

# Union Special LEWIS . COLUMBIA

INDUSTRIAL SEWING MACHINES

STYLES 63400XF 63400YF



CATALOG No. 121XF **CLASS 63400** 

STREAMLINED
HIGH SPEED LOCKSTITCH MACHINE
WITH
INTERMITTENT REVERSE FEED
AND
AND FEEDING PRESSER FOOT

Union Special MACHINE COMPANY

CHICAGO

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# Here are Oil Specifications for Union Special Sewing Machines

Specification 174 specifies a high quality petroleum oil, viscosity 100 seconds at 100°F. Recommended for all oiling applications on high speed machines.

Specification 175 specifies a high quality petroleum oil, viscosity 100 seconds at 100°F., water white or with a maximum A.S.T.M. color number of 1. For use where freedom from oil staining is paramount.

**Specification 87** specifies a high quality petroleum oil, viscosity 300 seconds at 100<sup>o</sup>F.

Specification 100 specifies a general purpose high quality grease for use in ball bearings and transmitters. It is similar to commercial N.L.G.I., grease No. 3. Where No. 3 grease is not obtainable, No. 2 may be used.

#### UNION SPECIAL

UNION SPECIAL			
SPECIFICATION NO.	174	175	87
Viscosity S.S.U. at 100°F	90-125	90-125	300-350
Flash (Min.)	350	350	350
Pour (Max.)	20	20	20
Color A.S.T.M. (Max.)	3	1	3
Neutralization No. (Max.)	0.10	0.10	0.10
Viscosity Index			
(D & D Min.)	85	85	85
Compounding	None	None	None
Copper Corrosion (Max.)	1A	1A	1A
*Anline No.	175-225	175-225	175-22

\*Used with Buna N Rubber "O" Retainers



NOTE 1: The use of non-corrosive additives in oils meeting above classification is desirable but not essential. These may include:

- 1. Oxidation inhibitors
- 2. Rust inhibitors
- 3. Lubricity additives
- 4. Anti-oxidants
- 5. Film strength additives

These additives must be completely soluble in the oil and not removable by wick feeding nor shall they separate.

NOTE 2: Oils containing the following type additives shall not be used at any time:

- 1. Extreme pressure additives-corrosive
- 2. Tackiness or adhesive additives
- 3. Lead soap additives
- 4. Detergents



Catalog No. 121 XF (Supplement to Catalog No. 121 M)

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 63400

Streamlined Lockstitch

Styles

63400 XF

63400 YF

First Edition

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October, 1972

#### 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 63400 XF". 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 63400 XFZ".

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 63400".

#### APPLICATION OF CATALOG

This catalog is a supplement to Catalog No. 121 M and should be used in conjunction therewith. Only those parts which are used on Styles 63400 XF and YF, but not used on Styles 63400 A and B are illustrated and listed at the back of this book.

Opposite the illustration page, parts are identified by detail number, part number, description and amount required.

NOTE: When ordering repair parts always use the part number listed in the second column.

Adjusting and operating instructions for Styles 63400 XF and YF are similar to those in Catalog No. 121 M for Styles 63400 A and Brespectively. The only instructions included in this catalog are the ones that are different from Styles 63400 A and B, or are additional instructions that pertain specifically to Styles 63400 XF and YF.

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 this class. Reference to direction, such as right, left, front, back, etc., are given from the operator's position while seated at the machine. Operating direction of handwheel is toward the operator.

#### STYLES OF MACHINES

Streamlined, Flat Bed, Lockstitch Machine, with Intermittent Reverse and Plain Feed, Automatic Lubrication, Gauged Oil Supply, Adjustable Feed Eccentric, Adjustable Hook Oil Supply, Equipped with a Feeding Presser Foot and Rotary Needle Thread Tension.

- 63400 XF For attaching pockets to shirt fronts and similar plain seaming operations on light to medium weight material, where matching plies and back-tacking are necessary. The reverse feed can be used for back-tacking. 1 9/64 inch needle bar travel. Seam Spec. 301-SSa-1. Type 180 GXS or 180 GYS needle. Stitch range 7 to 18 per inch. Specify stitches per inch, thread size, needle type and size, attachment and guide. Maximum recommended speed 5500 R.P.M. depending on operation.
- 63400 YF For attaching pockets to shirt fronts and similar plain seaming operations on medium to medium heavy weight material, where matching plies and backtacking are necessary. The reverse feed can be used for back-tacking. 1 13/64 inch needle bar travel. Seam Spec. 301-SSa-1. Type 180 GXS or 180 GYS needle. Stitch range 7 to 18 per inch. Specify stitches per inch, thread size, needle type and size, attachment and guide. Maximum recommended speed 5500 R.P.M. depending on operation.

#### NEEDLES

Each Union Special needle has both a type number and a 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 the blade, measured in thousandths of an inch across the eye. Collectively, the type number and the size number represent the complete symbol, which is given on the label of all needles packaged and sold by Union Special.

Needle Type 180 GXS or 180 GYS are recommended for Styles 63400 XF and YF. The description and sizes available are listed below.

Type No.	Description and Sizes
180 GXS	Round shank, round point, lockstitch, short length, ball eye, single groove, wide angle groove, struck groove, deep spot, ball point, chromium plated - sizes 029, 032, 036, 040, 044, 049, 054, 060.
180 GYS	Round shank, round point, lockstitch, short length, ball eye, single groove, wide angle groove, struck groove, deep spot, chromium plated - sizes 029, 032, 036, 040, 044, 049, 054, 060.

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 180 GXS, Size ".036".

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

#### SELECTING THE SIZE OF THE NEEDLE

The strength requirement of the seam produced is largely dependent upon the size of thread employed. The quality of the work desired is largely dependent upon the size of the needle employed.

The following table shows the preferred size of needle for a given size and kind of thread. The choice, however, should give consideration to factors referred to above, which may dictate the selection of a needle size slightly larger or smaller than the size specified.

Cotton Thread Size	Mercerized Thread Size	Needle Size
0	-	060
30	В	054 to 060
36	A	049 to 054
40	A	044 to 049
50	0	044 to 049
60	00	040 to 044
70	000	036 to 040
80	0000	032 to 036
90	0000	032 to 036
100	-	029 to 032

#### IDENTIFYING PARTS

Where the construction permits, each part is stamped with its part number. Parts too small for a complete catalog stamping are identified by letter symbols which distinguish one part from another that is similar in appearance.

Part numbers represent the same part, regardless of the catalog in which they appear.

IMPORTANT! ON ALL ORDERS, PLEASE INCLUDE PART NAME AND STYLE OF MACHINE FOR WHICH PART IS ORDERED.

#### ORDERING OF REPAIR PARTS

The arrangement of this catalog is to facilitate easy and accurate ordering of replacement parts for Styles 63400 XF and YF.

The exploded view plates at the back, cover the differences between the Standard Styles listed in this catalog and Styles 63400 A and B covered in Catalog No. 121 M. Each plate presents a sector of the machine, parts being aligned as in their assembled position. On the page opposite the illustration will be found a listing of the parts with their part numbers, descriptions 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 the part in the illustration. Reference numbers should never be used in ordering parts. Always use the part number listed in the second column. Each exploded view plate carries a reference number for each part available for sale.

Sub-assemblies, which are sold complete, or by separate part, are in a bracket or a solid line box on the picture plate. 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.

In those cases where a part is common to all of the machines covered by this catalog, no specific usage will be mentioned in the description. However, when the parts for the various machines are not the same, the specific usage will be mentioned in the description, and, if necessary, the difference will be shown in the illustration.

#### 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 Machine Company, 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*. Genuine repair parts are stamped with the Union Special trade mark. Each trade mark is your guarantee of the highest quality in materials and workmanship.

#### TERMS

Prices are strictly 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 the postage and insurance.

#### INSTALLING

CAUTION! When unpacking, DO NOT lift machine out of box by placing one hand on handwheel. Using both hands on bed casting, lift gently.

Before leaving factory, each Union Special machine is sewed off, inspected and carefully packed. After the machine and accessories have been removed from the packing box, the following steps should be followed:

#### PREPARATION OF MACHINE FOR INSTALLATION

A bag of assembly parts, consisting of one frame thread eyelet, one eyelet attaching screw, one extra bobbin, two hinge studs and two screws for holding miscellaneous attachments to the bed plate, is packed with each machine.

Insert hinge studs in holes provided for them in rear of cloth plate. Assemble the upper frame eyelet (A, Fig. 2A).

#### STANDARD ACCESSORIES

Included also with each machine, is a box of STANDARD ACCESSORIES -- containing one bobbin winder assembly, the machine mounting frame, one oil drain jar and its clamp spring, one knee lifter assembly and its rubber pad, bed positioning spring and screw, four isolator pads and clips, and one machine rest pin. These parts are essential when setting up the machine.

#### TABLE TOPS

Lockstitch machines are installed in table tops, prepared with cut-out, so that the bed plate is FLUSH with the top of the machine mounting frame.

#### MACHINE MOUNTING FRAME INSTALLATION

On a suitable tableboard, place machine mounting frame (21393 N) in the machine cut-out with the hinge lugs to the rear (Fig. 1). Insert the countersunk wood screw through left hinge pad and tighten securely. Assemble bed positioning spring (63474 A) over right hinge pad; insert round head wood screw and tighten securely. Assemble the retaining plate (21393 R) to outside front of pan section, as shown, and snug up nuts lightly.

Place sewing head in the frame mounting, and after being sure there is about 1/16 inch clearance between the cloth plate edge and the frame sides, rap the retaining plate smartly upward with a hammer to insure a good grip on the underside of the board and tighten locking nuts securely.

Tip machine back against the rest pin, and assemble the knee press assembly as shown. All end play of the cross shaft should be taken up by the cone bearings, but must not bind.

#### MACHINE MOUNTING FRAME INSTALLATION (Continued)

Before the machine is put into production, the bell crank (21665 J) of the knee lifter rod should be adjusted. The left stop screw (22597 F) should be set so that the maximum lift of the presser bar and its parts do not interfere with the moving parts within the head. This may be done by setting the stop screw so that the presser bar raises approximately 5/16 inch.

#### **BOBBIN WINDER**

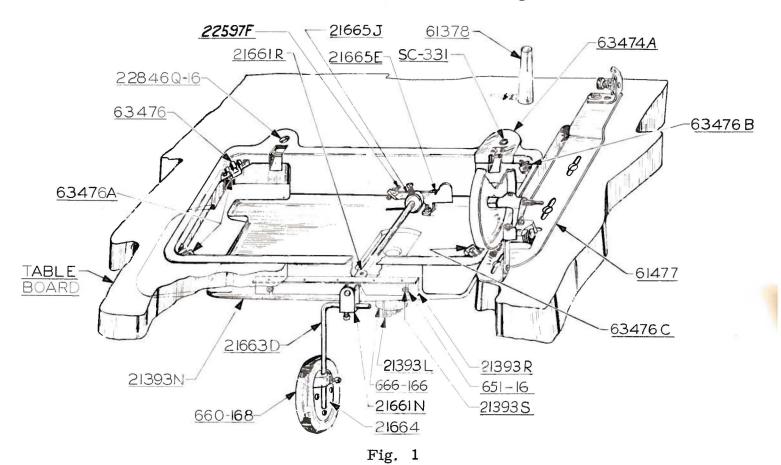
The bobbin winder should be secured to the table top so that its pulley will be located directly infront of the sewing machine belt and will bear against the belt when in operation. The base of the winder has two elongated attaching holes, which allow the mechanism to be moved closer to or farther away from belt as needed. The pulley of the winder, when in operation, should exert only enough pressure against the belt to wind the bobbin. Regulation and operation of the bobbin winder is described under "Winding the Bobbin", under OPERATOR'S INSTRUCTIONS, in Catalog No. 121M.

#### BELTS

These machines are equipped to use either #1 "Vee" or round belts.

#### THREADING

Thread machine as indicated in Fig. 2A. Check spring threading with dimensional requirements, has been enlarged for clarity and described under paragraph on "THREAD CONTROL". Needle is threaded from left to right.



#### OILING

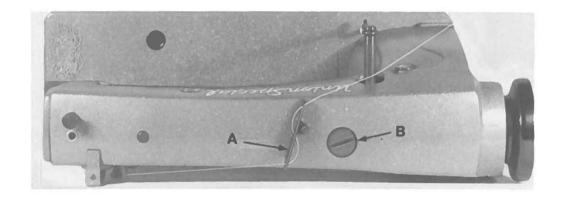
CAUTION! Oil has been drained from the main reservoir before shipment and the reservoir must be filled before starting to operate.

Fill main reservoir at plug screw (B, Fig. 2A) and check oil level at gauge (C); oil is at maximum level when needle is in yellow band marked "FULL". Oil should be added when needle is in yellow band marked "LOW". Use a stainless water-white straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit in the main reservoir. This is equivalent to Union Special specification No. 175.

Oil may be drained from main reservoir by removing plug screw located on the left in the oil reservoir cover.

The quantity of oil supplied to the hook is controlled by dial located on the front of the machine just below the cloth plate. Turning the dial in the direction of the arrow (counterclockwise) increases the oil flow and in a clockwise direction decreases the flow of oil.

It is recommended that a new machine, or one that has been out of service for a long period, be lubricated by removing the head cover and oiling all the moving parts. After oiling, replace head cover as no further hand oiling will be required. Run machine slowly for several minutes to distribute oil to the various parts. Full speed operation can then be expected without damage.



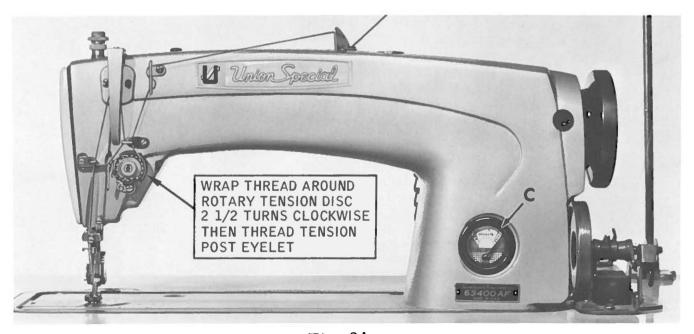


Fig. 2A

#### INSTRUCTIONS FOR MECHANICS

The adjusting instructions for Styles 63400 XF and YF are the same as for Styles 63400 A and B covered in Catalog No. 121 M, with the additions as follows:

#### FEED DOG SETTING

The feed dog must be centered in the feed slots of the throat plate and leveled in both directions, across the line of feed as well as in the line of feed. It should rise approximately 3/64 inch above the throat plate at the top of its stroke.

#### CHANGING THE STITCH LENGTH

To change the stitch length, loosen knurled locknut (A, Fig. 28) and turn the feed adjusting screw (B). Turning the screw clockwise decreases the stitch length (resulting in more stitches per inch) and turning the screw counterclockwise acts the reverse. Tighten locknut (A) after obtaining the desired stitch length.

NOTE: After setting the stitch length, make sure the feed dog has equal clearance at the front and back in both the forward and reverse feed direction.

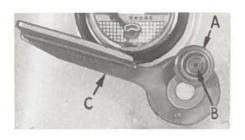


Fig. 28

#### SETTING THE REVERSE FEED MECHANISM

NOTE: The reverse feed is actuated by pushing down on the reverse feed control lever (C, Fig. 28) and the reverse feed will continue to operate as long as the control lever is held down.

Set the stitch length at 12 stitches per inch, on both the forward and reverse feed. This can be checked using heavy paper or very light cardboard. To obtain 12 stitches per inch on the forward and reverse feed,

it may require adjustments of both mechanisms. After making an adjustment to one feed, check the stitches per inch in both directions, because an adjustment to one feed will affect the travel of the other. To change the stitch length of the forward feed, refer to paragraph on "CHANGING THE STITCH LENGTH".

The reverse feed travel can be changed by adjusting the stitch control lever (A, Fig. 29). This can be accomplished by tipping the machine back against the rest pin and loosening clamp screw (B). When the machine is in this position move the control lever (A) toward you to increase the reverse feed travel or away from you to decrease the travel. Retighten clamp screw (B) after making an adjustment and check the stitch length in both directions.

NOTE: Once the forward and reverse feed has been set at 12 stitches per inch, a change in stitch length can be made as described under "Changing The Stitch Length", the reverse feed will not have to be adjusted, you should get approximately the same number of stitches in both directions.

CAUTION! On machines equipped with a treadle control reverse feed lever (A, Fig. 30) remove this lever before tipping machine back against the rest pin.

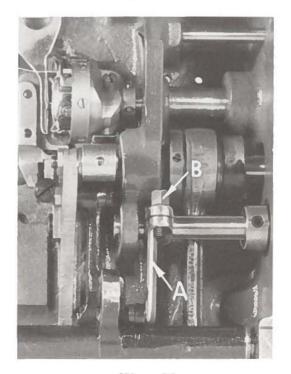


Fig. 29

If equal stitch length, forward and reverse cannot be obtained by adjusting the stitch length control lever, adjustment should be made to the feed linkage located inside the machine. The feed linkage is pre-set at the factory and may be checked as follows:

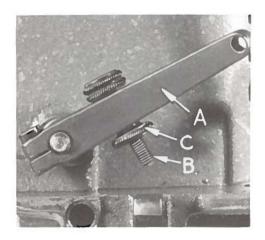


Fig. 30

Drain machine of oil and remove the bottom reservoir cover. Set the machine at zero stitches perinch. Loosen holding screw (A, Fig. 31) and move the stitch regulator plunger lever (B), so the center of screw (C) is 23/32 inch above the bottom of the base. Retighten holding screw (A) and replace the bottom reservoir cover. Now adjustment can be made to the reverse feed control lever as described earlier.

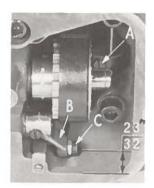


Fig. 31

On machines equipped with a treadle control reverse feed lever (A, Fig. 30) hold down the reverse feed control lever (C, Fig. 28) and adjust the stop screw (B, Fig. 30) to stop against the bed casting. Lock stop screw (B) in this position with locknut (C). This is to prevent damage to the feed adjusting screw, when reverse feed is actuated by stepping on the treadle.

#### ADJUSTING THE FEEDING PRESSER FOOT

Adjust the presser spring regulator (A, Fig. 16A) so that approximately three (3) threads are visible above the bed casting.

Back off stop screw (B, Fig. 16A) in feeding presser foot. With the presser foot resting flat on the throat plate and feed dog down, adjust stop nut (C) until the adjusting lines on the presser foot bottom, line up with the centerline of the needle. Tighten lock nut (D).

Loosen screw (E, Fig. 16A) in presser bar guide (F), while holding down on presser bar (G) depress presser foot lifter lever and retighten screw (E). Release lifter lever.

Set the presser bar connection (A, Fig. 16B) so its top surface is 5 1/8 inches above the throat plate seat (See Fig. 16B). This is accomplished by tipping the machine back against the rest pin, loosening the locknut and relocating the stop screw in the lifter lever bell crank (61468 F). By turning the stop screw to the right or left, the proper setting for the presser bar connection is accomplished. Retighten the locknut to lock the stop screw in place. Release pressure on presser spring as required to reset the presser bar guide (F, Fig. 16A) allowing a 1/16 inch space between the guide and presser bar connection, be sure the presser foot is in alignment with the needle before tightening screw (E).

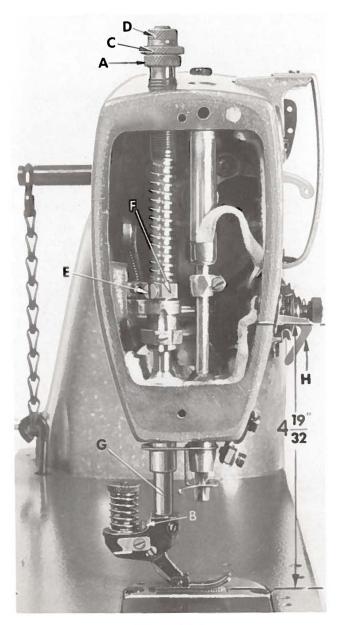


Fig. 16A

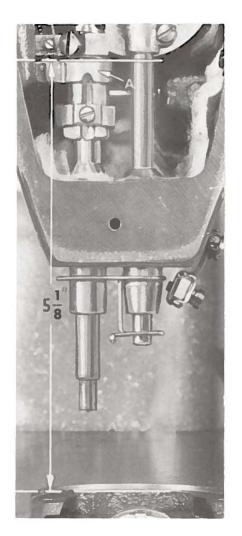


Fig. 16B

Remove nut (A, Fig. 18C) and presser spring (B) of the feeding presser foot and adjust stop nut (C) so that when the presser foot is pushed forward, the rear of the needle slot will not touch the needle. Lock in position with locknut (D). Replace

presser spring (B) and adjusting nut (A) on presser foot and adjust to 45/64 inch between the top of the yoke (E) and top of spring (B) with the feed dog down. Adjust stop screw (F) in feeding foot so that presser foot bottom slides rearward a maximum of 1/64 inch on throat plate when foot is lifted with feed dog down.

Lift feeding presser foot and check to see if bottom is parallel to throat plate. Should adjustment be necessary, remove the presser foot from the machine and loosen screw in bottom of presser foot shank to reposition leveling spring (G, Fig. 18C) as required to obtain proper position. Retighten screw.

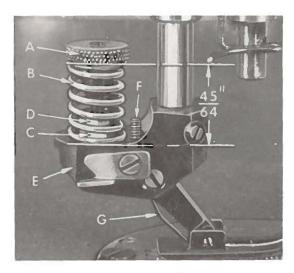


Fig. 18C

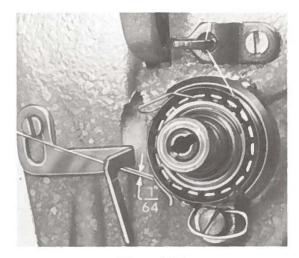


Fig. 18D

#### THREAD CONTROL

Set needle thread pull-up bracket (H, Fig. 16A) 4 19/32 inches from bottom (underside) of bracket to top of cloth plate (See Fig. 16A).

Set tension post eyelet so there is a 1/64 inch clearance between it and the thread running from the rotary tension to the thread pull-up bracket, with the check spring not threaded (See Fig. 18D). Set check spring 1/2 inch above bottom of thread pull-up bracket (See Fig. 18E). Thread machine as shown. Wind needle thread 2 1/2 times clockwise around rotary tension disc.

Set check spring tension so that check spring overthrows threadline slightly at bottom of check spring motion when machine is at speed.

Set needle and bottom thread tension as light as possible to produce a good stitch being sure check spring is acting properly.

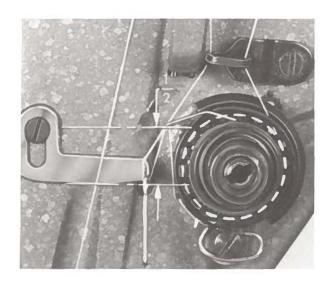
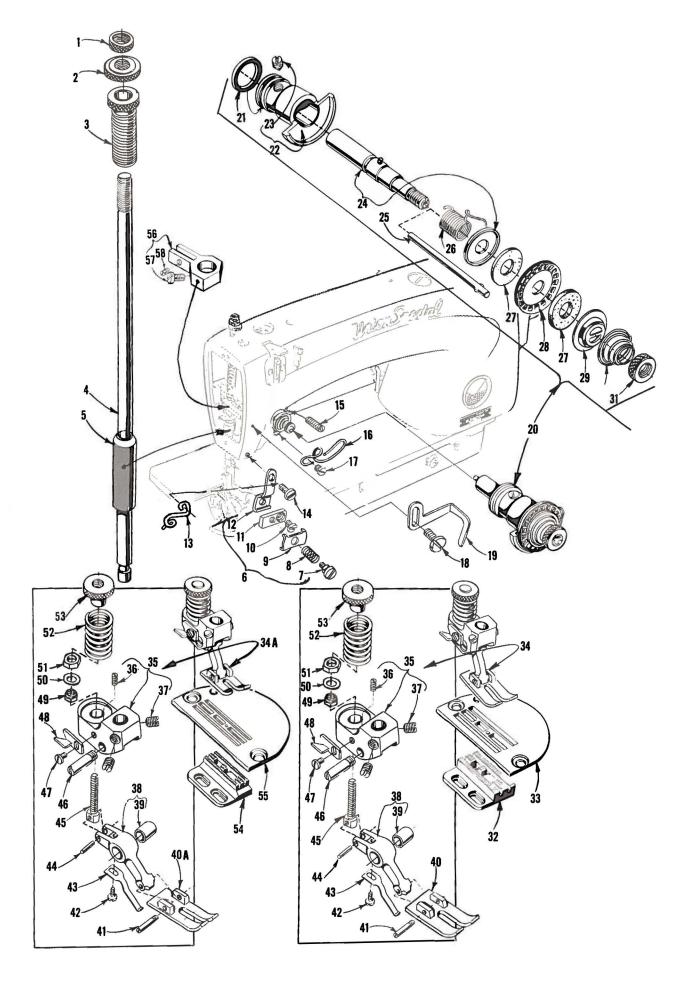


Fig. 18E

When sewing various materials, the pressure of the feeding foot presser spring may have to be changed to get good ply matching. Increasing the pressure will tend to feed the bottom ply faster and vice-versa.



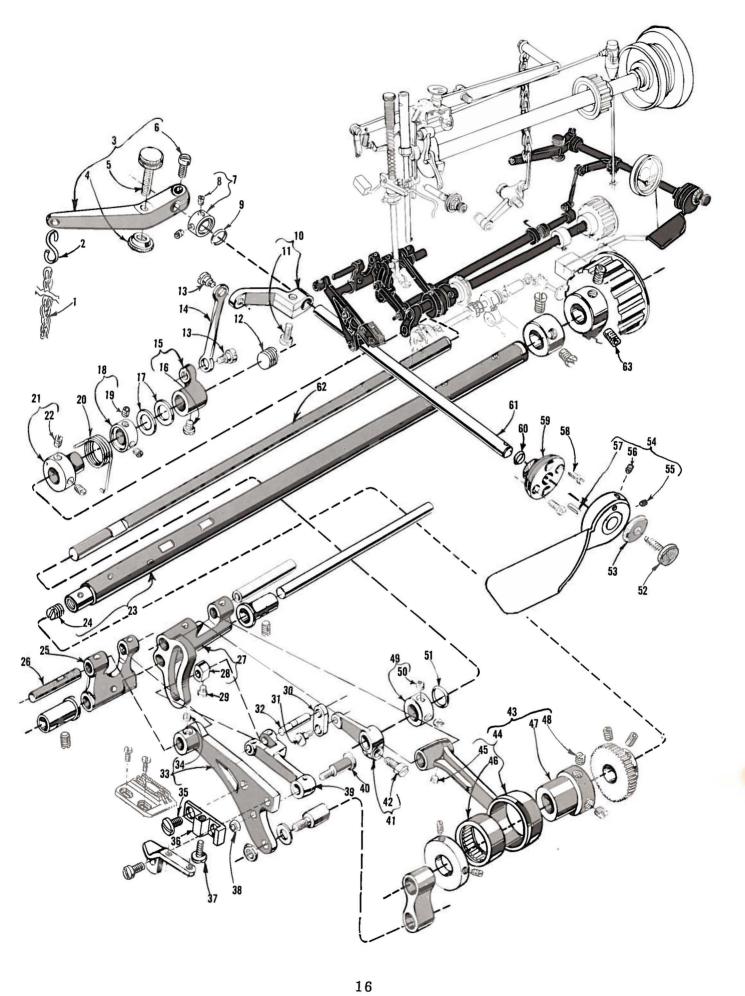
14

The parts illustrated on the opposite page and on page 16 and described on this page and page 17, represent the parts that are used on Styles 63400 XF and YF, but not used on Styles 63400 A or B respectively.

Use Catalog No. 121 M (Styles 63400 A or B) for all parts not illustrated or described in this catalog.

Reference numbers that are inside a bracket or box on the picture plate and have indented descriptions, indicate they are component parts of a complete part or assembly.

Ref.	Part		Amt.
No.	No.	Description	Req.
	C2457 34	T cale Niet	1
1	63457 M	Lock Nut	1
2	63457 L 61257 G	Presser Spring Regulator and Bushing	1
3	51257 G	Presser Bar	1
4		Presser Bar Bushing, lower	1
5	63957 A	Nipper Spring Assembly	I
6	21390 BE	Screw, for nipper spring	1
7	57 WD	Ninner Chaint	1
8	57 WC	Nipper Spring Plate	1
9	57 WB	Screw	1
10	22564 B	Nipper Base	1
11	63471	Nipper Spring Mounting Bracket	1
12	63471 A	Lower Needle Thread Eyelet	1
13	63470 S 90	Screw, for nipper spring assembly	1
14	100100	Screw, for tension assembly	1
15	12935 A	Tongian Dogs Socket Evolet	1
16	63992 A	Tension Post Socket Eyelet	1
17	HS24 C 22513	Screw, for thread pull-up bracket	1
18	63970 A	Thread Pull-up Bracket	
19 2 <b>0</b>	29475 BE	Potany Needle Tengion Assembly	1
21	660-269 A	Rotary Needle Tension Assembly	1
22	63992	Tension Post Socket	1
23	22560 G	Set Screw	1
24	63492 A	Tension Post	1
25	63492 B	Tension Release Pin	1
26	63453 N	Take-up Spring	1
27	61492 T	Felt Washer	2
28	61492 S	Rotary Tension Disc	1
29	61492 H	Tension Release Washer	
30	63492 C-4	Tension Spring	1
31	61292 C	Tension Nut	1
32	61405 AA	Feed Dog, 22 teeth per inch, for wide feed combination	1
33	61424 AA-063	Throat Plate, .063 inch needle hole, for wide feed combination	1
34	63420 J	Presser Foot, for wide feed combination	î
34A	63420 H	Presser Foot, for narrow feed combination	î
35	63430 U	Voke	1
36	22785	Screw	1
37	22560 B		
38	63430 T	Presser Foot Link, marked "C"  Bushing	ī
39	56330 AP	Bushing	1
40	63430 W		
		63420 J	1
40A	63430 S	Presser Foot Bottom, marked "BU", for presser foot No.	
	TO THE PROPERTY OF THE PROPERT	63420 H	
41	22799 AB	Hinge Pin Screw	1
42	73 A	Screw for hinge spring	1
43	56330 AS	Hinge Spring	1
44	56330 AJ	Hinge Pin	1
45	56330 AG	Regulating Screw	1
46	56330 AF	Link Hinge Screw	1
47	604	Screw, for chain cutting knife	1
48	52930 AC	Chain Cutting Knife, marked "D"	1
49	51430 F	Screw, for chain cutting knife	1
50	56330 AU	Washer	1
51	41071 G	Lock Nut	1
52	56330 AD	Compression Spring	1
53	63430 V	Regulating Nut	1
54	61405 AB	Feed Dog, 22 teeth per inch, for narrow feed combination	1
55	61424 AB-063	Throat Plate 063 inch needle hole, for narrow feed combination -	1
56	63459 B	Presser Bar Guide	1
57	22570	Screw	1
58	73 C	Screw	1



#### REVERSE FEED MECHANISM PARTS

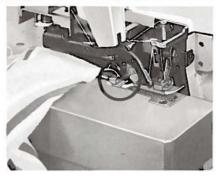
Ref. No.	Part No.	Description	Amt Req
×1	421 D-28	Treadle Chain, 28 inches long	1
*2	660-264	"S" Hook, for treadle chain	2
*3	63444 A	Reverse Feed Foot Control Operating Lever	1
4	64 B	Lock Nut, for stop screw	1
5	64 A	Stop Screw, foot control operating lever	1
6	22517	Clamp Screw	1
7	63444 C	Collar, for reverse feed control shaft	1
8	22894 W	Set Screw	2
9	660-206	"O" Ring, for reverse feed control shaft	
10	63444 D	Screw	1
$\frac{11}{12}$	93 22539 M	Plug Screw, for reverse feed shaft	1
13	86	Screw, for reverse feed control connecting link	2
14	63444 E	Reverse Feed Control Connecting Link ========================	
15	63444 F	Reverse Feed Shaft Lever, right	Î
16	22570 A	Screw	ī
17	39552 C	Thrust Wacher for night reverse feed shaft lever	2
18	63432 H	Collar, right, for reverse feed shaft return spring	1
19	22894 W	Set Screw	2
20	G61447	Reverse Feed Shaft Return Spring	1
21	G61448	Collar, left, for reverse feed shaft return spring	1
22	531	Feed Driving Shaft	2
23	63432 F	Plug Screw	
24 25	22586 G61436	Feed Rocker	1 1
26	63435	Feed Rocker Shaft	1
27	G61436 A	Reverse Feed Rocker, with drive crank	1
28	G61436 C	Reverse Feed Rocker, with drive crank	ī
29	22830	Screw, for sliding block (used in place of screw No. 88 B)	1
30	63433 B	Reverse Food Lever Link	1
31	99284	Screw, for left reverse feed shaft lever	1
32	96505	Screw, for left reverse feed shaft lever	1
33	<b>634</b> 34 B	Feed Bar	1
34	88	Set Screw	1
35	88 D	Screw, feed dog holder support	
36	G61439 A	Screw, for feed dog holder support	1
37 38	22775 A 12934 A	Nut, for reverse feed rocker link stud	1
39	G61436 B	Reverse Feed Rocker Link	1
40	99285	Reverse Feed Rocker Link Stud	1
41	63436 U	Reverse Feed Shaft Lever, left	1
42	22519 H	Clamp Screw	1
43	29126 EF	Earl Duising Propertie Associates and annual property of the Control of the Contr	1
44	61438 A	Connecting Rod	1
45	88	Set Screw	1
46	660-225	Needle Bearing	1
47	63437 C	Feed Driving Eccentric	1 0
48	95	Set Screw	2
49 50	63432 H 22894 W	Set Screw	1
51	660-207	"O" Ring, for reverse feed shaft	1
52	99282	Adjusting Screw for adjusting stitch length	1
53	99283	Adjusting Screw, for adjusting stitch length	î
54	63444 G	Reverse Feed Hand Control Operating Lever	ī
55	22894 P	Reverse Feed Hand Control Operating Lever	<u>1</u>
56	22894 U	Snot Screw	1
5 <b>7</b>	1246 L-1/2	Drive Pin	1
58	97	Screw, for reverse feed stitch control flange	2
59	63449	Reverse Feed Stitch Control Flange	1
60	660-206	"O" Ring, for reverse feed stitch control flange	l
61 62	63444 B	Reverse Feed Control Shaft	<u> </u>
63	63432 G 22651 CD-5	Screw, for feed driving shaft sprocket (used in place of screw No.	T.
55	22001 CD 0	22653 D-6)	2

<sup>\*</sup> Not furnished with machine, available as an extra send and charge item, where a foot treadle is desirable for operating the reverse feed mechanism.

## BOOST PRODUCTION WITH THESE WORK AIDS FROM UNION SPECIAL







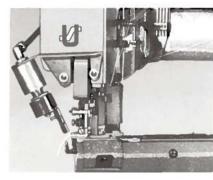
PNEUMATIC CHAIN-CUTTER—for use on conventional Class 39500 and 39600 is a durable scissor-action mechanism that makes a clean positive cut. Style 2899 A-1



PNEUMATIC FOOT LIFTER—The airoperated foot lifter for use on Class 39500 machines allows the operator to raise the foot simply by knee-touching an actuating switch.



AIR FABRIC UNCURLER—This unit, designed for Class 39500 machines, uses air jets to remove curls from top and bottom plies of flat knit materials as fabric passes through sewing area. Style 2899 B-1



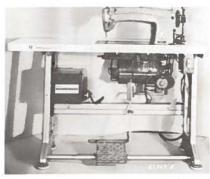
CHAIN CUTTER—The above photo shows the small pneumatic chain cutter that is available for installation as an accessory unit of Class 36200 Flatseamers. Style 2899 A-6

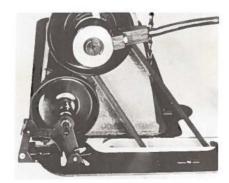


KNIFE GRINDER sharpens straight or angle type knives, is simple and easy to operate, eliminates defective garments caused by dull knives.



HEAT DISPELLER—Union Special's auxiliary unit (arrow) is an effective means for reducing oil temperature where heavy duty service requires it. Style 2899 E-1





AMCO ELECTRONIC NEEDLE POSITIONERS eliminate the necessity of reaching for the handwheel to move the needle up or down . . . this allows the operator to keep both hands on the work, insuring better control, uniform quality and increased production.

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



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No. 249, "Rainwear"

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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"

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No. 263, "Men's Clothing"

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

No. 265, "Women's Wear"

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