

LK1900A/LK1903A SERIES

**Computer-controlled High-Speed Bar Tacking Industrial
Sewing Machine/Lockstitch Button Sewing Machine**

**Operation Manual
Accessory stylebook**

(195831)¹

Operation Manual

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Before use, you are appreciated that you do read this manual carefully in order to operate the machine correctly and effectively. Please follow the instructions given in this operation manual. Our company shall not be held responsible for any loss caused by ill operation. Besides, you should keep well this manual for later use. Maintenance of the machine should only be carried out by technicians and specialists.

Chapter 1 Safety Requirements

1-1 Basic Requirements

In order to avoid fire, electrical shock or body injury, the following items must be strictly observed during operation.

 Notice	The non-specialist may not do the maintenance of the electrical parts, because it will cause unstable system and unnecessary loss. Maintenance should be carried out by specialists.
 Notice	Strictly follow each requirement and stay alert to each warning signs to ensure safety of life.
 Notice	Circuit board can be easily damaged by static, so disassembly by non-specialist is not allowed.
 Hazard	Do not open the circuit box while power on.
 Hazard	Don't use the machine if the running parts have no shields.
 Warning	If necessary, open the door of circuit box after switching off the power. And you must wait more than 1 minute to let the capacitors discharge before touching the circuit boards.
 Warning	Don't use parts that are not supplied or recommended by our company, for it will cause fire, electrical shock or other damages.
 Forbidding	Don't touch the running parts while embroidering.
 Forbidding	Don't expose the machine to humidity gas, poisonous gas, water and dust.
 Forbidding	Don't test the insulation of the circuit loop.
 Forbidding	Don't try to connect any equipment that can cause overloading to the plugs of the control box.

1-2 Safety Requirements for Cables

- (1) Any inappropriate cable connection may cause unstable running of the system, hazardous risk of electrical shock and severe damage to the machine. Therefore, you must be very cautious during operation.
- (2) Each cable (signal cable or power cord) should be confirmed well insulated.
- (3) Cables should be fixed appropriately. Special attentions should be paid as the cables go through sharp edges (for example, holes) to avoid abrasion. To enhance insulation ability, tubes or covers can be added to cables if necessary.

1-3 Insulations of Electrical Parts and Equipments

Before mounting the electrical parts and equipments, insulation of the live parts and their covers should be confirmed in good condition. The live parts include: main shaft motor, step motor, switch of power and all solenoids. Special attentions: insulation between windings and covers of the solenoids can be easily destroyed to cause short circuit. A 33 DC voltage may burn out the circuit board.

1-4 Connection of Power Wire

- (1) Use multimeter to confirm the type of power source, the results shall be in accordance with the nominal value. When the voltage fluctuation goes beyond the nominal value by -25% to 20%, a stabilized voltage power source with grounding line should be used.
- (2) To meet the safety requirements of this control system, do not share power source with such overload machines as elevator, because the power source will be greatly influenced by overload changing.
- (3) Secure the area where power wire is located.
- (4) Make sure that the power plug is installed properly.

1-5 Grounding

- (1) To prevent fire or electrical shock caused by leakage, over voltage, loss of insulation, etc;
- (2) To ensure long-life and stable operation of the machine;
- (3) Users should confirm: the machine should be well connected with the grounding wire.
The grounding resistance should be less than 10Ω .

Chapter 2 Features and Specifications

2-1 Features

- The main shaft motor adopts our self-developed AC servo control technology, which provides stability and reliability for the machine.
- The step motor is driven by subdivision technique, which gives the machine a more stable operation and takes the sewing quality to a new level.
- New type switch power source suits the areas with unstable voltage, which ranges from 165V to 265V.
- The surface mount technology (SMT) is adopted in control board jointing to ensure good quality while reduce trouble rate.
- Pass the standard test, which greatly enhance the stability and reliability.

2-2 Specifications

- (1) Sewing range: X direction: 40mm, Y direction: 20mm
- (2) Max. sewing speed: 2700rpm (X less than 4.5mm, Y less than 3.5mm)
- (3) Stitch length: 0.1-10.0mm (can be adjusted in the range of 0.1mm)
- (4) Feeding cloth with work clamp foot: feeding the cloth step by step (step motor with

2-axis driver mode)

- (5) Memory of data: E² PROM(64K)
- (6) Zoom out/in: during embroidery, you can zoom out/in X or Y separately. 20%-200%
(unit: 1%)
- (7) How to realize zoom out/in: increase or cut the length of stitch
- (8) Sewing speed limit: with the speed reduction button, you can adjust the sewing speed within a range from 400 to 2700 rpm. (unit: 100rpm)
- (9) Design selecting: select designs 1 to 99 according to their numbers.
- (10) bobbin counter: to help inform when to change the bobbin. (max. 9999)
- (11) Saving: system will save all the designs automatically in case of sudden cut of electricity.
- (12) Motor: 400W servo motor
- (13) Power of the controller: 600VA
- (14) Working temperature range: 5°C to 35°C
- (15) Working humidity range: 35% to 85% (no dew)
- (16) Voltage of the power source: rated voltage of 220V with an error range from -25% to 20%; rated frequency of 50Hz with an error range from -10% to 10%.
- (17) Counterclockwise rotate to stop: after sewing, system will let needle bar rotate counterclockwise to stop.

Chapter 3 Introduction of Types

LK1900A Bar Tacking Industrial Sewing Machine (see appendix 1 and 2 for designs)

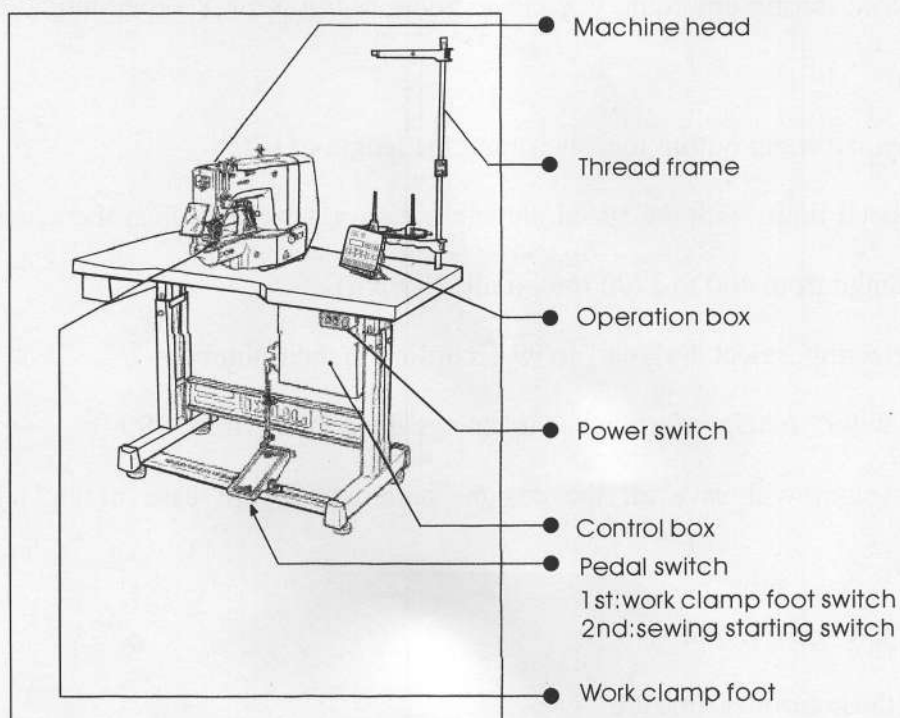
LK1903A Lockstitch Button Sewing Machine (see appendix 3 for designs)

LK1900AC Bar Tacking Industrial Sewing Machine with minim oil in machine head

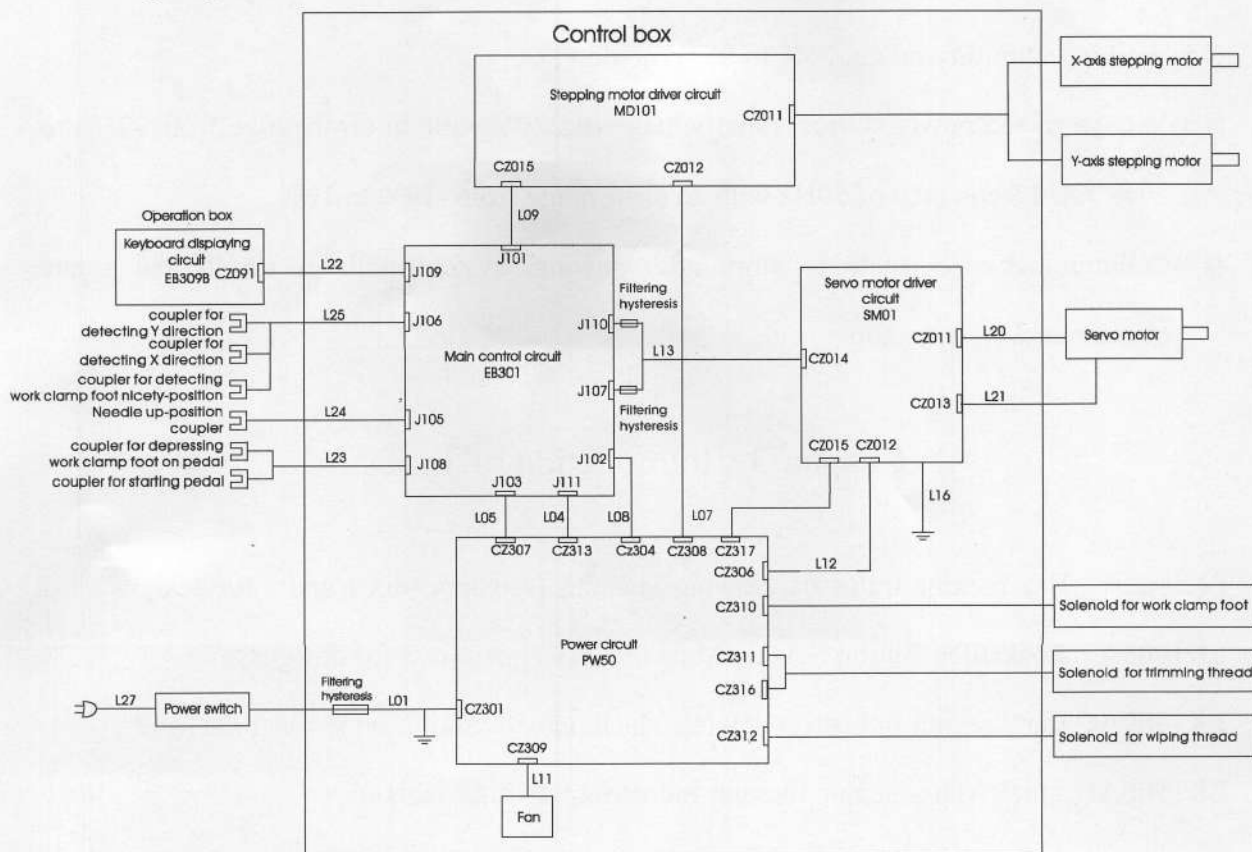
LK1900AH Thick Material Bar Tacking Industrial Sewing Machine

Chapter 4 Diagram and explanation of computer-controlled system

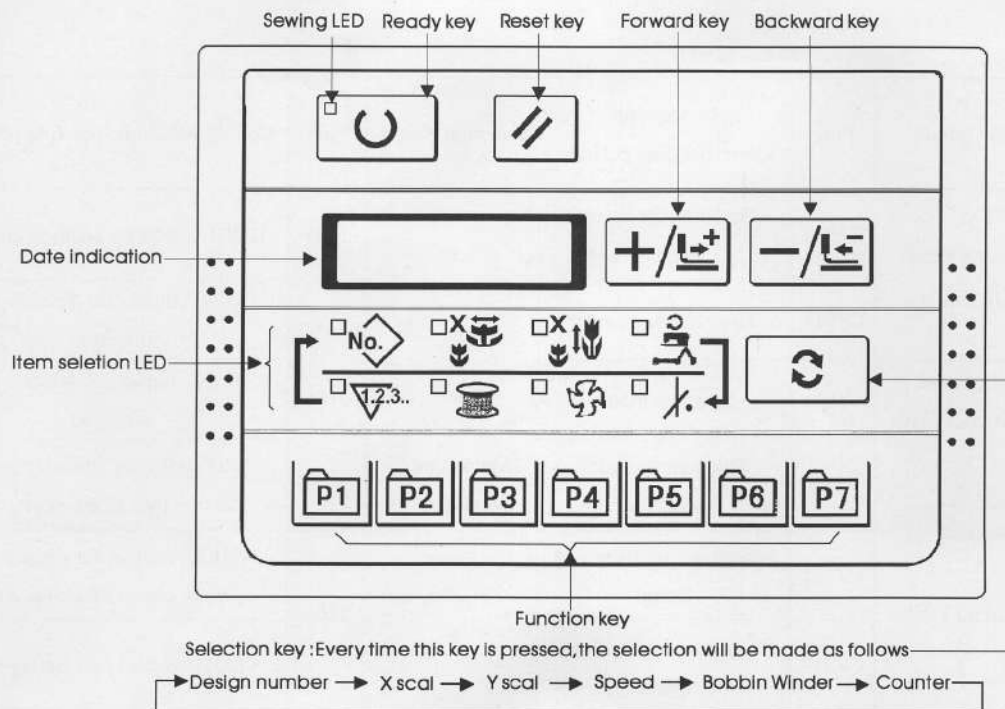
1. Names of main unit



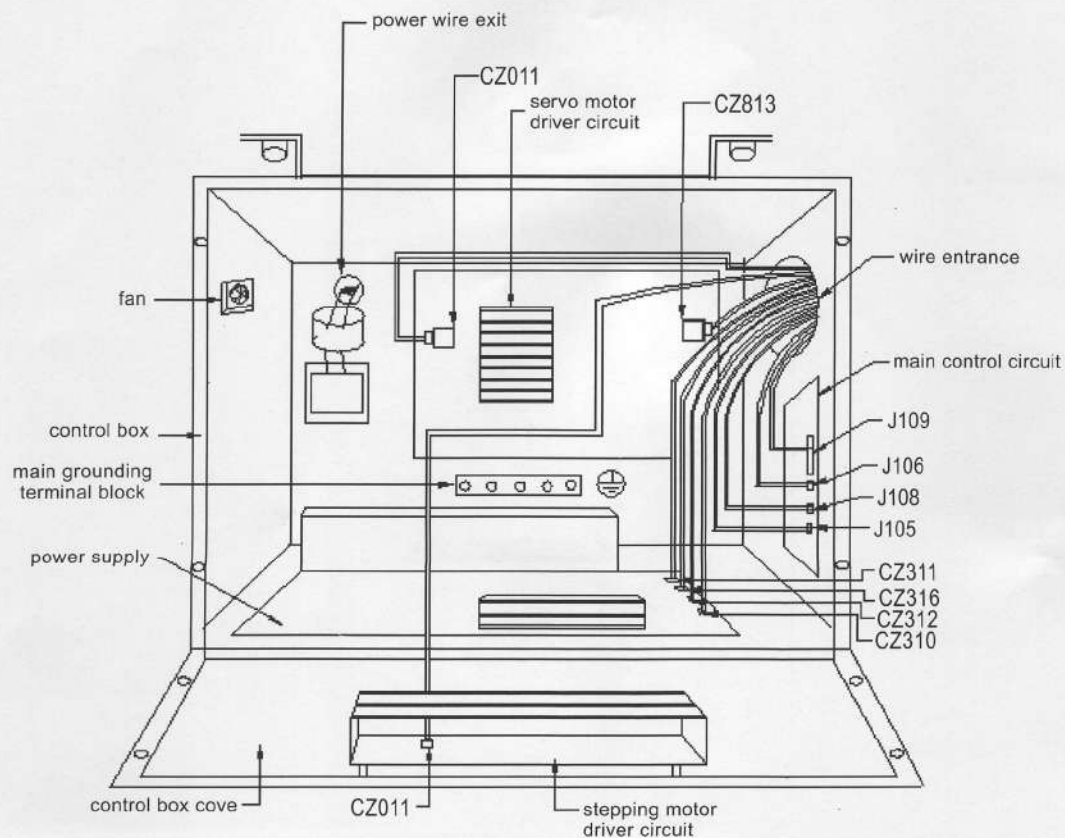
2. wiring diagram



3. names of parts on the operation box:



4. Control box cable is as follows :



The connection of cable from wire entrance is as follows:

Function circuit	Plug	Connection Corresponding position	Function circuit	Plug	Connection Corresponding position
Servo motor driver circuit SM01	CZ011	Servo motor power interface	Main control circuit EB301	J105	UDET/needle up-position coupler
	CZ813	Servo motor encoder		J106	XOR/ coupler for detecting X direction
Stepping motor driver circuit MD101	CZ011	Stepping motor			YOR/ coupler for detecting Y direction
Power circuit PW50	CZ310	Solenoid for work clamp foot			FP/ coupler for detecting work clamp foot nicety-position
	CZ311	Solenoid for trimming thread		J108	PRESS/coupler for depressing work clamp foot on pedal
	CZ312	Solenoid for wiping thread			START/coupler for starting pedal
	CZ316	Solenoid for trimming thread		J109	J201/keyboard displaying circuit on operation box

Chapter 5 Table of Function Code

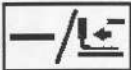
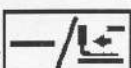
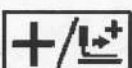
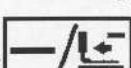
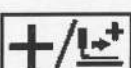
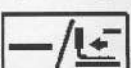
No.	Function	Set value	Suggested Value
01	Max. sewing speed limitation	400-2700st.pm	2700
02	Speed of 1st to 5th stitches at the sewing start	1st: 400-900 2nd: 400-2700 3rd: 400-2700 4th: 400-2700 5th: 400-2700	400 900 1500 2000 2500
03	Close those designs which are larger than the sewing range to prevent work clamp foot to be destroyed.	0: close 1: open	
04	If zooming and max. setting is valid	0: invalid 1: valid	0
05	For the counter, plus mode means unit-counting, while minus mode means bobbin-counting.	0: plus mode 1: minus mode	0
06	The stopping position of the needle bar (not available for Variable-Frequency motor)	0: upper point (53°, middle of the needle position) 1: upper dead point (0°, the highest point of the needle position)	0
07	Set datum mark for zooming	0: origin 1: starting point	0
08	After sewing, detect origin or not? (standard design sewing)	0: invalid 1: valid	0
09	After sewing, detect origin or not? (combined design sewing)	0: invalid 1: valid	0
10	Not in use		
11	Solenoid for wiper	0: invalid 1: valid	0
12	Detect the solenoid for work clamp foot in nicety-position or not?	0: do not detect 1: detect	1
13	Set the stop angle. If the value is small, the upper axis will not stop in nicety-position and thread can not be trimmed; if the value is big, the upper axis will stop over the position, needle top will be low. (not available for servo motor)	220-250°	234
18	Change the angle of cloth feeding	0: 161° 1: 149° 2: 137° 3: 125°	2
19	Winding speed	400-2700	1200

Chapter 6 Operation of the Control System

6-1 Basic Skills

1. Setting Items

After power on, design number lamp is on; design number displays. When the lamp is off, you can set parameters by following the steps given below:

- (1) Set design number: press “” key till the lamp is on, then press “” or “” till system displays “--XY”, which means the design XX is set.
- (2) Set X scale: press “” key till the X-scale lamp is on, then press “” or “” to set rate, which ranges from 20% to 200%.
- (3) Set Y scale: press “” key till the Y-scale lamp is on, then press “” or “” to set rate, which ranges from 20% to 200%.
- (4) Set the maximum speed: press “” key till the speed lamp is on, then press “” or “” till system displays “2000”, which means the sewing speed is set to 2000 st.pm.

* When the lamp is on, parameters can only be browsed, but can not be changed.

2. Sewing

Press “” key to let the start lamp twinkles. After the work clamp foot is lifted, the lamp stays on, which means the system is ready to sew. If you press “” key again, the lamp will be off. Press “”, then you can check the pre-set values of parameters. If the selected design is not sewed, then you must do a test sewing first. The test sewing includes the following steps: press the pedal to let the work clamp foot down. The work clamp foot will move a step as you press “” or “” once. When you press the key consistently, the work clamp foot will move consistently. You may

press “” to let the work clamp foot back to the start point and lifts up. Sewing process can be start until out of the sewing range.

Sewing operation steps is as follows:

- (1) Put the cloth under the work clamp foot.
- (2) Press the pedal to the first stop to let the work clamp foot down. When you loose the pedal, the work clamp foot will turn back.
- (3) After the work clamp foot is down, press the pedal to the second stop to start bar tacking sewing.
- (4) After sewing, the work clamp foot lifts and turn back to the start sewing point.

3. Winder

Operations:

- (1) Press “” key till the winder lamp is on.
- (2) Press “” key to let the work clamp foot down.
- (3) Press the pedal to the second stop to start winder.
- (4) Press any key on operation box to stop winder.
- (5) Return to step (3) to restart winder.
- (6) You have to press “” to quit winder status. If opertion box displays “E-3”, then you need to rotate the hand-wheel to adjust the main shaft, till “E-3” disappears.

6-2 Advanced Skills

1. Use function keys “P1”, “P2”, “P3”, “P4”, “P5”, “P6” and “P7”.

P1: press “”

P2: press “”

P3: press “”

P4: press “”

P5: press “”

P6: press “”

P7: press “”

(1) register keys

Example: set "P1" as design No. 3, X-scale: 50%, Y-scale: 80%, the max. sewing speed: 2000spm.

Operation:

- 1). Press " " key to power on.
- 2). Press " " key.
- 3). Press " " key till the design number lamp is on, then press " " or " " to set the number as "3".
- 4). Press " " key to set X-scale as 50%, Y-scale as 80%, and the max. sewing speed as 2000spm.
- 5). Press " " to complete registration.
* If you want to register P2 to P7, after the second step, press P2 to P7, and repeat steps 3 to 5.
- 6). after registration, turn off the power and then restart it, system starts tack sewing.

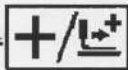
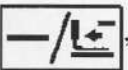
(2) Bar tacking Sewing

Operation: sew P3 after P1

It includes the following steps:

- 1) Power on the machine.
- 2) Press " " key.
- 3) Press " " key till the sewing lamp is on. The work clamp foot moves and lifts up.
- 4) Test sewing.
- 5) Design can be sew if the border is fit.
- 6) When P1 is done, press " " key to let the work clamp foot back to the start point (Function key "P" stays in effect as long as the sewing lamp is on).

7) Repeat steps 5) and 6).

* You can use “” or “” to get P1-P7, the order for the design code is “1-99-P1-P7-C1-C3”.

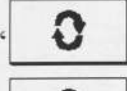
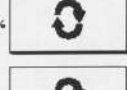
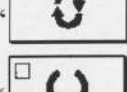
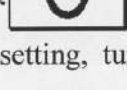
2. Use key combinations “C1”, “C2” and “C3”

You can register key combinations “C1”, “C2” and “C3” by putting keys P1 to P7 in order.

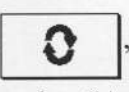
(1) Register design combinations

For example: set “C1” as the combination of “P1”, “P2” and “P3”.

Operations:

- 1) Press “” and “” at the same time to power on.
- 2) Press “”, then press “”.
- 3) Press “”, then press “”.
- 4) Press “”, then press “”.
- 5) Press “” to end setting.
- 6) After setting, turn off the power and then restart it, machine starts to bar tacking sewing.

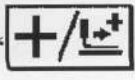
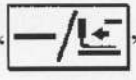
Notice:

- * 1. under the first status, press “” and “” at the same time to set “C2”, while press “” and “” at the same time to set “C3”.
- * 2. “10-15” will be displayed as “A-F”.

(2) Bar tacking Sewing

For example: sewing the design combination “C1”.

Operations:

- 1) Power on the machine.
- 2) Press “” or “” to set the design number as “C1”.

- 3) Press “” key till the sewing lamp is on. The presser foot moves and lifts up.
- 4) Combination design can be sew if the border is fit.
- 5) After sewing a design, system will automatically switch to the next one. After all the designs have been sewed, the machine will return to the first one.

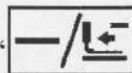
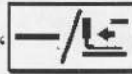
Notice:

- * a). You can use “” or “” to switch between designs.
- * b). “C1-C3” will change according to the change of “P1-P7”.
- * c). Please pay attention to the design range.

6-3 Memory Parameter Setting

1. Memory Parameter Setting

Operations:

- (1) Press “” and “” at the same time to power on the machine.
- (2) Press “” or “” to select “1-22” from the table of parameter.
- (3) Press “Ready” key to start setting.
- (4) Press “” or “” to change the value.
- (5) Press “” to complete the setting.

2. Return to the Default Setting

Operations:

- (1) Press “” and “” to power on the machine.
- (2) System will display “SF-O” after initialization. Turn off the power.

Chapter 7 Maintenance

This product shall be kept in clean and dry location. The control box shall be kept in clean location, which is good for thermal and dust-proof.

After power off, you must wait 1 minute until you restart the machine, so as to avoid system troubles.

In case of sudden power-off, you should cut out main power switch to avoid body from being shocked.

The keyboard is the most frequently used part of the machine. In order to protect the keyboard, pressing the keys by nail or stick is strictly prohibited.

You should clean the dust regularly to let the control box clean. You can use hot air to dry the box when it is wet inside. You should use compressed air and soft brush to clear the dust. Any maintenance work should be carried out with the system off.

Check the fans regularly. Make sure that there are no jams in thermal holes.

Clean the box regularly to prevent oil stain from getting in.

Check the grounding system (mostly outdoor) regularly.

Check if the wire connection mechanism is good. Make sure that the insulation of the connecting points and wires perform well.

If the control box is not in use for a short period, you should power it on regularly (better every 2 or 3 days a time), one hour or more for each time. If it is not in use for a long time, before use, specialist should take a all-round examine for the machine.

Chapter 8 Troubleshooting

Trouble	Reason One	Reason Two	Troubleshooting
Lamps don't shine	All the lamps on the power-source board don't shine.	Disconnection of the plug CZ301	Plug in or change a new power circuit.
	All the indicator lamps shine, except +5V lamp		
	The +5V lamp shines, but lamps on the main board don't shine.	CZ307 disconnecting to the power source board	Plug in
		J103 disconnecting to the main board	Plug in
	Keyboard display and the main board don't connect well.	J109 disconnecting to the main board	Plug in
Keys switch on keyboard don't function	Keys error		Change the keyboard display
	Circuit error		Change the keyboard display
After pressing "Ready", the work clamp foot goes down but can not move.	Do not supply +90 power source to the step motor	F3 on the power source board disconnects.	
		CZ308 disconnecting to the power source board.	Plug in
		CZ012 disconnecting to the step board	Plug in
After pressing "Ready", the work clamp foot goes down but can not move.	The signal cable between main board and step motor doesn't connect well.	J101 disconnecting to the main board	Plug in
		CZ015 disconnecting to the step board	Plug in
	Cables of X and Y step motors don't connect well.	CZ011 disconnecting to the step board	Plug in
	Step motor		Plug in
	Origin detecting cables of X and Y step motors don't connect well.	J106 disconnecting to the main board	Plug in
	Origin detecting unit of Y step motor destroyed.		Change the detecting unit
After pressing "Ready", the work clamp foot moves horizontally after going down.	Origin detecting unit of X step motor destroyed.		Change the detecting unit
The work clamp foot can not go down	The pedal switch doesn't connect well to the main board	J108 disconnecting to the main board	Plug in
	The pedal switch error		Change the switch
	The main board error		Change the main board
The machine is in usual when power on and press "Ready" key. After press the pedal, system shows error "E--7" after the upper axis rotates	Signal cable between the servo driver board and the main board doesn't connect well	The 3rd joint foot of J107 plug doesn't connect well	Reconnect
	The main board		Change the main board

Appendix 1

Table of patterns in LK1900A machine

Standard bar tacking machine pattern					
No	pattern	Number of stitches (mm)	sewing size (mm)		No. of work clamp foot
			length-wise	cross-wise	
1		42	2.0	16	1
2			2.0	10	1
3			2.5	16	1
4		28	2.0	24	5
5			2.0	10	1
6			2.5	16	1
7		36	2.0	10	1
8			2.5	16	1
9			3.0	24	5
10		64	3.0	24	5

Locking circularity hole					
No	pattern	Number of stitches (mm)	sewing size (mm)		No. of work clamp foot
			length-wise	cross-wise	
11		21	2.5	6	7
12		28	2.5	6	
13		36	2.5	6	
14		14	2.0	8	4
15		21	2.0	8	
16		28	2.0	8	
17		21	0	10	1
18		28	0	10	1
19			0	25	5
20			36	0	25

Beeline pattern					
No	pattern	Number of stitches (mm)	sewing size (mm)		No. of work clamp foot
			length-wise	cross-wise	
21		41	0	25	5
22		44	0	35	6
23		28	20	4.0	8
24		36	20	4.0	
25		42	20	4.0	
26		56	20	4.0	9
27		18	20	0	
28		21	10	0	
29			20	0	
30		28	20	0	

Feed plate in LK1900A

	1	2	3	4	5	6	7	8	9
Work clamp foot	13518659(suit)	13548557(suit)	13542964(suit)	13548151(suit)	13542451(suit)	13571955(suit)	13561360(suit)		
Work clamp foot	14116107	14116404	14116305	14116206	13548003	13554803	14116602	14116503	14116701
standard	S	F	H	H	S	H	S	F	F
remarks	13533104			13548300			13573407		
	Standard accessory for S(standard) type machine head	Standard accessory for F(foundation) type machine head	Standard accessory for H(heavy material) type machine head	Standard accessory for M(kitting) type machine head	Special long knot(annex)	Special type knot(annex)	accessory for beeline F(foundation) type machine head	Beeline knot	

Appendix 2

Other pattern

	No	pattern	Number of stitches (mm)	sewing size (mm)	
				length -wise	cross -wise
bar tacking sewing style	31		42	10	7
	32		54	10	7
	33		56	10	6.6
	34		48	7	10
	35		48	7	10
	36		56	7.3	10
	37		56	7.3	10
	38		85	10	12
	39		24	10	6
	40		31	12	6
	41	(single loop)	110	Ø2, 5, 8	
	42	(single loop)	119	Ø2, 5, 8	
	43	(double loop)	92	Ø2, 5, 8	
	44	(double loop)	111	Ø2, 5, 8	
	45	(double loop)	126	Ø2, 5, 8	
bar tacking sewing style	46	(double loop)	99	Ø0.5, 6, 7, 8	
	47	(double loop)	144	Ø0.5, 6, 7, 8	
	48	(single loop)	37	Ø12	
	49	(double loop)	36	Ø12	
	50	(treble loop)	76	Ø12	
	51		102	19	2.6
	52		120	20	3.6
	53		47	17	10
	54		67	20	20
	55		21	8	8
	56		32	26	15
	57		41	25	25
	58	(single loop)	39	19	15
	59	(double loop)	47	24	15
	60	(treble loop)	63	32	20
	61		124	10	10
	62				
	63				
	64				

Appendix 3

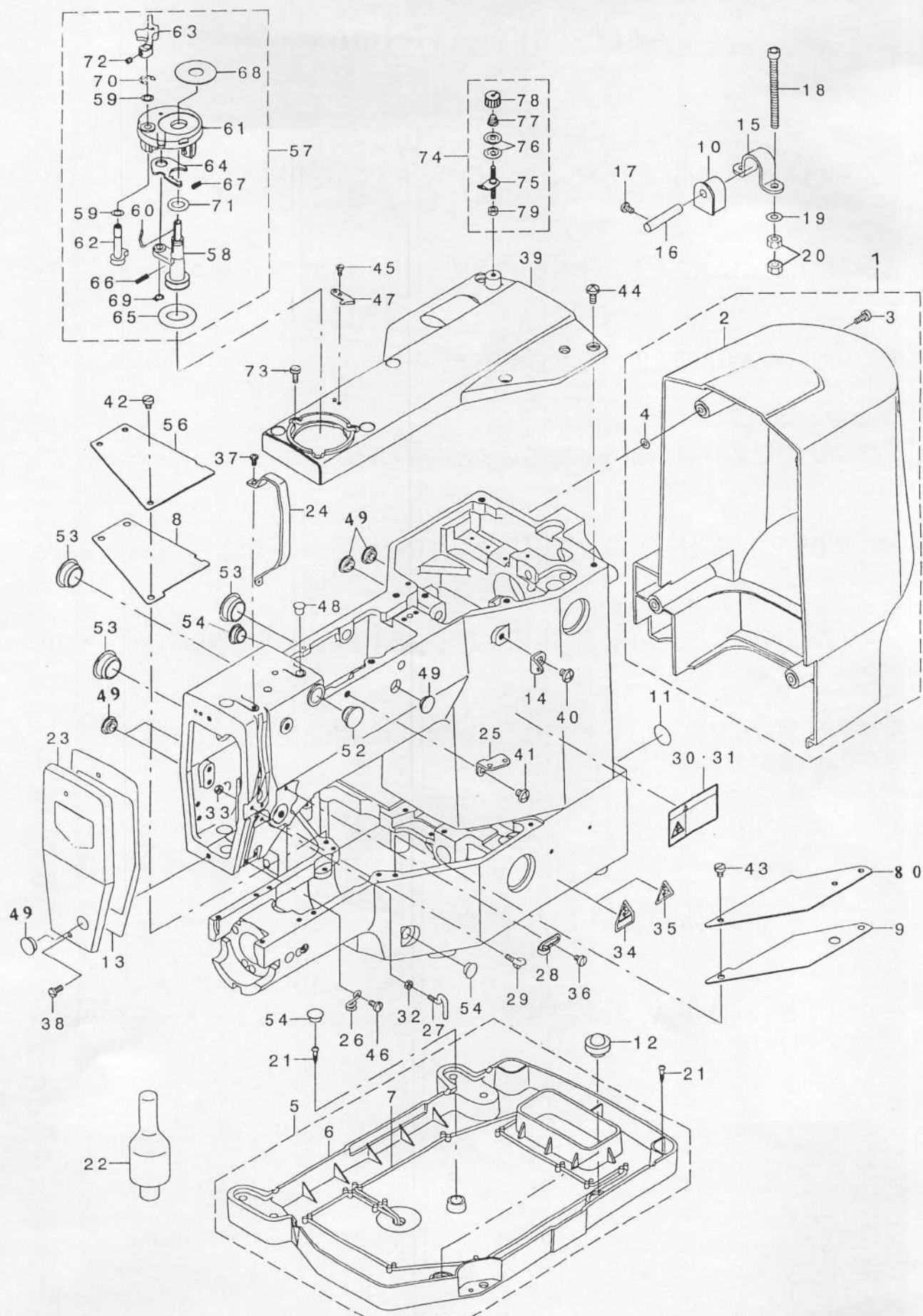
Table of standard pattern in YK1900A machine

Program No.	Stitch shape	Number of stitches	Standard sewing size X(mm)	Standard sewing size Y(mm)	Program No.	Stitch shape	Number of stitches	Standard sewing size X(mm)	Standard sewing size Y(mm)
1 • 34		6-6	3.4	3.4	18 • 44		6	3.4	0
2 • 35		8-8			19 • 45		8		
3		10-10			20		10		
4		12-12			21		12		
5 • 36		6-6			22		16		
6 • 37		8-8			23 • 46		6		
7		10-10			24		10		
8		12-12			25		12		
9 • 38		6-6			26 • 47		6-6		
10 • 39		8-8			27		10-10		
11		10-10			28 • 48		6-6		
12 • 40		6-6			29		10-10		
13 • 41		8-8			30 • 49		5-5-5		
14		10-10			31		8-8-8		
15 • 42		6-6			32 • 50		5-5-5		
16 • 43		8-8			33		8-8-8		
17		10-10							

Accessory stylebook

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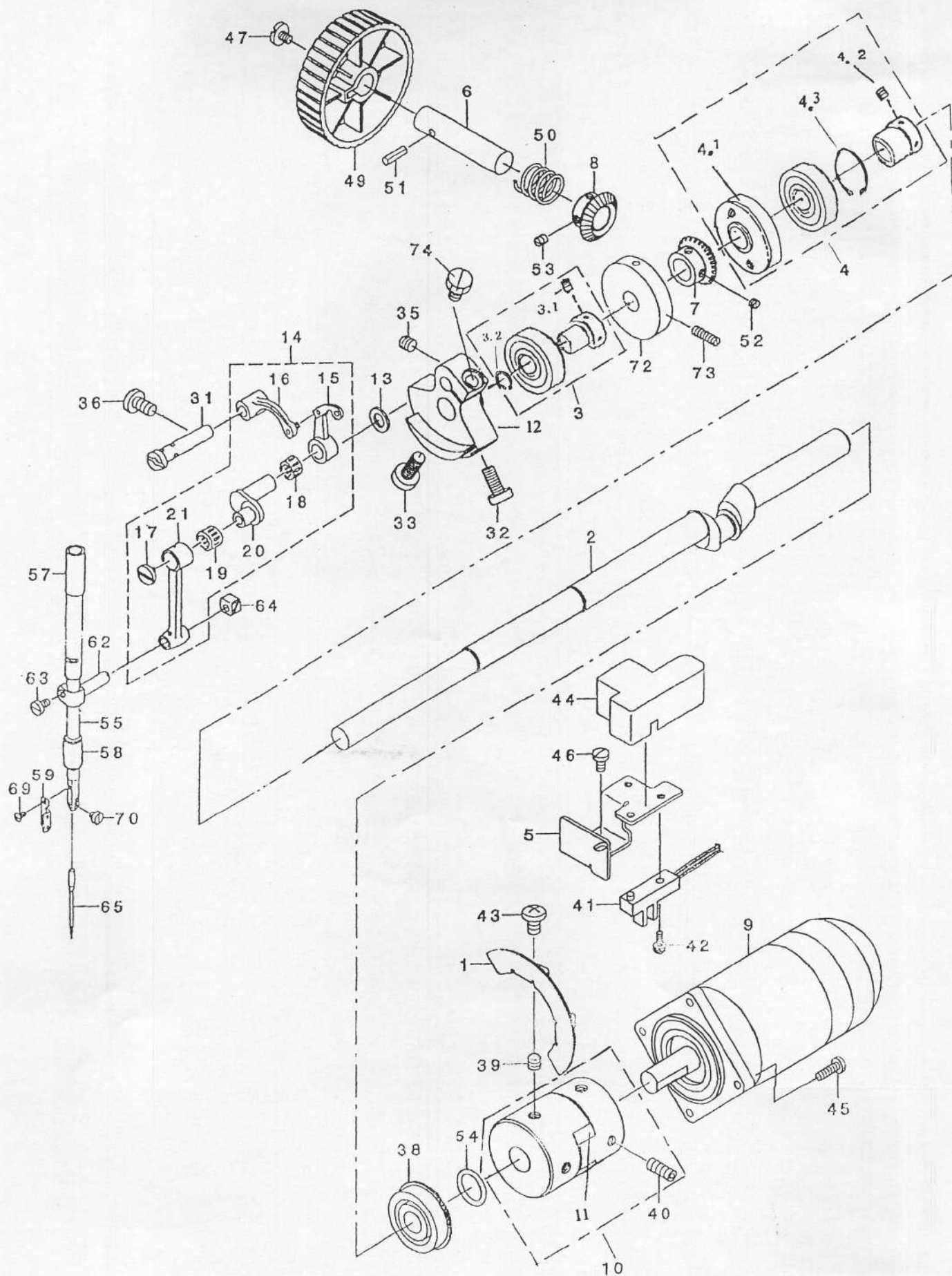
1. FRAME & MISCELLANEOUS COVER COMPONENTS



1. FRAME & MISCELLANEOUS COVER COMPONENTS

REF.NO		DESCRIPTION	PART NO		QTY
1		MOTOR COVER ASM.	141-00457		1
2		MOTOR COVER	141-00408	01-002-1900	(1)
3		SCREW 11/64-40 L=11	SS-6111140-SP	5-39-185	(4)
4		STOPPER	M8002-430-000	01-004-1900	(4)
5		OIL PAN ASM.	141-00754		1
6		OIL PAN	141-00705	01-006-1900	(1)
7		OIL WICK	CQ-2522000-00		(1)
8		BED COVER PACKING A	141-00903	01-008-1900	1
9		BED COVER PACKING B	141-01000	01-009-1900	1
10		HINGE RUBBER	B1115-210-D00	01-010-1900	2
11		GROUND MARK	100-04109		2
12		FRAME SUPPORT RUBBER	B1116-210-D00	01-012-1900	2
13		FACE PACKING	135-02307	01-002-185	1
14		THRED GUIDE NO. 1	137-86306	01-014-1900	1
15		BDE HINGE	B1111-210-D00	01-015-1900	2
16		HINGE STUD	B2707-761-000	01-016-1900	2
17		SCREW 11/64-40 L=4	SS-8110422-TP	5-30-1190	2
18		HEXAGONAL-HOLE BOLT M6 L=75	SM-6067552-TP	GB/T70-1985	4
19		WASHER	WP-0651646-SC	GB/T97.1-1985	4
20		NUT M6	NM-6060001-SC	GB/T6184-2000	8
21		SCREW D=3.8 L=20	SK-3382001-SE	GB/T15856.1H-2002	4
22		HEAD SUPPORT BAR	112-80856	01-022-1900	1
23		FACE COVER ASM.	135-38152	01-001-185	1
24		BALANCE COVER	138-16608	01-012-185	1
25		THREAD GUIDE PLATE	B1111-232-000	15037-780	1
26		ARM THREAD GUIDE B	B1124-280-000	01-013-185	1
27		L-SHAPED THREAD GUIDE A	B1125-280-000	11544-780	1
28		ARM THREAD GUIDE A	110-18504	11542-780	1
29		THREAD GUIDE	B3114-771-000	11545-780	1
30	01	SAFETY LABEL, 1(SMALL)	CM-3002001-01		1
31	02	SAFETY LABEL, 3(SMALL)	CM-3002001-A1		1
32		NUT 9/64-40	NS-6090310-SP	1-23-185	1
33		NUT 9/64-40	NS-6090310-SP	1-23-185	1
34	01	CAUTION LABEL(25)	CM-3002000-B2		1
35	03	CAUTION LABEL(25)	CM-3002000-02		1
36		SCREW 11/64-40 L=6	SS-6110610-TP	10924-780	1
37		SCREW 9/64-40 L=5	SS-4090515-SP	10305-780	2
38		SCREW 11/64-40 L=10	SS-4111015-SP	10338-780	2
39		TOP COVER	141-00309	01-039-1900	1
40		SCREW 15/64-28 L=7	SS-4150715-SP	10808-780	1
41		SCREW 15/64-28 L=7	SS-4150715-SP	10808-780	1
42		SCREW 11/64-40 L=6	SS-6110610-TP	10140-780	3
43		SCREW 11/64-40 L=6	SS-6110610-TP	10140-780	2
44		SCREW 15/64-28 L=12	SS-4151215-SP	10610-780	6
45		SCREW 9/64-40 L=7	SS-4090715-SP	10512-780	1
46		SCREW 11/64-40 L=7.8	SS-7110840-SP	10516-780	1
47		THREAD CUTTER	105-02300	01-047-1900	1
48		RUBBER PLUG D=7.5 L=7	TA-0750704-R0	10135-780	1
49		RUBBER PLUG D=12.5 L=4	TA-1250406-R0	10-005-185	6
52		RUBBER PLUG D=14.5 L=7.5	TA-1470704-R0	01-052-1900	1
53		RUBBER PLUG D=20.5 L=9	TA-2100904-R0	10-001-185	3
54		RUBBER PLUG D=10.5 L=5	TA-1050504-R0	10-002-185	3
46		BED COVER A	141-00507	01-056-1900	1
57		BOBBIN WINDER ASM.	141-13666		1
58		BOBBIN WINDER SHAFT COMPL.	141-13658	01-058-1900	(1)
59		WASHER	135-07504	01-059-1900	(2)
60		LATCH SPRING	B3212-761-000	01-060-1900	(1)
61		BOBBIN FITTING BASIS COMPL	225-37658	01-061-1900	(1)
62		BOBBIN CAM SHAFT COMPL	225-38151	01-062-1900	(1)
63		BOBBIN LEVER	225-38300	01-063-1900	(1)
64		ADJUSTING PLATE	225-38409	01-064-1900	(1)
65		RUBBER RING	A3216-001-00 A	01-065-1900	(1)
66		SPRING	B1148-555-000	01-066-1900	(1)
67		PRESSUR FOOT SPRING	B1529-890-00 C-A	01-067-1900	(1)
68		CUSHION	B3205-210-000	01-068-1900	(1)
69		RETAINING RING	RC-0560711-KP	GB/T894.1-1980	(1)
70		E-RING	RE-0500000-K0	GB/T896-1986	(1)
71		RUBBER RING	RO-0922702-00	GB/T3452.1	(1)
72		SCREW 11/64-40 L=4	SS-8110422-TP	05-030-1190	(1)
73		SCREW 11/64-40 L=11	SS-6111140-SP	01-073-1900	3
74		BOBBIN THREAD TENSION ASM.	141-13468		1
75		BOBBIN THREAD TENSION ROD ASM	141-13450	11416-780	(1)
76		THREAD TENSION DISK	B3126-012-000	11415-780	(2)
77		CONNECTING ROD SPRING	D7133-555-B00	11414-780	(1)
78		THREAD TENSION NUT	110-72402	11413-780	(1)
79		NUT 11/64-40	NS-6110310-SP	10211-780	(1)
80		BED COVER B	141-00606	01-080-1900	1

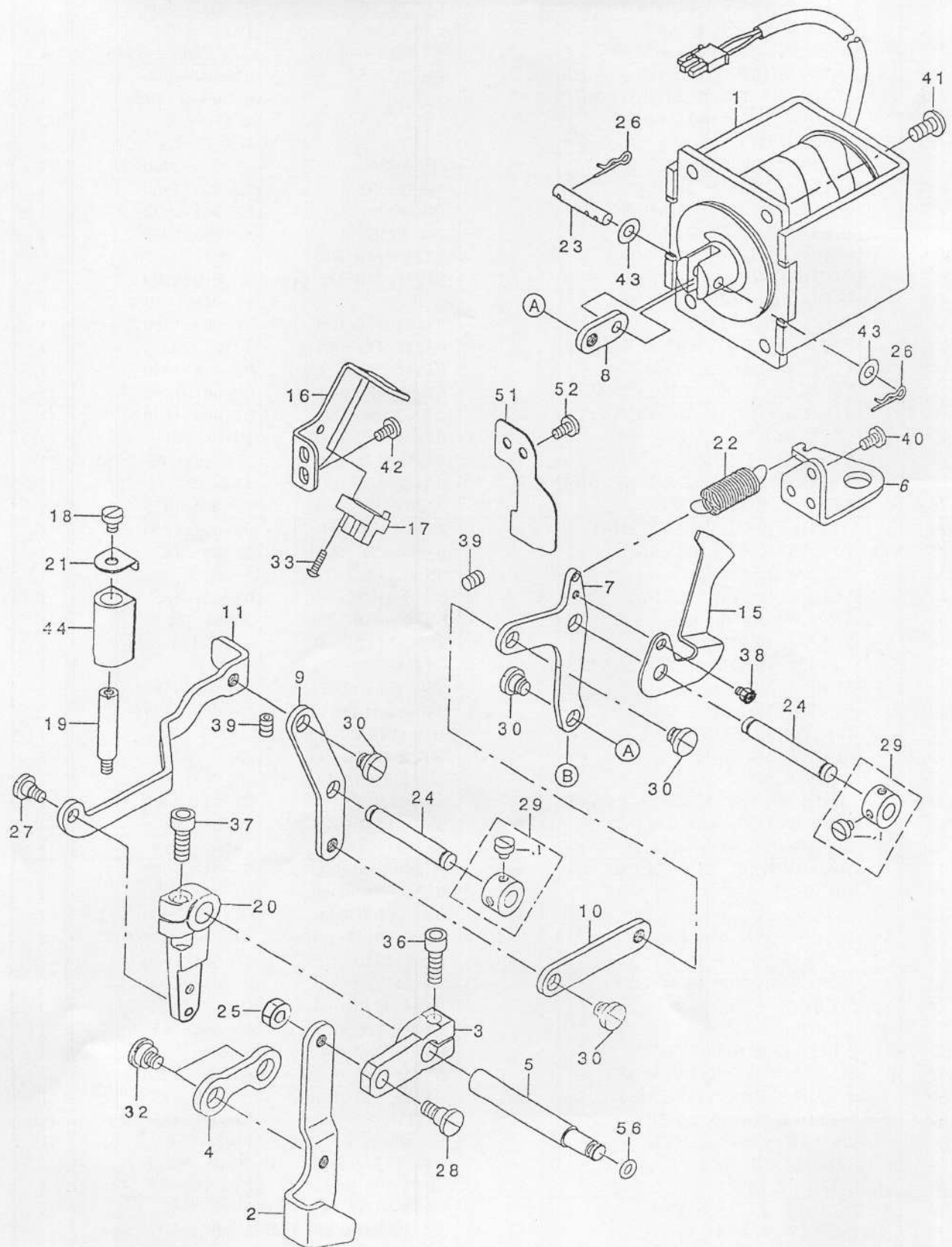
2. MAIN SHAFT & NEEDLE BAR COMPONENTS



2. MAIN SHAFT & NEEDLE BAR COMPONENTS

REF.NO		DESCRIPTION	PART NO		QTY
1		MAIN SHAFT SLIT PLATE	141-02404	02-001-1900	1
2		MAIN SHAFT	141-02107	02-002-1900	1
3		MAIN SHAFT BUSHING, FRONT	141-02206	02-003-1900	1
3.1		SCREW 11/64-40 L=6		10331-780	2
3.2		RETAINING RING 17		GB/T894.1-1986	1
4		MAIN SHAFT BUSHING, MIDDLE	141-02305	02-004-1900	1
4.1		MAIN SHAFT BUSHING, MIDDLE		02-004.1-1900	1
4.2		SCREW 11/64-40 L=6		10331-780	2
4.3		E-RING 37		GB/T893.1-1986	1
5		SENSOR INSTALLING BASE	141-02503	02-005-1900	1
6		HAND PULLEY SHAFT	141-02602	02-006-1900	1
7		HAND PULLEY GEAR A	141-02701	02-007-1900	1
8		HAND PULLEY GEAR B	141-02800	02-008-1900	1
9		MAIN MOTOR	B1230-210-D00		1
10		COUPLING	B1231-210-D00	02-010-1900	1
11		INDIA RUBBER		02-010.3-1900	1
12	01	COUNTER WEIGHT	B1202-280-000	02-002-1850	1
13		NEEDLE ROD CRANK WASHER	B1223-771-000	10317-780	1
14	01	LINK BALANCE ASM.	B1901-280-0 B0	02-014-1900	1
15		THREAD TAKE-UP LEVER	B1901-280 000	03-001-1850	(1)
16		THREAD TAKE-UP CRANK	B1903-280-000	03-005-1850	(1)
17		LEFT SCREW	B1903-552-000	10315-780	(1)
18		NEEDLE BUSHING	B1905-541-000	5846-081208-1850	(1)
19		NEEDLE DRIVING LEVER BEARING	B1411-804-000	5846-081110-1850	(1)
20		NEEDLE ROD CRANK	B1203-280-000	03-004-1850	(1)
21		NEEDLE BAR CRANK ROD	B1404 280 000	03-003-1850	(1)
31	01	BALANCE CRANK PIN	B1904-280-0001	03-002-185	1
32		SCREW 15/64-28 L=14	SS-6151412-TP	2-2-185	1
33		SCREW 9/32-28 L=16.5	SS-6681712-TP	02-001-185	1
35		SCREW 1/4-40 L=6	SS-8660610-TP	10404-780	1
36		SCREW 15/64-28 L=11	SS-7151120-SP	9-15-185	1
38		UPPER SHAFT REAR BEARING	G1216-870-000		1
39		SCREW M6 L=6	SM-8060612-TP	GB/T80-1985	2
40		SCREW M6×16	SM-8061612-TP	GB/T80-1985	2
41		PHOTO SENSOR	HD-0019300-00		1
42		SCREW M4 L=12	SL-4041291-SC	GB/T70-1985	1
43		SCREW	SL-4061091-SC	GB/T818-1985	2
44		MAIN SHAFT SENSOR COVER	141-14508	02-044-1900	1
45		SCREW 11/64-40 L=14	SS-7111410-TP	10127-780	4
46		SCREW 11/64-40 L=7.8	SS-7110840-SP	10516-780	1
47		HANDWHEEL SETSCREW	A1230-500-000-A	02-047-1900	1
49		PULLEY	B1212-210-D00	02-049-1900	1
50		SPRING	GAF-01007000	02-050-1900	1
51		SPRING PIN 4×14	PS-0400142-KH	GB/T879-1986	1
52		SCREW 11/64-40 L=2.8	SS-8110310-SP	02-052-1900	2
53		SCREW 11/64-40 L=2.8	SS-8110310-SP	02-053-1900	2
54		RUBBER RING	R0-1542401-00	GB/T3452.1	1
55	03	NEEDLE BAR	B1401-280-000	03-008-185	1
57		NEEDLE ROD METAL	B1402-280-000	03-006-185	1
58		NEEDLE ROD LOWER METAL	B1403-280-000	03-009-185	1
59	03	NEEDLE BAR THREAD GUIDE	B1405-280-0100	03-010-185	1
62		NEEDLE BAR CLAMP	B1411-552-000	03-007-185	(1)
63		SCREW 9/64-40 L=6	SS-6090670-TP	11424-780	(1)
64		SQUARE BLOCK	B1414-232-000	10601-780	1
65	02	NEEDLE DPX5 #11	MDP-500 B1100	DPX5#11	1
69	03	SCREW 3/32-56 L=4.5	SS-2060510-SP	3-15-185	1
70	03	SCREW 1/8-44 L=2.9	SS-6080340-SP	3-20-185	1
72		BOBBIN WINDER DRIVING WHEEL	B3213-205-000	02-072-1900	1
73		SCREW 11/64-40 L=15.5	SS-8111610-SP	02-073-1900	2
74	02	SCREW 1/4-40 L=12	SS-9661230-CP	2-3-1850	1

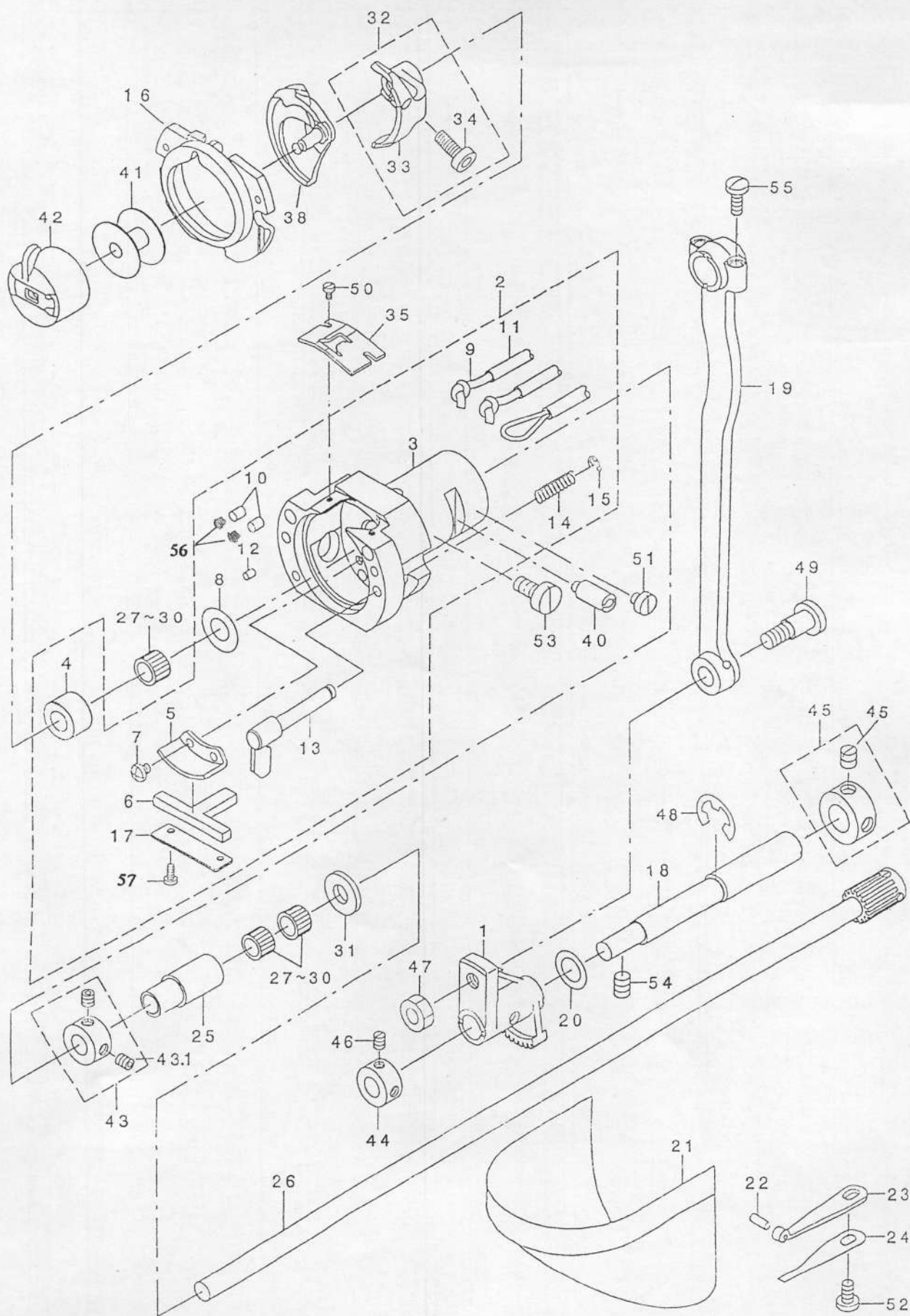
3. PRESSER LIFTER COMPONENTS



3. PRESSER LIFTER COMPONENTS

REF.NO		DESCRIPTION	PART NO		QTY
1		PRESSER LIFTING SOLENOID ASM.	141-04152		1
2		LOWERING FOOT	141-04202	03-002-1900	1
3		LOWERING ARM	141-04301	03-003-1900	1
4		CONNECTING LINK	141-04400	03-004-1900	1
5		CONNECTING SHAFT	141-04509	03-005-1900	1
6	01	RETURN SPRING HOOK	141-04608	03-006-1900	1
7		LINK D	141-05100	03-007-1900	1
8	01	SOLENOID LINK	141-04707	03-008-1900	1
9		LINK B	141-04905	03-009-1900	1
10		LINK C	141-05001	03-010-1900	1
11		LINK A	141-04806	03-011-1900	1
15		PRESSER SENSOR SLIT	141-05209	03-015-1900	1
16		SENSOR INSTALLING PLATE	141-05308	03-016-1900	1
17		PHOTO SENSOR	HD-0005700-0A		1
18	01	SCREW 11/64-40 L=6	SS-6110610-TP	10924-780	1
19	01	OIL PUMP SUPPORT	113-92107	03-019-1900	1
20		CONNECTING ARM	135-06415	03-020-1900	1
21	01	STOPPER RUBBER SET WASHER	WP-0560860-SE	03-021-1900	1
22	01	SPRING	135-44705	03-022-1900	1
23	01	MAGNET PIN	B1513-210-D00	03-023-1900	1
24		SHAFT BLOCK SHAFT	D2502-232-D00	03-024-1900	2
25		NUT 15/64 -28	NS-6150310-SP	10544-780	1
26	01	PIN	B1515-210-D00	GB/T91-1986	2
27		HINGE SCREW D=6.35 H=3.9	SD-0640391-TP	03-027-1900	1
28		HINGE SCREW D=7.94 H=6	SD-0790601-SP	03-028-1900	1
29		THRUST COLLAR ASM. D=7.94 W=10	CS-079101A-SH	03-029-1900	2
29.1		SCREW 11/64 -40 L=4.8		11005-780	4
30	01	HINGE SCREW D=8 H=3.4	SD-0800341-SP	03-030-1900	4
32		HINGE SCREW D=10 H=4	SD-1000401-SP	03-032-1900	2
33		SCREW M3 × 12	SL-4031291-SC	GB/T818	1
36		SCREW M6 L=18	SM-6061802-TP	GB/T70-1985	1
37		SCREW M6 L=18	SM-6061802-TP	GB/T70-1985	1
38		STUD	HX-0033900-00	GB/T70-1985	1
39		SCREW 15/64 -28 L=8	SS-8150822-TP	5-31-185	2
40	01	SCREW 11/64 -40 L=7.8	SS-7110840-SP	10516-780	2
41	01	SCREW 15/64 -28 L=12	SS-4151215-SP	10610-780	4
42		SCREW 11/64 -40 L=7.8	SS-7110840-SP	10516-780	2
43	01	WASHER 5 × 10 × 1	WP-0560860-SE	GB/T95-1985	2
44	01	PRESSER LIFTING STOPPER RUBBER	135-00400	03-044-1900	1
51		PLATE	141-05506	03-051-1900	1
52		SCREW 11/64 -40 L=7.8	SS-7110840-SP	10516-780	2
56		RUBBER RING		GB/T3452.1	1

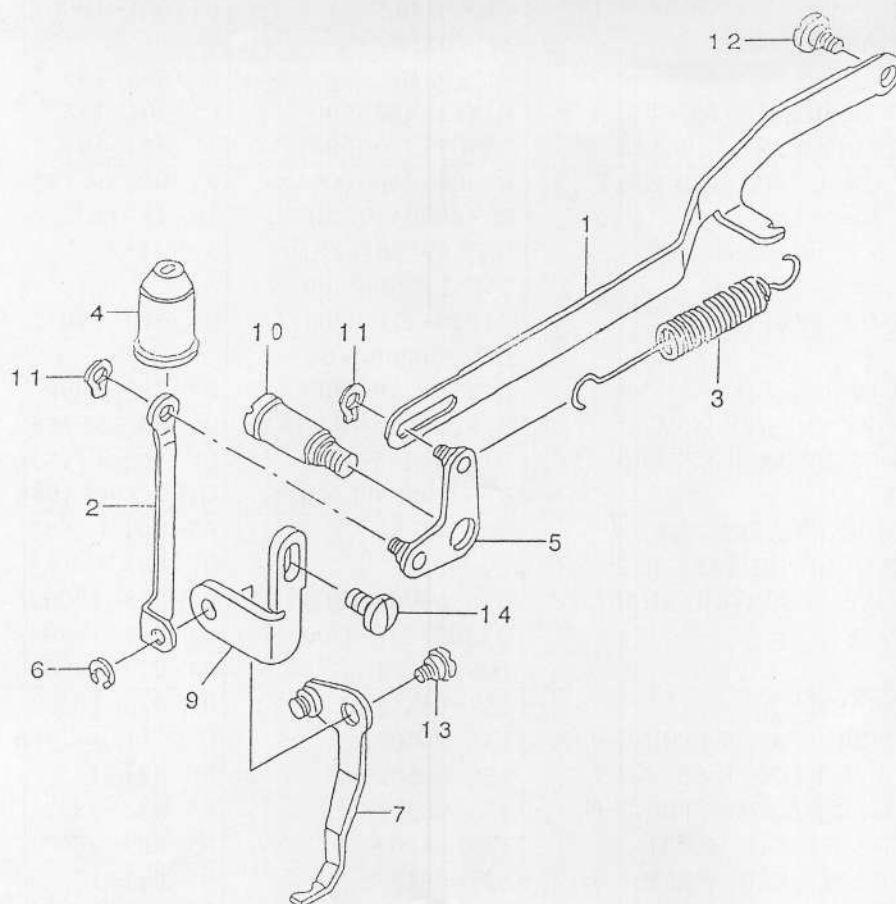
4. SHUTTLE DRIVER SHAFT COMPONENTS



4. SHUTTLE DRIVER SHAFT COMPONENTS

REF.NO		DESCRIPTION	PART NO.		QTY
1		OSCILLATOR	141-03402	04-001-1900	1
2		SHUTTLE ASM.	141-03154		1
3		SHUTTLE	141-03105	05-005-185	(1)
4		SHUTTLE NEEDLE OUTER RING	B1813-980-000	05-004-185	(1)
5		SHUTTLE LUBRICATING PLATE	B3505-280-000	10-034-185	(1)
6		SHUTTLE ONCE THROUGH OIL FELT	B3504-280-000	05-005.6-185	(1)
7		SCREW 9/64-40 L=4	SS-6090440-SP	10-45-185	(2)
8		WASHER 9.5×14.8×2.6	WP-0952616-SD	5-9-185	(1)
9		OIL WICK	CQ-2522000-00		(1.59M)
10		SHUTTLE OIL FELT,A	B1820-210-D00	04-010-190	(2)
11		VINYL PIPE	BP-3000000-00		(0.99M)
12		SHUTTLE OIL FELT,B	B1821-210-D00	04-012-1900	(1)
13		INNER HOOK PRESSER ASM.	B1820-215-PA0-A	05-005.1-185	(2)
14		INNER HOOK PRESSER SPRING	B1822-215-P00	05-005.4-185	(2)
15		E-RING 3	RE-0300000 K0	GB/T896-1986	(2)
16	01	INNER HOOK PRESSER ASM., A	141-03253	05-001.1-185	1
17		ONCE THROUGH OIL FELT PRESSER		05-005.5-185	1
18		OSCILLATING ECCENTRIC SHAFT	B1836-210-D00	04-018-1900	1
19		CRANK ROD	B1802-210-D00	04-019-1900	1
20		WASHER	105-23504	04-020-1900	1
21		CYLINDER ARM CAP	138-16855	05-020-185	1
22		HOOK COVER PRESSER SPRING PIN	135-08700	GB/T119-1986	1
23		HOOK COVER PRESSER SPRING A	135-08809	05-021-185	1
24		HOOK COVER PRESSER SPRING B	135-08908	05-022-185	1
25		LOWER SHAFT REAR METAL	135-08403	05-009-185	1
26		LOWER SHAFT GEAR A ASM.	135-09153	05-011-185	1
27	03	BEARING(A)	B1411-804-A00	5846-081110	3
31		LOWER SHAFT THRUST WASHER	B1808-980-000	05-010-185	1
32		DRIVER ASM.	B1812-980-0 A0		1
33		SHUTTLE DRIVER	B1812-980-000	05-003-185	(1)
34		SCREW 3/16-28 L=12	SS-6121212-TP	5-6-185	(1)
35	02	SHUTTLE UPPER SPRING	B1815-980-000	05-006-185	1
38	04	INNER HOOK	B1818-280-000	5-4 SH280	1
40		SHUTTLE RACE ADJUSTING SHAFT	B1819-280-000	05-007-185	1
41		BOBBIN	138-12102	05-002-185	1
42		BOBBIN CASE ASM. (RACING PREVE)	B1828-980-0 BB	B1828-185	1
43		THRUST COLLAR ASM. D=8 W=8	CS-080081C-SH	05-008-185	1
43.1		SCREW 11/64-40 L=4.5		10333-780	2
44		THRUST COLLAR	CS-1000811-SP	04-044-1900	1
45		THRUST COLLAR ASM.D=12 W=10	CS-1201010-SH	04-045-1900	1
45.1		SCREW 1/4-40 L=6		10404-780	2
46		SCREW 11/64-40 L=4.5	SS-8110520-TP	5-27-185	2
47		NUT 1/4-40	NS-6660430-SP	5-25-185	1
48		E-RING 9	RE-0900000-K0	GB/T896-1986	1
49		HINGE SCREW D=8 H=10.2	SD-0801021-TP	5-23-185	1
50		SCREW 3/32-56 L=3.5	SS-6060410-TP	5-12-185	2
51		SCREW 11/64-40 L=4.3	SS-6110480-SP	1-8-185	1
52		SCREW 11/64-40 L=7.8	SS-7110840-SP	10516-780	1
53		SCREW 15/64-28 L=11.5	SS-6151220-SP	6-31-185	1
54		SCREW 15/64-28 L=8	SS-8150822-TP	5-31-185	2
55		SCREW 11/64-40 L=10.5	SS-7111110-TP	5-3-1190	2
56		RUBBER PLUG		10-035-185	(2)
57		SCREW 3/32-56 L=3.5		5-12-185	2

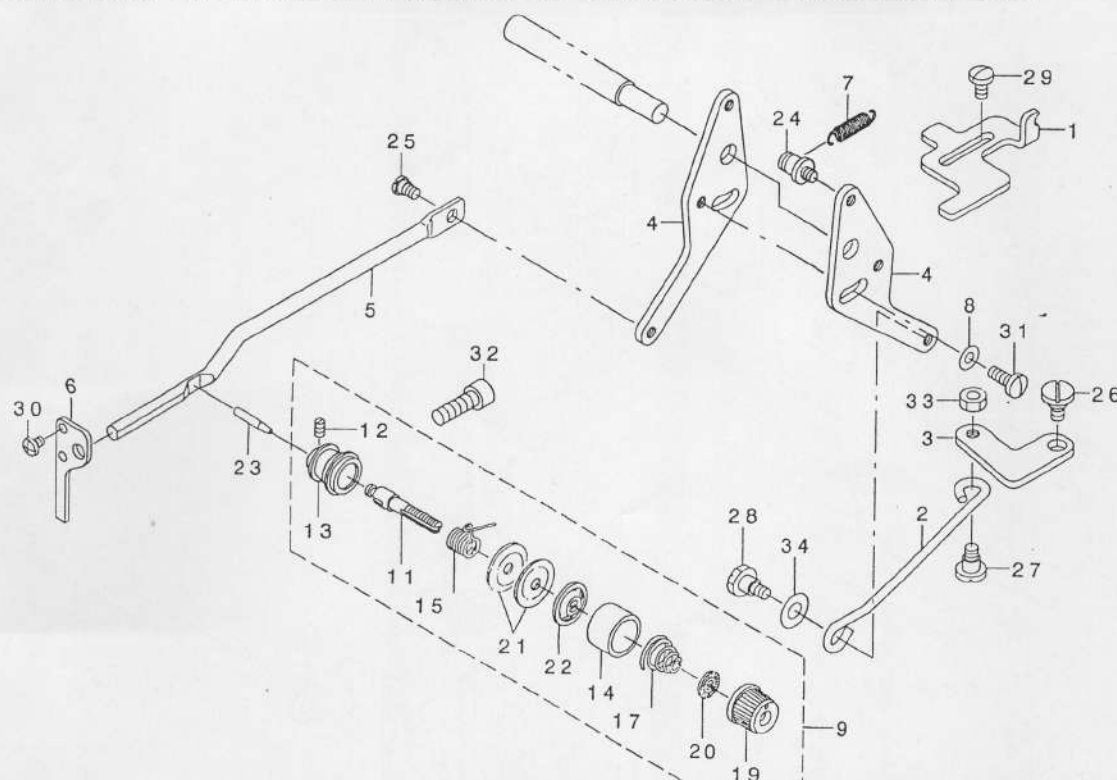
5. WIPER MECHANISM COMPONENTS



5. WIPER MECHANISM COMPONENTS

REF.NO		DESCRIPTION	PART NO		QTY
1		WIPER CONNECTING LINK	135-09500	04-024-185	1
2		WIPER CONNECTING PLATE	135-09609	04-029-185	1
3		SPRING	135-09708	04-025-185	1
4		OIL SHIELD CAP	135-09807	04-028-185	1
5		WIPER CONNECTING ARM ASM.	135-099555	04-026-185	1
6		RETAINING RING 5	B1229-232-000	GB/T894.1-1985	1
7	01	WIPER ASM.	B2101-280-0 A0	04-031-185	1
9		WIPER BASE PLATE	135-74009	04-030-185	1
10		WIPER CONNECTING SCREW	B2109-280-000	04-027-185	1
11		RETAINING RING 5	RC-0470611-KP	GB/T894.1-1985	2
12		HINGE SCREW D=5.3 H=2.2	SD-0530221-SP	4-30-185	1
13		HINGE SCREW D=6.35 H=2.1	SD-0640211-SP	4-56-185	1
14		SCREW 11/64-40 L=7.8	SS-7110840-SP	04-055-185	1

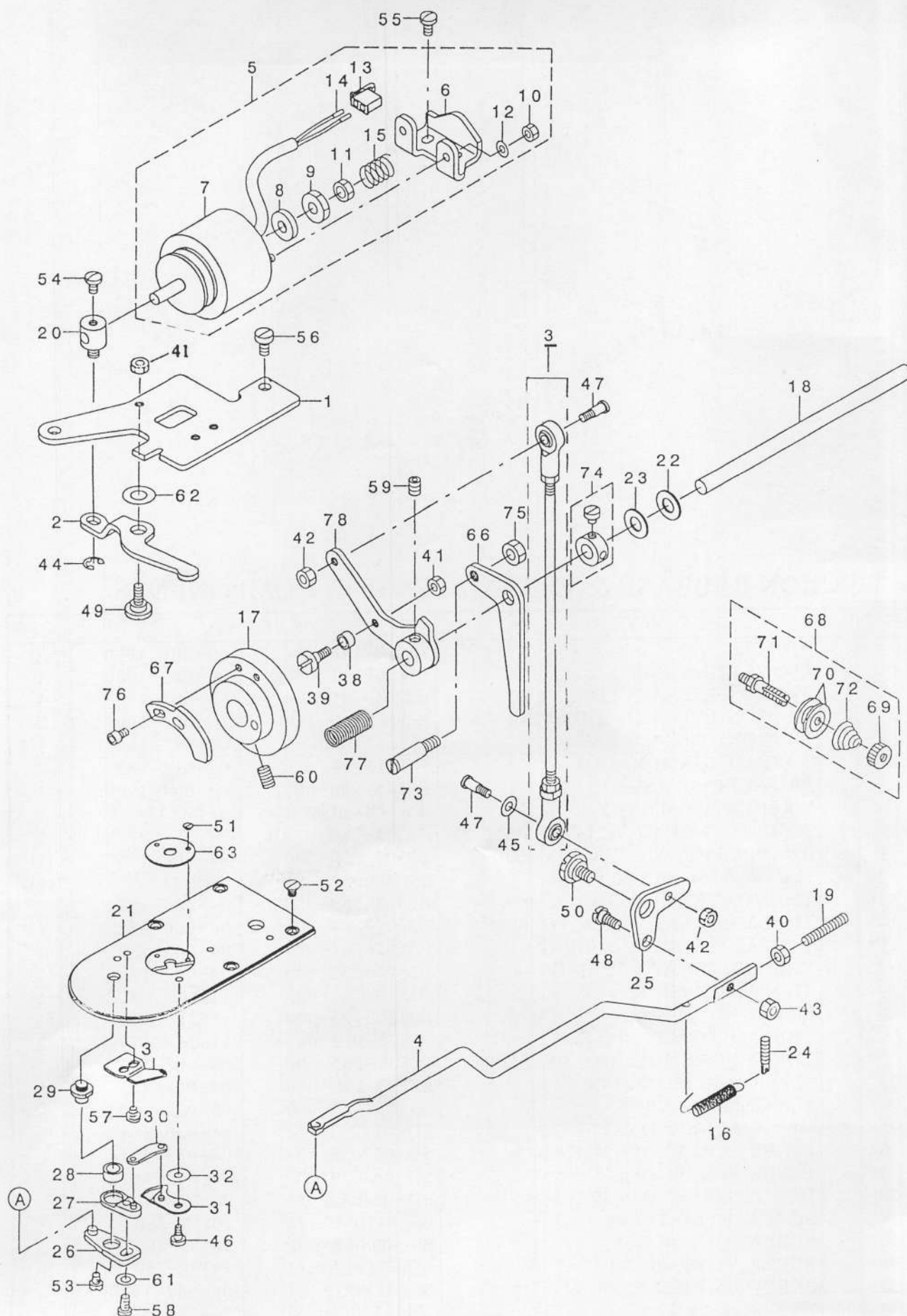
6. TENSION RELEASE & THREAD TENSION COMPONENTS



6. TENSION RELEASE & THREAD TENSION COMPONENTS

REF.NO	DESCRIPTION	PART NO		QTY
1	STOPPER	141-07502	06-001-1900	1
2	CONNECTING BAR	141-07700	06-002-1900	1
3	TENSION RELEASE LINK	B2304-210-D00	06-003-1900	1
4	TENSION RELEASE ADJUSTING ARM	B2306-210-D00	06-004-1900	2
5	TENSION RELEASE BAR	135-13205	04-017-185	1
6	THREAD TENSION ARM	135-13304	04-018-185	1
7	PRESSURE SPRING	B2545-280-000	06-007-1900	1
8	WASHER 4.8×11.5×2	WP-0482086-SD	9-2-195	1
9	01 SECOND THREAD TENSION ASM.	B2302-280-0 A0		1
11	SECOND THREAD TENSION ROD	B2302-280-000	04-004-185	(1)
12	SCREW 9/64-40 L=5.9	SS-8090610-SP	4-5-185	(1)
13	THREAD TENSION ROD, LARGE	B2313-280-000	04-003-185	(1)
14	THREAD TENSION DISK PRESSER	B3107-804-000	04-004-185	(1)
15	THREAD TAKE-UP SPRING	B3112-761-000	04-005-185	(1)
17	THREAD TENSION SPRING	B3114-232-000	04-007-185	(1)
19	THREAD TENSION NUT	B3119-771-000	11520-780	(1)
20	ROTATING STOPPER	B3120-125-000	11521-780	(1)
21	THREAD TENSION DISK	B3126-012-000	11524-780	(2)
22	THREAD TENSION DISK PRESSER	B3132-552-000	04-006-185	(1)
23	TENSION RELEASE PIN	B2303-280-000	04-001-185	1
24	SUSPENSION SCREW	B3413-552-000	06-024-1900	1
25	HINGE SCREW D=5.3 H=2.2	SD-0530221-SP	04-030-185	1
26	HINGE SCREW D=7.24 H=3.3	SD-0720321-TP	04-039-185	1
27	HINGE SCREW D=6.35 H=3.9	SD-0640391-TP	04-042-185	1
28	HINGE SCREW D=6.35 H=4.8	SD-0640482-SP	06-028-1900	1
29	SCREW 11/64-40 L=8	SS-6110810-TP	10516-780	2
30	SCREW 9/64-40 L=5	SS-4090515-SP	10305-780	2
31	SCREW 11/64-40 L=11	SS-7111120-TP	10338-780	1
32	SCREW 15/64-28 L=18	SS-6151812-TP	06-032-1900	1
33	NUT 3/16-28	NS-6120310-SP	7-12-185	1
34	WASHER 6.3×11.2×0.5	WP-0651056-SD	07-026-185	1

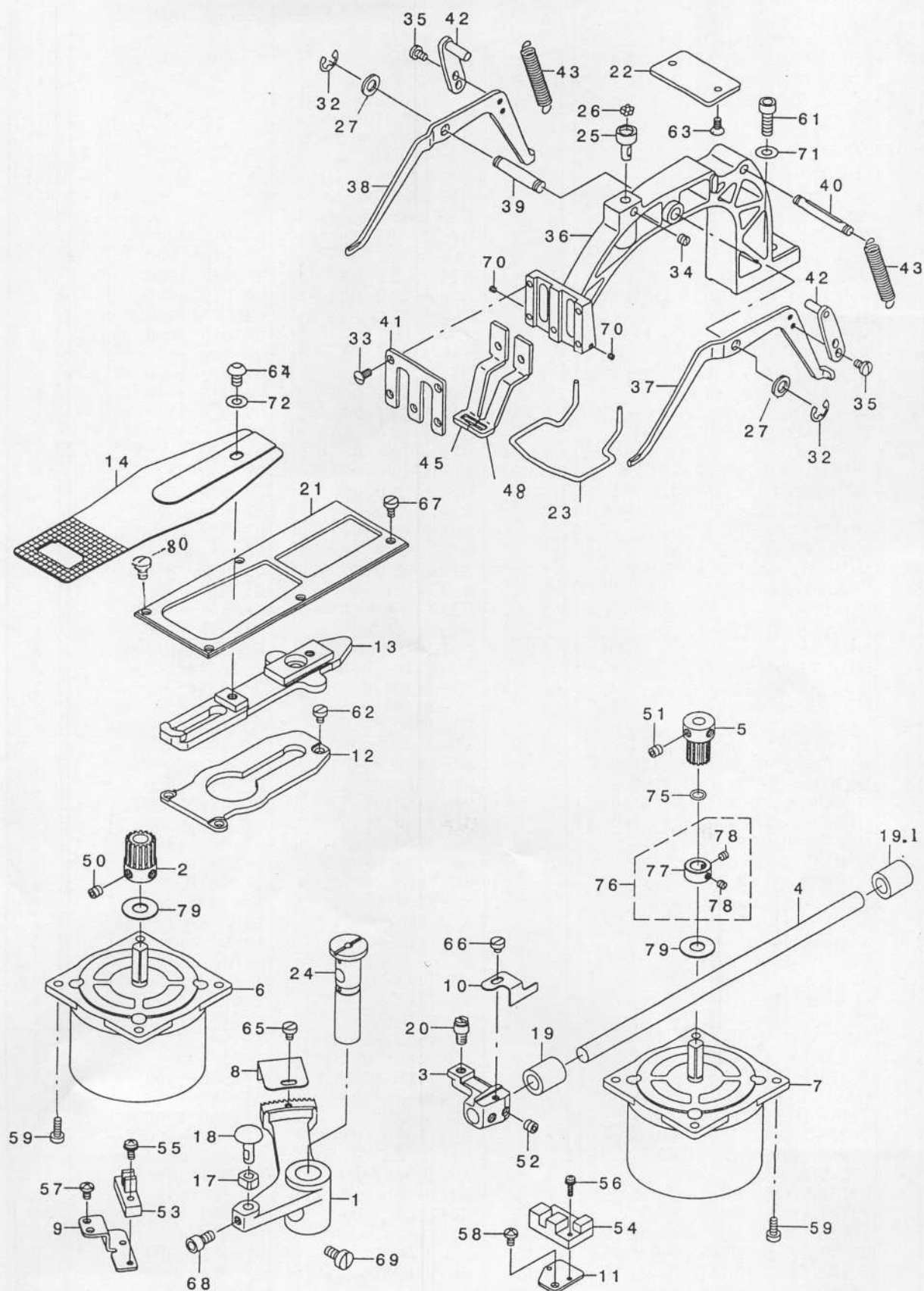
7. TENSION RELEASE & THREAD TRIMMER MECHANISM COMPONENTS



7. TENSION RELEASE & THREAD TRIMMER MECHANISM COMPONENTS

REF.NO	DESCRIPTION	PART NO		QTY
1	CAM FOLLOWER STOPPER	141-08401	07-001-1900	1
2	SOLENOID ARM	141-08500	07-002-1900	1
3	CONNECTING ROD	141-08609		1
4	CONNECTING BAR	141-08708	07-004-1900	1
5	THREAD TRIMMING SOLENOID ASM.	141-08955		1
6	SOLENOID INSTALLING BASE	141-08807	07-006-1900	(1)
7	SOLENOID FOR THREAD TRIMMING	141-08906		(1)
8	SOLENOID RUBBER	110-43304		(1)
9	NUT	NS-6660410-SH		(1)
10	NUT M4	NM-6040000-SN		(2)
11	NUT 1/4-40	NS-6660430-SP		(1)
12	WASHER 4.5×8×0.5	WP-0450000-SD		(2)
13	2-POLE NYLON PLUG	HK-0346100-20		(1)
14	PIN CONTACT	HK-0346400-00		(2)
15	SPRING	B1652-704-000	07-015-1900	(1)
16	THREAD TRIM LINK SPRING	141-09300	07-016-1900	1
17	THREAD TRIMMER CAM	B2401-210-D00	07-017-1900	1
18	THREAD TRIMMER SHAFT	B2408-210-D00	07-018-1900	1
19	SCREW M5 L=30	SM-8053002-TP	GB/T73-1988	1
20	SOLENOID PIN	110-43007	07-020-1900	1
21	NEEDLE PLATE	135-15507	03-026-185	1
22	NEEDLE ROD CRANK WASHER	B1223-771-000	07-022-1900	1
23	CLOTH PLATE WASHER	B1116-804-000	07-023-1900	1
24	TENSION SPRING ADJUSTING SCREW	B1649-161-000	07-021-185	1
25	THREAD TRIMMER LINK	B2411-210-000	07-025-1900	1
26	THREAD CUTTER LEVER ASM.,LARG	B2414-280-0 A0	03-026.1-185	1
27	THREAD CUTTER LEVER ASM.,SMAL	B2415-280-0 A0	03-030-185	1
28	THREAD CUTTING LEVER RING	B2416-280-000	03-029-185	1
29	THREAD CUTTER LEVER SHAFT	B2417-280-000	03-026.2-185	1
30	MOVING KNIFE LINK	B2418-280-000	03-028-185	1
31	MOVING KNIFE ASM.	B2421-280-0A0	03-033-185	1
32	01 MOVING KNIFE WASHER A	B2423-280-00 A	03-032-185	1
37	FIXING KNIFE	B2424-280-000	03-027-185	1
38	ROLLER	B2587-L8W-B00	07-038-1900	1
39	ROLLER SHAFT	D2588-L8W-B00	07-039-1900	1
40	NUT M5	NM-6050001-SP	GB/T6184-2000	1
41	NUT 11/64-40	NS-6110420-SP	7-39-185	2
42	NUT 11/64-40	NS-6110420-SP	7-39-185	2
43	NUT 3/16-28	NS-6120310-SP	11-36-185	1
44	E-RING	RE-0500000 K0	GB/T894.1-1986	1
45	WASHER 5×10.5×1	WP-0501016-SD	11-39-185	1
46	HINGE SCREW D=5.0 H=0.9	SD-0500091-TP	3-54-185	1
47	HINGE SCREW D=5 H=8	SD-0500803-TP	07-047-1900	2
48	HINGE SCREW D=6.5 H=3.1	SD-0650305-TP	07-048-1900	1
49	HINGE SCREW D=7.94 H=3.1	SD-0790311-TP	07-049-1900	1
50	HINGE SCREW H=11 W=3	SD-1100301-TP	07-050-1900	1
51	SCREW 3/32-56 L=2.2	SS-1060210-TP	3-56-185	2
52	SCREW 11/64-40 L=5.5	SS-1110640-TP	3-51-185	4
53	SCREW 11/64-40 L=4.0	SS-6110430-TP	1-8-185	1
54	SCREW 11/64-40 L=7	SS-7110740-TP	10140-780	1
55	SCREW 11/64-40 L=7.8	SS-7110840-SP	10516-780	2
56	SCREW 3/16-28 L=9	SS-6120930-SP	10703-780	2
57	SCREW 9/64-40 L=3.5	SS-7090410-SP	3-59-185	2
58	SCREW 11/64-40 L=7	SS-7110740-TP	3-66-185	1
59	SCREW 15/64-28 L=8	SS-8150822-TP	5-31-185	1
60	SCREW 1/4-40 L=10	SS-8661012-TP	2-19-185	2
61	WASHER 4.8×7.8×0.8	WP-0450846-SP	3-65-185	1
62	WASHER 5.6×16×3.2	WP-0553216-SD	07-062-1900	1
63	NEEDLE HOLE GUIDE	B2426-280-000	03-025-185	1
66	THREAD RELEASE ARM	141-07601	07-066-1900	1
67	TENSION RELEASE NOTCH	B2312-210-D00	07-067-1900	1
68	FIRST THREAD TENSION ASM.	B1115-232-0 A0		1
69	TENSION NUT, NO.1	A3125-002-000	04-011-185	(1)
70	THREAD TENSION DISK	B3126-012-000	15024-780	(2)
71	THREAD TENSION ROD	B3123-352-000	04-009-185	(1)
72	FIRST THREAD TENSION SPRING	B1115-232-000	04-010-185	(1)
73	TENSION RELEASE ARM PIN	141-07809	07-073-1900	1
74	THRUST COLLAR ASM. D=8.0 W=8	CS-080081C-SH	07-074-1900	1
74.1	SCREW 11/64-40 L=4.8		11005-780	2
75	NUT 15/64-28	NS-6150310-SP	10544-780	1
76	SCREW M4 L=6	SM-6040602-TP	GB/T70-1985	2
77	TRIPPING LEVER TENSION SPRING	B2617-771-000	07-077-1900	1
78	CAM FOLLOWER ASM.	141-09250	07-078-1900	1

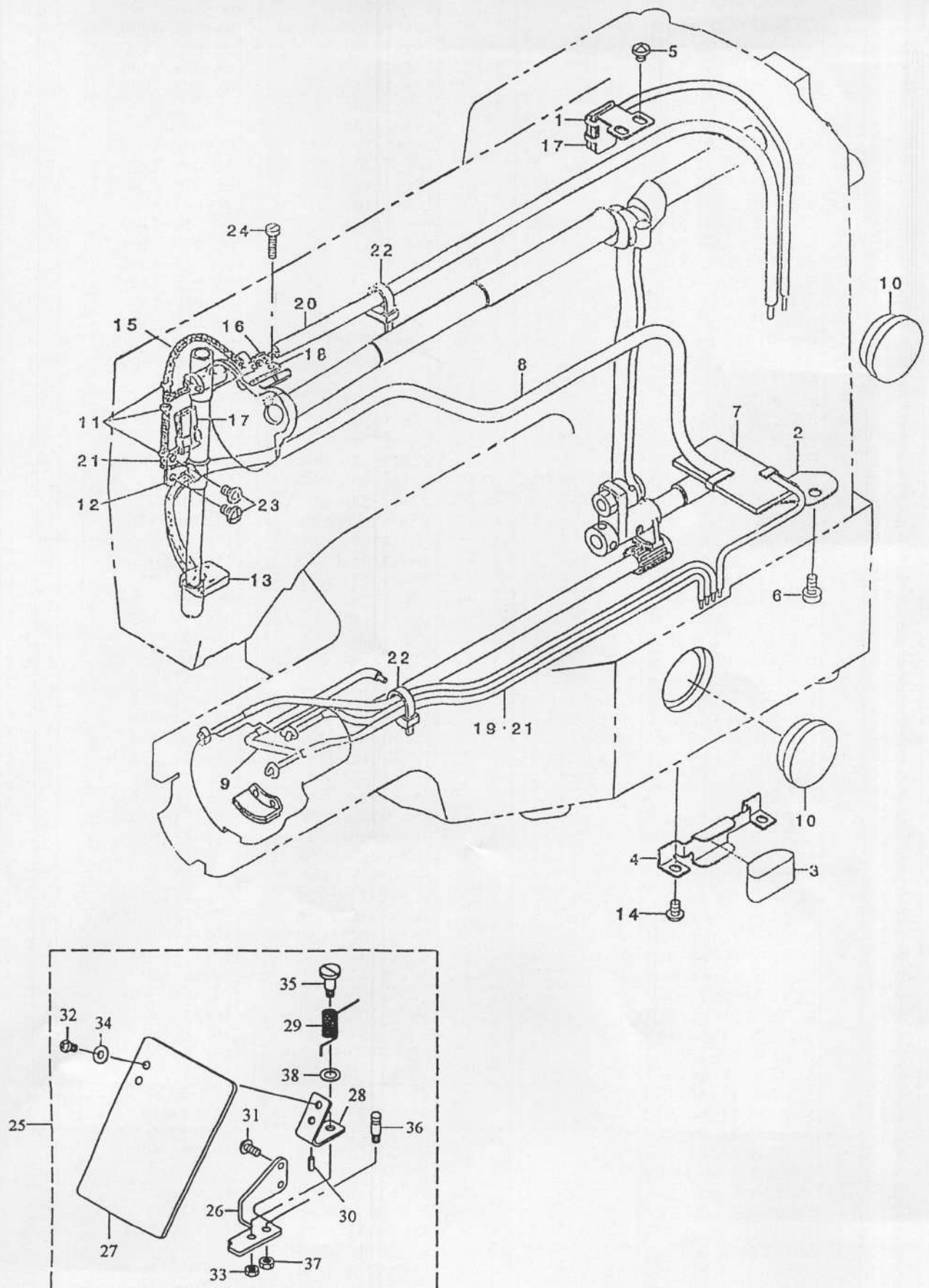
8. FEED MECHANISM COMPONENTS



8. FEED MECHANISM COMPONENTS

REF.NO	DESCRIPTION	PART NO		QTY
1	CROSSFEED ARM	141-10001	08-001-1900	1
2	CROSSFEED GEAR	141-10308	08-002-1900	1
3	LENGTHWISE FEED ARM	141-10100	08-003-1900	1
4	LENGTHWISE FEED SHAFT	141-10209	08-004-1900	1
5	LENGTHWISE FEED GEAR	141-10407	08-005-1900	1
6	X FEED STEPPING MOTOR	141-12304		1
7	Y FEED STEPPING MOTOR	141-12403		1
8	CROSSFEED SENSOR SLIT	141-11504	08-008-1900	1
9	SENSOR INSTALLING BASE	141-11702	08-009-1900	1
10	LENGTHWISE FEED SENSOR SLIT	141-36402	08-010-1900	1
11	SENSOR INSTALLING BASE	141-11801	08-011-1900	1
12	CLOTH FEED SUPPORT PLATE	141-10704	08-012-1900	1
13	CLOTH FEED PLATE	141-10811	08-013-1900	1
14	01 FEED PLATE A	141-16107	08-014-1900	1
17	SQUARE BLOCK	B1414-232-000	06-030-185	1
18	SLIDE BLOCK STUD	135-17206	06-029-185	1
19	BUSHING, REAR	B2509-704-000	08-019-1900	1
19.1	BUSHING, REAR		08-019.1-1900	1
20	HINGE STUD	135-17404	08-020-1900	1
21	CLOTH FEED PRESSER PLATE	135-62400	08-021-1900	1
22	SUPPORT PLATE	135-18907	06-005-185	1
23	08 FINGER GUARDE	135-33104	06-010-185	1
24	FEED DRIVING ARM SHAFT	135-16208	06-017A-185	1
25	BALL RETAINER	B2548-280-000	06-006-185	1
26	WORK CLAMP FOOT MOUNTING BASE	B2549-280-000	6-10-185	7
27	04 WASHER FOR DRIVING ARM	B2557-280-00 A	6-3-185	2
32	E-RING 7	RE-0700000 K0	GB896-1986	2
33	SCREW 11/64-40 L=8.7	SS-2110930-SP	10515-780	5
34	SCREW 15/64-28 L=4.7	SS-8150510-TP	11116-780	1
35	SCREW 11/64-40 L=7	SS-7110740-TP	10146-780	4
36	FEED BRACKET	135-17800	06-008-185	1
37	LIFTING LEVER, RIGHT	135-17909	06-009-185	1
38	LIFTING LEVER, LEFT	135-18006	06-003-185	1
39	LIFTING LEVER SHAFT	135-18105	06-004-185	1
40	SPRING SUSPENSION	135-18501	06-007-185	1
41	WORK CLAMP FOOT FACE PLATE	135-18808	06-011-185	1
42	LEVER DRIVING PLATE ASM.	135-18352	06-001-185	2
43	CLOTH PRESSER SPRING	141-05407	06-002-185	2
45	02 WORK CLAMP FOOT, RIGHT	135-42915	06-012-185	1
48	02 WORK CLAMP FOOT, LEFT	135-43012	06-013-185	1
50	SCREW M6 L=6	SM-8060612-TP	GB/T80-1985	2
51	SCREW M6 L=6	SM-8060612-TP	GB/T80-1985	2
52	SCREW 1/4-40 L=6	SS-8660612-TP	10404-780	2
53	PHOTO SENSOR	HD-0013500-00		1
54	PHOTO SENSOR	HD-0005700-0 A		1
55	SCREW M4 L=12	SL-4041291-SC	GB/T818-1985	1
56	SCREW M3×12	SL-4031291-SC	GB/T818-1985	1
57	SCREW 11/64-40 L=7	SS-4110715-SP	10140-780	2
58	SCREW 11/64-40 L=7	SS-4110715-SP	10140-780	1
59	SCREW 11/64-40 L=11	SS-6111140-SP	10338-780	8
61	SCREW M6 L=18	SM-6061802-TP	GB/T70-1985	1
62	SCREW 11/64-40 L=6	SS-6110610-TP	10924-780	3
63	SCREW 11/64-40 L=8.5	SS-2110920-TP	10515-780	2
64	SCREW M6 L=10	SM-3061052-TP	GB/T70.2-2000	1
65	SCREW 11/64-40 L=6	SS-6110610-T[	10924-780	1
66	SCREW 11/64-40 L=4.3	SS-6110480-SP	1-8-185	1
67	SCREW 11/64-40 L=7.8	SS-6110420-TP	10516-780	1
68	SCREW 15/64-28 L=10.5	SS-6151142-TP	6-56-185	1
69	SCREW 15/64-28 L=11.5	SS-6151220-SP	10610-780	1
70	SCREW 1/8-44 L=2.8	SS-8080310-TP	6-18-185	2
71	WASHER 6.2×13×1	WP-0621016-SD	6-13-185	1
72	WASHER 6.2×13×1	WP-0650876-SD	6-13-185	1
75	RUBBER RING	R0-0691801-00	GB/T3452.1	1
76	THRUST COLLAR ASM. D=9.53 W=8	CS-095081A-SH		1
77	THRUST COLLAR D=8 W=8	CS-0950817-SH	08-077-1900	(1)
78	SCREW 11/64-40 L=3.5	SS-8110410-TP	5-19-1190	(2)
79	RUBBER WASHER	141-12502	08-079-1900	2
80	SCREW 11/64-40 L=4.8		3-51-185	4

9. LUBRICATION & SAFETY PLATE COMPONENTS



9. LUBRICATION & SAFETY PLATE COMPONENTS

REF.NO	DESCRIPTION	PART NO		QTY
1	OIL SHIELD	141-14102	09-001-1900	1
2	OIL SHIELD	141-14201	09-002-1900	1
3	OIL FELT	141-14300	09-003-1900	1
4	FELT PRESER	141-14409	09-004-1900	1
5	SCREW 11/64-40 L=5	SS-4110515-SP	10158-780	2
6	SCREW 3/16-28 L=9	SS-6120930-SP	10131-780	1
7	OIL FELT	B3509-210-D00	09-007-1900	1
8	ONCE THROUGH OIL FELT	135-29003	09-008-1900	1
9	VINYL PIPE, OIL PORE	135-30357		1
10	OIL GAUGE	B3501-210-000	Ø28	2
11	OIL WICK PRESSER	B1419-026-000	10-004-185	3
12	OIL WICK PRESSER	B3506-280-000	09-012-1900	1
13	FACE FELT	B3507-280-000	09-013-1900	1
14	SCREW 11/64-40 L=7	SS-4110715-SP	10140-780	2
15	OIL WICK	CQ-2000000-00		2.3M
16	BALANCE LUBRICATING PLATE	B3508-280-000	10-010-185	2
17	NEEDLE ROD CRANK LUBRICATING	10-011-185	10-009-185	2
18	BALANCE LUBRICATING	B3518-280-000	10-011-185	1
19	VINYL TUBE	BP-3000001-00		0.7M
20	VINYL PIPE	BP-6000000-00		0.72M
21	OIL WICK	CQ-2522000-00		1.6M
22	CABLE BAND	EA-9500 B01-00		2
23	SCREW 11/64-40 L=7	SS-4110715-SP	10140-780	2
24	SCREW 9/64-40 L=21.2	SS-6092120-SP	10-13-185	1
25	SAFETY PLATE ASM.	135-51254	01-029-185	1
26	SAFETY PLATE INSTALLING BASE	135-51205	01-037-185	1
27	SAFETY PLATE	B3120-372-000	02-002-780	1
28	SAFETY PLATE INSTALLING PLATE	B3121-372-000	02-010-185	1
29	SAFETY PLATE RETURN SPRING	139-43204	02-006-780	1
30	SPRING PIN 2×6	PS-0200062-KH	GB879-76	1
31	SCREW 11/64-40 L=7	SS-4110715-SP	10203-780	2
32	SCREW 11/64-40 L=7	SS-4110715-SP	10203-780	2
33	NUT 11/64-40	NS-6110310-SP	10211-780	1
34	WASHER 4.5×10×0.8	WP-0450801-SD	10204-780	2
35	HINGE SCREW D=6 H=10.2	SD-0601021-SP	10205-780	1
36	TENSION SPRING RACK B	B1506-352-000	10208-780	1
37	NUT 3/16-28	NS-6120310-SP	10142-780	1
38	WASHER 7.4×11.8×0.5	WP-0740516-SP	10207-780	1



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