



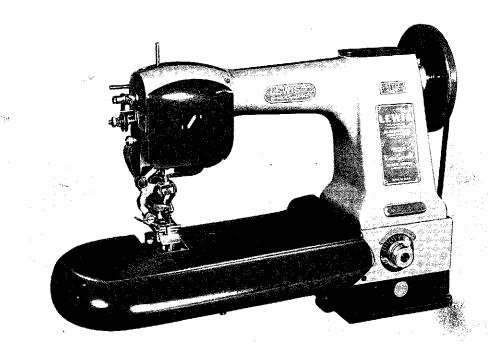
INDUSTRIAL SEWING MACHINES

STYLES

43-240

43-250

43-270



CATALOG No. 194-13 **CLASS 43**

CHAINSTITCH BLINDSTITCH MACHINES

UNION SPECIAL CORPORATION

CHICAGO

FOREWORD

Class 43 is Union Special Corporation's line of single thread chainstitch blindstitch machines with top and bottom feeds for coat work and work on furs. It also offers a bottom feed only machine for making mock full fashion marks on sweaters, knit dresses and similar garments.

All parts are made by precision methods insuring complete interchangeability.

It is our constant aim to furnish carefully prepared information which will enable the customer to secure all possible advantages from the use of UNION SPECIAL machines. The following pages contain valuable operating and adjusting data, and illustrate and describe the parts for Class 43.

Union Special representatives will be found in all manufacturing centers to cooperate in planning and estimating requirements.

UNION SPECIAL CORPORATION

Engineering Department

Catalog No. 194-13

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

Styles

43-240 43-250 43-270

First Edition

© 1964
By
Union Special Corporation
Rights Reserved in All Countries

UNION SPECIAL CORPORATION

INDUSTRIAL SEWING MACHINES

CHICAGO

Printed in U.S.A.

December, 1977

DENTIFICATION OF MACHINES

Each UNION SPECIAL LEWIS machine carries a style number, which, in this class of machines, is stamped in the style plate on the front of the column. The serial number of each machine is stamped in the lug also, on the front of the column.

APPLICATION OF CATALOG

This catalog applies specifically to the styles of machines listed herein. All references to directions, such as right and left, forward and back, etc., are taken from the operator's position while seated at the machine.

The operating direction of the handwheel is away from the operator.

DESCRIPTION OF MACHINES

High Production, Single Thread, Single Curved Needle, Chainstitch, Blindstitch, Cylinder Base Machine, Non-Skip 1 to 1 Stitch. Needle Travels Left to Right and Penetrates at an Angle of 90 Degrees to Line of Feed, Calibrated Penetration Adjustment, Knee Lifter for Inserting and Removing Work. Work Support Plate, Maximum Work Space to Right of Needle is 9 Inches.

- 43-240 For blindstitch felling bridle and edge tape on men's medium weight suit coats. Also for padding collars and lapels, and for tacking the canvas to facing on seamed edge coats of light, medium and heavy materials. Upper and lower feeds give positive control of all plies for quality work. Seam specification 104-SSm-1. Type 29 BC-090/036 needle.
- 43-250 Similar to Style 43-240 except equipped for fur work. Presser foot regulated depth of penetration from skin side. Skins are stitched without distorting or cutting the hairs of the finest furs. Upper and lower feed adjustments allow perfect feeding at lining and skins, which prevents unnecessary fullness. Seam specification 104-SSm-1. Type 29 BC-090/036 needle.
- 43-270 For making mock full fashion marks on sweaters, knit dresses and knitted garments of light, medium and heavy materials. Every stitch evenly spaced for quality work. Equipped with lower feed only. Seam specification 104-SSm-1 modified. Type 29 BD-110/044 needle.

NEEDLES

Use only genuine UNION SPECIAL needles. The needles are packaged under our brand name Union Specials.

The type number of the needles recommended for each style of machine covered by this catalog are given in the machine style description. Needles for the UNION SPECIAL LEWIS Class 43 machines are available in all the required sizes in both uniform blade and ball eye.

The following types and sizes are available:

Uniform Blade	Blade Diameter	Ball Eye	Blade Diameter
29BC-075/029 29BC-090/036 29BC-100/040 29BC-110/044 Uniform Blade Scarfed	.029 inch (.75 mm) .036 inch (.90 mm) .040 inch (1.00 mm) .044 inch (1.10 mm) Blade Diameter	29BD-065/025 29BD-075/029 29BD-090/036 29BD-100/040 29BD-110/044 29BD-140/054	.025 inch (.65 mm) .029 inch (.75 mm) .036 inch (.90 mm) .040 inch (1.00 mm) .044 inch (1.10 mm) .054 inch (1.40 mm)
Blade			

Selection of the proper needle size is determined by size of threadused and weight of material being sewn. Thread or yarn should pass freely through needle eye in order to produce a good stitch formation.

When sewing, immediately discard any needle which may have a hooked or blunt point,

To have needle orders promptly and accurately filled, an empty container, a sample needle, or the Type number should be forwarded. A complete order would read: "100 Needles, Type 29 BC-090/036".

ORDERING REPAIR PARTS

ILLUSTRATIONS

This catalog has been arranged to simplify ordering repair parts. Exploded views of various sections of the mechanism are shown so that the parts may be seen in their actual position in the machine. On the page opposite the illustration will be found a listing of the parts with their part numbers, description and the number of pieces required in the particular view being shown.

Numbers in the first column are reference numbers only, and merely indicate the position of that part in the illustration. Reference numbers should never be used in ordering parts. Always use the part number listed in the second column.

Component parts of sub-assemblies which can be furnished for repairs are indicated by indenting their descriptions under the description of the main sub-assembly. Example:

4115-72	Feed and Plunger Bearing Block, complete	1
1307~ m L	Plunger Barrel	
121-3	Plunger Frame	1

It will be noted in the above example that the plunger bearing block is not listed. The reason is that replacement of this part individually is not recommended, so the complete sub-assembly should be ordered.

At the back of the book will be found a numerical index of all the parts shown in this book. This will facilitate locating the illustration and description when only the part number is known.

IDENTIFYING PARTS

Where the construction permits, each part is stamped with its part number. Part numbers represent the same part, regardless of catalog in which they appear.

USE GENUINE NEEDLES AND REPAIR PARTS

Success in the operation of these machines can be secured only with genuine UNION SPECIAL Needles and Repair Parts as furnished by the Union Special Corporation, its subsidiaries and authorized distributors. They are designed according to the most approved scientific principles, and are made with utmost precision. Maximum efficiency and durability are assured.

Genuine needles are packaged with labels marked *Union Special*. This trademark is your guarantee of the highest quality in material and workmanship.

TERMS

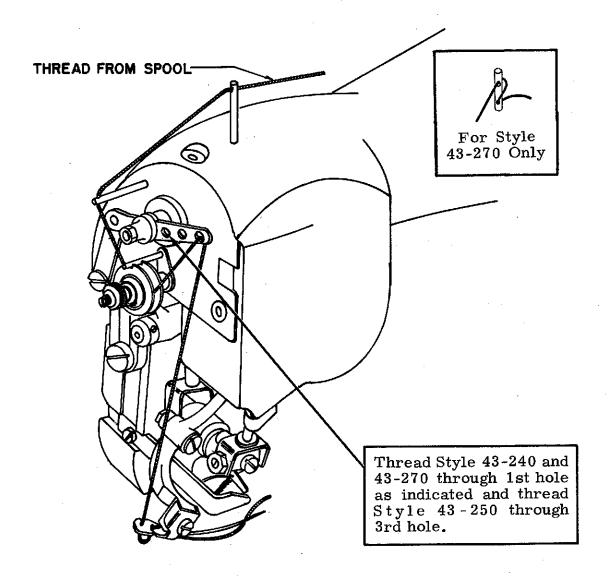
Prices are net cash and subject to change without notice. All shipments are forwarded f.o.b. shipping point. Parcel Post shipments are insured unless otherwise directed. A charge is made to cover postage and insurance.

SPEED

The recommended speed of these machines is 1600 R.P.M.

THREADING

Thread machines in accordance with threading diagram, Fig. 1, below.

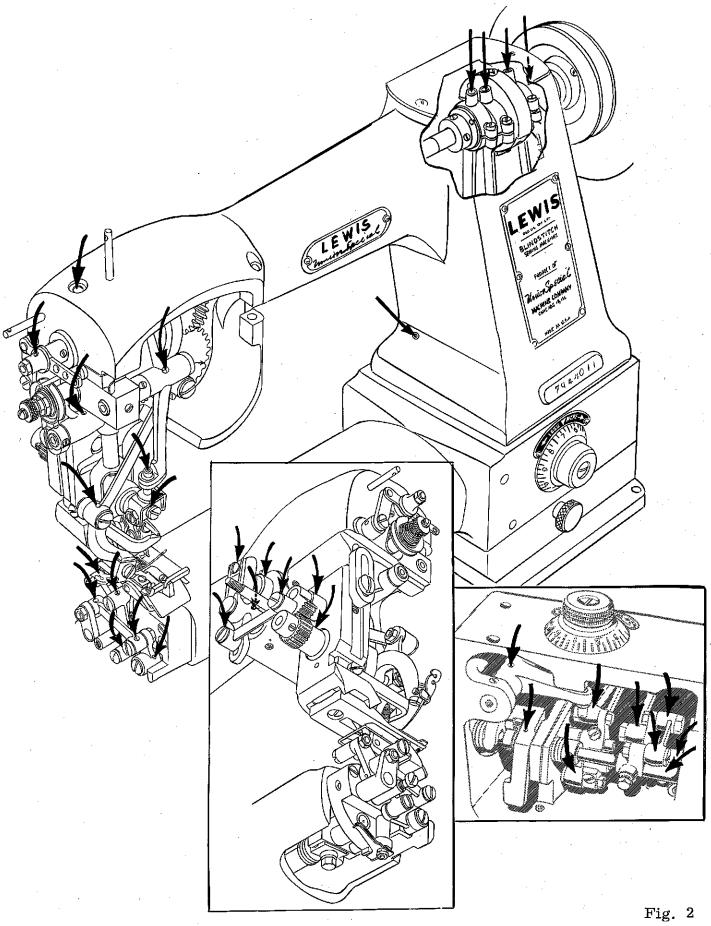


OILING

These machines should be oiled twice daily, before the morning and afternoon starts. Use a good grade of straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit.

Most of the oiling places on these machines are readily identifiable because of the fact they are painted red. However, reference to the oiling diagram (Fig. 2) will be beneficial.

Please note that it will be necessary to open head cover or remove cylinder end cover, and to tilt the machine back from the sub-base to reach some of the oiling places.



ADJUSTING INSTRUCTIONS

REMOVING EXCESS PLAY IN CONNECTING RODS

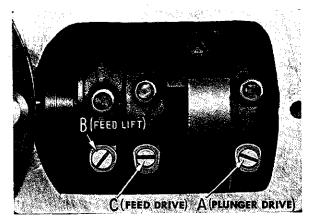


Fig. 3

set at the factory. Due to normal wear it may be necessary to remove any excessive play or shake that may develop. Access to connecting rod adjusting screws is through opening in top of arm (Fig. 3). Swing the arm cover plate out of position for access to adjusting screws. Tighten screw (A) in plunger drive connecting rod until machine begins to bind while handwheel is being turned in operating direction, which is away from operator. Then, loosen screw until the machine again turns freely. Repeat the same procedure for feed elevating connecting rod and feed driving connecting rod screws (B) and (C) respectively. Swing

Oil clearance for the connecting rods is

the arm cover plate back into position.

TIMING NEEDLE WITH PLUNGER

The main shaft drive gear (A, Fig. 4) and the looper cam (B) are spotted on the main shaft. Therefore, the arrow on the hub of the looper cam and on the right side of the drive gear should be in line. The timing is correct if the arrow on gear (C) points to the line on the left side of drive gear (A), or as the hand-wheel is turned in the operating direction this same arrow is in line with the arrow on the right side of gear (A). To check for proper timing, open front cover and turn handwheel in operating direction until the spot screw (the second screw around as the handwheel is

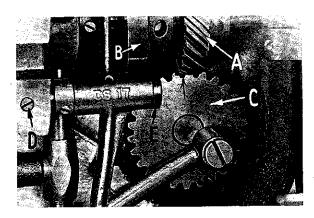


Fig. 4

turned in operating direction) in the looper cam (B, Fig. 5) is toward the front. The arrow on the cam will then be in a horizontal position pointing to the right. At this time the arrow on gear (C) should coincide with the arrow on the cam at a position pointing slightly above horizontal as in Fig. 5. If adjustment is necessary, loosen the two screws in drive gear (A) and slide gear to the right until the gears no longer

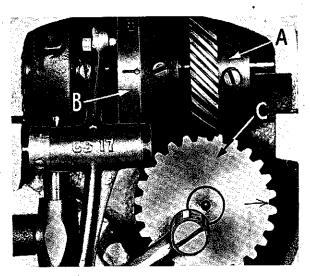


Fig. 5

mesh. Turn handwheel in operating direction until the spot in looper cam is to the front. Do not turn the handwheel after the spot is in this position. Now, turn gear (C) until the arrow points to the right and is slightly above a horizontal position. Slide drive gear (A) to the left so the gear teeth mesh and the spot screw lines up with the spot on the main shaft. Retighten the screws. Now, check alignment of the arrows on gears (A and C, Fig. 4). If the arrows do not line up, slide gear (A) to the right once again and turn gear (C) to the left or right as required. Reposition gear (A) so spot screw lines up with the spot on the main shaft and again check the arrow alignment. Repeat this procedure until arrows line up and the spot screw is in line with spot on main shaft, then tighten spot screw and set the screw in drive gear (A).

It may also be necessary to remove any play or bind that may have developed between gears (A and C, Fig. 5) as a result of normal wear or replacement. To remove any bind or excess play, loosen set screw (A, Fig. 6) and turn bushing (B) in the required direction by inserting a screwdriver in the oil hole on top of the shaft. Tighten screw. Turn the handwheel in operating direction to be sure the machine does not bind.

SETTING THE NEEDLE STROKE

Normal needle stroke setting is correct when the point protrudes approximately 1/8 inch beyond the right edge of presser foot at the end of its right stroke (Fig. 7). Increase to approximately 5/32 inch if a larger needle

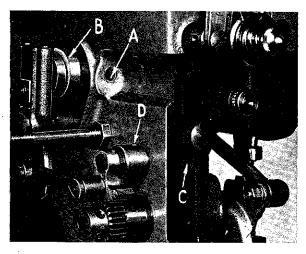


Fig. 6

to approximately 5/32 inch if a larger needle loop is required. If adjustment of the needle stroke is necessary, loosen the lock-nut (A, Fig. 7) and turn screw (B) to the right or left as required. Tighten the nut.

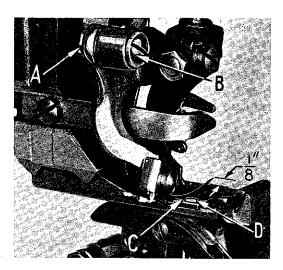


Fig. 7

The needle should travel in the center of the groove in the needle guide (C, Fig. 7). If the needle is deflected from front to the back in its travel, loosen screw (D) holding the needle guide and allow needle to position the guide. Retighten the screw.

ADJUSTING THE LOOPER SPREADER

When properly adjusted, the points of the looper spreader and the looper frame must move freely without any interference with the presser foot, eedle or needle carrier. When the needle is receding from the right side of its stroke, and the looper is on the right side of its stroke,

the looper should just clear the top of the needle. The right side of the

looper should be approximately 3/64 inch from the left side of the eye of the needle when the looper point is even with the center of the needle. When the looper is on the left side of its stroke and moving to the back, the point of the needle, moving to the right, should just clear the top of the looper frame.

Before making any adjustment to the looper spreader mechanism, check for excessive play between the looper frame (A, Fig. 8) and the bearing block (B). If excessive play is encountered, it can be removed by loosening nuts (C) and positioning the cone screws (D) accordingly.

To adjust the looper spreader mechanism to the right or left, loosen the set screw (D, Fig. 4) and slide the stud (E) in the required direction. Retighten the screw (D). To adjust the looper spreader

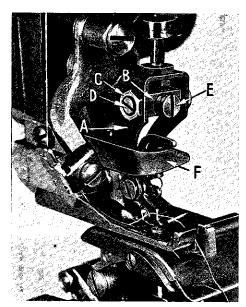


Fig. 8

mechanism up or down on both sides of its stroke remove gear cover at back, loosen nut on screw (A, Fig. 9) and slide the link (B) up to raise looper or down to lower it. If the looper spreader mechanism is too close to the needle on one side and too far away on the other loosen the two set screws in gear (C), insert a screwdriver in screw (E, Fig. 8) and turn in the required direction. Turning the screw in a clockwise direction lowers looper on right side of stroke and raises looper on the left side of stroke. Turning screw in a counterclockwise direction acts the reverse. Tighten the set screws.

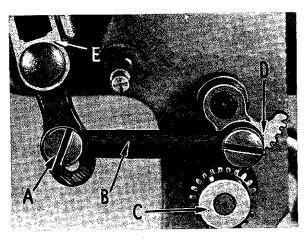


Fig. 9

A combination of all the preceding adjustments may be necessary to properly adjust the looper spreader mechanism. It may also be necessary to remove any excess play or bind that may have developed between gears (C and D, Fig. 9) as a result of these adjustments, normal wear, or replacement. can be checked by moving the gear (D, Fig. 9) left or right while holding the looper driving yoke (E, Fig. 9) to keep it from moving when the looper spreader mechanism is at its lowest position. The gears should retain a very slight motion between them. To remove any bind or excess play, loosen the set screw (C, Fig. 6) and turn the eccentric bushing in the required direction by inserting a screwdriver in the oil hole (D). Turn the hand-

wheel slowly in the operating direction to check for excess play or bind and retighten the screw (C).

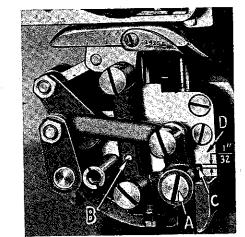
Turn handwheel slowly in operating direction to check the preceding adjustments to make sure there is no interference between the looper spreader mechanism and the other parts. Repeat the adjustments if necessary.

SETTING THE LOOPER OPENER

Looper opener (F, Fig. 8) should be set so that the bottom of the looper spreader point clears the needle by approximately 1/32 inch when the looper spreader mechanism is in the left hand position and moving to the back. To make this adjustment, remove looper opener from machine and bend in the required Check for clearance between the opener direction. and the looper frame (A). Bend the looper opener as required. Assemble the opener to the machine.

SETTING THE FEED PLATE HEIGHT AND PRESSURE

Turn handwheel in operating direction until the Fig. 10 feed point has reached the lowest point of its travel.



At this position there should be no play between the feed plate and the presser foot. To make this adjustment, loosen the screw (A, Fig. 10) and, with the right hand, hold the feed plate against the presser foot. Then, by holding feed link (B)

with the left hand, push down feed point until there is 1/32 inch clearance between the block (C) and the plunger bearing block (D). Then, retighten screw (A).

Turn handwheel in operating direction until the feed point reaches its highest position and check to see that the feed point is in the center of the slots in the feed plate. If the feed point is not in proper alignment, loosen screw (A, Fig. 10) and turn the feed plate to align the feed point in the slots. Retighten screw (A).

The feed plate pressure is adjusted at the factory. If it becomes necessary to change the pressure, turn knurled screw (A, Fig. 11) clockwise for more pressure and counterclockwise for less.

SETTING THE FEED POINT HEIGHT

Turn the handwheel in operating direction until the feed point reaches its highest position and the feed plate reaches its lowest position. At this point, there should be 1/8 inch space between the top of the feed plate and the bottom of the presser foot (Fig. 12). To obtain this adjustment, loosen the machine base locking screw (A, Fig. 13) and lay the machine on its back. Then, loosen screw (B, Fig. 11) and hold link (A, Fig. 12) so that the feed point is pressed up against the bottom of the presser foot. Turn the handwheel in operating direction until the feed point

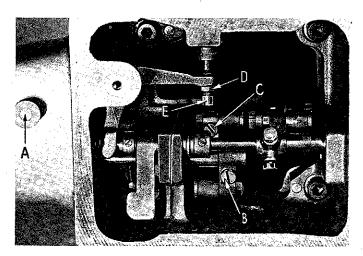


Fig. 11

reaches its most forward position, and retighten screw (B, Fig. 11).

SETTING BOTTOM FEED POINT IN LINE OF FEED

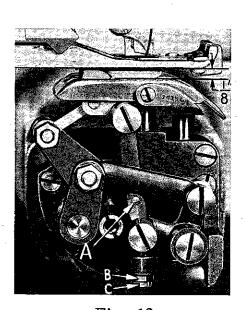


Fig. 12

Turn the handwheel in operating direction until the feed point first touches the presser foot. At this point, the front edge of the feed point should be aligned with the front edge of the knurling on the feed plate. To make this adjustment, loosen screw (C, Fig. 11), and by means of link (A, Fig. 12), move the feed point forward or backward as required. Retighten screw (C, Fig. 11). If, in this adjustment, the feed point has to be moved an appreciable distance, repeat the adjustment "Setting The Feed Point Height" in the previous instructions.

SETTING THE HEIGHT OF PLUNGER

The height of the plunger is adjusted by turning the knob (B, Fig. 13) clockwise to raise the plunger and counterclockwise to lower it. To provide for the maximum plunger adjustment, there should be 1/32 inch clearance between plunger crank (A, Fig. 14) and the plunger block (B) when the adjusting knob (B, Fig. 13)

is turned clockwise as far as it will go. Note that there are pins which stop the knob (B) after each complete revolution. The knob may be pulled out toward the operator to lift it over the stop. The knob can make three complete revolutions. To make the 1/32 inch adjustment, turn the knob clockwise as far as it will go. Loosen locknut (D, Fig. 11) and turn screw (E) in the required direction. Retighten nut (D). Setting is correct when the needle, on its stroke to the right, just clears

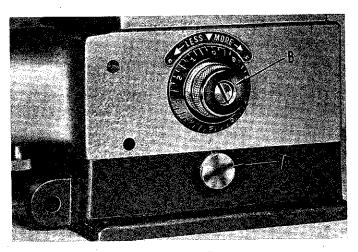


Fig. 13

the top of the plunger, with the adjusting knob in the maximum clockwise position. If after initial setting, further adjustment of height is necessary, it can be accomplished by turning nut (B, Fig. 12) and locknut (C) up or down as required. Check the adjustment so that the needle does not strike the plunger.

SETTING THE STITCH LENGTH OF BOTTOM FEED

Stitch length adjustment is made through the access hole in the top of the arm (Fig. 15). Swing arm cover plate out of position and turn the handwheel in operating direction until lock

screw (A, Fig. 15) and adjusting screw (B) are in view. Loosen lock screw and turn adjusting screw in the required direction. Turning the adjusting screw clockwise shortens the stitch and counterclockwise lengthens it. Retighten lock screw and swing the arm cover plate back into position.

SETTING THE STITCH LENGTH OF TOP FEED

The top feed should be synchronized with the bottom feed. If the setting is incorrect, loosen screw (A, Fig. 16) and move the slide (B) up to lengthen the stitch or down to shorten the stitch.

ADJUSTING THE TAKE-UP

Make sure the machine is threaded in accordance with threading diagram (Fig. 1) and sew under power to check stitch. If the looper is not catching the needle thread as a result of the needle not throwing up a large enough loop, then the needle stroke should be adjusted. To

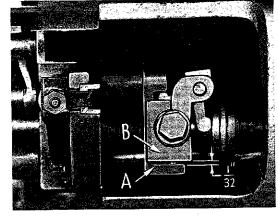


Fig. 14

make this adjustment, refer to instructions in paragraph one under "Setting The Needle Stroke".

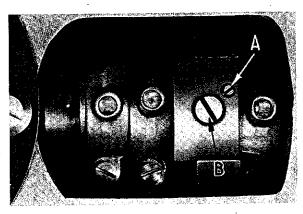


Fig. 15

The take-up lever (A, Fig. 17) should be set to produce a good stitch with a minimum amount of thread tension. Set the take-up so its downward travel begins when the needle eye, traveling from the right to left, is even with the left side of the cloth opening in the presser foot. Adjustment is made by turning the handwheel in the operating direction until the needle eye is even with the left side of the cloth opening in the presser foot, then loosen set screws (B, Fig. 17) in take-up lever crank and turn nut (C) counterclockwise until take-up begins its downward stroke. Retighten the screws (B).

NOTE: This is an approximate setting and may be varied to accommodate different types of thread, stitch length and weights of material.

Thread breakage may result if the needle thread tension is set either too loose or too tight. The tension on the needle thread is regulated by turning thumb nut (D, Fig. 17) to the right or left as required. This tension should be set sufficiently tight to produce a firm stitch. Do not, however, make this adjustment too tight as the thread will draw the goods and will leave impressions or dimples on the face of the garment.

ADJUSTING WIDTH OF BITE (STYLE 43-270)

The spacing between the stitches can be adjusted to a limited degree on machine Style 43-270, by moving the stitch guides on the front of the presser foot. To change width, loosen the two guide screws and move guide.

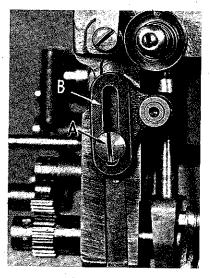


Fig. 16

change width, loosen the two guide screws and move guides left or right as required.

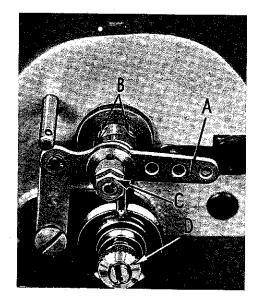
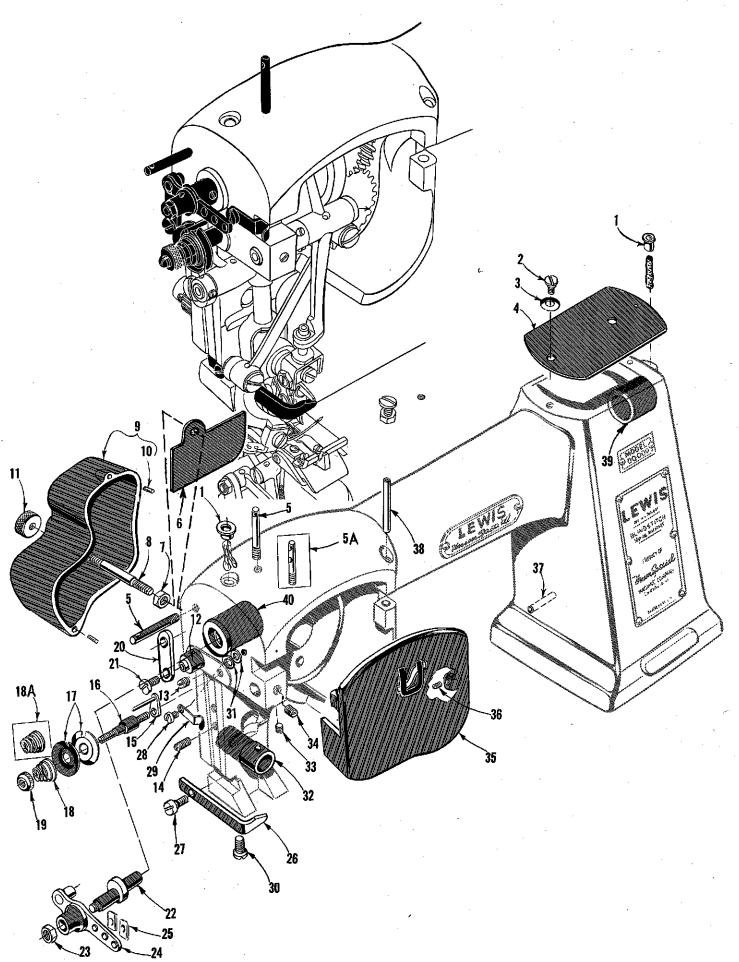
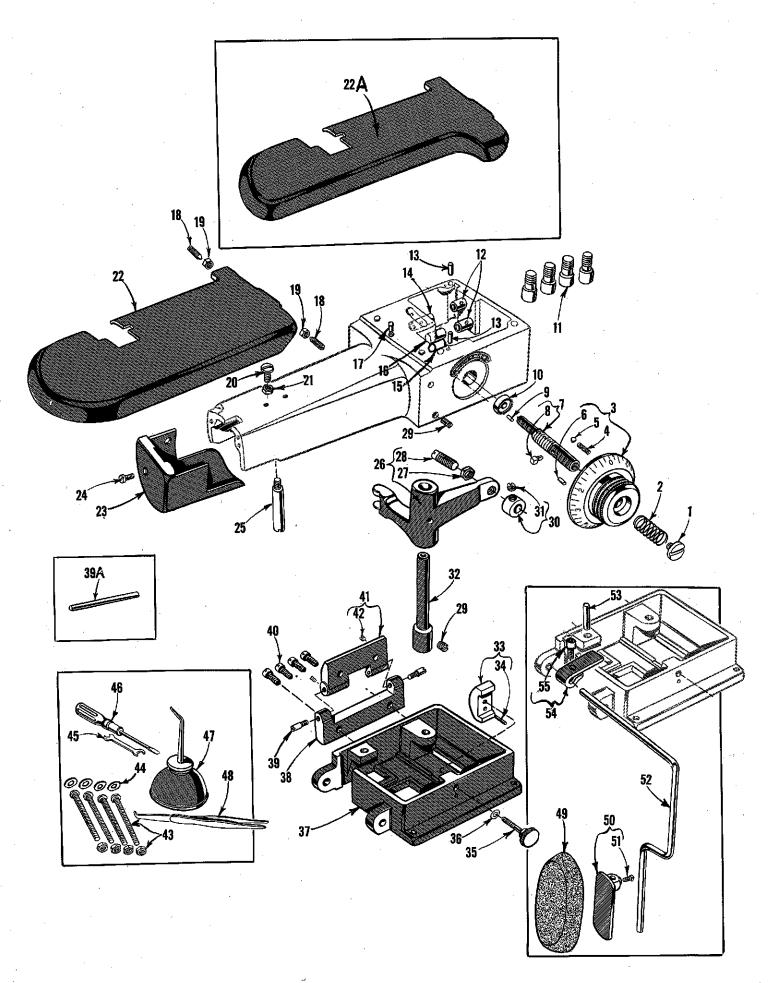


Fig. 17



ARM, COVERS, BUSHINGS AND THREAD TENSION PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	125-23	Oil Cup	
2	123 25 1220 L	Oil Cup	- 2
		ocrew	- 1
3	1221 L	Spring Washer	- 1
4	1219 L	Arm Cover Plate	- 1
5	CS454	Thread Guide, for Styles 43-240, 43-250	- 2
	CS454	Thread Guide, for Style 43-270	- 1
5A	41-55	Thread Guide, for Style 43-270	- 1
6	8-139	Cover G119rd	_ 1
7	CS232	Nut	- 1
8	CS467	Stud	` <u>1</u>
9		Gear Cover, complete	- 1
	CS466 A	Gear Cover, complete	- 1
10	CS469	Pin	- 2
11	CS468	Nut	- 1
12	CS445	Stud, for No. CS444	- 1
13	CS320-1/2	Set Screw, for No. CS441 A	- 1
14	1003 L	Set Screw, for No. CS434	. 1
1 5	CS471 A	Tension Disc Retainer, complete	1
16	CS324	Thread Tension Staff	. 1
17	1183 L	Tension Disc	. 2
18			~
	1132 L	Tension Spring, for Styles 43-240, 43-250	1
18A	1132 SL	Tension Spring, for Style 43-270	• 1
1 9	1134 L	Knurled Nut	• 1
20	CS444	Link	
21	1329 L-1/2	Screw	· 1
22	CS443	Take-up Lever Crank	1
23	1160 L	Nut	- 1
24	CS442 A	Take-up Lever, complete	. 1
25	21-176	Clin Spring for Style 43-250 only	\cdot $\frac{1}{2}$
26	CS448	Clip Spring, for Style 43-250 only	. 1
27 27	CS313	Screw	. 1
28	LS314	~ 02 011	
2 9	CS429	Front Gear Cover Latch	1
30	876 L	Screw, for presser foot (See Page 27 for	
		presser foot)	· 1
31	1185 L	Washer, for No. CS429	· 2
3 2	CS206	Needle Bar Bushing	· 1
33	CS320-1/2	Set Screw for No CS436	· 1
34	1025 L	Set Screw, for No. CS446	. 1
35	CS428	Front Gear Cover	. 1
36	1081 L	Set Screw	
37	61-33		
38	CS463	Hinge Pin, for No. CS428	. 1
39	CS427	Main Shaft Bushing, right	· 1
40	FP503	Main Shaft Bushing, right	· 1

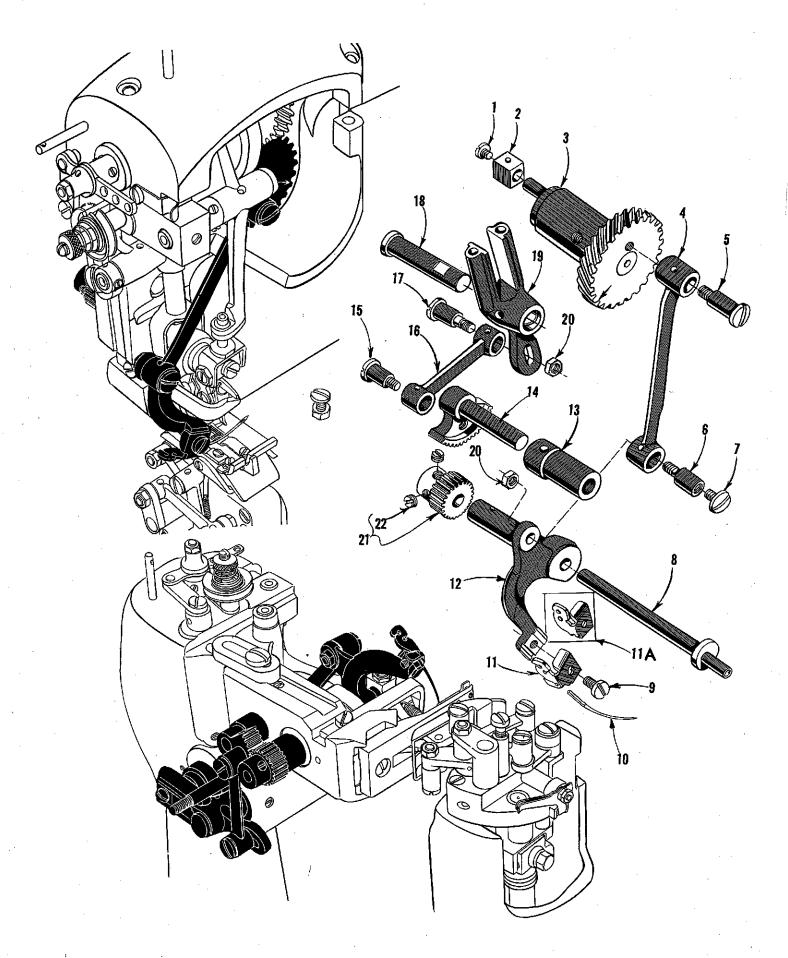


CYLINDER BASE, SUB-BASE, WORK SUPPORT PLATE, KNEE PRESS AND ACCESSORIES

Ref.	Part		Amt.
No.	No.	Description	Req.
1	18-1028	Screw	1
2	21-404	Spring	·1
. 3	4149-30	Plunger Regulator Knob Assembly	1
4	21-237	Spring	- 1
. 5	79-31	Ball	1
6	22-C214-4	Stop Pin	
7	418-1026	Plunger Regulating Screw, complete	1
8	22-296	Pin	1
9	22-C214-4 44-301	Notched Disc Plate	1
10	•-	Screw, for base No. 3-90	1
$\begin{array}{c} 11 \\ 12 \end{array}$	$18-1045 \\ 1321 \; \mathrm{L}$	Durking for No. 1901 I 1905 I	4
13	22-148	Bushing, for Nos. 1291 L, 1295 L	2
14	16-354	Bushing, for feed rocker shaft No. 1259 AL	2
15	16-379	Bushing, for plunger rocker shaft	· <u>i</u>
16	16-356	Bushing, for feed elevating rocker shaft	· 1
17	10-550 1055 L	Pin, for spring No. 1283 L	· 1
18	LS398	Pivot Screw	1
19	LS299	Nut	2
20	FP505	Adjusting Screw	1
21	1160 L	Nut	· 1
22	4-136	Work Support Plate, for Styles 43-240, 43-250	
22A	4-137	Work Support Plate, for Style 43-270	· 1
23	32 - 277	Work Support Plate, for Style 43-270	·· 1
24	CS313	Screw	· -1
25	17-167	Stud, for supporting cylinder base	 1
26	48-166	Plunger Regulating Bell Crank, large	· 1
27	20-34	Nut	· 1
28 29	$1192 \; m L \ 1025 \; L$		
30	1025 L 1173 L	Set Screw, for No. 14-472	<u>I</u>
31	1137 L	Set Screw	
32	14-472	Plunger Regulating Crank Shaft	
33	51-26	Sub-Base Locking Latch	1
34	22-C214-2	Sub-Base Locking Latch	1
35	18-1030	Sub-Base Locking Latch Screw	· 1
36	40-139	Washer	Ī
37	3-91	Sub-Base	1
38	50-262	Sub-Base Hinge Bracket	
† 39	18-959	Hinge Bracket Pivot Screw	2
39A	14-508	Hinge Bracket Shaft	1
40	18-998	Screw	4
41	50-263 L	Cylinder Base Hinge Bracket	1
42 43	1081 L 18-955		
44	652-16	Bolt, for holding machine on table board	4
45	1405 L	Double End Wrench, 1/4 inch and 5/16 inch opening	
46	21201	Screwdriver, 9/64 inch round blade, over all length	1
-,-		7 11/16 inches	1
47	413	Oil Can	1
* 48	660-240	Thread Tweezers	ī
* 49	660-168	Knee Press Plate Cushion, sponge rubber	1
50	4129-18	Knee Press Plate, complete	- - 1
51	22508	Screw	
52 53	71-86	Knee Press Rod	1
53 54	22-301	Pin, for knee lift	1
5 4 55	45-422 22652 E-12	Knee Press Lifter	1
ออ	22652 F-12	cramb screw	T

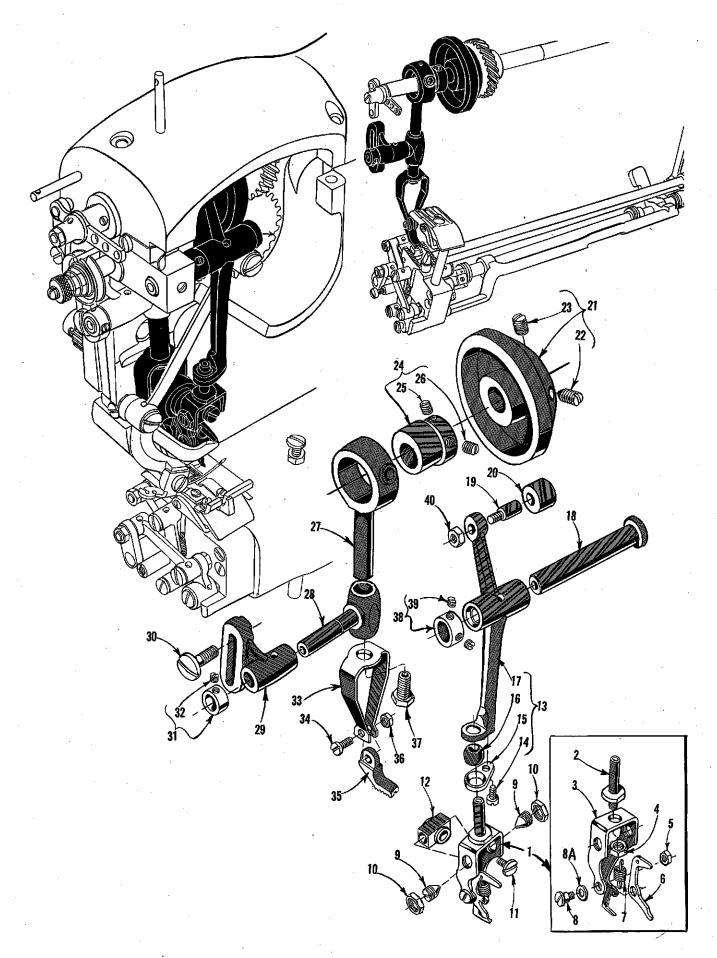
 $[\]dagger$ On new machines, two No. 18-959 will be replaced by one No. 14-508

^{*} Not furnished with machine, order as extra send and charge item



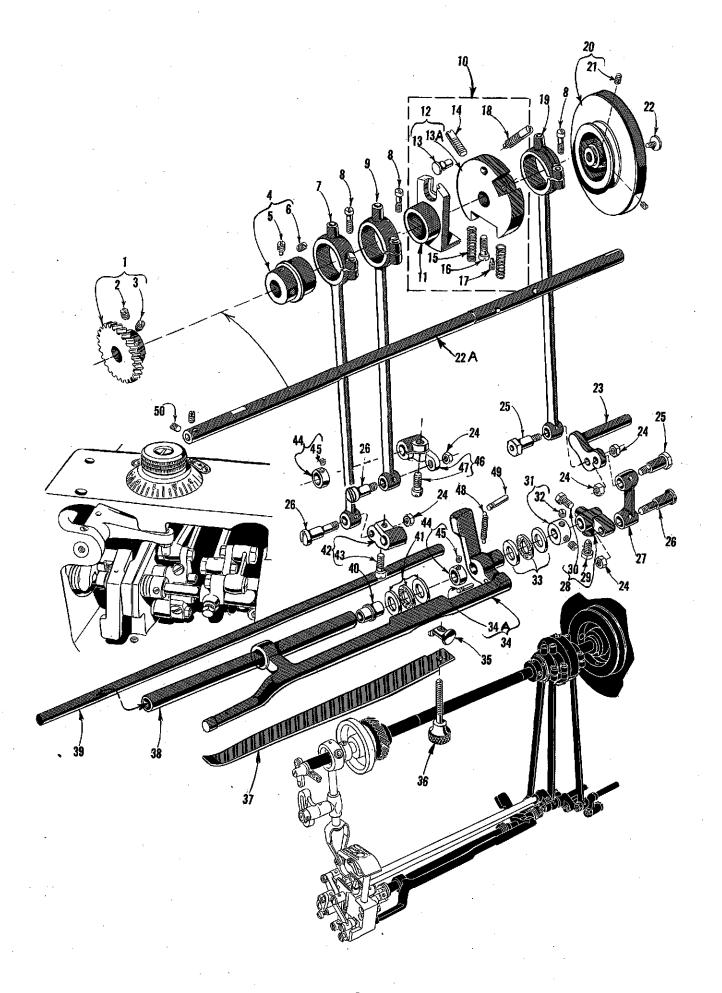
NEEDLE AND LOOPER SPREADER DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
	1104	Debel Ipitoti	
1	CS337	Screw	. 1
2	CS437	Slide Block	- 1
3	CS441 A	Needle and Looper Yoke Crank Shaft Bushing	
	•	and Gear complete	• 1
4	CS451	Needle Bar Connecting Link	- 1
5	CS307	Bearing Screw	• 1
6	18-902	Screw	- 1
. 7	888 L	Screw	
8	CS319	Looper Crank Shaft	- 1
9	CS327	Screw	
10	29 BC-090/036	Needle, for Styles 43-240, 43-250	- 1
	29 BD-110/044	Needle, for Style 43-270	_
11	CS616	Needle Clamp, for Styles 43-240, 43-250	1
11A	30-78	Needle Clamp, for Style 43-270	- 1
12	CS3 A	Needle Carrier	- 1
13	CS434	Bushing	- 1
14	CS433 A	Looper Rock, complete	• 1
15	CS438	Bearing Screw	- 1
16	CS439	Looper Rock Connecting Link	- 1
17	CS308	Screw	- 1
18	CS436	Looper Driving Yoke Shaft	- 1
19	CS435	Looper Driving Yoke	- 1
20	1160 L	Nut	- 2
21	CS606	Looper Pinion	
22	1029 L	Set Screw	- 2



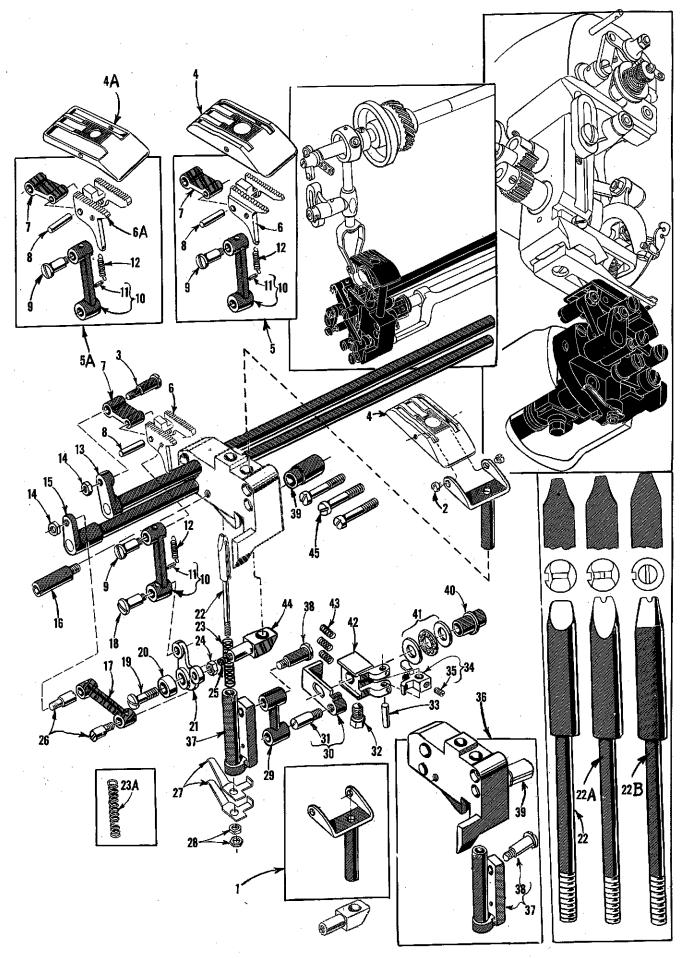
TOP FEED, TOP FEED MECHANISM, LOOPER AND SPREADER PARTS

Ref.	Part No.	Description Amt. Req.
1 2 3 4 5 6	CS503 BA CS216 CS503-1/2 1160 L 1311 L CS502	Looper and Spreader, complete
7 8 8 A	CS401 CS311-1/2 40-112	Spring 1 Bearing Screw 1 Washer, .003 inch thick if required
9 10	40-113 CS312 CS214	Washer, .005 inch thick if required Pivot Screw 2 Nut 2 Screw 1
11 12 13	CS335 CS203 CS17 A 1014 L	Bearing Block 1 Looper Ball Joint Connecting Lever, complete 1 Screw 1
14 15 16 17	CS6 CS228 CS17	Cap 1 Ball 1 Looper Ball Joint Connecting Lever 1
18 19 20	CS446 CS316 CS222	Shaft
21 22 23	CS608 CS317 CS317-1/2	Looper Cam 1 Spot Screw 1 Set Screw 1
24 25 26	FP535 1025 L 1025 L	Eccentric, for top feed, on Styles 43-240, 43-250 1 Set Screw 1 Set Screw 1
27 28 29	FP529 FP521 FP522	Top Feed Slide Rod, for Styles 43-240, 43-250 1 Top Feed Adjuster, for Styles 43-240, 43-250 1 Top Feed Adjuster Bracket, for Styles 43-240, 43-250
30 31 32	LS395 1284 L 1022 L	Screw, for Styles 43-240, 43-250
33 34 35	FP526 FP527 FP525	Top Feed Holder, for Styles 43-240, 43-250 1 Screw, for Styles 43-240, 43-250 1 Top Feed, for Styles 43-240, 43-250 1
36 37 38 39	20-35 FP530 CS462 1022 L	Nut, for Styles 43-240, 43-250 1 Clamp Screw, for Styles 43-240, 43-250 1 Collar 1 Set Screw 2
40	1160 L	Nut 1



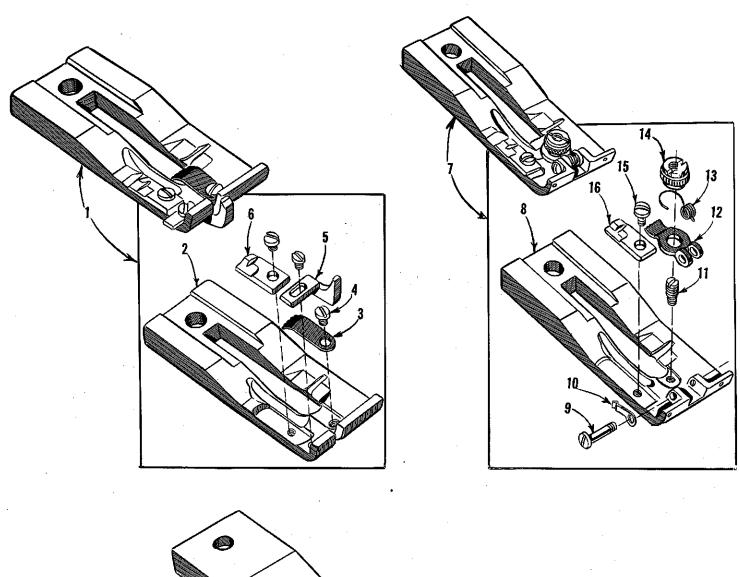
MAIN SHAFT, FEED AND PLUNGER DRIVING PARTS

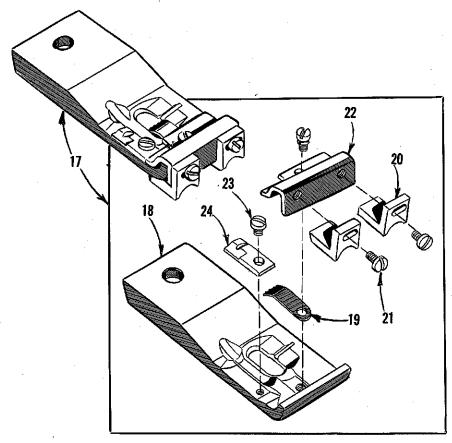
Ref. No.	Part No.	Description	Amt. Req.
		· · · · · · · · · · · · · · · · · · ·	
1	CS605	Main Shaft Drive Gear	
2	CS320-1/2	Set Screw	-· 1
3	CS320	Spot Screw	- 1
4	1204 L	Feed Elevating Eccentric	
5	1147 L	Spot Screw	- 1
6	$1005~\mathrm{L}$	Set Screw	
7	CS421	Feed Elevating Connecting Rod	
8	1206 L	Screw	
9	CS423	Feed Driving Connecting Rod	
10	CS424 A	Feed and Plunger Crank Disc, complete	- 1
11	1212 L	Feed Adjusting Eccentric	- 1
12	CS424 A-1/2	Feed and Plunger Crank Disc, with guide pin	- 1
13	1208~ m L	Guide Pin	- 1
13A	CS424	Feed and Plunger Crank Disc	- 1
14	1211 L	Set Screw	- 1
15	1214 L	Spring	- 2
16	1213~ m L	Screw	- 1
17	1020 L	Spot Screw	- 1
18	$1210~\mathrm{L}$	Spot Screw	- 1
19	CS422	Plunger Connecting Rod	- 1
20	57-45	Handwheel	
21	CS320-1/2	Set Screw	
22	18-748	Screw (not used on later models)	- 1
22A	14-326	Main Shaft	
23	1291 L	Plunger Differential Crank	- 1
24	1009 L	Nut, for 1244 L, 1288 L	- 5
25	1288 L	Screw for CS422, 1292 L	- 2
26	1244 L	Screw	- 3
27	1292 L	Plunger Differential Crank Link	- 1
28	1293 L	Plunger Rocker Crank	- 1
2 9	1294 L	Špot Screw	- 1
30	1333 L	Set Screw	
31	1027 L	Collar	
32	1029~ m L	Set Screw ~	- 2
33	478-11	Ball Bearing, complete with washers, for use	
		without 16-379 bushing	- 1
34	449-32	Feed Depresser Yoke, complete with pin for use	
		without 16-379 bushing	- 1
	449-33	Feed Depresser Yoke, for new machines with	
		16-379 bushing	~ 1
34A	1281 L	Spring Pin	- 1
35	1272 L	N11t ===================================	_ 1
36	1271 L	Knurled Adjusting Screw	- 1
37	$1270~\mathrm{L}$	Feed Spring	- 1
38	61-82	Plunger Rocker Shaft Tube	- 1
39	1295 L	Plunger Rocker Shaft	- 1
40	16-366	Bushing	
41	478-23	Ball Bearing, complete with washer	- 1
42	LS20 A	Feed Elevating Crank	- 1
43	LS301	Screw	- 1
44	1284 L	Collar	
45	$1022~\mathrm{L}$	Set Screw	
46	448-75	Feed Rocker Crank	
47	1243 L	Screw	
48	1283 L	Feed Depresser Yoke Spring	- 1
49.	$1055~\mathrm{L}$	Pin	- 1
50	1022~ m L	Set Screw. for CS443	- 2



FEED PLATES, PLUNGERS, FEED DRIVING AND PLUNGER DRIVING PARTS

Ref.	Part		-
No.	No.	Description	Amt. Req.
1	49-36	Feed Plate Yoke and Stem, complete	
2	1414 L	Screw, for feed plate	1
3	1260 L	Screw	2
4	24-285	Feed Plate, for Styles 43-240, 42-250	1
4A	24-316	Feed Plate, for Styles 43-240, 43-250	1
5	FP563 A	Feed Point, complete, for Styles 43-240, 43-250	·- 1
5A	423-329	Feed Point, complete, for Style 43-270	- 1
6	FP563	Feed Point, for Styles 43-240, 43-250	- 1
6A	23-329	reed Fulli, for Styles 43-970	-
7	1261 L		
8	1262 L	Hinge Pin	- <u>1</u>
10	1671 L	Screw	- 1
11	1677 AL	Feed Elevating Link, complete	-
12	1254 L	Spring Pin	_
13	1256 L	reed netaining Spring	_
14	1259 AL 1160 L	reed Nocker Shart, complete	4
15	1248 AL	41 W.C	
16	1667 L	reed Elevating Shaft, complete	4
17	46-94	orad, for No. 4115-72	
18	1671 L	Feed Elevating Link	- 1
19	18-745	ScrewBearing Screw	_ 1
20	1672 L	_ out mg oct cw	4
21	1669 L	·	_
22	CS449	Feed Elevating Bell Crank	- 1
22A	FP506	Plunger, for Style 43-240	- 1
22B	26-178	Plunger, for Style 43-250	- 1
23	1310 SL	Plunger, for Style 43-270	1
23A	1310 L	Plunger Spring, for Styles 43-240, 43-270	1
24	1160 L	Plunger Spring, for Style 43-250Nut	1
25	18-533	Screw, for feed spring slide block	1
26	1249 L	Bearing Stud	
27	21-255	Plunger Equalizing Spring	2
28	1311 L	Plunger Equalizing Spring Nut, for plunger	2
29	1304 L	Flunger Frame Link	_
30 31	48-168	Plunger Crank	1
32	18-1027	Dearing Screw	_
33	1298 L	opol ocrew	-
34	22-297 48-165		
35	48-165 18-416	Plunger Regulating Bell Crank, small	1
36	4115-72-4	Plunger Regulating Bell Crank, small	1
37	4121-3	- and mid timiset Destilla River completering	
38	1306 L		
39	16-352	OCL6M	_
40	16-366	Tunger Shair Bijshing	_
41	478-23	Truiger Nocker Shaff Bilghing =	-
42	115-139	Dearing. Complete with wachers	_
43	21-403		
44	1273 L	Tranger Crank Spring	_
4 5	1279 L	+ cor obiting billie bilder ==========	
		Screw, for No. 4115-72	3





PRESSER FEET

Ref. No.	Part No.	Description	Amt. Req.
1	405-14	Presser Foot, complete, for Style 43-240, for	- 1
	*405-13	medium weight material	- 1
	*405-15	Presser Foot, complete, for Style 43-240, for heavy weight material	- 1
2	5-14	Presser Foot Bottom, for presser foot No. 405-14	- 1
2	5-13	Presser Foot Bottom, for presser foot No. 405-13	- 1
	5-15	Presser Foot Bottom, for presser foot No. 405-15	- ⊥
0	CS453	Cloth Retaining Spring	- 1
3		Covaw	- 3
$\frac{4}{7}$	1351 L 475-*73	Edge Guide, for presser feet Nos. 405-13, 405-14	- 1
5	= : -	Edge Guide, for presser foot No. 405-15	- 1
^	CS504	Needle Guide	- 1
6	CS615	Presser Foot, complete, for Style 43-250, for	
. 7	FP549 A	1: +	- 1
	T7D 5 4 6	Presser Foot Bottom	- 1
8	FP549	TT: C	- ,
9	FP555	Retaining SpringScrew Stud	$ \bar{1}$
10	FP560	Retaining opring	- 1
11	FP556	Crown	- 1
12	FP550	Spring	- ī
13	FP559	Spring	- 1
14	FP558	Adjusting NutScrew	$ \overline{1}$
15	$1351~\mathrm{L}$	Needle Guide	- 1
16	CS615	Needle Guide	
17	CS455-2 A	Presser Foot, complete, for Style 43-270, small	- 1
		opening for light, medium and heavy weight material-	_ 1
•	*CS456-1 A	Presser Foot, complete, for Style 43-270, large	- 1
		opening for extra heavy weight material	
18	CS455-2	Presser Foot Bottom, for presser foot	- 1
		No. CS455-2 A	·- 1
	CS456-1	Presser Foot Bottom, for presser foot	- 1
		No. CS456-1 A	· - 1
19	CS453	Cloth Retaining SpringGuide	- 1 - 2
20	75-245	Guide	- 2 3
21	$1058~\mathrm{L}$	C	
22	50-275	Bracket, for guide No. 75-245	1
23	1351 L		
24	CS615	Needle Guide	- 1

^{*} Not furnished with machine, order as extra send and charge item.

NUMERICAL INDEX OF PARTS

	Page	Part	Page	Part		age
No.	No.	No.	No.	No.		No.
0.01	117	90.70	10	GG10.	ı	01
3-91			19	C540.	1 5 -1 3	21 97
CS3 A		40_1 1 9	21		5-14	
4-137	17	40-113.	21	40	5-15	21 27
5-13		40-139.			3	17
5-14		41-55		418	8-1026	17
5-15		44-301.	17		1	23
CS6		45-422.	17	CS422	2	23
8-139		46-94	25	423	3-329	2 5
14-326		48-165.	25		3	23
14-472	.17	48-166.	17	CS424	4	23
14-508		48-168.	25		4 A	23
16-352		49-36	25		4 A-1/2	23
16-354	.17	50-262.			7	15
16-356		50-263			B	15
16-366		50-275.	27	CS423	9	10
16-379		51-26	23		3 A 4	19 10
17-167		61-33	15		± 5	19
CS17 A		61-82	23		6	19
18-416		71-86	17	CS43'	7	19
18-533			$\overline{}$	CS43	8	19
18-745		79-31		CS43	9	19
18-748			25	CS44:		19
18-902		125-23	15	CS44:	2 A	15
18-955		CS203		CS44	3	15
18-959		CS206	15	CS44	4	1 5
18-998		CS214		CS44	5	15
18-1027		CS216		CS44	6	21
18-1028		CS222			8-75	
18-1030		CS228		CS44	8	7.9
18-1045		CS232		44	9-32 9-33	40 90
20-34		LS299			9	
20-35 LS20 A		LS301 CS307	10	CS45	1	10
21-176		CS308			3	
21-237		CS311 1/2.	21	CS45	4	15
21-255		CS312			5-2	
21-403		CS313	15,		5-2 A	
21-404	.17	LS314			6–1	
22-148		CS316			6-1 A	
22-C214-2		CS317	21		2	
22-C214-4		CS317 1/2.		CS46	3	15
22-296		CS319			6 A	
22-297		CS320			7	
22-301		CS320 1/2. CS324	15, 2	23 CS40 CS4 <i>R</i> 2	8 9	15 15
23-329 24-285		CS324			1 A	
24-285		CS321			5-73	
26-178		CS337			8 - 11	
29 BC-090/036		LS395		47	8-23	23. 25
29 BD-110/044		LS398		CS50	2	21

NUMERICAL INDEX OF PARTS

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
CS503 BA	21	1020 L	23	1270 L	23
CS503-1/2 FP503		1022 L		1271 L	23
	27	1025 L	15, 17, 21		23
	17	1027 L 1029 L		1273 L	25
	25	1055 L		1279 L	
	20	1058 L	27	1281 L 1283 L	
	21	1081 L		1284 L	
FP525		1132 L	15	1288 L	41, 43 99
	21	1132 SL	15	1291 L	
FP527	21	1134 L	15	1292 L	23
		1137 L	17	1293 L	23
	$\dots 21$	1147 L	23	1294 L	
FP530		1160 L	15, 17, 19	, 1295 L	
FP535	· · · · · ·		21, 2 5	1298 L	25
	25	1173 L	17	1304 L	25
FP549		1183 L	15	1306 L	25
	27	1185 L	15	1310 L	
	27	1192 L	17	1310 SL	
	27	1204 L	23	1311 L	21, 25
	27	1206 L	23	1321 L	17
	27	1208 L	23	1329 L-1/2.	
	27	1210 L 1211 L	23	1333 L	23
	25	1212 L	23 23	1351 L	27
FP563 A	25	1213 L	23	1405 L	17
CS605	23	1214 L	23	1414 L	25
CS606	19	1219 L	15	TATA T	25
CS608	21	1220 L	15		
CS615	27	1221 L	15	1667 L	25
CS616	19	1243 L	23	1669 L	
652-16	17	1244 L	23	1671 L	
660-168	17	1248 AL	25	1672 L	
660-240	17	1249 L	2 5	1677 AL	25
876 L		1254 L	2 5	4115-72-4	25
888 L	19	1256 L	25	4121-3	25
1003 L	15	1259 AL	25	4129-18	17
1005 L	23	1260 L		4149-30	17
1009 L	23	1261 L	25	21201	17
1014 L	21	1262 L	25	22508	17
•	·			22652 F-12	17

Union Special Wants to Help You **Cut Sewing Machine Maintenance Costs**

Union Special is offering two practical systems to help pinpoint and reduce your sewing machine maintenance costs: a record keeping system to help spot machines requiring abnormally high maintenance, and a parts inventory system to speed routine repairs.

Machine Maintenance Records

Repair-prone machines or inexperienced competent operators can eat up your maintenance dollars in short order. To help spot these problems, Union Special suggests two variations of a simple maintenance record keeping system using cards provided by Union Special.

The first system utilizes a "Machine Maintenance Record" card (Form 237) for each sewing machine in a plant. When a repair is required, the card is pulled from the file and the repair date, parts used, and their cost are entered in the spaces provided and the card is refiled.

		MACHIN	E MAIN	FENANCE	RECORD	
MAI	CERTS NAME	BITYLE	Ţ	PE NEEDLE	BERTAL NO.	DATE FURCH.
		Ī				
DATE	SYMBOL PAR	Usen	COST	DATE	SYMBOL PART USE	0 005
		FO Mach				
			σM	231		
\pm		– FO	W	aintena		
		— Wacı	ord car	'g _		
		Recu				=
			7			
			-			-

The second system is normally used when more detailed information on repair costs is desired. Two record cards are used: a "Repair Request Card" (Form 234), and a "Machine Repair Record" (Form 233). When a machine requires service, the forelady or foreman fills out the top of a "Repair Request Card" and gives it to a mechanic. He fills in the time the repair work is started, the parts used and their cost, and the completion time. This data is then transferred to the permanent "Machine Repair Record" kept in the office.

Whichever system is used, management now has an invaluable tool to reduce needless maintenance costs.

Repair Part Inventories

While record keeping tells management which machines require abnormally high maintenance, it does little to help reduce the downtime caused by routine repairs. To alleviate this situation, Union Special recommends that manufacturers establish a formal parts inventory system for each type of sewing machine they operate.

Excessive machine downtime and wasted hours by mechanics can be eliminated with an orderly in-plant inventory of the most commonly needed parts. There is no longer a need to cannibalize other machines for spare parts. Long waits for deliveries are avoided and machine downtime is kept to a minimum. The cost of a parts inventory is small when the overall savings are considered.

MACHINE REPAIR RECORD CARD						Devi Street		
MAKER'B HAME				MANSAC*		REPAIR REQUEST CARD		
DATE	несич	₩.	PANTE COST	E254*	ERRYIC DAYS	(HYENTONY SYMBOL MARKYS RAME MACK, SEBAL NO. OPERATON'S NO. PARTS USED		
				Н	-	FOR PART MUNICIPAL COST		
-								
			-	_	-			
		. 2	33-	- A CON	<u>.</u>			
1	FOR Nachine	DeDa	ir Rec		=	FORM 234— Repair Request Card		
_ N	Nachin	,				nair Request		
— ;		_				Keh		
						TIME STARTED		
	,		,	`		MECHANICS NO		
					1	where desires make his from my, the		

For free sample copies of the machine record cards and spare part inventory lists for a variety of the most popular machines, contact your local Union Special Representative or write direct to Union Special.

U. Union Special

Style 43-270

Part Number	Description	Minimum Quantity Per 5 Machines	Part Number	Description	Minimum Quantity Per 5 Machines
CS455-2A 23-329 1671 L CS615 135 IL CS453 1058 L 26-178 1311 L 1256 L 1414 L	Presser Foot Feed Dog Screw For Feed Dog Needle Guide Screw For Needle Guide Cloth Retaining Spring Screw For Guides Plunger Nut For Plunger Feed Retaining Spring Screw For Feed Plate	1 1 ,2 1 1 1 3 1 2 1 2	1213 L 1020 L CS320-½ CS320 CS503 BA CS503-½ CS502 CS401 1029 CS324 29 BD	Screw For Stitch Length Set Screw For Stitch Length Set Screw For Main Gear Spot Screw For Main Gear Looper and Spreader Looper Frame Looper Spreader Spring Set Screw Thread Tension Staff Needles (Specify Size)	1 2 2 2 2 1 1 2 1 2 1 2

^{*}The parts and quantities listed above are intended to assist you in setting up the initial inventory of spare parts. An efficient inventory can only be established according to actual usage. The nature of the sewing operation will determine actual usage.

Helpful, authoritative information on the most efficient types of equipment for making virtually any machine sewed article is available from Union Special Sales Promotion Department. Among the many interesting, illustrated bulletins that are available without obligation are the following:



No. 240, "Men's, Women's, Children's Footwear"

No. 249, "Rainwear"

No. 250, "Men's Dress Shirts"

No. 251, "Service Shirts and Pants"

No. 252, "Men's Shorts and Pajamas"

No. 253, "Overalls, Coveralls, and Dungarees"

No. 254, "Men's Knit Underwear"

No. 256, "Knit Outerwear"

No. 259, "Men's Sports Shirts"

No. 260, "Work Gloves"

No. 262, "Cotton, Burlap, Jute, and Multiwall Paper Bags"

No. 263, "Men's Clothing"

No. 264, "Men's Women's, Children's Jackets"

No. 265, "Women's Wear"

No. 266, "Women's Wear And High Fashion"

No. 267, "Corsets, Girdles, Brassieres"

No. 268, "Children's Wear"

No. 269, "Mattresses, Slip Covers, Furniture Upholstery"

No. 271, "Awnings, Canopies, Tents, Tarps"

No. 273, "Curtains & Drapes"

No. 610, "Klipp-it"

No. 710, "MCS ForMation Unit"

No. 730, "MCS Automatic Dual Underfront Shirt Hemmer"

No. 740, "MCS Automatic Rib-Knit Cuff Machine"

No. 750, "Fusing Presses"

No. 1100, "Lewis Blindstitch, Chainstitch, Lockstitch, Machines"

No. 1105, "Button Sewers-Ticket Tackers"

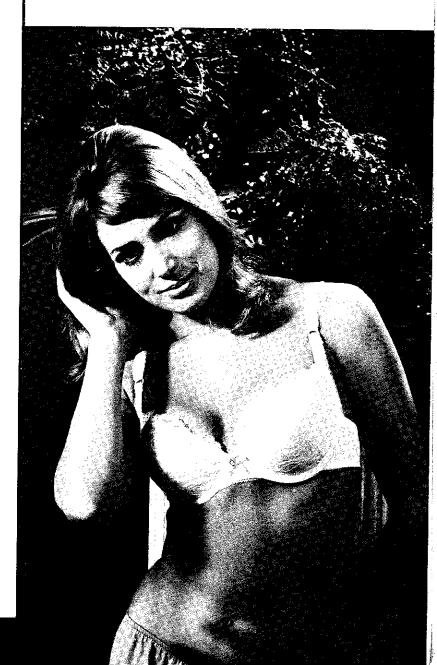
"Columbia Blindstitch, Saddle Stitch, and Tie Closing Machines"

No. 1500, "Alteration Department Machines"



UNION SPECIAL CORPORATION

HERE ARE HELPFUL BULLETINS and CATALOGS TO HELP YOU SOLVE SEWING PROBLEMS







UNION SPECIAL maintains sales and service facilities throughout the world. These offices will aid you in the selection of the right sewing equipment for your particular operation. Union Special representatives and service men are factory trained and are able to serve your needs promptly and efficiently. Whatever your location, there is a Union Special Representative to serve you. Check with him today.

ATLANTA, GA.
BOSTON, MASS.
CHICAGO, ILL.
DALLAS, TEXAS
LOS ANGELES, CAL.
NEW YORK, N. Y.
PHILADELPHIA, PA.

MONTREAL, CANADA
TORONTO, CANADA
BRUSSELS, BELGIUM
LEICESTER, ENGLAND
LONDON, ENGLAND
PARIS, FRANCE
STUTTGART, GERMANY

Representatives and distributors in all important industrial cities throughout the world.

UNION SPECIAL CORPORATION