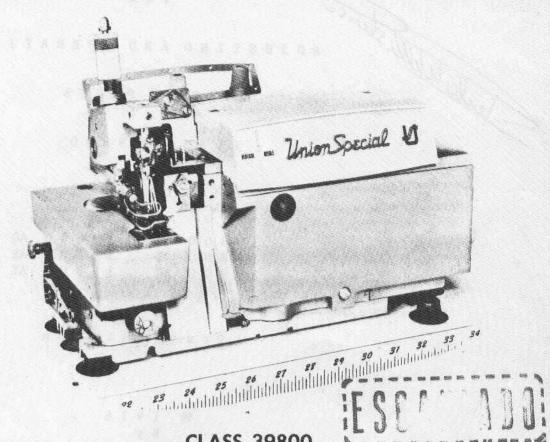


Union Speciale LEWIS®. COLUMBIA®

STYLES 39800AA 39800AB 39800AP 39800AQ 39800AX 39800AY

CATALOG No. 139AA



CLASS 39800

FRAME HIGH SPEED **FOUR AND FIVE THREAD VERTICAL NEEDLE DIFFERENTIAL FEED** WITH **QUICK STITCH CHANGE MECHANISM**

UNION SPECIAL CORPORATION

CHICAGO

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Catalog No. 139 AA

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INSTRUCTIONS

F O R

ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 39800

Styles

3 9 8 0 0 AA 3 9 8 0 0 AQ 3 9 8 0 0 AX 3 9 8 0 0 AX 3 9 8 0 0 AY

First Edition

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UNION SPECIAL CORPORATION

INDUSTRIAL SEWING MACHINES

CHICAGO

Printed in U.S.A.

IDENTIFICATION OF MACHINES

Each Union Special machine is identified by a Style number which is stamped into the name plate on the machine. Style numbers are classified as Standard and Special. Standard Style numbers have one or more letters suffixed but never contain the letter "Z". Example: "Style 39800 AA". 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 39800 AAZ".

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 39800".

The distance between the rows of stitches or between the needles is represented by a gauge number measured in 1/64ths of an inch (.40 mm), going from left to right. The width of overedge is represented by a fraction. Collectively, the gauge number and the width of overedge represent the machine gauge. Example: "5-1/8". Thus, 5-1/8 gauge represents a distance of 5/64 inch (1.98 mm) between the left needle (401 stitch) and the right needle (503 or 504 stitch) and the 1/8 inch (3.18 mm) represents the width of overedge to the right of the right hand needle.

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

STYLES OF MACHINES

Vertical Needle, Small Frame, High Speed, Two Straight Needles, Left Needle in Front, Differential Feed with Quick Stitch Change Mechanism, Light, Medium and Heavy Duty Machines, Trimming Mechanism with Spring Pressed Lower Knife, Automatic Lubricating System. Improved Air Cooling System.

- 39800 AA Two loopers, one spreader, four thread dual stitch; 401 double lock stitch on left needle and 503 two thread overedge stitch on right rear needle. Light to medium duty machine for simultaneously seaming and overedging on sport and dress shirts, ladies' blouses, street and house dresses, coat and jacket linings, pillow cases and similar operations on light to medium weight durable press or conventional materials. Seam specification, (401-503) 515-SSa-2; standard gauge and seam widths are 5-1/8 (1.98-3.18 mm) and 12-3/16 (4.76-4.76 mm); stitch range, 7 to 12 per inch; cam adjusted main feed and operator adjustable differential feed. Maximum recommended speed 7000 R.P.M.
- 39800 AB Same as Style 39800 AA, except three loopers, five thread dual stitch; 401 double locked stitch on left needle and 504 three thread overedge stitch on right rear needle. Seam specification (401-504) 516-SSa-2. Standard gauge and seam widths are 5-1/8 (1.98-3.18 mm) and 12-3/16 (4.76-4.76 mm).
- 39800 AP Same as Style 39800 AA, except medium to heavy duty for operations on slacks, jackets, sport shirts, street and house dresses, coat linings, shoulder pads and similar operations on medium to medium heavy weight materials. Maximum recommended speed 6500 R.P.M.
- 39800 AQ Same as Style 39800 AP, except three loopers, five thread dual stitch; 401 double locked stitch on left needle and 504 three thread overedge stitch on right rear needle. Seam specification (401-504) 516-SSa-2.
- 39800 AX Same as Style 39800 AP, except equipped with tractor type presser foot and associated sewing parts. Standard gauge and seam width 12-3/16 (4.76-4.76 mm) only.
- 39800 AY Same as Style 39800 AQ, except equipped with tractor type presser foot and associated sewing parts. Standard gauge and seam width 12-3/16 (4.76-4.76 mm) only.

SPEED RECOMMENDATION

These machines have been tested in their complete stitch range at their maximum rated speeds. Varied field conditions, severity and cleanliness of the sewing operation may necessitate operating at a lower speed. When operating from 50-100% machine running cycle and a longer than recommended stitch length, it may be necessary to reduce the machine's speed by 10-15%.

The 39800 is a precision manufactured and tested sewing machine. To obtain maximum performance, the machine should be operated at 1000 R.P.M. below maximum recommended speed for the first 20 days of field operation. This will minimize readjustment of precision mechanisms.

OILING

CAUTION! Oil was drained from machine when shipped, so reservoir must be filled before beginning to operate. Oil capacity of Class 39800 is six ounces (180 ml). A straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit should be used.

Machine is filled with oil at spring cap under the top cover. Oil level is checked at sight gauge on front of machine. Red bulb on oil level indicator should show between gauge lines when machine is stationary.

Machine is automatically lubricated. No oiling is necessary, other than keeping main reservoir filled. Check oil daily before the morning start; add oil as required.

To maintain maximum recommended speed and serviceability of this equipment when operating continuously, the oil must be changed at least every six months. In no case should oil remain in machine for more than one year.

The oil drain plug screw is located at back of machine near bottom edge of base. It is a magnetic screw designed to accumulate possible foreign materials which may have entered the crank case. It should be removed and cleaned periodically.

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 number and size number represent the complete symbol which is given on the label of all needles packaged and sold by Union Special.

Two straight needles of the same length are used in these machines. For Styles 39800 AA and AB the recommended needles are Type 120 GS, size .032 (.80 mm) for 5-1/8 (1.98-3.18 mm) gauge machine and Size .044 (1.10 mm) for 12-3/16 (4.76-4.76 mm) gauge machine. For Styles 39800 AP and AQ the recommended needles are Type 120 GS, Size .044 (1.10 mm) for 5-1/8 (1.98-3.18 mm) gauge machine and Size .049 (1.25 mm) for 12-3/16 (4.76-4.76 mm) gauge machine. On Styles 39800 AX and AY, use needle for 12 3/16 gauge only. Type 120 GS is a round shank, round point, extra short, double groove, struck groove, ball eye, spotted, rounded scarf, with a 3/64 inch (1.19 mm) radius at scarf, chromium plated needle and is available in sizes 075/029, 080/032, 090/036, 100/040, 110/044, 125/049 and 140/054.

Other useable needles are Type 120 GHS which is the same as Type 120 GS except it has a light ball point; available in same sizes.

NEEDLES (Continued)

Type 120 GKS is the same as Type 120 GHS except it has an oversize ball eye; available in sizes 075/029, 080/032, 090/036, 100/040 and 110/044.

To have needle orders promptly and accurately filled, an empty package, a sample needle, or type and size number should be forwarded. Use description on label. A complete order would read: "1000 Needles, Type 120 GS, Size 080/032".

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.

CHANGING NEEDLES

Release pressure on presser foot by turning presser foot release lever (A, Fig. 1, 2 or 2A) and swing presser arm (B) out of position. With needles at high position, loosen screws (C, Fig. 1) in needle head and withdraw needles.

To replace needles, insert same into needle head as far as they will go, assuring that the scarf of the needles are to the rear, tighten screws (C, Fig. 1) securely. Return presser arm (B) to position; lock presser foot release lever (A).

THREADING

Thread from thread stand (C, Fig. 2 or 2A) is threaded through the upper holes of tension thread guide (D) from front to back and then through the lower holes from back to front. NOTE: Thread No. 2 (401 looper - blue color code) is threaded through the upper hole of tension thread guide (D) from back to front and down through tension post thread bar eyelet (E). All other threads continued between the tension discs (L), through tension post slot (M) in tension post (J) and on through its proper hole in front thread guide (P).

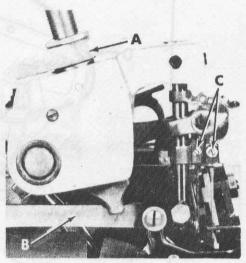
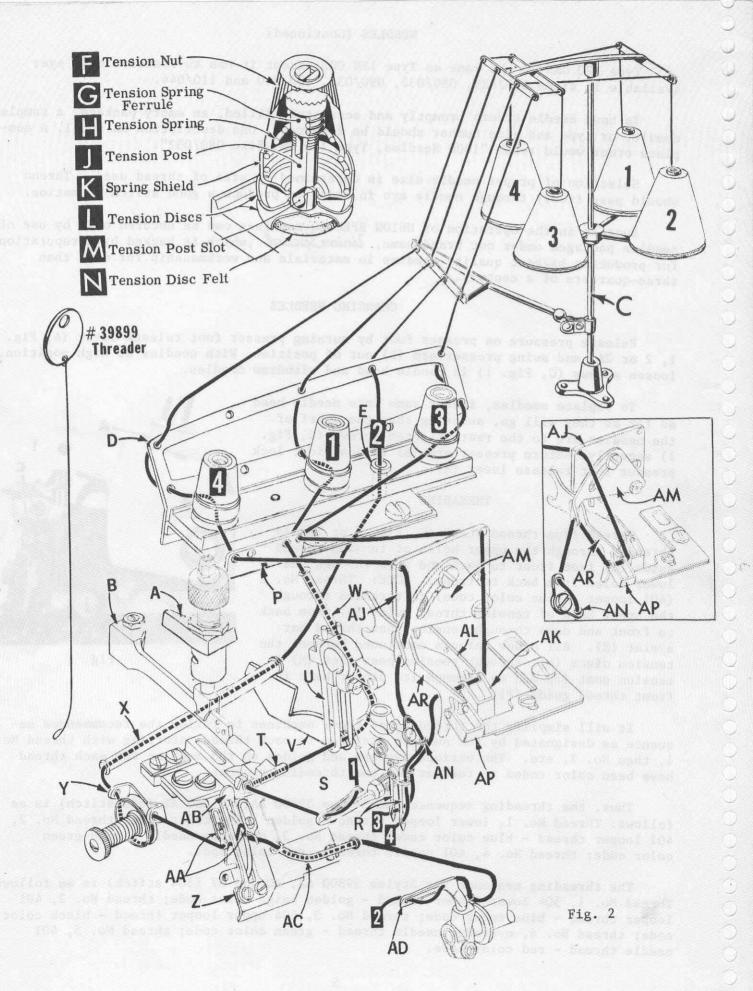


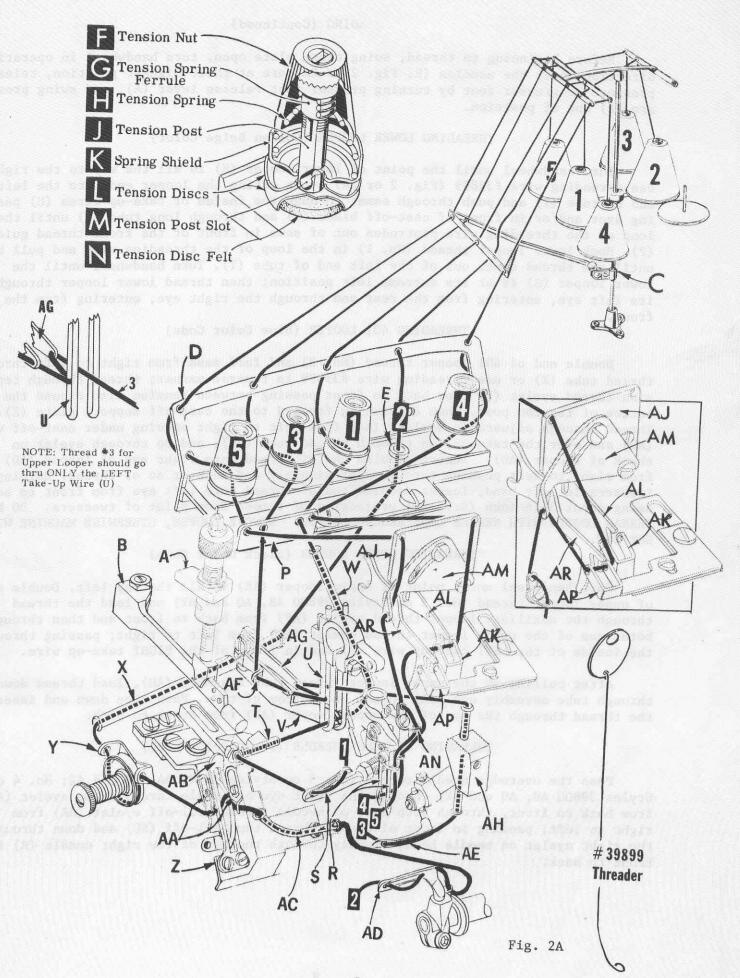
Fig. 1

It will simplify the threading of these machines to follow the recommended sequence as designated by the numbers assigned to each thread, starting with thread No. 1, then No. 2, etc. The various eyelets and guides on the machine for each thread have been color coded to further aid the threading process.

Thus, the threading sequence for Styles 39800 AA, AP and AX (503 stitch) is as follows: Thread No. 1, lower looper thread - golden beige color code; thread No. 2, 401 looper thread - blue color code; thread No. 3, overedge needle thread-green color code; thread No. 4, 401 needle thread - red color code.

The threading sequence for Styles 39800 AB, AQ and AY (504 stitch) is as follows: Thread No. 1, 504 lower looper thread - golden beige color code; thread No. 2, 401 looper thread - blue color code; thread No. 3, 504 upper looper thread - black color code; thread No. 4, overedge needle thread - green color code; thread No. 5, 401 needle thread - red color code.





Before beginning to thread, swing cloth plate open, turn handwheel in operating direction until the needles (R, Fig. 2 or 2A) are at their highest position, release pressure on presser foot by turning presser foot release lever (A), and swing presser arm (B) out of position.

THREADING LOWER LOOPER (Golden Beige Color)

Turn handwheel until the point of lower looper (S) is all the way to the right. Use threading wire #39899 (Fig. 2 or 2A) by in erting the looper end into the left end of tube (T) and push through same; through the inside of take-up wires (U) passing over and/or in front of cast-off blade (V) and through long tube (W) until the loop of the threading wire protrudes out of same in front of the front thread guide (P). Hook lower looper thread (No. 1) in the loop of the threading wire and pull back until the thread comes out of the left end of tube (T). Turn handwheel until the lower looper (S) is at its extreme left position; then thread lower looper through its left eye, entering from the rear and through the right eye, entering from the front.

THREADING 401 LOOPER (Blue Color Code)

Double end of 401 looper thread (No. 2) and feed same from right to left through thread tube (X) or use threading wire #39899 in reverse manner; thread through tension thread eyelet (Y) from back to front passing between tension disc around the bottom of tension post, then continuing forward to the cast-off support plate (Z). Thread through adjustable eyelets (AA) from left to right passing under cast-off wire (AB) and over the take-up, on through thread tube (AC), and up through eyelet on shank of looper (AD). Insert doubled end of thread into right eye of looper (AD) from right to left pushing through approximately and inch or so of thread. Holding tweezers in left hand, insert doubled end of thread into left eye from front to back, using about 3/16 inch (4.76 mm) projection of thread from point of tweezers. DO NOT THREAD LOOPER WITH NEEDLE LOOP AROUND LOOPER. REMOVE LOOPER, OTHERWISE MACHINE WILL NOT SEW.

THREADING UPPER LOOPER (Black Color Code)

Turn handwheel until point of upper looper (AE) is all the way left. Double end of upper looper thread (No. 3 on Styles 39800 AB, AQ and AY) and lead the thread through the auxiliary looper thread eyelet (AF) from back to front and then through both eyes of the upper looper thread eyelet (AG) from left to right; passing through the inside of the LEFT take-up wire (U) and in front of the RIGHT take-up wire.

After pulling up the upper looper thread tube assembly (AH), lead thread down through tube assembly and pull thread out bottom of tube. Push tube down and insert the thread through the eye of the upper looper (AE) from front to back.

THREADING OVEREDGE NEEDLE (Green Color Code)

Pass the overedge needle thread (No. 3 on Styles 39800 AA, AP and AX; No. 4 on Styles 39800 AB, AQ and AY) through the right eye of needle thread frame eyelet (AJ) from back to front, through both eyes of needle thread pull-off eyelet (AK) from right to left, passing in front of needle thread cam pull-off (AL) and down through the right eyelet on needle head, finally through the eye of the right needle (R) front to back.

FOR STYLES 39800 AP, AQ, AX and AY ONLY THREADING 401 NEEDLE (Red Color Code)

Pass the 401 needle thread (No. 4 on Style 39800 AP and AX; No. 5 on Style 39800 AQ and AY) through the left eye of needle thread frame eyelet (AJ) from back to front, through needle thread adjustable eyelet (AM) from right to left, and down through both holes in top eyelet (AN) on needle head from back to front, down through the lower eyelet on left side of needle head, then finally through the eye of the left needle (R) from front to back.

FOR STYLES 39800 AA and AB ONLY THREADING 401 NEEDLE (Red Color Code)

Pass the 401 needle thread (No. 4 on Style 39800 AA; No. 5 on Style 39800 AB) through the left eye of needle thread frame eyelet (AJ) from back to front, down through both eyes of needle thread pull-off eyelet (AP) from right to left, passing in front of needle thread cam pull-off (AR), up through needle thread adjustable eyelet (AM) from right to left, and down through both holes in top eyelet (AN) on needle head from back to front, down through lower eyelet on left side of needle head, then finally through the eye of the left needle (R) from front to back.

THREAD TENSION

The amount of tension on the needle and looper threads is regulated by the knurled tension nuts, (F. Fig. 1 or 1A). Tension on the threads should be only enough to secure proper stitch formation. Using a postal scale, the measurements are taken with the needles at the top of their stroke and pulled in the direction as indicated. As a start the approximate tensions should be as follows:

401 needle thread; 2 to 2 1/2 oz. (56.70 to 70.87 gr) straight out of lower eyelet on left side of needle head.

Overedge needle thread; $1\ 1/2$ to $2\ \text{oz}$. (42.52 to 56.70 gr) straight out of lower eyelet on right side of needle head.

Lower looper thread; 1 to 1 1/2 oz. (28.35 to 42.52 gr) straight out of left end of thread tube (T, Fig. 2 or 2A).

Upper looper thread; 1 to 1 1/2 oz. (28.35 to 42.52 gr) straight out bottom of thread tube assembly (AH, Fig. 2A).

401 looper thread; 1 to 1 1/2 oz. (28.35 to 42.52 gr) straight out of eye at point of looper (AD, Fig. 2 or 2A).

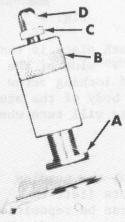


Fig. 3

Further refinement of thread tension adjustments will be required to suit a particular seam, thread or material and is discussed at the conclusion of the adjusting instructions.

PRESSER FOOT PRESSURE

Sufficient pressure to feed work uniformly should be maintained. Should it be necessary to increase or decrease amount of pressure on presser foot, loosen lock nut (A, Fig. 3) and turn the adjusting screw (B). Adjusting screw has a right hand thread so tightening increases the pressure, loosening decreases pressure. When pressure adjusting screw (B) has been properly set, tighten lock nut (A). With presser foot resting on the throat plate, position locking nut (C) so that its under surface is approximately 1/32 to 1/16 inch (.79 to 1.59 mm) from the top surface of adjusting screw (B). Set the cap (D) against the locking nut (C).

FEED ECCENTRICS

Feed eccentrics used in these machines have been selected to produce approximately 10 stitches per inch (2.5 mm per stitch) on 5-1/8 gauge machines and 8 stitches per inch (3.2 mm) per stitch on 12-3/16 gauge machines. It will be noted that part number 39540 B-10 is the main feed eccentric for 5-1/8 gauge machines, while 39540 B-8 is the main feed eccentric for 12-3/16 gauge machines. The differential feed eccentric for Styles 39800 AA and AB is 39540 E, while the differential feed eccentric is 39540 F for Styles 39800 AP, AQ, AX and AY.

Minor numbers of the part symbol indicate approximately the number of stitches obtainable when using that eccentric. Unless otherwise specified, machine will be shipped with above eccentrics.

Generally speaking, differential feed determines the number of stitches produced; the main (left hand) feed eccentrics are selected in relation to the degree and direction of stretch of material being sewn, or the type of operation. For these Styles of machines use two identical eccentrics for the main feed drive.

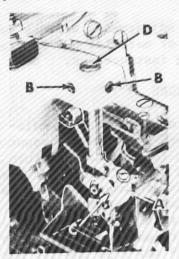
The following stitch number feed eccentrics are available under No. 39540 B; 6, 7, 8, 9, 10, 11, 12, 13, 14. Only two eccentrics are supplied with each machine. Additional eccentrics may be ordered separately. To order an eccentric, use No. 39540 B with a minor number suffixed to indicate number of stitches desired. Example: "39540 B-10".

ASSEMBLING AND ADJUSTING SEWING PARTS

Before assembling and adjusting sewing parts, remove cloth plate, fabric guard, chip guard, upper knife assembly, lower knife holder assembly, then follow this suggested sequence.

CLOTH PLATE REMOVAL AND ASSEMBLY

CAUTION: When removing the cloth plate (A, Fig. 4) loosen the cloth plate stud locking screw (B) and lift up cloth plate with the cloth plate stud (C) and cloth plate screw (D) assembled.



TWEST IN

In assembly, the cloth plate screw and the cloth plate stud are tightened to the point of removing

all play and yet turn in cloth plate the cloth plate is the assembled to the machine with the flat and "V" slot of the cloth plate stud (C) towards the rear. Stud locking screw (B) is tightened securely which collaps the body of the stud to the screw (D) so that only the cloth plate will turn when opening or closing.

SETTING THE NEEDLES

With throat plate assembled in position, the needles should center in the throat plate needle slots (left to right). The needle head (A, Figs. 5 and 6) can be repositioned by loosening set screws (B, Fig. 5) and binder screw (B, Fig. 6) in needle drive lever (C, Figs. 5 and 6); then simultane-

Fig. 5 6) in needle drive lever (C, Figs. 5 and 6); then simultaneously turning needle head guide bar (D) which is an eccentric and sliding the needle drive lever (C) to the left or right on needle rock shaft as required to alleviate bind.

When proper left to right needle position is obtained, tighten set screws (B, Fig. 5) securely and tighten screw (B, Fig. 6) lightly. Needle drive lever (C, Figs. 5 and 6) must also be positioned to set height of needles above throat plate which should be 7/16 inch (11.11 mm) on Styles 39800 AA and AB; 17/32 inch (13.49 mm) on Styles 39800 AP, AQ, AX and AY with needles at top of stroke (W, Fig. 7). Tap the needle drive lever (C, Figs. 5 and 6) lightly up or down to obtain desired needle height, then tighten screw (B, Fig. 6) securely.

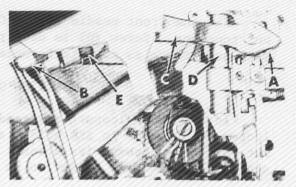


Fig. 6

Fig. 7

SETTING OVEREDGE LOWER LOOPER

Insert the lower looper (A, Fig. 8) into bar (B). With lower looper at the left end of its stroke, set looper point 3/32 inch (2.38 mm) from centerline of right needle (C) using gauge No. 21225-3/32. Do not have lower looper deflecting needle. Do not lock nut (D) because the looper point will have to be set to the needle scarf, after the rear needle guard has been positioned. (See paragraph under "Final Setting of Lower Looper").

SETTING OVEREDGE REAR NEEDLE GUARD

Set the rear needle guard (A, Fig. 9) as high as possible without interfering with either the lower looper or movement of the lower knife holder, but still in position to deflect the needle forward .002 to .004 inch (.051 to .102 mm). Screw (B)

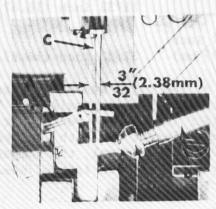
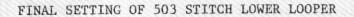


Fig. 8

is used to set rear needle guard. Make sure there is no interference between rear needle guard and lower looper. Also needle thread is free to pass through the needle eye without being pinched by the needle guard with the needle down.



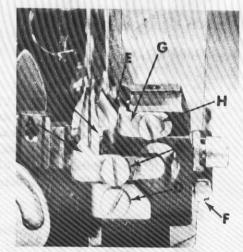


Fig. 9

Now complete the lower looper adjustment. As lower looper moves to the right, its point should be set into the needle scarf, barely touching but not deflecting the needle. Adjustment can be made by rocking the looper forward or backward around its shank. Recheck specified lower gauge setting and tighten nut (D, Fig. 8).

SETTING OVEREDGE FRONT NEEDLE GUARD

Set the front needle guard (C, Fig. 9) as close as possible to the needle without touching. Screw (D) is used to set front needle guard. After making adjustment, make sure there is no interference between needle guards and differential feed dog.

SETTING OVEREDGE UPPER LOOPER OR SPREADER

Insert upper looper or spreader (A, Fig. 10) in its holder. Screw (B) holds the looper or spreader in its holder and permits looper or spreader to be pushed in or out, or turned around its shank. Screw (C) in the collar, holds the holder in the shaft and allows the holder to be rotated or adjusted laterally.

NOTE: Specific settings for machine Styles, as described under preliminary settings are as follows:

Style	"X" Approximate Degrees Shank Back of Vertical	"Y" Spreader's Lower Point to Left of Needle Centerline	"Y" Looper Point to Left of Needle Centerline	"Z" Height Above Throat Plate
39800 AA	20°	5/32 inch (3.97 mm)	12 1047421 1667 4716, 1847 1684	5/8 inch (15.88 mm)
39800 AB	30°		5/32 inch (3.97 mm)	5/8 inch (15.88 mm)
39800 AP,	AX 15°	5/32 inch (3.97 mm)	eren i da enera arei A la la caractería	21/32 inch (16.67 mm)
39800 AQ,	AY 45°	1 1 1 2 2 1 1 1 1 1 1 1 1 2 1 2 2 2 2 2	5/32 inch (3.97 mm)	21/32 inch (16.67 mm)

Preliminary Setting: When looper or spreader is at the right end of its stroke, the holder should be set to position the looper or spreader shank approximately "X" degrees back of vertical and flush with the top of holder (Fig. 10). Set looper or spreader point to cross lower looper to the left of lower looper eye with .002 to .004 inch (.051 to .102 mm) clearance. At extreme left end of travel, the looper point or the lower point of the spreader should be set "Y" dimension left of needle centerline and "Z" dimension above throat plate (Fig. 11).

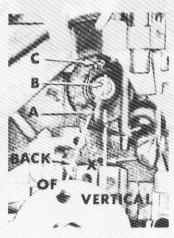


Fig. 10

Now check setting between looper or spreader and needle. If needle rubs back of either, pull looper or spreader out of its holder slightly and rotate the holder forward a short distance. These same adjustments, in opposite movement, will reduce the clearance between looper or spreader and needle. Reset to lower looper.

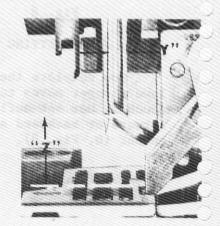


Fig. 11

Insert rear needle guard into the hole in the throat plate support bracket. Set height of guard (E, Fig. 9) approximately 3/16 inch (4.76 mm) below the throat plate seat. Bring the 401 needle down until its point is 1/64 inch (.40 mm) below the widest portion of the guarding surface. Then bring the guard forward to deflect the needle forward from .002 to .004 inch (.051 to .102 mm). Then lock the guard in place with set screw (F).

SETTING 401 STITCH LOOPER

Insert 401 stitch looper into looper holder and press down until the butt end of the shank strikes the looper shaft. Looper will be at correct height. Tighten the looper clamp screw while working the looper blade to and fro to secure accurate seating of clamp screw against flat on shank.

With looper at the right end of its stroke, set looper 3/32 inch (2.38 mm) from centerline of left needle (Fig. 12) using looper gauge No. 21225-3/32. For Styles 39800 AP, AQ AX and AY. NOTE: The looper setting on Styles 39800 AA and AB should be 1/8 inch (3.17 mm). Loosen looper holder binder screw (A, Fig. 12) to position the looper. Turn the handwheel to bring the looper point up to the needle and set the looper point to lie in the scarf of the needle within .002 inch (.051 mm) clearance viewing the machine from the left end (Fig. 13).Retighten looper holder binder screw.

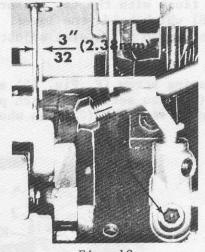


Fig. 12

While hand turning machine through cycle observe the action of the needle with relation to the looper. As needle rises from the bottom of its stroke the looper will approach the needle from right side and pass behind at top of needle scarf without striking. Further rising of the needle will result in the looper point entering the scarf. Furthermore, since the



Fig. 13

needle point is coming off the rear guard, the needle will resume its normal position by moving to the rear, resulting in a close relation of the needle and looper, or actual contact, until scarf passes looper. On the down

stroke, the needle should pass behind the looper without the point glancing off the guarding surface of the looper.

Set front needle guard (G, Fig. 9) as close as possible to the needle when looper point is behind the needle and flush with the left side of needle. Also, front needle guard should be set so there is from 1/64 to 1/32 (.40 to .79 mm) clearance between it and bottom of looper blade. Turn handwheel in operating direction, making complete revolutions to check whether needle is disturbed or pinched. Lock with screw (H).

For convenience, the looper may now be threaded as shown in (Fig. 2 or 2A) and as described under paragraph "To Thread 401 Looper". Replace differential feed dog, throat plate, lower knife holder and reset upper knife. Check cutting action with thread.

Assemble main and differential feed dogs (A, B, Fig. 14).

Feed dogs should be level with the throat plate surface by rotating feed tilting adjusting pin (C). This pin raises or lowers the back end of feed bar. Feed dogs should be level at the time teeth first appear above the throat plate. Screw (D) locks the feed tilting adjusting pin in place. Now set feed dogs at highest point of travel. Main and differential feed dog teeth should be set 3/64 inch (1.19 mm) above the throat plate.

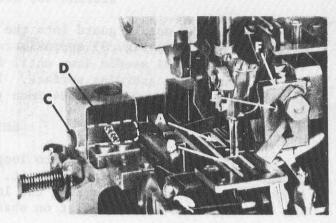


Fig. 14

SETTING THE LOWER KNIFE

Replace the lower knife holder assembly. In replacing the lower knife holder assembly, tighten screw (A, Fig. 15) so that when the face of the flange on sleeve (B) seats against throat plate mounting bracket (C), a free lateral motion of the lower knife and holder assembly is obtained when the knife is manually pressed at its upper corner. Lower knife (D) should be set with cutting edge flush with the top of throat plate. Adjustments are made with hexagonal head screw (E) which holds the lower knife. Lower knife is spring pressed against the upper knife, so no lateral adjustment is necessary when the width of trim is changed.

Lower knife may be secured in any position by tightening screw (F, Fig. 15) and locking nut (G) against support bracket. Because screw (F) also serves as latch pin for the cloth plate latch spring, it should always be locked with nut (G) even when screw is not tightened against lower knife holder.

SETTING THE UPPER KNIFE

Replace the upper knife assembly. Clamp upper knife (H, Fig. 15) in position, setting nut (J) to hold clamp (K) in its most clockwise position against upper knife. At the bottom of its stroke, front cutting edge of upper knife should extend not less than 1/64 inch (.40 mm) below cutting edge of lower knife.

After upper knife has been set for proper width of trim, screw (E, Fig. 14) should be tightened to lock upper knife holding block (F) in place. This will simplify resetting when upper knife is replaced.

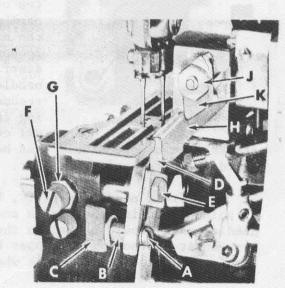


Fig. 15

SETTING THE STITCH LENGTH

The stitch length is determined by two factors in combination; one is the main feed eccentrics used and the other the setting of the differential feed control.

SETTING THE STITCH LENGTH (Continued)

The differential feed control is independent of the main feed.

The hand operated knurled knob marked "DIFF" is for adjusting the differential stitch length.

The uppermost letter "L" marked on the stitch indicator plate indicates the longest feed travel (longest stitch length), while the lowermost letter "S" indicates the shortest feed travel (shortest stitch length). Therefore, moving the indicator pointer of the differential control down shortens the stitch length and upward lengthens the stitch.

After selecting the proper eccentrics for the main feed, and the main and differential feed dogs have been set, turn the differential knob until the desired seam is obtained. As a precaution, after setting the stitch length check the travel of both feed dogs to make sure that there is clearance between the throat plate slots and the main and differential feed dogs.

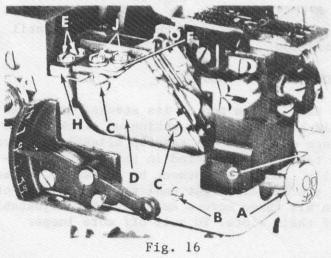
LOCKING THE DIFFERENTIAL FEED CONTROL

Set the differential thumbscrew (A, Fig. 16) to the stitch length desired and tighten lockscrew (B) to lock differential feed control in place.

REMOVING THE ECCENTRICS

The outer (left) eccentrics (A, Fig. 17) actuate main (rear) feed dog. In assembling feed eccentrics, be sure hubs are facing each other. Be careful not to damage the shaft or key.

To change feed eccentrics, remove screws (C, Fig. 16) securing cast-off support end plate (D); remove screws (E) and screw securing the extreme right end of cast-off support plate (F) accessible with chip chute (G) open; turning handwheel to position 401 looper at extreme right, permitting removal of the left main feed thrust bar guide (H) with cast-off support plate (F) assembled. Remove nut (C, Fig. 17)



and looper thread take-up (D) from end of shaft (E). Turn handwheel in operating direction until key slot in eccentric is toward the front. Using hooked eccentric extractor supplied with machine, reach behind eccentrics and withdraw eccentrics. It may be necessary to move handwheel back and forth slightly during extraction.

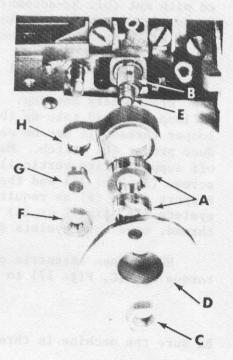


Fig. 17

REMOVING THE ECCENTRICS (Continued)

If eccentrics are unusually tight fitting, in addition to removing nut (C) and take-up (D, Fig. 17) from shaft (E), it may be helpful to remove nut (F), ferrule (G) and feed driving connection (H). Then continue as originally suggested.

NOTE: Before tightening nut (C, Fig. 17) refer to paragraph under "401 Looper Thread Control.

SETTING THE PRESSER FOOT

Assemble the presser foot to presser arm. With needle in high position, swing presser arm into sewing position and set the presser foot to align needle holes (front and back) and flat on throat plate. The front edge of needle hole in presser foot must be aligned with front edge of needle hole in throat plate. It is important that the bottom of the presser foot be flat on the throat plate. If necessary, presser foot can be realigned with throat plate slots by shifting the foot lifter lever shaft (A, Fig. 18). To move the shaft, loosen screws in collar (B) and clamp screw (C) and then shift the foot lifter lever shaft to the left or right as required. Retighten collar screws and clamp screw.

The foot lifter lever arm (D, Fig. 18) and the collar (B) secure the shaft. Be sure the presser arm does not bind and rise when presser foot release lever is unlocked.

Adjust lifter lever stop screw (E, Fig. 18) so that presser foot can be raised no higher than upper looper or spreader will permit; then lock the nut (F). There should be from 1/16 to 1/8 inch (1.59 to 3.18 mm) free motion of foot lifter lever before the presser foot begins to rise. This adjustment should be made with screw (G) and locked with nut (H). Re-assemble the chip

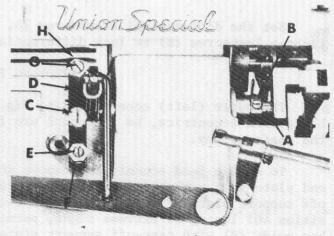


Fig. 18

guard, fabric guard and cloth plate. To assemble chip guard, turn handwheel until upper knife assembly reaches its highest position.

401 LOOPER THREAD CONTROL (CAM TAKE-UP)

Preliminary Setting: With the needle head at the top of its stroke, long flat of looper thread take-up (D, Fig. 17) should be set to begin taking up slack of the looper thread. It may be necessary to advance or retard cam take-up slightly, to produce proper 401 stitch. Make sure the cam take-up is centered in the slot of cast-off support plate vertically and horizontally. Should adjustment be necessary, loosen screws (J, Fig. 16) and the screw securing the extreme right end; reposition cast-off support plate (F) as required and retighten all three screws securely. Set adjustable eyelets (AA, Fig. 2 or 2A) in the center of their slots. To pull off more looper thread, move both eyelets down.

NOTE: When eccentric cams are changed or cam take-up requires adjustment, always torque nut (C, Fig. 17) to 24-25 in. 1bs. (28-39 cm/kg).

STARTING TO OPERATE

Be sure the machine is threaded according to the threading diagram (Fig. 2 or 2A).

OVEREDGE LOWER LOOPER THREAD CONTROL

Set thread tube (W, Fig. 2 or 2A) so the opening at its left end aligns with thread tube (T), though later it may be repositioned slightly to suit conditions. With needles at high position, the opening of the lower looper thread take-up wires



Fig. 19

(U) should be centered between the thread tubes, front to back. Adjustment can be made by loosening screw (A, Fig. 19), reposition take-up wire lever as required and retighten screw. A preliminary setting of the lower looper cast-off blade (V, Fig. 2 or 2A) is to position its curved section to contact thread as soon as the needle head commences its downward stroke and barely touches the thread on its vertical surface located at the heel of the blade as the needle head completes its downward stroke. The cast-off blade can later be

raised or lowered to increase or decrease amount of thread required in the system. NOTE: When adjusting cast-off blade and tightening its mounting screw, be sure that the fabric guard rests on top of thread tube (T).

OVEREDGE NEEDLE THREAD CONTROL

While sewing on material, check needle thread control as follows: Usually all needle thread is drawn on needle down stroke. Needle thread take-up (AL, Fig. 2 or 2A) should be set approximately in the center to upper portion of its slot, though it can be adjusted up or down to suit conditions. With the needle head at lowest position, the finger of the take-up (AL) should be set approximately 1/32 inch (.79 mm) below the thread holes in eyelet (AK). With needle head at highest position, the curved section of thread take-up (AL) should barely touch the needle thread. Adjust eyelet bracket (AK) forward or rearward to meet these conditions.

UPPER LOOPER THREAD CONTROL

With needles at high position, set looper thread eyelet (AG, Fig. 2A) approximately horizontal and so positioned, with thread taut through eyelet holes, thread barely contacts inside front wire of the left take-up wire (U). Make sure when needles are at down position, the rear wire of the left take-up wire (U) does not strike the inside of eyelet (AG). Usually all looper thread should be drawn on needle down stroke.

401 NEEDLE THREAD CONTROL

Set needle thread adjustable eyelet (AM, Fig. 2 or 2A) so that most of the needle thread is drawn on the downstroke. Eyelet (AN) located at top of needle head should be positioned with the bottom eye in line with the left needle.

THREAD TENSIONS

With take-ups and eyelets set, as described under thread controls, balance the thread tensions to obtain desired 401 and overedge stitch.

SPECIAL ADJUSTMENTS

SKIPPING: If skipping occurs, check and/or adjust the following:

(A) Overedge Stitch

- 1. Recheck lower looper to needle setting.
- 2. Recheck overedge needle guard setting.
- 3. Recheck upper looper or spreader to lower looper settings.

SPECI JUSTMENTS (Continued)

- 4. Recheck upper looper or spreader to needle setting.
- (B) 401 Stitch
 - 1. Recheck 401 looper to 401 needle setting.
 - Recheck 401 needle guard settings.
 - Check 401 looper cast-off cam take-up timing see note under "401 Looper Thread Control".
- 4. Should 401 chain skipping occur, recheck "Setting The Presser Foot".

TO REMOVE CRANKSHAFT

Crankshaft can be withdrawn easier if these steps are followed:

- Drain oil by removing plug screw located on back of machine near bottom edge of base.
- 2. Remove top and bottom covers of machine.

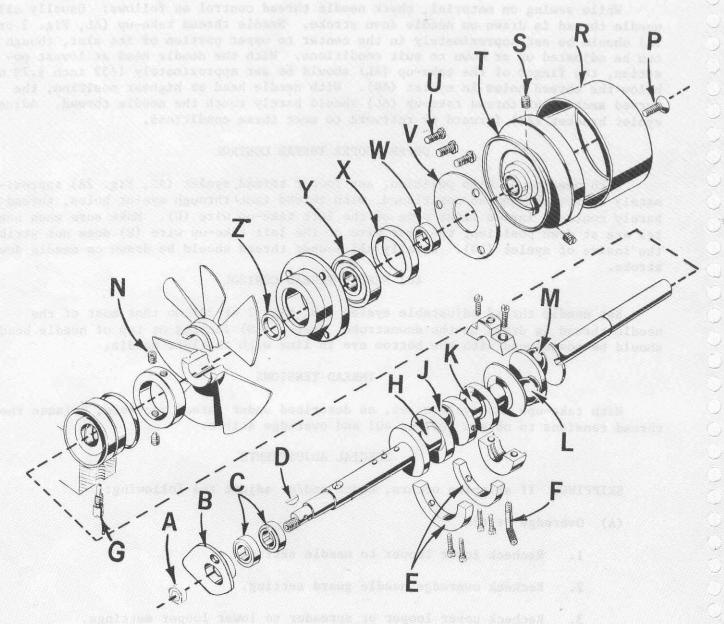


Fig. 20

- 3. Remove nut (A, Fig. 20), 401 looper thread take-up (B) and eccentrics (C).
- 4. Remove key (D).
- 5. Remove two counterweights (E). Identify these counterweights so that they will be re-assembled in the proper places.
- 6. Remove oil tube (F) which holds crankshaft split bearing and oil pump, and the screw (G) which holds the inner right crankshaft bearing. They are accessible through bottom of bed casting.
- 7. Remove caps of bearings on crankshaft at points H, J, L and M. When re-assembling bearing caps make sure they are in their original position. Trademarks are stamped on both halves of the caps and both trademarks should be on the same side of the bearings. Also, screws should be reassembled in the same holes from which they were removed.

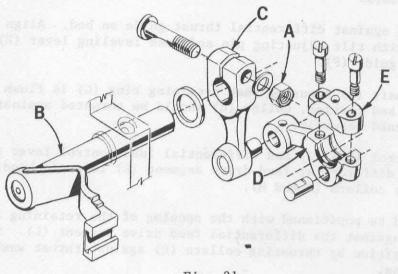


Fig. 21

- 8. Remove 401 looper drive lever shaft.
- Remove upper looper or spreader drive lever shaft from the rear of machine and lift out the drive lever and connecting rod.
- Remove upper looper or spreader drive shaft bushing and cam guide.
- 11. Remove lower looper drive lever shaft from the rear of machine, disconnect connecting link and lift out lower looper drive lever and connecting rod.
- 12. Remove lower looper thread take-up wire and take-up eyelet mounting bracket.
- 13. Remove throat plate and lower knife support bracket.
- 14. Loosen clamp nut (A, Fig. 21) which holds the upper knife driving arm (B). Access to clamp nut is through top cover. Draw driving arm to the left until upper knife driving lever (C) and connecting rod (D) drop, allowing removal of bearing cap (E). This is at bearing point (K, Fig. 20) on crankshaft. Observe same precautions when reassembling cap as described in paragraph 7.
- 15. Loosen two screws (N) in fan collar; remove both halves of cooling fan.
- 16. Remove screw (P); take off pulley cap (R).
- 17. Loosen two screws (S); remove pulley (T).
- 18. Remove three screws (U); take off bearing retaining plate (V); also, spacer collars (W) and (X) may be removed at this time.
- 19. Crankshaft may now be removed while holding needle lever connecting rod to the side.

TO REMOVE CRANKSHAFT (Continued)

- 20. If necessary to replace ball bearing (Y), it can be pressed off shaft on an arbor press. In replacing the bearing it must be pressed on carefully until it seats against ground thrust washer (Z).
- 21. Carefully observing reverse of the foregoing operations should simplify reassembly of crankshaft. Checking exploded view drawings for location of various parts and constant testing for binds during reassembly will also prove helpful.
- 22. Before reassembling, thoroughly clean and dry the top and bottom covers and gaskets. Coat the oil drain plug with a sealing compound before reassembling to prevent oil leakage. No. 1 Crane Lead Seal is recommended.

ADJUSTING INSTRUCTIONS FOR QUICK STITCH FEED DRIVE MECHANISM

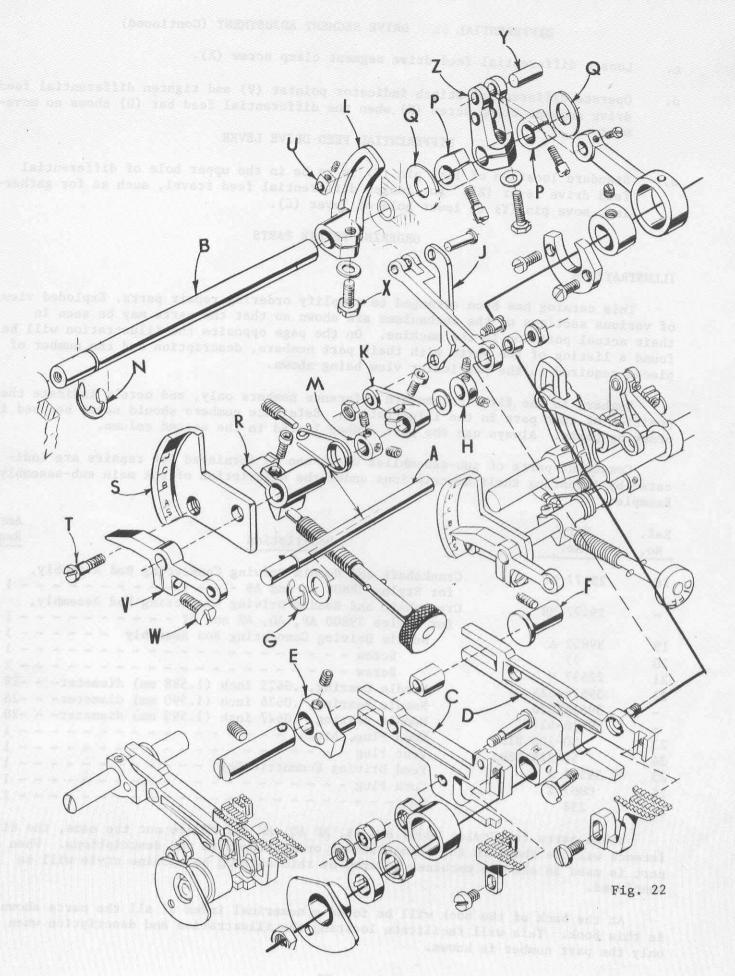
- Assemble parts as illustrated to feed control shaft (A, Fig. 22) and feed rock shaft (B); including feed bars.
- Thrust feed bars (C and D) against differential thrust guide on bed. Align and thrust rear of feed bars with tilt adjusting pin and feed leveling lever (E) and differential feed bar guide (F).
- 3. Thrust the feed control shaft (A) assuring that retaining ring (G) is flush against the recess in the bed casting. Collar (H) should be thrusted against the bed casting and tightened securely.
- 4. The differential feed control link (J) and differential feed control lever (K) must be in alignment with differential feed drive segment (L) to avoid binding and secured in position by collars (H and M).
- 5. Feed rock shaft (B) should be positioned with the opening of the retaining ring (N) upwards and thrusted against the differential feed drive segment (L). Secure shaft (B) in this position by thrusting collars (P) against thrust washers (Q) against the bed casting.
- 6. A bind could occur in the differential feed drive lever (K) and differential control lever actuator (R) if the indicator plate (S) is not properly aligned. Oversize holes are provided in plate (S) for its mounting screw (T) to allow repositioning and eliminate binds.

DIFFERENTIAL FEED CONTROL ADJUSTMENT

- a. Move differential feed segment sliding block (U) to lowest position in differential feed drive segment (L).
- b. Rotate differential stitch indicator pointer (V) counterclockwise until the pointer is at the bottom of scale.
- c. Clamp the indicator pointer (V) with screw (W)

DIFFERENTIAL FEED DRIVE SEGMENT ADJUSTMENT

- a. Move differential feed segment sliding block (U) to top position by rotating differential stitch indicator pointer (V) clockwise.
- b. Turn the handwheel until the feed bar is in its most rear position.



DIFFERENTIAL FRAD DRIVE SEGMENT ADJUSTMENT (Continued)

- Loosen differential feed drive segment clamp screw (X). C.
- Operate differential stitch indicator pointer (V) and tighten differential feed drive segment clamp screw (X) when the differential feed bar (D) shows no moved. ment.

DIFFERENTIAL FEED DRIVE LEVER

Standard location of link pin (Y) is to be in the upper hole of differential feed drive lever (Z). For longer differential feed travel, such as for gathera. ing, move pin (Y) to lower hole of lever (Z).

ORDERING REPAIR PARTS

ILLUSTRATIONS

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

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

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

Ref.	Part No.	Description Req.	
No. 18	29477 MF 29477 MB	Crankshaft and Needle Driving Connecting Rod Assembly, for Styles 39800 AA and AB	
19 20 21 22 - 23 24 25 26	39852 A 77 22587 M 39516-625 39516-626 39516-627 30-106 Blk. 51-228 Blk. 39541 A C067 E	for Styles 39800 AP, AQ, AX and AY	

Where parts for Styles 39800 AA, AB, AP AQ, AX and AY are not the same, the difference will be shown in the illustrations or mentioned in the descriptions. When a part is used in all the machines covered by this catalog no machine style will be mentioned.

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

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

Part numbers represent the same part, regardless of 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, it subsidiaries and authorized distributors. They are designed according to the most scientific principles, and are made with utmost precision. Maximum efficiency and durability are assured.

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

TERMS

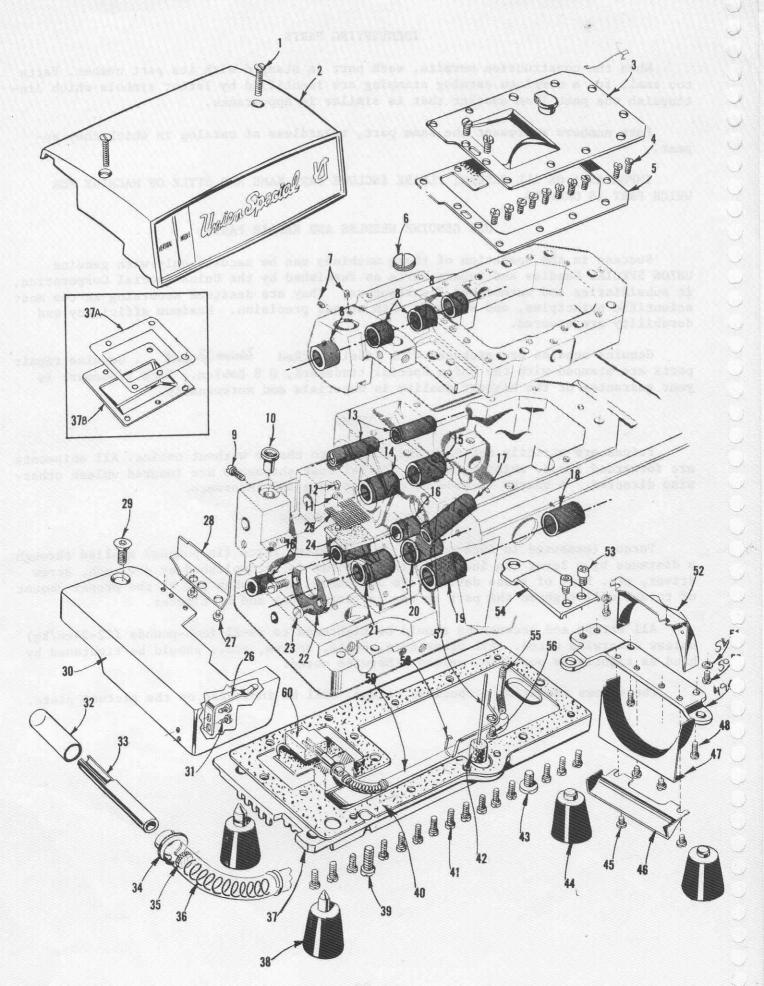
Prices are strictly net cash and subject to change without notice. All shipments are forwarded f.o.b. shipping point. Parcel Post shipments are insured unless otherwise directed. A charge is made to cover postage and insurance.

TORQUE REQUIREMENTS

Torque (measured in inch-pounds) is a rotating force (in pounds) applied through a 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.

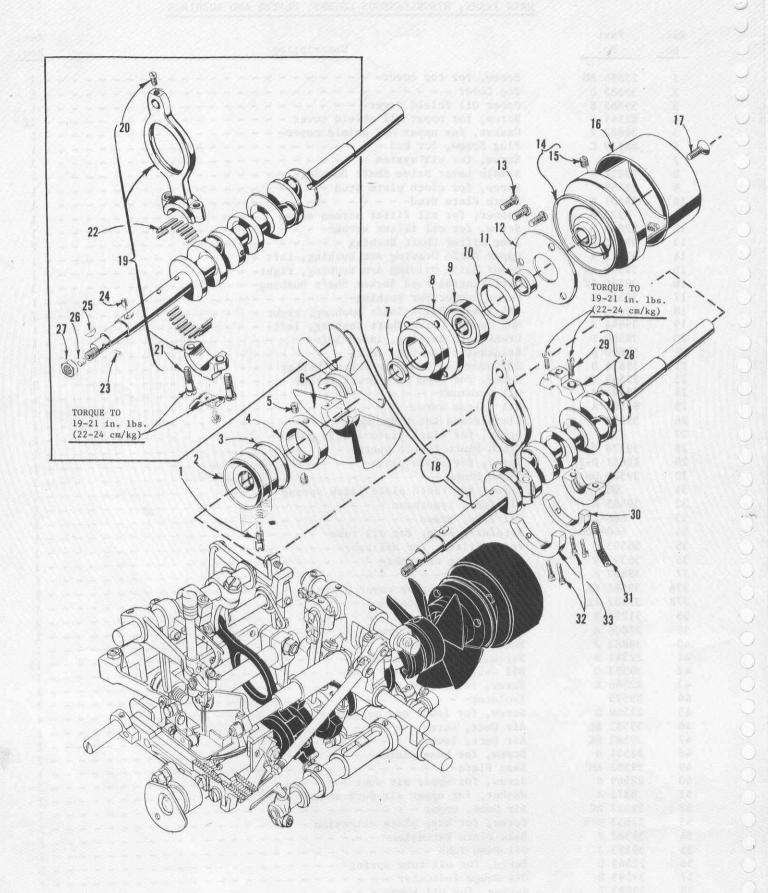
All straps and eccentrics should be tightened to 19-21 inch-pounds (22-24cm/kg) unless otherwise noted. All other nuts, bolts, screws, etc., should be tightened by hand as tightly as possible, unless otherwise noted.

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



MAIN FRAME, MISCELLANEOUS COVERS, PLATES AND BUSHINGS

Ref.	Part		Amt.
No.	No.	<u>Description</u>	Req.
		Screw, for top cover	0
. 1	22894 AG	Top Cover	1
2	39882 G	Upper Oil Shield Cover	1
3	39882 E 22541 B	Screw, for upper oil shield cover	12
5	39882 F	Gasket, for upper oil shield cover	1
6	22539 C	Plug Screw, for bed	1
7	88	Screw, for oil system	2
8	39852 M	Needle Lever Drive Shaft Bushing	
9	22569	Screw, for cloth plate stud	
10	39501 K	Cloth Plate Stud	
11	8372 A	Washer, for oil filter screen screw	
12	22824 B	Screw, for oil filter screen	
13	39855 D	Foot Lifter Shaft Bushing	
14	39573 K	Upper Knife Driving Arm Bushing, left	1
15	39573 AA	Upper Knife Driving Arm Bushing, right	
16	39536 BY	Differential Feed Rocker Shaft Bushing	
17	39544 L	Lower Looper Bar Bushing	
18	39644 C	401 Looper Drive Shaft Bushing, right 401 Looper Drive Shaft Bushing, left	
19	39644 S	Crankshaft Bushing, inner left	
20	39590 T 39890 D	Crankshaft Bushing, left	
21 22	39834 D	Differential Feed Bar Thrust Washer	
23	22569 G	Screw, for feed bar thrust washer	2
24	39894 B	Oil Strainer	1
25	39894 A	Oil Filter Screen	1
26	39832	Cloth Plate Latch Spring	1
27	138	Screw, for cloth plate fabric guard	2
28	39578 F	Cloth Plate Fabric Guard	
29	22657 D-12	Screw, for cloth plate	1
30	39501 DN	Cloth Plate	
31	90	Screw, for cloth plate latch spring	2
32	39593 K	0il Tube, tygothane	1
33	666-271	Oil Tube, brass	
34	660-506	Retaining Ring, for oil tube	1
35	56393 G	Porex Filter, for oil tube	1
36	56393 V	Spring, for oil tube	1
37	39882 K	Bottom Cover	1
37A	39582 BA	Bottom Cover Plate	1
37B 38	39582 AZ 51295 B	Isolator	
39	22806 A	Screw, for bottom cover	
40	39882 J	Bottom Cover Gasket	1
41	22541 B	Screw, for bottom cover	15
42	39593 C	Oil Gauge Float	1
43	22586 R	Screw, for bottom cover	1
44	39595	Isolator	2
45	22569 D	Screw, for lower and outer air duct	4
46	39582 BL	Air Duct, outer	1
47	39582 BK	Air Duct, lower	1
48	22541 B	Screw, for base plate	2
49	39582 BM	Base Plate	1
50	22569 C	Screw, for upper air duct	2
51	8372 A	Washer, for upper air duct screw	2
52	39582 BV	Air Duct, upper	1
53	22653 D-4	Screw, for base plate extension Base Plate Extension	2
54 55	39582 F 39593 J	Oil Pump Tube	1
55 56	39593 J 22569 D	Screw, for oil tube spring	1
56 57	39593 D	Oil Gauge Indicator	1
58	39593 L	Spring, for oil tube	1
59	666-280	0il Tube, tygothane	1
60	666-268	Felt Pad	1



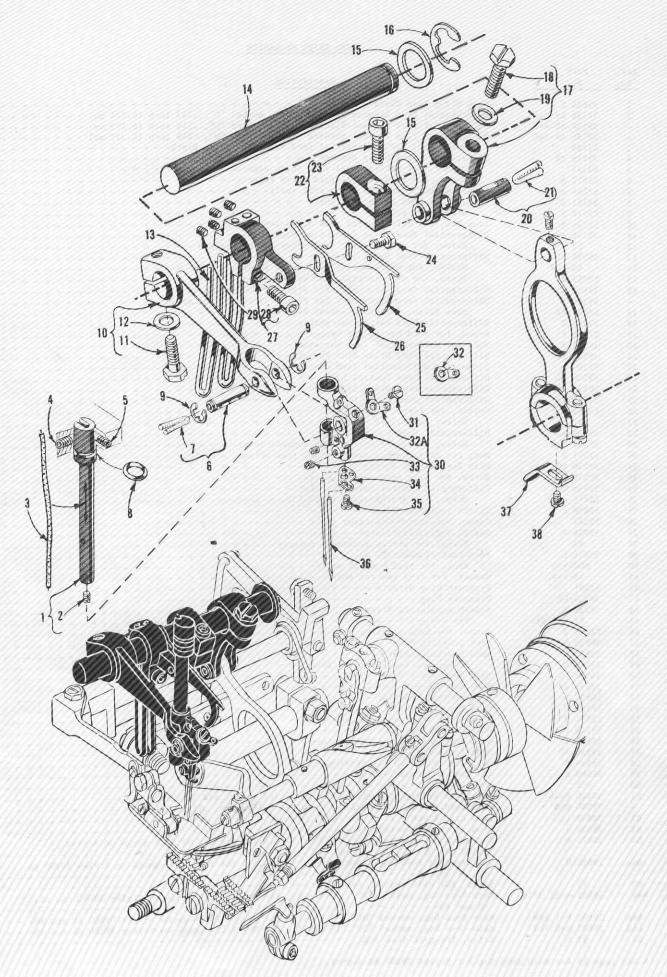
CRANKSHAFT MECHANISM

Ref.	Part	Description	
No.	No.		Amt. Req.
1	39690 A	Stud for grankahaft based	- Commonwealth
2	39890 C	Stud, for crankshaft bearing	- 1
3	660-443	Crankshaft Bearing, inner right	- 1
4	39591 Н	o, eramonare bearing, inner fight	- 1
5	22894 D	Crank Chamber Cooling Fan Collar	- 1
6	39591 L	Spot Screw, for crank chamber cooling fan collar	- 2
7	39590 J	Crank Chamber Cooling Fan	- 1
8	39590 G	Crankshaft Ball Bearing Housing	- 1
9	660-268	Crankshaft Ball Bearing	- 1
10	39590 R	Ball Bearing Stop Collar	- 1
11	39590 S	Spacer Collar	- 1
12	39590 н	Crankshaft Ball Bearing Retaining Dlane	- 1
13	22569 B	Crankshaft Ball Bearing Retaining Plate	- 1
14	39521 G	Screw, for ball bearing retaining plate and housing	- 3
15	95	Screw, for pulley	- 1
16	39821	Pulley Cap	- 2
17	22769 В	Screw, for pulley cap	- 1
18	29477 MF	Crankshaft and Needle Driving Connecting Rod Assembly for	- 1
		Styles 39800 AA and AB	
-	29477 MB	Crankshaft and Needle Driving Connecting Rod Assembly for	- 1
		Styles 39800 AP, AQ, AX and AY	
19	39852 A	Needle Driving Connecting Rod Assembly	- 1
20	77	DCIEW	
21	22587 M	Screw	- 1
22	39516-625	Needle Bearing, .0625 inch (1.588 mm) diameter	- 2
- 1	39516-626	Needle Bearing, .0626 inch (1.590 mm) diameter	-28
-	39516-627	medic bediling, .002/ Inch (1.593 mm) diameter	-28
23	30-106	bite. Wood ridg, Dirtil	
24	51-228	Div. Vent Ling	
25	39541 A	reed Dilving Eccentric Key	
26	C067 E	COLK Flug	
27	258	Nuc	
28	39890 E	Spirit bearing and Oil Pump	,
29	97 A	screw, for split bearing and oil numb	0
30	39691	Crankshart Counterweight, right	
31	39593 J	orr rump rube	
32	22747 B	Screw, for crankshaft counterweight	,
33	39591 K	Crankshaft Counterweight, left	4

FEED DRIVE MECHANISM

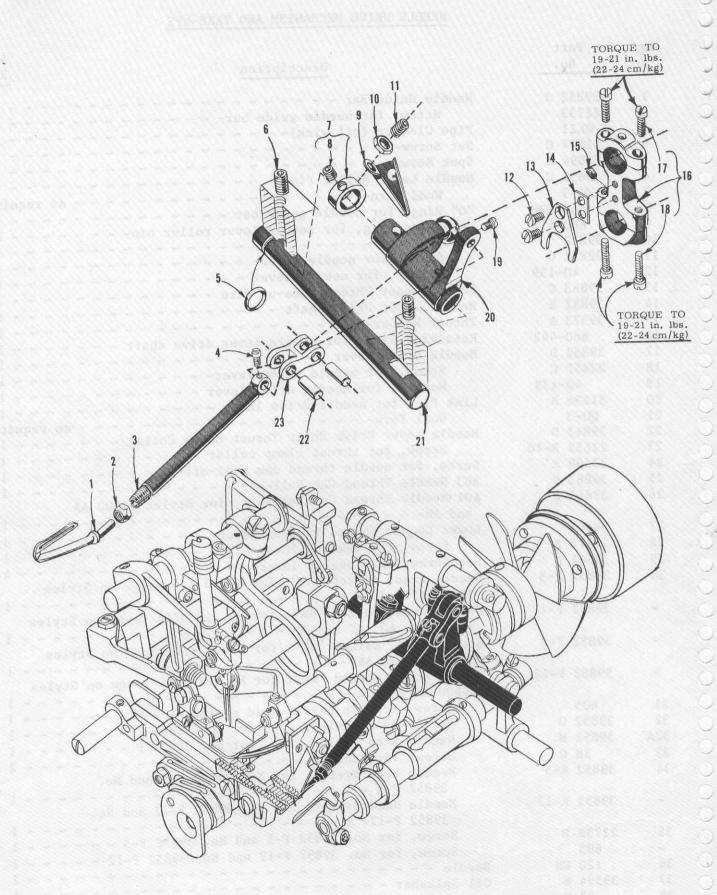
Ref No		Description Req.
1	39836 K	Feed Drive Rock Shaft
2	39536 AY-247	Differential Feed Segment Sliding Block, marked "K"247 inch (6.274 mm)
· -	39536 AY-248	Differential Feed Segment Sliding Block, marked "L", .248 inch (6 299 mm)
-	39536 AY-249	Differential Feed Segment Sliding Block, marked "M", .249 inch (6.325 mm) 1
3 4	22733 39536 AR	Set Screw, for differential feed segment sliding block
5	80557	Washer, for differential feed drive segment
6	22852 A	Screw, for differential feed drive segment
7	62244 A	Thrust Washer, for feed drive rock shaft
8	35751 G	Collar, for feed drive rock shaft
9	22572 B	Screw, for collar
10	51236 A	Link Pin, for differential feed drive lever 1
11 12	39536 AU 77	Differential Feed Drive Connecting Rod
13	39536 AL	Differential Feed Drive Lever
14	40-139	Washer, for differential feed drive lever
15	22852 A	Screw, for differential feed drive lever
16	39540 E	Differential Feed Eccentric, for Styles 39800 AA and AB
	39540 F	Differential Feed Eccentric, for Styles 39800 AP. AO. AX and AV
17 18	22894 AA 39834 D	Spot Screw, for differential feed eccentric1
19	22569 G	Differential Feed Bar Thrust Washer
20	39536 E	Nut. for differential feed bar stud
21	39536 BC	Differential Feed Drive Stud Ferrule
22	22760 E	Screw, for differential feed control link
23	39536 BA	Differential Feed Control Link
24	39536 BB	Differential Feed Drive Link Pin
25 26	39536 AX 61248 G	Differential Feed Drive Link
27	89	Screw, for collar
28	39536 AT	Differential Feed Control Lever
29	22652 A-6	Screw, for differential feed control lever
30	41071 G	Nut, for differential feed control link screw
31	39536 CH	Main Feed Return Spring
32 33	39536 CJ 39836 M	Screw. for main feed refurn spring
34	22652 A-8	Differential Control Lever Actuator 1 Screw, for differential control lever actuator
35	39836 P	Stitch Indicator Plate
36	22517	Screw, for stitch indicator plate
37	39836 R	Stitch indicator Pointer
38	93	Screw, for stitch indicator pointer
39 40	39836 L	reed Control Shart
41	660-466 40-144	"E" Ring, for feed control shaft1
42	92201	Pressure Plug Screw
43	39536 CA	Pressure Plug
44	39836 N	Stitch Regulating Screw
45	51-392 B1k	Pin
46	22894 J	Screw, for feed leveling pin
47 48	39835 В 39835 С	Feed Leveling Pin
49	22894 U	Screw, for feed leveling lever
50	39534	Main Feed Bar
51	39535 J	Feed Bar Guide Block
52	39834 C	Differential Feed Bar
53 54	39535 N	reed Bar Guide Right
55	22894 J 39536 BE	Screw, for feed adjusting pin
56	39836 J	Main feed Bar Driving Connection
57	39536 BU	Main Eccentric Ferrule
58	39536 E	Nut, for main feed bar driving stud
59	39868 R	401 Looper Thread Take-up
60	258	Nut
61	39540 B-10 39540 B-8	Main Feed Driving Eccentric, for No. 5 1/8 gauge, all Styles
62	39838	Main Feed Driving Eccentric, for No. 12 3/16 gauge, all Styles2 Feed Lift Block
63	39536 J	Stud, for differential feed bar
64	39826 A	Differential Feed Dog, marked "FT" 12 t n i for No. 12 3/16 company
		39800 AA, AB, AP, AO, AX and AY
64A	39626 D	Differential feed Dog, marked "BR", 16 f.p.f. for No. 5 1/8 gaves as that goods
		AB. AP and AU
65	93 39805 A-12 3/16	Screw, for differential feed dog
*66	39805 A-12 3/16	Main Feed Dog, marked "FU". 12 t.p.i. for No. 12 3/16 gauge on Chules 20000 the
66A	39605 F-1 1/8	AP and AQ
66B	39805 G-5 1/8	main reed bog, marked but, 10 E.D.1., for No. 5 1/8 gauge on Chalco 20000 11
67	93 A	Screw, for main feed dog
* See	nage 45 for main for	ed dog for Styles 39800 AX and AY

 $[\]star$ See page 45 for main feed dog for Styles 39800 AX and AY.



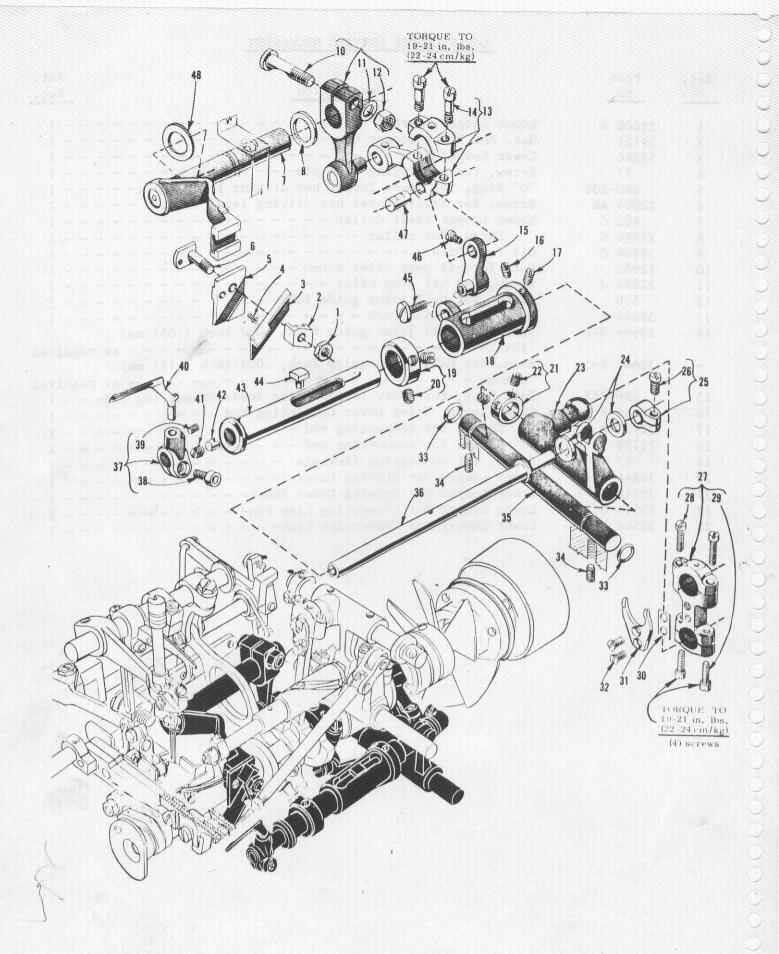
NEEDLE DRIVE MECHANISM AND TAKE-UPS

Ref.	Part No.	Amt. Description
		——————————————————————————————————————
1	39852 J	Needle Guide Bar 1
2	22733	Screw, for needle guide bar 1
3	CL21	Pipe Cleaner (oil wick) 1
4	22894 C	Set Screw 1
5	22894 L	Spot Screw 1
6	39852 C	Needle Lever Roller Pin
7	WO-3	Wool Yarn
8	660-220	"O" Ring, for needle guide bar as required
9	660-416	Retaining Ring, for needle lever roller pin 2
10	39852	Needle Lever 1
11	22852 C	Screw, for needle lever1
12	40-139	Washer, for needle lever 1
_ 13	39863 C	Lower Looper Throad Take are Man
14	39852 E	Lower Looper Thread Take-up Wire 2
15	39573 A	Needle Lever Drive Shaft1
16	660-442	Thrust Washer 2
17	39852 D	Retaining Ring, for needle lever drive shaft 1
18		Needle Drive Lever 1
	22852 C	Screw, for needle drive lever 1
19	40-139	Washer, for needle drive lever 1
20	51236 A	Link Pin, for needle drive lever 1
21	WO-3	Wool Yarnas required
22	39843 D	Needle Lever Drive Shaft Thrust Clamp Collar 1
23	22652 B-10	Screw, for thrust clamp collar 1
24	22588 A	Screw, for needle thread cam pull-off 1
25	39863 D	SU3 Needle Thread Cam Pull-off 1
26	39863 Ј	401 Needle Thread Cam Pull-off, for Styles 39800 AA and AB1
27	39863	Lower Looper Thread Take-up Lever 1
28	22572 B	Screw for take-up lever 1
29	22564 D	Screw, for take-up lever 1
30	39852 F-5	Set Screw, for take-up lever4
30		Needle Head, marked "AV", for No. 5 1/8 gauge on Styles 39800 AP and AQ 1
-	39852 F-12	Needle Head, marked "AW", for No. 12 3/16 gauge on Styles
		39000 AP, AQ, AX and AY
-	39852 P-5	Needle Head, marked "BK", for No. 5 1/8 gauge on Styles
	39852 P-12	39000 AA and AB
	39032 F-12	Needle Head, marked "BL", for No. 12 3/16 gauge on Styles 39800 AA and AB 1
31	605	Screw, for top needle head eyelet 1
32	39852 G	Needle Head Eyelet, top, for No. 39852 F 1
32A	39852 N	Needle Head Eyelet, top, for No. 39852 P 1
33	28 C	Screw, for needles 2
34	39852 K-5	Needle Head Eyelet, for No. 39852 F-5 and No.
		39852 P-5 1
7	39852 K-12	Needle Head Eyelet, for No. 39852 F-12 and No.
35	22738 В	39852 P-12 1
Ĭ	605	Screw, for No. 39852 F-5 and No. 39852 P-5 1
36	120 GS	Screw, for No. 39852 F-12 and No. 39852 P-12
37	39594 N	Needle
38		Oil Splasher 2
30	87 บ	Screw, for oil splasher1



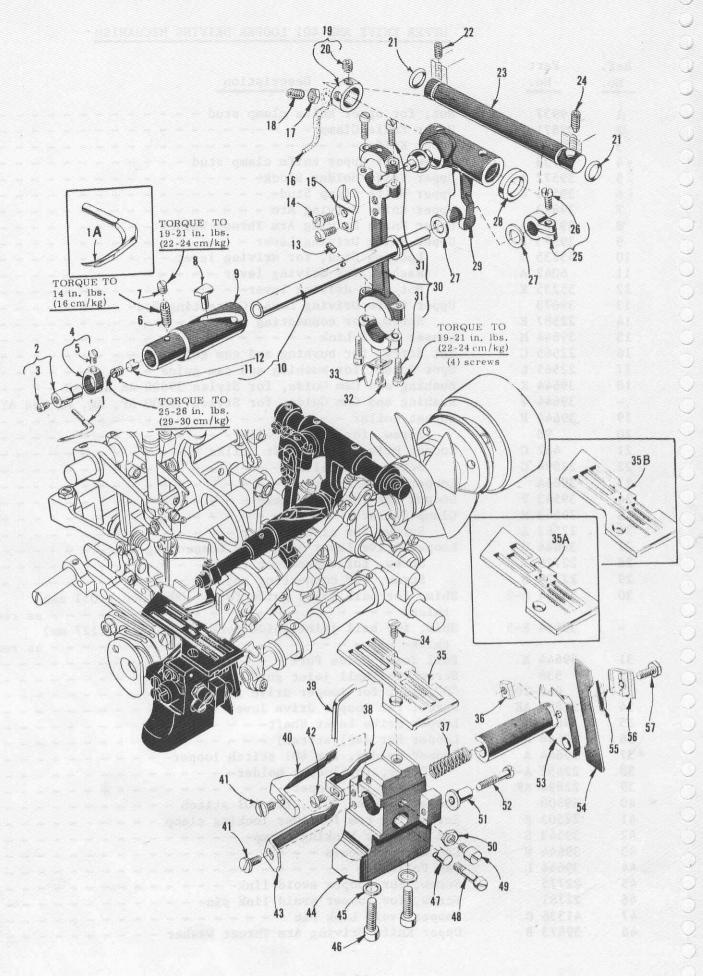
LOWER LOOPER DRIVING MECHANISM

Ref.	Part	Amt.
NO.	No.	Description Req.
	20000 B	Lower Looper, marked "CZ" 1
. 1	39808 B	Lower Looper, marked "CZ" 1
2	39151	Nut, for lower looper bar 1
3	52344	Lower Looper Bar
4	77	Screw, for connecting link pin ;
5	660-206	"O" Ring, for lower looper bar driving lever shaft-
6	22894 AE	Screw, for lower looper bar driving lever shaft 2
7	482 C	Lower Looper Shaft Collar
8	22894 C	Screw, for collar
9	39894 C	011 Pump 011er
10	12982	Nut, for oil pump oiler scrept
11	22894 J	screw, for oil pump oiler
12	538	Screw, for ball joint guide fork
13	39644 X	Ball Joint Guide Fork 1
14	39644 R-2	Shim, for ball joint guide fork, .002 inch (.051 mm) thickas required
-6	39644 R-5	Shim, for ball joint guide fork, .005 inch (.127 mm) thickas required
15	666-255	Felt Plug, for lower looper drive lever connecting rod 1
16	39644 F	Lower Looper Drive Lever Connecting Rod 1
17	22729 D	Screw, for connecting rod 2
18	22729 E	Screw, for connecting rod 2
19	77	Screw, for connecting link pin2
20	39844	Lower Looper Bar Driving Lover
21	39844 B	Lower Looper Bar Driving Lever 1 Lower Looper Bar Driving Lever Shaft 1
22	39544 D	Lower Looper Bar Connecting Link By
23	39544 B	Lower Looper Bar Connecting Link Pin2

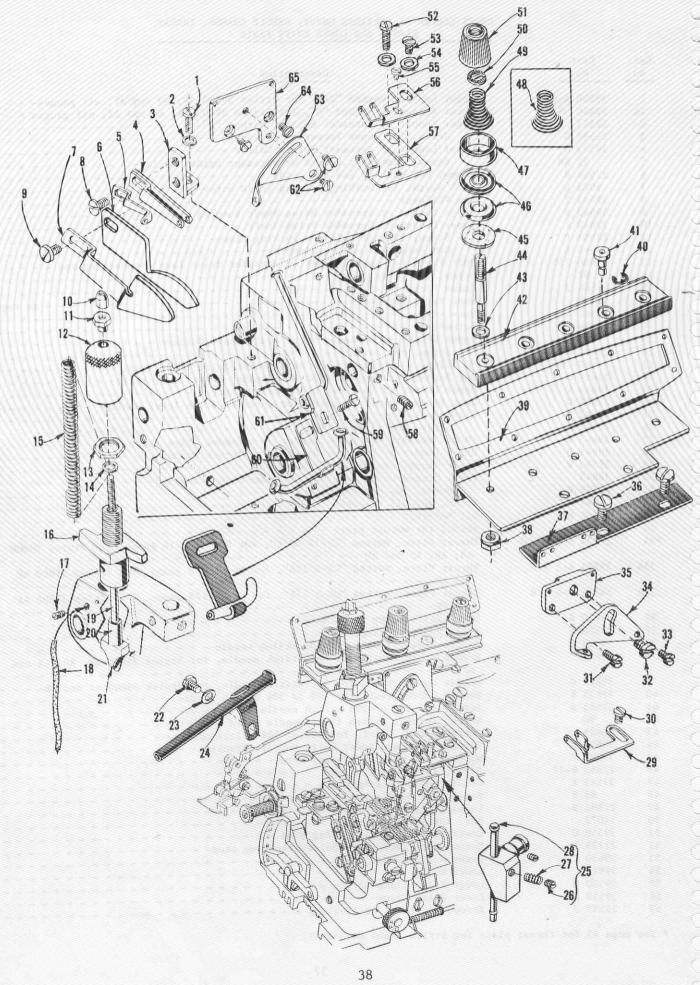


UPPER KNIFE AND 401 LOOPER DRIVING MECHANISM

Ref.	Part	Amt .	
No.	No.	<u>Description</u> Req	
. 1	9937	Nut, for upper knife clamp stud 1	
2	39871	Upper Knife Clamp 1	
3	39870	Upper Knife 1	
4	22738	Screw, for upper knife clamp stud 1	
5	39572 A	Upper Knife Holder Block 1	
6	39571 C	Upper Knife Clamp Stud 1	
7	39873	Upper Knife Driving Arm 1	
8	39573 A	Upper Knife Driving Arm Thrust Washer 1	
9	39573 E	Upper Knife Driving Lever 1	
10	55235 D	Locking Stud, for driving lever 1	
11	6042 A	Washer, for driving lever 1	
12	55235 E	Nut, for driving lever 1	
13	39673	Upper Knife Driving Lever Connecting Rod 1	
14	22587 E	Screw, for connecting rod2	
15	39644 M	Looper Avoid Link 1	
16	22565 C	Set Screw, for bushing and cam guide 1	
17	22565 L	Spot Screw, for bushing and cam guide 1	
18	39644 K	Bushing and Cam Guide, for Styles 39800 AA and AB 1	
-	39644 V	Bushing and Cam Guide, for Styles 39800 AP, AQ, AX and AY - 1	
19	39644 P	Thrust Collar 1	
20	98	Screw, for thrust collar2	
21	482 C	Looper Drive Lever Shaft Collar 1	
22	22894 C	Screw, for collar 2	
23	39644	Looper Drive Lever 1	
24	39543 P	Looper Bar Thrust Washer 2	
25	39543 M	Clamp Collar 1	
26	22562 A	Screw, for clamp collar 1	
27	39644 U	Looper Drive Lever Auxiliary Connecting Rod 1	
28	22729 E	Screw, for connecting rod 2	
29	22729 D	Screw, for connecting rod 2	
30	39644 R-2	Shim, for ball joint guide fork, .002 inch (.051 mm) thickas required	1
-	39644 R-5	Shim, for ball joint guide fork, .005 inch (.127 mm)	
31	39644 X	Ball Joint Guide Fork 1	1
32	538	Screw, for ball joint guide fork2	
33	660-206	"O" Ring, for looper drive lever shaft 2	
34	22894 AE	Screw, for looper drive lever shaft 2	
35	39644 N	Looper Drive Lever Shaft 1	
36	39644 A	Looper Bar (401 stitch) 1	
- 37	39844 A	Looper Holder, for 401 stitch looper	
38	22652 A-6	Screw, for looper holder 1	
39	22894 AF	Screw, for looper 1	
40	39808	Looper, marked "CY", for 401 stitch 1	
41	22503 F	Screw, for cam follower locking clamp 1	
42	39543 E	Cam Follower Locking Clamp 1	
43	39644 W	Looper Bar Sleeve 1	
44	39644 L	Cam Follower	
45	22775	Screw, for looper avoid link1	
46	22781	Screw, for looper avoid link pin 1	
47	41336 C	Looper Avoid Link Pin 1	
48	39873 B	Upper Knife Driving Arm Thrust Washer 1	

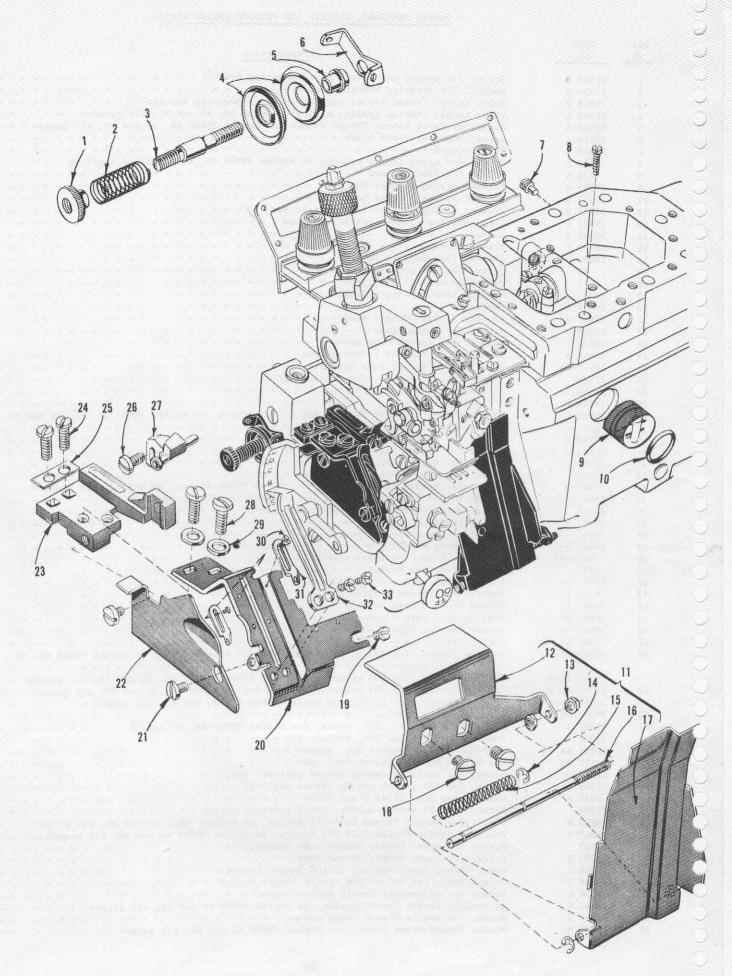


Ref. No.	Part No.	Description	ı#	Amt.
. , , _	20000 4	II - I - I - I - I - I - I - I - I - I		Req.
1 1A	39808 A 39860	Upper Looper, marked "DA", for Styles 39800 AB, AQ and AY, a	11 gauges	1
2	39543	Upper Spreader, marked "H", for Styles 39800 AA, AP and AX, Upper Looper or Spreader Holder, marked "J"	all gauges	1
3	22564 G	Screw, for upper looper or spreader		1
4	39543 A	Upper Looper or Spreader Holder Collar		- 1
5	22 KH	Screw, for upper looper or spreader holder collar		1
6 7	22565 R	Screw, for bushing and cam guide		1
8	1025 L 39543 T	Lock Screw, for bushing and cam guide screw Cam Follower		1
9	39543 S	Upper Looper or Spreader Drive Shaft Bushing and Cam Guide -		1
10	39843 A	Upper Looper or Spreader Drive Shaft		1
11	22503 F	Screw, for cam follower locking clamp		
12	39543 E	Cam Follower Locking Clamp		1
13 14	666-255 97	Felt Plug, for upper looper or spreader drive lever connecti	na rod	,
15	39544 J	Screw, for guide fork		2
16	WO-3	Guide Fork		1
17	12982	Nut	as re	equired
18	22894 J	Screw		
19	482 C	Upper Looper or Spreader Drive Lever Shaft Collar		
20	22894 C	Screw, for collar		0
21	660-206	"O" King, for upper looper or spreader drive lever shaft		0
22 23	22894 C 39843 C	Set Screw, for upper looper or spreader drive lever shaft	_ "	
24	22894 L	Upper Looper or Spreader Drive Lever Shaft Spot Screw, for upper looper or spreader drive lever shaft -		- 1
25	39543 M	Clamp Collar		- 1
26	22562 A	Screw, for clamp collar		
27	39843 E	infust washer, for upper looper or spreader drive shaft		- 0
28	39843 B	upper Looper or Spreader Drive Lever Thrust Washer		
29 30	39543 W	upper Looper or Spreader Drive Lever		
31	39843 22729 D	upper Looper or Spreader Drive Lever Connecting Rod		
32	87 U	Screw for oil splacher		- 4
33	39594 N	Screw, for oil splasher		- 1
34	22524	screw, for enroat plate		
*35	39824 A-12 3/16	AA, AB, AP and AO	Styles 39800	
35A	39824 A-5 1/8	and AQ	les 39800 AP	
35B	39824 G-5 1/8	and AB	les 39800 AA	
36	39650 B	Lower Knile Clamp Screw Nut		
37 . 38	39550 E 39625 C	Knile noider Spring		
39	39625	Needle Guard, front, for 401 stitch needle Needle Guard, rear, for 401 stitch needle, for Styles 39800 A	D AO AV 1	
_	39825 C	Needle Guard, rear, for 401 stitch needle, for Styles 39800 A		- 1
40	39825 B	Needle Guard, rear, for 503 or 504 stitch needle	A and AB	- 1
41	22585 A	screw, for 503 or 504 stitch needle guard		
42	90	screw, for 401 stitch front needle guard		
43	39825	Needle Guard, front, for 503 or 504 stitch needle		
44	39880 E 39580 F	initial Flate and Lower Knife Support Bracket		
46	22653 B-12	Washer, for support bracket screw		- 2
47	39543 E	Screw, for support bracket		- 2
48	88 F	screw, for needle guard locking clamp		
49	22892 B	Locking Sciew, for lower knite holder		
50	14077	Nut, for focking screw		
51 52	39550 C	Lower Knile Holder Locating Stud		
53	22729 B 39650 C	screw, for lower knile holder locating stud		
54	39849	Lower Knife Holder		
55	39550 M	Lower Knile Clamp Spring		
56	39550 Z	Lower Knire Clamp		
57	22588 J	Screw, for lower knife clamp		- 1 - 1



THREAD TENSIONS, EYELETS AND PRESSER SPRING PARTS

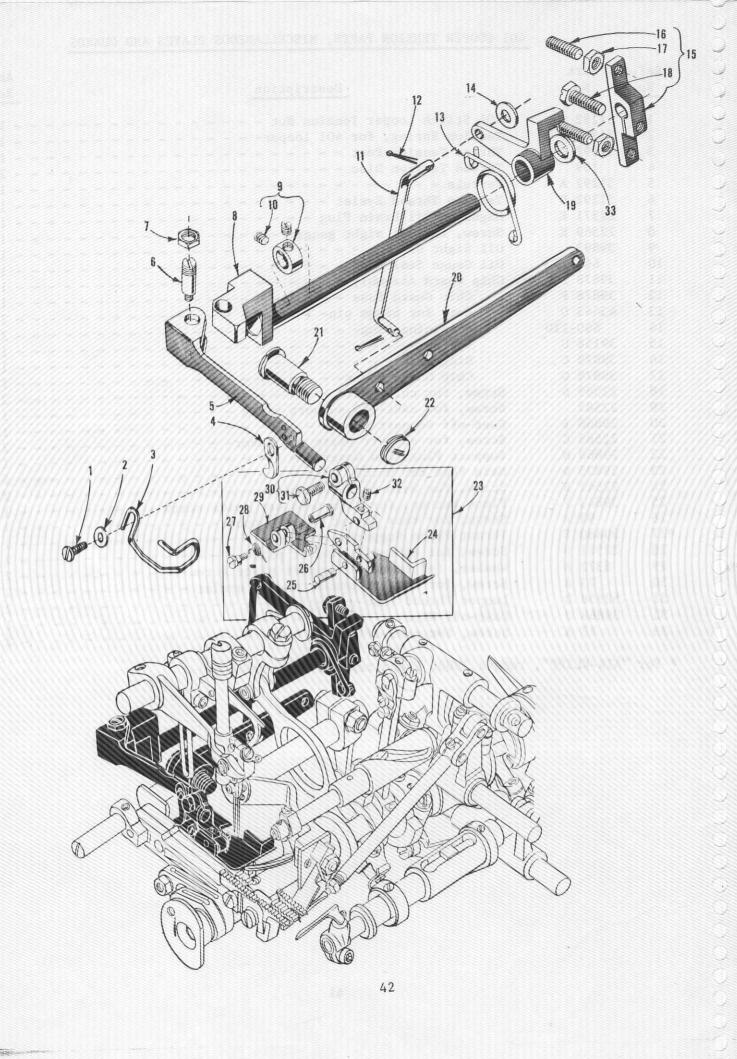
Ref.	Part No.	Description	Amt. Req.
1	22569 B	Screw, for eyelet and fabric guard mounting bracket	- 1
2	53634 C	Washer, for mounting bracket screw	1
3	39868 D	Upper Looper Thread Eyelet and Fabric Guard Mounting Bracket	
. 4	39568 L	Upper Looper Take-up Eyelet, on Styles 39800 AB, AQ and AY, all gauges	
5	39568 E	Auxiliary Upper Looper Thread Eyelet, on Styles 39800 AB, AQ and AY, all gauges Lower Looper Cast-off Blade	- 1
6	39868 X	Fabric Guard	1
7 8	39868 Y 376 A	Screw, for upper looper eyelet, on Styles 39800 AB, AQ and AY, all gauges	
9	376 A	Screw, for fabric guard	. 1
10	39557 B	Presser Spring Plunger Cap Nut	. 1
11	39857 G	Presser Spring Plunger Lock Nut	. 1
12	39857 D	Presser Spring Plunger Adjusting Screw	
13	39557 F	Lock Nut, for plunger adjusting screw	
14	39857 E	Washer	
15	39857 C	Presser Spring	
16 17	39856 A 95	Screw, for oil system	
18	CL21	Pipe Cleaner (oil wick)	
19	39857 J	Presser Spring Plunger Stud	
20	39857 F	Spacer	
21	39857 A	Presser Spring Plunger Head	. 1
22	22569 D	Screw, for thread tube	
23	53634 (Washer, for thread tube screw	
24	39868 S	Thread Tube, for 401 looper thread	
25	29477 MA	Upper Looper Thread Tube Assembly	
26	22743	Screw, for thread tube tension spring	
27 28	39568 F	Thread Tube	
29	39863 E	Needle Thread Pull-off Eyelet, 503 or 504 stitch, on Styles 39800 AP, AQ, AX and AY,	1
		all gauges	. 1
30	22569 0	Screw, for pull-off eyelet	. 1
31	2256- 1	Screw, for needle thread frame eyelet	
12	2000	Screw, for adjustable needle thread eyelet	
33	2.585	Screw, for adjustable needle thread eyelet	
35	1986 H	Adjustable Needle Thread Eyelet, on Styles 39800 AP, AQ, AX and AY, all gauges Needle Thread Frame Eyelet, on Styles 39800 AP, AQ, AX and AY	
36	225+5	Screw, for thread guide and mounting bracket	
37	39892 B	Thread Guide, front	. 1
38	39792 An	Nut, for thread tension post	3 or 4
39	39892 A-3	Tension Post Mounting Bracket	. 1
40	665-469	Retaining Ring, for tension post bar eyelet	
41	3989. C	Tension Post Bar Eyelet	
42	39592 AN	Tension Post Bar	1
43 44	8372 A 39592 AL	Thread Tension Post	3 or 4
45	39592 At	Tension Disc Felt	3 or 4
46	39592 AD	Thread Tension Disc	5 or 8
47	39592 AT -	Spring Shield	3 or 4
48	39592 AR-4	Tension Spring, for 503 stitch needle and 503 stitch looper on Styles 39800 AA. AP	
		and AX, all gauges	2
-	39592 AR-4	Tension Spring, for 504 stitch loopers on Styles 39800 AB, AQ and AY, all gauges	2
49	39592 AR-8	Tension Spring, for 401 stitch needle on Styles 39800 AA, AP and AX, all gauges	1
50	39592 AR-8 39592 AK	Tension Spring, for needles on Styles 39800 AB, AQ and AY, all gauges	
51	39592 Y	Upper Looper Tension Nut, black, for Styles 39800 AB, AQ and AY	
-	39592 Z	Lower Looper Tension Nut, yellow	
-	39592 AA	Overedge Needle Tension Nut, green	1
-	39592 AC	401 Stitch Needle Tension Nut, red	i
52	22541 D	Screw, for overedge needle thread pull-off eyelet	1
53	22569 C	Screw, for 401 stitch needle thread pull-off eyelet	
54	8372 A	Washer, for Nos. 22541 D and 22596 C	
55 56	22704 30863 V	Screw, for 401 stitch needle thread pull-off eyelet	1
56 57	39863 K	401 Stitch Needle Thread Pull-off Eyelet, on Styles 39800 AA and AB, all gauges Overedge Needle Thread Pull-off Eyelet, on Styles 39800 AA and AB, all gauges	
58	39863 L 22565	Screw, for upper looper thread tube assembly	1
59	22585 R	Screw, for lower looper thread tube	1
60	39868 U	Lower Thread Tube, for 401 stitch looper thread	1
61	39868 Z	Thread Tube, for 503 or 504 stitch looper thread	1
62	HS24 C	Screw, for Adjustable Needle Thread Eyelet	2
63	39863 N	Adjustable Needle Thread Eyelet, on Styles 39800 AA and AB, all gauges	1
64	22564 J	Screw, for needle thread frame eyelet	7
65	39863 M	Needle Thread Frame Eyelet, on Styles 39800 AA and AB, all gauges	1



401 LOOPER TENSION PARTS, MISCELLANEOUS PLATES AND GUARDS

Ref.	Part No.	Description	Amt. Req.
1	51292 C	401 Stitch Looper Tension Nut	1
2	51292 F-2	Tension Spring, for 401 looper	- 1
3	51292 G	Thread Tension Post	1
4	109	Thread Tension Disc	- 2
5	51292 A	Ferrule	- 1
6	51292 D	Tension Thread Eyelet	- 1
7	22571 E	Magnetic Oil Drain Plug	- 1
8	22569 K	Screw, for oil sight gauge	1
9	39893	Oil Sight Gauge	
10	660-243	Oil Gauge Seal Ring	
11	39878 E	Chip Guard Assembly	1
12	39878 F	Chip Guard Base	- 1
13	43443 Q	Nut, for hinge pin	2
14	660-210	Retaining Ring	_ 2
15	39158 U *	Spring	- 1
16	39878 C.	Hinge Pin	- 1
17	39878 G	Chip Guard Cover	1
18	22569 D	Screw, for chip guard	- 2
19	22585	Screw, for cast-off support plate	_ 1
20	39868 В	Cast-off Support Plate	_ 1
21	22585 C	Screw, for support plate end cover	- 2
22	39868 M	Support Plate End Cover	_ 1
23	39835 D	Main Feed Bar Guide, left	_ 1
24	22541 B	Screw, for main feed bar guide	- 2
25	39843 F	Plate Washer, for main feed bar guide screw	_ 1
26	93 A	Screw, for rear throat plate support	_ 1
*27	39880 F	Throat Plate Support, rear	_ 1
28	22541 B	Screw, for cast-off support plate	- 1
29	8372 A	Washer, for cast-off support plate screw	- 2
30	73 A	Screw, for looper thread take-up eyelet	- 2
31	52958 D	Looper Thread Take-up Eyelet	0
32	39868 J	Cast-off Wire	- 2
33	77 A	Screw, for cast-off wire	- 1 - 2

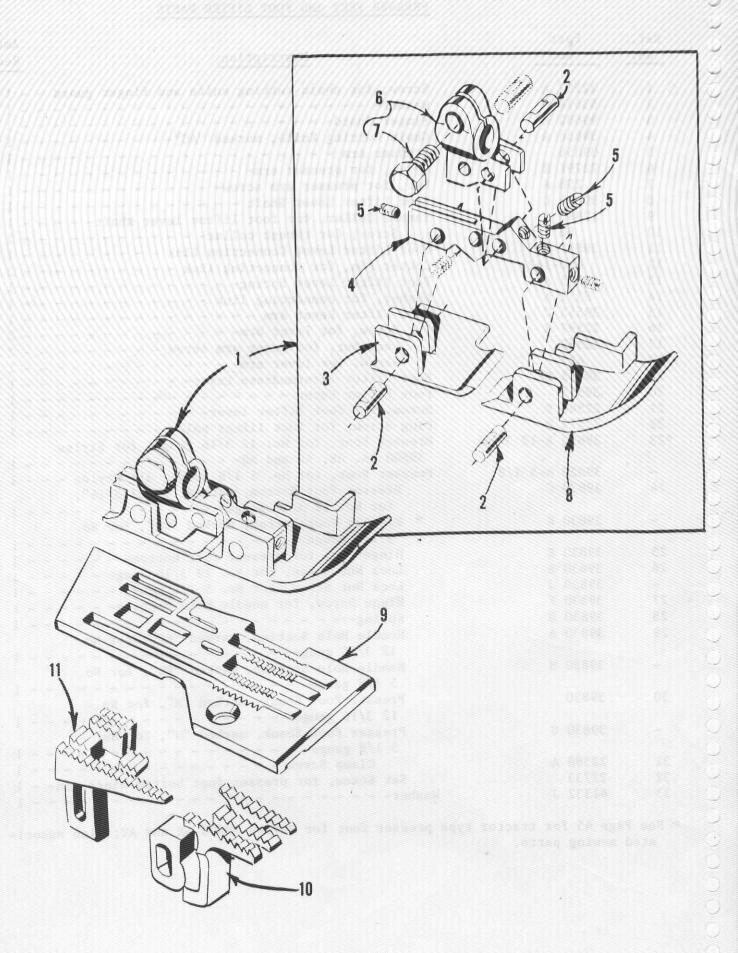
^{*} For "AIR-KLIPP", remove 39880 F and replace with 39880 G.



PRESSER FEET AND FOOT LIFTER PARTS

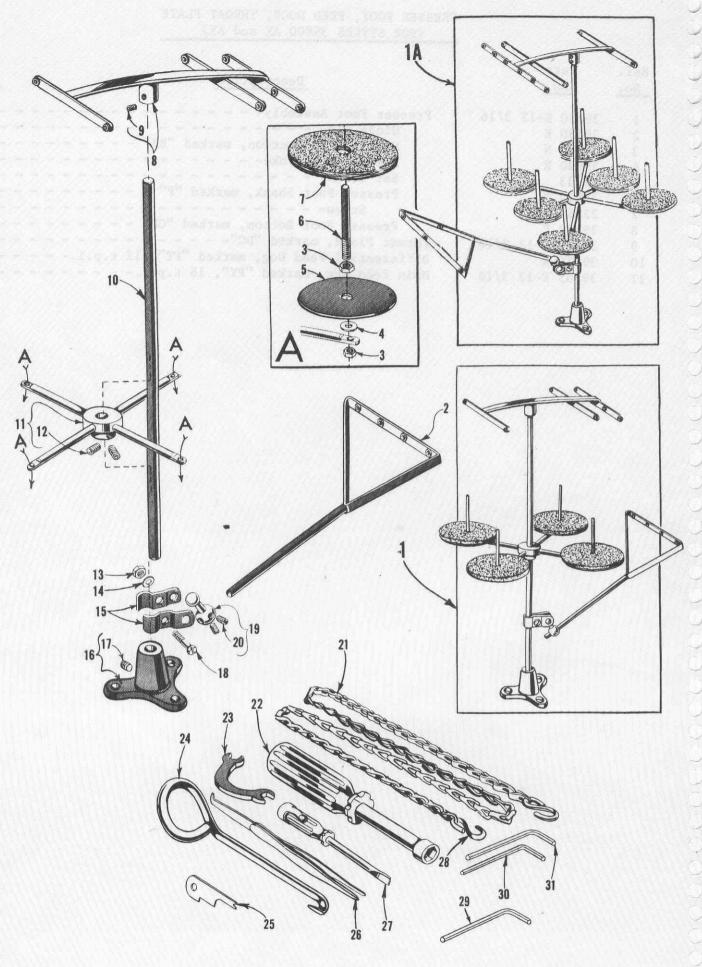
Ref.	Part	Amt.
No.	No.	Description Req.
. 1	22797 A	Screw, for chain cutting knife and finger guard 1
2	53678 N	Washer
3	99682 M	Finger Guard 1
4	39656 A	Chain Cutting Knife, marked "AC"1
5	39856	Presser Arm 1
6	22791 Н	Screw, for presser arm
7	258 A	Nut, for presser arm screw 1
8	39855 C	Foot Lifter Lever Shaft 1
9	12865	Thrust Collar, for foot lifter lever shaft 1
10	88	Screw, for thrust collar 2
11	39857 Н	Foot Lifter Lever Connection Link 1
12	660-142	Cotter Pin, for connecting link 2
13	39855 A	Foot Lifter Lever Spring 1
14	8372 A	Washer, for connecting link 1
15	39555 C	Foot Lifter Lever Arm 1
16	22597 E	Screw, for lever arm 2
17	12538	Lock Nut, for lever arm screw 2
18	627	Screw, for lever arm
19	39855 B	Foot Lifter Intermediate Lever 1
20	39855	Foot Lifter Lever 1
21	22566 B	Screw, for foot lifter lever 1
22	22571 D	Plug Screw, for foot lifter hole1
*23	39820 A-12 3/16	Presser Foot, for No. 12 3/16 gauge, for Styles
23	37020 K 12 3710	39800 AA, AB, AP and AQ 1
-	39820 A-5 1/8	Presser Foot, for No. 5 1/8 gauge, all Styles 1
24	39830 C	Presser Foot Bottom, marked "BZ-12-3/16",
		for No. 12 3/16 gauge 1
-	39830 K	Presser Foot Bottom, marked "CC", for No.
		5 1/8 gauge 1
25	39830 E	Hinge Pin, for presser foot bottom 1
26	39830 B	Lock Nut Screw, for No. 12 3/16 gauge 1
_	39830 J	Lock Nut Screw, for No. 5 1/8 gauge 1
27	39830 F	Hinge Screw, for needle hole section 1
28	39830 D	Spring 1
29	39830 A	Needle Hole Section, marked "BC", for No.
		12 3/16 gauge 1
_	39830 Н	Needle Hole Section, marked "BD", for No.
		E 1/0
30	39830	Presser Foot Shank, marked "M", for No.
		12 3/16 gauge-
_	39830 G	Presser Foot Shank, marked "N", for No.
		5 1/8 gauge 1
31	22588 A	Clamp Screw 1
32	22733	Set Screw, for presser foot bottom hinge pin 1
33	41332 J	Washer 1
	332 0	10000

^{*} See Page 45 for tractor type presser foot for Styles 39800 AX and AY; also associated sewing parts.



PRESSER FOOT, FEED DOGS, THROAT PLATE (FOR STYLES 39800 AX and AY)

Ref.	Part No.	Description Amt. Req.
1 2 3 4 5 6 7 8 9 10	39820 E-12 3/16 39830 E 39830 N 39830 R 22733 39830 M 22588 A 39830 P 39824 E-12 3/16 39826 A 39805 E-12 3/16	Presser Foot Assembly 1 Hinge Pin 3 Needle Hold Section, marked "BE" 1 Presser Foot Yoke 1 Set Screw 3 Presser Foot Shank, marked "P" 1 Screw 1 Presser Foot Bottom, marked "CD" 1 Throat Plate, marked "DC" 1 Differential Feed Dog, marked "FT", 12 t.p.i 1 Main Feed Dog, marked "PY", 16 t.p.i 1



THREAD STAND AND ACCESSORIES

Ref.	Part No.	Description	Amt.
HO.			Req.
. 1	21101 н-4	Thread Stand, complete, for 4 cones, for Styles 39800 AA, AP and AX	1
+ 1A		Thread Stand, complete, for 6 cones, for Styles 39800 AB, AQ and AY	1
2	21114 S-4	Lead Eyelet, for No. 21101 H-4	1
	21114 AL-5	Lead Eyelet, for 5 threads	1
3	258 A	Nut8	
4	652-16	Washer 4	or 5
5	21114	Spool Seat Disc	or 5
6	21114 W	Spool Pin	or 5
7	21104 V	Pad, for thread cone 4	or 5
8	21114 H-4	Eyelet Support, for No. 21101 H-4	1
1100 12	21114 H-6	Eyelet Support, for 6 threads	i
9	22651 CD-4	Screw	1
10	21104 B-24	Thread Stand Rod	1
11	21114 D-4	Spool Seat Support, for No. 21101 H-4	1
	21114 D-6	Spool Seat Support, for 6 threads	i
12	22651 CD-5	Screw	2
13	21104 H	Nut	1
14	652-16	Washer	1
15	21114 U	Lead Eyelet Ball Split Socket	2
16	21114 A	Thread Stand Base	1
17	22651 CD-4	Screw	î
18	22810	Clamp Screw	i
19	21114 T	Lead Eyelet Socket Ball	1
20	22651 CD-4	Screw	2
21	421 D-34	Foot Lifter Treadle Chain, 34 inches (863.60 mm)	1
22	21388 AU	Socket Wrench, for 3/8 inch (9.52 mm) hexagonal nut holding feed eccentric	1
23	21388 W	Wrench, curved double end, 9/32 inch (7.14 mm) opening	1
24	21227 BF	Feed Eccentric Extractor Hook	1
*25	21225-3/32	Looper Gauge, 3/32 inch (2.38 mm)	1
* _	21225-1/8	Looper Gauge, 1/8 inch (3.17 mm)	1
26	660-272	Thread Tweezers	1
27	21207	Screwdriver, 3/32 inch (2.38 mm) diameter	1
28	660-264	"S" Hook, for treadle chain	2
29	WR56	Wrench, 1/8 inch (3.18 mm) hexagonal	1
30	WR65	Wrench, 1/16 inch (1.59 mm) hexagonal	1
31	WR69	Wrench, 9/64 inch (3.58 mm) hexagonal	1
	660-458	Dust Cover (not shown)	1
-	39899	Threading Wire (not shown)	1
	SC-303	Wood Screw, #12, 1 inch (25.4 mm) long (not shown) -	3
-	28604 R	Container of Oil, 16 ounces, Spec. 175 (not shown) -	1
-	652-24	Washer, for use in tableboard (not shown)	8

^{*} Available as extra send and charge item.

⁺ Number for complete thread stand not available, order component parts.

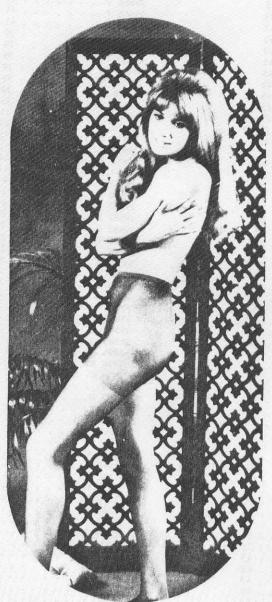
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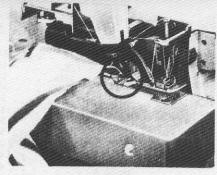
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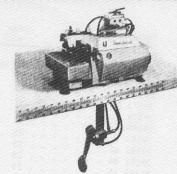




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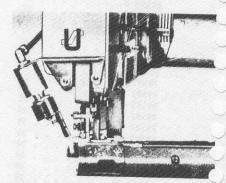
PNEUMATIC CHAIN-CUTTER—for use on conventional Class 39500 and 39600 is a durable scissor-action mechanism that makes a clean positive cut. Style 2899 A-1



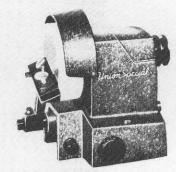
PNEUMATIC FOOT LIFTER—The airoperated foot lifter for use on Class 39500 machines allows the operator to raise the foot simply by knee-touching an actuating switch.



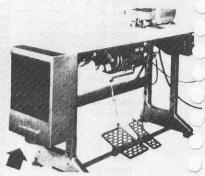
AIR FABRIC UNCURLER—This unit, designed for Class 39500 machines, uses air jets to remove curls from top and bottom plies of flat knit materials as fabric passes through sewing area. Style 2899 B-1



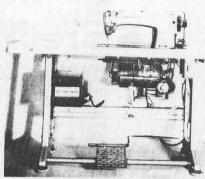
CHAIN CUTTER—The above photo shows the small pneumatic chain cutter that is available for installation as an accessory unit on Class 36200 Flatseamers Style 2899A-6



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



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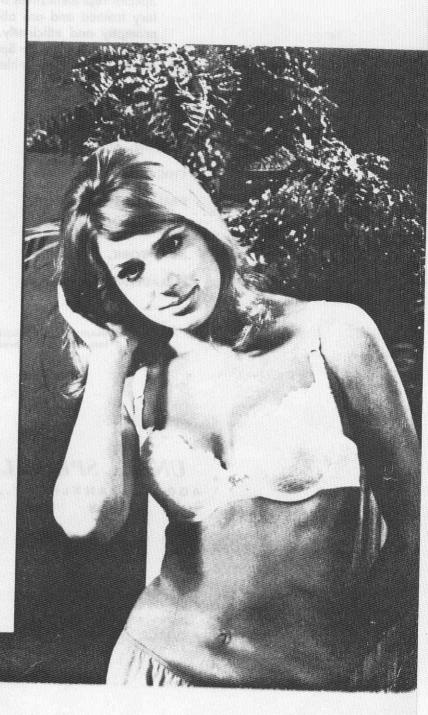
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