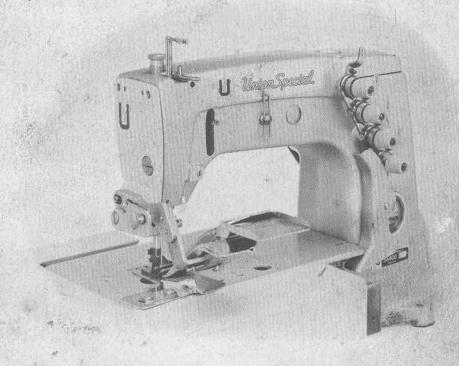


# Union Speciale LEWIS® . COLUMBIA®

INDUSTRIAL SEWING MACHINES

56700

56900



STYLE 56400R

No.

Fourth Edition

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ADVANCED HIGH SPEED
FIFTY THOUSAND SERIES
FLAT BED MACHINES

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IINION SPECIAL CORPORATION

- ORIGINAL OSVOINS



EDIÇÃO 01 Catalog No. 129 M

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

FOR

Classes 56200, 56300, 56400, 56500, 56700, 56900

Styles

56200 н	56300 R	56400 W
56200 K	56300 U	56400 X
56200 L	56300 W	56500 A
56200 R	56300 X	56500 B
56200 S	56300 AH	56500 C
56300 E	56300 AL	56500 J
56300 F	56400 D	56500 R
56300 G	56400 P	56500 U
56300 Н	56400 R	56700 J
56300 M	56400 S	56900 н

56400 T

Fourth Edition

56300 N

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## UNION SPECIAL CORPORATION

INDUSTRIAL SEWING MACHINES

CHICAGO

Printed in U.S.A.

56900 J

#### 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 56300 G". 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 56300 GZ".

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 56300".

#### APPLICATION OF CATALOG

This catalog applies specifically to the Standard Styles of machines as listed herein. It can also be applied with discretion to some Special Styles of machines in Classes 56200, 56300, 56400, 56500, 56700 and 56900. 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 IN CLASS 56200

Advanced High Speed Single Needle Flat Bed Machines, Low and Medium Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for Use with Knee Press for Presser Foot Lifter, Equiped with Disc Thread Tensions, Maximum Work Space to Right of Needle Bar 8 1/4 inches (209.6 mm).

56200 H Low throw machine, for miscellaneous seaming operations on light to medium weight wash and wear materials, where chaining and a short stitch are required. Seam Spec. 401-SSa-1. Type 101 GS needle. Maximum recommended speed 6500 R.P.M.

56200 K Low throw machine, for binding aprons, dresses and for similar operations on light to medium weight materials. Seam Spec. 401-BSc-1. Type 106 GLS needle. Uses cut edge binding 3/4, 7/8, 1, 1 1/8 and 1 1/4 inch (19.05, 22.22, 25.4, 28.58 and 31.75 mm) wide, and produces a 7/32, 1/4, 9/32, 11/32 and 13/32 inch (5.56, 6.35, 7.14, 8.73 and 10.32 mm) finish respectively. Maximum recommended speed 6500 R.P.M.

\*56200 L Medium throw machine, for binding mattress ticks and for similar operations on medium to medium heavy weight materials. Seam Spec. 401-BSa-1. Type 126 GS needle. Uses selvage edge binding 5/8, 3/4 and 7/8 inch (15.88, 19.05 and 22.22 mm) wide, and produces a 5/16, 3/8 and 7/16 inch (7.94, 9.52 and 11.11 mm) finish respectively. Maximum recommended speed 6500 R.P.M.

56200~R Low throw machine, for joining shoulders of shirts in one operation and for similar operations on light to medium weight materials. Seam Spec. 401-LSe-1. Type 106~GLS needle. Maximum recommended speed 6500~R.P.M.

\*Discontinued-Replaced By Style 56300 M.

#### STYLES OF MACHINES IN CLASS 56200 (Continued)

56200 S Low throw machine, for miscellaneous operations on woven materials, knitted drawer bands and knitted shirt fronts, and for similar operations on light to medium weight materials. Seam Spec. 401-SSa-1. Type 106 GS needle. Maximum recommended speed 6500 R.P.M.

56200 W Medium throw machine, for seaming cotton flannel and leather palm gloves. Seam Spec. 401-SSa-1. Type 128 GAS needle. Maximum recommended speed 6500 R.P.M.

#### STYLES OF MACHINES IN CLASS 56300

Advanced High Speed Single Needle Flat Bed Machines, Medium and High Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for Use with Knee Press for Presser Foot Lifter, Equipped with Disc Thread Tensions, Maximum Work Space to Right of Needle Bar 8 1/4 Inches (209.6mm).

56300 E Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet, automatic chain cutter and pressure release attachment, for seaming trousers, coats and similar operations on medium to medium heavy weight materials. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 F Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet and feeding presser foot, for seaming trousers, coats and for similar operations on medium to medium heavy weight durable press materials. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 G Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet, for seaming trousers, coats and similar garments, made of medium to medium heavy weight materials. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 H High throw machine, for seaming couch covers, with or without rope welt, and for similar operations on medium heavy to heavy weight materials. Welt guided to the left of needle. Seam Spec. 401-SSa-1 or 401-SSk-1 modified. Type 143 GS needle. Maximum recommended speed 6000 R.P.M.

56300 M High throw machine, for binding mattress ticks and for similar operations on medium heavy to heavy weight materials. Seam Spec. 401-BSa-1. Type 126 GS needle. Uses selvage edge binding 5/8, 3/4 and 7/8 inch (15.88, 19.05) and 22.22mm) wide, and produces a 5/16, 3/8 and 7/16 inch (7.94, 9.52 and 11.11mm) finish respectively. Maximum recommended speed 6000 R.P.M.

56300 N Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet and top-grip feed mechanism, for edge seaming operations on trousers, slacks, dress pants, jackets and similar garments made of light to medium weight durable press materials. Maximum seam width is 1 inch (25.4mm) necessitated by the top-grip-feed mechanism. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

#### STYLES OF MACHINES IN CLASS 56300 (Continued)

56300 R Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet and feeding presser foot, for seaming side and inseams on trousers, back and side seams on coats, sleeve seams on jackets, coats, and for similiar operations on medium to medium heavy weight materials. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 U Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet and top-grip-feed mechanism, for edge seaming operations on trousers, slacks, dress pants, jackets and similar garments made of light to medium materials. Maximum seam width is 1 inch (25.4 mm) necessitated by the top-grip-feed mechanism. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 W Medium throw machine, for attaching waistbands to men's trousers. Machine is equipped with zipper guiding presser foot for crossing zipper attached to pants fly. Seam Spec. 401-SSa-1. Type 128 GAS needle. Maximum recommended speed 6500 R.P.M.

56300 X Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet, top-grip-feed mechanism and presser foot with yielding section to the left of needle, for edge seaming operations on trousers slacks, dress pants, jackets and similar garments made of light to medium weight materials. Maximum seam width is 1 inch (25.4 mm) necessitated by the top-grip-feed mechanism. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 AH Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet, top-grip-feed mechanism and presser foot with yielding section to the left of needle, for edge seaming operations on trousers, slacks, dress pants, jackets and similar garments made of light to medium weight durable press materials. Maximum seam width is 1 inch (25.4 mm) necessitated by the top-grip-feed mechanism. Seam Spec. 401-SSa-1. Type 128 GBS needle. Maximum recommended speed 6500 R.P.M.

56300 AL Medium throw machine, equipped with thumbscrew adjustable frame needle thread eyelet, for miscellaneous operations on paper garments and plastic products requiring a long stitch. Stitch range is 4 to 7 per inch. Seam Spec. 401-SSa-1. Type 128 GAS needle. Maximum recommended speed 6000 R.P.M.

#### STYLES OF MACHINES IN CLASS 56400

Advanced High Speed Two Needle Flat Bed Machines, Left Needle in Front, Independent Row, Low Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for use with Knee Press for Foot Lifter, Equipped with Disc Thread Tensions, Work Space to Right of Needle Bar 8 1/4 Inches (209.6 mm).

56400 D For hemming and simultaneously inserting elastic in tops and legs of knitted undergarments and similar operations on light to medium weight materials. To be used with Galkin close-coupled puller. Attachments are not furnished with machine. Seam Spec. 401-EFg-2. Type 106 GHS needle. Standard gauges Nos. 12, 16. Maximum recommended speed 6500 R.P.M.

#### STYLES OF MACHINES IN CLASS 54600 (Continued)

56400 P For piecing sleeves, joining shoulders, and setting sleeves of ordinary quality shirts and for similar operations on light to medium weight material. Seam Spec. 401-LSc-2. Type 106 GHS needle. Standard gauges Nos. 6, 8, 10, 12, 16, 18. Maximum recommended speed 6500 R.P.M.

56400 R For attaching set-on center plaits and interlining strip to skirts and similar operations on light to medium weight materials. Start operation at the neck. Seam Spec. 401-LSm-2. Type 106 GHS needle. Standard gauge No. 48. Maximum recommended speed 6500 R.P.M.

56400 S For folding and attaching inside button facings to fronts of shirts and similar operations on light to medium weight materials. Start operation at the neck. Facing strip guided next to feed dog. Seam Spec. 401-LSk-2. Type 106 GHS needle. Standard gauges Nos. 32, 48. Maximum recommended speed 6500 R.P.M.

56400 T For piecing sleeves, joining shoulders and setting sleeves of extra fine quality shirts and similar operations on light to medium weight material. Seam Spec. 401-LSc-2. Type 106 GHS needle. Standard gauges Nos. 8, 10, 12, 16. Maximum recommended speed 6500 R.P.M.

56400 W For piecing sleeves of shirts and pajamas, and joining operations on woven shorts and for similar operations on light to medium weight materials, where the majority of the work consists of straight seams. Seam Spec. 401-LSc-2. Type 106 GHS needle. Standard gauges Nos. 8, 10, 12, 16. Maximum recommended speed 6500 R.P.M.

56400 X For quilting collar bands of shirts and similar operations on light to medium weight materials. No. 26 gauge is equipped with a folder so that this machine can also be used for setting sleeves on extra fine quality shirts. Seam Spec. 401-SSa-2 or 401-LSc-2. Type 106 GHS needle. Standard gauges Nos. 24, 26. Maximum recommended speed 6500 R.P.M.

#### STYLES OF MACHINES IN CLASS 56500

Advanced High Speed Two Needle Flat Bed Machines, Independent Row, High Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for use with Knee Press for Foot Lifter, Equipped with Disc Thread Tensions, Work Space to Right of Needle Bar 8 1/4 inches (209.6mm).

56500 A For seaming trousers and similar garments made of medium heavy to heavy weight materials. Right needle in front. Seam Spec. 401-SSa-2. Type 130 GS needle. Available for 5 stitches per inch only. Standard gauge No. 1 only. Maximum recommended speed 6000 R.P.M. (Formerly known as Style 56500 N-5).

56500 B For seaming trousers and similar garments made of medium heavy to heavy weight materials. Right needle in front. Seam Spec. 401-SSa-2. Type 130 GS needle. Available for 7 stitches per inch only. Standard gauge No. 1 only. Maximum recommended speed 6000 R.P.M. (Formerly known as Style 56500 N-7).

#### STYLES OF MACHINES IN CLASS 56500 (Continued)

56500 C For seaming trousers and similar garments made of medium heavy to heavy weight materials. Right needle in front. Seam Spec. 401-SSa-2. Type 130 GS needle. Available for 10 stitches per inch only. Standard gauge No. 1 only. Maximum recommended speed 6000 R.P.M. (Formerly known as Style 56500 N-10).

56500 J For felling overalls, coats, combination suits, and similar garments made of medium heavy weight material. Left needle in front. Seam Spec. 401-LSc-2. Type 128 GS needle. Standard gauges Nos. 16, 18. Maximum recommended speed 6000 R.P.M., depending on material or operation.

56500 R For attaching risers to dungarees, piecing sleeves on denim jackets, and for attaching overall bibs and for similar operations on medium heavy to heavy weight materials. Left needle in front. Seam Spec. 401-LSc-2. Type 128 GS needle. Standard gauge No. 18. Maximum recommended speed 6000 R.P.M., depending on mateial or operation.

56500~U For seaming trousers made of durable press material and for similar operations on medium heavy to heavy weight materials. Right needle in front. Seam Spec. 401-SSa-2. Type 130~GS needle. Available for 7 stitches per inch only. Standard gauage No. 1 only. Maximum recommended speed 6000~R.P.M.

#### STYLES OF MACHINES IN CLASS 56700

Advanced High Speed Two Needle Flat Bed Machines, Needles Abreast, Independent Row, Low Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservior Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for use with Knee Press for Foot Lifter, Equipped with Disc Thread Tensions, Work Space to Right of Needle Bar 8 1/4 Inches (209.6 mm).

56700 J For one operation of folding and attaching "set-on" center plait and interlining strips to fronts of shirts and similar garments made of light to medium weight material. Starts operation at neck. Equipped with "Tru-Front" folder. Plaits used in garment lengths and extend 1/4 inch (6.35 mm) beyond the rows of stitching. Seam Spec. 401-LSm-2. Type 108 GKS needle. Standard gauges Nos. 56, 64. Maximum recommended speed 6500 R.P.M.

#### STYLES OF MACHINES IN CLASS 56900

Advanced High Speed Three Needle Flat Bed Machines, Left Needle in Front, Independent Row, High Throw, Needle Bearing Needle Bar Drive Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Lateral Looper Travel, Large Handwheel and Improved Belt Guard, Prepared for use with Knee Press for Foot Lifter, Equipped with Disc Thread Tensions, Work Space to Right of Needle Bar 8 1/4 Inches (209.6 mm).

56900 H For seaming overalls, dungarees, coats, combination suits and similar garments made of medium heavy to heavy weight materials. Seam Spec. 401-LSc-3. Type 128 GAS needle. Standard gauge Nos. 7, 8, 9. Maximum recommended speed 6000 R.P.M.

#### STYLES OF MACHINES IN CLASS 56900 (Continued)

56900 J For seaming windbreakers, mackinaws, lumberjacks and similar garments made of medium heavy to heavy weight materials. Seam Spec. 401-LSb-3. Type 147 GKS needle. Standard gauge No. 9. Maximum recommended speed 6000 R.P.M.

#### NEEDLES

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

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 106 GHS, Size 080/032".

NOTE: Needle Type 106 GHS, Size 080/032; 080/032 is the blade diameter, the 080 indicates .80 millimeters in the Metric System and 032 indicates .032 inch in the U.S. Customary System.

The type numbers of the needles recommended for each style of machine covered by this catalog are given in the machine style description. Other needles are available, but the ones indicated are those recommended to produce the most satisfactory results. The type numbers of the recommended needles together with their descriptions, and the sizes available are listed below:

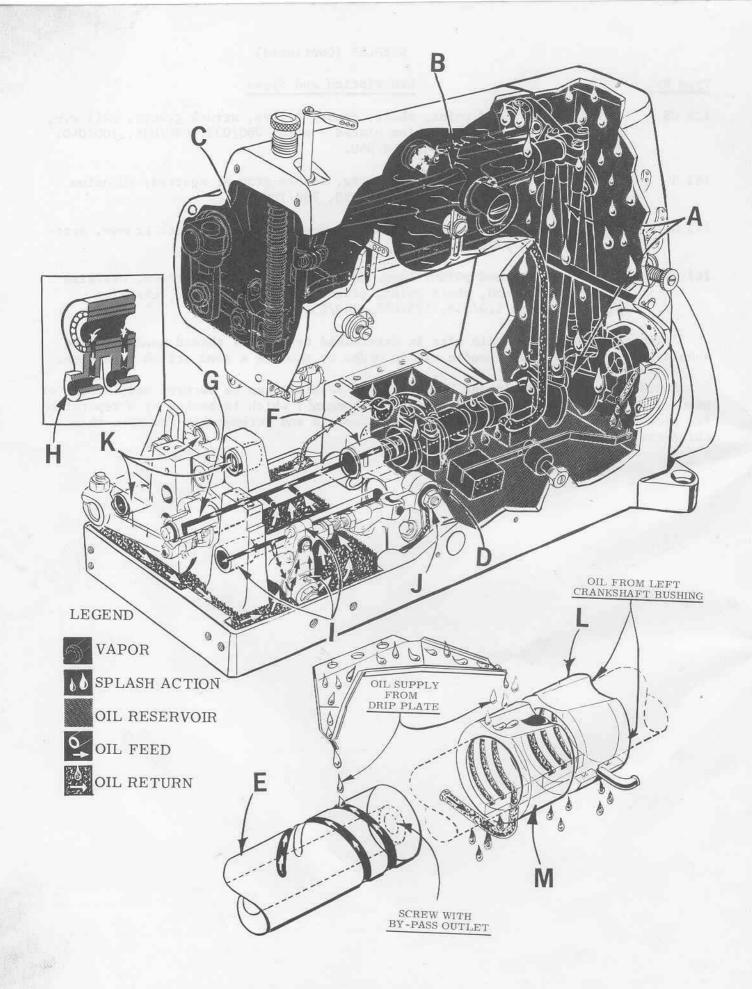
Type No.	Description and Sizes
101 GS	Round shank, round point, extra short, double groove, struck groove, chromium plated - sizes 022, 025, 027, 080/032, 049, 054.
106 GS	Round shank, round point, extra short, double groove, struck groove, ball eye, chromium plated - sizes 090/036.
106 GHS	Round shank, round point, extra short, double groove, struck groove, ball eye, ball point, chromium plated - sizes 070/027, 075/029, 080/032, 090/036, 100/040, 110/044.
106 GKS	Round shank, round point, extra short, double groove, struck groove, oversize ball eye, chromium plated - sizes 036, 040.
108 GKS	Round shank, round point, extra short, double groove, struck groove, oversize ball eye, spotted, chromium plated - sizes 080/032, 090/036, 100/040.
126 GS	Round shank, round point, short, double groove, struck groove, ball eye, chromium plated - sizes 080/032, 100/040, 054.
128 GS	Round shank, round point, short, double groove, struck groove, ball eye, spotted, undersize eye and groove 27% of size of needle, chromium plated - sizes 090/036, 100/040, 110/044, 125/049, 140/054.
128 GAS	Round shank, round point, short, double groove, struck groove, ball eye, spotted, chromium plated - sizes 080/032, 090/036, 100/040, 110/044, 125/049, 140/054, 150/060, 170/067.
128 GBS	Round shank, round point, short, double groove, struck groove, ball eye, spotted, ball point, chromium plated - sizes 080/032, 090/036, 100/040, 110/044, 125/049, 140/054, 150/060.

#### NEEDLES (Continued)

Description and Sizes
Round shank, round point, short, double groove, struck groove, ball eye, spotted, government, chromium plated - sizes 080/032, 090/036, 100/040, 110/044, 125/049, 140/054, 150/060.
Round shank, round point, No. 2 bag, double groove, spotted, chromium plated - sizes 073, 200/080, 230/090, 250/100.
Round shank, round point, No. 2 bag, double groove, struck groove, spotted, chromium plated - sizes 140/054, 150/060, 170/067.
Round shank, round point, long, double groove, struck groove, oversize ball eye, spotted, short point, standard eye and grooves, chromium plated - sizes 110/044, 125/049, 140/054.

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

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



## ADVANCED FLATBED LUBRICATION SYSTEM

## SUPPLY SYSTEM

Figure Letter	Bearing or Machine Area	Method of Lubrication
Α.	Crankshaft drives, upper ball straps and crankshaft bearings.	Oil agitation as a result of extensions on needle lever connecting rods.
В.	Needle lever cross shaft bearing.	Oil trough (51282 AE) which is supplied by splash in column area.
C.	Headarea (all mechanisms and bearings).	Mistas a result of splash in column.
D.	Looper drive crank, looper drive lever bearings.	Oil agitation as a result of splasher (56343 E) on bottom of looper drive connecting rod.
E.	Opposing Helical grooves in right end of mainshaft. Short groove prevents oil leakage from right mainshaft bearing.	Oil drip plate which accumulates splash in chamber.
F.	Right mainshaft bearing.	Supply grooves in right end of main-shaft.
G.	Left mainshaft bearing and all eccentric bearings located on mainshaft.	Oil supplied from hollow mainshaft and metered by felt plugs. Oil is introduced into center of shaft in the right mainshaft bearing area. Amount of lubricant in center of shaft controlled with by-pass hole in right end of mainshaft.
н.	Lower ends of connecting rods of mainshaft eccentrics.	Oil run-out from eccentric bearing supplies.
I.	Looper cone, right and left looper rocker shaft bearings, and left looper per rod ball joint.	Supplied from hollow looper rocker shaft which contains 4 strands of yarn as a metering device.
J.	Right looper rod needle bearing joint.	Oil supplied from front base felt to lubricating plate (56393 K).
К.	Feed rocker shaft and upper feed rocker shaft bearings.	Self-lubricated bearings.
	RETURN SYSTEM	
Figure Letter	Machine Area	Mathad of Batum
101-		Method of Return
L.	Head	Felt pad in head collects oil. Return pump located on crankshaft and primed by oil from left crankshaft bearing.
M.	Base	Felt pad in base collects oil. Second return pump located on crankshaft and primed by oil drip plate which accumulates splash in looper drive chamber.

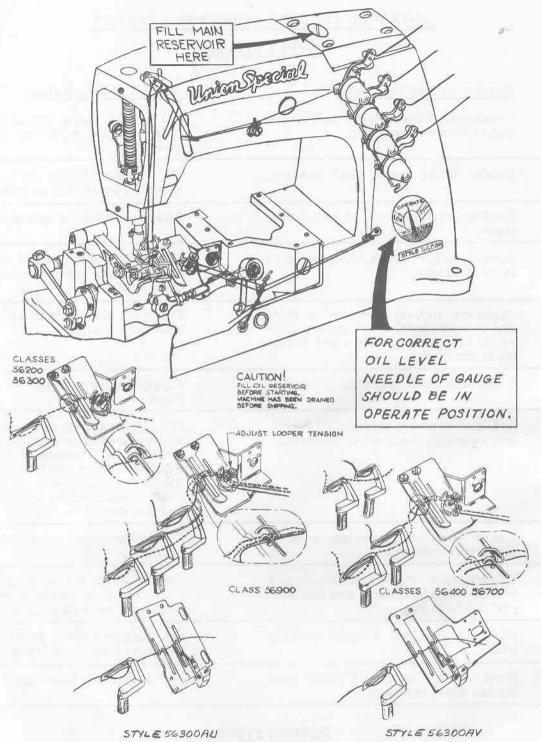


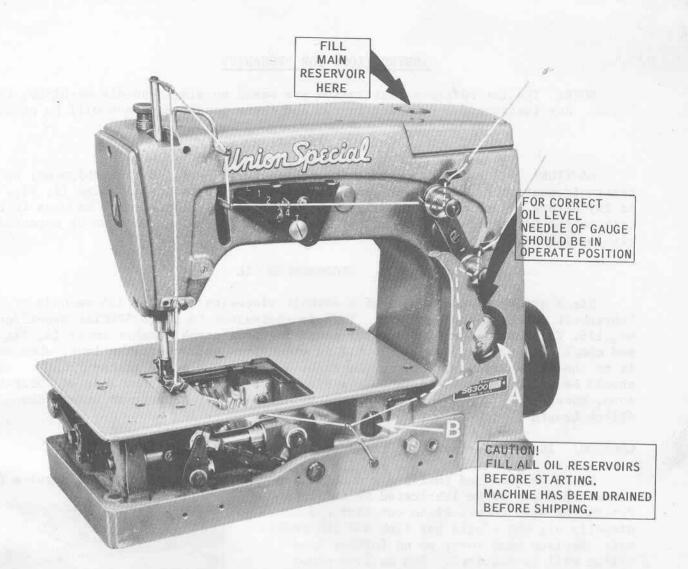
Fig. 1

THREADING AND OILING DIAGRAM

FOR ALL STYLES EXCEPT STYLES 56300 E,F,G,N,R,U,X,AH and AL

The oil has been drained from the machine before shipping and the reservoir must be filled before starting to operate. Maintain oil level in "OPERATE" position and add oil when needle is to the black line located to the left of the "OPERATE" zone marked "LOW". The machine is automatically lubricated and no oiling other than keeping the main reservoir filled is necessary. For further lubricating instructions refer to paragraph on "LUBRICATION" and "RECOMMENDED OIL" on page 14.

Thread machine in accordance with the threading diagram above or threading diagram Fig. 1A on page 13 for Styles 56300 E,F,G,N,R,U,X,AH and AL.



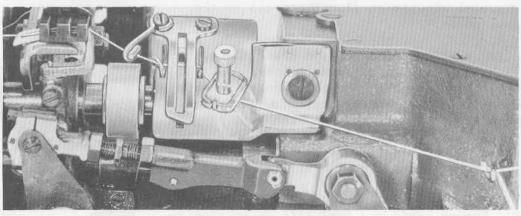


Fig. 1A

THREADING AND OILING DIAGRAM
FOR STYLES 56300 E,F,G,N,R,U,X,AH and AL

The oil has been drained from the machine before shipping and the reservoir must be filled before starting to operate. Maintain oil level in "OPERATE" position and add oil when needle is to the black line located to the left of the "OPERATE" zone marked "LOW". The machine is automatically lubricated and no oiling other than keeping the main reservoir filled is necessary. For further lubricating instructions refer to paragraph on "LUBRICATION" and "RECOMMENDED OIL" on page 14.

Thread machine in accordance with the threading diagram above for Styles 56300 E,F,G,N,R,U,X,AH or AL; or threading diagram Fig. 1 on page 12 for any other styles covered in this catalog.

#### INSTRUCTIONS FOR MECHANICS

NOTE: The instructions that follow are based on single needle machines, Class 56300. Any instructions peculiar to two and three needle machines will be noted.

#### LUBRICATION

CAUTION! Oil has been drained from the main reservoir before shipment, so the reservoir must be filled to the proper level as indicated on oil gauge (A, Fig. 1 or 1A) before beginning to operate. Run machine slowly for several minutes to distribute the oil to the various parts. Full speed operation can then be expected without damage.

#### RECOMMENDED OIL

Use a 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. Fill main reservoir at plug screw in upper crank chamber cover (A, Fig. 2) and check oil level at gauge (B). Oil is at maximum safe operating level when needle is to the black line, located to the right of "OPERATE" zone, marked "FULL". Oil should be added when needle is to the black line, located to the left of "OPERATE" zone, marked "LOW". Recommended grease No. 28604 P (See Paragraph under "Changing Stitch Length").

CAUTION! It is important that these machines not be over filled.

It is recommended that a new machine, or one that has been out of service for an extended period be lubricated as follows:

Remove the head cover, clean out lint and directly oil the needle bar link and the needle bar. Replace head cover as no further hand oiling will be required. Run machine slowly for several minutes to distribute oil to the various parts.

For machines in operation check the oil for and lint deposits at reasonable intervals. If dirty, change the oil. An oil change is recommend every 2000 operating hours. Oil may be drained from main reservoir by removing plug screw (C, Fig. 2) located below the cloth plate at front of the machine, or by removing the lower crank chamber cover, located at the back of machine.

NOTE: Looper avoid and feed lift eccentrics receive oil thru the mainshaft, so when assembling be sure oil holes in the eccentric line up with oil holes in mainshaft when spot screw is in time spot.

#### OIL GAUGE

The oil gauge is set at the factory to show the proper oil level in the reservoir. Should an adjustment become necessary, however, the following steps should be followed:

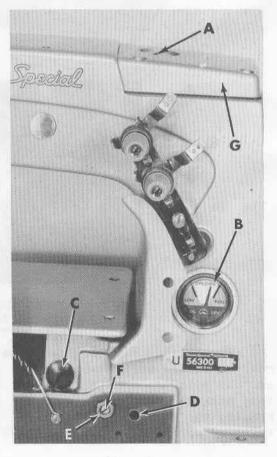


Fig. 2

#### OIL GAUGE (Continued)

- 1. Place the machine upright on a level table or bench.
- Remove the oil reservoir plug screw (C, Fig. 2) and tip machine forward to drain oil from the reservoir.
- Make sure all oil is drained from main reservoir.
- 4. Remove lower crank chamber cover, located at the back of the machine.
- 5. Fill main reservoir to a level even with the bottom contour of the knee press shaft bushing (D, Fig. 2).

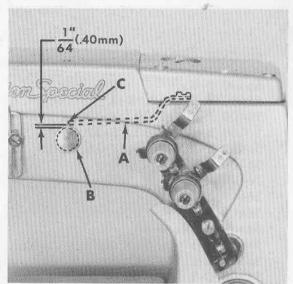


Fig. 3

- 6. Loosen lock nut (E) on calibrating screw (F), and turn the screw to the left or right until the gauge needle rests on the black line, located to the left of "OPERATE" zone, marked "LOW".
- 7. Tighten lock nut (E) and replace plug screw (C) and lower crank chamber cover.
- 8. Add oil so that gauge needle rests on the black line, located to the right of "OPERATE: zone, marked "FULL".

#### NEEDLE LEVER BEARING OILER

Remove the head cover and upper crank chamber cover (G, Fig. 2). Check position of needle lever bearing oiler (A, Fig. 3) located inside the arm casting, below the upper crank chamber cover, which lubricates the needle lever stud (B). Make sure it is tilted downwardly and that its delivery end (C) contacts the inside wall of the bed casting at the back, just above the notch of the needle lever shaft stop collar. (Do not allow the oiler to rest on the needle lever). Allow 1/64 inch (.40mm) clearance as in Figure 3.

# ALIGNING THE NEEDLE BAR (TWO AND THREE NEEDLE MACHINES)

Align the needle bar (A, Fig. 4) with the proper test plate, using test pins No. PI40 A, refer to chart. If test plate and test pins are not available, insert a new set of needles (Type and Size as required) and align the needle bar so that needles correspond with the vertical faces of the needle guard. To align needle bar, loosen needle bar clamp screw (B, Fig. 4) and turn bar as required. Tighten clamp screw.

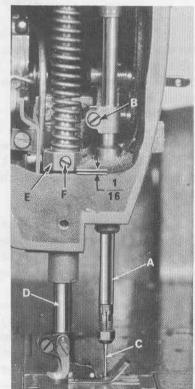


Fig. 4

# ALIGNING THE NEEDLE BAR (Continued) (TWO AND THREE NEEDLE MACHINES)

Machine Styles	Test Plate No.	Test Pin No.
56400 P-6	None	None
56400 P-8, T-8, W-8	698 AP-8	PI40 A
56400 P-10, T-10, W-10	698 AP-10	PI40 A
56400 D-12, P-12, T-12, W-12	698 AP-12	PI40 A
56400 D-16, P-16, T-16, W-16	698 AP-16	PI40 A
56400 P-18	698 AP-18	PI40 A
56400 X-24	None	None
56400 X-26	None	None
56400 S-32	None	None
56400 R-48, S-48	None	None
56500 A-1	None	None
56500 B-1, U-1	None	None
56500 C-1	None	None
56500 J-16	698 AT-16	PI40 A
56500 J-18, R-18	None	None
56700 J-56	None	* None
56700 J-64	698 AQ-64	PI40 A
56900 н-7	None	None
56900 н-8	None	None
56900 н-9	None	None
56900 J-9	None	None

#### SYNCHRONIZING LOOPER AND NEEDLE MOTIONS

Insert looper (A, Fig. 5) in the looper rocker and turn handwheel in operating direction until the point of the looper, moving to the left is even with the left side of the needle (B). Note the height of the eye of the needle with respect to the looper point, then turn handwheel in the reverse direction until the looper point again moves to the left, and is even with the left side of the needle. If the motions synchronize, the height of the eye of the needle with respect to the looper point will be the same. A variation of .005 inch (.127mm) is allowable. If the distance from the eye of the needle to the point of the looper is greatest when the pulley is turned in the operating direction, move the looper drive shaft synchronizing stud (C) to the rear. Moving it in the opposite direction acts the reverse.

Moving of the looper drive lever shaft synchronizing stud is accomplished as

follows: Loosen the clamp screw (D, Fig. 5) in the looper drive lever (G). To move stud to rear (away from operator), a light tap with a small hammer, directly on the stud, is all that is required. To move stud forward (toward operator), remove the cloth plate, throat plate support, oil reservoir top cover and oil reservoir back cover, then, a light tap on the looper drive lever rocker shaft, toward the operator, is all that is required.

NOTE: Looper drive lever (G, Fig. 5) has an oil seal collar and an "O" ring between it and the bed casting. All end play must be removed from the looper drive lever

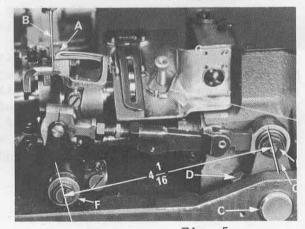


Fig. 5

#### SYNCHRONIZING LOOPER AND NEEDLE MOTIONS (Continued)

rocker shaft by compressing the "O" ring until drive lever (G) and the oil seal collar make metal to metal contact with the bed casting. Tighten screw (D).

With the looper at the extreme right end of its travel, check the location of the center line of the right looper connecting rod bearing, using gauge No. 21227 CX. Remove nut (E, Fig. 5) and place hole in gauge over thread stud. The left end of the gauge should locate against the right side of the looper rocker cone (F). If adjustment is necessary, loosen the clamp screw (D) and reposition the looper drive lever (G) as required. If gauge is not available setting can be checked with a scale. The distance between the center line of the looper rocker cone and the center line of the looper lever stud should be 4 1/16 inch (103.19 mm) (Fig. 5). For Class 56700 machines used gauge No. 21227 CX-56, etc. Retighten clamp screw (D) referring to "NOTE" in preceeding paragraph.

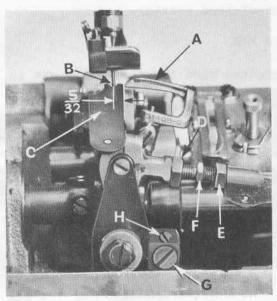


Fig. 6

#### SETTING THE LOOPER

Insert a new needle, type and size as specified. If the looper gauge is 5/32 inch (3.97 mm), for example, set the looper (A, Fig. 6) so the distance from the center of the needle (B) to the point of the looper is 5/32 inch (3.97 mm), when the looper is at its farthest position to the right. Looper gauge No. 21225-5/32 (C) can be used advantageously in making this adjustment. On two needle machines set the back looper to the right needle and on three needle machines set the middle looper to the middle needle, when setting the looper gauge. Refer to chart for needle Type, looper gauge setting and looper gauge number. If adjustment is required, loosen nut (D) (it has a left hand thread) and nut (E) on connecting rod (F), turn the connecting rod forward or backward to obtain the 5/32 inch (3.97 mm) dimension. Retighten both nuts, first nut (E), then nut

(D). Make sure the left ball joint is in vertical position and does not bind after adjustment.

Machine Styles	Needle Type	Looper Gauge Setting	Looper Gauge Number
56200 Н	101 GS	1/8 Inch (3.18 mm)	21225-1/8
56200 K, R	106 GLS	1/8 Inch (3.18 mm)	21225-1/8
56200 L	126 GS	5/32 Inch (3.97 mm)	21225-5/32
56200 S	106 GS or 106 GHS	1/8 Inch (3.18 mm)	21225-1/8
56200 W, 56300 W, AL	128 GAS	5/32 Inch (3.97 mm)	21225-5/32
56300 E,F,G,N,R.			
U,X,AH	128 GBS	5/32 Inch (3.97 mm)	21225-5/32
56300 Н	143 G or 143 GS	5/32 Inch (3.97 mm)	21225-5/32
56300 M	126 GS	5/32 Inch (3.97 mm)	21225-5/32
56400 D	106 GHS	1/8 Inch (3.18 mm)	21225-1/8
56400 P,R,S,T,W,X	106 GHS	1/8 Inch (3.18 mm)	21225-1/8
56500 A,B,C,U	130 GS	5/32 Inch (3.97 mm)	21225-5/32
56500 J,R	128 GS	5/32 Inch (3.97 mm)	21225-5/32
56700 J	108 GKS	1/8 Inch (3.18 mm)	21225-1/8
56900 H	128 GAS	5/32 Inch (3.97 mm)	21225-5/32
56900 J	147 GKS	7/32 Inch (5.56 mm)	21225-7/32

The looper is set correctly in line-of-feed, if, as it moves to the left, behind the needle, its point (A, Fig. 7) brushes, but does not pick at the rear of the needle (B).

If adjustment is necessary, loosen lock screw (G, Fig. 6) and turn stop screw (H) as required. Turning stop screw clockwise sets the looper to the rear and turning it counterclockwise acts the reverse. Holding looper to the front while making this adjustment may prove helpful. Tighten lock screw when setting is obtained and recheck the adjustment.

On the two and three needle machines, now insert the other needles and loopers. The same looper - needle relation should exist without any adjustment, other than applying pressure on the looper at front or back of blade, while clamping looper in looper rocker, so as to get the proper in-line-of-feed setting.

#### SETTING HEIGHT OF NEEDLE BAR

The height of the needle (C, Fig. 4) is corrected when the top of its eye is 1/64 inch (.40mm) below the underside of the looper, with the looper point flush with the left side of the needle. On Styles 56500 A, B and C the top of the needle eyes should be even with the underside of the looper when the looper point is flush with the left side of the needle. If adjustment is necessary, loosen screw (B) and move needle bar (A) up or down as required and retighten screw. On the two and three needle machines, care should be taken not to disturb the alignment of the needle bar when moving the needle bar either up or down.

All needles are to have equal clearance on the right and left sides of needle slots in throat plate. The descending needles must be deflected alike on the back of the loopers.

#### SETTING THE FEED DOG

Set the feed dog (A, Fig. 8) in the throat plate (B) so there is equal clearance on all sides. See that the tips of the teeth extend the depth of a tooth or approximately 3/64 inch (1.19mm) above the throat plate and are parallel with the throat plate at high point of travel. Adjust the supporting screw (C), under the feed dog, to maintain this setting. Screw (D) is used to hold feed dog in position.

On Styles 56300 N, 56300 U, 56300 X, 56300 AH the tips
of the teeth must extend 1/32 inch (.79mm) above the throat

Fig. 7
plate and the "Grip Feed" presser foot feed dog must line with the lower feed dog
left to right, and in-line-of-feed the last teeth of the top and bottom feeds
should match tooth point to point.

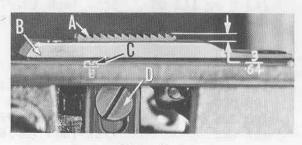


Fig. 8

If feed dog teeth are not parallel with the throat plate, loosen nut (A, Fig.9) and turn screw (B) clockwise to lower the front teeth, and counter-clockwise to raise the front teeth. Retighten nut when feed dog is set properly.

Should it be necessary to move the feed dog to the left or right, loosen screws (A, Fig. 10) which hold the feed rocker (B) onto the feed rocker shaft (C), and move feed rocker to desired position and retighten screws. Make sure the feed rocker arm (D) does not bind after making this adjustment.

When the handwheel is turned in the operating direction the feed dog should have equal clearance on both ends of the throat plate slots with feed travel set to desired stitch length.

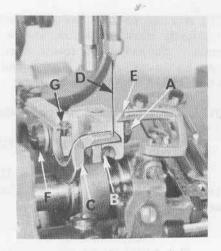


Fig. 9

Should it be necessary to move the feed dog forward or backward, loosen nut (E, Fig. 10) which clamps the feed rocker arm to the feed rocker and move the feed rocker forward or backward as needed and retighten nut.

#### CHANGING STITCH LENGTH

Set the stitch to required length. This is accomplished by loosening the lock-nut (F, Fig. 10) 1/2 turn (it has a left hand thread) on the end of the stitch regulating stud and turning the stitch adjusting screw (G) located under the left end of the cloth plate, in the head of the main shaft (H), which is marked with "L" and "S". Turning the screw clockwise shortens the stitch (moves stitch regulating stud toward the "S") and turning it in a counterclockwise direction lengthens the stitch (moves stitch regulating stud toward the "L"). Retighten the locknut securely. To prevent destructive damage to the feed drive bearing, the Key screw (J) must engage the "U" shaped key slot in the ferrule (K).

NOTE: Any change in stitch length will necessitate a corresponding change in the rear needle guard setting.

Machines having needle bearings in the feed rocker at locations (L, Fig. 10) may require repacking after years of service. Bearings should be throughly cleaned and repacked with Union Special Corporation grease No. 28604 P.

# SETTING THE REAR NEEDLE GUARD

Set the rear needle guard (C, Fig. 9) horizontally so that it does not quite contact the rear of the needle (D) when at its most forward point of travel. A clearance of .005 inch (.127mm) is permissible. It should be set as low as possible, yet have its vertical face approach within about 3/64 inch (1.19mm) of the needle, until the point of the looper

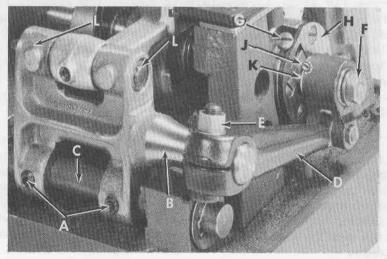


Fig. 10

#### SETTING THE REAR NEEDLE GUARD (Continued)

(E), moving to the left, is even with the needle. To move needle guard forward or backward, merely loosen screw (F), move needle guard as required, and retighten screw. To raise or lower needle guard, loosen screw (F), and turn screw (G) clockwise to lower needle guard and counterclockwise to raise it. Retighten screw (F) after guard is properly set.

NOTE: Any change in stitch length will require a change in rear needle guard setting.

THREADING (FOR ALL STYLES EXCEPT 56300 E, F, G, N, R, U, X, AH and AL)

Draw the looper and needle threads into the machine and start operating on a piece of fabric. Refer to threading diagram (Fig. 1) for the threading of these machines.

#### THREAD TENSIONS

The tension on the needle thread should be only sufficient to produce uniform stitches on the under surface of the fabric.

Pull the needle thread through the eyelets and set the needle tension at 3 ounces (85.05gr) for all Styles, except Styles 56500 J, 56900 H and 56900 J which should have 5 ounces (141.75gr); Styles 56500 A, 56500 B, 56500 C and 56500 U which should have 4 ounces (113.40gr); and Style 56300 H which should have 6 ounces (170.10gr). This will feel light.

The looper thread tension is applied at the cast-off support tension disc assembly, and the adjusting nut should be set so that the tension on the looper thread is just sufficient to steady the thread.

#### THREAD TENSION RELEASE

The thread tension release is set correctly when it begins to function as the presser foot is raised to within 1/8 inch (3.17mm) of the end of its travel and is entirely released when the presser foot has reached its highest position.

If adjustment is needed, loosen tension release lever screw (A, Fig. 11), located at the back of the machine and move tension disc separator as required. Retighten screw. After adjustment there should be no binding at any point.

#### SETTING HEIGHT OF PRESSER BAR

The height of the presser bar (D, Fig. 4) is set correctly if it is possible to remove the presser foot when the foot lifter lever (B, Fig. 11) is fully depressed. Also there should be approximately 1/16 inch (1.59mm) clearance between lower surface of the presser bar connection and guide (E, Fig. 4) and the bottom surface of the head opening in the bed when the foot lifter lever is released and the presser foot resting on the throat plate, with the feed dog down the throat plate.

If adjustment is needed, turn handwheel in operating direction until the needle bar is in the low position. Loosen screw (F, Fig. 4). Then, while holding presser foot down on the throat plate surface, pry up presser bar con-

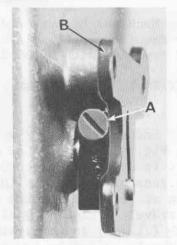


Fig. 11

nection and guide with a screw driver to obtain the 1/16 inch (1.59mm) setting and tighten screw (F). Check setting by turning handwheel so that needle bar is in its high position and see if presser foot can be removed as mentioned in previous paragraph.

#### PRESSER FOOT PRESSURE

Regulate the presser spring regulating screw (A, Fig. 12) so that it exerts only enough pressure on the presser foot to feed the work uniformly when a slight tension is placed on the fabric. This is the knurled screw, located directly behind the needle bar in the head of the machine. Turning it clockwise increases the pressure, counterclockwise acts the reverse.

SETTING NEEDLE THREAD TAKE-UP WIRE AND FRAME EYELET (FOR ALL STYLES EXCEPT 56300 E,F,G,N,R,U,X,AH and AL)

Set the needle thread take-up wire (B, Fig. 12), located adjacent to the needle bar thread eyelet (C), so that its upper surface is even with the top of the holes in the needle bar thread eyelet when the needle bar has completed its downward stroke. Lower this setting for a smaller needle thread loop, and raise it for a larger loop. Set the needle thread frame eyelet (D) so that the eyelet hole is 3/4 inch (19.05mm) above the attaching screw on all styles, except on Styles 56500 J, 56900 H and 56900 J the eyelet is to be set 5/8 inch (15.88mm) above the attaching screw and on style 56200 H the eyelet is to be set 1 inch (25.40mm) above the attaching screw.

NOTE: For the above setting on Styles 56300 E,F,G,N,R,U,X,AH and AL, see the following paragraphs.

THREADING
(FOR STYLES 56300 E,F,G,N,R,U,X,AH and AL)

Refer to threading diagram (Fig. 1A) for the manner in which these machines are threaded.

SETTING NEEDLE THREAD TAKE-UP WIRE AND FRAME EYELET (FOR STYLES 56300 E,F,G,N,R,U,X,AH and AL)

These machine styles are equipped with additional thread handling and control parts, so the adjusting sequence should be made in the following manner:

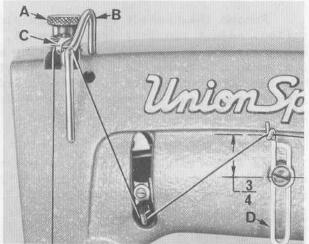


Fig. 12



Fig. 12A

#### SETTING NEEDLE THREAD TAKE-UP WIRE AND FRAME EYELET (Continued) (FOR STYLES 56300 E, F, G, N, R, U, X, AH and AL)

With the needle bar at the top of its stroke, set the needle thread take-up wire (A, Fig. 12A) so its lower extended surface is 1 7/16 inch (36.51mm) above the centerline of the needle lever thread eyelet hole and 3/4 inch (19.05mm) across the centerlines of its vertical surfaces (See Fig. 12A).

Set the looper thread guide eyelet (A, Fig. 13A) so its left outer surface is 3/4 inch (19.05mm) from the left side of the looper thread take-up (B), (See Fig. 13).

Adjust looper thread tension to a minimum required for controlling the looper thread (light). Set the thread index eyelet (B, Fig. 12A) at "3" on the adjusting plate (C). Changing the needle thread tension only, balance the stitch so that when 6" of sewn seam are raveled back, the needle thread is approximately as long as the looper thread. A 1" difference in lengths is permissible. NOTE: Use a sample of the material to be sewn. Maintaining this needle thread tension, move thread index eye let (B) up toward "L" to obtain a looser seam (longer needle loops) and toward "T" to obtain a tighter seam.

#### ADJUSTING THE FEEDING PRESSER FOOT

Remove the presser spring regulator and the presser spring. Adjust the long stop screw (A, Fig. 14) in presser bar guide (B) Against the bed casting as required to insure a clearance between the guide and the top of presser bar bushing (C), yet so the guide is pulled up quickly by the lifter lever link (D) when foot treadle is activated. Tighten lock nut (E) on stop screw.

As a preliminary setting, adjust the spring regulator nut (A, Fig. 15) on the feeding presser foot so the distance from the top of the spring (B) to the yoke (C) is 5/8 inch (15.88mm), (See Fig. 15). Assemble the feeding presser foot to

presser bar. With presser foot resting on throat plate and feed dog down, press down on spring regulator nut (A, Fig. 15) until the marks on the presser foot bottom line up with the centerline of the needle, while keeping the needle in the center of the needle slot, tighten set screw (D) securing the presser bar guide to the presser bar, making sure that the stop screw in the presser bar guide is resting on the bed casting.

Replace presser spring and presser spring regulator Turn the presser bar spring regulator screw down until the thread portion is level with the head casting.

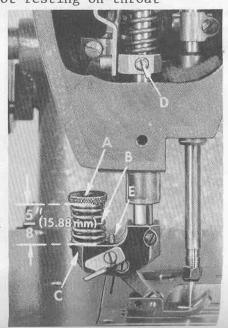


Fig. 15

#### ADJUSTING THE FEEDING PRESSER FOOT (Continued)

Note: Any change in the alignment of needle in relationship to the marks on the presser foot bottom probably means that the stop screw of the presser bar guide was not seated against bed casting before locking set screw.

When the presser foot is lifted off the bare throat plate, the foot should move back only slightly, less than 1/64 inch (.40mm). The stop screw (E, Fig. 15) on the yoke, which is set at the factory, can be readjusted if necessary, should this dimension become changed.

#### CHECK

Presser foot at back of needle slot should cover most of throat plate land when resting on the bare throat plate.

When the presser foot bottom is raised by material so that the feeding foot spring bottoms, the back of the needle slot should clear the needle. The main presser bar should not lift before the feeding foot spring bottoms.

The purpose of the feeding foot is to make the top and bottom ply of cloth feed the same amount without pulling on the bottom ply. The 5/8 inch (15.88mm) setting on the feeding foot spring usually gives a good matching of piles and a strong feeding pull. Reducing this pressure will tend to feed the top ply more. Increasing this pressure will tend to feed the bottom ply more.

# 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, descriptions and the numbers 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:

21	29105 AG	Looper Drive Lever Crank Assembly, for Styles 56200 L, W, Classes 56300, 56500 and 56900	1
22	22559 A	Bearing Cap Screw, lower	
23	56343 E	Oil Splasher	
24	22587 K	Bearing Cap Screw, upper	2
25	56343 C	Ball Joint Guide Fork	1

It will be noted in the above example that the eccentric, ball stud and bearing are not listed. The reason is that replacement of these parts individually is not recommended, so the complete sub-assembly should be ordered.

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

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. 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.

#### 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.

#### USE GENUINE NEEDLES AND REPAIR PARTS (Continued)

Genuine needles are packaged with labels marked Union Special . Genuine repair parts are stamped with the Union Special trademark. Each trademark is your guarantee of the highest quality in materials 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.

#### TORQUE REQUIREMENTS

Torque (measured in inch-pounds) is a rotating force (in pounds) applied through distance by a lever (in inches or feet). This is accomplished by a wrench, screw-driver, etc. Many of these devices are available, which when set at the proper amount of torque will tighten the part to the correct amount and no tighter.

All straps and eccentrics should be tightened to 19-21 inch-pound  $(22-24\,\text{cm/kg})$ , unless otherwise noted. All other nuts, bolts, screws, etc., should be tightened by hand as tightly as possible, unless otherwise noted.

The screws requiring a specific torque, will be indicated on the picture plates.

Before this machine left the factory it was adjusted and inspected to give you the utmost satisfaction and durability at all times. If, however, the machine has been readjusted and is not sewing properly, see the chart below for suggestions which may prove beneficial to you.

#### SKIPPED STITCHES

Condition	Causes	Cures
Needle loop too small	Take-up wire set too low	Raise take-up wire slightly
	Needle thread stretched at bottom of stroke, loop not formed till stretch relieved.	Lower frame thread eyelet and/or reduce needle tension
	Needle thread creased because it is too tight and needle is hot	Use oversize ball eye needle, lower frame needle eyelet, reduce tension
	Needle thread pinched by needle guard, collapsing needle loop	Drop needle guard slightly
	Thread twisting around needle	Keep needle loop as small as possible, keep needle thread tension to a minimum. Use a left twist thread.
	Needle thread sticking in needle grooves, due to heat	Use oversize ball eye needle, to reduce friction.
	Length of needle eye too long, causing delay in needle loop formation	Use needle with shorter eye, drop needle bar slightly or increase looper gauge 1/64 to 1/32 inch
	Needle does not rise enough to form needle loop properly	Increase looper gauge 1/64 to 1/32 inch-
Looper misses needle loop as presser foot is coming off a seam	Material is not held down in front of seam and is flagging	Use tractor type presser foot, if available, or see if presser bar is sticking
	Needle deflecting toward operator	Use sharp point needle
Needle loop formed properly but brushed out of the way by looper	Needle bar set too high	Lower needle bar slightly
Looper misses needle loop when operator is trying to match seams or ends of gar- ments	Needle deflecting toward operator who may be holding back on material while matching seams or ends of garment	Do not hold back excessively on material. Properly adjust feed and maintain a light presser foot pressure so operator does not hold back
Machine misses needle loop when stitch length is increased	Needle deflecting toward the operator because the needle guard is set too far forward	Move needle guard to the rear
Needle misses triangle on looper thread side	Looper thread too loose, not making a good triangle	Increase looper thread tension
	Needle being deflected to the rear by burr on needle point or due to operator pulling on material, or needle glancing off when coming on a seam	Do not pull material at the back. Use a sharp needle to stop needle from glancing off seam. Check needle for burn

NOTE: More detailed information concerning the double locked stitch (stitch type 401) is available under "Stitch Formation, Type 401".

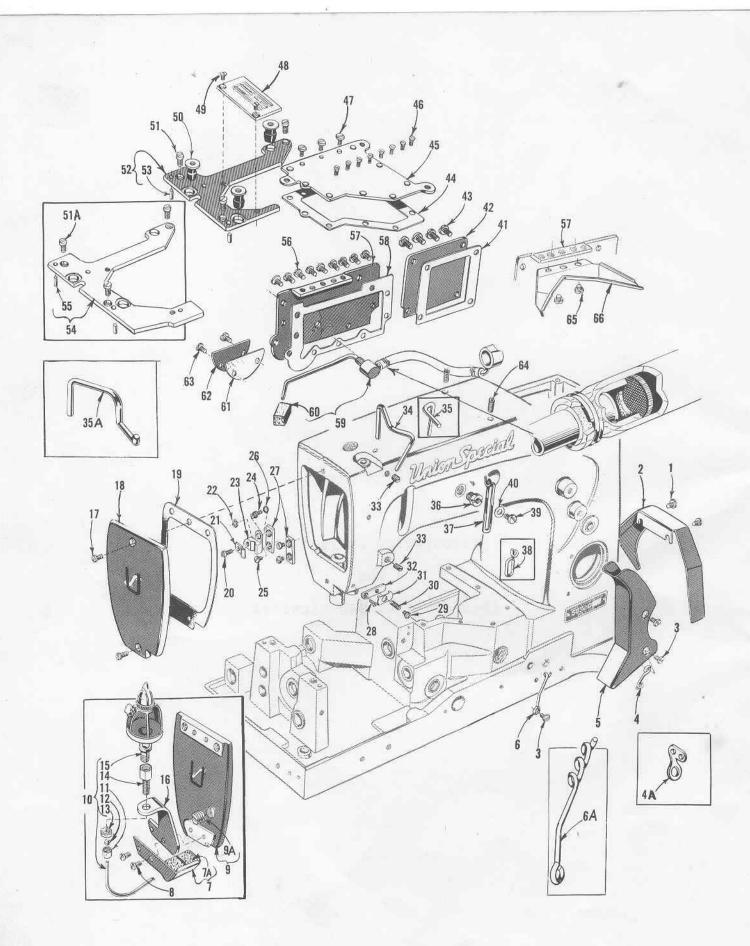
EXPLODED VIEWS

AND

DESCRIPTION OF PARTS

FOR

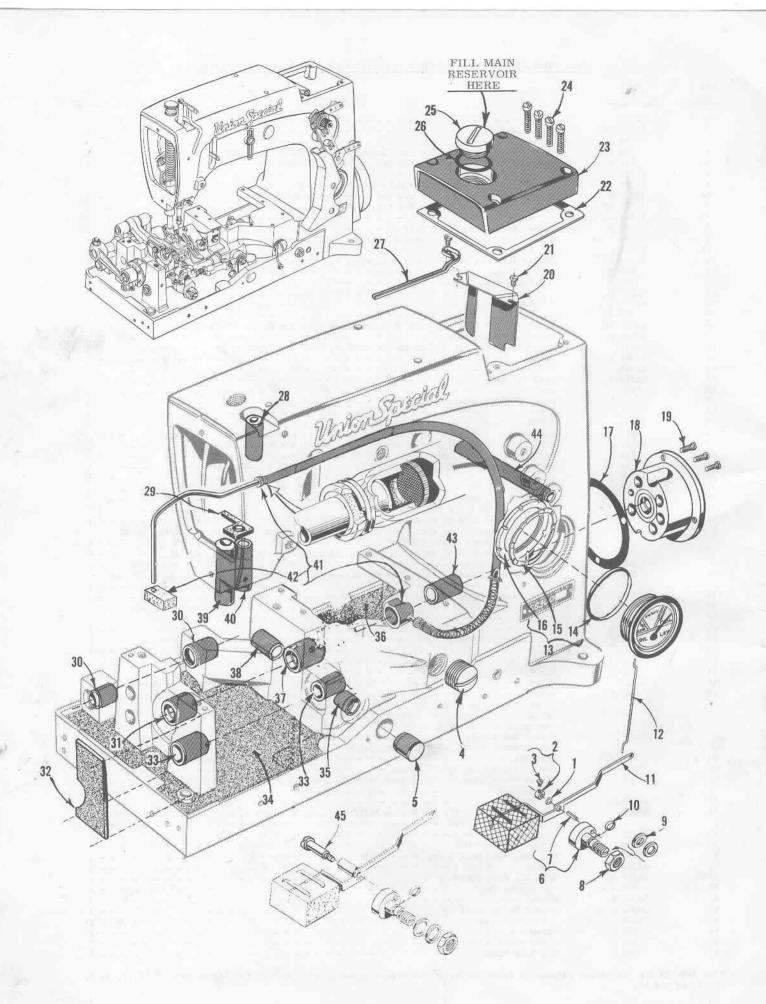
ADVANCED FLAT BED MACHINES



#### MAIN FRAME, THROAT PLATE SUPPORTS, MISCELLANEOUS COVERS AND OILING PARTS

Ref. No.	Part No.	Description Amt. Req.	
1	22829	Screw 2	
2	21375 AV	Belt Guard1	
3	98 A	Screw 3	
4	52 A	Looper Thread Eyelet, for all Classes, except 56500 and 56900 1	
4A 5	158 B 56391	Looper Thread Eyelet, for Classes 56500 and 56900 1 Looper Thread Guard 1	
6	52958 B	Looper Thread Eyelet, for single needle machines1	
6A	52958 G	Looper Thread Eyelet, for two and three needle machines 1	
7	21396 BP	Needle Thread Lubricator, for Styles 56900 H, J 1	
7A	21396 AG	Felt Pad2	
8	22569 B	Screw, for Styles 56900 H, J2	
9	56782	Head Cover, for Styles 56400 R, 56700 J, 56900 H, J 1	
9A	22733 C	Plug Screw1	
10 11	21396 BJ 660-75	Needle Thread Lubricator Oil Reservoir, for Styles 56900 H, J 1 Coupling 1	
12	660-74	Connection Sleeve 1	
13	11638 M	Nut 1	
14	61394 V	Adapter 1	
15	666-79	011 Cup 1	
16	21396 BK	Needle Thread Lubricator Oil Reservoir Bracket, for Styles 56900 H, J 1	
17	22569 C	Screw, for head cover	
18 19	56382 56382 N	Head Cover, for all Styles except 56400 R, 56700 J, 56900 H, J	
20	22585	Screw	
21	56393 D	Head Oil Tube Clamp 1	
22	7947	Nut1	
23	56393 C	Head Oil Tube Mounting Block1	
24	51294 R	Screw 1	
25 26	22513 660-342	Screw 3 Lockwasher	
27	35731 A	Presser Bar Connection Guide Plate2	
28	605 A	Screw, for Styles 56200 S, W; 56300 W, AL 1	
29	57 WD	Nipper Spring Screw, for Styles 56200 S, W; 56300 W, AL 1	
30	15438 C	Nipper Spring, for Styles 56200 S, W; 56300 W, AL 1	
31	57 WB	Nipper Spring Plate, for Styles 56200 S, W; 56300 W, AL 1	
32	43296	Nipper Spring Base, for Styles 56200 S, W; 56300 W, AL	
33 34	95 51270 B	Plug Screw and Screw for take-up wire 2  Needle Thread Take-up Wire, for Styles 56200 W; 56300 H, W 1	
35	56470	Needle Thread Take-up Wire, for Styles 56300 M, Classes 56400, 56500, 56700, 56900	
		and 56200 except Style 56200 W	
35A	56370	Needle Thread Take-up Wire, for Styles 56300 E, F, G, N, R, U, X, AH, AL 1	
36	22889 A	Adaptor Plug Screw	
*37	539	Frame Needle Thread Eyelet, for all Styles except 56300 E, F, G, N, R, U, X, AH, AL	
*38	51758	and 56700 J1 Frame Needle Thread Eyelet, for Style 56700 J	
39	22848	Screw	
40	20	Washer1	
41	56382 E	Gasket1	
42	56382 D	Crank Chamber Cover, lower	
43	22548	Screw 4	
44 45	56382 H 56382 G	Gasket1 Oil Reservoir Top Cover1	
46	22524	Screw	
47	22585 A	Screw 3	
48		Throat Plate (See Pages 51, 53, 55, 59, 61, 63, 65, 67, 69) 1	
49	87	Screw, for throat plate, countersunk head, for Styles 56200 R, S and Class 56300	
	22570	except Styles 56300 H, M, AL2	
	22570	Screw, for throat plate, fillister head, for Styles 56200 H, K, L, W, 56300 H, M, AL and Classes 56400, 56500, 56700, 56900 2	
50	660-313	Well Nut3	
51	22839	Screw, for throat plate support 3	
52	56380	Throat Plate Support, for Styles 56200 R, S and Class 56300 except Styles 56300	
		H, M, AL1	
53	51280 J	Dowel Pin2	
54	56480	Throat Plate Support, for Styles 56200 H, K, L, W, 56300 H, M, AL and Classes 56400	
55	51280 J	56500, 56700, 569001 Dowel Pin	
56	22848	Screw 9	
57	56382 F	Oil Reservoir Back Cover1	
58	56382 L	Gasket1	
59	56393 AC	Base Oil Pump Assembly1	
60	666-214	Intake Felt1	
61	56382 K	Gasket1	
62 63	56382 J 22829	Looper Drive Shaft Reservoir Cover1 Screw	
64	22894 E	Screw 2	
65	357	Screw 2	
66	57882 E	Oil Drip Plate1	

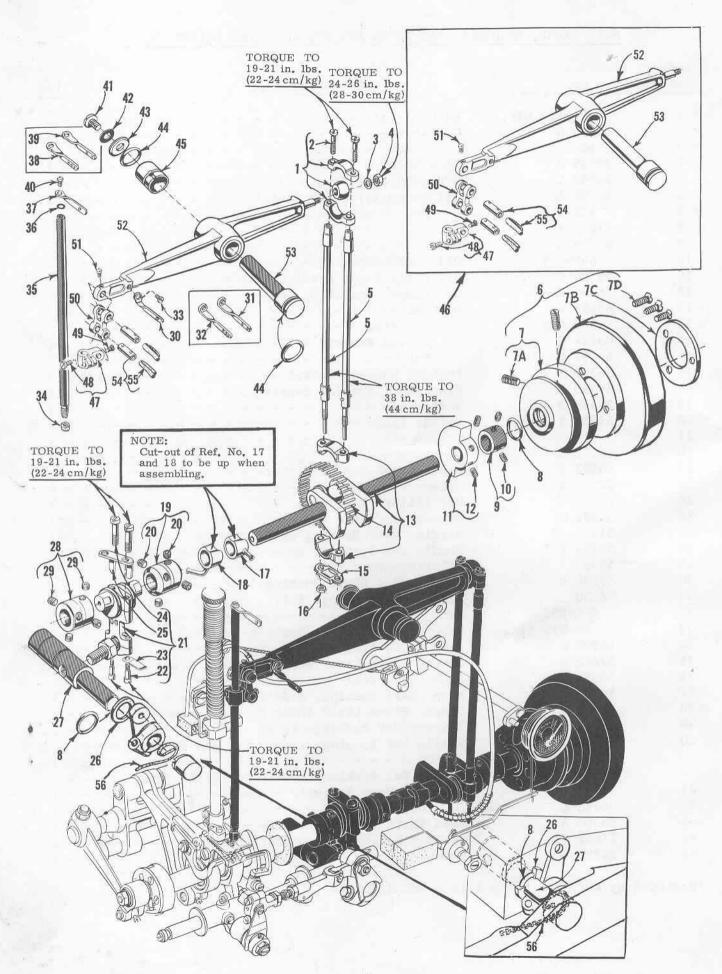
<sup>\*</sup>See Page 39 for thumbscrew adjustable frame needle thread eyelet assembly No. 29476 MY for Styles 56300 E, F, G, N, R, U, X, AH and AL.



# MAIN FRAME, BUSHINGS, OIL GAUGE AND MISCELLANEOUS OILING PARTS

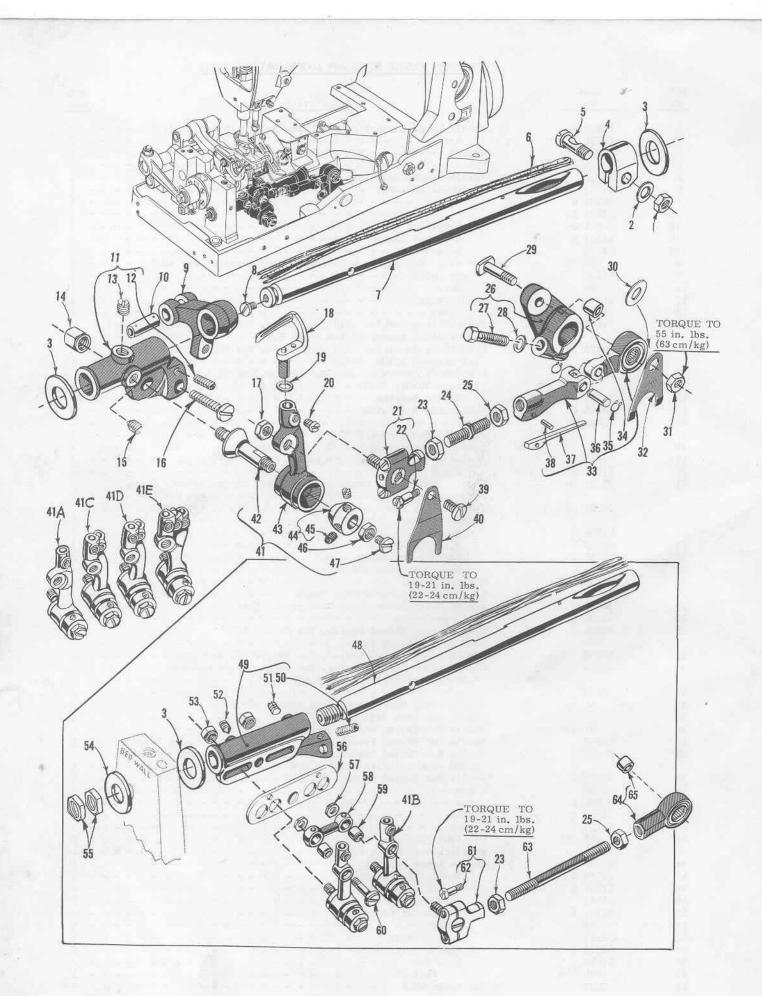
Ref.	Part No.	Description Amt. Req.
* 1	27-527 Blk.	Washer 1
* 2	61494 G	Collar 1
* 3	604	Screw 1
4	22539 R	Plug Screw 1
5	52942 Y	Synchronizing Stud 1
6	56394 A	Oil Gauge Adjusting Shaft 1
* 7	426 B	Pin1
8	11635 В	Nut1
9	61256 G	Washer 2
10	660-221	Oil Retaining Ring 1
11	56394 C	Oil Gauge Float Lever Assembly 1
12	56394 B	Oil Gauge Connecting Rod 1
13	63494 K	Oil Gauge 1
14	660-455	"O" Ring 1
15	63494 G	Spring Washer 1
16	63494 F	Nut1
17	56390 E	Bushing Housing Gasket 1
18	56390 В	Crankshaft Bushing Housing 1
19	22569 В	Screw 3
20	52882 Y	Baffle Plate 1
21	90	Screw 2
22	56382 C	Gasket 1
2.3	56382 B	Upper Crank Chamber Cover 1
24	22541 C	Screw 4
25	22733 E	Oil Filler Plug Screw 1
26	56382 M	Gasket 1
27	51282 AE	Needle Lever Bearing Oiler 1
28	51154 E	Needle Bar Bushing, upper 1
29	56393 W	Oil Attraction Felt1
30	57836 B	Feed Rocker Shaft Bushing 2
31	56390	Main Shaft Bushing, left 1
32	666-259	Felt1
33	50-895 Blk.	Looper Rocker Shaft Bushing 2
34	56393 P	Base Felt, front 1
35	52942 W	Looper Drive Lever Shaft Bushing, front 1
36	56393 Q	Base Felt, rear1
37	56190	Main Shaft Bushing, middle 1
38	57842 B	Looper Drive Lever Shaft Bushing, rear 1
39	51257 AA	Presser Bar Bushing, lower 1
40	56354 В	Needle Bar Bushing, lower, for all Styles except 56900 J 1
( <u></u>	57954	Needle Bar Bushing, lower, for Style 56900 J 1
41	56393 T	Head Oil Pump Assembly 1
42	56393 L	Intake Felt 1
43	56390 A	Main Shaft Bushing, right1
44	21657 X	Tension Release Lever Shaft Bushing 1
45	22793	Screw 1

<sup>\*</sup>Replaced by Ref. No. 45 on late model machines.



## CRANKSHAFT, NEEDLE LEVER AND LOOPER DRIVING PARTS

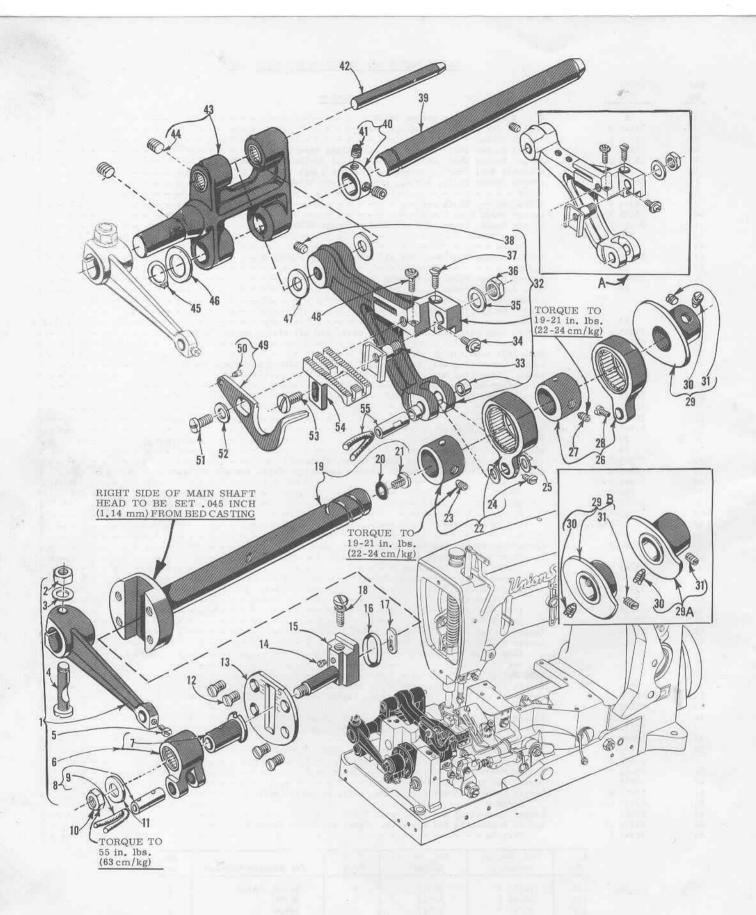
Ref.	Part No.	Description		Amt. Req.
1	29066 R	Needle Lever Connecting Rod Upper Ball Joint Assembly		1
2	22559 G	Screw		2
3	51216 N	Washer		1
4	51216 P	Nut		1
5	56316	Needle Lever Connecting Rod		2
6	56321 J	Handwheel Assembly		
7	56321 Н	Pulley		1
7A	22894 AB	Screw		2
7B	56321 D	Handwheel		1
7C 7D	61321 L 22574	Retainer Plate		1
8	660-202	Screw		3
9	51147	"O" Ring, for pulley and looper drive lever rocker shaft -		
10	95	Screw		1
11	51247	Counterweight		2
12	22894 J	Screw		2
13	29476 LL	Crankshaft Assembly, .910 inch throw, for Styles 56200 L,W	and	4
		Class 56300 except Styles 56300 H,M		1
	29476 LM	Crankshaft Assembly, .770 inch throw, for Styles 56200 H,K,		#82.5
	20170	and Classes 56400, 56700	2 4 4	1
	29476 LN	Crankshaft Assembly, .990 inch throw, for Styles 56300 H,M		2
14	51216 M	Classes 56500, 56900 Needle Bearing		1
15	56316 C	Connecting Rod Guide		
16	12934 A	Nut		1
17		Head Oil Pump, (See Ref. No. 41 - Page 31)		1
18		Base Oil Pump, (See Ref. No. 59 - Page 29)		
19	529'43 L	Looper Drive Lever And Crankshaft Connection, right		1
20	22894 X	Screw		4
21	29105 AG	Looper Drive Lever Crank Assembly, for Styles 56200 L,W and		
	20105 AH	Classes 56300, 56500, 56900		1
	29105 AH	Looper Drive Lever Crank Assembly, for Styles 56200 H,K,R,S Classes 56400, 56700		
22	22559 A	Bearing Cap Screw, lower		1 2
23	56343 E	011 Splasher		1
24	22587 K	Bearing Cap Screw, upper		2
25	56343 C	Ball Joint Guide Fork		1
26	56342 B	Spacing Washer		1
27	52942 A	Looper Drive Lever Rocker Shaft		
28	56343 D	Looper Drive Lever Crank Connection, left		1
29	22894 X	Screw		4
30	56358 A	Needle Lever Thread Eyelet, for Class 56200		
31	56458	and Styles 56300 H,M,W,		
32	56958	Needle Lever Thread Eyelet, for two needle machines		1
	20,30	Needle Lever Thread Eyelet, for three needle machines and Cl 56300 except Styles 56300 H,M,W	Lass	-
33	22768	Screw		1
34	56	Needle Clamp Nut, for Classes 56200, 56300		1
35		Needle Bar (See Page 47)		1 '
36	27-435 Blk.	Needle Bar Eyelet Washer		1
37	56358	Needle Bar Thread Eyelet, for Class 56200 and Styles 56300 F	I,M,W-	1
38	56958 A	Needle Bar Thread Eyelet, for three needle machines and Clas	SS	
39	E6/E0 A	56300 except Styles 56300 H,M,W		1
40	56458 A 22768	Needle Bar Thread Eyelet, for two needle machines		1
41	22586 R	Screw		1
42	51250 F	Gasket		1
43	51250 D	Washer		1
44	660-212	011 Seal Ring		1 2
45	51150	Needle Lever Thrust Collar		1
46	29348 Y	Needle Lever Assembly		1
47	51254 J	Needle Bar Connection		1
48	22562 A	Screw		1
49	22564	Screw		1
50	56354 A	Needle Bar Link		1
51	77	Screw		1
52 53	56315	Needle Lever		1
54	56350 A 51054	Needle Lever Stud		1
55	666-149	Link Pin		2
56	CL21	Oil Drain Wick		1
	154 - 1777/W252			7



### LOOPER ROCKER AND CONNECTING ROD PARTS

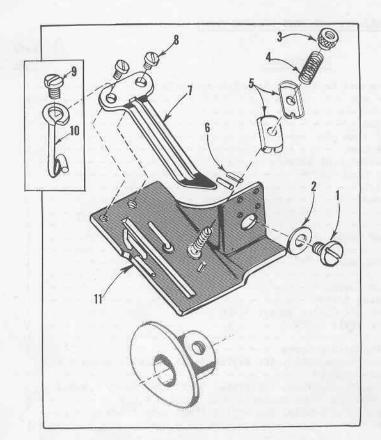
Ref.	Part No.			Amt.
		Description	350	Req.
1	18	Nut, for all Styles except 56700 J		1
2	51216 N	Washer, for all Styles except 56700 J		
3	51244 L	Thrust Washer		2
5	51244 N 55244 G	Looper Rocker Shaft Clamp, for all Styles except 56700 J		1
6	W03	Looper Rocker Shaft Collar Stud, for all Styles except 56700 J		1
7	56344 B	Columbia Wool Yarn (4 strands - 8 inches long)		
8	22513	Looper Rocker Shaft, for all Styles except 56700 J		1
9	56344 B	Looper Rocker Shaft Arm		1
10	51236 A	Looper Avoid Link Pin		1
11	56344 C	Looper Rocker Frame, for all Styles except 56700 J		
12	719	Stop Screw		
13	98	Screw		
14 15	51246 96	Looper Rocker Stud Nut, for all Styles except 56700 J		1
16	22874	Screw		1
17	18	Looper Rocker Frame Lock Screw		1
18		Looper (See Page 49)		I
19		Looper Collar (See Page 49)		
20	73	Screw		1
21	57841	Looper Connecting Rod Ball Joint, left, for all Styles except 56700 I	L L L SPERSON	1
22	22729 C	Screw	L K E GWENNEN	
23	269	Nut, left hand thread		1
24	51240 D	Looper Connecting Rod, for all Styles except 56700 J and Class 56400		
25	51240 E 18	Looper Connecting Rod, for Class 56400		1
26	56342	Nut, right hand thread		1
27	22882 C	Looper Drive Lever, marked "A"		1
28	51242 M	Washer		1
29	52942 R	Looper Lever Stud		
30	20	Washer		
31	18	Nut		1
32	56393 K	Looper Connecting Rod Ball Joint Oiler, right		1
33 34	56341 M	Looper Connecting Rod Jointed Section Assembly, right, for all Styles aver	+ 56700 T	4
35	56341 F 660-310	Ferrule		1
36	56341 E	Truarc Ring		2
37	56341 G	Spring		1
38	50-458 Blk.	Spring Pin		1
39	87 U	Screw		1
40	56393 J	Looper Connecting Rod Ball Joint Oiler, left		1
41	20012	Looper Rocker Assembly (See Chart Below)		
42 43	51745	Looper Rocker Cone Stud		1
44	15465 F	Looper Rocker (See Chart Below)		1
45	88	Looper Rocker Cone		1
46	258 A	Lock Nut		2
47	22829	Lock Nut Screw		□ □ 1
48	56744 A	Looper Rocker Shaft, for Style 56700 J		4
49	56744	Looper Rocker Frame, for Style 56700 J		4
50	719	Stop Screw		1
51	98	Set Screw		1
52 53	96	Spot Screw		1
54	1280 56751	Looper Rocker Stud Nut, for Style 56700 J		2
55	51170 D	Looper Rocker Shaft Thrust Collar, right, for Style 56700 J Nut, for Style 56700 J		1
56	56772-56	Looper Rocker Spacing Plate, for No. 56 gauge, Style 56700 J		- + 2
-	56772-64	Looper Rocker Spacing Plate, for No. 64 gauge, Style 56700 J		1
57	14077	Nut, for Style 56700 J		1
58	51770-56	Looper Rocker Link, for No. 56 gauge, Style 56700 J		1
	51770-64	Looper Rocker Link, for No. 64 gauge, Style 56700 J		1
59	51771	Looper Rocker Link Ferrule, for Style 56700 J		0
60 61	22835	Screw, for Style 56700 J		
62	57841 A 22729 C	Looper Connecting Rod Ball Joint, left, for Style 56700 J		1
63	41047	Screw		2
64	29476 LV	Looper Connecting Rod, for Style 56700 J		1
65	56341 F	Ferrule		1
				+

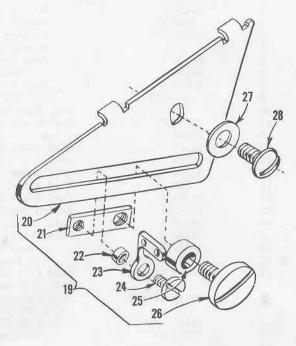
Ref. No.	Ref. No. 41 Assembly	Ref. No. 43 Rocker	I. D. Mark	For Machine Classes	Amt. Req.
41A	29192 V	56313	S	56200, 56300	1
41B	29192 X	56713	V	56700	2
41C	29192 W	56413	U	56400	1
41D	29192 AA	56513	x	56500	1
41E	29192 Y	56913	Z	56900	1

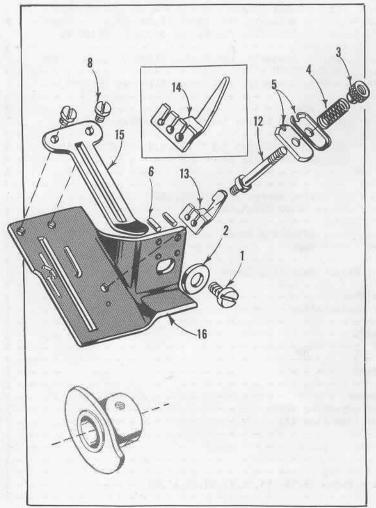


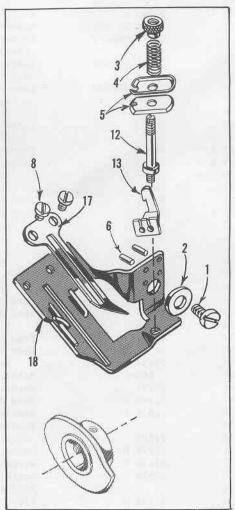
#### MAIN SHAFT, TAKE-UPS AND FEED DRIVING PARTS

Ref.	Part No.	Description Amt.
	W4044901-0000 - 5901700	WARRANT AND THE RESIDENCE OF THE WHITE AND THE REAL WAYS NOT A VICE
1	29476 MJ	Feed Rocker Arm and Feed Crank Link Sub-Assembly 1
2	55235 E	Nut1
3	6042 A	Washer 1
4	55235 D	Locking Stud 1
5	77	Screw, for link pin1
6	56336 В	Feed Crank Link1
7	56336 C	Feed Crank Link Ferrule
8	51054	Feed Crank Link Pin1
9	666-149	Oil Wick 1
10	269	Nut, left thread 1
11	21657 E	Washer 1
12	22525 A	Screw 4
13	56322 C	Main Shaft Head Plate1
14	22798 C	Screw1
15	56336	Feed Crank Stud, marked "A"1
16	660-269 B	Quad Ring1
17	56336 D	Feed Crank Stud Insert1
-18	22543 -A	Stitch Regulating Screw1
19	56122 A	Main Shaft, for all Styles except 56700 J1
-	56722 E	Main Shaft, for Style 56700 J1
20	56322 B	Gasket 1
21	22891 B	Oil Flow Regulating Screw 1
22	29476 NM-062	Feed Lift Eccentric Assembly, for Styles 56200 H,K,R,S; 56300 U,X; 56700 J and Class 56400 1
-	29476 NM-080	Feed Lift Eccentric Assembly, for Styles 56200 L.W; 56500 A.B.C.J.
		U, Classes 56900 and 56300 except Styles 56300 H,M,U,X 1
( <del>**</del>	29476 NM-096	Feed Lift Eccentric Assembly, for Styles 56300 H.M; 56500 R 1
23	22894 AA	Spot Screw 1
24	77	Screw, for link pin1
25	39543 N	Thrust Washer, for feed bar2
26	29476 NM-054	Looper Avoid Eccentric Assembly, for Class 56400 1
-	29476 NM-072	Looper Avoid Eccentric Assembly, for Styles 56200 L, 56300 W, Classes 56500 and 56900 1
-	29476 NM-062	Looper Avoid Eccentric Assembly, for Styles 56200 H,K,R,S: 56300
	23 10 0 111 002	E,F,G,N,R,U,X,AH,AL; 56700 J1
0+1	29476 NM-080	Looper Avoid Eccentric Assembly, for Styles 56200 W; 56300 H,M 1
27	22894 AA	Spot Screw 1
28	77	Screw, for link pin1
29	56323	Looper Thread Take-up, for Styles 56200 L,W and Classes 56300,
		56500 and 56900
29 A	56423	Looper Thread Take-up, for Styles 56200 H,K,R,S and Class 56400 1
29 B	56723	Looper Thread Take-up, for Style 56700 J 1
30	22764 C	Spot Screw 1
31	22580 D	Set Screw1
32	56334 N	Feed Bar, for all Styles except 56300 N,U,X,AH 1
32 A	56334 P	Feed Bar, for Styles 56300 N,U,X,AH1
33	56334 L	Feed Dog Holder1
34	22863 C	Feed Dog Holder Adjusting Screw1
35	6042 A	Feed Dog Holder Washer 1
36	258 A	Nut1
37	22637 P-24	Feed Dog Height Adjusting Screw1
38	22651 CB-4	Screw1
39	56335 L	Feed Rocker Shaft1
40	56335 D	Feed Rocker Shaft Collar 1
41	98	Screw2
42	56334 B	Feed Bar Shaft 1
43	56335 G	Feed Rocker
44	22651 CD-4	Screw2
45	660-438	Retaining Ring 1
46	41391	Washer 1
47	61341 J	Feed Bar Washer2
48	22834 A	Needle Guard Adjusting Screw 1
49	22201	Needle Guard (See Page 47) 1
50	22801	Screw1
51	22875 H	Screw, for needle guard1
52	61434 G	Washer 1
53	22528	Screw, for feed dog1
54	51226 A	Feed Dog (See Pages 51,53, 55,59,61,63,65,67,691
55	51236 A	Link Pin1



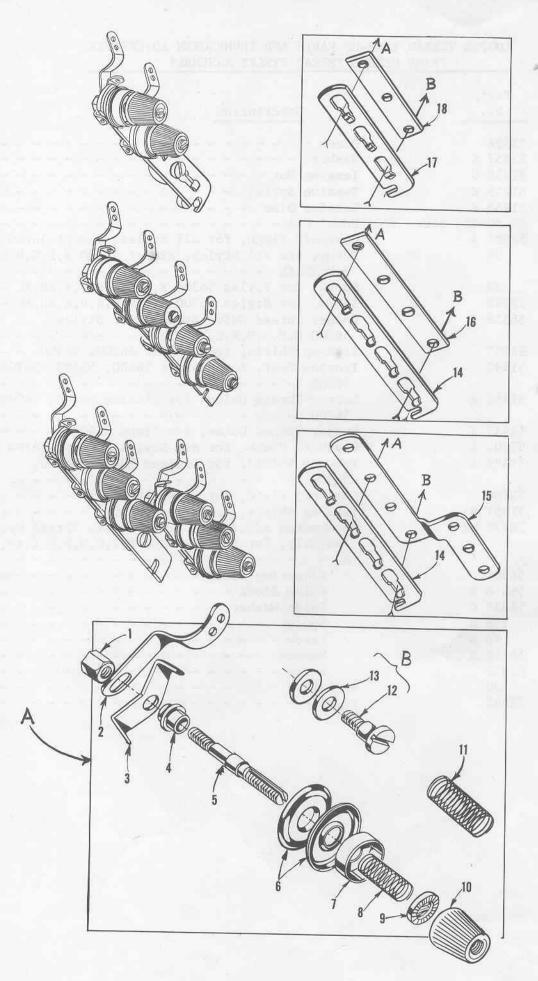






# LOOPER THREAD TAKE-UP PARTS AND THUMBSCREW ADJUSTABLE FRAME NEEDLE THREAD EYELET ASSEMBLY

Ref.	Part	4 Aeuri
No.	No.	Description Amt. Req.
1	22528	
2	21657 E	Screw 1
3	51959 D	Washer1
4	51959 K	Tension Nut 1
5	51959 B	Tension Spring1
6	50-216 Blk.	Tension Disc2
7	52804 A -	Dowel Pin 2
8	28	Cast-off Plate, for all Styles, except 56700 J- 1
	20	screw, for all Styles, except 56300 E.F.G.N.R.
_	28	U,X,AH,AL 2
9	22768	Screw, for Styles 56300 E,F,G,N,R,U,X,AH,AL 1
10	56358 E	Screw, for Styles 56300 E,F,G,N,R,U,X,AH,AL 1
	J 0550 E	Looper Thread Guide Eyelet, for Styles
11	51557	56300 E, F, G, N, R, U, X, AH, AL 1
12	51492	Take-up Shield, for Classes 56200, 56300 1
	31472	Tension Post, for Classes 56400, 56500, 56700,
13	51459 A	56900 1
	31-35 K	Looper Thread Guide, for Classes 56400, 56500,
14	51959 J	56700
15	52804 A -	Looper Thread Guide, for Class 56900 1
16	51457 A	Cast-off Plate, for all Styles, except 56700 J- 1
	15, 11	Take-up Shield, for Classes 56400, 56500,
17	51704	56900 1
18	51757 В	- Cast-off Plate, for Style 56700 J 1
19	29476 MY	Take-up Shield, for Style 56700 J1
		Thumbscrew Adjustable Frame Needle Thread Eyelet
		Assembly, for Styles 56300 E,F,G,N,R,U,X,AH,
20	56304	Adjusting Plate 1
21	56358 B	Guide Block 1
22	56358 C	Guide Washer1
23	158 B	Eyelet
24	98 A	Screw 1
25	56358 D	Washer 1
26	22837	Screw 1
27	20	Washer1
28	22848	Screw 1



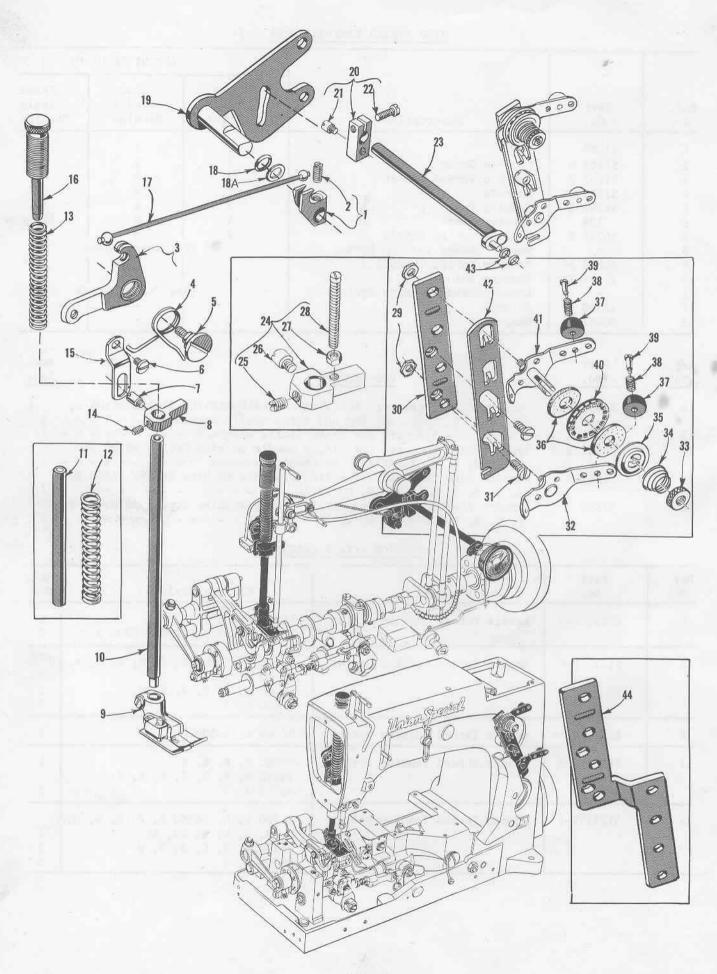
#### DISC THREAD TENSION PARTS

Ref.			AMOUNT REQUIRED		
	Part No.	Description	One Needle Machine	Two Needle Machine	Three Needle Machine
1	43266	Nut	1	2	5
2	51491 C	Lead-in Guide	2	4	6
2	51292 D	Tension Thread Eyelet	2	4	6
4	51292 A	Ferrule	2	4	6
5	56392 E	Tension Post	2	4	6
6	109	Tension Disc	4	8	12
7	56392 F	Tension Spring Shield	2	4	6
8	-	Needle Thread Tension Spring	(S	ee Chart Belo	w)
9	39592 AK	Tension Spring Ferrule	2	4	1 6
10	39592 Z	Tension Nut	2	4	6
11	=	Looper Thread Tension Spring	(S	ee Chart Belo	w)
12	22598 C	Screw	1		1
13	80557	Washer	2		2

Ref.	Part No.	Description	Amt. Req.
14	21657-4	Tension Disc Separator, for Single needle machine Styles 56300 E, F, G, N, R, U, X, AH; Two and Three needle machines	1
15	51992 A	Tension Post Support, for Three needle machines	
16	56382 X	Tension Post Support, for Single needle machine Styles 56300 E, F, G, N, R, U, X, AH and Two needle machines	
17	21657-3	Tension Disc Separator, for Single needle machine Styles 56200 H,	
18	52892	K, L, R, S, W, 56300 H, M, W, AL	40
		L, R, S, W, 56300 H, M, W, AL	1

#### TENSION SPRING CHART

Ref. No.	Part No.	Description	Machine Style	Amt. Req.
8	51292 F-5	Needle Thread Tension Spring	56200 H, K, R, S 56400 D,P,R,S,T,W,X; 56700 J	1 2
8	51292 F-8	Needle Thread Tension Spring	56200 L; 56300 E, F, G, M, N, R, U, W, X, AH, AL 56500 A, B, C, J, R, U, 56900 H, J	1 *.2 3
8	51292 F-14	Needle Thread Tension Spring	56200 W, 56300 H	1
11	51292 F-1	Looper Thread Tension Spring	56200 H, K, R, S 56400 D, P, R, S, T, W, X; 56700 J	1 2
11	51292 F-2	Looper Thread Tension Spring	56200 L, W, 56300 E, F, G, H, M, N, R, U, W, X, AH, AL 56500 A, B, C, J, R, U 56900 H, J	1 2 3

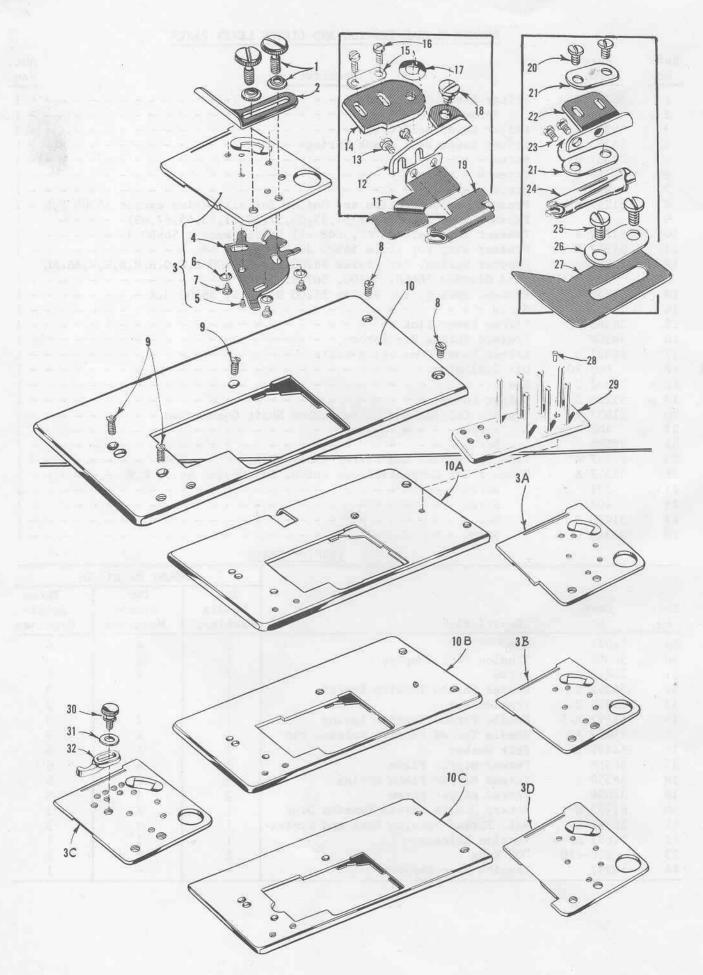


#### ROTARY THREAD TENSION AND LIFTER LEVER PARTS

Ref.	Part No.	Applications and the second and the	Amt. Req.
1	56383 X	Lifter Lever Connection	One of the last of
2	74 E	Screw	- L
3	56383 Y	Lifter Lever Bell Crank	
4	56383 D	Lifter Lever Bell Crank Spring	
5	22557 G	Screw	
6	22758 C	Screw	_ 1
7	402	Screw	_ 1
8	51257 M	Presser Bar Connection and Guide, for all Styles except 56300 F,R	
9		Presser Foot (See Pages 51,53,55,57,59,61,63,65,67,69)	- i
10	51257 K	Presser Bar, marked "A", for all Styles except 56900 J	- 1
11	51957 E	Presser Bar, for Style 56900 J	- 1
12	53787	Presser Spring, for Styles 56200 L,W, 56300 E,F,G,H,M,N,R,W,AH,AL	
		and Classes 56400, 56500, 56700, 56900	- 1
13	51256 C	Presser Spring, for Styles 56200 H,K,R,S, 56300 U,X	- 1
14	531	Screw	- 1
15	56383 A	Lifter Lever Link	- 1
16	56356	Presser Spring Regulator	- 1
_17	56383 W	Lifter Lever Connecting Cable	- 1
18	660-207	Oil Seal Ring	
18 A	39552 C	Washer	- 1
19	51283 Н	Lifter Lever	- 1
20	21657 Y	Tension Release and Lifter Lever Shaft Connection	- 1
21	402	Screw	- î
22	22596	Screw	- 1
23	21657 W	Tension Release and Lifter Lever Shaft	- 1
24	56357 A	Presser Bar Connection and Guide, for Styles 56300 F,R	- 1
25	531	Screw	- 1
26	402	Screw	- 1
27	51430 F	Nut	- 1
28	22840 C	Screw	- 1
		TENSION PARTS	

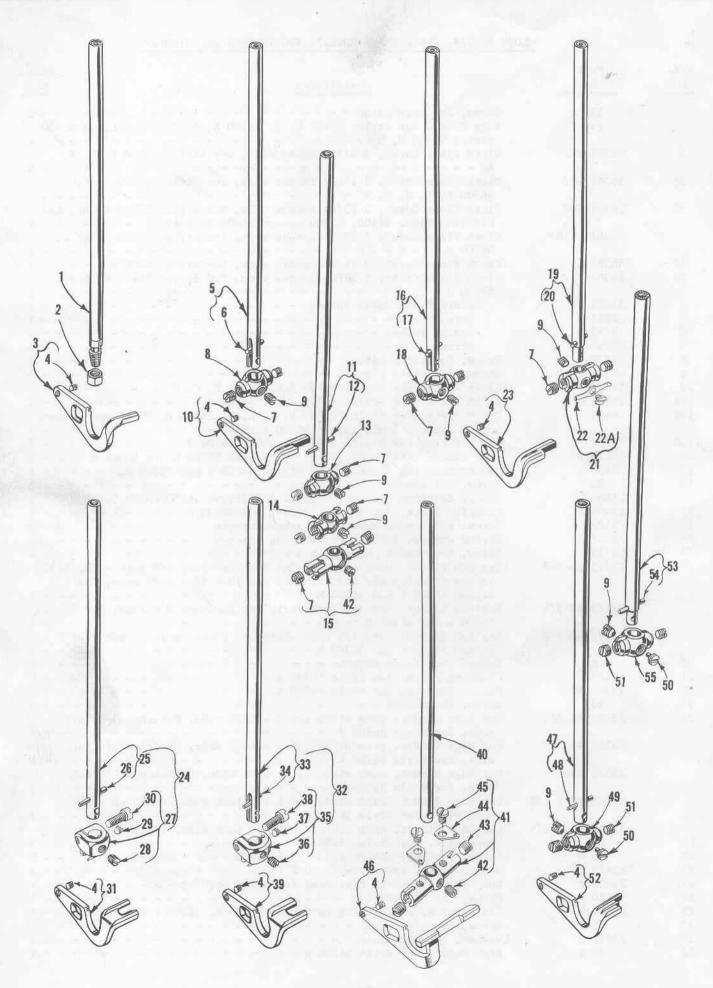
#### TENSION PARTS

			AMOUNT REQUIRED			
Ref.	Part No.	Description	One Needle Machines	Two Needle Machines	Three Needle Machines	
29	14077	Nut	2	4	6	
30	56392	Tension Post Support	1	i	_	
31	22872 A	Screw	2	2	2 *	
32	56392 C	Looper Thread Tension Eyelet	1	2	2 3	
33	61292 C	Tension Nut	1	2	3	
34	61492 M-5	Needle Thread Tension Spring	1	2	3	
35	21657 AE	Needle Thread Tension Release Pin	1	2	3	
36	61492 T	Felt Washer	2	4	6	
37	56359	Thread Nipper Plate	2	4	6	
38	56359 A	Thread Nipper Plate Spring	2	4	6	
39	22856	Thread Nipper Screw	2	4	6	
40	61492 S	Rotary Needle Thread Tension Disc	1	2	3	
41	56392 B	Ndl. Thread Tension Post and Eyelet	1	2	3	
42	21657 AD-4	Tension Release	1	1 '	1	
43	660-220	"O" Ring	2	2	2	
44	56992	Tension Post Support	-	_	1	



#### CLOTH PLATES, CLOTH PLATE COVERS, EDGE GUIDES AND BINDERS

Ref.	Part No.	Fe.	Amt. Req.
1 2	25 24	Screw, for edge guide Edge Guide, for Styles 56200 H, S, 56500 A, B, C, U and Class 56300	
3	56381-212	except 56300 H, M	- 1
		AH	- 1
3A	56381-222	Cloth Plate Cover, 3 15/32 inches wide, for Styles 56200 R, S, 56300 E, G, N, U, W	
3В	56381-207	Cloth Plate Cover, 3 15/64 inches wide, for Styles 56300 H, AL, and Classes 56400, 56500, 56900 except 56400 R, S-48	
	56381 C-207	Cloth Plate Cover, 3 15/64 inches wide, for Styles 56200 H, K, L, 56300 M	
3C	56381 E-207	Cloth Plate Cover, 3 15/64 inches wide, for Style 56200 W	
3D	56381-187	Cloth Plate Cover, 2 59/64 inches wide, for Styles 56400 R, S-48, 56700 J	
4	51281 AC	Cloth Plate Cover Spring	= 1
	51281 AC 22845 B	Screw	1
5		Spring Washer	- 1
6	35772 H	Screw	- 3
7	22760 A	Screw	- 3
8	22839 C	Screw, for cloth plate	- 2
9	22526 C	Screw, for cloth plate	
10	56301	Cloth Plate, for Styles 56200 R,S, 56300 E, F, G, R, W	- 1
10A	56301 A	Cloth Plate, for Styles 56300 N, U, X, AH	- 1
10В	56401	Cloth Plate, for Styles 56200 H, K, L, W, 56300 H, M, AL and Class 56400, 56500, 56900 except 56400 R, S-48	es - 1
10C	56701	Cloth Plate, for Styles 56400 R, S-48, 56700 J	- 1
11	23438 В	Body Fabric Lead-in Platform, for Styles 56200 L and 56300 M	
12	23437 Y	Binder Swinging Bracket, for Styles 56200 L and 56300 M	
13	90	Screw, for binder	- 2
14	23437 В	Binder Swinging Bracket Support, for Styles 56200 L and 56300 M -	
15	23425 T	Clamping Plate, for Styles 56200 L and 56300 M	
16	22585	Screw, for binder swinging bracket support	- 2
17	12957 E	Spring Washer, for binder swinging bracket	_ 1
18		Screw, for binder swinging bracket	1
	22735		
19	23215 BG-5/8	English Binder, uses selvage edge binding strip 5/8 inch wide, 5/3 inches capacity for body fabric, finsihes 5/16 inch wide, for Styles 56200 L and 56300 M	
	23215 BG-3/4	English Binder, use 3/4 inch strip and finishes 3/8 inch, for Styl	
		56200 L and 56300 M	- 1
	23215 BG-7/8	English Binder, uses 7/8 inch strip and finishes 7/16 inch, for Styles 56200 L and 56300 M	- 1
20	90	Screw, for binder support	- 2
21	23425 T	Clamping Plate, for Style 56200 K	- 2
22	23322 AC	Binder Support, for Style 56200 K	1
23	90	Screw, for binder	- 2
24	23322 AB-3/4	Cut Edge Binder, uses strip cut 3/4 inch wide, finishes 7/32 inch wide, for Style 56200 K	- 1
	23322 AB-7/8	Cut Edge Binder, uses strip cut 7/8 inch wide, finishes 1/4 inch wide, for Style 56200 K	- 1
	23322 AB-1	Cut Edge Binder, uses strip cut 1 inch wide, finishes 9/32 inch wide, for Style 56200 K	- 1
	23322 AB-1 1/8	Cut Edge Binder, uses strip cut 1 1/8 inch wide, finishes 11/32 inch wide, for Style 56200 K	- 1
	23322 AB-1 1/4	Cut Edge Binder, uses strip cut 1 1/4 inch wide, finishes 13/32 inch wide, for Style 56200 K	- 1
25	25 C	Screw, for body fabric lead-in platform	- 2
26	23425 V	Washer Plate, for Style 56200 K	- 1
27	23438 A	Body Fabric Lead-in Platform, for Style 56200 K	- 1
28	90	Screw, for pin tension	- 1
29	23439 A	Pin Tension, for binding on Styles 56200 K, 56200 L and 56300 M -	
30	25 TB	Screw, for edge guide	- 1
31	21657 E	Washer, for edge guide	- 1
32	24 S	Edge Guide, for Style 56200 W	- 1

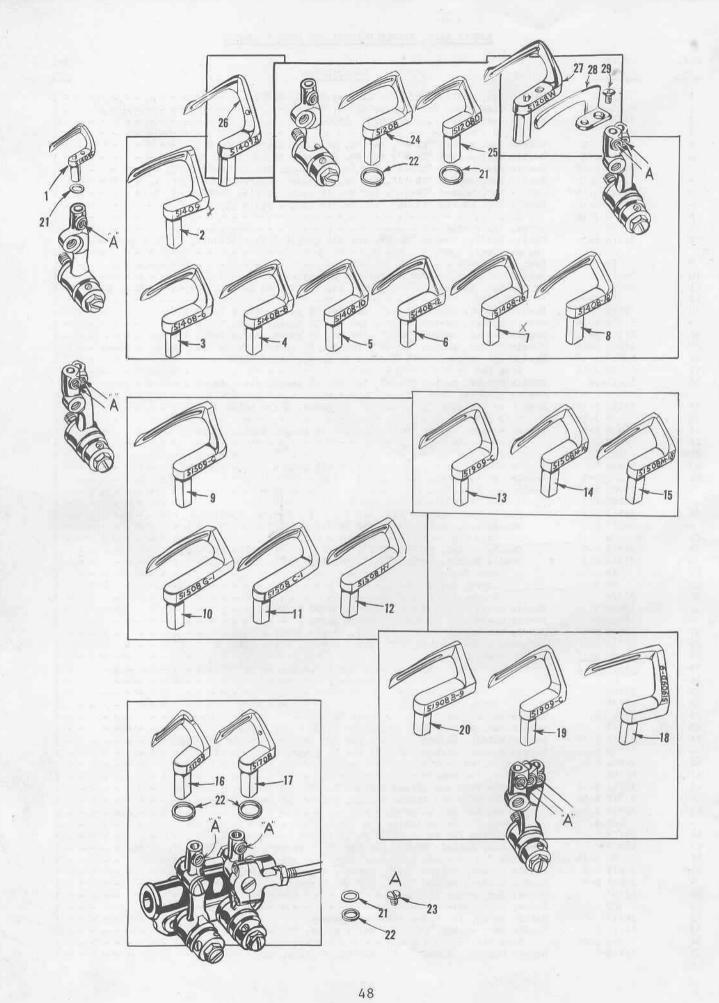


#### NEEDLE BARS, NEEDLE HOLDERS AND NEEDLE GUARDS

```
Ref.
          Part
                                                                                        Amt .
No.
          No.
                                              Description
                                                                                        Req.
                     Needle Bar, marked "CU", for Classes 56200, 56300 - - - - - - - -
1
         51217 C
                     Needle Clamp Nut, for Classes 56200, 56300 --------
2
          56
3
         56325
                     Needle Guard, for Classes 56200, 56300 - - - - -
         22801
                        Screw - -
                     5
         51417 C-6
         51417 C-8
         51417 C-10
         51417 C-12
         51417 C-16-
         51417 C-18
                     6
           50 J-16
           98
         51418-16
                     Needle Holder, marked "D-16", for all gauges Styles 56400 D, P, T, W and No. 16
8
                      Spot Screw ------
9
           89
         56425
10
                     Needle Guard, for Class 56400, all gauges - -
         51417 D
                     Needle Bar, marked "DE", for Nos. 24, 26, 32, 48 gauges, Styles 56400 R, S, X - - :
11
           50 J-40
12
                        Stop Pin - - -
                     51418 K-24
13
         51418 K-26
         51418 B-32
15
         51418 D-48
                     Needle Bar, marked "ET", for No. 16 gauge, Style 56500 J -----
         56517 B-16 -
16
                        17
           50 J-16
                     Needle Holder, marked "D-16", for No. 16 gauge, Style 56500 J and all gauges
         51418-16
                      Style 56400 D. P. T. W --------------
19
         56517 B-18
                     Needle Bar, marked "EU", for No. 18 gauge, Style 56500 J, R - - - -
20
           50 J-16
                         Needle Holder, marked "G-5", for No. 18 gauge, Styles 56500 J, R - - -
21
          7018 E-5
          7040-6
22
                         Thread Guide - -
22A
          187 B
                         Screw - - - - - - -
                     Needle Guard, for Styles 56500 J, R all gauges --------
23
         56525
                     Needle Bar Assembly, for 7 S.P.I., Style 56500 U -------
Needle Bar Assembly, for 7 S.P.I., Style 56500 B ------
24
         29202 F-1
         29202 M-1
                     Needle Bar Assembly, for 10 S.P.I., Style 56500 C ------

Needle Bar, marked "EK", for 7 S.P.I., Styles 56500 B, U ----

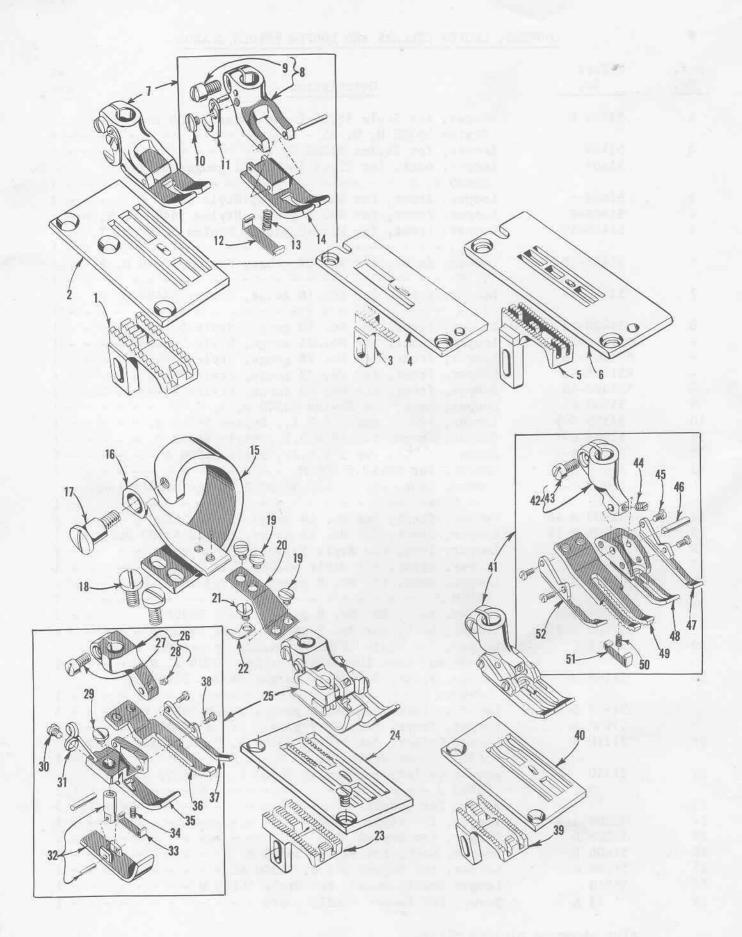
Needle Bar, marked "EL", for 10 S.P.I., Style 56500 C -----
         29202 N-1
25
         56517 D-1
         56517 E-1
26
           50 J-16
                            Stop Pin ----
                        Needle Holder, marked "P-1", for 7 S.P.I., Styles 56500 B, U -- Needle Holder, marked "Q-1", for 10 S.P.I., Style 56500 C -- --
         51518 G-1
27
         51518 C-1
28
           89
                            Spot Screw ------
                            88 B
29
                     30
         22729
         56525 B
31
                     Needle Guard, for 10 S.P.I., Style 56500 C -------
         56525 C
                     32
         29202 L-1
         56517 C-1
33
34
           50 J-16
                         Needle Holder, marked "AS", for 5 S.P.I., Style 56500 A
35
        56518 C-1
36
           89
                            Screw, for needle - - - - - - - - - - - - - - - -
         22743
37
                            Screw, for needle - - - - - - - - - - - -
38
         22729
                     Needle Guard, for 5 S.P.I., Style 56500 A - - - - - -
39
         56525 A
40
         51717
                     Needle Bar, marked "AU", for Style 56700 J all gauges - - - -
                     Needle Holder, marked "AB-56", for No. 56 gauge, Style 56700 J ---- Needle Holder, marked "AB-64", for 64 gauge, Style 56700 J -----
         51718 A-56
41
         51718 A-64
42
         22894 P
                        Screw, for needle - - -
43
          98
         51718 B-64
                        Needle Stop and Thread Eyelet, for No. 64 gauge - - - - - - - - -
         51718 B-56
                        Needle Stop and Thread Eyelet, for No. 56 gauge - - - - - - -
                        Screw, for No. 64 gauge - - - - - - - - - - - - - - - - - -
         22513 B
45
                         Screw, for No. 56 gauge - - - - - - - - - - - - - - -
          605 A
46
         56725
                     Needle Guard, for Style 56700 J all gauges -------
         56917 *
                     Needle Bar, marked "EP-9", for Nos. 8, 9 gauges, Styles 56900 H, J ---
47
           50 J-26
48
                        Stop Pin - - - -
                     Needle Holder, marked "C-8", for No. 8 gauge, Style 56900 H - - Needle Holder, marked "C-9", for No. 9 gauge, Styles 56900 H, J
         35818 N-8
494
         35818 N-9
50
         22752
                     Screw, for center needle ----------
                     Screw, for needle - - - - - - -
51
         22580
                     Needle Guard, for Class 56900 all gauges --------
         56925 -
52
                     Needle Bar, marked "DC", for No. 7 gauge, Style 56900 H - - - - - - -
53
         51917 A
54
           50 J-26
         51918-7
                     Needle Holder, marked "E-7", for No. 7 gauge, Style 56900 H - - - - - -
```



#### LOOPERS, LOOPER COLLARS AND LOOPER NEEDLE GUARDS

Ref.	Part No.		Description	Amt. Req.
1	51409	C	Looper, for Style 56200 L and Class 56300 except Styles 56300 H, M, AL	- 1
2	51409 51409		Looper, for Styles 56200 K, R Looper, back, for Class 56400 all gauges Styles 56400 R, S	- 1 - 1
3	51408-	6	Looper, front, for No. 6 gauge, Style 56400 P	- 1
4	51408-		Looper, front, for No. 8 gauge, Styles 56400 P, T, W	
- 5	51408-	10	Looper, front, for No. 10 gauge, Styles 56400 P, T,	
			Marian and the second	- 1
6	51408-	12	Looper, front, for No. 12 gauge, Styles 56400 D, P, T, W	- 1
7	51408-	16	Looper, front, for No. 16 gauge, Styles 56400 D, P, T, W	
8	51408-	18	Looper, front, for No. 18 gauge, Style 56400 P	
-	*51408-	24	Looper, front, for No. 24 gauge, Style 56400 X	
	*51408-		Looper, front, for No. 26 gauge, Style 56400 X	
2	*51408-		Looper, front, for No. 32 gauge, Style 56400 S	
-	*51408-		Looper, front, for No. 48 gauge, Styles 56400 R, S -	
9	51509		Looper, back, for Styles 56500 A, B, C, U	
10	51508		Looper, front, for 7 S.P.I., Styles 56500 B, U	
11	51508		Looper, front, for 10 S.P.I., Style 56500 C	
12	51508		Looper, front, for 5 S.P.I., Style 56500 A	
13	51909 51909		Looper, for Style 56300 M Looper, back, for Styles 56500 J, R and middle loope for Class 56900	
14	51508	M_16	Looper, front, for No. 16 gauge, Style 56500 J	
15	51508		Looper, front, for No. 18 gauge, Styles 56500 J, R -	
16	51709	11 10	Looper, left, for Style 56700 J all gauges	
17	51708		Looper, right, for Style 56700 J all gauges	
18	51909	D-9	Looper, back, for No. 9 gauge, Styles 56900 H, 56900 J	
	51909	D-8	Looper, back, for No. 8 gauge, Style 56900 H	- 1
	51909	D-7	Looper, back, for No. 7 gauge, Style 56900 H	
19	51909	С	Looper, for Style 56300 M, middle looper for Class 56900 and back looper for Styles 56500 J, R	
20	51908	B-9	Looper, front, for No. 9 gauge, Styles 56900 H, 56900 J	
	51908	B-8	Looper, front, for No. 8 gauge, Style 56900 H	- 1
	51908	B-7	Looper, front, for No. 7 gauge, Style 56900 H	- 1
21	21210	A	Looper Collar, for Styles 56200 H, K, R, S and Class 56300 except Styles 56300 G, H, M	
22	21210		Looper Collar, for Styles 56200 L, W, 56300 H, M 56700 J	1,2
23	73		Screw, for looper1	,2,3
24	51208		Looper, for Style 56300 H	- 1
25	51208	D	Looper, for Styles 56200 H, S	- 1
26	51409	В	Looper, back, for Styles 56400 R, S	- 1
27	51208	W	Looper, for Styles 56200, 56300 AL	- 1
28	51210		Looper Needle Guard, for Style 56200 W	- 1
29	73	A	Screw, for looper needle guard	- 1

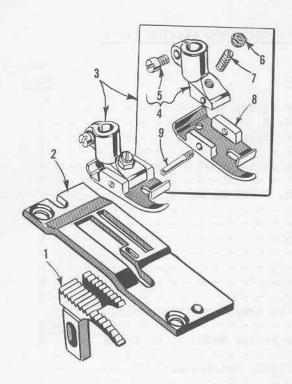
\*Not shown on picture plate.

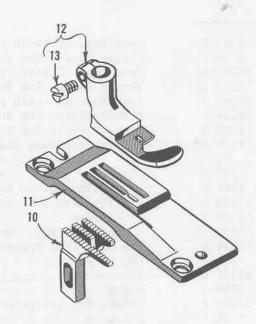


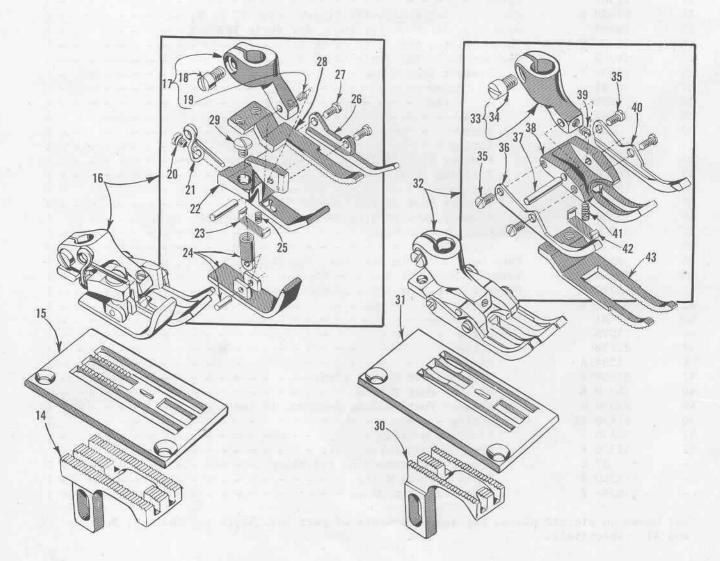
## FEED DOGS, THROAT PLATES, PRESSER FEET AND TOP GRIP-FEED DRIVING PARTS

			3.	
Ref.	Part	1		
No.	No.		Description	Amt.
70			Description	Req.
1	9205	F	Food Dog 16 tooth por inch for State F6200 o H	_
2	9224		Feed Dog, 16 teeth per inch, for Styles 56300 G, U	- 1
3	56305		Throat Plate, for Styles 56300 G, W	- 1
4	56324		Feed Dog, 12 teeth per inch, for Style 56300 AL	- 1
5			Throat Plate, for Style 56300 AL	
	51205		Feed Dog, 16 teeth per inch, for Style 56200 H	
6	56224		Throat Plate, for Style 56200 H	
7	51320		Presser Foot, for Styles 56200 H, 56300 G, AL	- 1
8	51330		Presser Foot Shank	- 1
9	91		Screw	- 1
10	187	В	Screw	- 1
11	1741	В	Chain Cutting Knife	- 1
12	51330	AH	Yielding Section	- 1
13	51330	W	Spring	_ 1
14	51330	AG	Presser Foot Bottom	1
15	51334	A	Top Grip Feed Presser Foot Driving Arm, for Styles 56300 N,	- 1
			U, X, AH	
16	51334	D	Presser Foot Connecting Rod, for Styles 56300 N, U, X, AH	- 1
17	22758		Screw	- 1
18	22875	-	Screw for top and feel and fee	- 1
19	28		Screw, for top grip feed presser foot driving arm	- 2
20	51334		Screw	- 3
21	22561	C	Connecting Rod Flat Spring, for Styles 56300 N, U, X, AH	- 1
22		a A	Screw	
	51330	S	Chain Cutting Knife, for Styles 56300 N, U, X, AH	- 1
23	56305	1000	Feed Dog, 16 teeth per inch, for Style 56300 X	- 1
24	51324		Throat Plate, for Style 56300 X	- 1
25	56320		Presser Foot. for Style 56300 X	- 1
26	51330	Z	Presser Foot Shank	- 1
27	91		Screw	- 1
28	1096		Screw	- 1
29	22561		Screw	_ 1
30	604		Screw	- 1
31	19146	A	Spring	- 1
32	51330	AB	Presser Foot Yielding Section	50 A
33	56330	F	Yielding Section	
34	56330	G	Spring	- 1
35	56330		Presser Foot Bottom, marked "AG"	- 1
36	51330	AD	Pressor Foot Fooding Costing 16	- 1
37	51330		Presser Foot Feeding Section, 16 teeth per inch	- 1
38	22738	1115	Feed Section Guide	- 1
39	9205	E	Screw	- 2 *
40	51324		Feed Dog, 16 teeth per inch, for Styles 56300 G, U	- 1
			Throat Plate, for Style 56300 U	- 1
41	56320		Presser Foot, for Style 56300 U	- 1
42	51330	M	Presser Foot Shank	- 1
43	91		Screw	- 1
44	1096		Screw	- 1
45	22738		Screw	- 4
46	1594	A	Hinge Pin	- 1
47	51330	R	Feed Section Guide, right	- î
48	56330	E	Presser Foot Bottom	- 1
49	51330		Presser Foot Feeding Section, 16 teeth per inch	2 1
50	61430	BT	Spring	1
51	56330		Yielding Section	
52	51330		Feed Section Guide, left	
_	* 87		Screw for compacting and bines	- I
	*51330		Screw, for connecting rod hinge	- 2
	*56334		Chain Cutting Knife	- 1
	20234	*	Connecting Rod Hinge	- 1

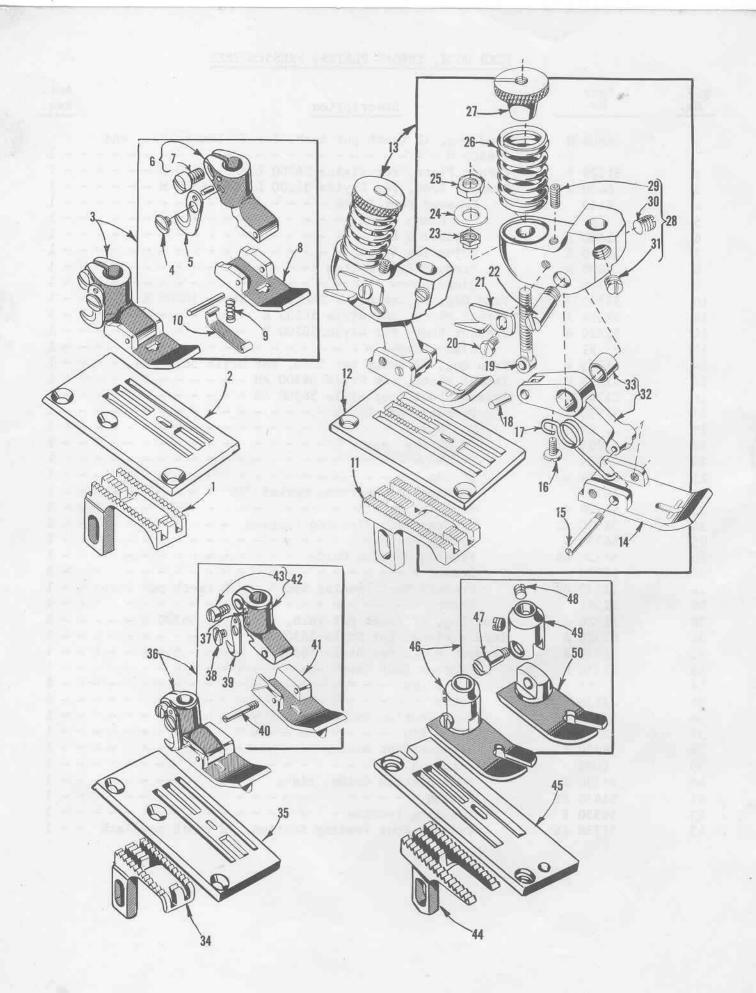
 $<sup>^{\</sup>star}$  Not Shown on picture plate, but are components of part Nos. 56320 and 56320 U, Ref. No. 25 and 41 respectively.



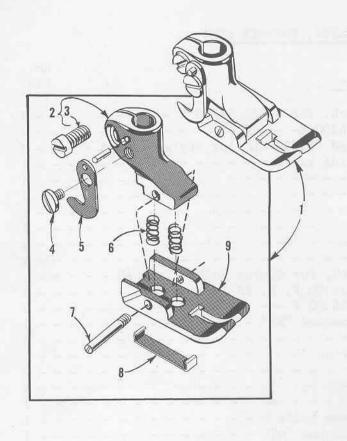


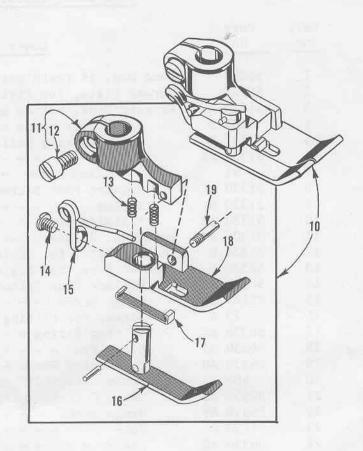


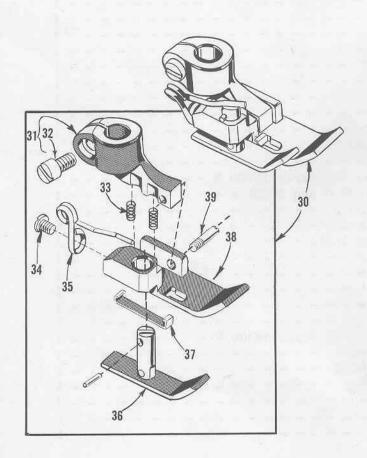
Ref. No.	Part No.	Description	Amt. Req.
1	6405 M	Feed Dog, 12 teeth per inch, for Styles 56200 L and	1
0	5100/ D	56300 M	
2	51224 B	Throat Plate, for Styles 56200 L and 56300 M	
3	6420 W	Presser Foot, for Styles 56200 L and 56300 M	1
4	6430	Presser Foot Shank	
5	91	Clamp Screw	1
6	51430 F	Adjusting Nut	1
7	22840 A	Adjusting Screw	1
8	6430 A	Presser Foot Bottom	1
9	22799 E	Hinge Screw	1
10	51205 A	Feed Dog, 16 teeth per inch, for Style 56200 K	
11	51224 A	Throat Plate, for Style 56200 K	
12	51220 A	Presser Foot, for Style 56200 K	1
13	91	Clamp Screw	1
14	51305 W	Feed Dog, 22 teeth per inch, for Style 56300 AH	
15	51324 W	Throat Plate, for Style 56300 AH	1
16	51320 W	Presser Foot, for Style 56300 AH	1
17	51330 Z	Presser Foot Shank	
18	91	Screw	
19	1096	Screw	1
20	604	Screw	1
21	19146 A	Spring	1
22	56330	Presser Foot Bottom, marked "AG"	
23	56330 F	Yielding Section	
24	51330 AB	Presser Foot Yielding Section	1
25	56330 G	Spring	1
26	51330 AE	Feeding Section Guide	
27	22738	Screw	1.00
28	51330 BB	Presser Foot Feeding Section, 22 teeth per inch-	
29	22561	Screw	-
30	51326 A	Feed Dog, 22 teeth per inch, for Style 56300 N	
31	51328 A	Throat Plate, for Style 56300 N	1
32	51327 A	Presser Foot, for Style 56300 N	1
33	51330 M	Presser Foot Shank	1
34	91	Screw	1
35	22738	Screw	4
36	51330 P	Feed Section Guide, left	1
37	1594 A	Hinge Pin	1
38	56330 E	Presser Foot Bottom	1
39	1096		1
			. – 1
40	51330 R	Feed Section Guide, right	1
41	61430 BT	Spring	1
42	56330 F	Yielding Section	1
43	51330 AX	Presser Foot Feeding Section, 22 teeth per inch -	1

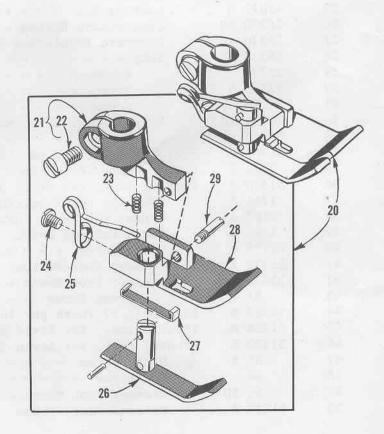


Ref.	Part		Amt.
No.	No.	Description	Req.
1	56205	Feed Dog, 16 teeth per inch, for Style 56200 S	1
2	56224	Throat Plate, for Style 56200 S	1
3	51320 N	Presser Foot, bottom marked "51330 AL" for Style 56200 S	
4	187 B	Screw, for chain cutting knife	1
5	1741 B	Chain Cutting Knife	1
6	51330 AK	Shank	
7	91	Clamp Screw	
8	51330 AL	Presser Foot Bottom	
9	51330 W	Spring	
10	51330 AM	Yielding Section	
11	51305 W	Feed Dog, 22 teeth per inch, for Styles 56300 F, R, AH	1
12	51324 W	Throat Plate, for Styles 56300 F, R, AH	1
13	56320 F	Presser Foot, for Styles 56300 F	
14	56330 AB	Presser Foot Bottom, marked "BS"	
15	22799 B	Hinge Screw	1
16	73 A	Screw, for tilting spring	
17	56330 AX	Tilting Spring	
18	56330 AJ	Hinge Pin	1
19 -	56330 AG	Connecting Screw	1
20	604	Screw, for chain cutting knife	
21	52930 AC	Chain Cutting Knife, marked "D"	
22	56330 AF	Hinge Screw	
23	51430 F	Nut	1
24	56330 AU	Washer	1
25	41071 G	Locking Nut	1
26	56330 AD	Compression Spring	
27	56330 AH	Pressure Regulating Nut	
28	56330 AK	Yoke	1
29	22785	Screw	1
30	22560 B	Screw	
31	88	Screw	1
32	56330 AE	Presser Foot Link, marked "A"	
33	56330 AP	Bushing	
34	51305 U	Feed Dog, 12 teeth per inch, for Style 56300 W	
35	9224 E	Throat Plate, for Styles 56300 G and 56300 W	
36	51320 J	Presser Foot, for Style 56300 W	
37	1741 A	Pin, for chain cutting knife	
38	187 A	Screw, for chain cutting knife	
39	1741 B	Chain Cutting Knife	
40	22799 B	Hinge Screw	
41	51330 X	Presser Foot Bottom	
42	51330 Y	Presser Foot Shank	
43	91	Clamp Screw	
44	51305 B	Feed Dog, 12 teeth per inch, for Style 56300 H	
45	51324 B	Throat Plate, for Style 56300 H	
46	51320 B	Presser Foot, for Style 56300 H	
47	86 X	Hinge Screw	
48	88	Set Screw	
49	65 XD	Presser Foot Shank	
50	51330 B	Presser Foot Bottom	





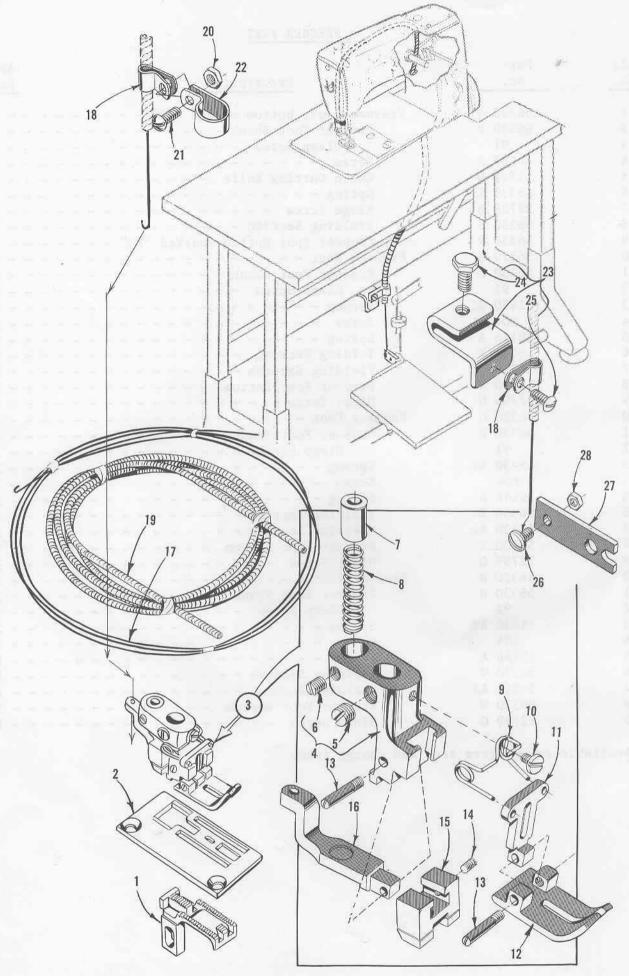




#### PRESSER FEET

	2		4-	
Ref.	Part			Amt.
No.	No.	Description		Req.
* 1	56320 G	Presser Foot, bottom marked "BM"		1
2	56330 P	Presser Foot Shank		
3	91	Clamp Screw		
4	187 A	Screw		
5	1741 B	Chain Cutting Knife		1
6	56330 T	Spring		
7	22799 В	Hinge Screw		1
8	56330 S	Yielding Section		1
. 9	56330 R	Presser Foot Bottom, marked "BM" -		1
*10	56320 B	Presser Foot		1
11	56330 U	Presser Foot Shank		1
12	91	Clamp Screw		
13	61430 BT	Spring		
14	604	Screw		-
15	19146 A	Spring		-
16	56330 Y	Yelding Section		
17	56330 AA	Yielding Section		1 1
18	56330 W	Presser Foot Bottom		-
19	22799 G	Hinge Screw		1
*20	56320 C	Presser Foot		- I
21	56330 U	Presser Foot Shank		· - 1
22	91	Clamp Screw		
23	61430 BT			777
24	604	Spring		7
25	19146 A	Screw		- 1
26	56330 Y	Spring		1
27		Yielding Section		1
28	56330 AA	Yielding Section		
29	56330 X	Presser Foot Bottom		1
*30	22799 G	Hinge Screw		1
31	56320 D	Presser Foot		- 1
32	56330 U	Presser Foot Shank		
	91	Clamp Screw		- 1
33	61430 BT	Spring		2
34	604	Screw		-
35	19146 A	Spring		
36	56330 V	Yielding Section		
37	56330 AA	Yielding Section		- 1
38	56330 W	Presser Foot Bottom		- 1
39	22799 G	Hinge Screw		- 1

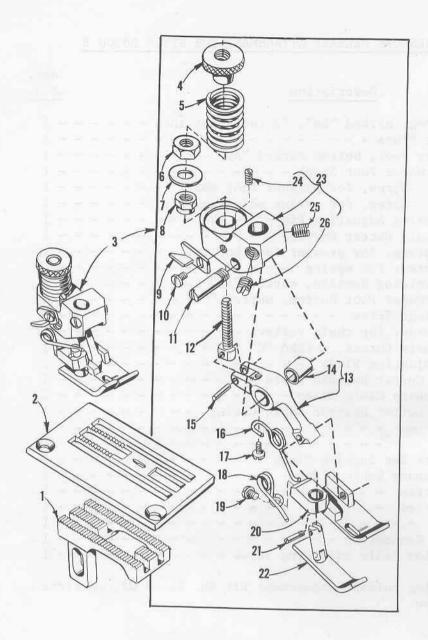
<sup>\*</sup> Available as an extra send and charge item.

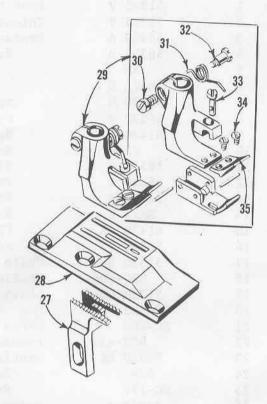


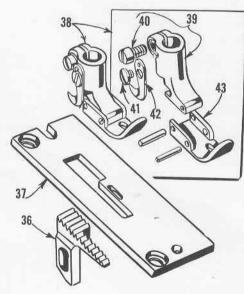
## AUTOMATIC CHAIN CUTTER AND PRESSURE RELEASE ATTACHMENT FOR STYLE 56300 E

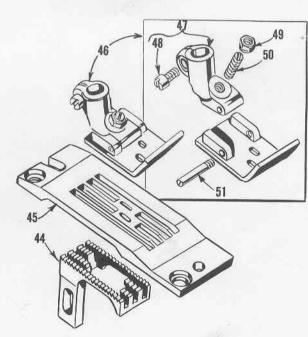
Ref. No.	Part No.	Description Req.
1	51305 V	
2	51305 V	Feed Dog, marked "BN", 22 teeth per inch 1 Throat Plate 1
	56320 A	
3	56330 H	Presser Foot, bottom marked "AU" 1  Presser Foot Shank 1
5	30330 H	
6	HA73 B	Screw, for presser foot shank1
7	56330 N	Screw, for spring adjusting pin1
8	56330 J	Spring Adjusting Pin 1
9	61430 AJ	Chain Cutter Spring 1
10	73 A	Spring, for presser foot bottom 1
11		Screw, for spring1
	56330 M	Yielding Section, marked "AS" 1
12	56330 L	Presser Foot Bottom, marked "AU" 1
13	22799 R	Hinge Screw2
14	HA73 B	Screw, for chain cutter1
15	61430 AN	Chain Cutter, marked "G" 1
16	56330 K	Adjusting Slide1
17	51330 BC	Chain Cutter Release Cable 1
18	660-406	Stationary Cable Clamp 2
19	51330 BD	Chain Cutter Release Cable Casing1
20	NU-12	Nut1
21	SC-180	Screw 1
22	660-437	Presser Bar Bushing Clamp1
23	51330 BF	Stationary Cable Clamp 1
24	SC-2	Screw1
25	SC-178	Screw 1
26	22848 A	Screw 1
27	51330 BE	Pedal Connection 1
28	12934 A	Nut, for cable adjusting screw 1

NOTE: Automatic Chain Cutting Release Attachment Kit No. 29480 GJ, consists of Ref. Nos. 17 thru 28 inclusive.

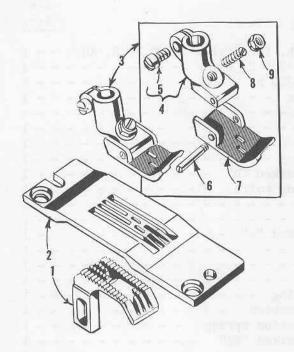


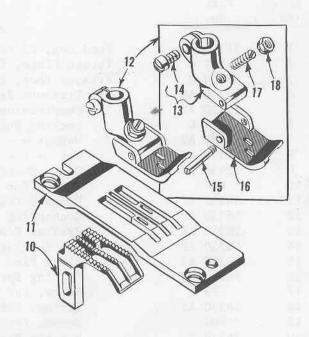


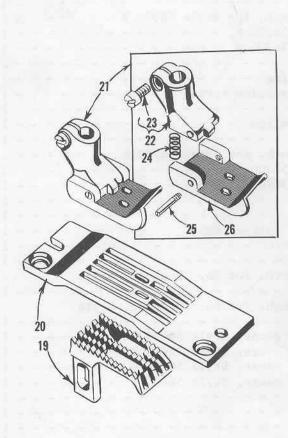


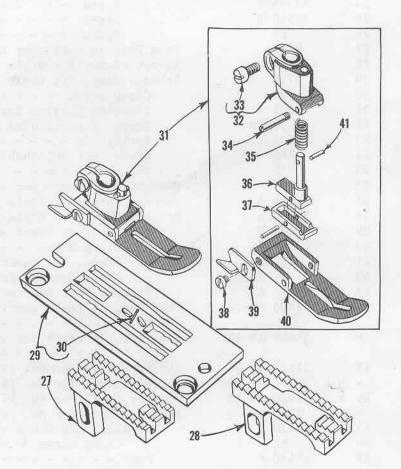


Ref.	Part			4	Amt.
No.	No.		Description		Req.
1	51305		Feed Dog, 22 teeth per inch, for Styles 56300 F,		
2	51324		Throat Plate, for Styles 56300 F, R, AH		1
3	56320		Presser Foot, for Style 56300 R		1
4	56330	AH	Pressure Regulating Nut		1
5	56330	AD	Compression Spring		1
6	41071	G	Locking Nut	-22 <del>-</del> 23-2 <del>-</del> 2-2-	1
7	56330	AU	Washer		
8	51430	F	Nut		1
9	52930	AC	Chain Cutting Knife, marked "D"		1
10	604		Screw, for chain cutting knife		1
11	56330	AF	Hinge Screw		1
12	56330		Connecting Screw		1
13	56330		Presser Foot Link, marked "B"		1
14	56330		Bushing		1
15	56330		Hinge Pin		
16	56330		Tilting Spring		1
	11		Screw, for tilting spring		1
17	73		Screw, for tilting spring		1
18	56330	AR	Spring, for yielding section		1
19	604		Screw, for yielding section spring		1
20	56330		Presser Foot Bottom, marked "BR"		1
21	22799	G	Hinge Screw		1
22	56330	AM	Yielding Section		1
23	56330	AK	Yoke		
24	22785		Screw		1
25	22560	В	Screw		1
26	88		Screw		1
27	9705		Feed Dog, 16 teeth per inch, for Style 56200 R -		1
28	9724		Throat Plate, for Style 56200 R		1
29	9720		Presser Foot, for Style 56200 R		1
30	91		Clamp Screw		1
31	9634		Yielding Section Spring		1
32	57	MD	Screw, for yielding section spring		1
33	9634		Spring Pin		1
34	605	Λ	Screw, for detachable toe		2
	9735		Detachable Toe		
35					
36	51205		Feed Dog, 12 teeth per inch, for Style 56200 W -		1
37	56224		Throat Plate, for Style 56200 W		1
38	51220		Presser Foot, for Style 56200 W		1
39	51230	F	Presser Foot Shank		1
40	91		Clamp Screw		1
41	187		Screw, for chain cutting knife		1
42	1741	В	Chain Cutting Knife		1
43	51230	G	Presser Foot Bottom		1
44	51405	AD-12	Feed Dog, 16 teeth per inch, for No. 12 gauge, 5 56400 D		1
	51405	AD-16	Feed Dog, 16 teeth per inch. for No. 16 gauge, 5 56400 D		
45	51424	AD-12	Throat Plate, for No. 12 gauge, Style 56400 D -		1
_	51424	AD-16	Throat Plate, for No. 16 gauge, Style 56400 D -		1
46		AD-12	Presser Foot, for No. 12 gauge, Style 56400 D -		1
ariano		AG-41/2	Presser Foot, for No. 16 gauge, Style 56400 D -		1
47	51430		Presser Foot Shank		1
48	91	D	Clamp Screw		1
49		T	Nut		_ 1
17774	51430		Adjusting Screw		1
50	22840		Hinge Screw		1
51	22799	L	ninge screw		1

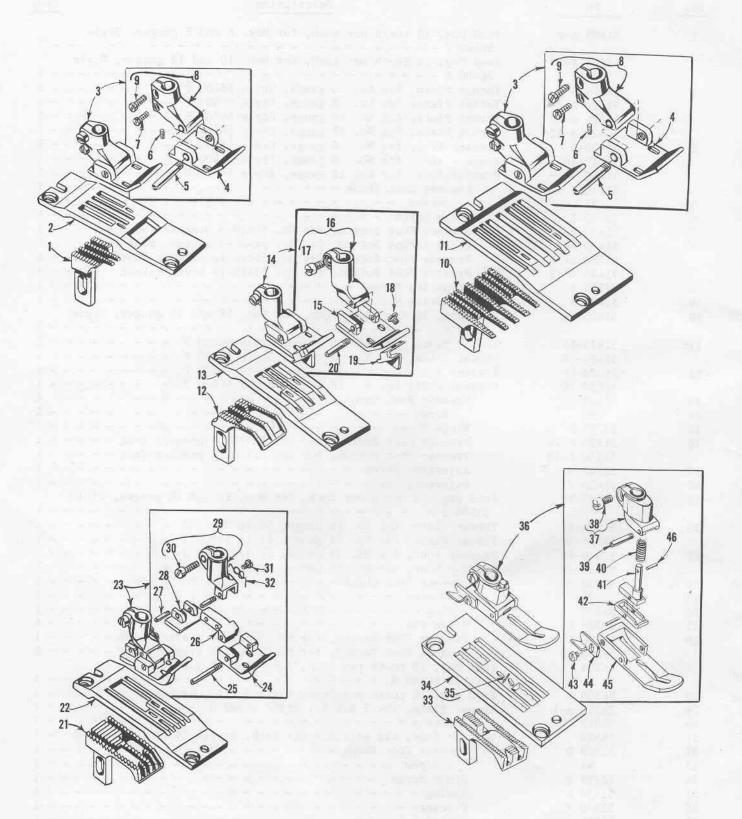




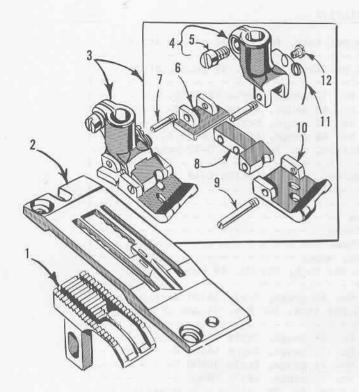


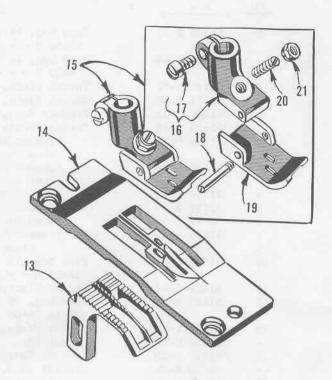


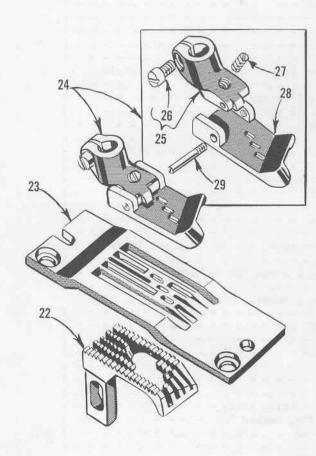
Ref.	Part	December	Amt.
No.	No.	Description	Req.
1	51405 A-8	Feed Dog, 16 teeth per inch, for Nos. 6 and 8 gauges, Style 56400 P	- 1
	51405 A-10 -	Feed Dog, 16 teeth per inch, for Nos. 10 and 12 gauges, Style 56400 P	- 1
2	51424 A-6	Throat Plate, for No. 6 gauge, Style 56400 P	- 1
	51424 A-8	Throat Plate, for No. 8 gauge, Style 56400 P	- 1
	51424 A-10	Throat Plate, for No. 10 gauge, Style 56400 P	- 1
	51424 A-12-	Throat Plate, for No. 12 gauge, Style 56400 P	
3	51420-6	Presser Foot, for No. 6 gauge, Style 56400 P	-
	51420-10	Presser Foot, for No. 8 gauge, Style 56400 P	- 1
,	51420-12 -	Presser Foot, for No. 12 gauge, Style 56400 P	
4	51430 D	Presser Foot Shank	
6	91 22799 B	Hinge Screw	
7	51430 A-16	Presser Foot Bottom, for No. 51420-6 presser foot	
	51430 A-8	Presser Foot Bottom, for No. 51420-8 presser foot	
	51430 A-10	Presser Foot Bottom, for No. 51420-10 presser foot	
	51430 A-12	Presser Foot Bottom, for No. 51420-12 presser foot	
8	22840 A	Adjusting Screw	
9	51430 F	Adjusting Nut	- 1
10	51405–16	Feed Dog, 16 teeth per inch, for Nos. 16 and 18 gauges, Style 56400 P	- 1
11-	51424-16	Throat Plate, for No. 16 gauge, Style 56400 P	
	51424-18	Throat Plate, for No. 18 gauge, Style 56400 P	
• 12	51420-16	Presser Foot, for No. 16 gauge, Style 56400 P	
7.0	51420-18	Presser Foot, for No. 18 gauge, Style 56400 P	
13 14	51430 D 91	Screw	
15	22799 В	Hinge Screw	
16	51430 A-16	Presser Foot Bottom, for No. 51420-16 presser foot	
	51430 A-18	Presser Foot Bottom, for No. 51420-18 presser foot	
17	22840 A	Adjusting Screw	
18	51430 F	Adjusting Nut	- 1
19	51505-18	Feed Dog, 12 teeth per inch, for Nos. 16 and 18 gauges, Style 56500 J	
- 20	51524-16	Throat Plate, for No. 16 gauge, Style 56500 J	
0.1	51524-18	Throat Plate, for No. 18 gauge, Style 56500 J	
v 21	51520-16	Presser Foot, for No. 16 gauge, Style 56500 J Presser Foot, for No. 18 gauge, Style 56500 J	
22	51520-18 35830	Presser Foot Shank	
23	91	Screw	
24	51930	Spring	
25	22799 C	Hinge Pin	- 1
26	51530-16	Presser Foot Bottom, for No. 51520-16 presser foot	
0.7	51530-18	Presser Foot Bottom, for No. 51520-18 presser foot	- 1
27	56505	Feed Dog, 10 teeth per inch, for 7 and 10 S.P.I.,	-
28	56505 B	Styles 56500 B, C	- 1
29	56524 A-1	Throat Plate, for 5 S.P.I., Style 56500 A	
30	56528	Insert	
31	56520	Presser Foot, all stitches per inch, Styles 56500 A, B, C, U -	- 1
32	51530 D	Presser Foot Shank =	- 1
33	91	Screw	
34	22799 E	Hinge Screw	
35	51530 G	Spring	
36	51530 F	Plunger	
37 38	56530 A	Yielding Section	
39	91 A 52930 AC	Chain Cutting Knife, marked "D"	_ 1
40	56530 AC	Presser Foot Bottom	
41	1740	Pin	

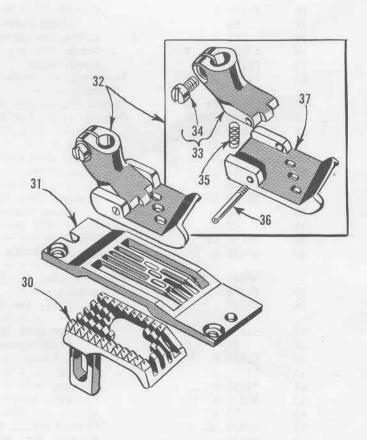


Ref.	Part			dr-	Amt.
No.	No.		Description		Req.
1	51405	B-32	Feed Dog, 16 teeth per inch, for No. 32 gauge, Style 56400 S	-	1
75	51405	B-48	Feed Dog, 16 teeth per inch, for No. 48 gauge, Style 56400 S		A.
2	51424	B-32	Throat Plate, for No. 32 gauge, Style 56400 S		
119	51424		Throat Plate, for No. 48 gauge, Style 56400 S		
3	51420	C-32	Presser Foot, for No. 32 gauge, Style 56400 S		- 1
-	51420	C-48	Presser Foot, for No. 48 gauge, Styles 56400 R, S -	_	- 1
4	51430	C-32	Presser Foot Bottom, for No. 51420 C-32 presser foot		
	51430	C-48	Presser Foot Bottom, for No. 51420 C-48 presser foot		
5	22799	D	Hinge Screw		
6	22752	В	Adjusting Screw		- 1
7	77		Clamp Screw, lower		
8	51430		Presser Foot Shank		
9	91		Clamp Screw, upper		
10	51405		Feed Dog, 16 teeth per inch, for No. 48 gauge, Style 56400 R		
11	51424	C-48	Throat Plate, for No. 48 gauge, Style 56400 R		- 1
12	51405	K-26	Feed Dog, 16 teeth per inch, for Nos. 24 and 26 gaug Style 56400 X	e.	
13	51424	K-24	Throat Plate, for No. 24 gauge, Style 56400 X		
-	51424		Throat Plate, for No. 26 gauge, Style 56400 X		- 1
14	51420		Presser Foot, for No. 24 gauge, Style 56400 X		- 1
-	51420		Presser Foot, for No. 26 gauge, Style 56400 X		- 1
15	51430		Presser Foot Bottom, for No. 51420 K-24 presser foot		- 1
	51430		Presser Foot Bottom, for No. 51420 K-26 presser foot		- 1
16	51430	В	Presser Foot Shank	- :-	1 _
17	91	1000	Clamp Screw		. 1
18	187		Screw, for guide	= =	- 1
19	53530		Guide	-	- 1
20 21	22799		Hinge Screw		. 1
	51505		Feed Dog, 12 teeth per inch, for No. 18 gauge, Style 56500 R		
22 23	51524		Throat Plate, for No. 18 gauge, Style 56500 R		1
200	51520		Presser Foot, for No. 18 gauge, Style 56500 R		1
24 25	51530 22799		Presser Foot Bottom, front section		
26	35730		Hinge Screw		
27	22799		Hinged Section		1
28	51530		Hinge Screw		
29	35730		Presser Foot Bottom, rear section Presser Foot Shank		
30	91		Clamp Screw		1
31	73	A	Screw, for spring		
32	35730		Spring		1
33	56505	A	Feed Dog, 22 teeth per inch, for No. 1 gauge, Style 56500 U		
34	56528	B-1	Throat Plate, for No. 1 gauge, Style 56500 U		1
35	56528		Insert		1
36	56520		Presser Foot, for No. 1 gauge, Styles 56500 A, B, C, U		
37	51530	D	Presser Foot Shank		
38	91		Clamp Screw		
39	22799	E	Hinge Screw		1
40	51530	G	Spring		1
41	51530	F	Plunger		
42	56530		Yielding Section		
43	91		Screw, for chain cutting knife		1
44	52930	AC	Chain Cutting Knife, marked "D"		1
45	56530		Presser Foot Bottom		1
46	1740		Pin		1

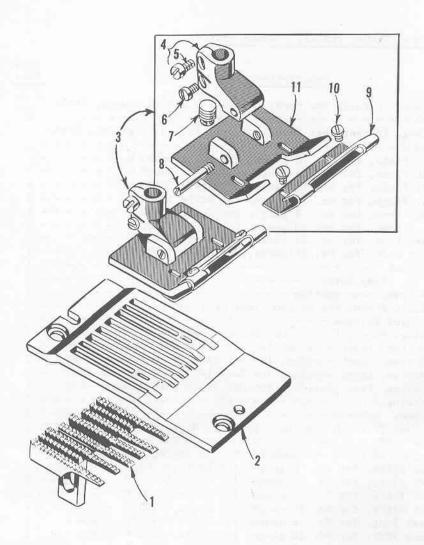


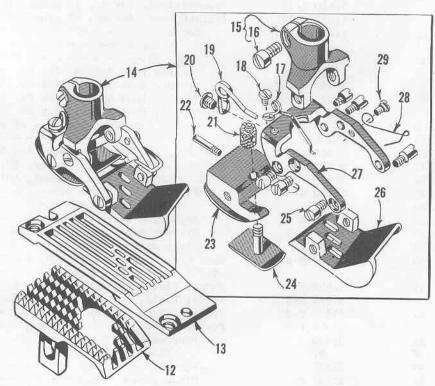




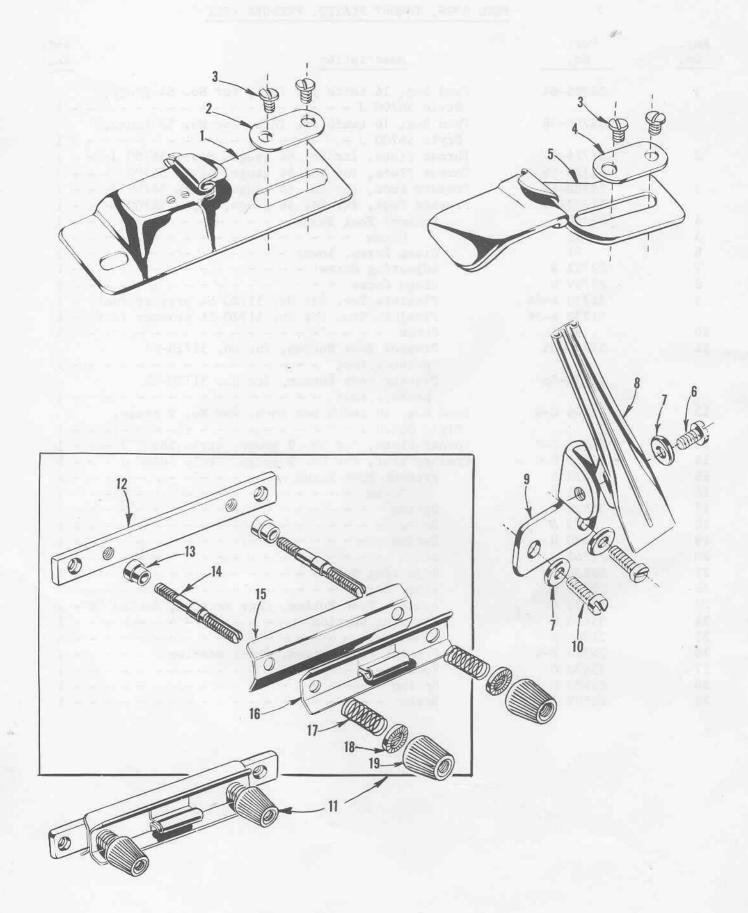


Ref.	Part No.	Description	Amt. Req.
1	51405 R-8	Feed Dog, 16 teeth per inch, for Nos. 8 and 10 gauges, Style	
	51405 R-12	Feed Dog, 16 teeth per inch, for Nos. 12 and 16 gauges, Style	
	and the state of t	56400 W	
2	51424 R-8	Throat Plate, for No. 8 gauge, for Style 56400 W	
	51424 R-10	Throat Plate, for No. 10 gauge, for Style 56400 W	
	51424 R-12	Throat Plate, for No. 12 gauge, for Style 56400 W	- 1
	51424 R-16	Throat Plate, for No. 16 gauge, for Style 56400 W	- 1
3	51420 R-8	Presser Foot, for No. 8 gauge, for Style 56400 W	- 1
	51420 R-10	Presser Foot, for No. 10 gauge, for Style 56400 W	- 1
	51420 R-12	Presser Foot, for No. 12 gauge, for Style 56400 W	
	∞ 51420 R-16	Presser Foot, for No. 16 gauge, for Style 56400 W	- 1
4	35730 AD	Shank	- 1
5	91	Clamp Screw	- 1
6	35730 AB	Bottom, rear section	
7	22799 G	Hinge Screw, for bottom, rear section	- 2
8	35730 AC	Hinged Section	
9	22799 E	Hinge Screw, for bottom, front section	- 1
10	51430 R-8	Bottom, front section, for No. 51420 R-8 presser foot -	
	51430 R-10	Bottom, front section, for No. 51420 R-10 presser foot	
	51430 R-12	Bottom, front section, for No. 51420 R-12 presser foot	- 1
	51430 R-16	Bottom, front section, for No. 51420 R-16 presser foot -	- 1
11	35730 AE	Spring	- 1
12	73 A	Screw	- 1
13	51405 G-8	Feed Dog, 22 teeth per inch, for Nos. 8, 10 and 12 gauges, Style 56400 T	- 1
	51405 G-16	Feed dog, 22 teeth per inch for No. 16 gauge, Style 56400 T	
14	51424 E-8	Throat Plate, for No. 8 gauge, for Style 56400 T	- 1
	51424 E-10	Throat Plate, for No. 10 gauge, for Style 56400 T	- 1
	51424 E-12	Throat Plate, for No. 12 gauge, for Style 56400 T	- 1
	51424 E-16	Throat Plate, for No. 16 gauge, for Style 56400 T	- 1
15	51420 E-8	Presser Foot, for No. 8 gauge, for Style 56400 T	
	51420 E-10	Presser Foot, for No. 10 gauge, for Style 56400 T	
	51420 E-12	Presser Foot, for No. 12 gauge, for Style 56400 T	
16	₹51420 E-16 51430 D	Presser Foot, for No. 16 gauge, for Style 56400 T	- I
17	91	Shank	
18	22799 B	Clamp Screw	
×19	51430 E-8		
	51430 E-10	Presser Foot Bottom, for No. 51420 E-8 presser foot Presser Foot Bottom, for No. 51420 E-10 presser foot	- 1
	51430 E-12	Presser Foot Bottom, for No. 51420 E-10 presser foot	- T
	+51430 E-16	Presser Foot Bottom, for No. 51420 E-12 presser foot	- 1
20	22840 A	Screw, for adjusting tilt of presser foot	- L
21	51430 F	Nut	- 1
22	51905 A-7	Feed Dog, 16 teeth per inch, for No. 7 gauge, Style 56900 H -	
23	51924 A-7	Throat Plate, for No. 7 gauge, for Style 56900 H	1
24	51920-7	Presser Foot, for No. 7 gauge, for Style 56900 H	1
25	51930 A	Presser Foot Shank	1
26	91	Clamp Screw	1
27	12935 A	Adjusting Screw	
28	51930 B-7	Presser Foot Bottom	
29	22799 В	Hinge Screw	. 1
30	51905 B-9	Feed Dog, 10 teeth per inch, for Nos. 8 and 9 gauges, Style 56900 H	
31	51924 B-8	Throat Plate, for No. 8 gauge, for Style 56900 H	
	51924 B-9	Throat Plate, for No. 9 gauge, for Style 56900 H	
32	35820 P-8	Presser Foot, for No. 8 gauge, for Style 56900 H	. 1
2012	35820 P-9	Presser Foot, for No. 9 gauge, for Style 56900 H	1
33	35830	Presser Foot Shank	1
34	91	Clamp Screw	. 1
35	51930	Spring	1
36	22799 C	Hinge Screw	
37	35830 P-8	Presser Foot Bottom, for No. 35820 P-8 presser foot	1
	35830 P-9	Presser Foot Bottom, for No. 35820 P-9 presser foot	1



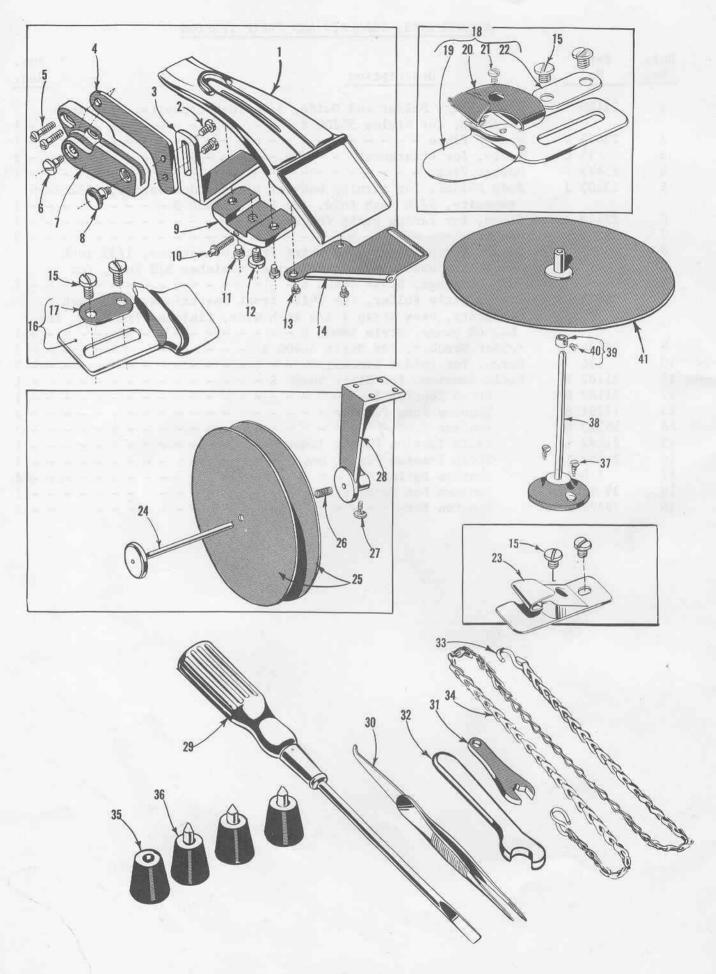


Ref.	Part	Access to the second se
No.	No.	Description Reg
		Req.
1	51705-64	Feed Dog, 16 teeth per inch, for No. 64 gauge, Style 56700 J1
	51705-56	Feed Dog, 16 teeth per inch, for No. 56 gauge, Style 56700 J 1
2	51724-64 51724-56	Throat Plate, for No. 64 gauge, Style 56700 J 1
3	51720-64	Throat Plate, for No. 56 gauge, Style 56700 J 1
3	51720-56	Presser Foot, for No. 64 gauge, Style 56700 J 1
4	51/20-36	Presser Foot, for No. 56 gauge, Style 56700 J 1
5	91	Presser Foot Shank 1
6	77	Screw 1
7	22752 B	Clamp Screw, lower 1
8	22799 D	Adjusting Screw1
9	51730 A-64	Hinge Screw1
	51730 A-56	Flexible Toe, for No. 51720-64 presser foot - 1
10	91 A	Flexible Toe, for No. 51720-56 presser foot - 1 Screw 2
11	51730-64	Presser Foot Bottom, for No. 51720-64
		presser foot1
	51730-56	Presser Foot Bottom, for No. 51720-56
		presser foot1
12	51905 C-9	Feed Dog, 10 teeth per inch, for No. 9 gauge,
		Style 56900 J 1
13	51924 C-9	Throat Plate, for No. 9 gauge, Style 56900 J 1
14	- 35820 R-9	Presser Foot, for No. 9 gauge, Style 56900 J 1
15	35830 в	Presser Foot Shank 1
16	91 D	Screw 1
17	35830 Н	Spring 1
18	73 A	Screw1
19	35830 D	Spring 1
20	22561	Screw1
21	35830 F	Adjusting Nut1
22	22799 L	Hinge Screw 1
23	35830 G	Presser Foot Bottom, rear section, marked "G"- 1
24	35830 E	Yielding Section 1
25	22845 A	Screw 6
26 27	35830 R-9	Presser Foot Bottom, front section 1
28	35830 C	Yoke 1
29	35830 K	Spring 1
49	22599	Screw 1



## ATTACHMENTS, BRACKETS AND STRIP TENSION

Ref.	Part	Amt.
No.	No.	Description Req.
1	23100	Double Edge Folder and Guide, 3/64 inch capacity, 3/16 inch overlap, for Styles 56200 R 1
2	23425 V	Washer Plate 1
3	25 C	Screw, for attachment
4	23425 V	Washer Plate 1
5	23405 Ј	Body Folder, for turning body of garment downwardly, 1/32 inch capacity, 5/16 inch fold, for Style 56400 S 1
6	22548	Screw, for facing strip folder 1
7	9255	Washer 3
8	23435-32	Facing Strip Folder, for shirt front operations, 1/32 inch capacity, uses strip 1 inch wide, finishes 5/8 inch, for No. 32 gauge, Style 56400 S 1
-	23435-48	Facing Strip Folder, for shirt front operations, 1/32 inch capacity, uses strip 1 1/4 inch wide, finishes 7/8 inch, for No. 48 gauge, Style 56400 S 1
9	23436	Folder Bracket, for Style 56400 S1
10	136	Screw, for folder bracket2
11	21182 N	Strip Tension, for Style 56400 S 1
12	21182 P	Strip Tension Base 1
13	11261 B	Tension Post Ferrule 2
14	56392 E	Tension Post 2
15	21182 L	Strip Tension Plate, inner 1
16	21182 K	Strip Tension Plate, outer 1
17	110-3	Tension Spring 2
18	39592 AK	Tension Nut Ferrule2
19	39592 Z	Tension Nut



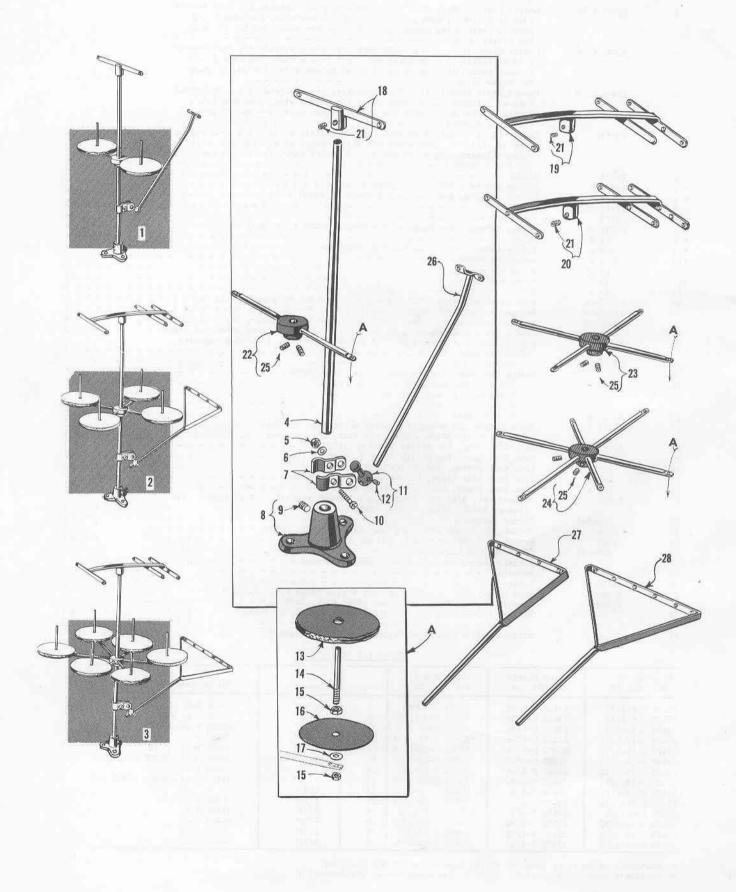
#### ATTACHMENTS, TAPE REEL AND MISCELLANEOUS ACCESSORIES

Ref.	Part		11-	Amt.
No.	No.	Description		Req.
		71 to 7 21 1/20 to 1 1 1/20 to 1 1/4 to the howard		
1	23401 K-64	Center Plait Folder, 1/32 inch capacity, plait extends 1/4 inch beyond rows of stitches, uses plait cut 2 1/2 inches wide, finishes 1 1/2		
		inches; interlining strip cut 1 15/32 inches wide, for No. 64 gauge,		
		for Styles 56700 J		1
-	23401 K-56	Center Plait Folder, 1/32 inch capacity, plait extends 1/4 inch beyond		
		rows of stitches, uses plait cut 2 3/8 inches wide, finishes 1 3/8		
		inches; interlining strip cut 1 11/32 inches wide, for No. 56 gauge, for Style 56700 J		1
	23401-K-48	Center Plait Folder, 1/32 inch capacity, plait extends 1/4 inch beyond		
<u></u>	Z3401-K-40	rows of stitches, uses plait cut 2 1/4 inches wide, finishes 1 1/4		
		inches interlining strip cut 1 7/32 inches wide, for No. 48 gauge,		
		for Style 56400 R		1
+ -	K58337	Center Plait Folder, 1/16 inch capacity, plait extends 1/4 inch beyond		
		rows of stitches, uses plait cut 2 1/2 inches wide, finishes 1 1/2 inches; interlining strip cut 1 7/16 inches wide, for No. 64 gauge,		
		6 C1- E6700 T		1
* 2	22528	Coron		2
* 3	23229 P	Folder Preshet for Styles 56400 R 56700 I		1
* 4	23229 N	Folder Swinging Arm, for Styles 56400 R, 56700 J Screw		1
5	22572 A 22773	C		1
* 6 * 7	23229 Y	Folder Swinging Arm Support, for Styles 56400 R. 56700 J		1
* 8	25 T	0		
* 9	23229 Q	Folder Clamp, for Styles 56400 R, 56700 J		1
*10	22863 A	Adjusting Screw	2 2 2 2 2 2	1
*11	25 CC	Screw		1
*12 13	25 S 25 B	Screw		2
14	23403-64	Angular Interlining Guide, reversible, for No. 64 gauge, Style 56700 J -		1
-	23403-56	Angular Interlining Guide, reversible, for No. 56 gauge, Style 56700 J -	0000000	1
177	23403-48	Angular Interlining Guide, reversible, for No. 48 gauge, Style 56400 R -		1
15	25 C	Screw, for Styles 56200 K, R, 56500 J, R, 56700 J, Class 56400 and 56900 Body Folder, for turning body of garment upwardly, 1/32 inch capacity,	0000000	
16	23405 L	5/16 inch fold for Styles 56400 R 56700 I		1
17	23425 V	Unaber Plato		
18		Double Lan Seam Feller Assembly (See Chart Below)		1
19		Lower Scroll and Base (See Chart Below) Upper Scroll (See Chart Below)		1
20	28	Screw		1
21 22	23425 V	Washer Plate		1
23	23151 A	Plate Folder and Guide, for heavy materials, 1/4 inch capacity for both		
		piles top ply folded. lower ply flat, 1/2 inch overlap, for Style 56900	J	1
24	21385 B	Tape Reel Axle, for Styles 56400 R, 56700 J		1
25 26	21178 110-3	Tane Real Spring for Styles 56400 R 56700 J		
27	201 C	Tape Reel Ayle Screw, for Styles 56400 R. 56700 J		
28	201 A	Tape Reel Frame, for Styles 56400 R, 56700 J		1
29	21201	Screwdriver, 9/64 inch round blade, length overall 7 11/16 inches, for		
20	660 260	Classes 56400, 56500, 56700, 56900		1
30 31	660-240 116	Wrench 9/32 inch open end for Classes 56200, 56300		1
32	21388	Wrench 3/8 inch open end for all Styles		
33	660-264	"S" Hook, for all Styles		2
34	421 D-34	Treadle Chain, 34 inches long, for all Styles		1
35	51295 A	Isolator		3
36 37	51295 B SC303	Wood Screw #12 1 inch long, for Styles 56200 K. L. 56300 M		2
38	21169 F	Binding Holder Base, for Styles 56200 K. L. 56300 M		1
39	161	Binding Holder Stop Collar, for Styles 56200 K, L, 56300 M		1
40	88	Screw		
41	21169 E	Binding Holder Disc, for Styles 56200 K, L, 56300 M		

#### DOUBLE LAP SEAM FELLER

Assembly No. Ref. No. 18	Lower Scroll Ref. No. 19	Upper Scroll Ref. No. 20	Gauge	Capacity	For Machine Style
23420 U-6-1/32	23422 U-1/32	23421 U-6-1/32	6	1/32"	56400 P-6
23420 U-8-1/32	23422 U-1/32	23421 U-8-1/32	8	1/32"	56400 P-8, W-8
23420 U-10-1/32	23422 U-1/32	23421 U-10-1/32	10	1/32"	56400 P-10, W-10
23420 U-12-1/16	23422 U-1/16	23421 U-12-1/16	12	1/16"	56400 P-12, W-12
23420 U-16-1/16	23422 U-1/16	23421 U-16-1/16	16	1/16"	56400 P-16, W-16
23420 U-16-3/32	23422 U-3/32	23421 U-16-3/32	16	3/32"	56500 J-16, 56900 H-7, H-8
23420 U-18-1/16	23422 U-1/16	23421 U-18-1/16	18	1/16"	56400 P-18
23420 U-18-3/32	23422 U-3/32	23421 U-18-3/32	18	3/32"	56500 J-18, R-18, 56900 H-9
+23420 U-18-1/8	23422 U-1/8	23421 U-18-1/8	18	1/8"	=
23420 U-26-1/16	23422 U-1/16	23421 U-26-1/16	26	1/16"	56400 X-26
23420 V-8-1/32	23422 V-1/32	23421 V-8-1/32	8	1/32"	56400 T-8
23420 V-10-1/32	23422 V-1/32	23421 V-10-1/32	10	1/32"	56400 T-10
23420 V-12-1/32	23422 V-1/32	23421 V-12-1/32	12	1/32"	56400 T-12
23420 V-16-1/32	23422 V-1/32	23421 V-16-1/32	16	1/32"	56400 T-16

<sup>+</sup> Available as an extra send and charge item or on special machines. \* Available complete as part No. 29481 D (Suspended Folder Arm Assembly).



## THREAD STAND PARTS

			Amount Required			
Ref.	Part No.	Description	One Needle	Two Needle	Three Needle	
1	21101 н-2	Thread Stand, complete, for	h pisi			
17.00	100	Classes 56200, 56300	1			
2	21101 H-4	Thread Stand, complete, for				
1941	2-1102/240	Classes 56400, 56500, 56700-		1		
3	21101 н-6	Thread Stand, complete, for				
797		Class 56900	11111111		1	
4	21104 B-24	Thread Stand Rod	1	1	1	
5	21104 Н	Nut	1	1	1	
6	652-16	Washer	1	21 676	1	
7	21114 U	Lead Eyelet Ball Split				
		Socket	2	2	2	
8	21114 A	Thread Stand Base	1	1	1	
9	22651 CD-4	Screw	1	1	1	
10	22810	Screw	1	1	1	
11	21114 T	Lead Eyelet Socket Ball -	1	1	1	
12	22651 CD-4	Screw	1	1	1	
13	21104 V	Pad, for thread cone	2 2	4	6	
14	21114 W	Spool Pin		4	6	
15	258 A	Nut	4	8	12	
16	21114	Spool Seat Disc	2	4	6	
17	652-16	Washer	2	- 4	6	
18	21114 н-2	Eyelet Support	1	7.1		
19	21114 H-4	Eyelet Support		1		
20	21114 H-6	Eyelet Support	110000		1	
21	22651 CD-4	Screw	2	2	2	
22	21114 D-2	Spool Seat Support	1			
23	21114 D-4	Spool Seat Support		1		
24	21114 D-6	Spool Seat Support			1	
25	22651 CD-5	Screw	2	2	2	
26	21114 S-2	Lead Eyelet	1			
27	21114 S-4	Lead Eyelet		1		
28	21114 S-6	Lead Eyelet	- ZEO-I	Section -	1	

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27-527 Blk .		660-202 .	33	21114 U	75
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50-216 Blk .		660-212 .		21169 E	
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