

FINEST QUALITY

Union Special[®]

LEWIS[®] • COLUMBIA[®]

INDUSTRIAL
SEWING
MACHINES

STYLE

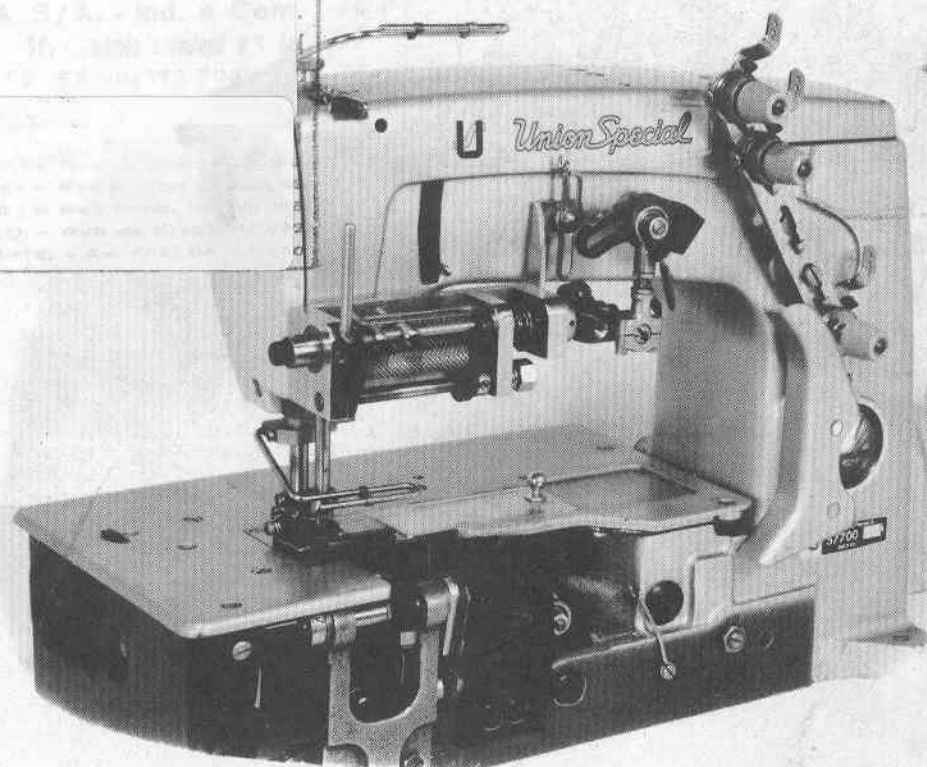
57700R

57700S

57700T

57700U

57700V



CLASS 57700



- ORIGINAL

ADVANCED HIGH SPEED
FIFTY THOUSAND SERIES
FLAT BED MACHINES

WITH

ELASTIC METERING DEVICE

UNION SPECIAL CORPORATION

CHICAGO

CATALOG

No.

131N

EDIÇÃO

01

24 folhas

Catalog No. 131 N

INSTRUCTIONS

FOR

ADJUSTING AND OPERATING

LIST OF PARTS

CLASS 57700

Styles

57700 R
57700 S

57700 V

57700 T
57700 U

First Edition

Copyright © 1974

By

Union Special Corporation
Rights Reserved in All Countries

UNION SPECIAL CORPORATION

INDUSTRIAL SEWING MACHINES

CHICAGO

Printed in U.S.A.

January, 1979

IDENTIFICATION OF MACHINES

Each UNION SPECIAL machine is identified by a Style number which is on 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 57700 R". 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 57700 RZ".

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 57700".

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, Two and Three Needles Abreast, One Looper, Flat Bed Medium Throw Machines, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir, Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base. Lateral Looper Travel, Double Disc Take-up, Large Handwheel and Improved Belt Guard. Prepared for use with Knee Press for Presser Foot Lifter, Equipped with Disc Thread Tensions, Maximum Work Space to Right of Needle Bar 8 1/4 Inches (209.55 mm).

57700 R Two needle plain feed machine, for attaching elastic in long lengths, 1/4 to 1 1/2 inches (6.35 to 38.10 mm) wide, to rayon, silk, cotton, nylon and wool, flat, warp and ribbed knit garments and for similar operations on light to medium weight materials. Equipped with adjustable top driven metering device and under trimmer. Standard gauge Nos. 8 and 12. Seam specification 406-LSa-1. Type 121 GBS needle. Maximum recommended speed 5500 R. P. M.

57700 S Three needle plain feed machine, for attaching elastic in long lengths, 3/8 to 1 1/2 inches (9.52 to 38.10 mm) wide, to rayon, silk, cotton, nylon and wool, flat, warp and ribbed knit garments and for similar operations on light to medium weight materials. Equipped with adjustable top driven metering device and under trimmer. Standard gauge No. 16 only. Seam specification 407-LSa-1. Type 121 GBS needle. Maximum recommended speed 5500 R. P. M.

57700 T Twoneedle differential feed machine, for attaching elastic in long lengths, 3/16 to 1 1/2 inches (4.76 to 38.10 mm) wide, to rayon, silk, cotton, nylon and wool, flat, warp and ribbed knit garments and for similar operations on light to medium weight materials. Equipped with adjustable top driven metering device, under trimmer and thumbscrew adjusted offset differential feed. Standard gauge No. 8 only. Seam specification 406-LSa-1. Type 121 GBS needle. Maximum recommended speed 5500 R. P. M.

STYLES OF MACHINES (Continued)

57700 U Three needle differential feed machine, for attaching elastic in long lengths, 3/8 to 1 1/2 inches (9.52 to 38.10 mm) wide, to rayon, silk, cotton, nylon and wool, flat, warp and ribbed knit garments and for similar operations on light to medium weight materials. Equipped with adjustable top driven metering device, under trimmer and thumbscrew adjusted offset differential feed. Standard gauge No. 16 only. Seam specification 407-LSa-1. Type 121 GBS needle. Maximum recommended speed 5500 R.P.M.

57700 V Same as 57700 R, except without under trimmer, but fitted with body folder for turning body of garment upwardly. Standard gauge Nos. 8 and 12. Seam specification 406-LSb-1. Type 121 GBS needle. 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 standard recommended needle for the machines covered here is Type 121 GBS. Below is the description and sizes available of the recommended needle.

<u>Type No.</u>	<u>Description and Sizes</u>
121 GBS	Round shank, round point, short, single groove, struck groove, spotted, ball point, chromium plated - available in sizes 065/025, 070/027, 075/029, 080/032, 090/036, 100/040.

To have needle orders promptly and accurately filled, an empty package, a sample needle, or the type and size number should be forwarded. Use description on label. A complete order would read: "1000 Needles, Type 121 GBS, Size 080/032".

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.

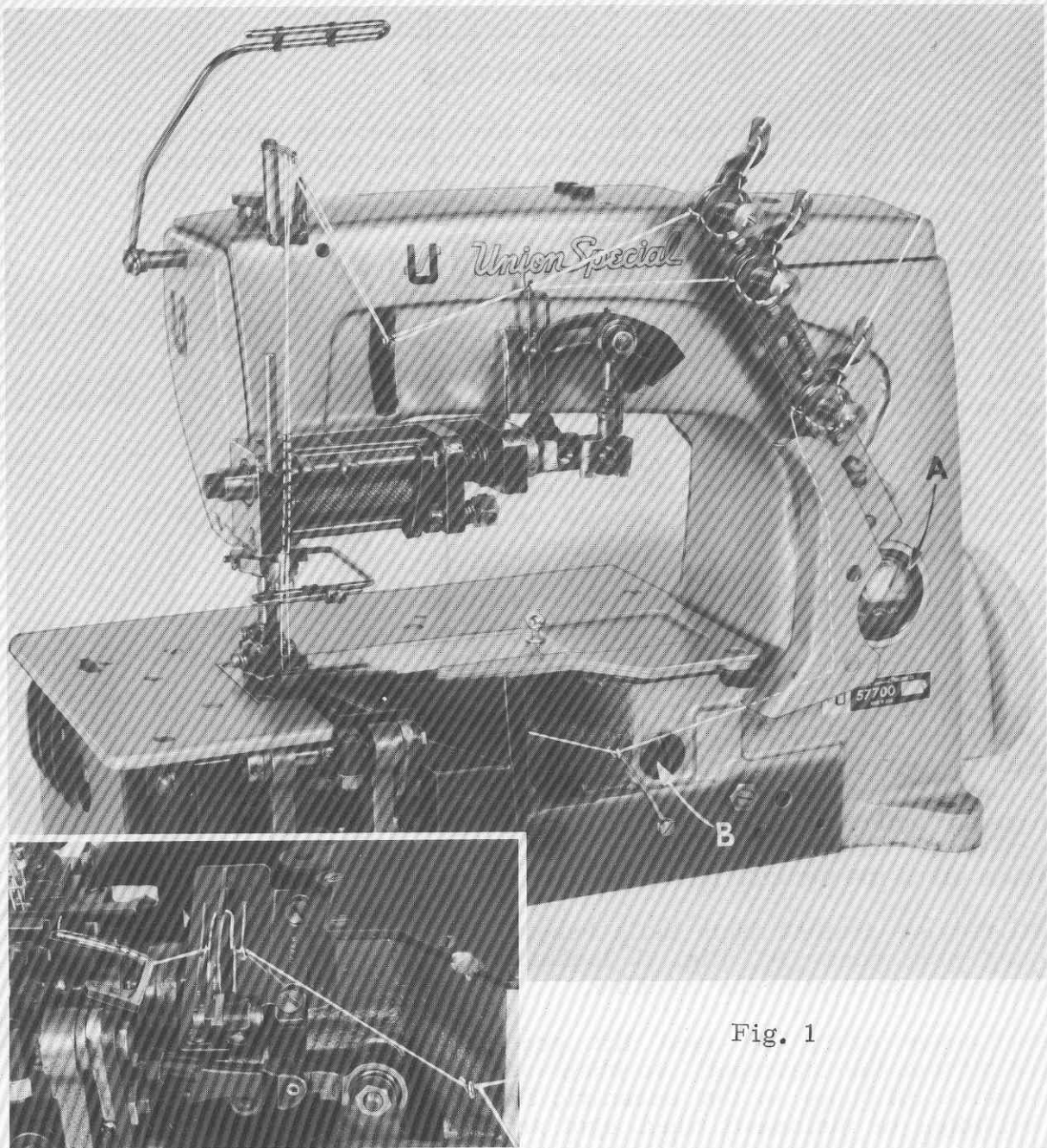


Fig. 1

THREADING AND OILING DIAGRAM

Thread machine as indicated. The looper threading has been enlarged for clarity. The RIGHT needle thread should be threaded through the uppermost thread tensioner and eyelet holes closest to the bed casting. The machine illustrated is a two needle machine, but the three needle machines are threaded in substantially the same manner.

The oil has been drained from the machine before shipping, 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 the needle of oil gauge (A) is in gold 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 gold 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).

INSTRUCTIONS FOR MECHANICS

LUBRICATION

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

RECOMMENDED OIL

Use a straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit in the main reservoir. This is equivalent to Union Special specification No. 175. Fill main reservoir at plug screw in upper crank chamber cover (A, Fig. 2) and check oil level at gauge (B). Oil is at maximum level when needle is in gold band marked "Full". Oil should be added when needle is in gold 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 of time, 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 eccentric lines up with oil holes in mainshaft when spot screw is in timespot. See paragraph on "Changing Stitch Length" for repacking feed rocker sealed greased bearings.

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.

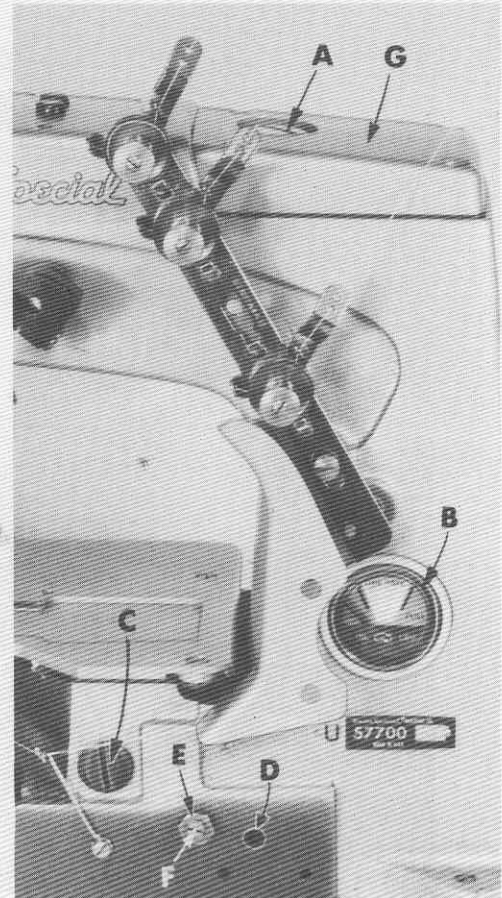


Fig. 2

OIL GAUGE (Continued)

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).
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 gold 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 gold band marked "FULL".

NEEDLE LEVER BEARING OILER



Fig. 3

Remove the head cover and upper crank chamber cover (G, Fig. 2). Check position of needle lever bearing oiler (A, Fig. 3) located inside the arm casting, below the upper crank chamber cover, which lubricates the needle lever stud (B). Make sure it is tilted downwardly and that its delivery end (C) contacts the inside wall of the bed casting at the back, just above the notch of the needle lever shaft stop collar. (Do not allow the oiler to rest on the needle lever). Allow 1/64 inch (.40 mm) clearance as in Figure 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 Styles	Test Plate No.	Right Test Pin No.	Left Test Pin No.
57700 R, T, V	698 BB-8	699 R-8	699 L
57700 S, U	698 BB-16	699 D	699 L

Insert test pin No. 699 L in the left seat of the needle holder and the proper right hand test pin (see chart) should be inserted in the right needle seat. 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 rests on the test plate, when the needle 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 that the needles correspond with the vertical face of the needle guard. To turn needle bar, loosen needle bar clamp screw (B, Fig. 4) and turn bar as required. Tighten clamp screw.

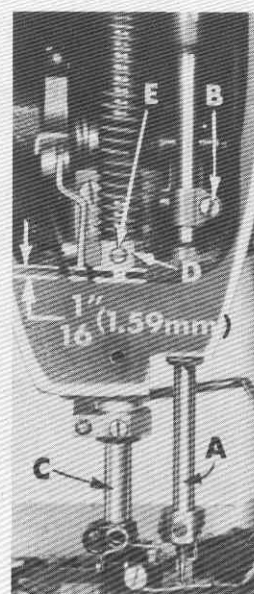


Fig. 4

SYNCHRONIZING LOOPER AND NEEDLE MOTIONS

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

Insert the pin (A, Fig. 5) in the looper rocker. Place the gauge plate (B) on the throat plate seat using the throat plate screws for attaching. Place the shank (C) of the indicator (D) in the needle thread take-up wire hole. Turn the handwheel in operating direction until the pin (A) contacts the edge of gauge plate (B) and set the indicator (D) so that the left end of the pointer (E) rests on top of the needle bar and the right end of the pointer aligns with "0". Tighten the set screw to secure the indicator in this position. Turn the handwheel in the reverse direction until pin (A) again contacts gauge plate (B). 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, the looper drive lever 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 looper in the looper rocker and turn the handwheel in operating direction until the point of the looper, moving to the left, is even with the left side of the right needle. Note the height of the eye of the needle with respect to the looper point, then turn the handwheel in 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 (.13 mm) is allowable. If the distance from the eye of the needle to the point of the looper is greatest when the handwheel is turned in the operating direction, move the looper drive shaft synchronizing stud (A, Fig. 6) to the rear. Moving it in the opposite direction acts the reverse.

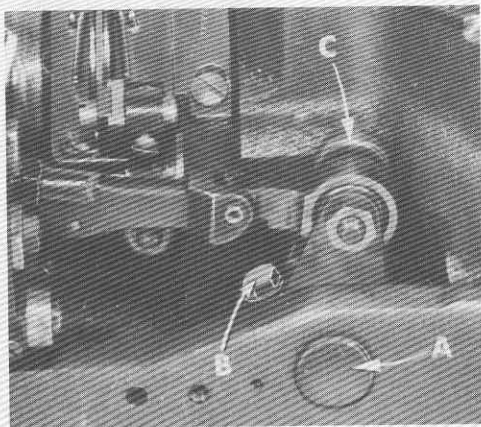


Fig. 6

(C) to take up the end play between the looper drive lever rocker shaft and its synchronizing stud (A), tighten the looper drive lever on the shaft, with clamp screw (B).

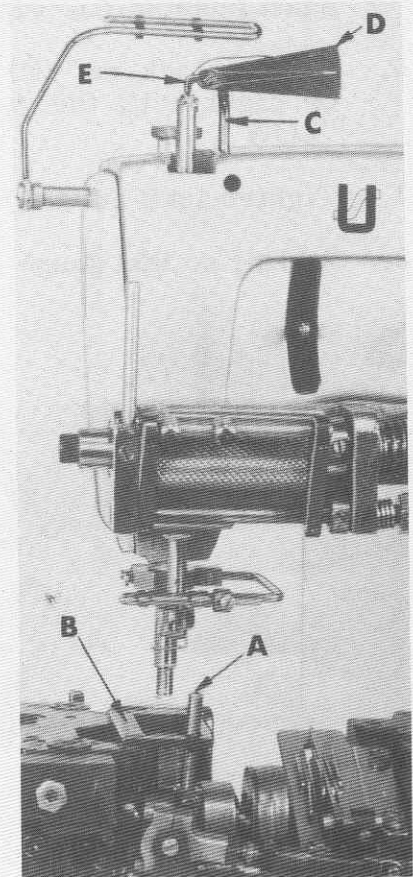


Fig. 5

SYNCHRONIZING LOOPER AND NEEDLE MOTIONS (Continued)

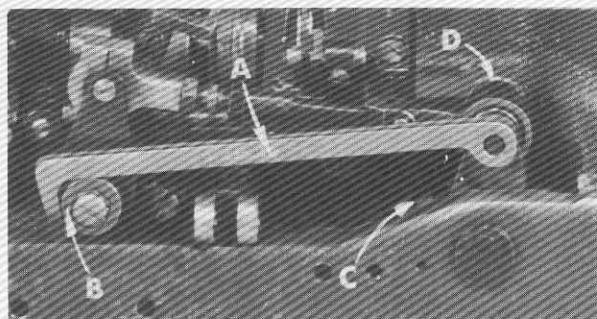


Fig. 7

With the looper at the extreme right end of its travel, check the location of the right looper connecting rod bearing, using gauge No. 21227 DC (A, Fig. 7). Place the hole in gauge over threaded stud and the left inside edge of the gauge should locate against the left side of the looper rocker cone (B). If adjustment is necessary, loosen clamp screw (C), reposition looper drive lever (D) as required and retighten clamp screw.

NOTE: Whenever looper drive lever is repositioned, apply pressure to rear to assure that "O" ring is compressed, preventing oil leakage, and take up all the end play.

SETTING THE LOOPER

Insert a new needle in the right needle seat, type and size as specified. If the looper gauge is $\frac{3}{16}$ inch (4.76 mm), for example, set the looper (A, Fig. 8) so the distance from the center of the right needle (B) to the point of the looper is $\frac{3}{16}$ inch (4.76 mm) when the looper is at its farthest position to the right. Looper gauge No. 21225- $\frac{3}{16}$ can be used advantageously in making this adjustment. Refer to chart for looper gauge setting and looper gauge number applicable to machine Style. If adjustment is required, loosen nut (C) (it has a left hand thread) and nut (D) on connecting rod (E), turn the connecting rod forward or backward to obtain specified dimension. Retighten both nuts, first nut (D) and then nut (C). Make sure the left ball joint is in vertical position and does not bind after adjustment.

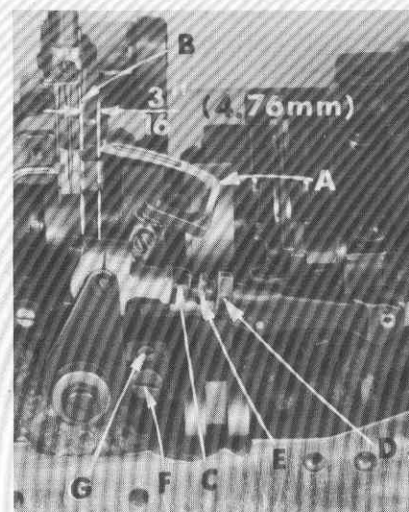


Fig. 8

Machine Style	Looper Gauge Setting	Looper Gauge Number
57700 R-8	$\frac{7}{32}$ inch (5.56 mm)	21225- $\frac{7}{32}$
57700 S-16	$\frac{3}{16}$ inch (4.76 mm)	21225- $\frac{3}{16}$
57700 T-8	$\frac{7}{32}$ inch (5.56 mm)	21225- $\frac{7}{32}$
57700 U-16	$\frac{3}{16}$ inch (4.76 mm)	21225- $\frac{3}{16}$
57700 V-8	$\frac{7}{32}$ inch (5.56 mm)	21225- $\frac{7}{32}$
57700 V-12	$\frac{7}{32}$ inch (5.56 mm)	21225- $\frac{7}{32}$

The looper is set correctly in line-of-feed, if, as it moves to the left, behind the needle, its point brushes, but does not pick at the rear of the needle. If adjustment is necessary, loosen lock screw (F, Fig. 8) and turn stop screw (G) as required. Turning stop screw clockwise sets the looper to the rear and turning it counterclockwise acts the reverse. Holding looper to the front while making this adjustment may prove helpful. Tighten lock screw when setting is obtained and recheck the adjustment.

SETTING HEIGHT OF NEEDLE BAR

The height of the needle bar should be correct if proper test plate and test pins were used to "align" needle bar. If not, the height of the needle is correct when the top of its eye is $\frac{3}{64}$ inch (1.19 mm) below the underside of the looper, with the looper point flush with the left side of the left needle. If adjustment is necessary, loosen screw (B, Fig. 4) and move needle bar (A) up or down as required and retighten screw. Care should be taken not to disturb the alignment of the needle bar when moving it up or down.

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

SETTING THE DIFFERENTIAL FEED DOG (FOR STYLES 57700 T and U)

The differential feed dog should be set to rise the depth of a full tooth or approximately $\frac{3}{64}$ inch (1.19mm) above the throat plate at highest point of travel. Adjustment can be made by loosening screw (A, Fig. 9 or B, Fig. 12), raise or lower feed dog (B, Fig. 9) and retighten screw. At maximum feed travel, the feed dog should clear the forward end of throat plate by $\frac{1}{32}$ inch (.79 mm) Fig. 10; also parallel to the top surface of throat plate and centered in throat plate slot across-the-line-of-feed. Adjustments can be made by loosening set screws (A, Fig. 10 or C, Fig. 12), permitting the differential feed bar (B, Fig. 10 or D, Fig. 12), to be moved forward, backward or rotated as needed to acquire the aforementioned conditions. Under extreme circumstances it may be necessary to shift the complete feed mechanism slightly, to the right or left to meet these conditions. This can be done by loosening collars (C, Fig. 10) and moving feed rocker (D); retighten collars and set screws securely. Make sure the feed rocker arm does not bind after making this adjustment.

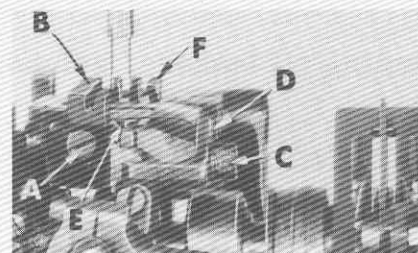


Fig. 9

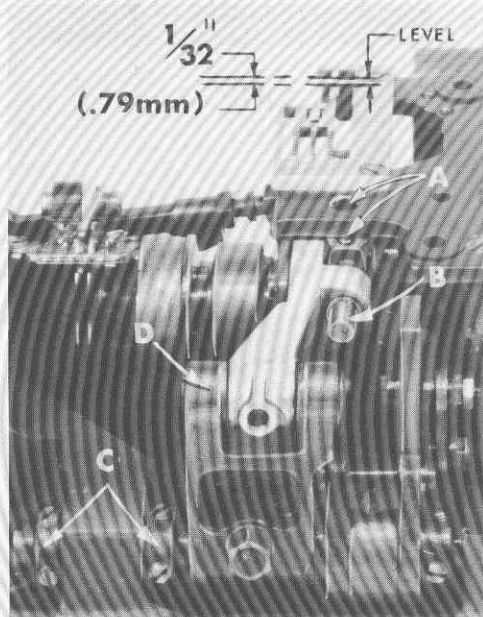


Fig. 10

SETTING THE MAIN FEED DOG (FOR STYLES 57700 T and U)

The main feed dog should also be set to rise the depth of a full tooth above the throat plate at highest point of travel and centered in the slots of throat plate at maximum feed travel.

To raise or lower main feed dog, loosen Allen screw (C, Fig. 9) allowing feed dog holder (D) to be moved. NOTE: Screw (E) must be set to support the main feed dog (F) when specified height is obtained. Retighten screw (C).

NOTE: Any change in the setting of main feed dog height will necessitate a check of the rear needle guard setting.

To center main feed dog in the slots of throat plate across-line-of-feed, loosen screws (A, Fig. 11), move feed dog to the right or left as required, retighten screws. To center the feed dog in-line-of-feed, loosen nut (A, Fig. 12) and move feed rocker forward or backward as needed, retighten nut.

SETTING THE MAIN FEED DOG (Continued) (FOR STYLES 57700 T and U)

NOTE: Recheck differential feed dog setting.

SETTING THE DIFFERENTIAL FEED RATIO (FOR STYLES 57700 T and U)

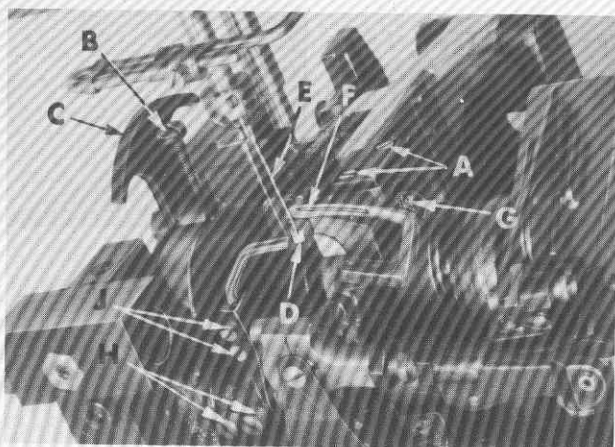


Fig. 11

The differential feed ratio is set by loosening screw (B, Fig. 11) and move the selector slide (C) to the desired position. The screw and selector slide are accessible through the top of the cloth plate on the left side. Moving the differential feed selector slide (C) toward the front increases the amount of differential and moving it toward the rear decreases the amount of differential feed. Retighten screw.

These styles of machines have an infinite stretching ability and a gathering ratio of up to 2 to 1, with the main feed dog set at 9 stitches per inch. Turn machine by hand, making sure the differential feed dog clears the main feed dog at the back end of its stroke.

SETTING THE FEED DOG (FOR STYLES 57700 R, S, V)

Set the feed dog (A, Fig. 13) in the throat plate (B) so there is equal clearance on all sides. See that the tips of the teeth extend the depth of a tooth or approximately $\frac{3}{64}$ inch (1.19 mm) above the throat plate and are parallel with the throat plate at high point of travel. Adjust the supporting screw (C), under the feed dog, to maintain this setting. Screw (D) is used to hold feed dog in position.

If feed dog teeth are not parallel with the throat plate, loosen nut (A, Fig. 14) and turn screw (B) clockwise to lower the front teeth and counterclockwise to raise the front teeth. Retighten nut when feed dog is set properly.

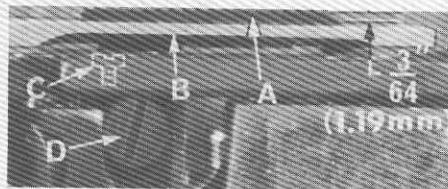


Fig. 13

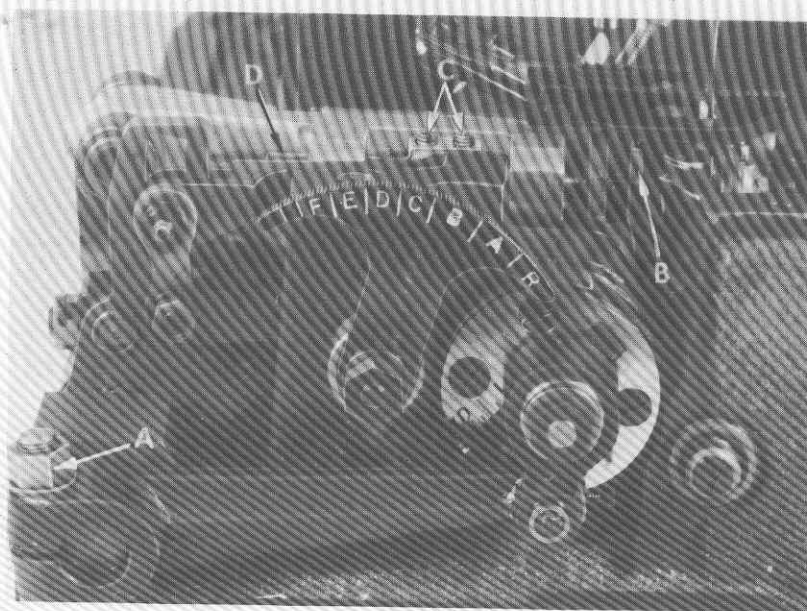


Fig. 12

Should it be necessary to move the feed dog to the left or right, loosen screws (A, Fig. 15), which hold the feed rocker (B) onto the feed rocker shaft (C) and move feed rocker to desired position then retighten the screws. Make sure the feed rocker arm (D) does not bind after making this adjustment.

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

SETTING THE FEED DOG (Continued) (FOR STYLES 57700 R, S, V)

Should it be necessary to move the feed dog forward or backward, loosen nut (E, Fig. 15) which clamps the feed rocker arm to the feed rocker and move feed rocker forward or backward as necessary. Retighten nut.

SETTING THE REAR NEEDLE GUARD (FOR STYLES 57700 T and U)

Set the rear needle guard (D, Fig. 11) horizontally so that it does not quite contact the rear of the right needle (E) when at its most forward point of travel. A clearance of .005 inch (.13 mm) is permissible. It should be set as low as possible, yet have its vertical face approach within about 3/64 inch (1.19 mm) of the needle, until the point of the looper (F), moving to the left, is even with the needle. To move needle guard, merely loosen screw (G), move needle guard as required, and retighten screw.

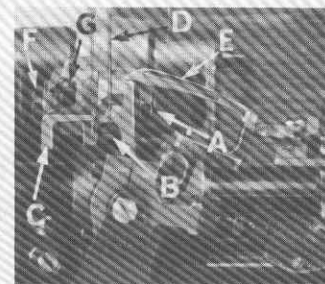


Fig. 14

NOTE: Adjustment of the rear needle guard will necessitate a check of the main feed dog height.

SETTING THE REAR NEEDLE GUARD (FOR STYLES 57700 R, S, V)

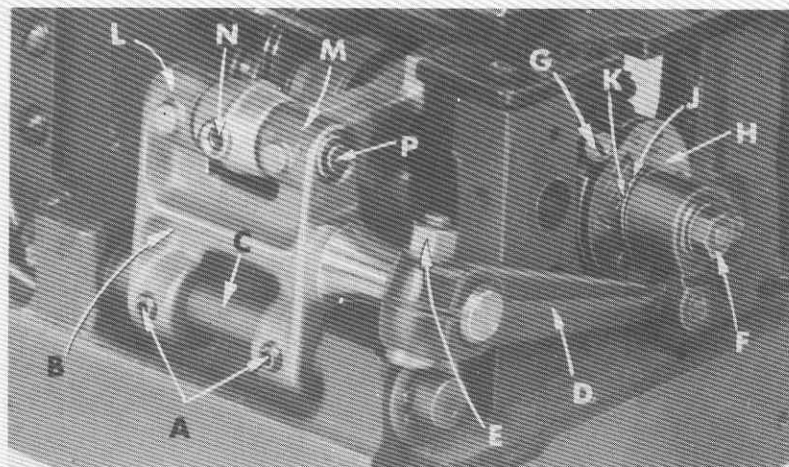


Fig. 15

Set the rear needle guard (C, Fig. 14) horizontally so that it does not quite contact the rear of the right needle (D) when at its most forward point of travel. A clearance of .005 inch (.13 mm) is permissible. It should be set as low as possible, yet have its vertical face approach within about 3/64 inch (1.19 mm) of the needle, until the point of the looper (E), moving to the left, is even with the needle. To move needle guard forward or backward, merely loosen screw (F), move needle guard as required, and retighten screw. To raise or lower needle guard,

loosen screw (F), and turn screw (G) clockwise to lower needle guard and counterclockwise to raise it. Retighten screw (F) after guard is properly set.

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

SETTING FRONT NEEDLE GUARD

Set the front needle guard so that it pushes the left needle back toward the path of the looper as it moves behind the needle. The looper may brush but not pick at the left needle. It should be set as low as possible, yet have its vertical face push the left needle until the point of the looper is just past the left side of the left needle. The front needle guard should not contact the rear needle guard or right needle at any time. To move guard forward or backward, merely loosen screws (H, Fig. 11) move needle guard as required and retighten screws. To raise, lower or rotate needle guard, loosen screws (J), move guard and retighten screws after guard is properly set.

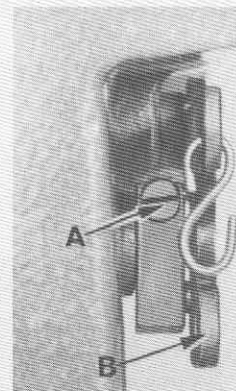


Fig. 16

SETTING FRONT NEEDLE GUARD (Continued)

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

CHANGING STITCH LENGTH

Set the stitch to required length. This is accomplished by loosening lock nut (F, Fig. 15) 1/2 turn (it has a left thread) on the end of the stitch regulating stud and turning the stitch adjusting screw (G) located under the left end of the cloth plate in the head of the main shaft (H) which is marked with "L" and "S". Turning the screw in a clockwise direction shortens the stitch (moves stitch regulating stud toward the "S") and turning it in a counterclockwise direction lengthens the stitch (moves stitch regulating stud toward the "L"). Retighten the lock nut securely. To prevent destructive damage to the feed drive bearing, the key screw (J) must engage the "U" shaped key slot in the ferrule (K).

On Styles 57700 R, S and V, the feed rocker assembly may require lubrication after years of operation at the feed rocker needle bearings (L and M, Fig. 15). This can be accomplished by loosening Allen screw (N) and remove shaft (P). When packing needle bearings, parts must be clean and grease should be applied directly from the tube to avoid contamination. Tube of grease can be supplied under part No. 28604 P. Replace shaft inserting tapered end first and tighten screw (N).

THREAD TENSION RELEASE

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

If adjustment is needed, loosen tension release lever screw (A, Fig. 16) located at the back of the machine and move tension disc separator as required. Retighten screw. After adjustment there should be no binding at any point.

SETTING HEIGHT OF PRESSER BAR

The height of the presser bar (C, Fig. 4) is set correctly if it is possible to remove the presser foot when the foot lifter lever (B, Fig. 16) is fully depressed. Also there should be approximately 1/16 inch (1.59 mm) 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, Fig. 4) 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 (1.59 mm) 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.

METERING DEVICE ADJUSTMENTS

The metering device MUST operate freely with the connecting rod assembly (A, Fig. 17) positioned at any point in the clutch drive lever (B) and the clutch rocker shaft lever (C).

NOTE: Once the metering device has been adjusted properly, the (2) threaded holes in the clutch rocker shaft lever are provided for positioning the connecting rod assembly as near VERTICAL as possible when EXTREME right or left positions in the clutch drive lever are being used.

METERING DEVICE ADJUSTMENTS (Continued)

If adjustment is required, first, check and/or adjust the connecting rod assembly. There should be 2 inches (50.8 mm) between centerline of screw and centerline of ball stud (Fig. 17). Reposition clutch drive lever (B) on the needle lever shaft, up or down as required, so the connecting rod assembly does not bind, moving to either extreme of travel while turning handwheel in the operating direction. The connecting rod assembly should have a SLIGHT SHAKE in all positions. The clutch drive lever may require a slight adjustment when moving connecting rod assembly as described in "NOTE".

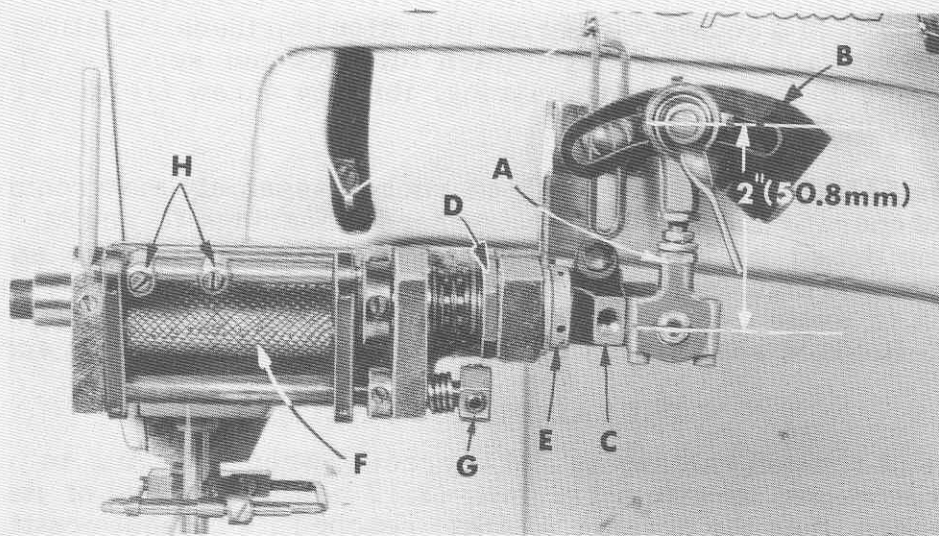


Fig. 17

As sewing conditions require, moving the connecting rod assembly to the left, in the clutch drive lever, increases the amount of elastic being metered; moving it to the right, decreases the amount of elastic being metered.

The clutch brake is set at the factory, though a considerable change in stitch length may necessitate a change in the amount of brake pressure required to eliminate overthrow of the metering device at high speeds. Should adjustment be necessary, loosen nut (D, Fig. 17) and turn bushing (E) clockwise to lessen clutch overthrow (viewed from the handwheel end of machine); turning bushing counterclockwise acts the reverse. NOTE: Apply only enough brake pressure to eliminate overthrow. Too much brake pressure will create excessive heat and wear to the metering device mechanism. Retighten nut (D).

Tension on the metering device pressure roller (F) can be adjusted by loosening set screws and rotating hexagon collar (G) as required, retighten set screws. Normal setting about 1/4 turn.

The tape guides (H) are set correctly when they hold the elastic to the left against the presser foot guide.

UNDERTRIMMER ADJUSTMENTS (FOR ALL STYLES EXCEPT 57700 V)

The lower knife (A, Fig. 18) should be set with cutting edge flush with throat plate surface, at approximately a one degree shear angle (Fig. 18A). Adjustment can be made by loosening hexagonal head screw (B, Fig. 18) permitting lower knife to be moved up or down; loosening (2) screws (C) will allow positioning of lower knife block (D) to obtain the proper shear angle. Never loosen screw (E) for adjusting purposes, it should remain tight at all times. After adjustments are made, tighten screws (B and C) securely.

UNDERTRIMMER ADJUSTMENTS (Continued) (FOR ALL STYLES EXCEPT 57700 V)

The upper knife (F, Fig. 18) should be set to align its cutting edge with the centerline of right needle and to engage lower knife for full cutting length. This can be accomplished by loosening screw (G) permitting upper knife to be moved forward or rearward; loosen screws (H and J) and turn eccentric (K) as required to obtain proper positioning for up and down movements. Retighten screws securely.

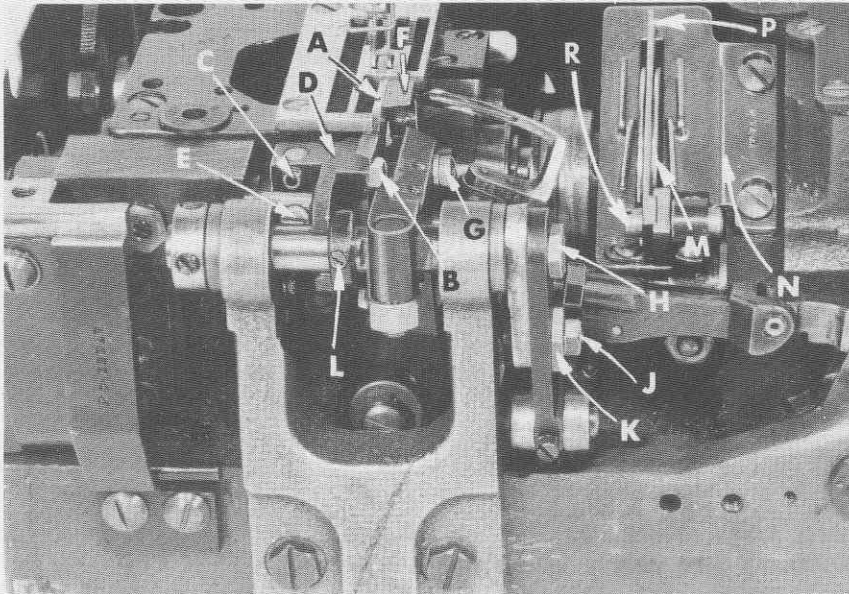


Fig. 18



Fig. 18A

Lower knife is spring pressed against upper knife. Pressure can be increased or decreased by adjusting stud (A, Fig. 19) which is locked by nut (B). Lower knife may be secured in any position by tightening screw (C) and locking nut (D) against support bracket.

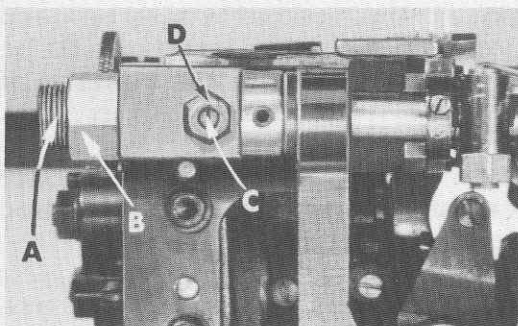


Fig. 19

With upper knife in UP position, set and lock collar (L, Fig. 18) so it barely contacts lower knife block (D).

Set the lower chip chute to clear looper connecting rod and cast-off support plate. Set the upper chip chute to clear the lower chip chute at bottom of stroke and tight against the right side of upper knife.

THREADING

Thread machine as indicated in Fig. 1 and start sewing on a piece of fabric.

THREAD TENSIONS

The tension on the needle threads should be only sufficient to produce uniform stitches on the under surface of the fabric. Tension on the looper thread should be just sufficient to steady the thread.

SETTING THE NEEDLE THREAD FRAME EYELET AND TAKE-UP WIRE

Set the needle threadframe eyelet hole $\frac{3}{8}$ inch (9.52 mm) above the center of its mounting screw. Lower for more needle thread in the stitch, raise for less. Top of the take-up wire should be set even with top of the holes in the needle bar thread eyelet when needle bar is at the bottom of its stroke. Lower this setting for less needle loop, reverse for more loop.

SETTING LOOPER THREAD TAKE-UP

The looper thread take-up (M, Fig. 18) is not spotted on the main shaft and, consequently, can be set to compensate for varying conditions. It is set correctly when the looper thread is just cast off the highest lobe of the take-up when the point of the left needle is clearly visible below the underside of the looper. The cast-off plate assembly (N) is adjustable, and its setting determines the amount of thread pulled off by the take-up. Moving the cast-off plate assembly up towards the bottom of the screw slots causes more thread to be pulled from the cones, and moving the cast-off plate assembly down towards the top of the screw slots causes less thread to be pulled. The cast-off plate assembly is set correctly when the looper thread just becomes taut as the looper reaches its extreme position to the left. Additional looper thread control can be obtained by raising or lowering the retaining finger (P) which is secured by screw (R). The retaining finger should be centered in the take-up disc with its bottom edge set parallel to and approximately $\frac{3}{16}$ inch (4.76 mm) above cast-off plate assembly.

PRESSER FOOT PRESSURE

Regulate the presser spring regulating screw 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. Turning it clockwise increases the pressure, counterclockwise acts the reverse.

ORDERING REPAIR PARTS

ILLUSTRATIONS

This catalog has been arranged to simplify ordering repair parts. Exploded views of various sections of the mechanism are shown so that the parts may be seen in their actual position in the machine. On the page opposite the illustration will be found a listing of the parts with their part number, 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:

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
50	29105 AJ	Looper Driving Lever Crank Assembly -----	1
51	22587 K	Bearing Cap Screw, upper -----	2
52	56343 C	Ball Joint Guide Fork -----	1
53	56343 E	Oil Splasher -----	1
54	22559 A	Bearing Cap Screw, lower -----	2

ORDERING REPAIR PARTS (Continued)

ILLUSTRATIONS

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

At the back of the book will be found a numerical index of all the parts shown in this book. This will facilitate locating the illustration and description when only the part number is known.

IDENTIFYING PARTS

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

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

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

USE GENUINE NEEDLES AND REPAIR PARTS

Success in the operation of these machines can be secured only with genuine UNION SPECIAL Needles and Repair Parts as furnished by the Union Special Corporation, its subsidiaries and authorized distributors. They are designed according to the most approved scientific principles, and are made with utmost precision. Maximum efficiency and durability are assured.

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

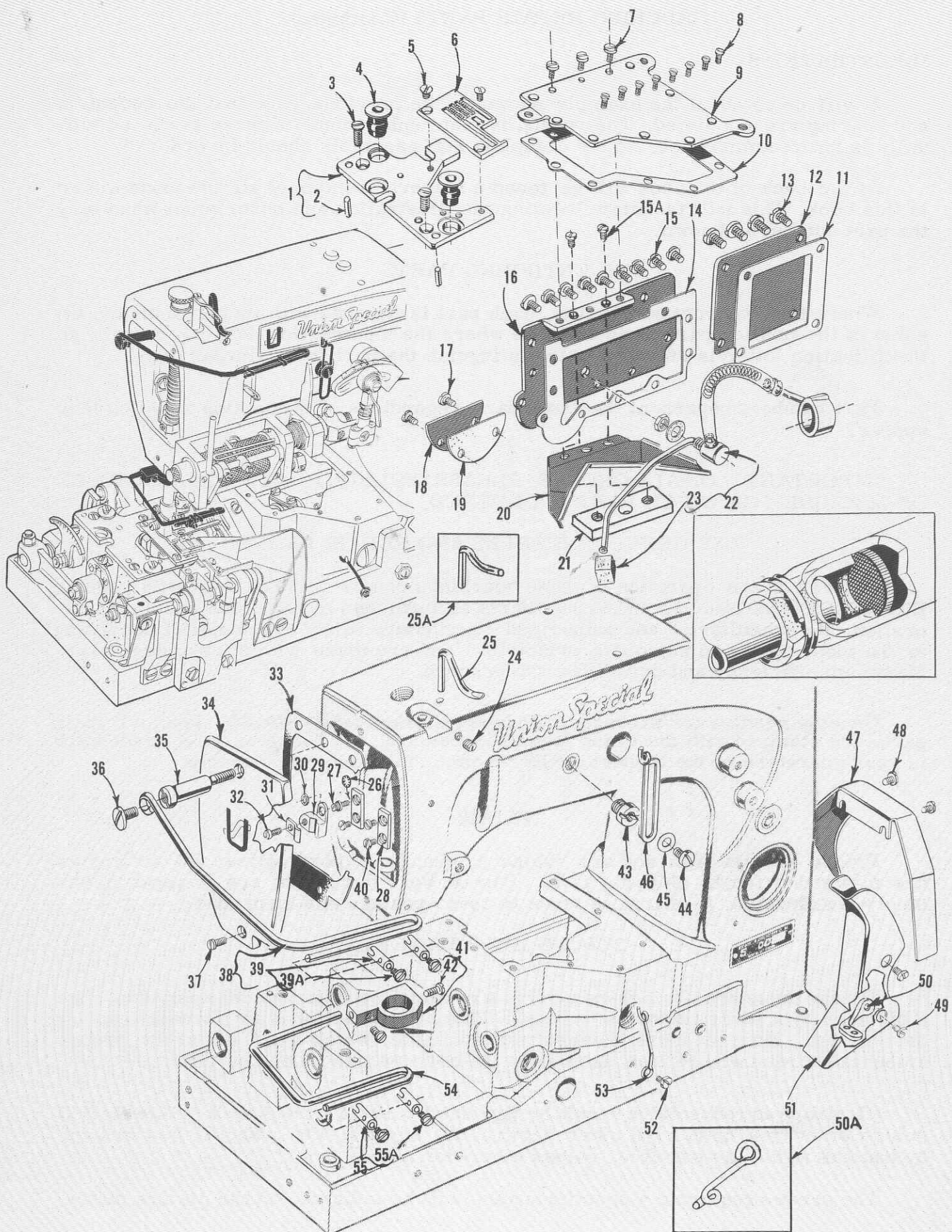
Prices are net cash and are subject to change without notice. All shipments are forwarded f.o.b. shipping point, Parcel Post shipments are insured unless otherwise directed. A charge is made to cover postage and insurance.

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.

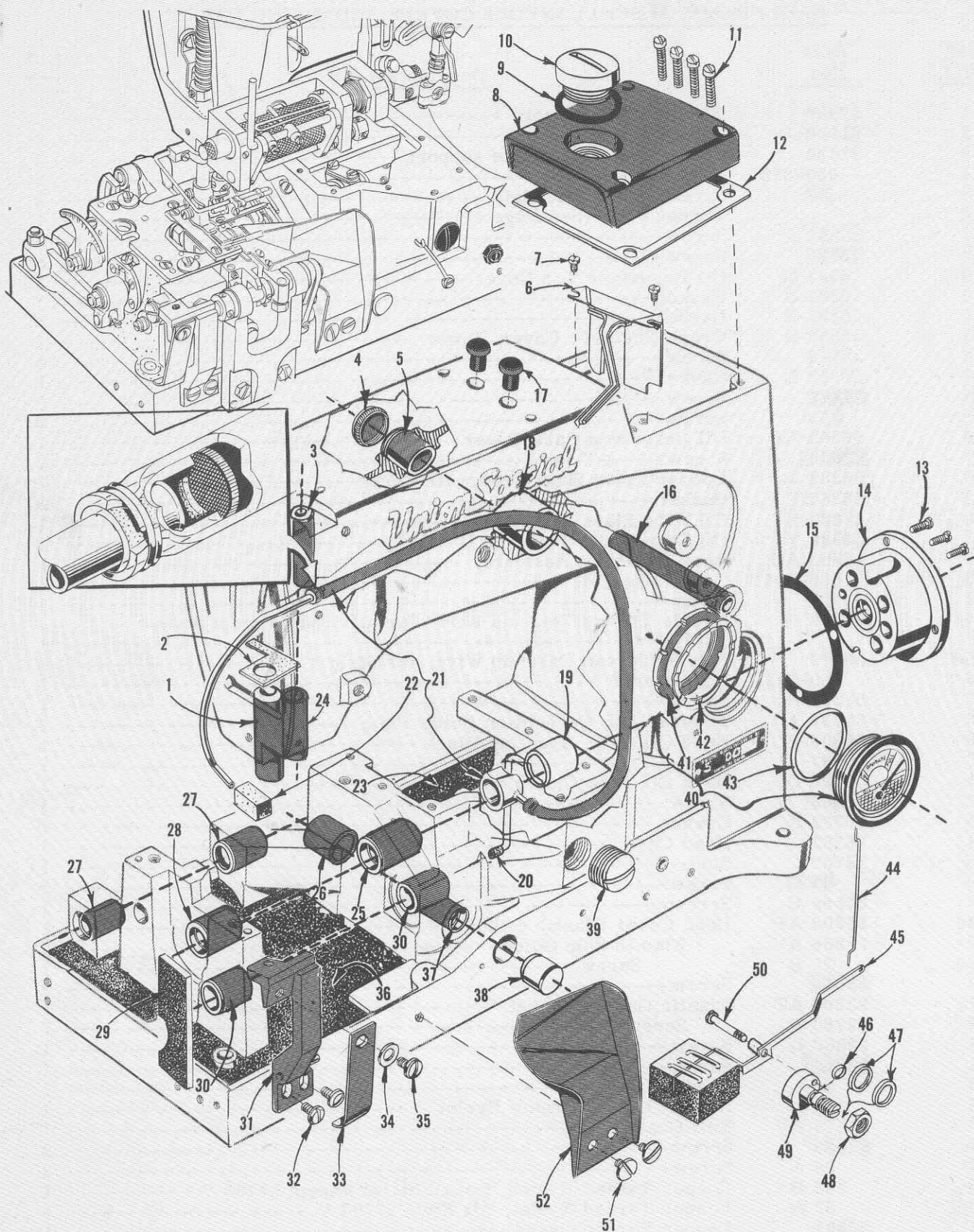
All straps and eccentrics should be tightened to 19-21 inch-pounds (22-24 cm/kg) unless otherwise noted. All other nuts, bolts, screws, etc., should be tightened by hand as tightly as possible, unless otherwise noted.

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



MAIN FRAME, MISCELLANEOUS COVERS AND OILING PARTS

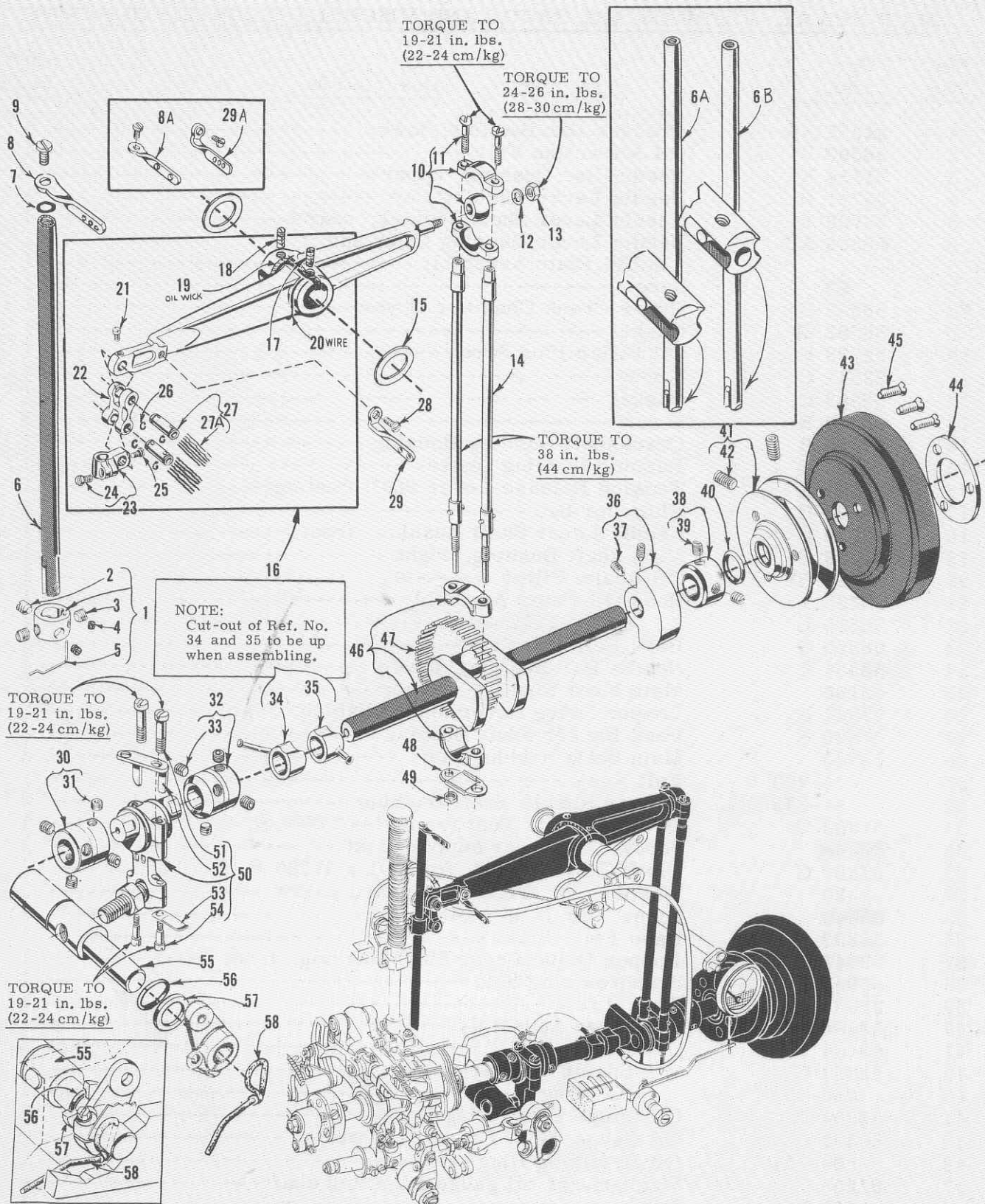
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	57880	Throat Plate Support -----	1
2	51280 J	Dowel Pin -----	2
3	22839	Screw, for throat plate support -----	2
4	660-313	Well Nut -----	2
5	87	Screw, for throat plate -----	2
6		Throat Plate (See Page 41) -----	1
7	22585 A	Screw -----	3
8	22524	Screw -----	8
9	56382 G	Oil Reservoir Top Cover -----	1
10	56382 H	Gasket -----	1
11	56382 E	Gasket -----	1
12	56382 D	Crank Chamber Cover, lower -----	1
13	22548	Screw -----	4
14	56382 L	Gasket -----	1
15	22848	Screw -----	9
15A	357	Screw -----	2
16	56382 AA	Oil Reservoir Back Cover -----	1
17	22829	Screw -----	2
18	56382 J	Looper Drive Shaft Reservoir Cover -----	1
19	56382 K	Gasket -----	1
20	57882 E	Oil Drip Plate -----	1
21	56382 Y	Oil Drip Plate Clamping Block -----	1
22	56393 AC	Base Oil Pump Assembly -----	1
23	666-214	Intake Felt -----	1
24	95	Screw -----	1
25	57770	Needle Thread Take-up Wire, for all Styles except Style 57700 V-8 -----	1
25A	56470	Needle Thread Take-up Wire, for Style 57700 V-8 -----	1
26	660-342	Lockwasher -----	1
27	51294 R	Screw -----	1
28	35731 A	Presser Bar Connection Guide Plate -----	2
29	56393 C	Head Oil Tube Mounting Block -----	1
30	7947	Nut -----	1
31	56393 D	Head Oil Tube Clamp -----	1
32	22585	Screw -----	1
33	56382 N	Gasket -----	1
34	56382	Head Cover -----	1
35	52782 C	Stud -----	1
36	88 D	Screw -----	1
37	22569 C	Screw -----	1
38	23306 AP	Head Cover Elastic Guide -----	1
39	23306 AV	Elastic Stop Guide -----	2
39A	25 B	Screw -----	1
40	22513	Screw -----	3
41	23306 AT	Elastic Guide Bracket -----	1
42	22768 B	Screw -----	2
43	22889 G	Screw -----	1
44	22848	Screw -----	1
45	20	Washer -----	1
46	539	Needle Thread Frame Eyelet -----	1
47	21375 AV	Belt Guard -----	1
48	22829	Screw -----	2
49	98 A	Screw -----	2
50	158 B	Looper Thread Eyelet, for all Styles except 57700 V -----	1
50A	52 A	Looper Thread Eyelet, for Style 57700 V -----	1
51	56391	Looper Thread Guard -----	1
52	98 A	Screw -----	1
53	52958 B	Looper Thread Eyelet -----	1
54	23306 AU	Elastic Guide -----	1
55	23306 AV	Elastic Stop Guide -----	2
55A	25 B	Screw -----	1



MAIN FRAME, BUSHINGS, OIL GAUGE AND MISCELLANEOUS OILING PARTS

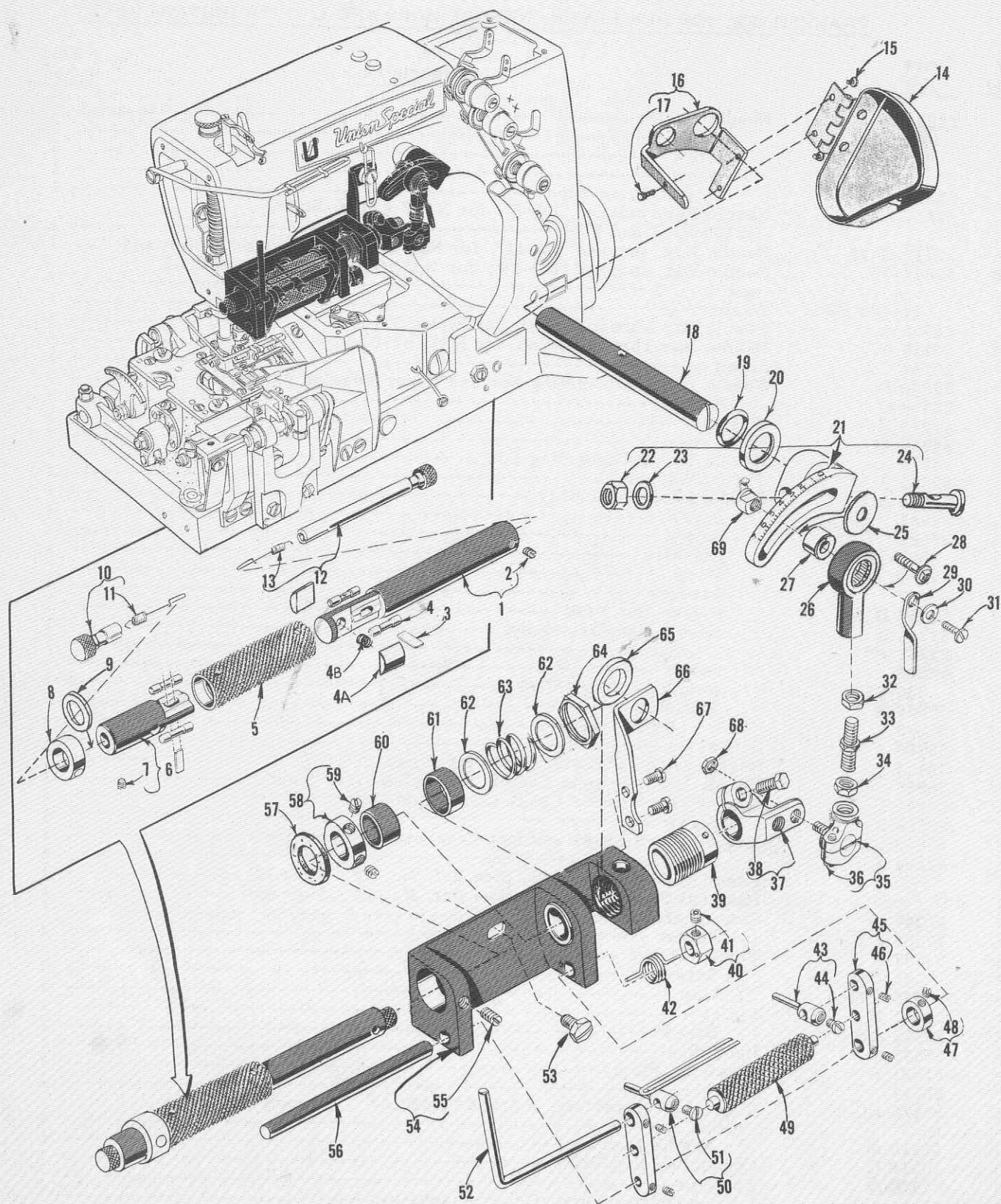
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	51257 AA	Presser Bar Bushing, lower -----	1
2	56393 W	Oil Attraction Felt -----	1
3	51154 E	Needle Bar Bushing, upper -----	1
4	35761 B	Needle Lever Bushing Cap -----	1
5	57750 A	Needle Lever Shaft Bushing, rear -----	1
6	56382 AC	Needle Lever Bearing Oiler and Baffle Plate Assembly -----	1
7	90	Screw -----	2
8	56382 B	Upper Crank Chamber Cover -----	1
9	56382 M	Gasket -----	1
10	22733 E	Oil Filler Plug Screw -----	1
11	22541 C	Screw -----	4
12	56382 C	Gasket -----	1
13	22569 B	Screw -----	3
14	56390 B	Crankshaft Bushing Housing -----	1
15	56390 E	Bushing Housing Gasket -----	1
16	21657 X	Tension Release Lever Shaft Bushing -----	1
17	63494 B	Plug, for bed -----	2
18	52750 B	Needle Lever Shaft Bushing, front -----	1
19	56390 G	Main Shaft Bushing, right -----	1
20	35897 BV	Oil Intake Filter -----	1
21	56393 T	Head Oil Pump Assembly -----	1
22	56393 L	Intake Felt -----	1
23	56393 Q	Base Felt, rear -----	1
24	56354 C	Needle Bar Bushing, lower -----	1
25	56190	Main Shaft Bushing, center -----	1
26	57842 B	Looper Drive Lever Shaft Bushing, rear -----	1
27	57836 B	Feed Rocker Shaft Bushing -----	2
28	56390	Main Shaft Bushing, left -----	1
29	666-259	Felt -----	1
30	50-895 Blk.	Looper Rocker Shaft Bushing -----	2
31	57882 C	Cover Support Post for Styles 57700 R, S, T and U ----	1
32	22848	Screw, for cover support post -----	2
33	57882 G	Cloth Guard, front, for Styles 57700 R, S, T and U ----	1
34	20	Washer, for front cloth guard screw -----	1
35	22848	Screw, for front cloth guard -----	1
36	56393 P	Base Felt, front -----	1
37	52942 W	Looper Drive Lever Shaft Bushing, front -----	1
38	52942 Y	Synchronizing Stud -----	1
39	22539 R	Plug Screw -----	1
40	63494 K	Oil Gauge Assembly -----	1
41	63494 F	Nut -----	1
42	63494 G	Spring Washer -----	1
43	660-455	"O" Ring -----	1
44	56394 B	Oil Gauge Connecting Rod -----	1
45	56394 C	Oil Gauge Float Lever Assembly -----	1
46	660-221	Oil Retaining Ring -----	1
47	61256 G	Washer, for oil gauge adjusting shaft -----	2
48	11635 B	Nut -----	1
49	56394 A	Oil Gauge Adjusting Shaft -----	1
*50	22793	Screw -----	1
51	22711	Screw, for lower chip guard -----	2
52	57779	Chip Guard, lower, for Styles 57700 R, S, T and U ----	1

* Screw No. 22793 is used in place of part Nos. 27-527 Blk. and 61494 G on late model machines.



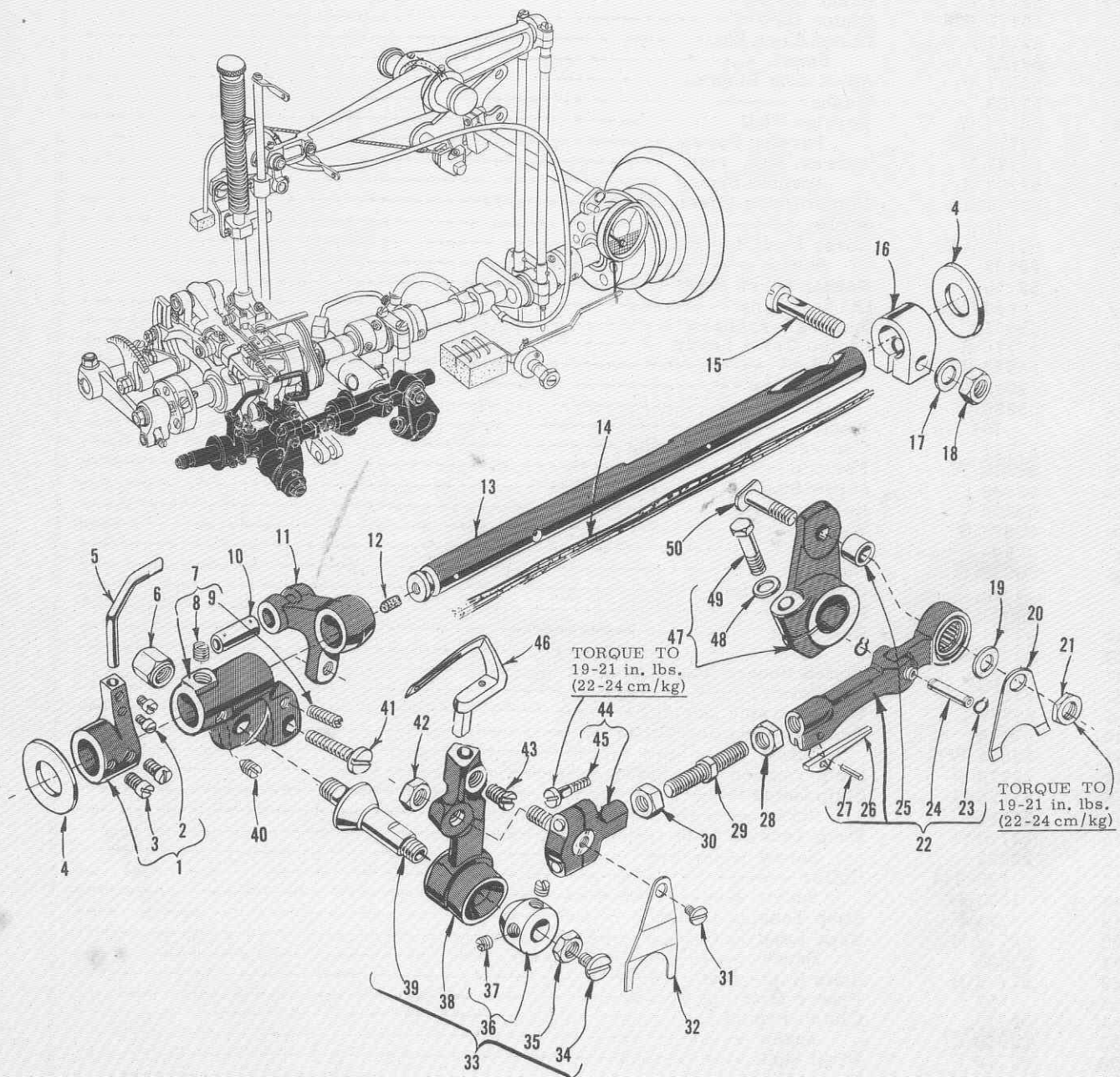
CRANKSHAFT, NEEDLE LEVER, NEEDLE BARS AND LOOPER DRIVING PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	52818-8	Needle Holder -----	1
2	89	Screw -----	1
3	88 B	Screw -----	2
4	28 B	Screw -----	1
5	52842 G	Thread Guide Wire -----	1
6	52817 E-8	Needle Bar, marked "BG-8", for No. 8 gauge, Styles 57700 R, T and V -----	1
6A	52717 E-12	Needle Bar, marked "EJ-12", for No. 12 gauge, Styles 57700 R and V --	1
6B	52817-16	Needle Bar, marked "BD-16", for No. 16 gauge, Styles 57700 S and U -----	1
7	27-435 Blk.	Washer -----	1
8	56958 A	Needle Bar Thread Eyelet, for Styles 57700 R, S, T and U -----	1
8A	56458 A	Needle Bar Thread Eyelet, for Style 57700 V -----	1
9	22768	Screw -----	1
10	29066 R	Needle Lever Connecting Rod and Upper Bearing Assembly -----	1
11	22559 G	Screw -----	2
12	51216 N	Washer -----	1
13	51216 P	Nut -----	1
14	56316	Needle Lever Connecting Rod -----	2
15	62295 A	Thrust Washer -----	2
16	29348 AG	Needle Lever Assembly -----	1
17	HA81	Screw -----	1
18	22591	Screw -----	1
19	666-123	Oil Wick -----	1
20	WI-3	Wire -----	-
21	77	Screw -----	1
22	56354 D	Needle Bar Link -----	1
23	51254 K	Needle Bar Connection -----	1
24	22562 A	Screw -----	1
25	22564	Screw -----	1
26	660-215	Retaining Ring -----	4
27	52336 A	Link Pin -----	2
27A	WO-3	Yarn -----	6
28	22768	Screw -----	1
29	56458	Needle Lever Thread Eyelet, for Styles 57700 R, T, and V -----	1
29A	56958	Needle Lever Thread Eyelet, for Styles 57700 S and U -----	1
30	56343 D	Looper Drive Lever Crank Connection, left -----	1
31	22894 X	Screw -----	4
32	52943 L	Looper Drive Lever and Crankshaft Connection, right -----	1
33	22894 X	Screw -----	4
34		Base Oil Pump Assembly (See Ref. No. 22 - Page 19) -----	1
35		Head Oil Pump Assembly (See Ref. No. 22 - Page 21) -----	1
36	51247	Crankshaft Counterweight -----	1
37	22894 J	Screw -----	2
38	51147	Thrust Collar -----	1
39	95	Screw -----	2
40	660-202	"O" Ring -----	1
41	56321 H	Pulley -----	1
42	22894 AB	Screw -----	2
43	57821	Handwheel -----	1
44	61321 L	Retaining Plate -----	1
45	22574	Screw -----	3
46	29476 LL	Crankshaft Assembly, marked "56322 A", .910 inch (23.11 mm) throw -----	1
47	51216 M	Needle Bearing -----	28
48	56316 C	Connecting Rod Guide -----	1
49	12934 A	Nut -----	1
50	29105 AJ	Looper Driving Lever Crank Assembly -----	1
51	22587 K	Bearing Cap Screw, upper -----	2
52	56343 C	Ball Joint Guide Fork -----	1
53	56343 E	Oil Splasher -----	1
54	22559 A	Bearing Cap Screw, lower -----	2
55	52942 A	Looper Drive Lever Rocker Shaft -----	1
56	660-202	"O" Ring -----	1
57	56342 B	Spacing Collar -----	1
58	CL21	Oil Wick -----	1



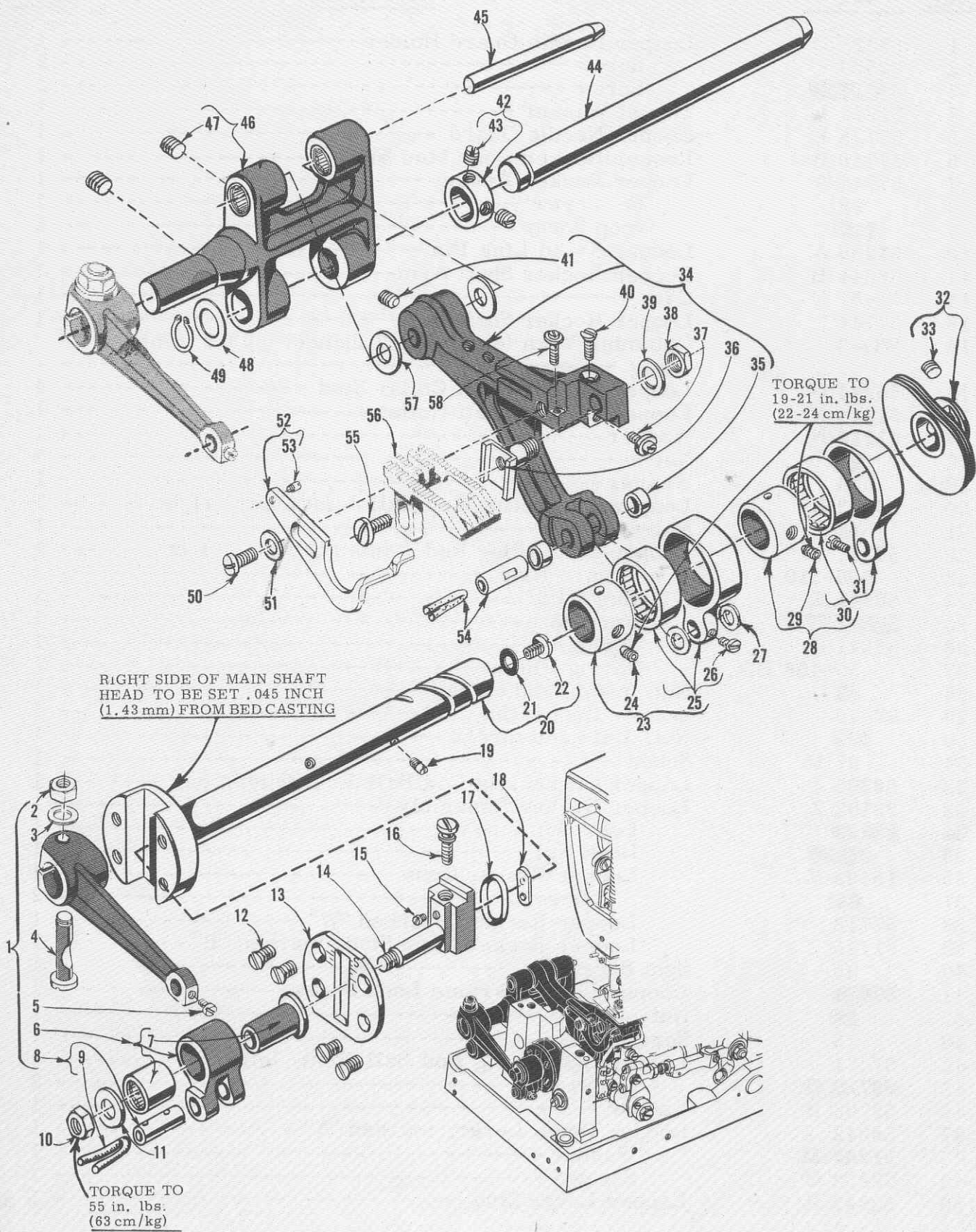
UPPER METERING DEVICE AND DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	52776 P	Clutch Drive Shaft -----	1
2	22743	Screw -----	1
3	52777 Y	Torison Rod Pressure Plate -----	2
4	52777 Z	Clutch Roller -----	4
4A	52777 T	Fiber Brake -----	2
4B	52777 U	Brake Spring -----	1
5	52777 R	Clutch Barrel -----	1
6	52777 S	Clutch Lock Shaft -----	1
7	22743	Screw -----	1
8	52777 P	Adjustable Bushing -----	1
9	57783	Washer -----	1
10	52777 W	Torsion Rod, left -----	1
11	52777 AE	Torsion Spring -----	1
12	52777 V	Torsion Rod, right -----	1
13	52777 X	Torsion Spring -----	1
14	52777 AA	Clutch Drive Cover, hinged -----	1
15	J87 J	Screw -----	2
16	52777 AC	Cover Mounting Plate -----	1
17	22703	Screw -----	1
18	52750	Needle Lever Shaft -----	1
19	660-202	Oil Seal Ring -----	1
20	52951	Spacing Washer -----	1
21	57776 A	Clutch Drive Lever -----	1
22	55235 E	Nut -----	1
23	6042 A	Washer -----	1
24	55235 D	Stud -----	1
25	40-C193	Washer -----	1
26	57741	Connecting Rod Bearing -----	1
27	56341 F	Ferrule -----	1
28	22889 E	Screw Stud -----	1
29	52776 V	Release Lever -----	1
30	53678 N	Washer -----	1
31	22804	Screw -----	1
32	43242 P	Nut, left thread -----	1
33	59348 C	Connecting Rod -----	1
34	15037 A	Nut -----	1
35	57741 A	Ball Joint, lower -----	1
36	22729 C	Screw -----	2
37	57776	Clutch Rocker Shaft Lever -----	1
38	22852	Screw -----	1
39	57777 C	Clutch Frame Bushing -----	1
40	57778	Tension Adjusting Collar -----	1
41	22894 W	Screw -----	1
42	52778 P	Strip Tension Link Spring -----	1
43	52778 D	Strip Guide -----	1
44	22562	Screw -----	1
45	52778 N	Strip Tension Link -----	2
46	22733	Screw -----	2
47	39-141	Collar -----	1
48	1022 L	Screw -----	1
49	52778 F	Strip Tension Roller -----	1
50	52778 W	Tape Lead-in Guide -----	1
51	22562	Screw -----	1
52	57778 B	Strip Guide Shaft -----	1
53	627	Frame Mounting Screw -----	1
54	57777	Clutch Frame -----	1
55	22560 A	Screw -----	1
56	57778 A	Pivot Shaft -----	1
57	57777 H	Brake Disc -----	1
58	57777 J	Brake Disc Collar -----	1
59	22743	Screw -----	2
60	57777 B	Clutch Frame Bushing -----	1
61	57777 F	Sleeve Bearing -----	1
62	57783	Washer -----	2
63	57777 E	Brake Spring -----	1
64	57777 G	Bushing Lock Nut -----	1
65	57777 K	Washer -----	1
66	57777 A	Clutch Frame Bracket -----	1
67	22570 A	Screw -----	2
68	12982	Nut -----	1
69	52776 W	Elastic Metering Pointer -----	1



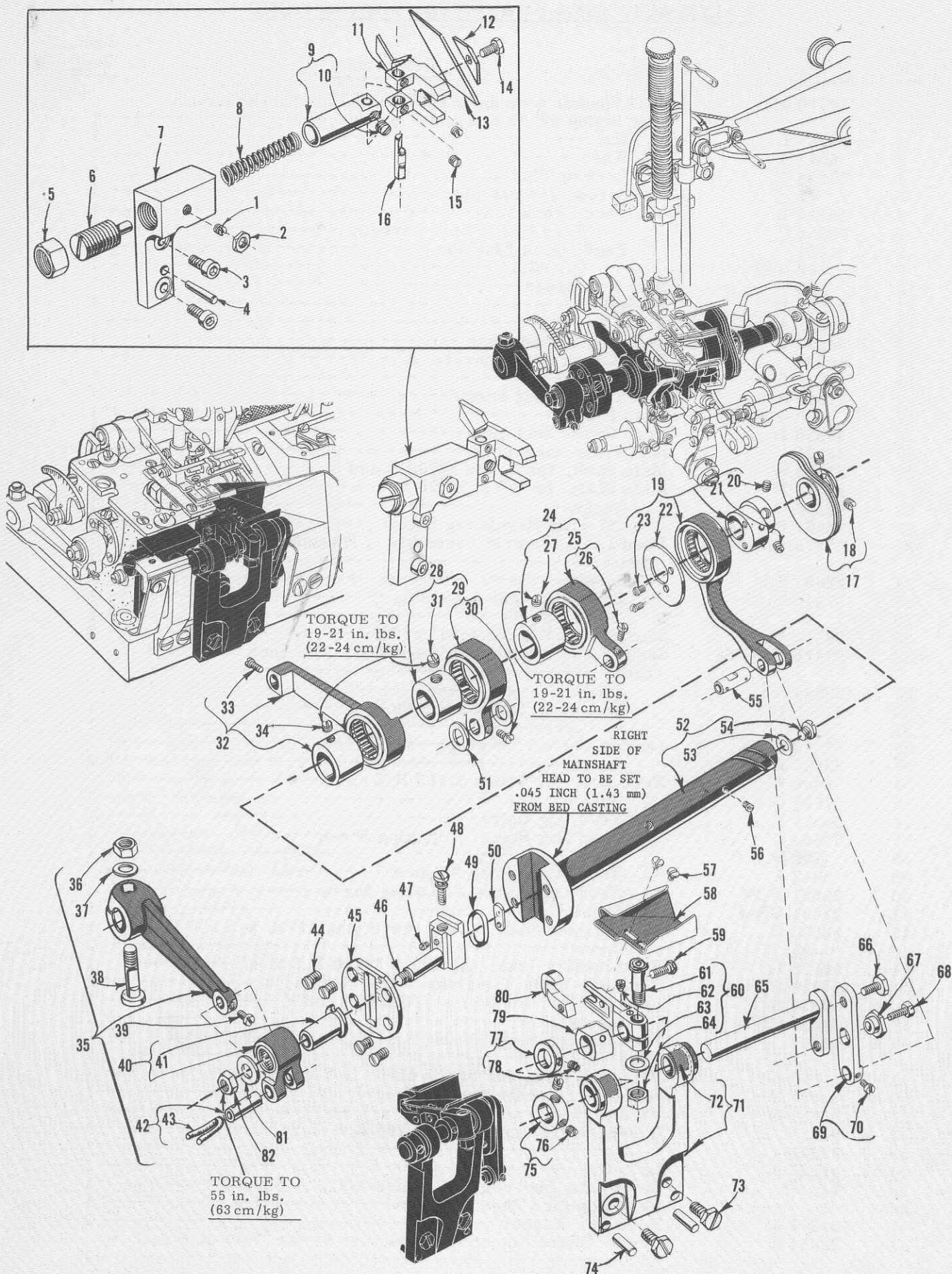
LOOPER ROCKER AND CONNECTING ROD PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	52825 D	Looper Needle Guard Holder -----	1
2	22563	Screw -----	2
3	33174 B	Screw -----	2
4	51244 L	Thrust Washer -----	2
5	57725 B	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	CO-67 E	Cork -----	1
13	57744	Looper Rocker Shaft -----	1
14	WO-3	Columbia Yarn (4 strands 8 inches) (203.2 mm) 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 -----	1
19	20	Washer -----	1
20	56393 K	Looper Connecting Rod Ball Joint Oiler, right -----	1
21	18	Nut -----	1
22	56341 M	Looper Connecting Rod Jointed Section, right -----	1
23	660-310	Truarc Ring -----	2
24	56341 E	Hinge Pin -----	1
25	56341 F	Ferrule -----	1
26	56341 G	Spring -----	1
27	50-458 Blk.	Spring Pin -----	1
28	18	Nut, right hand thread -----	1
29	57840	Looper Connecting Rod -----	1
30	269	Nut, left hand thread -----	1
31	87 U	Screw -----	1
32	56393 J	Looper Connecting Rod Ball Joint Oiler, left -----	1
33	29192 Z	Looper Rocker Assembly -----	1
34	22829	Lock Nut Screw -----	1
35	258 A	Lock Nut -----	1
36	15465 F	Looper Rocker Cone -----	1
37	88	Screw -----	2
38	57713	Looper Rocker, marked "W" -----	1
39	51745	Looper Rocker Cone Stud, marked "B" -----	1
40	96	Spot Screw -----	1
41	22874	Looper Rocker Frame Lock Screw -----	1
42	18	Nut -----	1
43	73	Screw -----	1
44	57841	Looper Connecting Rod Ball Joint, left -----	1
45	22729 C	Screw -----	2
46	52708 B	Looper -----	1
47	56342	Looper Drive Lever, marked "A" -----	1
48	51242 M	Washer -----	1
49	22882 C	Screw -----	1
50	52942 R	Looper Lever Stud -----	1



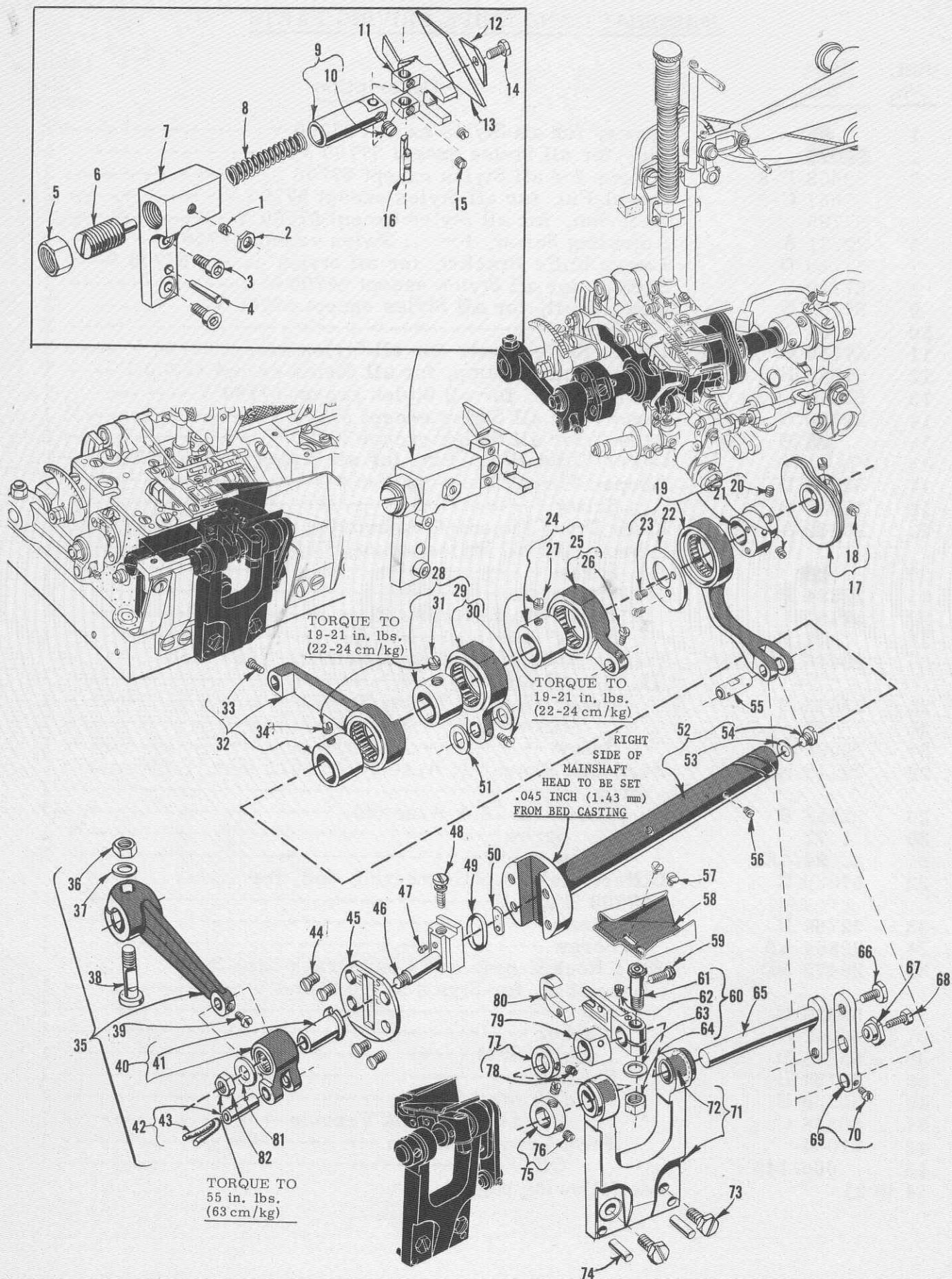
MAIN SHAFT, TAKE-UP AND FEED DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	29476 MJ	Feed Rocker Arm and Feed Crank Link Sub-Assembly, for Styles 57700 R, S and V -----	1
2	55235 E	Nut -----	1
3	6042 A	Washer -----	1
4	55235 D	Locking Stud -----	1
5	77	Screw, for link pin -----	1
6	56336 B	Feed Crank Link -----	1
7	56336 C	Feed Crank Link Ferrule -----	1
8	51054	Feed Crank Link Pin -----	1
9	666-149	Oil Wick -----	1
10	269	Nut, left thread -----	1
11	21657 E	Washer -----	1
12	22525 A	Screw -----	4
13	56322 C	Main Shaft Head Plate -----	1
14	56336	Feed Crank Stud, marked "A" -----	1
15	22798 C	Screw -----	1
16	22543 A	Stitch Regulating Screw -----	1
17	660-269 B	Quad Ring -----	1
18	56336 D	Feed Crank Stud Insert -----	1
19	22801	Screw, for take-up -----	1
20	57722 A	Main Shaft, for Styles 57700 R and S -----	1
-	57722 E	Main Shaft, for Style 57700 V -----	1
21	56322 B	Gasket -----	1
22	22891 B	Oil Flow Regulating Screw -----	1
23	29476 NM-072	Feed Lift Eccentric Assembly, .072 inch (1.83 mm) throw -----	1
24	22894 AA	Screw -----	1
25	57845 B	Eccentric Link Assembly -----	1
26	77	Screw -----	1
27	39543 N	Thrust Washer, for feed bar -----	2
28	29476 NM-062	Looper Avoid Eccentric Assembly, .062 inch (1.58 mm) throw -----	1
29	22894 AA	Screw -----	1
30	57845 B	Eccentric Link Assembly -----	1
31	77	Screw -----	1
32	52923 D	Looper Thread Take-up -----	1
33	22580 D	Screw -----	2
34	56334 N	Feed Bar, for Styles 57700 R, S and V -----	1
35	57834 G	Bushing -----	2
36	56334 L	Feed Dog Holder -----	1
37	22863 C	Feed Dog Holder Adjusting Screw -----	1
38	258 A	Nut -----	1
39	6042 A	Feed Dog Holder Washer -----	1
40	22637 P-24	Feed Dog Height Adjusting Screw -----	1
41	22651 CB-4	Screw -----	1
42	56335 D	Feed Rocker Shaft Collar, for Styles 57700 R, S and V -----	1
43	98	Screw -----	2
44	56335 L	Feed Rocker Shaft, for Styles 57700 R, S and V -----	1
45	56334 B	Feed Bar Shaft, for Styles 57700 R, S and V -----	1
46	56335 G	Feed Rocker, for Styles 57700 R, S and V -----	1
47	22651 CD-4	Screw -----	2
48	41391	Feed Rocker Shaft Thrust Washer, for Styles 57700 R, S and V -----	1
49	660-438	Retaining Ring, for Styles 57700 R, S and V -----	1
50	22875 H	Screw, for needle guard -----	1
51	61434 G	Washer -----	1
52	57725	Needle Guard, for Styles 57700 R, S and V -----	1
53	22801	Screw -----	1
54	51236 A	Link Pin -----	1
55	22528	Screw, for feed dog, for Styles 57700 R, S and V -----	1
56		Feed Dog (See Page 41) -----	1
57	61341 J	Feed Bar Washer -----	2
58	22834 A	Needle Guard Adjusting Screw, for Styles 57700 R, S and V -----	1



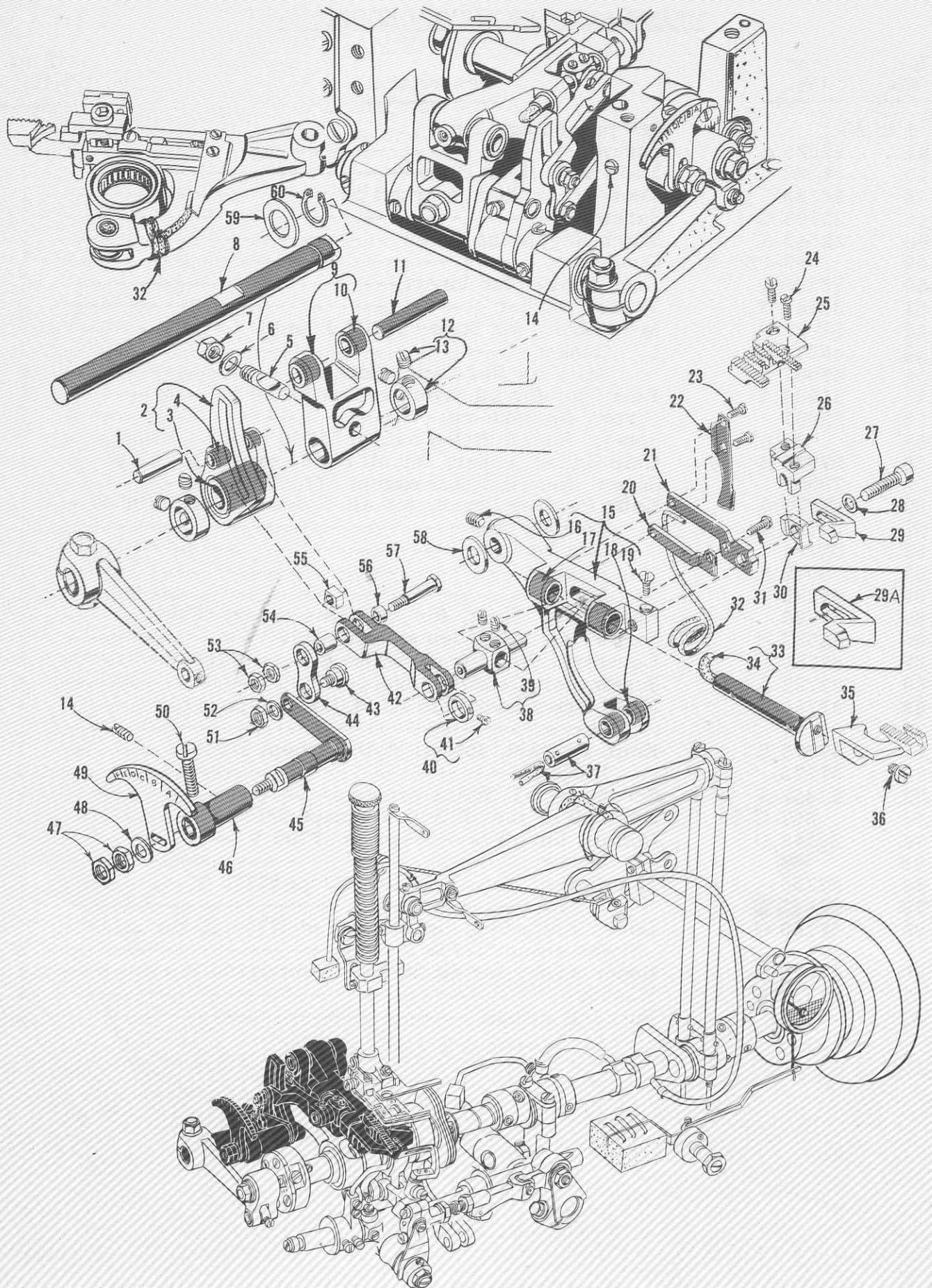
MAINSHAFT AND KNIFE DRIVING PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	89	Screw, for all Styles except 57700 V-----	1
2	14077	Nut, for all Styles except 57700 V-----	1
3	22653 B-8	Screw, for all Styles except 57700 V-----	2
4	667 C-8	Dowel Pin, for all Styles except 57700 V-----	2
5	57795	Lock Nut, for all Styles except 57700 V-----	1
6	22771 A	Adjusting Screw, for all Styles except 57700 V-----	1
7	57750 D	Lower Knife Bracket, for all Styles except 57700 V---	1
8	57740	Spring, for all Styles except 57700 V-----	1
9	57750 E	Guide Shaft, for all Styles except 57700 V-----	1
10	98	Screw-----	1
11	57750 C	Lower Knife Block, for all Styles except 57700 V----	1
12	57950 B	Lower Knife Clamp, for all Styles except 57700 V----	1
13	57949	Lower Knife, for all Styles except 57700 V-----	1
14	22588 A	Screw, for all Styles except 57700 V-----	1
15	88 B	Screw, for all Styles except 57700 V-----	2
16	57750 H	Lower Knife Block Pin, for all Styles except 57700 V -	1
17	52923 D	Looper Thread Take-up-----	1
18	22580 D	Screw-----	2
19	29132 AJ	Knife Drive Eccentric Assembly, .276 inch (7.01 mm) throw, for all Styles except 57700 V-----	1
20	88	Screw-----	2
21	22894 P	Set Screw-----	2
22	57751	Eccentric Retaining Plate-----	1
23	77 P	Screw-----	2
24	29476 NM-062	Looper Avoid Eccentric Assembly, .062 inch (1.58 mm) throw-----	1
25	57845 B	Eccentric Link Assembly-----	1
26	77	Screw-----	1
27	22894 AA	Screw-----	1
28	29476 NM-072	Feed Lift Eccentric Assembly, .072 inch (1.83 mm) throw-----	1
29	57845 B	Eccentric Link Assembly-----	1
30	77	Screw-----	1
31	22894 AA	Screw-----	1
32	57836 E	Differential Feed Connecting Rod, for Styles 57700 T and U-----	1
33	22768 B	Screw-----	1
34	22894 AA	Screw-----	1
35	29476 ND	Feed Rocker Arm and Feed Crank Link Sub- Assembly, for Styles 57700 T and U-----	1
36	55235 E	Nut-----	1
37	6042 A	Washer-----	1
38	55235 D	Locking Stud-----	1
39	22768 B	Screw-----	1
40	56336 B	Feed Crank Link-----	1
41	56336 C	Feed Crank Link Ferrule-----	1
42	51054	Feed Crank Link Pin-----	1
43	666-149	Oil Wick-----	1
44 to 81		See following page	



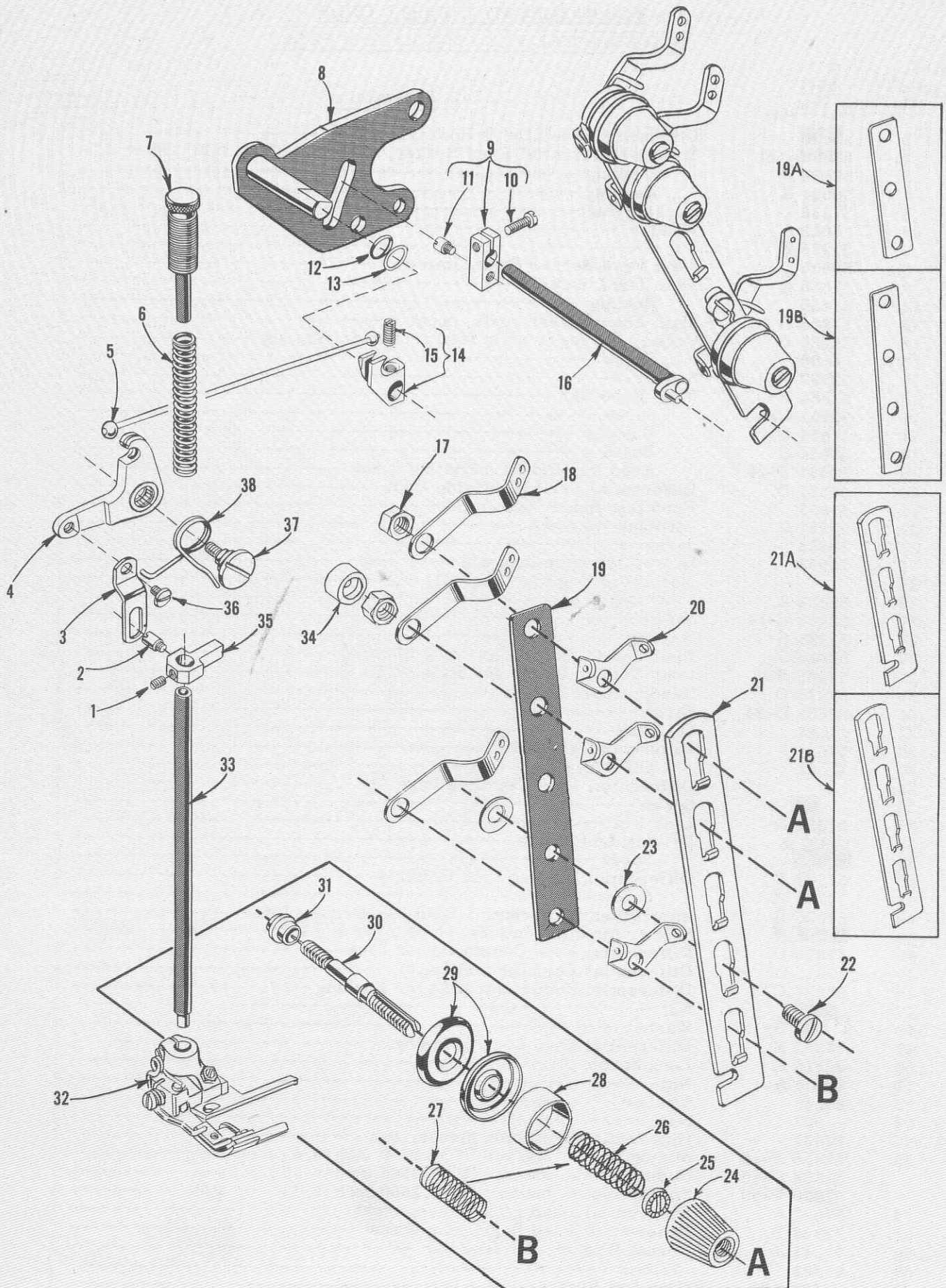
MAINSHAFT AND KNIFE DRIVING PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1 to 43		See preceding page	
44	22525 A	Screw -----	4
45	56322 C	Main Shaft Head Plate -----	1
46	56336	Feed Crank Stud, marked "A" -----	1
47	22798 C	Screw -----	1
48	22543 A	Stitch Regulating Screw -----	1
49	660-269 B	Quad Ring -----	1
50	56336 D	Feed Crank Stud Insert -----	1
51	39543 N	Thrust Washer -----	2
52	57722 B	Main Shaft, for Styles 57700 T and U -----	1
53	56322 B	Gasket -----	1
54	22891 B	Oil Flow Regulating Screw -----	1
55	51236 A	Link Pin, for all Styles except 57700 V -----	1
56	22801	Screw, for take-up -----	1
57	87 U	Screw, for all Styles except 57700 V -----	2
58	57779 A	Chip Guard, upper, for all Styles except 57700 V -----	1
59	79048	Screw, for all Styles except 57700 V -----	1
60	57773 A	Knife Driving Lever, for all Styles except 57700 V --	1
61	57736 A	Locking Stud -----	1
62	22764	Spot Screw -----	1
63	6042 A	Washer -----	1
64	55235 E	Nut -----	1
65	57785	Knife Drive Shaft, for all Styles except 57700 V ----	1
66	22567 B	Screw, for all Styles except 57700 V -----	1
67	57750 B	Eccentric Nut, for all Styles except 57700 V -----	1
68	22782 A	Screw, for all Styles except 57700 V -----	1
69	57750 F	Knife Drive Link, for all Styles except 57700 V -----	1
70	77	Screw -----	1
71	57773 B	Knife Bracket, for all Styles except 57700 V -----	1
72	57773	Bushing -----	2
73	22852 A	Screw, for all Styles except 57700 V -----	2
74	667 C-10	Dowel Pin, for all Styles except 57700 V -----	2
75	39147 D	Collar, for all Styles except 57700 V -----	1
76	88	Screw -----	2
77	57735	Stop Collar, for all Styles except 57700 V -----	1
78	22565 C	Screw -----	1
79	57750 G	Lower Knife Bearing Block, for 57750 C, for all Styles except 57700 V -----	1
80	57770 A	Upper Knife, for all Styles except 57700 V -----	1
81	21657 E	Washer -----	1
82	269	Nut, left thread -----	1



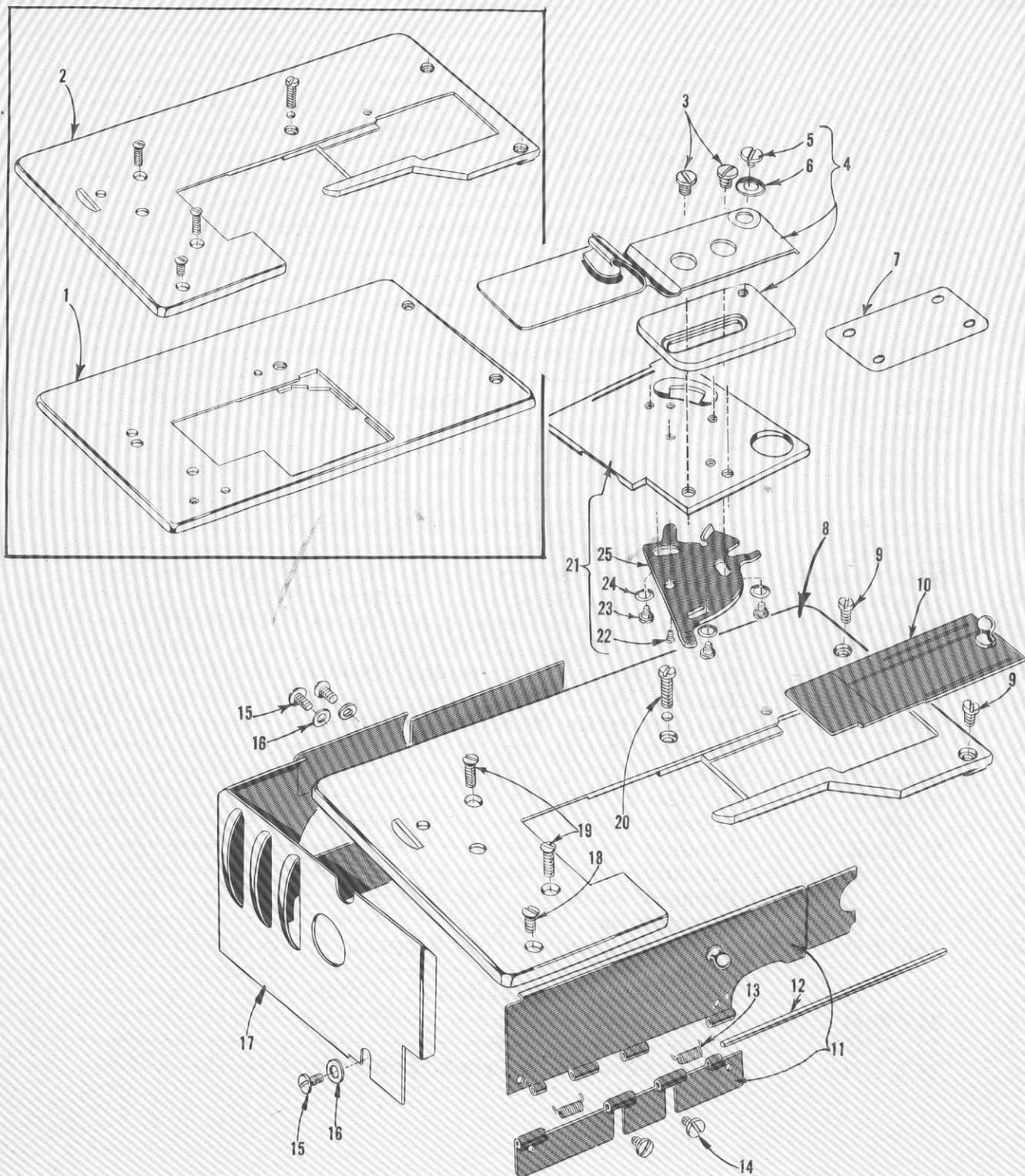
FOR STYLES 57700 T and U ONLY
DIFFERENTIAL FEED MECHANISM PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	57836 G	Differential Feed Drive Rocker Shaft -----	1
2	57806-040	Stretch Differential Feed Rocker, .040 inch (1.02 mm) throw ----	1
3	57836 A	Bushing -----	1
4	56334 R	Bushing -----	2
5	57836 D	Locking Stud -----	1
6	6042 A	Washer -----	1
7	55235 E	Nut -----	1
8	57835	Main Feed Rocker Shaft, lower -----	1
9	57836 C	Main Feed Rocker -----	1
10	57836	Bushing -----	2
11	57834 B	Main Feed Rocker Shaft, upper -----	1
12	56335 D	Collar, for lower main feed rocker driving shaft-----	2
13	98	Screw -----	2
14	22597	Set Screw-----	1
15	57834 F	Main Feed Bar -----	1
16	22651 CB-4	Screw -----	1
17	57834 D	Bushing -----	2
18	57834 G	Bushing -----	2
19	22637 P-24	Feed Dog Height Adjusting Screw-----	1
20	57837 D	Differential Feed Bar Guide Plate -----	1
21	57853	Feed Dog Holder Support -----	1
22	57834 C	Oil Wick Retainer -----	1
23	22593	Screw -----	2
24	22593	Screw, for main feed dog-----	2
25		Main Feed Dog (See Page 41) -----	1
26	52953 A	Feed Dog Holder -----	1
27	22653 B-14	Screw -----	1
28	51235 G	Washer -----	1
29	52825 F	Rear Needle Guard, for Style 57700 T -----	1
29A	52825 B	Rear Needle Guard, for Style 57700 U -----	1
30	52925 D	Needle Guard Holder -----	1
31	22635 E-24	Screw -----	1
32	CL21	Oil Wick-----	2
33	57834 A	Differential Feed Bar -----	1
34	CL21	Oil Wick-----	1
35		Differential Feed Dog (See Page 41) -----	1
36	90	Screw -----	1
37	51236 A	Link Pin -----	1
38	57837 E	Driving Link Guide -----	1
39	22743	Screw -----	2
40	57837 F	Differential Driving Link Collar-----	1
41	22738 B	Screw -----	1
42	57835 B	Intermittent Differential Feed Bar Driving Link-----	1
43	22758 E	Screw, for differential control lever and link -----	1
44	57835 D	Differential Feed Control Lever Link -----	1
45	57835 C	Differential Feed Control Lever -----	1
46	57837 C	Differential Feed Control Lever Bushing -----	1
47	9937	Nut -----	2
48	69 H	Washer -----	1
49	57835 E	Differential Feed Control Indicator -----	1
50	22874 K	Lock Screw -----	1
51	12934 A	Nut -----	1
52	80265	Washer -----	1
53	907	Nut -----	2
54	57837	Differential Feed Link Sleeve, left -----	1
55	57836 F-40	Sliding Block, marked "N", .2540 inch (6.45 mm) wide-----	1
	57836 F-45	Sliding Block, marked "P", .2545 inch (6.46 mm) wide-----	1
	57836 F-50	Sliding Block, marked "R", .2550 inch (6.48 mm) wide-----	1
56	57837 A	Differential Feed Link Sleeve, right -----	1
57	22868 B	Differential Feed Regulating Screw -----	1
58	61341 J	Thrust Washer, for feed bar -----	2
59	41391	Washer -----	1
60	660-438	Tru-Arc Ring -----	1



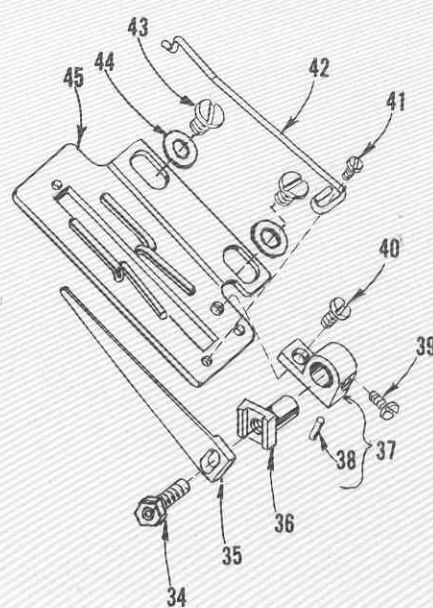
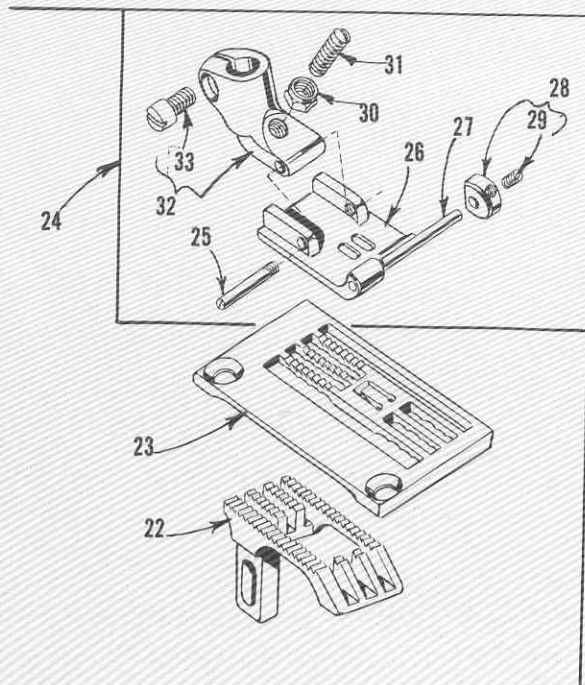
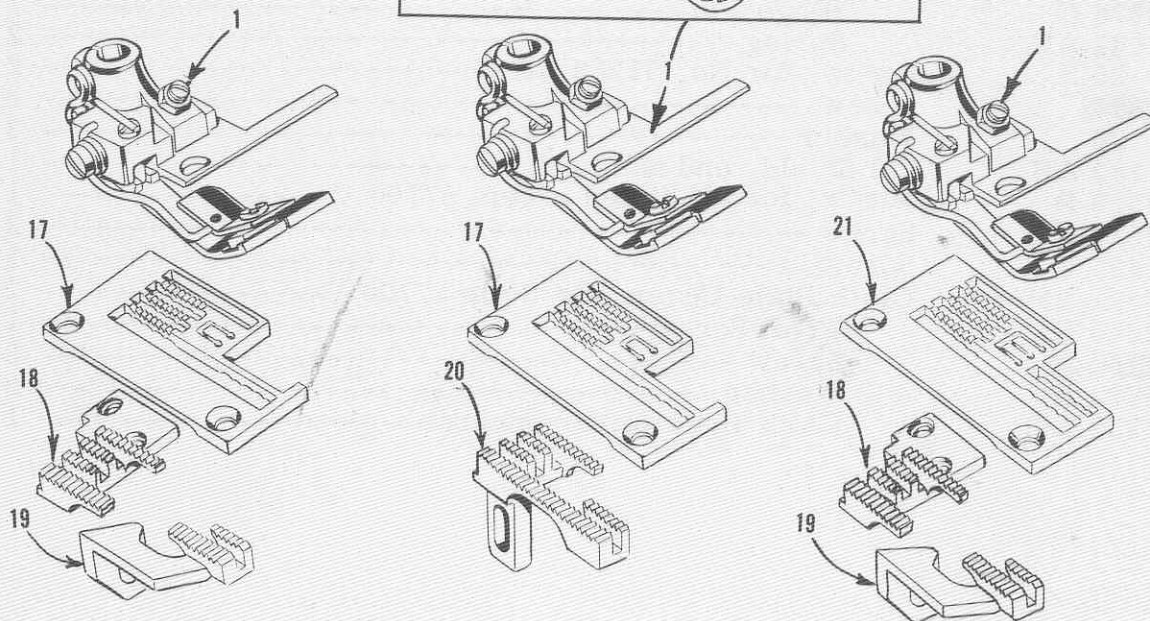
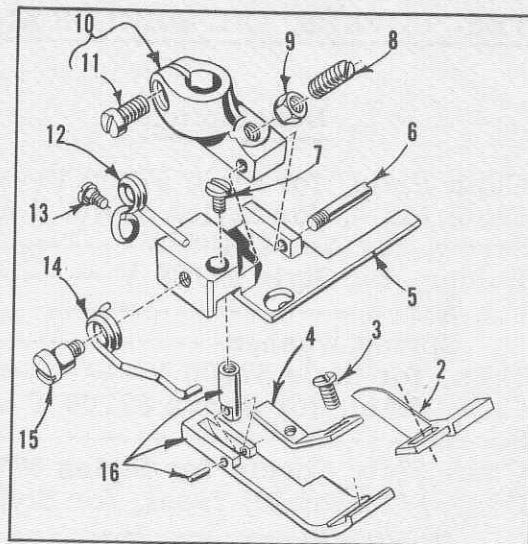
THREAD TENSION AND LIFTER LEVER PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	531	Screw -----	1
2	402	Screw -----	1
3	56383 A	Lifter Lever Link -----	1
4	56383 Y	Lifter Lever Bell Crank -----	1
5	56383 W	Lifter Lever Connecting Cable -----	1
6	51256 C	Presser Spring -----	1
7	56356	Presser Spring Regulator -----	1
8	51283 H	Lifter Lever -----	1
9	21657 Y	Tension Release and Lifter Lever Shaft Connection --	1
10	22596	Screw -----	1
11	402	Screw -----	1
12	660-207	Oil Seal Ring -----	1
13	39552 C	Washer -----	1
14	56383 X	Lifter Lever Connection -----	1
15	74 E	Screw -----	1
16	21657 W	Tension Release and Lifter Lever Shaft -----	1
17	43266	Nut, for tension post -----	2 or 3
18	51491 C	Thread Lead-in Guide -----	3 or 4
19	52992 A	Tension Post Support, for Styles 57700 R and T -----	1
19A	52892	Tension Post Support, for Style 57700 V -----	1
19B	56382 X	Tension Post Support, for Styles 57700 S and U -----	1
20	51292 D	Tension Post Eyelet -----	3 or 4
21	21657 AM-5	Tension Disc Separator, for Styles 57700 R and T ---	1
21A	21657-3	Tension Disc Separator, for Style 57700 V -----	1
21B	21657-4	Tension Disc Separator, for Styles 57700 S and U ---	1
22	22598 C	Screw, for Styles 57700 R and T -----	1
23	80557	Spacing Washer, for Styles 57700 R and T -----	2
24	39592 Z	Tension Nut -----	3 or 4
25	39592 AK	Tension Spring Ferrule -----	2, 3 or 4
26	51292 F-5	Tension Spring, needle -----	2 or 3
27	51292 F-1	Tension Spring, looper -----	1
28	56392 F	Tension Spring Shield -----	3 or 4
29	109	Tension Disc -----	6 or 8
30	56392 E	Tension Post -----	3 or 4
31	51292 A	Tension Post Ferrule -----	3 or 4
32		Presser Foot (See Page 41) -----	1
33	51257 K	Presser Bar, marked "A" -----	1
34	57892 E	Auxiliary Tension Post Support, for Styles 57700 R and T -----	1
35	51257 M	Presser Bar Connection and Guide -----	1
36	22758 C	Screw -----	1
37	22557 G	Screw -----	1
38	56383 D	Lifter Lever Bell Crank Spring -----	1



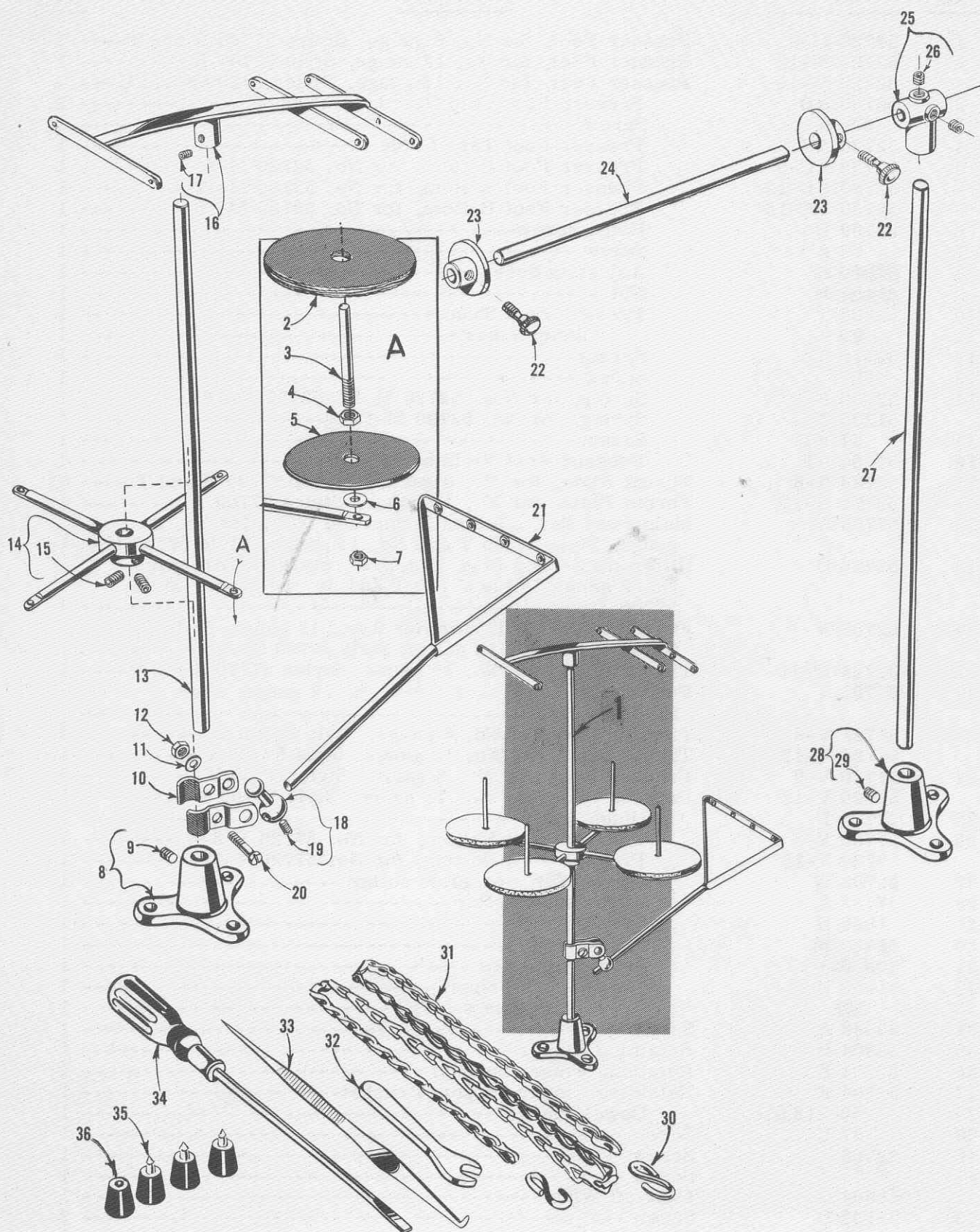
CLOTH PLATES, COVERS, OIL SHIELDS AND FOLDER

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	57701 C	Cloth Plate, for Style 57700 V-----	1
2	57701 A	Cloth Plate, for Styles 57700 R and S -----	1
3	25 C	Screw, for No. 23405 W -----	2
4	23405 W	Folder, for Style 57700 V-----	1
5	22726	Screw -----	2
6	12957 E	Spring Washer-----	2
7	39152 U-6	Shim, for Style 57700 V -----	2
8	57701 B	Cloth Plate, for Styles 57700 T and U -----	1
9	22839 C	Screw -----	2
10	57802 A	Cloth Plate Cover, for Styles 57700 R, S, T and U ---	1
11	51282 AJ	Hinged Oil Shield, front, for Style 57700 V -----	1
12	52978 G	Hinge Pin -----	1
13	51282 AK	Spring -----	2
14	25 S	Screw, for No. 51282 AJ -----	2
15	22848	Screw -----	3
16	20	Washer -----	3
17	51282 AH	Oil Shield, end and back -----	1
18	22526 D	Screw, for all Styles except 57700 V -----	1
19	22526 C	Screw -----	2
20	22839 E	Screw -----	1
21	56381-219	Cloth Plate Cover, for Style 57700 V-----	1
22	22845 B	Pivot Screw -----	1
23	22760 A	Screw -----	3
24	35772 H	Washer -----	3
25	51281 AC	Cloth Plate Cover Spring -----	1



FEED DOGS, THROAT PLATES, PRESSER FEET

Ref. No.	Part No.	Description	Amt. Req.
1	52720 M-8	Presser Foot, for No. 8 gauge, Styles 57700 R and T----	1
-	52720 M-12	Presser Foot, for No. 12 gauge, Style 57700 R -----	1
-	52720 M-16	Presser Foot, for No. 16 gauge, Styles 57700 S and U ---	1
2	52730 AD	Presser Foot Chip Guard, marked "C" -----	1
3	605 A	Screw -----	1
4	52730 AE	Presser Foot Tape Guide -----	1
5	52730 AC-8	Presser Foot Bottom, for No. 52720 M-8 -----	1
-	52730 AC-12	Presser Foot Bottom, for No. 52720 M-12 -----	1
-	52730 AC-16	Presser Foot Bottom, for No. 52720 M-16 -----	1
6	22799 B	Hinge Screw-----	1
7	73 A	Screw -----	1
8	22840 A	Adjusting Screw -----	1
9	51430 F	Nut -----	1
10	52730 T	Presser Foot Shank -----	1
11	91	Clamp Screw -----	1
12	52730 AB	Spring -----	1
13	605	Screw -----	1
14	52730 Y	Spring, for Nos. 52720 M-8 & 52720 M-16 -----	1
-	51230 T	Spring, for No. 52720 M-12-----	1
15	57 WD	Screw -----	1
16	52730 AF	Presser Foot Yielding Section-----	1
17	52728 N-8	Throat Plate, for No. 8 gauge, Styles 57700 R and T ----	1
-	52728 N-12	Throat Plate, for No. 12 gauge, Styles 57700 R -----	1
18	57705 A	Main Feed Dog, 16 t.p.i., marked "ER", for No. 8 gauge, Style 57700 T and No. 16 gauge, Style 57700 U --	1
19	52726 C	Differential Feed Dog, 16 t.p.i., marked "DD", for No. 8 gauge, Style 57700 T and No. 16 gauge, Style 57700 U -----	1
20	52705 N	Feed Dog, 16 t.p.i., for Nos 8 and 12 gauge, Style 57700 R and No. 16 gauge, Style 57700 S -----	1
21	52728 M-16	Throat Plate, for No. 16 gauge, Styles 57700 S and U----	1
22	57705 V	Feed Dog, 16 t.p.i., for Nos. 8, 12 gauge, Style 57700 V -----	1
23	57724 V-8	Throat Plate, for No. 8 gauge, Style 57700 V -----	1
	57724 V-12	Throat Plate, for No. 12 gauge, Style 57700 V -----	1
24	57720 V-8	Presser Foot, for No. 8 gauge, Style 57700 V -----	1
	57720 V-12	Presser Foot, for No. 12 gauge, Style 57700 V -----	1
25	22799 B	Hinge Screw-----	1
26	57730 V-8	Presser Foot Bottom, for No. 57720 V-8-----	1
	57730 V-12	Presser Foot Bottom, for No. 57720 V-12-----	1
27	22799 W	Screw, for tape guide collar -----	1
28	57730 A	Tape Guide Collar -----	1
29	1096 B	Screw -----	1
30	51430 F	Nut-----	1
31	22840 A	Adjusting Screw -----	1
32	51430 D	Presser Foot Shank -----	1
33	91	Clamp Screw -----	1
34	22588 A	Screw -----	1
35	52904 B	Retaining Finger-----	1
36	52804 E	Retaining Finger Support -----	1
37	52904 E	Retaining Finger Support Bracket-----	1
38	50-216 Blk.	Dowel Pin-----	1
39	87 U	Screw -----	1
40	22768	Screw -----	1
41	73 A	Screw -----	1
42	52904 G	Cast-off Wire -----	1
43	22569 D	Screw -----	2
44	69 H	Washer-----	2
45	57757 A	Cast-off Support Plate-----	1



THREAD STAND, ACCESSORIES AND ELASTIC REEL

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	21101 H-4	Thread Stand, complete -----	1
2	21104 V	Pad, for thread cone -----	4
3	21114 W	Spool Pin -----	4
4	258 A	Nut -----	4
5	21114	Spool Seat Disc -----	4
6	652-16	Washer -----	4
7	258 A	Nut -----	4
8	21114 A	Thread Stand Base -----	1
9	22651 CD-4	Screw -----	1
10	21114 U	Lead Eyelet Ball Split Socket -----	2
11	652-16	Washer -----	1
12	21104 H	Nut -----	1
13	21104 B-24	Thread Stand Rod -----	1
14	21114 D-4	Spool Seat Support -----	1
15	22651 CD-5	Screw -----	2
16	21114 H-4	Eyelet Support -----	1
17	22651 CD-4	Screw -----	1
18	21114 T	Lead Eyelet Socket Ball -----	1
19	22651 CD-4	Screw -----	1
20	22810	Screw -----	1
21	21114 S-4	Lead Eyelet -----	1
22	201 C	Thumbscrew -----	2
23	21177 B	Binding Guide Collar -----	2
24	21104 B-14	Elastic Reel Rod -----	1
25	21173 A	Vertical Rod Connection -----	1
26	22650 CD-4	Set Screw -----	2
27	21104 B-24	Elastic Reel Support Rod -----	1
28	21114 A	Elastic Holder Base -----	1
29	22651 CD-4	Screw -----	1
30	660-264	"S" Hook -----	2
31	421 D-34	Treadle Chain, 34 inches (863.60 mm) long -----	1
32	21388	Wrench, 3/8 inch (9.52 mm) open end -----	1
33	660-240	Thread Tweezers -----	1
34	21201	Screwdriver, 9/64 inch (3.58 mm) round blade, length overall 7 5/8 inches (177.8 mm) -----	1
35	51295 B	Isolator -----	3
36	51295 A	Isolator -----	1
-	SC303	Screw, for thread stand and elastic holder base (not shown) -----	6

NUMERICAL INDEX OF PARTS

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
WI-3.....	23	666-123.....	23	22570 A.....	25	23306 AP.....	19
WO-3.....	23, 27	666-149.....	29, 31	22574.....	23	23306 AT.....	19
18.....	27	666-214.....	19	22580 D.....	29, 31	23306 AU.....	19
20.....	19, 21, 27, 39	666-259.....	21	22585.....	19	23306 AV.....	19
CL21.....	23, 35	667 C-8.....	31	22585 A.....	19	23405 W.....	39
25 B.....	19	667 C-10.....	33	22587 K.....	23	29066 R.....	23
25 C.....	39	719.....	27	22588 A.....	31, 41	29105 AJ.....	23
25 S.....	39	907.....	35	22591.....	23	29132 AJ.....	31
27-435 Blk.....	23	1022 L.....	25	22593.....	35	29192 Z.....	27
28 B.....	23	1096 B.....	41	22596.....	37	29348 AG.....	23
39-141.....	25	6042 A.....	25, 29, 31	22597.....	35	29476 LL.....	23
40-C193.....	25		33, 35	22598 C.....	37	29476 MJ.....	29
50-216 Blk.....	41	7947.....	19	22635 E-24.....	35	29476 ND.....	31
50-458 Blk.....	27	9937.....	35	22637 P-24.....	29, 35	29476 NM-062.....	29, 31
50-895 Blk.....	21	11635 B.....	21	22650 CD-4.....	43	29476 NM-072.....	29, 31
52 A.....	19	12934 A.....	23, 35	22651 CB-4.....	29, 35	33174 B.....	27
57 WD.....	41	12957 E.....	39	22651 CD-4.....	29, 43	35731 A.....	19
CO-67 E.....	27	12982.....	25	22651 CD-5.....	43	35761 B.....	21
69 H.....	35, 41	14077.....	31	22653 B-8.....	31	35772 H.....	39
73.....	27	15037 A.....	25	22653 B-14.....	35	35897 BV.....	21
73 A.....	41	15465 F.....	27	22703.....	25	39147 D.....	33
74 E.....	37	21101 H-4.....	43	22711.....	21	39152 U-6.....	39
77.....	23, 29, 31, 33	21104 B-14.....	43	22726.....	39	39543 N.....	29
77 P.....	31	21104 B-24.....	43	22729 C.....	25, 27	39552 C.....	37
HA81.....	23	21104 H.....	43	22733.....	25	39592 Z.....	37
87.....	19	21104 V.....	43	22733 E.....	21	39592 AK.....	37
J87 J.....	25	21114.....	43	22738 B.....	35	41391.....	29, 35
87 U.....	27, 33, 41	21114 A.....	43	22743.....	25, 35	43242 P.....	25
88.....	27, 31, 33	21114 D-4.....	43	22758 C.....	37	43266.....	37
88 B.....	23, 31	21114 H-4.....	43	22758 E.....	35	51054.....	29, 31
88 D.....	19	21114 S-4.....	43	22760 A.....	39	51147.....	23
89.....	23, 31	21114 T.....	43	22764.....	33	51154 E.....	21
90.....	21, 35	21114 U.....	43	22768.....	23, 41	51216 M.....	23
91.....	41	21114 W.....	43	22768 B.....	19, 31	51216 N.....	23, 27
95.....	19, 23	21173 A.....	43	22771 A.....	31	51216 P.....	23
96.....	27	21177 B.....	43	22782 A.....	33	51230 T.....	41
98.....	27, 29, 31, 35	21201.....	43	22793.....	21	51235 G.....	35
98 A.....	19	21375 AV.....	19	22798 C.....	29, 33	51236 A.....	27, 29, 33, 35
109.....	37	21388.....	43	22799 B.....	41	51242 M.....	27
158 B.....	19	21657-3.....	37	22799 W.....	41	51244 L.....	27
201 C.....	43	21657-4.....	37	22801.....	29, 33	51244 N.....	27
258 A.....	27, 29, 43	21657 E.....	29, 33	22804.....	25	51247.....	23
269.....	27, 29, 33	21657 W.....	37	22810.....	43	51254 K.....	23
SC303.....	43	21657 X.....	21	22829.....	19, 27	51256 C.....	37
357.....	19	21657 Y.....	37	22834 A.....	29	51257 K.....	37
402.....	37	21657 AM-5.....	37	22839.....	19	51257 M.....	37
421 D-34.....	43	22513.....	19	22839 C.....	39	51257 AA.....	21
531.....	37	22524.....	19	22839 E.....	39	51280 J.....	19
539.....	19	22525 A.....	29, 33	22840 A.....	41	51281 AC.....	39
605.....	41	22526 C.....	39	22845 B.....	39	51282 AH.....	39
605 A.....	41	22526 D.....	39	22848.....	19, 21, 39	51282 AJ.....	39
627.....	25	22528.....	29	22852.....	25	51282 AK.....	39
652-16.....	43	22539 R.....	21	22852 A.....	33	51283 H.....	37
660-202.....	23, 25	22541 C.....	21	22863 C.....	29	51292 A.....	37
660-207.....	37	22543 A.....	29, 33	22868 B.....	35	51292 D.....	37
660-215.....	23	22548.....	19	22874.....	27	51292 F-1.....	37
660-221.....	21	22557 G.....	37	22874 K.....	35	51292 F-5.....	37
660-240.....	43	22559 A.....	23	22875 H.....	29	51294 R.....	19
660-264.....	43	22559 G.....	23	22882 C.....	27	51295 A.....	43
660-269 B.....	29, 33	22560 A.....	25	22889 E.....	25	51295 B.....	43
660-310.....	27	22562.....	25	22889 G.....	19	51430 D.....	41
660-313.....	19	22562 A.....	23	22891 B.....	29, 33	51430 F.....	41
660-342.....	19	22563.....	27	22894 J.....	23	51491 C.....	37
660-438.....	29, 35	22564.....	23	22894 P.....	31	51745.....	27
660-455.....	21	22565 C.....	33	22894 W.....	25	52336 A.....	23
		22567 B.....	33	22894 X.....	23	52705 N.....	41
		22569 B.....	21	22894 AA.....	29, 31	52708 B.....	27
		22569 C.....	19, 41	22894 AB.....	23		

NUMERICAL INDEX OF PARTS

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
52717 E-12...	23	55235 E.....	25, 29, 31,	56393 Q.....	21	57779 A.....	33
52720 M-8....	41		33, 35	56393 T.....	21	57783.....	25
52720 M-12...	41	55244 G.....	27	56393 W.....	21	57785.....	33
52720 M-16...	41	56190.....	21	56393 AC.....	19	57795.....	31
52726 C.....	41	56316.....	23	56394 A.....	21	57802 A.....	39
52728 M-16...	41	56316 C.....	23	56394 B.....	21	57806-040...	35
52728 N-8....	41	56321 H.....	23	56394 C.....	21	57821.....	23
52728 N-12...	41	56322 B.....	29, 33	56458.....	23	57834 A.....	35
52730 T.....	41	56322 C.....	29, 33	56458 A.....	23	57834 B.....	35
52730 Y.....	41	56334 B.....	29	56470.....	19	57834 C.....	35
52730 AB.....	41	56334 L.....	29	56958.....	23	57834 D.....	35
52730 AC-8...	41	56334 N.....	29	56958 A.....	23	57834 F.....	35
52730 AC-12...	41	56334 R.....	35	57701 A.....	39	57834 G.....	29, 35
52730 AC-16...	41	56335 D.....	29, 35	57701 B.....	39	57835.....	35
52730 AD.....	41	56335 G.....	29	57701 C.....	39	57835 B.....	35
52730 AE.....	41	56335 L.....	29	57705 A.....	41	57835 C.....	35
52730 AF.....	41	56336.....	29, 33	57705 V.....	41	57835 D.....	35
52750.....	25	56336 B.....	29, 31	57713.....	27	57835 E.....	35
52750 B.....	21	56336 C.....	29, 31	57720 V-8....	41	57836.....	35
52776 P.....	25	56336 D.....	29, 33	57720 V-12...	41	57836 A.....	35
52776 V.....	25	56341 E.....	27	57722 A.....	29	57836 B.....	21
52776 W.....	25	56341 F.....	25, 27	57722 B.....	33	57836 C.....	35
52777 P.....	25	56341 G.....	27	57722 E.....	29	57836 D.....	35
52777 R.....	25	56341 M.....	27	57724 V-8....	41	57836 E.....	31
52777 S.....	25	56342.....	27	57724 V-12...	41	57836 F-40...	35
52777 T.....	25	56342 B.....	23	57725.....	29	57836 F-45...	35
52777 U.....	25	56343 C.....	23	57725 B.....	27	57836 F-50...	35
52777 V.....	25	56343 D.....	23	57730 A.....	41	57836 G.....	35
52777 W.....	25	56343 E.....	23	57730 V-8....	41	57837.....	35
52777 X.....	25	56344 B.....	27	57730 V-12...	41	57837 A.....	35
52777 Y.....	25	56354 C.....	21	57735.....	33	57837 C.....	35
52777 Z.....	25	56354 D.....	23	57736 A.....	33	57837 D.....	35
52777 AA.....	25	56356.....	37	57740.....	31	57837 E.....	35
52777 AC.....	25	56381-219...	39	57741.....	25	57837 F.....	35
52777 AE.....	25	56382.....	19	57741 A.....	25	57840.....	27
52778 D.....	25	56382 B.....	21	57744.....	27	57841.....	27
52778 F.....	25	56382 C.....	21	57744 A.....	27	57842 B.....	21
52778 N.....	25	56382 D.....	19	57750 A.....	21	57845 B.....	29, 31
52778 P.....	25	56382 E.....	19	57750 B.....	33	57846 B.....	27
52778 W.....	25	56382 G.....	19	57750 C.....	31	57853.....	35
52782 C.....	19	56382 H.....	19	57750 D.....	31	57880.....	19
52804 E.....	41	56382 J.....	19	57750 E.....	31	57882 C.....	21
52817-16....	23	56382 K.....	19	57750 F.....	33	57882 E.....	19
52817 E-8....	23	56382 L.....	19	57750 G.....	33	57882 G.....	21
52818-8.....	23	56382 M.....	21	57750 H.....	31	57892 E.....	37
52824 G.....	23	56382 N.....	19	57751.....	31	57949.....	31
52825 B.....	35	56382 X.....	37	57757 A.....	41	57950 B.....	31
52825 D.....	27	56382 Y.....	19	57770.....	19	59348 C.....	25
52825 F.....	35	56382 AA.....	19	57770 A.....	33	61256 G.....	21
		56382 AC.....	21	57773.....	33	61321 L.....	23
52892.....	37	56383 A.....	37	57773 A.....	33	61341 J.....	29, 35
52904 B.....	41	56383 D.....	37	57773 B.....	33	61434 G.....	29
52904 E.....	41	56383 W.....	37	57776.....	25	62295 A.....	23
52904 G.....	41	56383 X.....	37	57776 A.....	25	63494 B.....	21
52923 D.....	29, 31	56383 Y.....	37	57777.....	25	63494 F.....	21
52925 D.....	35	56390.....	21	57777 A.....	25	63494 G.....	21
52942 A.....	23	56390 B.....	21	57777 B.....	25	63494 K.....	21
52942 R.....	27	56390 E.....	21	57777 C.....	25	79048.....	33
52942 W.....	21	56390 G.....	21	57777 E.....	25	80265.....	35
52942 Y.....	21	56391.....	19	57777 F.....	25	80557.....	37
52943 L.....	23	56392 E.....	37	57777 G.....	25		
52951 C.....	25	56392 F.....	37	57777 H.....	25		
52953 A.....	35	56393 C.....	19	57777 J.....	25		
52958 B.....	19	56393 D.....	19	57777 K.....	25		
52978 G.....	39	56393 J.....	27	57778.....	25		
52992 A.....	37	56393 K.....	27	57778 A.....	25		
53678 N.....	25	56393 L.....	21	57778 B.....	25		
55235 D.....	25, 29, 31	56393 P.....	21	57779.....	21		

Union Special Wants to Help You Cut Sewing Machine Maintenance Costs

Union Special is offering two practical systems to help pinpoint and reduce your sewing machine maintenance costs: a record keeping system to help spot machines requiring abnormally high maintenance, and a parts inventory system to speed routine repairs.

Machine Maintenance Records

Repair-prone machines or inexperienced competent operators can eat up your maintenance dollars in short order. To help spot these problems, Union Special suggests two variations of a simple maintenance record keeping system using cards provided by Union Special.

The first system utilizes a "Machine Maintenance Record" card (Form 237) for each sewing machine in a plant. When a repair is required, the card is pulled from the file and the repair date, parts used, and their cost are entered in the spaces provided and the card is refiled.

The second system is normally used when more detailed information on repair costs is desired. Two record cards are used: a "Repair Request Card" (Form 234), and a "Machine Repair Record" (Form 233). When a machine requires service, the forelady or foreman fills out the top of a "Repair Request Card" and gives it to a mechanic. He fills in the time the repair work is started, the parts used and their cost,

and the completion time. This data is then transferred to the permanent "Machine Repair Record" kept in the office.

Whichever system is used, management now has an invaluable tool to reduce needless maintenance costs.

Repair Part Inventories

While record keeping tells management which machines require abnormally high maintenance, it does little to help reduce the downtime caused by routine repairs. To alleviate this situation, Union Special recommends that manufacturers establish a formal parts inventory system for each type of sewing machine they operate.

Excessive machine downtime and wasted hours by mechanics can be eliminated with an orderly in-plant inventory of the most commonly needed parts. There is no longer a need to cannibalize other machines for spare parts. Long waits for deliveries are avoided and machine downtime is kept to a minimum. The cost of a parts inventory is small when the overall savings are considered.

For free sample copies of the machine record cards and spare part inventory lists for a variety of the most popular machines, contact your local Union Special Representative or write direct to Union Special.

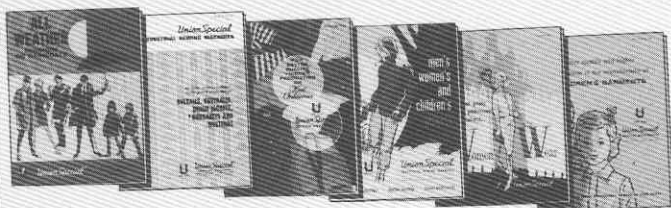
Union Special
Industrial Sewing Equipment

Style 57700 R (8 & 12 Gauge) Suggested Minimum Spare Parts List*

Part Number	Description	Minimum Quantity Per 5 Machines	Part Number	Description	Minimum Quantity Per 5 Machines
52720 M-8	Presser foot 8 gauge	1	52904 G	Cast-off wire	1
52720 M-12	Presser foot 12 gauge	1	73 A	Cast off wire screw	2
91	Presser foot clamp screw	1	52904 B	Retaining Finger	1
52730 AB	Spring	2	22516	Screw for #52904 B	2
605	Screw for #52730 AB	2	57949	Lower knife	1
52730 Y	Spring	2	57950 B	Lower knife clamp	1
57 WD	Screw for spring #52730 Y	1	22588 A	Screw for #57950	2
52705 N	Feed dog 8 & 12 gauge	1	57770 A	Upper knife	1
22528	Screw for feed dog	1	22516	Screw for #57770 A	2
52728 N-8	Throat plate 8 gauge	1	80265	Washer for screw #22516	2
52728 N-12	Throat plate 12 gauge	1	57777 E	Break spring	1
87	Screw for throat plate	2	52777 AE	Torsion spring	1
121 GBS	Needles (specify size)	200	52777 X	Torsion spring	1
88 B	Needle (set screw)	2	22889 E	Screw stud	2
52708 B	Looper	1	52776 W	Elastic metering pointer	2
57725 B	Looper needle guard	1	21255-7/32	Looper gauge	1
73	Looper set screw	2	29484	Screw assortment	1
57757 A	Cast-off support plate	1			

*The parts and quantities listed above are intended to assist you in setting up the initial inventory of spare parts. An efficient inventory can only be established according to actual usage. The nature of the sewing operation will determine actual usage.

Helpful, authoritative information on the most efficient types of equipment for making virtually any machine sewed article is available from Union Special Sales Promotion Department. Among the many interesting, illustrated bulletins that are available without obligation are the following:

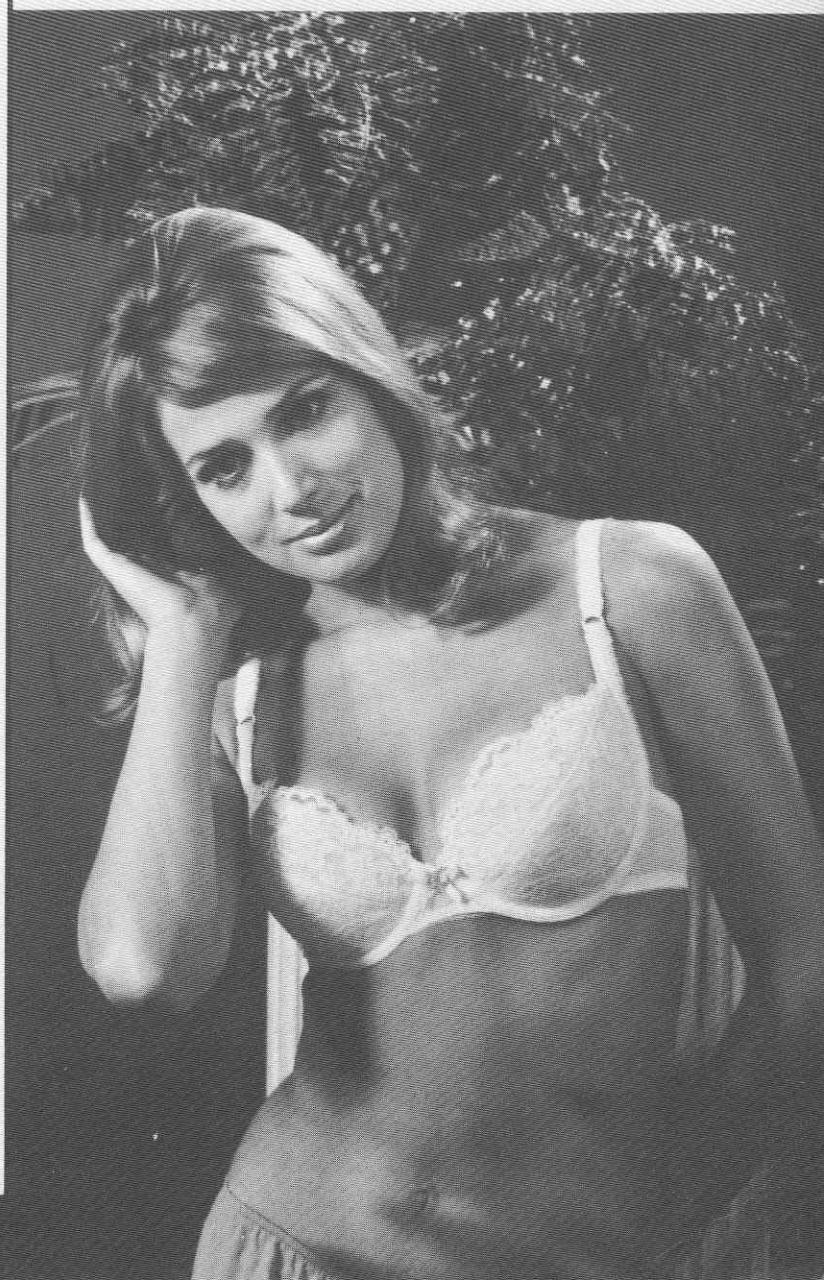


- No. 240, "Men's, Women's, Children's Footwear"
- No. 249, "Rainwear"
- No. 250, "Men's Dress Shirts"
- No. 251, "Service Shirts and Pants"
- No. 252, "Men's Shorts and Pajamas"
- No. 253, "Overalls, Coveralls, and Dungarees"
- No. 254, "Men's Knit Underwear"
- No. 256, "Knit Outerwear"
- No. 259, "Men's Sports Shirts"
- No. 260, "Work Gloves"
- No. 262, "Cotton, Burlap, Jute, and Multiwall Paper Bags"
- No. 263, "Men's Clothing"
- No. 264, "Men's Women's, Children's Jackets"
- No. 265, "Women's Wear"
- No. 266, "Women's Wear And High Fashion"
- No. 267, "Corsets, Girdles, Brassieres"
- No. 268, "Children's Wear"
- No. 269, "Mattresses, Slip Covers, Furniture Upholstery"
- No. 271, "Awnings, Canopies, Tents, Tarps"
- No. 273, "Curtains & Drapes"
- No. 610, "Klipp-it"
- No. 710, "MCS ForMation Unit"
- No. 730, "MCS Automatic Dual Underfront Shirt Hemmer"
- No. 740, "MCS Automatic Rib-Knit Cuff Machine"
- No. 750, "Fusing Presses"
- No. 1100, "Lewis Blindstitch, Chainstitch, Lockstitch, Machines"
- No. 1105, "Button Sewers—Ticket Tackers"
- "Columbia Blindstitch, Saddle Stitch, and Tie Closing Machines"
- No. 1500, "Alteration Department Machines"



**UNION SPECIAL
CORPORATION**

**HERE ARE HELPFUL
BULLETINS and CATALOGS
TO HELP YOU SOLVE
SEWING PROBLEMS**





Union Special[®]
INDUSTRIAL SEWING MACHINES

UNION SPECIAL maintains sales and service facilities throughout the world. These offices will aid you in the selection of the right sewing equipment for your particular operation. Union Special representatives and service men are factory trained and are able to serve your needs promptly and efficiently. Whatever your location, there is a Union Special Representative to serve you. Check with him today.

ATLANTA, GA.

BOSTON, MASS.

CHICAGO, ILL.

DALLAS, TEXAS

LOS ANGELES, CAL.

NEW YORK, N. Y.

PHILADELPHIA, PA.

MONTREAL, CANADA

TORONTO, CANADA

BRUSSELS, BELGIUM

LEICESTER, ENGLAND

LONDON, ENGLAND

PARIS, FRANCE

STUTTGART, GERMANY

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

UNION SPECIAL CORPORATION
400 N. FRANKLIN ST., CHICAGO, ILL. 60610