

DN 9242 & DN 9242 LH

DOUBLE NEEDLE, NEEDLE FEED, LOCKSTITCH SEWING MACHINE

PARTSLIST & INSTRUCTION MANUAL

PRECAUTIONS BEFORE STARTING TO OPERATE

(1) Safety precautions

- 1. Keep your hands and fingers away from the area around the needle and the area around the pulley when turning the power on
- 2. Power must be turned off when the machine is not in use, or when the operator leaves his/her seat.
- 3. Power must be turned off before tilting the machine head, installing or removing the "V" belt, adjusting the machine, or replacing its parts.
- 4. Avoid placing fingers, hair, bars etc., near the pulley, "V" belt, bobbin winder, or motor when the machine is operating.
- 5. Do not insert fingers into the thread take-up cover, under/around the needle, or pulley when the machine is operating.
- 6. If a belt cover, finger guard, and/or 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 pulley with the power on.
 - (The pulley should rotate counterclockwise when viewed from the pulley.)
- 4. Verify the voltage and (single or three) phase with those given on the motor nameplate.

(3) Precautions for Operating Condition

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

1. MAIN SPECIFICATION

Model:

DN 9242

DN 9242 LH

Application:

Light-Medium

Mcdium-Heavy

Max. speed:

4000s.p.m.

3000s.p.m.

Stitch length:

0-4mm

0 **–7**mm

Needle bar stroke:

33.4mm

35mm

Presser foot lift:

Manual 8mm

Knee: 15mm

Needle:

DP×5 18#

Rotating hook:

Horizontal hook (standard)

Horizontal hook (Large)

Needle gauge: Standard

6.4mm

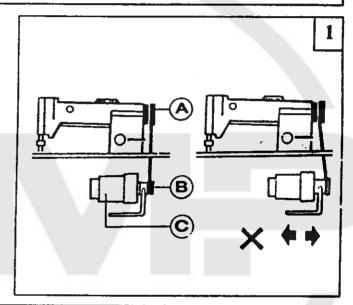
2.4, 3.2, Special

4.8, 5.6,

9.5, 12.7, 16, 19, 25.4, 28.5, 31.8, 38.1mm

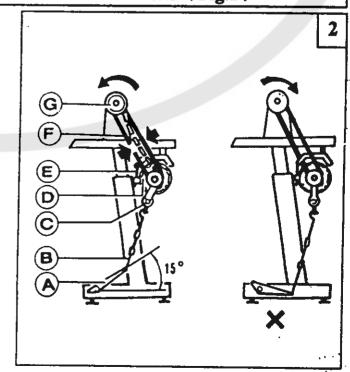
2. INSTALL THE MOTOR (Fig.1)

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



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

- The optimum tilt angle of Pedal (A) is approximately 15 degree.
- 2. Adjust Clutch Cover (D) so that Clutch Lever (C) and Draw Bar (B) run in line.
- 3. The balance wheel should rotate counterclockwise when viewed from the outside of Balance Wheel (G). The direction of the motor pulley rotation can be reversed by reversing (turning over 180 degree) the power plug of the motor.
- 4. Adjust the tension of V-belt (F) by turning Motor Vertical Position Screw (E). The proper tension of the V-belt is a slack of 10-20mm when the belt is depressed at the center of the belt by finger.



4. PREPARATION AND LUBRICATION (Fig.3)

1. Cleaning the machine

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

2. Examination

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

- 3. Oiling
- 1) Required amount of oil

Line (A) on the oil reservoir: Max. oil level

Line (B) on the oil reservoir: Min. oil level

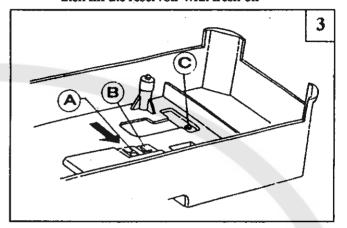
If oil level goes down under Line (B), oil cannot be distributed to each part of the machine, thus causing the parts a seizure.

2) Replenishing

Always use only No.18 special machine oil for high speed sewing. Be sure to replenish oil to Line (A) before starting operation.

- 3) Replacing oil
- ① To replace oil, remove Screw (C) to drain oil.

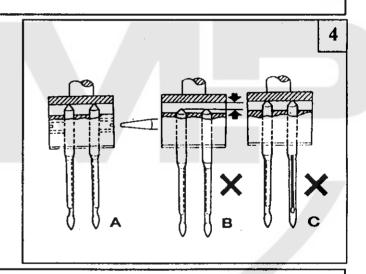
 After completely draining off oil, clean the oil reservoir and securely tighten Screw (C), then fill the reservoir with fresh oil



5. REPLACE NEEDLE (Fig.4)

Turn the balance wheel to lift needle bar to the upper end of its stroke. Loosen Needle Clamp Screw while keeping the long groove of the needle face to face, fully insert the needle shank up to the bottom of the needle socket. Then tighten Needle Clamp Screw.Fig.4A

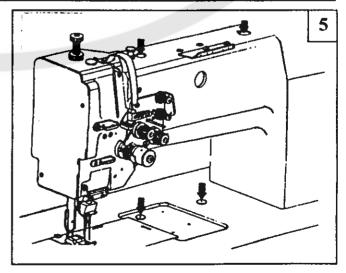
Note: Improper Needle setting shown in Fig.4B and Fig.4C. Fig.4B Insufficient insertion. Fig.4C Needle distorted.



6. RUN IN OPERATION (Fig.5)

Run-in operation is required for a new sewing machine, or a sewing machine left out of operation for a considerable length of time.

- 1) Remove Rubber Plugs on the top of the arm and replenish sufficient amount of oil.
- 2) Lift Presser Foot.
- 3) Run the machine at a low speed (1000-1500s.p.m.) to check oil distributing condition through Oil Check Window.
- 4) Perform run-in operation at 1000-1500spm for 30 minutes. After a lapse of one month of service during which the working speed is increased gradually and the machine runs sufficiently well, the high speed can be adopted according to the nature of the work.

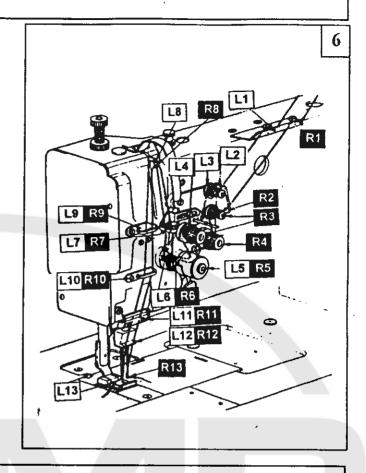


7. THREADING (Fig.6)

Raise needle bar to the highest position of its stroke, lead the thread from spool and perform threading in sequence

Note: "L" shows the left needle threading

" R" shows the right needle position.



8. WINDING ADJUSTMENT (Fig.7)

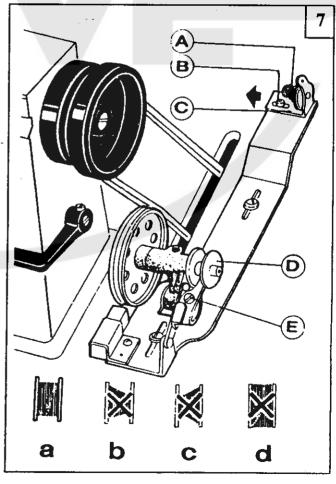
 The wound bobbin thread should be neat and tight, if not, adjust the winding tension by turning Tension Stud Nut(A) of bobbin winder tension bracket.

Note: nylon or polyester thread should be wound with little tension, otherwise, Bobbin(D) might break or deform.

When the wound thread layer does not present a cylindrical shape as shown in Fig.7(a), loosen Set Screw(B) of bobbin winder tension bracket and slide Bracket(C) lestward or rightward. If thread is wound as shown in Fig.7(b) move the bracket rightward, but if thread is wound as shown in Fig.7(c), move the bracket lestward.

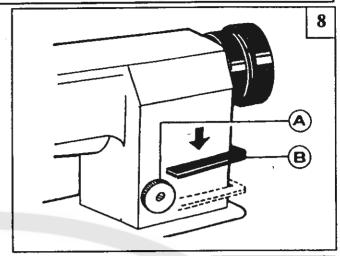
After adequately positioning the bracket, tighten Set Screw(B).

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.



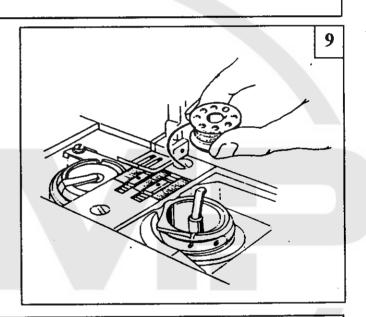
9. SET STITCH LENGTH AND REVERSE FEEDING (Fig.8)

- 1) Stitch length can be set by turning Dial (A), and the figures on face of dial show stitch length in mm.
- 2) Reverse feeding starts when Reverse Feed Lever (B) is depressed, and the machine will feed forward again if Reverse Feed Lever (B) is released.



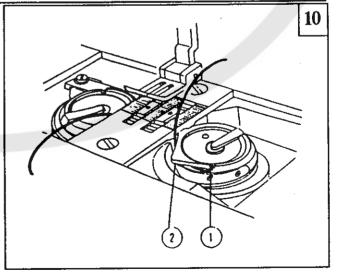
10. REPLACE THE BOBBIN (Fig.9)

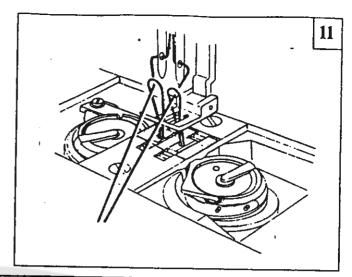
Pull thread out by 5mm from the bobbin. Hold the bobbin as shown in Fig.9 and place it into the Hook.



11. BOBBIN THREADING (Fig.10, 11)

- 1. Lead the end of thread to the groove of the hook ① and beneath the horn ② then put the thread out. (shown in Fig.10)
- 2. Holding the end of the needle threads with left hand and turn the balance wheel slowly. Pull out the bobbin thread and keep them away form the underneath of the presser foot.(shown in Fig.11)





12. ADJUST THREAD TENSION (Fig. 12, 13, 14, 15, 16)

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

In principle, thread tension is adjusted according to the stitches obtained. Fig.12(a) shows the normal stitches.

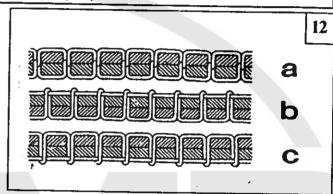
If Needle thread is too strong and Bobbin thread is too weak, the stitches are as shown in (b).

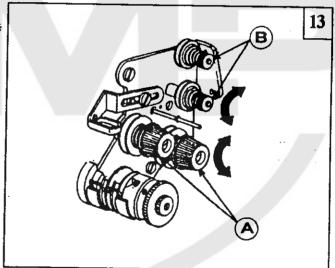
If Needle thread is too weak and Bobbin thread is too strong, the stitches are as shown in (c).

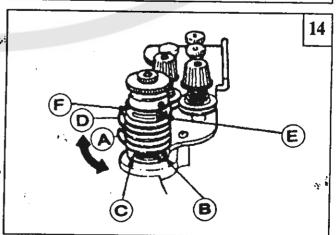
1. Adjust the tension of needle thread (Fig. 13)

Turn Nut (A) and Nut (B) clockwise to increase the tension of needle thread and counterclockwise to decrease it.

- 2. Adjust thread take-up spring
- 1) Adjustment of the thread take-up spring stroke (Fig.14)
 - -1. Thread take-up spring (A) of left needle thread. Adjust the Take-up Spring Adjusting Plate (C) after loosening the Set Screw (B).
 - -2. Thread take-up spring (D) of right needle thread: Adjust the Take-up Spring Adjusting Plate (F) after loosening the Set Screw (E)







5

- 2) Adjust the tension of the thread take-up spring (Fig.15)
- -1. Adjustment of the left needle thread.

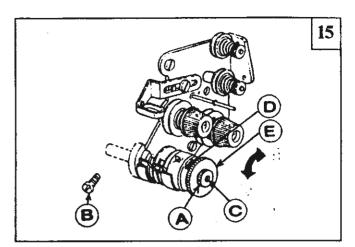
Loosen the Nut (A) and screw (B) in the machine head. Turn the Stud (C) clockwise to decrease the tension of thread take-up spring and turn the Stud (C) counterclockwise to increase the tension of thread take-up spring. Tighten the Nut (A) and Screw (B) after the adjustment.

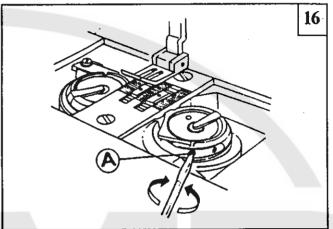
-2. Adjustment of the right needle thread.

Loosen the Set Screw (D). Turn the Take-up Spring Guide (E) clockwise to decrease the tension of the thread take-up spring and turn the Take-up Spring Guide (E) counterclockwise to increase the tension of the thread take-up spring. Tighten the Set Screw (D) after the adjustment.

3. Adjust the tension of the bobbin thread (Fig. 16)

Turn the Screw (A) of the hook clockwise to increase the tension of the bobbin thread and counterclockwise to decrease it.



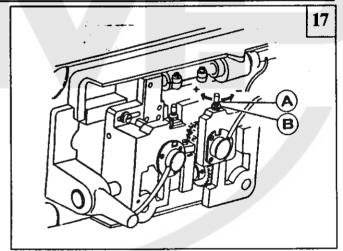


13. LUBRICATION OF ROTATING HOOK (Fig.17)

Adjust the lubrication of the rotation hook by Oil Adjusting Screw (A) as follow:

Loosen Nut (B), turn Oil Adjusting Screw (A) clockwise to increase oil amount and turn Oil Adjusting Screw (A) counterclockwise to decrease oil amount.

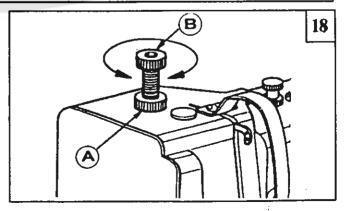
Tighten the Nut (B) after the adjustment



14. ADJUST THE PRESSURE OF PRESSER FOOT (Fig.18)

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

Firstly, loosen Lock Nut (A), for heavy materials, turn the Pressure Regulating Thumb Screw (B) clockwise to increase the pressure of presser foot. For light materials, turn the Pressure Regulating Screw (B) counterclockwise to decrease the pressure of presser foot. After the adjustment, tighten Lock Nut (A)

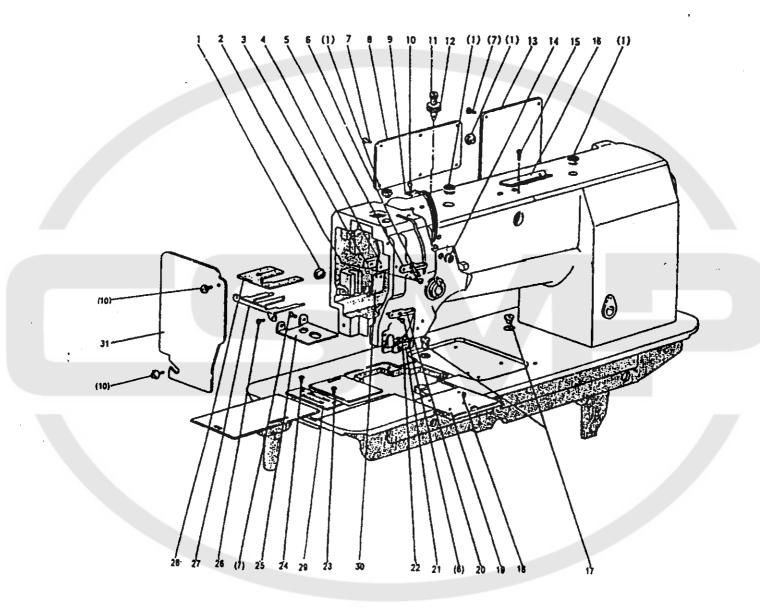


PROBLEMS ANALYSIS AND FAULT CLEARING

Fault	Reasons	Fault clearing
Skipped stitches	1. Arise from problems of the needles -1, Needle bent -2, Needle specification doesn't conform to the thread 2. Mounting trouble of the needles -1, insufficient insertion of the needle -2, Deflective installation of needles	Replace the needles
Floating	 Needle thread is too weak The tension of the thread take-up spring is too weak The bobbin thread is too weak 	Tighten the needle thread by turning the thread regulating nut clockwise Properly increase the tension of thread take-up spring Properly tighten the screw on the hook
Thread breaking	 Bad quality of thread Arise from the problems of the needle Needle bent Needle wrongly installed Compared with the thread, the needle is to thin Needle thread tension is too strong Dust and dirt between the thread tension disc Bobbin thread is wrongly wound or overfilled Dust and dirt in the hook Tension spring of the hook is deflective or bent Bobbin wrongly installed 	Always use good quality thread, never use uneven thread Replace the needle linstall the needle rightly Use needle which specification conforms to the thread Loosen the thread regulating nut properly Remove the thread tension disc, then clear off the dust Rewind the bobbin Clear off the dust in the hook Straighten the tension spring or replace it Reinstall the bobbin rightly
	 Needle or thread is too thick Both of needle thread and bobbin thread tension are too strong The pressure of presser foot is too strong 	Replace the needle or thread, which is suitable for the materials to be sewn Decrease the tension of bobbin thread or needle thread. Properly reduce the pressure of the presser foot

Partslist

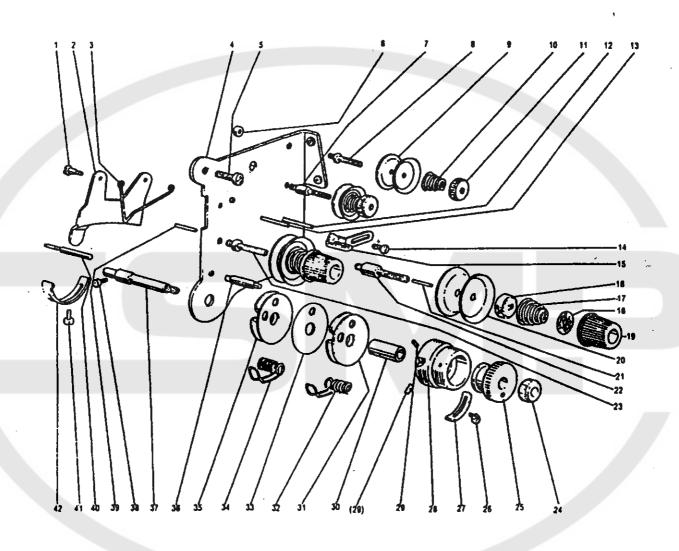
1. ARM BED AND ITS ACCESSORIES



1. ARM BED AND ITS ACCESSORIES

No.	Ref. No.	Descriptions	9242	9242	LH
1	BM18-01-038	Rubber plug	5	5	
2	BM18-01-022	Screw	2	2	
3	BM18-01-021	Oil splasher pad	1	1	
4	BM18-01-020	Oil splasher	1	i	
5	BM18-01-023	Thread guide (Upper)	1	1	
6	BM18-01-025	Screw	2	2	
7	72T1-017	Screw	12	12	
8	BM18-01-014	Arm side cover (Left)	1	1	
9	BM18-01-016	Thread take up lever cover	1	1	
10	72T2-003	Set screw	3	3	
11	BM18-09-020	M10×33 Screw	1	1	
12	BM18-09-021	Regulating nut	1	1	
13	BM18-01-015	Arm side cover (Right)	1	1	
14	BM18-01-039	Rubber plug	1	1	
15	BM18-01-018	Screw	2	2	
16	BM18-01-017	Neddle thread guide plate	1	1	
	BM18-01-040	Oil cup	2	2	
18	BM18-01-034	Set screw	1	1	
	BM18-01-033	Slide plate (front)	1 1		
20	BM18-01-024	Thread guide (Middle)	i	1	
21	BM18-01-026G	Thread guide (widdle) Thread guide comp.(Lower)	1	1	/
22	BM18-01-020	Screw	i	i	
23	72T1-019	Screw	1	1	Ì
24	BM18-01-029	Screw	1	ì	
				1	
25	BM18-09-023	Oil braid plate	2	2	
	BM18-01-037	Screw		2	
27	BM18-09-02411	Oil plate	1	1	
	BM18-09-02412	Felted wool	1 1	1	
29	BM18-01-028	Needle plate (1/4)	1	1	
20	BM19-01-002	Needle plate (1/4)		1 1	
	BM18-01-019	Oil seal plate	1	1	
31	BM18-01-013	Face plate	1	1	
		1			

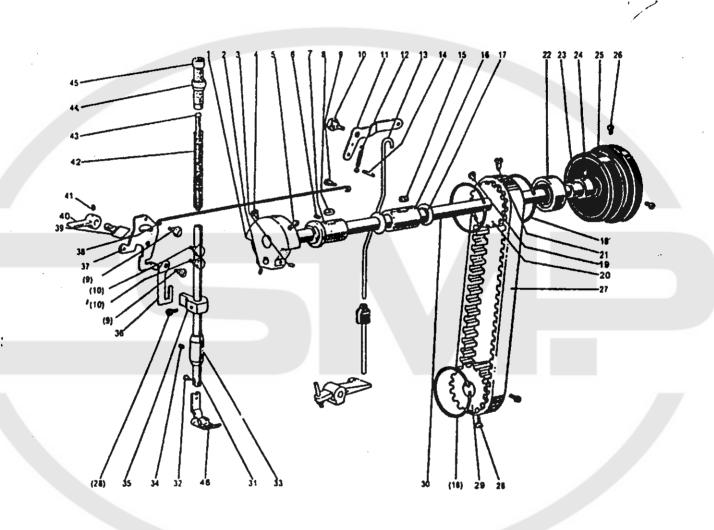
2. THREAD REGULATOR MECHANISM



2. THREAD REGULATOR MECHANISM

No.	Ref. No.	Descriptions	9242		9242	LH
1	BM18-01-035I19	Screw	2		2	
2	BM18-01-035118	Tension release lever	1		1	
3	BM18-01-035117	Spring	1		1.	
4	BM18-01-03511	Thread tension base plate	1		1	
5	72T2-003	Set screw	2		2	
6	BM18-01-035I11	Hex nut	2		2	
7	BM18-01-03517	Regulating stud (upper)	1		1	
8	BM18-01-035I5	Regulating stud (lower)	-1		1	
9	22T1-009E3	Disc for pretension	4		4	
10	BM18-01-03516	Spring for pretension	2		2	
11	BM18-01-03518	Thumb nut	2		2	
12	BM18-01-035I4	Thread pin	2		2	
13	BM18-01-03513	Pin	1		1	
14	22T1-003C6	Set screw	1		1]	
15	BM18-01-035I13	Thread guide	1			
	BM19-01-003B2	Thread guide			1	
16	72T1-007F2	Thread tension release disc	2		2	
17	22T1-012F3	Thread tension spring	2			
	BM19-01-003B1	Thread tension spring			2	
18	22T1-012F10	Stop disc	2		2	
19	72T1-007F1	Thread regulating nut	2		2	
20	72T1-007F2	Thread tension disc	4		4	
21	BM18-01-035I15	Thread tension release pin (right)	1		1	
22	BM18-01-035I10	Thread tension stud (right)	1		1	
23	BM18-01-03519	Thread tension stud (left)	1		1	
24	BM18-01-035I12a12	Nut	1		1	
25	BM18-01-035I12a11	Take-up spring guide	1		1	
26	BM18-01-035112a14	Set screw	1			
	BM18-01-035112a13	Take-up spring adjusting plate	1		1	
	BM18-01-035I12a9	Thread tension post	1		1	
29	BM18-01-035112a10	Set screw	2		2	
30	BM18-01-035I12a8	Presser collar	1		1	
	BM18-01-035I12a4	Thread guide plate complete	ī		1	
32	BM18-01-035112a7	Thread take up spring	1		1	
33	BM18-01-035I12a3	Thread guide plate	1		1	
34	BM18-01-035112a6	Thread take up spring	1		1	
35	BM18-01-035I12a2	Thread guide plate complete	1		1	
36	BM18-01-035I12a5	Take-up spring guide stud	1		1 1	
- 1	BM18-01-035I12a1	Therad take-up spring stud	Ī		1	
	BM18-01-037	Set screw			1	
- 1	BM18-01-035114	Thread tension release pin (left)	Î			
- 1	BM18-01-035116	Tension releasing bar]		i	
- 1	BM18-01-036	Set screw	i			
	BM18-01-027	Take-up spring adjusting plate	1	- 1	;	

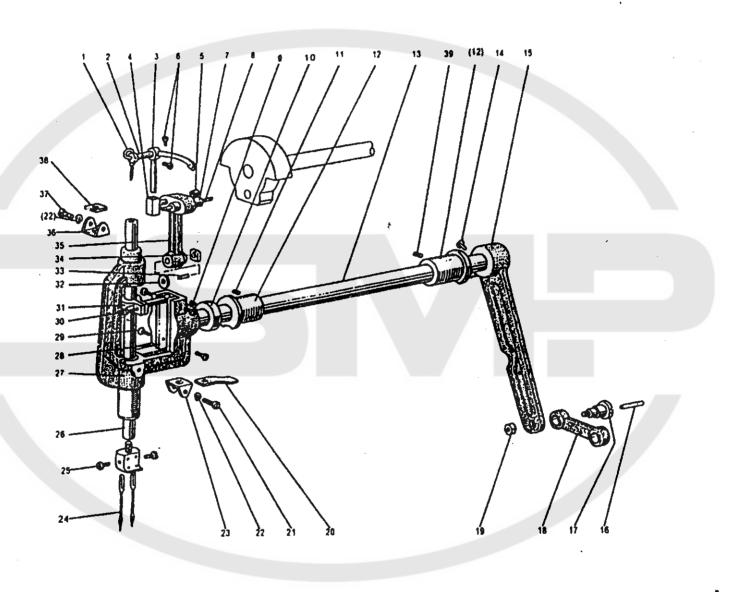
3. ARM SHAFT, PRESSER FEET MECHANISM



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No.	Ref. No.	Descriptions	9242	9242	LH
ı	BM18-02-001A2a1	Needlo bar crank	1		
	BM19-02-001A1a1	Needle bar crank		11	
2	22T3-002B2	Screw	1]	1 1	
3	72T2-004B2	Set scrow	1	1	
4	22T2-006	Scrow	1	1	
5	22T2-007	Set screw	1 1	1 1	
6	BM18-01-005	Screw	1	1 1	
7	BM18-01-004B2	Arm shaft bushing (left)	- 1	1 1	
8	BM18-01-004B1	Felted wool	1	1 1	
9	22T7-004B2	Screw	3	3	
10	22T7-005	Screw	3	3	
11	BM18-04-008E1	Knee lifter lever	1 1	1	
12	BM18-04-008E2	Spring	1 1	1 1	
13	BM18-04-008E3	Knee lifter connecting rod	1		
14	BM18-04-009	Pin	1	11	
15	BM18-01-006C2	Felted wool	1		!
	BM18-01-006C1	Arm shaft bushing(middle)	1		
17	22T3-006F	Oil seal for arm shaft	2		
18	BM18-02-002B1	Spring collar	3	3	
19	22T3-007C2	Screw		\perp	
20	BM18-02-002B2	Timing pulley (upper)	1	1 1	
21	22T5-013	Set screw	1	11	
22	BM18-02-006E2	Bearing	1	1	
23	BM18-02-006E1	Bushing	1 1	1 1	
24	22T5-001A4	Screw	2	2	
25	BM18-02-005D1	Balance wheel	1	1 1	
26	22T3-007C2	Screw	2	2	
27	BM18-02-003	Timing belt	1		
	22T5-001A4	Screw	3	3	
	BM18-02-004C1	Timing pulley (lower)	111	1 1	
30	BM18-02-001A1	Arm shaft	l i l	1 i l	
31	BM18-04-001	Presser bar	l i l	1 1	
	BM18-04-002	Screw	lil	\perp i \perp i	
	BM18-01-012	Presser bar bushing	lil		
1	22T2-002	Set screw	$ \mid$ i \mid \mid		
	BM18-04-004B1	Presser bar lifting bracket		d i l	
36	BM18-04-007D3	Knee lifter connecting rod	i		
	BM18-04-007D2	Knee lifter lever (left)	î	1:1	
38	BM18-04-007D1	Knee lifter rod	1 1	i	
	BM18-04-006	Presser bar lifter cam	lil	1:1	
40	BM18-04-005C1	Presser bar lifter	lil	i i	
	22T1-011	Set screw		;	
	BM18-04-010		1 1		
42		Presser bar spring			
43	22T7-012 22T7-014E2	Spring guide pin Lock nut			
44					•
45 46	72T7-006D1	Presser regulating thumb screw		'	•
710	BM18-04-003A	Presser foot	1 1	1 1	
70	BM19-04-001A	Presser foot		111	1

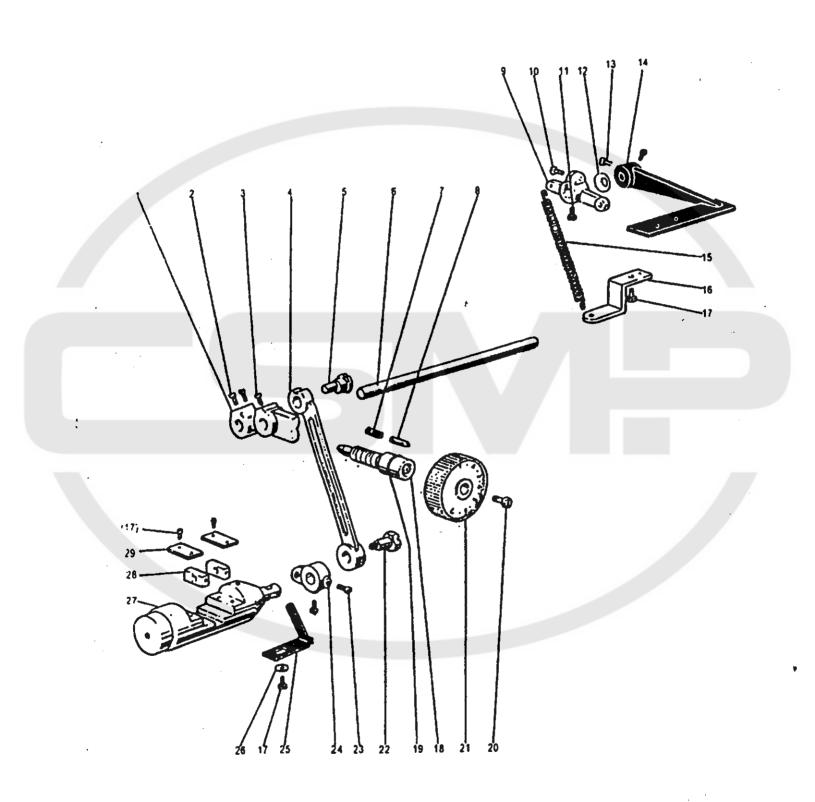
4. NEEDLE BAR AND THREAD TAKE-UP MECHANISM



4. NEEDLE BAR AND THREAD TAKE-UP MECHANISM

No.	Ref. No.	Descriptions	9242		9242	,LI
1	BM18-03-001A1a3	Oil braid	1		1	1
2	BM18-03-001A1a2	Hinge pin	l		1	l
3	BM18-03-001A2c	Thread take up lever	1			l
	BM19-03-001A1	Thread take up lover			l l	l
4	BM18-03-001A3b1	Slide block	l			l
	BM19-03-001A2b1	Slide block			i	
5	BM18-03-001A3b2	Plug for slide block	1		1	l
6	22T3-007C2	Set screw	. 3		3	
7	BM18-02-001A3b1	Needle bar crank pin	1		- 1	l
8	BM18-02-001A3b2	Oil braid	1		1	
9	72T2-004B2	Screw	1		1	1
10	BM18-03-003C1	Collar	1		1	l
11	72T3-005D1a3	Set screw	1		1	
12	BM18-01-007	Needle bar rock frame shaft bushing	2		2	
13	BM18-03-002B1a4	Needle bar rock frame shaft	1		1	
14	BM02-08-007	Set screw	1		1	١
- //	BM18-03-004D1a1	Needle bar rock frame shaft crank	1		i	l
16	BM18-03-004D3b2	Oil braid	1			l
17	BM18-03-004D3b1	Hinge pin	li			
		1 -	1		i	
18 19	BM18-03-004D2	Crank connecting rod Hex. nut	1		1	Г
	BM18-03-004D4	1			1	l
20	BM18-03-002B13	Felted wool	1		1	l
21	BM18-03-002B15	Screw	2		2	
22	GB93-87	Retaining washer	4		4	
23	BM18-03-002B14	Retainer (lower)	1		1	L
24	DP×5 14#	Needle	2			l
	DP×5 18#	Needle .			2.	
25	BM18-03-002B3b2	Needle clamp screw	2		2	
26 -	BM18-03-002B2	Needle bar	1		ı	
27	BM18-03-002B1a1	Needle bar rock frame	1		1	۱
28	BM18-03-002B1a2	Slide way	2		2	L
29	BM18-03-002B1a3	Screw	4		4	ľ
30	BM18-03-002B5	Screw	1		1	
31	BM18-03-002B4	Needle bar adaptor	1		1	
32	BM18-03-002B8	Washer	1		1	l
33	BM18-03-002B9	Felted wool	1		1	l
	BM18-03-002B7	Slide block	1		1	l
- 1	BM18-03-002B6	Needle bar connecting link	1		1	l
- 1	BM18-03-002B11	Retainer	1		1	l
	BM18-03-002B12	Screw	2		2	l
	BM18-03-002B12	Felted wool	1]	1	
38 39	22T2-002	Screw	1		1	
					-	
					-	

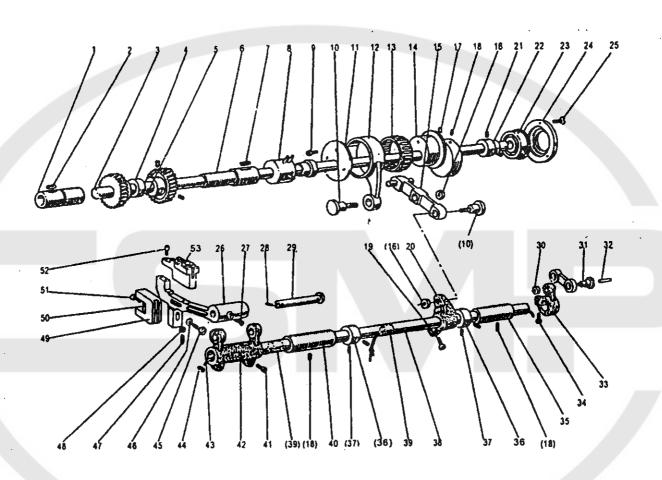
5. STITCH LENGTH REGULATING MECHANISM



5. STITCH LENGTH REGULATING MECHANISM

No.	Ref. No.	Descriptions	9242	9242	LH
1	BM18-07-001A1	Feed regulator	1	1	
2	22T5-001A4	Set screw	2	2	
3	BM18-07-002	Set screw	1	1	
4	BM18-07-003	Feed connecting link	1	1	
5	22T6-007	Hinge pin	ı	1	ĺ
6	BM18-07-007C1	Reverse feed lever shaft	1	1	ĺ
7	BM18-07-009	Spring for stopper pin	1	1	
8	22T5-008	Stopper pin	-1	1	
9	BM18-07-004B1	Reverse feed crank	1	1	
10	BM18-07-004B2	Screw	1	1	
11	BM18-07-004B3	Set screw	1	1	
12	22T5-011	Washer	1	1	
13	22T5-001A4	Screw	2	2	
14	BM18-07-007C2	Reverse feed lever	1	1	
15	BM18-07-005	Spring for reverse feed crank	1	1	
	BM18-07-006	Bracket for spring	1	1	
17	72T2-003	Screw	6	6	
18	22T5-006C1	Feed regulator screw bar	1	1	
	22T5-006C4	O-ring	1	1	
	22T5-006C3	Screw	1	1	
21	BM18-07-008D1	Dial	1		
	BM19-07-001A1	Dial	L		
22	BM18-07-010	Eccentric shaft	1	1	
	GB70-85	Screw M5 × 14	1	1	
	BM18-07-011E1	Reverse feed crank (lower)		i	
	BM18-07-014	Retainer	1	1	
	BM18-07-015	Washer	1	,	
		Reverse feed bed	1	1	
	BM18-07-012F2		1 1	2	
	BM18-07-013	Stide block	2	2	
29	BM18-07-012F1	Guide plate	2	4	
				3	
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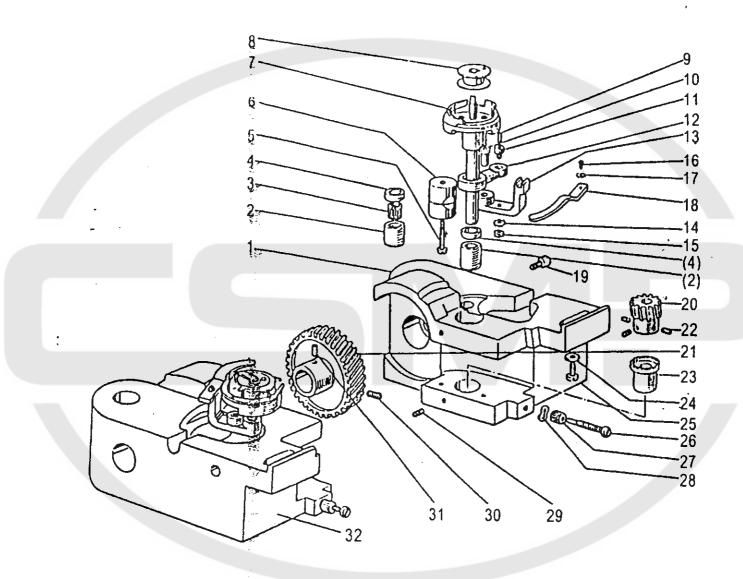
6. LOWER SHAFT, FEED LIFTING MECHANISM



6. LOWER SHAFT, FEED LIFTING MECHANISM

No.	Ref. No.	Descriptions	9242	 9242	,L
ı	BM18-01-008D1	Lower shaft bushing (left)	!		
2	BM18-01-008D2	Oil braid	1 1		
3	BM18-05-001	Lower shaft	1 1	1	
4	BM18-05-002A1	Feed lifting cam	1 1	1	1
5	BM18-05-002A2	Set screw	1	1	
6	BM18-01-009E1	Lower shaft bushing (right)	i	1	
7	BM18-01-008D2	Oil braid	1 1	1	ı
8	BM18-01-010F	Lower shaft bushing complete	1 1	1	ĺ
9	BM18-05-004C5	Screw	3	3	ļ
10	BM18-06-005	Screw	2	2	
11	BM18-05-004C4	Cover plate	1	'1	
12	BM18-05-004C3	Feed eccentric link	1	1	ĺ
13	BM18-05-004C2	Bearing	1	1	ı
14	BM18-05-004C1	Feed eccentric	1 1	1	
- '	BM19-05-001A1	Feed eccentric	1 1	1	l
15	BM18-06-007	Feed link lever		1	l
16	BM18-06-006	Hex. nut	2	2	
10 17	22T2-002	Screw	i	1	1
18	BM18-01-005	Screw	3	3	
10 19	BM18-06-004C2	Screw	1	i	
19 20	BM18-06-004C1	Feed rock shaft crank	lil		
	22T3-002B2	Screw	2	2	
21			1 1		١
22	BM18-05-005D2	Bushing	- }	1 ;	l
23	BM18-05-005D1	Bearing	1		l
24	BM18-05-006	Retaining plate	1 1	1	l
25	BM08-03-004D18	Screw	3	3	l
26	BM18-06-002B1a1-2	Feed bar	1 1	1	Ι
27	GB77-85	Screw M5×6	1 1	1	
28	BM18-06-002B4b2	Oil braid	1	. 1	l
29	BM18-06-002B4b1	Feed bar crank shaft	1	1.	ı
30	BM18-03-004D7	Hex. nut	1	1	l
31 ,	BM18-03-004D3b1	Pin	1 1	1	l
32	BM18-03-004D3b2	Oil braid	1	1	
33	BM18-03-004D6c1	Feed rock shaft crank	1 1	1	١
34	BM02-08-007	Screw	1 1	1	L
35	BM18-01-011	Bushing for feed rock shaft	1 1	1/	۱
36	22T6-005B1	Collar for feed rock shaft	2	2	
	22T3-002B2	Screw	4	4	1
37		1	1 1		I
	BM18-06-001A1	Feed rock shaft	1 1	1	
	BM18-06-001A2	Feited wool	2	2	
40	22T6-012	Feed rock shaft bushing	1	1	
41	22T6-001A1b	Screw	2	2	۱
42	BM18-06-002B5c1	Feed bar crank	1 1		I
43	BM18-06-001A3	Oil braid	1	1	I
44	BM18-06-003	Oil braid holder	1 1] 1	
45	BM18-06-002B1a5	Bolt	1 1	1	
46	GB97.1-85	Washer	1 1	1	
47	GB73-85	Screw M3×14	1	1	
48	GB6170-86	Nut M3	[1]	1	
49	BM18-06-002B1a2	Feed lifting fork	1 1	1	
50	BM18-06-002B1a3	Felted wool	i	1	
	BM18-06-002B1a4	Screw		li	
	BM18-06-002B3	Screw	2	2	
52 53	BM18-06-002B2	Feed dog			
	LINKLOSUSUSUSUS	וו ככם עטצ	1 1 1		

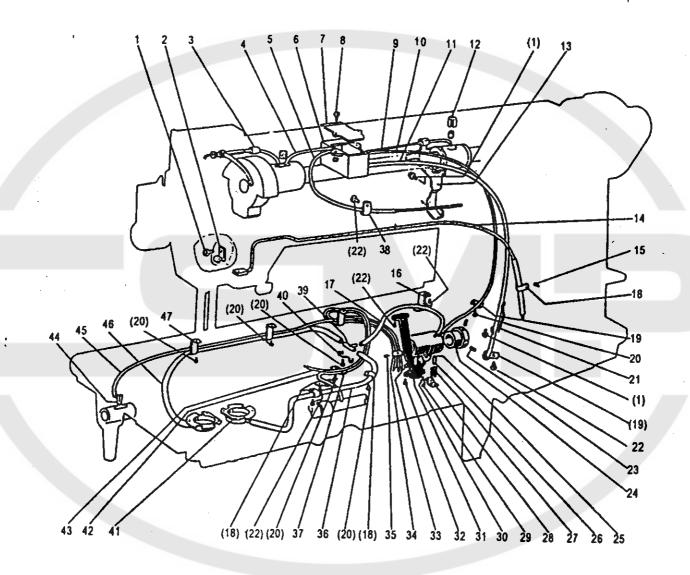
7. ROTATING HOOK SADDLE AND ACCESSORIES



7. ROTATING HOOK SADDLE AND ACCESSORIES

7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 8 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 9 BM18-08-001A6d5 Oil braid 2	1 2 2 2 2 2
2 BM18-08-001A2a1 Rotating hook shaft bushing (upper) 2 BM19-08-001A2a1 Rotating hook shaft bushing (upper) 2 BM18-08-001A2a2 Bearing 2 BM19-08-001A2a3 Washer 2 BM19-08-001A2a2 Washer 2 BM18-08-004C1 Locking screw 2 BM18-08-004C2 Locking bushing 2 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 2 BM18-08-001A6d5 Oil braid 2	2 2 2 2 .
BM19-08-001A2a1 Rotating hook shaft bushing (upper) 3 BM18-08-001A2a2 Bearing 2 4 BM18-08-001A2a3 Washer 2 BM19-08-001A2a2 Washer 2 5 BM18-08-004C1 Locking screw 2 6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 8 BM18-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2 2 2
3 BM18-08-001A2a2 Bearing 2 4 BM18-08-001A2a3 Washer 2 BM19-08-001A2a2 Washer 2 5 BM18-08-004C1 Locking screw 2 6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 8 BM19-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2 2 2
4 BM18-08-001A2a3 Washer 2 BM19-08-001A2a2 Washer 2 5 BM18-08-004C1 Locking screw 2 6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 8 BM18-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2 2
BM19-08-001A2a2 Washer 5 BM18-08-004C1 Locking screw 2 6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 2 BM18-08-001A6d5 Oil braid 2	2 2
5 BM18-08-004C1 Locking screw 2 6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 8 BM18-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2 2
6 BM18-08-004C2 Locking bushing 2 7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 8 BM18-08-003 Bobbin 2 9 BM19-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2
7 BM18-08-001A12 Rotating hook comp. 2 BM19-08-001A5 Rotating hook comp. 2 8 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	'
BM19-08-001A5 Rotating hook comp. 8 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 9 BM18-08-001A6d5 Oil braid 2	2
8 BM18-08-003 Bobbin 2 BM19-08-003 Bobbin 2 9 BM18-08-001A6d5 Oil braid 2	2
BM19-08-003 Bobbin 9 BM18-08-001A6d5 Oil braid 2	
9 BM18-08-001A6d5 Oil braid 2	
	2
	2
1	2
11 BM18-08-001A6d2 Bobbin case opener base stud 2	2
12 BM18-08-001A6d3 Opener link 2	
BM19-08-001A3b2 Opener link	2
13 BM18-08-001A6d1 Bobbin case opener base 2	
BM19-08-001A3b1 Bobbin case opener base	2
	2
15 22T6-001A8 Nut 2	2
16 BM18-01-037 Set screw 2	2
17 BM18-08-001A11 Washer 2	2
18 BM18-08-001A10 Bobbin case opener 2	
	2
	2.
	2
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	6
	2
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	2
	2
1 - 0 - 1	2
	2
	4
	2
	2
32 BM18-08-002B1-2 Hook saddle (left) 1	-
BM19-08-002B1-2 Hook saddle (left)	, 1
1 look saddle (lott)	1
	-

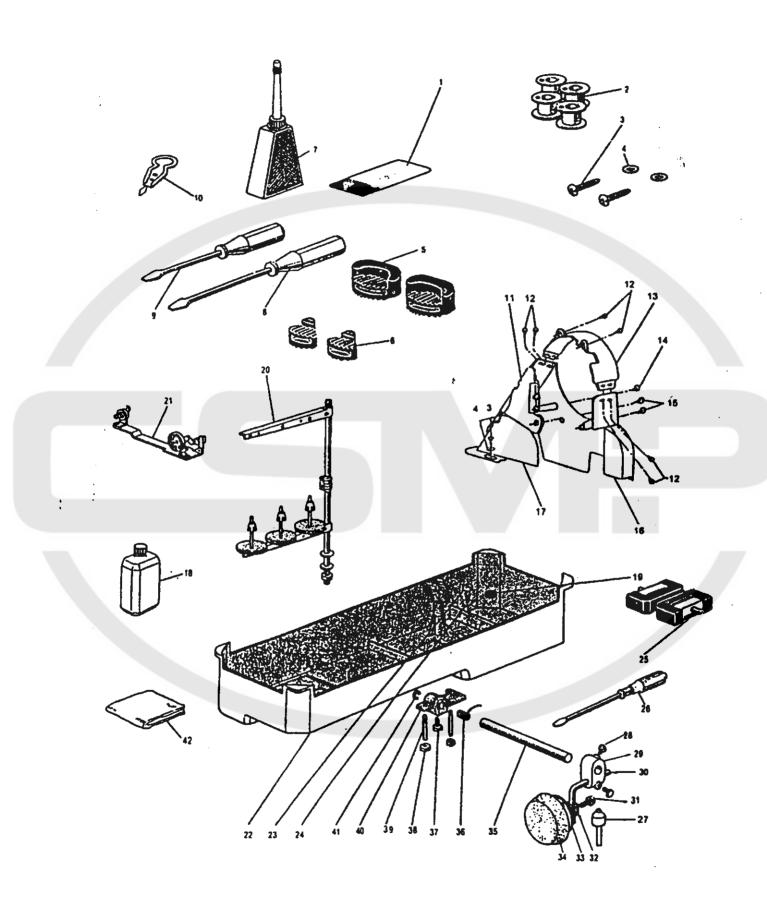
8. LUBRICATING MECHANISM



8. LUBRICATING MECHANISM

٦	No.	Ref. No.	Descriptions	9242	9242	,
r	1	72T7-01 7	Screw	2	2	ı
	2	BM18-09-007	Oil pipe holder	1	1	
1	3	BM18-03-001A1a2	Rubber pipe	1	1	
١	4	BM18-09-001A2b	Oil pipe comp	1	ı	
	5	BM18-09-001A4d	Oil pipe comp	ı	1	
1	6	BM18-09-001Ala	Oil tank	1	1	
ı	7	BM18-09-001A8	Gasket for oil box	1	1	
	8	GB819-85	Screw	2	2	
	9	BM18-09-001A3c	Oil pipe comp	1		
	10	BM18-09-001A5	Oil pipe	1	1	
١	11	BM18-09-001A6	Oil pipe	1	1	
	12	BM18-09-022	Oil pipe for arm shaft bushing	1		
	13	BM18-09-003	Oil pipe holder	1	1	
ı	14	BM18-09-006B	Oil pipe comp	1	1	
ı	15	BM08-03-004D17	Set screw	1	1	
	16	BM18-09-018H3	Presser board	1	1	
	17	BM18-09-008C3	Oil pipe	1	1	
1	18	BM18-03-004D5	Oil pipe holder	5	5	
	19	BM18-09-004	Oil pipe holder	2	2	
	20	72T1-013	Screw	9	9	
۱	21	BM18-09-005	Pinch cock	1	1	
L	22	72T2-003	Screw	5	5	
ļ		BM18-05-003B2	Screw	2	2	
1	24	BM18-05-003B1	Eccentric	1	1	
	25	BM18-09-018H7	Oil pipe	1	1	
	26	BM18-09-015	Plunger	1	1	
ı	27	BM18-09-016	Plunger spring	1	1 .	
		BM18-09-017	Spring retaining plate	1	1	
	29	BM18-03-002B15	Screw	1	1	
ļ	30	BM18-08-018H4	Screw	1	1	
1	31	BM18-09-018H2	Oil filter	1	1 .	
		BM18-09-018H5	Screw	1	1	
		BM18-09-018Hla	Oil pipe board comp	1	1	
	34	BM18-09-018H6	Oil pipe holder	1	1	
		22T1-003C6	Set screw	1	1	
		BM18-09-008C2	Oil pipe	1	1	
	37	BM18-09-013	Oil pipe holder	1	1	
	38	BM18-09-002	Oil pipe holder	1	1	
		BM18-09-008C1	Pipe connection	1	1	
	40	BM18-09-008C4	Pipe holder	1	ı	
	41	BM18-09-014G	Oil pipe cover comp.	2	2	
	42	BM18-09-011F	Oil pipe comp	1	1	
	43	BM18-09-010E	Oil pipe comp	i	1	١
	44	BM18-09-0102	Oil braid	i	1	
	45	BM18-09-009D	Oil pipe comp	î	1	Ì
	46	BM18-09-001A5	Oil pipe	ī	1	
	47	BM18-09-012	Oil pipe holder	2	2	
			K. K. 110000	-	_	۱
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9. OIL RESERVIOR AND OTHER ACCESSORIES



9. OIL RESERVIOR AND OTHER ACCESSORIES

No.	Ref. No.	Descriptions	9242		9242	L
1	DP×5 14#	Needlo	6		_	
	DP×5 18#	Needle			6	l
2	BM18-08-003	Bobbin	4			l
	BM19-08-003	Bobbin			4	l
3	GB99-76	Scrow	4		4	l
4	72T9-023	Washer	4		4	
5	BM18-10-010	Rubber cushion (big)	2		2	۱
6	BM18-10-011	Rubber cushion (small)	2		2	l
7	22T9-011	Oiler	1		,1	l
8	72T9-007	Screw driver (long)	1		1	l
9	72T9-020	Screw driver (medium)	1		1	1
10	BM18-10-005	thread-in device	1		1	l
11	20H14-005F	Belt cover plate	1		1	l
12	72T1-017	Screw	6		6	l
13	20H14-005D	Belt cover	1		l	
14	72T9-025	Screw	1		1	-
15	72T9-028	Screw	2		2	
16	20H14-005C	Belt cover (lower)	1		1	1
17	72T9-002B6	Belt cover bracket	1	·	1	
18	72T9-017	Oil container	1		1	ľ
19	22T9-012	Magnet	1		1	1
20	BM18-10-007	Thread stand	1		1	ł
21	RXQ-2	Bobbin winder comp.	1			l
	RXQ-3	Bobbin winder comp.			1	ł
22	BM18-10-002A1	Oil reservoir	1		1	l
23	22T9-001A2	Oil drain screw	1		- 1	
24	22T9-001A3	Washer	1		1	1
25	72T9-004C	Table hinge comp.	2		2	١
	72T9-021	Screw driver (short)	1	•	1	l
27	BM18-010-003B1a	Knee lifter lifting rod	1		1	
28	72T9-018	Set screw	2		2	
29	22T9-003B3	Joint for knee lifter bell crank	1		1	4
30	22T9-003B2	Knee lifter bell crank	1		1	1
31	22T9-003B7	Set screw	1		1	1
32	22T9-003B6	Bracket for knee plate	1		1	۱
33	22T9-003B5	Knee lifter plate	1		1	١
34	22T9-003B8	Pad for knee lifter plate	1		1	١
35	BM18-10-002A2	Hinge pin for knee lifter	1		1	
36	22T9-001A7	Retracting spring	1		1	١
		Screw	ì		li	
37	72T9-018	Lock nut	2		2	
38	22T9-001A10		2		2	
39	22T9-001A9	Screw Knee lifter lever crank	1		1	
40	BM18-10-002A3		1 1		'	I
41	GB896-86	Retaining ring	1 1		;	١
42	22T9-018	Vinyl cover	1 '		1 '	١
				l		
			1	<u> </u>		