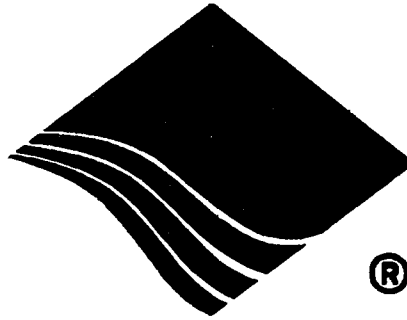# HIGHLEAD

GC188-MC/GC188-MC-D

High Speed Lockstitch Machine With Edge Cutter And Automatic Thread Trimmer

Instruction Manual
Parts Catalog

SHANGHAI HUIGONG NO.3 SEWING MACHINE FACTORY

CONTENTS

1. PRECAUTIONS BEFORE STARTING 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 balance wheel.

(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 balance wheel, "V" belt, bobbin winder balance wheel, or motor when the machine is in operation.

(5) Do not insert fingers into the thread take-up cover, under/around the needle, or balance wheel 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) If the machine's oil pan has an oil sump, never operate the machine before filling it.

(2) If the machine is lubricated by a drop oiler, never operate the machine before lubricating.

(3) When a new sewing machine is first turned on, verify the rotational direction of the balance wheel with the power on. (The balance wheel should rotate counter-clockwise when viewed from the balance wheel)

(4) Verify the voltage and (single or three) phase with those given on the machine nameplate.

3) Precautions for Operating Conditions:

(1) Avoid using the machine at abnormally high temperature（35℃ or higher）or low temperature（5℃ or lower）.

(2) Avoid using the machine in dusty conditions.

2. MAIN SPECIFICATIONS

Item		GC188-MC-D	GC188-MC
Material		Light-Medium heavy	
Max.sewing speed		4500 rpm	
Stitch length		0-5mm	
Needle bar stroke		31.8mm	
Presser	By hand	4mm	
	By knee	10mm	
Needle		DB×1 #9~#14	
Lubrication		Auto lubricated	
Auto trimmer		○	—
Auto backtracking		○	—
Rotating hook		Auto lubrication hook (Thread trimming)	Auto lubrication hook
Motor		Speed adj. Motor	370W clutch motor

3. INSTALLING THE BELT (Fig.1)

1) Use a V-belt for sewing machine use, type M

2) To adjust the belt tension, change the motor height by turning the tension adjust nuts so that the belt sinks about 15 mm when depressed by hand at the center of the belt span. If the tension is too low, the speed may not be consistent in the low or medium range, or the needle may not stop in the proper position. If the tension is too high, the motor bearings will deteriorate more rapidly.
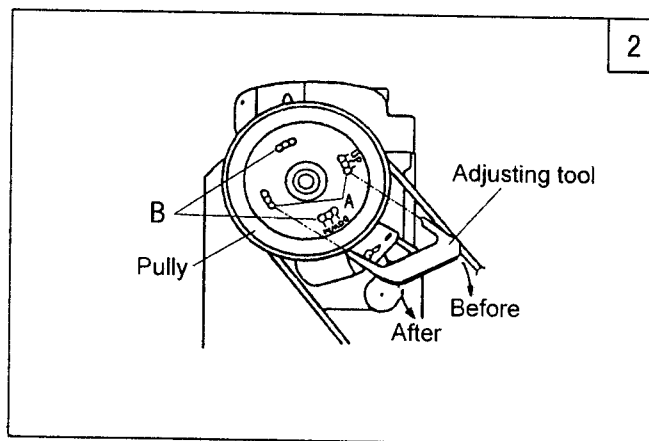
4. ADJUSTMENT OF NEEDLE
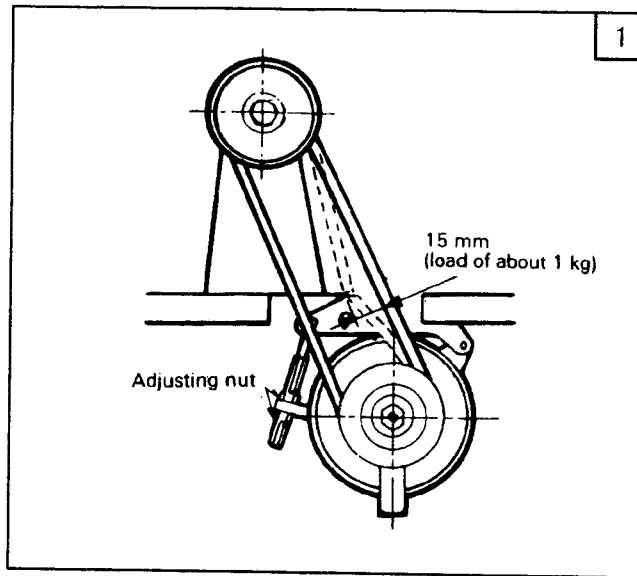
BAR STOP POSITION (Fig. 2, 3)

1) Adjusting of "Up" position

When the pedal is kicked down by heel, the machine stops at "UP" position. If the marks deviate larger than 3 mm adjust as follows:

   (1) Disconnect the plug (12 pins) of cable from the machine head.

   (2) Run the machine and stop at "UP" position.

   (3) While holding the balance wheel insert the "adjusting tool" in the hole A, then remove the tool.

2) Adjusting of "DOWN" position

Set the machine stops at "DOWN" position. When the pedal is kicked down by hell, the machine stops as "DOWN" position. If the marks deviate larger than 3 mm adjust as follows:

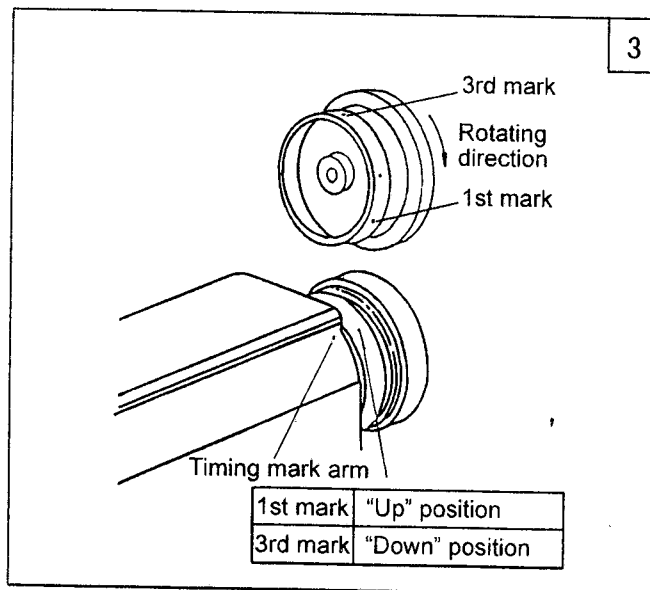   (1) Disconnect the plug (12 pins) of cable from the machine head.

   (2) Run the machine and stop at "DOWN" position.

   (3) While holding the balance wheel insert the "adjusting tool" in the hole B, then remove the tool.

3) Confirm the stop operation then the plug (12 pins) coming from the machine head into the receptacle.

1st mark	"Up" position
3rd mark	"Down" position

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5. LUBRICATION (Fig.4)

Pour oil up to position A of the oil tank.

During operation, check the oil level periodically, and in cases where the oil level is below position B replenish the oil supply up to position A.

Use white spindle oil.
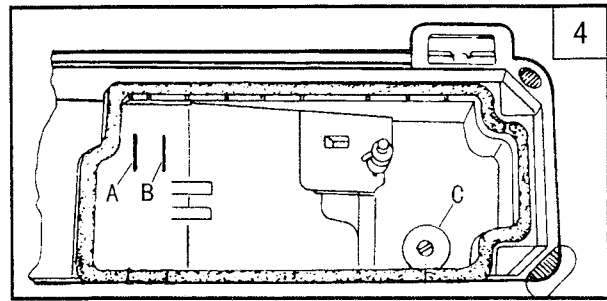
6. CONDITION OF OIL LUBRICATION (Fig.5)

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

Oil check window
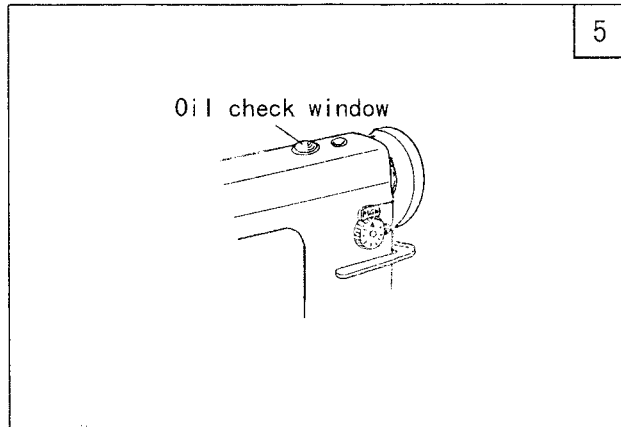
7. LUBRICATION ADJUSTMENT (Fig.6)

Adjusting the lubrication of rotating hook.

Oil adjusting screw (A) can adjust the lubrication of the rotating hook as follows:

(1) Turn oil adjusting screw (A) clockwise to increase oil and turn 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 oil splashed on the paper.

A
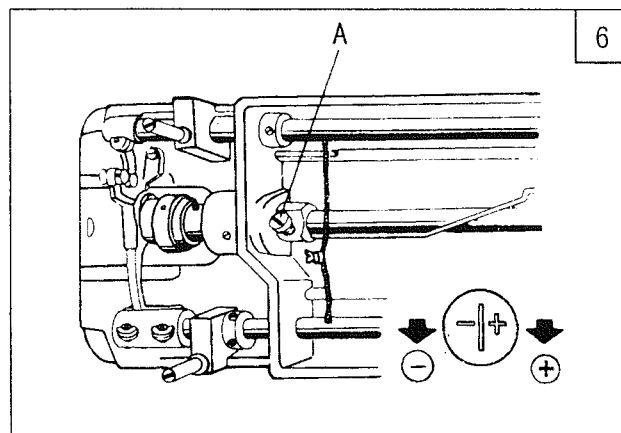
8. ADJUSTMENT OF OIL PUMP (Fig.7)

The standard adjustment is as follows: The adjusting plate keeps the bypass hole fully closed. To decrease splashing, open the bypass hole appropriately.

Adjusting plate

Bypass hole
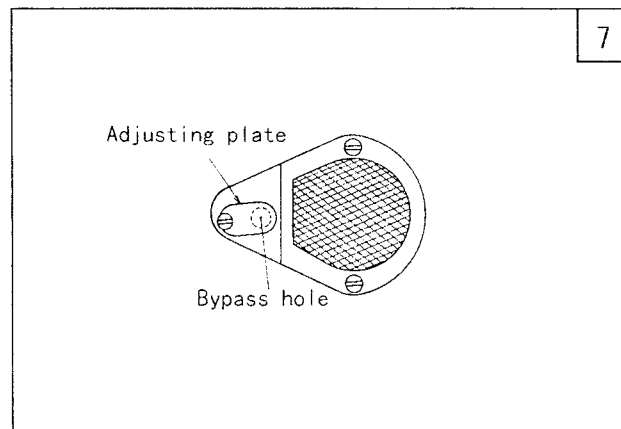
9. REGULAR CLEANING (Fig.8)

1) Cleaning feed dog

   Remove the throat plate and clear off the dust and lint between feed dog tooth slots.

2) Cleaning rotating hook

   Swing out the machine head and clean the hook. Wipe the bobbin case with soft cloth.

3) Cleaning oil pump, screen

   Swing out the machine head and clear off the dust and dirt on oil pump screen.

Feed dog / Rotating hook / Rotating hook / Feed bar / Oil pump

A B C D E | a b c d
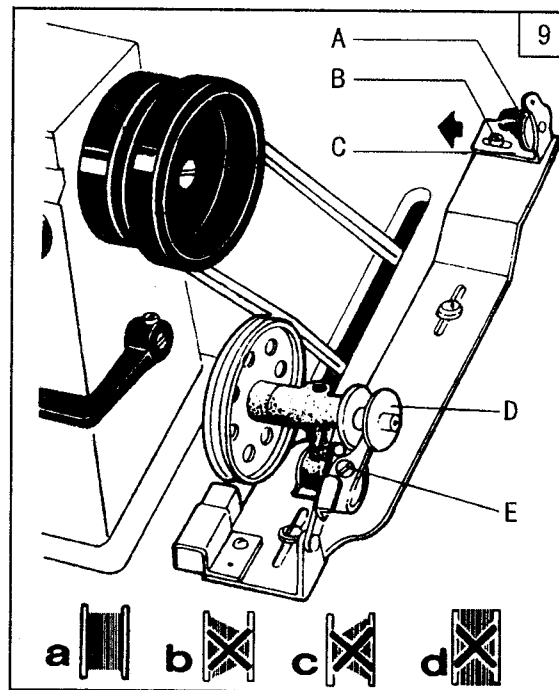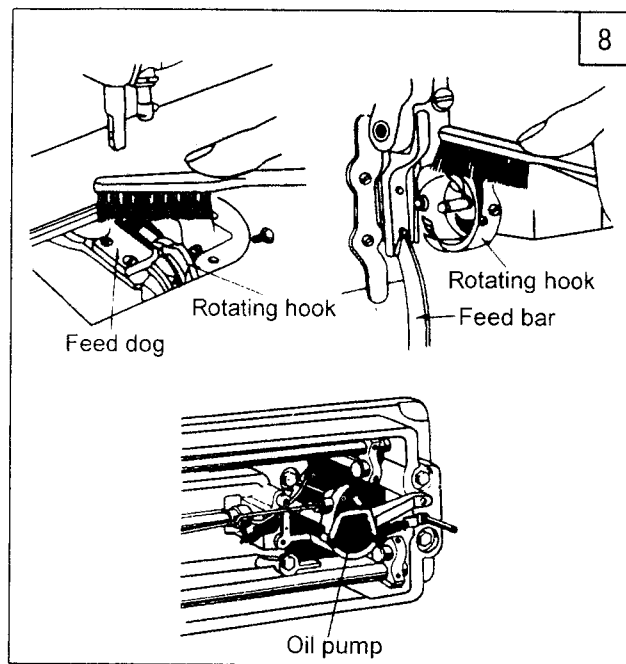
10. WINDING ADJUSTMENT (Fig.9)

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 Fig.9 (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.9 (b), move the bracket rightward, but if thread is wound as shown in Fig.9 (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.

11. REPLACE NEEDLES (Fig.10)

Turn the balance wheel to lift needle bar to the upper

A Gap | Long groove | a b c
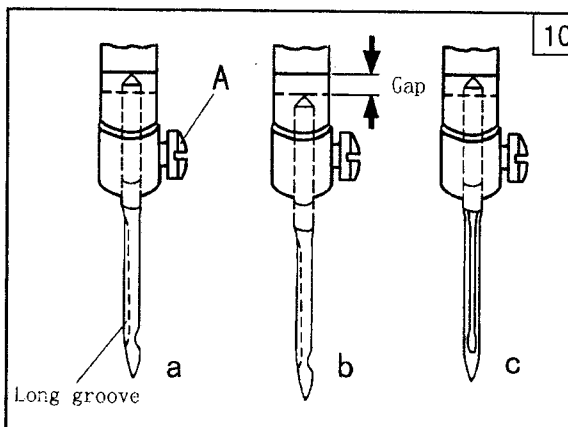
end of its stroke. Loosen needle clamp screw (A). While keeping the long groove of the needle leftward fully insert the needle shank up to the bottom of the needle socket. Then tighten needle clamp screw (A).

Note: Fig. (b): insufficient insertion.

Fig. (c): wrong direction of long groove.

12. THREADING (Fig.11)

To thread the needle thread, raise needle bar to the upper end of its stroke, lead the thread from spool and perform threading as shown in Fig.3. To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then to lift it to its highest position. Pull the needle thread and the bobbin thread is drawn up. Put the ends of needle thread and bobbin thread frontward under presser foot.
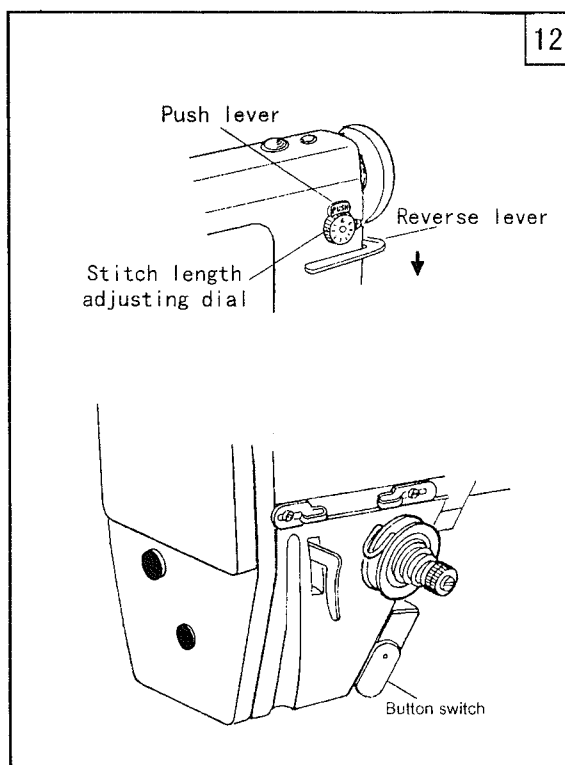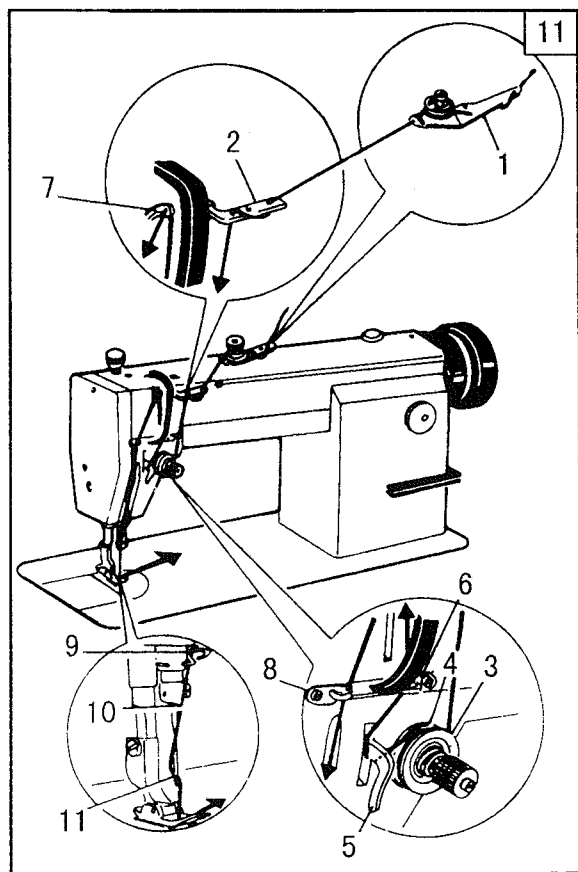
13. SET STITCH LENGTH AND REVERSE FEEDING (Fig.12)

1) To change the stitch length, rotate the stitch length adjusting dial while pressing the push lever.

2) Pressing the reverse lever to reverse stitching.

3) The button switch can be pressed to perform reverse stitching.

4) Normally, set the button switch as illustrated by the solid lines. To reverse stitching, press the button switch.

14. ADJUSTING THE THREAD TENSION (Fig.13)

— 6 —
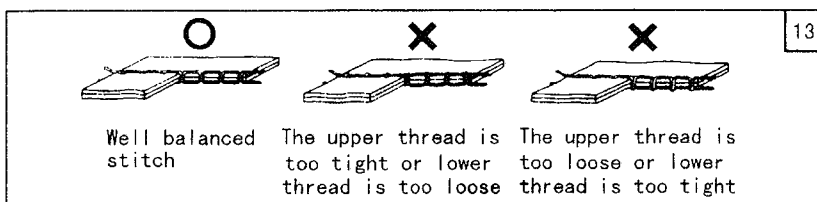
15. UPPER THREAD TENSION (Fig.14)

1) The upper thread can be adjusted based on the lower thread tension.

2) Adjustment can be done by rotating the thread tension nut. For special fabric sewing with special thread, the desired tension can be obtained by adjusting the strength and operating range of thread take-up spring.
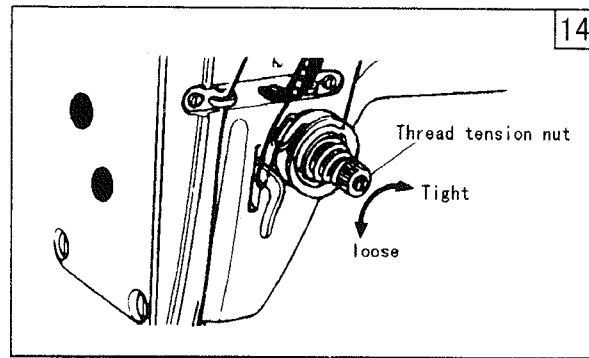
16. LOWER THREAD TENSION (Fig.15)
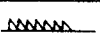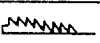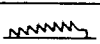
1) The lower thread tension can be adjusted by rotating screw A.
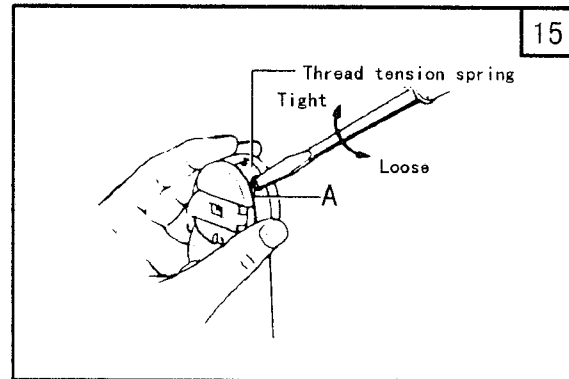
17. ADJUSTMENT OF FEED DOG INCLINATION (Fig.16)

The feed dog has been set to standard (horizontally). If necessary, adjust the inclination according to the material to be sewn as follows:

1) Slightly loosen screw A located in the feed rock shaft crank.

2) Using a screwdriver. While pressing the groove located in the eccentric shaft by using a screwdriver, rotate the eccentric shaft clockwise (to lift the front end) or counter-clockwise (to lower the rear end).

3) When adjustment is completed, tighten screw A.

Position of mark on the eccentric shaft		Feed dog	
	Horizontal		Standard
	Up		Front up (MAX.)
	Down		Front down (MAX.)

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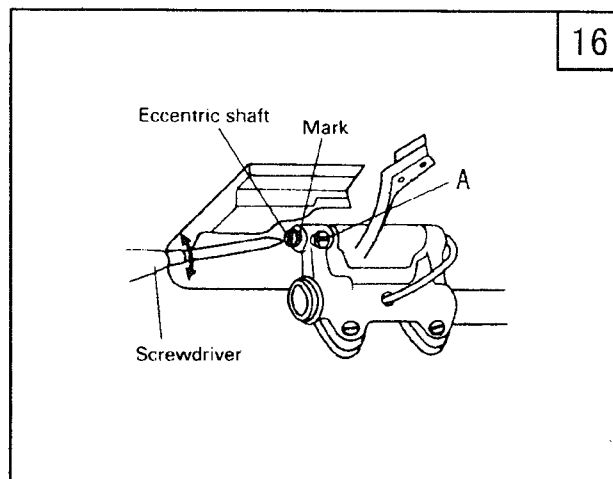
18. ADJUSTMENT OF THREAD TRIMMER MECHANISM

1) Thread trimmer mechanism as shown Fig.17

   Operation stroke of the thread trimmer solenoid

   (1) Standard operation stroke is 6.0 mm.

   (2) This stroke can be adjusted by using nut A.
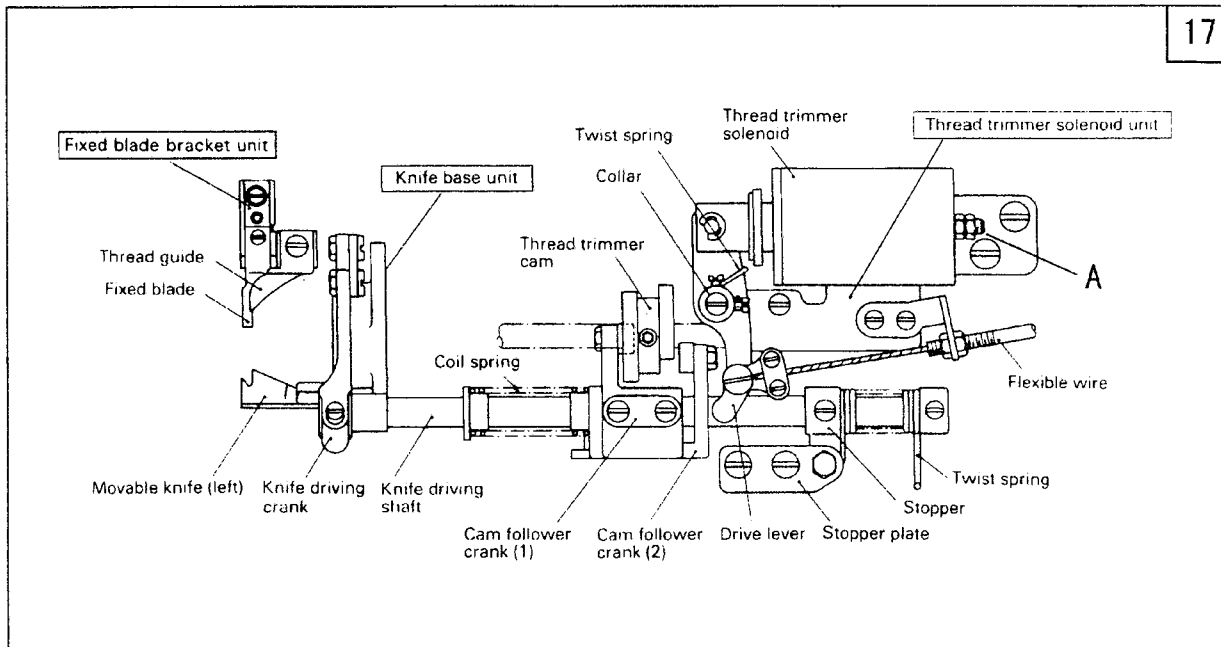
2) Adjustment of knife engagement (Fig.18)

   (1) Position of movable knife (left) and fixed blade. See the illustration. The standard distances from the needle center are 6.5 mm and 3.3 mm from the movable knife (left) and fixed blade respectively.

   (2) Adjustment of knife engagement. With the solenoid activated, turn on the machine. This rotates the thread trimming cam which rotates the movable knife (left). When the movable knife (left) has moved to its farthest distance, the standard engagement of the blade is 1.5-2.0 mm.

   (3) Adjustment of knife engaging pressure. If a thread is poorly cut, particularly when it is thick, slightly increase the engaging pressure. This should solve the problem. The engaging pressure can be adjusted in this way: Loosen lock nut B, and adjust it by using adjusting screw A.

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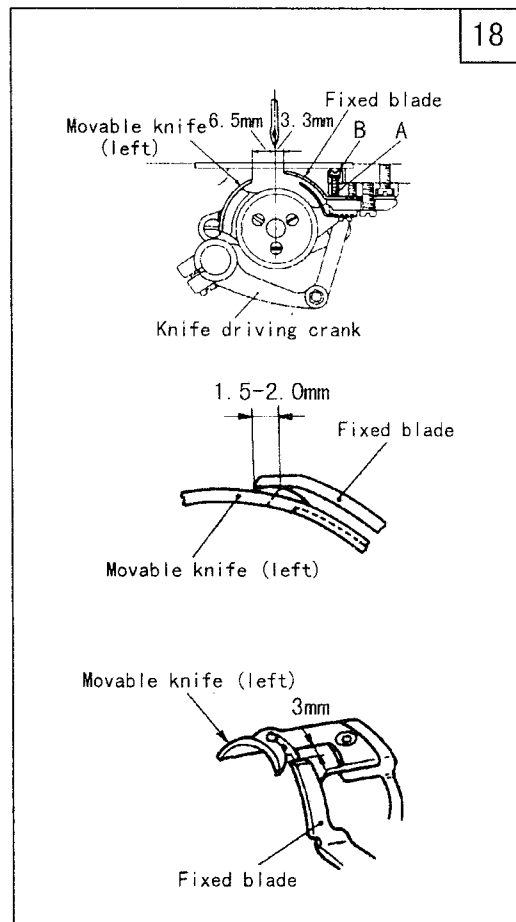
19. INSTALLING OF THE NEDDLE PLATE (Fig.19)

To attach the needle plate, bring the cloth-cutting knife to its lowest position, and gradually tighten the two set screws alternately while lightly pressing the needle plate onto the cloth-cutting knife.
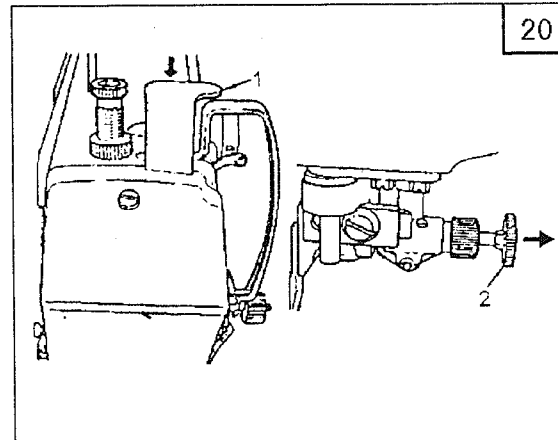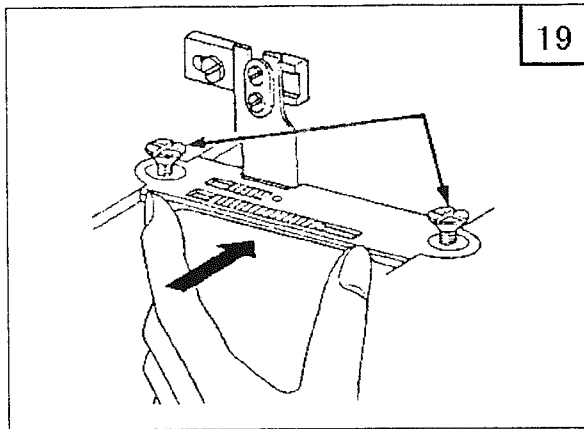
20. CLOTH CUTTING KNIFE (Fig.20, 21)

1) Operation of the cloth cutting knife
   (1) To actuate the cloth-cutting knife, press down knife setting plate 1.
   (2) To stop the cloth-cutting knife and reset the machine to the normal lockstitching mode, pull knob 2 in the direction of the arrow.

2) Attaching the cloth cutting knife
   (1) Raise or lower the cloth-cutting knife so that section A of the cloth-cutting knife is positioned 0-0.5 mm below the top face of the needle plate when the knife is in its lowest position.
   (2) Loosen two knife set screws 1, and replace the cloth-cutting knife.

3) Changing the cutting width
   (1) The needle plate decides the cutting width. When the needle plate is replaced, loosen knife guiding shaft set screw 1 so that proper parallelism is obtained and the sharpness of the knife blade is increased as shown in the figure.

   (2) When the position of the knife is changed in accordance with the change of the needle plate size, loosen set screw 2, and position the knife so that the blade of the needle plate comes in contact with the knife blade. Then tighten set screw 2.
   (3) For the standard machine, a 3.2 mm wide needle plate is installed at the time of delivery.
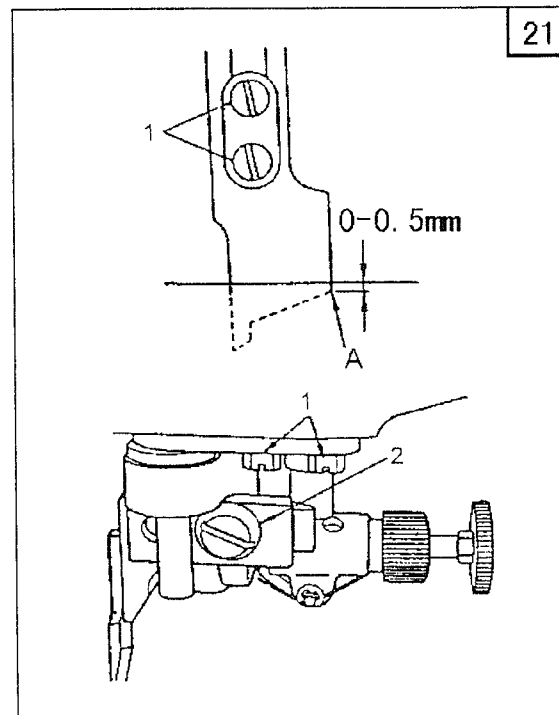
21. THROAT PLATE COVER

1) When the cloth-cutting knife is not in use, fit the throat plate cover, which is provided as an accessory,

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onto the throat plate, and press A portion from above.

2) The throat plate cover is now securely fixed, and the hole for the waste cloth is closed.
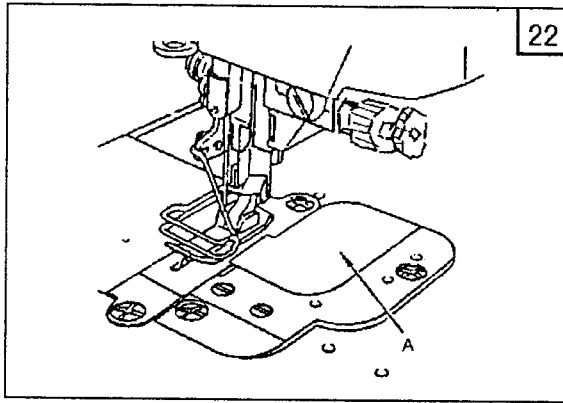
22. OTHER REPLACEMENT PARTS

The standard cutting width of the machine is 1/8" (3.2mm). We offer the other specs according to your need. Please choose as follow sheet.

Cutting width		Needle plate	Feed dog	Presser	Throat plate chip guard	Chip guard	Throat plate cover
3/32 " (2.4)	MC	H5732B7101	H5707B8001	H5705G7101	H5722B8001	H5719B7 101	H5719I7101
	MC-D				H7510B8001		
1/ 8 " (3.2)	MC	H5716B7101	H5705B8001	H5705G7101	H5722B8001	H5719B7 101	H5719I7101
	MC-D				H7510B8001		
5/32 " (4.0)	MC	H5733B7101	H5705B8001	H5705G7101	H5722B8001	H5719B7 101	H5719I7101
	MC-D				H7510B8001		
3/16 " (4.8)	MC	H5724B7101	H5705B8001	H5705G7101	H5722B8001	H5726B7 101	H5719I7101
	MC-D				H7510B8001		
1/ 4 " (6.4)	MC	H5725B7101	H5706B8001	HA316H0070	H5728B8001	H5726B7 101	H5719I7101
	MC-D				H7511B8001		
3/ 8 " (9.5)	MC	H5734B7101	H5708B8001	HA316H0070	H5737B8001	H5726B7 101	H5722I7101
	MC-D				H7512B8001		

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A.ARM BED AND ITS ACCESSORIES

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
A01	HA307B0674	Rubber plug	6	6	
A02	HA307B0673	Rubber plug	2	2	
A03	HA300B2090	Rubber plug	5	5	
A04	HA300C2030	Set screw	1	1	SM11/64(40)×8
A05	HA300B2110	Rubber plug	2	2	
A06	HA300C2020	Thread take-up guard	1	1	
A07	HA100B2110	Set screw	1	1	SM11/64(40)×5.5
A08	HA100B2100	Thread guide	1	1	
A09	HA112B0691	Set screw	1	1	
A10	HA300B2170	Set screw	6	6	SM11/64(40)×9
A11	H1210B0067	Oil check window	1	1	
A12	HA300B2100	Rubber plug	1	1	
A13	H005008060	Spring washer	3	3	GB/T93 6
A14	HA100B2220	Leg	3	3	
A15	HA106B0676	Set screw	2	2	SM9/64(40)×6
A16	HA300B2080	Set screw	1	1	SM15/64(28)×6.8
A17	HA100B2140	Thread guide	1	1	
A18	HA106B0675	Thread guide	1	1	
A19	H5729B8001	Face plate gasket	1	1	
A20	H5713B8001	Face plate	1	1	
A21	H5716B7101	Needle plate	1	1	
A22	HA300B2190	Set screw	2	2	SM11/64(40)×4.5
A23	HA300B2160	Set screw	3	3	SM11/64(40)×10
A24	HA124B0711	Slide plate	1	1	
A25	HA324B0711	Slide plate spring	1	1	
A26	HA124B0713	Set screw	2	2	SM3/32(56)×2.2
A27	HA112B0692	Spring for pre-tension	1	1	
A28	HA112B0693	Disk for pre-tension	2	2	
A29	HA112B0694	Space for pre-tension	1	1	
A30	H007013030	Stop ring	1	1	
A31	HA112B0695	Pre-tension thread guide	1	1	
A32	HA115B7011	O-ring	1	1	
A33	HA115B0708	Set screw	1	1	SM9/64(40)×6
A34	HA310B0703	Thread tension regulating bushing	1	1	
A35	HA115B0706	Thread take-up spring	1	1	
A36	HA115B0701	Thread tension stud	1	1	
A37	HA115B0709	Thread tension releasing pin	1	1	
A38	HA310B0705	Thread tension disc	2	2	
A39	HA310B0702	Thread releasing disc	1	1	
A40	HA115B0703	Thread tension spring	1	1	
A41	HA115B7010	Stop disc	1	1	
A42	HA310B0701	Thumb nut	1	1	
A43	H5726B8001	Chip guide plate	1	1	

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A.ARM BED AND ITS ACCESSORIES

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
A44	H5727B8001	Screw	2	2	SM1/8(44)×3.4
A45	H5720B8001	Clip plate	1	1	
A46	H5722B8001	Chip funnel	1		
A46	H7510B8001	Chip funnel		1	
A47	H5723B8001	Chip funnel plate	1	1	
A48	H5727B8001	Screw	2	2	SM1/8(44)×3.4
A49	HA300B2190	Screw	2	2	
A50	H5720I8001	Chip funnel cover	1	1	
A51	H5721I8001	Spring for chip funnel cover	1	1	
A52	H5727B8001	Screw	2	2	SM1/8(44)×3.4
A53	H5714B8001	Gasket for face plate	1	1	
A901	HA324B0071	Slide plate complete	1	1	
A902	HA112B0069	Pre-tension thread complete	1	1	
A903	HA310B0070	Thread tension complete	1	1	

B.NEEDLE BAR AND THREAD TAKE-UP MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
B01	H5709C8001	Needle bar	1	1	
B02	H5710C8001	Thread guide	1	1	
B03	HA100C2170	Needle clamp screw	1	1	SM1/8(44)×4.5
B04	HA100C2160	Needle	1	1	
B05	HA7311C606	Set screw	1	1	SM11/64(40)×12
B06	HA100C2070	Set screw	1	1	
B07	HA100C2060	Set screw	1	1	
B08	H5705C7101	Needle bar crank complete	1	1	
B09	HA307C0662	Set screw	2	2	SM1/4(40)×6
B10	HA100C2200	Slide block	1	1	
B11	HA104D0652	Rubber plug	2	2	
B12	HA100D2030	Arm shaft bushing (left)	1	1	
B13	H5711C7101	Arm shaft	1		
B13	H7504C7101	Arm shaft		1	
B14	HA100C2020	Set screw	4	4	SM15/64(28)×10
B15	HA100D2040	Arm shaft bushing (middle)	1	1	
B16	HA108G0066	Collar for arm shaft	1	1	
B17	HA105D0662	Set screw	2	2	SM1/4(40)×4
B18	HA113D2112	Bevel gear for arm shaft	1	1	
B19	HA113D2122	Bevel gear for vertical shaft(upper)	1	1	
B20	HA112D3012	C-type ring	1	1	
B21	HA7311C106	Feed and feed lifting eccentric	1	1	
B22	HA7311C206	Washer	1	1	
B23	HA7311C306	Set screw	3	3	SM9/64(40)×7
B24	HA300D2020	Arm shaft bushing (right)	1	1	
B25	HA306D0066	Oil seal	1	1	
B26	H30211C206	Needle bearing	1	1	
B27	HA7311C506	Crank rod for feed rock shaft	1	1	
B28	HA112D3013	Crank rod for feed lifting rock shaft	1	1	
B29	HA100D2110	Vertical shaft bushing (upper)	1	1	
B30	HA113D0691	Vertical shaft	1	1	
B31	HA100D2110	Vertical shaft bushing (lower)	1	1	
B32	HA113D2222	Bevel gear for vertical shaft(lower)	1	1	
B33	HA113D2212	Bevel gear for hook shaft	1	1	
B34	HA108C0663	Set screw	8	8	SM1/4(40)×7
B35	HA710R0651	Balance wheel		1	
B35	HA307D0671	Balance wheel	1		
B36	HA110D0672	Set screw	2	2	SM15/64(28)×12
B37	HA700R0030	Spacer 1		2	
B38	HA700R0010	Speed command disc 1		1	
B39	HA700R0020	Speed command disc 2		1	
B40	HA700R0040	Spacer 2		1	
B41	HA700R0050	Support spring		1	

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Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
B42	HA700R0060	Washer		1	
B43	H007009300	C-type ring		1	GB/T894.1 30
B44	HA300C2030	Set screw		3	SM11/64(40)×8
B45	HA703R0066	Detector bracket supporter		1	
B46	HA703R0067	Washer		1	
B47	HA700R0000	Balance wheel complete		1	
B48	HA703R0065	Detector complete		1	
B49	HB4252C081	Guide for slide block		1	
B49	HA100C2180	Guide for slide block	1		
B50	HB4251C072	Tension releasing hinge base complete		1	
B51	H3000H2040	Tension releasing pin		1	
B51	HA100H2060	Tension releasing pin	1		
B52	H5341B8001	Set screw		2	SM11/64(40)×26
B52	HA100C2190	Set screw	2		SM11/64(40)×8
B53	HA104C0065	Needle bar link and thread take-up lever complete	1	1	
B54	HA113D4021	Bevel gear for arm shaft complete	1	1	
B55	HA113D4022	Bevel gear for hook shaft complete	1	1	

C.ROTATING HOOK SHAFT MECHANISM
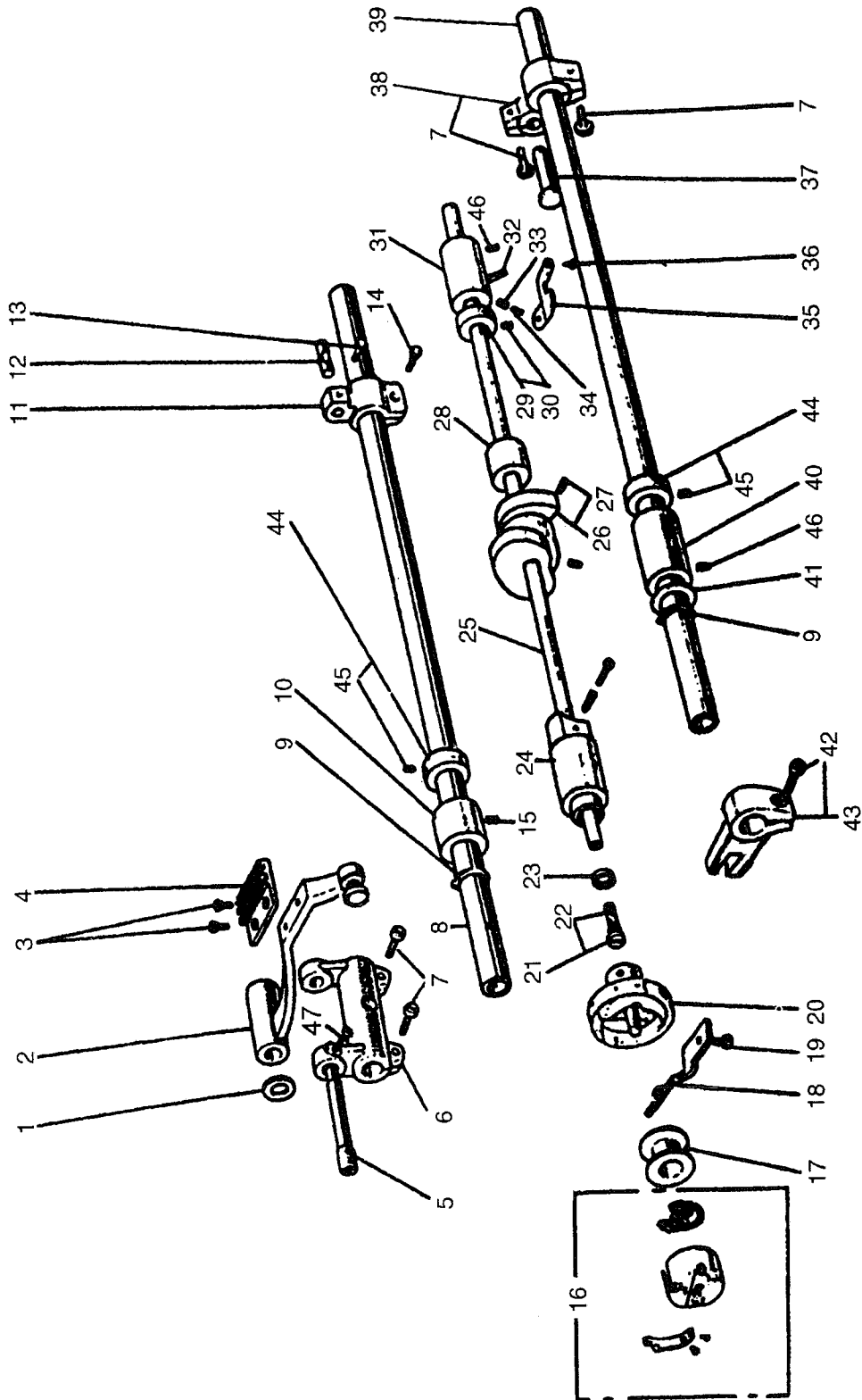
Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
C01	HA104G0656	Washer	1	1	
C02	HA705J0031	Feed bar	1	1	
C03	HA104G0654	Set screw	2	2	SM1/8(44)×6
C04	H5705D8001	Feed dog	1	1	
C05	HA705J0654	Shaft for feed bar crank (eccentric)	1	1	
C06	HA104G0011	Feed rock shaft crank	1	1	
C07	HA104G0012	Set screw	4	4	SM3/16(28)×12
C08	HA300G2050	Feed rock shaft	1	1	
C09	H007009150	C-type ring	2	2	
C10	HA100G2040	Feed rock shaft bushing	1	1	
C11	HA7311C706	Feed rock shaft crank (right)	1	1	
C12	HA706C11B2	Feed rock shaft crank pin	1	1	
C13	HA7311C806	Set screw	2	2	SM11/64(40)×7
C14	HA7311C606	Set screw	1	1	SM11/64(40)×12
C15	HA305E0662	Set screw	1	1	SM15/64(28)×4.5
C16	HA115E0069	Rotating hook complete	1		
C16	HA707E0067	Rotating hook complete		1	
C17	HA100E2170	Bobbin	1		
C17	H2604D8001	Bobbin		1	
C18	HA300E2050	Rotating hook positioner	1	1	
C19	HA100E2150	Set screw	1	1	SM11/64(40)×10
C20	HA119E0070	Bobbin case complete	1		
C20	HA708E0068	Bobbin case complete		1	
C21	HA104E0011	Filter complete	1	1	
C22	HA1111E204	Filter	1	1	
C23	HA700E2030	Oil seal	1	1	
C24	HA704B0654	Hook shaft bushing (left)	1	1	
C25	HA704E0651	Rotating hook shaft	1	1	
C26	HA710E0691	Thread timmer cam		1	
C27	HA710E0692	Set screw		2	SM1/4(40)×10
C28	HA704B0653	Rotating hook shaft bushing (middle)		1	
C29	HA305E0066	Collar for rotating hook shaft	1	1	
C30	HA305E0662	Set screw	1	1	SM15/64(28)×4.5
C31	HA311E0671	Rotating hook shaft bushing (right)	1	1	
C32	HA110E0672	Oil pipe for rotating hook shaft	1	1	
C33	HA300E2100	Plunger	1	1	
C34	HA300E2110	Plunger spring	1	1	
C35	HA300E2040	Guide plate	1	1	
C36	HA104F0654	Set screw	1	1	SM15/64(28)×10
C37	HA100G2070	Hinge pin	1	1	
C38	HA705K0066	Feed lifting rock shaft crank (right)	1	1	
C39	HA704K0652	Feed lifting rock shaft	1	1	
C40	HA100G2120	Feed lifting rock shaft bushing	1	1	

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C.ROTATING HOOK SHAFT MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
C41	HA100G2130	Washer	1	1	
C42	HA111G0683	Set screw	1	1	SM11/64(40)×12
C43	HA7111K104	Feed lifting rock shaft crank (left)	1	1	
C44	HA108G0066	Collar for Feed lifting rock shaft	2	2	
C45	HA105D0662	Set screw	4	4	SM1/4(40)×4
C46	HA100C2020	Set screw	2	2	SM15/64(28)×10
C47	HA300C2030	Set screw	1	1	SM11/64(40)×8

D.STITCH REGULATOR MECHANISM
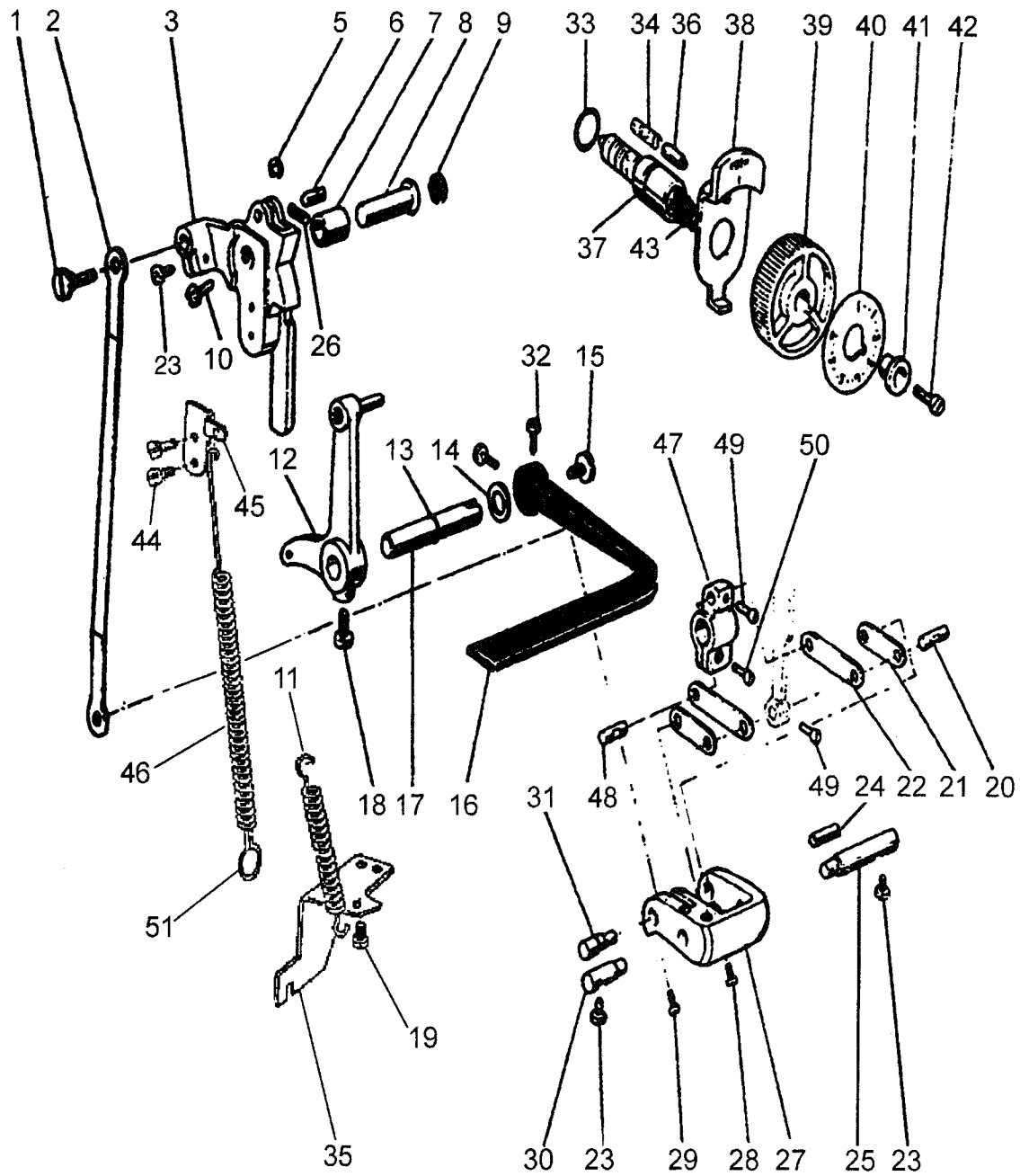
Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
D01	H1204E0652	Hinge pin	1		
D01	HA700C2060	Connecting rod stud		1	
D02	HA7311C406	Feed connecting link	1	1	
D03	H1204E0651	Feed regulator	1		
D03	H2604E0065	Feed regulator		1	
D05	H007013050	Washer	1		GB/T896 5
D06	H2204D0652	Pin	1		
D07	HA704B0655	Feed regulator bushing	1	1	
D08	HA100F2040	Hinge pin for feed regulator	1	1	
D09	HA700B2120	Rubber plug	1	1	
D10	HA113F0684	Set screw	1	1	SM15/64(28)×8.5
D11	HA115F0692	Spring for reverse feed lever crank	1	1	
D12	HA115F0069	Reverse feed lever crank	1	1	
D13	HA113F3022	O-ring	1	1	
D14	HA100F2110	Washer	1	1	
D15	HA113F0683	Set screw	1	1	SM3/16(28)×6.5
D16	HA309F0671	Reverse feed lever	1	1	
D17	HA113F3021	Reverse feed lever pin	1	1	
D18	HA100F2130	Set screw	1	1	SM15/64(28)
D19	HA800F2020	Set screw	1	1	SM15/64(28)×13.5
D20	HA706C11B1	Link stud	1	1	
D21	HA706C1191	Link (short)	2	2	
D22	HA706C1192	Link (long)	2	2	
D23	HA111G0683	Set screw	3	3	SM11/64(40)×12
D24	HA7311CE06	Link stud	1	1	
D25	HA700C2040	Feed regulator shaft (right)	1	1	
D26	HA100C2020	Set screw	2	2	SM15/64(28)×10
D27	HA7311CG06	Stitch length adjusting crank	1	1	
D28	HA7311CD06	Set screw	1	1	SM9/64(40)×8.5
D29	HA7311CC06	Set screw	1	1	SM9/64(40)×6.5
D30	HA700C2050	Feed regulator shaft (left)	1	1	
D31	HA7311CF06	Link stud	1	1	
D32	HA104F0654	Set screw	2	2	SM15/64(28)×10
D33	HA109F0674	O-ring	1	1	
D34	HA100F2090	Spring for stopper pin	1	1	
D35	HA100F2140	Spring holder	1		
D35	HA800F2010	Spring holder		1	
D36	HA100F2080	Stopper pin	1		
D36	HA700F2030	Stopper pin		1	
D37	HA109F0671	Feed regulator screw bar	1		
D37	HA720F0681	Feed regulator screw bar		1	
D38	HA720F0683	Stopper pin releasing lever		1	
D39	HA307F0066	Dial	1		

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D.STITCH REGULATOR MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
D39	HA7421F120	Dial		1	
D40	HA720F0684	Stitch length indicating plate		1	
D41	HA720F0685	Bushing for dial screw		1	
D42	HA109F0673	Dial screw	1		
D42	HA720F0686	Dial screw		1	
D43	HA720F0687	Coil spring		1	
D44	HA100C2190	Set screw		2	SM9/64(40)×8
D45	H2600E2020	Spring holder		1	
D46	HA806C0674	Spring for feed regulator crank		1	
D47	HA7311C706	Feed rock shaft bushing	1	1	
D48	HA7311C806	Set screw	2	2	SM11/64(40)×7
D49	HA7311C606	Set screw	2	2	SM11/64(40)×12
D50	HA706C11B2	Link stud	1	1	
D51	HA806C0674	Spring retainer		1	
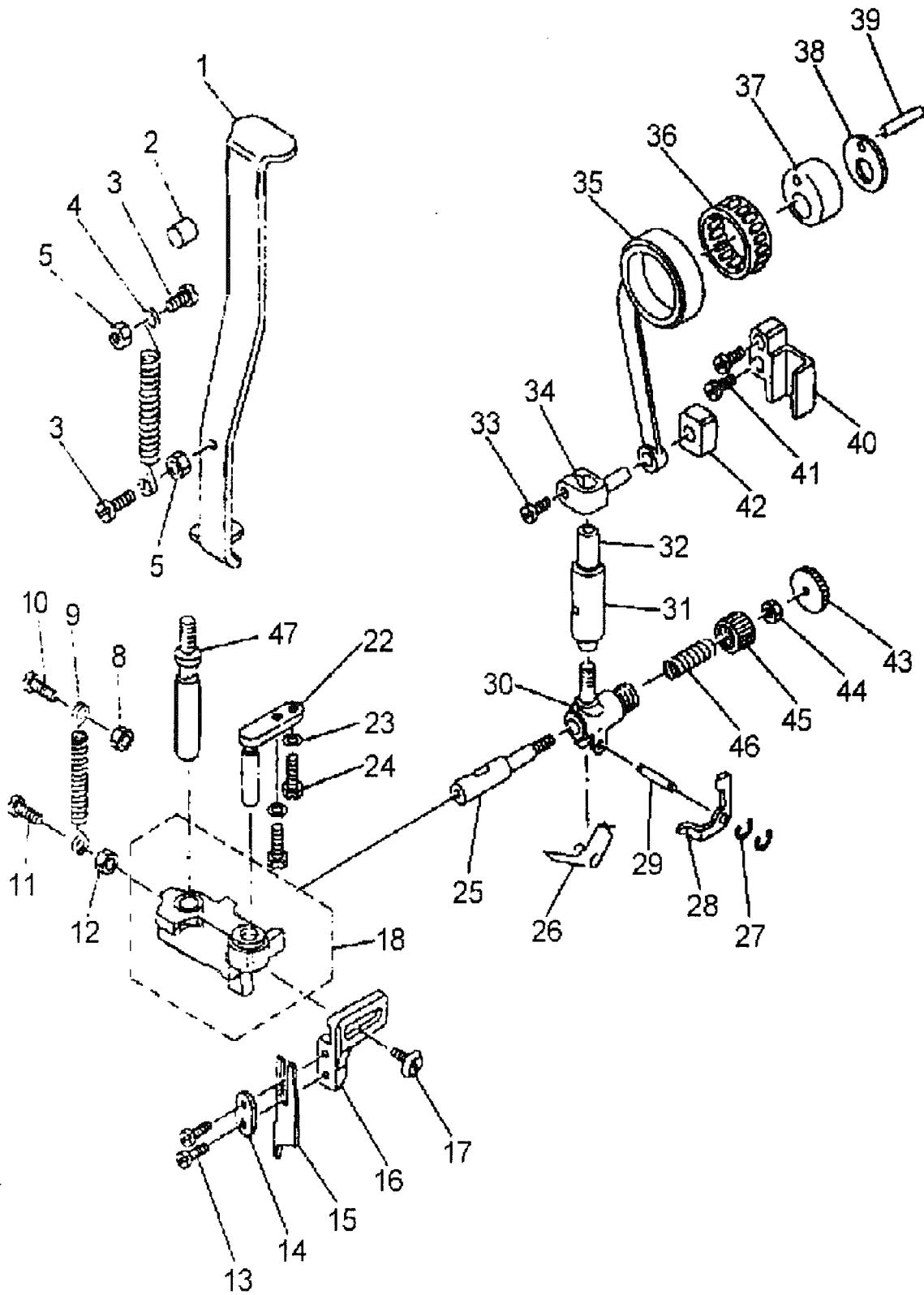
E.KNIFE MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
E01	H5704F8001	Knife positioning plate	1	1	
E02	H5705F8001	Felt	1	1	
E03	H2004J0067	Screw	2	2	SM9/64(40)×7
E04	H5706F8001	Spring	1	1	
E05	H5734F8001	Nut	2	2	SM9/64(40)
E08	HA104J6510	Nut	1	1	SM15/64(28)
E09	H5707F8001	Spring	1	1	
E10	HA104F0654	Screw	1	1	SM15/64(28)×10
E11	HA100E2150	Screw	1	1	SM11/64(40)×9.5
E12	H5729F8001	Nut	1	1	
E13	HA100C2170	Screw	2	2	SM1/8(44)×4.5
E14	H5709F8001	Washer	1	1	
E15	H5710F8001	Knife	1	1	
E16	H5711F8001	Knife holder	1	1	
E17	H5733F8001	Screw	1	1	SM11/64(40)×8
E18	H5712F8001	Knife driving block Asm.	1	1	
E22	H5713F8001	Guide stud for knife driving	1	1	
E23	H005004050	Washer	2	2	GB/T848 5
E24	H5735F8001	Screw	2	2	SM3/16(28)×9
E25	H5715F8001	Knife driving rod clutch pin	1	1	
E26	H5716F8001	Spring	1	1	
E27	H007013015	Stop ring	2	2	GB/T896 1.5
E28	H5717F8001	Knife release lever	1	1	
E29	H5718F8001	Pin	1	1	
E30	H5719F8001	Knife driving rod clutch pin guide	1	1	
E31	H5720F8001	Bushing	1	1	
E32	H5721F8001	Knife driving stud	1	1	
E33	HA104C0659	Screw	1	1	SM9/64(40)×6
E34	H5722F8001	Knife driving stud connection	1	1	
E35	H5723F8001	Knife driving rod	1	1	
E36	H30211C206	Knife needle bearing	1	1	
E37	H5724F8001	Knife cam	1	1	
E38	H5725F8001	Thrust plate	1	1	
E39	H5726F8001	Pin	1	1	
E40	H5727F8001	Slide block guide	1	1	
E41	HA100C2190	Screw	2	2	SM11/64(40)×8
E42	HA100C2200	Slide block	1	1	
E43	H5728F8001	Knob	1	1	
E44	H5729F8001	Nut	1	1	
E45	H5730F8001	Cap	1	1	
E46	H5731F8001	Spring	1	1	
E47	H5732F8001	Knife driving block stud	1	1	

F.PRESSER FOOT MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
F01	HA107H0663	Knee lifter rod	1	1	
F02	HA107H0662	Set screw	2	2	SM3/16(28)×3.5
F03	HA100H2050	Set screw	1	1	SM15/64(28)×13.5
F04	HA306H0067	Knee lifter lever (right)	1	1	
F05	HA306H0671	Knee lifter connecting rod	1	1	
F06	HA100H2080	Pin for spring	1	1	
F07	HA110H0672	Spring for knee lifter lever	1	1	
F08	HA100H2050	Set screw	1	1	SM15/64(28)×13.5
F09	HA305H6611	Tension releasing cam	1	1	
F10	HA107H1011	Knee lifter lever (left)	1	1	
F11	H5705G7101	Presser foot complete	1	1	
F12	HA100H2150	Set screw	1	1	SM9/64(40)×11
F13	HA704B0651	Presser bar bushing	1	1	
F14	HA300H2110	Presser bar	1	1	
F15	H1205F0661	Presser bar lifting cam	1	1	
F16	HA300H2080	Oil seal for presser bar lifting cam	1	1	
F17	H1204F0651	Presser bar lifter	1	1	
F18	HA300B2170	Set screw	1	1	SM11/64(40)×5.5
F19	HA100B2130	Set screw	1	1	SM15/64(28)×7
F20	HA307H0067	Presser bar lifting bracket	1	1	
F21	HA100H2130	Presser bar spring	1	1	
F22	HA107H0662	Set screw	1	1	SM3/16(28)×3.5
F23	HA100H2120	Presser bar guide	1	1	
F24	HA309H0681	Pressure regulating thumb screw	1	1	
F25	HA117H0692	Lock nut	1	1	
F27	H5711G8001	Screw	1	1	
F28	HA300H2120	Thread guide	1	1	

G.OIL LUBRICATION MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
G01	HA100H2150	Screw	2	2	SM9/64(40)×11
G02	H5705H7101	Oil wick fitting plate complete	1	1	
G03	H3000L0020	Oil filter holder	1	1	
G04	H3006L0065	Oil return tube complete	1	1	
G05	HA116I0068	Arm shaft oil tube complete	1	1	
G06	HA116I0682	Arm shaft oil tube connector	1	1	
G07	HA100I2010	Oil pump	1	1	
G08	HA100I2090	Set screw	3	3	SM11/64(40)×13
G09	HA100I2030	Set screw	1	1	SM1/8(44)×6.5
G10	HA300I2050	Set screw	3	3	SM1/8(44)×13
G11	HA100I2050	Spring washer	1	1	
G12	HA100I2070	Oil adjusting plate	1	1	
G13	HA111I0065	Oil pump screen complete	1	1	
G14	HA700L0030	Oil pump fitting plate	1	1	
G15	HA100I2020	Oil pump impeller	1	1	
G16	HA113I0066	Oil pipe for hook shaft complete	1		
G16	HA707L0065	Oil pipe for hook shaft complete		1	
G17	HA113I0661	Oil pipe for hook shaft connector	1	1	
G18	HA300I2030	Oil return tube holder	1	1	
G19	HA300E2030	Oil adjusting screw	1	1	SM15/64(28)×12
G20	HA100E2060	Oil adjusting spring	1	1	
G21	HA305G0664	Oil wick	1	1	
G22	H3000E2050	Oil wick	1	1	
G23	HA300C2030	Set screw	1	1	SM11/64(40)×8
G24	H3000L0030	Oil pipe holder	1	1	

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Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
H01	HA713N0070	Flexible wire complete		1	
H02	HA713N0701	Thread trimmer driving lever		1	
H03	HA712N0698	Thread trimmer driving lever		1	
H04	HA712N0695	Stud screw		1	
H05	HA712N0697	Trimmer driving lever spring		1	
H06	HA712N0696	Collar for stud screw		1	
H07	HA710N0683	Stopper nut		1	SM15/64(28)
H08	HA712N6910	Flexible wire support plate		1	
H09	HA712N0699	Set screw		1	SM11/64×40/4
H10	HA712N6911	Flexible wire presser		1	
H11	HA712N6912	Set screw		2	SM1/8×44/7
H12	HA712N6913	Wire holder		1	
H13	H003002050	Wire nut		2	GB/T6170 M5
H14	HA7511N212	Solenoid bracket		1	
H15	HA700N0080	Set screw		4	SM15/64(28)×12
H16	HA712N0692	Thread trimmer solenoid stud		1	
H17	HS90011406	P-type screw		3	M4×6
H18	HA7641B319	Terminal pin		2	
H22	HA7121N604	Set screw		1	SM9/64(40)×8.5
H23	HA7121N104	Bracket for fixed blade		1	
H24	HA7121N404	Thread finger		1	
H25	HA7121N304	Set screw		1	9/64(40)×5
H26	HA7121N204	Fixed blade		1	
H27	HA7121N704	Nut		1	SM9/64(40)
H28	HA7221N206	Crank screw		1	
H29	HA7221N106	Crank roller		1	
H30	HA706N0663	Nut		1	SM3/16(28)
H31	HA709N0671	Stopper block		1	
H32	HA700N0110	Coil spring		1	
H33	HA715N0711	Collar with screw		1	
H34	HA710N0682	Lever stopper plate		1	
H35	HA7411N110	Screw		1	SM15/64(28)×23
H36	HA700N0040	Coil spring (left)		1	
H37	HA700N0050	Bushing		1	
H38	H7508I8001	Knife driving shaft		1	
H39	H7506I8001	Knife holding bracket saddle		1	
H40	HA7111N204	Set screw		2	SM11/64(40)×6.2
H41	HA7111N404	Rod		1	
H42	HA7111N304	Nut		2	SM11/64(40)
H43	HA719B7011	Set screw		1	SM11/64(40)×11.4
H44	H7507I8001	Knife driving crank		1	
H45	HA704N1114	Set screw		3	SM1/8（44）×5.2
H46	HA704N1113	Washer		1	

H.THREAD TRIMMER MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
H47	HA704N1112	Knife holding bracket saddle (left)		1	
H48	HA7111N804	Movable knife (left)		1	
H49	HA7111N704	Set screw		2	SM11/64（40）×5.5
H50	HA300C2030	Set screw		6	SM11/64（40）×8
H51	HA7311CC06	Set screw		2	SM9/64（40）×6.5
H52	HA100E2150	Set screw		1	SM11/64（40）×10
H53	H007013040	Stop ring		2	GB/T896 4
H54	HA7311CH06	Set screw		1	SM9/64（40）×8
H55	HA113F0684	Set screw		2	SM15/64（28）×8.5
H56	HA105D0662	Set screw		1	SM1/4（40）×4
H57	HA300B2170	Screw		1	SM11/64（40）×9
H58	HA708P0668	Cord holder		1	
H59	HA712N0069	Solenoid bracket complete		1	

I.TOUCH BACK AND DETECTOR MECHANISM

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
I01	HA300B2170	Screw		4	
I02	HA700Q0030	Cord holder		3	
I03	H2206I0673	Solenoid		1	
I04	HA712Q0693	Tie-in		1	
I05	HA700Q0010	Pin		1	
I06	H2206I0672	Washer		1	
I07	HA108B0681	Arm side cover	1		
I07	H2609E0671	Arm side cover		1	
I08	HA108B0682	Gasket for arm side cover	1		
I08	H2609E0672	Gasket for arm side cover		1	
I09	HA712N0692	Link stud		1	
I10	H2204G0651	Screw		1	SM15/64（28）×7
I11	H2204G0652	Stop ring		1	
I12	HA705Q0065	Ground wire assy.		1	
I13	HA700Q0050	Cord holder		1	
I14	HA300B2170	Screw		2	SM11/64(40)×9
I15	H5911J8001	Bracket for touch switch		1	
I16	H411030060	Screw		2	M3×6
I17	HA704O0657	Rubber plug		1	
I18	HA704O0659	Screw		1	M2×4
I19	HA704O0654	Plate spring		1	
I20	H2205I0661	Bracket for touch switch		1	
I21	HA704O0021	Touch switch complete		1	
I22	H007013030	E-type ring		2	GB/T896 3
I23	HA704O0653	Spring		1	
I24	HA7641B319	Cord assy.		3	
I25	HA7641B319	Terminal pin		5	
I26	HA300C2030	Screw		4	SM11/64(40)×8
I27	H007013040	Stop ring		2	GB/T896 4
I28	HA704O6510	Screw		2	M2×8
I29	HA704O0655	Micro switch		1	
I30	HA704O0658	Insulator seet		1	

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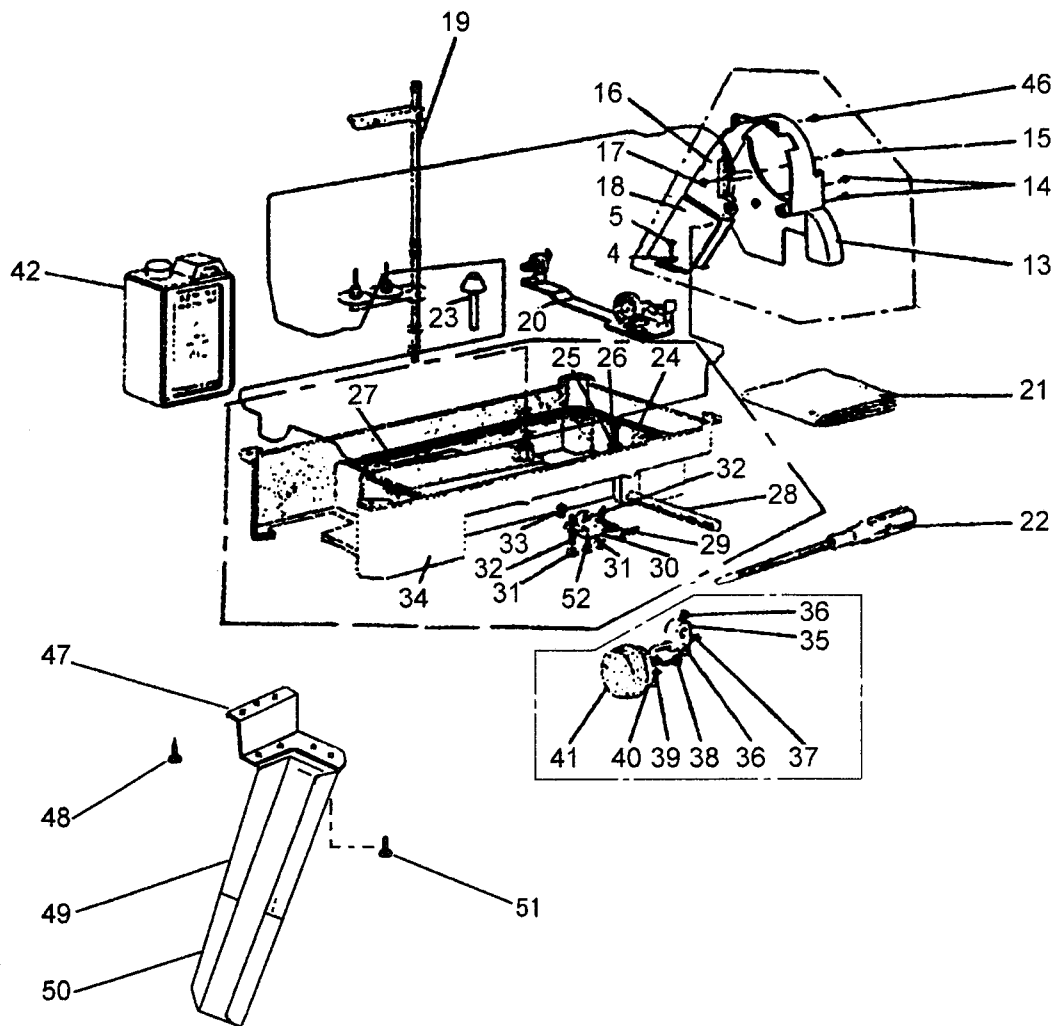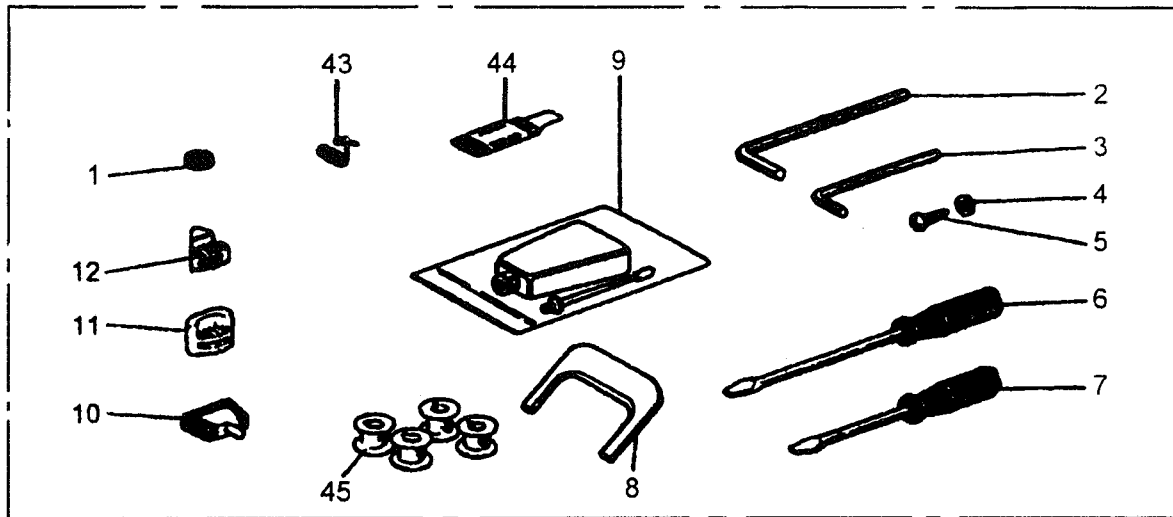
J.ACCESSORIES

Fig. No.	Part No.	Description	GC'188-MC	GC'188-MC1	Remarks
J01	HA100J2120	Magnet block	1	1	
J02		Hexagon socket screw key 3	1	1	
J03	HA704S0653	Hexagon socket screw key 2	1	1	
J04	HA300J2230	Washer	4	4	
J05	H801045200	Wood screw	4	4	GB T99 4 5/2:
J06	HA300J2200	Screw driver (Size M)	1	1	
J07	HA300J2210	screw driver (Size S)	1	1	
J08	HA704S0654	Speed command disc adjusting plate		1	
J09	HA100J2110	Oil with oiler	1	1	
J10	HA307J0067	Hinge with rubber cushion	1	1	
J11	HA300J2050	Head cushion (large)	2	2	
J12	HA300J2060	Head cushion (small)	2	2	
J13	HA305J0666	Belt cover	1	1	
J14	HA300J2280	Set screw	2	2	SM15/64(28)×8
J15	HA300J2250	Screw	1	1	M4×12.5
J16	HA305J0662	Belt cover complete	1	1	
J17	H003002040	Nut	1	1	GB/T6170 M4
J18	HA305J0665	Belt cover	1	1	
J19	HA707S0068	Thread stand complete	1	1	
J20	HA706S0067	Bobbin winder complete	1	1	
J21	HA300J2190	Head cover	1	1	
J22	HA300J2130	Screw driver (Size L)	1	1	
J23	HA106J0661	Knee lifter lifting rod	1	1	
J24	HA104J0654	Gasket for oil reservoir (small)	1	1	
J25	HA104J0653	Seal washer	1	1	
J26	HA104J0652	Oil drain screw	1	1	SM5/16(28)×10
J27	HA104J0655	Gasket for oil reservoir (large)	1	1	
J28	HA300J2160	Knee lifter shaft	1	1	
J29	HA104J0657	Knee lifter spring	1	1	
J30	HA104J0658	Knee lifter	1	1	
J31	HA104J6510	Nut	2	2	SM5/16（28）
J32	HA104J0659	Set screw	2	2	SM15/64(28)×8
J33	H007013090	E-type ring	1	1	GB/T896 9
J34	H5703I7101	Oil reservoir	1		
J34	H7504K7101	Oil reservoir		1	
J35	HA106J0663	Knee lifter coupling joint	1	1	
J36	HA300J2180	Bolt	2	2	SM5/16(18)×16
J37	HA106J0662	Knee lifter bell crank	1	1	
J38	HA106J0667	Screw	1	1	SM15/64(28)×8
J39	HA106J0666	Gasket for Knee lifter plate	1	1	
J40	HA106J0665	Knee lifter plate	1	1	
J41	HA106J0668	Pad for knee plate	1	1	
J42	HA300J2170	Oil tank	1	1	

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J.ACCESSORIES

Fig. No.	Part No.	Description	GC188-MC	GC188-MC-D	Remarks
J43	HA115B0706	Thread take-up spring	1	1	
J44	HA300J2310	Needle	1	1	
J45	HA100E2170	Bobbin	4		
J45	H2604D8001	Bobbin		4	
J46	HA300B2170	Screw	2	2	SM11/64(40)×8
J47	H5709I8001	Bracket	1	1	
J48	H801045200	Screw	3	3	GB/T99 4.5×20
J49	H5704I8001	Waste material chure(large)	1	1	
J50	H5705I8001	Waste material chure(small)	1	1	
J51	H401040080	Screw	4	4	GB/T65 M4×8
J52	HA110D0672	Screw	1	1	SM15/64(28)×12

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

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