



# **TYPICAL**

# **GC0323/GC0323-D2**

**中厚料上下送料 / 自动剪线平缝机**

**使用说明 / 零件手册**



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**中厚料上下送料 / 自动剪线平缝机**

**使用说明 / 零件手册**

- Please don't adjust and repair the machine by non-professionals
- Specifications subject to change without notice

#### **TYPICAL SEWING MACHINE WANPING MACHINERY CO.,LTD.**

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# **Operation Instruction**

## 1. Brief introduction

This series of machines adopt link feed, thread take-up lever and rotating hook looping, which form the 301 stitch. Extra long machine head ensures a special operation room. Extra long needle bar stroke and large amount of alternation presser foot lifter ensure excellent sewing capacity.

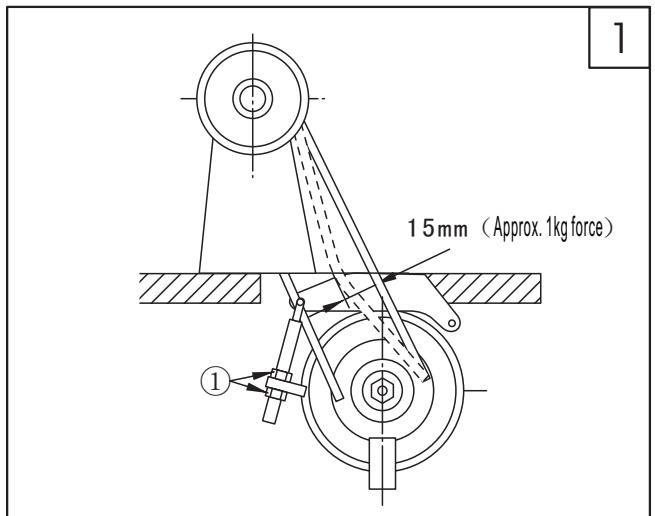
This machine adopts auto lubrication system and runs smoothly with low noise and little vibration. This machine is widely used in manufacturing leather products such as suitcase, cushion, tent, sofa and canvas, heavy weight decorative, fabric, etc.

## 2. Main specifications

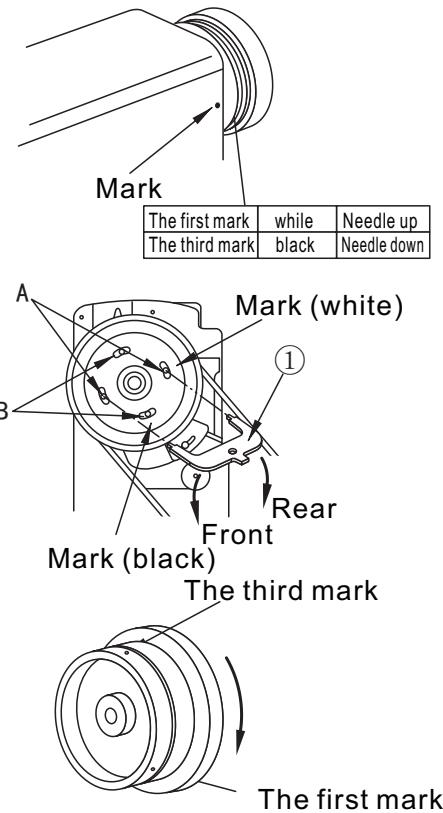
Model	GC0323	GC0323-D2
Applications	Medium & heavy weight materials	
Max sewing speed	2200 s.p.m	
Max stitch length	9mm	
Needle bar stroke	37mm	
Thread take-up lever stroke	73mm	
Lifting amount of presser feet	2.0-5.5mm	
Climbing device	Dial type	
Feed dog height	1mm	
Needle	DP×17 23#	
Presser foot	8mm	
lifting height	16mm	
Hook	Large lubrication hook	
Lubrication	Automatic lubrication	
Thread trimmer	no	yes
Reverse stitch	yes	

## 3. Installing the belt (Fig.1)

1. Using V-belt.
2. Adjust the tension of the belt. Change the height of the motor by turning the adjusting nut ①, press on the center position of the belt and there should be a slack of 15mm.  
If the tension is too weak, the sewing speed will not stable or the needle can not stop in the proper position when the machine runs at low speed.  
If the tension is too strong, the bearing of the motor will be damaged easily.



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#### 4. Adjusting the position of needle bar (Fig.2)

##### 1. Adjusting the “needle up” position

When depressing the trimming pedal, the needle bar should stop at the “needle up” position. If the mark error is more than 3mm, adjust it as follows:

- (1) Turn off the power.
- (2) Hold the machine pulley, insert the probe unit the adjusting plate① into the two holes A and press on it by hand, then turn the machine pulley until the first marked point on the machine pulley is aligned with the marked point on the arm.

(3) Start a running test.

##### 2. Adjusting the “needle down” position

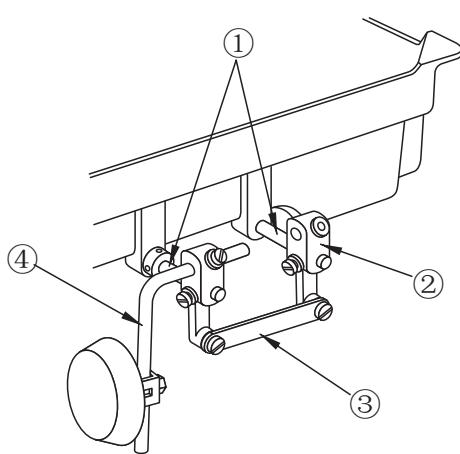
When the pedal returns to the middle position, the needle bar should stop at the “needle down” position. If the mark error is more than 3mm, adjust it as follows:

- (1) Turn off the power.
- (2) Hold the machine pulley, insert the probe unit the adjusting plate ① into the two holes B, then turn the machine pulley until the third marked point on the machine pulley is aligned with the marked point on the arm.

(3) Start a running test.

3. After confirm, connecting the power plug.

3



#### 5. Installing the knee control mechanism (Fig.3)

1. Pull out the two hinge shafts ①, and then install it properly;

2. Install the bell connector② onto each shaft;

3. Connect the bell connectors with the connecting rod③;

4. Install the bent bar④ onto the left bell connector.

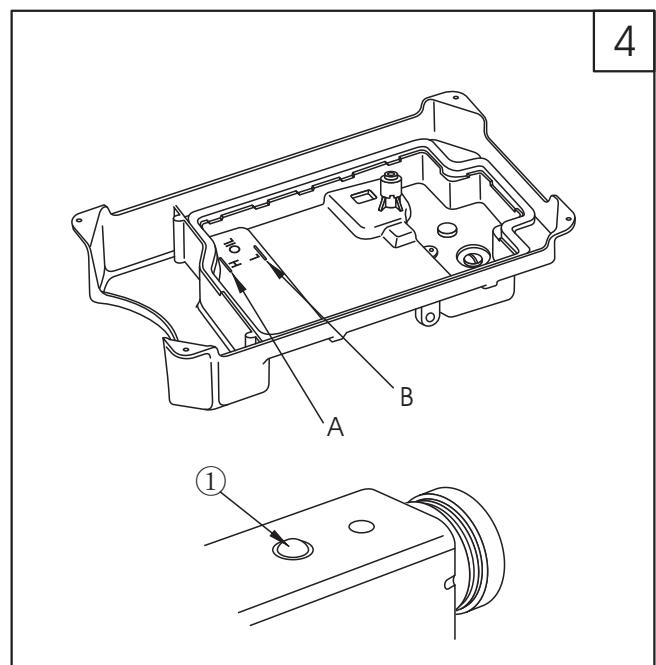
## 6. Lubrication (Fig.4)

Fill the oil until the oil level reaches the mark A of the oil reservoir.

During the operation, check the height of the oil level frequently.

If the oil level is lower than mark B, fill the oil.

Note: When running the machine, examine the lubrication situation through the oil window ①.

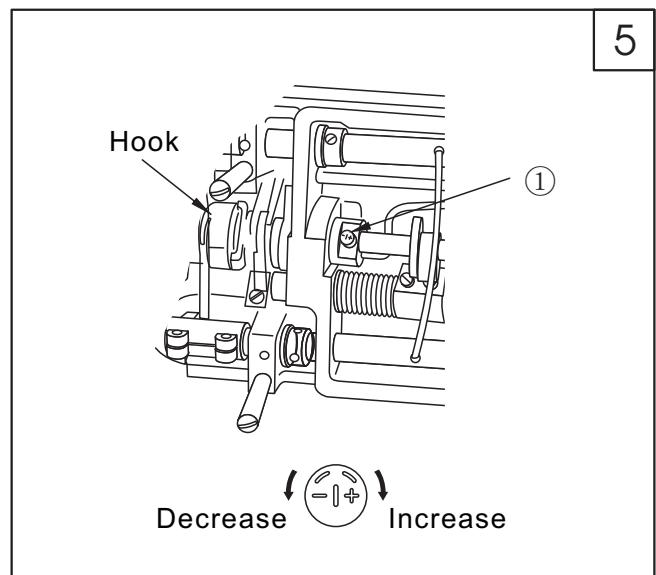


## 7. Adjusting the lubrication of rotary hook (Fig.5)

Adjust the lubrication situation of the rotary hook by turning the screw①.

- If tighten the screw, the oil amount will be at the max.
- If loosen the screw, the oil amount will be at the minimum.

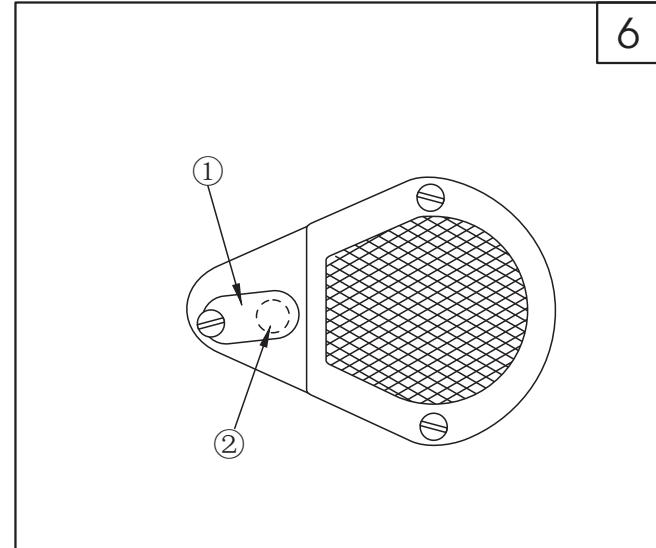
Note: After adjustment, the machine should be running at least 30 seconds, then check if the oil is leaking into the rotating hook.



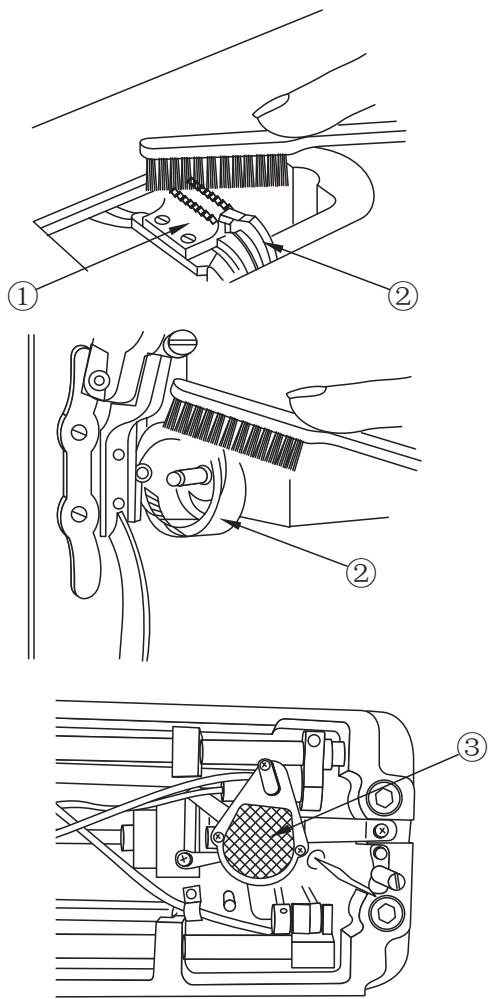
## 8. Oil pump adjustment (Fig.6)

Adjust the oil pump as follows:

The adjusting plate① should fully cover the oil by-pass hole②. If the oil amount need to be reduced, then open the by-pass oil hole② suitably.



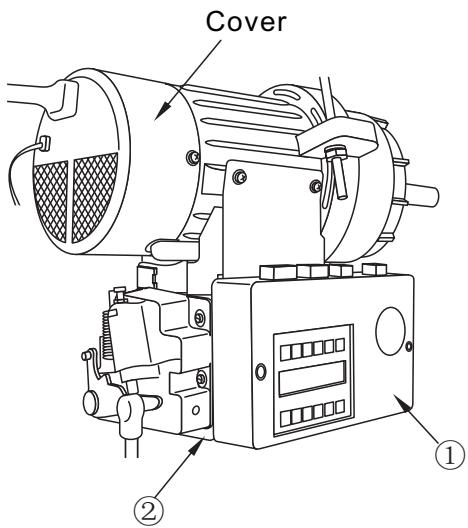
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## 9. Cleaning the machine (Fig.7)

Clean the feed dog①, the rotary hook② and the oil pump③ periodically.

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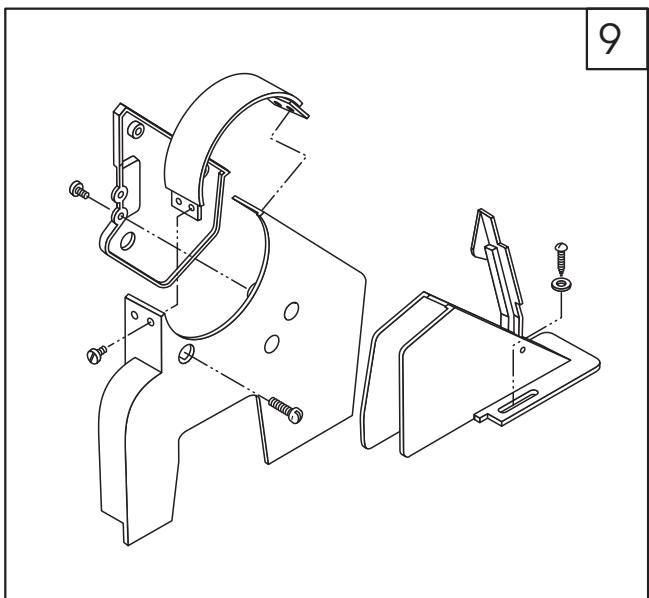


## 10. Instruction of controlling box and the motor (Fig.8)

1. Do not press on the pedal when running the machine.
2. Turn off the power when leave the machine.
3. If the power is turned off or is down when sewing, thereby the detent will appear mistake.
4. When operating the machine, the cover of controlling box should be closed to avoid error operation.
5. The controlling loop should be examined by the avometer to protect the semiconductor parts.
6. The off the power when tilting back the machine or touching the needle.
7. The three phase machine must be connected to the ground with the ground cable (green wire).
8. When operating the switch of the controlling box, first turn off the power, then open the front cover ①, if the bottom cover ② need to be opened, please wait about ten minutes after turning off the power as the inside of the box still maintains upper voltage. (It's important to release the inside energy.)
9. When using the motor, be sure to keep away from the high frequency weld zone.
10. The single phase machine is suitable for 15A, and the three phase machine is suitable for 10A.
11. The probe unit has a smooth and bright surface. Avoid the dirt, oil or other objects sticking onto the probe unit. When pulling out the machine pulley and adjusting it, if there is dirt, clean it softly and avoid scratching the surface. Note: prevent the oil leaking into the gap of the surface of the plate.

## 11. Installing the belt cover(Fig.9)

Both the sewing machine and motor should be installed with belt cover for safety.



## 12. Winding the bobbin thread (Fig.10)

### Thread tension:

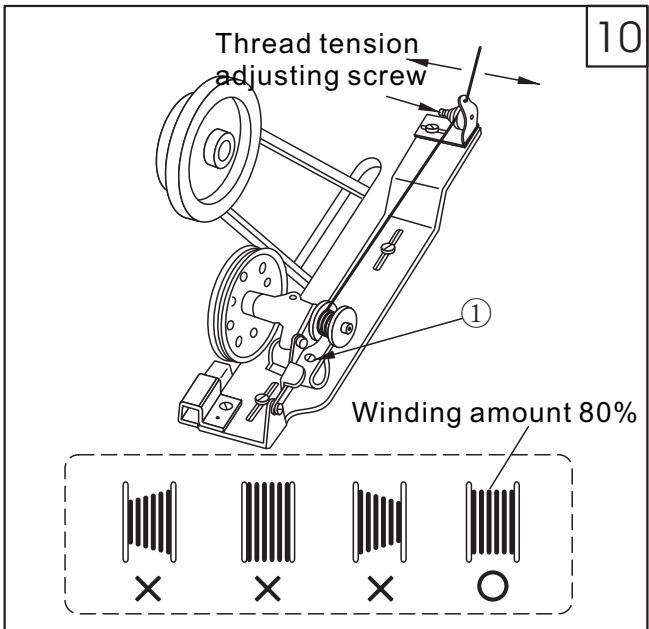
When winding the nylon or polyester thread, the thread tension should be weak.

### One-side winding:

The thread guide bracket should move to the place where the winding amount is at the minimum.

### Winding amount:

If the bobbin is wound excessively, loosen the adjusting screw ①; if the bobbin is not wound enough, tighten the screw ①.

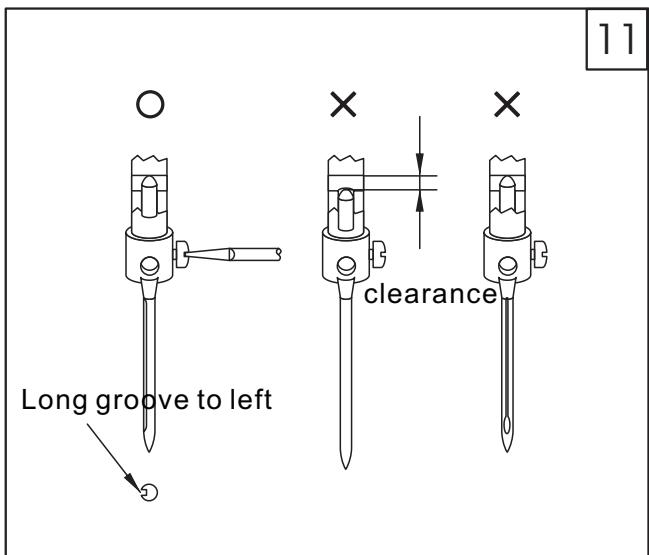


## 13. Installing the needle (Fig.11)

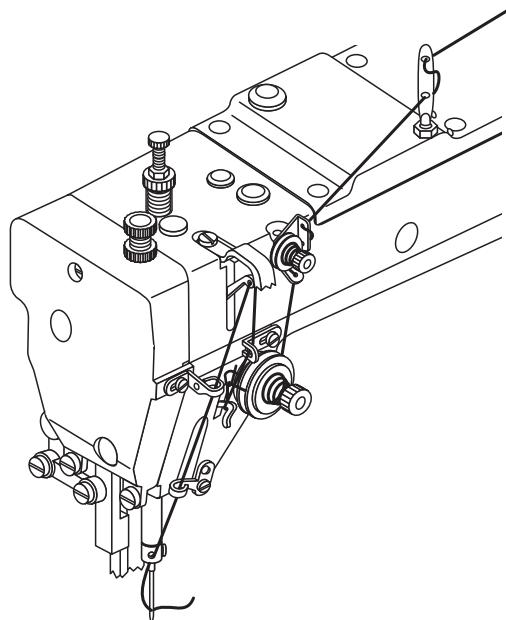
Note: Turn off the power before installing the needle.

Insert the needle to the bottom, tighten the screw, then keep the long groove of the needle toward to the left.

Note: When reverse sewing with polyester thread, if the thread is breaking, turn the long groove of the needle to the front, which may avoid the thread breakage. In general, do not turn the long groove of the needle to the back.



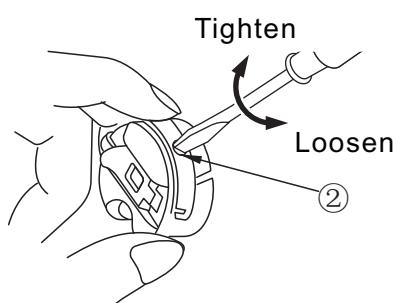
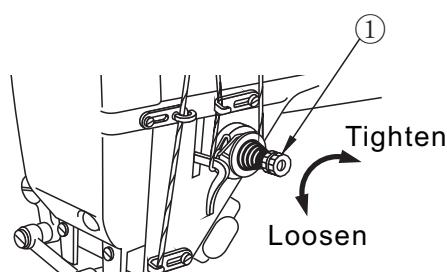
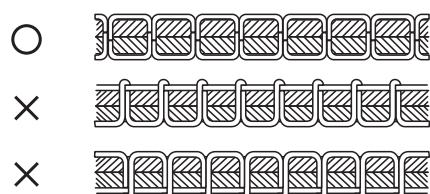
12



#### 14. Threading the needle thread (Fig.12)

Raise the thread take-up lever to its highest position, and then thread it as shown in the Fig.

13



#### 15. Adjusting the thread tension(Fig.13)

##### 1. Needle thread tension

(1) Adjust the needle thread tension with reference to the needle thread tension.

(2) Adjust the needle thread tension by turning the thread tension nut①.

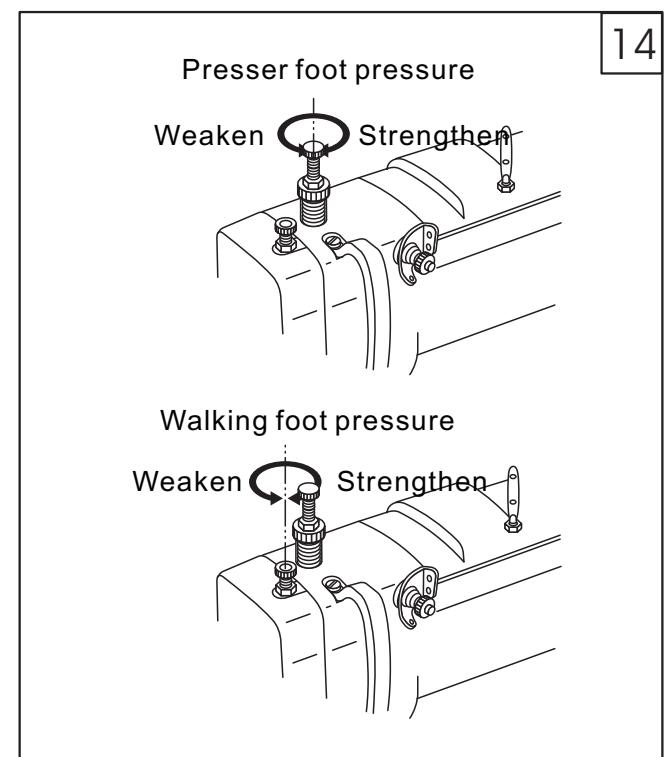
As to some special materials, adjust its tension by adjusting the thread take-up spring.

##### 2. Needle thread tension

Adjust the needle thread tension by turning the screw②.

## 16. Adjusting the presser foot pressure (Fig.14)

1. The pressure of the presser foot should be adjusted with reference to the nature of the sewing material.
2. The pressure of both the inside and the outside presser foot can be adjusted.(The adjusting screw has been adjusted before delivery as shown in the Fig.)
3. The sewing pressure should be adjusted to a minimum of need.



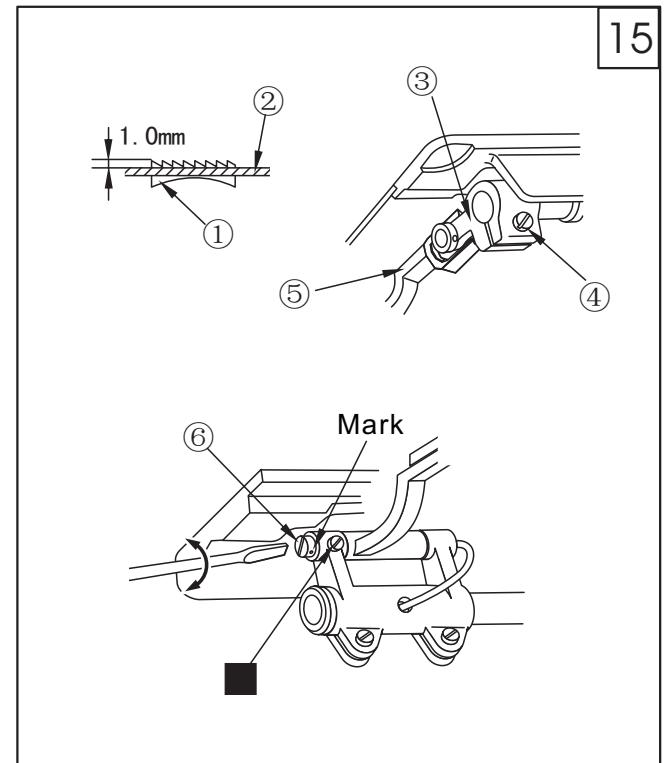
## 17. Adjusting the feed dog (Fig.15)

### 1. Height of feed dog

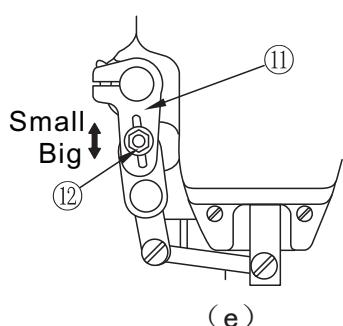
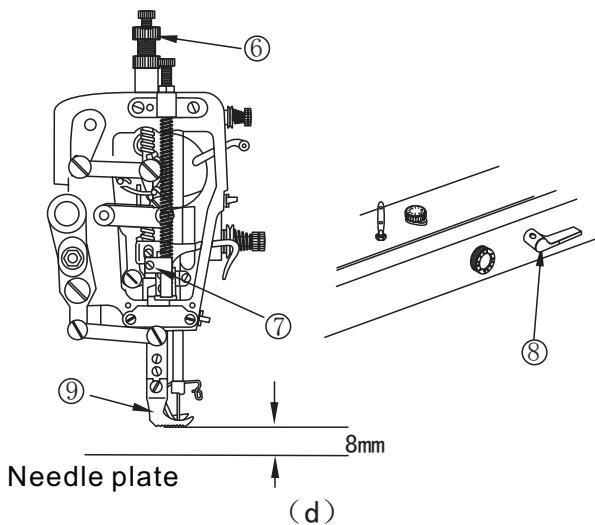
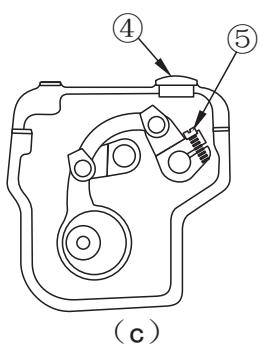
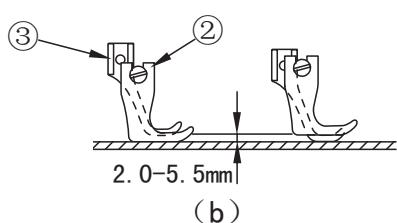
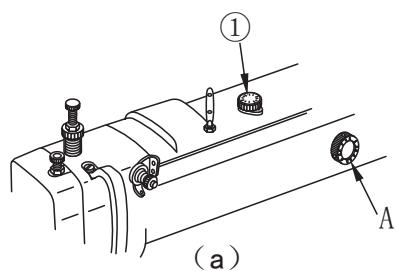
(1) The feed dog① should be 1.0 mm higher than the surface of the needle plate②, this is the standard height.

#### (2) Adjusting the height of feed dog:

- 1) Loosen the screw④ on the feed dog lifting crank③, then move the feed dog carrier ⑤ up or down;
- 2) After the adjustment, tighten the screw④.



The mark position of the eccentric shaft	Feed dog
Horizontal	Standard
Up	The front lifts
Down	The front falls



## 18. Adjusting the inside and outside foot (Fig.16)

### 1. Adjusting the alternating movement (Fig.a, b)

- (1) the amount of alternating movement can be adjusted in the range of 2.0-5.0mm
- (2) Adjust the alternating movement of the presser feet by the dial A
- (3) The dial ① on the upper cover is for the locking dial A.

Note: Adjust the lifting amount from small to big, first turn the dial ①, then turn the dial A; on the contrary, first turn the dial A, next is dial ①.

### 2. Changing the balance of the alternating movement of the inside and outside presser foot (Fig.c)

- (1) Increase the lifting amount of outside presser foot ② and decrease the lifting amount of inside presser foot ③.
  - ① Remove the rubber plug④ on the upper cover.
  - ② Turn the machine pulley until the inside presser foot ③ is lifted from the needle plate.
  - ③ Loosen the screw⑤;
  - ④ The spring pulls the inside presser foot downward until the later touches the needle plate, then tighten the screw ⑤.
  - ⑤ Accordingly, the lifting amount of the inside presser foot will be reduced for certain amount, and the lifting amount of the outside presser foot will be increased for the same certain amount.
- (2) Opposite to the above situation: decrease the lifting amount of the outside presser foot and increase the lifting amount of the inside presser foot.

First, turn the machine pulley until the outside presser foot is lifted away from the needle plate, then loosen the screw⑤, finally, tighten the screw⑤.

### 3. Adjusting the outside presser foot (Fig. d)

Loosen the screw ⑥ and set screw ⑦, when lift the presser foot lifting bar ⑧, adjust the position of screw ⑦ to make the lifting height of outside foot ⑨ from needle plate is 8mm, after adjustment, tighten the screw ⑦.

### 4. Adjusting the feed amount of the outside presser foot (Fig.e)

The upward feed amount and the downward feed amount of the outside presser foot are the same. However the feed amount can be adjusted with reference to the situation.

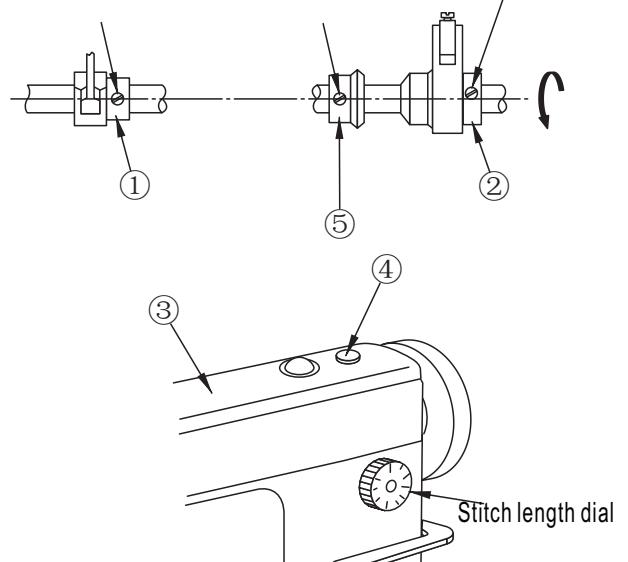
Loosen the nut (12) on the crank (11), and then adjust the crank shaft upward and downward.

- Up position→feed amount→small
- Down position→feed amount→big

## 19. Adjusting the feed dog timing (Fig.17)

1. The standard position between the feed cam (left) ① and the feed cam (right) ② is shown in the Fig.
2. Open the upper cover ③, and then adjust its position.
3. The feed dog (right) ② can be adjusted by removing the rubber plug ④ on the upper cover. Under such condition, be careful to protect the bevel gear ⑤ as it is not easy to be found when adjusting.

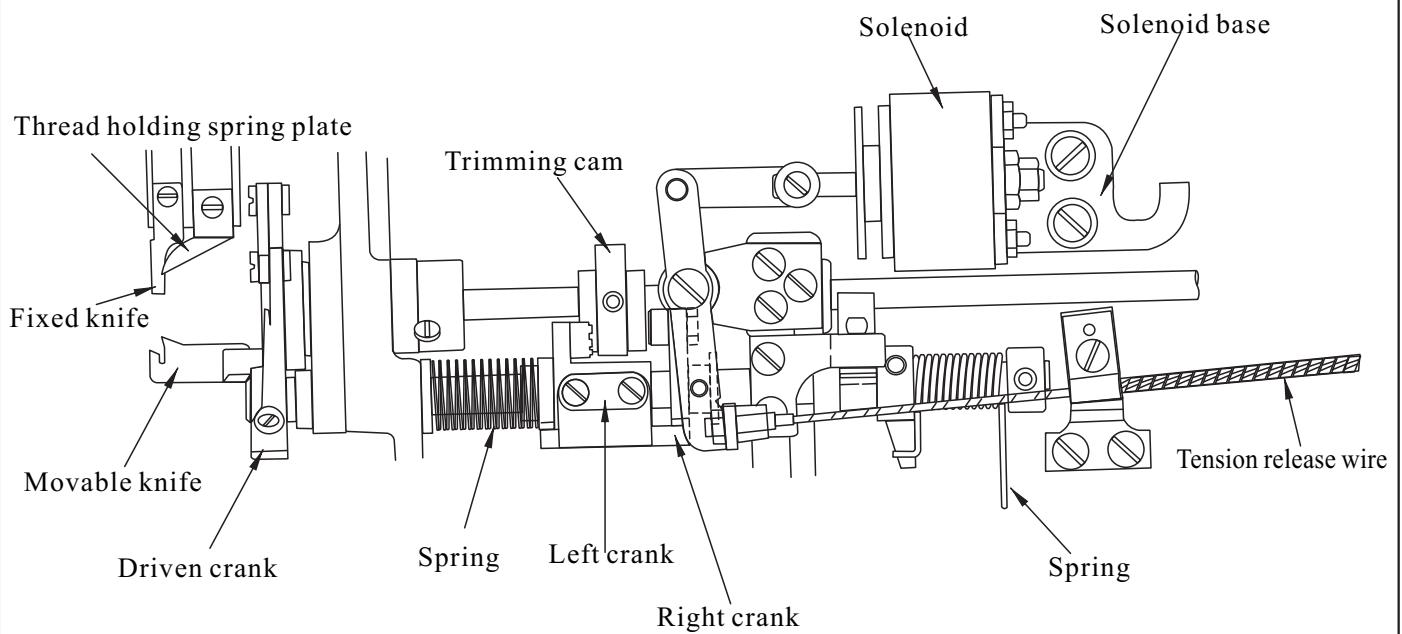
The first screw The second screw The first screw



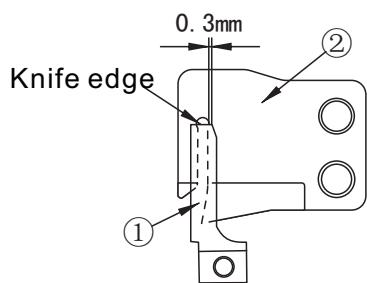
## 20. Adjusting the trimming device

1. Trimming mechanism (Fig. 18)

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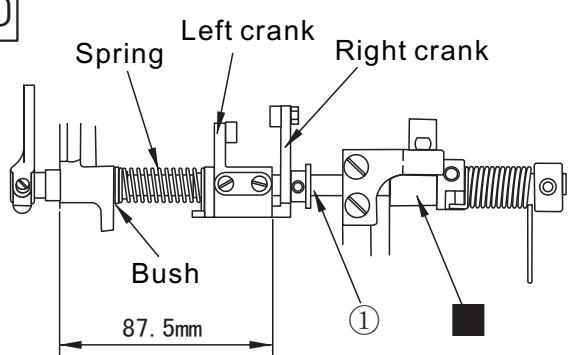
19



2.The relation between fixed knife and movable knife (Fig. 19)

- (1)The clearance between fixed knife ① and movable knife ② should be 0.3mm
- (2)Adjust the position illustrated by the Fig. 19,move the bobbin case opener and adjust the holder of fixed knife.

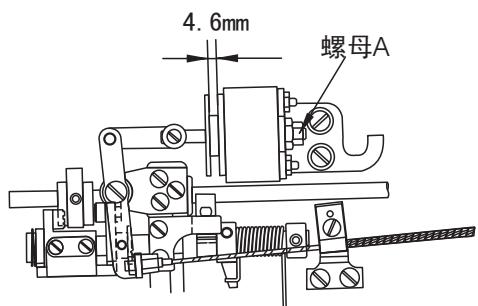
20



3.Thread trimmer cam lever shaft(Fig. 20)

- (1)Install the shaft ① on the machine bed first;
- (2)Install the cam lever L on the shaft ① as illustrated;
- (3)Slightly turn the shaft ①, and install the positioning block ② as illustrated.

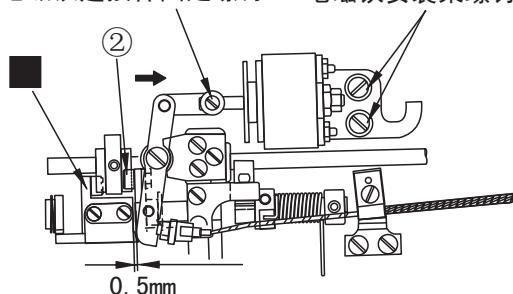
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4.Installing the trimming solenoid (Fig. 21)

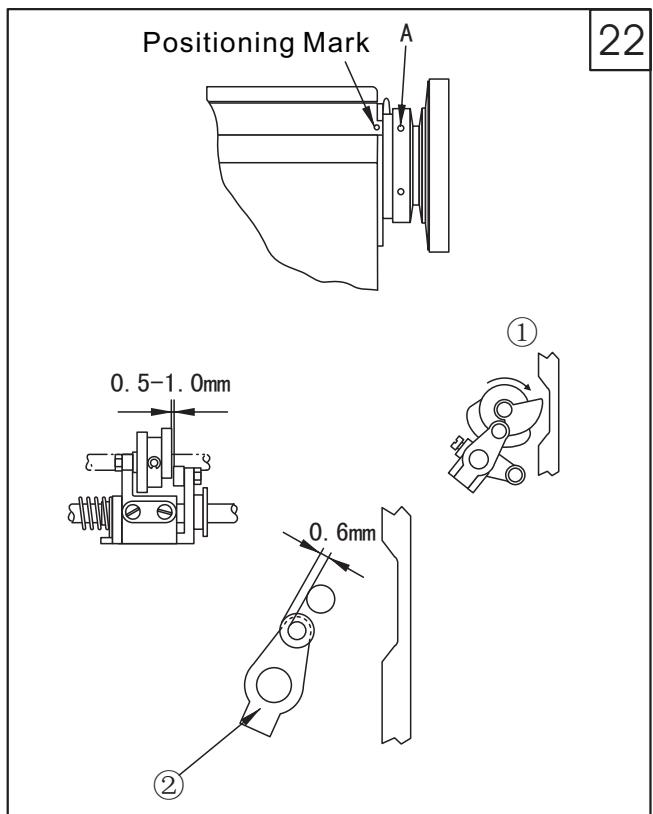
- (1)The stoke of solenoid
  - a. The standard stroke is 4.6mm
  - b. Turn the nut (A) to adjust the stroke
- (2)Adjusting the solenoid
  - a.When the solenoid is active, there should be a 0.5mm clearance between the cam lever L ③ and cam lever R ②. If need to adjust, please move the solenoid base shown by the arrow.

电磁铁连接件固定螺钉 电磁铁安装架螺钉



### 5. Installing the trimming cam (Fig. 22)

- (1) Align the second mark A on the machine pulley with the Positioning Mark on the arm;
- (2) Set the solenoid active and turn the trimming cam ① until the cam is touched with the roller, then fix the cam;
- (3) Set the solenoid inactive and make the cam lever ② restore to the original position, there should be a 0.5-1.0mm clearance between cam and roller.



### 6. Adjusting the knives (Fig. 23)

#### (1) The relation between fixed knife and movable knife

The clearance between movable knife ① and needle center is 7.5mm, and the clearance between fixed knife ② and needle center is 5mm.

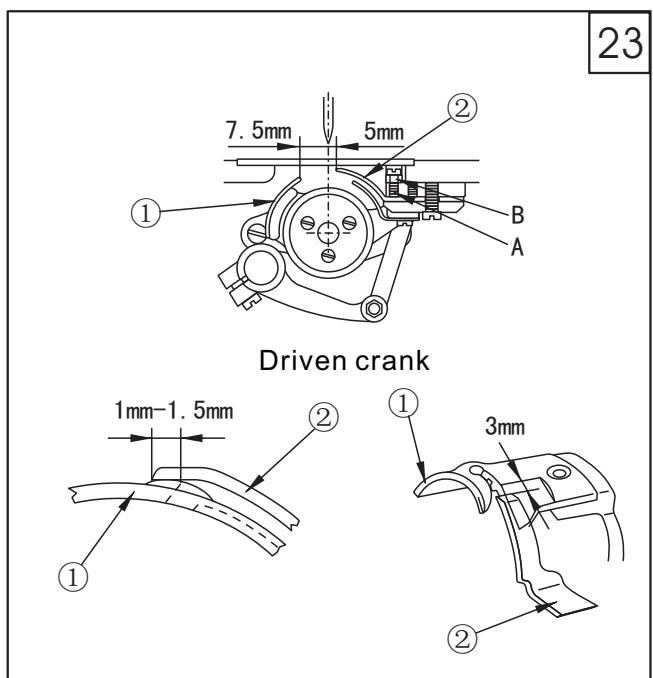
#### (2) Adjusting the knife

Set the solenoid active, the movable knife ① will turn rightward driven by the trimming cam. When the movable knife ① moves to its left furthest position, the clearance between two knives ① and ② should be 1.0-1.5mm

#### (3) Adjusting the trimming solenoid

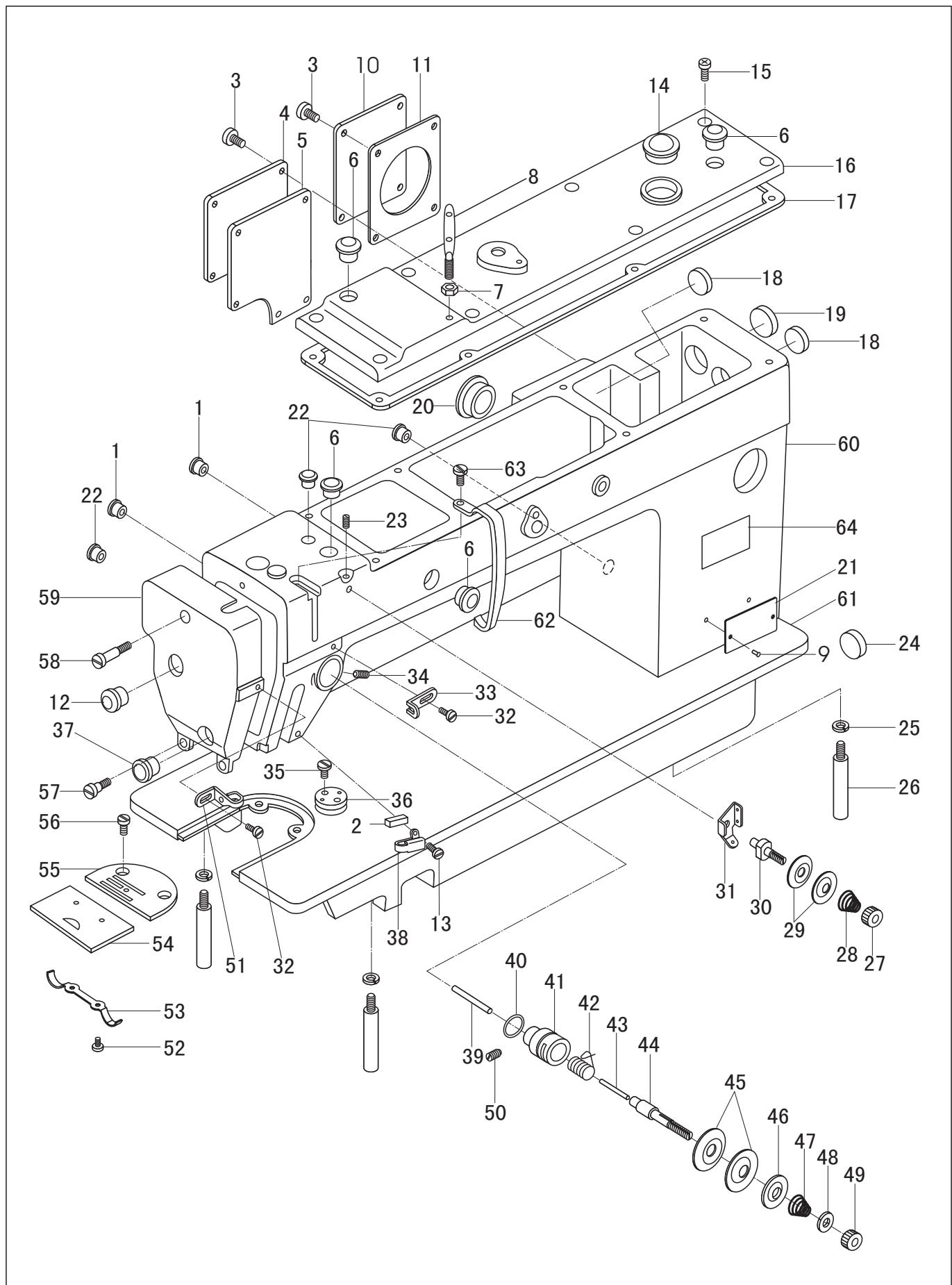
A. If the thread trimming not smoothly, especially the thick thread used, just need to increase the trimming pressure;

B. Adjusting the trimming pressure: loosen the nut B, adjust the screw A to get the reasonable pressure.



# **Parts Manual**

## 1. Casting mechanism

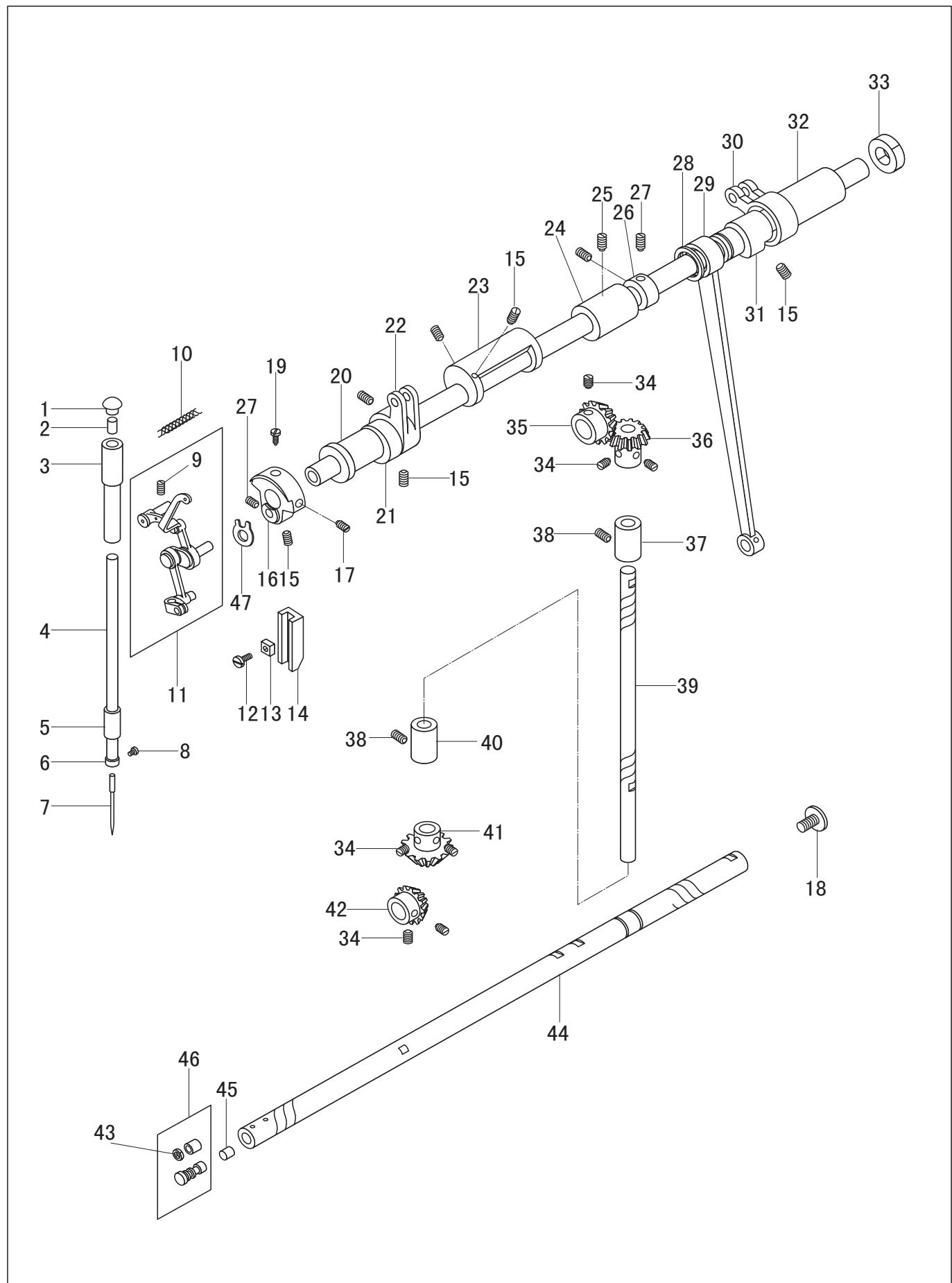


## 1. Casting mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	22T2-011	Rubber plug	2	2	
2	233WF1-011	Felt	1	1	
3	22T1-006	Screw	9	9	
	22T1-007	Washer	9	9	Φ 8. 8
4	68WF1-001	Cover	1	1	
5	68WF1-002	Seal	1	1	SM11/64"×40×9. 4
6	22T1-003C3	Rubber plug	4	4	
7	68WF1-029	Nut	1	1	
8	68WF1-028	Thread guide	1	1	
9		Rivet	2	2	Φ 19
10	68WF1-018	Back cover	1	-	SM11/64"×40×8
11	68WF1-019	Seal	1	1	
12	7WF4-030	Rubber plug	1	1	GB827 2. 5×5镀铬
13	17WF1-018	Screw	1	1	
14	22T1-008	Oil window	1	1	
15	1WF5-039	Screw	8	8	
16	233WF1-003	Upper cover	1	1	
17	68WF1-010	Seal	1	1	
18	68WF1-011	Rubber plug	2	2	SM11/64"×40×12
19	68WF1-012	Rubber plug	1	1	
20	68WF1-013	Rubber plug	1	1	
21	233WF1-006	Model label	-	1	Φ 21. 8
	235WF1-003	Model label	1	-	Φ 29
22	22T1-015	Rubber plug	3	3	Φ 26
23	22T1-011	Screw	1	1	
24	22T1-016	Rubber plug	1	1	
25		Washer	4	4	
26	68WF1-015	Bed leg	4	4	Φ 8. 8
27	36T2-006D4	Nut	1	1	SM11/64"×40×5. 5
28	36T2-006D3	Spring	1	1	Φ 27
29	22T1-009E3	Thread tension disc	2	2	GB93 6 发黑
30	36T2-006D2	Screw	1	1	
31	36T2-006D1	Thread guide	1	1	
32	22T1-003C6	Screw	2	2	
33	68WF1-016	Thread guide	1	1	
34	22T1-013	Screw	1	1	
35	1WF3-025	Screw	2	2	SM9/64"×40×6
36	7WF4-005	Holder	1	1	
37	22T1-003C4	Rubber plug	1	1	SM15/64"×28×8
38	233WF1-008	Thread guide	1	1	SM11/64"×40×5. 5
39	233WF1-012	Thread release bar	1	1	
40	233WF1-005A	Seal ring	1	1	Φ 11. 8
41	233WF1-005B	Adjusting bracket	1	1	
42	233WF1-005E	Thread take-up spring	1	1	
43	233WF1-005K	Thread release pin	1	1	
44	233WF1-005C	Screw	1	1	
45	233WF1-005F	Thread tension disc	2	2	
46	233WF1-005G	Thread release disc	1	1	
47	233WF1-005H	Spring	1	1	
48	233WF1-005I	Stop disc	1	1	
49	233WF1-005J	Nut	1	1	
50	233WF1-005D	Screw	1	1	
51	68WF1-017	Thread guide	1	1	
52	20T1-013F3	Screw	2	2	
53	20T1-013F2	Spring	1	1	SM9/64"×40×4
54	68WF1-023	Slide plate	1	1	
55	233WF1-009	Needle plate	1	1	SM3/32"×56
56	20T1-020	Screw	2	2	
57	7WF4-004	Screw	2	2	
58	68WF1-008	Screw	1	1	
59	233WF1-004	Face plate	1	1	SM11/64"×40
60	233WF1-001	Arm	-	1	SM11/64"×40×20
	235WF1-001	Arm	1	-	SM11/64"×40×28
61	233WF1-002	Bed	-	1	
	235WF1-001	Bed	1	-	
62	233WF1-010	Thread take-up lever guard	1	1	
63	22T2-004	Screw	1	1	
64	7WF4-019	Caution label	1	1	

SM11/64"×40×7. 5

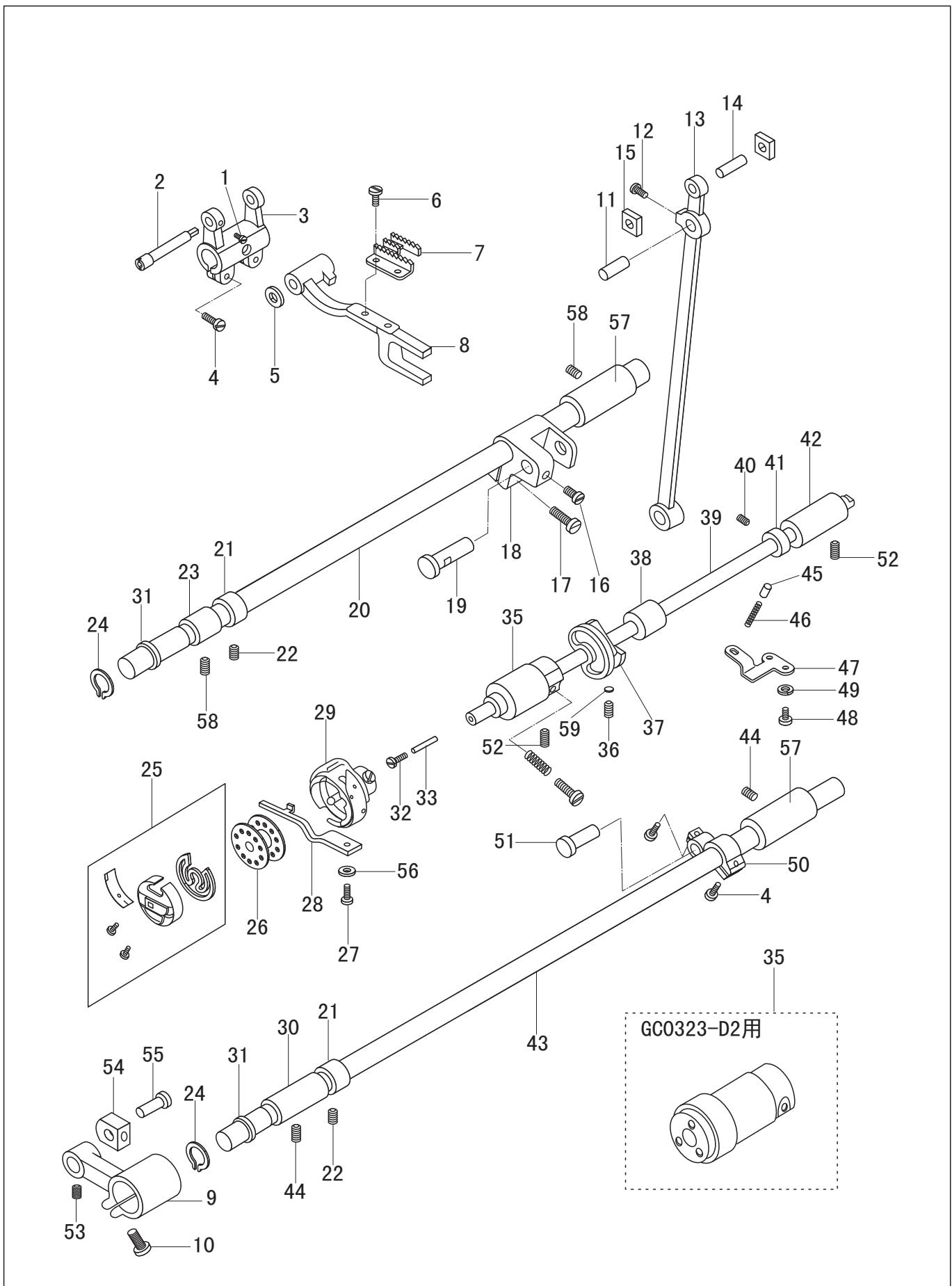
## 2. Thread take-up mechanism



## 2. Thread take-up mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	22T2-011	Rubber plug	1	1	
2		Felt	1	1	
3	68WF2-001	Needle bar bushing, upper	1	1	
4	233WF2-018	Needle bar	1	1	Φ 8. 8
5	233WF2-007	Needle bar bushing, lower	1	1	Φ 8×8
6	233WF2-019	Thread guide	1	1	
7		Needle	1	1	
8	22T2-017	Screw	1	1	
9	J0. 0. 5	Screw	1	1	
10		Oil wick	1	1	DP×17 23#
11	233WF2-006	Thread take-up lever assy.	1	1	SM1/8"×44×4. 5
12	21WF4-047	Screw	1	1	SM15/64"×28×10
13	68WF2-006	Slide block	1	1	棉线长130mm
14	81WF2-003	Guide rail	1	1	
15	22T2-005B3	Screw	7	7	SM11/64"×40×7. 5
16	233WF2-017	Needle bar crank	1	1	
17	21WF1-012	Screw	1	1	
18	22T3-008	Screw	1	1	SM1/4"×40×7
19	233WF2-015	Screw	1	1	
20	233WF2-001	Bushing, L	1	1	SM9/32"×28×13. 3
21	233WF2-010	Feed cam (L)	1	1	SM11/32"×28×11
22	233WF2-011	Feed cam crank (L)	1	1	SM9/32"×28×11. 5
23	233WF2-002	Balance block	1	1	
24	233WF2-003	Bushing, M	1	1	
25	J0. 0. 81	Screw	1	1	
26	233WF2-004	Collar	1	1	
27	22T3-002B2	Screw	3	3	
28	233WF2-012	Retaining ring	1	1	SM15/64"×28×7. 5
29	233WF2-013	Link	1	1	
30	233WF2-009	Feed cam crank (R)	1	1	SM1/4"×40×4
31	233WF2-008	Feed cam (R)	1	1	
32	233WF2-005	Bushing (R)	1	1	
33	2KT1-005	Oil seal	1	1	
34	22T2-005B3	Screw	8	8	
35	ZOA140379	Upper shaft gear	1	1	
36	ZOA140380	Vertical shaft gear, upper	1	1	
37	68WF2-018	Bushing, upper	1	1	SM1/4"×40×7
38	61-04-01/B308	Screw	2	2	
39	68WF2-019	Vertical shaft	1	1	
40	68WF2-020	Bushing, lower	1	1	
41	ZOA140382	Vertical shaft gear, lower	1	1	SM15/64"×28×6
42	ZOA140383	Lower shaft gear	1	1	
43	17WF5-021	Oil seal	2	2	
44	233WF2-014	Upper shaft	1	1	
45	22T2-010	Felt	3	3	
46	233WF2-016	Oil adjusting pin assy.	1	1	
47	13WF3-009	Washer	1	1	

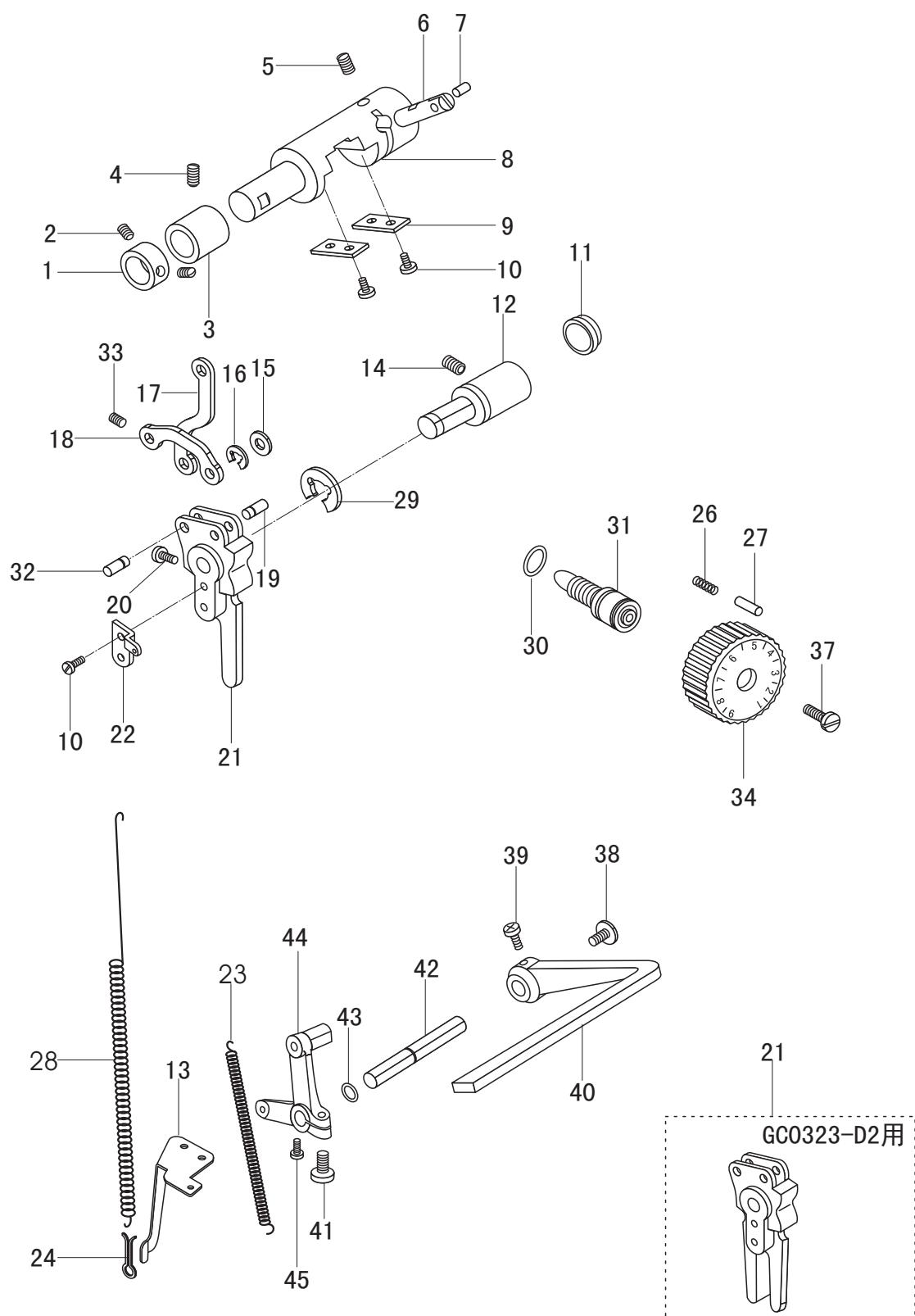
### 3. Lower feed mechanism



### 3. Lower feed mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	21WF4-047	Screw	1	1	
2	36T1-001A2	Eccentric shaft	1	1	
3	22T6-001A1a	Crank	1	1	
4	22T6-001A1b	Screw	4	4	
5	51T5-001A6	Washer	1	1	
6	J0. 0. 50	Screw	2	2	
7	2KT3-001	Feed dog	1	1	
8	233WF3-017	Feed dog	1	1	
9	233WF3-020	Feed dog carrier	1	1	
10	22T6-001A1b	Feed dog lift crank (L)	1	1	
11	68WF3-004	Screw	1	1	
12	21WF4-047	Pin	1	1	SM11/64"×40×7.5
13	68WF3-005	Screw bar	1	1	
14	68WF3-006	Link	1	1	
15	1WF4-040	Pin	2	2	SM3/16"×28×10
16	1WF2-038	Slide block	1	1	Φ10×Φ6×1.3
17	16WF3-061	Screw	1	1	SM1/8"×44×6
18	233WF3-013	Screw	1	1	
19	233WF3-028	Feed crank (R)	1	1	
20	68WF3-009	Pin	1	1	
21	233WF3-014	Feed shaft	1	1	
22	22T3-002B2	Collar	2	2	SM3/16"×28×10
23	233WF3-015	Screw	1	1	
24		Bushing	2	2	SM11/64"×40×7.5
25	35T1-104	Retaining ring	1	-	
	151845001	Bobbin case assy.	-	1	
26	33T1-027	Bobbin case assy.	1	-	
	24WF2-001	Bobbin	-	1	SM15/64"×28×10
27	22T4-015	Bobbin	1	-	SM15/64"×28×16
	52WF5-033	Screw	-	1	
28	33T1-029	Bobbin case opener	1	-	
	2KT1-013	Bobbin case opener	-	1	
29	68WF3-018	Rotary hook	1	-	SM1/4"×40×4
	122WF3-002	Rotary hook	-	1	
30	233WF3-010	Bushing	1	1	GB894.1 15 发黑
31	51T5-013	Washer	2	2	
32	22T4-001A1a1	Washer	1	1	
33	22T4-001A1a2	Oil filter	1	1	
35	233WF3-002	Lower shaft bushing, L	-	1	
	235WF2-001	Lower shaft bushing, L	1	-	
36	2KT5-031	Screw	-	2	
37	233WF4-010	Thread trimming cam	-	1	
38	233WF3-016	Lower shaft bushing, M	1	1	
39	68WF3-017	Lower shaft	1	-	
	78WF3-002	Lower shaft	-	1	
40	J0. 0. 35	Screw	2	2	
41	22T4-002B1	Collar	1	1	
42	233WF3-001	Lower shaft bushing, R	1	1	
43	68WF3-012	Feed dog lift shaft	1	1	
44	J0. 0. 5	Screw	2	2	
45	36T4-015	Plunger	1	1	
46	36T4-016	Spring	1	1	SM1/4"×40×10
47	22T4-010	Retainer	1	1	
48	22T9-006	Screw	1	1	
49		Washer	1	1	
50	68WF3-011	Crank	1	1	
51	22T6-007	Pin	1	1	SM15/64"×28×4.5
52	J0. 0. 40	Screw	2	2	
53	50WF3-020	Screw	1	1	
54	233WF3-019	Slide block	1	1	
55	233WF3-018	Shaft	1	1	SM15/64"×28×13
56		Washer	-	1	
57	233WF3-024	Bushing	2	2	
58	1WF2-044	Screw	2	2	
59	2KT5-032	Washer	-	2	SM15/64"×28×10 GB93-6 发黑

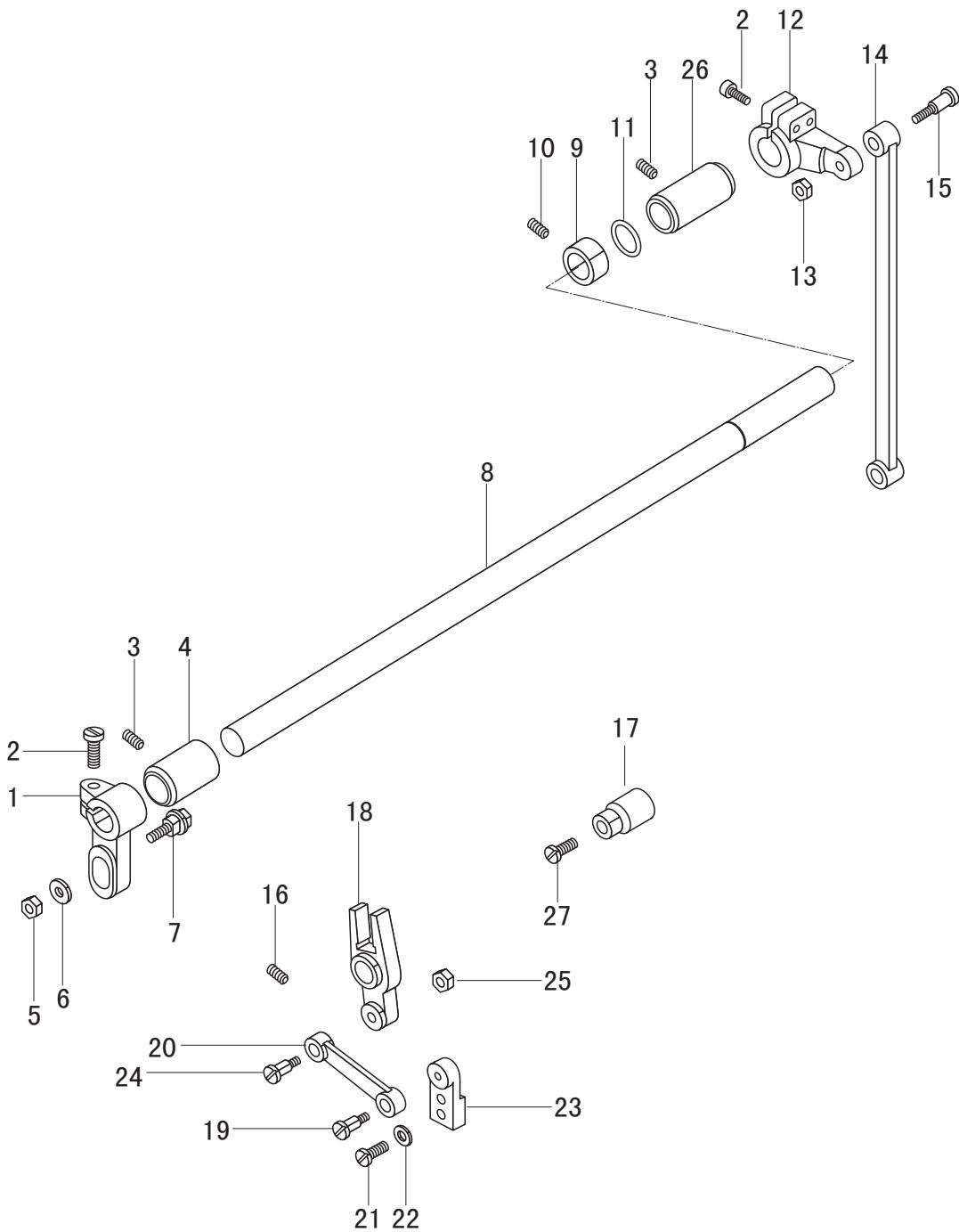
#### 4. Stitch length adjusting mechanism



#### 4. Stitch length adjusting mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	22T3-002B1	倒缝台紧圈	1	1	
2	22T3-002B2	倒缝台紧圈螺钉	2	2	
3	233WF3-010	倒缝台轴套	1	1	
4	1WF5-022	倒缝台轴套螺钉	1	1	
5	J0.0.40	支撑轴螺钉	1	1	
6	233WF3-012	支撑轴	1	1	
7	68WF4-003	支撑轴销	1	1	
8	68WF4-004	倒缝台	1	1	
9	233WF3-011	倒缝台导向板	2	2	
10	21WF4-047	倒缝台导向板螺钉	6	6	
11	68WF4-005	橡皮塞	1	1	SM1/4"×40×4
12	233WF3-007	针距调节摆杆铰链轴	1	1	
13	68WF4-019	拉簧架	1	1	SM11/64"×40×5.5
14	J0.0.40	针距调节摆杆铰链轴套螺钉	1	1	SM15/64"×28×10
15	68WF4-008	针距连杆垫圈	-	1	
16		针距连杆挡圈	-	1	
17	233WF3-026	针距连杆	1	1	
18	78WF6-001	倒缝连杆	-	1	
19	68WF4-011	针距连杆销	2	2	SM11/64"×40×7.5
20	1WF2-038	针距调节摆杆铰链轴螺钉	1	1	Φ19.5
21	233WF3-006	针距调节摆杆	-	1	
22	235WF2-002	针距调节摆杆	1	-	
23	233WF3-025	小拉簧架	1	1	SM15/64"×28×10
24	122WF4-005	倒缝操纵杆曲柄弹簧	1	1	
25	68WF4-020	拉簧勾	1	1	GB896 4 发黑
26	22T4-015	针距标盘座螺钉	4	4	
27	233WF3-030	标盘止动销弹簧	1	1	
28	233WF3-005	止动销	1	1	
29	68WF4-021	倒缝操纵杆拉簧	1	1	
30	233WF3-029	针距调节摆杆轴挡圈E7	1	1	
31	33T2-030-A	针距调节螺杆密封圈	1	1	
32	233WF3-004	针距调节螺杆	1	1	
33	233WF3-003	针距连杆销	1	1	
34	89WF5-005	针距连杆紧固螺钉	1	1	
35	233WF3-027	针距标盘	1	1	SM11/64"×40×10
36	233WF3-021	标盘螺钉	1	1	
37	2KT3-005	倒缝操纵杆紧固螺钉	1	1	
38	52WF4-020	倒缝操纵杆螺钉	1	1	
39	233WF3-031	倒缝操纵杆	1	1	
40	6KT2-030	倒缝操纵杆曲柄夹紧螺钉	1	1	
41	233WF3-008	倒缝操纵杆短轴	1	1	
42	233WF3-009	倒缝操纵杆短轴密封圈	1	1	
43	235WF2-003	倒缝操纵杆曲柄组件	-	1	M4×5
44	1WF5-042	倒缝操纵杆曲柄组件	1	-	
		倒缝操纵杆短轴紧固螺钉	1	1	SM3/16"×28×18
					SM3/16"×32×6.5
					SM3/16"×32×19
					SM3/16"×28×17
					GB3452.1-92 6.3×1.8G

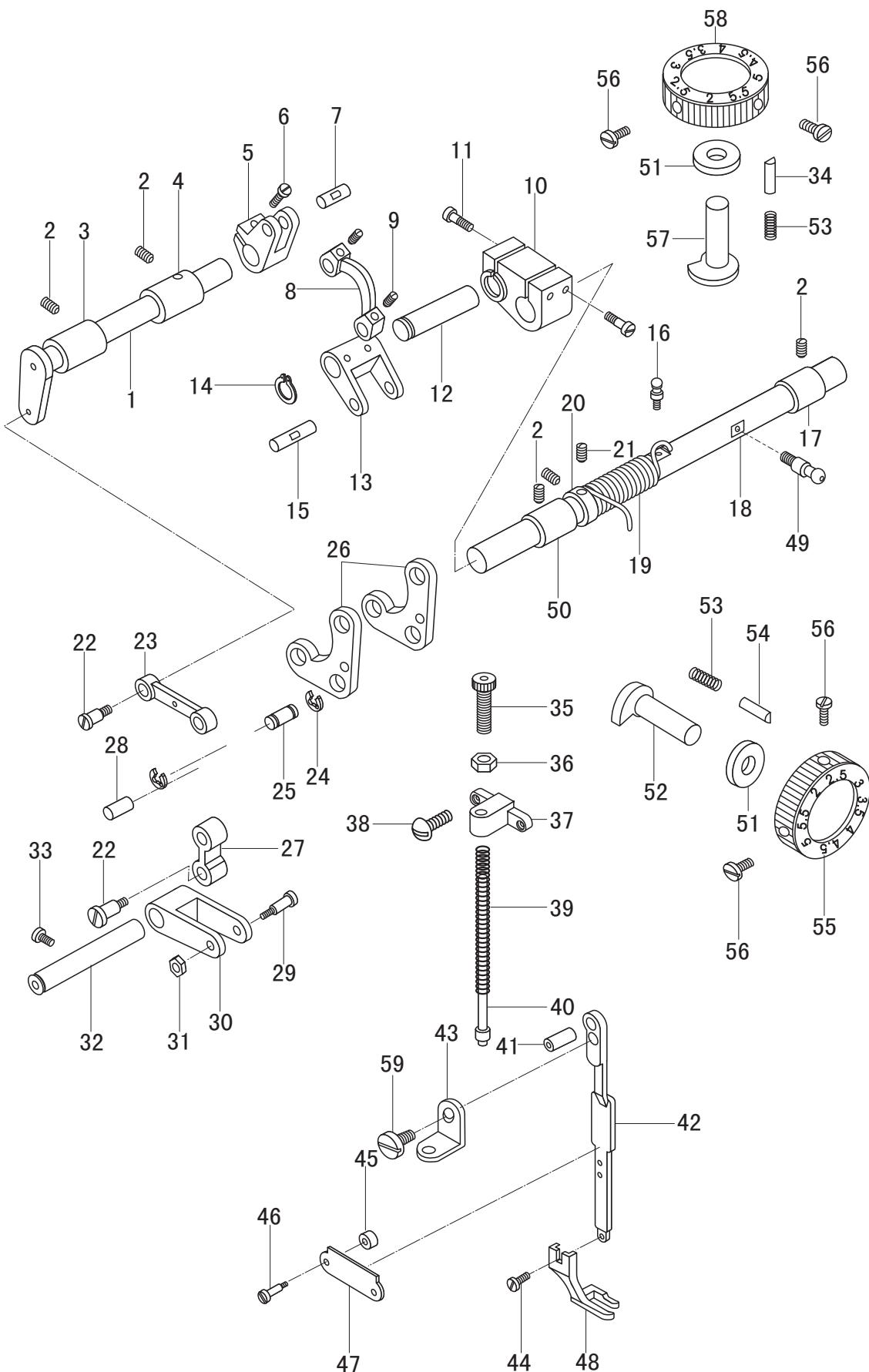
## 5. Upper feed mechanism



## 5. Upper feed mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	233WF5-023	Left crank	1	1	
2	16WF3-061	Screw	2	2	
3	1WF5-022	Screw	2	2	
4	233WF3-024	Upper feed shaft bushing, L	1	1	
5	7WF5-003	Nut	1	1	
6		Washer	1	1	
7	7WF5-014	Crank shaft assy.	1	1	
8	68WF5-003	Upper feed shaft	1	1	
9	22T3-002B1	Collar	1	1	
10	22T3-002B2	Screw	2	2	
11	33T2-030-A	O-ring	1	1	SM15/64"×28×16
12	233WF5-030	Right crank	1	1	SM11/64"×40×5.5
13	7WF5-022	Nut	1	1	
14	68WF5-006	Link	1	1	
15	7WF5-037	Screw	1	1	GB/T97.2 6 镀镍
16	J0.0.40	Screw	1	1	
17	233WF5-034	Guide column	1	1	
18	233WF5-024	Crank	1	1	
19	7WF5-019a	Screw	1	1	SM1/4"×40×5
20	68WF5-009	Link	1	1	
21	7WF5-008	Screw	2	2	
22		Washer	2	2	
23	233WF5-025	Bracket	1	1	
24	7WF5-011	Screw	1	1	SM9/32"×28
25	7WF5-001	Nut	1	1	SM15/64"×28×7.5
26	68WF5-002	Upper feed shaft bushing, R	1	1	
27	233WF5-035		1	1	SM1/4"×40 SM9/64"×40×7 GB93 4 发黑 SM1/4"×40×26 SM15/64"×28×10

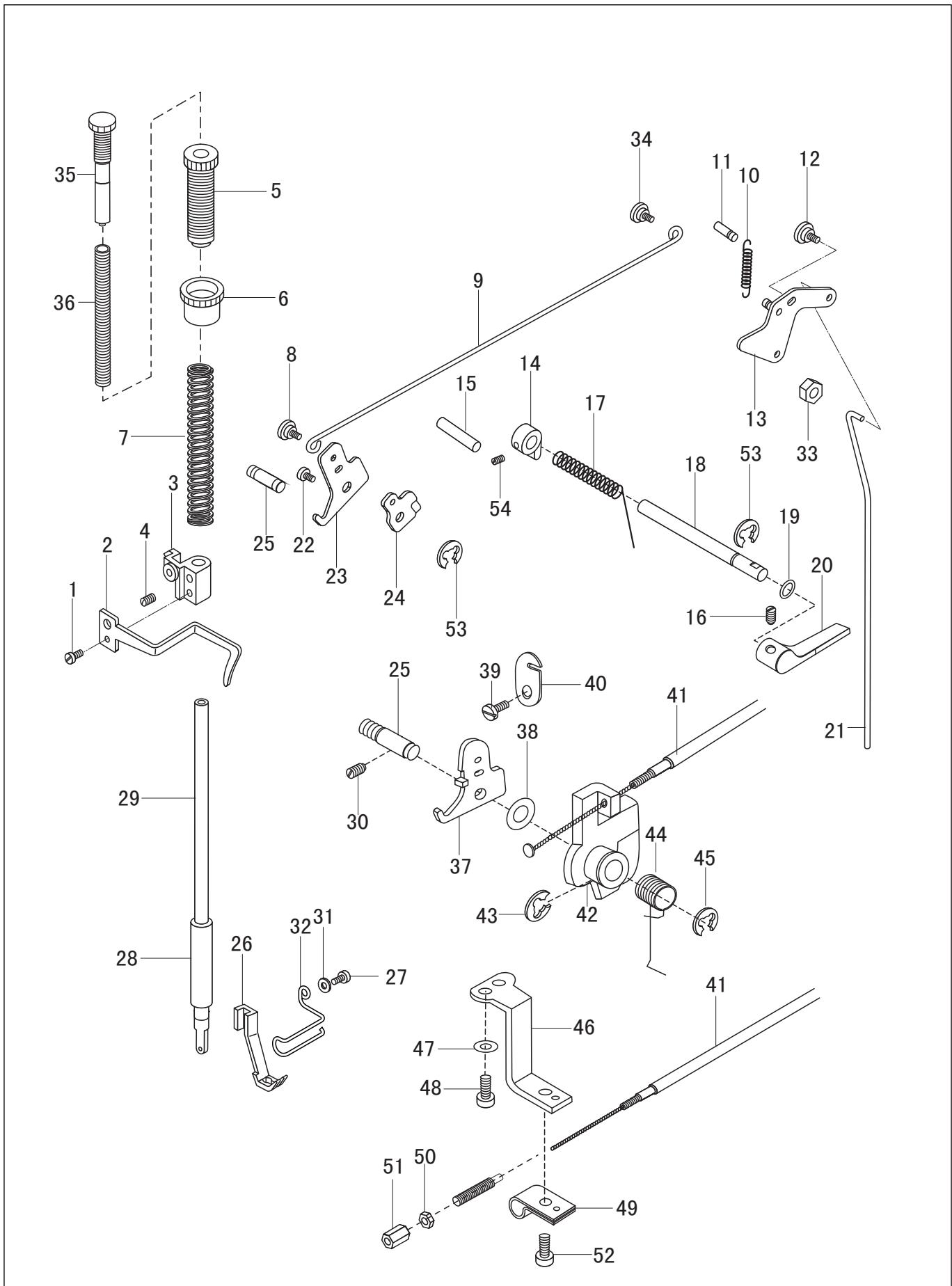
## 6. Walking foot mechanism



## 6. Walking foot mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	68WF6-001	Walking foot lifting shaft	1	1	
2	1WF5-022	Screw	4	4	
3	233WF5-007	Bushing, L	1	1	
4	233WF5-008	Bushing, R	1	1	
5	233WF5-006	Crank	1	1	
6	1WF4-027	Screw	1	1	
7	68WF6-005	Shaft	1	1	
8	233WF5-031	Link	1	1	
9	2KT5-036b	Screw	2	2	
10	233WF5-005	Bracket	1	1	
11	7KT3-035	Screw	4	4	SM11/64"×40×5.5
12	68WF6-008	Shaft	1	1	
13	233WF5-004	Crank	1	1	
14		Retaining ring	1	1	
15	68WF6-010	Pin shaft	1	1	SM15/64"×28×13
16	233WF5-003B	Screw	-	1	
	235WF3-001A	Screw	1	-	
17	233WF5-002	Bushing	2	2	SM11/64"×40×4
18	233WF5-001	Shaft	1	1	
19	233WF5-032	Spring	1	1	SM3/16"×28×14
20	233WF3-014	Collar	1	1	
21	22T3-002B2	Screw	2	2	
22	7WF5-019a	Screw	2	2	GB894.1 10 发黑
23	233WF5-009	Link	1	1	
24		Retaining ring	2	2	SM15/64"×28
25	68WF6-016	Pin shaft	1	1	
26	233WF5-010	Crank	2	2	
27	233WF5-013	Link	1	1	
28	68WF6-019	Shaft	1	1	
29	68WF6-022	Screw	1	1	
30	233WF5-011	Bracket	1	1	SM1/4"×40×4
31	36WF5-008	Nut	1	1	SM1/4"×40
32	233WF5-012	Feed crank shaft	1	1	
33	1WF2-019	Screw	1	1	GB896 6 发黑
34	994131	Stop pin	1	1	
35	7WF5-021	Screw	1	1	
36	7WF5-022	Nut	1	1	
37	233WF5-026	Bracket	1	1	
38	21WF4-047	Screw	2	2	SM15/64"×28
39	81WF6-003	Spring	1	1	
40	81WF6-004	Guide bar	1	1	
41	68WF6-020	Bushing	1	1	
42	233WF5-014	Walking foot connector	1	1	SM15/64"×28×12
43	233WF5-027	Guide bracket	1	1	
44	61-04-01/B316	Screw	1	1	SM9/32"×28
45	7WF5-002	Padding	2	2	
46	22T6-008D3	Screw	2	2	
47	7WF5-031	Press plate	1	1	SM11/64"×40×7.5
48	233WF5-029	Walking foot	1	1	
49	233WF5-003A	Screw	-	1	
	235WF3-001B	Screw	1	-	
50	233WF3-010	Bushing, L	1	1	
51	233WF5-022	Washer	2	2	
52	233WF5-019	Crank	1	1	SM9/64"×40×8
53	233WF5-021	Spring	2	2	
54	233WF5-020	Stop pin	1	1	SM11/64"×40×12
55	233WF5-018	Dial	1	1	
56	50WF1-004	Screw	4	4	
57	233WF5-017	Crank	1	1	
58	233WF5-016	Dial	1	1	
59	233WF5-028	screw	1	1	

## 7. Presser foot mechanism



## 7. Presser foot mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	22T2-004	大线勾螺钉	1	1	Screw
2	233WF6-022	大线勾	1	1	Thread
3	233WF6-006	压紧杆导架	1	1	Guide
4	22T1-013	压紧杆导架螺钉	1	1	Screw
5	233WF6-002	调压螺钉	1	1	Adjust
6	233WF6-003	调压螺钉锁紧螺母	1	1	Nut
7	81WF7-011	压紧杆弹簧	1	1	Spring
8	22T7-004B2	膝控提升拉杆螺钉	-	1	Screw
	235WF4-003	膝控提升拉杆螺钉	1	-	Screw
9	233WF6-019	膝控提升拉杆	1	1	Connec
10	68WF7-005	膝控提升杠杆(右)弹簧	1	1	Sprin
11	22T7-008	弹簧销	1	1	Sprin
12	22T7-005B	膝控提升杠杆(右)螺钉	1	1	Screw
13	233WF6-014	膝控提升杠杆(右)	1	1	Knee
14	233WF6-009	压紧杆提升凸轮	1	1	Press
15	68WF7-013	压紧杆提升凸轮限位销	2	2	Stop
16	80WF6-036	压脚扳手螺钉	2	2	Screw
17	68WF7-008	压脚扳手轴弹簧	1	1	Spring
18	233WF6-008	压脚扳手轴	1	1	Shaft
19	17WF5-021	压脚扳手轴O型圈	1	1	O-rin
20	233WF6-007	压脚扳手	1	1	Press
21	233WF6-011	膝控提升连杆	1	1	Knee
22	22T7-004B1c	膝控提升杠杆(左)螺钉	1	-	Screw
23	235WF4-001	膝控提升杠杆(左)	1	-	Knee
24	235WF4-002	松线板	1	-	Thread
25	233WF6-013	松线轴	-	1	Thread
	235WF4-004	膝控提升杠杆销	1	-	Pin
26	233WF6-020	小压脚	1	1	Press
27	22T7-015	压脚螺钉	1	1	Screw
28	233WF6-001	压紧杆轴套	-	1	Press
	235WF4-005	压紧杆轴套	1	-	Press
29	233WF6-021	压紧杆	1	1	Screw
30	21WF1-060	松线板销螺钉	1	1	Washer
31		防护勾垫片	1	1	Finge
32	7WF3-004	防护勾	1	1	Nut
33	1WF2-067	螺母	1	1	Screw
34	68WF7-016	拉杆螺钉	1	1	Screw
35	233WF6-004	辅助调压螺钉	1	1	Spring
36	233WF6-005	辅助调压弹簧	1	1	Knee
37	233WF6-010	膝控提升杠杆(左)	-	1	Washer
38	17WF5-008	松线轴垫片	1	1	Screw
39	36WF2-031	软线夹(上)螺钉	-	1	Wire
40	233WF6-016	软线夹(上)	-	1	Tensi
41	233WF6-015A	松线钢绳组件	-	1	Tensi
42	233WF6-015B	松线板组件	-	1	Retai
43		松线板挡圈	-	1	Spring
44	233WF6-012	松线弹簧	-	1	Retai
45		松线轴挡圈	-	1	Fixed
46	233WF6-018	软线夹(下)固定架	-	1	Washer
47		软线夹(下)固定架螺钉垫片	-	1	Screw
48	89WF2-016	软线夹(下)固定架螺钉	-	1	Wire
49	233WF6-017	软线夹(下)	-	1	Nut
50	13WF3-074	软线螺母	-	1	Nut
51	233WF6-015C	软线锁紧螺母	-	1	Screw
52	21WF4-047	软线夹(下)螺钉	-	1	Retai
53	233WF6-023	挡圈E6	2	1	Screw
54	2KT5-027	提升凸轮螺钉	1	1	GB896 5

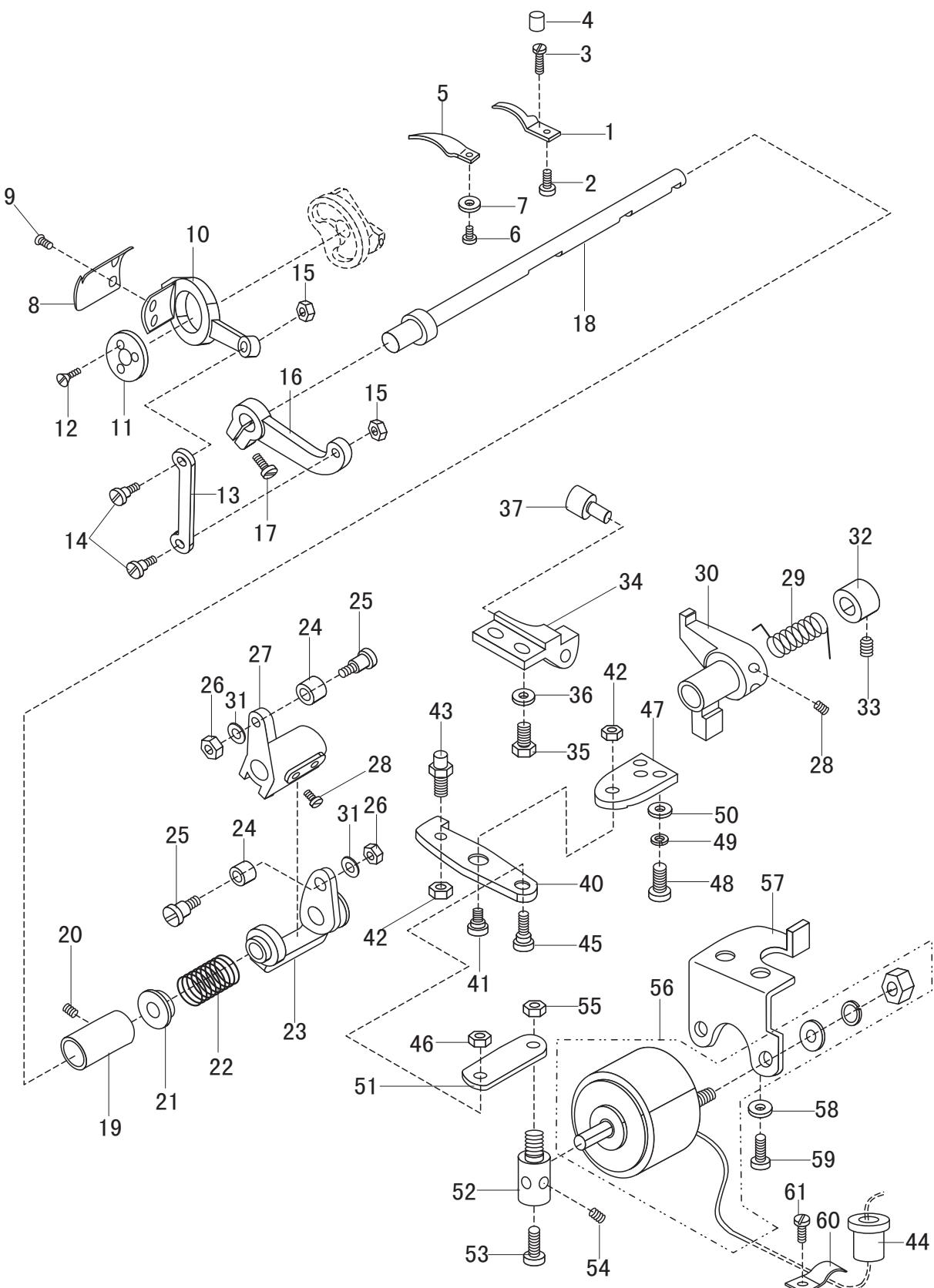
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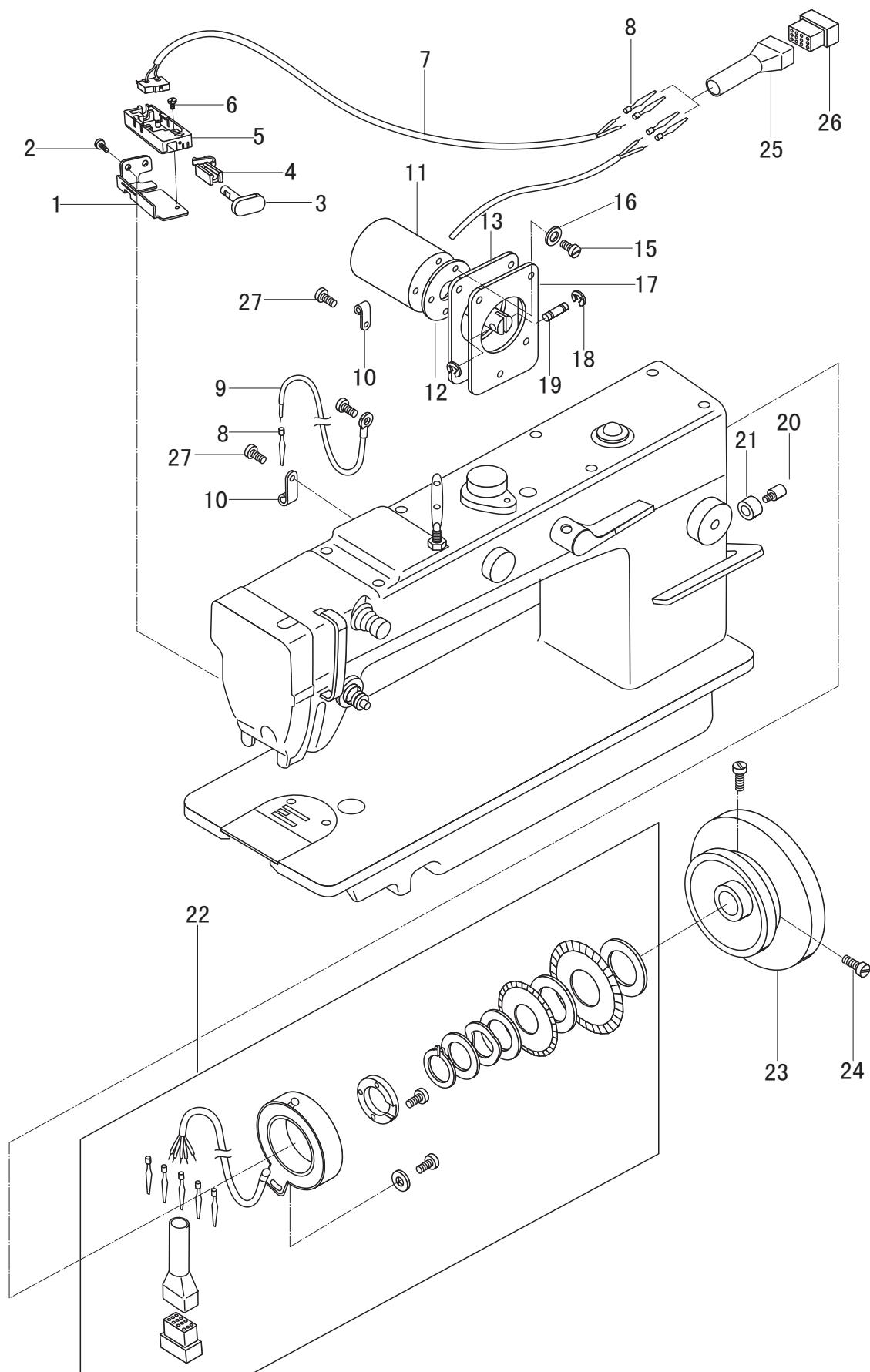
## 8. Thread trimming mechanism



## 8. Thread trimming mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	78WF1-002	Fixed knife	-	1	
2	2KT5-002	Screw	-	1	SM11/64"×40
3	16WF3-038	Screw	-	1	SM1/8"×40
4	2KT5-042	Nut	-	1	
5	78WF1-016	Thread holding plate	-	1	
6	2KT6-017	Screw	-	1	SM9/64"×40×6
7	79WF3-020	Washer	-	1	
8	78WF1-003	Movable knife	-	1	
9	2KT5-007	Screw	-	2	SM11/64"×40
10	233WF4-026	Movable knife carrier	-	1	
11	233WF4-021	Washer	-	1	
12	2KT5-002	Screw	-	3	
13	233WF4-001	Link	-	1	
14	233WF4-006	Screw	-	2	SM3/16"×32
15	2KT4-020	Nut	-	2	SM3/16"×32
16	233WF4-002	Driving crank	-	1	
17	53WF3-010	Screw	-	1	M6×1×15
18	233WF4-003	Thread trimming shaft	-	1	
19	233WF4-004	Bushing	-	1	
20	21WF1-045	Screw	-	1	SM3/16"×32×6
21	78WF1-025	Cover	-	1	
22	233WF4-025	Spring	-	1	
23	233WF4-019	Crank, R	-	1	
24	233WF4-024	Roller	-	2	
25	233WF4-023	Screw	-	2	SM3/16"×32
26	2KT4-020	Nut	-	2	
27	233WF4-020	Crank, L	-	1	
28	21WF3-010	Screw	-	2	SM15/64"×28
29	78WF1-029	Spring	-	1	
30	233WF4-005	Positioning block	-	1	
31		Washer	-	2	GB 859 5 发黑
32	233WF4-007	Collar	-	1	
33	22T3-002B2	Screw	-	2	SM1/4"×40
34	233WF4-008	Bracket	-	1	
35	6K1-010	Screw	-	2	SM3/16"×32×11
36		Washer	-	2	GB/T 95 5 镀镍
37	233WF4-009	Rubber	-	1	
40	233WF4-011	Clutch lever	-	1	
41	233WF4-022	Screw	-	1	
42	22WF3-004	Nut	-	2	SM15/64"×28
43	233WF4-012	Screw	-	1	
44	78WF1-032	Cover	-	1	
45	233WF4-013	Screw	-	1	
46	1WF2-074	Nut	-	1	SM3/16"×32
47	233WF4-014	Base	-	1	
48	49WF4-003	Screw	-	3	M5×0. 8×15
49		Washer	-	3	GB859 5 发黑
50		Washer	-	3	GB/T 95 5 镀镍
51	233WF4-015	Link	-	1	
52	233WF4-016	Pin	-	1	
53	17WF3-008	Screw	-	1	SM11/64"×40×8
54	36WF5-025	Screw	-	1	SM11/64"×40×5
55	13WF3-074	Nut	-	1	M5×0. 8
56	233WF4-017	Thread trimming solenoid assy.	-	1	
57	233WF4-018	Solenoid base assy.	-	1	
58		Washer	-	2	GB895 6 镀镍
59	1WF4-027	Screw	-	2	SM15/64"×28×13
60	2KT5-040	Wire clamp	-	1	
61	2KT6-017	Screw	-	1	SM9/64"×40×6

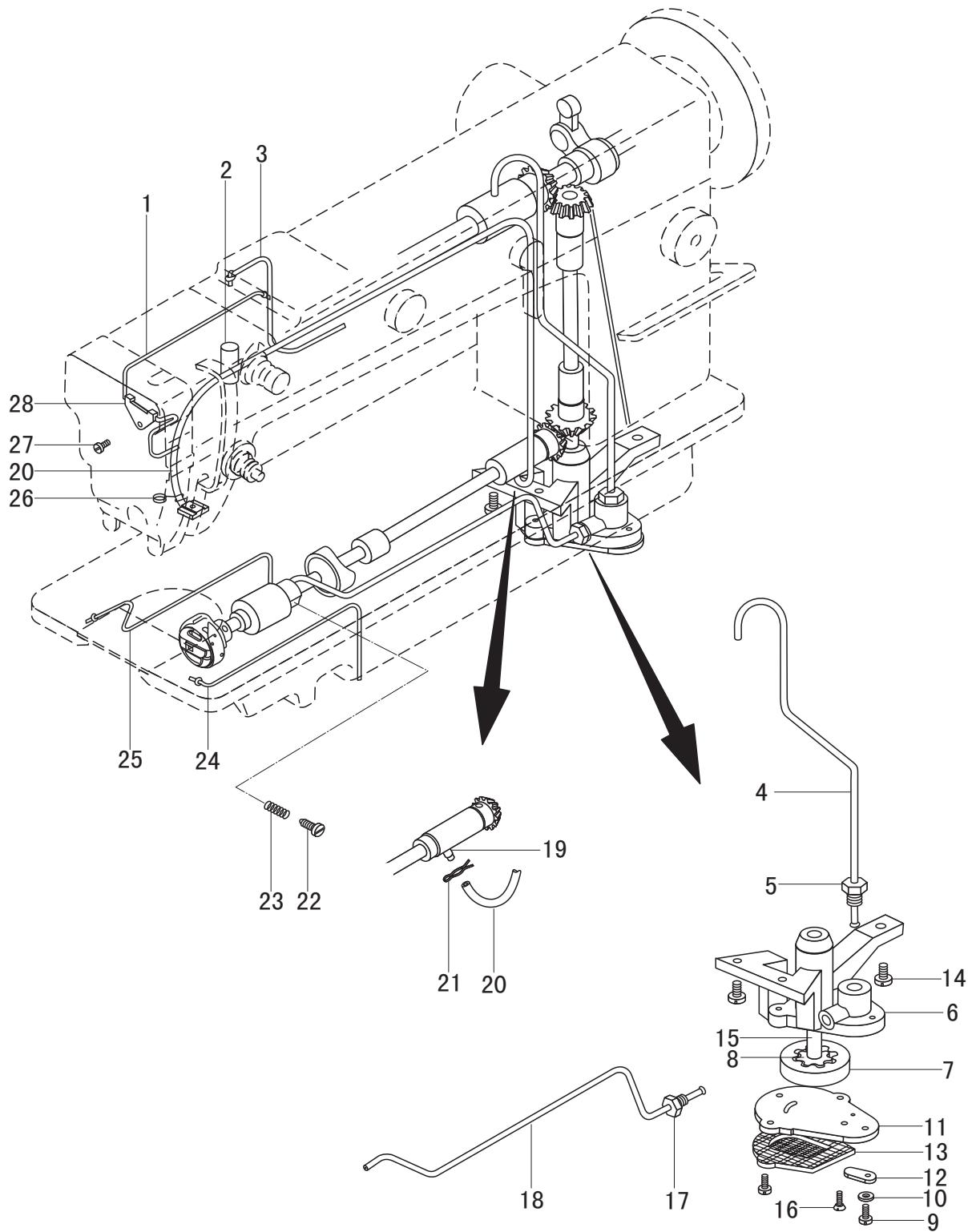
## 9. Reverse stitching mechanism



## 9. Reverse stitching mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1	2KT6-011	Set plate	-	1	
2	21WF1-062	Screw	-	2	
3	2KT6-015	Button	-	1	
4	2KT6-014	Switch	-	1	
5	2KT6-013	Switch base	-	1	
6		Screw	-	1	
7	2KT6-016	Reverse stitching switch assy.	-	1	
8	2KT6-001C	Terminal	-	5	SM3/16"×32×9.5
9	2KT8-001	Ground wire assy.	-	1	
10	2KT5-040	Thread clamp	-	2	
11	233WF7-003	Reverse stitching solenoid assy.	-	1	
12	233WF7-001	Washer	-	1	GB/T818 M3×6 发黑
13	78WF2-003	Back cover	-	1	
14	21WF4-047	Screw	-	1	
15	21WF3-026	Screw	-	4	
16		Washer	-	4	
17	68WF1-019	Washer	-	1	
18		Retaining ring	-	2	
19	78WF1-001A	Pin	-	1	
20	233WF3-022	Screw bar	-	1	SM11/64"×40×7.5
21	233WF3-023	Roller	-	1	SM11/64"×40×9.4
22	233WF7-002	Synchronizer assy.	-	1	GB859 5 发黑
23	7WF1-001	Handwheel	1	-	
	78WF2-004	Handwheel	-	1	GB896 4 发黑
24	22T3-007C2	Screw	-	2	
25	2KT8-002	Connector cover	-	1	
26	2KT8-003	Connector	-	1	
27	2KT6-017	Screw	-	2	
					SM15/64"×28×15
					SM9/64"×40×6

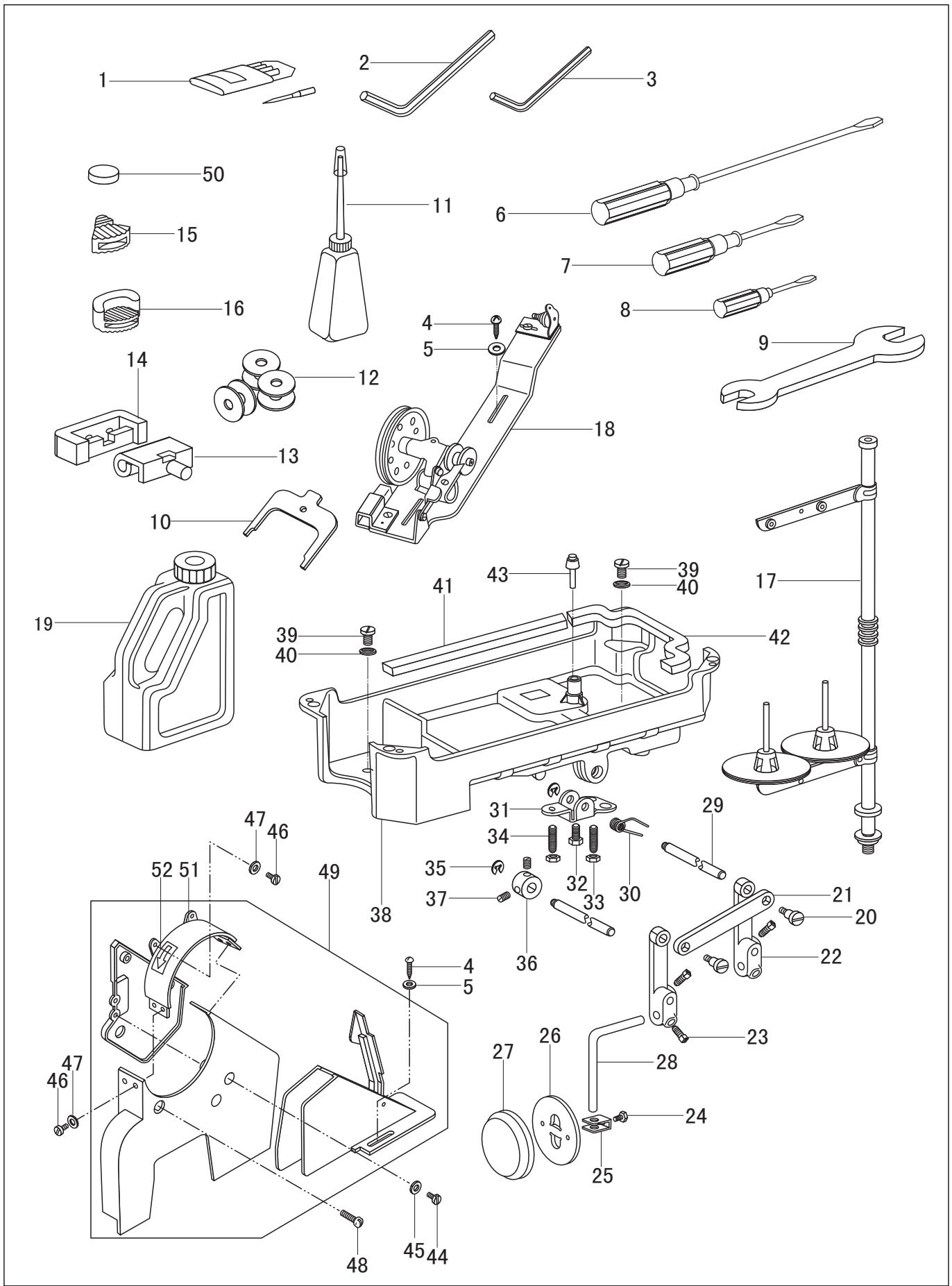
## 10. Lubrication mechanism



## 10. Lubrication mechanism

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1		Oil wick	1	1	
2	7WF2-013	Felt	5	5	
3		Oil wick	1	1	
4	68WF8-001A	Oil tube	1	1	
5	22T8-013D2	Adaptor	1	1	
6	15WF4-003	Oil pump	1	1	
7	15WF4-006	Big gear	1	1	
8	15WF4-007	Small gear	1	1	
9		Screw	3	3	
10		Washer	1	1	长500mm
11	15WF4-004	Oil pump cover	1	1	
12	22T8-006	Adjusting plate	1	1	长250mm
13	22T8-008A	Oil felt	1	1	
14	22T8-009	Screw	3	3	
15	15WF4-005	Shaft	1	1	
16		Screw	2	2	
17	22T8-010B1	Adaptor	1	1	
18	68WF8-002A	Oil tube	1	1	GB/T67 M3×10 镀镍
19	22T4-007C2	Adaptor	1	1	GB93 4 发黑
20		Oil pipe	1	1	
	22T8-015	Oil felt	1	1	
21	68WF8-005	Clamp	1	1	
22	233WF8-001	Screw	1	1	SM11/64"×40×13
23	233WF8-002	Spring	1	1	
24		Oil wick	1	1	GB/T68 M3×10 镀镍
25		Oil wick	1	1	
26	68WF8-004	Clamp	1	1	
27	22T1-003C6	Screw	1	1	
28	68WF8-003	Set plate	1	1	
					长250mm
					长300mm
					SM9/64"×40×6

## 11. Accessories



## 11. Accessories

No .	Parts No .	Name of parts	Qty.		Remarks
			0323	0323-D2	
1		Needle	4	4	
2		Spanner	1	1	
3		Spanner	1	1	
4		Wooden screw	4	4	
5		Washer	4	4	
6	33TF-012	Screwdriver (big)	1	1	
7	33TF-013	Screwdriver (medium)	1	1	
8	33TF-014	Screwdriver (small)	1	1	
9	22WF6-008	Spanner	1	1	
10	78WF7-001	Adjusting plate	-	1	
11	33TF-011	Oil pot	1	1	
12	33TF1-027	Bobbin	4	-	GB5282 ST4. 8×19 镀镍
	24WF2-001	Bobbin	-	4	GB/T95 6 (外径Φ14) 镀镍
13	22T9-007F1	Hinge	2	2	
14	22T9-007F2	Rubber cover	2	2	
15	1KT5-003	Cushion (big)	2	2	
16	1KT5-004	Cushion (small)	2	2	
17	4F-007	Thread stand	1	1	
18	S14420020	Bobbin winder	1	1	
19	22T9-017	Oil tank	1	1	
20	68WF9-007	Screw	2	2	
21	68WF9-006	Link	1	1	
22	68WF9-009	Bell adaptor	2	2	
23	22T9-003B4	Screw	3	3	
24	22T9-003B7	Screw	1	1	
25	22T9-003B6	Bell bracket	1	1	
26	22T9-003B5	Bell	1	1	
27	22T9-003B8	Bell pad	1	1	
28	22T9-003B2	Bent rod	1	1	
29	68WF9-008	Hinge shaft	1	1	
30	22T9-001A7	Spring	1	1	
31	22T9-001A8	Stop bracket	1	1	
32	1WF4-032	Screw	1	1	SM5/16"×18×13
33	22T9-001A10	Adjusting nut	2	2	SM15/64"×28×8
34	22T9-001A9	Screw	2	2	
35		Retaining ring	2	2	
36		Collar	1	1	
37	J0. 0. 35	Screw	2	2	
38	233WF9-003	Oil pan	1	1	
39	22T9-001A2	Screw	2	2	
40	22T9-001A3	Washer	2	2	SM15/64"×28×15
41	68WF9-011	Pad (big)	1	1	SM15/64"×28
42	68WF9-012	Pad (small)	1	1	SM15/64"×28×27
43	165F01001	Knee lifter lifting bar	1	1	GB896 9 发黑
44	13WF3-018	Screw	1	1	
45		Washer	1	1	SM15/64"×28×4. 5
46	21WF4-047	Screw	6	6	
47	22T1-007	Washer	6	6	SM15/16"×28×10
48	22T9-006	Screw	2	2	
49	68WF9-013	Belt cover	1	1	
50	22T9-012	Magnet	1	1	
51	68WF9-013A	Upper belt cover	1	1	
52	36WF1-031E	Turning mark label	1	1	M4×10 GB/T97. 1 4 镀镍 SM11/64"×40×7. 5  SM15/64"×28×8