



HIGHLEAD

GC24518-1LD/1RD/2D

**Single needle/twin-needle post-bed needle bar
feed lockstitcher with auto trimmer**

**Instruction Manual
Parts Catalog**

SHANGHAI HUIGONG NO.3 SEWING MACHINE FACTORY

From the library of: Superior Sewing Machine & Supply LLC

1. 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.

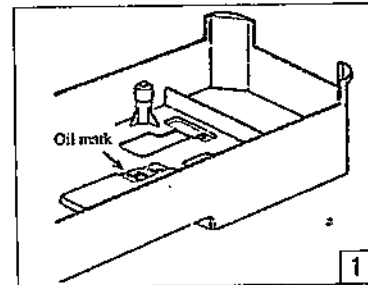
4) Specifications

Model	GC24518-1LD/1RD	GC24518-2D
Max. sewing speed	2000rpm	
Stitch length	0—5mm	
Needle bar stroke	33.4mm	
Presser foot stroke	By hand	7mm
	By knee	10mm
Hook	1.6times hook	
Needle	DP×5 (14#-18#)	
Needle gauge		8 mm
Lubrication	Semi-auto lubricated	
Motor	220V550W Servo motor	

2. Lubrication (Fig.1, Fig.2, Fig.3)

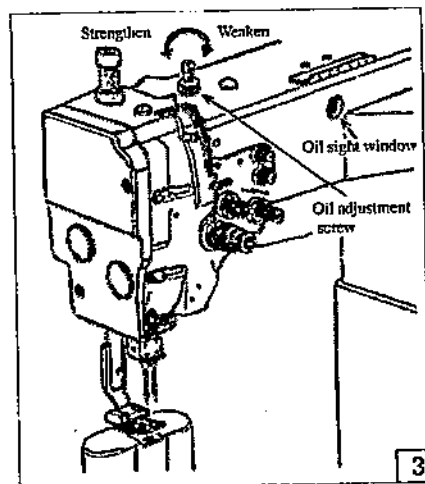
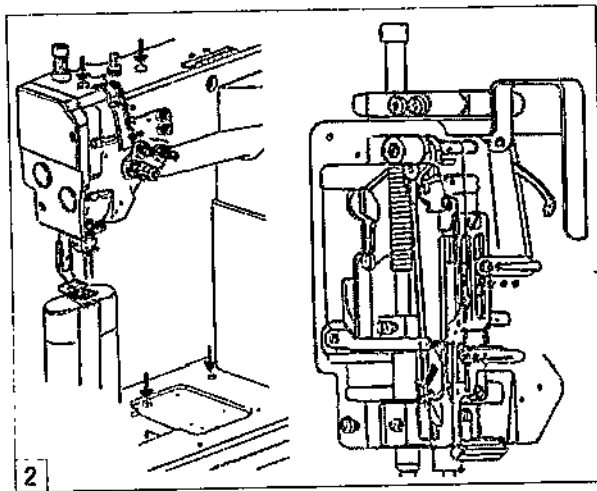
1) Before starting operation, be sure to pour oil up to the position H of oil tank. If the oil below position L, replenish the oil supply up to position H. (Fig.1)

2) When a new sewing machine is first operated, or when a sewing machine which left out of use for a long period of time is operated, it will be necessary to oil through the oilholes after removing the rubber plugs shown below (the direction shown in arrows). (Fig. 2)



3) While operating the machine, check the condition of oil lubrication through the oil check window.

The oil amount can be adjusted by oil adjustment screw. (Fig. 3)



3. How to attach needle (Fig.4, Fig.5)

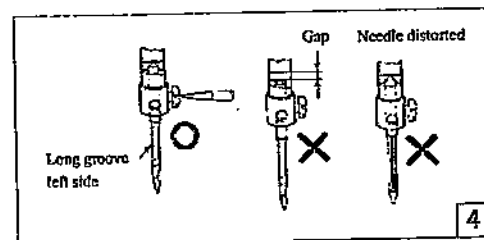
Note: Before attach needle, be sure to turn off the power.

1) Turn the balance wheel by hand to raise the needle bar to its highest position.

2) Loosen the needle clamping screw.

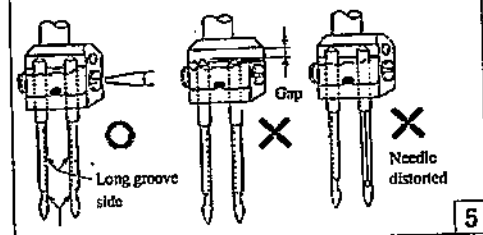
3) GC24518-1LD/ GC24518-1RD (Fig.4)

Hold the needle to its side with the long groove side (left), then insert the needle as deeply as it will go into the needle clamping hole.



GC24518-2D (Fig.5)

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.



4) Tighten the needle clamping screw.

4. How to wind the lower thread (Fig.6)

Strength of winding

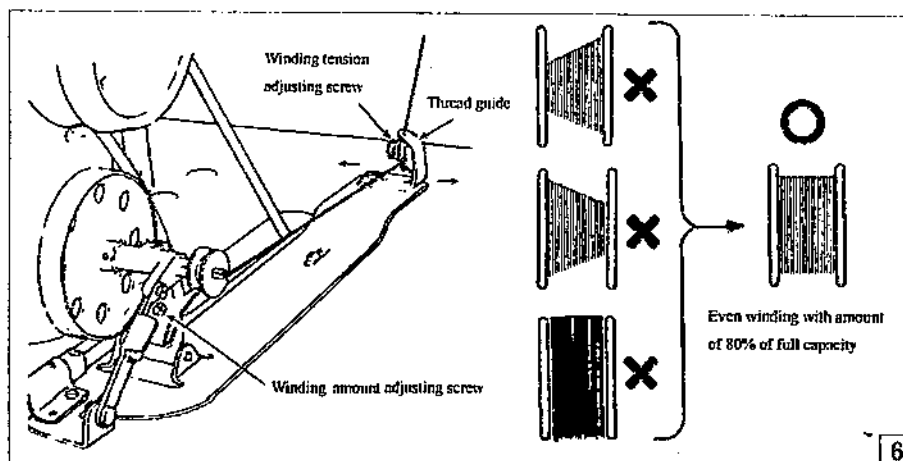
Particularly in the case of nylon or polyester thread, wind the bobbin loosely.

Uneven winding

If the bobbin is wound unevenly, slide the thread guide toward the less wound portion of bobbin.

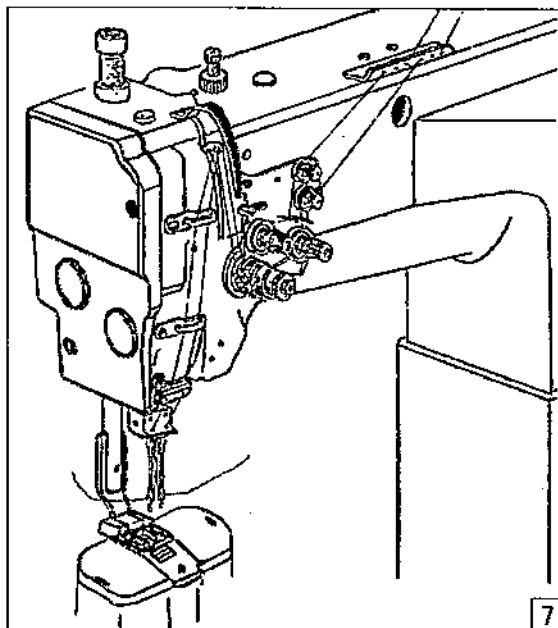
Winding amount

When the bobbin is wound excessively, loosen the adjusting screw. When the bobbin is wound insufficiently, tighten the adjusting screw.



5. How to route the upper thread (Fig.7)

Raise the thread take-up lever to its highest position and lead the upper thread as shown in fig.7

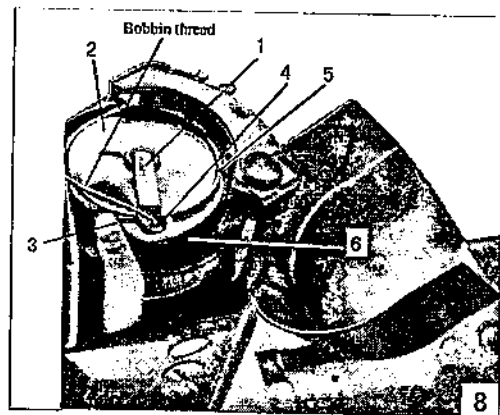


6. Setting of bobbin (Fig.8)

- 1) Raise flap 1 and remove the empty bobbin.
- 2) Insert bobbin 2 in such a way that when the thread is unwound from it moves in the opposite direction to the gripper.
- 3) Pass the thread through slit 5 and below spring 6, pass the thread through slit 3 and pull about 3 cm through.
- 4) Close flap 1 and pass the thread through the flap's guide 4.

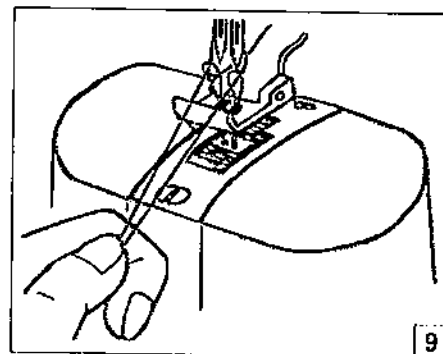
7. How to adjust the lower thread (Fig.9)

Pick up the end of needle thread by left hand and lightly press down the pedal by toe to run the machine one turn. When the needle thread is pulled up, the bobbin thread will be drawn out as shown in the right figure.



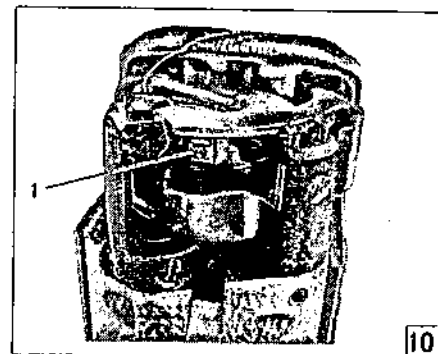
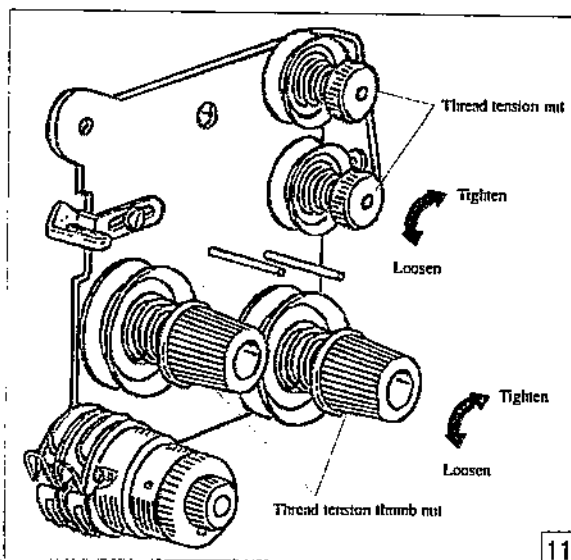
8. How to adjust the lower thread (Fig.10)

The lower-thread tension should be set in accordance with the type of seam required. Adjust the tension with screw 1.



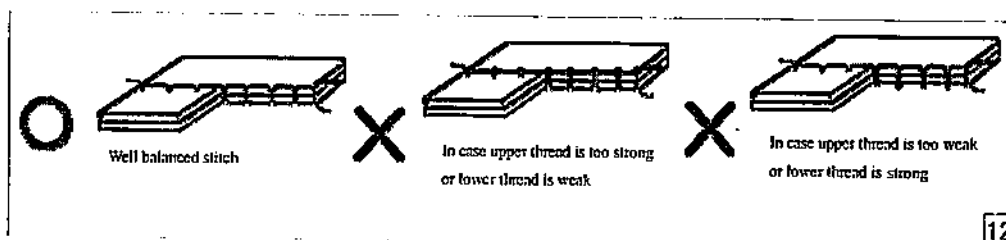
9. Adjustment of upper thread (Fig.11)

Turn the Thread Tension Nut left or right to loosen or tighten the pressure of upper thread.



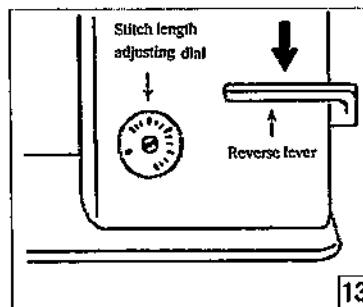
10. Adjusting of thread tension (Fig.12)

For ordinary stitching, the tension of the upper and the lower threads should be equal.



11. Adjustment of stitch length and reverse sewing (Fig.13)

- 1) Rotate the stitch length adjusting dial to change the stitch length.
- 2) Pressing the stitch length adjusting lever for reverse stitching.
- 3) Reverse feeding starts when Reverse Feed Lever is depressed, and the machine will feed forward again if Reverse Feed Lever is released.



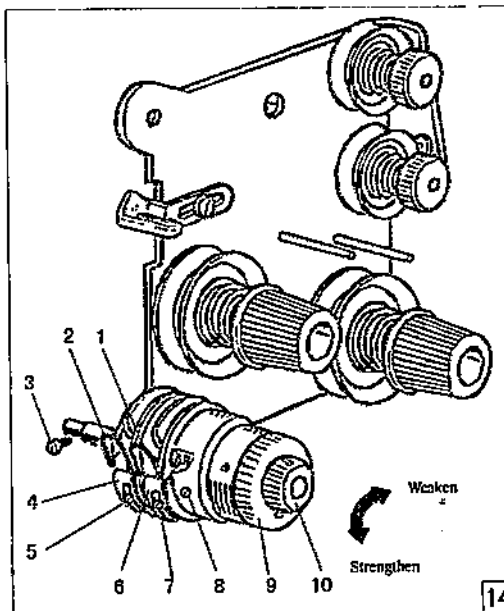
12. Adjusting thread take-up spring (Fig.14)

1) Adjusting the thread take-up spring stroke

- Thread take-up spring for left upper thread 2
Loosen the screw 5, adjusting the stopper block 4.
- Thread take-up spring for right upper thread 1
Loosen the screw 7, adjusting the stopper block 6.

2) Adjusting the thread take-up spring tension

- Thread take-up spring tension for left upper thread 2
Loosen the nut 10 and screw 3, then adjusting the tension screw. After adjustment, tighten the nut 10 and screw 3.
- Thread take-up spring tension for right upper thread 1
Loosen the screw 8, adjusting the nut 9. After adjustment, tighten screw 8.



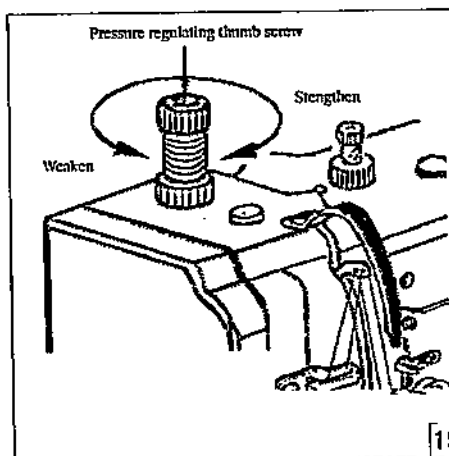
13. Adjustment of pressure of presser foot (Fig.15):

As shown in Fig.15, turn the pressure regulating thumb screw to increase or decrease the pressure of presser foot.

14. Adjust the thread guide

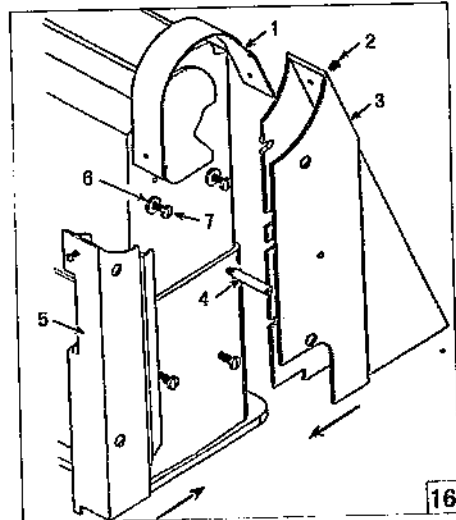
The position of the thread guide affects stitch tightness, and therefore must be adjusted according to sewing materials and sewing conditions.

Thread guide position	Leftward	Center	Rightward
Material weight	Heavy	Medium	Light
Supply	More	Standard	Less



15. Installation of Belt cover (Fig. 16)

Set the screw 4, 6 and the washer 7 on the arm as illustrated. Assemble the belt guard 3 in the direction of the arrow, tighten its screw. The assembling of the belt guard 5 is the same as the belt guard 3, then, insert the belt guard 1 from the top of the pulley into the inside of the 3 and 5, tighten the screw 2.



16. Driving knife adjustment (Fig. 17)

In resting position the rear edge of the driving knife should be flush with the front edge of the counter-knife.

The fixed knife should abut on the thread pulling knife along its total width.

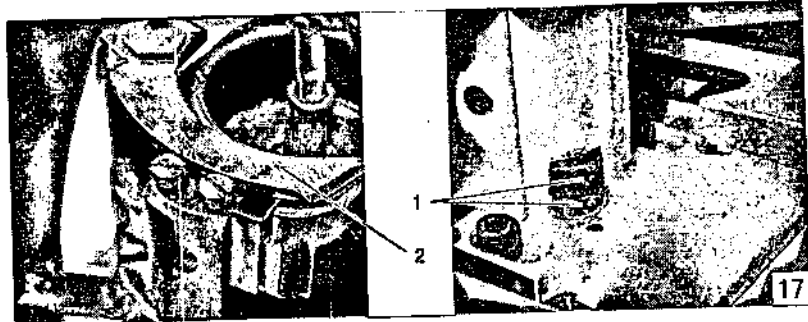
The pivoting driving knife should abut on the fixed knife after approx. 1/3 of its width.

The driving knife must not collide with the bobbin case.

The clearance between the lower blade edge of the driving knife a and the lower surface of the inner rotary hook b should be 0.3-0.4mm.

Checking:

Loosen two screws 1 for adjusting the resting position of the driving knife 2 and adjust the knife according to the standard, then tighten screws 1.



Attention:

Check the axial clearance of the knife shaft when tightening the screws 1. The driving knife must be easily movable and the axial clearance as low as possible.

17. Adjusting the fixed knife position and bobbin thread clamping (Fig. 18).

Checking:

The clamping spring 5 has the function to hold the cut bobbin thread in order to avoid skipped stitches at the seam beginning.

Fixed knife 4 and driving knife 6 must be in parallel position standing under a slight cutting pressure.

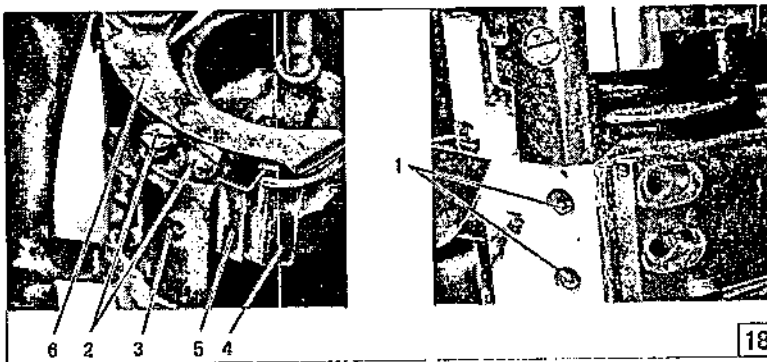
Parallel position correction

Loosen screw 3 slightly for adjusting the parallel position of thread pulling knife 6 and counter-knife 4, then change counter-knife 4 by setting the screws 2 in such a way that the edges of thread pulling knife and counter-knife are in parallel position. Tighten screw 3 at last.

Cutting pressure adjustment

The knives should guarantee a safe cut at the lowest possible pressure of the counter-knife against the thread pulling knife. This is normally the case when the edge of the counter-knife just touches the thread pulling knife with a knife overlapping of 1/3.

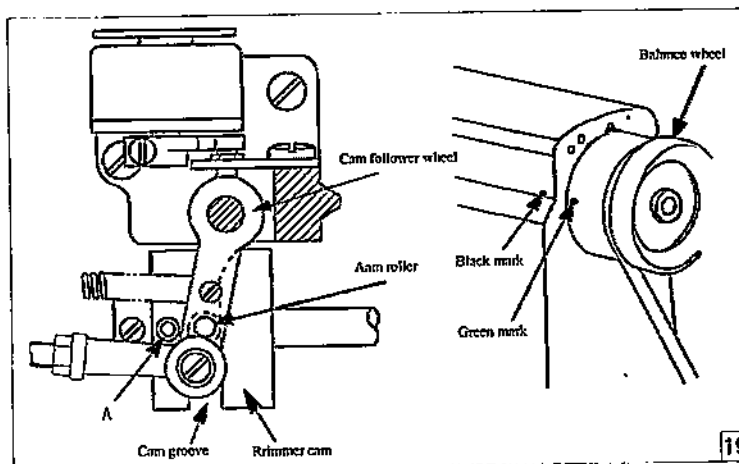
Loosen screws 1, then turn counter-knife support in such a way that the condition is fulfilled, at last, tighten screws 1.



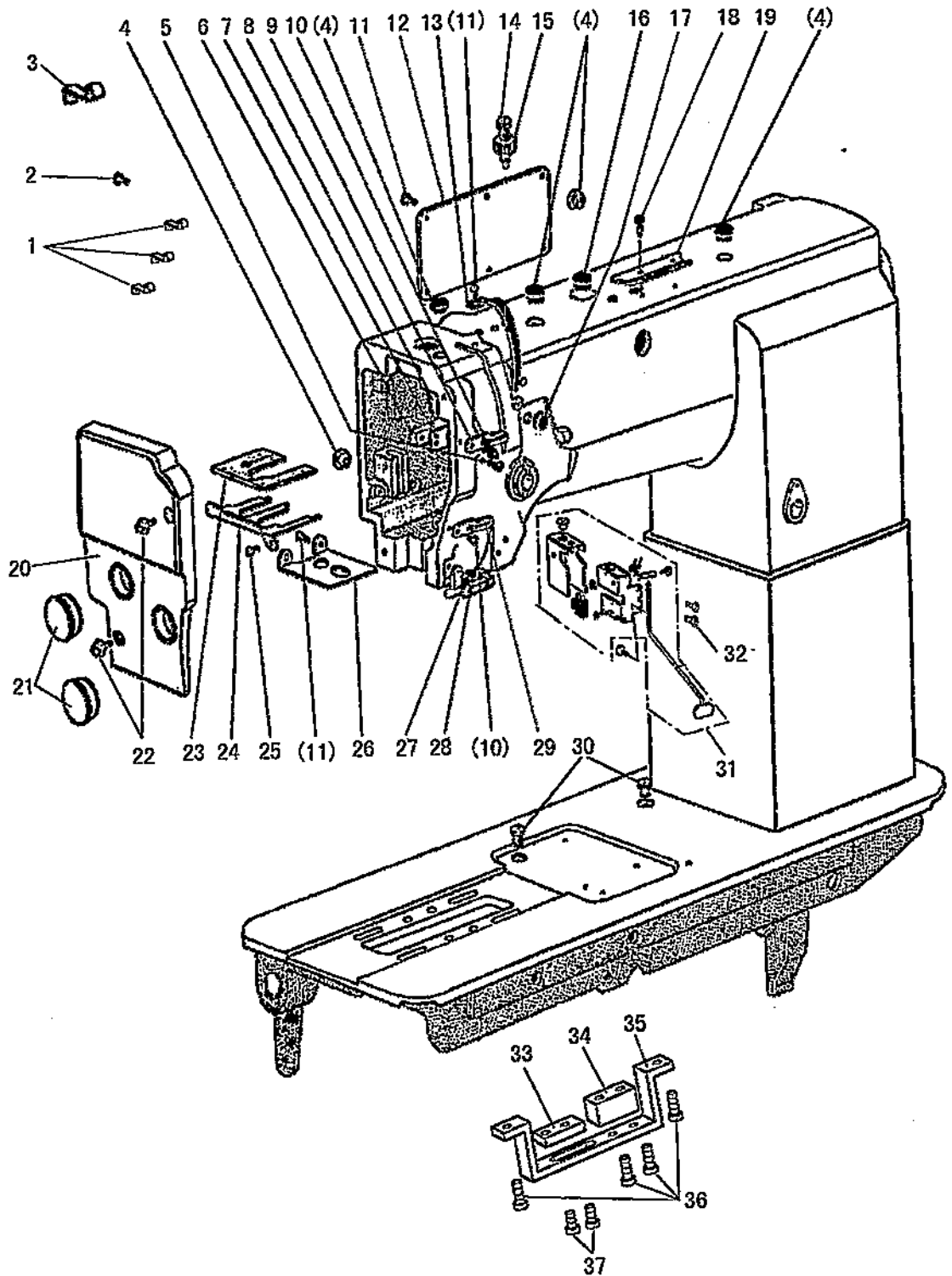
18. Adjustment of trimmer cam (Fig.19)

- 1) Rotate the balance wheel to lower the needle to the DOWN position .
- 2) While keeping the DOWN position, press the cam follower crank to enter the roller into the trimmer cam groove.
- 3) Adjust the trimmer cam so that the movable knife starts moving when the balance wheel is turned by hand and the green mark point on the balance wheel meets the black point on the arm.

To adjust, loosen two trimmer cam screws A.



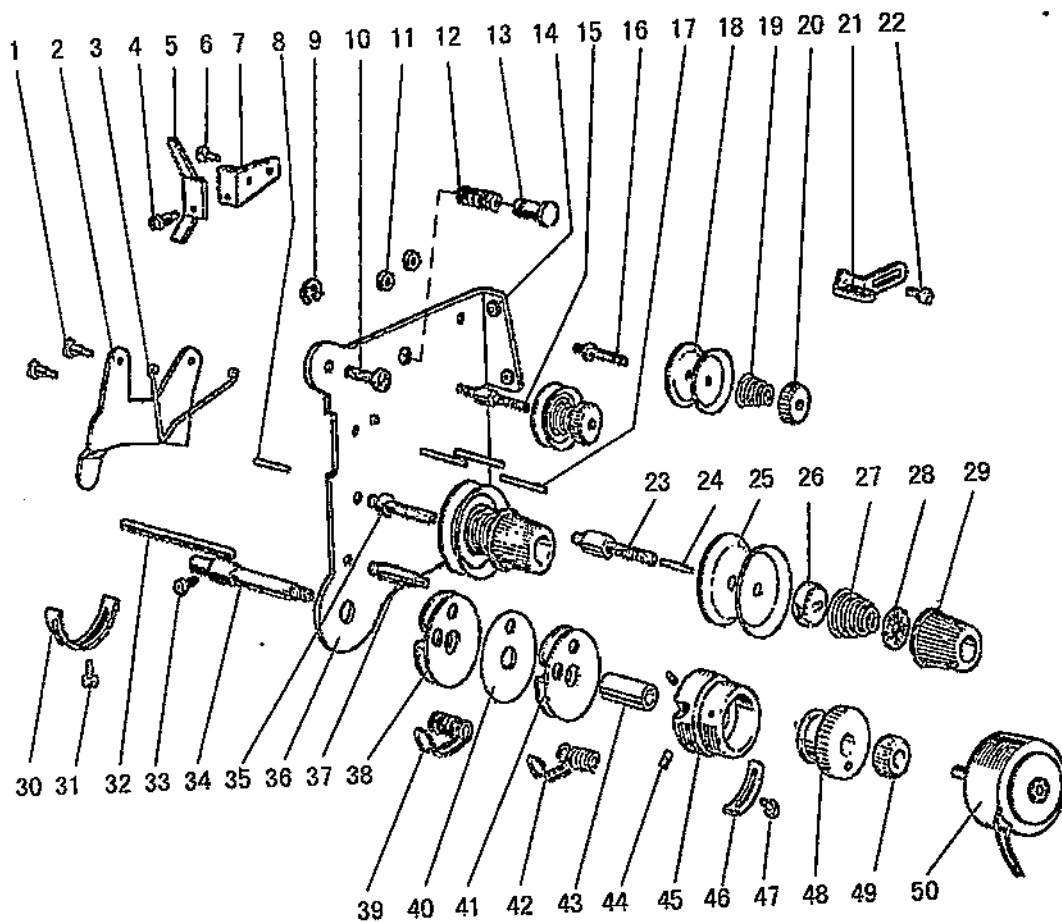
A.ARM BED AND ITS ACCESSORIES



A.ARM BED AND ITS ACCESSORIES

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
A01	H6648I8001	Holder	3	3	3	AB-6N
A02	HA300C2030	Screw	1	1	1	AB-10N
A03	H6647H8001	Holder	5	5	5	
A04	H4715B8001	Rubber plug	2	2	2	SM3/16 (28) × 12.1
A05	H2400B2080	Spring	1	1	1	
A06	H2400B2060	Spacer	1	1	1	
A07	H2400B2050	Oil guard plate	1	1	1	
A08	H3200B2060	Oil guide plate	1	1	1	
A09	H3200B2070	Thread guide	2	2	2	SM9/64 (40) × 4.5
A10	H3000D2160	Screw	9	9	9	SM11/64 (40) × 9
A11	HA300B2170	Spring	1	1	1	
A12	H3200B2030	Arm side cover (left)	1	1	1	
A13	H3200B2050	Thread take-up cover	1	1	1	M10×33
A14	H3200K0210	Screw	1	1	1	M10×8.5
A15	H3200K0220	Nut	1	1	1	
A16	H4735B8001	Rubber plug	1	1	1	
A17	H2000B2010	Rubber plug	2	2	2	SM11/64 (40) × 8
A18	HA700B2060	Screw	1	1	1	
A19	H2400B2100	Thread guide	1	1	1	
A20	H3200B2020	Face plate	2	2	2	
A21	HA300B2160	Rubber plug	2	2	2	SM11/64 (40) × 10
A22	HA307B0673	Screw	1	1	1	
A23	H3229K0742	Felt	1	1	1	
A24	H3229K0741	Oil guard plate	2	2	2	SM9/64 (40) × 7
A25	H2004J0067	Screw	1	1	1	
A26	H3200K0240	Cover	1	1	1	SM9/64 (40) × 6.5
A27	H3200B2100	Screw	1	1	1	
A28	H3212B0066	Thread guide	1	1	1	
A29	H3200B2080	Thread guide	2	2	2	
A30	H2000M0090	Cap	1	1	1	
A31	H4905L7101	Touth switch complete	2	2	2	
A32	H4918L8001	Screw	1	1	1	
A33	HH31M28001	Guide	1	1	1	
A34	HH31M38001	Limiting stopper	1	1	1	
A35	HH31M18001	Guide holder	4	4	4	
A36	H415050140	Screw	2	2	2	
A37	H415050100	Screw				

B.THREAD TENSION REGULATOR MECHANISM



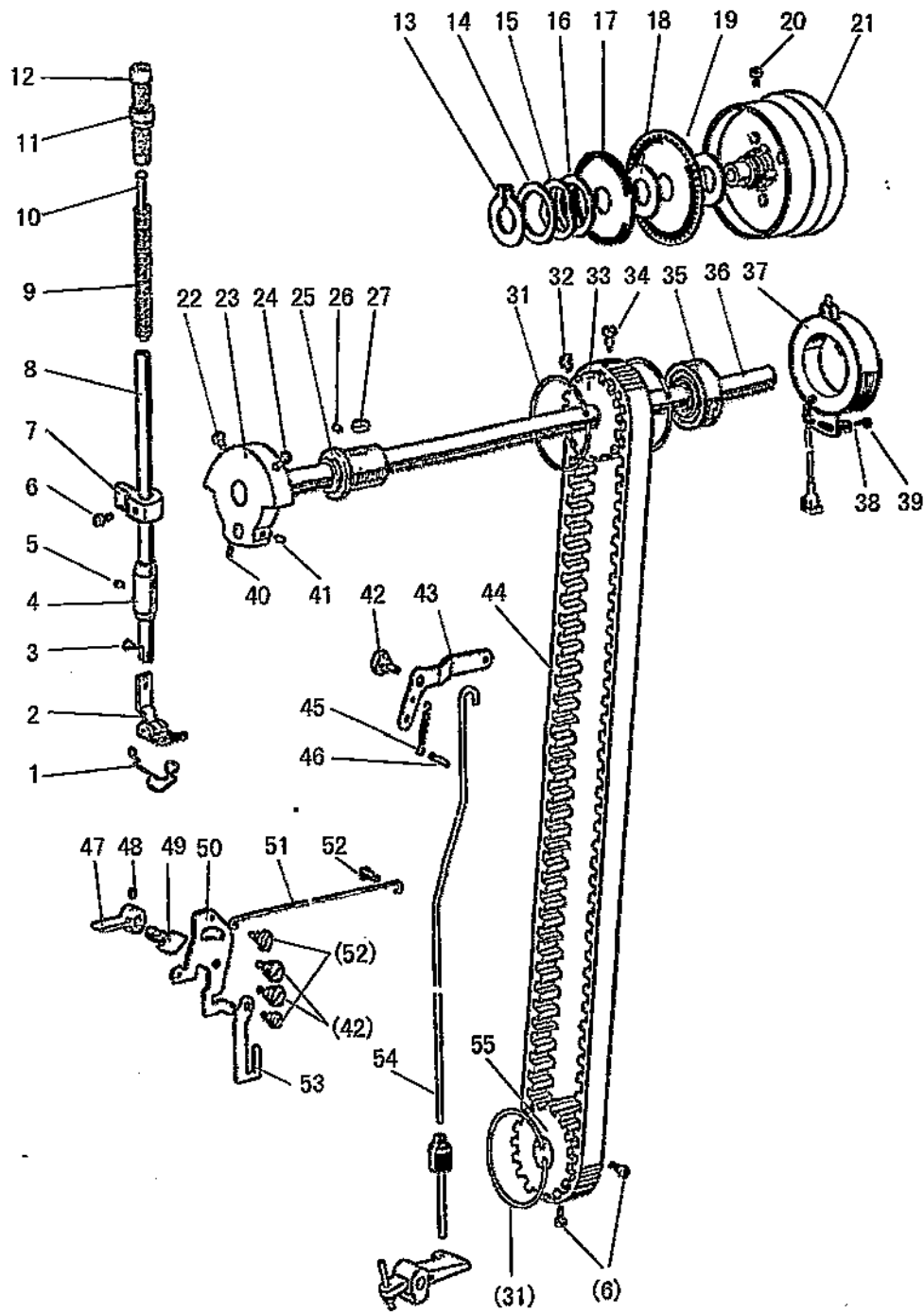
B.THREAD TENSION REGULATOR MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
B01	H3221B6811	Screw	2	2	2	SM9/64 (40) ×3
B02	H4910C8001	Tension releasing plate	1	1	1	SM3/16 (28) ×12.1
B03	H3221B6812	Tension releasing spring	1	1	1	
B04	H4705C8001	Screw	1	1	1	
B05	H4706C8001	Lever	1	1	1	
B06	HA7311C306	Screw	1	1	1	
B07	H4707C8001	Mounting plate	1	1	1	
B08	H3221B6817	Pin	1	1	1	
B09	H007013050	E-type ring	1	1	1	
B10	HA300C2030	Screw	2	2	2	SM11/64 (40) ×8
B11	H3221B6810	Nut	1	1	2	SM11/64 (40) ×3
B12	H4708C8001	Spring	1	1	1	
B13	H4709C8001	Push button	1	1	1	
B14	H3221B0681	Porcelain cluct	2	2	2	
B15	H3221B0685	Thread tension stud			1	SM11/64 (40) ×14
B16	H3221B0683	Thread tension stud	1	1	1	SM11/64 (40) ×14
B17	H3221B0682	Pin	2	2	3	
B18	HA112B0693	Thread tension disc	2	2	4	
B19	H3221B0684	Spring	1	1	2	
B20	HA710B0671	Thumb nut	1	1	2	
B21	H3306B0661	Thread guide	1	1	1	
B22	HA106B0676	Screw	1	1	1	SM9/64 (40) ×6.
B23	H3221B0689	Thread tension stud			1	SM1/4 (40) ×23
B24	H3221B6816	Pin			1	
B25	HA310B0705	Thread tension disc	2	2	4	
B26	HA310B0702	Tension releasing plate	1	1	2	
B27	H4710C8001	Spring	1	1	2	
B28	HA115B7010	Thumb nut revolution stopper	1	1	2	
B29	HA310B0701	Thumb nut	1	1	2	
B30	H3221B6819	Stopper	1	1	1	
B31	H3200B2100	Screw	1	1	1	SM9/64 (40) ×6.5
B32	H3221B6818	Pin	1	1	1	
B33	H2004J0067	Screw	1	1	1	SM9/64 (40) ×7
B34	H32481B121	Screw			1	SM1/4 (40) ×64
B34	H4805C8001	Screw	1	1		
B35	H3221B0686	Thread tension stud	1	1	1	SM1/4 (40) ×24
B36	H4908C8001	Mounting plate	1	1	1	
B37	H32481B421	Screw			1	SM9/64 (40) ×22
B37	H4804C8001	Screw	1	1		
B38	H32481BD21	Plate complete	1	1	1	
B39	H4713C8001	Thread take-up spring	1	1	1	
B40	H32481BE21	Plate			1	
B41	H32481BF21	Plate complete			1	

B.THREAD TENSION REGULATOR MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
B42	H4712C8001	Thread take-up spring			1	
B43	H32481B821	Bushing			1	
B44	H32481B521	Screw			2	SM1/8 (40) × 3.5
B45	H32481B921	Thread tension post			1	
B46	H32481BB21	Stopper			1	
B47	H32481BC21	Screw			1	SM9/64 (40) × 6
B48	H32481B621	Bushing			1	
B49	H32481B721	Thumb nut	1	1	1	SM1/4 (40) × 4.5
B50	H4911C7101	Solenoid complete	1	1	1	

C.PRESSER FOOT MECHANISM



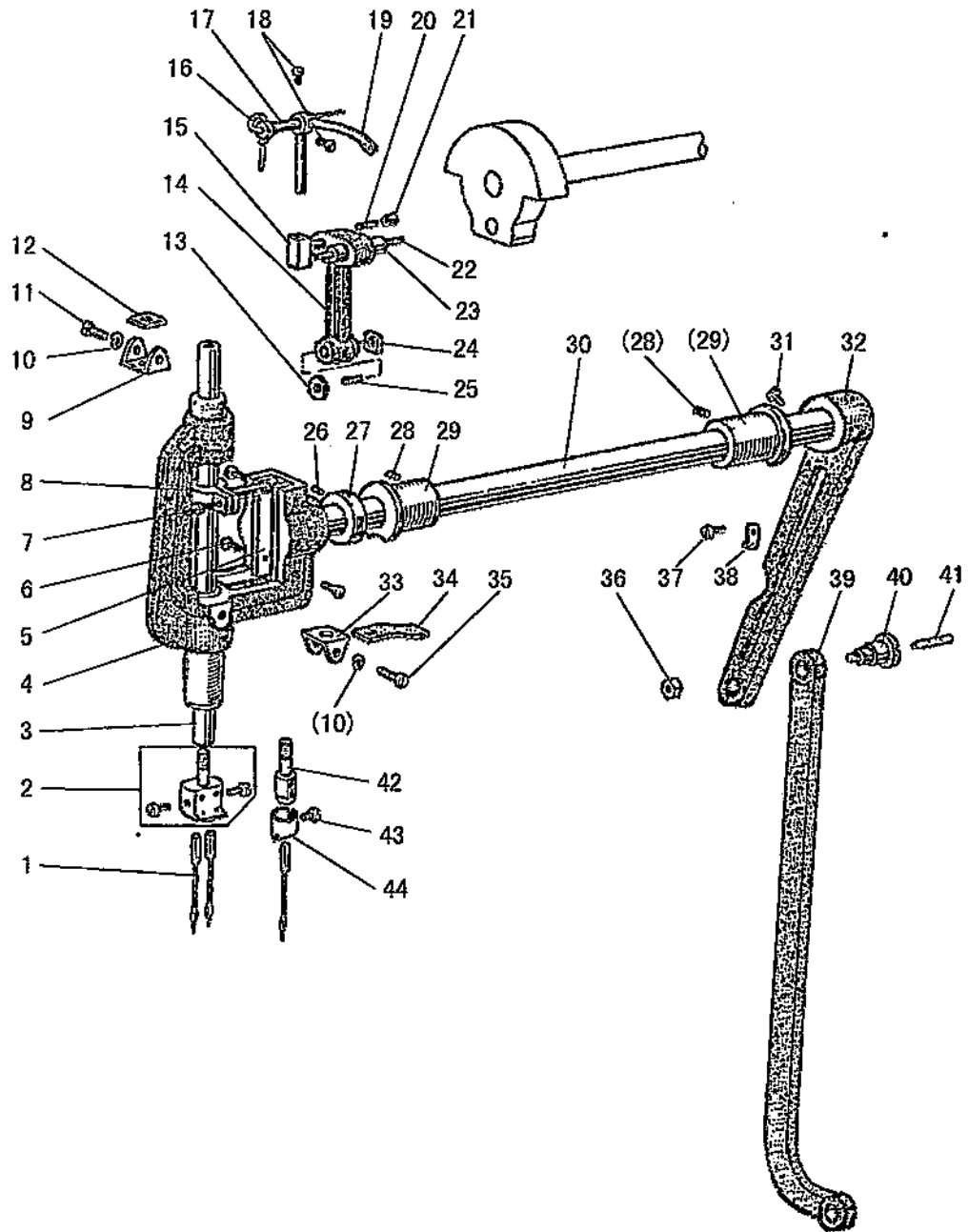
C.PRESSER FOOT MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
C01	H3200E2250	Walking foot guard cover	1	1	1	
C02	H3306E0067	Presser foot complete			1	
C02	H6204E7101	Presser foot complete	1	1		
C03	H3200E2020	Screw	1	1	1	SM1/8 (44) × 9
C04	HA704B0651	Bushing	1	1	1	
C05	HA100C2020	Screw	1	1	1	SM15/64 (28) × 14
C06	HA104F0654	Screw	3	3	3	SM15/64 (28) × 10
C07	H3207E0661	Presser bar guide bracket	1	1	1	
C08	H3200E2010	Presser bar	1	1	1	
C09	H3200E2100	Spring	1	1	1	
C10	HA100H2120	Presser spring guide	1	1	1	
C11	HA117H0692	Nut	1	1	1	
C12	HA309H0681	Screw	1	1	1	
C13	H007009300	C-type stop ring	1	1	1	
C14	HA700R0060	Washer	1	1	1	
C15	HA700R0050	Spring washer	1	1	1	
C16	HA700R0040	Washer	1	1	1	
C17	H4928L8001	Speed command disk F20 (up)	1	1	1	
C18	HA700R0030	Washer	2	2	2	
C19	H4930L8001	Speed command disk F11 (down)	1	1	1	
C20	HA110D0672	Screw	2	2	2	SM15/64 (28) × 12
C21	H4931L8001	Pulley	1	1	1	
C22	HA100C2060	Screw	1	1	1	SM9/32 (28) × 13
C23	H32121C104	Crank	1	1	1	
C24	HA100C2070	Screw	1	1	1	SM9/32 (28) × 10
C25	H3211B204	Arm shaft bushing left (complete)	1	1	1	
C26	H2405D0664	Screw	1	1	1	SM15/64 (28) × 14
C27	H3211B104	Felt	1	1	1	
C31	H3205C0661	Spring flange	3	3	3	
C32	HA110D0672	Screw	1	1	1	SM15/64 (28) × 12
C33	H3205C1021	Pulley	1	1	1	
C34	HA100F2130	Screw	1	1	1	SM15/64 (28) × 6.7
C35	H3205J0662	Needle bearing	1	1	1	
C36	H6906D8001	Arm shaft	1	1	1	
C37	HA703R0065	Detector bracket (complete)	1	1	1	
C38	HA703R0067	Washer	1	1	1	
C39	HA300C2030	Screw	1	1	1	SM1/4 (40) × 4
C40	HA105D0662	Screw	1	1	1	SM1/4 (40) × 6
C41	HA307C0662	Screw	3	3	3	
C42	HA100H2050	Screw	1	1	1	
C43	H3211E0691	Knee lifter lever (right)	1	1	1	
C44	H6304C8001	Cog belt	1	1	1	
C45	H3211E0692	Spring	1	1	1	

C.PRESSER FOOT MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
C46	H3200E2090	Pin type	1	1	1	
C47	H3208E0067	Presser bar lifter	1	1	1	
C48	HA100B2110	Screw	2	2	2	SM11/64 (40) × 5.5
C49	H3200E2060	Eccentric	1	1	1	
C50	H3210E0682	Knee lifter lever left	1	1	1	
C51	H3210E0681	Knee lifter rod	1	1	1	
C52	HA107H0662	Screw	3	3	3	SM3/16 (28) × 2.5
C53	H3210E0683	Operation plate	1	1	1	
C54	H6307E8001	Operation rod	1	1	1	SM9/64 (40) × 6
C55	H3207C0671	Pulley	1	1	1	

D.NEEDLE BAR AND THREAD TAKE-UP MECHANISM



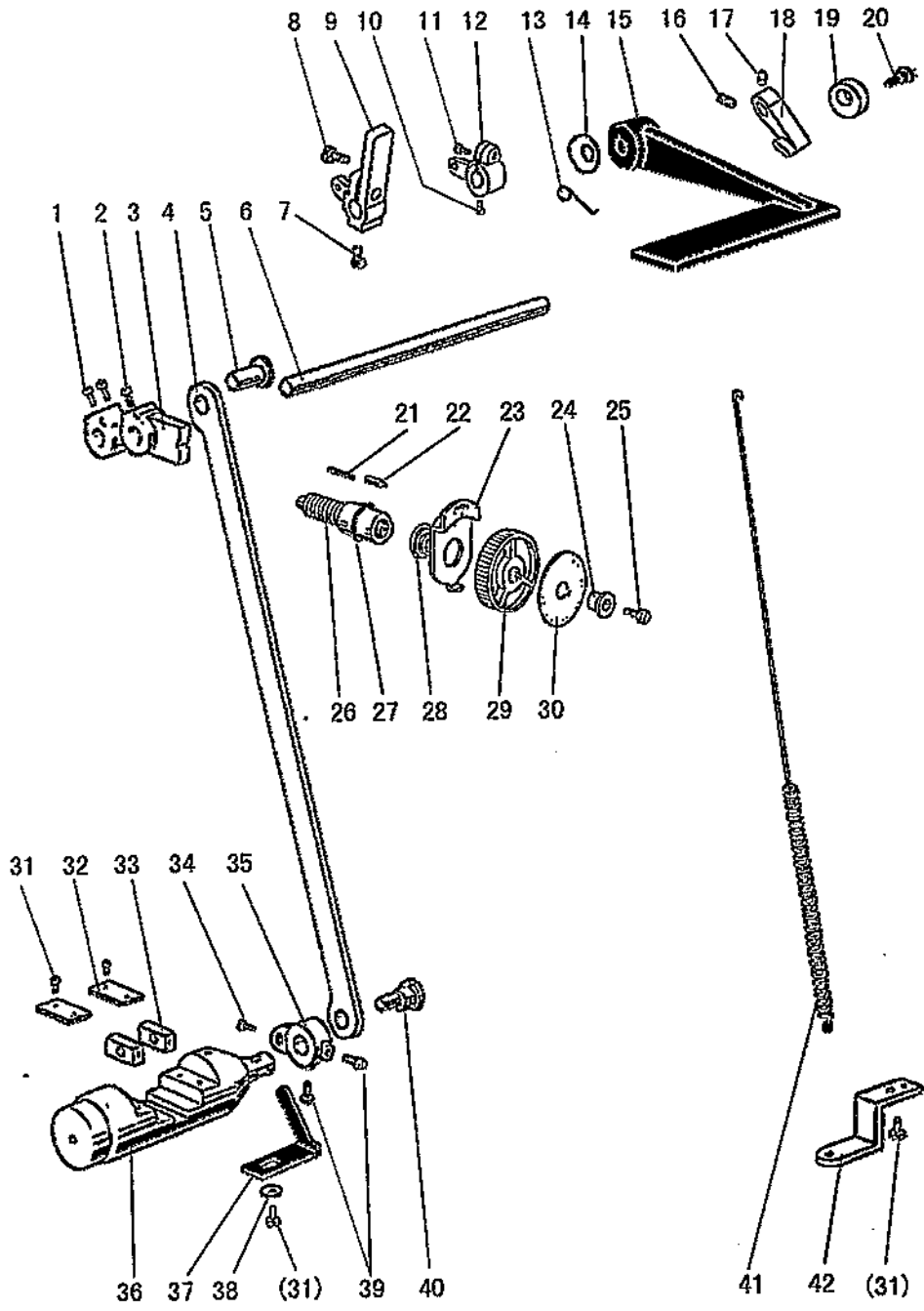
D.NEEDLE BAR AND THREAD TAKE-UP MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
D01	JZDP5000G1803	Needle	1	1	2	DP×5 #18
D02	H3200D2090	Needle clamp			1	
D03	H32111D404	Needle bar	1	1	1	
D04	H32111D104	Needle bar rock frame	1	1	1	
D05	H32111D204	Washer	2	2	2	
D06	H32111D304	Screw	4	4	4	SM3/32 (56) ×4
D07	H32111D604	Screw	1	1	1	SM9/64 (40) ×8.5
D08	H32111D504	Needle bar connecting stud	1	1	1	
D09	H3204D0655	Holder	1	1	1	
D10	H005008030	Spring flange	4	4	4	
D11	H3204D6511	Screw	2	2	2	SM1/8 (44) ×3.5
D12	H3204D0654	Felt	1	1	1	
D13	H3204D6512	Washer	1	1	1	
D14	H32111D704	Lever for pulley	1	1	1	
D15	H2405D1112	Thread take-up slide brock	1	1	1	
D16	H2405D1122	Oil wick	1	1	1	
D17	H32422C108	Shaft	1	1	1	
D18	HA110D0672	Screw	3	3	3	SM15/64 (28) ×12
D19	H2405D1111	Thread take-up lever	1	1		
D19	H3504B0651	Thread take-up lever			1	
D20	H24211D405	Oil wick	1	1	1	
D21	H24211D305	Plug	1	1	1	
D22	H2405D0663	Oil wick	1	1	1	
D23	H2405D0662	Pin	1	1	1	
D24	H32111D804	Slide block	1	1	1	
D25	H3204D6513	Felt	1	1	1	
D26	HA307C0662	Screw	1	1	1	SM1/4 (40) ×6
D27	H3205D0066	Collar	1	1	1	
D28	H2405D0664	Screw	2	2	2	SM15/64 (28) ×7
D29	H3204B0652	Bushing	2	2	2	
D30	H3204D0652	Needle bar rock shaft	1	1	1	
D31	H2012N0652	Screw	1	1	1	SM1/4 (24) ×15
D32	H6306D8001	Crank	1	1	1	
D33	H3204D0657	Holder	1	1	1	
D34	H3204D0656	Felt	1	1	1	
D35	H3204D6510	Screw	2	2	2	SM1/8 (44) ×4.8
D36	H32311D506	Nut	1	1	1	SM5/16 (24) ×5.5
D37	HA7311CC06	Screw	1	1	1	
D38	H32311D606	Holder	1	1	1	
D39	H6304D8001	Link	1	1	1	
D40	H32311D306	Screw	1	1	1	SM5/16 (24) ×26.2
D41	H32311D406	Oil wick	1	1	1	
D42	H6204D8001	Needle clamp	1	1		

D.NEEDLE BAR AND THREAD TAKE-UP MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
D41	HA100C2170	Screw	1	1		SM1/8 (44) ×4.6
D42	HA500C2030	Thread guide for needle bar	1	1		

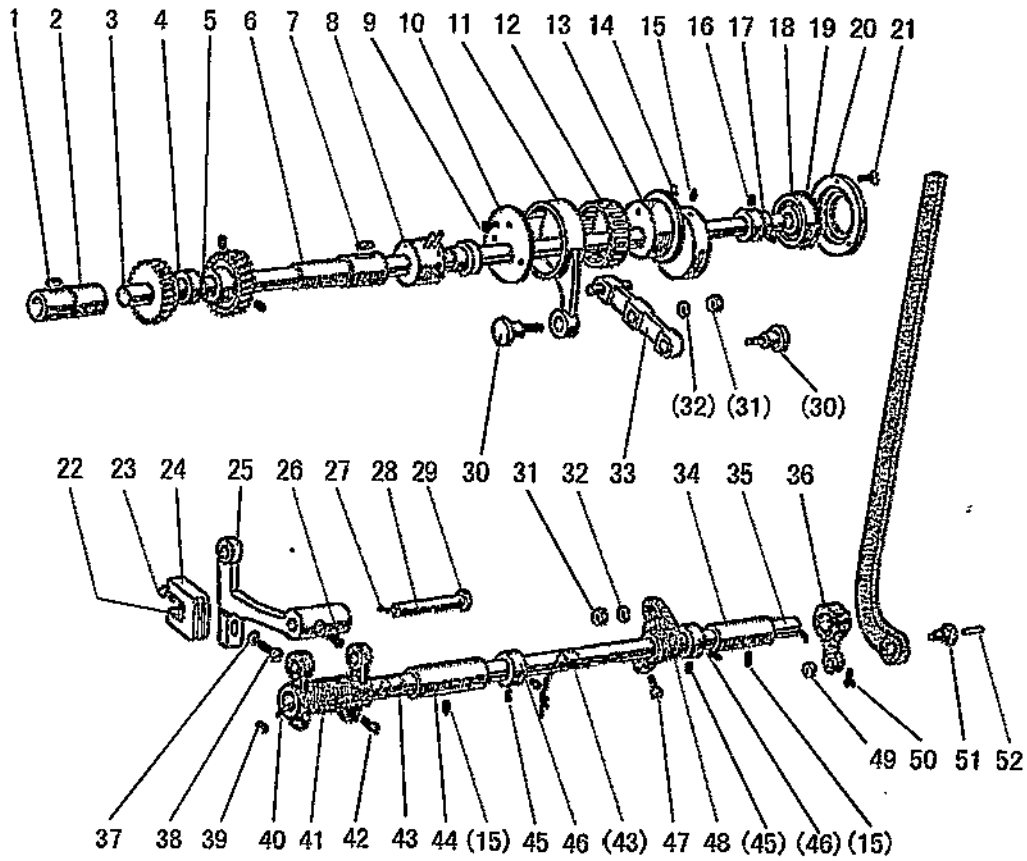
E. STITCH REGULATOR MECHANISM



E.STITCH REGULATOR MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
E01	HA113F0684	Screw	2	2	2	SM15/64 (28) × 8.5
E02	H3200F2020	Screw	1	1	1	SM15/64 (28) × 12
E03	H6309F8001	Screw bar	1	1	1	
E04	H6304F8001	Link	1	1	1	
E05	HA100G2070	Hinge pin	1	1	1	
E06	HH30F58001	Reverse stitch shaft (upper)	1	1	1	
E07	H3207F0672	Screw	1	1	1	SM11/64 (40) × 8.5
E08	HA800F2020	Screw	1	1	1	SM15/64 (28) × 12
E09	HF30G58001	Reverse stitch shaft crank	1	1	1	
E10	HA800F2020	Screw	1	1	1	SM15/64 (28) × 12
E11	H3207F0672	Screw	1	1	1	SM11/64 (40) × 8.5
E12	H6306F8001	Crank	1	1	1	
E13	H4939L8001	Spring	1	1	1	
E14	HA100F2110	Washer	1	1	1	
E15	H4906G8001	Reverse sewing lever	1	1	1	
E16	HA113F0684	Screw	1	1	1	15/64 (28) × 8.5
E17	HA3411D308	Screw	1	1	1	15/64 (28) × 7
E18	H4936L8001	Lever	1	1	1	
E19	H4938L8001	Rubber ring	1	1	1	
E20	H4937L8001	Screw	1	1	1	
E21	H3200F2110	Spring	1	1	1	
E22	HA100F2080	Pin	1	1	1	
E23	HA720F0683	Stopper pin releasing lever	1	1	1	
E24	HA720F0685	Bushing	1	1	1	
E25	HA720F0686	Screw	1	1	1	SM3/16 (28) × 6
E26	HA109F0671	Screw bar	1	1	1	
E27	HA109F0674	O-ring	1	1	1	
E28	HA720F0687	Coil spring	1	1	1	
E29	HA7421F120	Dial	1	1	1	
E30	H8504H8001	Stitch length indicating plate	1	1	1	
E31	HA300C2030	Screw	6	6	6	SM11/64 (40) × 8
E32	H3212F0691	Guide plate	2	2	2	
E33	H3208G0672	Square block	2	2	2	
E34	H415050140	Screw	1	1	1	
E35	H3210F0683	Stitch regulating crank lower	1	1	1	
E36	H3212F0692	Reverse block	1	1	1	
E37	H3200F2080	Holding plate of reverse bar	1	1	1	
E38	HA703R0067	Washer	1	1	1	
E39	H428050060	Screw	2	2	2	
E40	H6307F8001	Spring	1	1	1	
E41	H6308F8001	Guide plate	1	1	1	
E42	H3206F0662	Pin	1	1	1	

F.LOWER SHAFT AND FEED ROCK SHAFT MECHANISM



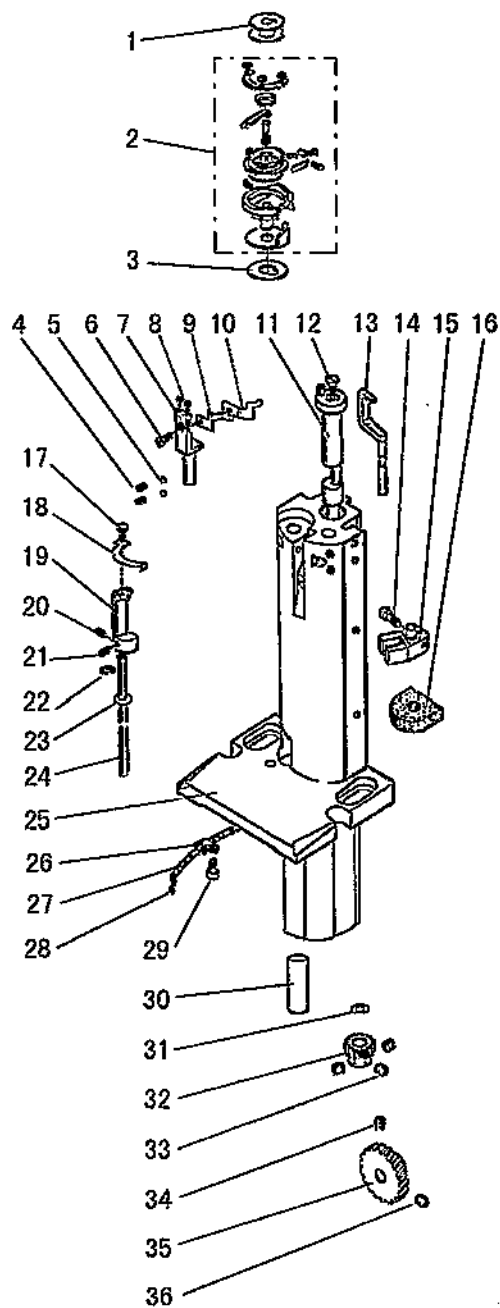
F.LOWER SHAFT AND FEED ROCK SHAFT MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
F01	H32132B204	Oil wick	1	1	1	
F02	H6315B8001	Lower shaft bushing (left)	1	1	1	
F03	HH30H48001	Lower shaft	1	1	1	
F04	H3205H0655	Feed lifting cam	1	1	1	
F05	H3205H0654	Screw	1	1	1	SM1/4 (40) × 5
F06	H6317B8001	Lower shaft bushing (right)	1	1	1	
F07	H32132B204	Oil wick	1	1	1	
F08	HH30B97101	Lower shaft bushing complete (middle)	1	1	1	
F09	HA700F2100	Screw	3	3	3	SM11/64 (40) × 7
F10	H32372G208	Washer	1	1	1	
F11	H32372G408	Feed connecting rod	1	1	1	
F12	H32372G308	Needle bearing	1	1	1	
F13	H32372G108	Feed eccentric	1	1	1	
F14	HA100C2020	Screw	1	1	1	SM15/64 (28) × 14
F15	H2405D0664	Screw	3	3	3	SM15/64 (28) × 14
F16	HA105D0662	Screw	2	2	2	SM1/4 (24) × 4
F17	H3208H0662	Bushing	1	1	1	
F18	H3208H0661	Needle bearing	1	1	1	
F19	HA112D3012	Washer	1	1	1	
F20	H3200H2060	Bearing holder	1	1	1	
F21	HA7311C306	Screw	3	3	3	SM9/64 (28) × 7
F22	H3205H0652	Felt	1	1	1	
F23	H3205H0653	Screw	1	1	1	SM1/8 (44) × 4
F24	H3205H0651	Feed bar connecting fork	1	1	1	
F25	H6305G8001	Feed bar	1	1	1	
F26	H42905005	Screw	1	1	1	
F27	H3205G0662	Oil wick	1	1	1	
F28	H32243G205	Feed bar shaft	1	1	1	
F29	H007009070	Retaining ring C-type	1	1	1	
F30	H3208G0674	Screw	2	2	2	SM1/4 (24) × 22
F31	H3208G0675	Nut	2	2	2	SM1/4 (24) × 3.5
F32	H005008060	Spring flange	2	2	2	
F33	H3208G2011	Link (complete)	1	1	1	
F34	H3204B0656	Feed rock shaft bushing	1	1	1	
F35	H3204G0651	Feed rock shaft	1	1	1	
F36	H6305D8001	Feed rock shaft crank(right)	1	1	1	
F37	H005001060	Washer	1	1	1	
F38	H3200H2040	Bolt	1	1	1	SM15/64 (28) × 18
F39	H3200G2030	Holder	1	1	1	
F40	H3204G0031	Oil wick	1	1	1	
F41	H3205G1032	Feed connection crank (left)	1	1	1	
F42	HA104G0012	Screw	2	2	2	SM3/16 (28) × 12
F43	H3204G0652	Felt	2	2	2	

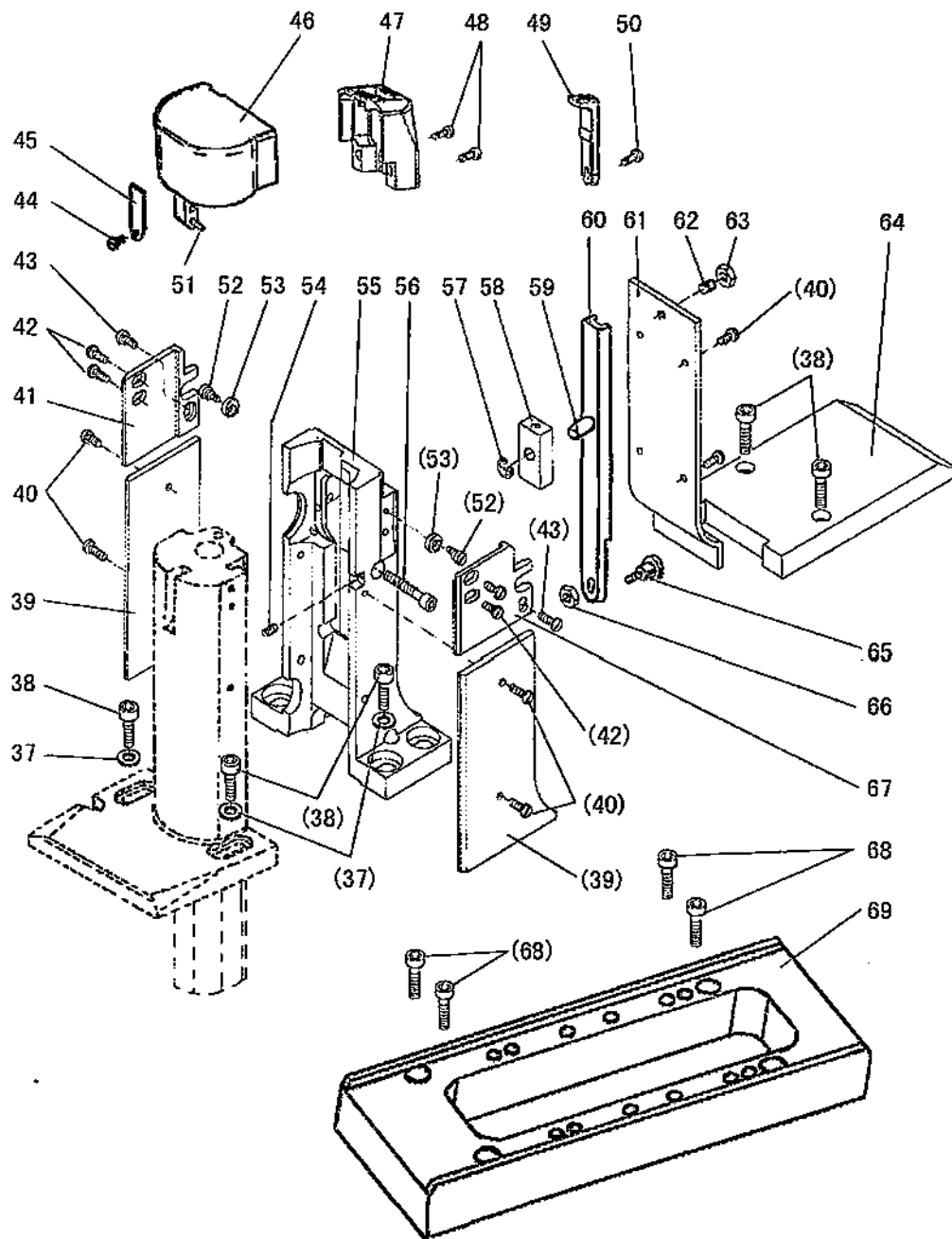
F.LOWER SHAFT AND FEED ROCK SHAFT MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
F44	HA100G2120	Bushing	1	1	1	
F45	HA105D0662	Screw	4	4	4	SM1/4 (24) × 4
F46	HA106G0661	Collar	2	2	2	
F47	H3208G0676	Screw	1	1	1	SM15/64 (28) × 14
F48	H3208G0673	Connecting rod crank(middle)	1	1	1	
F49	H3206D0674	Nut	1	1	1	SM5/16 (24) × 5
F50	H2012N0652	Screw	1	1	1	SM1/4 (24) × 15
F51	H32311D306	Screw	1	1	1	SM5/16 (24) × 26.2
F52	H32311D406	Oil wick	1	1	1	

G.HOOK SADDLE MECHANISM GC24518-1LD (1)



G.HOOK SADDLE MECHANISM GC24518-1LD (2)



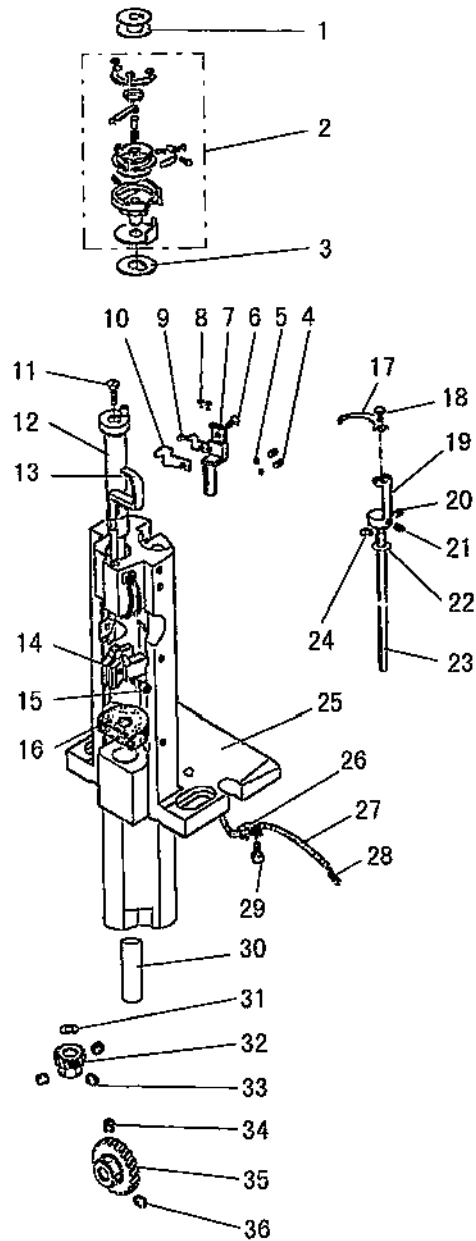
G.HOOK SADDLE MECHANISM GC24518-1LD

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
G01	HG187J8001	Bobbin	1			
G02	HG145J7101	Hook complete	1			
G03	HG146J8001	Washer	1			
G04	H431040050	Screw	2			
G05	HG123J8001	Washer	2			M4 (0.5) × 5
G06	H403025040	Screw	1			M2.5 × 4
G07	HG119J8001	Knife bearer	1			
G08	H401020050	Screw	2			
G09	HG121J8001	Spring	1			
G10	HG122J8001	Counter knife	1			
G11	HH30187101	Hook shaft	1			
G12	HG127J8001	Screw	1			
G13	HG128J8001	Opener	1			
G14	H415040100	Screw	1			
G15	HG131J8001	Lifter hook	1			
G16	HG133J8001	Felt	1			
G17	HG109J8001	Screw	1			
G18	HG108J8001	Knife	1			
G19	HG110J8001	Knife bearer	1			
G20	HG111J8001	Screw	1			
G21	HG112J8001	Screw	1			
G22	H007013060	E-type ring	1			
G23	HF94518001	Washer	1			
G24	HH30178001	Knife shaft	1			
G25	HH30168001	Hook saddle	1			
G26	H6732K8001	Holder	1			
G27	H3204K0655	Oil pipe	1			
G28	HG141J8001	Oil wick	1			
G29	H401040060	Screw	1			
G30	HH31138001	Bushing	1			
G31	H3125E7201	Washer	1			
G32	H32142I204	Gear (small)	1			
G33	HA105D0662	Screw	3			1/4 (40) × 6.5
G34	H3204I6510	Screw	1			
G35	H32142I104	Gear (large)	1			1/4 (40) × 6
G36	HA307C0662	Screw	1			
G37	H005001060	Washer	6			
G38	H415060160	Screw	8			
G39	HG90J88001	Cover plate	2			
G40	HG163J8001	Screw	8			
G41	HG91J48001	Plate Holder	1			
G42	HG163J8001	Screw	4			
G43	HG191J8001	Screw	2			

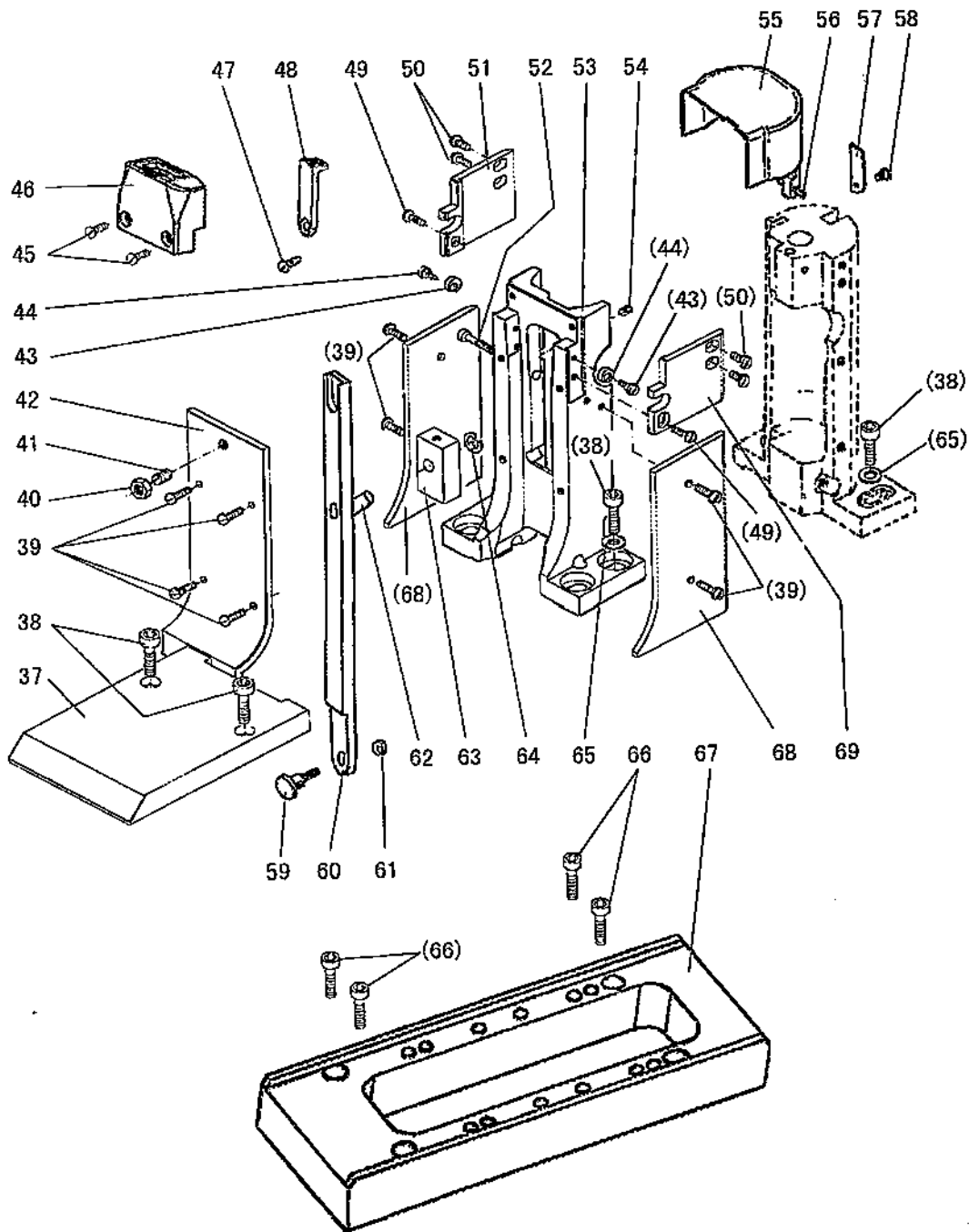
G.HOOK SADDLE MECHANISM GC24518-1LD

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
G44	H401030060	Screw	1			
G45	HG171J8001	Spring	1			
G46	HG164J7101	Cover	1			
G47	HH10I58001	Needle plate	1			
G48	HD726G8001	Screw	2			
G49	HH10I68001	Feed dog	1			
G50	HG177J8001	Screw	1			
G51	H604020180	Taper pin	1			
G52	HG182J8001	Screw	2			
G53	HG181J8001	Adjust cover	2			
G54	H427040060	Screw	1			
G55	HG90J78001	Transp.column	1			
G56	H415040370	Screw	1			
G57	H007013060	E-type ring	1			
G58	HG156J8001	Square block	1			
G59	HG155J8001	Pin	1			
G60	HH31I18001	Transp.lever	1			
G61	HG91J88001	Cover plate	1			
G62	H428050080	Screw	1			
G63	H003008050	Nut	1			
G64	HG91J98001	Cover	1			
G65	H631I18001	Screw	1			
G66	H2000M0120	Nut	1			
G67	HC91J58001	Plate Holder	1			
G68	H415060250	Screw	4			
G69	HH31I28001	Plate	1			

H.HOOK SADDLE MECHANISM GC24518-1RD (1)



H.HOOK SADDLE MECHANISM GC24518-1RD (2)



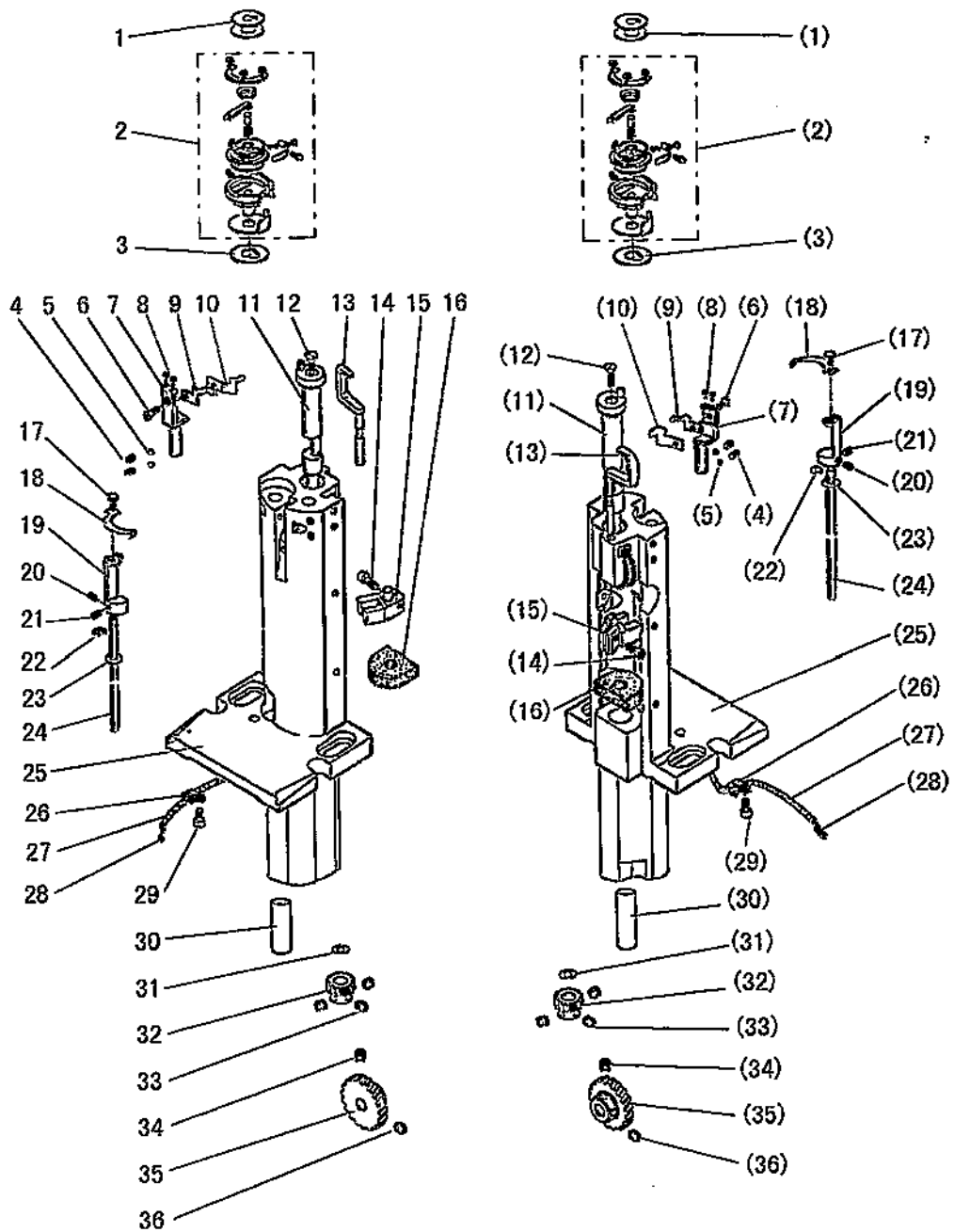
H.HOOK SADDLE MECHANISM GC24518-1RD

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
H01	HG187J8001	Bobbin		1		
H02	HG145J7101	Hook complete		1		
H03	HG146J8001	Washer		1		
H04	H431040050	Screw		2		M4 (0.5) × 5
H05	HG123J8001	Washer		2		
H06	H403025040	Screw		1		M2.5 × 4
H07	HG119J8001	Knife bearer		1		
H08	H401020050	Screw		2		
H09	HG121J8001	Spring		1		
H10	HG122J8001	Counter knife		1		
H11	HG127J8001	Screw		1		
H12	HH30187101	Hook shaft		1		
H13	HG128J8001	Opener		1		
H14	HG131J8001	Lifter hook		1		
H15	H415040100	Screw		1		
H16	HG133J8001	Felt		1		
H17	HG108J8001	Knife		1		
H18	HG109J8001	Screw		1		
H19	HG110J8001	Knife bearer		1		
H20	HG112J8001	Screw		1		
H21	HG111J8001	Screw		1		
H22	HF945I8001	Washer		1		
H23	HH30178001	Knife shaft		1		
H24	H007013060	E-type ring		1		
H25	HH30168001	Hook saddle		1		
H26	H6732K8001	Holder		1		
H27	H3204K0655	Oil pipe		1		
H28	HG141J8001	Oil wick		1		
H29	H401040060	Screw		1		
H30	HH31I38001	Bushing		1		
H31	H3125E7201	Washer		1		
H32	H32142I204	Gear (small)		1		1/4 (40) × 6.5
H33	HA105D0662	Screw		3		
H34	H3204I6510	Screw		1		1/4 (40) × 6
H35	H32142I104	Gear (large)		1		
H36	HA307C0662	Screw		1		
H37	HG91J98001	Cover		1		
H38	H415060160	Screw		8		
H39	HG163J8001	Screw		8		
H40	H003008050	Nut		1		
H41	H428050080	Screw		1		
H42	HG91J88001	Cover plate		1		
H43	HG181J8001	Adjust cover		1		

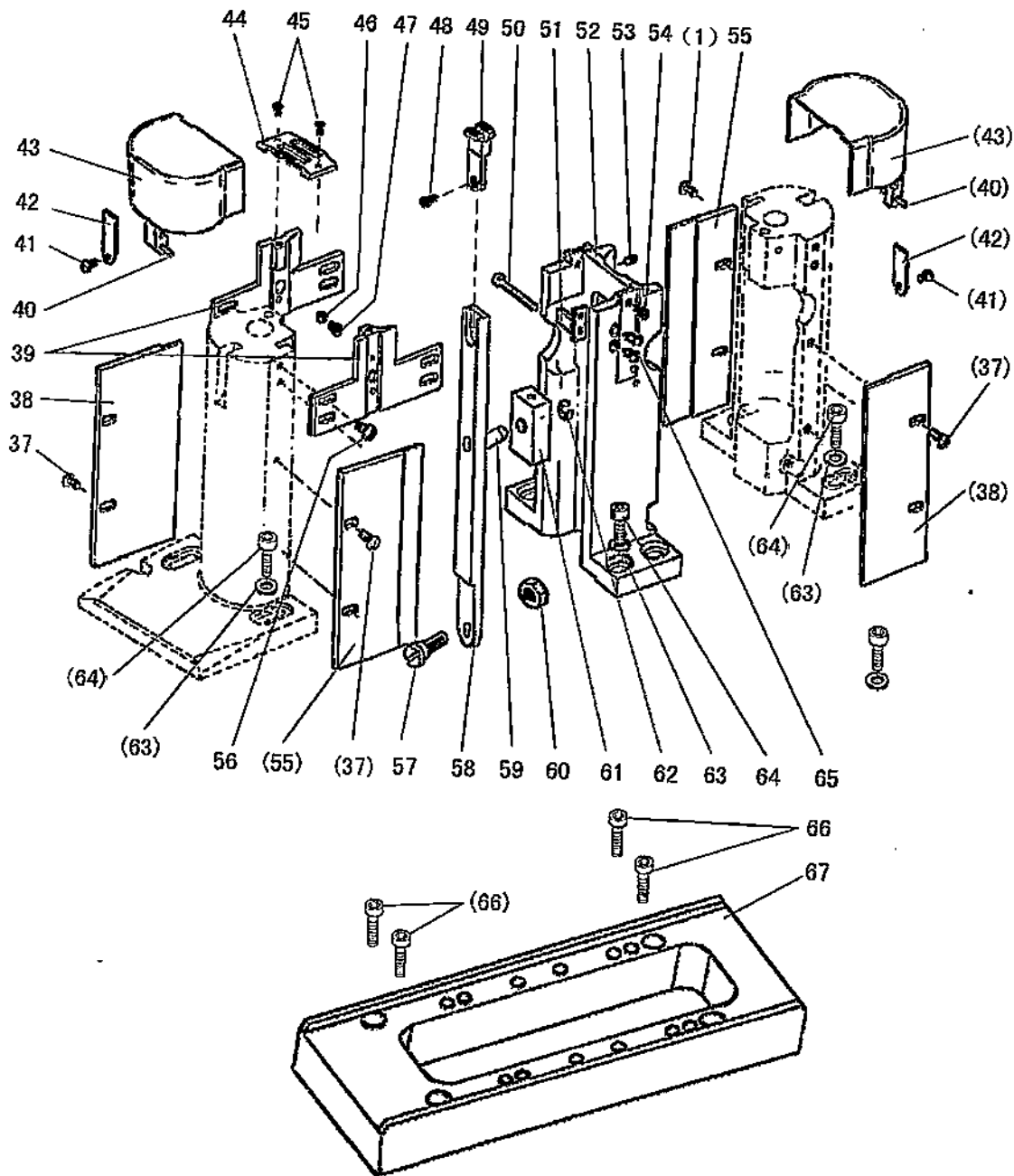
H.HOOK SADDLE MECHANISM GC24518-1RD

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
H44	HG182J8001	Screw		1		
H45	HD726G8001	Screw		2		
H46	HH20158001	Needle plate		1		
H47	HG177J8001	Screw		1		
H48	HH20168001	Feed dog		1		
H49	HG191J8001	Screw		2		
H50	HG163J8001	Screw		4		
H51	HG91J58001	Plate Holder		1		
H52	H415040370	Screw		1		
H53	HG90J78001	Transp.column		1		
H54	H427040060	Screw		1		
H55	HG164J7101	Cover		1		
H56	H604020180	Taper pin		1		
H57	HG171J8001	Spring		1		
H58	H401030060	Screw		1		
H59	H631118001	Screw		1		
H60	HH31118001	Transp.lever		1		
H61	H2000M0120	Nut		1		
H62	HG155J8001	Pin		1		
H63	HG156J8001	Square block		1		
H64	H007013060	E-type ring		1		
H65	H005001060	Washer		6		
H66	H415060250	Screw		4		
H67	HH31128001	Plate		1		
H68	HG90J88001	Cover plate		2		
H69	HG91J48001	Plate Holder		1		

I.HOOK SADDLE MECHANISM GC24518-2D (1)



I.HOOK SADDLE MECHANISM GC24518-2D (2)



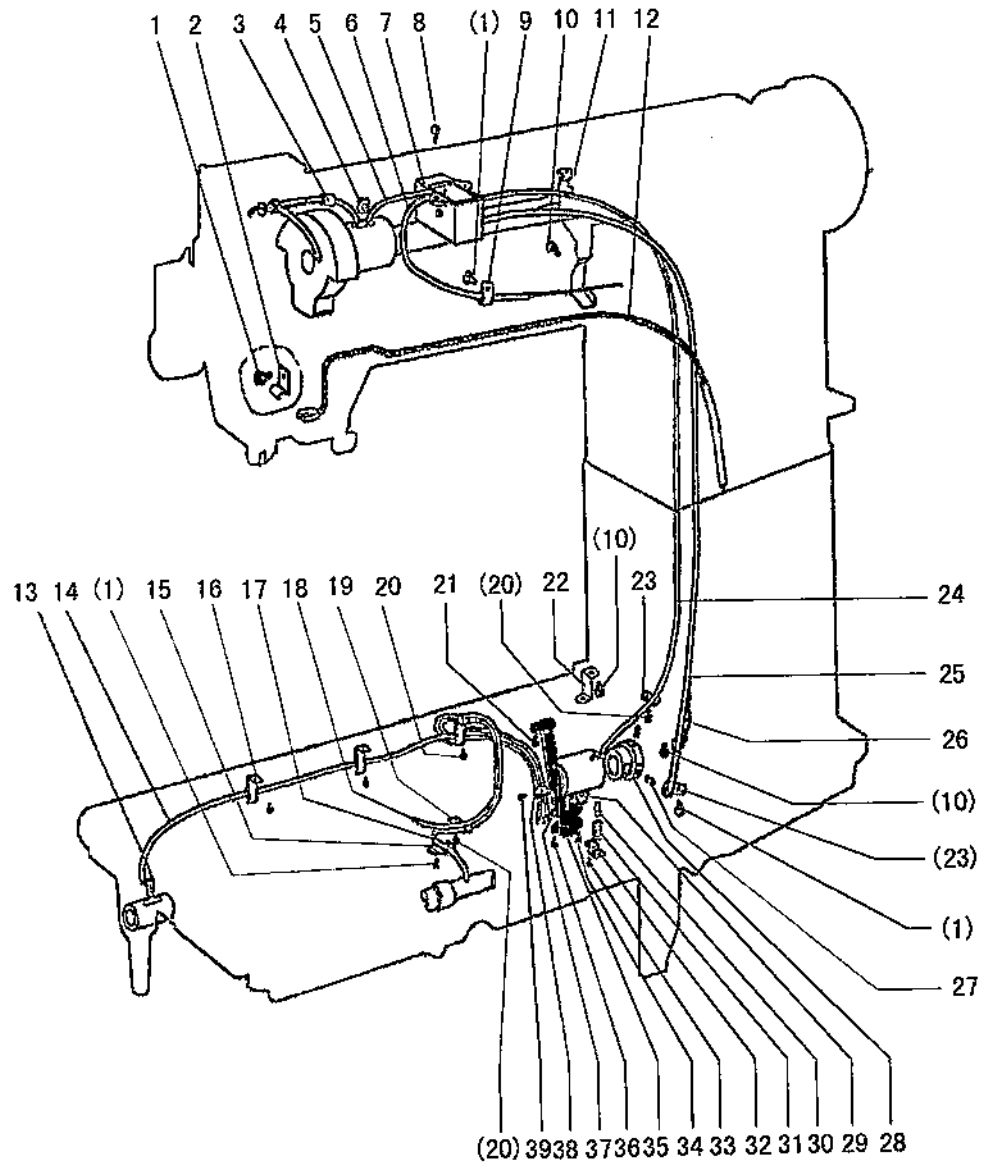
L.HOOK SADDLE MECHANISM GC24518-2D

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
I01	HG187J8001	Bobbin			2	
I02	HG145J7101	Hook complete			2	
I03	HG146J8001	Washer			2	
I04	H431040050	Screw			4	M4 (0.5) × 5
I05	HG123J8001	Washer			4	
I06	H403025040	Screw			2	M2.5 × 4
I07	HG119J8001	Knife bearer			2	
I08	H401020050	Screw			4	
I09	HG121J8001	Spring			2	
I10	HG122J8001	Counter knife			2	
I11	HH30187101	Hook shaft			2	
I12	HG127J8001	Screw			2	
I13	HG128J8001	Opener			2	
I14	H415040100	Screw			2	
I15	HG131J8001	Lifter hook			2	
I16	HG133J8001	Felt			2	
I17	HG109J8001	Screw			2	
I18	HG108J8001	Knife			2	
I19	HG110J8001	Knife bearer			2	
I20	HG111J8001	Screw			2	
I21	HG112J8001	Screw			2	
I22	H007013060	E-type ring			2	
I23	HF94518001	Washer			2	
I24	HH30178001	Knife shaft			2	
I25	HH30168001	Hook saddle			2	
I26	H6732K8001	Holder			2	
I27	H3204K0655	Oil pipe			2	
I28	HG141J8001	Oil wick			2	
I29	H401040060	Screw			2	
I30	HH31138001	Bushing			2	
I31	H3125E7201	Washer			2	
I32	H32142I204	Gear (small)			2	1/4(40) × 6.5
I33	HA105D0662	Screw			6	
I34	H3204I6510	Screw			2	1/4 (40) × 6
I35	H32142I104	Gear (large)			2	
I36	HA307C0662	Screw			2	
I37	HG163J8001	Screw			8	
I38	HG161J8001	Cover plate(right)			2	
I39	HG179J8001	Plate Holder			2	
I40	H604020180	Taper pin			2	
I41	H401030060	Screw			2	
I42	HG171J8001	Spring			2	
I43	HG164J7101	Cover			2	

I.HOOK SADDLE MECHANISM GC24518-2D

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
I44	HH31168001	Needle plate			1	
I45	HG175J8001	Screw			2	
I46	HG181J8001	Adjust cover			2	
I47	HG182J8001	Screw			2	
I48	HG177J8001	Screw			1	
I49	HH31158001	Feed dog			1	
I50	H415040370	Screw			1	
I51	HG169J8001	Guide plate			1	
I52	HG150J8001	Transp.column			1	
I53	H427040060	Screw			1	
I54	HG191J8001	Screw			2	
I55	HG162J8001	Cover plate(left)			2	
I56	HG163J8001	Screw			8	
I57	H631118001	Screw			1	
I58	HH31118001	Transp.lever			1	
I59	HG155J8001	Pin			1	
I60	H2000M0120	Nut			1	
I61	HG156J8001	Square block			1	
I62	H007013060	E-type ring			1	
I63	H005001060	Washer			8	
I64	H415060160	Screw			8	
I65	H401035080	Screw			2	
I66	H415060250	Screw			4	
I67	HH31128001	Plate			1	

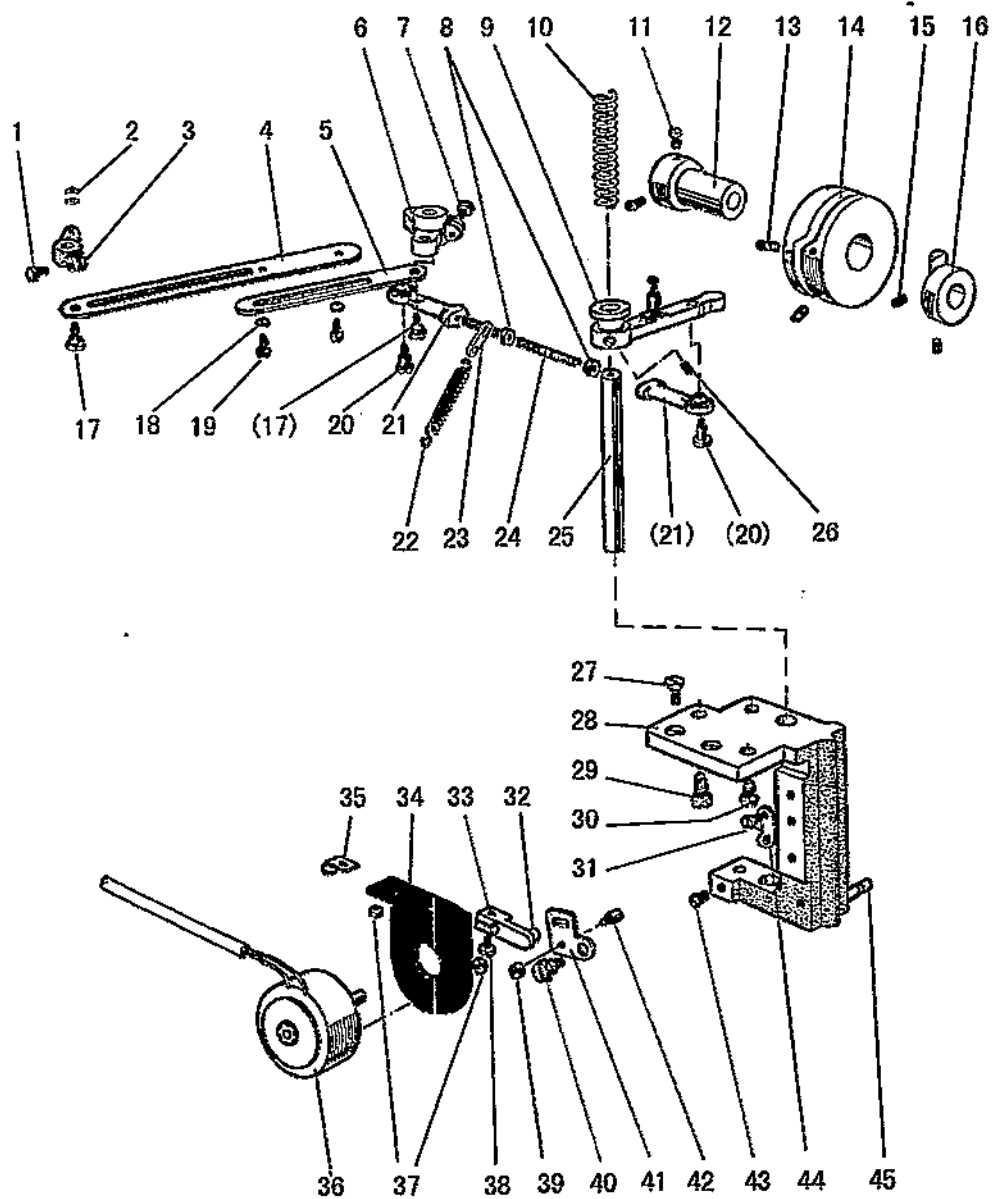
J.OIL LUBRICATION MECHANISM



J.OIL LUBRICATION MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
J01	HA300C2030	Screw	4	4	4	
J02	H3200K0050	Holder	1	1	1	
J03	H32422C208	Rubber plug	1	1	1	
J04	H32175B304	Felt	2	2	2	
J05	H3204K0032	Oil pipe complete	1	1	1	
J06	H3204K0043	Oil pipe complete	1	1	1	
J07	H3204K0011	Oil pipe complete	1	1	1	
J08	H411040160	Screw	2	2	2	
J09	H3200K0030	Holder	1	1	1	
J10	HA300B2170	Spring	2	2	2	
J11	H3200K0040	Holder	1	1	1	
J12	H3209K0066	Oil pipe complete	1	1	1	
J13	H3200K0180	Oil wick	3	3	3	
J14	H3216K0070	Oil pipe complete	1	1	1	
J15	H32311D606	Holder	1	1	1	
J16	H3200K0160	Holder	3	3	3	
J17	H3218K0072	Oil pipe complete	1	1	1	
J18	H3217K0071	Oil pipe complete	1	1	1	
J19	H3200K0170	Holder	1	1	1	
J20	HA300B2130	Screw	5	5	5	
J21	HA100E2150	Screw	2	2	2	
J22	H3200K0250	Holding plat	1	1	1	
J23	H3200K0190	Holder	2	2	2	
J24	H6304K8001	Oil pipe	1	1	1	
J25	H6305K8001	Oil pipe	1	1	1	
J26	H3200K0200	Holder	1	1	1	
J27	H3230K0751	Screw	2	2	2	
J28	H3230K0752	Bushing	1	1	1	
J29	H3215K0696	Oil pipe	1	1	1	
J30	H1100I2070	Pin	1	1	1	
J31	H1100I2080	Spring	1	1	1	
J32	H1100I2110	Spring holder	1	1	1	
J33	H3204D6510	Screw	1	1	1	
J34	H3215K0693	Screw	1	1	1	
J35	H3215K0692	Filter	1	1	1	
J36	H3215K0694	Screw	1	1	1	
J37	H3215K4011	Mounting plate complete	1	1	1	
J38	H3215K0695	Holder	1	1	1	
J39	HA106B0676	Screw	1	1	1	

K.KNIFE MECHANISM



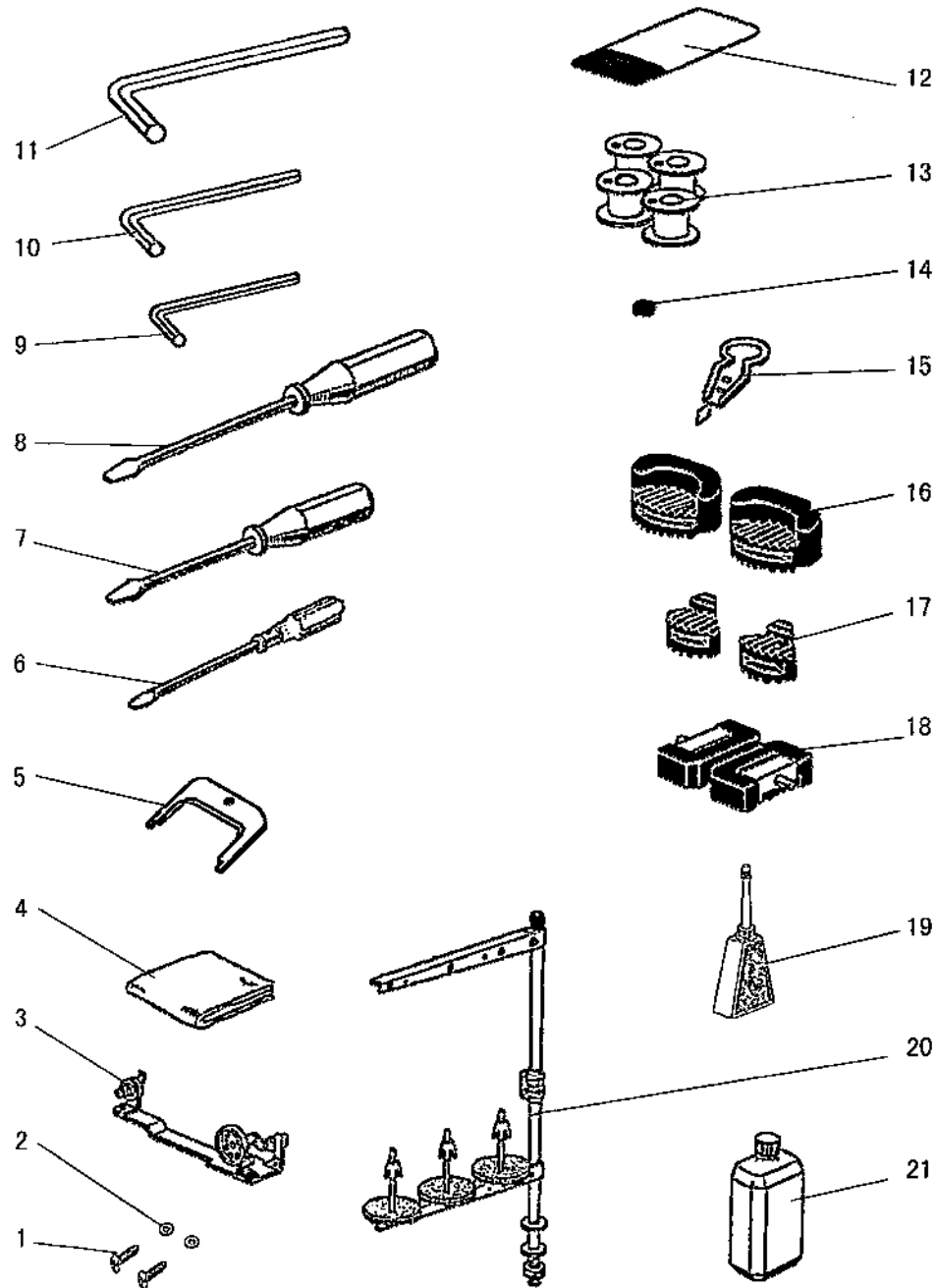
K.KNIFE MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
K01	H4907K8001	Screw			1	
K02	H7314G8001	Washer			2	
K03	HH31M58001	Arm			1	
K04	HH30M48001	Link			1	
K05	H4909K8001	Link			1	
K06	HH10M58001	Arm	1			
K06	HH30M58001	Arm		1	1	
K07	H4913K8001	Screw	1	1	1	
K08	H003002050	Nut	2	2	2	
K09	HH30M87101	Vibrating crank complete	1	1	1	
K10	H4945K8001	Spring	1	1	1	
K11	HA113F0684	Screw	2	2	2	
K12	H6904J8001	Bushing	1	1	1	
K13	HA710E0692	Screw	2	2	2	
K14	HH31M68001	Cam	1	1	1	
K15	H431050050	Screw	2	2	2	M5×5
K16	H4934K8001	Cam	1	1	1	
K17	H4905K8001	Screw			2	
K18	H005001050	Washer			2	
K19	H4911K8001	Bolt			2	
K20	H4936K8001	Screw	2	2	2	
K21	H3405D0663	Link	2	2	2	
K22	H6017H8001	Spring	1	1	1	
K23	HH32M18001	Mounting plate	1	1	1	
K24	H3405D0661	Screw bar		1	1	
K24	HH10M68001	Screw bar	1			
K25	H4963K8001	Shaft	1	1	1	
K26	H431050050	Screw	2	2	2	M5×5
K27	H411050160	Screw	2	2	2	
K28	H4965K8001	Set plate	1	1	1	
K29	H2012N0652	Screw	1	1	1	M5×16
K30	H4983K8001	Screw	1	1	1	
K31	H4967K8001	Screw	2	2	2	
K32	H4973K8001	Pin	1	1	1	
K33	H4974K8001	Arm	1	1	1	
K34	H4977K8001	Mounting plate	1	1	1	
K35	H4981K8001	Holder	1	1	1	
K36	H4979K8002	Solenoid complete	1	1	1	
K37	H003008050	Nut	2	2	2	
K38	HA111G0683	Screw	1	1	1	
K39	HA7111N304	Nut	1	1	1	
K40	H4972K8001	Screw	1	1	1	
K41	H4971K8001	Lever	1	1	1	

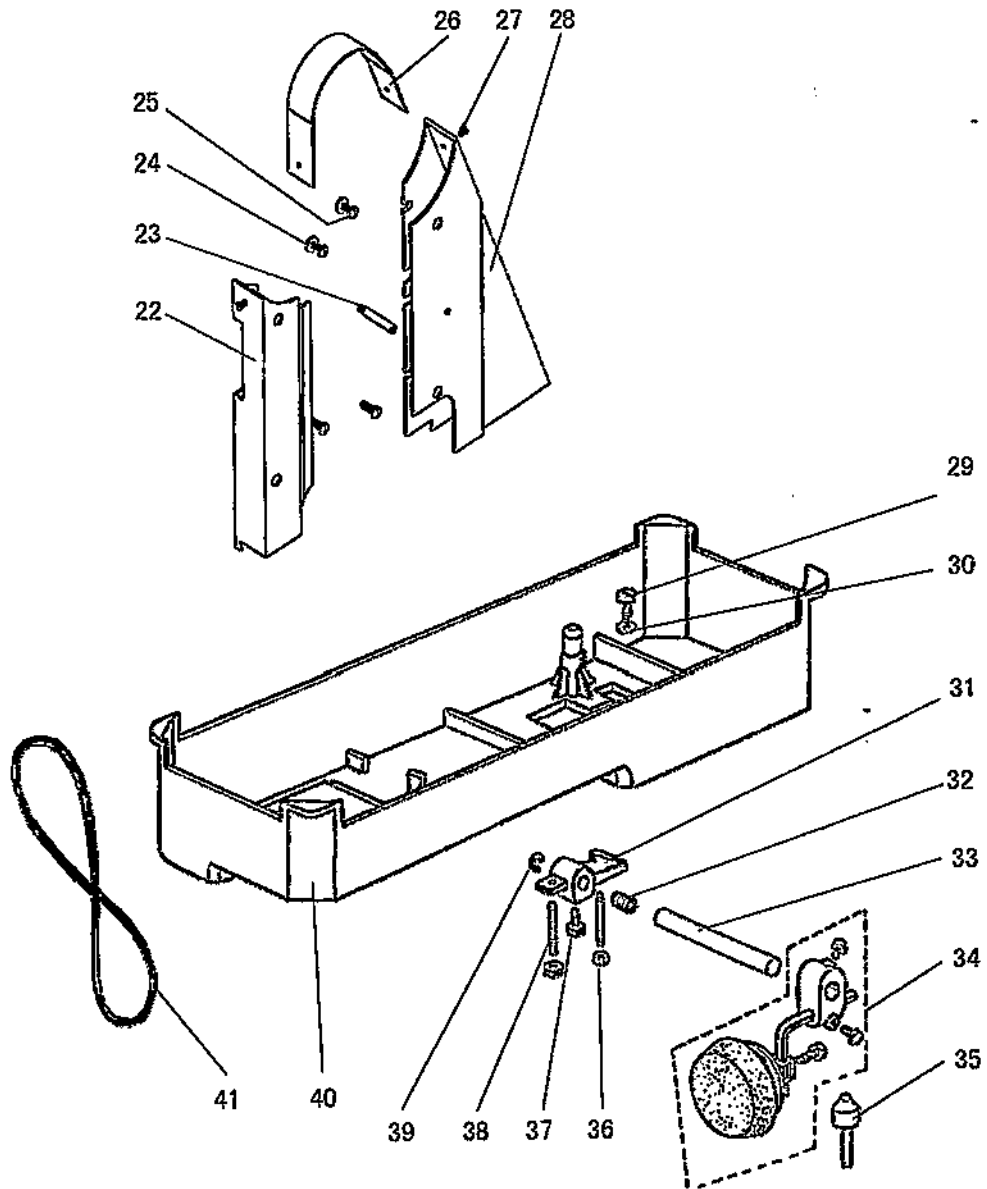
K.KNIFE MECHANISM

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
K42	H4970K8001	Spring	1	1	1	
K43	H4969K8001	Screw	1	1	1	
K44	H4966K8001	Stopper	1	1	1	
K45	HA100H2080	Pin type	1	1	1	

L.ACCESSORIES (1)



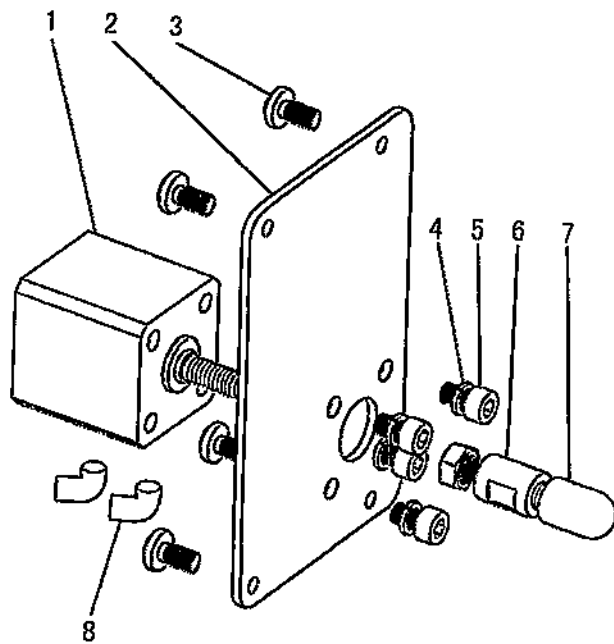
L.ACCESSORIES (2)



L.ACCESSORIES

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
L01	H801045200	Vibration preventing rubber	2	2	2	
L02	HA300J2230	Washer	2	2	2	
L03	HA706S0067	Bobbin winder	1	1	1	
L04	HA100J2180	Vinyl cover	1	1	1	
L05	HA704S0654	Adjusting plate for speed command disk	1	1	1	
L06	HA300J2210	Screw driver (small)	1	1	1	
L07	HA300J2200	Screw driver (middle)	1	1	1	
L08	HA300J2070	Screw driver (large)	1	1	1	
L09	HB01001015	Socket wrench	1	1	1	
L10	HB01001025	Socket wrench	1	1	1	
L11	HB01001030	Socket wrench	1	1	1	
L12	JZDP5000G1803	Needle	3	3	6	DP×5 #18
L13	HG187J8001	Bobbin	2	2	4	
L14	HA100J2120	Magnet block for reservoir	1	1	1	
L15	H3207L0065	Thread a needle kit	1	1	1	
L16	H4705K8001	Vibration preventing rubber	2	2	2	
L17	H4706K8001	Vibration preventing rubber	2	2	2	
L18	HA307J0067	Hinge complete	2	2	2	
L19	HA100J2110	Oiler	1	1	1	
L20	H3200L0120	Cotton stand			1	
L20	HA200J2030	Cotton stand	1	1		
L21	HA120J8001	Oil can	1	1	1	
L22	H6310L8001	Belt cover (left)	1	1	1	
L23	H0208L8001	Screw	1	1	1	
L24	H6722N8001	Washer	2	2	2	
L25	H0207L8001	Screw	4	4	4	
L26	H6307L8001	Belt cover	1	1	1	
L27	H200000360	Screw	2	2	2	
L28	H6309L8001	Belt cover (right)	1	1	1	
L29	HA104J0652	Screw	1	1	1	
L30	HA104J0653	Washer	1	1	1	
L31	H3213L0664	Knee lifter crank	1	1	1	
L32	HA104J0657	Spring	1	1	1	
L33	H3213L0662	Knee lift shaft	1	1	1	
L34	H3214L0067	Small parts	1	1	1	
L35	H3214L2011	Knee lifter pin	1	1	1	
L36	HA104J6510	Nut	2	2	2	
L37	HA300J2180	Screw	1	1	1	
L38	HA104J0659	Screw	2	2	2	
L39	H007013090	E-type ring	1	1	1	
L40	HH30L58001	Oil reservoir	1	1	1	
L41	H2400K0080	V-belt	1	1	1	

M.PNEUMATIC CONTROL UNIT



M. PNEUMATIC CONTROL UNIT

Fig. No.	Part No.	Description	24518-1LD	24518-1RD	24518-2D	Remarks
M01	H491568001	Air cylinder	1	1	1	
M02	HH30B88001	Arm side cover (right)	1	1	1	
M03	HA300B2170	Screw	4	4	4	
M04	H005008060	Spring flange	4	4	4	
M05	H415060200	Screw	4	4	4	
M06	H4914G8001	Join pole	1	1	1	
M07	H4913G8001	Feeler	1	1	1	
M08	H4916G8001	Windpipe joint	2	2	2	