Plate For Presser Foot Lift	1	
35	34T5-506	Nut	2	
36	35T3-301	Set Block	1	
37	34T5-527	Screw	1	
38	34T5-539	Needle Bar Motion Shaft	1	
39	17T4-002	Screw	1	
40	34T5-523	Rear Crank	1	
41	61-04-01/B06	Nut	1	
42	34T5-538b	Oil Felt	2	
43	34T5-538c	Cotton Rope	2	
44	34T5-532	Collar	1	
45	22T3-002B2	Screw	2	
46	34T5-533	Front Crank	1	
47	34T5-541	Screw	1	
48	34T5-531	Sliding Block Complete	1	
49	34T5-529	Fork Lever	1	
50	34T5-530	Pin	1	
51	35T5-512	Link	1	
52	35T5-502	Follow Presser Foot	1	
53	22T2-004	Screw	1	
54	5WF4-003	Link	1	
55	36T5-008E3	Screw	1	
56	J0.0.71	Screw	1	
57	5WF4-001	Connecting Pin	1	
58	5WF4-004	Feed Shaft Crank	1	

7. Oil pump

7

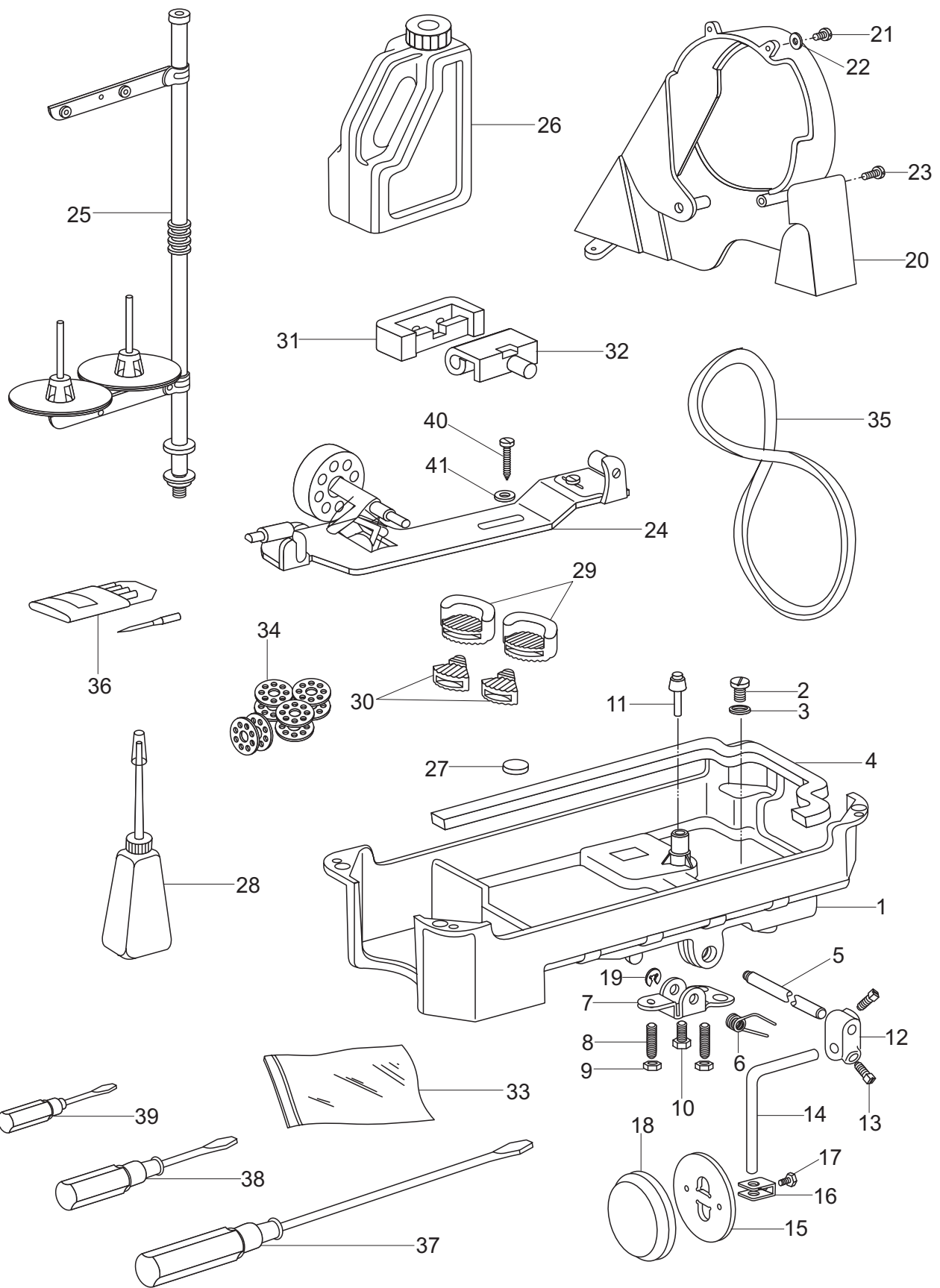


## 7. Oil Pump

No.	Part number	Name	Qt.	Remark
1	22T8-001	Oil Pump	1	
2	22T8-002	Screw	1	
3	22T8-003	Screw	1	
4	22T8-004	Screw	3	
5		Washer	1	
6	22T8-006	Cover For Oil Pump	1	
7	22T8-007	Adjusting Plate For Oil Pump	1	
8	22T8-008A	Filter Complete	1	
9	22T8-009	Screw	1	
10	22T8-010B	Oil Pipe	1	
11	22T8-11C	Oil Wick Set Plate Complete	1	
12	22T8-012	Screw	2	
13	22T8-013D	Oil Pipe	1	
14	22T8-014	Oil Return Pipe	1	
15	22T8-015	Oil Felt	1	
16	22T8-016	Pipe Clamp	1	

8. Oil reservoir and accessories

8





8. Oil Reservoir And Accessories

No.	Part number	Name	Qt.	Remark
1	4WF5-001	Oil Reservoir	1	
2	22T9-001A2	Screw	2	
3	22T9-001A3	Washer	2	
4	2KT9-008	Gasket	1	
5	22T9-001A6	Hinge Pin	1	
6	22T9-001A7	Spring	1	
7	22T9-001A8	Knee Lifter Stop Bracket	1	
8	22T9-001A9	Screw	2	
9	22T9-001A10	Nut	2	
10	22T3-007C2	Screw	1	
11	22T9-003B1	Knee Lifter Prop Bar	1	
12	22T9-003B3	Connector	1	
13	22T9-003B4	Screw	2	
14	22T9-003B2	Bent Rod	1	
15	22T9-003B5	Bell	1	
16	22T9-003B6	Bell Bracket	1	
17	22T9-003B7	Screw	1	
18	22T9-003B8	Pat	1	
19		Split Stop Ring	1	
20	33TF-021	Belt Guard Complete	1	
21		Screw	2	
22		Washer	2	
23		Screw	2	
24	S14420020	Thread Winder Complete	1	
25	GJX-2	Spool Stand Complete	1	
26	22T9-017	Oil Tank	1	
27	22T9-013	Magnet	1	
28	22T9-012	Oil Pot	1	
29	22T9-009	CUSHION	2	
30	22T9-010	CUSHION	2	
31	33T1-002	Hinge	2	
32	22T9-007F2	Rubber Coat	2	
33		Parts Bag	1	
34	33T1-027	Bobbin	5	
35		V-type Belt	1	
36		Needle	1 Pack	
37	33TF-013	Screwdriver (big)	1	
38	33TF-014	Screwdriver	1	
39	33TF-015	Screwdriver (small)	1	
40		Wood Screw	4	
41		Washer	2	