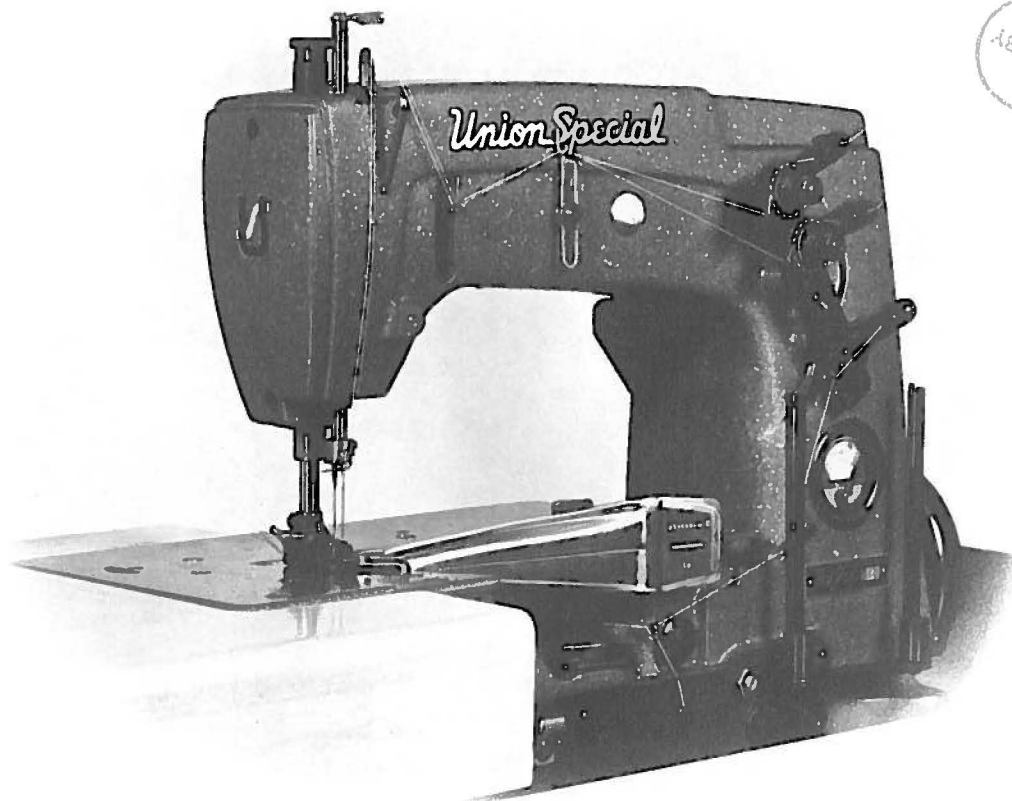


BEST QUALITY

Union Special[®]
LEWIS[®] • COLUMBIA[®]

INDUSTRIAL
SEWING
MACHINES

STYLE
57700B



CLASS 57700

ADVANCED HIGH SPEED
FIFTY THOUSAND SERIES
DIFFERENTIAL FEED
FLAT BED MACHINES

UNION SPECIAL CORPORATION

CHICAGO

From the library of: Superior Sewing Machine & Supply LLC

CATALOG
No.
131L

Catalog No. 131 L
(Supplement to Catalog No. 131 M)

INSTRUCTIONS
FOR
ADJUSTING AND OPERATING
LIST OF PARTS

CLASS 57700

Style
57700 B

First Edition

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UNION SPECIAL CORPORATION
INDUSTRIAL SEWING MACHINES
CHICAGO

Printed in U. S. A.

May, 1979

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 57700 B". 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 BZ".

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 is a supplement to Catalog No. 131 M and should be used in conjunction therewith. Only the parts found on Style 57700 B but not on Style 57700 L are illustrated. At the back are illustrations identifying the parts by reference number and on the opposite page, the part numbers and descriptions identifies the part. Any part that is a component of another part is indicated by indenting its description under the description of the assembly or base part. Always use the part number in the second column, never use the reference number in the first column when ordering repair parts.

STYLE OF MACHINE

Advanced High Speed, Two Needle, One Looper, Differential Feed Flat Bed Machine, Medium Throw, Needle Bearing Needle Bar Drive, Light Weight Presser Bar and Needle Bar Driving Mechanism, Single Reservoir, Enclosed Positive Automatic Lubricating System, Filtered Oil Return Pumps for Head and Base, Needle Bearings and Bronze Bearings for Feed Bar and Feed Rocker Shafts, Greased and Sealed. 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 Rotary Thread Tensions, Maximum Work Space to Right of Needle Bar 8 1/4 Inches.

57700 B Offset differential feed machine for attaching long length rib knit strip cut perpendicular to the wale or parallel with the wale to knitted undergarments and similar operations on medium to medium heavy weight material. Standard gauge No. 12 only. Seam specification 406-BSb-1. Type 121 GS needle. Maximum recommended speed 6000 R. P. M.

NEEDLES

Each UNION SPECIAL needle has both a type and size number. The type number denotes the kind of shank, point, length, groove, finish and other details. The size number, stamped on the needle shank, denotes largest diameter of blade, measured in thousandths of an inch, midway between shank and eye. Collectively, the 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 machine covered by this catalog is Type 121 GS. Below is the description and sizes available of the recommended needle.

<u>Type No.</u>	<u>Description and Sizes</u>
121 GS	Round shank, round point, short, double groove, struck groove, chromium plated - available in sizes 065/025, 070/027, 075/029, 080/032, 090/036, 100/040, 110/044, 125/049, 140/054.

NEEDLES (Continued)

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 GS, 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.

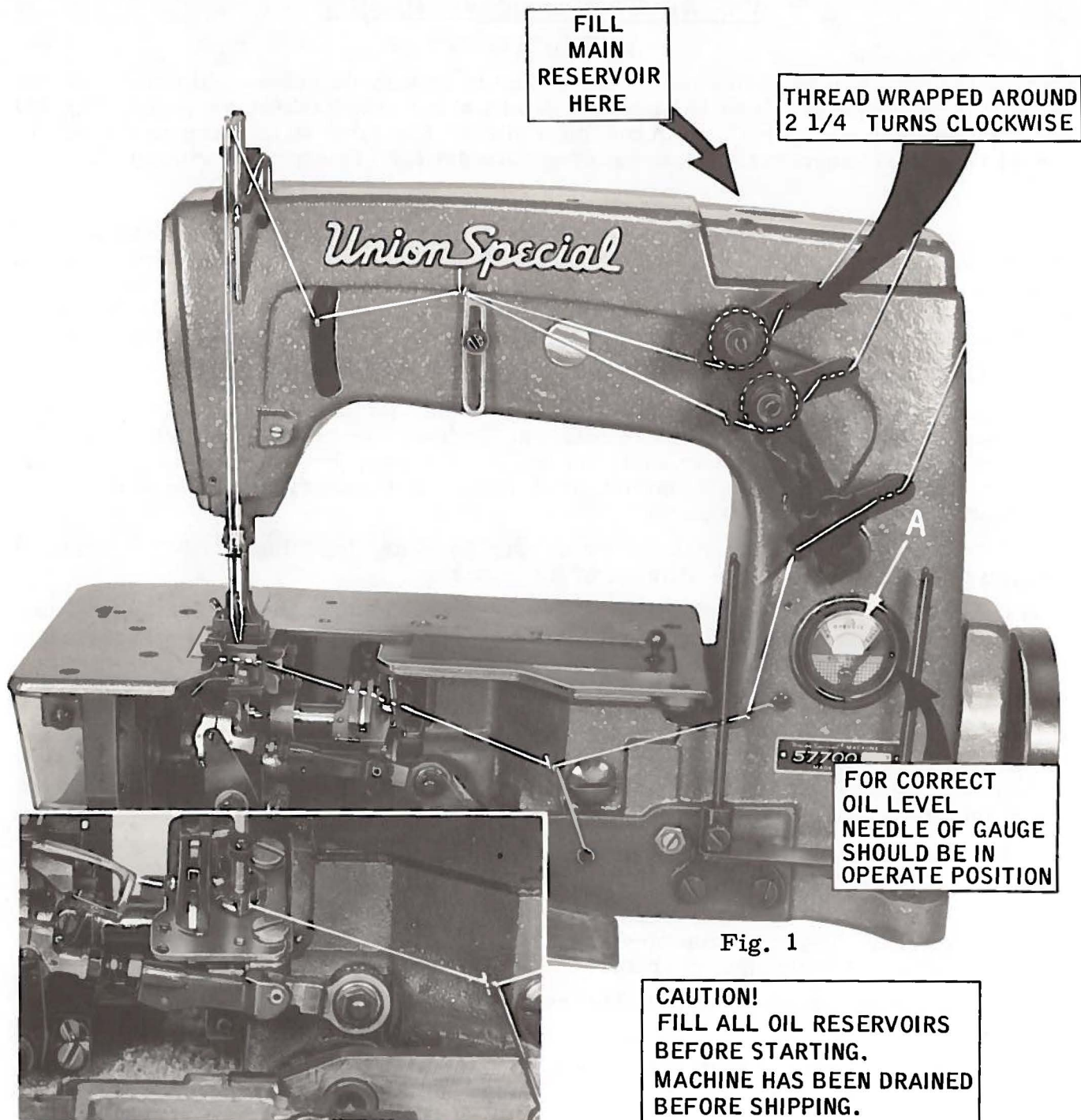


Fig. 1

CAUTION!
FILL ALL OIL RESERVOIRS
BEFORE STARTING.
MACHINE HAS BEEN DRAINED
BEFORE SHIPPING.

THREADING AND OILING DIAGRAM FOR STYLE 57700 B MACHINES

Thread machine as indicated. The looper threading has been enlarged for clarity.

The oil has been drained from the machine before shipping and 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 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 in the main frame to the left of the oil gauge.

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 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. 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 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 eccentric lines up with oil holes in mainshaft when spot screw is 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).
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".

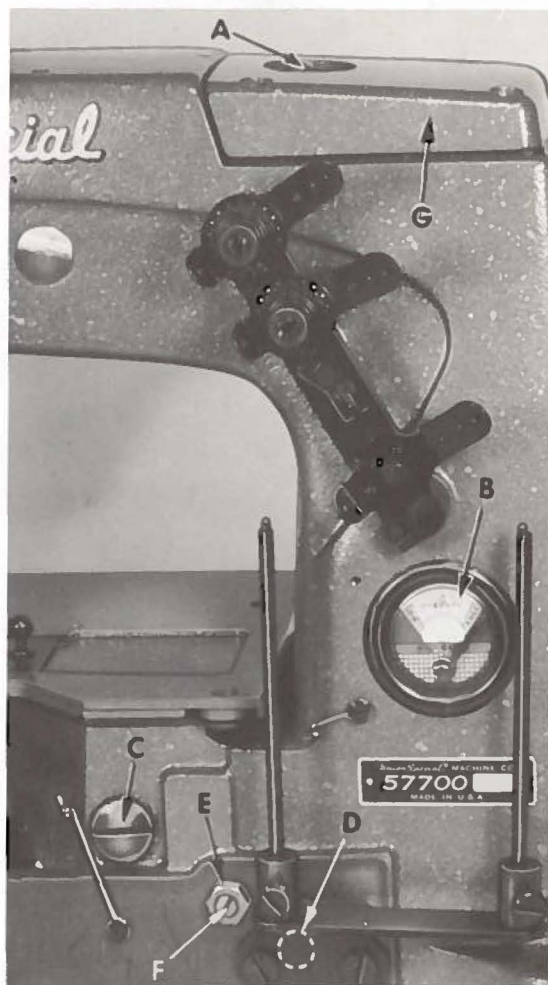


Fig. 2

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 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.

Insert test pin No. 699 L in the left seat of the needle holder and test pin No. 699 R-12 in the right needle seat. Now assemble test plate No. 698 BB-12 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 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

Insert the looper in the looper rocker and turn hand-wheel in operating direction until the point of the looper (A, Fig. 5), 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 hand-wheel 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 (A, Fig. 6) to the rear. Moving it in the opposite direction acts the reverse.

Moving of the looper drive lever shaft synchronizing stud is accomplished as follows: Loosen the clamp screw (B, Fig. 6) of the looper drive lever (C). 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, 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 (B, Fig. 6).

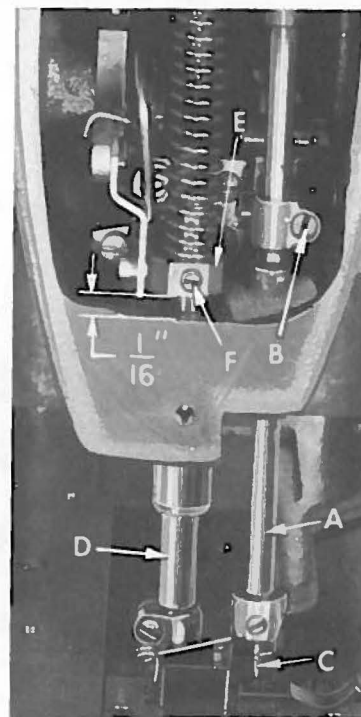


Fig. 4

SYNCHRONIZING LOOPER AND NEEDLE MOTIONS (Continued)

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 (C, Fig. 5) 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 (D). If adjustment is necessary, loosen the clamp screw (B, Fig. 6) and reposition the looper drive lever (C) 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 center line of the looper lever stud should be $4 \frac{1}{16}$ inches (Fig. 6), when looper is at the extreme right end of its travel.

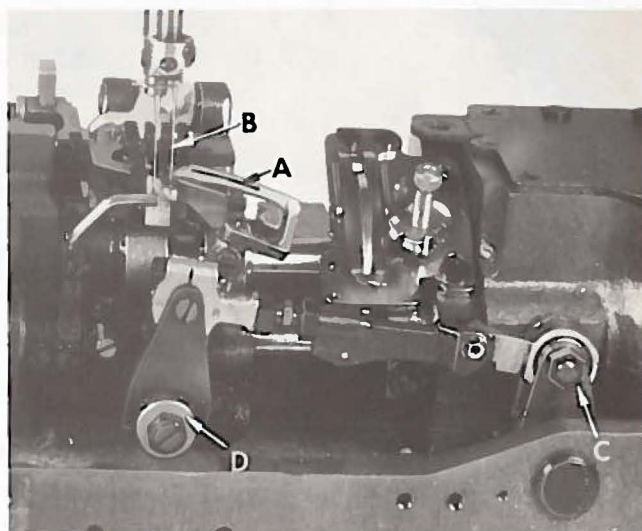


Fig. 5

SETTING THE LOOPER

Insert a new needle in the right needle seat, type and size as specified. If the looper gauge is $\frac{7}{32}$ inch, for example, set the looper (D, Fig. 6) so the distance from the center of the right needle (E) to the point of the looper is $\frac{7}{32}$ inch, when the looper is at its farthest position to the right. Looper gauge No. 21225- $\frac{7}{32}$ can be used advantageously in making this adjustment. If adjustment is required, loosen nut (F) (it has a left hand thread) and nut (G) on connecting rod (H), turn the connecting rod forward or backward to obtain the $\frac{7}{32}$ inch dimension. Retighten both nuts, first nut (G) and then nut (F). Make sure the left ball joint

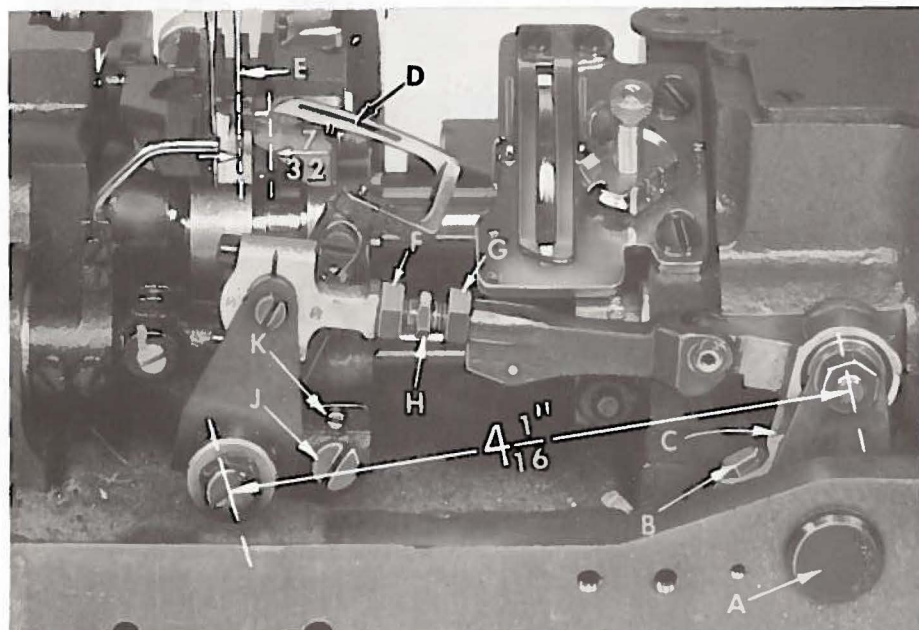


Fig. 6

is in vertical position and does not bind after adjustment.

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

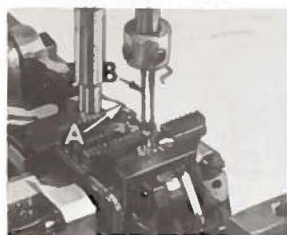


Fig. 7

If adjustment is necessary, loosen lock screw (J, Fig. 6) and turn stop screw (K) as required. Turning stop screw clockwise sets the looper to the rear and turning it counter-clockwise acts the reverse. Holding looper to

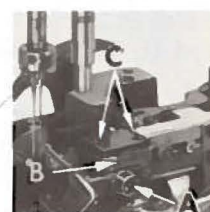


Fig. 8

SETTING THE LOOPER (Continued)

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 (C, Fig. 4) is correct when the top of its eye is $\frac{3}{64}$ inch below the underside of the looper, with the looper point flush with the left side of the needle. If adjustment is necessary, loosen screw (B) and move needle bar (A) up or down as required and retighten screw. Care should be taken not to disturb the alignment of the needle bar when moving the needle bar either up or down.

The needles are to have equal clearance on the right and left sides of needle slots in throat plate.

SETTING THE MAIN FEED DOG

The main feed dog should be set to rise the depth of a full tooth, or approximately $\frac{3}{64}$ inch above the throat plate, at the highest point of travel. The feed dog should be centered in the slots of the throat plate at maximum feed travel.

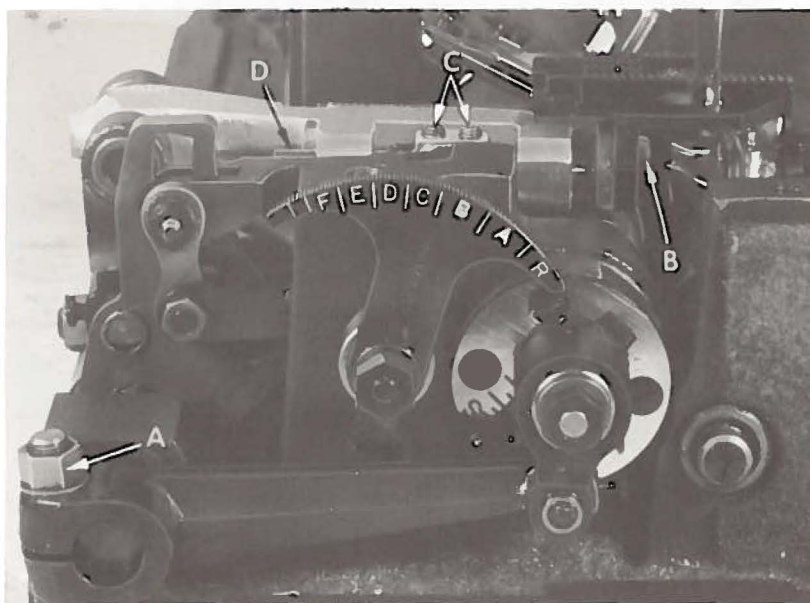


Fig. 9

To raise or lower the main feed dog, loosen allen screw (A, Fig. 8) and adjust the feed dog holder (B) to set the feed dog at specified height. Retighten screw (A).

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

The main feed dog should have equal clearance on all sides of feed slots in the throat plate at maximum feed travel. To adjust the main feed dog across-the-line-of-feed, loosen screws (C, Fig. 8) and position feed dog as required. Retighten screws (C). To adjust main feed dog in-line-of-feed, loosen nut (A, Fig. 9) and move feed bar as required. Retighten nut.

SETTING THE DIFFERENTIAL FEED DOG

The differential feed dog should also be set to rise the depth of a full tooth above the throat plate, at the highest point of travel and center in the feed slots of the throat plate at maximum feed travel. In addition to this the teeth of the feed dog should be parallel to the top surface of the throat plate across-the-line-of-feed.

To raise or lower the differential feed dog, loosen screw (B, Fig. 9) and set the feed dog at the required height. Retighten screw.

Loosen set screws (C, Fig. 9) and move the differential feed bar (D) forward or backward as required. The loosening of set screws (C) will also allow the differential feed bar (D) to be rotated, so the differential feed dog can be aligned parallel with the top surface of the throat plate, across-the-line-of-feed. Tighten screws securely.

NOTE: Turn machine by hand to make sure the differential feed dog has clearance through its cycle and does not contact the main feed dog at back end of its travel or the throat plate at the forward end of its travel.

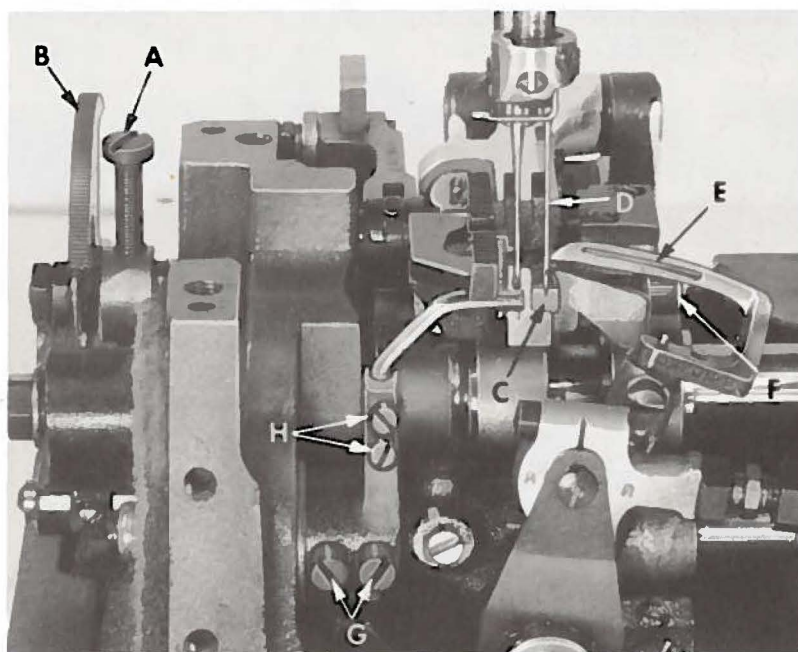


Fig. 10

SETTING THE DIFFERENTIAL FEED RATIO

The differential feed ratio is set by loosening screw (A, Fig. 10) and moving the selector slide (B) 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 (B) toward the front increases the amount of differential and moving it back decreases the differential feed. Retighten screw.

This Class of machine has a stretching ratio of $\frac{3}{4}$ to 1 up to a gathering ratio of 2 to 1, depending on the length of stitch set at the main feed dog. Turn machine by hand, making sure the differential feed dog clears the main feed at the back end of its stroke.

CHANGING STITCH LENGTH

Set the stitch to the required length. This is accomplished by loosening locknut (A, Fig. 11) (it has a left hand thread) and turning the stitch adjusting screw (B).

Turning screw (B) clockwise shortens the stitch and turning it in a counterclockwise direction lengthens the stitch. The head of the mainshaft (C) 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.

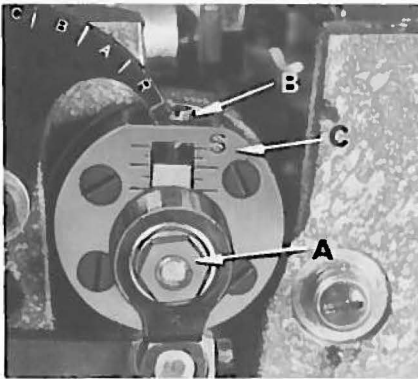


Fig. 11

NOTE: Any change in stitch length will necessitate a corresponding change in the rear needle guard setting and a check of the feed dog height.

SETTING THE REAR NEEDLE GUARD

Set the rear needle guard (C, Fig. 10) 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 is permissible. It should be set as low as possible, yet have its vertical face approach within about 3/64 inch of the needle, until the point of the looper (E), moving to the left, is even with the needle. To move needle guard merely loosen screw (F), move needle guard as required, and retighten screw.

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

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 (G, Fig. 10) move needle guard as required and retighten screws. To raise, lower or rotate needle guard, loosen screws (H), move guard and retighten screws after guard is properly set.

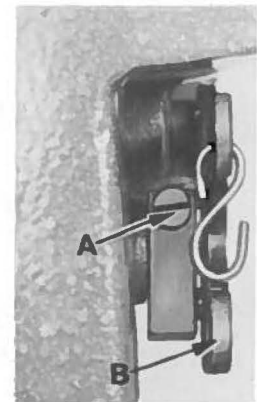


Fig. 12

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.

If adjustment is needed, loosen tension release lever screw (A, Fig. 12), located at the back of the machine and move tension disc separator as required. Retighten screw. After adjustment there should be no binding at any point.

SETTING HEIGHT OF PRESSER BAR

The height of the presser bar (D, Fig. 4) is set correctly if it is possible to remove the presser foot when the foot lifter lever (B, Fig. 12) is fully depressed. Also there should be approximately 1/16 inch clearance between lower surface of the presser bar connection and guide (E, 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 (F), 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.

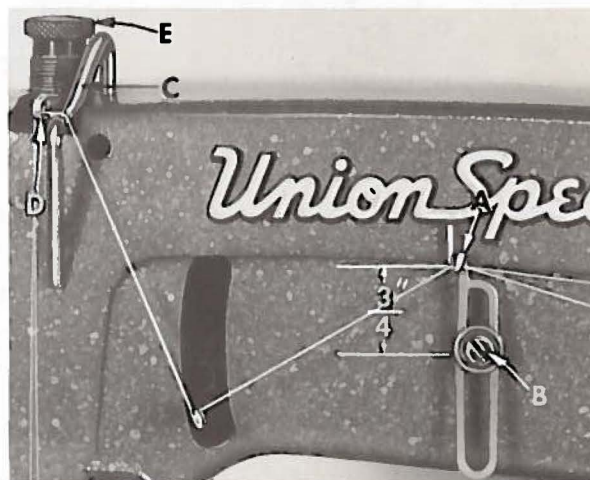


Fig. 13

THREADING

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

THREAD TENSION

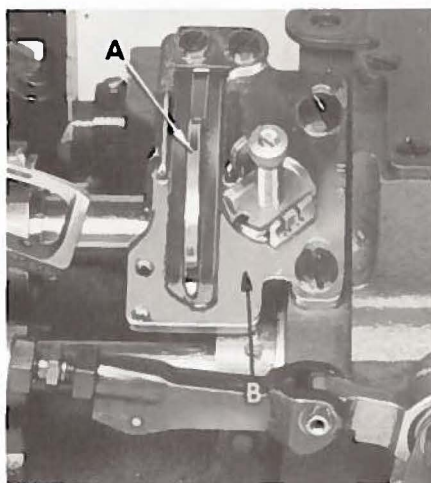


Fig. 14

The needle thread is to be wrapped around the rotary tension 2 1/4 times. Pull the thread through the eyelets and set the left needle thread tension at 2 ounces; the right needle thread tension at 2 1/2 ounces or sufficient tension to produce uniform stitches on the under surface of the fabric.

The looper thread tension is applied at the cast-off support tension disc assembly, and the adjusting nut should be set just below the end of the tension post. The spring must still have free length. The tension on the looper thread should be just sufficient to steady the thread.

SETTING THE NEEDLE THREAD FRAME EYELET AND TAKE-UP WIRE

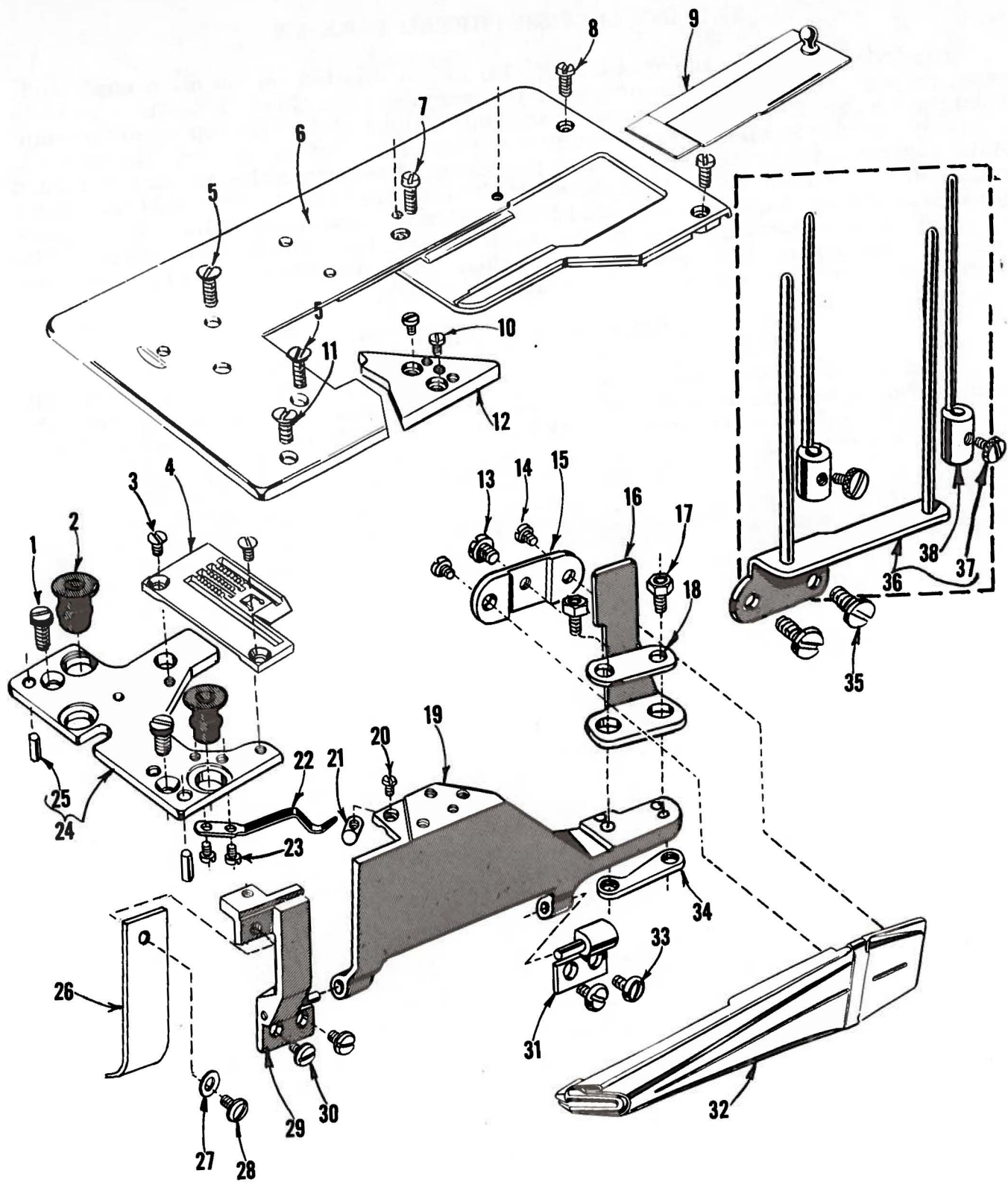
Set the needle thread frame eyelet hole (A, Fig. 13) 3/4 inch above the center of mounting screw (B). Lower for more needle thread in the stitch, raise for less. Top of take-up wire (C) to be even with top of holes in the needle thread eyelet (D) when needle bar is at the bottom of its stroke. Lower this setting for less needle loop, reverse for more loop.

SETTING LOOPER THREAD TAKE-UP

The looper thread take-up (A, Fig. 14) 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 (B) is adjustable, and its setting determines the amount of thread pulled off by the take-up. Moving the cast-off plate assembly to the top of the screw slots causes more thread to be pulled from the cones, and moving the cast-off plate assembly to the bottom 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.

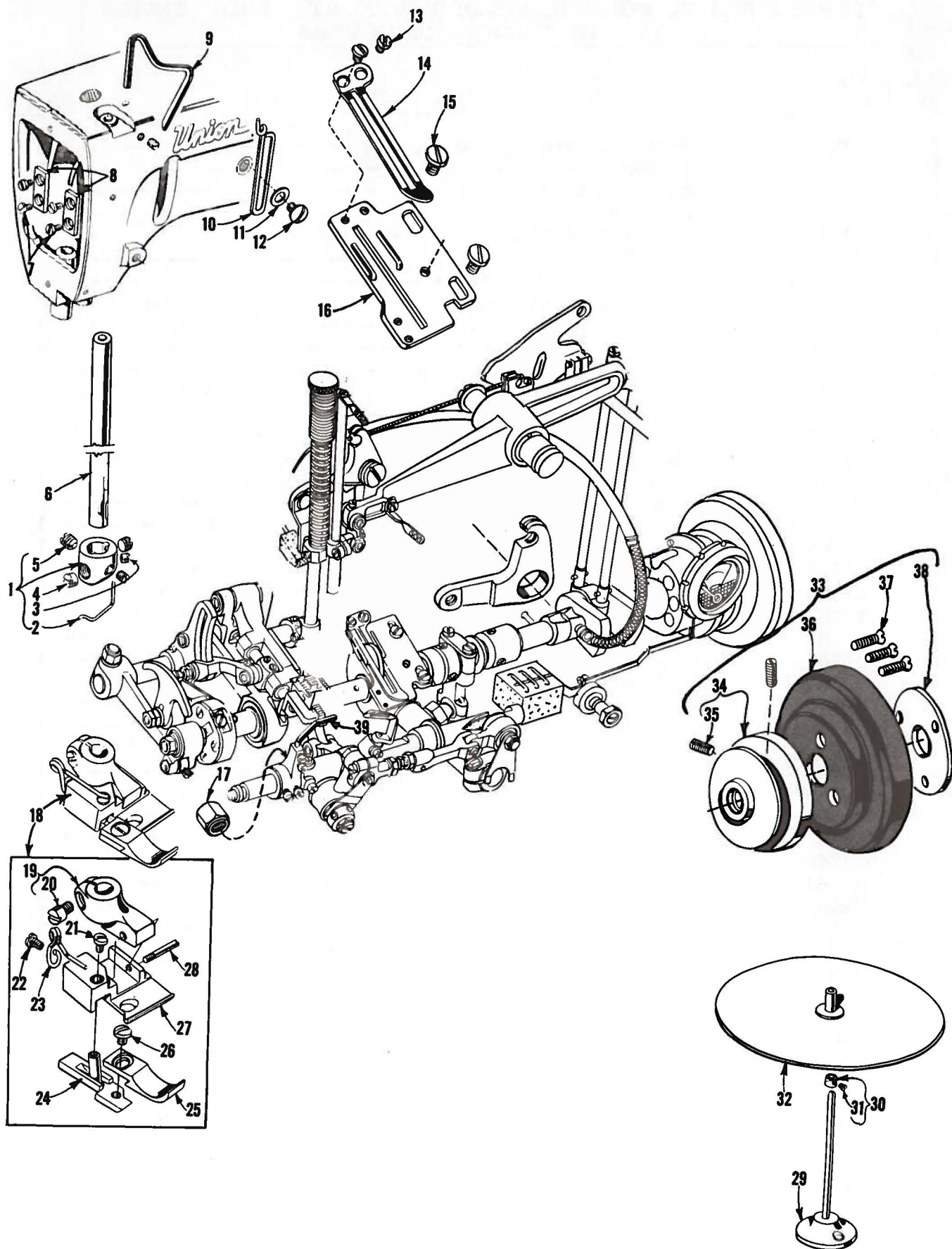
PRESSER FOOT PRESSURE

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



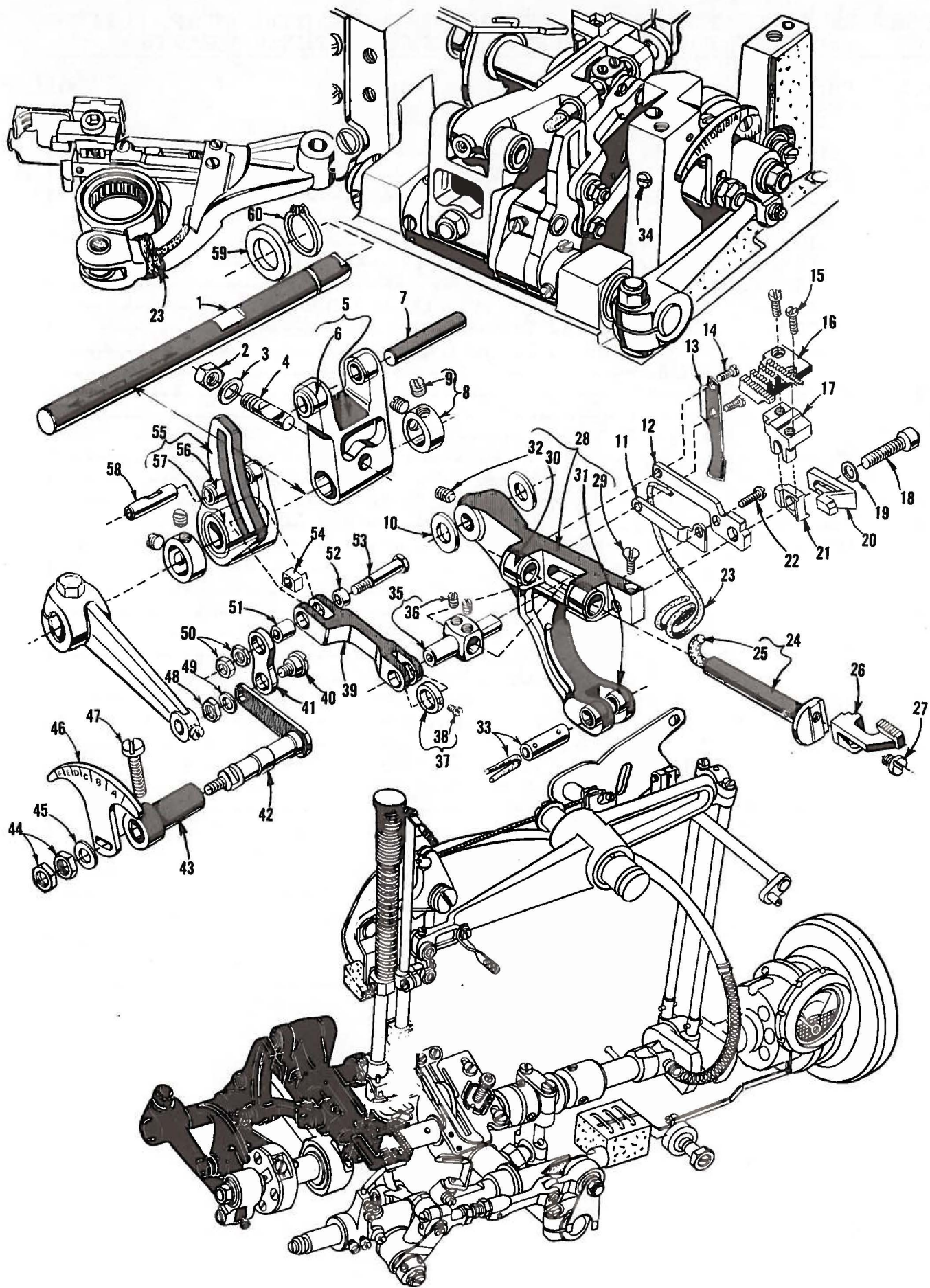
THROAT PLATE, FOLDER, FOLDER SUPPORT, STRIP TENSION
AND MISCELLANEOUS COVERS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	22839	Screw, for throat plate support -----	2
2	660-313	Well Nut -----	2
3	87	Screw, for throat plate -----	2
4	57724 A-12	Throat Plate -----	1
5	22526 C	Screw, for cloth plate -----	2
6	57801 A	Cloth Plate -----	1
7	22839 E	Screw, for cloth plate -----	1
8	22839 C	Screw, for cloth plate -----	2
9	57802 A	Cloth Plate Sliding Cover -----	1
10	90	Screw -----	2
11	22526 D	Screw, for cloth plate -----	1
12	57764 A	Folder Support Platform -----	1
13	25 S	Screw -----	1
14	25 CC	Screw -----	2
15	23432	Folder Clamp -----	1
16	52864 N	Folder Support Bracket -----	1
17	T38	Screw -----	2
18	23425 V	Washer Plate -----	1
19	57764 B	Folder Support Hinged Bracket -----	1
20	22564	Screw -----	1
21	57885 A	Hinge Pin -----	1
22	43281 K	Hinge Bracket Spring -----	1
23	90	Screw -----	2
24	57880	Throat Plate Support -----	1
25	51280 J	Dowel Pin -----	2
26	57882 G	Front Cloth Guard -----	1
27	20	Washer, for front cloth guard -----	1
28	22848	Screw, for front cloth guard -----	1
29	57882 C	Support Post -----	1
30	22848	Screw -----	2
31	57885	Swinging Cover Hinge -----	1
32	23406 R-5/8	Folder -----	1
33	22848	Screw -----	2
34	57864	Clamp Plate, for folder support bracket -----	1
35	22548	Screw -----	2
36	23439 D	Strip Tension -----	1
37	188 D	Screw -----	2
38	23439 E	Adjustable Pin -----	2



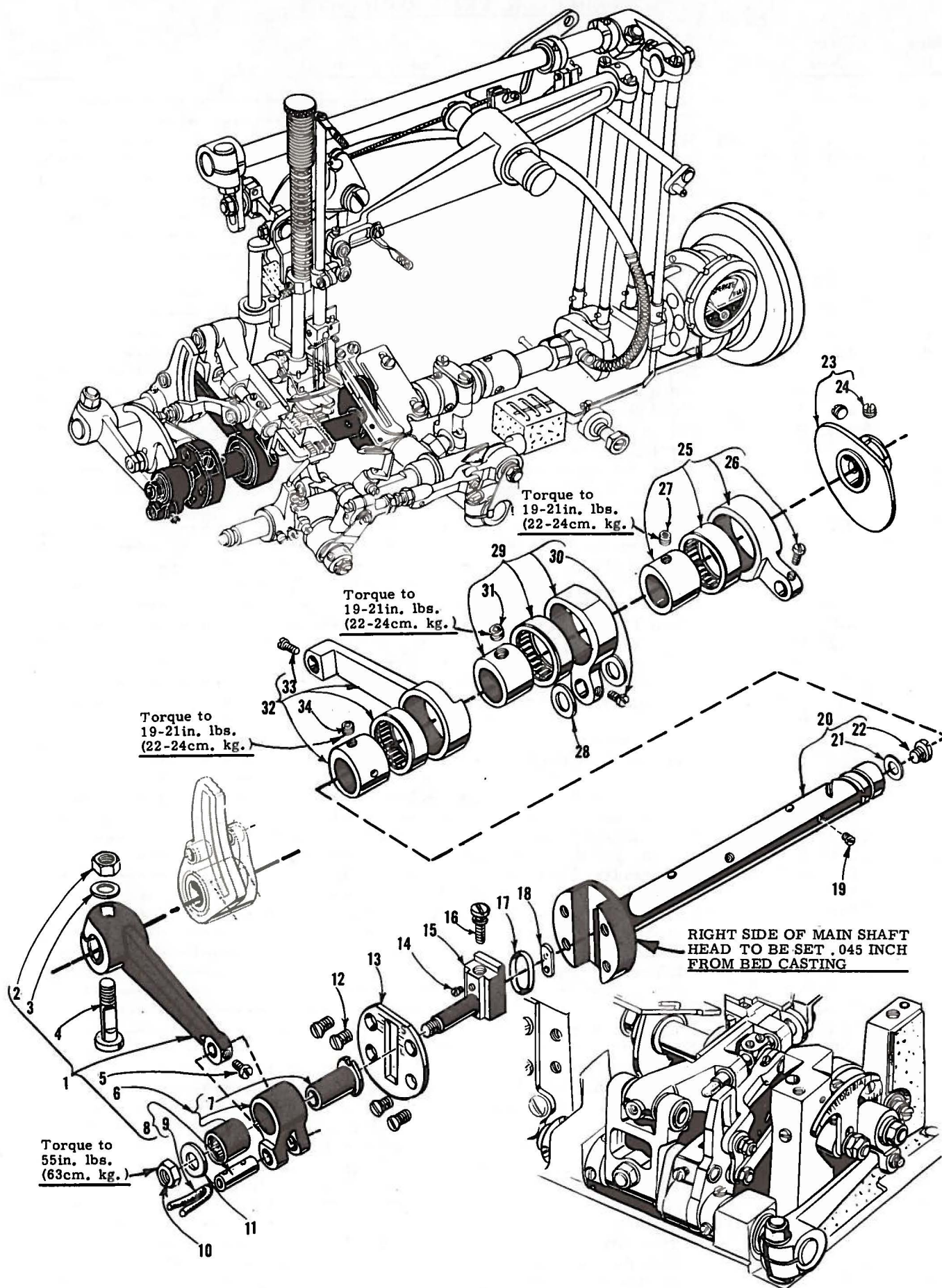
**PRESSER FOOT, NEEDLE BAR, NEEDLE HEAD, HEAD OIL PUMP, PULLEY,
LOOPER THREAD TAKE-UP AND THREAD TENSION PARTS**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	52818-8	Needle Bar Head -----	1
2	52842 G	Thread Guide Wire -----	1
3	28 B	Screw, thread guide wire -----	1
4	88 B	Screw, needle -----	2
5	89	Screw, spot -----	1
6	52717 E-12	Needle Bar, marked 'EJ-12'-----	1
7	22513	Screw -----	4
8	35731 A	Presser Bar Connection Guide Plate-----	2
9	51270 B	Needle Thread Take-up Wire -----	1
10	539	Needle Thread Frame Eyelet -----	1
11	20	Washer-----	1
12	22848	Screw -----	1
13	28	Screw -----	2
14	57804	Cast-off Plate-----	1
15	22569 D	Screw -----	2
16	57857	Cast-off Plate Support -----	1
17	57846 B	Looper Rocker Cone Stud Nut -----	1
18	52820 H-12	Presser Foot -----	1
19	13130 B	Presser Foot Shank -----	1
20	91	Screw -----	1
21	73 A	Screw -----	1
22	605	Screw -----	1
23	11534	Spring-----	1
24	52830 C	Yielding Section -----	1
25	52830 D	Adjustable Guide -----	1
26	22561	Screw -----	1
27	52830 H-12	Presser Foot Bottom -----	1
28	22799 B	Hinge Screw -----	1
29	21169 F	Binder Holder Base-----	1
30	161	Binding Holder Stop Collar -----	1
31	88	Screw -----	1
32	21169 E	Binding Holder Disc -----	1
33	57821 A	Handwheel Assembly -----	1
34	56321 H	Pulley -----	1
35	22894 AB	Screw -----	2
36	57821	Handwheel-----	1
37	22574	Screw -----	3
38	61321 L	Retaining Plate -----	1
39	57725 B	Looper Needle Guard -----	1



DIFFERENTIAL FEED MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1	57835	Main Feed Rocker Shaft, lower -----	1
2	55235 E	Nut-----	1
3	6042 A	Washer-----	1
4	57836 D	Locking Stud -----	1
5	57836 C	Main Feed Rocker -----	1
6	57836	Bushing-----	2
7	57834 B	Main Feed Rocker Shaft, upper -----	1
8	56335 D	Collar, for lower main feed rocker driving shaft -----	2
9	98	Screw -----	2
10	61341 J	Thrust Washer, for feed bar -----	2
11	57837 D	Differential Feed Bar Guide Plate -----	1
12	57853	Feed Dog Holder Support -----	1
13	57834 C	Oil Wick Retainer -----	1
14	22593	Screw -----	2
15	22593 A	Screw, for main feed dog -----	2
16	57705 A	Main Feed Dog, marked "ER"-----	1
17	52953 A	Feed Dog Holder -----	1
18	22653 B-14	Screw -----	1
19	51235 G	Washer-----	1
20	52825 B	Rear Needle Guard -----	1
21	52925 D	Needle Guard Holder-----	1
22	22635 E-24	Screw -----	1
23	CL21	Oil Wick -----	2
24	57834 A	Differential Feed Bar -----	1
25	CL21	Oil Wick-----	1
26	57726	Differential Feed Dog, marked "ES"-----	1
27	90	Screw -----	1
28	57834 F	Main Feed Bar -----	1
29	22637 P-24	Feed Dog Height Adjusting Screw -----	1
30	57834 D	Bushing-----	2
31	57834 G	Bushing-----	2
32	22651 CB-4	Screw -----	1
33	51236 A	Link Pin-----	1
34	22597	Set Screw -----	1
35	57837 E	Driving Link Guide -----	1
36	22743	Screw -----	2
37	57837 F	Differential Driving Link Collar-----	1
38	22738 B	Screw -----	1
39	57835 B	Intermittent Differential Feed Bar Driving Link -----	1
40	22758 E	Screw, for differential control lever and link -----	1
41	57835 D	Differential Feed Control Lever Link -----	1
42	57835 C	Differential Feed Control Lever -----	1
43	57837 C	Differential Feed Control Lever Bushing -----	1
44	9937	Nut -----	2
45	69 H	Washer-----	1
46	57835 E	Differential Feed Control Indicator -----	1
47	22874 K	Lock Screw -----	1
48	12934 A	Nut -----	1
49	80265	Washer-----	1
50	907	Nut -----	2
51	57837	Differential Feed Link Sleeve, left -----	1
52	57837 A	Differential Feed Link Sleeve, right -----	1
53	22868 B	Differential Feed Regulating Screw -----	1
54	57836 F-40	Sliding Block, marked "N", .2540 inch wide -----	1
	57836 F-45	Sliding Block, marked "P", .2545 inch wide -----	1
	57836 F-50	Sliding Block, marked "R", .2550 inch wide -----	1
55	57806-040	Stretch Differential Feed Rocker, .040 inch throw -----	1
56	56334 R	Bushing-----	2
57	57836 A	Bushing-----	1
58	57836 G	Differential Feed Drive Rocker Shaft -----	1
59	41391	Washer -----	1
60	660-438	Tru-Arc Ring -----	1



MAIN SHAFT, TAKE-UP AND FEED DRIVING PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	29476 ND	Feed Rocker Arm and Feed Crank Link Sub- Assembly -----	1
2	55235 E	Nut -----	1
3	6042 A	Washer -----	1
4	55235 D	Locking Stud -----	1
5	22768 B	Screw, for link pin -----	1
6	56336 B	Feed Crank Link Assembly -----	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 hand thread -----	1
11	21657 E	Washer -----	1
12	22525 A	Screw -----	4
13	56322 C	Main Shaft Head Plate -----	1
14	22798 C	Screw -----	1
15	56336	Feed Crank Stud, marked "A" -----	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	57822 A	Main Shaft -----	1
21	56322 B	Gasket -----	1
22	22891 B	Oil Flow Regulating Screw -----	1
23	57823	Looper Thread Take-up -----	1
24	22580	Screw -----	2
25	29476 NM-062	Looper Avoid Eccentric Assembly, .062 inch (1.58 mm) throw -----	1
26	77	Screw -----	1
27	22894 AA	Screw -----	1
28	39543 N	Thrust Washer, for feed bar -----	2
29	29476 NM-072	Feed Lift Eccentric Assembly, .072 inch (1.83 mm) throw -----	1
30	77	Screw -----	1
31	22894 AA	Screw -----	1
32	57836 E	Differential Feed Connecting Rod, .080 inch (2.03 mm) throw -----	1
33	22768 B	Screw -----	1
34	22894 AA	Screw -----	1

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 refilled.

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.



Style 57700 B-12

Suggested Minimum Spare Parts List*

Part Number	Description	Minimum Quantity Per 5 Machines	Part Number	Description	Minimum Quantity Per 5 Machines
52820 H-12	Presser foot	1	57724 A-12	Throat plate	1
11534	Presser foot spring	1	87	Screw for cloth plate	4
13130 B	Presser foot shank	1	52708 B	Looper	1
91	Presser foot clamp screw	2	73	Looper screw	2
605	Screw to presser foot spring	1	52818-8	Needle bar head	1
52830 D	Adjustable guide	1	88 B	Screw for needle	2
22561	Screw for adjustable guide	2	89	Screw (spot) for needle	2
22799 B	Hinge screw	1	57804	Cast-off plate	1
57705 A	Main feed dog	1	28	Screws for cast-off plate	2
22593	Screw for main feed dog	2	121 GS	Needles	200
57726	Differential feed dog	1	21225-7/32	Looper gauge	1
90	Screw for differential feed dog	2	29484	Screw assortment	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.

From the library of: Superior Sewing Machine & Supply LLC

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:

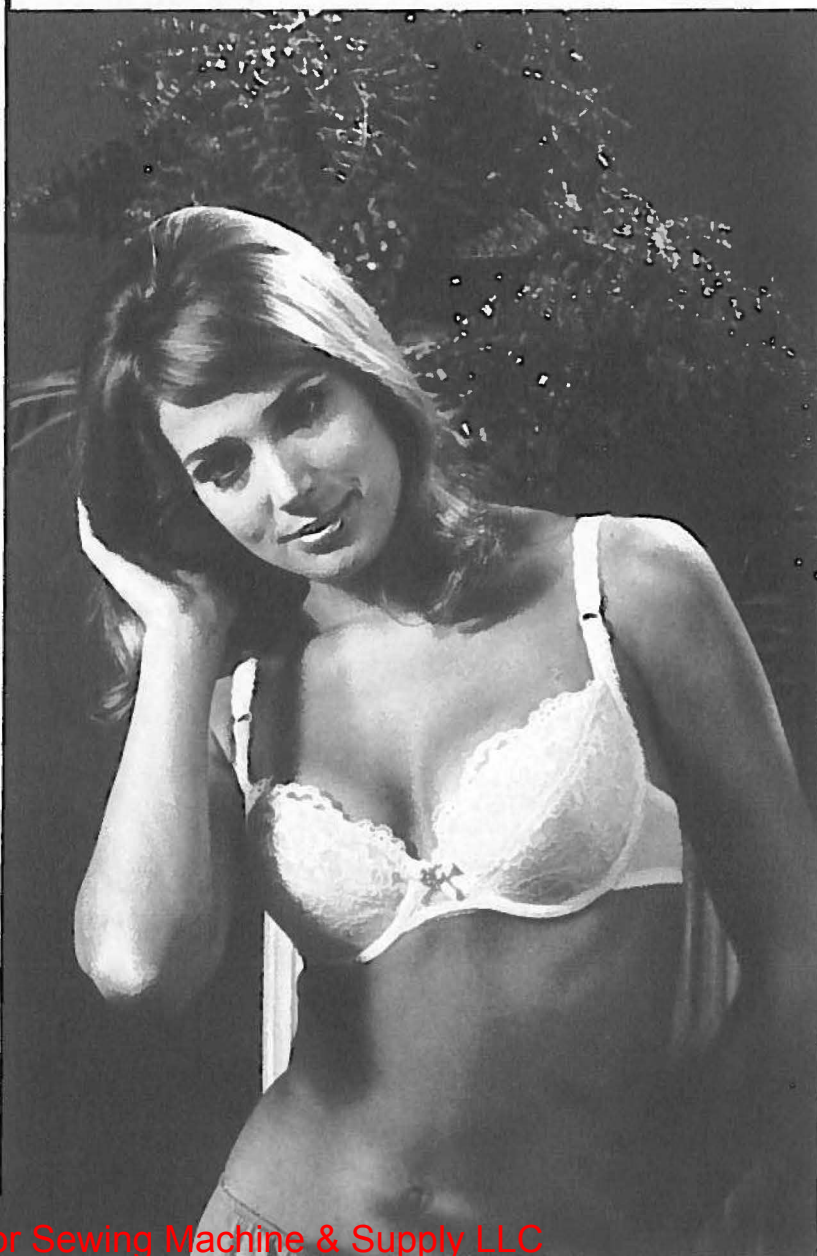


- No. 240, "Men's, Women's, Children's Footwear"
- No. 249, "Rainwear"
- No. 250, "Men's Dress Shirts"
- No. 251, "Service Shirts and Pants"
- No. 252, "Men's Shorts and Pajamas"
- No. 253, "Overalls, Coveralls, and Dungarees"
- No. 254, "Men's Knit Underwear"
- No. 256, "Knit Outerwear"
- No. 259, "Men's 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"



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