

# GC24698-25L/-25R

Long Arm Post Bed Compound Feed Split Lockstitch Sewing Machine

# Instruction Manual Parts Catalog

SHANGHAI HUIGONG NO.3 SEWING MACHINE FACTORY

## ---- CONTENTS -----

Prep	aration for operation	٠1
1.	Safety precautions	٠1
2.	Precaution before Starting Operation	
3.	Precaution for Operating Conditions	
Caut	ions on use	٠1
1.	Lubrication	٠1
2.	Cautions on operation	•2
Oper	ration	•2
1.	How to attach needle ·····	
2.	How to wind the lower thread	
3.	Selection of Thread ·····	
4.	How to route the upper thread	
5.	Adjustment of stitch length and reverse sewing	
6.	Balance of thread tension	
7.	Upper thread tension	
8.	Adjustment of pressure of presser foot	
9.	Timing between rotating hook motion and needle motion	•4
10.		
11.	6 T T T T T T T T T T T	•5
12.	Safety clutch device	•5
Speci	fications	۰6
PAR <sup>7</sup>	TS LIST	٠7
A.	ARM BED MECHANISM	٠7
В.	THREAD TENSION REGULATOR MECHANISM	.9
C.	ARM SHAFT MECHANISM	11
D.	PRESSER FOOT MECHANISM	13
<b>E.</b>	THRED TAKE-UP LEVER & NEEDLE BAR MECHANISM1	16
F.	STICH REGULATOR MECHANISM	19
G.	LOWER AND FEEDING SHAFT MECHANISM	21
Н.	FEED BAR MECHANISM	24
I.	HOOK SADDLE MECHANISM	
J.	OIL LUBRICATION MECHANISM	28
K.	ACCESSORIES	
T.	PNEUMATIC CONTROL UNIT	13

#### **■** Preparation for operation:

#### 1. Safety precautions:

- 1) When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
  - 2) Power must be turned off when the machine is not in use, or when the operator leaves the seat.
- 3) Power must be turned off when tilting the machine head, installing or removing the "V" belt, adjusting the machine, or when replacing.
- 4) Avoid placing fingers, hairs, bars etc. near the pulley, "V" belt, bobbin winder pulley, or motor when the machine is in operation.
- 5) Do not insert fingers into the thread take-up cover, under/around the needle, or pulley when the machine is in operation.
- 6) If a belt cover, finger guard, eye guard are installed, do not operate the machine without these safety devices.

#### 2. Precautions before starting operation:

- 1) Never operate the machine before filling the machine's oil pan.
- 2) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on.
  - 3) Verify the voltage and phase (single or three) with those given on the machine nameplate.

#### 3. Precautions for operating conditions:

- 1) Avoid using the machine at abnormally high temperatures (35°C or higher) or low temperatures (5°C or lower) .
  - 2) Avoid using the machine in dusty conditions.

#### ■ Cautions on use:

#### 1. Lubrication (Fig.1, Fig.2)

When a new sewing machine is used for the first time, or sewing machine left out of use for a long time is used again, replenish a suitable amount of oil to the portions indicated by arrow in the fig.

Note: Filling the oil to the fount timely (Fig.3). Use white spindle oil.

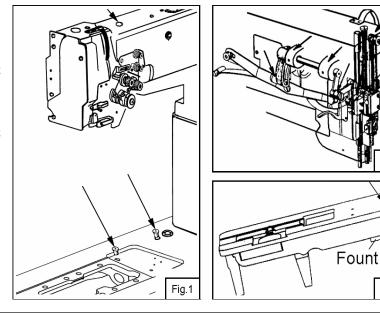


Fig.3

#### 2. Cautions on operation

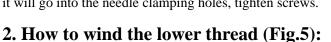
- 1) When the power is turned on or off, keep foot away from the pedal.
- 2) It should be noted that the brake might not work when the power is interrupted or power failure occurs during sewing machine operation.
- 3) Periodically clean the machine.

#### **■** Operation

#### 1. How to attach needle (Fig.4):

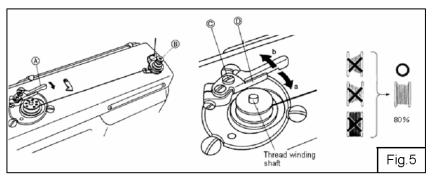
Note: Before attach needle, be sure to turn off the power.

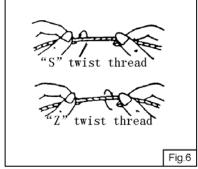
Loosen the needle clamping screw; Hold the needles so that the two needles side with the long grooved (faces each other), and insert it as deeply as it will go into the needle clamping holes, tighten screws.



Strength of winding: Particularly in the case of nylon or polyester thread, wind the bobbin loosely.

- (1) Press the bobbin onto the thread winding shaft.
- (2) Pass the thread for winding thread as shown in the figure, and wind the end of the thread clockwise around the bobbin several times, then wind the thread on the thread adjuster side counter-clock wise several times.
  - (3) Press lever A in the direction of the arrow, and start the sewing machine.
  - (4) The operation will automatically stop when winding is completed.
  - (5) Adjustment of thread winding strength, Adjust with the thread adjuster nut B.
  - (6)Adjustment of thread winding amount, Adjust by loosening screw C and moving the adjustment plate D
  - a. The thread winding amount will decrease when moved in the direction of a.
  - b. The thread winding amount will increase when moved in the direction of b.

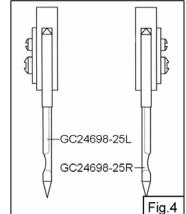




#### 3. Selection of Thread (Fig.6):

It is recommended to use "S" twist thread in the left needle (Viewed from front), and "Z" twist thread in the right needle.

When discriminate use of needle thread is impossible, use "Z" twist thread in the needle. For bobbin thread, "S" twist thread as well as "Z" twist thread can be used.



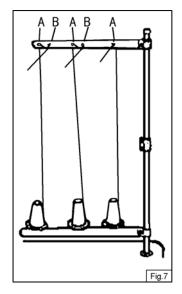
#### 4. How to route the upper thread (Fig.7, Fig.8):

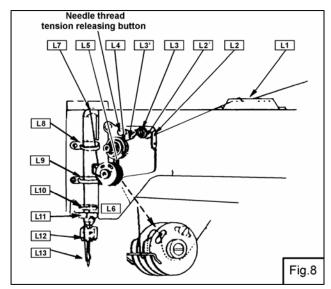
1) Pass each upper thread through thread guide A

Note: when thin slippery thread (polyester thread for example) is used pass the thread through thread guide B as show in Fig.7

2) With the take-up lever located at the upper most position, pass each thread in the order in Fig.8.

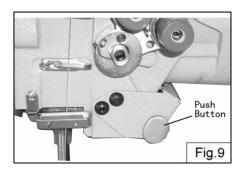
Note: Pressing the upper thread loosening button, the upper thread can be pulled out easily.

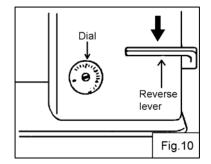




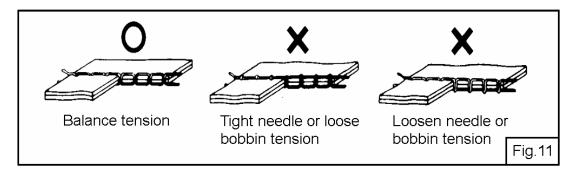
#### 5. Adjustment of stitch length and reverse sewing (Fig. 9 Fig. 10):

- 1) Rotate the stitch length adjusting dial to change the stitch length
- 2) If the reverse lever/push-button is depressed, reverse sewing will take place.



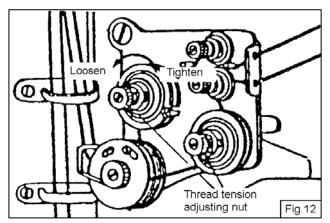


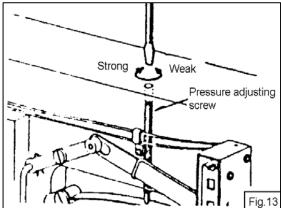
#### 6. Balance of thread tension (Fig.11):



#### 7. Upper thread tension (Fig.12):

- 1) The upper thread can be adjusted based on the lower thread tension.
- 2) Adjustment can be done by rotating the thread tension nut.





#### 8. Adjustment of pressure of presser foot (Fig.13):

- 1) Pressure should be adjusted according to the material to be sewn.
- 2) Turning the pressure adjusting screw to adjust the pressure of presser foot

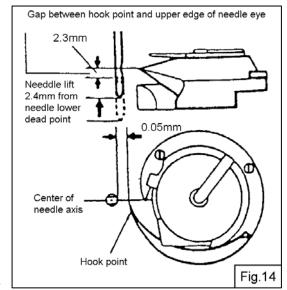
# 9. Timing between rotating hook motion and needle motion (Fig.14):

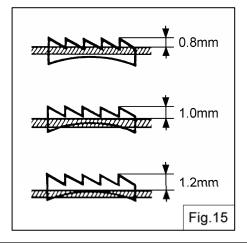
- 1) Set stitch length to "6";
- 2) When needle is lifted 2.4mm from the lower dead point, the following position relationship should be maintained:
- $\bullet$  The upper edge of needle eye should be 2.3mm below the hook point
- The hook point should be located at the center of needle axis.
- $\bullet\,$  Gap between the hook point and the side face of needle should be 0.05 mm

#### 10. Adjustment of Feed dog height (Fig.15):

Height of feed dog should be adjusted for individual fabrics with the following cautions:

- 1) Fabric will be damaged if the feed dog extends too high or pressure of presser foot is too large
- 2) Even stitch length cannot be assured if the feed dog is too low or pressure of presser foot is too small





3) Feed dog height should be measured at the point where the needle is at the top position.

For light fabric: Approx 0.8mm For usual fabric: Approx 1.0mm For heavy fabric: Approx 1.2mm

#### Adjustment procedure:

- 1) Lay down the machine bed toward the other side;
- 2) Turn the balance wheel by hand stop when the feed dog is raise to its highest position from the surface of needle place;
  - 3) Loosen the Screw and adjust the height of the feed dog;
  - 4) After adjusted, tighten the screw.

The feed dog height is factory-adjusted to 1.2mm

# 11. Walking foot and presser foot vertical

#### stroke adjustment (Fig.16):

When fabric with large elasticity is sewn, or when thickness of fabric changes, the vertical stroke (movable range) of the presser feet should be adjusted as follows:

- 1) Loosen the special bolt;
- 2) The vertical strokes of presser feet become minimum when the crank rod is moved downward and set;
- 3) The vertical strokes of presser feet become minimum when the crank rod is moved upward and set;
  - 4) After the adjustment, tighten the special nut.

The vertical strokes of presser feet can be adjusted within a range from 2mm to 6mm.

#### 12. Safety clutch device (Fig.17, Fig.18)

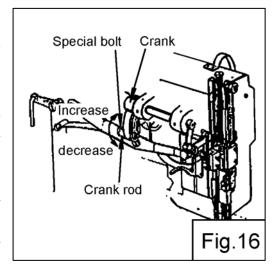
Safety clutch device is installed to prevent the hook and cog belt from damage in case the thread is caught into the hook when the machine is loaded abnormally operation.

#### 1) Function of safety clutch:

- A. When the safety clutch acts, the cog belt pulley will be unloaded. Then the rotation of hook shaft will stop. The arm shaft only will rotate. Stop the operation of machine.
  - B. Clean the thread thoroughly which is caught into the hook.
- C. Turn the cog belt hub by hand, and check whether the hook shaft rotates lightly and properly, place the clutch device as follows.

#### 2) How to set the safety clutch (Fig.18)

- A. While pressing down the push button on the opposite side of bed by left hand, turn the balance wheel slowly by right hand away from you;
- B. The balance wheel will stop by the gear plate, but turn the balance wheel more firmly;



Push

button

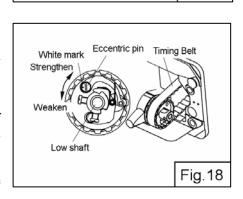


Fig.17

C. Release the push button, the safety clutch device is set.

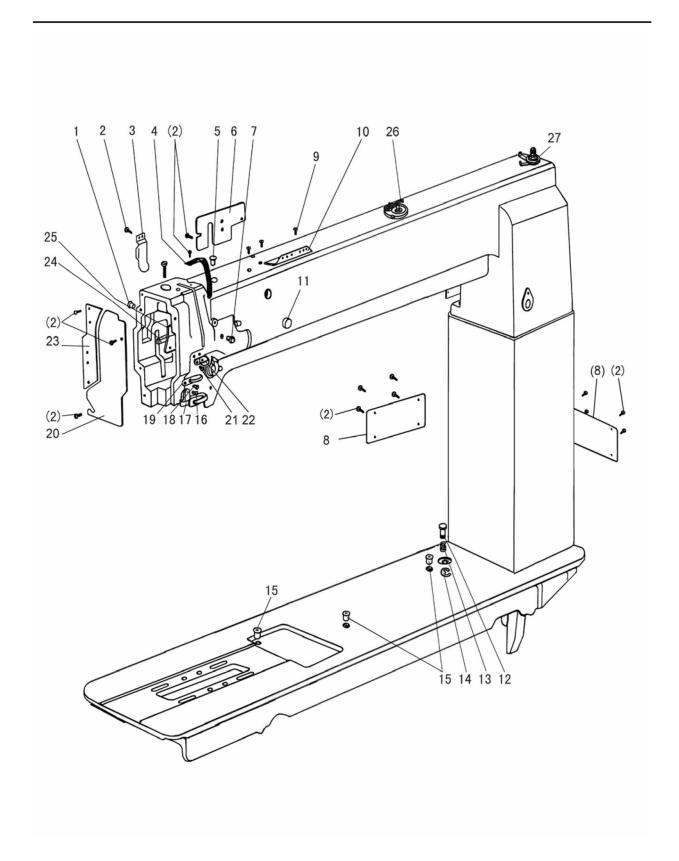
#### 3) Force applied to the safety clutch (Fig.18)

A. The force applied to the safety clutch is the smallest when the mark of eccentric pin faces the center of the lower shaft. The force proportionally increases as the mark faces the outside;

- B. To adjust the force slide the timing belt, loosen the set screw, and turn the eccentric pin;
- C. After the adjustment, tighten the set screw.

#### **Specifications:**

	Model	GC24698-25R/GC24698-25L
Spec		GC24098-23R/GC24098-23L
Materia	l weight	Medium Heavy material
Max. sew	ing speed	1200rpm
Stitch	length	0-7mm
Needle b	ar stroke	33.4mm
Presser	By hand	8mm
foot stroke	By knee	16mm
Alternating	movement	2-6mm
Stitch-lengt	th adjusting	Dial type
Alternating	movement	Automatic
Nee	edle	DP×17 (22#24#)
Mo	otor	Servo Motor 550W



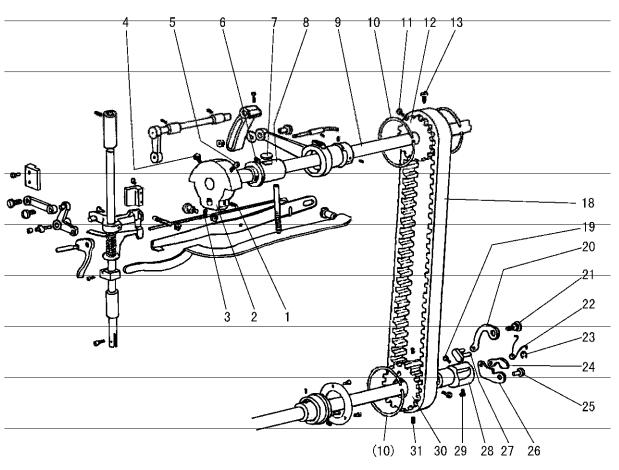
# A. ARM BED MECHANISM

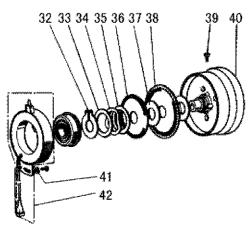
Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
A01	HA300B2090	Rubber plug	2	2	
A02	HA300B2170	Screw	15	15	SM11/64 (40) ×9
A03	H4716B8001	Oil guide plate	1	1	
A04	H4717B8001	Thread take-up cover	1	1	
A05	H4715B8001	Rubber plug	1	1	
A06	H4718B8001	Arm side cover (left)	1	1	
A07	H2000B2010	Rubber plug	1	1	
A08	H7117B8001	Arm side cover	2	2	
A09	HA700B2060	Screw	2	2	SM11/64 (40) ×8
A10	H2400B2100	Thread guide	1	1	
A11	HA307B0673	Rubber plug	1	1	
A12	H4715H8001	Push button	1	1	
A13	H4714H8001	Spring	1	1	
A14	H007013050	E-type ring	1	1	
A15	H2000M0090	Cap	3	3	
A16	H3200B2100	Screw	1	1	SM9/64 (40) ×6.5
A17	H3212B0066	Thread guide	1	1	SM3/01 (40) //0.3
A18	H3000D2160	Screw	1	1	SM9/64 (40) ×4.5
A19	H4726B8001	Thread guide	1	1	SM3/04 (40) A4.3
		Face plate			
A20	H4727B8001		1	1	SM3/16 (28) ×12.1
A21	H2400B2080	Screw	2	2	SM3/10 (28) ×12.1
A22	H2400B2070	Thread guide	1	1	
A23	H4730B8001	Guide mounting plate	1	1	
A24	H2400B2060	Spacer	1	1	
A25	H3200B2060	Oil guide plate	1	1	
A26	H7007D7101	Bobbin winder	1	1	
A27	H7014D7101	Down-lead complete	1	1	

# **B. THREAD TENSION REGULATOR MECHANISM** Ø - 19 20 - 21 22 23 - 24 ~ 25 26 38 37 36 29 35 34 33 32 31 30 28

# **B. THREAD TENSION REGULATOR MECHANISM**

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
B01	H2504C6510	Screw	2	2	9/64 (40) ×3
B02	H3221B3142	Tension releasing plate	1	1	
В03	H3221B6812	Tension releasing spring	1	1	
B04	H4705C8001	Screw	1	1	
В05	H4706C8001	Lever	1	1	
В06	HA7311C306	Screw	1	1	9/64 (40) ×7
В07	H4707C8001	Mounting plate	1	1	
В08	H007013050	E-type ring	1	1	GB/T896 5
В09	H3221B6820	Mounting plate	1	1	
B10	HA300C2030	Screw	2	2	11/64 (40) ×8
B11	H3221B6810	Nut	2	2	
B12	H4708C8001	Spring	1	1	
B13	H4709C8001	Push button	1	1	
B14	H3221B0683	Thread tension stud	1	1	11/64 (40) ×14
B15	HA112B0693	Thread tension disc	2	2	
B16	H3221B0684	Spring	1	1	
B17	HA710B0671	Thumb nut	1	1	
B18	H3221B0682	Pin	2	2	
B20	HA106B0676	Screw	1	1	9/64 (40) ×6
B19	H3306B0661	Thread guide	1	1	
B21	HA310B0702	Tension releasing disc	1	1	
B22	H4710C8001	Spring	1	1	
B23	HA115B7010	Thumb nut revolution stopper	1	1	
B24	HA310B0701	Thumb nut	1	1	
B25	HA310B0705	Thread tension disc	2	2	
B26	H3221B6817	Pin	1	1	
B27	H3221B0686	Thread tension stud	1	1	$1/4 (40) \times 23$
B28	H32481B721	Thumb nut	1	1	
B29	H32481B621	Take-up spring guide	1	1	
B30	H32481BE21	Plate complete	1	1	
B31	H4713C8001	Thread take-up spring	1	1	
B32	H32481BD21	Plate complete	1	1	
B33	H4804C8001	Thread tension stud	1	1	9/64 (40) ×2.9
B34	H4805C8001	Thread tension stud	1	1	1/4 (40) ×14.5
B35	H3230K0751	Screw	1	1	11/64 (40) ×10
B36	H3221B6817	Pin	1	1	
B37	H4769E8001	Pin	1	1	
B38	H3200B2100	Screw	1	1	9/64 (40) ×6.5
B39	H3221B6819	Stopper	1	1	





# C. UPPER SHAFT MECHANISM

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
C01	HA307C0662	Set screw	1	1	SM1/4 (40) ×6
C02	H33111C104	Crank	1	1	
C03	HA105D0662	Set screw	1	1	SM1/4 (40) ×4
C04	HA100C2060	Screw	1	1	SM9/32 (28) ×13
C05	HA100C2070	Screw	1	1	SM9/32 (28) ×14
C06	H4708D8001	Set screw	1	1	$SM1/4(24) \times 13$
C07	H32111B104	Felt	1	1	
C08	H32111B204	Arm shaft bushing (left)	1	1	
C09	H7004D8001	Arm shaft	1	1	
C10	H3205C0661	Spring flange	3	3	
C11	HA113F0684	Screw	3	3	SM15/64 (28) ×8.5
C12	H3205C1021	Pulley	1	1	
C13	HA100F2130	Screw	1	1	SM15/64 (28) ×14.5
C18	H7104D8001	Cog belt	1	1	
C19	HA104F0654	Screw	1	1	SM15/64 (28) ×10
C20	H4713D8001	Link	1	1	
C21	H4714D8001	Pin	1	1	
C22	H4716D8001	Spring	1	1	
C23	H007013025	E-type ring	1	1	
C24	H4717D8001	Link	1	1	
C25	H4718D8001	Pin	1	1	
C26	H4719D8001	Link	1	1	
C27	H4715D8001	Pin	1	1	
C28	H4720D8001	Bushing	1	1	
C29	H4721D8001	Screw	1	1	$SM15/64(28) \times 10.5$
C30	H4722D8001	Pulley	1	1	
C31	H4723D8001	Screw	2	2	$SM15/64(28) \times 4.5$
C32	Н007009300	Retaining ring C-type	1	1	GB/T894. 1 30
C33	HA700R0060	Washer	1	1	
C34	HA700R0050	Support spring	1	1	
C35	HA700R0040	Spacer B	1	1	
C36	H4928L8001	Speed command disk F20 (up)	1	1	
C37	HA700R0030	Spacer A	2	2	
C38	H4930L8001	Speed command disk F11 (down)	1	1	
C39	HA110D0672	Screw	2	2	SM15/64 (28) ×12
C40	H4931L8001	Pulley (complete)	1	1	
C41	HA703R0067	Washer	1	1	
C42	HA703R0065	Detector bracket (complete)	1	1	
В39	H3221B6819	Stopper	1	1	

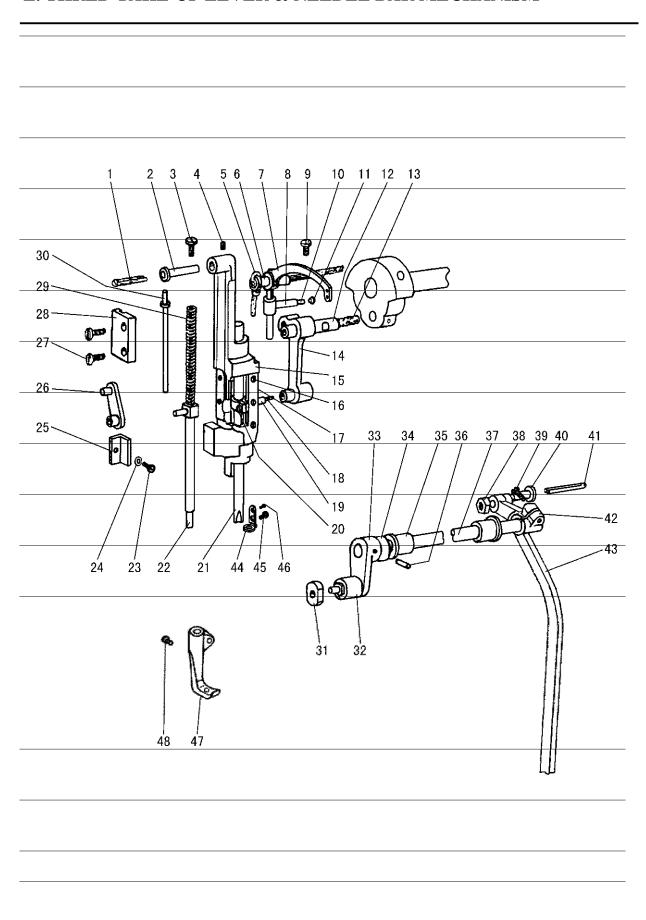
# **D. PRESSER FOOT MECHANISM**

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
D01	H4705E8001	Feed lifting rock shaft	1	1	
D02	H4707E8001	Bushing	2	2	
D03	H0030580608	Nut	1	1	$(M6 \times 0.75)$
D04	H4706E8001	Set screw	2	2	$SM1/4$ (24) $\times 7$
D05	H4709E8001	Crank	1	1	
D06	H3115F0671	Screw	1	1	SM1/4 (28) ×16
D07	H2013J0065	Washer	1	1	
D08	H2014J0066	Connecting rod	1	1	
D09	H2000J2100	Screw	1	1	$M6(0.75) \times 24$
D10	H4713E8001	Oil wick	1	1	
D11	H20111C106	Holder	1	1	
D12	Н007009250	C-type ring	1	1	
D13	H4714E8001	Eccentric	1	1	
D14	HA307C0662	Screw	2	2	SM1/4 (40) ×6
D21	H3100G2170	Screw	1	1	SM1/4 (24) ×17
D22	H4730E8001	Lever spring	1	1	
D23	H4729E8001	Screw	1	1	SM15/64 (28) ×79
D24	H4727E8001	Twist spring	1	1	
D25	H4728E8001	Knee lifting lever	1	1	
D26	H3100G2130	Screw	1	1	SM1/4 (24) ×7
D27	H4726E8001	Nut	1	1	
D28	H4725E8001	Screw	1	1	SM1/4 (24) ×19
D29	HA111G0683	Screw	2	2	SM11/64(40)×12
D30	H4723E8001	Guide	1	1	
D31	H4754E8001	Presser bar	1	1	
D32	H4744E8001	Bushing	1	1	
D33	H3200E2020	Screw	1	1	SM1/8(44)×9
D34	H4746E8001	Spring bracket	1	1	, = , = , = ,
D35	H4768E8001	Thread releasing plate	1	1	
D36	H2404I0034	Screw	1	1	SM9/64 (40) ×8.5
D37	H4748E8001	Lift lever	1	1	
D38	H4767E8001	Spring	1	1	
D39	H4752E8001	Bracket	1	1	
D40	H4749E8001	Screw	1	1	SM11/64 (40) ×8.5
D41	H0207E8001	Bell crank	1	1	
D42	H2004J0655	Screw	1	1	SM3/16 (28) ×10
D43	H4717E8001	Roller	1	1	
D44	H4718E8001	Screw	1	1	SM11/64(32)×6
D44	H2004J0662	Screw	1	1	$SM1/4(40) \times 5$
D46		Link	1	1	J. 1 (10) / 10
D40 D47	HA100E2150	Screw	2	2	SM11/64 (40) ×10
D48	H4722E8001	Washer	2	2	S. 10/ /\10
D40 D49	H4721E8001	Bell crank guide	1	1	

# **D. PRESSER FOOT MECHANISM**

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
D50	H4753E8001	Screw	1	1	SM11/64 (40) ×17.5
D51		Set screw	2	2	$SM1/4(24) \times 13$
D52		Lifting presser	1		
D52		Lifting presser		1	
D53		Finger gusrd	1	1	

#### E. THRED TAKE-UP LEVER & NEEDLE BAR MECHANISM

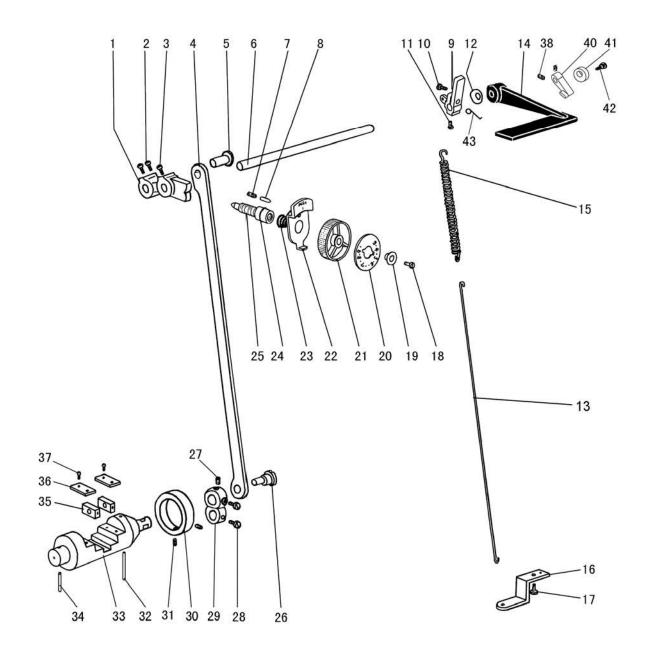


## E. THRED TAKE-UP LEVER & NEEDLE BAR MECHANISM

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
E01	H24211DN05	Oil wick	1	1	
E02	H4706F8001	Needle bar guide bracket stud	1	1	
E03	H4707F8001	Screw	1	1	5/16 (28) ×10.4
E04	HA100C2020	Set screw	1	1	15/64 (28) ×10
E05	H24211DN05	Oil wick	1	1	
E06	H24211DM05	Thread take-up lever support stud	1	1	
E07	H3504B0651	Thread take-up lever	1	1	
E08	H2405D1112	Thread take-up slide brock	1	1	
E09	HA110D0672	Screw	1	1	15/64 (28) ×12
E10	H24211D405	Oil wick	1	1	
E11	H24211D305	Plug	1	1	
E12	H2405D0662	Needle bar crank pin	1	1	
E13	H4716F8001	Oil wick	1	1	
E14	H4717F8001	Needle bar connecting link	1	1	
E15	H4719F8001	Needle bar rock frame	1	1	
E16	H32111D304	Screw	6	6	$3/32 (56) \times 4$
E17	H4721F8001	Washer	2	2	
E18	H3204D6513	Felt	1	1	
E19	H4722F8001	Needle bar connecting stud	1	1	
E20	H32111D604	Screw	1	1	9/64 (40) ×8.5
E21	H4806F8001	Needle bar	1	1	
E22	H4725F8001	Vibrating presser bar	1	1	
E23	H3400C2020	Bolt	1	1	
E24	H3200I2030	Washer	1	1	
E25	H3400C2010	Needle bar guide	1	1	
E26	H4726F8001	Vibrating presser bar link	1	1	
E27	H4753E8001	Screw	2	2	11/64 (40) ×17.5
E28	H4728F8001	Vibrating presser bar guide	1	1	
E29	H4729F8001	Spring	1	1	
E30	H4730F8001	Vibrating presser spring guide	1	1	
E31	H3410C301P	Square block	1	1	
E32	H3406C0671	Screw	1	1	$15/64(28) \times 10$
E33	H3406C0672	Needle bar vibrating crank(left)	1	1	
E34	H4734F8001	Washer	1	1	
E35	H3204B0652	Bushing	2	2	
E36	H602040240	Taper pin	1	1	GB/T117 4×24
E37	H7004F8001	Needle bar vibrating shaft	1	1	
E38	H7107F8001	Nut	1	1	
E39	H2012N0652	Screw	1	1	1/4 (24) ×16
E40	H7108F8001	Screw	1	1	5/16 (24) ×5
E41	H32311D406	Oil wick	1	1	
E42	H7104F8001	Needle bar vibrating crank(right)	1	1	
E43	H7105F8001	Connecting link	1	1	

## E. THRED TAKE-UP LEVER & NEEDLE BAR MECHANISM

Part No.	Description	GC24698-25R	GC24698-25L	Remarks
H3129F0693	Thread guide	1	1	
		1	1	1/8 (44) ×4.5
	Screw	1	1	3/32 (56) ×2.5
H7106F8001	Vibrating presser foot	1	1	
	Screw	1	1	11/64 (40) ×7
	H3129F0693 HA100C2170 H3129F0691 H7106F8001	H3129F0693 Thread guide HA100C2170 Screw H3129F0691 Screw H7106F8001 Vibrating presser foot	H3129F0693       Thread guide       1         HA100C2170       Screw       1         H3129F0691       Screw       1         H7106F8001       Vibrating presser foot       1	H3129F0693       Thread guide       1       1         HA100C2170       Screw       1       1         H3129F0691       Screw       1       1         H7106F8001       Vibrating presser foot       1       1



# F. STICH REGULATOR MECHANISM

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
F01	H4706G8001	Feed regulator	1	1	
F02	HA113F0684	Screw	2	2	15/64 (28) ×8.5
F03	H3200F2020	Screw	1	1	15/64 (28) ×12
F04	H7104G8001	Link	1	1	
F05	HA100G2070	Eccentric shaft	1	1	
F06	HF30G78001	Reverse stitch shaft	1	1	
F07	HA720F0687	Spring	1	1	
F08	HA700F2030	Stopper pin	1	1	
F09	HF30G58001	Reverse stitch crank	1	1	
F10	HA800F2020	Screw	1	1	15/64 (28) ×13.5
F11	H3207F0672	Screw	1	1	11/64 (40) ×8.5
F12	HA100F2110	Washer	1	1	
F13	H7105G8001	Spring hook	1	1	
F14	H4906G8001	Feed reversing lever	1	1	
F15	H4710G8001	Spring	1	1	
F16	H3200F2050	Bracket for spring	1	1	
F17	HA300C2030	Screw	4	4	11/64 (40) ×8
F18	HA109F0673	Screw	1	1	3/16 (28) ×8.6
F19	HA720F0685	bush	1	1	
F20	H7107G8001	Face plate	1	1	
F21	HA7421F120	Dial	1	1	
F22	HA720F0683	Plate	1	1	
F23	HA720F0687	Spring	1	1	
F24	HA109F0674	O-ring	1	1	
F25	HA109F0671	Screw bar	1	1	T7/16 (8) ×54.3
F26	H3206F0662	Pin	1	1	
F27	H415050200	Screw	1	1	GB/T70.1 M5×20
F28	H428050060	Screw	2	2	GB/T77 M5×6
F29	H4714G8001	Reverse sewing crank	1	1	
F30	H4715G7101	Collar	1	1	
F31	HA3411D308	Screw	2	2	$SM15/64(28) \times 7$
F32	H4719G8001	Felt	1	1	
F33	H4720G8001	Rverse block	1	1	
F34	H4721G8001	Felt	1	1	
F35	H4722G8001	Square block	2	2	
F36	H4723G8001	Guide plate	2	2	
F37	HA300C2030	Screw	4	4	SM11/64 (40) ×8
F38	HA113F0684	Screw	2	2	$M5 \times 6$
F40	H4936L8001	block	1	1	
F41	H4938L8001	rubber band	1	1	
F42	H4937L8001	Screw	1	1	
F43	H4939L8001	Spring	1	1	

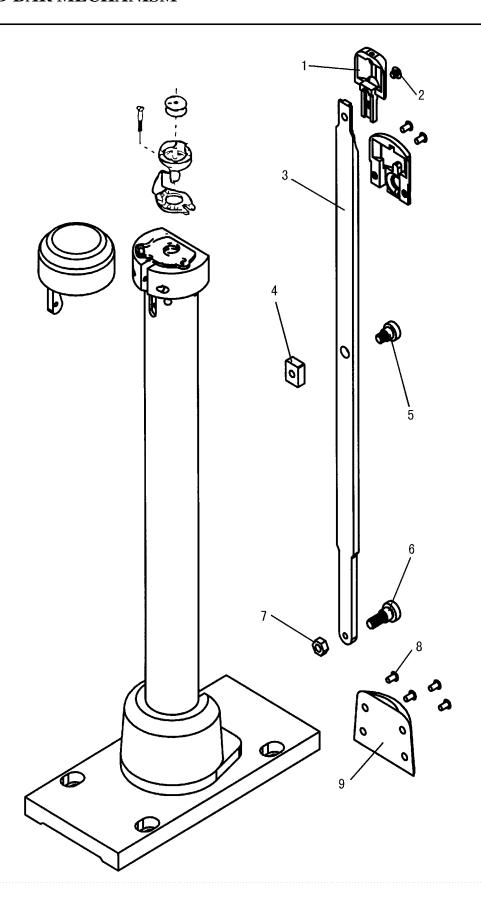
# G. LOWER AND FEEDING SHAFT MECHANISM 55 45 44 (41) (30) (33) (32) 41 40 35 34 33 32 31 30

# G. LOWER AND FEEDING SHAFT MECHANISM

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
G01	H4706H8001	Lower shaft bushing (left)	1	1	
G02	H4707H8001	Oil wick	1	1	
G03	H7004H8001	Lower shaft	1	1	
G04	H4710H8001	Feed eccentric cam	1	1	
G05	Н3205Н0654	Screw	1	1	$SM1/4(40) \times 5$
G06	H4712H8001	Lower shaft bushing (right)	1	1	
G07	Н4713Н8001	Oil wick	1	1	
G11	H2405D0664	Screw	2	2	$SM15/64(28) \times 14$
G12	H4717H8001	Feed eccentric	1	1	
G13	Н4719Н8001	Needle bearing	1	1	
G14	H4718H8001	Feed connecting rod	1	1	
G15	Н007009260	C-type stop ring	1	1	GB/T894.1 26
G16	Н4720Н8001	Oil wick	1	1	
G17	H4721H8001	Shaft	1	1	
G18	Н7006Н7101	Lower shaft bushing complete (middle)	1	1	
G19	H4724H7101	Bushing	1	1	
G20	HA105D0662	Screw	1	1	SM1/4 (40) ×4
G21	H3205H0654	Screw	1	1	$SM1/4(40) \times 5$
G22	H4723H8001	Ball bearing	1	1	
G23	H4727H8001	Bearing holder	1	1	
G24	HA7311C306	Screw	3	3	SM9/64 (40) ×7
G25	H4728H8001	Washer	1	1	
G26	Н4729Н8001	Screw	1	1	М6
G27	Н0030580608	Nut	1	1	GB52008 M6
G28	Н7105Н8001	Feed connection crank (right)	1	1	
G29	H2012N0652	Screw	1	1	$SM1/4(24) \times 16$
G30	HA100G2120	Feed rock shaft bushing	2	2	
G31	H4708D8001	Screw	2	2	$SM1/4(24) \times 13$
G32	HA108G0661	Collar	2	2	
G33	HA105D0662	Screw	4	4	$1/4(40) \times 4$
G34	H2012N0652	Screw	1	1	$SM1/4(24) \times 16$
G35	Н4736Н8001	Feed connection crank (middle)	1	1	
G36	Н4737Н8001	Link	1	1	
G37	Н007013050	E-type stop ring	2	2	GB/T896 5
G38	H4738H8001	Pin	1	1	
G39	Н4739Н8001	Oil wick	1	1	
G40	Н7005Н8001	Feed rock shaft	1	1	
G41	H4740H8001	Felt	2	2	
G42	H3204G0031	Oil wick	1	1	
G43	H3200G2030	Clip	1	1	
G44	HA104G0012	Screw	2	2	SM3/16 (28) ×12
G45	H3205G1032	Feed connection crank (left)	1	1	
G46	H32243G205	Feed bar shaft	1	1	

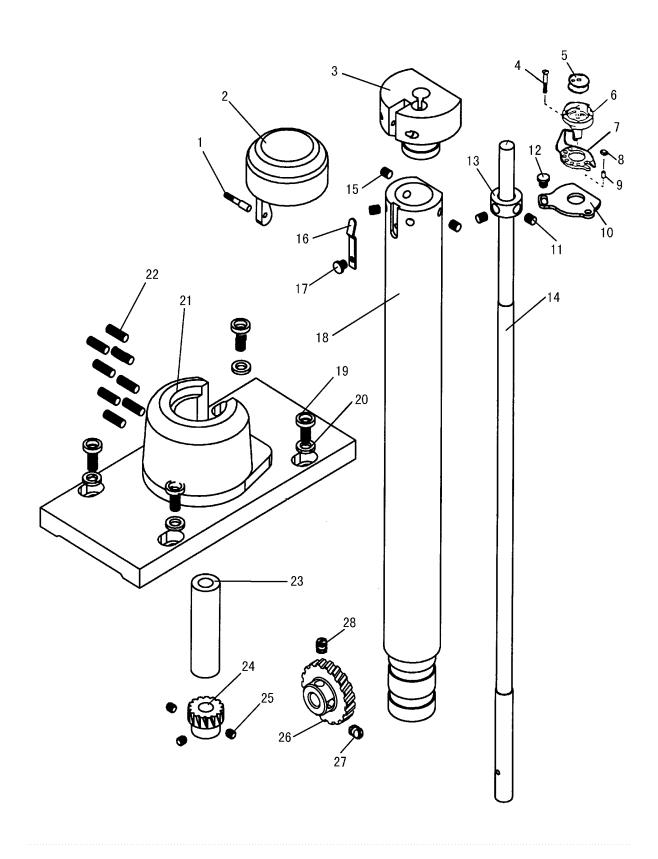
# G. LOWER AND FEEDING SHAFT MECHANISM

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
G47	H3205G0662	Oil wick	1	1	
G49		Bolt	1		GB/T78 M5×5
G50		Feed bar	1	1	
G51		Screw	1		SM15/64(28)×17
G52		Washer	1	1	
G55		Screw	1		SM1/8 (44) ×4
G56		Felt	1	1	
G57		Feed bar forked connection	1	1	
G59		C-type stop ring	1	1	



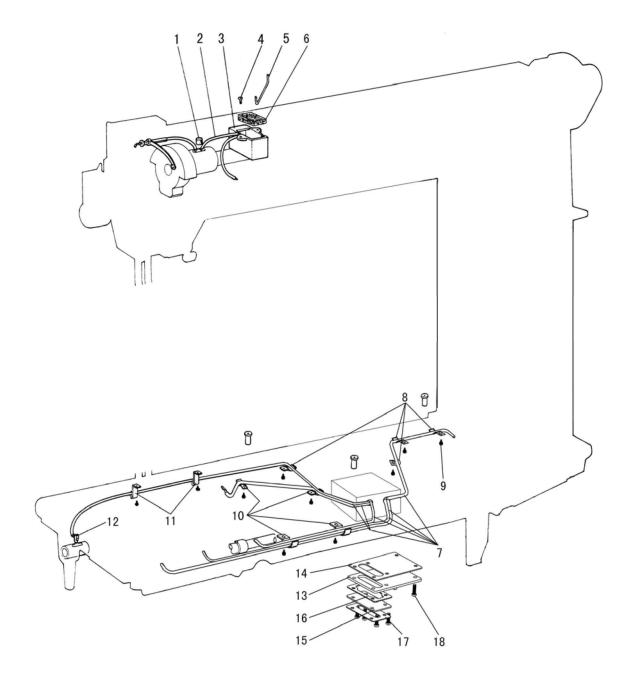
## **H.FEED BAR MECHANISM**

Fig. No. Part No.	Description	GC24698-25R	GC24698-25L	Remarks
H01 H7107I8002	Feed dog		1	
	Feed dog	1		
	Screw	1	1	
	Feed bar	1	1	
	Square block	1	1	
	Screw	1	1	
	Screw	1	1	
	Nut	1	1	
	Screw	4	4	$11/64(40) \times 10$
	Cover plate	1	1	11/04(40) \( 10



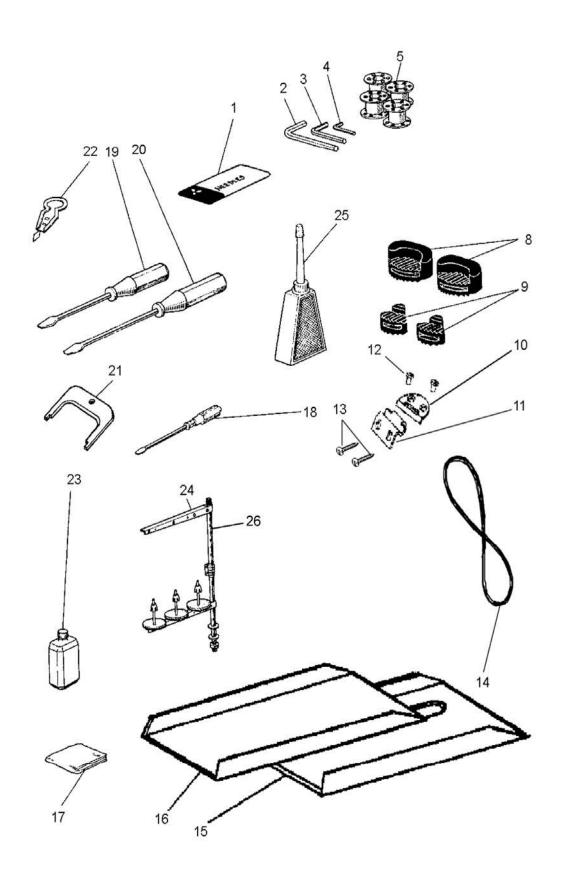
# I. HOOK SADDLE MECHANISM

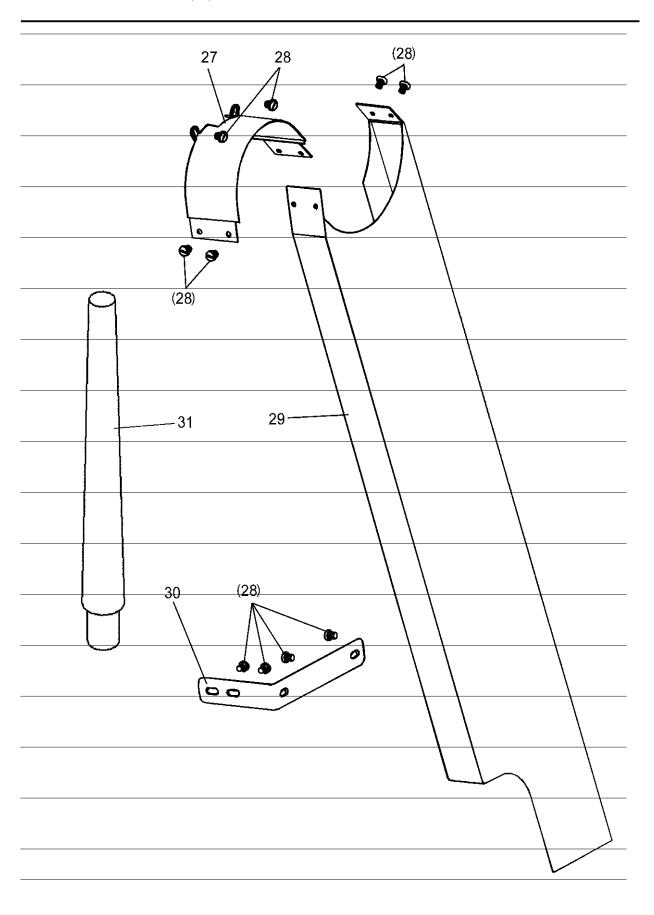
Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
101	H7124J8001	Screw	1	1	
102	H7123J8001	Slide plate	1	1	
103	Н7109Ј8001	Hook saddle	1	1	
104	H5337D8001	Screw	3	3	$9/64(36) \times 30$
105	H2400I2020	Bobbin	1	1	
106	H7127J7101	Hook	1	1	
107		Opener	1	1	
108	H41622D216	Square block	4	4	
109	H410270D16	Pin	1	1	
I10	H7115J8001	Cover plate	1	1	
I11	HA105D0662	Screw	1	1	1/4 (40) ×4
I12	H2204C0651	Screw	1	1	$9/64(40) \times 6.5$
I13	Н7106Ј8001	Collar	1	1	
I14	H7104J8002	Hook shaft	1	1	
I15	H3210F0681	Screw	1	1	$M5 \times 6$
I16	H7122J8001	Spring	1	1	
I17	H3204D6511	Screw	1	1	$1/8(44) \times 3.5$
I18	H7113J8001	Hook saddle post bed	1	1	_, _ ( ,
I19	H415080200	Screw	4	4	GB/T70.1 M8×20
120	H005004080	Washer	4	4	GB/T848 8
I21	H7904J8001	supporter	1	-	52, 1010 0
I21	Н7116Ј8001	supporter		1	
I22	H2000H2020	Screw	1	1	$15/64(28) \times 14$
I23	H7121J8001	Bushing	1	1	15, 51(25, 111
I24	H4705I8001	Gear (small)	1	1	
125	HA105D0662	Screw	3	3	1/4 (40) ×4
126	H4706I8001		1	1	2, 1 (10)
127	H4707I8001	Screw	1	1	$1/4(40) \times 6.5$
128	HA307C0662	Screw	1	1	1/4 (40) ×6



# J. OIL LUBRICATION MECHANISM

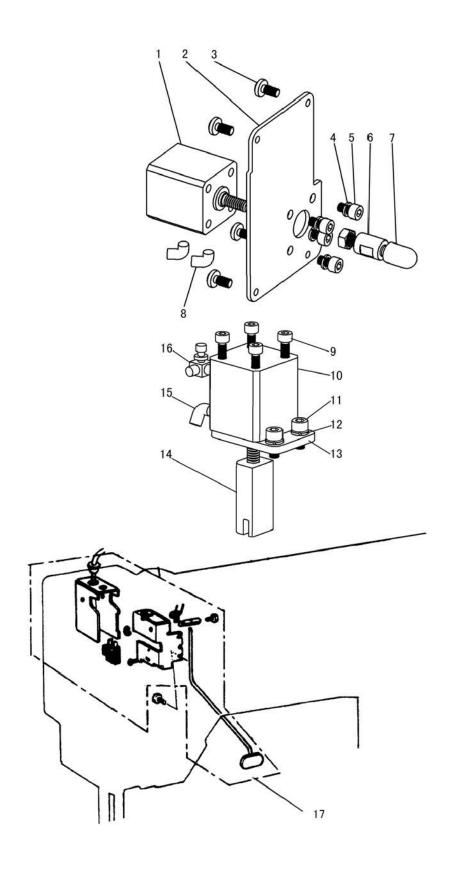
Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
Ј01	H32175B304	Felt	1	1	
J02	H4705J7101	Oil pipe complete	1	1	
Ј03	H3204K0011	Oil reservoir complete	1	1	
J04		Screw	2	2	GB/T819.1 M4×16
J05		Holder	1	1	
J06		Felt	1	1	
J07	_	Oil pipe complete	6	6	
J08		Holder	4	4	
J08		Screw	10		SM9/64 (40) ×4.5
					SM9/04 (40) ~4.3
J10		Holder	4	4	
J11		Holder	2	2	
J12		Oil wick $\Phi$ 2.5×35	3	3	
J13		Pressing plate	1	1	
J14		Sealed cushion	1	1	
J15		The oil amount observes window	1	1	
J16	H2000M0190	Sealed cushion	1	1	
J17	H2000M0200	Pressing plate	1	1	
J18	H3107G0661	Screw	6	6	





# K. ACCESSORIES

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
K01	JZDP1700P23	Needle DP×17-23	6	6	DP×17-23
K02	HB01001025	Socket wrench	1	1	
К03	HB01001030	Socket wrench	1	1	
K04	HB01001015	Socket wrench	1	1	
K05	H2400I2020	Bobbin	4	4	B0-B872 (A)
К06	НАЗООЈ2230	Washer	2	2	
К07	H801045200	Screw	4	4	GB/T99 4.5×20
К08	H200400065	Vibration preventing rubber	2	2	
К09	H200400066	Vibration preventing rubber	2	2	
K10	H2404K0654	Hinge complete	2	2	
K11	H2404K0655	Hinge complete	2	2	
K12	H2404K0656	Screw	4	4	
K13	H802080350	Screw	4	4	GB/T100 8×35
K14	730	O-type belt	1	1	52, 1100 01100
K15	H7013K8001	Oil check	1	1	
K16	H7014K8001	Oil check	1	1	
K17	H7009K8001	Vinyl cover	1	1	
K18	HA300J2210	Screw driver (small)	1	1	
K19		Screw driver (middle)	1	1	
K20	НАЗООЈ2070	Screw driver (large)	1	1	
K21	HA704S0654	Adjusting plate for speed command disk	1	1	
K22	H3207L0065	Thread a needle kit	1	1	
K23	H3200L0130	Oil box	1	1	
K24	H3200L0120	Knee lift shaft	1	1	
K25	HA100J2110	Oiler	1	1	
K26	H7112L8001	Cotton stand pipe	1	1	
K27		Belt cover (upper)	1	1	
K28		Screw	10	10	
K29		Belt cover	1	1	
K30	H7123L8001	Belt cover stand	1	1	
K31		Supporter	1	1	



# L. PNEUMATIC CONTROL UNIT

Fig. No.	Part No.	Description	GC24698-25R	GC24698-25L	Remarks
L01	H4915B8001	Air cylinder	1	1	
L02		Plate	1	1	
L03		Screw	4	4	
L04	H005008100	Washer	4	4	
L05	H415060200	Screw	4	4	
L06	H4914G8001	Pole	1	1	
L07	H4913G8001	Feeler	1	1	
L08		Joint	2	2	
L09		Screw	4	4	
L10		Air cylinder	1	1	
L11		Screw	2	2	
L12		Washer	2	2	
L13		Plate	1	1	
L14		Block	1	1	
L15		Joint	1	1	
L16	H0608N8001	Valve	1	1	
L17	HF106L7101	Touth switch complete	1	1	

#### SHANGHAI HUIGONG NO.3 SEWING MACHINE FACTORY

ADD: 1418, Yishan Road, Shanghai, China

**Zip Code: 201103** 

Overseas Business: TEL: 86-21-64853303 FAX: 86-21-64854304

E-mail:highlead@online.sh.cn http://www.highlead.com.cn

The description covered in this manual is subject to change for improvement of the commodity without notice

**2010.5. Printed**