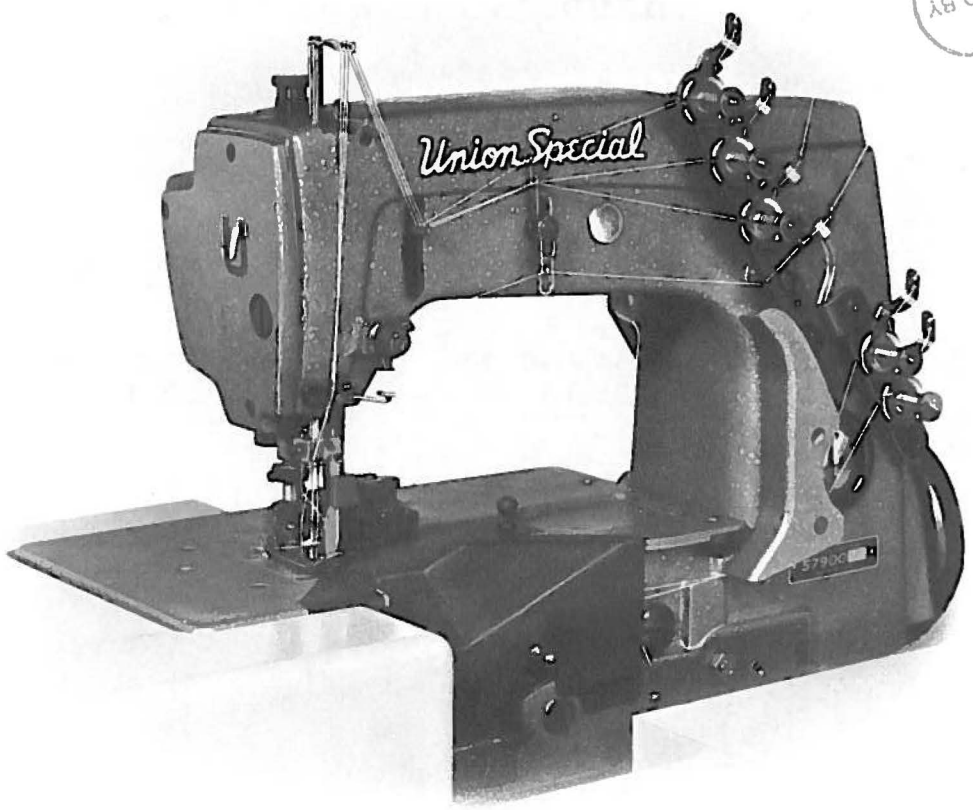
NEST QUALITY

STYLES
57900F
57900G
57900H
57900N

CATALOG
No.
135M

Union Special®
LEWIS • COLUMBIA

INDUSTRIAL
SEWING
MACHINES



CLASS 57900

ADVANCED HIGH SPEED
FIFTY THOUSAND SERIES
SAFETY STITCH MACHINES
FRONT DISPOSAL OF TRIMMINGS

Union Special MACHINE COMPANY
CHICAGO

Catalog No. 135 M

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 57900

Styles

57900 F
57900 G
57900 H
57900 N

First Edition

Union Special
MACHINE COMPANY
INDUSTRIAL SEWING MACHINES
CHICAGO

Printed in U.S.A.

November, 1971

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 57900 F". 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 57900 FZ".

The distance between the rows of stitches or between needles is represented by a gauge number measured in 1/64ths of an inch, going from left to right. Thus, a 5-8 gauge represents a distance of 5/64 inch from left needle (needle for 401 stitch) to middle or left needle of 602 stitch and 8/64 or 1/8 inch from middle needle to extreme right needle.

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 57900".

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 toward the operator.

STYLES OF MACHINES

Advanced High Speed Flat Bed Machines, Medium and High Throw, Vertical Trimmer, Front Disposal of Trimmings, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism. Three Needles, Left Needle in Rear, Two Loopers, Dual Stitch, Double Locked Stitch on Left and Four Thread Interlock Stitch on Right, Single Reservoir Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Wakefield Bearings for Feed Bar and Feed Rocker Shafts, Lateral Looper Travel, Single Disc Take-up, Large Handwheel and Improved Belt Guard. Prepared for use with Knee Press for Presser Foot Lifter, Equipped with Disc Type Thread Tensions. Maximum Work Space to Right of Needle Bar 8 1/4 Inches.

57900 F Medium throw machine for simultaneous seaming and overedging on garment pockets and for similar operations on medium to medium heavy weight material. Seam specification (401-602) 519-SSa-2. Type 128 GAS needle. Standard gauge No. 5-8 only. Maximum recommended speed 5500 R. P. M.

57900 G Medium throw machine for simultaneous seaming and overedging on sport shirts, ladies' blouses, street and house dresses, shoulder pads, coat linings, pillow cases and for similar operations on medium to medium heavy weight material. Seam specification (401-602) 519-SSa-2. Type 128 GAS needle. Standard gauge Nos. 5-8, 16-8. Maximum recommended speed 5500 R. P. M.

57900 H Medium throw machine for simultaneous seaming and overedging on the in-seams and out-seams of light and medium weight corduroy pants, wash pants, slacks, ladies' skirts, jackets, bathing suits, beach and bathrobes, kiddies' corduroy overalls, and for similar operations on light to medium weight material. Seam specification (401-602) 519-SSa-2. Type 128 GAS needle. Standard gauges Nos. 5-8, 12-12, 16-8. Maximum recommended speed 5500 R. P. M.

57900 N High throw machine for side seaming, shoulder seaming, sleeve setting and closing on sport shirts, play pants, heavy bathrobes, and for similar operations on medium heavy to heavy weight material. Seam specification (401-602) 519-SSa-2. Type 147 GS needle. Standard gauges Nos. 5-8, 12-12, 16-8. Maximum recommended speed 5500 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.

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
128 GAS	Round shank, round point, short, double groove, struck groove, ball eye, spotted, chromium plated - sizes 032, 036, 040, 044, 049, 054, 060, 067.
147 GS	Round shank, round point, long, double groove, struck groove, ball eye, spotted, short point, undersize eye and grooves, one step reduction, chromium plated - sizes 032, 036, 040, 044, 049, 054, 060, 067.

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 128 GAS, Size 032".

Selection of proper needle size is determined by the 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.

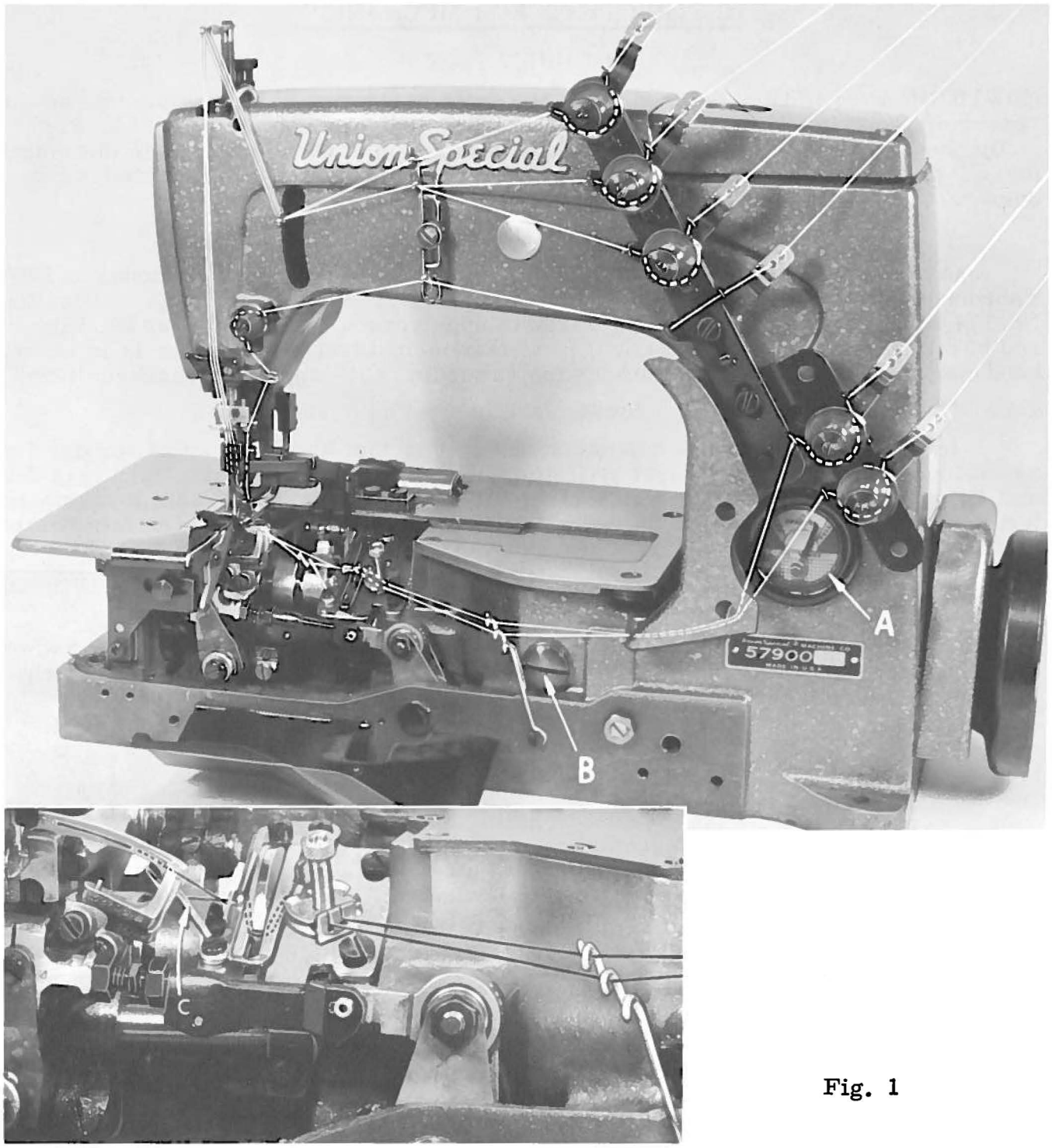


Fig. 1

THREADING AND OILING DIAGRAM FOR CLASS 57900 MACHINES

Thread machine as indicated above. The looper threading has been enlarged for clarity. Only the back looper thread is threaded through the looper thread cast-off guide (C, Fig. 1).

The oil has been drained from the machine before shipping and so the reservoir must be filled before starting to operate. To fill machine with oil, remove plug screw in top cover and add oil until needle of oil gauge (A, Fig. 1) is in yellow band marked "FULL". Use a straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit. Maintain oil level in "OPERATE" position and add oil when needle is in yellow band marked "LOW". The machine is automatically lubricated and no oiling other than keeping the main reservoir filled is necessary.

Excessive oil in the main reservoir may be drained at the plug screw (B, Fig. 1).

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) 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. 174. 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 level when needle is in yellow band marked "Full". Oil should be added when needle is in yellow band marked "Low".

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.

Oil may be drained from main reservoir by removing plug screw (C, Fig. 2) located below the cloth plate at front of the machine.

NOTE: Looper avoid and feed lift eccentrics receive oil thru the mainshaft, so when assembling be sure oil holes in the eccentrics line up with oil holes in mainshaft when spot screws are in timespot.

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:

1. Place the machine upright on a level table or bench.
2. Remove the oil reservoir plug screw (C, Fig. 2) and tip machine forward to drain oil from the reservoir.
3. 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).

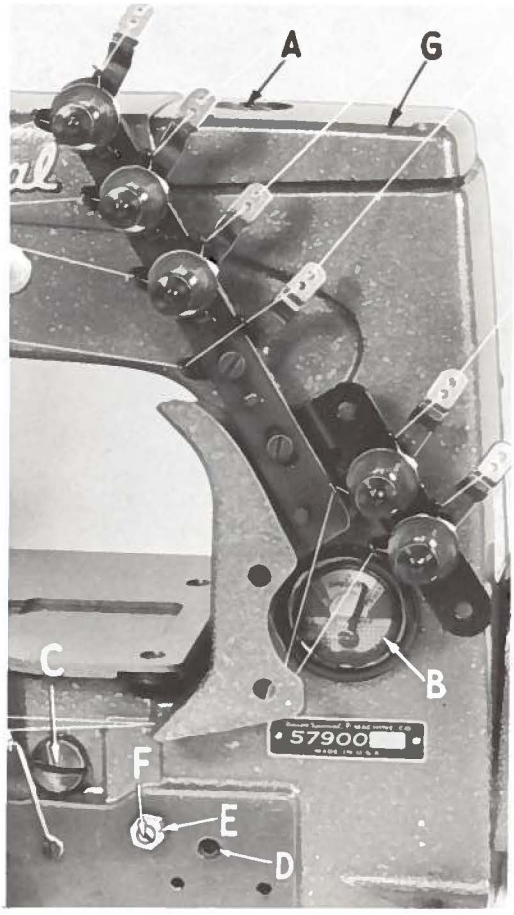


Fig. 2

OIL GAUGE (Continued)

6. Loosen lock nut (E) on calibrating screw (F), and turn the screw to the left or right until the gauge needle rests in the middle of the yellow band marked "LOW".

7. Tighten lock nut (E) and replace plug screw (C).

8. Add oil so that gauge needle rests in the middle of the yellow band marked "FULL".

Fig. 3

NEEDLE LEVER BEARING OILER

Remove the head cover and upper crank chamber cover (G, Fig. 2). Check position of needle lever bearings 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 clearance as in Fig. 3.

ALIGNING THE NEEDLE BAR

Align the needle bar (A, Fig. 4) and set to height, using the proper test pins and test plate of the right gauge. See chart below.

Machine Style	Test Plate No.	Right Test Pin No.	Left Test Pin No.
57900 F-5-8	698 AX-5-8	PI 40 A	PI 40 A
57900 G-5-8	698 AX-5-8	PI 40 A	PI 40 A
57900 G-16-8	698 BH-16-8	PI 40 A	PI 40 A
57900 H-5-8	698 AX-5-8	PI 40 A	PI 40 A
57900 H-12-12	698 AX-12-12	PI 40 A	PI 40 A
57900 H-16-8	698 BH-16-8	PI 40 A	PI 40 A
57900 N-5-8	698 AX-5-8	PI 40 A	PI 40 A
57900 N-12-12	698 AX-12-12	PI 40 A	PI 40 A
57900 N-16-8	698 BH-16-8	PI 40 A	PI 40 A

Insert test pins No. PI 40 A in the left and right seat of the needle holder. Now assemble test plate to machine using the throat plate attaching screws. The needle bar is located properly if the test pins align with the holes in the test plate and the height of the needle bar is correct when the shoulder of the test pins rest on the test plate, when the needle bar is at its lowest position.

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 the needles center in the needle holes of throat plate. To align needle bar, loosen needle bar clamp screw (B, Fig. 4) and turn bar as required. Tighten clamp screw.

SYNCHRONIZING LOOPER AND NEEDLE MOTIONS

Check the synchronization of the looper and needle motions, using gauge No. 21227 R as follows:

Insert the pin, which is included with the gauge, in the back hole in the looper rocker. Place the gauge plate on the throat plate seat using the throat plate screws for attaching. Place the shank of the indicator in the take-up wire hole in bed. Turn the handwheel in operating direction until the pin in the looper rocker contacts the edge of the gauge plate and set the indicator so that the left end of the pointer rests against the top of the needle bar and the right end of the pointer rests at "O". Tighten the set screw and note indicator reading. Turn the handwheel in the reverse direction until the pin again contacts the plate. If the motions are in synchronization, the pointer of the indicator will return to the same reading. A variation of one graduation on the scale is allowable. If the reading is higher on the scale when the handwheel is turned in the operating direction, the looper drive lever shaft will have to be moved to the rear. If the reading is lower, this shaft will have to be moved to the front.

NOTE: If gauge No. 21227 R is not available, synchronization may be checked as follows:

Insert the front 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 right 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 right 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 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, Fig. 5) to the rear. Moving it in the opposite direction acts the reverse.

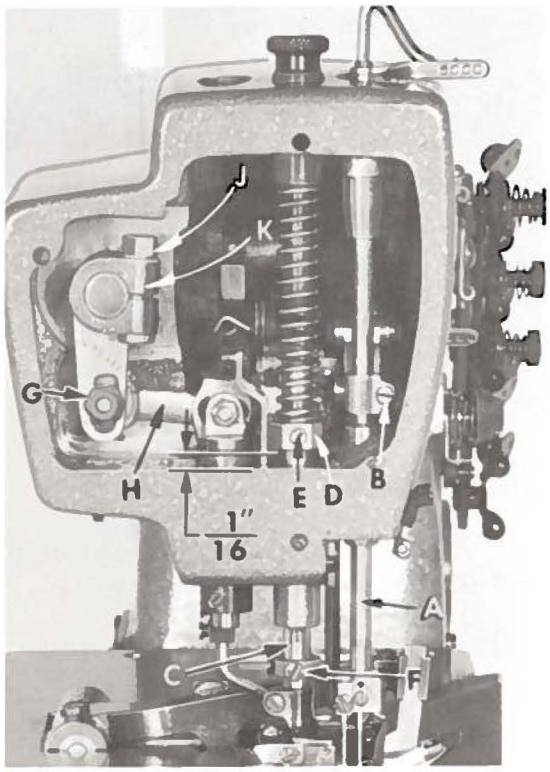


Fig. 4

Moving of the looper drive lever shaft synchronizing stud is accomplished as follows: Loosen the clamp screw (D, Fig. 5) of the looper drive lever (E). 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. Then, using the looper drive lever to take up the end play between the looper drive lever rocker shaft and its synchronizing stud, tighten the looper drive lever on the shaft, using screw (D, Fig. 5).

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 (A, Fig. 6) and place hole in gauge over threaded stud. The left end of the gauge should locate against the right side of the looper rocker cone (B). If adjustment is necessary, loosen the clamp screw (C, Fig. 6) and reposition the looper drive lever (D) as required. Tighten clamp screw. 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 centerline of the looper lever stud should be 4 1/16 inches (Fig. 6), when looper is at the extreme right end of its travel.

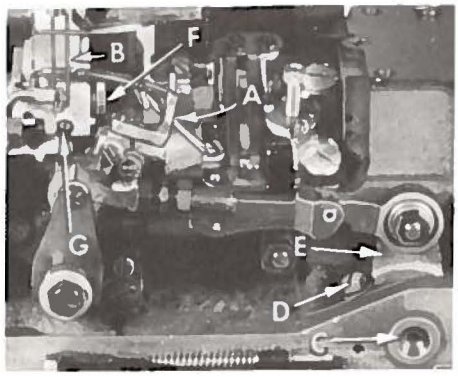


Fig. 5

SETTING THE TAKE-UP

After the main shaft has been positioned so the .045 inch dimension is obtained between the head of the main shaft and the casting you will have an approximate setting of the take-up in relation to the cast-off plate support. For the final setting, loosen the two screws that hold the cast-off plate to the casting. Using shim No. 39152 U-4 bent in half, position it over the take-up allowing each end to be positioned between the take-up and the cast-off plate support. Tighten screws that hold the cast-off plate support and remove shim No. 39152 U-4.

SETTING THE LOOPER

Insert a new set of needles, type and size as specified. Also insert front looper. The distance from the center of the right needle (E, Fig. 6) to the point of the front looper (F) should be 5/32 inch, when the looper is at its farthest position to the right. Looper gauge No. 21225-5/32 can be used advantageously to check this setting. If adjustment is required, loosen nut (G, Fig. 6) (it has a left hand thread) and nut (H)

on connecting rod (J), turn the connecting rod forward or backward to obtain the 5/32 inch dimension. Retighten both nuts, first nut (H) and then nut (G). Make sure the left ball joint is in vertical position and does not bind after adjustment.

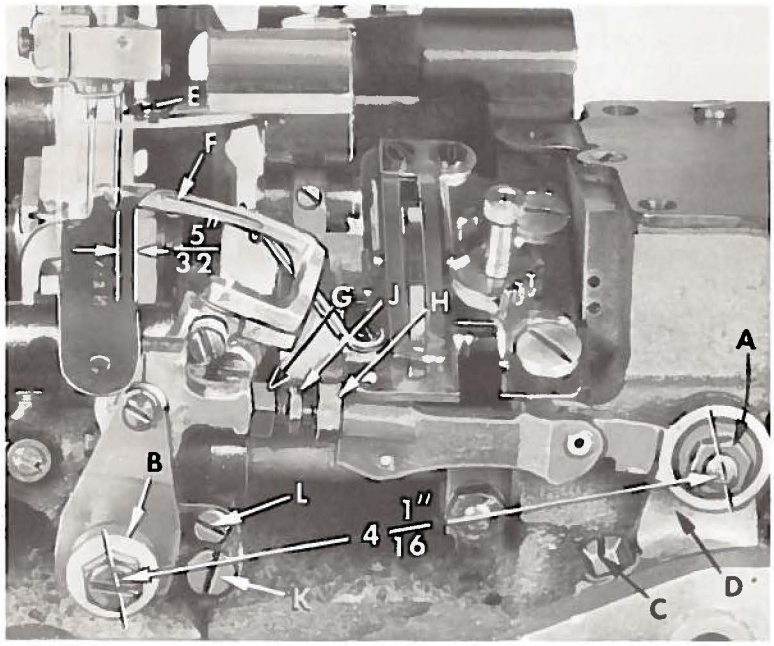


Fig. 6

The looper is set correctly in line-of-feed, if, as it moves to the left, behind the needles, its point brushes, but does not pick at the rear of the right and center needles.

If adjustment is necessary, loosen lock screw (K, Fig. 6) and turn stop screw (L) as required. Turning stop screw clockwise sets the loopers to the rear and turning it counterclockwise acts the reverse. Holding the loopers to the front while making this adjustment may prove helpful. Tighten lock screw securely after setting is obtained and recheck the adjustment. Insert back looper and obtain the same needle-looper relationship. A minute adjustment of looper-needle relationship can be accomplished by applying pressure on the loopers at front or back of the blade, while clamping loopers in looper rocker, so as to get the proper in-line-of-feed setting.

SETTING HEIGHT OF NEEDLE BAR

The height of the needle bar (A, Fig. 4) is correct when the top of the left 602 stitch needle's eye is 3/64 inch below the underside of the front looper, when the point of looper, moving to the left, is even with the left side of this needle. If adjustment is necessary, loosen screw (B) and reposition needle bar (A) up or down as required and retighten screw. Care must be taken not to disturb the alignment of the needle bar while making this adjustment, as the needles are to have equal clearance on both the right and left sides of the needle slots in throat plate.

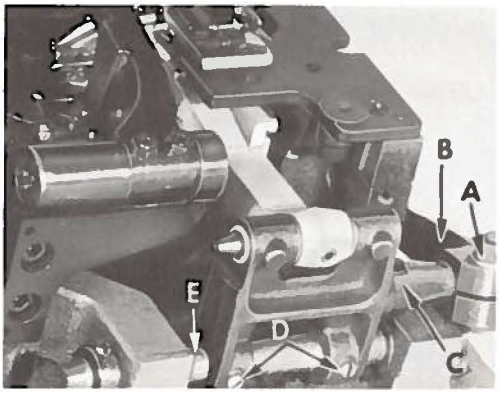


Fig. 7

SETTING THE FEED DOG

The feed dog should be set for maximum travel and equal clearance on all sides in the throat plate. NOTE: See "CHANGING STITCH LENGTH". With maximum feed travel set, it may be necessary to centralize feed dog motion to obtain equal clearance in the front and rear of throat plate. If required, loosen nut (A, Fig. 7) which clamps the feed rocker arm (B) to the feed rocker (C) and move the feed rocker forward or rearward as needed and retighten nut. Equal side clearance can be obtained by loosening screws (D) which hold the feed rocker (C) onto the feed rocker shaft (E), move the feed rocker to desired position and retighten screws. Make sure the feed rocker arm (B) does not bind after making this adjustment.

SETTING THE FEED DOG (Continued)

The tips of the feed dog teeth should extend the depth of a tooth or approximately 3/64 inch above the throat plate and parallel with the throat plate at high point of travel. The height can be adjusted by loosening screw (A, Fig. 8) which holds the feed dog in position, turn height adjusting screw (B) as required and retighten screw (A). If feed dog teeth are not parallel with the throat plate, loosen nut (F, Fig. 5) and turn screw (G) clockwise to lower the front teeth, or counterclockwise to raise the front teeth. Retighten nut when feed dog is set properly.

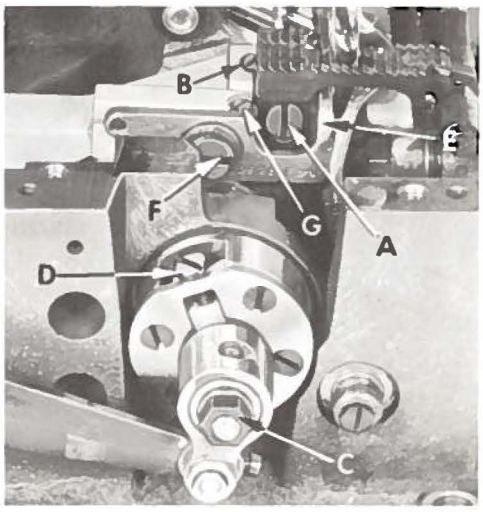


Fig. 8

CHANGING STITCH LENGTH

Set the stitch to the required length. This is accomplished by loosening locknut (C, Fig. 8) (it has a left hand thread) and turning the stitch adjusting screw (D). Turning screw (D) clockwise shortens the stitch and turning it in a counterclockwise direction lengthens the stitch. The head of the mainshaft is marked with an "S" and an "L", moving the stitch regulating stud toward the "S" shortens the stitch and toward the "L" lengthens the stitch. Retighten locknut (C) after setting the stitch to the required length.

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

SETTING THE REAR NEEDLE GUARD

Set the rear needle guard (E, Fig. 8) horizontally so that it does not quiet contact the rear of the needles when at its most forward point of travel. A clearance of .005 inch is permissible. It should be set as low as possible, yet have its vertical face approach within about 3/64 inch of the needles, until the points of the loopers moving to the left, are even with the needles. To move the guard forward or rearward, 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 or 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.

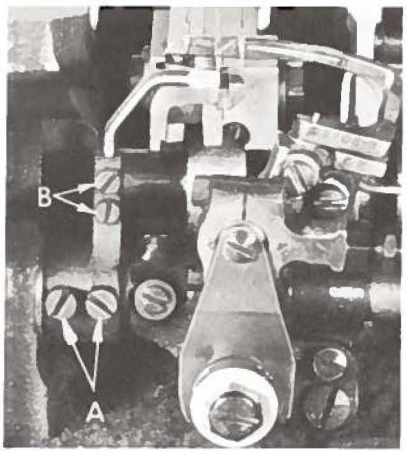


Fig. 9

SETTING FRONT NEEDLE GUARD

Set the front needle guard so that it pushes the left 602 stitch needle back toward the path of the front looper as it moves behind the needle. The looper may brush but not pick at this needle. It should be set as low as possible, yet have its vertical face push the needle until the point of the looper is just past the left side of the needle. The front needle guard should not contact the rear needle guard or right needle at any time. To move guard forward or rearward, loosen screws (A, Fig. 9), rotate needle guard holder as required and retighten screws. To raise, lower or rotate needle guard, loosen screws (B), reposition as necessary and retighten screws after guard is properly set.

NOTE: A change in stitch length WILL NOT require a change in front needle guard setting.

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 of the end of its travel and is entirely released when the presser foot has reached its highest position.

THREAD TENSION RELEASE (Continued)

If adjustment is needed, loosen tension release lever screw (A, Fig. 10), 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

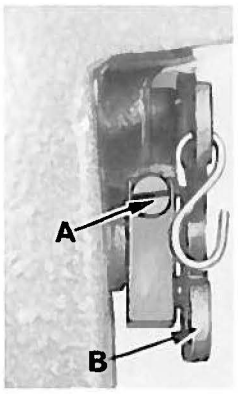


Fig. 10

The height of the presser bar (C, Fig. 4) is set correctly if it is possible to remove the presser foot when the foot lifter lever (B, Fig. 10) is fully depressed. Also there should be approximately 1/16 inch clearance between lower surface of the presser bar connection and guide (D, Fig. 4) and the bottom surface of 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 below the throat plate.

If adjustment is needed, turn handwheel in operating direction until the needle bar is in the low position. Loosen screw (E), then, while holding presser foot down on the throat plate surface, pry up presser bar connection and guide with a screwdriver to obtain the 1/16 inch setting and retighten screw. 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.

Set the presser bar stop collar (F, Fig. 4) so that the presser foot does not contact the spreader when raised.

SETTING THE SPREADER

The arc travel of the spreader should be set at 9/16 inch. Measurement is made by placing a scale between the two extreme spreader arc travel points. Adjustment can be made by loosening nut (G, Fig. 4) and moving the connecting link (H) up or down as required to obtain the desired amount of arc travel. Set the connecting link so that its arc travel is equal distance to the center of its arc. This is accomplished by loosening nut (J) and moving the spreader rocker shaft arm (K) to position the connecting link properly.

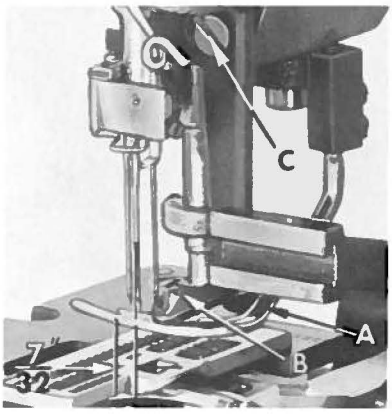


Fig. 11

With the needle bar in its up position, and the spreader (A, Fig. 11) at the left end of its stroke, the upper spreader point should extend 7/32 inch to the left of the center line of the center needle. This is accomplished by loosening screws (A, Fig. 12) and rotating spreader holder (B) to position the upper spreader point. Retighten screws.

CAUTION: The spreader holder is also the lower thrust collar for the spreader shaft, so when tightening screws (A, Fig. 12) be sure to push down on the spreader shaft and up on the spreader holder.

The spreader should clear the left needle shank by 1/64 to 1/32 inch on all machine Styles. The bottom of the spreader should be 21/64 inch above the throat plate on machine Styles 57900 F, G, H and 27/64 inch above the throat plate on machine Style 57900 N (Fig. 12). Adjustment can be made by loosening screws (C, Fig. 12) and position spreader as required.

The left edge of the spreader thread guide (B, Fig. 11) should clear the right needle by approximately 3/32 inch and be kept close to the top of the spreader. This can be accomplished by loosening screws (C) and moving the guide as necessary.

THREAD TENSIONS

For best results the following conditions are desirable:

The 602 stitch must be pulled up unpuckered.

Needle loops may hang down as much as 1/3 of one stitch and within this range the loops do not have to be alike.

The left needle loop may pull in slightly.

The 401 stitch must be a medium tight stitch.

Needle loops may be pulled up between 1/64 inch to 1/32 inch.

The seam may grin or open up to 1/64 inch.

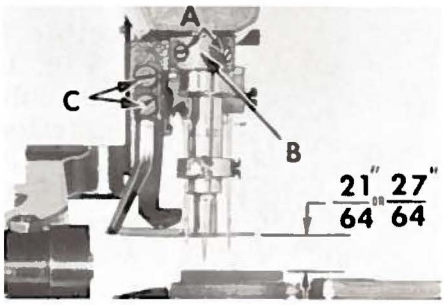


Fig. 12

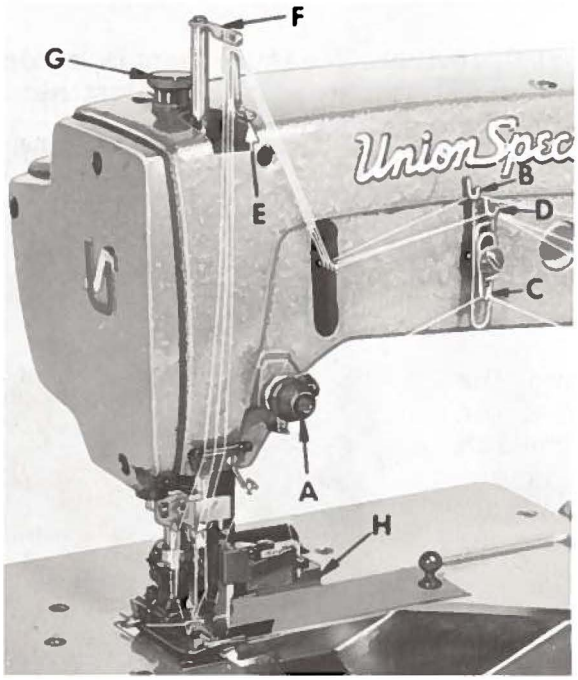


Fig. 13

The spreader thread tension is applied at tension nut (A, Fig. 13). The adjusting nut should be set so that the tension on the spreader thread is 1/2 ounce or more, depending on the type of thread being used.

SETTING NEEDLE AND SPREADER THREAD FRAME EYELETS

Set the 401 stitch needle thread frame eyelet (B, Fig. 13) 1 inch above, and the spreader thread frame eyelet (C), 1/2 inch below the center of the mounting screw. Set the 602 stitch needle thread frame eyelet (D) as high as possible without drawing thread on the downstroke.

SETTING NEEDLE THREAD TAKE-UP WIRE

Set the needle thread take-up wire (E, Fig. 13) located adjacent to the needle bar thread eyelet (F) 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, or raise it for a larger loop.

PRESSER FOOT PRESSURE

Regulate the presser spring regulating screw (G, Fig. 13) 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.

ADJUSTING TRIMMER MECHANISM

The cutting edge of the lower knife (A, Fig. 14) should be set level with the top of the throat plate (B). This can be accomplished by loosening screw (C), move lower knife up or down as required and retighten screw. The trimming edge of lower knife should be aligned with the center of the right needle. This can be accomplished by loosening screw (D), turn screw (A, Fig. 15) toward the operator to move knife to the left and turning it away from the operator acts the reverse. When desired position of knife has been obtained, retighten screw (D, Fig. 14). The shear angle of the lower knife should be set at about 1 degree. This adjustment can be made by loosening screws (E) and turning screw (F) counterclockwise and screw (G) clockwise until the 1 degree is obtained, turning screws (F) & (G) in the opposite direction will decrease the shear angle. Retighten screws (E).

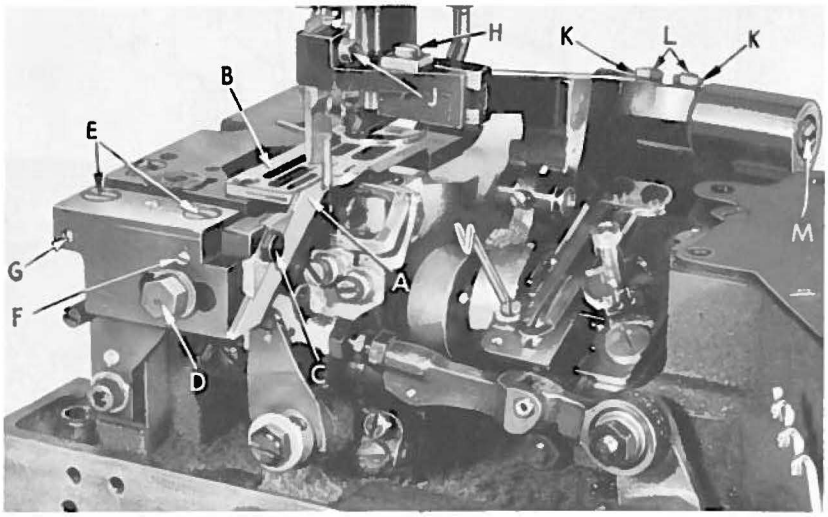


Fig. 14

The upper knife should be set to trim the full length of its blade. Positioning of knife to the left or right can be accomplished by loosening screw (H, Fig. 14). Positioning of knife upward or downward can be accomplished by loosening screw (J). When desired position of knife has been obtained, retighten screws. Should forward or rearward repositioning of upper knife become necessary, loosen lock nuts (K) and loosen Allen head screws (L), then turn eccentric pin (M) as required. Retighten Allen head screws and lock nuts.

NOTE: Upper knife lever thrust bracket (H, Fig. 13) should bear against upper knife lever.

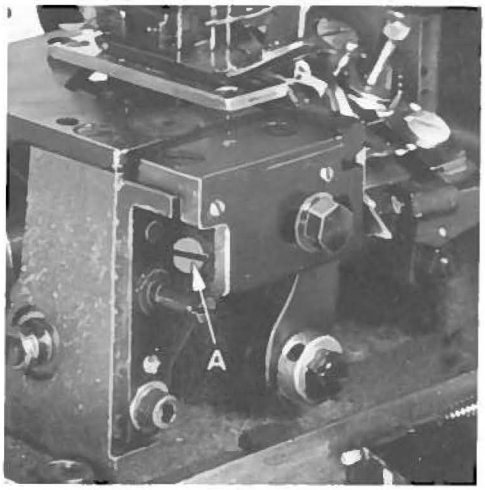


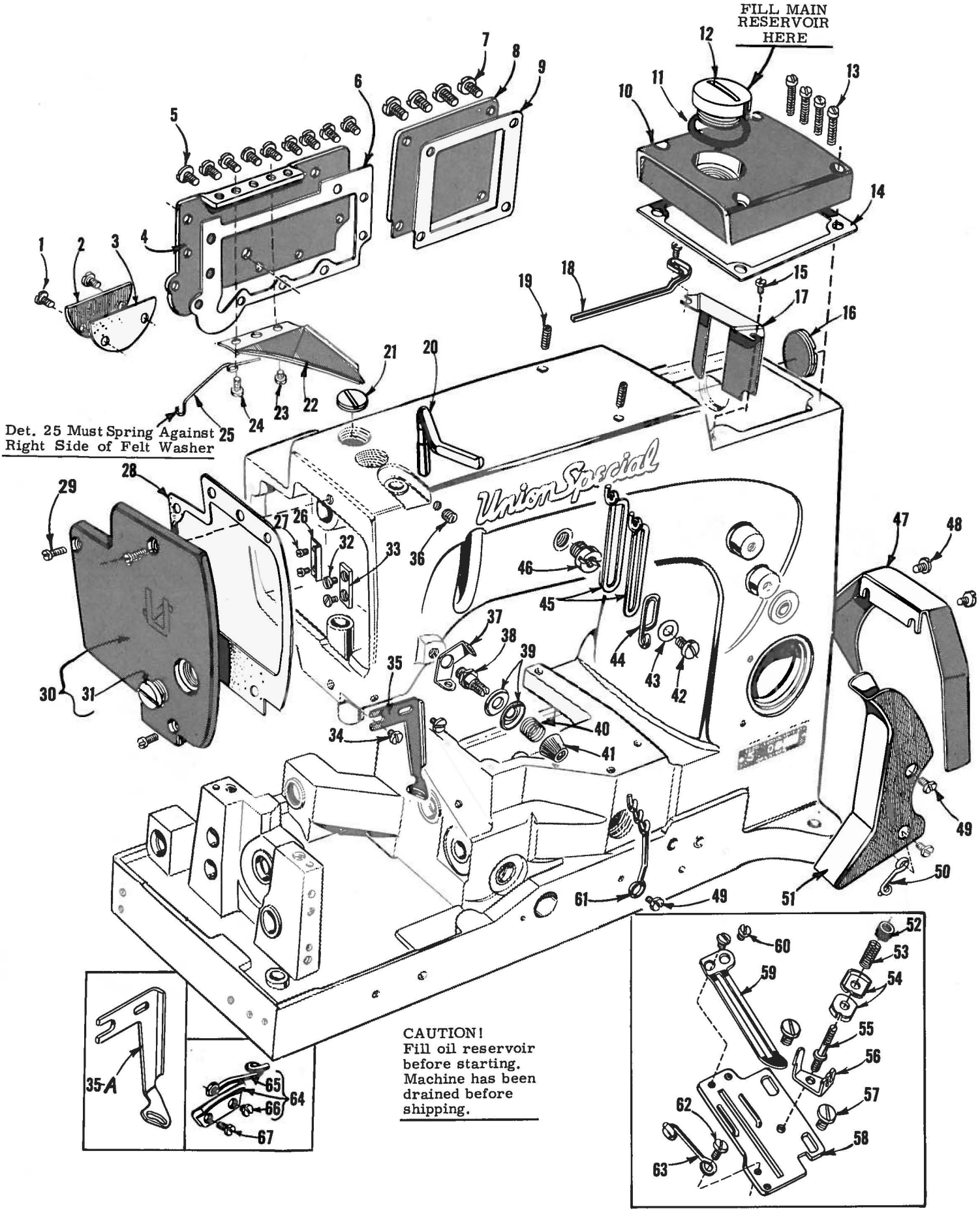
Fig. 15

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, screwdriver, 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.

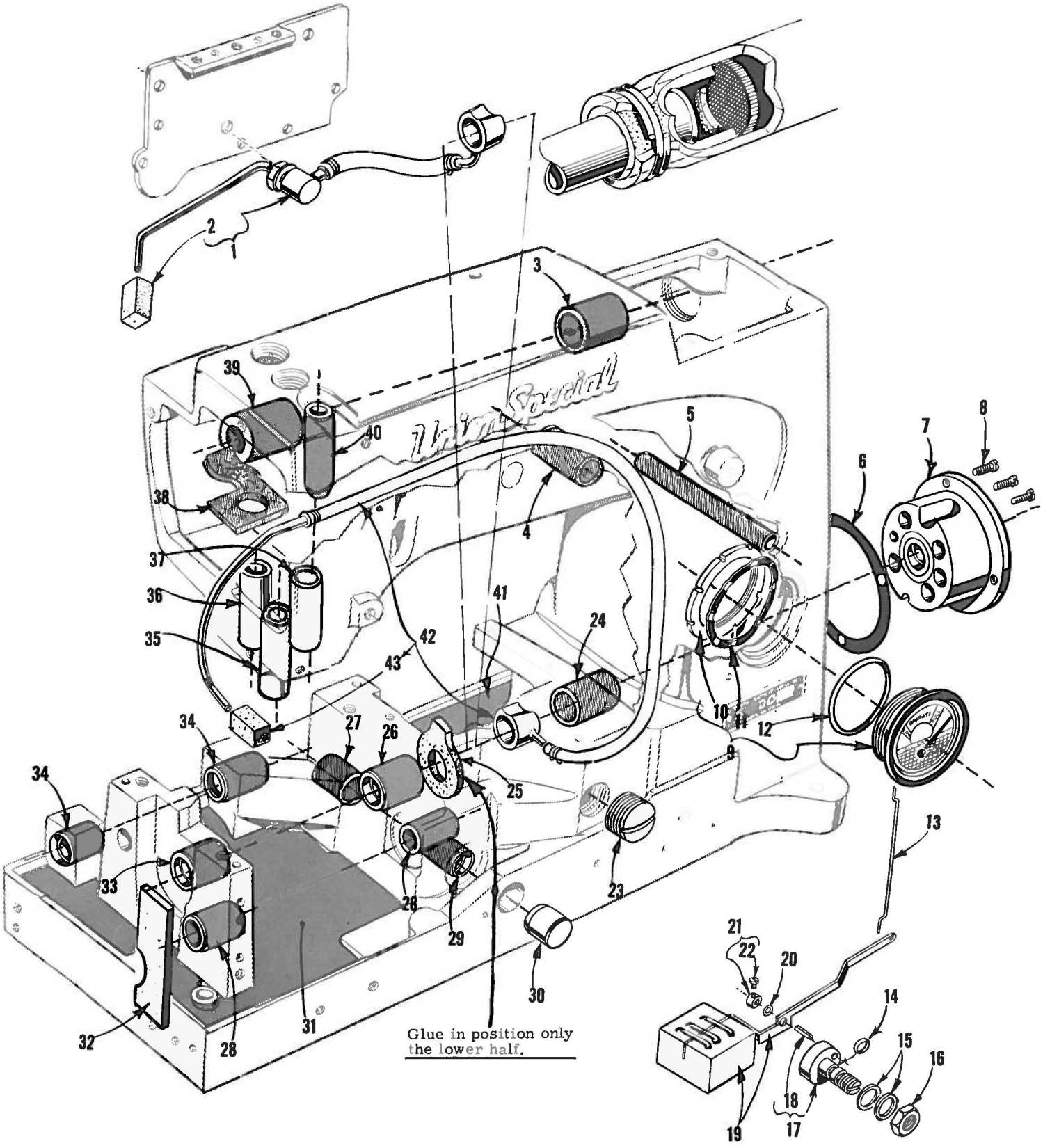
All straps and eccentrics should be tightened to 19-21 inch-pounds, unless otherwise noted. All other nuts, bolts, screws, etc., should be tightened by hand as tightly as possible, unless otherwise noted.

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



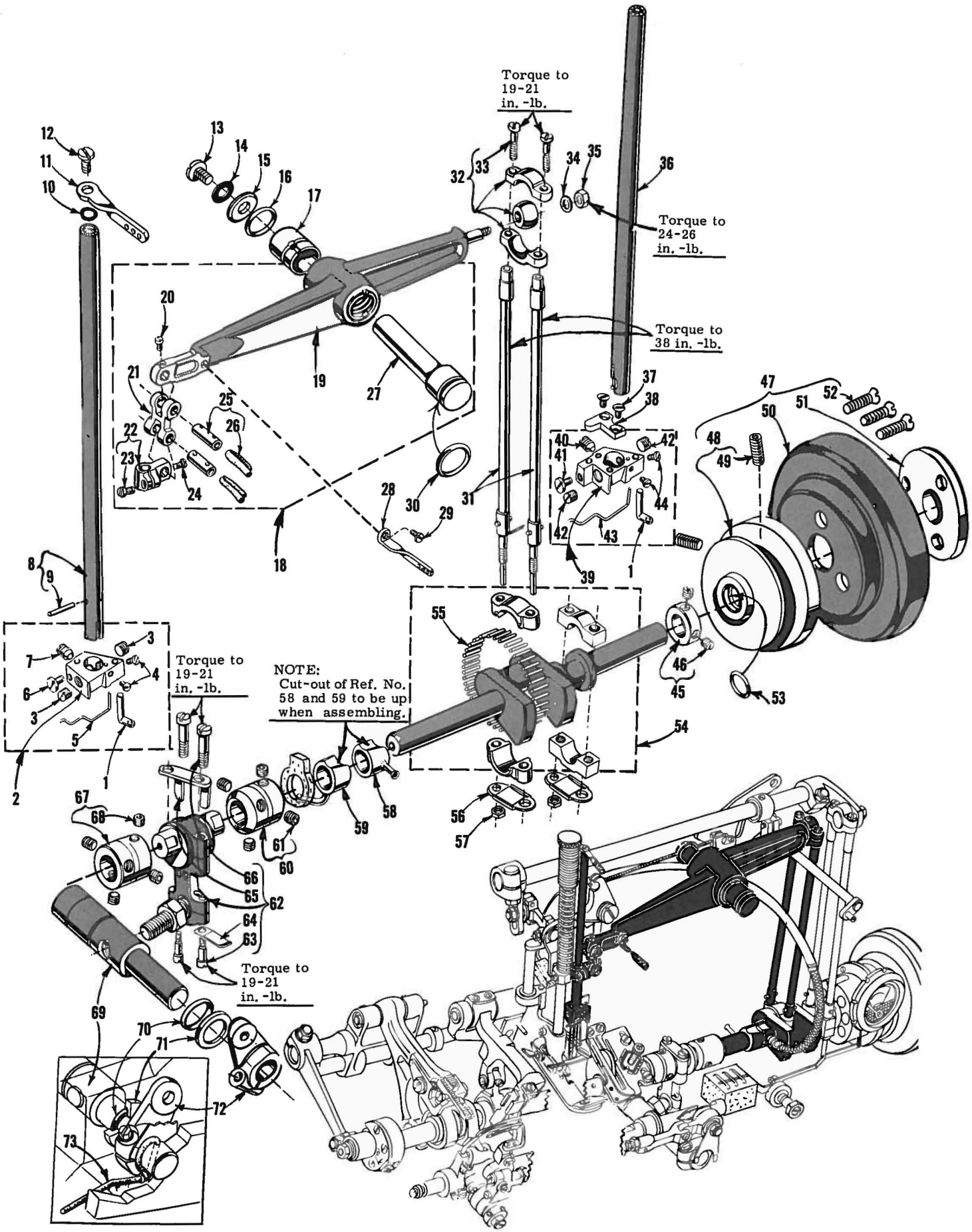
MAIN FRAME, CAST-OFF PLATE AND MISCELLANEOUS COVERS

Ref. No.	Part No.	Description	Amt. Req.
1	22829	Screw	2
2	56382 J	Looper Drive Shaft Reservoir Cover	1
3	56382 K	Gasket	1
4	56382 F	Oil Reservoir Back Cover	1
5	22848	Screw	9
6	56382 L	Gasket	1
7	22548	Screw	4
8	56382 D	Crank Chamber Cover, lower	1
9	56382 E	Gasket	1
10	56382 B	Upper Crank Chamber Cover	1
11	56382 M	Gasket	1
12	22733 E	Oil Filler Plug Screw	1
13	22541 C	Screw	4
14	56382 C	Gasket	1
15	90	Screw	2
16	22539 S	Plug Screw	1
17	52882 Y	Baffle Plate	1
18	51282 AE	Needle Lever Bearing Oiler	1
19	22894 E	Screw	2
20	57970 A	Needle Thread Pull-off Wire	1
21	22539 G	Plug Screw	1
22	56382 P	Oil Drip Plate	1
23	357	Screw	1
24	90	Screw	1
25	56382 S	Spring	1
26	57831	Presser Bar Connection Guide Plate, rear	1
27	22564 B	Screw	2
28	57882 B	Gasket	1
29	22569 C	Screw	3
30	57882	Head Cover	1
31	22733 C	Plug Screw	1
32	22513	Screw	2
33	35731 A	Presser Bar Connection Guide Plate, front	1
34	22585 A	Screw	2
35	57844 A	Spreader Thread Guide, for all Styles except 57900 N, All Gauges	1
35A	57944	Spreader Thread Guide, for Style 57900 N, All Gauges	1
36	95	Screw	1
37	57844	Spreader Thread Eyelet	1
38	57892 A	Spreader Thread Tension Post	1
39	80665 F	Spreader Thread Tension Disc	2
40	57892 C-5	Spreader Thread Tension Spring	1
41	57892 B	Spreader Thread Tension Post Nut	1
42	22848	Screw	1
43	20	Washer	1
44	51758	Spreader Thread Frame Eyelet	1
45	539	Needle Thread Frame Eyelet	2
46	22889 A	Adaptor Plug Screw	1
47	21375 AV	Belt Guard	1
48	22829	Screw	2
49	98 A	Screw	3
50	52 A	Looper Thread Eyelet	1
51	56391	Looper Thread Guard	1
52	51959 D	Tension Nut	1
53	51959 K	Tension Spring	1
54	51959 B	Tension Disc	2
55	51492	Tension Post	1
56	51459 A	Looper Thread Guide	1
57	22569 D	Screw	2
58	57857	Cast-off Plate Support	1
59	57804	Cast-off Plate, marked "B"	1
60	28	Screw	2
61	52958 G	Looper Frame Thread Eyelet	1
62	87 U	Screw	1
63	52958	Looper Thread Cast-off Guide Eyelet	1
64	57944 B	Spreader and Needle Thread Guide	1
65	57944 A	Thread Eyelet	1
66	HT2 C	Screw	1
67	605 A	Screw	1



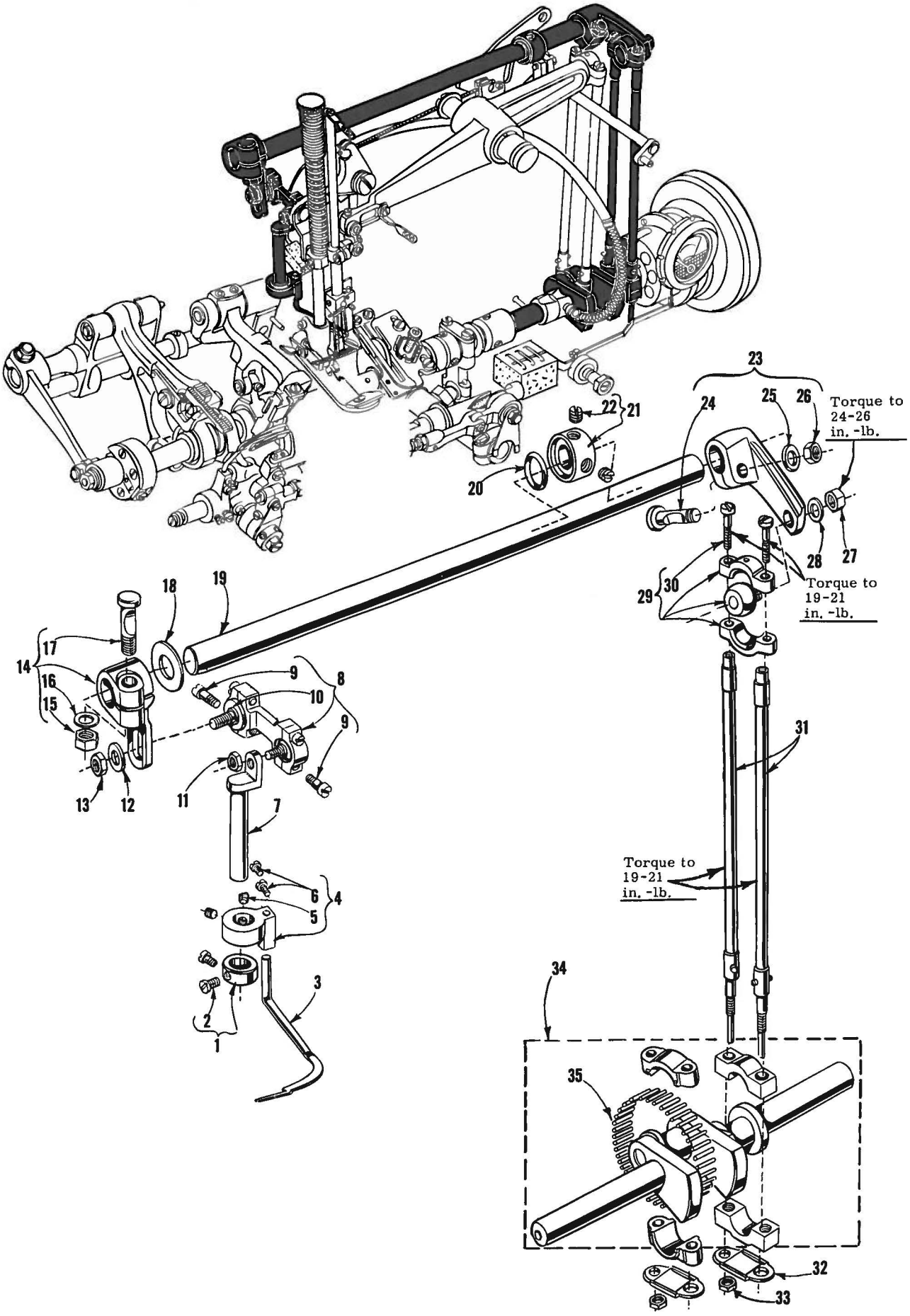
MAIN FRAME, BUSHINGS, OIL GAUGE AND MISCELLANEOUS OILING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	56393 S	Base Oil Pump Assembly	1
2	666-214	Intake Felt	1
3	57849	Spreader Rocker Shaft Bushing	1
4	52883 R	Presser Foot Lifter Lever Bushing	1
5	21657 X	Release Lever Bushing	1
6	56390 E	Bushing Housing Gasket	1
7	57890	Crankshaft Bushing Housing	1
8	22569 B	Screw	3
9	63494 K	Oil Gauge Assembly	1
10	63494 F	Nut	1
11	63494 G	Spring Washer	1
12	660-455	"O" Ring	1
13	56394 B	Oil Gauge Connecting Rod	1
14	660-221	Oil Retaining Ring	1
15	61256 G	Washer	2
16	11635 B	Nut	1
17	56394 A	Oil Gauge Adjusting Shaft	1
18	660-219 A	Pin	1
19	56394 C	Oil Gauge Float Lever Assembly	1
20	27-527 Blk.	Washer	1
21	61494 G	Collar	1
22	604	Screw	1
23	22539 R	Plug Screw	1
24	56390 A	Main Shaft Bushing, right	1
25	666-232	Felt Washer	1
26	56390 D	Main Shaft Bushing, middle	1
27	52942 X	Looper Drive Lever Shaft Bushing, rear	1
28	50-895 Blk.	Looper Rocker Shaft Bushing	2
29	52942 W	Looper Drive Lever Shaft Bushing, front	1
30	52942 Y	Synchronizing Stud	1
31	56393 P	Base Felt, front	1
32	666-259	Felt	1
33	56390	Main Shaft Bushing, left	1
34	57836 B	Feed Rocker Shaft Bushing	2
35	51257 AA	Presser Bar Bushing, lower	1
36	57846	Spreader Holder Carrier Bushing	1
37	57954	Needle Bar Bushing, lower	1
38	56393 R	Oil Attraction Felt	1
39	57849	Spreader Rocker Shaft Bushing	1
40	51154 E	Needle Bar Bushing, upper	1
41	56393 Q	Base Felt, rear	1
42	57893	Head Oil Pump Assembly	1
43	666-214	Intake Felt	1



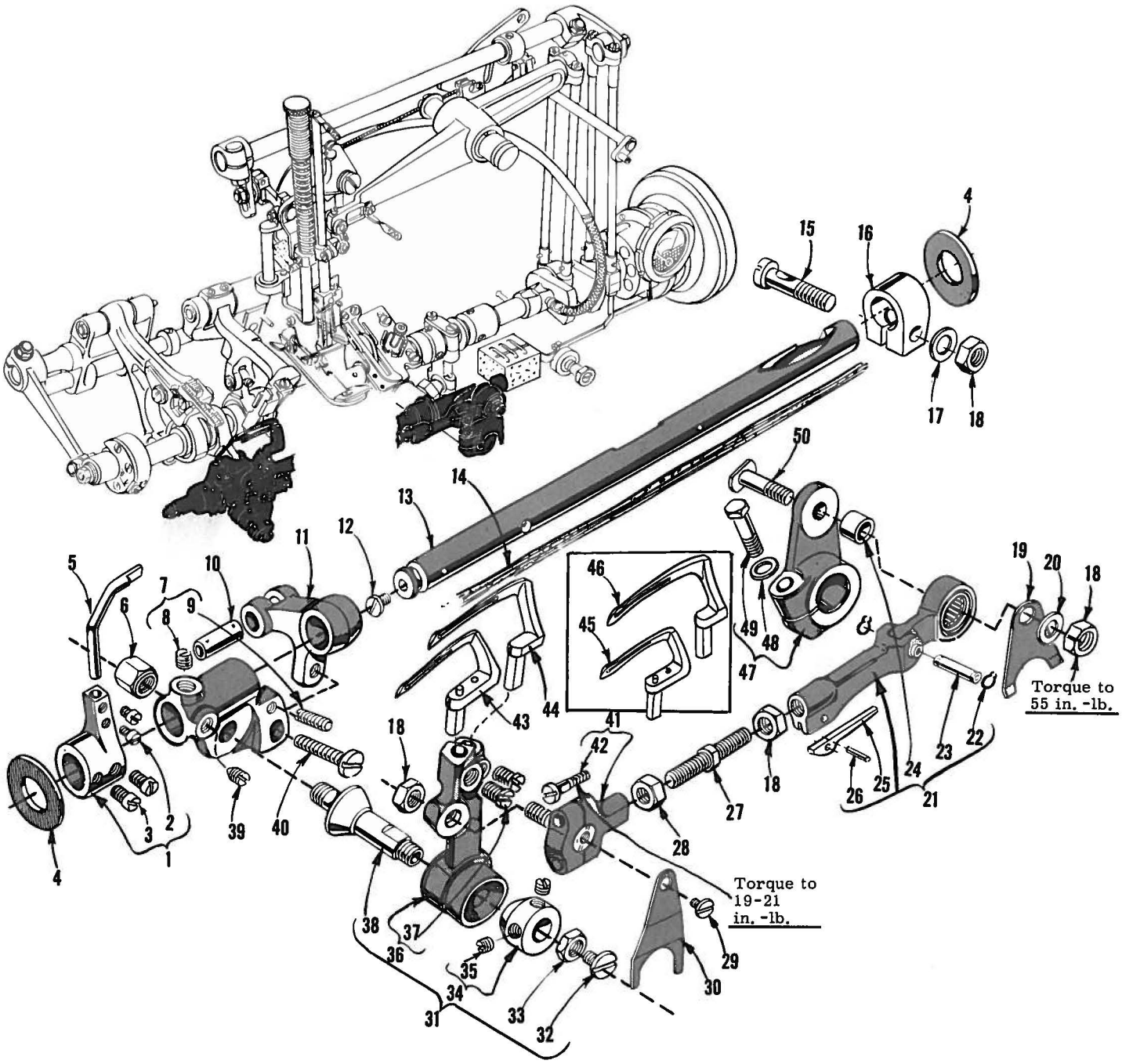
CRANKSHAFT, NEEDLE LEVER, NEEDLE BAR AND LOOPER DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	57842 A	Spreader Thread Eyelet	1
2	57918-5-8	Needle Bar Head, marked "AU", for No. 5-8 gauge, Styles 57900 F, G, H, N	1
3	88 B	Set Screw	2
4	22738 F	Screw	2
5	57942	Needle Thread Guide	1
6	77	Screw	1
7	89	Spot Screw	1
8	52917-8	Needle Bar, marked "BE-8", for No. 5-8 gauge, Styles 57900 F, G, H, N; for No. 16-8 gauge, Styles 57900 G, H, N	1
9	50 J-16	Needle Stop Pin	1
10	27-435 Blk.	Needle Bar Eyelet Lockwasher	1
11	56958 A	Needle Bar Thread Eyelet	1
12	22768	Screw	1
13	22586 R	Screw	1
14	51250 F	Gasket	1
15	51250 D	Washer	1
16	660-212	Oil Seal Ring	1
17	51150	Needle Lever Thrust Collar	1
18	29348 Y	Needle Lever Assembly	1
19	56315	Needle Lever	1
20	77	Screw	1
21	56354 A	Needle Bar Link	1
22	56354	Needle Bar Connection	1
23	22562 A	Screw	1
24	22564	Screw	1
25	51054	Link Pin	2
26	666-149	Felt Wick	1
27	56350 A	Needle Lever Stud	1
28	56958	Needle Lever Thread Eyelet	1
29	22768	Screw	1
30	660-212	Oil Seal Ring	1
31	56316	Needle Lever Connecting Rod	2
32	29066 R	Needle Lever Connecting Rod Upper Ball Joint Assembly	1
33	22559 G	Screw	2
34	51216 N	Washer	1
35	51216 P	Nut	1
36	52917-12	Needle Bar, marked "BE-12", for No. 12-12 gauge, Styles 57900 H, N	1
37	22716	Screw, for No. 16-8 gauge, Styles 57900 G, H, N; for No. 12-12 gauge, Styles 57900 H, N	2
38	52931	Needle Stop Plate, for No. 16-8 gauge, Styles 57900 G, H, N; for No. 12-12 gauge, Styles 57900 H, N	1
39	57918-16-8	Needle Bar Head, marked "AT", for No. 16-8 gauge, Styles 57900 G, H, N; for No. 12-12 gauge, Styles 57900 H, N	1
40	89	Spot Screw	1
41	28	Screw	1
42	88 B	Set Screw	2
43	57942 A	Needle Thread Guide	1
44	22738 F	Screw	2
45	57847	Thrust Collar	1
46	95	Screw	2
47	57821 A	Handwheel Assembly	1
48	56321 A	Pulley	1
49	22894 AB	Screw	2
50	57821	Handwheel	1
51	61321 L	Retaining Plate	1
52	22574	Screw	3
53	660-202	"O" Ring	1
54	29476 MN	Crankshaft Assembly, .910 inch throw, for all gauges, Styles 57900 F, G, H	1
-	29476 MR	Crankshaft Assembly, .990 inch throw, for all gauges, Style 57900 N	1
55	51216 M	Needle Bearing	28
56	56316 C	Connecting Rod Guide	2
57	12934 A	Nut	2
58		Head Oil Pump Assembly, (See Ref. No. 42 - Page 17)	1
59		Base Oil Pump Assembly, (See Ref. No. 1 - Page 17)	1
60	52943 L	Looper Drive Lever and Crankshaft Connection, right	1
61	22894 X	Screw	4
62	29105 AG	Looper Drive Lever Crank Assembly	1
63	22559 A	Bearing Cap Screw, lower	2
64	56343 E	Oil Splasher	1
65	56343 C	Ball Joint Guide Fork	1
66	22587 K	Bearing Cap Screw, upper	2
67	56343 D	Looper Drive Lever Crank Connection, left	1
68	22894 X	Screw	4
69	52942 A	Looper Drive Lever Rocker Shaft	1
70	660-202	"O" Ring	1
71	56342 B	Oil Seal Collar	1
72	57942 B	Looper Drive Lever, marked "C"	1
73	CL21	Oil Wick	1



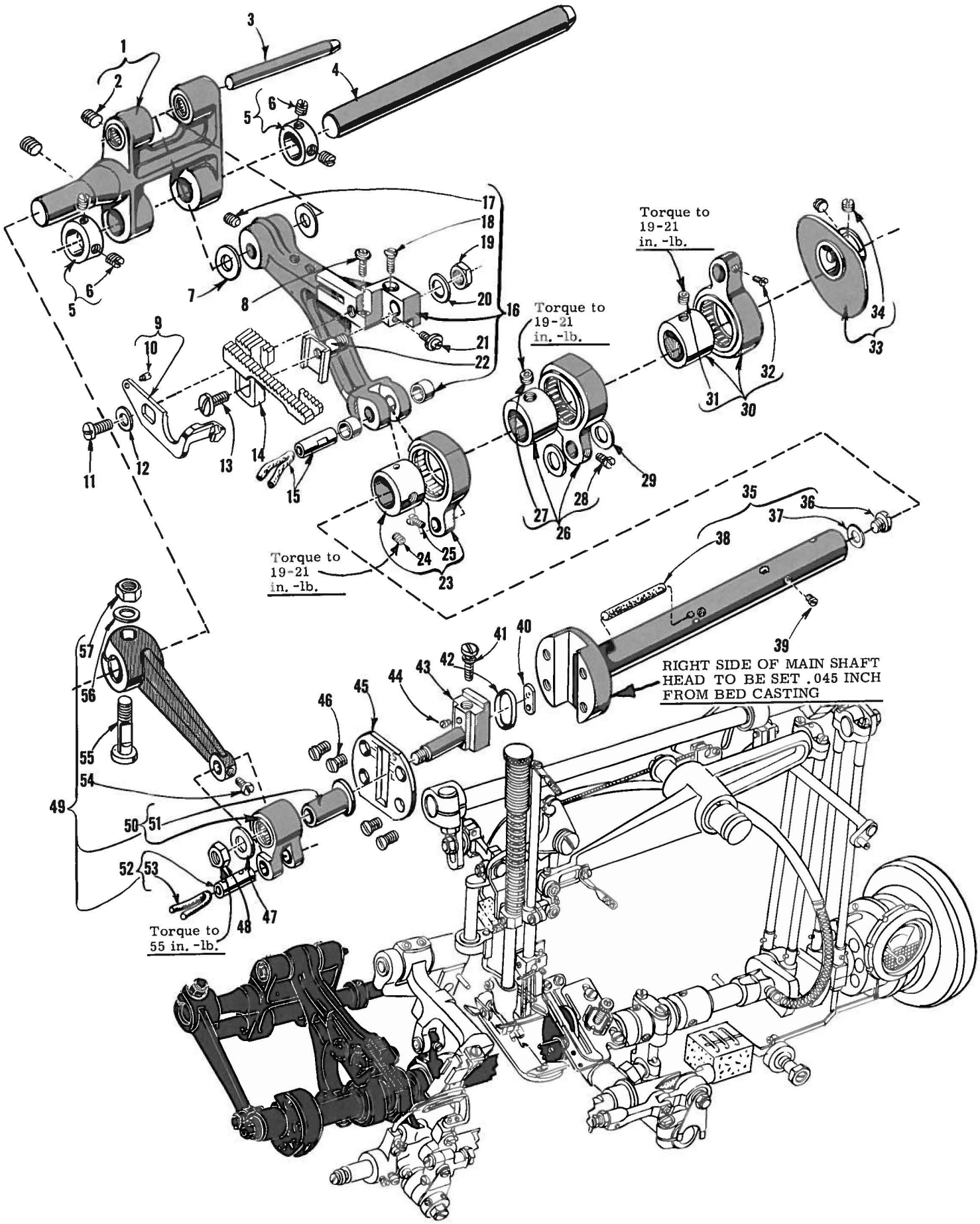
SPREADER AND SPREADER DRIVING MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1	52888 B	Presser Bar Stop Collar	1
2	22562	Screw	2
3	57845	Spreader, marked "G"	1
4	57846 A	Spreader Holder	1
5	22894 W	Screw	2
6	77 A	Screw	2
7	57847 A	Spreader Holder Carrier	1
8	57848	Carrier Connecting Rod Assembly	1
9	97 A	Screw	4
10	57835 F	Ball Washer	1
11	12934 A	Nut	1
12	61434 G	Washer	1
13	12538	Nut	1
14	57849 A	Spreader Rock Shaft Arm	1
15	55235 E	Nut	1
16	6042 A	Washer	1
17	55235 D	Locking Stud	1
18	57849 C	Thrust Washer	1
19	52849	Spreader Rock Shaft	1
20	660-202	Oil Seal Ring	1
21	52849 C	Spreader Rock Shaft Oil Seal Collar	1
22	95	Screw	2
23	57852	Spreader Rock Shaft Lever	1
24	55235 D	Locking Stud	1
25	6042 A	Washer	1
26	55235 E	Nut	1
27	18	Nut	1
28	39543 P	Washer	1
29	52952 B	Spreader Connecting Rod Ball Joint, upper	1
30	22559 G	Screw	2
31	56316	Spreader Drive Connecting Rod	2
32	56316 C	Connecting Rod Guide	2
33	12934 A	Nut	2
34	29476 MN	Crankshaft Assembly, .910 inch throw, for all gauges, Styles 57900 F, G, H	1
-	29476 MR	Crankshaft Assembly, .990 inch throw, for all gauges, Style 57900 N	1
35	51216 M	Needle Bearing	28



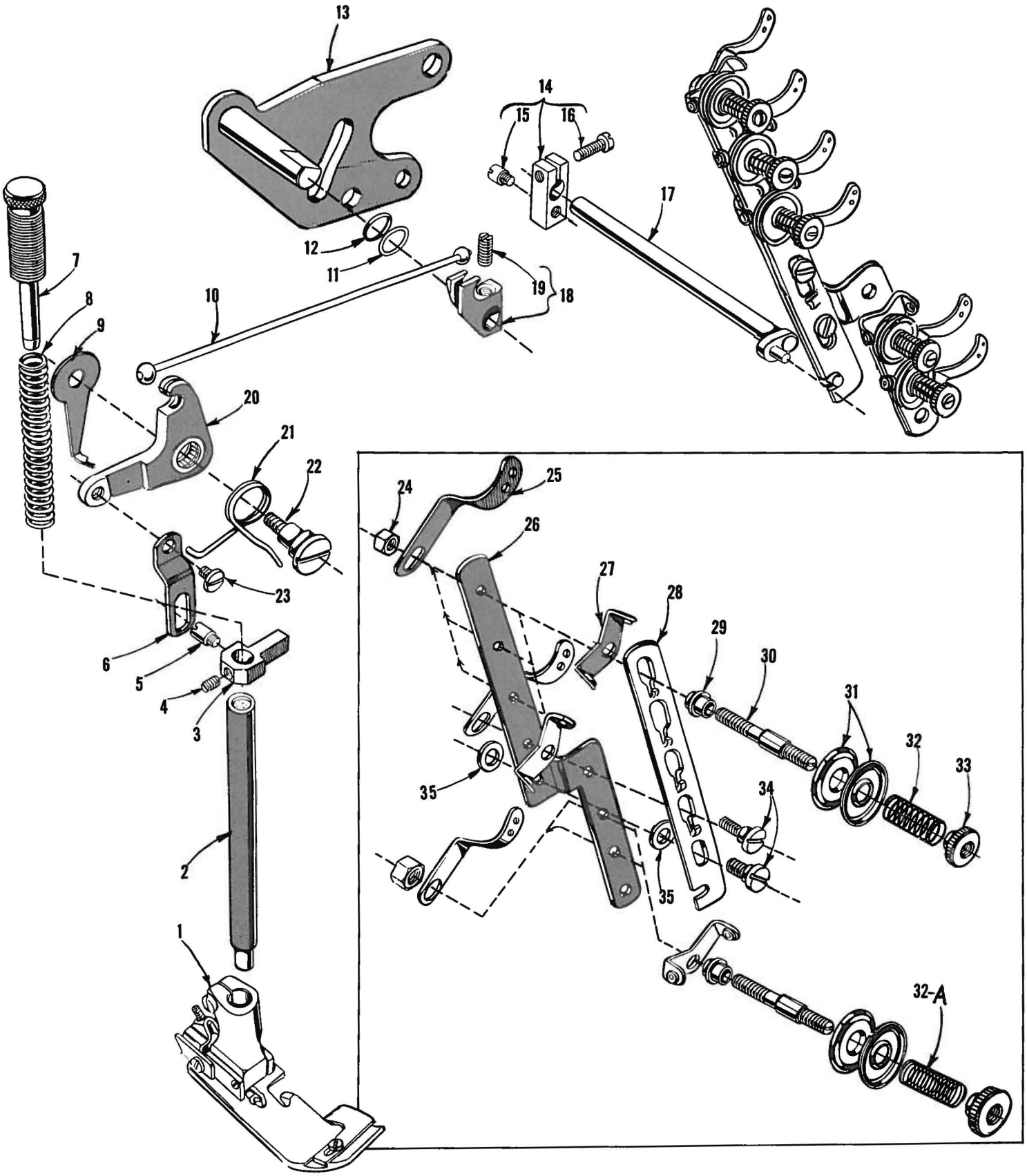
LOOPERS, LOOPER ROCKER AND CONNECTING ROD PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	52825 D	Looper Needle Guard Holder	1
2	22563	Screw	2
3	33174 B	Screw	2
4	51244 L	Thrust Washer	2
5	57925	Looper Needle Guard	1
6	57846 B	Looper Rocker Cone Stud Nut	1
7	57744 A	Looper Rocker Frame	1
8	98	Set Screw	1
9	719	Stop Screw	1
10	51236 A	Looper Avoid Link Pin	1
11	56344 B	Looper Rocker Shaft Arm	1
12	22513	Screw	1
13	57744	Looper Rocker Shaft	1
14	WO-3	Columbia Yarn (4 strands 8 inches long)	-
15	55244 G	Looper Rocker Shaft Collar Stud	1
16	51244 N	Looper Rocker Shaft Collar	1
17	51216 N	Washer	1
18	18	Nut	4
19	56393 K	Looper Connecting Rod Ball Joint Oiler, right	1
20	20	Washer	1
21	56341 B	Looper Connecting Rod Jointed Section, right	1
22	660-310	Truarc Ring	2
23	56341 E	Hinge Pin	1
24	56341 F	Ferrule	1
25	56341 G	Spring	1
26	50-458 Blk.	Spring Pin	1
27	51240 E	Looper Connecting Rod	1
28	269	Nut, left hand thread	1
29	87 U	Screw	1
30	56393 J	Looper Connecting Rod Ball Joint Oiler, left	1
31	29192 AB	Looper Rocker Assembly	1
32	22829	Lock Nut Screw	1
33	258 A	Lock Nut	1
34	15465 F	Looper Rocker Cone	1
35	22894 W	Screw	2
36	57913	Looper Rocker, marked "Y"	1
37	73	Screw	2
38	51745	Looper Rocker Cone Stud, marked "B"	1
39	96	Spot Screw	1
40	22874	Looper Rocker Frame Lock Screw	1
41	56341	Looper Connecting Rod Ball Joint, left	1
42	22729 C	Screw	2
43	52708 B	Looper, front, for all Styles and gauges except 57900 N-12-12	1
44	52909 A	Looper, back, for No. 5-8 gauge, Styles 57900 F, G, H, N	1
45	57908	Looper, front, for Style 57900 N-12-12	1
46	52909 E-16	Looper, back, marked "CE", for No. 16-8 gauge, Styles 57900 G, H, N; for No. 12-12 gauge, Styles 57900 H, N	1
47	57942 B	Looper Drive Lever, marked "C"	1
48	51242 M	Washer	1
49	22882 C	Screw	1
50	52942 R	Looper Lever Stud	1



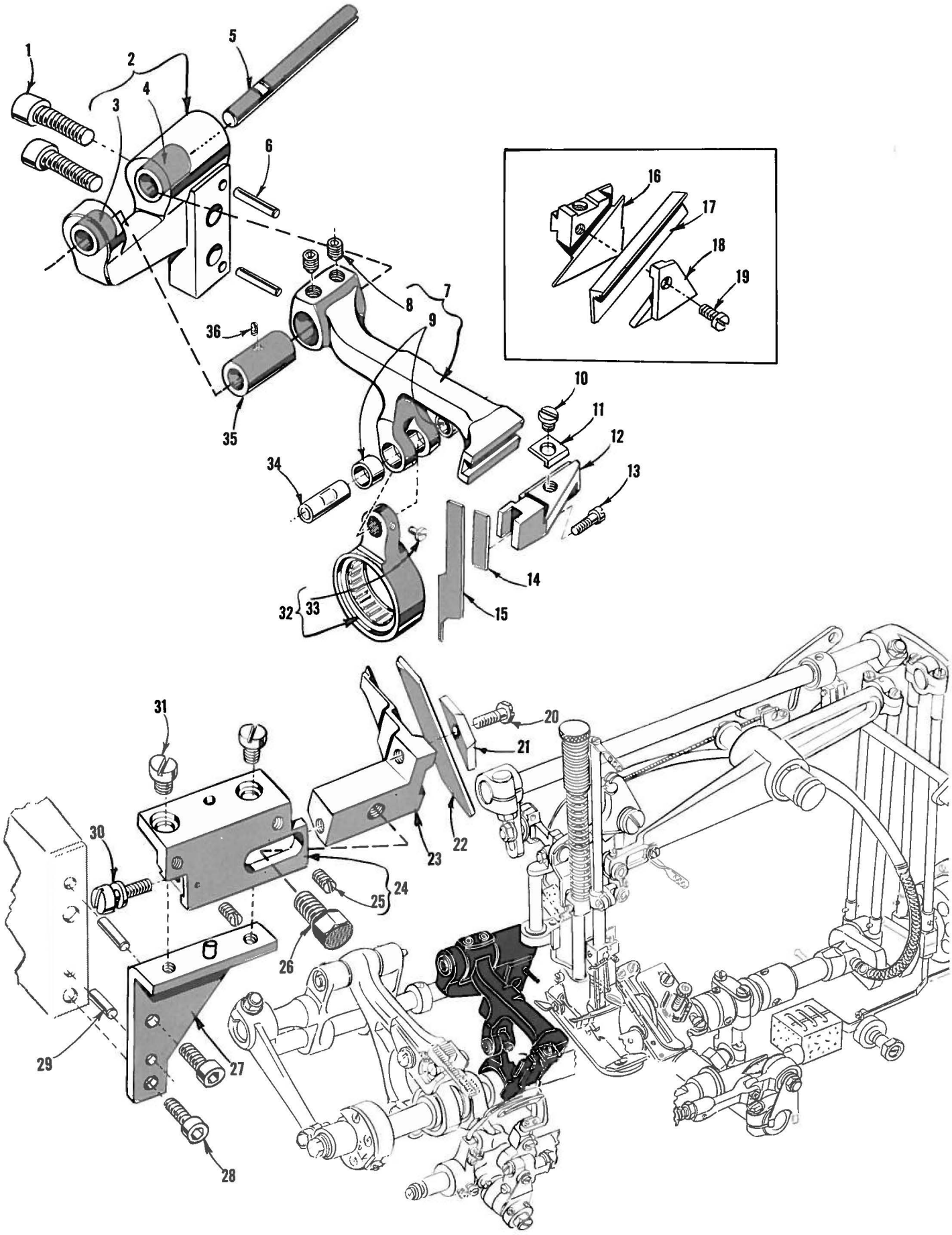
NEEDLE GUARD, MAIN SHAFT, TAKE-UP AND FEED DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	56335 G	Feed Rocker	1
2	22651 CD-4	Screw	2
3	56334 B	Feed Bar Shaft	1
4	56335	Feed Rocker Shaft	1
5	56335 D	Feed Rocker Shaft Collar	2
6	98	Screw	2
7	61341 J	Washer, feed bar	2
8	22834 A	Needle Guard Height Adjusting Screw	1
9	52925 G	Needle Guard	1
10	22801	Pivot Screw	1
11	22875 H	Screw	1
12	61434 G	Washer	1
13	22528	Screw, for feed dog	1
14		Feed Dog, (See Page 33)	1
15	51236 A	Link Pin	1
16	56334	Feed Bar	1
17	22651 CB-4	Screw	1
18	22637 P-24	Feed Dog Height Adjusting Screw	1
19	258 A	Nut	1
20	6042 A	Feed Dog Holder Washer	1
21	22863 C	Feed Dog Holder Adjusting Screw	1
22	56334 L	Feed Dog Holder	1
23	29476 LK-080	Feed Lift Eccentric Assembly	1
24	22894 AA	Screw	1
25	77	Screw	1
26	29476 LK-072	Looper Avoid Eccentric Assembly	1
27	22894 AA	Screw	1
28	77	Screw	1
29	39543 N	Thrust Washer, for feed bar	2
30	29132 AE-150	Upper Knife Eccentric Assembly	1
31	22894 AA	Screw	1
32	77	Screw	1
33	57823	Looper Thread Take-up	1
34	22580	Screw	2
35	57922	Main Shaft	1
36	22891 B	Oil Flow Regulating Screw	1
37	56322 B	Gasket	1
38	WO-3	Columbia Yarn	-
39	22801	Screw, for take-up	1
40	56336 D	Feed Crank Stud Insert	1
41	22543 A	Stitch Regulating Screw	1
42	660-269 B	Quad Ring	1
43	56336	Feed Crank Stud, marked "A"	1
44	22798 C	Screw	1
45	56322 C	Main Shaft Head Plate	1
46	22525 A	Screw	4
47	21657 E	Washer	1
48	269	Nut	1
49	29476 MJ	Feed Rocker Arm and Feed Crank Link Sub-Assembly	1
50	56336 B	Feed Crank Link	1
51	56336 C	Feed Crank Link Ferrule	1
52	51054	Feed Crank Link Pin	1
53	666-149	Oil Wick	1
54	77	Screw, for link pin	1
55	55235 D	Locking Stud	1
56	6042 A	Washer	1
57	55235 E	Nut	1



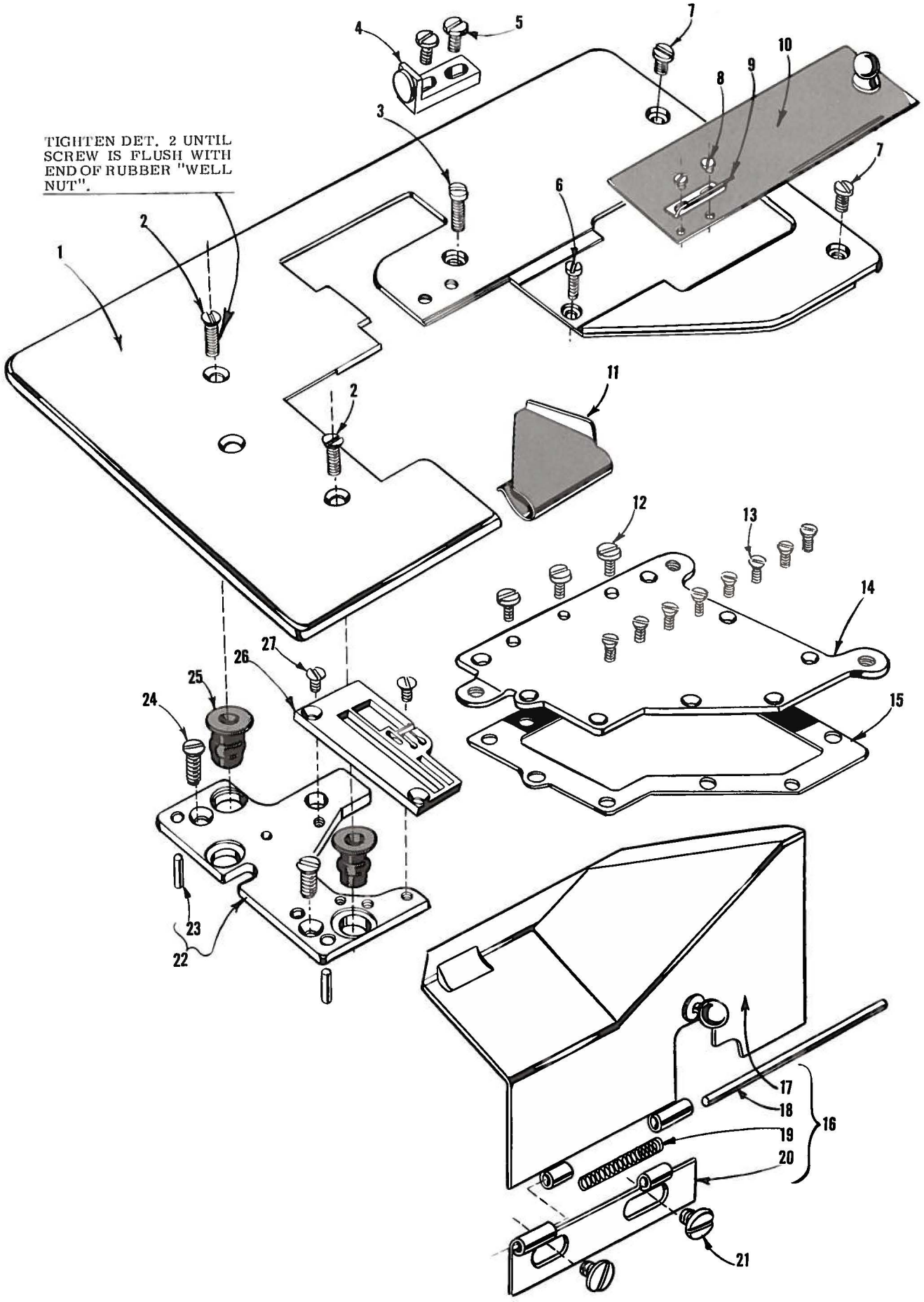
THREAD TENSION AND LIFTER LEVER PARTS

Ref. No.	Part No.	Description	Amt. Req.
1		Presser Foot (See Page 33)	1
2	51257 K	Presser Bar, marked "A"	1
3	51257 M	Presser Bar Connection and Guide	1
4	531	Screw	1
5	22892 E	Screw	1
6	56383 A	Lifter Lever Link	1
7	56356	Presser Spring Regulator	1
8	53787	Presser Spring	1
9	57893 B	Head Oil Tube Clamp	1
10	56383	Lifter Lever Connecting Cable	1
11	39552 C	Washer	1
12	660-207	Oil Seal Ring	1
13	51283 H	Lifter Lever	1
14	21657 Y	Tension Release and Lifter Lever Shaft Connection	1
15	402	Screw	1
16	22596	Screw	1
17	21657 W	Tension Release and Lifter Lever Shaft	1
18	56383 C	Lifter Lever Connection	1
19	74 E	Screw	1
20	56383 B	Lifter Lever Bell Crank	1
21	56383 D	Lifter Lever Bell Crank Spring	1
22	22557 G	Screw	1
23	22758 C	Screw	1
24	43266	Nut, for tension post	5
25	51491 C	Thread Lead-in Guide	6
26	51892	Tension Post Support	1
27	51292 D	Tension Post Eyelet	6
28	21657 AA-4	Tension Disc Separator	1
29	51292 A	Tension Post Ferrule	5
30	51292 G	Tension Post	5
31	109	Tension Disc	10
32	51292 F-5	Tension Spring, needle	3
32A	51292 F-2	Tension Spring, looper	2
33	51292 C	Tension Nut	5
34	22598 C	Screw	2
35	80557	Spacing Washer	2



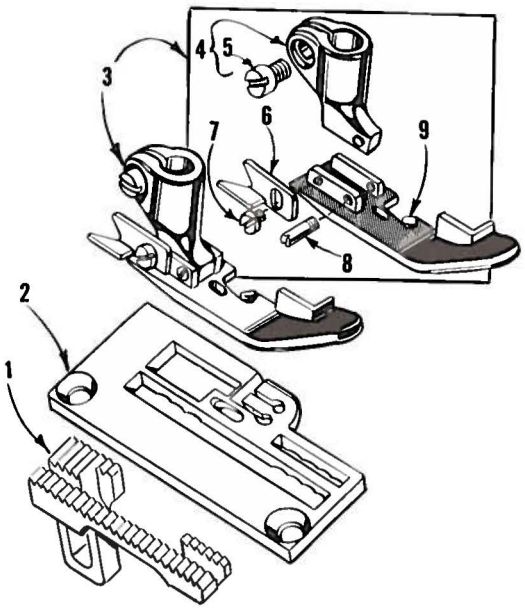
UPPER AND LOWER KNIFE MECHANISM

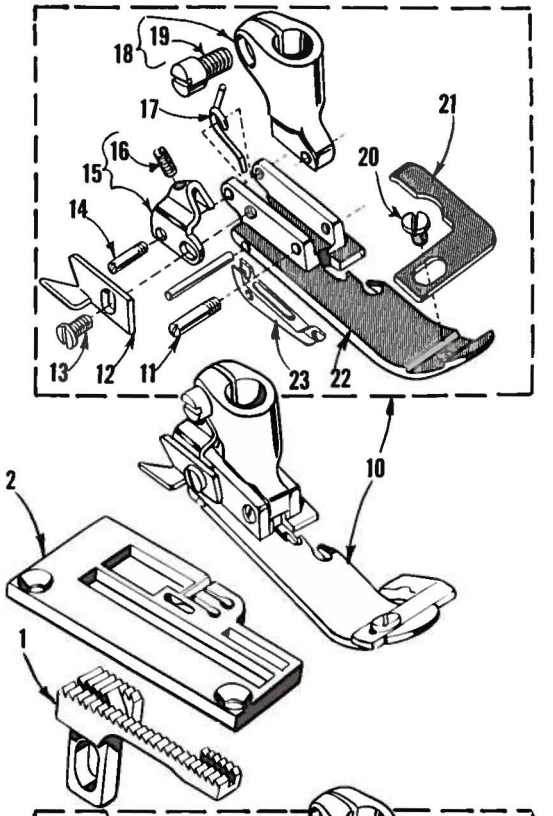
Ref. No.	Part No.	Description	Amt. Req.
1	22652 D-12	Screw	2
2	57973 B	Upper Knife Lever Bracket	1
3	57836	Bushing	1
4	57973 D	Bushing	1
5	57973 C	Upper Knife Arm Shaft	1
6	667 B-16	Dowel Pin	2
7	57973 A	Upper Knife Arm	1
8	22894 D	Screw	2
9	56334 A	Bushing	2
10	90	Screw, for 52973 S	1
11	52973 S	Upper Knife Holder Clamp Block	1
12	57973	Upper Knife Holder Block, for all Styles except 57900 F-5-8	1
13	97	Screw	1
14	57973 E	Upper Knife Clamp Plate, for all Styles except 57900 F-5-8	1
15	57970	Knife, upper, for all Styles except 57900 F-5-8	1
16	52973 Z	Upper Knife Holder Block, for Style 57900 F-5-8	1
17	52970 E	Knife, upper, for Style 57900 F-5-8	1
18	52973 T	Upper Knife Clamp, for Style 57900 F-5-8	1
19	97	Screw, for 52973 T	1
20	22588 A	Screw	1
21	57950 B	Lower Knife Clamp	1
22	57949	Knife, lower	1
23	57950	Lower Knife Holder Block	1
24	57950 A	Lower Knife Holder Block Adjustable Bracket	1
25	12935 A	Screw	2
26	BP108	Screw	1
27	57950 C	Lower Knife Bracket	1
28	22653 B-8	Screw	2
29	667 C-8	Dowel Pin	2
30	22568	Screw	1
31	94	Screw	2
32	29132 AE-150	Upper Knife Eccentric Assembly	1
33	77	Screw	1
34	51236 A	Link Pin	1
35	57975 A	Upper Knife Lever Eccentric	1
36	28 C	Screw	1

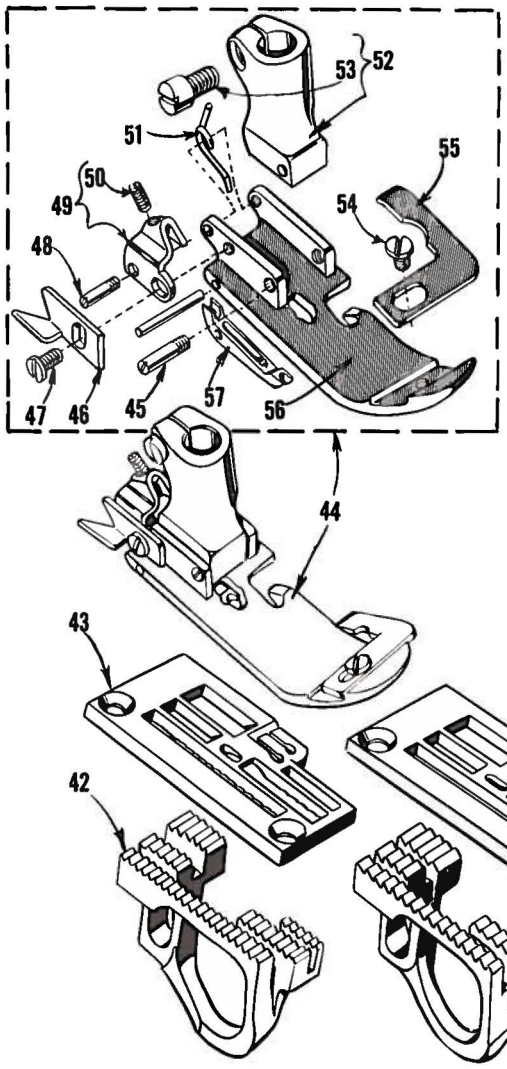


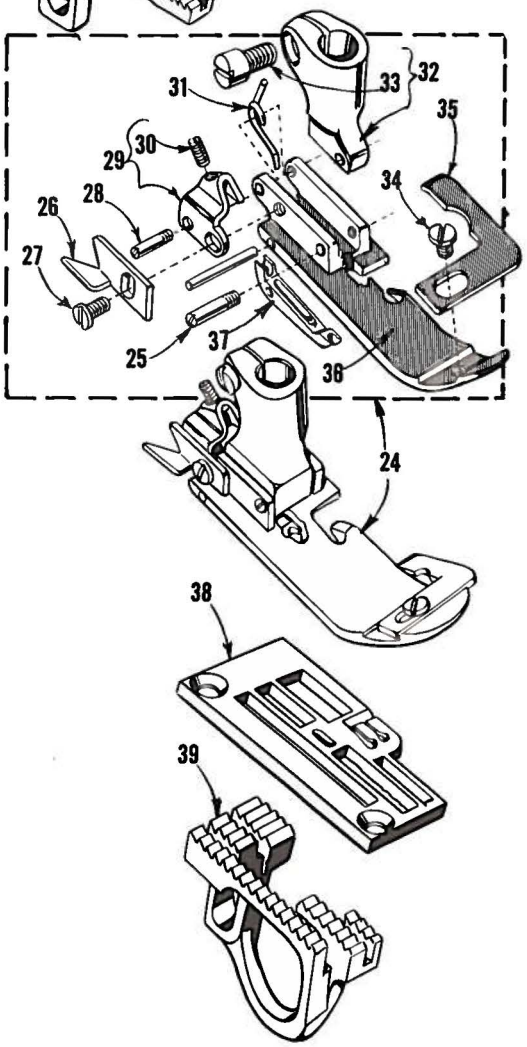
CLOTH PLATE, MISCELLANEOUS COVERS AND SUPPORTS

Ref. No.	Part No.	Description	Amt. Req.
1	57901	Cloth Plate	1
2	22526 C	Screw	2
3	22839 E	Screw	1
4	57973 F	Upper Knife Lever Thrust Bracket	1
5	22528	Screw	2
6	22585 R	Screw	1
7	22839 C	Screw	2
8	HT2 C	Screw	2
9	57978 B	Upper Knife Chip Guard	1
10	57902	Cloth Plate Sliding Cover	1
11	52703 A	Edge Guide	1
12	22585 A	Screw	3
13	22524	Screw	8
14	56382 G	Oil Reservoir Top Cover	1
15	56382 H	Gasket	1
16	57978	Front Cover and Chip Guard Assembly	1
17	57978 A	Front Cover	1
18	52978 U	Hinge Pin	1
19	39158 U	Spring	1
20	52978 T	Hinge	1
21	22730	Screw	2
22	57880	Throat Plate Support	1
23	51280 J	Dowel Pin	2
24	80	Screw, for throat plate support	2
25	660-313	Well Nut	2
26		Throat Plate (See Page 33)	1
27	87	Screw, for throat plate	2



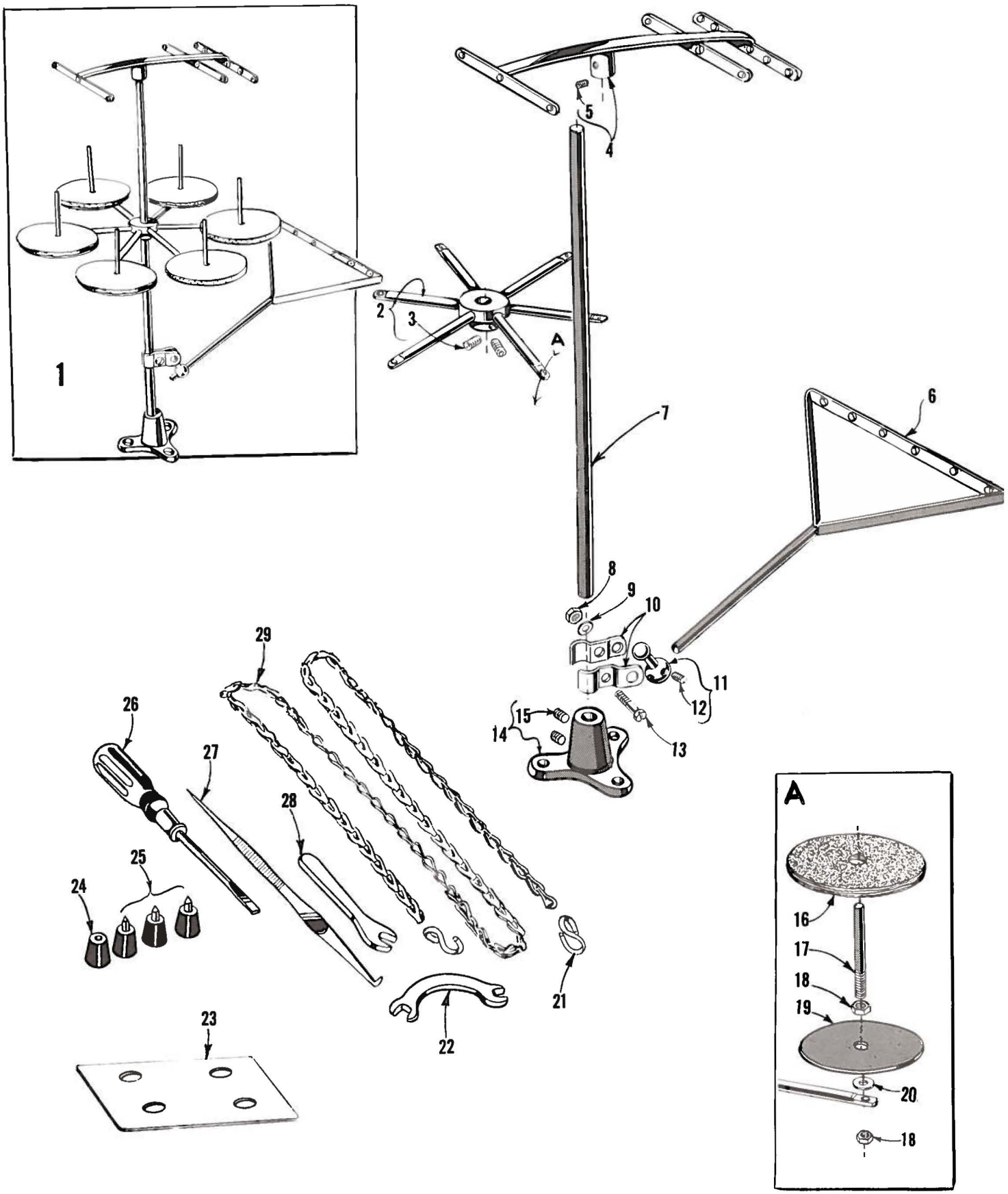






FEED DOGS, THROAT PLATES, PRESSER FEET

Ref. No.	Part No.	Description	Amt. Req.
1	52905 BH-5-8	Feed Dog, for No. 5-8 gauge, Styles 57900 F, G, H, N	1
2	52924 BH-5-8	Throat Plate, for No. 5-8 gauge, Styles 57900 F, G, H, N	1
3	52920 F-5-8	Presser Foot, for No. 5-8 gauge, Style 57900 F	1
4	52930	Presser Foot Shank	1
5	91	Screw	1
6	52930 AC	Chain Cutter, marked "D"	1
7	91 A	Screw	1
8	22799 F	Hinge Screw	1
9	52930 Y	Presser Foot Bottom	1
10	57920 A-5-8	Presser Foot, for No. 5-8 gauge, Style 57900 G	1
	57920 B-5-8	Presser Foot, for No. 5-8 gauge, Styles 57900 H, N	1
11	22799 F	Hinge Screw	1
12	52930 AC	Chain Cutter, marked "D"	1
13	604	Screw	1
14	22799 G	Screw	1
15	57930 G	Presser Foot Adjusting Section, marked "AW"	1
16	22565 P	Adjusting Screw	1
17	57930 D	Spring	1
18	57930 J	Presser Foot Shank	1
19	91	Screw	1
20	604	Screw	1
21	52330 J	Chip Curler	1
22	57930 H	Presser Foot Bottom, for No. 57920 A-5-8 presser foot	1
-	57930	Presser Foot Bottom, for No. 57920 B-5-8 presser foot	1
23	57930 F	Yielding Section, marked "AY"	1
24	57920 H-12-12	Presser Foot, for No. 12-12 gauge, Styles 57900 H, N	1
25	22799 R	Hinge Screw	1
26	52930 AC	Chain Cutter, marked "D"	1
27	604	Screw	1
28	22799 Z	Screw	1
29	57930 G	Presser Foot Adjusting Section, marked "AW"	1
30	22565 P	Adjusting Screw	1
31	57930 D	Spring	1
32	52930 H	Presser Foot Shank	1
33	91	Screw	1
34	604	Screw	1
35	52330 J	Chip Curler	1
36	57930 A	Presser Foot Bottom	1
37	57930 E	Yielding Section, marked "AX"	1
38	52924 C-12-12	Throat Plate, for No. 12-12 gauge, Styles 57900 H, N	1
39	52926 C-16-8	Feed Dog, for No. 12-12 gauge, Styles 57900 H, N	1
40	52926 BH-16-8	Feed Dog, for No. 16-8 gauge, Styles 57900 H, N	1
41	52924 D-16-8	Throat Plate, for No. 16-8 gauge, Styles 57900 H, N	1
42	52926 B-16-8	Feed Dog, for No. 16-8 gauge, Style 57900 G	1
43	52924 C-16-8	Throat Plate, for No. 16-8 gauge, Style 57900 G	1
44	57920 G-16-8	Presser Foot, for No. 16-8 gauge, Styles 57900 G, H, N	1
45	22799 R	Hinge Screw	1
46	52930 AC	Chain Cutter, marked "D"	1
47	604	Screw	1
48	22799 Z	Screw	1
49	57930 G	Presser Foot Adjusting Section, marked "AW"	1
50	22565 P	Adjusting Screw	1
51	57930 D	Spring	1
52	52930 H	Presser Foot Shank	1
53	91	Screw	1
54	604	Screw	1
55	52330 J	Chip Curler	1
56	57930 B	Presser Foot Bottom	1
57	57930 E	Yielding Section, marked "AX"	1



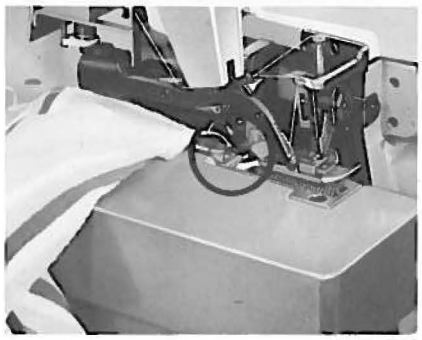
THREAD STAND PARTS AND ACCESSORIES

Ref. No.	Part No.	Description	Amt. Req.
1	21101 H-6	Thread Stand Assembly	1
2	21114 D-6	Spool Seat Support	1
3	22651 CD-5	Screw	2
4	21114 H-6	Eyelet Support	1
5	22651 CD-4	Screw	1
6	21114 S-6	Lead Eyelet	1
7	21104 B-24	Thread Stand Rod	1
8	21104 H	Nut	1
9	652-16	Washer	1
10	21114 U	Lead Eyelet Ball Split Socket	2
11	21114 T	Lead Eyelet Socket Ball	1
12	22651 CD-4	Screw	1
13	22810	Screw	1
14	21114 A	Thread Stand Base	1
15	22651 CD-4	Screw	1
16	21104 V	Spool Support Pad	6
17	21114 W	Spool Pin	6
18	258 A	Nut	12
19	21114	Spool Seat Disc	6
20	652-16	Washer	6
21	660-264	"S" Hook	2
22	21388 W	Wrench, double end, curved, 9/32 inch opening	1
23	39152 U-4	Shim, .004 inch thick, for setting the cast-off plate	2
24	51295 A	Isolator	1
25	51295 B	Isolator	3
26	21207 A	Screwdriver, 1/8 inch diameter blade, length overall 4 3/8 inches	1
27	660-240	Thread Tweezers	1
28	21388	Wrench, single end, 3/8 inch opening	1
29	421 D-34	Treadle Chain, 32 3/64 inches long	1
-	28604 R	Can of Oil, Spec. 174, 1 pint	1

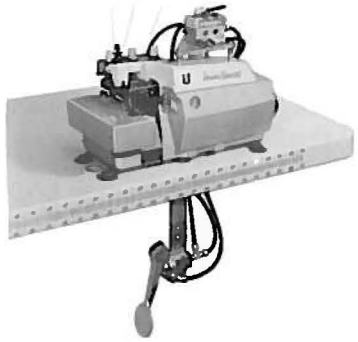
NUMERICAL INDEX OF PARTS

NUMERICAL INDEX OF PARTS

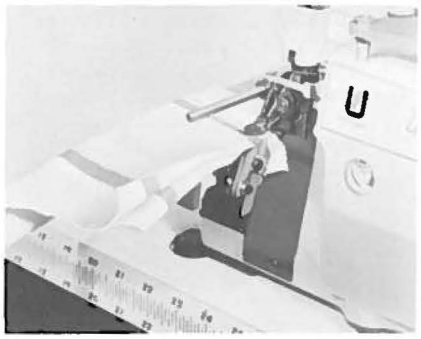
BOOST PRODUCTION WITH THESE WORK AIDS FROM UNION SPECIAL



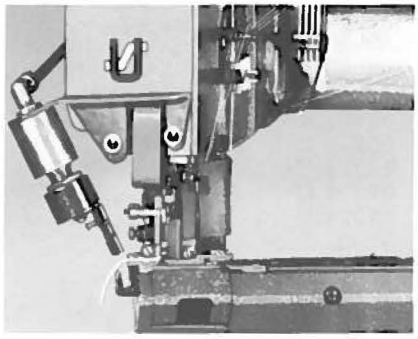
PNEUMATIC CHAIN-CUTTER—for use on conventional Class 39500 and 39600 is a durable scissor-action mechanism that makes a clean positive cut. Style 2899 A-1



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

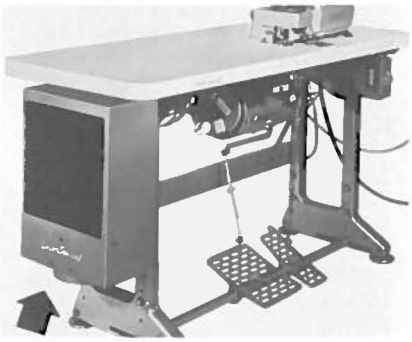


AIR FABRIC UNCURLER—This unit, designed for Class 39500 machines, uses air jets to remove curls from top and bottom plies of flat knit materials as fabric passes through sewing area. Style 2899 B-1

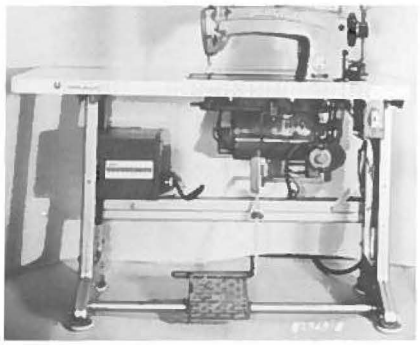


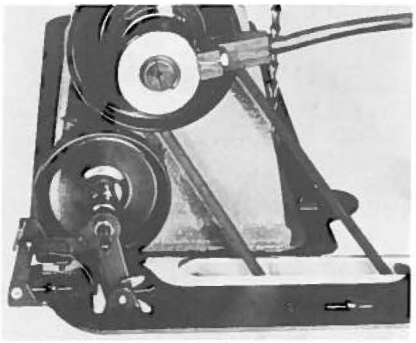
CHAIN CUTTER—The above photo shows the small pneumatic chain cutter that is available for installation as an accessory unit on Class 36200 Flatseamers. Style 2899A-6

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



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





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

Union Special®
FINEST QUALITY MACHINE COMPANY