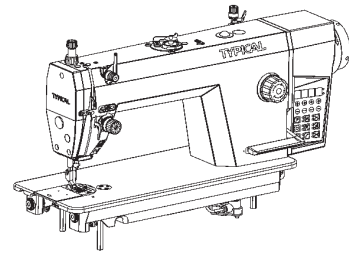# TYPICAL

GC6910 INTEGRATED LOCKSTITCH SEWING MACHINE WITH AN AUTOMATIC THREAD TRIMMER
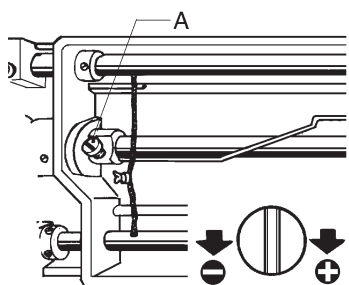
INSTRUCTION BOOK

※NOTE

The sewing machine,should always be lubricated and the oil supply replenished before it is used for the first time,and also replenished it is used for the first time. and also after long periods of non–use use only the lubricating oil our company. then lift the presser foot and run the machine at a low speed of 3000 spm to check oil distributing condition through oil check window.When lubricating is normal,keep the machine run in at this speed for 30 minutes,then increase the running speed gradually.After one month run–in operation,the machine can be run at the max speed under normal working condition.

1. OIL FILLING

(1)The oil amount in the oil reservoir is controlled through the reference marks A and B shown in .The mark A indicates the max oil amount level,the mark B for the min oil amount level .If the oil amount level is under the mark B replenish the oil reservoir with oil in time reservoir with oil in time.

(2)When filling oil, loosen the oil draining screw (c), drain off the remaining oil in the oil reservoir completely, clean the oil reservoir and tighten the oil draining screw (c),then fill the oil reservoir with fresh oil.

2.ROTATING HOOK OIL AMOUNT ADJUSTMENT

Adjust the oil amount of the rotating hook by turning the oil amount adjusting screw (A). Turn the screw (A) clockwise (in the "+" direction) to increase the oil amount ; turn it counter–clockwise (in the "–" direction) to decrease the oil amount.

3.OIL PUMP ADJUSTMENT

In ordinary operation , adjustment is not required for the oil pump , If oil splashing does not occur in the oil check window when the machine runs at a low speed , close the clearance of the bypass oil hole.

There isn't by–pass oil hole in GC6–9 series.

4.NEEDLE INSTALLATION

Turning the balance wheel to lift the needle bar to the upper end of its stroke. Loosen the needle clamp screw while keeping the long groove of the needle leftward, fully insert the needle shank up to the bottom of the needle socket, then tighten the needle clamp screw.
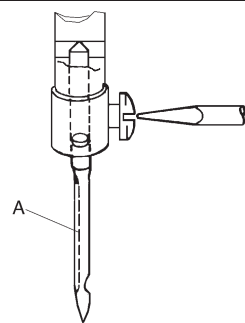
5.CONNECTION OF THE CLUTCH LEVER WITH THE PEDAL

(1)Install speed gorernor A, link speed gorernor A and pedal B with tie barc,keep tie bar C vertical.
(2)The optimum tilt angle of pedal is approximately 15 deg.
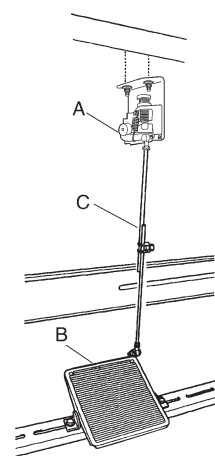
6.ADJUST THE OPENING TIME OF THE TENSION DISCS

Within the presser foot lift range , the opening time of the tension discs can be adjusted as follows:
(1)Remove the rubber plug from the back of the arm and Loosen the screw (A) of the knee lift level (left)
(2)Move the tension releasing cam (D) leftward for earlier opening or rightward for later opening.It will facilitate the adjustment if putting a lifting high block under the presser foot lift.
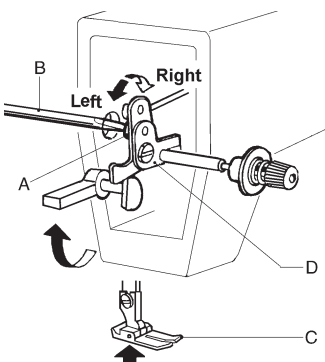
7.THREADING

To thread the needle thread, raise the needle bar to the upper end of its stroke, lead the thread from the spool and perform. Threading as shown in . To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then lift it to its highest position. Pull the ends of needle thread and bobbin thread frontward under presser foot.
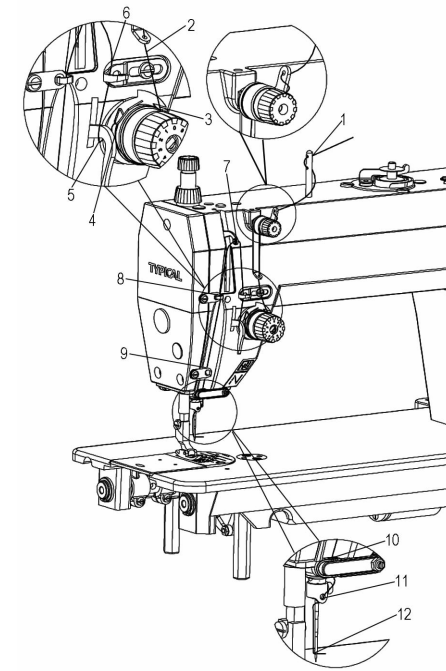
8.WINDING THE LOWER THREAD

Turn on the power switch.Place the bobbin (A) onto the bobbin winder shaft(B).Wind the thread several times around the bobbin (A) in thedirection indicated by the arrow.Push the bob bin presser arm (C) toward the bobbin (A).Raise the presser foot with the lifting lever .Depress the treadle. Lower thread winding will then start.Once winding of the lower thread is completed, the bobbin presser arm (C) will return automatically.After the thread has been wound on , remove the bobbin and cut the thread with the knife(D).
NOTE:
1.Loosen the screw (E) and mover the bobbin presser(C) to adjust the amount of thread wound onto the bobbin.
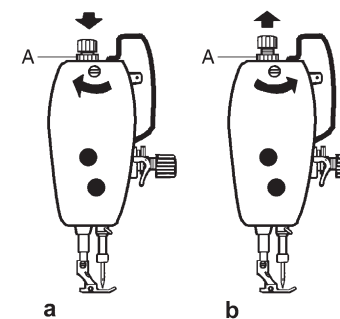2.The amount of thread wound onto the bobbin should be a maximum of 80% of the bobbin capacity.
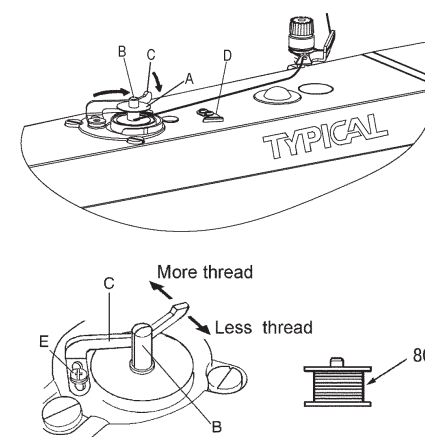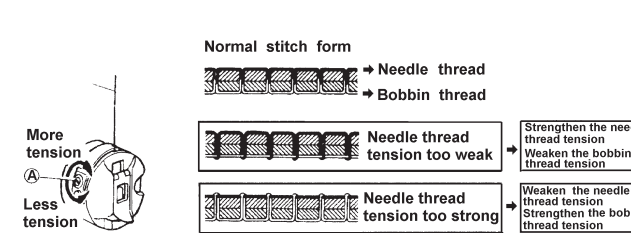
9.ADJUST THE PRESSURE OF PRESSER FOOT

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

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

10.THREAD TENSION ADJUSTMENT

Normal stitch form	
→ Needle thread → Bobbin thread	
Needle thread tension too weak	Strengthen the needle thread tension Weaken the bobbin thread tension
Needle thread tension too strong	Weaken the needle thread tension Strengthen the bobbin thread tension

Thread tension should be determined in accordance with the stitch obtained by adjusting the tension of the bobbin thread and needle thaead.
The tension of the bobbin thread:to be adjusted by turning the tension spring regulating screw of the bobbin case,After adjusting , insert the bobbin into the bobbin case and hold the end of the thread from the bobbin case to hang the bobbin case, If the bobbin case falls slowly and evenly, the proper tension of the bobbin thread is obtained.
The tension of needle thread: to be adjusted by turning the thumb nut.
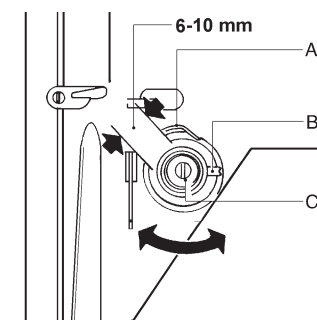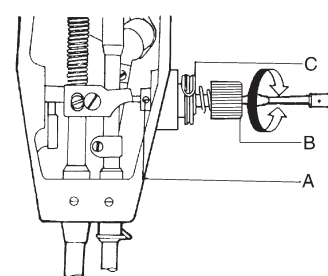
The stroke of the thread take–up spring runs from 6mm to 10mm , when sewing very thin fabrics, reduce the thread take–up spring tension and increase the thread take–up spring stroke , where as increase the thread take–up spring tension and reduce the thread take–up stroke when sewing very thick fabrics.
Adjusting the thread take–up spring tension : First loosen the set screw (A) , Turn the tension stud (B) counter–clockwise to decrease the tension of the thread take–up spring (c) to zero. Then turn the tension stud (B) clockwise till the spring (c) comes to the notch of the tension regulating bushing, and again turn the tension stud (B) halfway back (counter clockwise),After the adjustment, tighten the set screw (A).
Adjusting the thread take–up spring stroke: loosen the set screw (B) turn the stud (C) clockwise to increase the stroke or turn stud (C) counter–clockwise to decrease the stroke after the adjustment. tighten the set screw (B).

### 11.ADJUST THE SYNCHRONIZATION OF THE NEEDLE WITH ROTATING HOOK
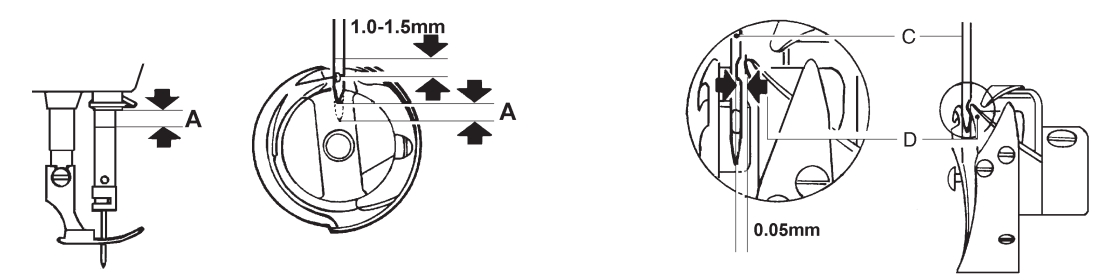
When lifting the needle bar from its lowest posi–tion of the stroke to the distance A, the hook point D of the bobbin should align with the center' line of the needle and be 1.0–1.5mm above upper end of the needle eye (Fig.15)

The clearance between the bottom of the needle notch and the hook tip should be 0.05 mm .

### 12.ADJUSTMENT OF STITCH LENGTH AND REVERSE FEEDING

The stitch length can be adjusted by turning the dial knob (A). The figures on the face (B) of the dial show the stitch length in mm. The reverse feed level must be depressed by another hand while adjusting the stitch length (B).The reverse feeding start when the reverse feed lever (B) is depressed, the machine will feed forward again if the reverse feed level is released.
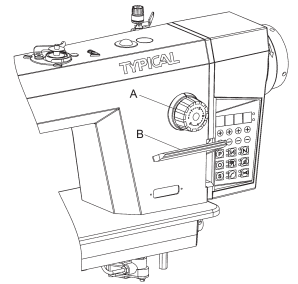
13.ADJUST ING THE POSITION OF FEED DOG AND NEEDLE
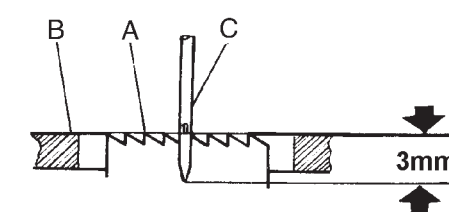
Turn the balance wheel, and lower Feed Dog (A). When the top of the feed dog is flush with needle Plate Surface (B), Needle Point (C)should be 3mm below the needle plate surface.
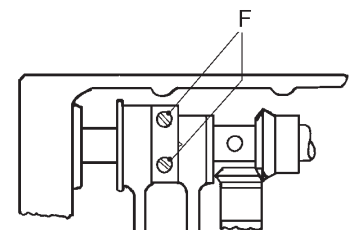
Loosen eccentric wheel screw,turn eccentric wheel and balance wheel separately to adjust the position of needle and feed doy .Tnen tighten the screw.

14.STITCH LENGTH ERROR ADJUSTMENT
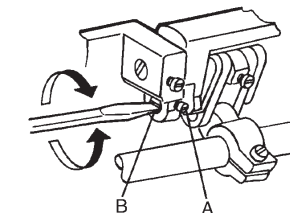
Loosen screw (A) to adjust the stitch length adjusting cam (B). Turn it rightward to narrow the stitch length as forward sewing, and widen it as reverse sewing; turn it leftward to widen the stitch length as forward sewing, and narrow it as reverse sewing .

15.FEED DOG HORIL ONTALLTY ADJUSTMENT

Mark position on eccentric shaft		Feed dog	
	Level	≈≈≈≈≈	Standard
	Above	≈≈≈≈≈	The front up the max.
	Under	≈≈≈≈≈	The front down the max.
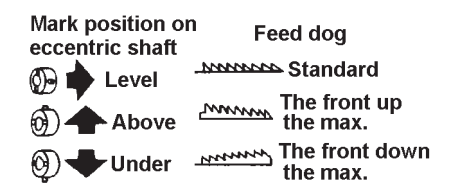
Heighten the front of feed dog to prevent fabric from wrinkling ,lower the front of feed dog to prevent fabric from defection, breaking of hook thread.

16.POSITION OF THE FIXED KNIFE AND LEFT KNIFE POINT

(1)The standard position is shown in the figure.
(2)If the size is larger than the standard, the knife will cut the 3 threads in the meantime or draw the thread out of the needle eye; if smaller, will cause cutting damage, so make sure to avoid that.
(3)As things mentioned above occur, adjustment is done by setting the fixed knife support or the fixed knife (B).
  A–the blade   B–Fixed   knife C–the knife (left)
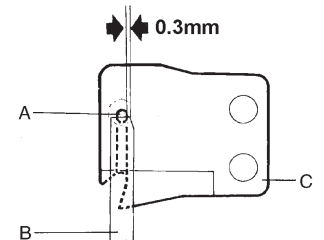
17.POSITION OF THE CUTTER DRIVING SHAFT

(1)The Standard position is shown in the figure.
(2)When assemble it,Cutter Driving Shaft (G) should be first put in Cutter Driving Crank (A).
(3)Set Thread Cutting Cam Crank 1(D) on the cutter driving shaft with reference to the standard position.
(4)Set Stopper (F), make sure that there is no clearance between parts around the cutter driving shaft, and rotate steadily.
  A–knife driring crank
  B–spring end cover
  C–spring
  D–thread cuttiy cam crank
  E–thread cutting cam crank 2
  F–stopper
  G–knife driring shaft
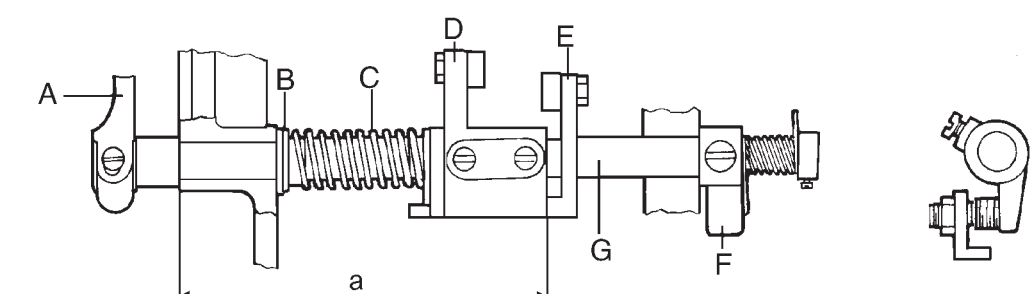
18.THE ELECTROMAGNET CORE STROKE

(1)The standard stroke of the electromagnet core is 6mm.
(2)The stroke can be adjusted with Positioning screw (A).
B—thread cutting electromagnet holder
C—thread cutting cam crank 2
D—driving bar
E—thread cutting electromagnet
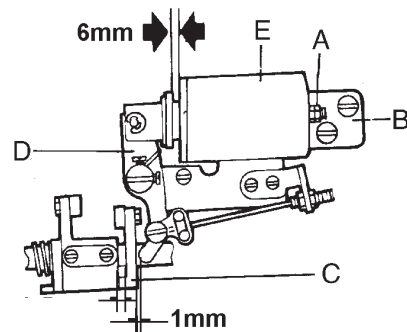
19.INSTALLING THREAD CUTTING CAM
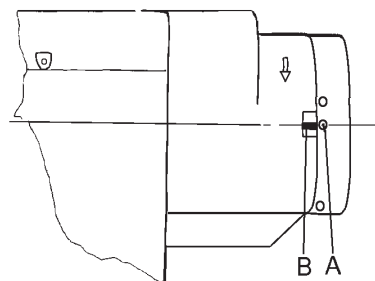
(1)Align No.2 Positioning Mark (A) on the balance wheel with Positioning Mark (B) on the machine arm.
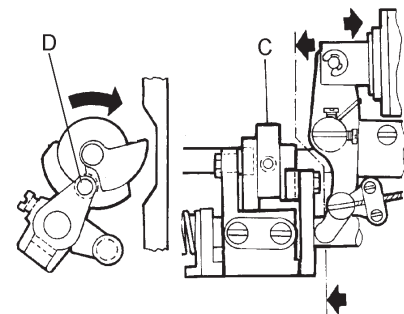
(2)As the thread cutting electromagnet works, Thread Cutting Cam (C) run in normal rotating direction. Fix the cam when Cam (C) is engaged with Roller (D).
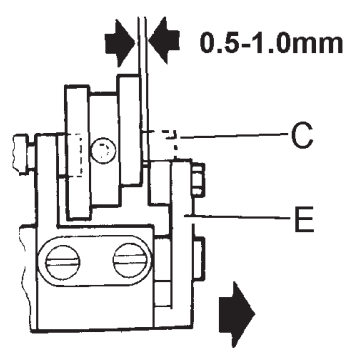
(3)Stop the operation of the electromagnet, reset Cam Driving Crank (E), Cam (C) is seperated from the en-gagement with the roller,the standard clearance is 0.5—1.0mm.

M H

NOTE:
1.the figure shows the standard position of Cam Driving Crank (E) before operation.
F—hook shaft   G—roller   H—cutter driving shaft

2.It may change the positions mentioned above to remove the stopper, then adjust with Screw (K), and readjust the above .

20.ADJUSTING KNIFE CUTTING ENGAGEMENT

①When the electromagnet works, turn the machine, the movable knife (A) follows the motion of the thread cutting cam. The maximum degree of cutting engagement is 1.5—2.0mm (B—the fixed knife)
②Adjust the cutter driving crank if necessary.

21.ADJUSTING CUTTING PRESSURE
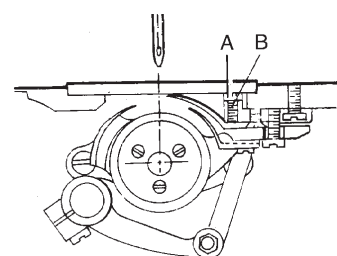
(1)When cutting thick thread, increase the cutting force.
(2)For adjusting cutting force, loosen Set Nut (A),and adjust Screw (B).

22.ADJUSTING NEEDLE THREAD TENSION
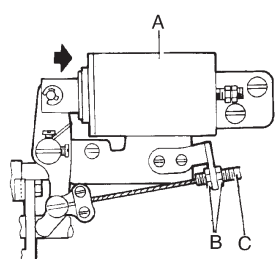
There should be a clearance of 1mm between the two discs while the thread cutting electromagnet (A) is work-ing.
For adjustment, loosen Nut (B),and move soft thread (C).

Note: If the clearance is too small, the thread end left after cutting is too short and may easily go away from the needle eye; otherwise the tension is poor and affect the needle thread tension.
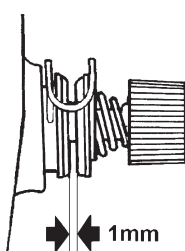
23.THREAD END REMAINS ADJUSTMENT

To get the needle thread end remains properly, adjust Nut (A).
Turn rightwrd: get shorter
Turn leftward: get longer
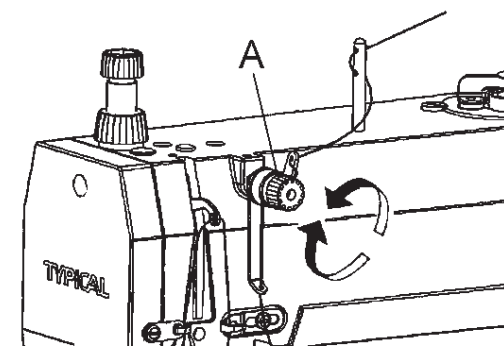
24.INSTALLING REVERSE STITCH ELECTROMAGNET(D3)

Adjust the position of Electromagnet (A) properly to guarantee the flexible connection of the magnet with the link lever and the convenient operation of Reverse Stitch Bar (B) ,then set with a screw.
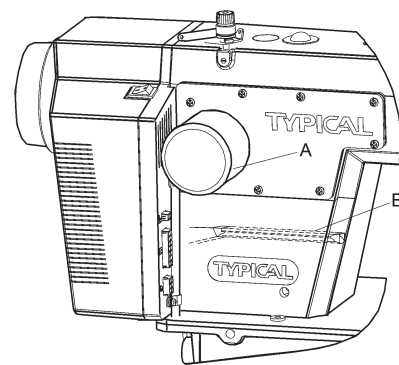
25.REVERSE STITCH NEEDLE SWITCH

For the double switch model:
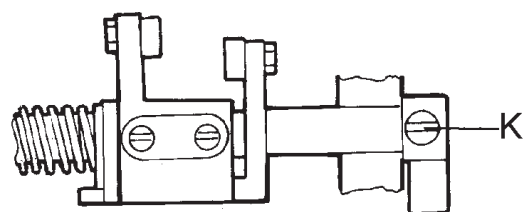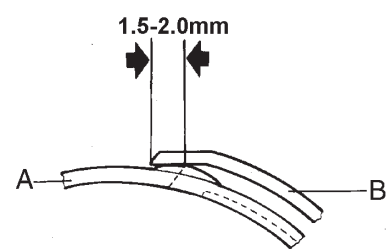push button A, it can perform back tacking sewing push button B it can perform reverse sewing.
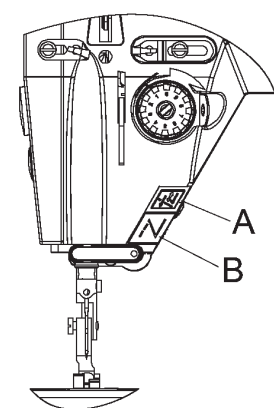
26.HOOK BOBBIN CASE AND BOBBIN
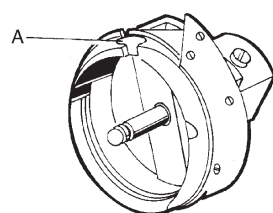
1.There is a thread groove (A) in the special hook for thread cutting sewing machine.
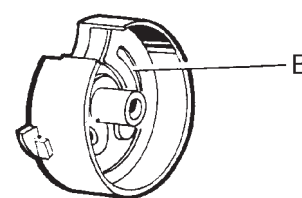
2.The bobbin case used in the machine should be with a spring (B) in its bottom, which prevents the bobbin from running without loading.

27.PERIODICAL CLEANING

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.
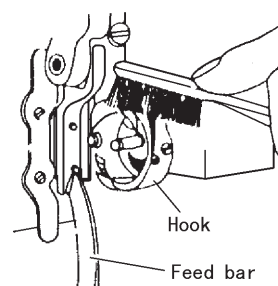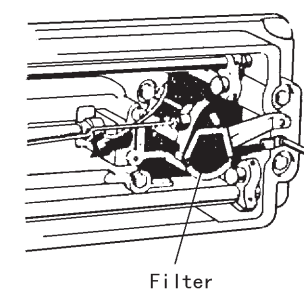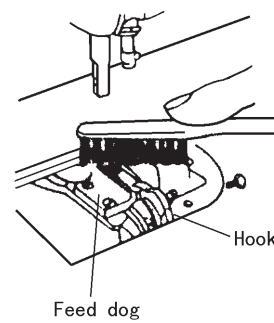
28.THREAD RETAINING DEVICE
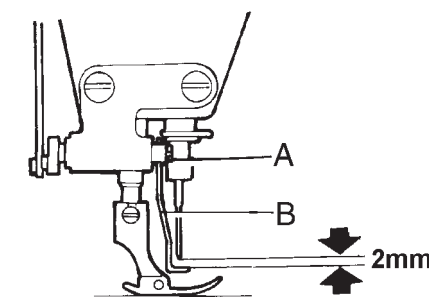
1.Thread Retainer Height
(1) Standard height: 2 mm from the thread retainer as the needle in its highest position.
(2) To adjust Thread Retainer (B), loosen Screw (A).
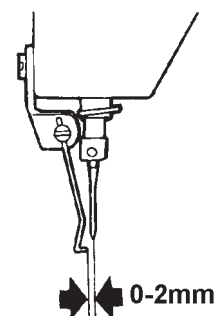
2. Thread Retainer Working position.
(1) When the magnet move into the electromagnet completely, the standard distance between the thread retainer and the center of the needle should be 0~2 mm.
(2)To adjust its position, loosen Screw (C), Screw (B) , and adjust the position of Electro-magnet Asm(A).
D—magnet
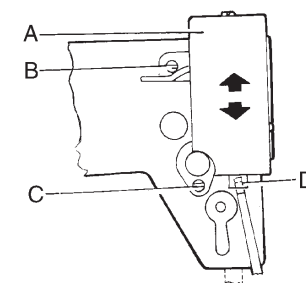
6910 machine's main technical date

Model / Item	M	H	B
Application	Commom materials	Thick materials	Large hook
Sewing speed	5000 spm	3500 spm	
Max. Stitch length	5mm	7mm	
knee controlled Presser foot lifting height	13mm		
Rotating shuttle	Standard automatic oiling	Thick materials automatic oiling	
Needle	DBx1 11 # – 16 #	DPx5 18 #– 22 #	

When sewing at speeds of 4000 rpm or higher,set the stitch length to 4mm or less.

6910 □ D □

1.Thread trimmer
2.Thread trimmer+Quick reverse
3.Thread trimmer+Quick reverse +Electronic wire clip

M—Medium—weight materials
H –Heavy –weight materials
B –Large hook

Note：1. Model GGC6910MD3C has thread trimmer, reverse sewing and wiper
2. Model GC6910MD3C-PM is for the machine with Powermax control system
3. Back foot lifter is optional for all above models

TYPICAL

GC6910 INTEGRATED LOCKSTITCH SEWING MACHINE WITH AN AUTOMATIC THREAD TRIMMER

PARTS CATALOGUE

1

2

3

4

5
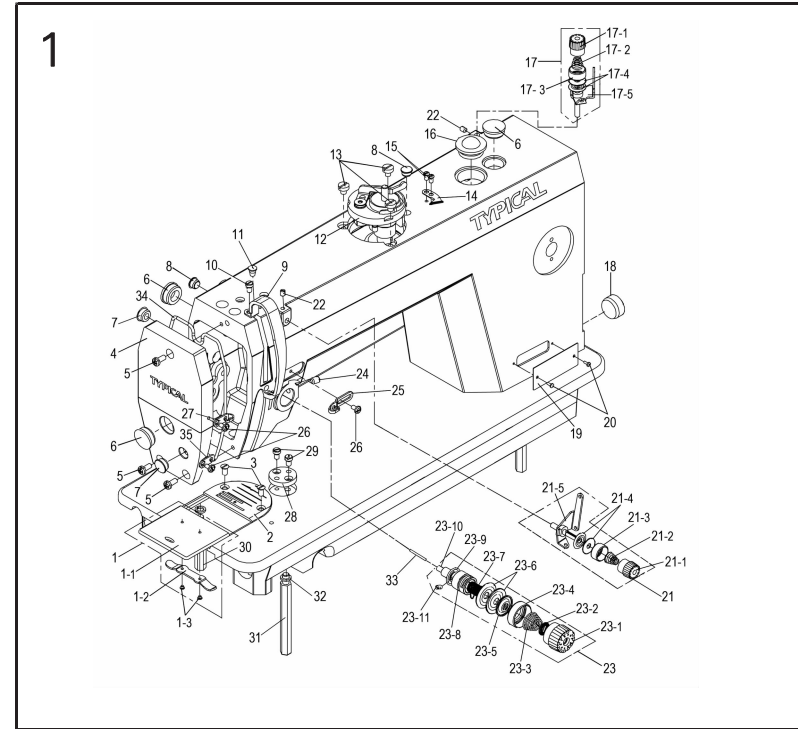
1. ARM AND ITS ACCESSORIES

No.	Ref.No.	Description	M	H	B
1	022170000	Push plate assembly	1	1	1
1-1	022170001	Push plate	1	1	1
1-2	022170002	Push plate spring	1	1	1
1-3	022170003	Push plate spring screws	2	2	2
2	274100004	Needle plate	1		
	048100004	Needle plate		1	
	048100006	Needle plate 2.6			1
3	022100020	Needle plate screws	2	2	2
4	274120001	Panel	1	1	1
5	022100004	Panel screws	3	3	3
6	022130003--V	Rubber stopper φ 19	3	3	3
7	022130004--V	Rubber stopper φ 11.8	2	2	2
8	022200011--V	Rubber stopper φ 8.8-5	2	2	2
9	274100002	The wiper shield	1	1	
	274G10001	The wiper shield			1
10	022200004--D	Screws SM11/64"(4.37)×40-5.5	1	1	1
11	022100017--V	Rubber stopper φ 5.7	1	1	1
12	263140000	Winder assembly	1	1	1
13	263100001	Screws	3	3	3
14	001100009	Secant knife	1	1	1
15	022830004--D	Screws	2	2	2
16	022180001--V	Oil window	1	1	1
17	274130000	Small clamp assembly	1	1	1
17-1	274130001	Knobs	1	1	1
17-2	274130002	Spring	1	1	1
17-3	274130003	Knob cap	1	1	1
17-4	022150003	Small clamp plate	2	2	2
17-5	274131000	Over the line board assembly	1	1	1
18	274300005	Rubber stopper φ 21	1	1	1
19	198000020	Model Brand	1	1	1
20	BXF8899009	Rivet	2	2	2
21	274140000	Small clamp assembly	1	1	1
21-1	274130001	Knobs	1	1	1
21-2	274140001	Spring	1	1	1
21-3	274130003	Knob cap	1	1	1
21-4	022150003	Small clamp plate	2	2	2
21-5	274141000	Over the line board assembly	1	1	1
22	022100011--D	Screws SM11/64"(4.37)×40-5.5	2	2	2
23	274150000	Clamp assembly	1		
	274160000	Clamp assembly		1	1
23-1	274150001	Knobs	1	1	1
23-2	022160010	Stopper plate	1	1	1
23-3	022160003	Clamp spring	1		
	048110001	Clamp spring		1	1
23-4	274150002	Knob cap	1	1	1
23-5	022160004	Loose wire board	1	1	1
23-6	022160005	Clamp plate	2	2	2
23-7	022160006	Thread tension spring	1		
	048110002	Thread tension spring		1	1
23-8	022160007	Clamp mount	1	1	1
23-9	022160001	O-ring	1	1	1
23-10	022160001	Clamp screw	1	1	1
23-11	022160008	Screws	1	1	1
24	022100013--D	Screws SM15/64"(5.95)×28-7.5	1	1	1
25	021700014	Line hook	1	1	
	078100005	Line hook			1
26	022150006	Line hook screws SM3.57×6	3	3	3
27	BXF3839009	Panel line hook	1	1	
	078130001	Panel line hook			1
28	057100008	Clip side seat	1	1	1
29	124100004	Clip side seat screws	2	2	2
30	048100005	Bottom strut	2	2	2
31	274100001	Bottom strut	1	1	1
32	S150601004	Spring washer	3	3	3
33	022160009	Loose wire nails	3	3	3
34	S1506S1047	O-ring	1	1	1
35	022100006	Line hook	1		
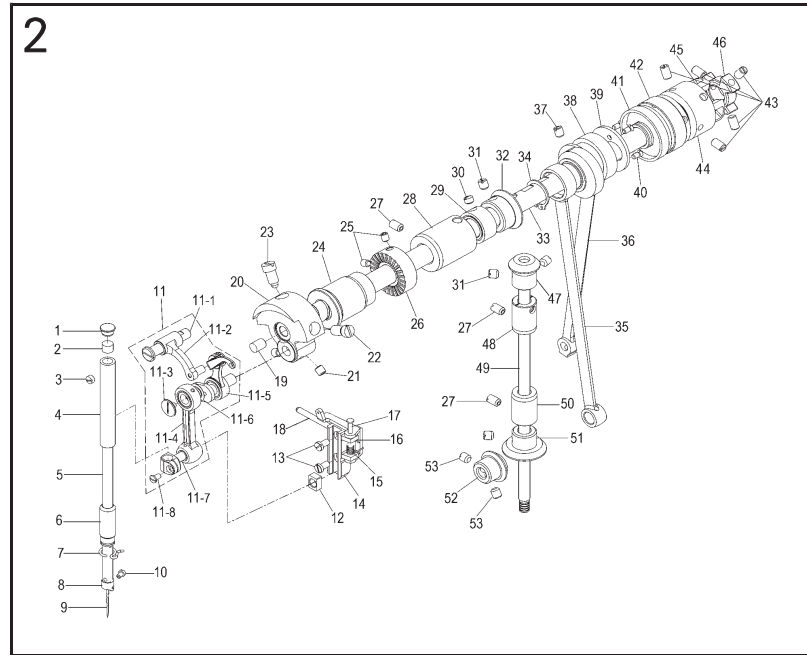
2. ARM SHAFT AND VERTICAL SHAFTTHREAD TAKE-UP MECHANISM

No.	Ref.No.	Description	M	H	B
1	022200011--V	Rubber stopper φ8.8-5	1	1	1
2	022200010	Linoleum plug	1	1	1
3	022200009	Screws	1	1	1
4	274200002	Needle bar Sleeve (up)	1	1	1
5	153200003	Needle bar	1		
	078200004	Needle bar		1	1
6	153200005	Needle bar Sleeve (down)	1		
	124200006	Needle bar Sleeve (down)		1	1
7	022230002	Hook over the line (M/HD3C)	1	1	1
8	048200004	Over the line ring	1	1	1
9	022200016	Needle DB × 1 14#	1		
	048200005	Needle DP × 5 18#		1	
	S150901013	Needle DP × 5 22#			1
10	022200017	Screws	1	1	1
11	02221	The wiper assembly	1		
	04821	The wiper assembly		1	
	07821	The wiper assembly			1
11-1	022210003	The wiper hinge axis	1	1	1
11-2	022210002	The thread link	1	1	1
11-3	022210006	Screws	1	1	1
11-4	022212000	Needle bar linkage assembly	1		
	048210002	Needle bar linkage assembly		1	1
11-5	022210001	The thread rod assembly	1		
	048210001	The thread rod assembly		1	
	078210001	The thread rod assembly			1
11-6	022210004	Crank the thread	1		
	078210001	Crank the thread		1	1
11-7	022210007	Needle bar connector	1	1	1
11-8	022210009	Screws	1	1	1
12	022200020	Slider	1	1	1
13	022200019	Screws	2	2	2
14	036350004	Slide rails	1	1	1
15	036350004	The hinge spring	1	1	1
16	036350002	Hinges	1	1	1
17	036350003	The hinge pin	1	1	1
18	238400003	Pine poles	1	1	1
19	022310002	Rubber stopper φ 7.4X10	1	1	1
20	022220001	Needle bar crank	1		
	048220001	Needle bar crank		1	1
21	022220003	Screws SM1/4"(6.35)	2	2	2
22	022200006	Screws	1	1	1
23	022200007	Locate screws	1	1	1
24	022300003	The shaft sleeve (left)	1	1	1
25	S150212006	Screws	1	1	1
26	207302000	Friction wheel	1	1	1
27	022200002	Screws	3	3	3
28	022300004	The shaft sleeve (middle)	1	1	1
29	022320001	The shaft tight circle	1	1	1
30	022220003	Screws	2	2	2
31	022200004	Screws	6	6	6
32	Z0A180891	Bevel gear	1	1	1
33	274200001	The shaft	1	1	1
34	022342001	Collar	1	1	1
35	022343001	Dental lift rod	1	1	1
36	03634	Cam assembly	1		
	114300001	Cam assembly		1	1
37	022100013	Screws	2	2	2
38	036550002	The feed link	1	1	1
39	036300004	Cam baffle	1	1	1
40	165330001	Screws	3	3	3
41	274200003	Seal	1	1	1
42	S150801006	Bearing	1	1	1
43	BX87459009	Couplings 1	6	6	6
44	274210001	Couplings 1	1	1	1
45	274210003	Elastomer	1	1	1
46	274210002	Couplings 2	1	1	1
47	Z0A180892	Bevel gear	1	1	1
48	022300111	Vertical shaft sleeve (up)	1	1	1
49	022350001	The vertical axis	1	1	1
50	022300112	Vertical shaft sleeve (down)	1	1	1
51	Z0A180885	Bevel gear	1	1	1
52	Z0A180886	Bevel gear	1	1	1
53	022320002	Screws	2	2	2
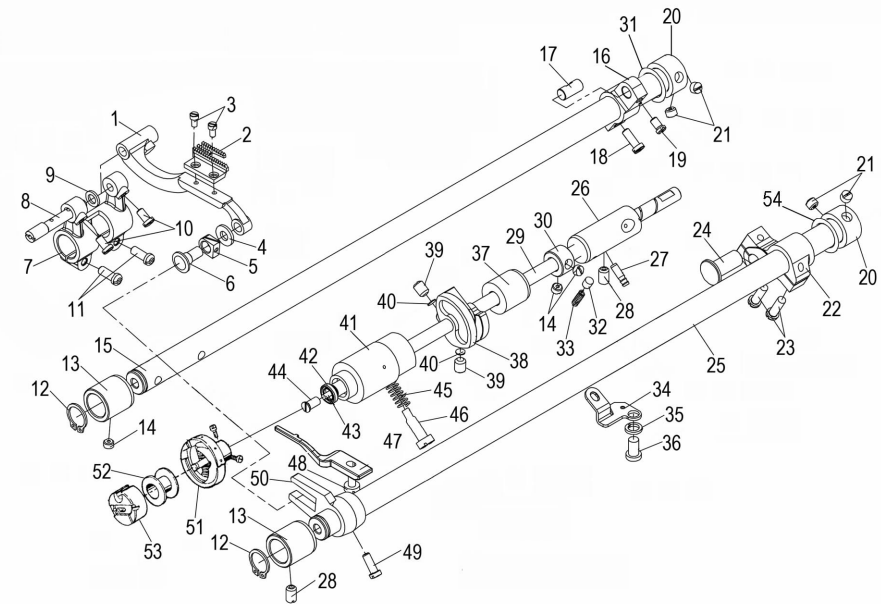
3. FEEDING AND FEED LIFTING AND ROTATING HOOK MECHANISM

No.	Ref.No.	Description	M	H	B
1	036411002	Feed dog holder	1	1	1
2	274300003	Feed dog	1		
	022610003	Feed dog		1	1
3	022610004	Feed dog screws	2	2	2
4	036413001	Washer	1	1	1
5	036411001	Fork lift slider	1	1	1
6	036412001	Fork lift axle sliders	1	1	1
7	022611001	Crank	1	1	1
8	036410002	The eccentric shaft	1	1	1
9	022610006	Washer	1	1	1
10	022200019	Crank screws	2	2	2
11	022612001	Crank screws	2	2	2
12	S150617006	Collar	2	2	2
13	022600004	Feed shaft sleeve	2	2	2
14	022200009	Screws	3	3	3
15	274300002	The feed axis	1	1	1
16	036400003	Feed crank (right)	1		
	114400001	Feed crank (right)		1	1
17	036400204	Crank rod pin (short)	1	1	1
18	022640003	Screws	1	1	1
19	036550005	Screws	1	1	1
20	022620001	Feed axis tight circle	1	1	1
21	022220003	Screws	4	4	4
22	036400017	Crank	1	1	1
23	022600016	Screws	2	2	2
24	022600007	Hinge shaft	1	1	1
25	274300001	Dental lift shaft	1	1	1
26	036460001	Under axis sleeve (right)	1	1	1
27	022430002	Tubing	1	1	1
28	022200002	Screws	2	2	2
29	036440001	Under axis	1	1	
30	022420001	Tight circle	1	1	1
31	274300004	Washer	2	2	2
32	036400015	Plunger	1	1	1
33	036400016	Plunger spring	1	1	1
34	022400010	Bezel	1	1	
	078400006	Bezel			1
35	S150601004	Spring washer	1	1	1
36	022820001	Screws	1	1	1
37	036400012	Under axis sleeve (middle)	1	1	1
38	036450001	Tangent cam	1	1	1
39	B096339088	Fixing screws	2	2	2
40	165400001	Washer	2	2	2
41	036400010	Under axis sleeve (left)	1	1	1
42	036470001	Under axis seal	1	1	1
43	022411002	Oil filter plug	1	1	1
44	022411001	Screws	1	1	1
45	022400006	Fuel adjustment spring	1	1	1
46	022400005	Fuel adjustment screws	1	1	1
47	022400013	Hook positioning hook	1		
	048400002	Hook positioning hook		1	
	078400003	Hook positioning hook			1
48	022400015	Screws	1	1	1
49	022640003	Screws	1	1	1
50	036484001	Feed lifting fork	1	1	1
51	274310000	Rotating hook complete	1		
	274320000	Rotating hook complete		1	
	12041	Rotating hook complete			1
52	036400006	Bobbin	1	1	
	078400005	Bobbin			1
53	165440000	Bobbin case complete	1	1	
	12042	Bobbin case complete			1
	120400001	Under axis			

4. STITCH LENGTH ADJUSTMENT MECHANISM

No.	Ref.No.	Description	M	H	B
1	036500001	Pin	1	1	1
2	036550003	Stitch regulator rod	1	1	1
3	022640003	Screws	1	1	1
4	022540004	Screws	1	1	1
5	036510001	Stitch regulator seat	1	1	1
	114500001	Stitch regulator seat			1
6	036510002	Spring hook	1	1	1
7	022200019	Screws	2	2	2
8	036510004	Pin	1	1	1
9	S150620004	Collar	1	1	1
10	036510003	Backstitch link	1	1	1
11	022200002	Screws	1	1	1
12	238300001	Bushing	1	1	1
13	036550004	Hinge shaft	1	1	1
14	238300002	Rubber stopper Φ16	1	1	1
15	124510003	O-ring	1	1	1
16	274400009	Screw	1	1	1
17	274400008	Pitch knob transposon	1	1	1
18	S150403011	Cylindrical pin	1	1	1
19	S150209022	Screw	1	1	1
20	274400006	Pitch knob 5mm	1	1	
	274400007	Pitch knob 7mm			1
21	238300004	Screw	1	1	1
22	022540004	Screws	2	2	2
23	022540003	Screws	1	1	1
24	274400010	Backstitch joystick	1	1	1
25	022500011	Washer	1	1	1
26	036531001	Short axis	1	1	1
27	S150651007	O-ring	1	1	1
28	036520002	Joystick crank shaft	1	1	1
29	036520001	Crank lever	1	1	1
30	022500013	Screws	1	1	1
31	274400004	Spring frame	1	1	1
32	022820001	Screws	1	1	1
33	036510005	Screws	1	1	1
34	036510006	Spring adjustment hook	1	1	1
35	022640003	Screw	2	2	2
36	036580002	Crank positioning pin (left)	1	1	1
37	036558001	Crank short rod	1	1	1
38	036550009	Rod eccentric shaft	1	1	1
39	036558002	Crank long rod	2	2	
	114500003	Crank long rod			2
40	036400104	Crank rod pin (long)	1	1	1
41	036550006	Crank short rod pin	1	1	1
42	036550005	Screw	1	1	1
43	036550008	Screw	1	1	1
44	036558002	Screw	1	1	1
45	036550010	Stitch regulator crank	1	1	1
46	036580001	Crank positioning pin (right)	1	1	1
47	036820002--9	Joystick spring	1	1	1
48	036558007	Screw	1	1	1
49	036520003	Coil spring	1	1	1

5. KNIFE ACTUATING MECHANISM

No.	Ref.No.	Description	M	H	B
1	03676	Cord assy	1	1	1
2	022200019	Screw	1	1	1
3	274510000	Tangent solenoid assy	1	1	1
3-1	274511000	Tangent solenoid	1	1	1
3-2	036712	Mounting bracket	1	1	1
3-3	S150503004	Nut	2	2	2
3-4	S150632004	Washer	1	1	1
3-5	165710001	Cushion	1	1	1
3-6	S150203006	Screw	3	3	3
3-7	036711001	Washer	1	1	1
3-8	S150620012	Collar	1	1	1
3-9	036710001	Driver board	1	1	1
3-10	036710003	The support plate	1	1	1
3-11	036710005	Plate	1	1	1
3-12	036710004	Screw	1	1	1
3-13	036710006	Screw	2	2	2
3-14	036710010	Driver board tight circle	1	1	1
3-15	036550008	Screw	2	2	2
3-16	036710002	Screw	1	1	1
3-17	022910010	Screw nut	1	1	1
3-18	S150620004	Collar	2	2	2
3-19	036800009	Pin	1	1	1
3-20	036710007	Cord Holder	1	1	1
3-21	022200019	Screw	2	2	2
4	036800002	Screw	2	2	2
5	022200019	Screw	1	1	1
6	036700013--V	Rubber sleeve	1	1	1
7	036700014	Chuck wire	1	1	1
8	022200019	Screw	1	1	1
9	036780001	Tight circle	1	1	1
10	022300002	Screw	1	1	1
11	036700016	Spring	1	1	1
12	165720004	Stopper assembly	1	1	1
13	036730008	Screw	1	1	1
14	165720001	Restrictor plates	1	1	1
15	165720003	Cushion	1	1	1
16	165720002	Screw	1	1	1
17	S150503005	Screw nut	1	1	1
18	036800002	Screw	2	2	2
19	036700004	Cutter shaft	1	1	
	120700002	Cutter shaft			1
20	036700003	Cam Crank	1	1	1
21	165730008	Screw	2	2	2
22	036730005	Roller nut	2	2	2
23	036730003	Roller	2	2	2
24	036730004	Crank roller cam	2	2	2
25	036700001	Spring	1	1	1
26	036700006	Spring cover	1	1	1
27	036750001	Fixed blade holder	1	1	1
28	036750001	Grommet	1	1	1
	120700001	Grommet			1
29	022130006	Screw	1	1	1
30	036750003	Fixed blade	1	1	1
	120700002	Fixed blade			1
31	036750004	Screw	1	1	1
32	036750005	Screw	1	1	1
33	036750006	Screw nut	1	1	1
34	036731001	Tool Holder	1	1	1
35	022200019	Screw	2	2	2
36	036721002	Turret	1	1	1
37	036720003	Arbor link	1	1	1
38	036720007	Screw	2	2	2
39	036720007	Screw nut	2	2	2
40	036720004	Crank	1	1	1
41	036721003	Washer	3	3	3
42	036721004	Screw	1	1	1
43	036710004	Blade left	1	1	1
44	036721004	Blade left	1	1	1
45	036720003	Screw	2	2	2
46	S150503004	Screw nut	1	1	1

6. WIPER ELECTROMAGNET MECHANISM (M/HD3C)

No.	Ref.No.	Description	M	H	B
1	274610000	Block line solenoid assy	1	1	1
1–1	036910001	Wire connector	1	1	1
1–2	198000009	Wire assy	1	1	1
1–3	036910003	Cord clamp	1	1	1
1–4	S150607007	Washer3	8	8	8
1–5	S150601003	Washer3	8	8	8
1–6	S150216011	Screw M3×6	8	8	8
1–7	036910004	Solenoid bracket	1	1	1
1–8	036910005	Cover for wiper mech	1	1	1
1–9	036910006	Solenoid for wiper	1	1	1
1–10	036910007	Coil spring	1	1	1
1–11	S150620003	Retaining ring9 GB896–86	1	1	1
1–12	036910008	Rubber ring	1	1	1
1–13	036910009	Switch for wiper	1	1	1
1–14	036910010	Washer Φ13	1	1	1
1–15	036900002	Screw	1	1	1
1–16	022510004	Screw	2	2	2
1–17	036900003	Washer	2	2	2
2	036920001	Wiper bracket	1	1	1
3	036921008	Wiper shaft asm	1	1	1
4	S150620014	Retaining ring 4 GB896–86	2	2	2
5	036920003	Wiper	1	1	1
6	022610004	Screw	1	1	1
7	036920004	Link	1	1	1
8	036921007	Shaft	1	1	1
9	036900005	Screw	2	2	2
10	036921006	Washer	1	1	1
11	S150503002	Nut M3 GB6170–86	1	1	1
12	036921005	Spring washer	1	1	1
13	165900001	Rubber washer	1	1	1
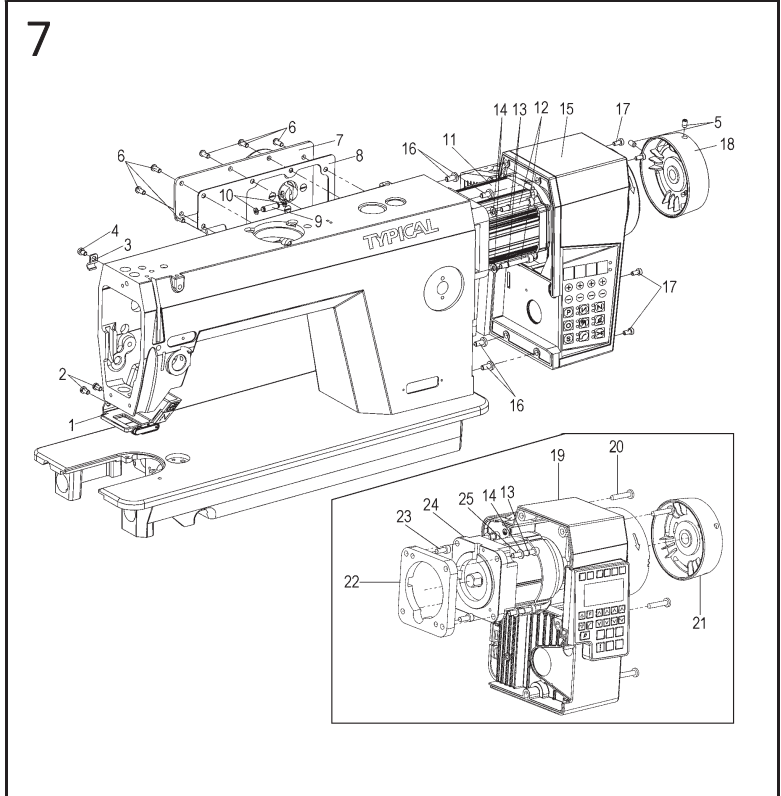
7. BACKSTITCH SOLENOID AND CONTROLLER MECHANISM

No.	Ref.No.	Description	M	H	B
1	274420000	Integrated switch assy	1	1	1
	274430000	Reserve sewing switch assy (M/HD3C)	1	1	1
2	022200019––D	Screw	2	2	2
3	217N00026	Clamps	2	2	2
4	022200004––D	Screw	1	1	1
5	S150215001	Screw GB/T80–2000 M5×8	2	2	2
6	022100006––D	Screw	8	8	8
7	274410000	Backstitch solenoid assy	1	1	1
8	274400002	Seals	1	1	1
9	036800009	Pin	1	1	1
10	S150620004	Collar GB896–76 φ4	2	2	2
11	274712000	Motor	1	1	1
12	S150209177	Screw M5×35	4	4	4
13	B082050864	Washer	4	4	4
14	B084050974	Washer	4	4	4
15	274711000	Controller components	1	1	1
16	S150216046	Screw M5×10	4	4	4
17	S150216013	Screw M4×12	4	4	4
18	238710001	Handwheel	1	1	1
19	274B71100	Controller components	1	1	1
20	S150216033	Screw M5×25	5	5	5
21	274B71003	Handwheel	1	1	1
22	274B71002	Motor spacers	1	1	1
23	S150209052	Screw M5×12	2	2	2
24	274B71200	Motor	1	1	1
25	S150209027	Screw M5×30	4	4	4
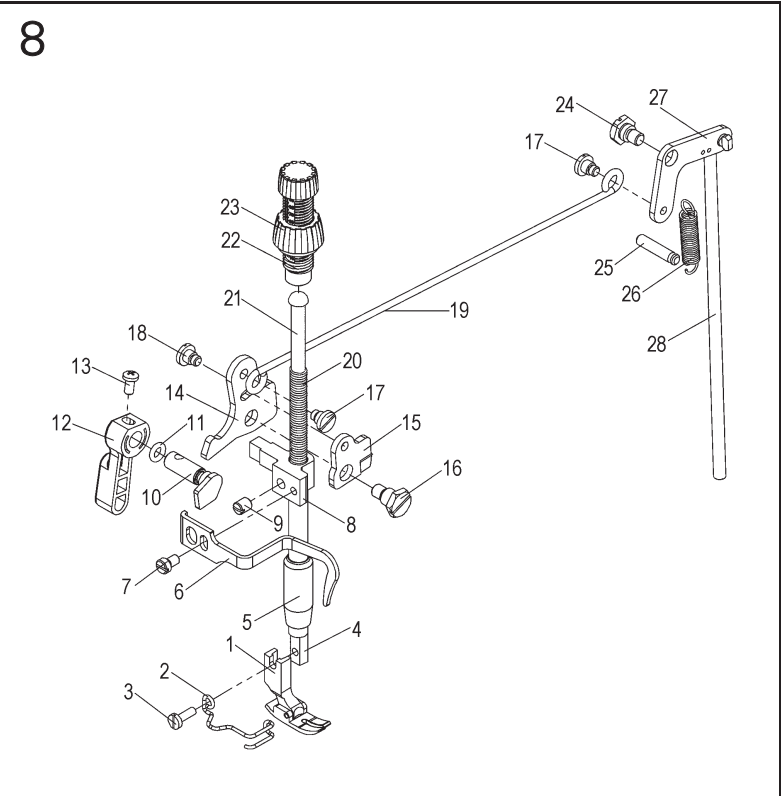
8. PRESSER FOOT MECHANISM

No.	Ref.No.	Description	M	H	B
1	02276	Presser foot assembly	1		
	048710000	Presser foot assembly		1	1
2	057700002	Finger spring	1	1	1
3	022700015	Screw	1	1	1
4	022700010	Clamping lever	1	1	1
5	022700009	Clamping lever Sleeve	1	1	1
6	238400004	Big line hook	1	1	1
7	022200004	Screw	1	1	1
8	238410001	Lead frame	1	1	1
9	022100013	Screw	1	1	1
10	036620001	Clamping lever lift cam	1	1	1
11	S150651010	O–ring	1	1	1
12	022710001––W	Presser foot wrench	1	1	1
13	B040600294	Screw M4X8	1	1	1
14	036631001	Knee lifter lever (left)	1	1	1
15	022722001	Loose wire cam	1	1	1
16	022700005	Screw	1	1	1
17	022720002	Screw	2	2	2
18	022723001	Screw	1	1	1
19	022720003	Knee lifter rod	1	1	1
20	230100021	Clamping lever spring	1		
	048700002	Clamping lever spring		1	1
21	022700012	Guide posts	1	1	1
22	274800001	Regulator screw	1	1	1
23	274800002	Regulator nut	1	1	1
24	022730004	Screw	1	1	1
25	022700008	Spring pin	1	1	1
26	022730002	Spring	1	1	1
27	022730001	Knee lifter lever (right)	1	1	1
28	022730003	Knee lifter rod	1	1	1
29	S150215001	Screw GB/T80–2000 M5×8	2	2	2
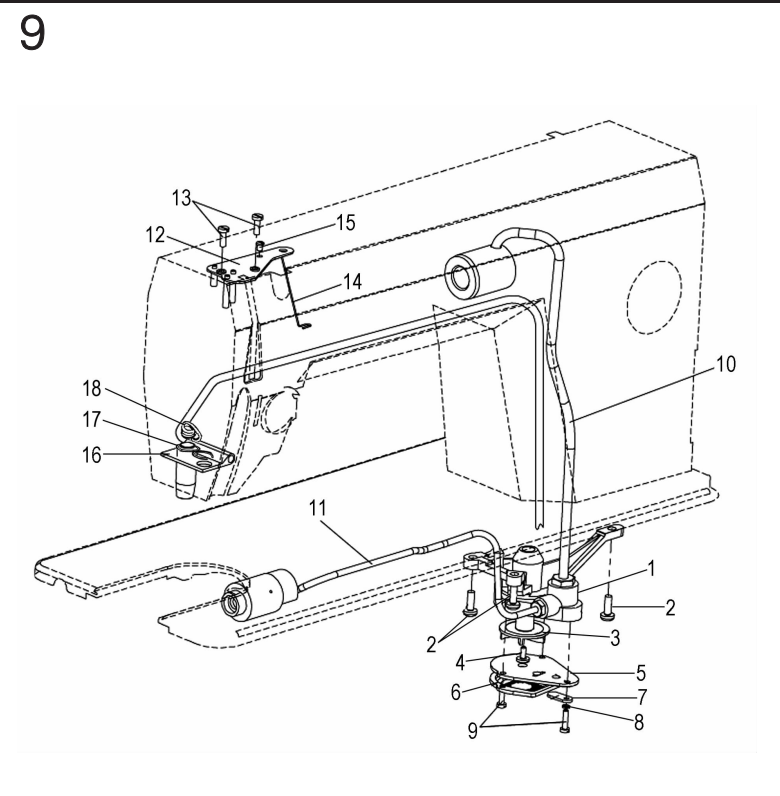
9. OIL PUMP MECHANISM

No.	Ref.No.	Description	M	H	B
1	022800001	Pump	1	1	1
2	022800009	Screw	3	3	3
3	022800002	Pump impeller	1	1	1
4	022800003	Screw	1	1	1
5	022800006	Pump cover	1	1	
	078800001	Pump cover			1
6	022810001	Pump filter	1	1	1
7	022800007	Fuel adjustment board	1	1	1
8	S150601003	Washer	1	1	1
9	022800004	Screw	3	3	3
10	022840N	The shaft tubing assembly	1	1	
	078800002	The shaft tubing assembly			1
11	036A20N	Lower shaft tubing assy	1	1	1
12	022831	Oil line board	1	1	1
13	022700015	Screw	2	2	2
14	022830005	Oil line fixed hook	1	1	1
15	022830004	Screw	1	1	1
16	022850000	Return pipe assy	1	1	1
17	B965373089	Setting bolt spring	1	1	1
18	036A00002	Oil return pipe clamp	1	1	1
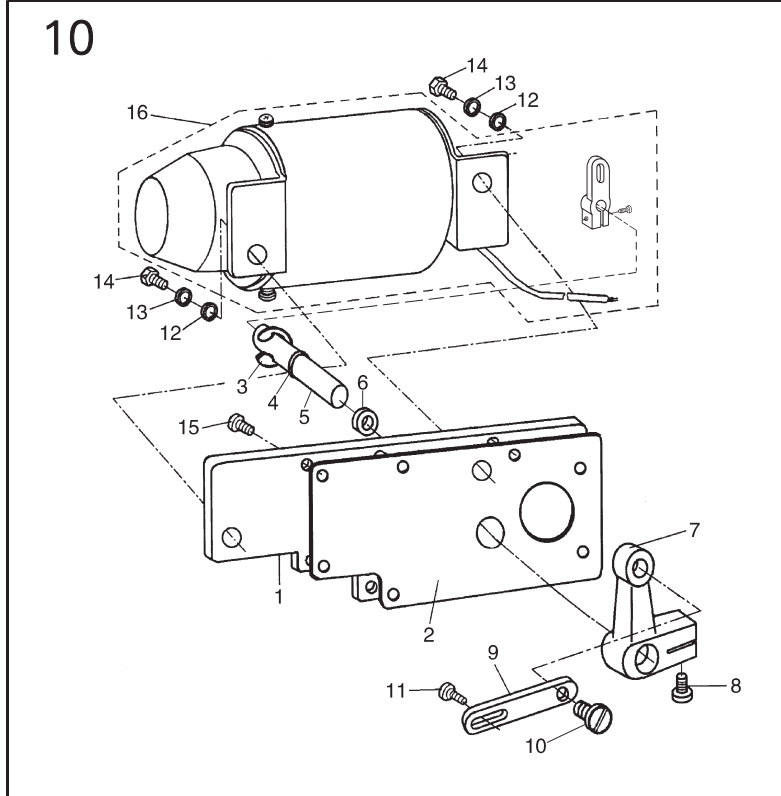
10. AUTOMATIC FOOT LIFTER MECHANISM

No.	Ref.No.	Description	M	H	B
1	274C41000	Back plate	1	1	1
2	274400002	Gasket for back plate	1	1	1
3	S150620009	Stop ring 8	1	1	1
4	S150607011	Washer 10	1	1	1
5	108C02004	Shaft	1	1	1
6	110280000	Seal	1	1	1
7	108C02002	Link crank	1	1	1
8	022612001	Screw SM3/16"(4.76)x28/12	1	1	1
9	108C02001	Link	1	1	1
10	108C02003	Screw	1	1	1
11	108C00001	Hinge screw	1	1	1
12	S150610007	Washer 6	2	2	2
13	S150601004	Washer 6	2	2	2
14	S150106003	Screw M6x10	2	2	2
15	022640003	Screw SM11/64"(4.37)x40/12	8	8	8
16	274C20000	Foot lifter solenoid	1	1	1
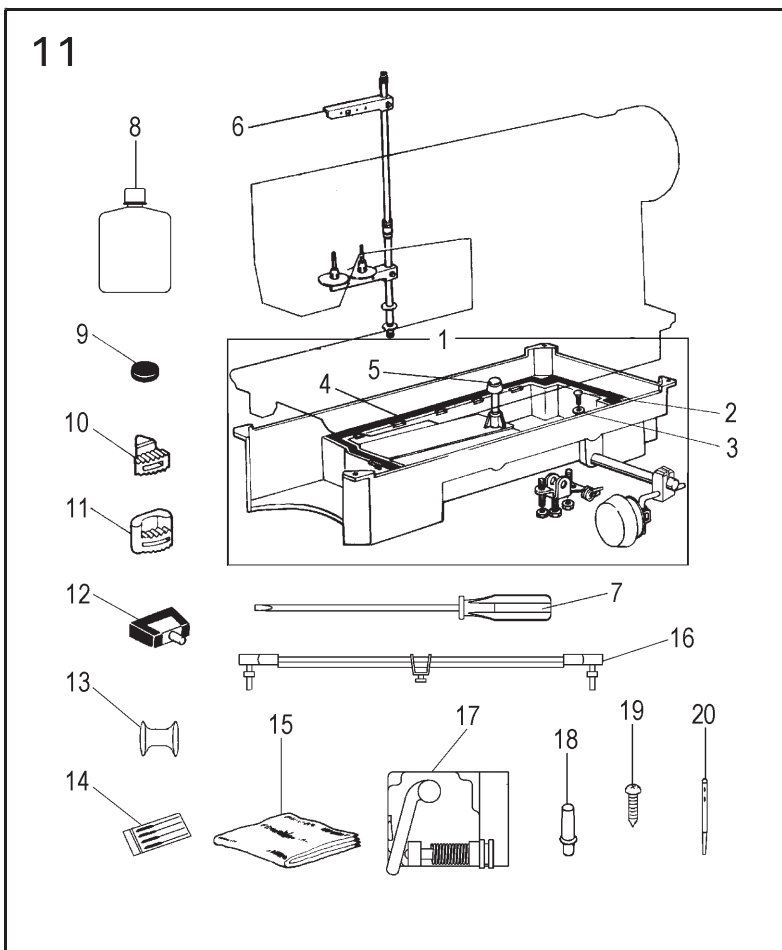
11. ACCESSORIES

No.	Ref.No.	Description	M	H	B
1	036111000	Oil reservoir assy	1	1	1
2	022910002	Screw	1	1	1
3	022910003	Washer	1	1	1
4	022910005	Oil gasket	1	1	1
5	165F01001	Knee lifter lifting pin	1	1	1
6	006F00030––W	Thread spool asm	1	1	1
7	W050102068	Screw drive(long)	1	1	1
8	W060302087	Oil pot	1	1	1
9	W060401014	Magnet block	1	1	1
10	022900009––V	Cushion(B)	2	2	2
11	022900010––V	Cushion(S)	2	2	2
12	02299	Hinge with rubber cushion	1	1	1
13	036400006	Bobbin	2	2	
	078400005	Bobbin			2
14	022200016	Needle DB×1 14#	4		
	048200005	Needle DP×5 18#		4	
	S150901013	Needle DP×5 22#			4
15	W060302052	Machine head cover	1	1	1
16	238C15000	Bar assy	1	1	1
17	274713000	Governor	1	1	1
18	022900040––W	Head rest	1	1	1
19	S150229001	Wood screw GB846–76 5X20	4	4	4
20	108200009	Thread guide pole	1	1	1