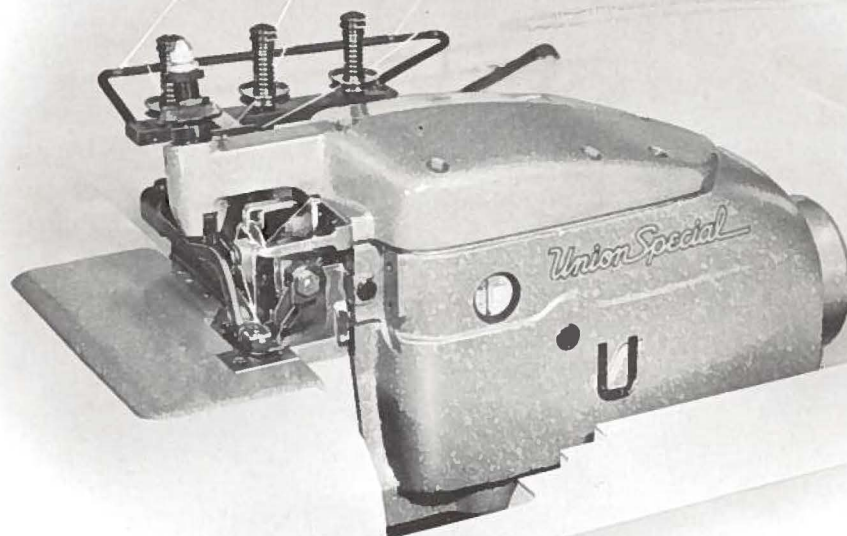


FINEST QUALITY

Union Special®
LEWIS • COLUMBIA

**INDUSTRIAL
SEWING
MACHINES**

**STYLE
39500AK**



CLASS 39500

**STREAMLINED
HIGH SPEED OVERSEAMERS**

**CATALOG
No.
103AK**

Union Special **MACHINE COMPANY**

CHICAGO

From the library of: Superior Sewing Machine & Supply LLC

Catalog No. 103 AK
(Supplement to Catalog No. 103 S)

INSTRUCTIONS
FOR
ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 39500

Style
39500 AK

The parts listed in this catalog are
furnished at list prices for repairs only.

First Edition

Copyright 1962
by
Union Special Machine Co.
Rights Reserved in All Countries

Union Special
MACHINE COMPANY
INDUSTRIAL SEWING MACHINES
CHICAGO

Printed in U.S.A.

IDENTIFICATION OF MACHINE

Each Union Special machine is identified by a Style number which is stamped into the 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 39500 AK". 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 39500 AKZ".

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: "39500".

APPLICATION OF CATALOG

This catalog is a supplement to Catalog No. 103 S and should be used in conjunction therewith. Only those parts which are used on Style 39500 AK and not on Style 39500 B are illustrated and listed at the back of the book.

This catalog applies specifically to the Standard Style of machine 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 away from the operator.

STYLE OF MACHINE

Single Curved Blade Needle, Two Looper, Three Thread, Low Throw, Overseaming Machine, Differential Feed, Trimming Mechanism with Spring Pressed Lower Knife and Variable Width Knife Shift Mechanism, Automatic Lubricating System.

39500 AK For seaming light and medium weight flat, warp and ribbed knit fabrics of cotton, silk, or similar weight synthetics. For general purpose seaming on "T" shirts, polo shirts, panties and similar garments which have varying plies of material requiring an adjustable bite. The variable width knife shift mechanism permits quick change from narrow to wide bite when crossing elastic, lace, etc. Seam specification, 504-SSa-1; standard seam widths, 3/32 and 1/8 inch; stitch range, 8 to 30 per inch; cam adjusted main and differential feeds.

OILING

CAUTION! Oil was drained from machine when shipped, so reservoir must be filled before beginning to operate. Oil capacity of Class 39500 is six ounces. A straight mineral oil of a Saybolt viscosity of 200 to 250 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.

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.

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.

IDENTIFYING PARTS

Where construction permits, each part is stamped with its part number. On some of the smaller parts and on those where construction does not permit, an identification letter is stamped in to distinguish the part from similar ones.

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

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

TERMS

Prices are strictly net cash and are 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.

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 the largest diameter of blade measured in thousandths of an inch, midway between the shank and the eye. Collectively, the type number and the size number is the complete symbol.

Style 39500 AK uses a curved blade needle. The standard needle for this Style is Type 154 GAS. It has a round shank, round point, curved blade, standard length, single groove, struck groove, spotted, chromium plated in sizes 022, 025, 027, 029, 032, 036, 040, 044, 049, 054.

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 154 GAS, Size 027".

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

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.

CHANGING NEEDLES, ETC.

All instructions with regards to Changing Needles, Thread Stand, and Threading are the same as for Style 39500 B covered in Catalog No. 103 S.

ASSEMBLING AND ADJUSTING SEWING PARTS

All instructions pertaining to the adjustment of Style 39500 AK are the same as those for Style 39500 B, described in Catalog No. 103 S, except with the additional instructions pertaining to the variable width knife shift mechanism described below. These instructions and Fig. 13A should follow the two paragraphs on "Setting The Upper Knife", on Page 11.

SETTING THE VARIABLE WIDTH KNIFE SHIFT MECHANISM

Loosen set screws (A and B, Fig. 13A) on pawl shaft stop collars (C and D) and move knives (E and F) by pushing down on pawl lever (G) to position desired for obtaining the standard $\frac{3}{32}$ or $\frac{1}{8}$ inch seam width. From the operator's position while seated at the machine, rotate collar (C) clockwise to its upper position and tighten set screws (A). This will position the knives for the Standard seam width or constant trim line.

Next, move knives to the right to obtain the variable trim line desired by pushing down on lever (G) and rotate collar (D) counterclockwise to its upper position and tighten set screws (B). This will position the knives for the variable trim line when lever (G) is pulled downwardly, when crossing elastic, etc.

Screw (H) holds the variable shift mechanism in place, while screw (J) is used for holding the tension post mounting bracket.

NOTE: This machine is designed to give a maximum of $\frac{5}{64}$ inch travel of the cutting knives from the constant trim line to the variable trim line.

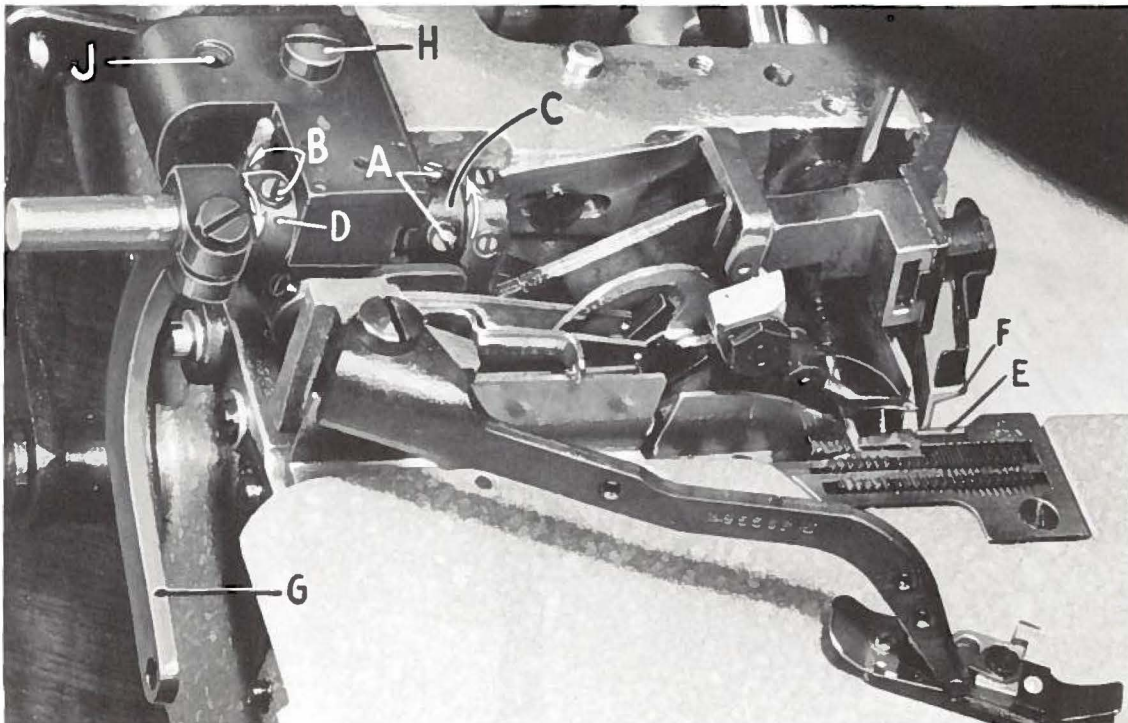
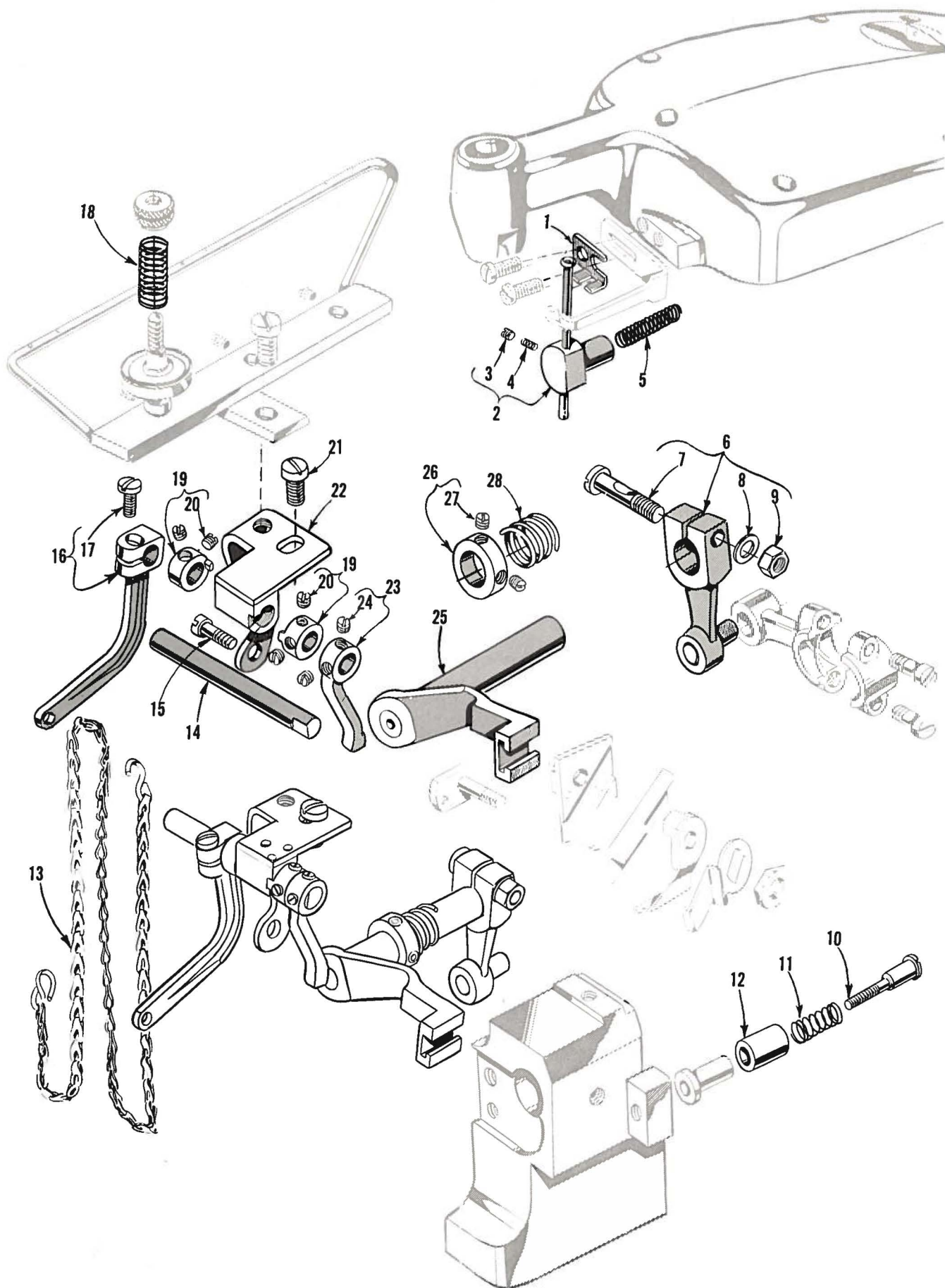


Fig. 13A



The parts illustrated on the preceding page and described on this page represent the parts used on Style 39500 AK, but not used on Styles 39500 A, B, P, or AF.

Parts shown in phantom views, bearing no reference numbers, are common to Styles 39500 A, B, P, AF, and AK.

Use Catalog No. 103 S for all parts not illustrated or described here.

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|---|--------------|
| 1 | 39573 Y | Thread Tube Guide ----- | 1 |
| 2 | 29477 HR | Upper Looper Thread Tube Assembly----- | 1 |
| 3 | 22743 | Screw - Tube Tension Spring----- | 1 |
| 4 | 39568 J | Looper Thread Tube Tension Spring----- | 1 |
| 5 | 39573 Z | Knife Support Block Spring ----- | 1 |
| 6 | 39573 W | Upper Knife Driving Lever ----- | 1 |
| 7 | 55235 D | Locking Stud - Driving Lever----- | 1 |
| 8 | 6042 A | Washer - Driving Lever ----- | 1 |
| 9 | 55235 E | Nut - Driving Lever ----- | 1 |
| 10 | 22559 H | Screw - Lower Knife Holder Locking Stud ----- | 1 |
| 11 | 39550 J | Lower Knife Pressure Equalizing Spring ----- | 1 |
| 12 | 39550 K | Spring Cover ----- | 1 |
| 13 | 421 D-34 | Treadle Chain, 34 inches long ----- | 1 |
| 14 | 39573 N | Knife Regulating Pawl Shaft----- | 1 |
| 15 | 22572 A | Screw - Pawl Shaft Support Bracket ----- | 1 |
| 16 | 39573 S | Pawl Lever----- | 1 |
| 17 | 93 | Screw - Pawl Lever ----- | 1 |
| 18 | 51292 F-5 | Looper Thread Tension Spring ----- | 2 |
| 19 | 39573 P | Pawl Shaft Stop Collar ----- | 2 |
| 20 | 88 | Screw - Pawl Shaft Stop Collar ----- | 2 |
| 21 | 22891 | Screw - Pawl Shaft Support Bracket ----- | 1 |
| 22 | 39573 M | Pawl Shaft Support Bracket ----- | 1 |
| 23 | 39573 R | Knife Regulating Pawl----- | 1 |
| 24 | 88 | Screw - Knife Regulating Pawl----- | 2 |
| 25 | 39573 T | Upper Knife Driving Arm----- | 1 |
| 26 | 39573 U | Upper Knife Driving Arm Collar ----- | 1 |
| 27 | 22894 W | Screw - Upper Knife Driving Arm Collar ----- | 2 |
| 28 | 39573 V | Upper Knife Driving Arm Spring ----- | 1 |



Union Special[®]
INDUSTRIAL SEWING MACHINES

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, QUEBEC

BRUSSELS, BELGIUM

LEICESTER, ENGLAND

LONDON, ENGLAND

PARIS, FRANCE

STUTTGART, GERMANY

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

Union Special

MACHINE COMPANY

404 N. FRANKLIN ST., CHICAGO 10, ILL.