## INSTRUCTION MANUAL BOOK PARTS BOOK

## 9995SK

UPPER AND LOWER FEED LOCKSTITCH SEWING MACHINE FOR MEDIUM AND HEAVY DUTY



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#### 1. MAIN SPECIFICATIONS

T	ype	
Material		Medium and heavy duty
Max.sew	ing speed	2000spm
Max.stit	ch length	8mm
Max.th	nickness	8mm
Alternate presser fool lift volume		3.5-5.5mm
Ne	edle	DPx17(20#~23#)
Presser	by hand	8mm
foo lift	by knee	16mm
Но	ook	Auto-lubricating big rotating hook
Lubri	cation	Auto lubrication
Motor	power	370W (use for wewing)

#### 2. PREPARATION

#### (1) Cleaning the machine

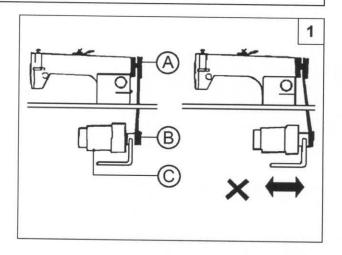
Before leaving the factory, the machine parts are coated with rust-preventive grease, which may be hardened and contaminated by dust during storage and shipment. This grease must be removed with gasoline.

#### (2) Examination

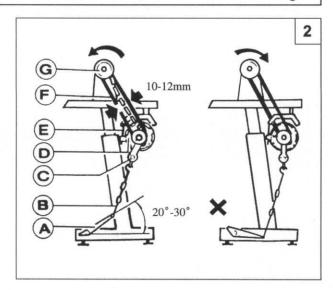
Though every machine is confirmed by strict inspection and test before leaving the factory, the machine parts may be loose or deformed after long distance transporation with jolt. A thorough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstruction, parts collision, uneven resistance or abnormal noise. If these exist, adjustment must be made accordingly before run-in operation.

#### INSTALL THE MOTOR (Fig.1)

Align Motor Pulley Groove (B) and Balance Wheel Groove (A) by moving the motor leftward or rightward.



#### CONNECT THE CLUTCH LEVER WITH THE PEDAL(Fig.2)



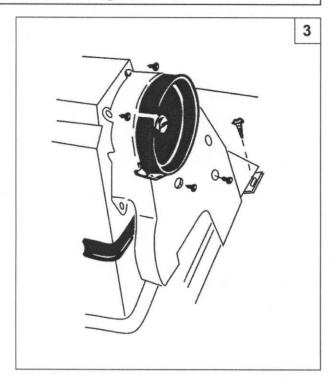
a. The optimum tilt angle of pedal (A) is approximately 20-30 deg.

4.

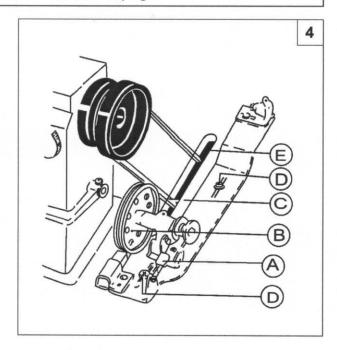
- b. Adjust Clutch Cover (D) so that Clutch-Lever (C) and DrawBar (B) run in line.
- c. The balance wheel should rotate counter-clockwise when viewed from the outside of Balance Wheel (G). The direction of the motor pulley rotation can be reversed by reversing (turning over 180 deg.) the power plug of the motor.
- d. Adjust the tension of V-belt (F) by turning Motor Vertical Position Screw (E). The proper tension of the V-belt is a slack of 10-20 mm when the belt is depressed

#### 5. / INSTALLING BELT GUARD (Fig 3)

The belt guard should be installed for safety.



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



#### 7. /OILING (Fig 5)

A B C C

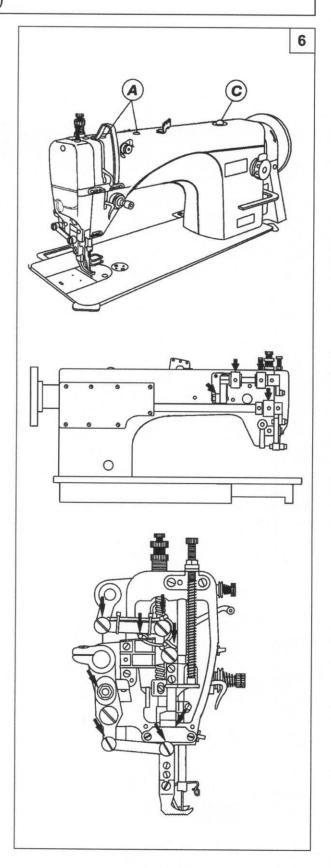
- 1. Required amount of oil.
  - Line(A)on the oil reervoir: Max.oil level.

    Line(B)on the oil reservoir: Min.oil level. If oil level goes down under line(B), oil cannot be distributed to each part of the machine, thus causing the parts a seizure.
- 2. Replenishing
  - Always use only No.18 special machine oil for high speed sewing. Be sure to replenish oil to Lne (A) before starting operation.
- 3. Replacing oil

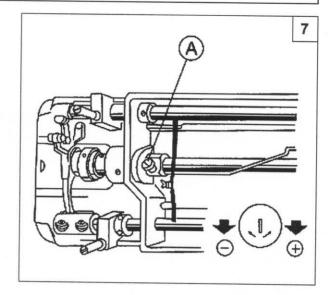
To replace oil, remove Screw(C)to drain oil. After completely draining off oil. clean the oil reservoir and securely tighten Screw(C), then fill the reservoir with fresh oil.

#### 8 . . . . . / RUN-IN OPERATION(Fig.6)

When the machine left out of operation for a quite long time and used again, remove the red rubber plug on top of the machine head, oil it thoroughly, the lift the presser foot and run at a low speed of  $1000\sim1500$ spm, observe the sparkling condition through oil windew(c), as the lubrication is well, keep the running test at the low speed about 30 minutes, then increase the speed gradually, after months running to perfect its performance, then increase up to proper sewing speed.



#### /LUBRICATION ADJUSTMENT(Fig.7)



#### A. Adjusting oil pump.

In ordinary operation, adjustment is not required for the oil pump. If oil splashing does not occur in the oil check window when the machine runs at a low, speed (approx. 2000spm), reduce the clearance of the by-pass hole.

#### B.Adjusting the lubrication of rotating hook.

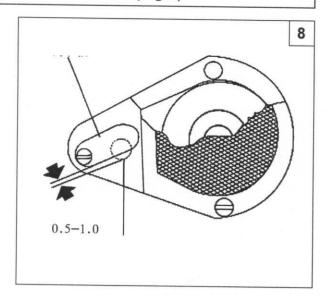
The lubrication of the rotating hook can be adjusted by Oil Adjusting Screw ( A ) as follows:

- 1) Turn Oil Adjusting Screw ( A ) clockwise to increase oil and tuen Oil Adjusting Screw ( A ) counter clockwise to decrease oil.
- 2) Oil Adjusting Screw ( A ) adjusts oil amount within 5 turns. When Oil Adjusting Screw ( A ) is fully tightened, oil amount is maximum.
- 3) Readjustment depends on temperature, sewing speed and the like. In practice, oil amount can be judged as follows: remove the throat plate and place a piece of paper on instead, run the machine for about 20 seconds, then check the oin splashed on the paper.

#### 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.

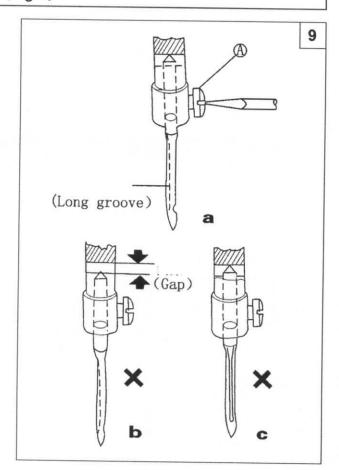


#### REPLACE NEEDLES (Fig.9)

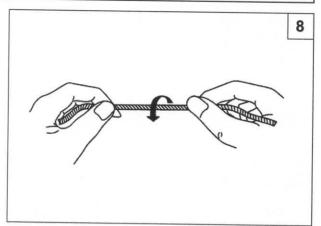
Turn the balance wheel to lift needle bar to the upper end of its stroke. Loosen Needle Clamp Screw A. While keeping the long groove of the needle leftward fully insert the needle shank up to the bottom of the needle socket Then tighten Needle Clamp ScrewA.

Note: Fig.(b):insufficient insertion.

Fig.(c):wrong direction oflong groove.



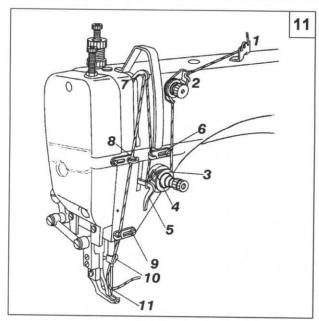
12. / COORDINATION AMONG THE NEEDLE THE THREAD AND THE MATERIAL(Fig10)



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, co-ntrarily, it is right-twisted.

The needle is DPx17 20#~24# (JK-6320CXDPx17 25#), the needle number must be fitted for the materials. Sewing too heavy the weight of ma-terials, 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. There for, the selectionofneedle and thread must be fitted to the materials.

#### THREADING(Fig.11)

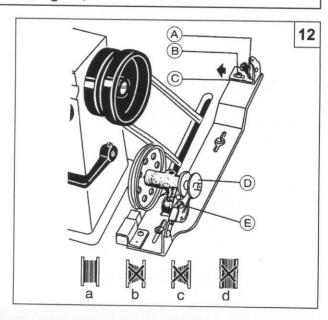


When threading the needle thread, raise the needle bar to its highest position, lead the thread from the spool and pass it in the order instructed.

- (1) Lead the thread down through the three-eye thread guide ① on the top.
- (2) Pass down thru the left hole of thread retainer ②, then down thru the lower hole of thread retainer ②.
- (3) Pass down thru between the two tension disc 3.
- (4) Pass up thru the hook of thread take-up spring 4 . thru thread regulator 5, thru thread guide 6 and up thru the hole of thread take-up lever 7.
- (5) Down thru thread guide 8, 9, and needle bar thread guide 0, then pass the thread from the left thru the eye of needle 1, draw out the thread approx 100mm from the needle eye.
  - 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

#### /WINDINGADJUSTMENT(Fig.12)

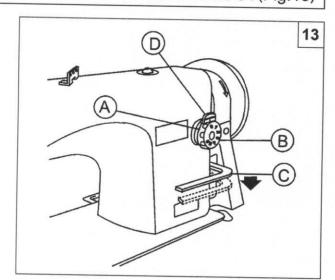


- 1) The wound bobbin thread should be neat and tight, if not, adjust the winding tension by turning Tension Stud Nut(A) of bobbin winder tension bracket.
  - Note: nylon or polyester thread should be wound with little tension, otherwise, Bobbin (D) might break or deform.
- 2) When the wound thread layer does not present a cylindrical shape as shown in Fig7(a), loosen Set Screw (B) of bobbin winder tension bracket and slide Bracket (C) leftward or rightward If thread is wound as shown in Fig,7 (b), move the bracket rightward, but if thread is wound as shown in Fig.7 (c), move the bracket leftward.

  After adequately positioning the bracket, tighten Set Screw(B).
- 3) Do not overfill the bobbin. The optimum length of thread will fill about 80% of bobbin capacity. This can be adjusted by Adjusting Screw(E) of bobbin winder stop latch.

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#### / ADJUST THE PRESSURE OF PRESSER EOOT(Fig.13)

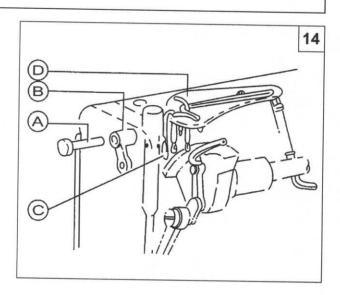


Stitch length can be set by turning stitch length regulating dial (A). The figures on the stitch length regulation dial plate (B) indicate the stitch length.

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

14)



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

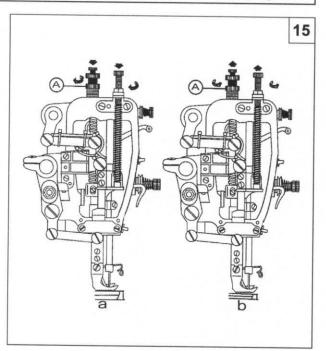
- ① Open the face plate, remove the pressure scre screw, lock nut and presser bar.
- ② Renove Hinge(A) and Lever (B)
- 3 Draw out Oil wiick(C).
- Loosen the wick fix screw on the arm top, and take out Set Plate (D).
- ⑤ Replace with a new one.
- ⑤ Installing is a reverse sequence.

#### 17.

#### / ADJUST THE PRESSURE OF PRESSER EOOT(Fig.15)

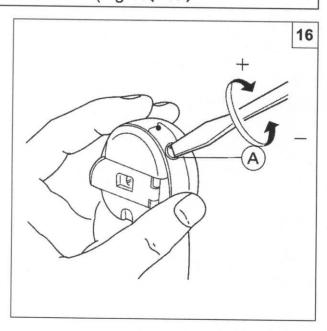
Pressure of presser foot is to be adjust in accordance with thickness of materials to be sewn.

First loosen Lock Nut (A). For heavy materials, turn the pressure regulating thumb screw as shown in Fig.10(a) to increase the pressure, while for light materials, turn the pressure regulating thumb screw as shown in Fig.10(b) to decrease the pressure. Then tighten Lock Nut(A). The pressure of presser foot is recommended to be less as long as normal feeding is ensured.



#### 18

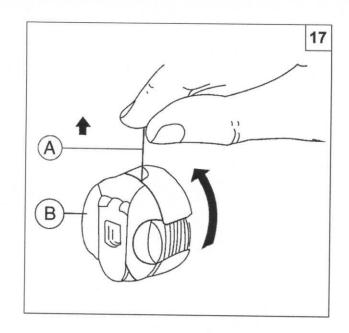
#### 17) /ADJUST THREAD TENSION(Fig.16、17)



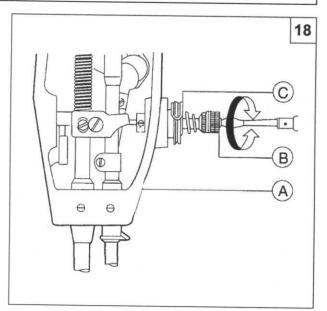
In principle, thread tension is to be adjusted in accordance with materials, thread and other factors.

In practice, thread tension is adjusted according to the stitches obtained. The needle thread tension should be adjusted with reference to the bobbin thread tension. Turn Tension Spring Regulating Screw (A) of bobbin case clockwise for more tension. or turn the screw counterclockwise for less tension.

It is common practice to test the bobbin test the bobbin thread tension as shown in Fig.12. Hold the end of the thread from delivery eye. If the bobbin case is falling slowly, the proper tension is obtained. The needle thread tension can be adjusted by setting (1) the take-up spring tension.(2) the thread take-up spring stroke and (3) tension spring. All these adjustments will be described in the following.



#### 19) /ADJUST THREAD TAKE-UP SPRING(Fig.18,19)



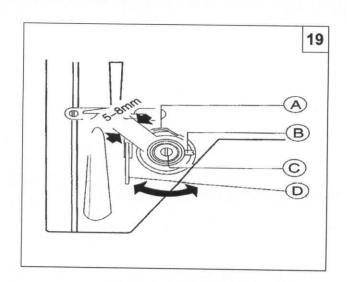
The normal sewing range of thread take-up spring is 5-8mm. For sewing light weight materials (short stitch), weaken the spring tension and widen the sewing range of spring, while for sewing heavy weight materials, strengthen the spring tension and shorten the sewing range of spring.

#### 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 release 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 stop slot on the thread take-up spring regulator, then to further turn tension stud (B) counterclockwise by 1/2 turn After adjustment, tighten tension stud set screw (A).

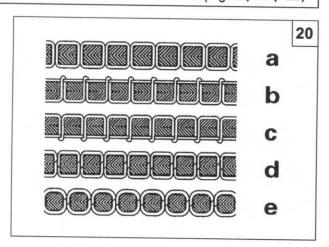


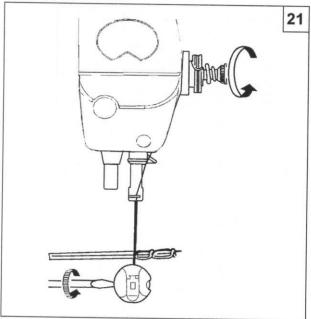
#### 2) Adjusting the thread take-up spring stroke

Loosen Set Screw ( B ), turn Stud ( C ) clockwise to increase the stroke or turn Stud ( C ) counter-clockwise to decrease the stroke. After the adjustment tighten Set Screw ( B ).

Before leaving the factory, the thread take-up spring has properly been adjusted, Readjustment is needed only in the case of special material or special thread.

## 21, 22)/ADJUST THREAD GUIDE AND THREAD TENSION(Fig.20, 21, 22)

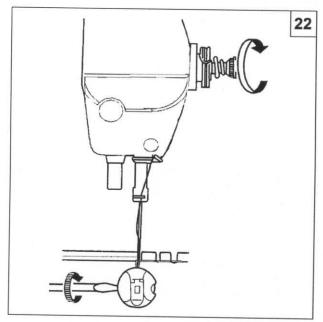




The position of the thread guide affects stitch tightness and therefore must be adjusted according to sewing materials and sewing conditions.

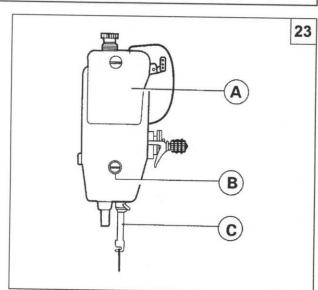
Thread	Leftward	Center	Rightward
guide position	500	200	200
Material weight	Heavy	Medium	Light

Fig15 shows different stitch forms. Normal stitch form should be as shown in Fig.20(a). When abnormal stitches cause puckering and thread break-age, the tension of needle thread and bobbin thread must be adjusted accordingly.

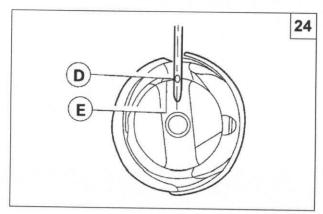


- 1) In case needle thread tension is too strong or bobbin thread tension is too weak, as shown in Fig.20(b), turn the thumb nut counterclockwise to decrease the needle thread tension, or tighten the tension spring regulating screw of bobbin case to increase the bobbin thread tension (See Fig.21)
- 2) In case needle thread tension is too weak or bobbin thread tension is too strong, as shown in Fig.20(c), turn the thumb nut clockwise to increase the needle thread tension. or loosen the tension spring regulating screw of bobbin case to decrease the bobbin thread tensio.
- 3) In case of the stitch forms as shown in Fig.20(d) and (e), adjustment can be made with reference to the above means.

21 23、24、25、26)/ TIME NEEDLE TO ROTAING HOOK (Fig.23、24、25、26)



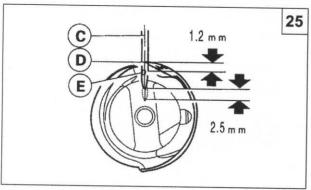
- 1. Adjusting the needle position ( See Fig.23 )
- 1) Turn balance wheel by hand to bring Needle Bar (C) to the lowest position of its stroke.
- 2) Remove rubber plug from Face Plate (A).
- 3) Loosen Set Screw(B) of needle bar adaptor.
- 4) Move Needle Bar (C) vertically to adjust needle timing.
- 5) After the adjustment, tighten Set Screw (B) and put in the rubber plug. The standard needle timing (SeeFig.24) is to align Timing Mark (B) on the needle bar and thebottom of Needle Bar Bushing (A) and meanwhile align the Inner Surface (E) of the hook and the center of Needle Eye (D) when the needle bar gets down to its lowest position.

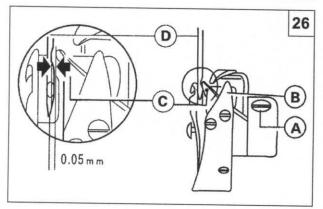


#### 2. Adjusting the hook point timing

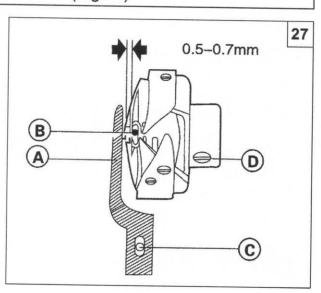
Timing of needle motion to rotating hook motion has a great effect on sewing performance. The standard hook point timing (See Fig.25) is to align Hook Point (D) and Needle Centerline (C) when Needle Bar (B) is lifted by 2.2mm from the lower end of its stroke.Besides. Hook Point (D) should be 1.0-1.5mm above the upper end of needle eye (E).

When adjusting the hook point timing, also notoce that the clearance between the bottom of needle notch and Hook Point (C) should be approx.0.05mm (See Fig.26)





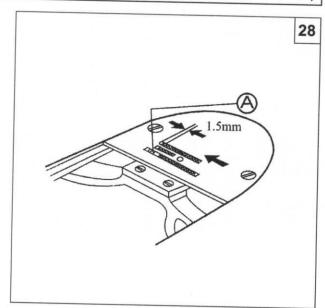
#### 22 / REPLACE ROTATING HOOK (Fig.27)



- 1) Lift needle bar to the highest position of its stroke.
- 2) Remove throat plate, take down needle and bobbin case.
- 3) Loosen Screw (C) of hook positioner and take down Hook Positioner (A).
- 4) Loosen two Screws ( D ) of rotating hook.
- 5) Turn balance wheel to raise feed bar to its highest position, then take down the rotating hook by turning it away from feed bar.
- 6) Installing the hook can be done in reverse sequence. Note that Needle (B) and the convex surface of Hook Positioner (A) should align with a clearance of 0.5-0.7 mm between them.

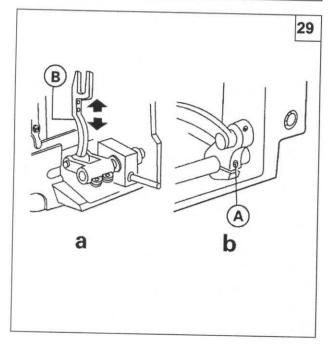
#### 23

## 28) / ADHUST THE POSITION OF FEED DOG (Fig.28, 29)

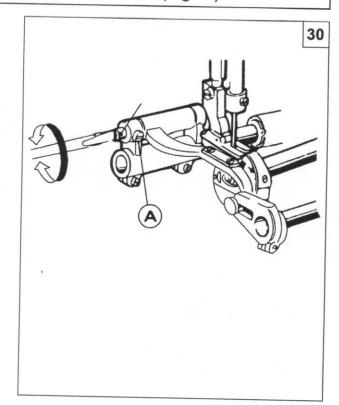


#### in Fig.28.

- Fully advance the feed dog toward the front end of the throat plate slot.
- Loosen Feed Rock Shfat Crank Screw (A). See Fig. 29(b).
- Move Feed Bar (B) in the direction shown by the arrow in Fig. 29 (a) to adjust the feed dog position.
- 4) After the adjustment, be sure to tighten Screw (A).



#### 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 screw driver to turn eccentric shaft left and right.

Tighten screw (A).

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

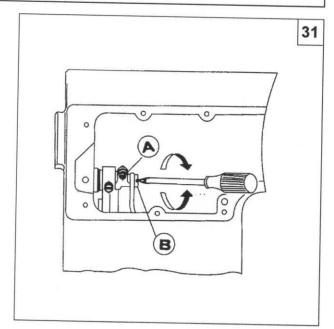
The front of it is lower, which can prevent maferial sliding and no breakage of bobbin thread.

#### / Stitch length error adjustment (Fig 31)

Loosen screw (A), and turn stitch length adjusting cam (B).

Turn clockwise: forward sewing, stitch length enlarged; reverse sewing, stitch length shorten.

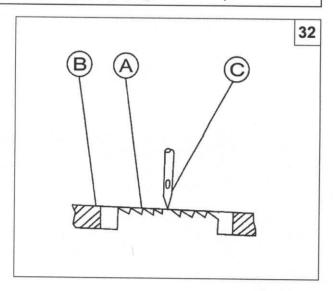
Turn counter-clockwise: forward sewing stich length shorten; reverse sewing, stich length enlarged.



#### 1. Standard position

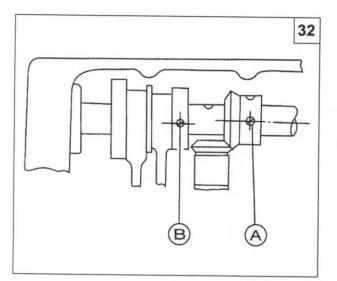
Turn balance wheel to lower Feed dog (A) till it is horizontal with the surface (B) of thrat plate, at the moment, the tip of needle (C) should be horzontal with the surfaces of throat plate and feed dog.

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



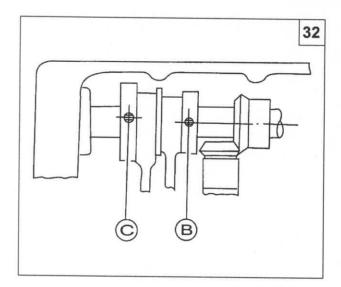
#### 2. Installing feed dog lift cam (See Fig 33)

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



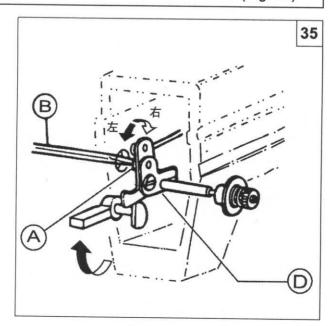
#### 3. Installing feed cam (See Fig 34)

Continuously 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).



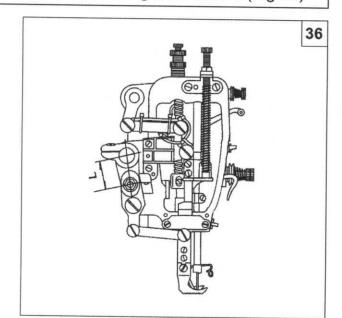
#### ADJUST OPENING TIME OF THE TENSION DISCS (Fig. 35)

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 right-ward. it is later to open, otherwise it is earlier to open.



28.

#### / Adjusting the tension releasing mechanism (Fig 36)

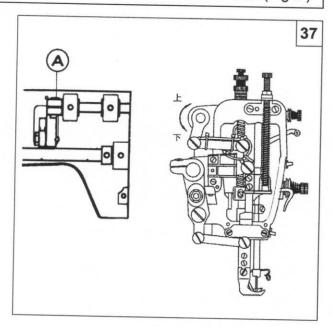


During the sewing, the center gauge (L) between the walking foot sliding block and its shaft can be adjusted according to the differences of the friction coefficients of the friction coefficients of materials and the sewing process.

Method: Increase L---the upper feed amount enlarged  ${\hbox{ reduce $L$--- the upper feed amount} }$ 

shorten

For special sewing requirements, for example, the upper layer of material needs more amount than the lower layer does, in this case, adjustment can be done in the range of above theory for operation.



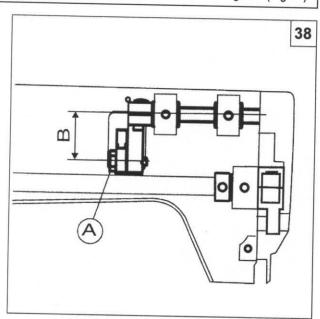
During the sewing, the alternate lift amount can be adjusted according to the nature of material. In general sewing, the amount of walking foot is 5.5mm, and the presser foot lift amount is 3.5mm.

Method: loosen the screw A. turn presser foot front crank up ward to increase the amount of walking foot, turn it downward to reduce the presser foot amount, the range of adjusting amount is not too

30

Adjusting the lift amount of presser foot together with walking foot (Fig 38)

The lift amount of walking presser foot together with presser foot can also be adjusted slightly. When adjusting, loosen screw (A) adjust its center distance B between the screw (A) and the presser foot lift shaft. The lift amount is increased as to shorten the ceter distance B, and the lift amount is decreased as to widen the center diatance B. After adjustment, tighten the nut again.



39 L F

In sewing operation, for preventing the walking foot from striking on presser foot a proper clearance C of approx. 1.5mm should be maintained between them. When the clearance is too small or too big, necessary to adjust, loosen rear crank screw and trun the rock shaft, then the walking foot moves near the needle bar. When adjust, be sure to note the fixed number of the clearance C.

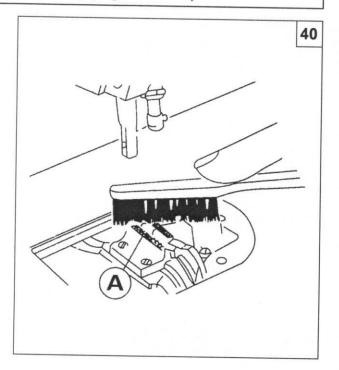
#### 32.

#### Periodical cleaning (Fig 40 42 42)

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

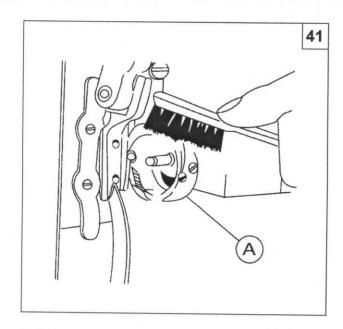
#### 1. Cleaning the feed dog

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



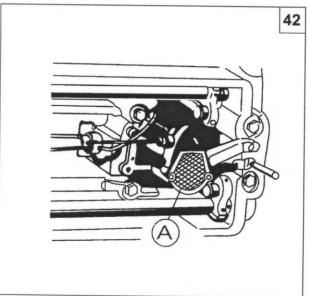
#### 2. Cleaning the rotating hook

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



#### 3. Cleaning the oil filter

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



# 3 0-0.5mm

#### 33 Vertical edge trimmer (Fig.43)

1.Mounting of the trimmer:Procedure of replacement refers to directions as shown on FIG.8. Only when it has been driven to the lower dead point can part① of the trimmer be adjusted up to the range ② of 0~0.5 millimetre from the uppre surface of the throat plate. Loosen two screws ③ in order to make replacement of the worn-out trimmer.

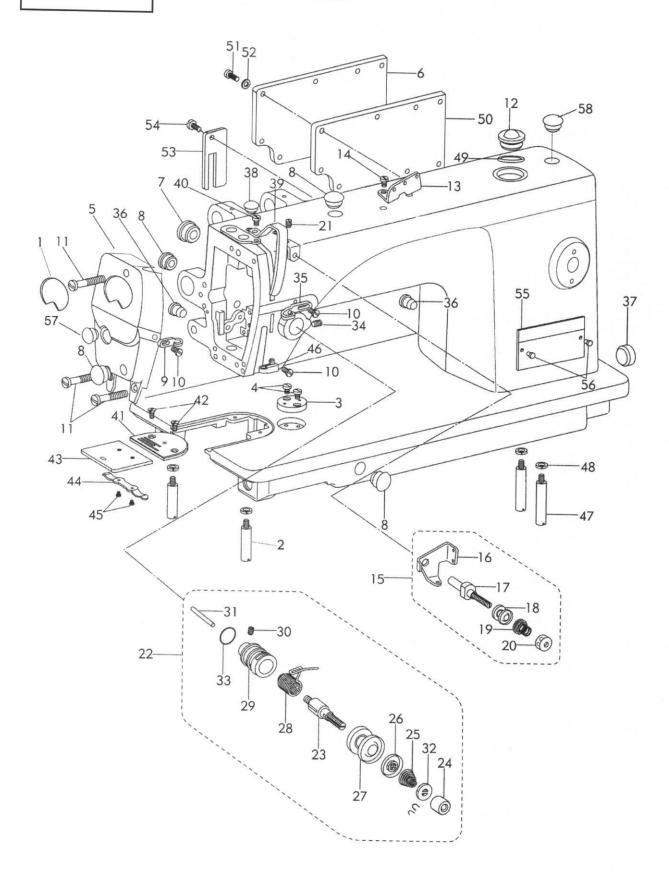
2.Adjustment of clearance of the trimmer: Clearance of the trimmer for trimming relies upon the specifications of the throat plate. To adjust parallel degree(s) of the throat plate to be replaced,first loosen screw ④ (see Fig.43) and then adjust the trimmer to the execellent trinning condition of fabrics.The adjusting proceduce is as follows:

1)Loosen screw ③ to make the edges of the throat plate and trimmer come in contact with each other

2)Secure the screw of the trimmer in place. Specified standard of the throat plate for Model GC19-1 is 6.4mm

Specifications	Presser fact	Throat plate	Feed cbg	Cover
1/4	168WF5-001	168WF1-003A 6.4mm 168WF1-003B 7.9mm		
5/16	No.		Control of the Contro	
3/8	168WF4-001	168WF1-003C 9.5mm	168WF3-001	1/4" 168WF6-003
1/ 8 3/16	168WF5-003	168WF1-003D 3.2mm 168WF1-003D 4.8mm	168WF3-002	1/8" 168WF6-032

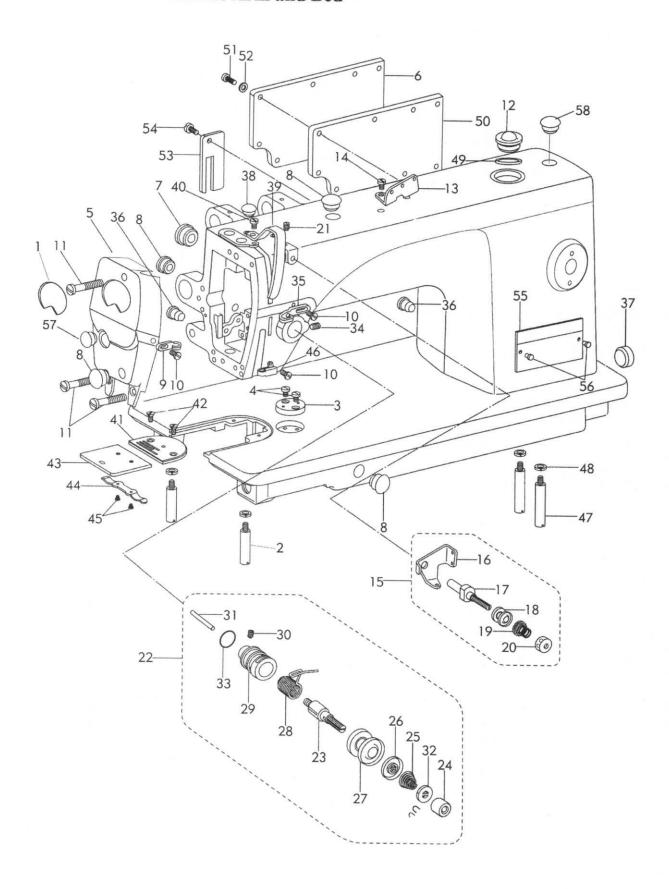
## PARTS BOOK



## Machine Arm and Bed

Ref. No.	Part No.	Ref.Part.No.	Description	Amt
1	10137004		Plate	1
2	135S20010		Bed screw stud(head)	2
3	10112002		Ruler stop seat	1
4	101S11002		Screw	2
5	13501003		Face plate arm	1
6	13512002		Side plate	1
7	13522001	22T1-003C3	Rubber plug( φ 19)	2
8	13522002	22T1-003C4	Rubber plug( $\phi$ 11.8)	3
9	13512003	22T1-003C5	Arm thread guide	1
10	101S11005	111443003	Screw	3
11	201S11025	SK278	Screw	3
12	10111004		Oil sight window	1
13	13512004	36T2-004	Three hole thread guide	1
14	201S11016	SK257	Screw	1
15	1351300100	36T2-006D	Thread tension asm,No.1	1
16	13512005	36T2-006D1	Thread tension guide	1
17	135S30001	36T2-006D2	Thread tension post	1
18	13513002	22T1-009E3	Thread tension disk	2
19	13527001	36T2-006D3	Thread tension spring	1
20	101S16016		Thread tension nut	1
21	135S15001	20T1-004	Screw	1
22	1351300300	33T4-008C	Thread tension asm	1
23	135S30002	22T1-012F1	Thread tension post	1
24	101S16001		Tension nut	1
25	13527002	33T4-008C1	Tension spring	1
26	13513004	22T1-012F4	Disk stopper	1
27	13513005	22T1-012F5	Thread tension disk	2
28	13527003	22T1-012F6	Takeup spring	1
29	13513006	22T1-012F7	Thread tension post base	1
30	101S15005	SS-8090670-SP	Screw	1
31	13513007	22T1-012F9	Thread release pin	1
32	13513008	22T1-012F10	Tension disc stopper	1
33	O01050	22T1-012F11	Ring14.5x1.5	1
34	135S11001	22T1-013	Screw	1
35	13513009	22T1-014	Arm thread guide	1
36	13522003	22T1-015	Rubber plug φ 8.8	2
37	13522004	22T1-016	Rubber plug φ 27	1
38	13522005	22T1-017	Rubber plug φ 5.7	1
39	13512006	1KT1-003	Thread tade-up lever cover	1
40	101S11002		Screw	1
41	13515001	33T4-012-A	Throat plate	1
42	101S17002		Throat plate Screw	2

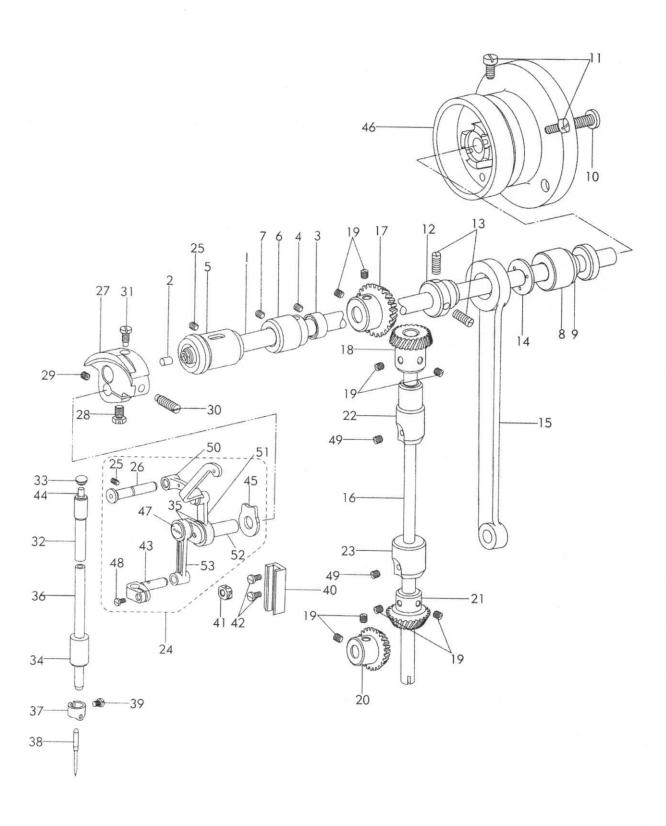
## Machine Arm and Bed



#### Machine Arm and Bed

Ref. No.		Ref.Part.No.	Description	Amt
43	13515002	7WF4-006	Slide plate	1
44	13512007	20T1-013F2	Slide plate spring	1
45	101S11019		Screw	2
46	13513010	7WF4-015	Down arm thread guide	1
47	135S20001		Bed screw stud(tail)	2
48	W02004		Spring washer	4
49	10122019		Screw	1
50	13522006		Gasket	1
51	113S11001		Screw	8
52	10128003	22T1-007	Washer	8
53	13512008	7WF4-011	Keep off plate	1
54	101S11002		Screw	1
55	13537001		Model plate	1
56	R03001		Model plate rivet	2
57	13522001	7WF4-030	Rubber plug ф 19	1
58	13522008	13WF2-035	Rubber plug $\phi$ 25.5	1

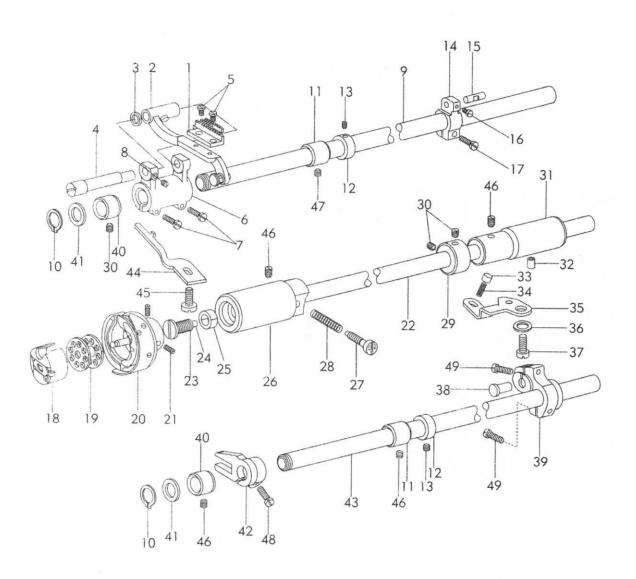
## Arm shaft and Vertical shaft Needle bar Thread Take-up



## Arm shaft and Vertical shaft Needle bar Thread Take-up

ef. No.		Ref.Part.No.	Description	Aı
1	13502001	70WF1-001	Main shaft	
2	13522009	22T3-001A2	Rubber plug	
3	13508001	22T3-002B1	Thrust collar asm.	
4	135S15004	22T3-002B2	Screw	
5	13503001	4WF1-006	Main shaft bushing,front	
6	13503002	4WF1-002	Brshing, intermediate	
7	135S15006	J0.0.40	Screw	
8	13503003	22T3-005	Main shaft bushing,rear	
9	13522010	22T3-006F	Main shaft	
10	135S11013	22T3-008	Screw	
11	135S11014	22T3-007C2	Screw	
12	13510001	36T3-003D1		
13	135S15007	36T3-003D2	Screw	3
14	13528002	36T3-004	Thrust collar	1
15	13505001	22T3-009D1C	Connecting rod	1
16	13502002	15WF1-001	Upring shaft	1
17	13525001	ZOA140379	Gear asm.	1
18	13525002	ZOA140380	Gear asm.	1
19	101S15007		Screw	8
20	13525003	ZOA140383	Pinion asm.	1
21	13525004		Gear asm.	1
22	13503004	2KT1-015	Bushing,upper	1
23	13503005	33T1-023P	Upring shaft bushing,ower	$\frac{1}{1}$
24	1353800100		Thread take-up asm	1
25	135S15009	J0.0.5	Screw	2
26	13502003	33T1-002	Thread take-up crank shaft	1
27	13504001	4WF1-007A	Counterweight	1
28	135S12001	33T1-006C3	Screw	1
29	101S15007		Screw	1
30	101S15004	SS-8681650-TP	Screw	1
31	101S11003	SS-7681650-TP	Screw	1
32	13503006	22T2-008	Needle bar metal,upper	1
33	10122005	22T2-011	Cap	1
	13503007	34T1-001	Needle bar metal,lower	1
	10124001	19242/8	Bearing	2
	13502004	33T1-017	Needle bar	1
	13513011	22T2-015	Needle bar thread guide	1
	13517001		Needle	1
	101S11006	SS-7080510-TP	Screw	1
	13509001	33T1-012	Needle bar trough	1
	10109001	33T1-013	Slide block	1
	101S11008		Screw	2
	10138002		Needle bar connection asm.	1
	13523001	22T2-010	Oil felt for needle bar	1
	13528003	33T1-005	Washer plate	1
	13535001	7WF1-001	Hand wheel	1
	135S11016	22T2-001A6	Screw(left twist)	1
	101S11005	111443003	Screw	1
	135S15008	61-04-01/B308	Screw	2
	13538002	33T1-003A	Thread take-up lever crand rod	1
	13538003	33T1-004B	Thread take-up lever	1
	13504002	33T1-001	Needle bar crand	1
3	13505003	33T1-014	Needle bar crand rod	1

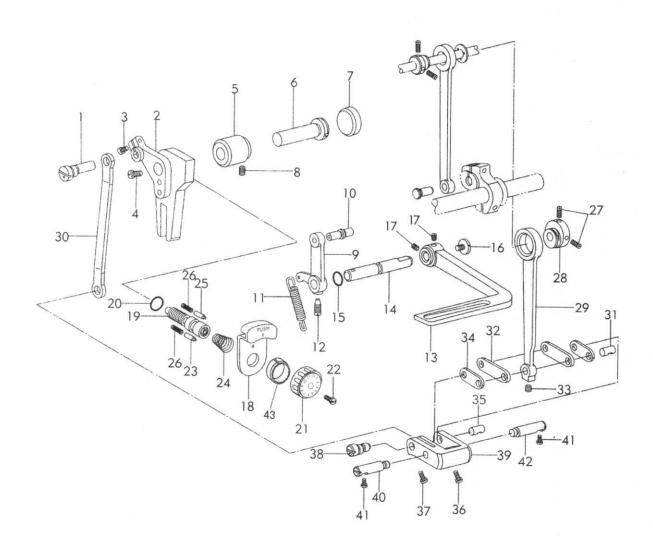
## Feed Dog Lift And Feed And Thread Looping



## Feed Dog Lift And Feed And Thread Looping

Ref. No.	Part No.	Ref.Part.No.	Description	An
11	13514001	20T3-008	Feed dog	1
2	1350700300	36T4-001Alal	Feed bar asm	1
3	13528004	51T5-001A6	Washer	1
4	13502005	36T4-001A2	Feed bar shaft	1
5	101S11018	J0.0.50	Screw	2
6	13504003	4WF2-002	Feed rocker asm.	j
7	101S11016	61-04-01/B504	Screw	2
8	101S11008		Screw	1
9	13502006	7WF2-004	Feed rocker shaft	1
10	H03001		Retaining ring	2
11	13503008	7WF2-003	Thrust collar asm.	2
12	13508001	22T3-002B1		2
13	135S15004	22T3-002B2	Screw	4
14	13504004	4WF2-006	Feed rocker shaft crank asm	1
15	13526001	82T2-003Clal0-2	Walking foot pin	1
16	101S11025		Screw	1
17	105S11019	SS-4120915-TP	Screw	1
18	10818502		Hook asm	1
19	10818501		Bobbin	1
20	10818001		Hook asm	1
21			Screw	3
22	13502007	36T4-008D1	Hook driving shaft	1
23	135S20007	22T4-001Alal	Screw	1
24	10123003	22T4-001Ala2	Oil wick	1
25	10122015		Thtust collar	1
26	13503009	4WF1-005	Bushing,front	1
27	135S20008	22T4-005	Oil adjusting screw	1
28	13527005	22T4-006	Spring	1
29	10108002	22T4-002B1	Thtust collar asm.	1
30	101S11012		Screw	3
31	13503010	4WF1-004	Bushing,rear	1
32	13521001	22T4-007C2	Oil pipe for hook shaft bushing	1
33	13502008	36T4-015	Plunger	1
34	13527006	36T4-016	Plunger spring	
35	13512009	22T4-010	Guide plate	1
36	W02004		Washer	1
37	135S11019	22T9-006	Screw	1
38	13502009	22T6-007	Hinge pin	1
39	13504005	68WF3-011	Feed lifting rock shaft crank(right)	
	13503011	7WF2-002	Bushing for feed rock shaft(right)	1
	13528006	51T5-013	Washer	2
	13505004	36T4-018H1D1	Feed forked connection	2
	13502010	7WF2-001	Feed lifting rock shaft	1
	13512010	33T1-029	Rotating hook positioner	1
	101S11011	22T4-015	Screw	1
	135S15009	J0.0.5	Screw	1
	135S15006	J0.0.40	Screw	4
	105S11019	SS-4120915-TP	Screw	1
	201S11027		Screw	2

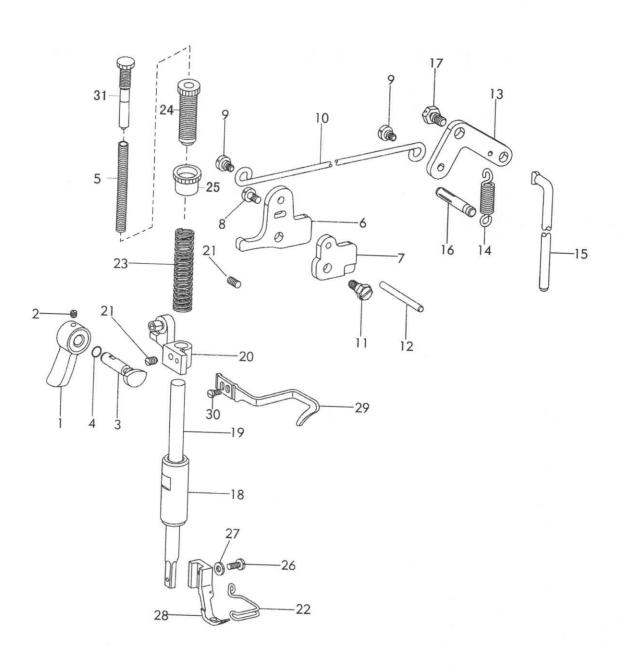
#### Feed Mechanism



#### Feed Mechanism

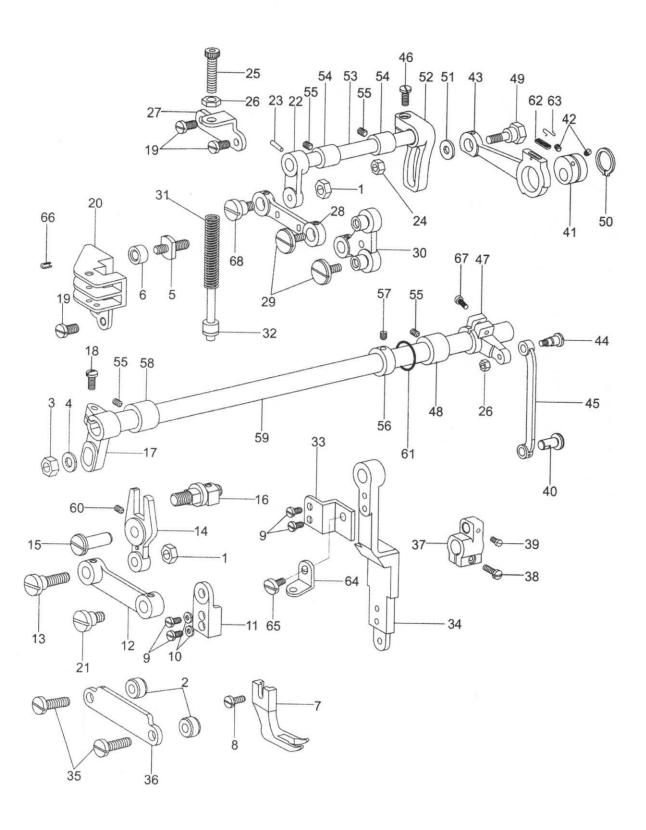
Ref. No.		Ref.Part.No.	Description	Amt
1	13510002	4WF2-012	Hinge pin	1
2	13509003	7WF2-012	Feed regulator	1
3	101S11020		Screw	1
4	135S11009	22T5-010D4	Screw	1
5	13503012	5WF1-003	Feed regulator bushing	1
6	13502011	22T5-004	Hinge pin for feed regulator	1
7	13522014	36T5-003	Rubber plug( φ 19.5)	1
8	135S15009	J0.0.5	Screw	1
9	13504006	7WF2-009	Slide block pin	1
10	13502012		Slide block	1
11	13527007	1KT3-002	Spring for feed crank	1
12	135S15014	22T5-013	Screw	1
13	13531001	4WF2-007A	Reverse feed lever	1
14	13502013	7WF2-010	Reverse feed lever shaft	1
15	O01045	6.3x1.8黑色	O-ring	1
16	135S11022	22T5-010D3	Screw	1
17	135S11009	22T5-010D4	Screw	2
18	13512011	7WF2-005	Feed regulator key-press	1
19	135S30003	36T5-007D1	Feed regulator screw bar	1
20	O01046	33T2-030-A	O-ring	1
21	13511002		Dial	1
22	101S11022		Dial screw	1
23	13526004	7WF2-006	Dial stopper pin	1
24	13527009	36T5-011	Dial spring for stopper pin	1
25	13526002	36T5-012	Stopper pin	1
26	13527008	22T5-009	Spring for stopper pin	2
27	135S15007	36T3-003D2	Screw	3
28	13510003	36T5-008E1	Feed drive eccentric cam.	1
29	13505005	4WF2-009A	Rocker shaft connecting rod	1
30	13505006	4WF2-009B	Feed regulator connecting rod	1
31	13502014	82T2-003C1a10-1	Walking foot link	1
32	13505007	36T5-008E4H02	Walking foot pin	2
33	101S11025		Screw	1
34	13505008	36T5-008E4H01	connecting link	2
35	13526003	36T5-008E6	Walking foot link	1
36	201S11012	SK241	Screw	1
37	201S11007	SK229	Screw	1
38	13502015	36T5-008E9	Hinge pin	1
39	13504007	36T5-008E10	Walking foot adjusting link	1
40	13502016	5WF1-002	Adjusting link fulcrum shaft	1
41	305s11001	SS-4120915-TP	Screw	2
42	13502017	5WF1-001	Adjusting link fulcrum shaft	1
43	13522007		Rubber plug	1

## **Presser Foot**

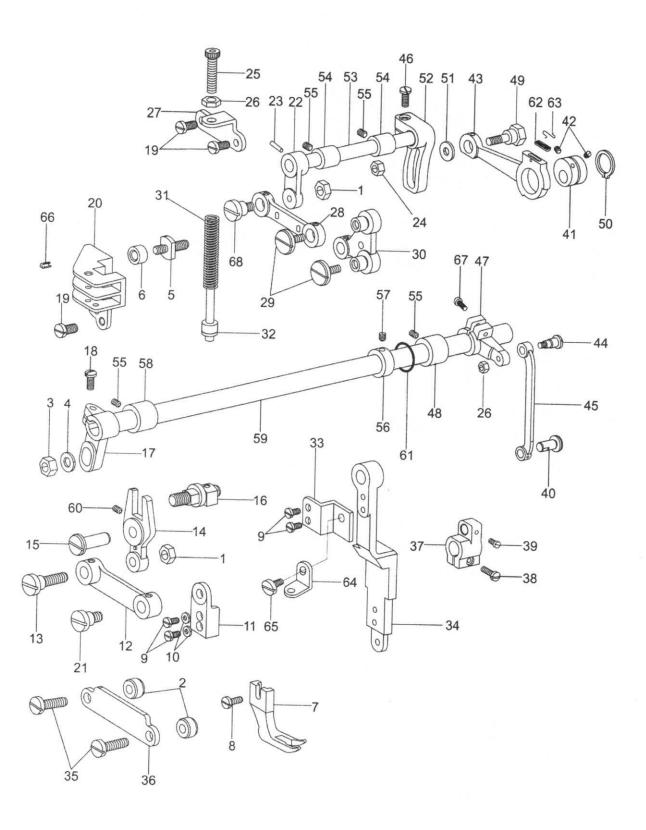


#### **Presser Foot**

Ref. No.		Ref.Part.No.	Description	Ami
1	13511005	33T3-003	Presser bar lifter	1
2	135S15017	22T1-011	Set screw	1
3	13510004	1KT4-005	Presser bar lifting cam	1
4	O01009		O-ring	1
5	13527012	233WF6-005	Presser spring	1
6	13512013	22T7-004B1a	Knee lifter lever (left)	1
7	13510005	22T7-004B1b	Tension releasing cam	1
8	135S11026	22T7-004B1c	Knee lifter lever (left) screw	1
9	135S11027	22T7-004B2	Hinged screw	2
10	10112013		Knee lifter rod	1
11	135S11028	22T7-005A	Screw	1
12	13502018	35T3-305	Tension releasing pin	1
13	13512015	22T7-007C1	Knee lifter lever (right)	1
14	13527010	22T7-007C2	Presser spring	1
15	13512016	4WF3-001	Knee lifter connecting rod	1
16	13526005	22T7-008	Pin for spring	1
17	135S12002	22T7-005B	Knee lifter lever (right) screw	1
18	13503013	34T3-305	Presser bar bushing	1
19	13502019	241WF5-001	Presser bar	1
20	13505009	7WF3-001	Presser bar lifting bracket	1
21	135S15003	22T1-013	Set screw	2
22	13512017	7WF3-004	Defend tick off	1
23	13527011	20T4-002	Presser spring	1
24	135S30004	233WF6-002	Lock nut	1
25	135S16003	233WF6-003	Set screw	1
26	101S11009	22T7-015	Screw	1
27	13528007		Washer	1
28	13516001	7WF3-003	Presser loot complete	1
29	13513012	7WF3-002	Upper thread guide	1
30	101S11002		Screw	1
31	135S30005	233WF6-004	Auxiliary lock nut	1

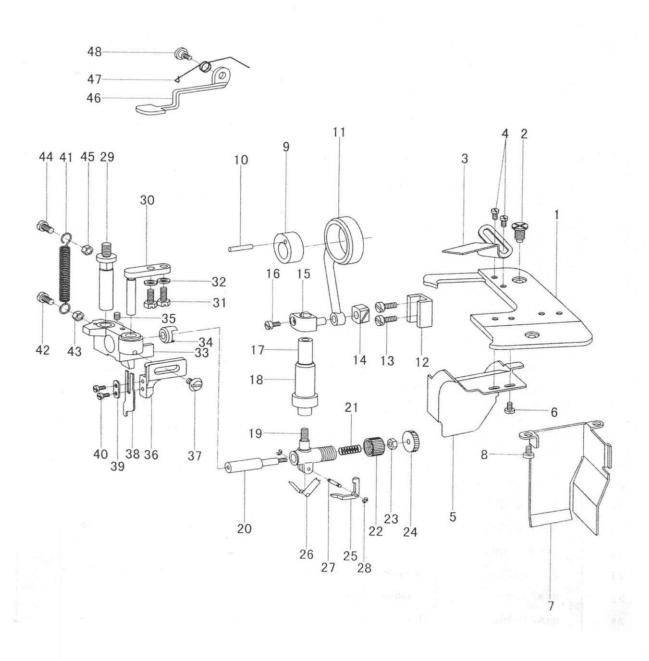


Ref. No		Ref.Part.No.	Description	
1	135S16004	7WF5-001	Nut	Am
2	13508003	7WF5-002	Shim	2
3	135S16005	7WF5-003	Nut	2
4	W01003		Washer	1
5	135S30006	7WF5-004	Guide shaft	1
6	13508004	7WF5-005	Needle of bearing	1
7	13516002	7WF5-006	Walking foot	1
8	135S11030	61-04-01/B316	Screw	1
9	301S11007	Feb-98	Screw	1
10	W02002		Washer	4
11	13501004	7WF5-009		2
12	13505010	7WF5-010	Holder for walking foot bar	1
13	135S20009	7WF5-011	Link of walking foot	1
14	13505011	7WF5-012	Screw	1
15	13526006	7WF5-013	Fork lever	1
16	1350202000		Pin	1
17	13504008	233WF5-023	Crank shaft complete	1
18	135S11032	1WF4-032	Presser swing shaft	1
19	101S11008		Screw	1
20	13509004	7WF5-018	Screw	4
21	135S20003	7WF5-019	Lifting presser plate	1
22	13504009	7WF5-020	Screw	1
23	P02009		Presser lifting crank	1
24	N02001	7WF5-050	Pin	1
25	135S30007	7WF5-021	Nut	1
26	135S16006	7WF5-022	Lifting presser adjusting screw	1
27	13512018	7WF5-023	Lifting presser adjusting nut	2
28	13505012	7WF5-024	Lifting presser bracket for spring	1
29	135S11034	7WF5-025	Presser feed crank link	1
30	13504010	7WF5-026	Screw	2
	13527013	81WF6-003	Presser feed crank	1
	1350202100	81WF6-004	Lifting presser spring	1
	13501005	241WF3-001	Presser spring guide	1
		7WF5-030	Lifting presser guide plate	1
		SS-4120915-TP	Presser rod guide	1
		7WF5-031	Screw	2
		5WF4-002	Lifting presser sway crank guide pir	n 1
			Feed rocker shaft crank asm	1
	01S11016 01S11025	61-04-01/B504	Screw	1
		5WE4 001	Screw	1
		5WF4-001	Screw	1
		7WF5-032	Eccentric wheel	1
1	01S15007		Screw	2



Ref. No.	Part No.	Ref.Part.No.	Description	١.
43	13505013	7WF5-034	Eccentric wheel rod	Am
44	135S20005	7WF5-037	Screw	1
45	13505014	7WF5-038	Presser swing crank(right)rod	1
46	135S11035	7WF5-039	Screw	1
47	13504012	241WF3-003		1
48	13503014	241WF3-005	Presser swing crank(right)	1
49	135S20006	7WF5-042	Presser swing shaft bushing (right	
50	H03012			1
51	13528008	7WF5-049	C-type stop ring Washer	1
52	13504013	7WF5-043		1
53	13502022	7WF5-044	Presser lifting shaft	1
54	13503015	7WF5-045	Shaft	1
55	135S15008	61-04-01/B308	Presser lifting shaft bushing	2
56	13508001	22T3-002B1	Screw	3
57	135S15004	22T3-002B2	Thrust collar asm.	1
58	13508006	1KT2-004	Screw	2
59	13502023	241WF3-004	Presser swing shaft bushing (left)	1
60	135S15018	7WF5-048	Presser swing shaft	1
61	O01046	33T2-030-A	Screw	1
62	13523002	7WF5-035	O-ring	1
63	13527015	Management of the second of th	Oil felt for needle bar	1
	13512020	1WF5-024	Spring	1
		241WF3-002	Lifting presser guide plate	1
	135S11036	241WF3-006	Screw	1
	P03035	1000	Spring plug	2
	135S13002	16WF3-031	Screw	1
68	135S20011		Screw	1

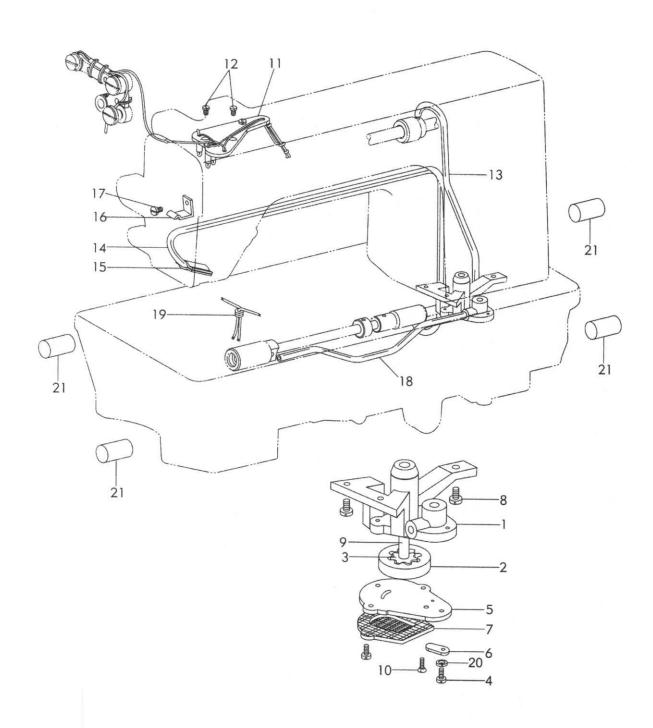
## Edge trimmer mechanism



Edge trimmer mechanism

2	7-1 7-2 7-3 7-4 7-5 7-6 7-7 7-8 7-9 -10 -11 -12 -13 -14	168WF6-001 22T1-020 168WF6-002 17WF2-010 168WF6-003 168WF6-004 168WF6-005 22T2-001A9 168WF6-006 168WF6-006	Plate Screw Plate Screw Trash guide(1/4") Screw SM3/32"x56 Cover Screw Cam, trimmer Pin Link, trimmer	Remark  1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 1
3	7-3 7-4 7-5 7-6 7-7 7-8 7-9 -10 -11 -12 -13 -14 -15	168WF6-002 17WF2-010 168WF6-003 168WF6-004 168WF6-005 22T2-001A9 168WF6-006 168WF6-006	Screw Plate Screw Trash guide(1/4") Screw SM3/32"x56 Cover Screw Cam, trimmer Pin Link, trimmer	2 1 2 1 2 1 2
4	7-4 7-5 7-6 7-7 7-8 7-9 -10 -11 -12 -13 -14 -15	17WF2-010 168WF6-003 168WF6-004 168WF6-005 22T2-001A9 168WF6-006	Plate Screw Trash guide(1/4") Screw SM3/32"x56 Cover Screw Cam, trimmer Pin Link, trimmer	1 2 1 2 1 2
5	7-5 7-6 7-7 7-8 7-9 -10 -11 -12 -13 -14 -15	168WF6-003 168WF6-004 168WF6-005 22T2-001A9 168WF6-006	Screw Trash guide(1/4") Screw SM3/32'x56 Cover Screw Cam, trimmer Pin Link, trimmer	2 1 2 1 2
6 7 7 7 8 7 8 7 9 7 7 10 7 11 7 12 7 13 7 14 7 15 7 16 7 17 18 7 19 7 19 7 19 7 19 7 19 7 19 7	7-6 7-7 7-8 7-9 -10 -11 -12 -13 -14 -15	168WF6-004 168WF6-005 22T2-001A9 168WF6-006 168WF6-007 168WF6-008	Trash guide(1/4") ScrewSM3/32"x56 Cover Screw Cam,trimmer Pin Link,trimmer	1 2 1 2 1
7	7-7 7-8 7-9 -10 -11 -12 -13 -14 -15	168WF6-005 22T2-001A9 168WF6-006 168WF6-007 168WF6-008	Screw SM3/32"x56 Cover Screw Cam, trimmer Pin Link, trimmer	2 1 2 1
8 7 9 7 10 7 11 7 12 7 13 7 14 7 15 7 16 7 17 7 18 7 19 7 20 7 21 7 22 7 23 7 24 7 25 7 26 7 27 7 28 7 29 7 30 7 31 7 32 7 31 7 32 7 33 7 34 7 35 7 36 7 37 7 38 7 39 7 40	7-8 7-9 -10 -11 -12 -13 -14 -15 -16	22T2-001A9 168WF6-006 168WF6-007 168WF6-008	Cover Screw Cam,trimmer Pin Link,trimmer	1 2 1
9 7 10 7 11 7 12 7 13 7 14 7 15 7 16 7 17 7 18 7 19 7 20 7 21 7 22 7 23 7 24 7 25 7 26 7 27 7 28 7 29 7 30 7 31 7 32 7 31 7 32 7 33 7 34 7 35 7 36 7 37 7 38 7 39 7 39 7 40 7 40 7	7-9 -10 -11 -12 -13 -14 -15 -16	168WF6-006 168WF6-007 168WF6-008	Screw Cam,trimmer Pin Link,trimmer	2
10 7 11 7 12 7 13 7 14 7 15 7 16 7 17 7 18 7 19 7 20 7 21 7 22 7 23 7 24 7 25 7 26 7 27 7 28 7 29 7 30 7 31 7 32 7 31 7 32 7 33 7 34 7 35 7 36 7 37 7 38 7 39 7	-10 -11 -12 -13 -14 -15	168WF6-007 168WF6-008	Cam,trimmer Pin Link,trimmer	1
11 7. 12 7. 13 7. 14 7. 15 7. 16 7. 16 7. 17 7. 18 7. 19 7. 20 7. 21 7. 22 7. 23 7. 24 7. 25 7. 26 7. 27 7. 28 7. 29 7. 30 7. 31 7. 32 7. 31 7. 32 7. 33 7. 34 7. 35 7. 36 7. 37 7. 38 7. 39 7. 39 7. 39 7.	-11 -12 -13 -14 -15 -16	168WF6-008	Pin Link,trimmer	
12 7. 13 7. 14 7. 15 7. 16 7. 16 7. 17 7. 18 7. 19 7. 20 7. 21 7. 22 7. 23 7. 24 7. 25 7. 26 7. 27 7. 28 7. 29 7. 30 7. 31 7. 32 7. 31 7. 32 7. 33 7. 34 7. 35 7. 36 7. 37 7. 38 7. 39 7. 39 7.	-12 -13 -14 -15 -16	168WF6-008	Link,trimmer	
13 7. 14 7. 15 7. 16 7. 16 7. 17 7. 18 7. 19 7. 20 7. 21 7. 22 7. 23 7. 24 7. 25 7. 26 7. 27 7. 28 7. 29 7. 30 7. 31 7. 32 7. 31 7. 32 7. 33 7. 34 7. 35 7. 36 7. 37 7. 38 7. 39 7. 39 7.	-13 -14 -15 -16			1
14 7. 15 7. 16 7. 16 7. 17 7. 18 7. 19 7. 20 7. 21 7. 22 7. 23 7. 24 7. 25 7. 26 7. 27 7. 28 7. 29 7. 30 7. 31 7. 32 7. 33 7. 34 7. 35 7. 36 7. 37 7. 38 7. 39 7. 39 7.	-14 -15 -16	22T2-010	Guide rail	1
15 7. 16 7. 16 7. 17 7. 18 7. 19 7. 20 7. 21 7. 22 7. 23 7. 24 7. 25 7. 26 7. 27 7. 28 7. 29 7. 30 7. 31 7. 32 7. 33 7. 34 7. 35 7. 36 7. 37 7. 38 7. 39 7. 39 7.	-15 -16	12212-019	Screw	2
16 7-17 7-18 7-19 7-19 7-20 7-21 7-22 7-23 7-24 7-25 7-26 7-27 7-28 7-29 7-30 7-31 7-32 7-33 7-33 7-33 7-33 7-33 7-33 7-33	-16	22T2-020	Trimmer sliding block	
17 7-18 7-19 7-19 7-20 7-21 7-22 7-23 7-24 7-25 7-26 7-27 7-28 7-29 7-30 7-31 7-32 7-33 7-33 7-33 7-33 7-33 7-33 7-33		168WF6-009	Joint, trimmer shaft	1
18 7-19 7-20 7-21 7-22 7-23 7-24 7-25 7-32 7-28 7-33 7-33 7-33 7-33 7-33 7-33 7-33 7-3		36T5-008E7	Screw	1
19 7- 20 7- 21 7- 21 7- 22 7- 23 7- 24 7- 25 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 31 7- 32 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	-17	168WF6-010	Trimmer shaft	
20 7- 21 7- 21 7- 22 7- 23 7- 24 7- 25 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	-18	168WF6-011	Bushing, trimmer shaft	1
21 7- 22 7- 23 7- 24 7- 25 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	-19	168WF6-012	Support Support	1
22 7- 23 7- 24 7- 25 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-4	-20	168WF6-013	Pin	1
23 7- 24 7- 25 7- 26 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	-21	168WF6-014	Spring	1
23 7- 24 7- 25 7- 26 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	-22	168WF6-015	Cap	1
24 7- 25 7- 26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-	23	22WF4-044	Nut	1
25 7-3 26 7-2 27 7-3 28 7-3 29 7-3 30 7-3 31 7-3 32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		168WF6-016		1
26 7- 27 7- 28 7- 29 7- 30 7- 31 7- 32 7- 33 7- 34 7- 35 7- 36 7- 37 7- 38 7- 39 7- 40 7-		168WF6-017	Tumcap	1
27 7-28 7-29 7-30 7-31 7-32 7-33 7-35 7-36 7-38 7-39 7-340 7-4		168WF6-018	Release lever, trimmer	1
28 7-3 29 7-3 30 7-3 31 7-3 32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		168WF6-019	Spring Pin	1
29 7-3 30 7-3 31 7-3 32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4	28	130111 0 0 10		1
30 7-3 31 7-3 32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		168WF6-020	Retaining ring	2
31 7-3 32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		168WF6-021	Shaft	1
32 7-3 33 7-3 34 7-3 35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		89WF2-016	Guide shaft	1
33 74 34 74 35 74 36 74 37 74 38 74 39 74 40 74		22T1-007	Screw	2
34 7.4 35 7.4 36 7.4 37 7.4 38 7.4 39 7.4 40 7.4		168WF6-022	Washer	2
35 7-3 36 7-3 37 7-3 38 7-3 39 7-3 40 7-4		168WF6-022D	Trimmer support assy	11
36 7-4 37 7-4 38 7-4 39 7-4 40 7-4		168WF6-022E	Bushing	1
37 7-3 38 7-3 39 7-3 40 7-4		168WF6-023	Screw	1
38 7-3 39 7-3 40 7-4	$\overline{}$	168WF6-024	Trimmer bracket	1
39 7-3 40 7-4		168WF6-025	Setscrew	1
40 7-4		168WF6-026	Upper trimmer	1
		168WF6-027	Presser plate	1
		168WF6-027	ScrewM3x0.6x7	2
42 7-4		22T1-006	Spring	1
43 7-4		22WF4-044	ScrewSM11/64'x40x10	1
44 7-4			Nut SM11/64"x40	1
45 7-4		1WF2-038	Screw SM15/64"x28x10	1
		22T9-001A10	Nut SM15/64'x28	1
		168WF6-031	Lever	1
	46	68WF6-029	Spring	1
48 7-4 49 7-4	46 <i>f</i> 47 1	68WF6-030 11WF3-012	Screw Nut	1

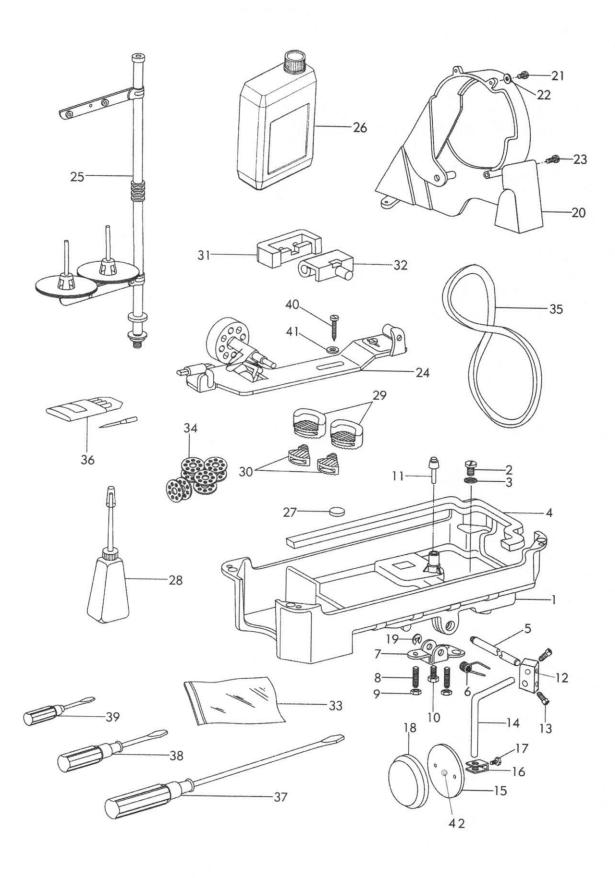
## Oil pump and Lubrication mechanism



## Oil pump and Lubrication mechanism

Ref. No.	Part No.	Ref.Part.No.	Description	Amı
1	13520001	15WF4-003	Oil pump	1
2	13525005	15WF4-006	Big gear for oil pump	1
3	13525006	15WF4-007	Small gear for oil pump	1
4	135S11037		Screw	3
5	13512021	15WF4-004	Cover for oil pump	1
6	13512022	22T8-007	Adjusting plate for oil pump	1
7	1351202300	22T8-008A	Filter complete	1
8	135S11038	22T8-009	Screw	3
9	13502024	15WF4-005	Shaft for oil pump	1
10	S02024		Screw	2
11	1351202400	7WF4-016	Oil wick set plate complete	1
12	101S11010		Screw	2
13	1352100700	22T8-013D	Oil pipe complete for upper shaft	1
14	11436002		Oil return pipe	1
15	13523003	22T8-015	Oil felt	1
16	13512025	22T8-016	Pipe return pipe clamp	1
17	201S11014	SK250	Screw	1
18	1352100800	4WF4-005	Oil pipe for arm shaft	1
19	10123001		Oil wick	1
20	W02002		Spring washer	
21	13523005	7WF2-013	Oil felt	1 4

#### Oil Reservoir Accessories



### Oil Reservoir Accessories

Ref. No		Ref.Part.No.	Description	Am
1	13501007	4WF5-001	Oil reservoir	1
2	135S11041		Screw	1
3	O01047		Washer	1
4	13523006	2KT9-008	Gasket	1
5	13502025	22T9-001A6	Hinge pin	1
6	13527014	22T9-001A7	Spring	1
7	13512026	22T9-001A8	Knee lifter stop bracket	1
8	135S15019	22T9-001A9	Screw	2
9	N01029	22T9-001A10	Nut	2
10	135S12003	22T9-036	Screw	1
11	13511006		Knee lifter prop bar	1
12	10101008		Connector	1
13	101s12003		Screw	2
14	10112028		Bent rod	1
15	10112029		Bell	1
16	10112030		Bell bracket	1
17	101s12004		Screw	1
18	10122024		Pat	1
19	H05011		Split stop ring	1
20	1351100700		Belt guard complete	1
21	135S13003		Screw(small)	2
22	W01001		Washer	2
23	135S13004		Screw(big)	2
24	1163101600		Thread winder complete	1
25	1013100700		Spool stand complete	1
26	1011101200		Oil tank	1
27	10131001		Magnet	1
28	11631008		Oil pot	1
29	10122023		Cushion(big)	2
30	10122022		Cushion(small)	2
31	10122060		Rubber coat	2
32	1011203100		Hing	2
33	20131078		Parts bag	1
34	10818501	33T1-027	Bobbin	1
35	13535002		V-type belt	1
36	13517001		Needle	4
37	10131002		Screw driver(big)	1
38	10131003		Screw driver(middle)	1
39	10131004		Screw driver(small)	$\frac{1}{1}$
40	101S30014		Wood screw	4
41	W01003		Washer	2
42	10122025		Rubber	1

## GLOBAL

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