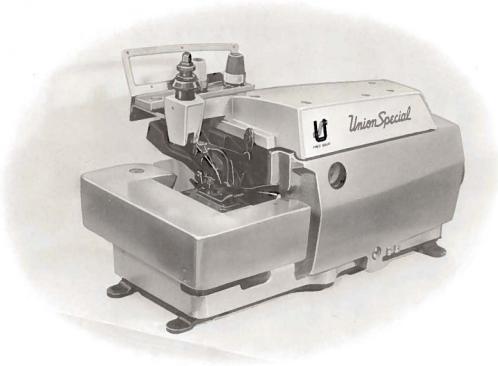




INDUSTRIAL SEWING MACHINES

STYLES 43500D 43500F 43500L



CLASS 43500

No. 134M

> Second Edition

HI-STYLED HIGH SPEED SINGLE CURVED NEEDLE PLAIN FEED MACHINES

UNION SPECIAL CORPORATION

CHICAGO

From the library of: Superior Sewing Machine & Supply LLC

Catalog No. 134 M

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 43500

Styles

43500 D 43500 F 43500 L

Second Edition

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UNION SPECIAL CORPORATION

INDUSTRIAL SEWING MACHINES

CHICAGO

Printed in U.S.A.

March, 1976

IDENTIFICATION OF MACHINES

Each UNION SPECIAL machine is identified by a Style number on a name plate on the machine. Style numbers are classified as standard and special. Standard Style numbers have one or more letters suffixed, but never contain the letter 'Z'. Example: 'Style 43500 F'. Special Style numbers contain the letter 'Z'. When only minor changes are made in a standard machine, a 'Z' is suffixed to the Standard Style number. Example: 'Style 43500 FZ'.

Styles of machines similar in construction are grouped under a Class number which differs from the Style number in that it contains no letters. Example: "Class 43500".

APPLICATION OF CATALOG

This catalog applies specifically to the Standard Styles of machines as listed herein. It can also be applied with discretion to some Special Styles of machines in Class 43500. References to directions, such as right, left, front, back, etc., are given from the operator's position while seated at the machine. Operating direction of handwheel is away from operator.

STYLES OF MACHINES

Hi-Styled High Speed Plain Feed Single Curved Needle, Medium to Heavy Duty machine, with Single Enclosed Reservoir for Automatic Lubrication.

- 43500 D For seaming canton flannel and jersey cloth gloves and similar operations on medium to heavy weight materials. Seam specification 401-SSa-1. Stitch range 6 to 12 per inch. Cam adjusted feed. Maximum recommended speed 6500 R.P.M.
- 43500 F For seaming trousers, coats, jackets, dresses and similar garments. Seam specification 401-SSa-1. Stitch range 8 to 14 per inch. Cam adjusted feed. Maximum recommended speed 6500 R.P.M.
- 43500 L For side seaming trousers, etc., with yielding section on left side of presser foot. Seam specification 401-SSa-1. Stitch range 8 to 14 per inch. Cam adjusted feed. Maximum recommended speed 6500 R.P.M.

OILING

CAUTION! Oil was drained from machine when shipped, so reservoir must be filled before beginning to operate. Oil capacity of Class 43500 is six ounces. A straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit should be used.

Machine is filled with oil at spring cap in top cover. Oil level is checked at sight gauge on front of machine. Red bulb on oil level indicator should show between gauge lines when machine is stationary.

Machine is automatically lubricated. No oiling is necessary, other than keeping main reservoir filled. Check oil daily before the morning start; add oil as required.

The oil drain plug screw is located at back of machine near bottom edge of base. It is a magnetic screw designed to accumulate possible foreign materials which may have entered the crank case. It should be removed and cleaned periodically.

NEEDLE

Each UNION SPECIAL needle has both type and size number. The type number denotes the kind of shank, point, length, groove, finish and other details. The size number, stamped on the needle shank, denotes largest diameter of blade, measured in thousandths of an inch, midway between shank and eye. Collectively, type and size number represent the complete symbol which is given on the label of all needles packaged and sold by Union Special.

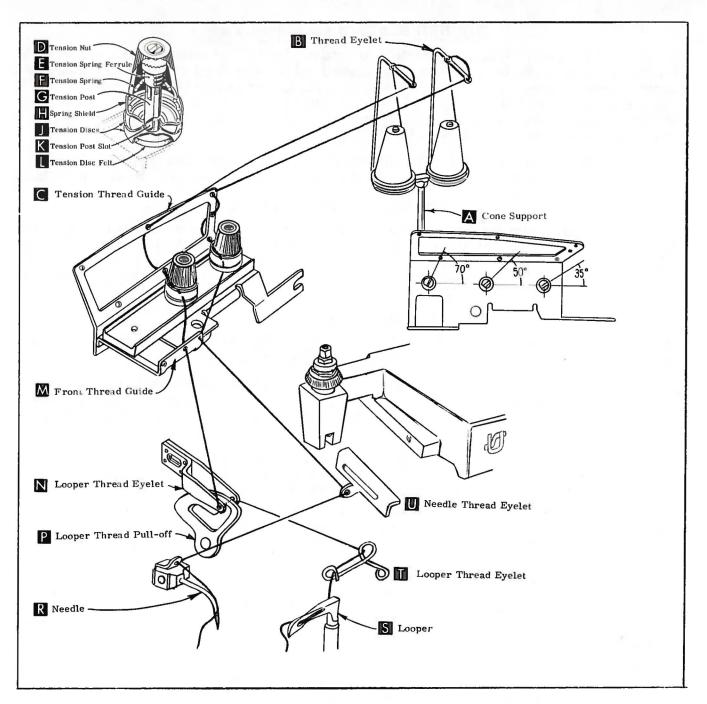


Fig. 1

THREADING DIAGRAM AND OILING INSTRUCTIONS FOR CLASS 43500

Only parts involved in threading are shown in the above diagram. Thread machine as indicated.

It will simplify the threading to follow the recommended sequence of threading the looper first and the needle second.

No oiling is necessary other than keeping the red bulb between the lines on the oil gauge on the front of the machine. Machine is filled with oil at the spring cap in top cover.

A straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at $100^{\rm O}$ Fahrenheit should be used.

NEEDLE (Continued)

Class 43500 machines use a curved blade needle. The standard recommended needle is Type 157 GJS. Below is the description and sizes available of the recommended needle.

Type No.

Description and Sizes

157 GJS

Round shank, round point, curved blade, flat tapered blade, Class A, double groove, struck groove, long spot, government point, chromium plated and is available in sizes 080/032, 090/036, 100/040, 110/044, 125/049.

To have needle orders promptly and accurately filled, an empty package, a sample needle, or the type and size number should be forwarded. Use description on label. A complete order would read: '1000 Needles, Type 157 GJS, Size 100/040".

Selection of proper needle size is determined by size of thread used. Thread should pass freely through needle eye in order to produce a good stitch formation.

Success in the operation of UNION SPECIAL machines can be secured only by use of needles packaged under our brand name, *Union Special* which is backed by a reputation for producing highest quality needles in materials and workmanship for more than three-quarters of a century.

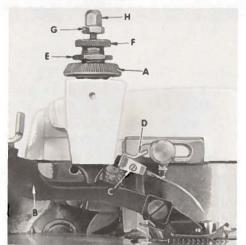


Fig. 2

CHANGING NEEDLE

Release pressure on presser foot by turning presser foot release bushing (A, Fig. 2) and swing presser arm (B) out of position. With needle at high position, loosen screw (C) and withdraw needle.

To replace needle, leave needle holder at high position and with the flat to the left, insert the needle in the needle holder until it bottoms against the needle thread eyelet (D). Tighten screw (C), return presser arm (B) to position and re-lock presser foot release bushing (A).

PRESSER FOOT PRESSURE

Sufficient presser foot pressure to feed work uniformly should be maintained. Should

it be necessary to increase or decrease amount of pressure on presser foot, loosen lock nut (E, Fig. 2) and turn adjusting screw (F). Adjusting screw has a right hand thread, so tightening increases pressure, loosening decreases pressure. When pressure adjusting screw (F) has been properly set, tighten lock nut (E). With presser foot resting on throat plate, position locking nut (G) so that its under surface is approximately 1/32 inch to 1/16 inch from the top surface of adjusting screw (F). Set cap (H) against locking nut (G).

FEED ECCENTRICS

The feed eccentric used in these machines have been selected to produce approximately 10 stitches per inch on Styles 43500 F and L, while on Style 43500 D the eccentric has been selected to produce approximately 8 stitches per inch. It will be noted that the part number of the feed eccentric is No. 39540 B-10 on Styles 43500 F and L, while the part number of the feed eccentric is No. 39540 B-8 on Style 43500 D. Minor numbers of the part symbol indicates approximately the number of stitches produced when using that eccentric. Unless otherwise specified, the machine will be shipped with above eccentric.

FEED ECCENTRICS (Continued)

The following stitch number feed eccentrics are available under No. 39540 B-4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -18, -20, -22, -24, -26, -28, -30, -32, -34, -36, -40. Only one eccentric is supplied with each machine. Additional eccentrics may be ordered separately. To order an eccentric, use No. 39540 B with a minor number suffixed to indicate approximately the number of stitches desired. Example: "39540 B-10".

SETTING THE NEEDLE

With the throat plate (A, Fig. 3) assembled in position, the needle arm (B) should be set so that the needle enters the center of the slot in the throat plate and at high position, the point of the needle should be set 7/16 inch above the top surface of the throat plate (Fig. 3). This can be accomplished by loosening screw (C), reposition needle driving arm as required and retighten screw. Remove the throat plate.

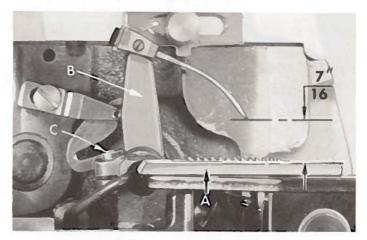
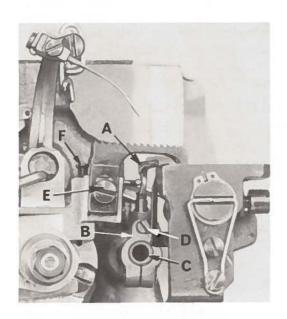


Fig. 3

SETTING THE LOOPER

The looper (A, Fig. 4) should be inserted in the looper holder (B) until its shank contacts the looper bar (C) and should be set so the flat side of the blade is parallel with the looper bar. Tighten screw (D). The looper holder (A, Fig. 5) should be set



on the looper bar (B) so that the point of the looper is 5/64 inch to the right of the centerline of the needle when the looper is at its extreme right position (Fig. 5). The point of the looper must barely clear the back of the needle as it passes to the left. This can be accomplished by loosening screw (C, Fig. 5), reposition looper holder as required and retighten screw.

The needle must also clear the backside of the looper on the downstroke of the needle. The setting as outlined in the first paragraph gives the maximum amount of needle clearance behind the looper. To decrease the clearance and eliminate skipping, loosen screw (C, Fig. 5) and move holder to the rear and then loosen screw (D, Fig. 4) and move looper point forward to just clear the needle as it moves to the left. Retighten screws.

SETTING FRONT NEEDLE GUARD

Fig. 4

The front needle guard (D, Fig. 5) should be set as high as possible without interfering with the

looper and clear the closest contacting surface of the needle by approximately .003 inch. This can be accomplished by loosening screws (E, Fig. 5), reposition front needle guard (D) as required and retighten screws.

SETTING REAR NEEDLE GUARD

The rear needle guard (F, Fig. 5) should be set as high as possible without interfering with the needle thread loop and deflect the needle .002 to .005 inch at the point of contact.

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SETTING REAR NEEDLE GUARD (Continued)

This can be accomplished by loosening nut (G, Fig. 5), reposition rear needle guard (F) as required and retighten nut.

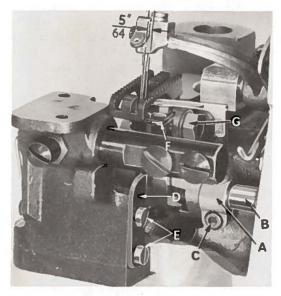


Fig. 5

NOTE: Should ever the tilt angle of the feed dog or stitch length require changing, always recheck the rear needle guard setting.

SETTING THE FEED DOG

The feed dog (A, Fig. 6) should be set so that the tips of its teeth extend the depth of a tooth above the throat plate at its high point of travel. This can be accomplished by loosening screw (E, Fig. 4), turn the feed dog height adjusting screw (F) as required and retighten screw (E). The feed dog must also be tilted so the end closest to the operator is .005 to .010 inch lower than the rear teeth. Loosen nut (B, Fig. 6) and turn screw (C) as required to obtain the proper tilt angle. Turning the screw clockwise will lower the front of the feed dog, turning it counterclockwise acts the reverse. Recheck rear needle guard setting and tighten nut (B).

SETTING THE STITCH LENGTH

Length of stitch is determined by feed eccentric used. In assembling the feed eccentric (A, Fig. 7), be sure the hub and oil groove is to the left. Beveled edge of feed eccentric spacer (B) should also be to the left side, so the undercut on the spacer will be over the hub on the feed eccentric. Be careful not to damage shaft or key. Assemble washer (C) and tighten nut (D) securely.

To change feed eccentrics, remove nut (D), washer (C) and feed eccentric spacer (B). Turn handwheel in operating direction until key slot in eccentric is toward the front. With a suitable tool reach behind the eccentric (A) and withdraw eccentric. It may be necessary to move the handwheel back and forth slightly during extraction. If eccentric is unusually tight fitting, it may be helpful to remove nut (E) and feed driving connection (F). Then continue as originally suggested.

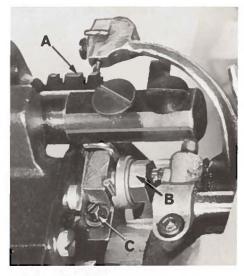


Fig. 6

D C B

Fig. 7

SETTING THE PRESSER FOOT

Assemble the presser foot to the presser arm. With needle in high position, swing presser arm into sewing position and set the presser foot to align needle holes (back and front) and flat on throat plate. The front edge of needle hole in presser foot must be aligned with front edge of needle hole in throat plate. It is also important that the bottom of the presser foot be flat on the throat plate. If necessary, presser foot can be realigned with throat plate slots by shifting the foot lifter lever shaft (A, Fig. 8).

SETTING THE PRESSER FOOT (Continued)

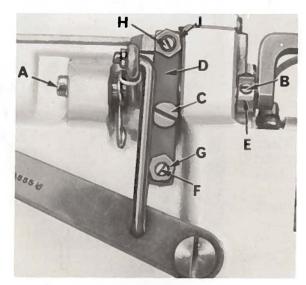
To move the shaft, loosen collar screws (B) and clamp screw (C) and then shift the foot lifter lever shaft to the left or right as required. Retighten collar screws and clamp screw. The foot lifter lever arm (D) and the collar (E) secure the shaft. Be sure the presser arm does not bind and rise when presser foot release bushing is unlocked. Adjust lifter lever stop screw (F) so that presser foot can be raised no higher than the head of the needle driving arm will permit, approximately 3/16 inch above the top surface of the throat plate, then lock nut (G). There should be from 1/16 to 1/8 inch free motion of foot lifter lever before the presser foot begins to rise. This adjustment should be made with screw (H) and locked with nut (J).

EYELET SETTINGS

The needle thread eyelet (A, Fig. 9) should be set at position "3" as a pre-liminary starting point (See Fig. 9). Upon sewing, if a tight needle thread loop is desired, loosen thumbscrew (B) and move needle thread eyelet (A) to a lower number (towards letter "T"). Moving eyelet in the reverse direction (towards letter "L") will produce a loose needle thread loop.

Moving the eyelet towards the "T" position tends to draw more thread on the upstroke of the needle travel and moving the eyelet towards the "L" position will tend to draw more thread on the downstroke of the needle travel.

The looper thread take-up (C, Fig. 9) should be set so its leading edge is even with the front edge of the needle driving arm (D). This can be accomplished by loosening screws (E), reposition looper thread take-up as required and retighten screws. CAUTION: This take-up is also an oil seal for the needle driving arm shaft and must be pressed to the right against the bed casting to seal and take-up end play.



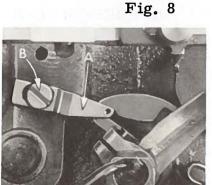


Fig. 10

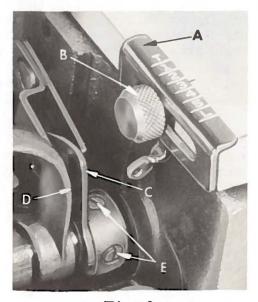


Fig. 9

The looper thread take-up eyelet (A, Fig. 10) should be set so the thread is in alignment through the very top of the take-up (before cast-off) with the needle in the up position and also in alignment through end of slot of take-up with the needle in the down position (See Fig. 10).

EYELET SETTING (Continued)

Looper thread should cast-off when the point of the needle is at the top of the looper for a preliminary setting. Loosen screw (B), reposition looper thread take-up eyelet as required and retighten screw. Should more thread be required in the stitch, move the looper thread take-up eyelet upward, to cast off later, moving it downward acts the reverse.

THREAD TENSIONS

The looper thread tension should be set as light as possible and still control the thread. The needle thread tension should be set to produce a reasonably well pulled up stitch and still not pucker the material.

CLOTH PLATE REMOVAL

CAUTION: When removing the cloth plate (A, Fig. 11) loosen the cloth plate stud locking screw (B) and lift up cloth plate with the cloth plate stud (C) and cloth plate screw (D) assembled.

In assembly, the cloth plate screw and the cloth plate stud are tightened to the point of removing all play and yet turn in the cloth plate. The cloth plate is then assembled to the machine with the flat and 'V' slot of the cloth plate stud (C) towards the rear. Stud locking screw (B) is tightened securely which collapses the body of the stud to the screw (D) so that only the cloth plate will turn when opening or closing.

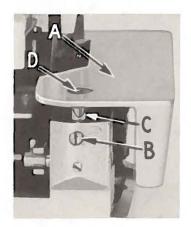
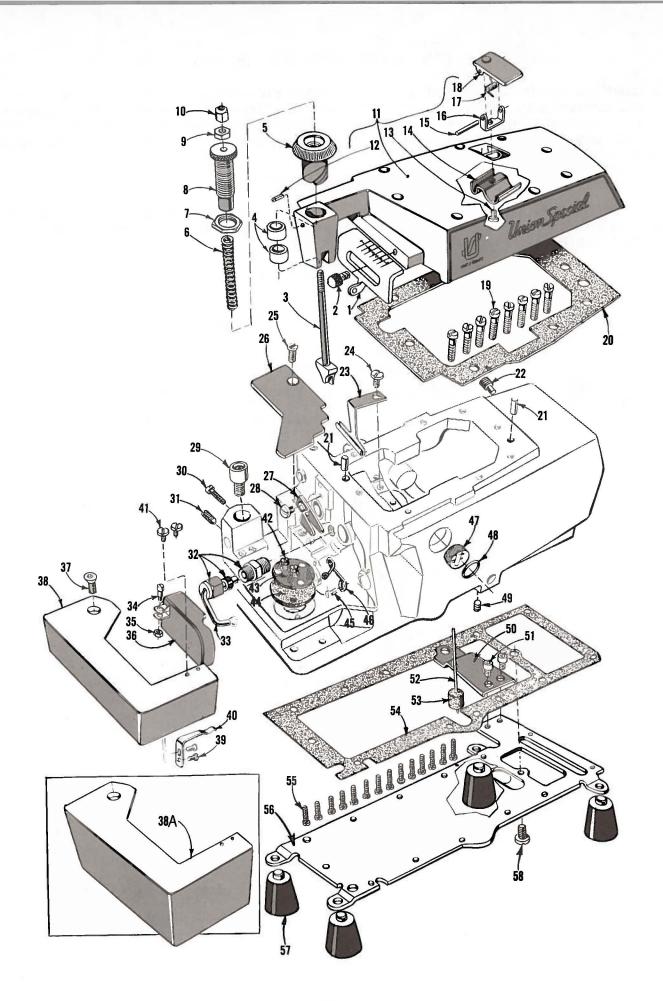
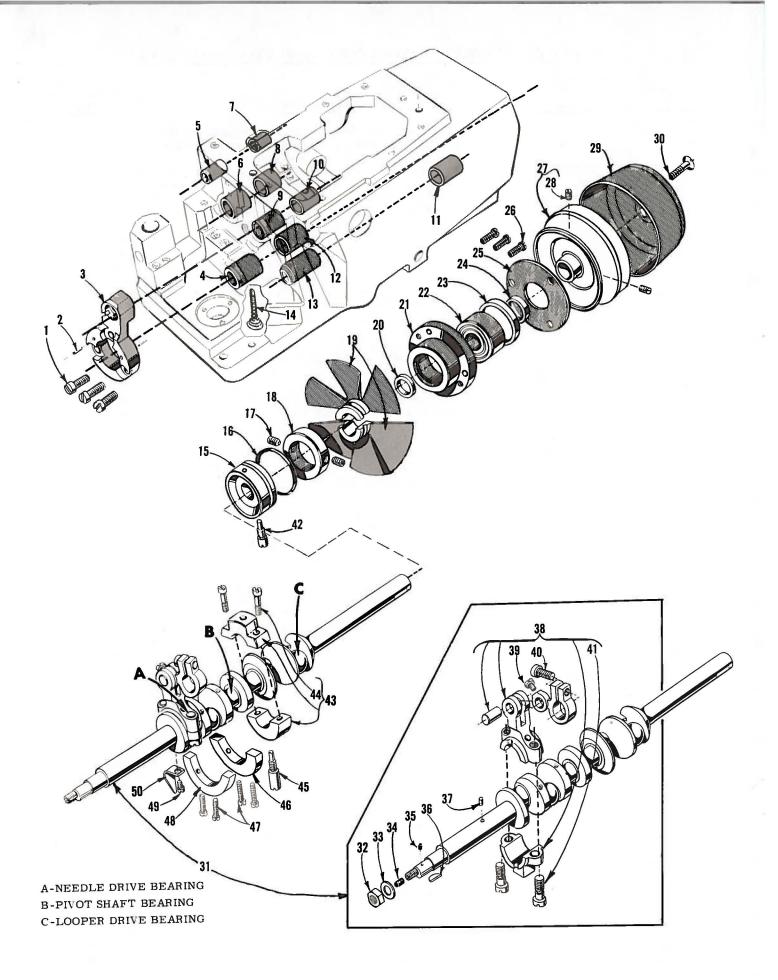


Fig. 11



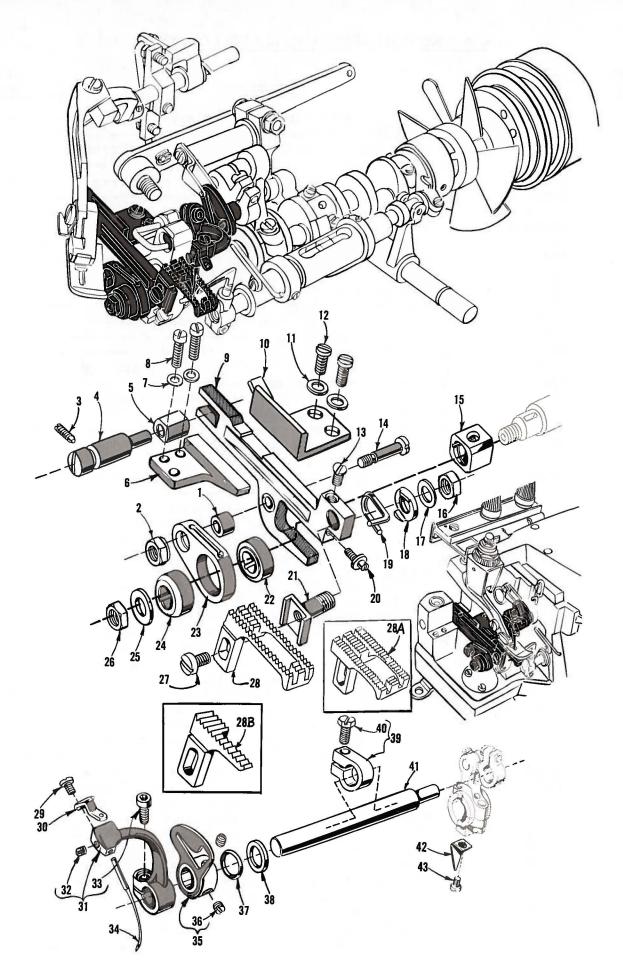
MAIN FRAME, MISCELLANEOUS COVERS, PLATES AND EYELETS

Ref.	Part		Amt.
No.	No.	Description	Req.
1 2	43564 22838	Adjustable Needle Thread Control Eyelet Thumbscrew, for adjustable needle thread control eyelet	
3	39557 A	Presser Spring Plunger	
4	43557	Presser Spring Spacer	- 2
5	39556 A	Presser Foot Release Bushing	- 1
6	39557	Presser Spring	- 1
7	39557 F	Lock Nut, for plunger adjusting screw	
8	39557 C	Presser Spring Plunger Adjusting Screw	- 1
9	39557 E	Presser Spring Plunger Lock Nut	
10	39557 B	Presser Spring Plunger Cap Nut	- 1
11	39582 AH	Top Cover	
12	50-795 Blk.	Presser Foot Release Bushing Guide Pin	
13	22562 A	Screw, for hinge bracket	
14	39582 W	Oil Guard	
15	51-103 Blk.	Hinge Pin	
16 17	39582 AG	Hinge Bracket	- 1
18	39582 V 39582 AF	Spring, for oil filler cover	- 1 - 1
19	22541	Screw, for top cover	- 1
20	39582 AE	Top Cover Gasket	- 1
21	667 D-8	Dowel Pin, for top cover	- 2
22	22571 E	Magnetic Oil Drain Plug	- ĩ
23	39594 R	Oil Collector Plate	- 1
24	22569 D	Screw, for oil collector plate	- 1
25	80	Screw, for supplementary cloth plate	- 1
26	43579	Supplementary Cloth Plate	- 1
27	43568 A	Looper Thread Take-up Eyelet	- 1
28	22569 D	Screw, for looper thread take-up eyelet	- 1
29	39501 K	Cloth Plate Stud	- 1
30	22569	Screw, for cloth plate stud	
31 32	22565 F 660-234	Screw, for feed adjusting pin	- 1 - 1
33	43594	Needle Driving Arm Bushing Oil Tube	
34	86 X	Screw, for feed mechanism cover	· 1
35	41071 G	Nut, for feed mechanism cover screw	- 1
36	39582 D	Feed Mechanism Cover	- 1
37	22657 D-12	Screw, for cloth plate	- 1
38	43501 A	Cloth Plate, for semi or fully-submerged installation	- 1
38A	43501	Cloth Plate, for non-submerged installation	· 1
39	90	Screw, for cloth plate latch spring	
40	39532 A	Cloth Plate Latch Spring	· 1
41	25 S	Screw, for mounting attachment	- 2
42	22824	Screw, for oil filter screen	· 2
43	39594 G	Oil Filter Screen	· 1
44	39594 H	Oil Strainer	
45	22513 B	Screw, for looper thread frame eyelet	
46	43568 B	Looper Thread Frame Eyelet	· 1
47	39593 H	Oil Sight Gauge	1
48	660-243	Oil Gauge Seal Ring	
49 50	22894 AE 39582 F	Screw, for looper lever shaft	
50 51	22653 D-4	Screw, for bottom cover and base plate	7
01	22000 D-1	extension	2
52	39593 D	Oil Gauge Indicator	1
53	39593 C	Oil Gauge Float	1
54	39582 Y	Bottom Cover Gasket	1
55	22569	Screw, for bottom cover	14
5 6	39582 XD	Bottom Cover	1
57 50	39595 22586 B	Mounting Isolator, rubber	1
58	22586 R	belew, for bottom cover	



CRANKSHAFT MECHANISM AND BUSHINGS

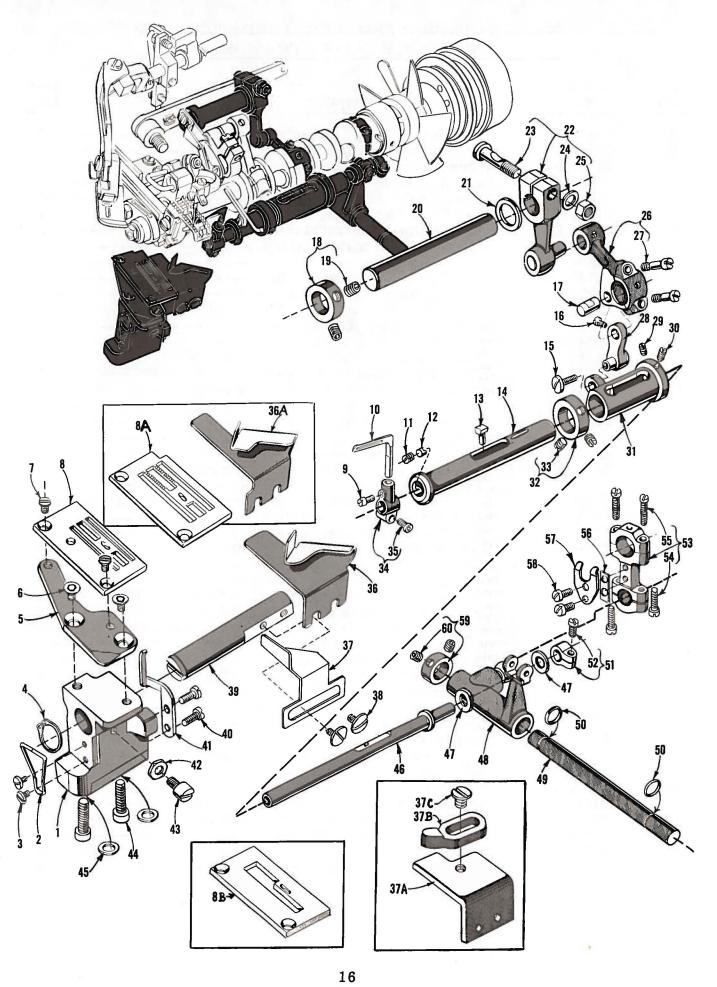
Ref. No.			
1	22569	Screw, for feed bar thrust washer	3
2	660-219 E	Roll Pin, for feed bar thrust washer	
3	43534 E	Feed Bar Thrust Washer and Needle Driving Arm Bushing, left	
4	39590	Crankshaft Bushing, left	1
5	43555 A	Foot Lifter Shaft Bushing, left	1
6	39573 K	Pivot Shaft Bushing, left	1
7	39555 N	Foot Lifter Shaft Bushing, right	1
8	39573 AA	Pivot Shaft Bushing, right	1
9	43552 B	Needle Arm Bushing, left	1
10	39552 P	Needle Arm Bushing, right	
11	39644 C	Looper Drive Shaft Bushing, right	1
12	39590 T	Crankshaft Bushing, inner left	1
13	39644 S	Looper Drive Shaft Bushing, left	1
14	666-94	Oil Wick and Spring]
1 5	39690	Crankshaft Bearing, inner right	1
16	660-443	"O" Ring, for crankshaft bearing, inner right	1
17	22894 D	Screw, for fan collar	2
18	39591 H	Chamber Cooling Fan Collar	1
19	39591 L	Chamber Cooling Fan	1
20	39590 J	Thrust Washer	
21	39590 G	Crankshaft Ball Bearing Housing	1
22	660-268	Crankshaft Ball Bearing	1
23	39590 R	Ball Bearing Stop Collar	· 1
24	39590 S	Spacer Collar	1
25	39590 H	Crankshaft Ball Bearing Retainer Plate	1
26	22541 A	Screw, for ball bearing housing	3
27	39521 G	Pulley	1
28	95	Screw, for pulley	2
29	39521 D	Pulley Cap	1
30	22769 B	Screw, for pulley cap	1
31	29477 JV	Crankshaft and Needle Driving Crank	1
32	258	Nut, for crankshaft	1
33	40-46	Washer, for crankshaft	l
34	CO-67 E	Cork Plug, for crankshaft	1
35	30-106 Blk.	Wood Plug	1
36	39541 A	Feed Drive Eccentric Key	1
37	51-228 Blk.	Vent Plug, for crankshaft	1
38	29477 MD	Needle Driving Arm Crank and Connecting Rod Assembly	
39	22768 C	Screw, for needle driving arm connecting rod pin	1
40	22596 H	Screw, for needle driving arm crank	1
41	22587 M	Screw, for needle driving arm connecting	2
42	39690 A	Stud, for crankshaft bearing	1
43	39690 B	Crankshaft Split Bearing	1
44	97 A	Screw, for split bearing	2
45	39590 N	Stud, for split bearing	1
46	39691	Crankshaft Counterweight, right	1
47	22747 B	Screw, for counterweights	4
48	39591 K	Crankshaft Counterweight, left	1
49	87 U	Screw, for oil splasher	1
50	39594 N	Oil Splasher	1



14

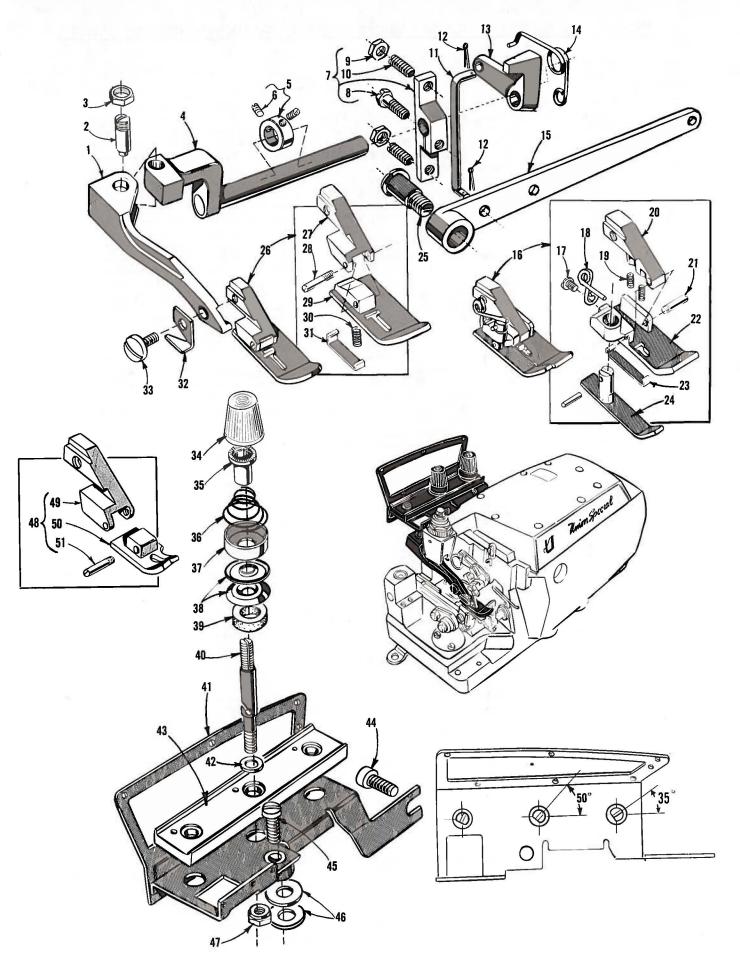
NEEDLE GUARD, FEED DOGS, FEED MECHANISM AND NEEDLE DRIVE MECHANISM

Ref.	Part		Amt.		
No.	No.	No. Description			
1	39536 K	Feed Bar Driving Connection Bushing	1		
2	39536 E	Nut, for feed bar driving stud	· Ī		
3	22565 F	Screw, for feed adjusting pin	1		
4	39535 C	Feed Adjusting Pin	1		
5	39535 J	Feed Bar Guide Block	1		
6	39535	Main Feed Bar Guide, left	1		
7	53634 C	Washer, for feed bar guide screw	2		
8	22569	Screw, for left main feed bar guide	2		
9	43534 D	Main Feed Bar	1		
10	43535	Main Feed Bar Guide, right	1		
11	53634 C	Washer, for feed bar guide screw	2		
12	22569 B	Screw, for right main feed bar guide	2		
13	538	Feed Dog Height Adjusting Screw	1		
14	39536 J	Feed Bar Driving Stud	1		
15	39538	Feed Lift Block	1		
16	258 A	Nut, for feed dog holder	1		
17	43534 C	Stabilizing Washer, for feed dog holder	1		
18	43525 B	Clamp Washer, for rear needle guard	i		
19	43525 A	Needle Guard, rear	1		
20	22863 C	Tilting Screw, for feed dog holder	1		
21	43534 B	Feed Dog Holder	1		
22	39540 B-10	Main Feed Driving Eccentric, for Styles 43500	1		
44	29240 TI-10	Fand L	1		
-	39540 B-8	Main Feed Driving Eccentric, for Style 43500 D			
23	39536 AF	Feed Bar Driving Connection			
24	39540 K	Feed Eccentric Spacer	ī		
25	40-46	Washer, for feed driving eccentric	1		
26	258	Nut, for feed driving eccentric	1		
27	93 A	Screw, for feed dog	1		
28	9205 E	Feed Dog, 16 teeth per inch, for Style 43500 F	1		
28A	56305	Feed Dog, 16 teeth per inch, for Style 43500 L			
28B	43505	Feed Dog, 12 teeth per inch, for Style 43500 D			
29	87 U	Screw, for needle driving arm thread eyelet			
30	43552 A	Needle Driving Arm Thread Eyelet	Ī		
31	43552	Needle Driving Arm, marked "H"	1		
32	28 C	Screw, for needle	1		
33	22596 E	Screw, for needle driving arm			
34	157 GJS	Needle	ī		
35	43568	Looper Thread Take-up	1		
36	88	Screw, for looper thread take-up	2		
37	660-207	"O" Ring, for looper thread take-up			
38	39552 C	Take-up Lever Thrust Washer	1		
39	39543 Y	Needle Lever Drive Shaft Thrust Collar			
40	22782 A	Screw, for needle drive shaft thrust collar			
41	39552 R	Needle Lever Drive Shaft	1		
42	39594 N	Oil Splasher			
43	87 U	Screw, for oil splasher	ī		
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THROAT PLATE, THROAT PLATE SUPPORT, LOOPER AND LOOPER DRIVE MECHANISM

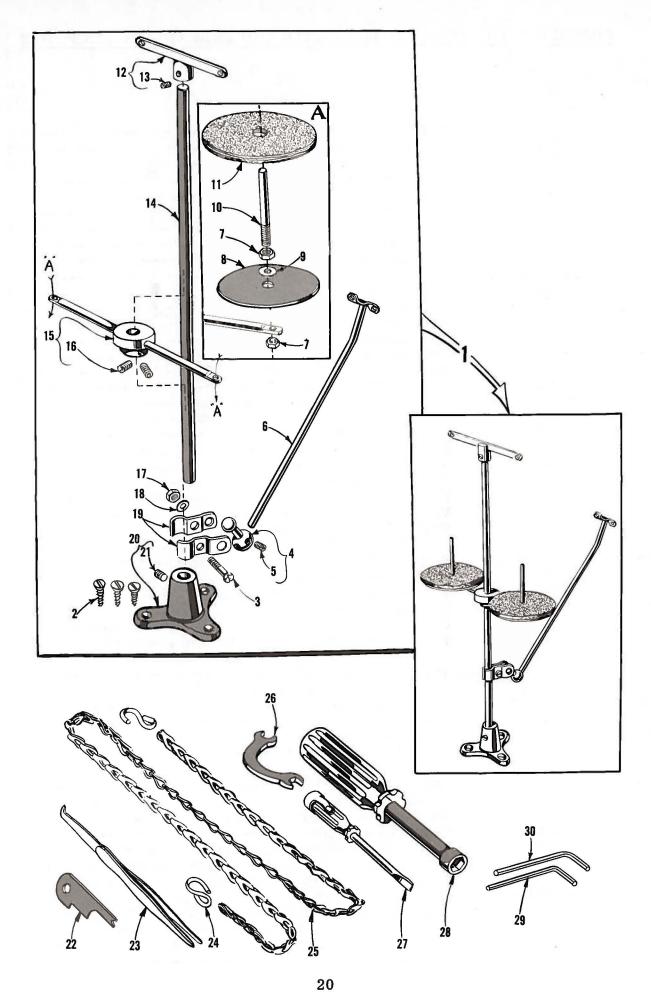
Ref. No.	Part No.	Description		
1	43580	Throat Plate Support Bracket	1	
2	43578 B	Fabric Guard Positioning Finger	1	
3	22784 E	Screw, for fabric guard positioning finger	2	
4	660-334	Retaining Ring, for pivot shaft	1	
5	43580 A	Throat Plate Support Plate	1	
6	22656 A-6	Screw, for throat plate support plate	2	
7	87	Screw, for throat plate	2	
8	43524 A	Throat Plate, for Style 43500 F ;	1	
8A	43524	Throat Plate, for Style 43500 L ;	1	
8B	O112	Throat Plate, for Style 43500 D	1	
9	22564 D	Screw for looper	1	
10	43508	Looper, marked "CT" 1	1	
11	22503 F	Screw, for cam follower locking clamp	1	
12	39543 E	Cam Follower Locking Clamp	1	
13	39644 L	Cam Follower	1	
14	39644 W	Looper Bar Sleeve	1	
15	22775	Screw, for looper avoid link	1	
16	22781	Screw, for looper avoid link pin	1	
17	41336 C	Looper Avoid Link Pin	1	
18	43544 A	Thrust Collar, for pivot shaft	1	
19	98	Screw, for thrust collar	2	
20	43544	Looper Avoid Pivot Shaft	1	
21	39573 A	Washer, for pivot shaft	î	
22	39573 E	Pivot Shaft Drive Lever		
23	55235 D	Locking Stud, for driving lever	1	
24	6042 A	Washer, for driving lever	1	
25	55235 E	Nut, for driving lever	1	
26	39673	Looper Avoid Connecting Rod	î	
27	22587 E	Screw, for connecting rod	2	
28	39644 M	Looper Avoid Link 1	1	
29	22565 C	Set Screw, for bushing and cam guide	ī	
30	225 6 5 L	Spot Screw, for bushing and cam guide	Ī	
31	39644 V	Bushing and Cam Guide	ì	
32	39644 P	Thrust Collar	i	
33	98	Screw, for thrust collar 2	Ž	
34	39644 E	Looper Holder	ī	
35	22653 J-4	Screw, for looper holder	ì	
36	43578	Fabric Guard, for Style 43500 F 1	Ī	
36A	43578 C	Fabric Guard, for Style 43500 L 1	i	
37	43503 C	Edge Guide, for Styles 43500 F and L 1	ì	
37A	43503 B	Edge Guide Bracket, for Style 43500 D 1	ì	
37B	43503 A	Edge Guide, for Style 43500 D 1	ī	
37C	25 C	Screw, for No. 43503 A on Style 43500 D 1	Ĺ	
38	22542	Screw, for fabric guard and edge guide No. 43503 C	,	
39	43578 A	Pivot Shaft, for fabric guard	Ĺ	
40	22585	Screw for front needle guard	?	
41	43525	Needle Guard, front 1		
42	14077	Nut, for locking screw 1	Ĺ	
43	22892 B	Locking Screw for cloth plate latch spring 1		
44	22653 B-12	Screw, for throat plate support bracket	,	
45	39580 F	Washer	į	
46	39644 A	Washer	ĺ	
47	39543 P	Thrust Washer, for looper bar 2	,	
48	39644	Looper Drive Lever 1		
49	39644 N	Looper Drive Lever Shaft 1	į	
50	660-206	"O" Ring, for looper drive lever shaft 2	,	
51	39543 M	Clamp Collar 1	P.	
52	22562 A	Screw, for clamp collar 1		
53	39644 U	Looper Drive Lever Connecting Rod 1	į	
54	22729 D	Screw, for connecting rod 2	,	
55	22729 E	Screw, for connecting rod 2	į	
5 6	39644 R-2	Shim, for ball joint guide fork, .002 inch thickas required	ŀ	
-	39644 R-5	Shim, for ball joint guide fork, .002 inch thickas required	å	
57	39644 K-5 39644 X	Ball Joint Guide Fork 1	4	
5 <i>1</i> 58	538	Screw, for ball joint guide fork 2	ĺ	
56 59	482 C	Looper Drive Lever Shaft Collar 1	į	
60	22894 C	Screw. for collar 2	į	



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PRESSER FEET, FOOT LIFTER PARTS AND THREAD TENSION PARTS

Ref. No.				
1	43556	Presser Arm	1	
2	22791 H	Screw, for presser arm		
3	258 A	Nut, for presser arm screw	1	
4	43555	Foot Lifter Lever Shaft	î	
5	12865	Thrust Collar, for foot lifter lever shaft		
6	88	Screw, for thrust collar		
7	39555 C	Foot Lifter Lever Arm	1	
8	627	Screw, for lever arm	1	
9	12538	Lock Nut, for lever arm	2	
10	22597 E	Screw, for lever arm	2	
11	39555 F	Foot Lifter Lever Connecting Link	1	
12	660-142	Cotter Pin, for connecting link	2	
13	39555 D	Foot Lifter Intermediate Lever	1	
14	39555 B			
15	39855	Foot Lifter Lever SpringFoot Lifter Lever	1	
16	43520 A	Presser Foot Assembly, for Style 43500 L		
17	604	Screw, for spring	1	
18	56330 AR	Spring, for yielding section	1	
19	61430 BT	Spring for chaining section	1	
20	43530 D	Spring, for chaining section Presser Foot Shank		
20 21	22799 G	Hinge Screw, for presser foot bottom		
22	43530 B	Presser Foot Bottom		
23		Chaining Section	1	
23 24	56330 B	Violding Section	1	
	43530 C	Yielding Section	1	
25	22566 B	Screw, for foot lifter lever	1	
26	43520	Presser Foot Assembly, for Style 43500 F		
27	43530	Presser Foot Shank		
28	22799 H	Hinge Screw, for presser foot bottom		
29	43530 A	Presser Foot Bottom		
30	51330 W	Spring, for chaining section	1	
31	43530 F	Chaining Section	1	
32	43556 A	Chain Cutting Knife	1	
33	22585 B	Screw, for chain cutting knife and presser foot -	1	
34	39592 AB	Looper Tension Nut, blue	1	
	39592 AC	Needle Tension Nut, red	1	
35	39592 AK	Tension Spring Ferrule	2	
36	39592 AR-2	Looper Tension Spring		
	43592-8	Needle Tension Spring	1	
37	39592 AJ	Spring Shield	2	
38	39592 AD	Thread Tension Disc		
39	39592 AF	Tension Disc Felt		
40	$39592~\mathrm{AL}$	Thread Tension Post		
41	39592 AG-3	Tension Post Mounting Bracket	1	
42	8372 A	Washer, for thread tension post	2	
43	39592 AM	Tension Post Bar	1	
44	22847 B	Screw, for tension post mounting bracket	1	
45	22806 A	Screw, for tension post mounting bracket	1	
46	652-16	Washer, for bracket screw	2	
47	39592 AH	Shoulder Nut, for thread tension post	2	
48	43520 B	Presser Foot Assembly, for Style 43500 D	1	
49	43530	Presser Foot Shank	1	
50	43530 G	Presser Foot Bottom, marked "BX"	1	
51	22799 H	Hinge Screw	1	



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THREAD STAND AND ACCESSORIES

Ref. No.	Part No.	Description	Amt. Req.
1	21101 H-2	Thread Stand, complete	1
2	SC303	Wood Screw, for thread stand base	3
3	22810	Clamp Screw	1
4	21114 T	Lead Eyelet Socket Ball	1
5	22651 CD-4	Screw	1
6	21114 S-2	Thread Stand Lead Eyelet	1
7	258 A	Nut	4
8	21114	Spool Seat Disc	
9	652-16	Washer	
10	21114 W	Spool Pin	
11	21104 V	Pad, for thread cone	2
12	21114 H-2	Thread Stand Eyelet Support	
13	22651 CD-4	Screw	1
14	21104 B-24	Thread Stand Rod	1
15	21114 D-2	Thread Stand Spool Seat Support	1
16	22651 CD-5	Screw	
17	21104 H	Nut	
18	652-16	Washer	
19	21114 U	Lead Eyelet Ball Split Socket	2
20	21114 A	Thread Stand Base	1
21	22651 CD-4	Screw	
*22	21225-5/64	Looper Gauge, 5/64 inch	1
23	660-272	Thread Tweezers	1
24	660-264	"S" Hook, for treadle chain	
25	421 D-34	Foot Lifter Treadle Chain, 34 inches long	1
26	21388 W	Wrench, curved double end, 9/32 inch opening	1
27	21207 A	Screwdriver, 1/8 inch diameter, 4 3/16 inches	
		long	1
28	21388 AU	Socket Wrench, for 3/8 inch hexagonal nut holding	
		feed eccentric	1
29	WR64	Wrench, 3/32 inch hexagonal	1
30	WR70	Wrench, 7/64 inch hexagonal	1
_	28604 R	Container of Oil, 16 fluid ounces (not shown)	1
-	660-458	Dust Cover (not shown)	1

^{*} Available as extra send and charge item.

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