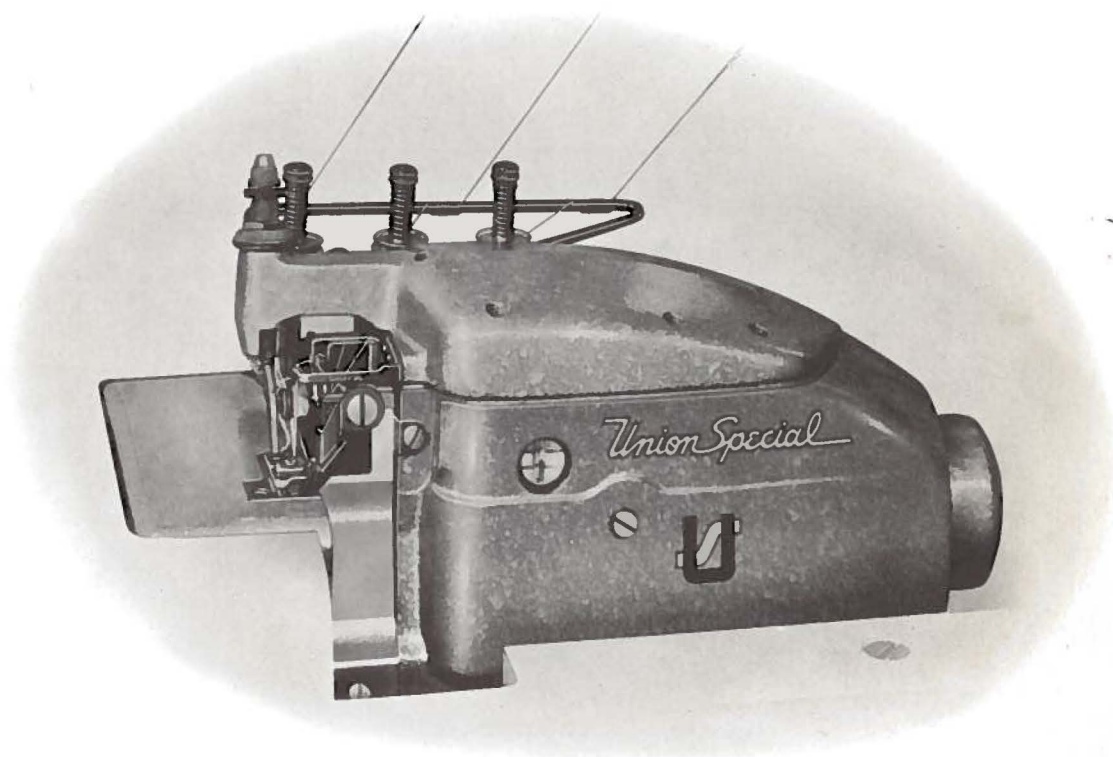




Union Special[®]
LEWIS • COLUMBIA

INDUSTRIAL
SEWING
MACHINES

STYLE
39500AR



CATALOG
No.
103AR

CLASS 39500

STREAMLINED
HIGH SPEED OVERSEAMERS

Union Special MACHINE COMPANY

CHICAGO

From the library of: Superior Sewing Machine & Supply LLC

INDUSTRIAL SEWING MACHINES

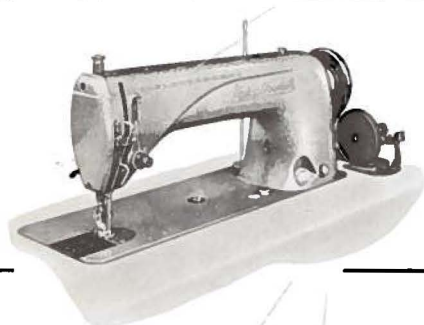
... for Every Purpose!

Job requirements vary — that's why Union Special builds a wide variety of specially designed sewing machines. It is also the reason why Union Special field representatives make a careful study of requirements before giving you detailed recommendations on the kind of equipment to install. Plants equipped with modern, high speed Union Specials have an important advantage. Union Special machines are built to do the job faster . . . better . . . cheaper, and they stay on the job with minimum time out for repairs. You're ahead when you use Union Special.



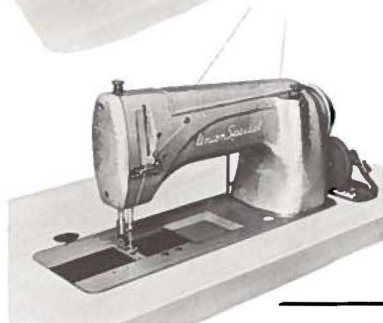
50000 SERIES MACHINES

The thousands of manufacturers using Union Special's new 50000 SERIES machines are finding these ultra-modern, streamlined models to be invaluable aids in cutting costs of operations and boosting production of a wide variety of products. Each of the many machines in the improved 50000 SERIES is specially designed to do a specific job efficiently, quickly, and economically!



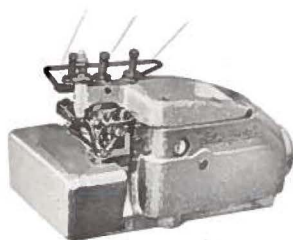
THE 61400 LOCKSTITCH

Never before has a general purpose Lockstitch machine been so thoroughly engineered for handling modern industrial sewing requirements! And never has a machine offered more than the new Union Special SIXTY-ONE-FOUR — a superior machine for light or heavy weight work . . . for short runs as well as long . . . for tacking and back stitching . . . for curved seams and straight runs.



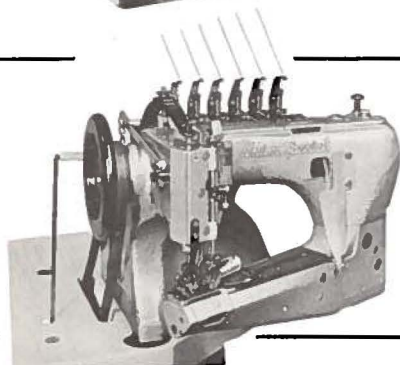
NEEDLE FEED LOCKSTITCH MACHINES

Latest improvements in engineering, manufacturing methods, and materials have been combined in Union Special Class 61800 and Class 62200 needle feed Lockstitch machines providing operators with smooth, streamlined, light-running machines that reduce fatigue and strain. It's no wonder that manufacturers in plants throughout the country are praising the superior performance of these ultra-modern machines!



THE NEW CLASS 39500 OVEREDGER

This new development antiquates every machine presently on the market for use where a curved needle machine is recommended. From its handsome, dynamically functional, modern design to its innermost mechanism, the THIRTY-NINE-FIVE has been produced to accelerate quicker . . . run faster . . . operate more smoothly and quietly . . . with less maintenance . . . and yield a greater profit than any other like equipment available to users today.



35700-35800 FEED-OFF-THE-ARM MACHINES

Union Special's popular feed-off-the-arm felling machines are light running, smooth operating machines that offer great advantages: sewing head of the latest type, new presser bar which practically eliminates feed marking, and presser foot which will lift at the lightest touch. Faster felling is certain with Union Special Class 35700-35800 feed-off-the-arm machines.

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

INSTRUCTIONS
FOR
ADJUSTING AND OPERATING
LIST OF PARTS

CLASS 39500

Style

39500 AR

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

First Edition

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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 AR". 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 ARZ".

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 AR, and not on Style 39500 P, 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 Or One Looper-One Spreader-Two Thread, High Throw, Overseaming Machine. Differential Feed, Trimming Mechanism With Spring Pressed Lower Knife, Automatic Lubricating System.

39500 AR For break open seaming and attaching elastic to girdles and foundation garments with either a two or three thread stitch. Machine can be used with or without the standard trimming knives. For those who do not wish to trim the material, a fabric guide is included. Seam specification, 503 or 505-SSa-1, hinged open to make LSa-1; standard seam width 1/4 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 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.

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 AR uses a curved blade needle. The standard needle for this Style is Type 154 GHS. It has a round shank, round point, curved blade, standard length, single groove, ball point, struck groove, spotted, chromium plated, in sizes 025, 027, 029, 032, 036, 040.

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 GHS, Size 032".

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.

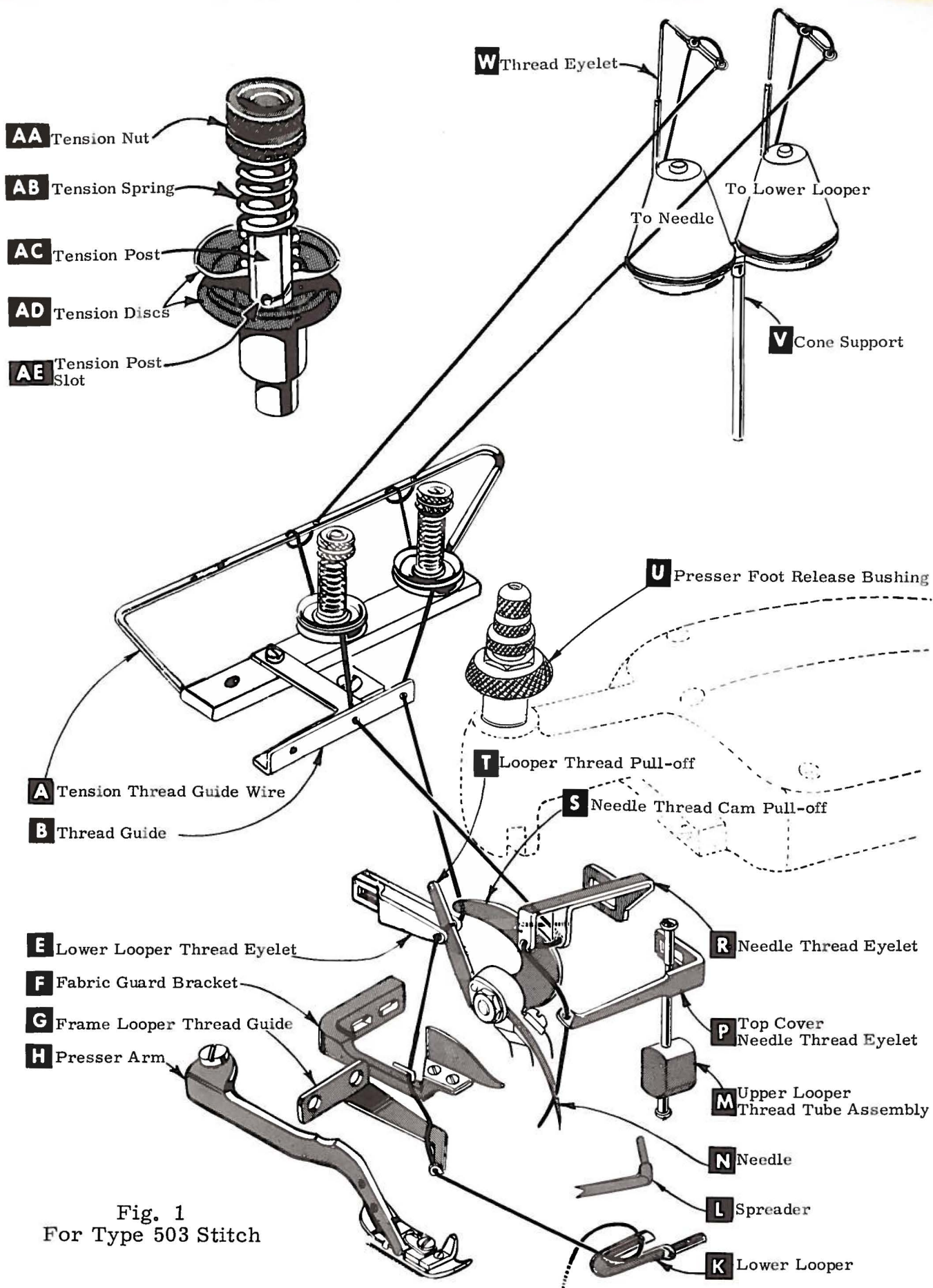


Fig. 1
For Type 503 Stitch

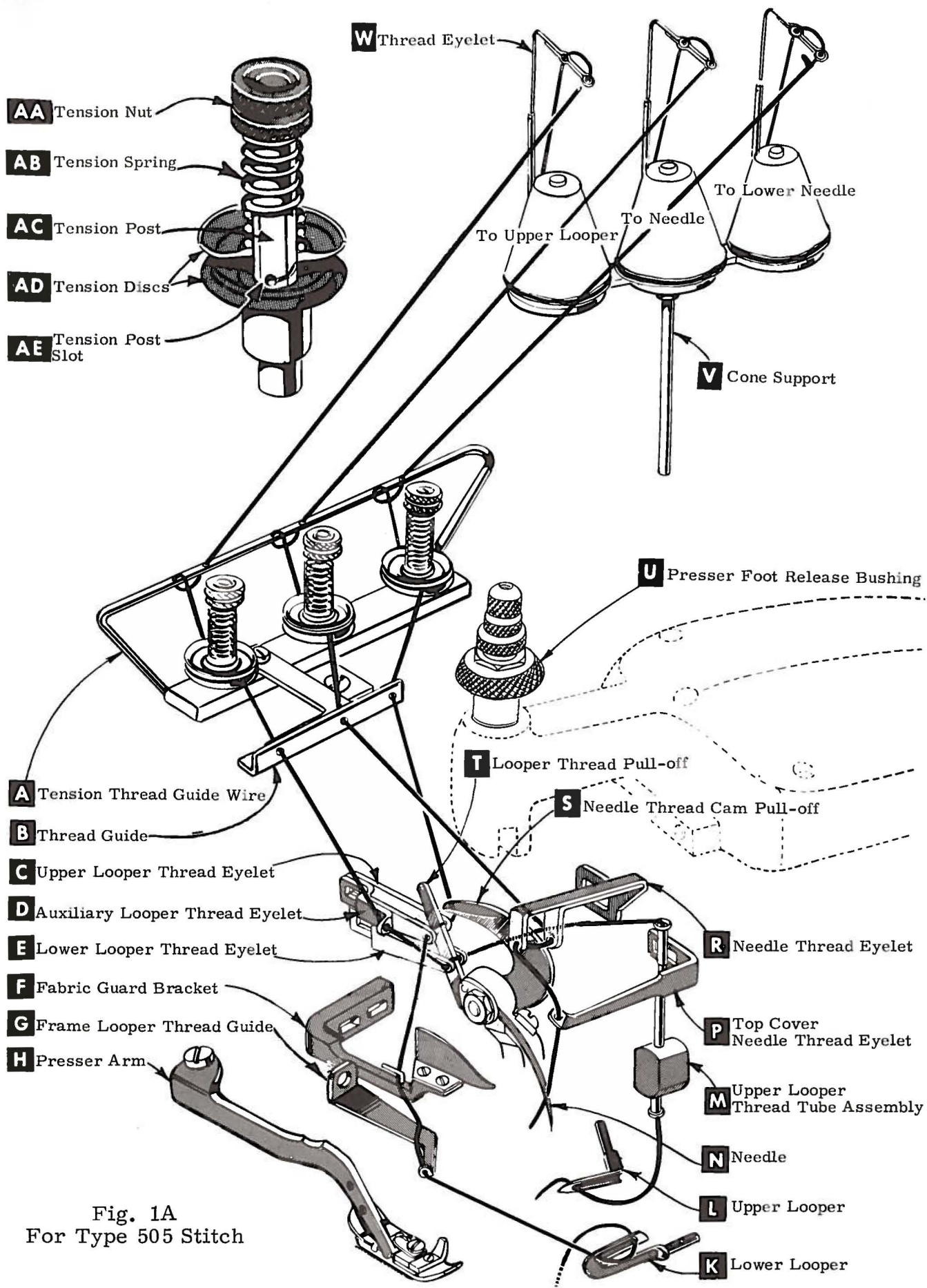


Fig. 1A
For Type 505 Stitch

CHANGING NEEDLES, ETC. (Pages 5 and 6)

All instructions with regards to Changing Needles, ThreadStand, Threading, etc., are the same as those for Style 39500 P covered by Catalog No. 103 S with the following exceptions. The differences, applicable only to Style 39500 AR, are underlined below with page numbers where each is found in Catalog No. 103 S.

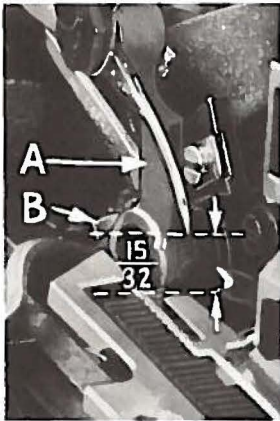


Fig. 3

Be sure threads, as they come from the tension thread guide, are between tension discs (AD) and in diagonal slots (AE) in tension posts (AC).

Use threading diagram (Fig. 1) for Type 503 stitch, and use threading diagram (Fig. 1A) for Type 505 stitch.

TO THREAD LOWER LOOPER (Page 6)

Double end of thread and lead it through both eyes of upper looper thread eyelet (C, Fig. 1 and Fig. 1A) from right to left. Note: thread must pass in front of looper thread pull-off (T). Lead thread behind fabric guard (F) and through hole of frame looper thread guide (G). Turn handwheel in operating direction until heel of lower looper (K) is all the way to the left; then, thread through both eyes from left to right. Left eye of lower looper can be threaded easily if tweezers are in left hand.

TO THREAD UPPER LOOPER (Page 6)

Turn handwheel until point of upper looper (L) is all the way left. Lead thread through auxiliary looper thread eyelet (D) from back to front, then through both eyes of lower looper thread eyelet (E) from left to right. Note: thread must pass in front of looper thread pull-off (T). After pulling up upper looper thread tube assembly (M), lead thread under neck of top cover casting and down through thread tube assembly (M). Pull thread out bottom of tube; push tube down, then insert thread through upper looper eye from front to back.

CAUTION! Be sure upper looper thread is under lower looper thread when passing from tube assembly to upper looper eye.

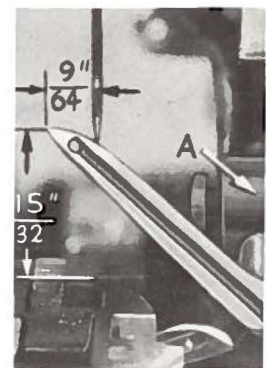


Fig. 10

ASSEMBLING AND ADJUSTING SEWING PARTS (Page 8)

All instructions pertaining to the adjustment of Style 39500 AR are the same as those for Style 39500 P covered by Catalog No. 103 S with the following exceptions. The differences, applicable only to Style 39500 AR, are underlined on following page with page numbers where each is found in Catalog No. 103 S.

SETTING THE NEEDLE (Page 8)

With throat plate in position, needle should center in the front end of needle slot. When needle is at high position, needle point should be set $\frac{15}{32}$ inch above throat plate (Fig. 3). Move needle driving arm (A, Fig. 3) by loosening clamp screw (B). Remove throat plate.

SETTING THE UPPER LOOPER (Page 10)

NOTE: For Style 39500 AR, the dimensional setting should be as in Fig. 10. Dimension $\frac{15}{32}$ inch is increased by turning upper looper holder counterclockwise looking from left end of machine; dimension $\frac{9}{64}$ inch is increased by pulling upper looper holder left, out of upper looper shaft. After these changes are made, it may be necessary to turn upper looper around its shank slightly to maintain the condition shown in Fig. 9.

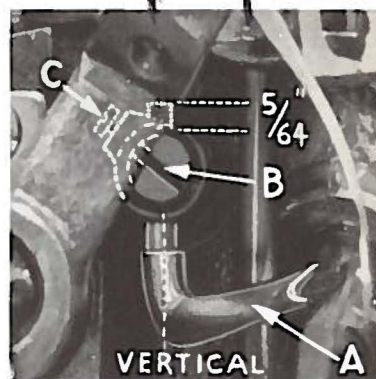


Fig. 8A

When the correct setting is obtained, it can be checked quickly as follows: As upper looper is moving to the right, when upper looper eye centers on the needle, the eyes of the upper looper and needle should align exactly (Fig. 11).



Fig. 9A

NOTE: "Setting the Spreader" will be used in place of "Setting the Upper Looper", when making adjustments for Type 503 stitch.

SETTING THE SPREADER

Insert spreader (A, Fig. 8A) in its holder. Screw (B, Fig. 8A) holds spreader in its holder, and permits spreader to be pushed in or out or turned around its shank. Screw (C, Fig. 8A) on collar holds spreader holder in the shaft, and allows holder to be rotated or adjusted laterally.

Preliminary Setting: When spreader is at the right end of its stroke, spreader holder should be set to position spreader shank about vertical (Fig. 8A). Top end of spreader shank should extend about $\frac{5}{64}$ inch above holder (Fig. 8A).

Set spreader to pass just behind eye of lower looper, with approximately .002 inch clearance between spreader and lower looper (Fig. 9A).

Next, turn handwheel until spreader is at left end of its travel; check setting so lower point of spreader extends about $\frac{5}{32}$ inch to left of needle (Fig. 10A).

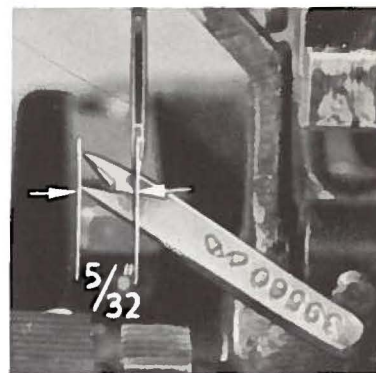
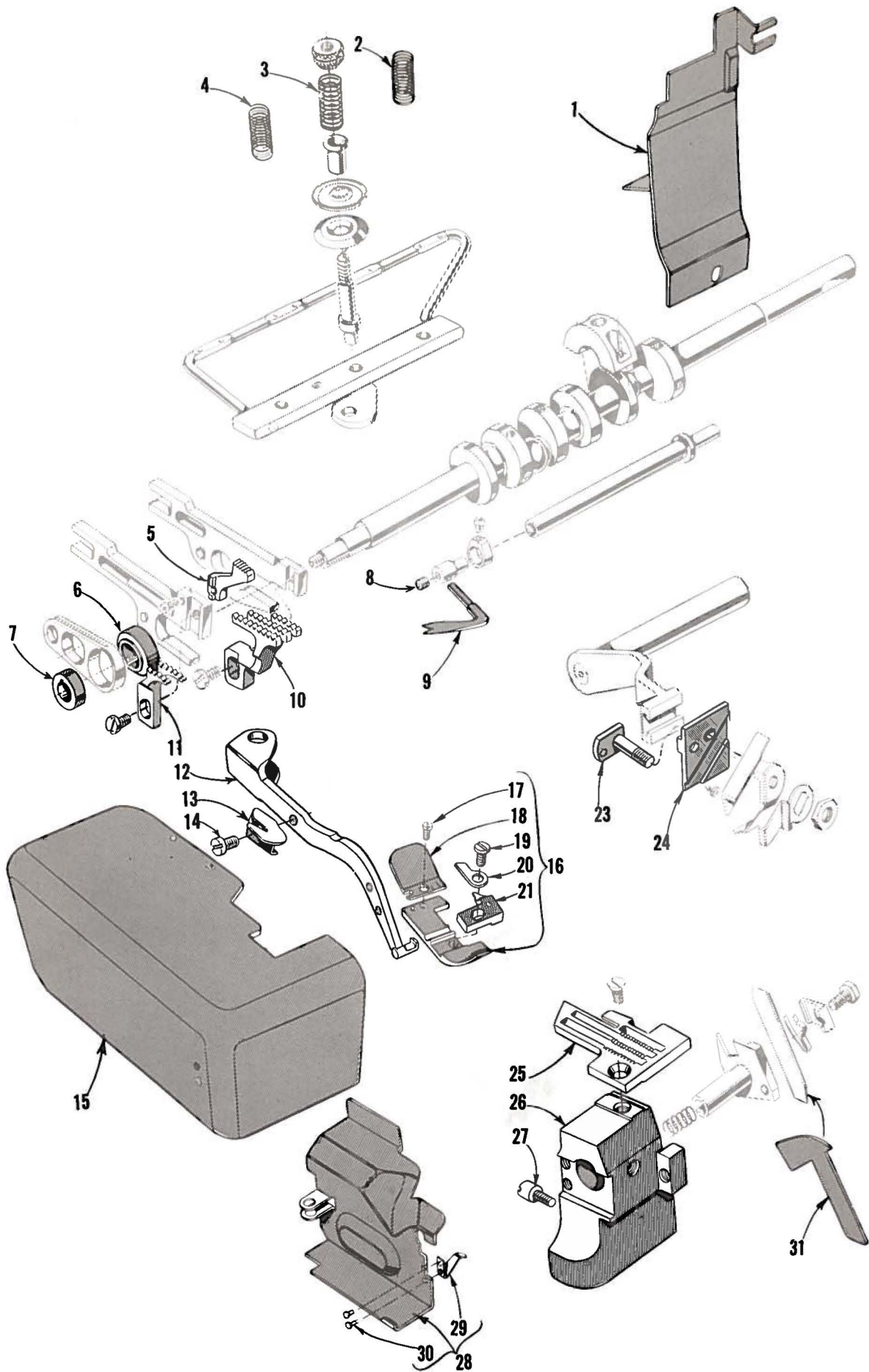


Fig. 10A



The parts illustrated on the preceding page and described on this page represent the parts that are used on Style 39500 AR, but are not used on Style 39500 P.

Those parts shown in phantom views and bearing no reference numbers are common to Styles 39500 AR and 39500 P.

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

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	39578 BB	Chip Guard -----	1
2	51292 F-8	Lower Looper Thread Tension Spring-----	1
3	51292 F-1	Needle Thread Tension Spring -----	1
4	51292 F-2	Upper Looper Thread Tension Spring -----	1
5	39505	Chaining Feed Dog-----	1
6	39540-18	Differential Feed Driving Eccentric -----	1
7	39540-20	Main Feed Driving Eccentric -----	1
8	22894 Y	Screw - Upper Looper or Spreader -----	1
9	39560 A	Spreader -----	1
10	39526 AA	Differential Feed Dog, marked "AA" -----	1
11	39505 P	Main Feed Dog, marked "J" -----	1
12	39556 E	Presser Arm -----	1
13	39556 K	Chain Cutting Knife, marked "J" -----	1
14	90	Screw - Chain Cutting Knife -----	1
15	39501	Cloth Plate -----	1
16	39520 AR	Presser Foot -----	1
17	22738	Screw - Presser Foot Chain Shield-----	1
18	39530 H	Presser Foot Chain Shield -----	1
19	22768 B	Screw - Stitch Tongue and Spring -----	1
20	39530	Presser Foot Hinge Spring -----	1
21	39597 AR	Presser Foot Stitch Tongue, marked "EN"-----	1
23	39571 C	Upper Knife Clamp Stud -----	1
24	39572 A	Upper Knife Holder Block -----	1
25	39524 AR-1/4	Throat Plate, marked "BC-1/4" -----	1
26	39580 AA	Throat Plate and Lower Knife Support Bracket-----	1
27	22585 G	Latch Screw - Side Cover -----	1
28	39582 GG	Side Cover-----	1
29	39582 H	Spring -----	1
30	39582 J	Rivet -----	2
31	39503 H	Front Fabric Guide -----	1



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