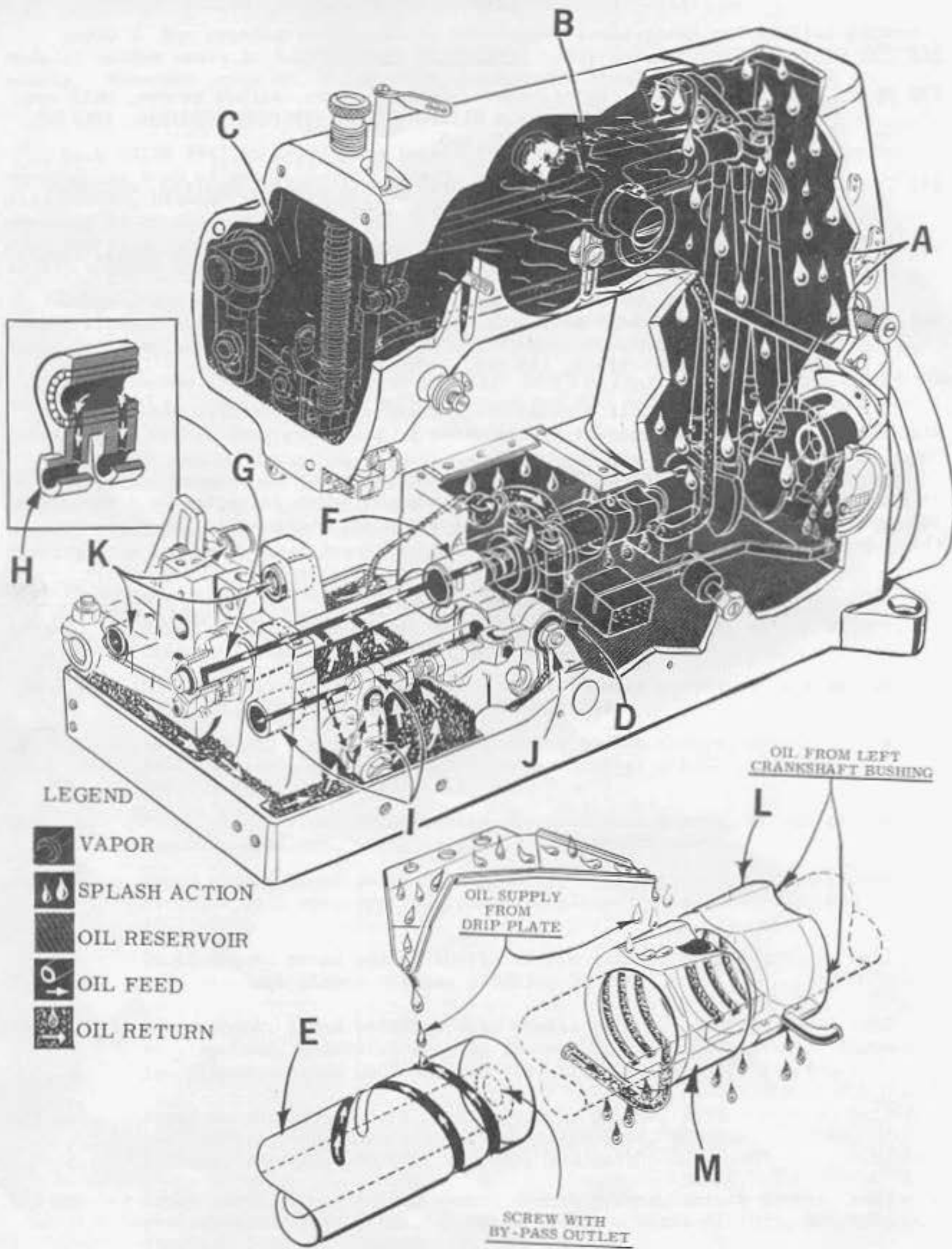




SETTING THE FEED DOG (Continued)

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

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

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

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

CHANGING STITCH LENGTH

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

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

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

SETTING THE REAR NEEDLE GUARD

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

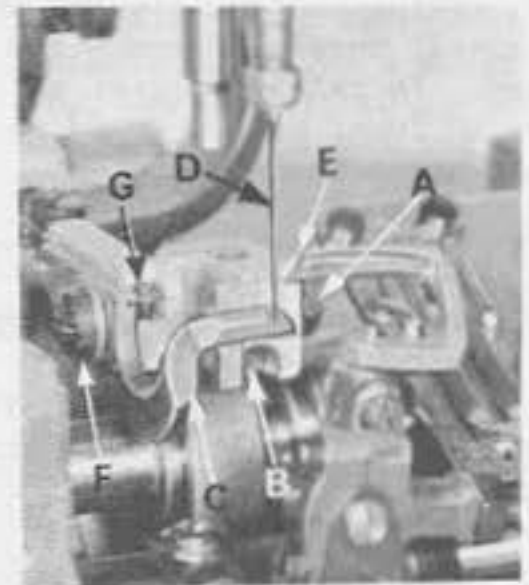


Fig. 9

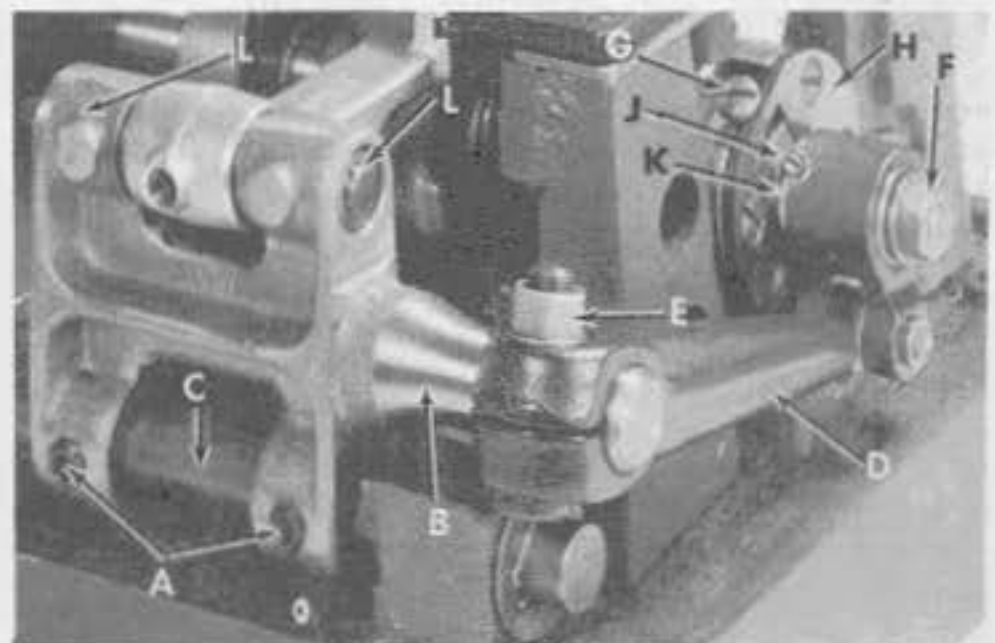


Fig. 10

SETTING THE REAR NEEDLE GUARD (Continued)

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

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

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

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

THREAD TENSIONS

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

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

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

THREAD TENSION RELEASE

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

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

SETTING HEIGHT OF PRESSER BAR

The height of the presser bar (D, Fig. 4) is set correctly if it is possible to remove the presser foot when the foot lifter lever (B, Fig. 11) is fully depressed. Also there should be approximately 1/16 inch (1.59mm) clearance between lower surface of the presser bar connection and guide (E, Fig. 4) and the bottom surface of the head opening in the bed when the foot lifter lever is released and the presser foot resting on the throat plate, with the feed dog down 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, Fig. 4). Then, while holding presser foot down on the throat plate surface, pry up presser bar connection and guide with a screw driver to obtain the 1/16 inch (1.59mm) setting and tighten screw (F). Check setting by turning handwheel so that needle bar is in its high position and see if presser foot can be removed as mentioned in previous paragraph.

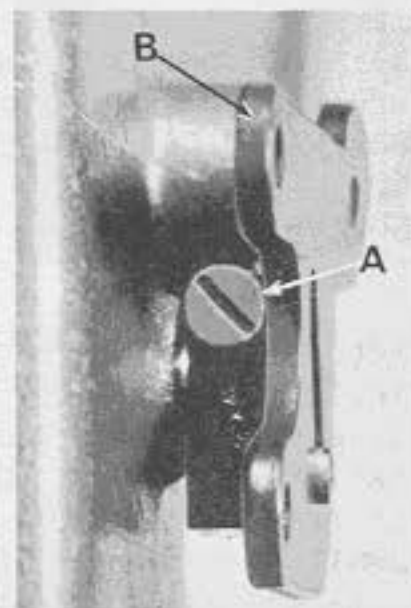


Fig. 11

PRESSER FOOT PRESSURE

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

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

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

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

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

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

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

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

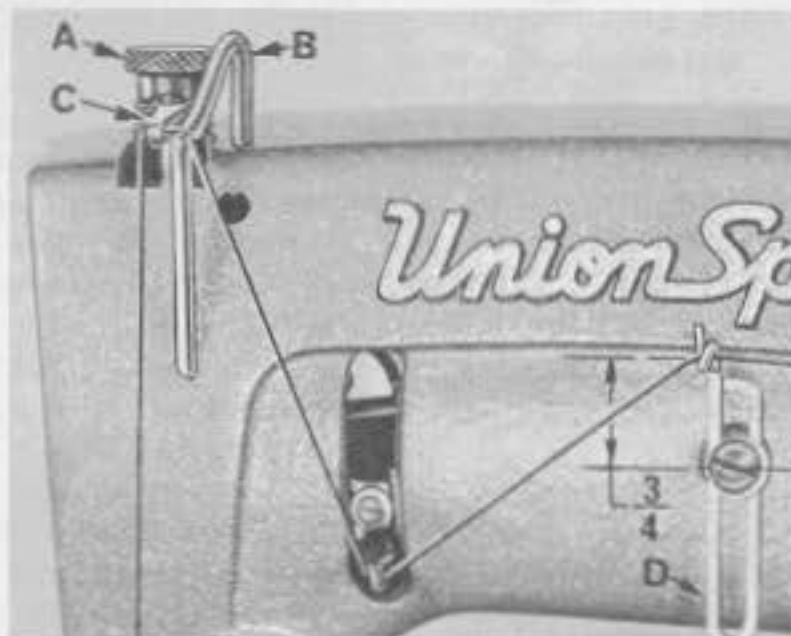


Fig. 12



Fig. 12A

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

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

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

Adjust looper thread tension with nut (B, Fig. 12A) to a minimum required for controlling the looper thread (light). Set the thread index eyelet (C) at "3" on the adjusting plate (D). Changing the needle thread tension only, with nut (E), balance the stitch so that when 6 inches (152.4 mm) of sewn seam are raveled back, the needle thread is approximately as long as the looper thread. A 1 inch (25.4 mm) difference in lengths is permissible. NOTE: Use a sample of the material to be sewn. Maintaining this needle thread tension, move thread index eyelet (C) up toward "L" to obtain a looser seam (longer needle loops) and toward "T" to obtain a tighter seam.

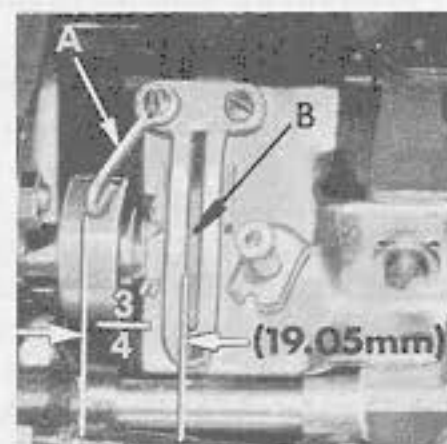


Fig. 13

ADJUSTING THE FEEDING PRESSER FOOT

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

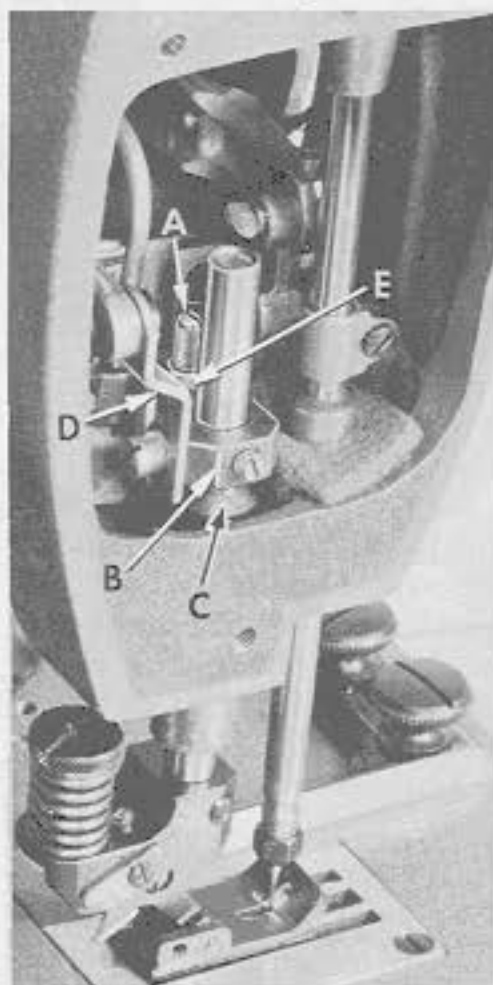


Fig. 14

As a preliminary setting, adjust the spring regulator nut (A, Fig. 15) on the feeding presser foot so the distance from the top of the spring (B) to the yoke (C) is $\frac{5}{8}$ inch (15.88 mm), (see Fig. 15). Assemble the feeding presser foot to presser bar. With presser foot resting on throat plate and feed dog down, press down on spring regulator nut (A, Fig. 15) until the marks on the presser foot bottom line up with the centerline of the needle, while keeping the needle in the center of the needle slot, tighten set screw (D) securing the presser bar guide to the presser bar, making sure that the stop screw in the presser bar guide is resting on the bed casting.

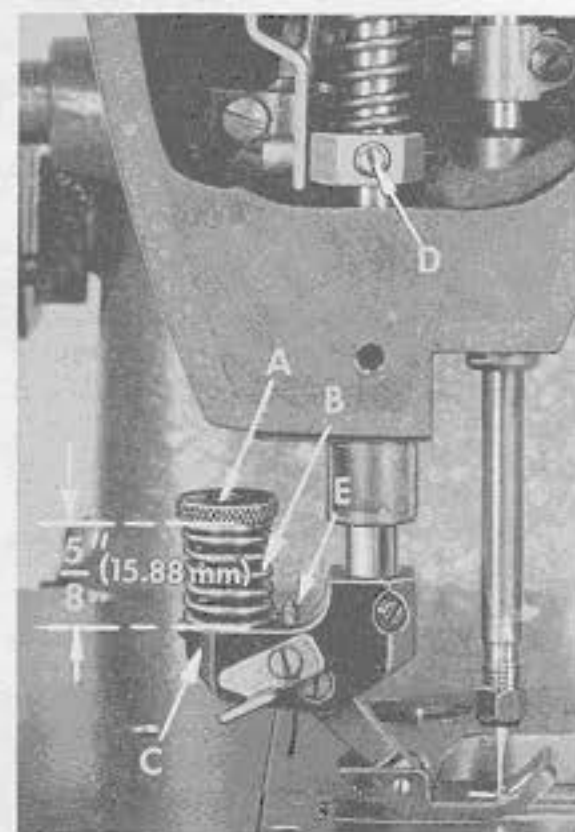


Fig. 15

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

ADJUSTING THE FEEDING PRESSER FOOT (Continued)

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

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

CHECK

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

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

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

ORDERING REPAIR PARTS ILLUSTRATIONS

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

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

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

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

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

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

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

IDENTIFYING PARTS

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

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

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

USE GENUINE NEEDLES AND REPAIR PARTS

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

USE GENUINE NEEDLES AND REPAIR PARTS (Continued)

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

TERMS

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

TORQUE REQUIREMENTS

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

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

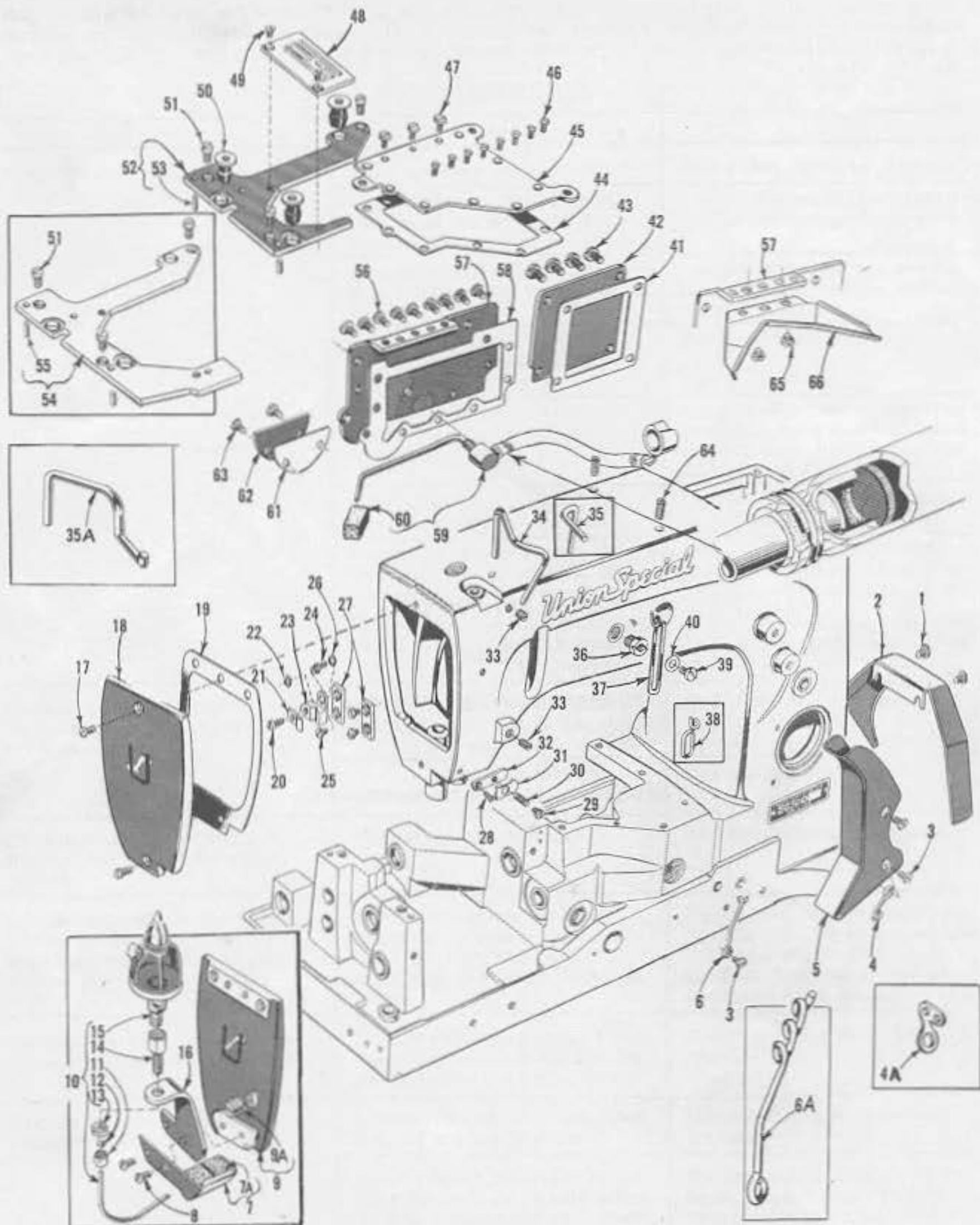
The screws requiring a specific torque, will be indicated on the picture plates.

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

SKIPPED STITCHES

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

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



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

Ref. No.	Part No.	Description	Amt. Req.
1	22829	Screw - - - - -	2
2	21375 AV	Belt Guard - - - - -	1
3	98 A	Screw - - - - -	3
4	52 A	Looper Thread Eyelet, for all Classes, except 56500 and 56900 - - - - -	1
4A	158 B	Looper Thread Eyelet, for Classes 56500 and 56900 - - - - -	1
5	56391	Looper Thread Guard - - - - -	1
6	52958 B	Looper Thread Eyelet, for single needle machines - - - - -	1
6A	52958 C	Looper Thread Eyelet, for two and three needle machines - - - - -	1
7	21396 BP	Needle Thread Lubricator, for Styles 56900 H, J - - - - -	1
7A	21396 AG	Felt Pad - - - - -	2
8	22569 B	Screw, for Styles 56900 H, J - - - - -	2
9	56782	Head Cover, for Styles 56400 R, 56700 J, 56900 H, J - - - - -	1
9A	22733 C	Plug Screw - - - - -	1
10	21396 BR	Needle Thread Lubricator Oil Reservoir, for Styles 56900 H, J - - - - -	1
11	660-75	Coupling - - - - -	1
12	660-74	Connection Sleeve - - - - -	1
13	11638 M	Nut - - - - -	1
14	21396 AL	Adapter - - - - -	1
15	660-73	Oil Cup - - - - -	1
16	21396 BK	Needle Thread Lubricator Oil Reservoir Bracket, for Styles 56900 H, J - - - - -	1
17	22569 C	Screw, for head cover - - - - -	2,3
18	56382	Head Cover, for all Styles except 56400 R, 56700 J, 56900 H, J - - - - -	1
19	56382 N	Gasket - - - - -	1
20	22585	Screw - - - - -	1
21	56393 D	Head Oil Tube Clamp - - - - -	1
22	7947	Nut - - - - -	1
23	56393 C	Head Oil Tube Mounting Block - - - - -	1
24	51294 R	Screw - - - - -	1
25	22513	Screw - - - - -	3
26	660-342	Lockwasher - - - - -	1
27	35731 A	Presser Bar Connection Guide Plate - - - - -	2
28	605 A	Screw, for Styles 56200 S, W; 56300 W, AL - - - - -	1
29	57 WD	Nipper Spring Screw, for Styles 56200 S, W; 56300 W, AL - - - - -	1
30	15438 C	Nipper Spring, for Styles 56200 S, W; 56300 W, AL - - - - -	1
31	57 WB	Nipper Spring Plate, for Styles 56200 S, W; 56300 W, AL - - - - -	1
32	43296	Nipper Spring Base, for Styles 56200 S, W; 56300 W, AL - - - - -	1
33	95	Plug Screw and Screw for take-up wire - - - - -	2
34	51270 B	Needle Thread Take-up Wire, for Styles 56200 W; 56300 H, W - - - - -	1
35	56470	Needle Thread Take-up Wire, for Style 56300 M, Classes 56400, 56500, 56700, 56900 and 56200 except Style 56200 W - - - - -	1
35A	56370	Needle Thread Take-up Wire, for Styles 56300 E, F, G, N, R, U, X, AH, AL - - - - -	1
36	22889 A	Adaptor Plug Screw - - - - -	1
*37	539	Frame Needle Thread Eyelet, for all Styles except 56300 E, F, G, N, R, U, X, AH, AL and 56700 J - - - - -	1
*38	51758	Frame Needle Thread Eyelet, for Style 56700 J - - - - -	1
39	22848	Screw - - - - -	1
40	20	Washer - - - - -	1
41	56382 E	Gasket - - - - -	1
42	56382 D	Crank Chamber Cover, lower - - - - -	1
43	22548	Screw - - - - -	4
44	56382 H	Gasket - - - - -	1
45	56382 G	Oil Reservoir Top Cover - - - - -	1
46	22524	Screw - - - - -	8
47	22585 A	Screw - - - - -	3
48		Throat Plate (See Pages 51, 53, 55, 59, 61, 63, 65, 67, 69) - - - - -	1
49	87 43.2	Screw, for throat plate, countersunk head, for Styles 56200 R, S and Class 56300 except Styles 56300 H, M, AL - - - - -	2
	22570	Screw, for throat plate, fillister head, for Styles 56200 H, K, L, W, 56300 H, M, AL and Classes 56400, 56500, 56700, 56900 - - - - -	2
50	660-313	Well Nut - - - - -	3
51	22839	Screw, for throat plate support - - - - -	3
52	56380	Throat Plate Support, for Styles 56200 R, S and Class 56300 except Styles 56300 H, M, AL - - - - -	1
53	51280 J	Dowel Pin - - - - -	2
54	56480	Throat Plate Support, for Styles 56200 H, K, L, W, 56300 H, M, AL and Classes 56400 56500, 56700, 56900 - - - - -	1
55	51280 J	Dowel Pin - - - - -	2
56	22848	Screw - - - - -	9
57	56382 F	Oil Reservoir Back Cover - - - - -	1
58	56382 L	Gasket - - - - -	1
59	56393 AC	Base Oil Pump Assembly - - - - -	1
60	666-214	Intake Felt - - - - -	1
61	56382 K	Gasket - - - - -	1
62	56382 J	Looper Drive Shaft Reservoir Cover - - - - -	1
63	22829	Screw - - - - -	2
64	22894 E	Screw - - - - -	2
65	357	Screw - - - - -	2
66	57882 E	Oil Drip Plate - - - - -	1

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

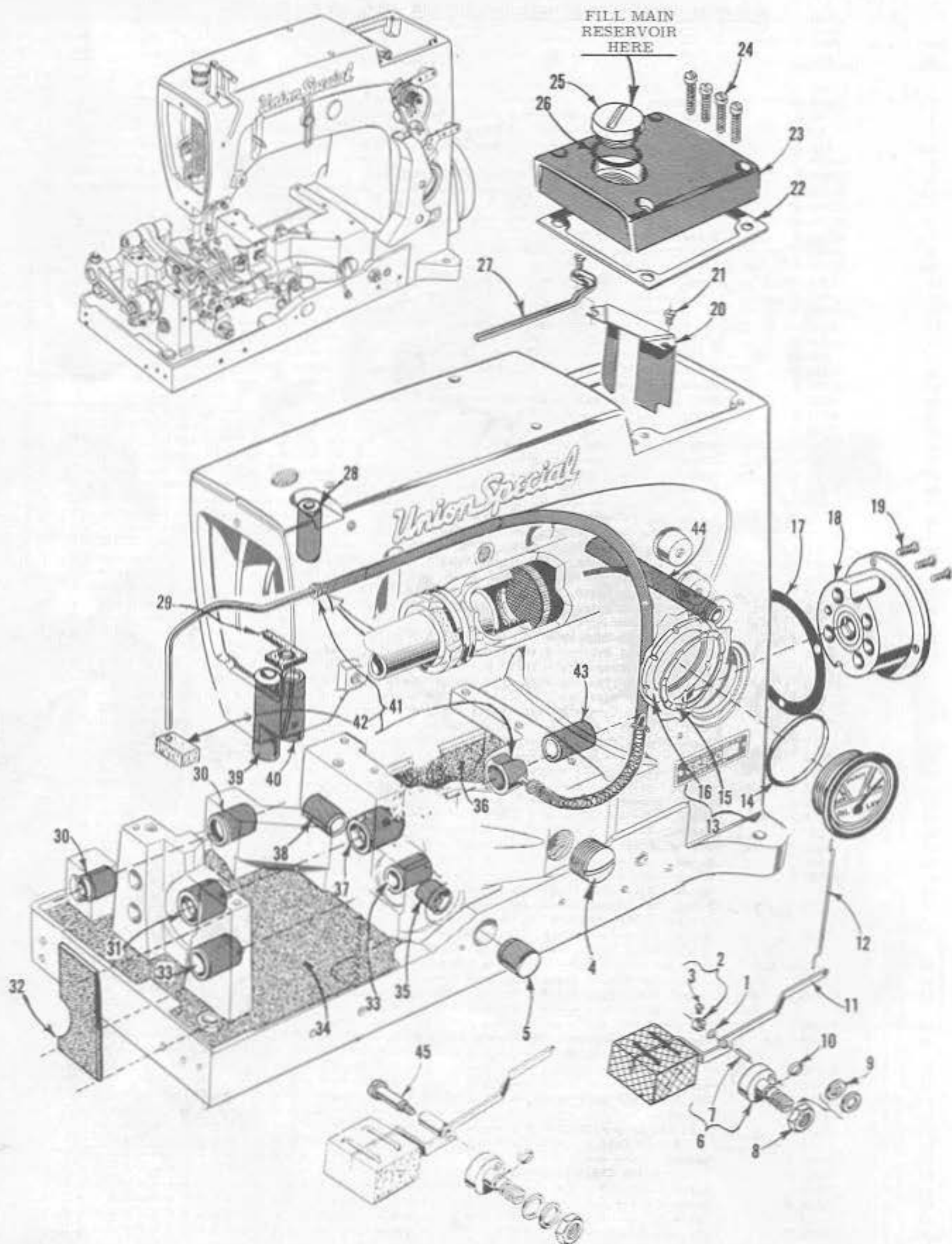
ADVANCED FLATBED LUBRICATION SYSTEM

SUPPLY SYSTEM

<u>Figure Letter</u>	<u>Bearing or Machine Area</u>	<u>Method of Lubrication</u>
A.	Crankshaft drives, upper ball straps and crankshaft bearings.	Oil agitation as a result of extensions on needle lever connecting rods.
B.	Needle lever cross shaft bearing.	Oil trough (51282 AE) which is supplied by splash in column area.
C.	Head area (all mechanisms and bearings).	Mist as a result of splash in column.
D.	Looper drive crank, looper drive lever bearings.	Oil agitation as a result of splasher (56343 E) on bottom of looper drive connecting rod.
E.	Opposing Helical grooves in right end of mainshaft. Short groove prevents oil leakage from right mainshaft bearing.	Oil drip plate which accumulates splash in chamber.
F.	Right mainshaft bearing.	Supply grooves in right end of mainshaft.
G.	Left mainshaft bearing and all eccentric bearings located on mainshaft.	Oil supplied from hollow mainshaft and metered by felt plugs. Oil is introduced into center of shaft in the right mainshaft bearing area. Amount of lubricant in center of shaft controlled with by-pass hole in right end of mainshaft.
H.	Lower ends of connecting rods of mainshaft eccentrics.	Oil run-out from eccentric bearing supplies.
I.	Looper cone, right and left looper rocker shaft bearings, and left looper rod ball joint.	Supplied from hollow looper rocker shaft which contains 4 strands of yarn as a metering device.
J.	Right looper rod needle bearing joint.	Oil supplied from front base felt to lubricating plate (56393 K).
K.	Feed rocker shaft and upper feed rocker shaft bearings.	Self-lubricated bearings.

RETURN SYSTEM

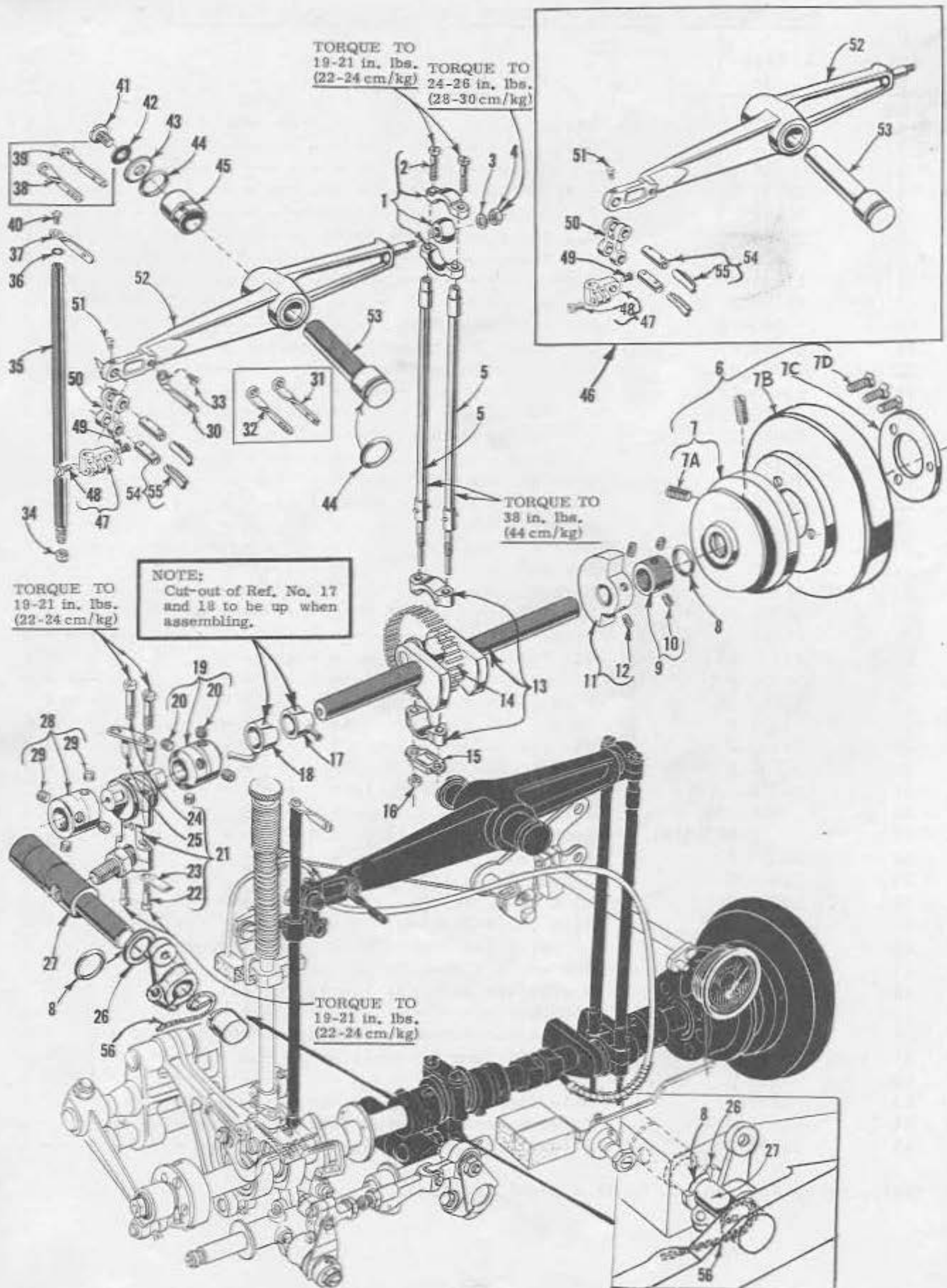
<u>Figure Letter</u>	<u>Machine Area</u>	<u>Method of Return</u>
L.	Head	Felt pad in head collects oil. Return pump located on crankshaft and primed by oil from left crankshaft bearing.
M.	Base	Felt pad in base collects oil. Second return pump located on crankshaft and primed by oil drip plate which accumulates splash in looper drive chamber.



MAIN FRAME, BUSHINGS, OIL GAUGE AND MISCELLANEOUS OILING PARTS

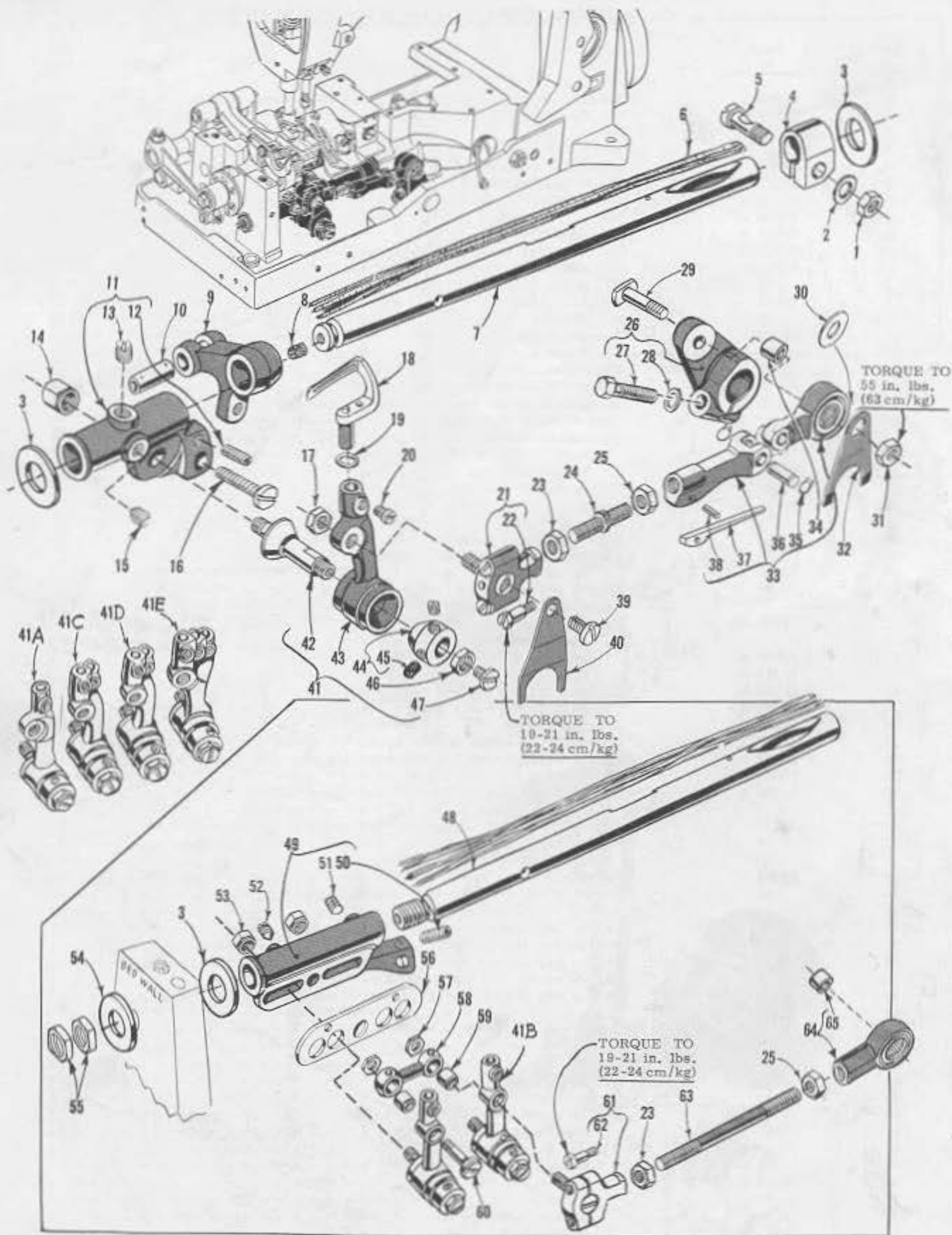
<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>	<u>Amt.</u> <u>Req.</u>
* 1	27-527 Blk.	Washer - - - - -	1
* 2	61494 G	Collar - - - - -	1
* 3	604	Screw - - - - -	1
4	22539 R	Plug Screw - - - - -	1
5	52942 Y	Synchronizing Stud - - - - -	1
6	56394 A	Oil Gauge Adjusting Shaft- - - - -	1
* 7	426 B	Pin- - - - -	1
8	11635 B	Nut- - - - -	1
9	61256 G	Washer - - - - -	2
10	660-221	Oil Retaining Ring - - - - -	1
11	56394 C	Oil Gauge Float Lever Assembly - - - - -	1
12	56394 B	Oil Gauge Connecting Rod - - - - -	1
13	63494 K	Oil Gauge- - - - -	1
14	660-455	"O" Ring - - - - -	1
15	63494 G	Spring Washer- - - - -	1
16	63494 F	Nut- - - - -	1
17	56390 E	Bushing Housing Gasket - - - - -	1
18	56390 B	Crankshaft Bushing Housing - - - - -	1
19	22569 B	Screw- - - - -	3
20	52882 Y	Baffle Plate - - - - -	1
21	90	Screw- - - - -	2
22	56382 C	Gasket - - - - -	1
23	56382 B	Upper Crank Chamber Cover- - - - -	1
24	22541 C	Screw- - - - -	4
25	22733 E	Oil Filler Plug Screw- - - - -	1
26	56382 M	Gasket - - - - -	1
27	51282 AE	Needle Lever Bearing Oiler - - - - -	1
28	51154 E	Needle Bar Bushing, upper- - - - -	1
29	56393 W	Oil Attraction Felt- - - - -	1
30	57836 B	Feed Rocker Shaft Bushing- - - - -	2
31	56390	Main Shaft Bushing, left - - - - -	1
32	666-259	Felt - - - - -	1
33	50-895 Blk.	Looper Rocker Shaft Bushing- - - - -	2
34	56393 P	Base Felt, front - - - - -	1
35	52942 W	Looper Drive Lever Shaft Bushing, front- - - - -	1
36	56393 Q	Base Felt, rear- - - - -	1
37	56190	Main Shaft Bushing, middle - - - - -	1
38	57842 B	Looper Drive Lever Shaft Bushing, rear - - - - -	1
39	51257 AA	Presser Bar Bushing, lower - - - - -	1
40	56354 C	Needle Bar Bushing, lower, for all Styles except 56900 J - - - - -	1
-	57954	Needle Bar Bushing, lower, for Style 56900 J - - - - -	1
41	56393 T	Head Oil Pump Assembly - - - - -	1
42	56393 L	Intake Felt- - - - -	1
43	56390 A	Main Shaft Bushing, right- - - - -	1
44	21657 X	Tension Release Lever Shaft Bushing- - - - -	1
45	22793	Screw- - - - -	1

*Replaced by Ref. No. 45 on late model machines.



CRANKSHAFT, NEEDLE LEVER AND LOOPER DRIVING PARTS

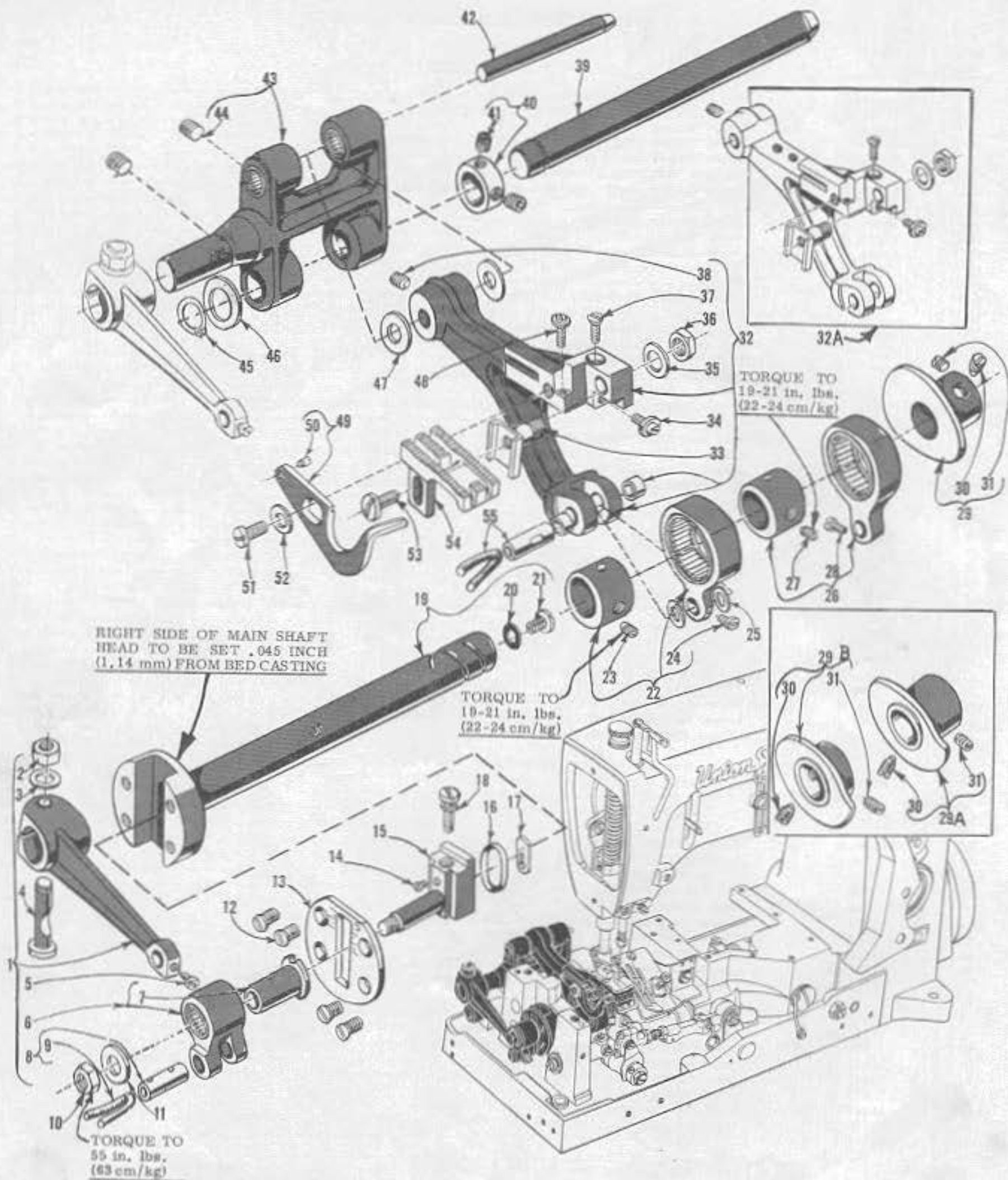
Ref. No.	Part No.	Description	Am. Req.
1	29066 R	Needle Lever Connecting Rod Upper Ball Joint Assembly - - - - -	1
2	22559 G	Screw - - - - -	2
3	51216 N	Washer - - - - -	1
4	51216 P	Nut - - - - -	1
5	56316	Needle Lever Connecting Rod - - - - -	2
6	56321 J	Handwheel Assembly - - - - -	1
7	56321 H	Pulley - - - - -	1
7A	22894 AB	Screw - - - - -	2
7B	56321 D	Handwheel - - - - -	1
7C	61321 L	Retainer Plate - - - - -	1
7D	22574	Screw - - - - -	3
8	660-202	"O" Ring, for pulley and looper drive lever rocker shaft - - - - -	2
9	51147	Thrust Collar - - - - -	1
10	95	Screw - - - - -	1
11	51247	Counterweight - - - - -	2
12	22894 J	Screw - - - - -	2
13	29476 LL	Crankshaft Assembly, .910 inch throw, for Styles 56200 L,W and Class 56300 except Styles 56300 H,M - - - - -	1
	29476 LM	Crankshaft Assembly, .770 inch throw, for Styles 56200 H,K,R,S and Classes 56400, 56700 - - - - -	1
	29476 LN	Crankshaft Assembly, .990 inch throw, for Styles 56300 H,M and Classes 56500, 56900 - - - - -	1
14	51216 M	Needle Bearing - - - - -	28
15	56316 C	Connecting Rod Guide - - - - -	1
16	12934 A	Nut - - - - -	1
17		Head Oil Pump, (See Ref. No. 41 - Page 31) - - - - -	1
18		Base Oil Pump, (See Ref. No. 59 - Page 29) - - - - -	1
19	52943 L	Looper Drive Lever And Crankshaft Connection, right - - - - -	1
20	22894 X	Screw - - - - -	4
21	29105 AG	Looper Drive Lever Crank Assembly, for Styles 56200 L,W and Classes 56300, 56500, 56900 - - - - -	1
	29105 AH	Looper Drive Lever Crank Assembly, for Styles 56200 H,K,R,S and Classes 56400, 56700 - - - - -	1
22	22559 A	Bearing Cap Screw, lower - - - - -	2
23	56343 E	Oil Splasher - - - - -	1
24	22587 K	Bearing Cap Screw, upper - - - - -	2
25	56343 C	Ball Joint Guide Fork - - - - -	1
26	56342 B	Spacing Washer - - - - -	1
27	52942 A	Looper Drive Lever Rocker Shaft - - - - -	1
28	56343 D	Looper Drive Lever Crank Connection, left - - - - -	1
29	22894 X	Screw - - - - -	4
30	56358 A	Needle Lever Thread Eyelet, for Class 56200 and Styles 56300 H,M,W, - - - - -	1
31	56458	Needle Lever Thread Eyelet, for two needle machines - - - - -	1
32	56958	Needle Lever Thread Eyelet, for three needle machines and Class 56300 except Styles 56300 H,M,W - - - - -	1
33	22768	Screw - - - - -	1
34	56	Needle Clamp Nut, for Classes 56200, 56300 - - - - -	1
35		Needle Bar (See Page 47) - - - - -	1
36	27-435 Blk.	Needle Bar Eyelet Washer - - - - -	1
37	56358	Needle Bar Thread Eyelet, for Class 56200 and Styles 56300 H,M,W- - - - -	1
38	56958 A	Needle Bar Thread Eyelet, for three needle machines and Class 56300 except Styles 56300 H,M,W - - - - -	1
39	56458 A	Needle Bar Thread Eyelet, for two needle machines - - - - -	1
40	22768	Screw - - - - -	1
41	22586 R	Screw - - - - -	1
42	51250 F	Gasket - - - - -	1
43	51250 D	Washer - - - - -	1
44	660-212	Oil Seal Ring - - - - -	2
45	51150	Needle Lever Thrust Collar - - - - -	1
46	29348 Y	Needle Lever Assembly - - - - -	1
47	51254 J	Needle Bar Connection - - - - -	1
48	22562 A	Screw - - - - -	1
49	22564	Screw - - - - -	1
50	56354 A	Needle Bar Link - - - - -	1
51	77	Screw - - - - -	1
52	56315	Needle Lever - - - - -	1
53	56350 A	Needle Lever Stud - - - - -	1
54	51054	Link Pin - - - - -	2
55	666-149	Felt Wick - - - - -	1
56	CL21	Oil Drain Wick - - - - -	1



LOOPER ROCKER AND CONNECTING ROD PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	18	Nut, for all Styles except 56700 J	1
2	51216 N	Washer, for all Styles except 56700 J	1
3	51244 L	Thrust Washer	2
4	51244 N	Looper Rocker Shaft Clamp, for all Styles except 56700 J	1
5	55244 G	Looper Rocker Shaft Collar Stud, for all Styles except 56700 J	1
6	W03	Columbia Wool Yarn (4 strands - 8 inches long)	1
7	56344	Looper Rocker Shaft, for all Styles except 56700 J	1
8	CO67 E	Cork Plug	1
9	56344 B	Looper Rocker Shaft Arm	1
10	51236 A	Looper Avoid Link Pin	1
11	56344 C	Looper Rocker Frame, for all Styles except 56700 J	1
12	719	Stop Screw	1
13	98	Screw	1
14	51246	Looper Rocker Stud Nut, for all Styles except 56700 J	1
15	96	Screw	1
16	22874	Looper Rocker Frame Lock Screw	1
17	18	Nut, for all Styles except 56700 J	1
18		Looper (See Page 49)	1
19		Looper Collar (See Page 49)	1
20	73	Screw	-1,2,3
21	57841	Looper Connecting Rod Ball Joint, left, for all Styles except 56700 J	1
22	22729 C	Screw	1
23	269	Nut, left hand thread	1
24	51240 D	Looper Connecting Rod, for all Styles except 56700 J and Class 56400	1
-	51240 E	Looper Connecting Rod, for Class 56400	1
25	18	Nut, right hand thread	1
26	56342	Looper Drive Lever, marked "A"	1
27	22882 C	Screw	1
28	51242 M	Washer	1
29	52942 R	Looper Lever Stud	1
30	20	Washer	1
31	18	Nut	1
32	56393 K	Looper Connecting Rod Ball Joint Oiler, right	1
33	56341 M	Looper Connecting Rod Jointed Section Assembly, right, for all Styles except 56700 J	1
34	56341 F	Ferrule	1
35	660-310	Truarc Ring	2
36	56341 E	Hinge Pin	1
37	56341 G	Spring	1
38	50-458 Blk.	Spring Pin	1
39	87 U	Screw	1
40	56393 J	Looper Connecting Rod Ball Joint Oiler, left	1
41		Looper Rocker Assembly (See Chart Below)	1
42	51745	Looper Rocker Cone Stud	1
43		Looper Rocker (See Chart Below)	1
44	15465 F	Looper Rocker Cone	1
45	88	Screw	2
46	258 A	Lock Nut	1
47	22829	Lock Nut Screw	1
48	56744 A	Looper Rocker Shaft, for Style 56700 J	1
49	56744	Looper Rocker Frame, for Style 56700 J	1
50	719	Stop Screw	1
51	98	Set Screw	1
52	96	Spot Screw	1
53	1280	Looper Rocker Stud Nut, for Style 56700 J	2
54	56751	Looper Rocker Shaft Thrust Collar, right, for Style 56700 J	1
55	51170 D	Nut, for Style 56700 J	2
56	56772-56	Looper Rocker Spacing Plate, for No. 56 gauge, Style 56700 J	1
-	56772-64	Looper Rocker Spacing Plate, for No. 64 gauge, Style 56700 J	1
57	14077	Nut, for Style 56700 J	2
58	51770-56	Looper Rocker Link, for No. 56 gauge, Style 56700 J	1
-	51770-64	Looper Rocker Link, for No. 64 gauge, Style 56700 J	1
59	51771	Looper Rocker Link Ferrule, for Style 56700 J	2
60	22835	Screw, for Style 56700 J	1
61	57841 A	Looper Connecting Rod Ball Joint, left, for Style 56700 J	1
62	22729 C	Screw	2
63	41047	Looper Connecting Rod, for Style 56700 J	1
64	29476 LV	Looper Connecting Rod Assembly, right, for Style 56700 J	1
65	56341 F	Ferrule	1

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



MAIN SHAFT, TAKE-UPS AND FEED DRIVING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	29476 MJ	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	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	22798 C	Screw - - - - -	1
15	56336	Feed Crank Stud, marked "A" - - - - -	1
16	660-269 B	Quad Ring - - - - -	1
17	56336 D	Feed Crank Stud Insert - - - - -	1
18	22543 A	Stitch Regulating Screw - - - - -	1
19	56122 A	Main Shaft, for all Styles except 56700 J - - - - -	1
-	56722 E	Main Shaft, for Style 56700 J - - - - -	1
20	56322 B	Gasket - - - - -	1
21	22891 B	Oil Flow Regulating Screw - - - - -	1
22	29476 NM-062	Feed Lift Eccentric Assembly, for Styles 56200 H,K,R,S; 56300 U,X; 56700 J and Class 56400 - - - - -	1
-	29476 NM-080	Feed Lift Eccentric Assembly, for Styles 56200 L,W; 56500 A,B,C,J, U, Classes 56900 and 56300 except Styles 56300 H,M,U,X - - - - -	1
-	29476 NM-096	Feed Lift Eccentric Assembly, for Styles 56300 H,M; 56500 R - - - - -	1
23	22894 AA	Spot Screw - - - - -	1
24	77	Screw, for link pin - - - - -	1
25	39543 N	Thrust Washer, for feed bar - - - - -	2
26	29476 NM-054	Looper Avoid Eccentric Assembly, for Class 56400 - - - - -	1
-	29476 NM-072	Looper Avoid Eccentric Assembly, for Styles 56200 L, 56300 W, Classes 56500 and 56900 - - - - -	1
-	29476 NM-062	Looper Avoid Eccentric Assembly, for Styles 56200 H,K,R,S; 56300 E,F,G,N,R,U,X,AH,AL; 56700 J - - - - -	1
-	29476 NM-080	Looper Avoid Eccentric Assembly, for Styles 56200 W; 56300 H,M - - - - -	1
27	22894 AA	Spot Screw - - - - -	1
28	77	Screw, for link pin - - - - -	1
29	56323	Looper Thread Take-up, for Styles 56200 L,W and Classes 56300, 56500 and 56900 - - - - -	1
29 A	56423	Looper Thread Take-up, for Styles 56200 H,K,R,S and Class 56400 - - - - -	1
29 B	56723	Looper Thread Take-up, for Style 56700 J - - - - -	1
30	22764 C	Spot Screw - - - - -	1
31	22580 D	Set Screw - - - - -	1
32	56334 N	Feed Bar, for all Styles except 56300 N,U,X,AH - - - - -	1
32 A	56334 P	Feed Bar, for Styles 56300 N,U,X,AH - - - - -	1
33	56334 L	Feed Dog Holder - - - - -	1
34	22863 C	Feed Dog Holder Adjusting Screw - - - - -	1
35	6042 A	Feed Dog Holder Washer - - - - -	1
36	258 A	Nut - - - - -	1
37	22637 P-24	Feed Dog Height Adjusting Screw - - - - -	1
38	22651 CB-4	Screw - - - - -	1
39	56335 L	Feed Rocker Shaft - - - - -	1
40	56335 D	Feed Rocker Shaft Collar - - - - -	1
41	98	Screw - - - - -	2
42	56334 B	Feed Bar Shaft - - - - -	1
43	56335 G	Feed Rocker - - - - -	1
44	22651 CD-4	Screw - - - - -	2
45	660-438	Retaining Ring - - - - -	1
46	41391	Washer - - - - -	1
47	61341 J	Feed Bar Washer - - - - -	2
48	22834 A	Needle Guard Adjusting Screw - - - - -	1
49		Needle Guard (See Page 47) - - - - -	1
50	22801	Screw - - - - -	1
51	22875 H	Screw, for needle guard - - - - -	1
52	61434 G	Washer - - - - -	1
53	22528	Screw, for feed dog - - - - -	1
54		Feed Dog (See Pages 51,53, 55,59,61,63,65,67,69 - - - - -	1
55	51236 A	Link Pin - - - - -	1

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

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

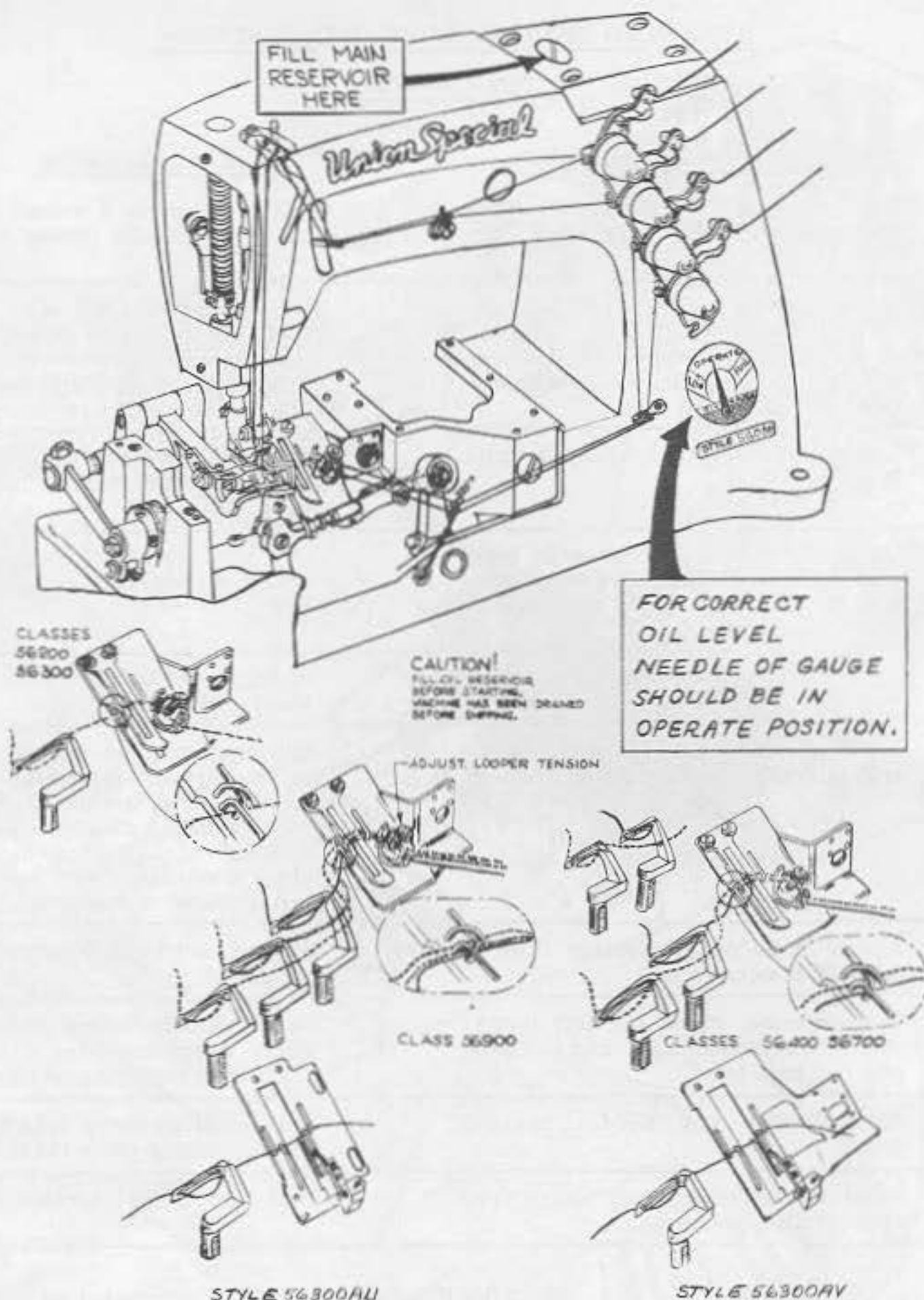
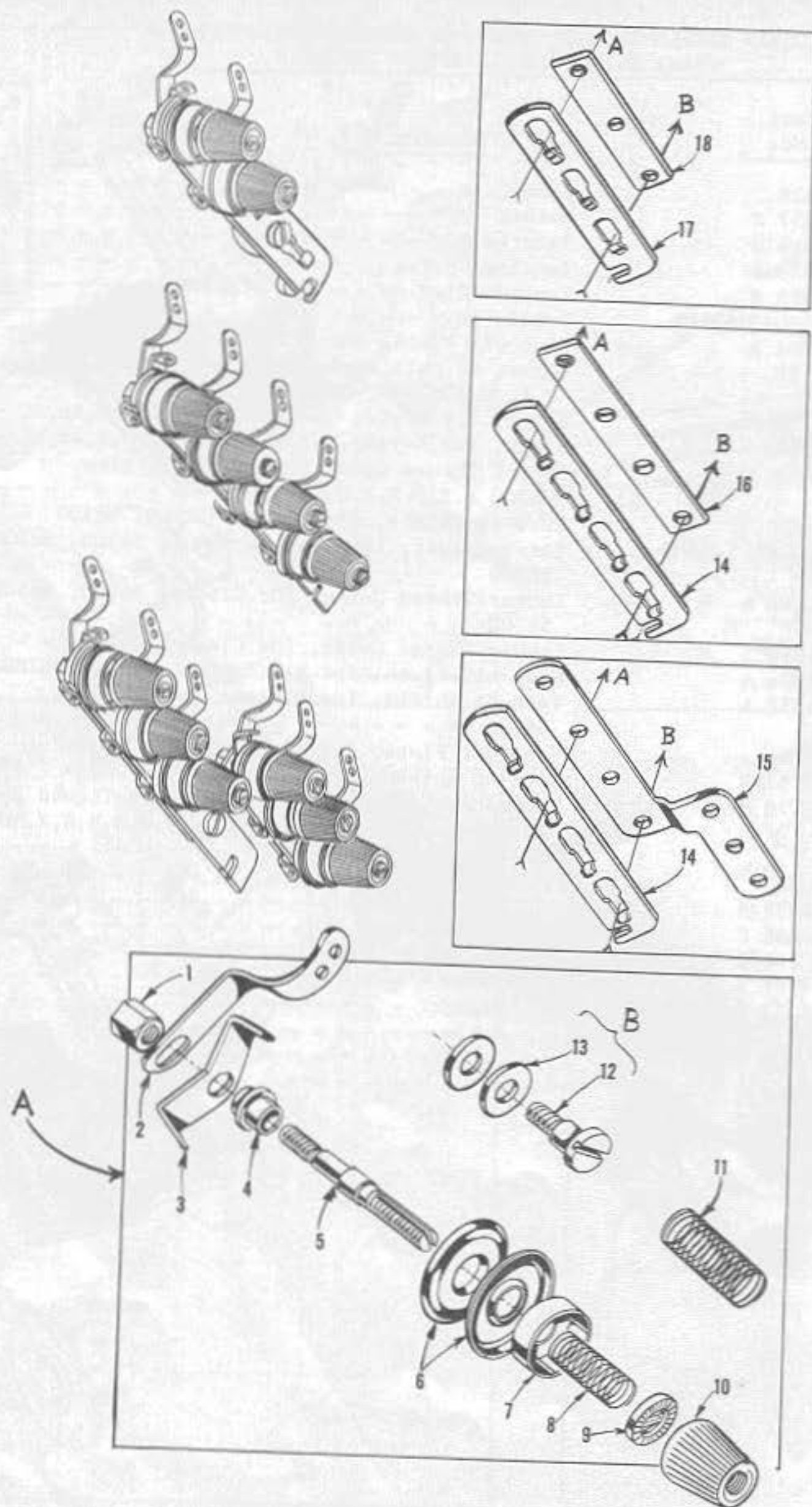


Fig. 1

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

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

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



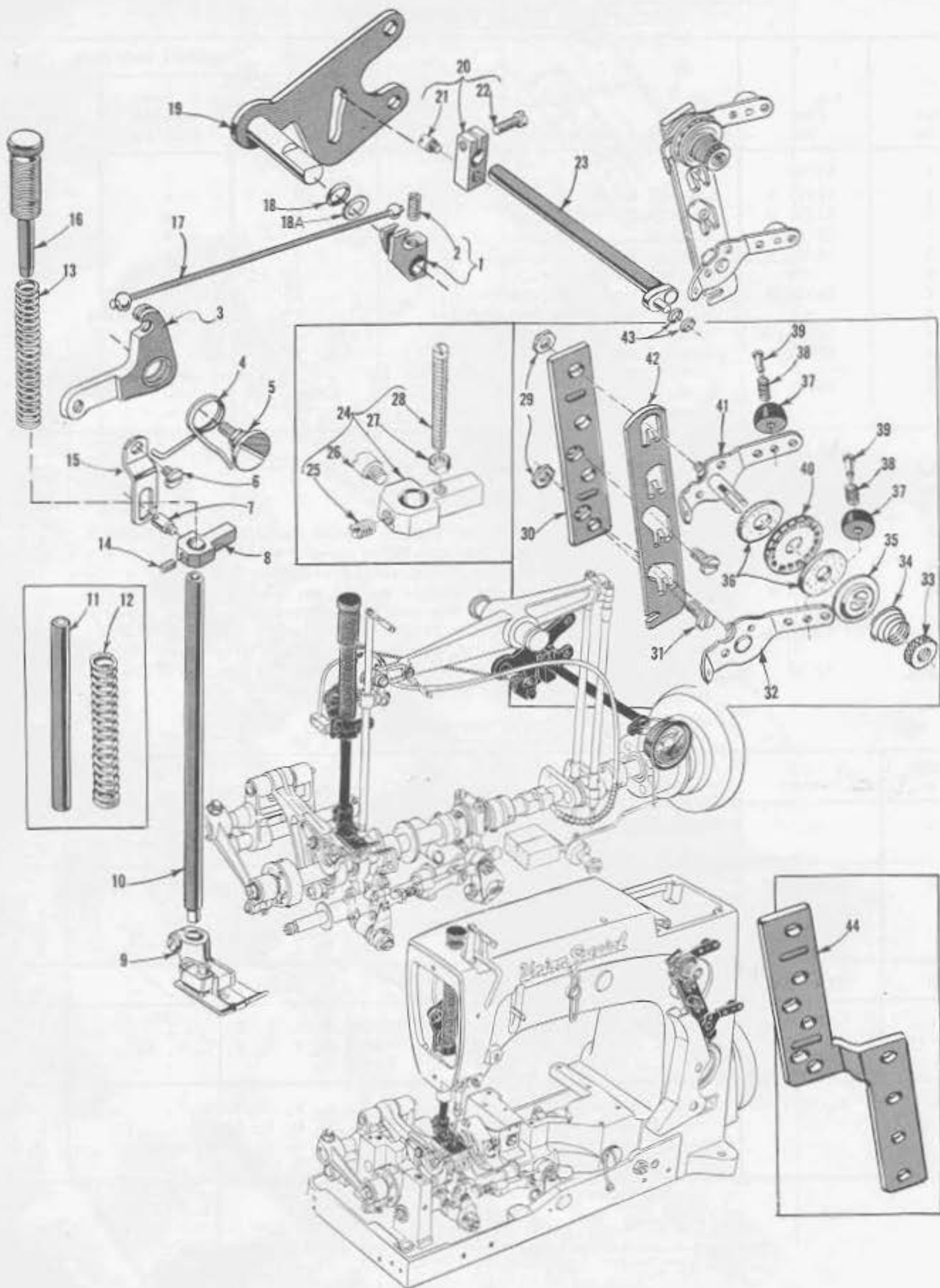
DISC THREAD TENSION PARTS

Ref. No.	Part No.	Description	AMOUNT REQUIRED		
			One Needle Machine	Two Needle Machine	Three Needle Machine
1	43266	Nut	1	2	5
2	51491 C	Lead-in Guide	2	4	6
3	51292 D	Tension Thread Eyelet	2	4	6
4	51292 A	Ferrule	2	4	6
5	56392 E	Tension Post	2	4	6
6	109	Tension Disc	4	8	12
7	56392 F	Tension Spring Shield	2	4	6
8	-	Needle Thread Tension Spring	(See Chart Below)		
9	39592 AK	Tension Spring Ferrule	2	4	6
10	39592 Z	Tension Nut	2	4	6
11	-	Looper Thread Tension Spring	(See Chart Below)		
12	22598 C	Screw	1	-	1
13	80557	Washer	2	-	2

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

TENSION SPRING CHART

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

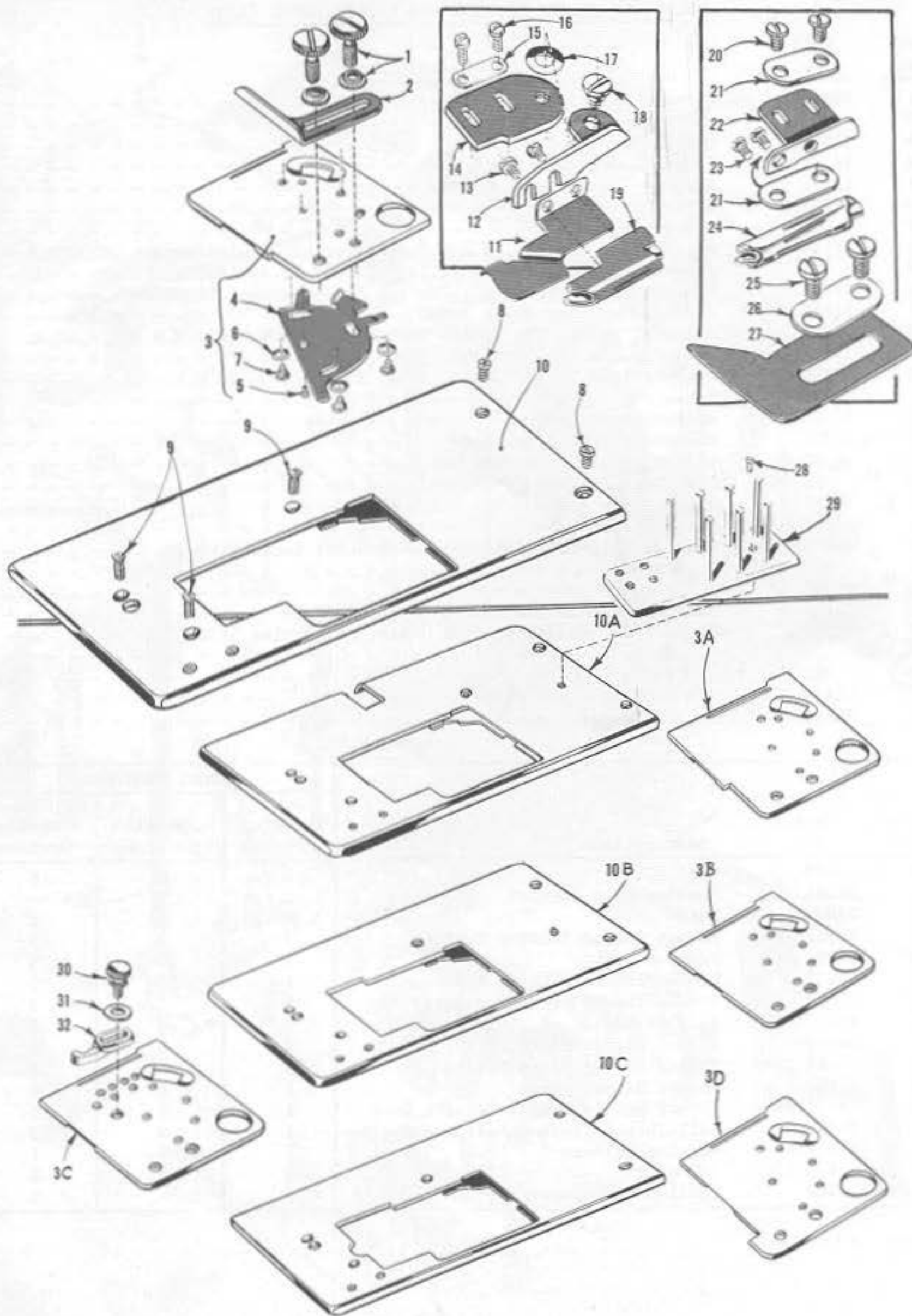


ROTARY THREAD TENSION AND LIFTER LEVER PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	56383 X	Lifter Lever Connection - - - - -	1
2	74 E	Screw - - - - -	1
3	56383 Y	Lifter Lever Bell Crank - - - - -	1
4	56383 D	Lifter Lever Bell Crank Spring- - - - -	1
5	22557 G	Screw - - - - -	1
6	22758 C	Screw - - - - -	1
7	402	Screw - - - - -	1
8	51257 M	Presser Bar Connection and Guide, for all Styles except 56300 F,R -	1
9		Presser Foot (See Pages 51,53,55,57,59,61,63,65,67,69)- - - - -	1
10	51257 K	Presser Bar, marked "A", for all Styles except 56900 J- - - - -	1
11	51957 E	Presser Bar, for Style 56900 J- - - - -	1
12	53787	Presser Spring, for Styles 56200 L,W, 56300 E,F,G,H,M,N,R,W,AH,AL and Classes 56400, 56500, 56700, 56900 - - - - -	1
13	51256 C	Presser Spring, for Styles 56200 H,K,R,S, 56300 U,X - - - - -	1
14	531	Screw - - - - -	1
15	56383 A	Lifter Lever Link - - - - -	1
16	56356	Presser Spring Regulator- - - - -	1
17	56383 W	Lifter Lever Connecting Cable - - - - -	1
18	660-207	Oil Seal Ring - - - - -	1
18 A	39552 C	Washer- - - - -	1
19	51283 H	Lifter Lever- - - - -	1
20	21657 Y	Tension Release and Lifter Lever Shaft Connection - - - - -	1
21	402	Screw - - - - -	1
22	22596	Screw - - - - -	1
23	21657 W	Tension Release and Lifter Lever Shaft- - - - -	1
24	56357 A	Presser Bar Connection and Guide, for Styles 56300 F,R- - - - -	1
25	531	Screw - - - - -	1
26	402	Screw - - - - -	1
27	51430 F	Nut - - - - -	1
28	22840 C	Screw - - - - -	1

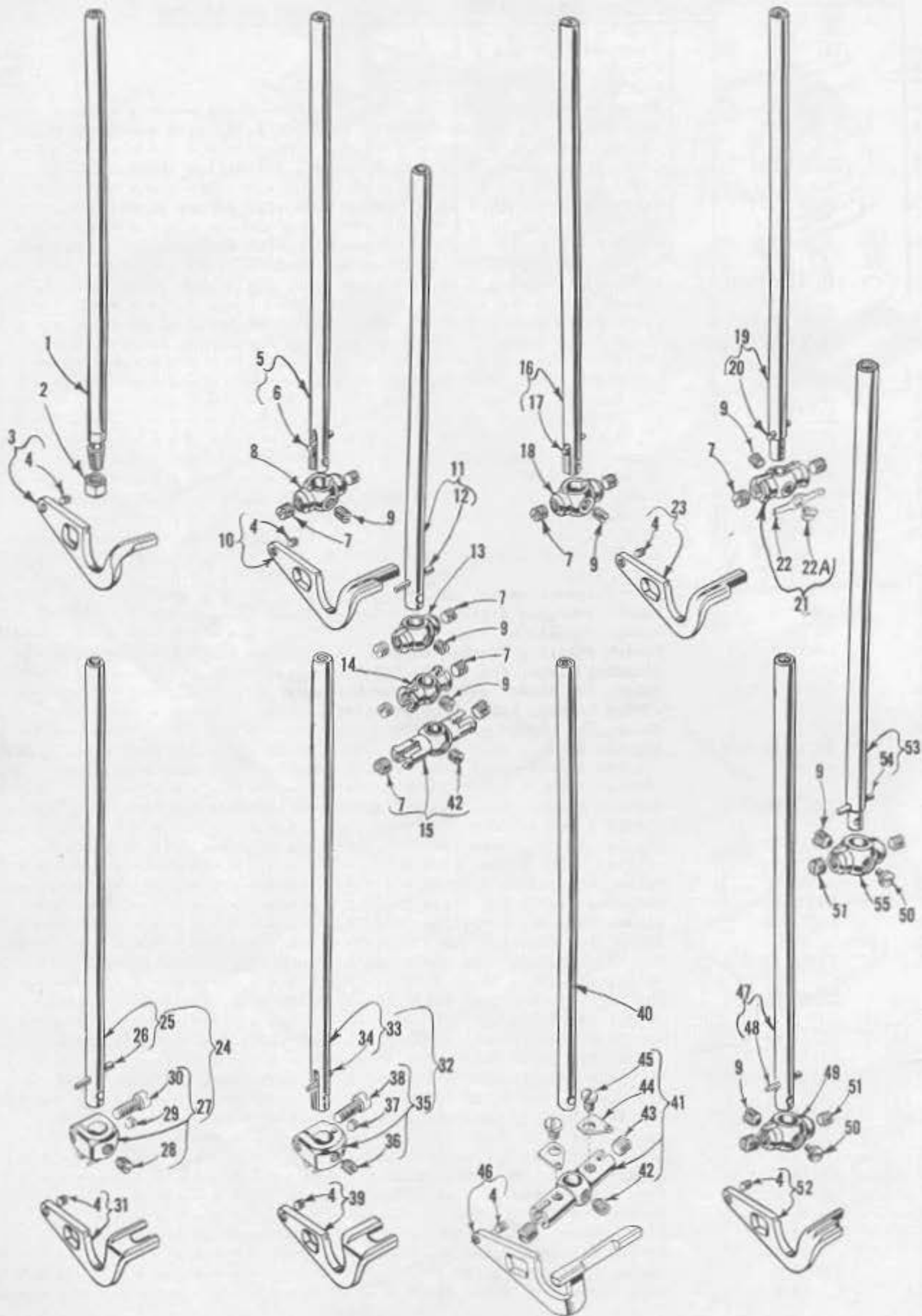
TENSION PARTS

Ref. No.	Part No.	Description	AMOUNT REQUIRED		
			One Needle Machines	Two Needle Machines	Three Needle Machines
29	14077	Nut	2	4	6
30	56392	Tension Post Support	1	1	-
31	22872 A	Screw	2	2	2
32	56392 C	Looper Thread Tension Eyelet	1	2	3
33	61292 C	Tension Nut	1	2	3
34	61492 M-5	Needle Thread Tension Spring	1	2	3
35	21657 AE	Needle Thread Tension Release Pin	1	2	3
36	61492 T	Felt Washer	2	4	6
37	56359	Thread Nipper Plate	2	4	6
38	56359 A	Thread Nipper Plate Spring	2	4	6
39	22856	Thread Nipper Screw	2	4	6
40	61492 S	Rotary Needle Thread Tension Disc	1	2	3
41	56392 B	Ndl. Thread Tension Post and Eyelet	1	2	3
42	21657 AD-4	Tension Release	1	1	1
43	660-220	"O" Ring	2	2	2
44	56992	Tension Post Support	-	-	1



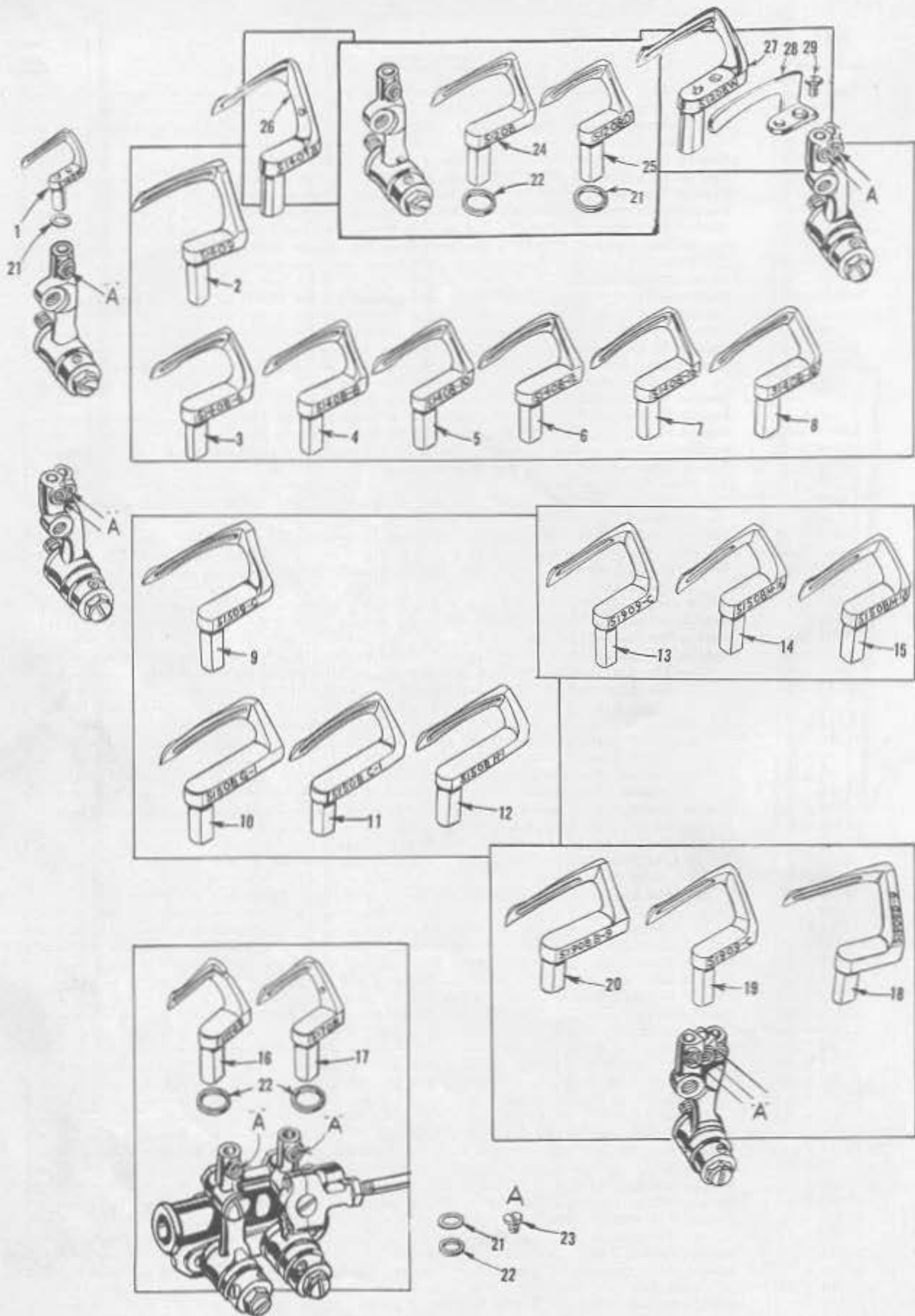
CLOTH PLATES, CLOTH PLATE COVERS, EDGE GUIDES AND BINDERS

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



NEEDLE BARS, NEEDLE HOLDERS AND NEEDLE GUARDS

Ref. No.	Part No.	Description	Amt. Req.
1	51217 C	Needle Bar, marked "CU", for Classes 56200, 56300 - - - - -	1
2	56	Needle Clamp Nut, for Classes 56200, 56300 - - - - -	1
3	56325	Needle Guard, for Classes 56200, 56300 - - - - -	1
4	22801	Screw - - - - -	1
5	51417 C-6	Needle Bar, marked "CV-6", for No. 6 gauge, Style 56400 P - - - - -	1
-	51417 C-8	Needle Bar, marked "CV-8", for No. 8 gauge, Styles 56400 P, T, W - - - - -	1
-	51417 C-10	Needle Bar, marked "CV-10", for No. 10 gauge, Styles 56400 P, T, W, - - - - -	1
-	51417 C-12	Needle Bar, marked "CV-12", for No. 12 gauge, Styles 56400 D, P, T, W - - - - -	1
-	51417 C-16	Needle Bar, marked "CV-16", for No. 16 gauge, Styles 56400 D, P, T, W - - - - -	1
-	51417 C-18	Needle Bar, marked "CV-18", for No. 18 gauge, Style 56400 P - - - - -	1
6	50 J-16	Stop Pin - - - - -	1
7	98	Screw, for needle - - - - -	2
8	51418-16	Needle Holder, marked "D-16", for all gauges Styles 56400 D, P, T, W and No. 16 gauge, Style 56500 J - - - - -	1
9	89	Spot Screw - - - - -	1
10	56425	Needle Guard, for Class 56400, all gauges - - - - -	1
11	51417 D	Needle Bar, marked "DE", for Nos. 24, 26, 32, 48 gauges, Styles 56400 R, S, X - - - - -	1
12	50 J-40	Stop Pin - - - - -	1
13	51418 K-24	Needle Holder, marked "L-24", for No. 24 gauge, Style 56400 X - - - - -	1
-	51418 K-26	Needle Holder, marked "L-26", for No. 26 gauge, Style 56400 X - - - - -	1
14	51418 B-32	Needle Holder, marked "D-32", for No. 32 gauge, Style 56400 S - - - - -	1
15	51418 D-48	Needle Holder, marked "AC-48", for No. 48 gauge, Styles 56400 R, S - - - - -	1
16	56517 B-16	Needle Bar, marked "ET", for No. 16 gauge, Style 56500 J - - - - -	1
17	50 J-16	Stop Pin - - - - -	1
18	51418-16	Needle Holder, marked "D-16", for No. 16 gauge, Style 56500 J and all gauges Style 56400 D, P, T, W - - - - -	1
19	56517 B-18	Needle Bar, marked "EU", for No. 18 gauge, Style 56500 J, R - - - - -	1
20	50 J-16	Stop Pin - - - - -	1
21	7018 K-5	Needle Holder, marked "G-5", for No. 18 gauge, Styles 56500 J, R - - - - -	1
22	7040-6	Thread Guide - - - - -	1
22A	187 B	Screw - - - - -	1
23	56525	Needle Guard, for Styles 56500 J, R all gauges - - - - -	1
24	29202 M-1	Needle Bar Assembly, for 7 S.P.I., Styles 56500 B, U - - - - -	1
-	29202 N-1	Needle Bar Assembly, for 10 S.P.I., Style 56500 C - - - - -	1
25	56517 D-1	Needle Bar, marked "EK", for 7 S.P.I., Styles 56500 B, U - - - - -	1
-	56517 E-1	Needle Bar, marked "EL", for 10 S.P.I., Style 56500 C - - - - -	1
26	50 J-16	Stop Pin - - - - -	1
27	51518 G-1	Needle Holder, marked "P-1", for 7 S.P.I., Styles 56500 B, U - - - - -	1
-	51518 C-1	Needle Holder, marked "Q-1", for 10 S.P.I., Style 56500 C - - - - -	1
28	89	Spot Screw - - - - -	1
29	88 B	Screw, for needle - - - - -	1
30	22729	Screw, for needle - - - - -	1
31	56525 B	Needle Guard, for 7 S.P.I., Styles 56500 B, U - - - - -	1
-	56525 C	Needle Guard, for 10 S.P.I., Style 56500 C - - - - -	1
32	29202 L-1	Needle Bar Assembly, for 5 S.P.I., Style 56500 A - - - - -	1
33	56517 C-1	Needle Bar, marked "ES", for 5 S.P.I., Style 56500 A - - - - -	1
34	50 J-16	Stop Pin - - - - -	1
35	56518 C-1	Needle Holder, marked "AS", for 5 S.P.I., Style 56500 A - - - - -	1
36	89	Spot Screw - - - - -	1
37	22743	Screw, for needle - - - - -	1
38	22729	Screw, for needle - - - - -	1
39	56525 A	Needle Guard, for 5 S.P.I., Style 56500 A - - - - -	1
40	51717	Needle Bar, marked "AU", for Style 56700 J all gauges - - - - -	1
41	51718 A-56	Needle Holder, marked "AB-56", for No. 56 gauge, Style 56700 J - - - - -	1
-	51718 A-64	Needle Holder, marked "AB-64", for 64 gauge, Style 56700 J - - - - -	1
42	22894 P	Spot Screw - - - - -	1
43	98	Screw, for needle - - - - -	2
44	51718 B-64	Needle Stop and Thread Eyelet, for No. 64 gauge - - - - -	2
-	51718 B-56	Needle Stop and Thread Eyelet, for No. 56 gauge - - - - -	1
45	22513 B	Screw, for No. 64 gauge - - - - -	2
-	605 A	Screw, for No. 56 gauge - - - - -	2
46	56725	Needle Guard, for Style 56700 J all gauges - - - - -	1
47	56917	Needle Bar, marked "EP-9", for Nos. 8, 9 gauges, Styles 56900 H, J - - - - -	1
48	50 J-26	Stop Pin - - - - -	1
49	35818 N-8	Needle Holder, marked "C-8", for No. 8 gauge, Style 56900 H - - - - -	1
-	35818 N-9	Needle Holder, marked "C-9", for No. 9 gauge, Styles 56900 H, J - - - - -	1
50	22752	Screw, for center needle - - - - -	1
51	22580	Screw, for needle - - - - -	2
52	56925	Needle Guard, for Class 56900 all gauges - - - - -	1
53	51917 A	Needle Bar, marked "DC", for No. 7 gauge, Style 56900 H - - - - -	1
54	50 J-26	Stop Pin - - - - -	1
55	51918-7	Needle Holder, marked "E-7", for No. 7 gauge, Style 56900 H - - - - -	1



LOOPERS, LOOPER COLLARS AND LOOPER NEEDLE GUARDS

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

*Not shown on picture plate.

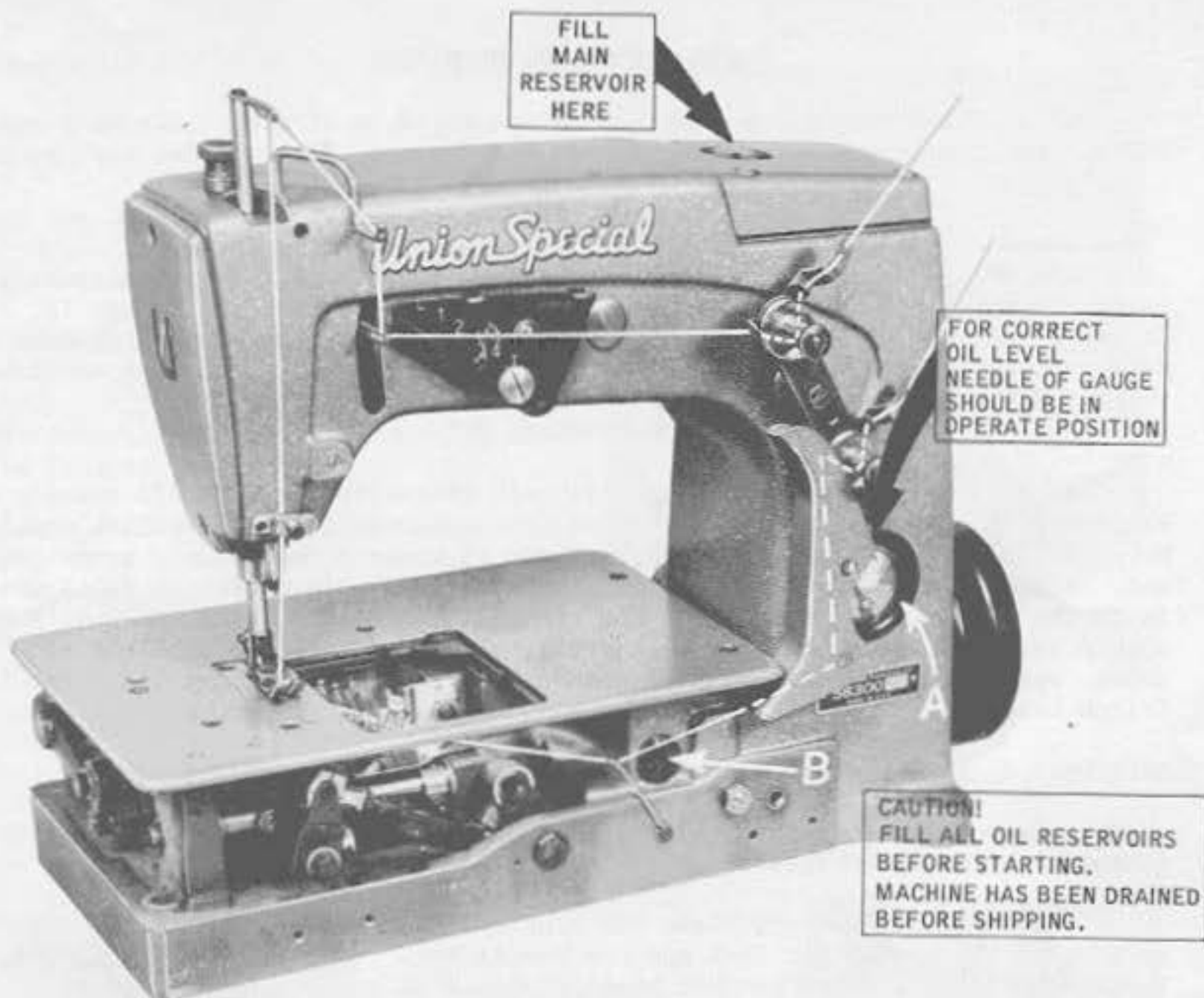
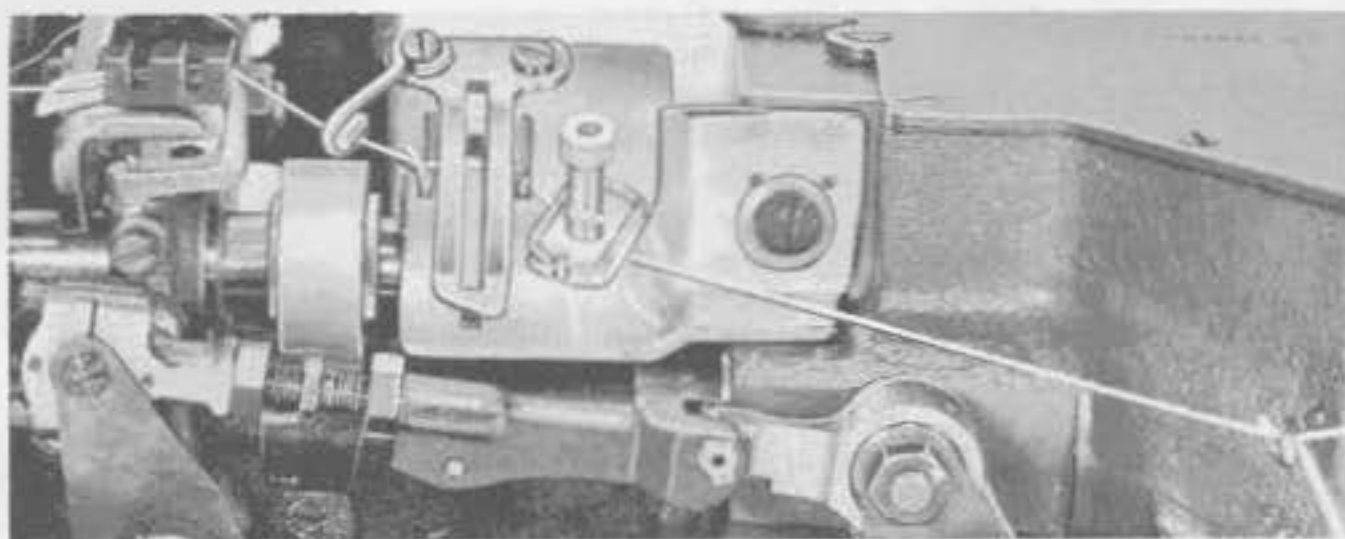


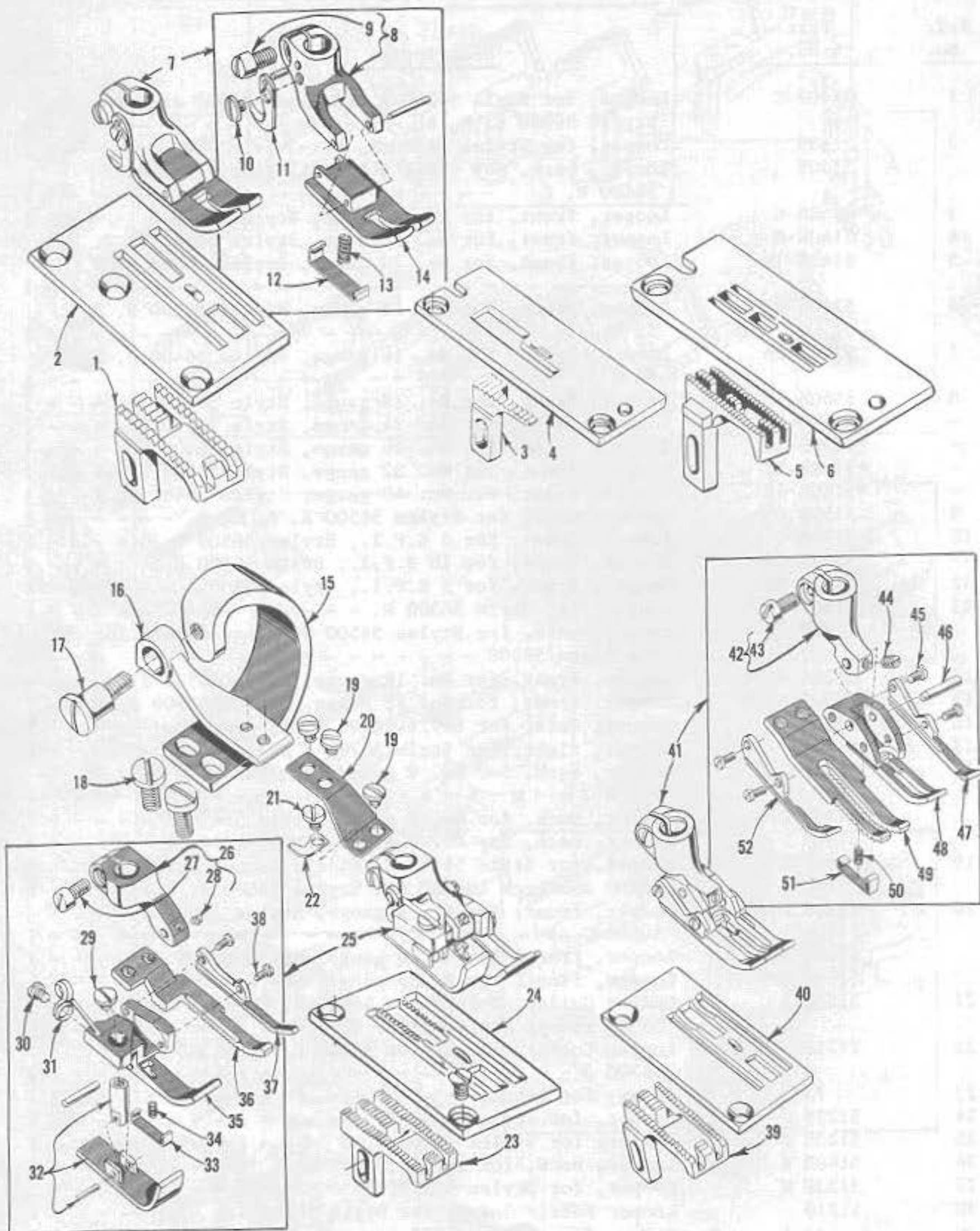
Fig. 1A



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

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

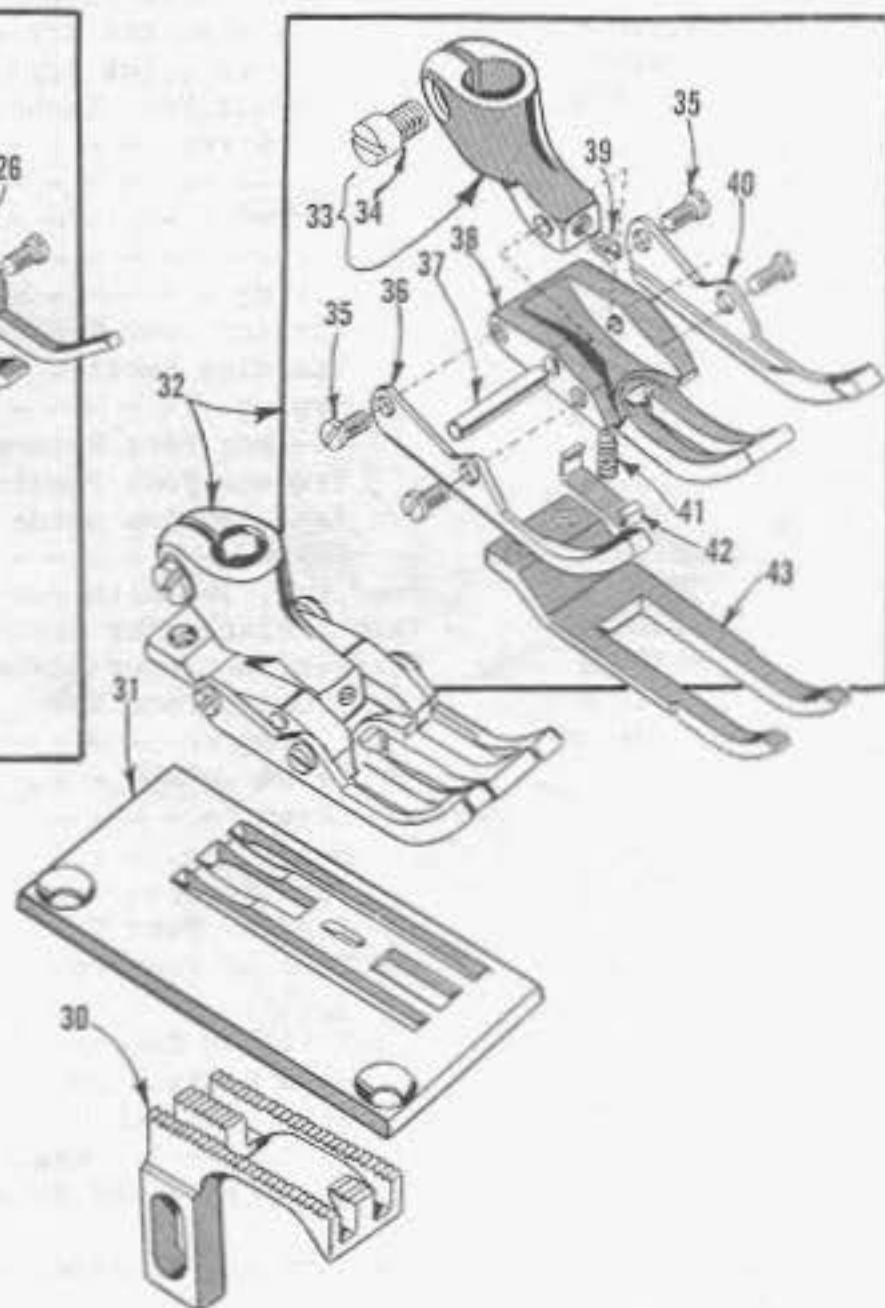
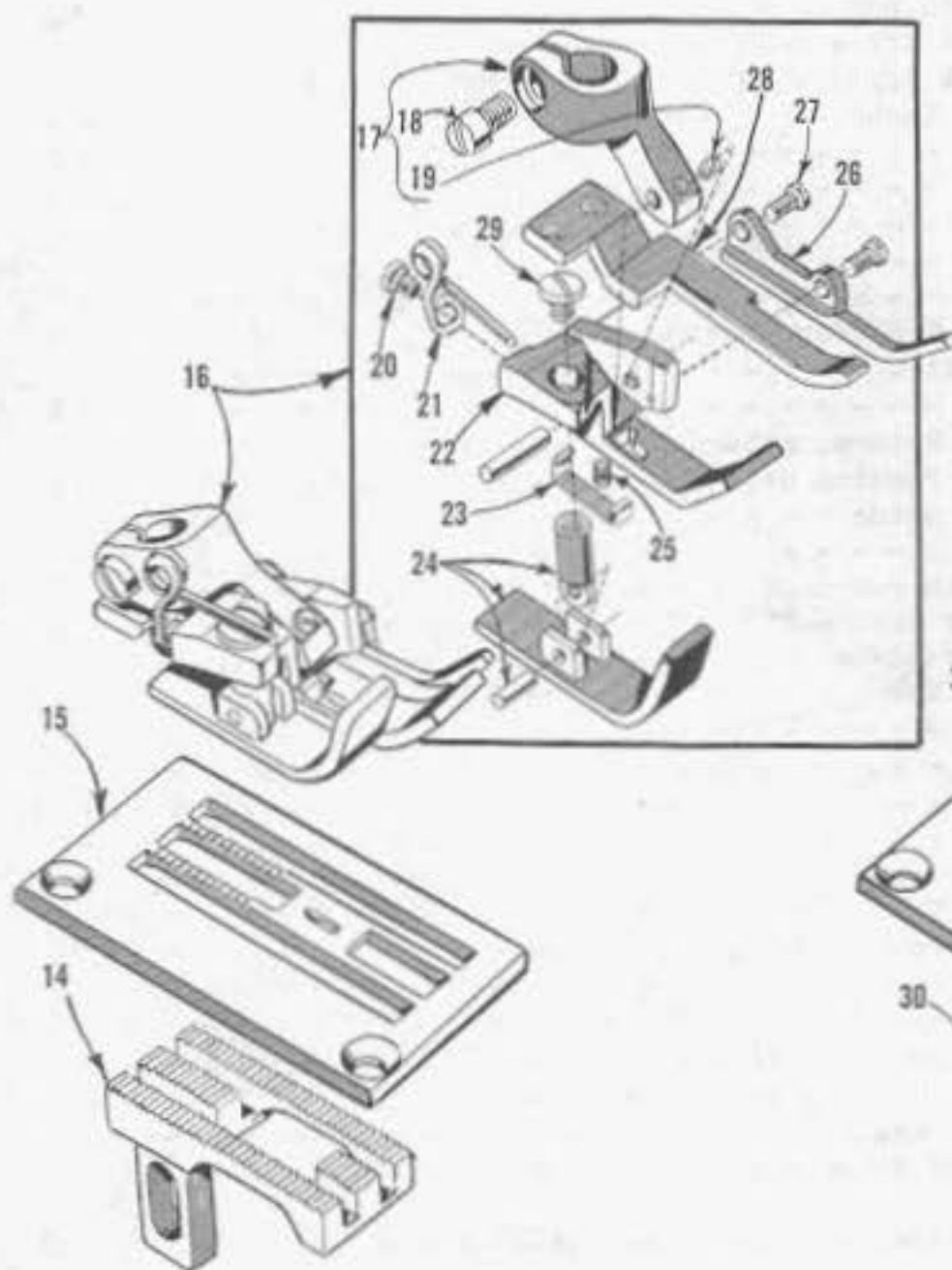
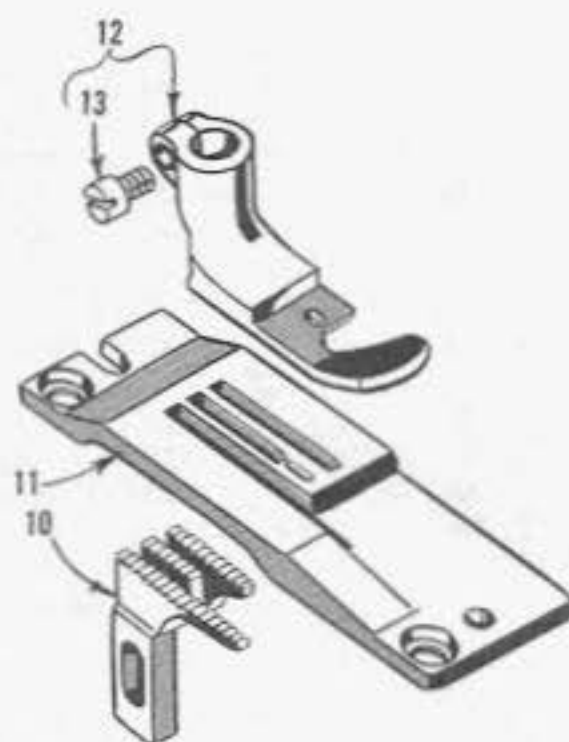
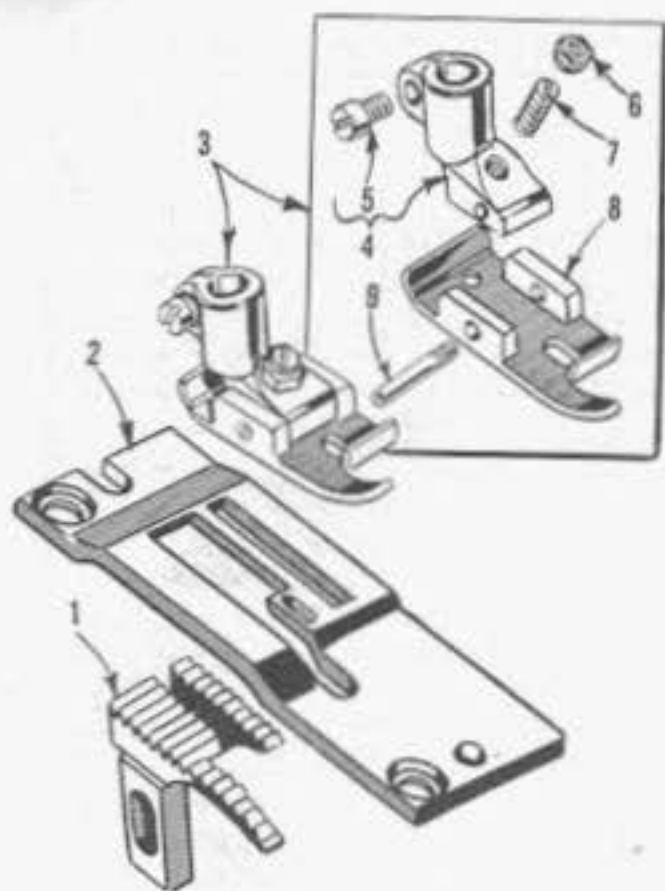
Thread machine in accordance with the threading diagram above for Styles 56300 E,F,G,N,R,U,X,AH or AL; or threading diagram Fig. 1 on page 12 for any other styles covered in this catalog.



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

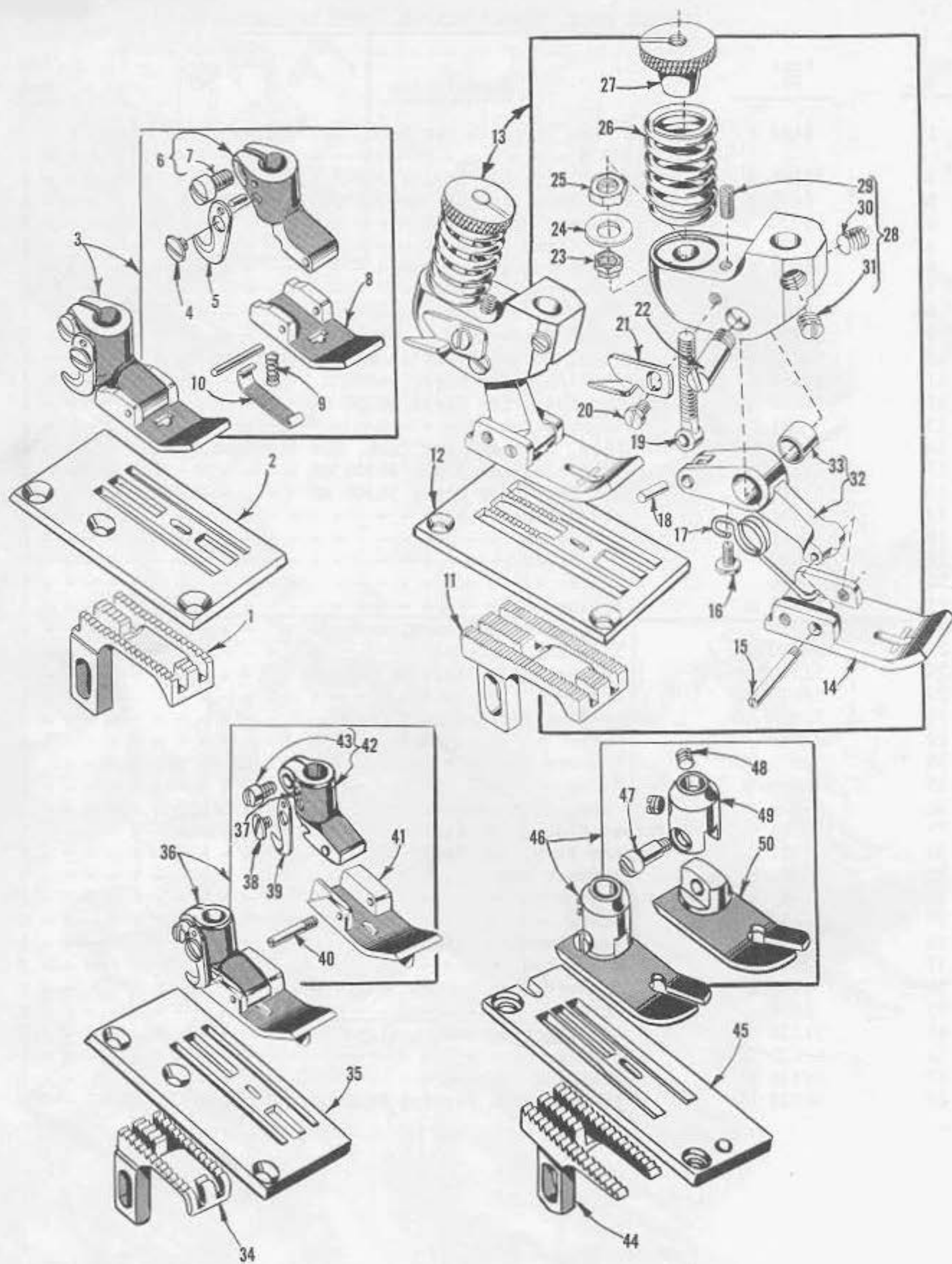
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	9205 E	Feed Dog, 16 teeth per inch, for Styles 56300 G, U - - - - -	1
2	9224 E	Throat Plate, for Styles 56300 G, W - - - - -	1
3	56305 AL	Feed Dog, 12 teeth per inch, for Style 56300 AL - - - - -	1
4	56324 AL	Throat Plate, for Style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

* Not Shown on picture plate, but are components of part Nos. 56320 and 56320 U, Ref. No. 25 and 41 respectively.



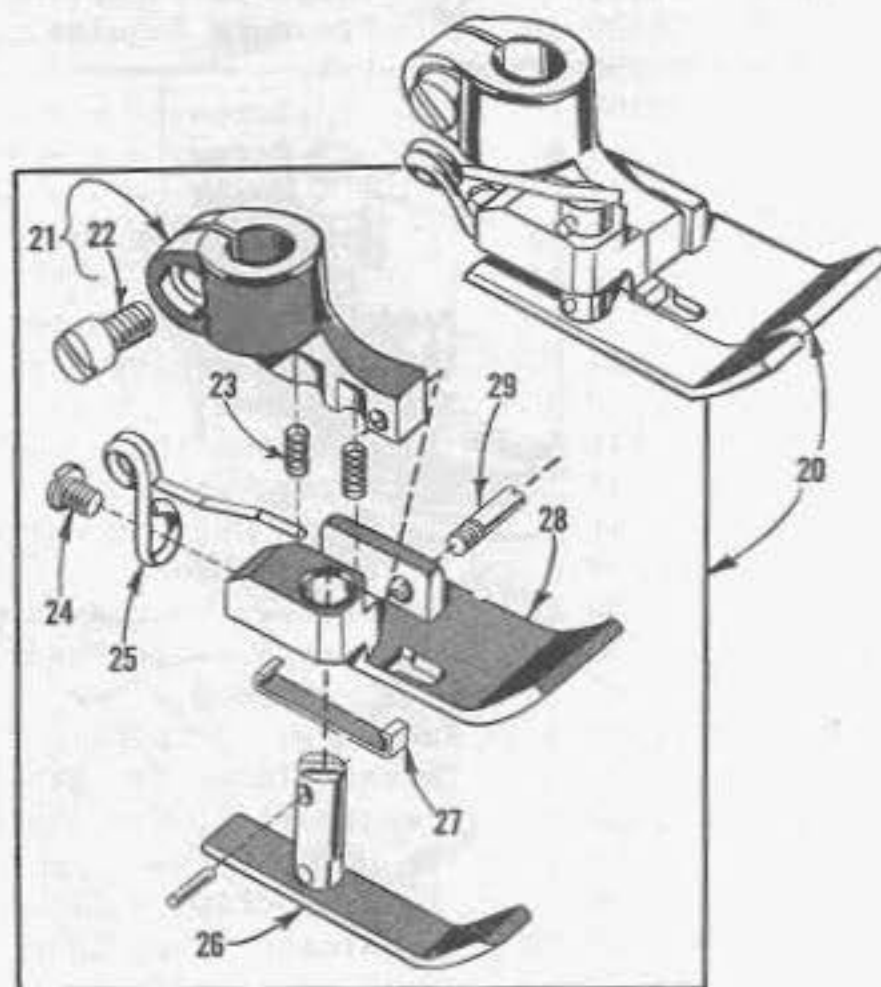
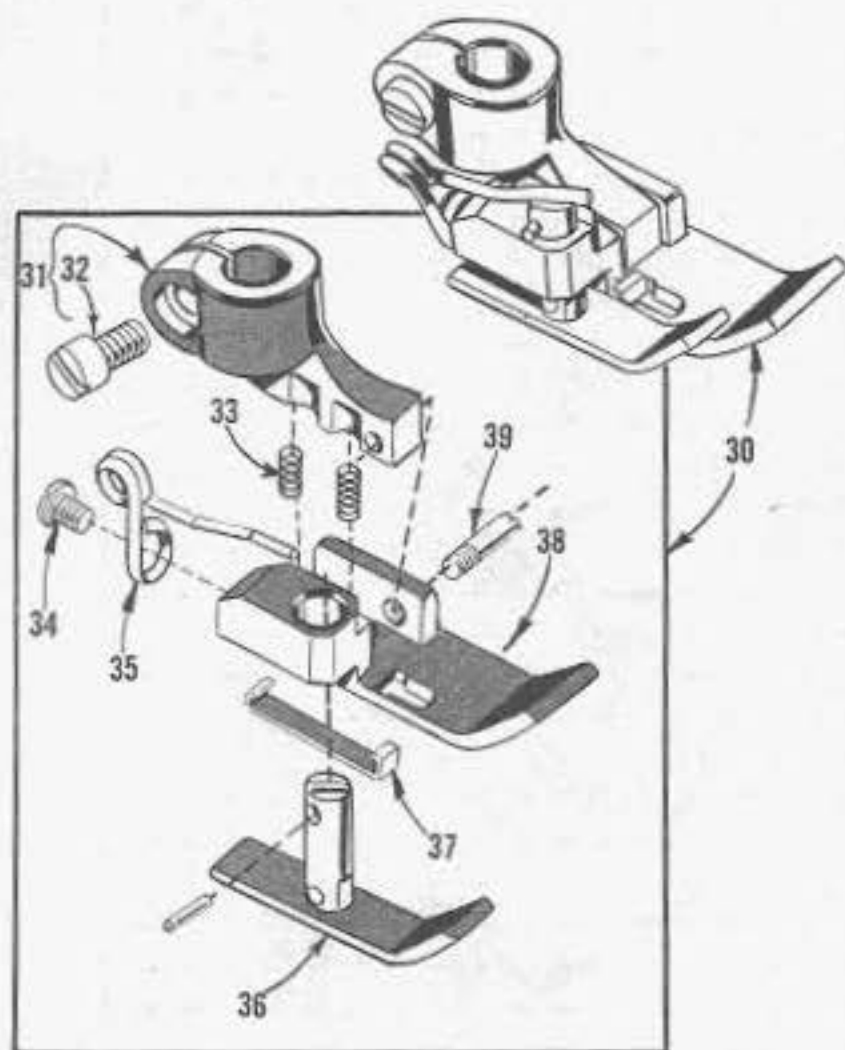
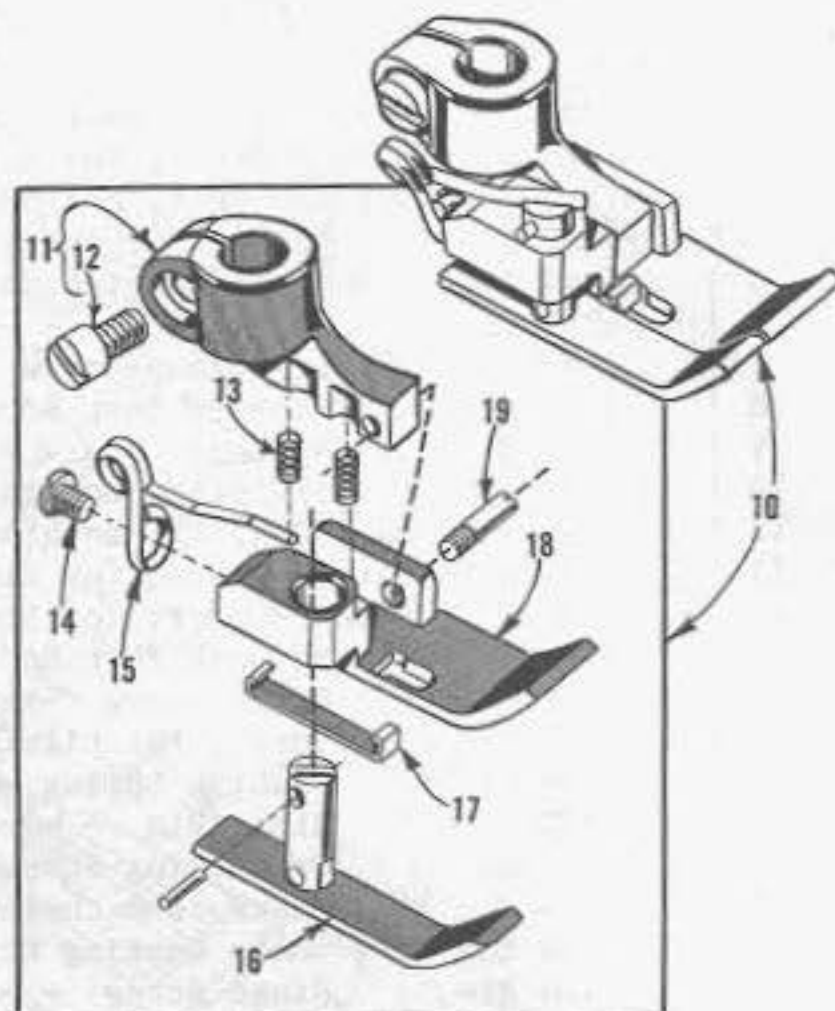
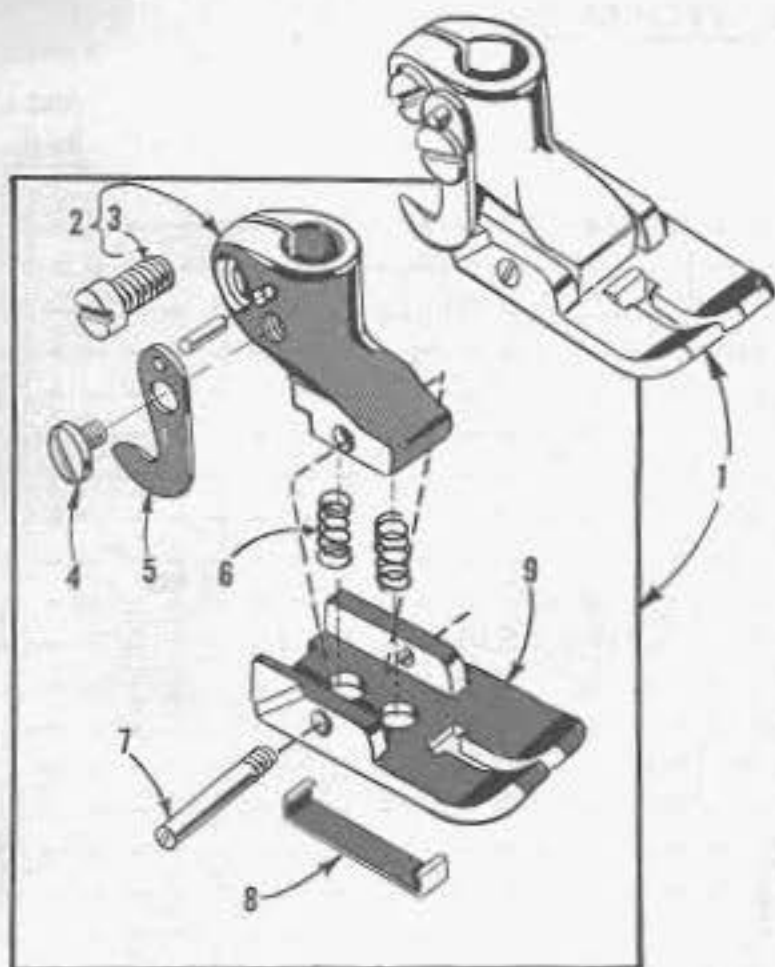
FEED DOGS, THROAT PLATES, PRESSER FEET

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



FEED DOGS, THROAT PLATES, PRESSER FEET

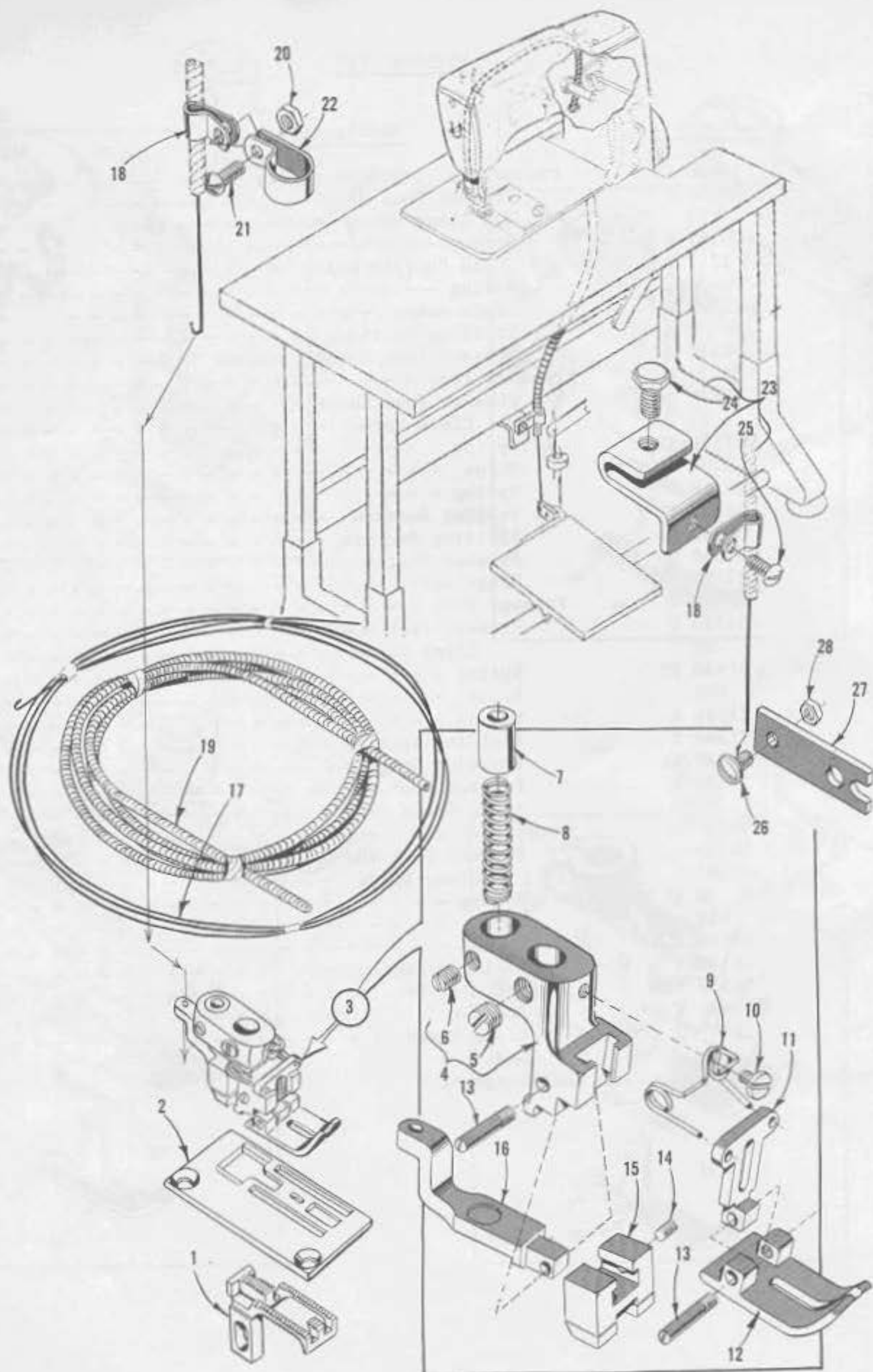
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1	56205	Feed Dog, 16 teeth per inch, for Style 56200 S - - - - -	1
2	56224	Throat Plate, for Style 56200 S- - - - -	1
3	51320 N	Presser Foot, bottom marked "51330 AL" for Style 56200 S - - - - -	1
4	187 B	Screw, for chain cutting knife - - - - -	1
5	1741 B	Chain Cutting Knife - - - - -	1
6	51330 AK	Shank - - - - -	1
7	91	Clamp Screw - - - - -	1
8	51330 AL	Presser Foot Bottom - - - - -	1
9	51330 W	Spring - - - - -	1
10	51330 AM	Yielding Section - - - - -	1
11	51305 W	Feed Dog, 22 teeth per inch, for Styles 56300 F, R, AH - - - - -	1
12	51324 W	Throat Plate, for Styles 56300 F, R, AH - - - - -	1
13	56320 F	Presser Foot, for Styles 56300 F - - - - -	1
14	56330 AB	Presser Foot Bottom, marked "BS" - - - - -	1
15	22799 B	Hinge Screw - - - - -	1
16	73 A	Screw, for tilting spring - - - - -	1
17	56330 AX	Tilting Spring - - - - -	1
18	56330 AJ	Hinge Pin - - - - -	1
19	56330 AG	Connecting Screw - - - - -	1
20	604	Screw, for chain cutting knife - - - - -	1
21	52930 AC	Chain Cutting Knife, marked "D" - - - - -	1
22	56330 AF	Hinge Screw - - - - -	1
23	51430 F	Nut- - - - -	1
24	56330 AU	Washer - - - - -	1
25	41071 G	Locking Nut - - - - -	1
26	56330 AD	Compression Spring - - - - -	1
27	56330 AH	Pressure Regulating Nut - - - - -	1
28	56330 AK	Yoke - - - - -	1
29	22785	Screw - - - - -	1
30	22560 B	Screw - - - - -	1
31	88	Screw - - - - -	1
32	56330 AE	Presser Foot Link, marked "A" - - - - -	1
33	56330 AP	Bushing - - - - -	1
34	51305 U	Feed Dog, 12 teeth per inch, for Style 56300 W - - - - -	1
35	9224 E	Throat Plate, for Styles 56300 G and 56300 W - - - - -	1
36	51320 J	Presser Foot, for Style 56300 W - - - - -	1
37	1741 A	Pin, for chain cutting knife - - - - -	1
38	187 A	Screw, for chain cutting knife - - - - -	1
39	1741 B	Chain Cutting Knife - - - - -	1
40	22799 B	Hinge Screw - - - - -	1
41	51330 X	Presser Foot Bottom - - - - -	1
42	51330 Y	Presser Foot Shank - - - - -	1
43	91	Clamp Screw - - - - -	1
44	51305 B	Feed Dog, 12 teeth per inch, for Style 56300 H - - - - -	1
45	51324 B	Throat Plate, for Style 56300 H - - - - -	1
46	51320 B	Presser Foot, for Style 56300 H - - - - -	1
47	86 X	Hinge Screw - - - - -	1
48	88	Set Screw - - - - -	2
49	65 XD	Presser Foot Shank - - - - -	1
50	51330 B	Presser Foot Bottom - - - - -	1



PRESSER FEET

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

* Available as an extra send and charge item.



AUTOMATIC CHAIN CUTTER AND PRESSURE RELEASE ATTACHMENT FOR STYLE 56300 E

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	51305 V	Feed Dog, marked "BN", 22 teeth per inch - - - - -	1
2	51324 V	Throat Plate - - - - -	1
3	56320 A	Presser Foot, bottom marked "AU" - - - - -	1
4	56330 H	Presser Foot Shank - - - - -	1
5	88	Screw, for presser foot shank - - - - -	1
6	HA73 B	Screw, for spring adjusting pin - - - - -	1
7	56330 N	Spring Adjusting Pin - - - - -	1
8	56330 J	Chain Cutter Spring - - - - -	1
9	61430 AJ	Spring, for presser foot bottom - - - - -	1
10	73 A	Screw, for spring - - - - -	1
11	56330 M	Yielding Section, marked "AS" - - - - -	1
12	56330 L	Presser Foot Bottom, marked "AU" - - - - -	1
13	22799 R	Hinge Screw - - - - -	2
14	HA73 B	Screw, for chain cutter - - - - -	1
15	61430 AN	Chain Cutter, marked "G" - - - - -	1
16	56330 K	Adjusting Slide - - - - -	1
17	51330 BC	Chain Cutter Release Cable - - - - -	1
18	660-406	Stationary Cable Clamp - - - - -	2
19	51330 BD	Chain Cutter Release Cable Casing - - - - -	1
20	NU-12	Nut - - - - -	1
21	SC-180	Screw - - - - -	1
22	660-437	Presser Bar Bushing Clamp - - - - -	1
23	51330 BF	Stationary Cable Clamp - - - - -	1
24	SC-2	Screw - - - - -	1
25	SC-178	Screw - - - - -	1
26	22848 A	Screw - - - - -	1
27	51330 BE	Pedal Connection - - - - -	1
28	12934 A	Nut, for cable adjusting screw - - - - -	1

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

INSTRUCTIONS FOR MECHANICS

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

LUBRICATION

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

RECOMMENDED OIL

Use a straight mineral oil of a Saybolt viscosity of 90 to 125 seconds at 100° Fahrenheit in the main reservoir. This is equivalent to UNION SPECIAL specification No. 175. Fill main reservoir at plug screw in upper crank chamber cover (A, Fig. 2) and check oil level at gauge (B). Oil is at maximum safe operating level when needle is to the black line, located to the right of "OPERATE" zone, marked "FULL". Oil should be added when needle is to the black line, located to the left of "OPERATE" zone, marked "LOW". Recommended grease No. 28604 P (See Paragraph under "Changing Stitch Length").

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

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

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

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

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

OIL GAUGE

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

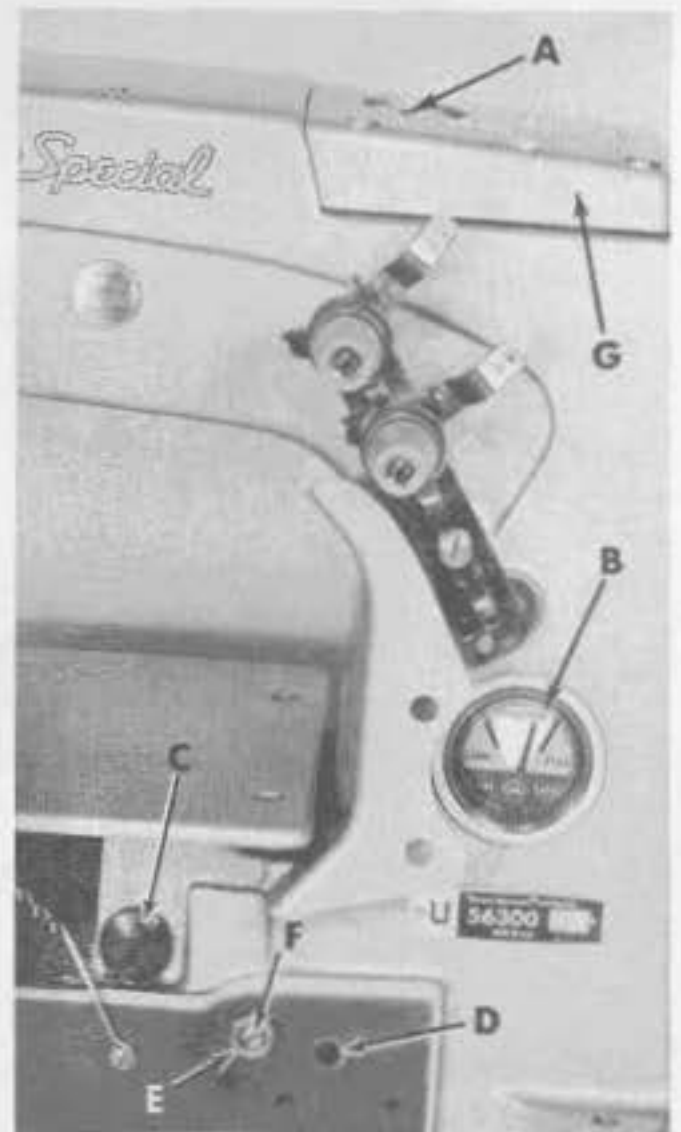
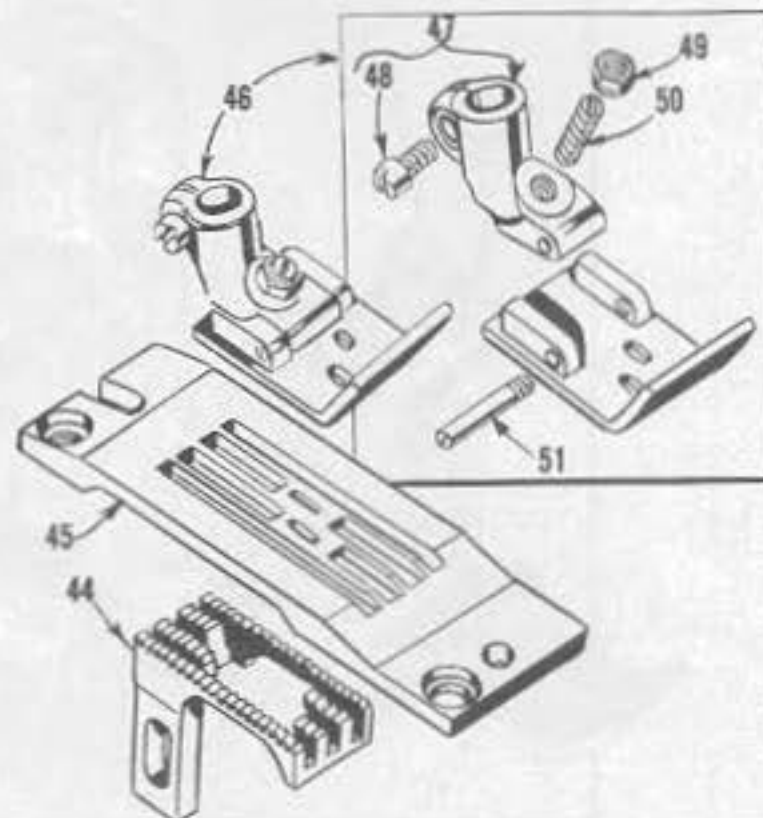
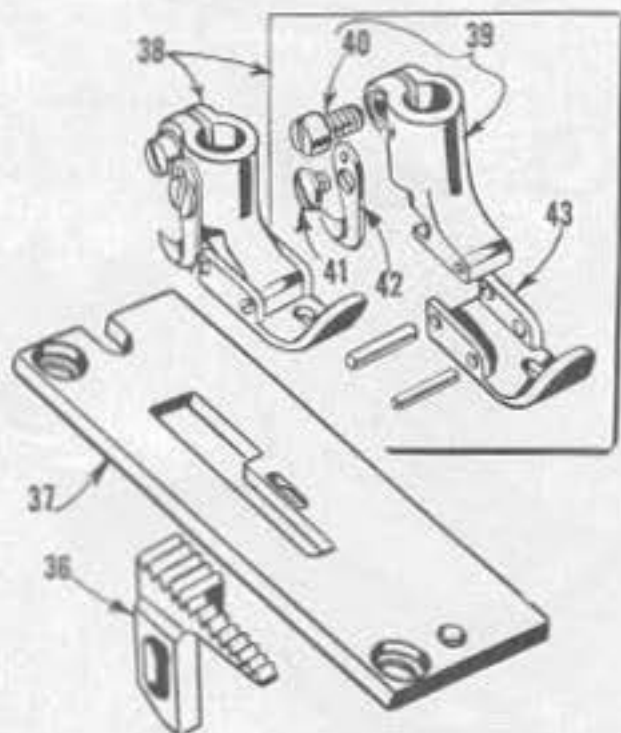
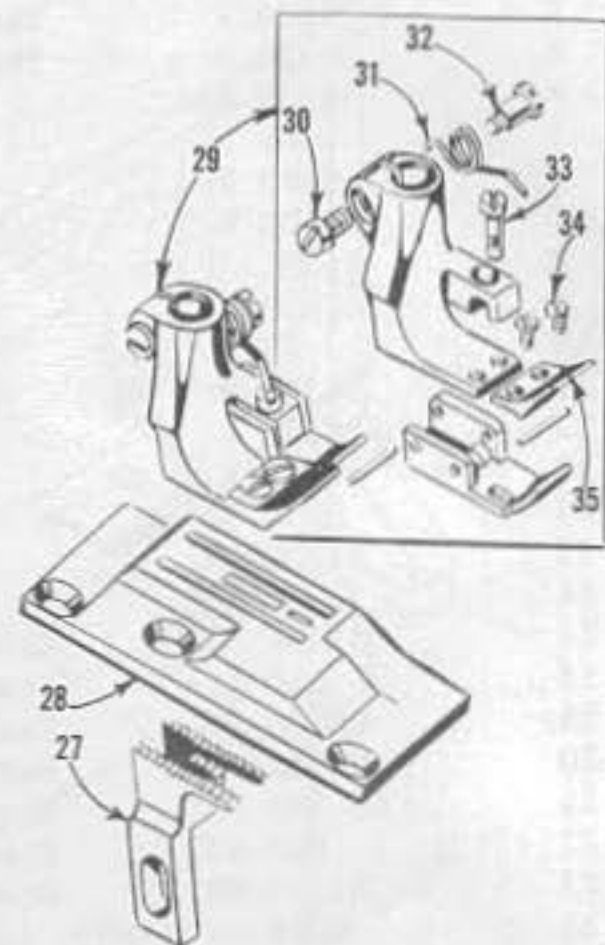
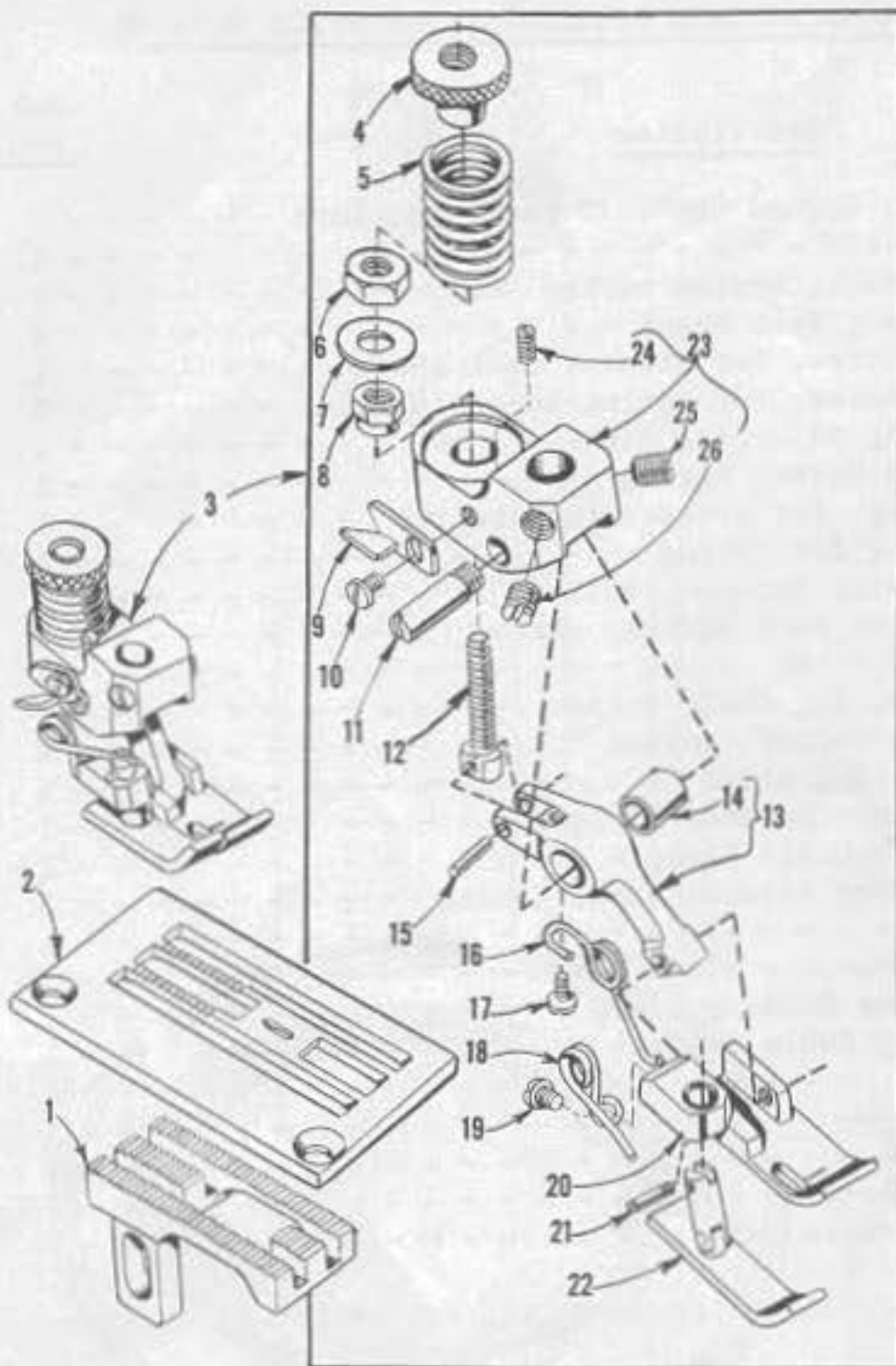
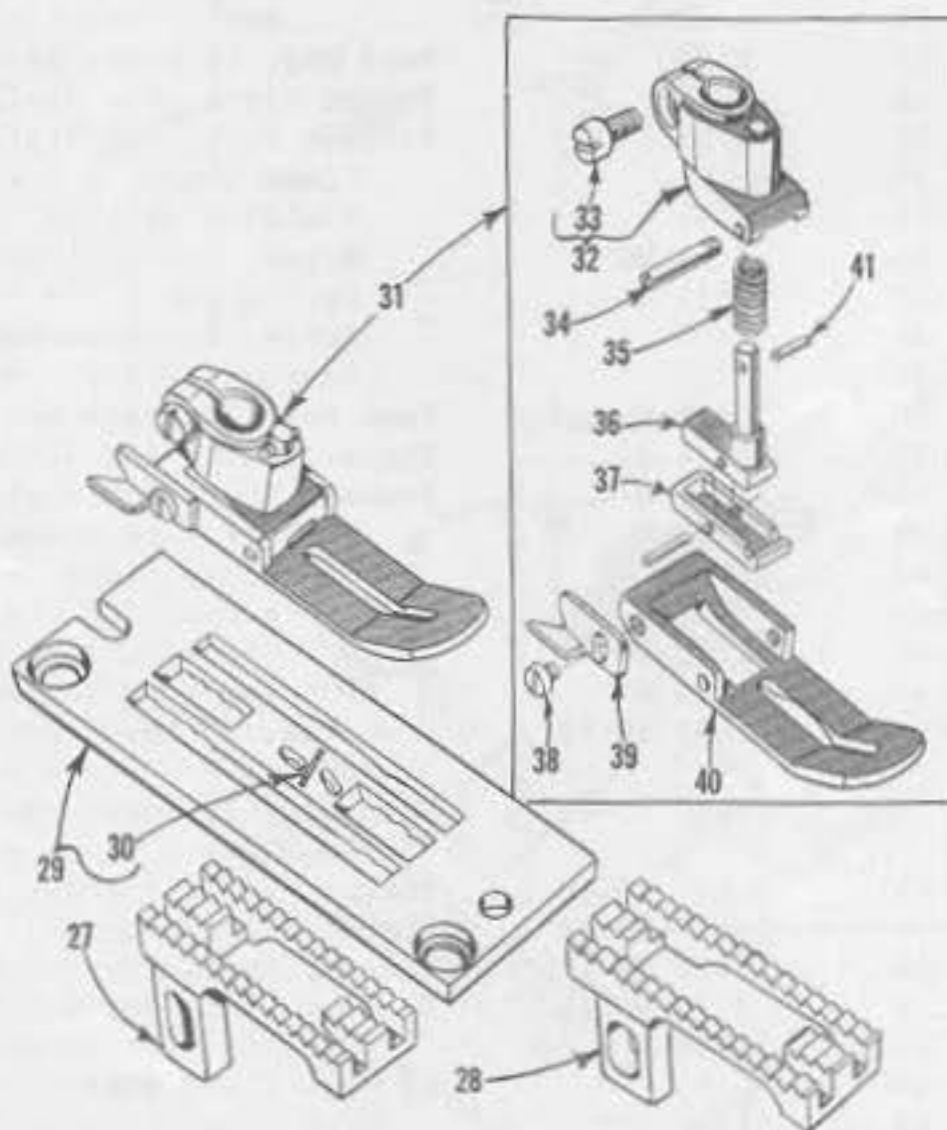
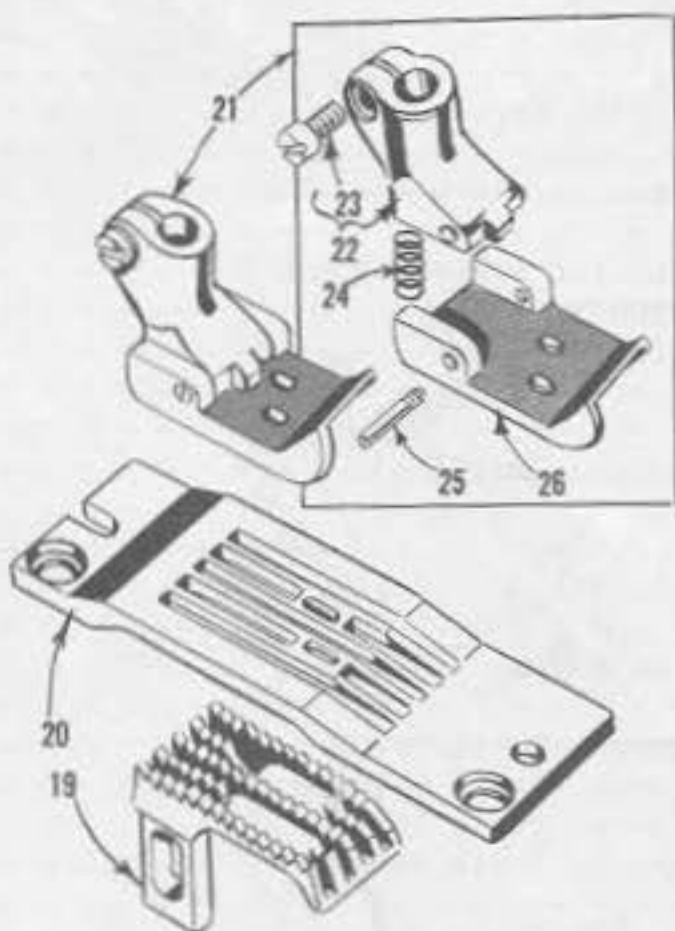
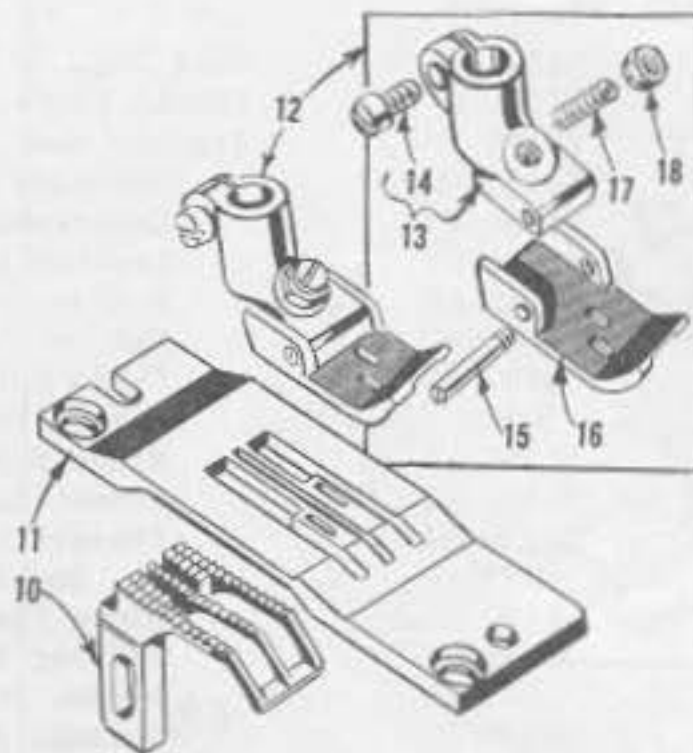
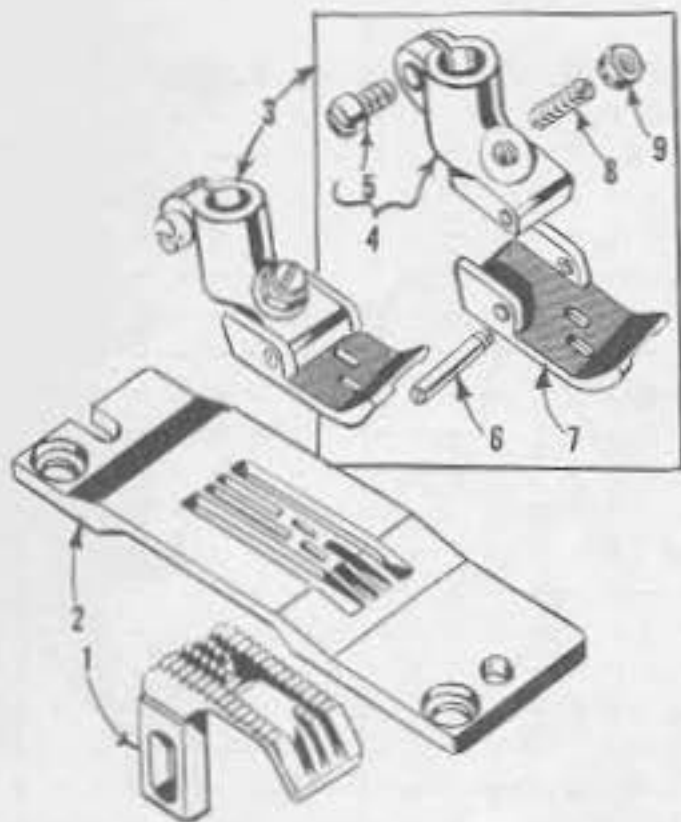


Fig. 2



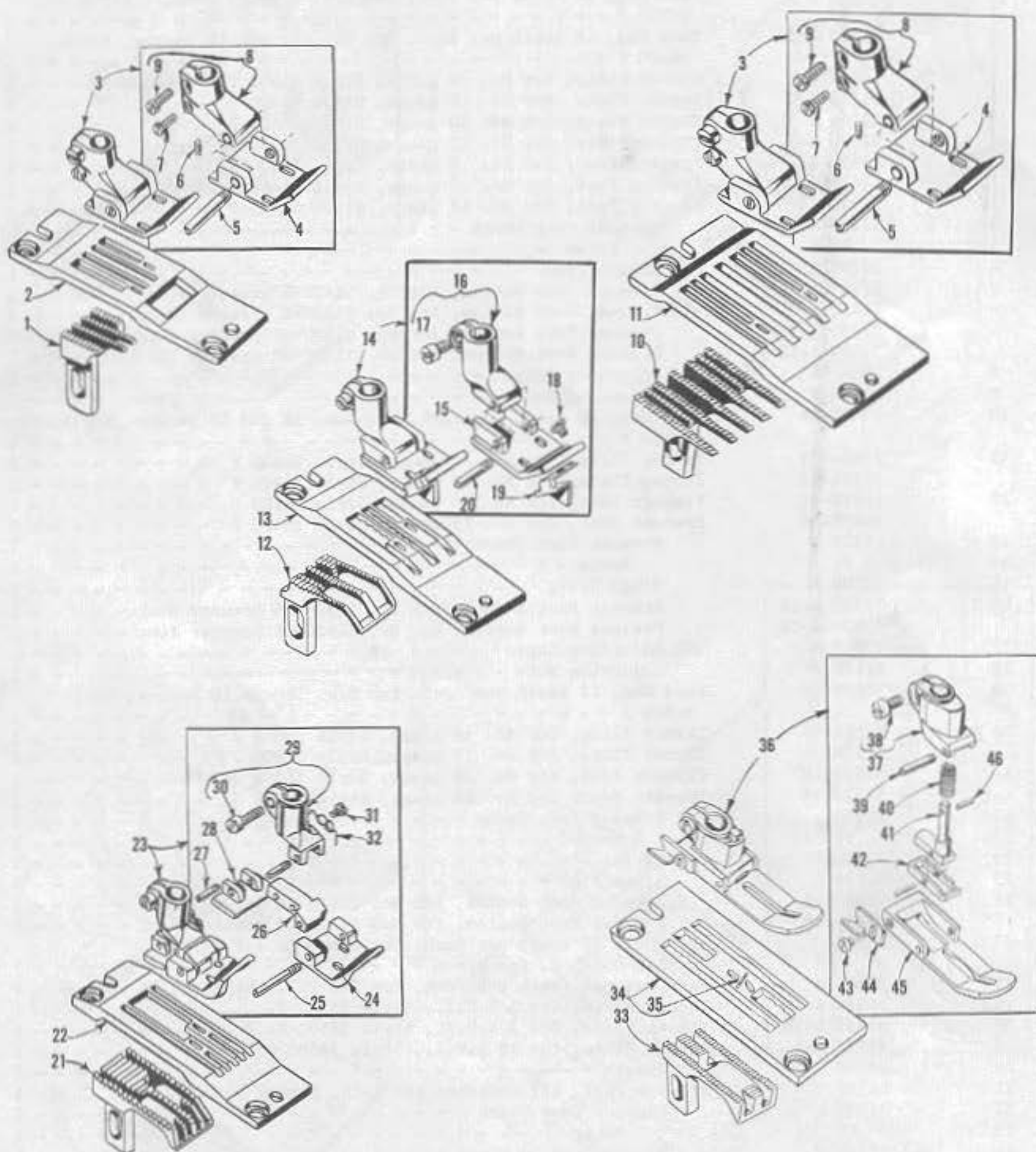
FEED DOGS, THROAT PLATES, PRESSER FEET

Ref. No.	Part No.	Description	Amt. Req.
1	51305 W	Feed Dog, 22 teeth per inch, for Styles 56300 F, R, AH - - -	1
2	51324 W	Throat Plate, for Styles 56300 F, R, AH - - - - -	1
3	56320 H	Presser Foot, for Style 56300 R - - - - -	1
4	56330 AH	Pressure Regulating Nut - - - - -	1
5	56330 AD	Compression Spring - - - - -	1
6	41071 G	Locking Nut - - - - -	1
7	56330 AU	Washer - - - - -	1
8	51430 F	Nut - - - - -	1
9	52930 AC	Chain Cutting Knife, marked "D" - - - - -	1
10	604	Screw, for chain cutting knife - - - - -	1
11	56330 AF	Hinge Screw - - - - -	1
12	56330 AG	Connecting Screw - - - - -	1
13	56330 AN	Presser Foot Link, marked "B" - - - - -	1
14	56330 AP	Bushing - - - - -	1
15	56330 AJ	Hinge Pin - - - - -	1
16	56330 AX	Tilting Spring - - - - -	1
17	73 A	Screw, for tilting spring - - - - -	1
18	56330 AR	Spring, for yielding section - - - - -	1
19	604	Screw, for yielding section spring - - - - -	1
20	56330 AL	Presser Foot Bottom, marked "BR" - - - - -	1
21	22799 G	Hinge Screw - - - - -	1
22	56330 AM	Yielding Section - - - - -	1
23	56330 AK	Yoke - - - - -	1
24	22785	Screw - - - - -	1
25	22560 B	Screw - - - - -	1
26	88	Screw - - - - -	1
27	9705	Feed Dog, 16 teeth per inch, for Style 56200 R - - - - -	1
28	9724	Throat Plate, for Style 56200 R - - - - -	1
29	9720	Presser Foot, for Style 56200 R - - - - -	1
30	91	Clamp Screw - - - - -	1
31	9634	Yielding Section Spring - - - - -	1
32	57 WD	Screw, for yielding section spring - - - - -	1
33	9634 A	Spring Pin - - - - -	1
34	605	Screw, for detachable toe - - - - -	2
35	9735	Detachable Toe - - - - -	1
36	51205 W	Feed Dog, 12 teeth per inch, for Style 56200 W - - - - -	1
37	56224 A	Throat Plate, for Style 56200 W - - - - -	1
38	51220 W	Presser Foot, for Style 56200 W - - - - -	1
39	51230 F	Presser Foot Shank - - - - -	1
40	91	Clamp Screw - - - - -	1
41	187 B	Screw, for chain cutting knife - - - - -	1
42	1741 B	Chain Cutting Knife - - - - -	1
43	51230 G	Presser Foot Bottom - - - - -	1
44	51405 AD-12	Feed Dog, 16 teeth per inch, for No. 12 gauge, Style 56400 D - - - - -	1
-	51405 AD-16	Feed Dog, 16 teeth per inch, for No. 16 gauge, Style 56400 D - - - - -	1
45	51424 AD-12	Throat Plate, for No. 12 gauge, Style 56400 D - - - - -	1
-	51424 AD-16	Throat Plate, for No. 16 gauge, Style 56400 D - - - - -	1
46	51420 AD-12	Presser Foot, for No. 12 gauge, Style 56400 D - - - - -	1
-	7420 AG-4½	Presser Foot, for No. 16 gauge, Style 56400 D - - - - -	1
47	51430 D	Presser Foot Shank - - - - -	1
48	91	Clamp Screw - - - - -	1
49	51430 F	Nut - - - - -	1
50	22840 A	Adjusting Screw - - - - -	1
51	22799 E	Hinge Screw - - - - -	1



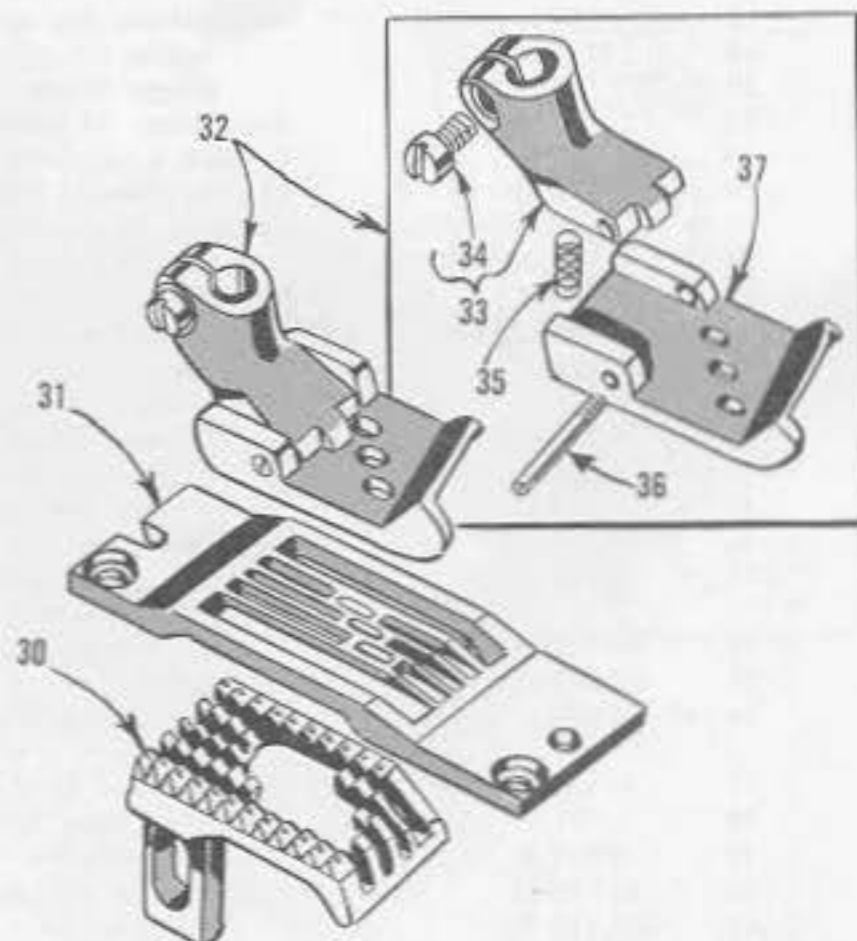
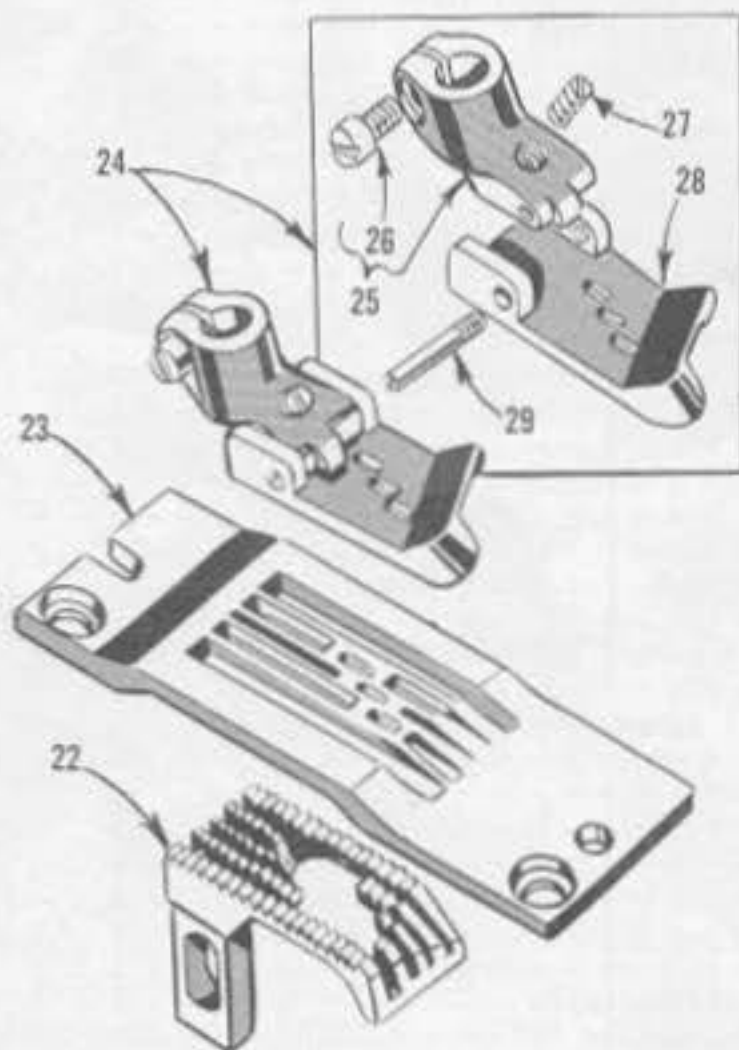
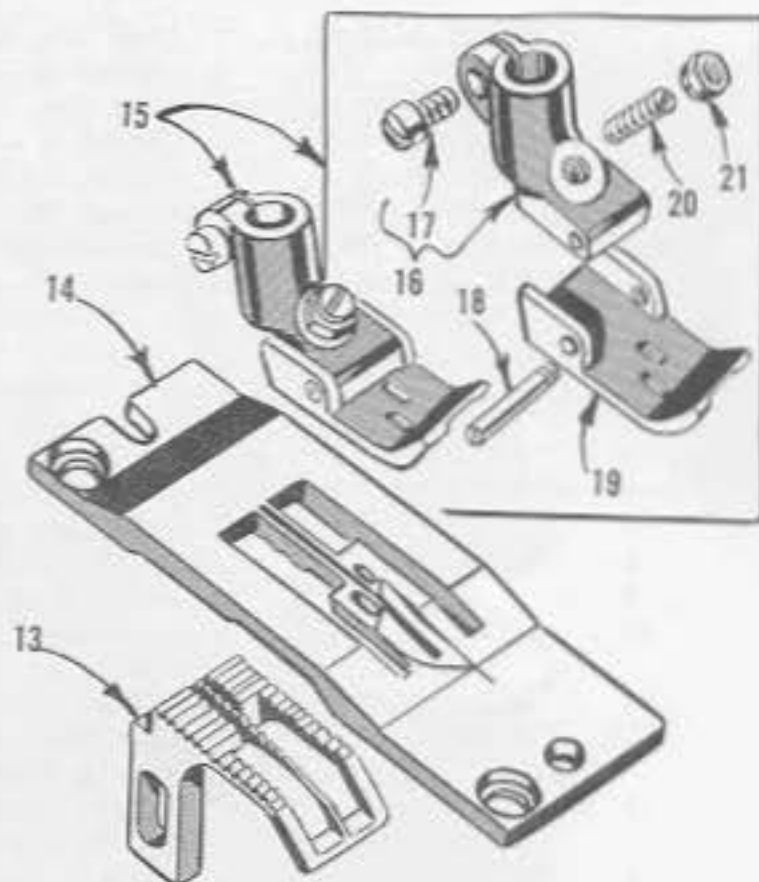
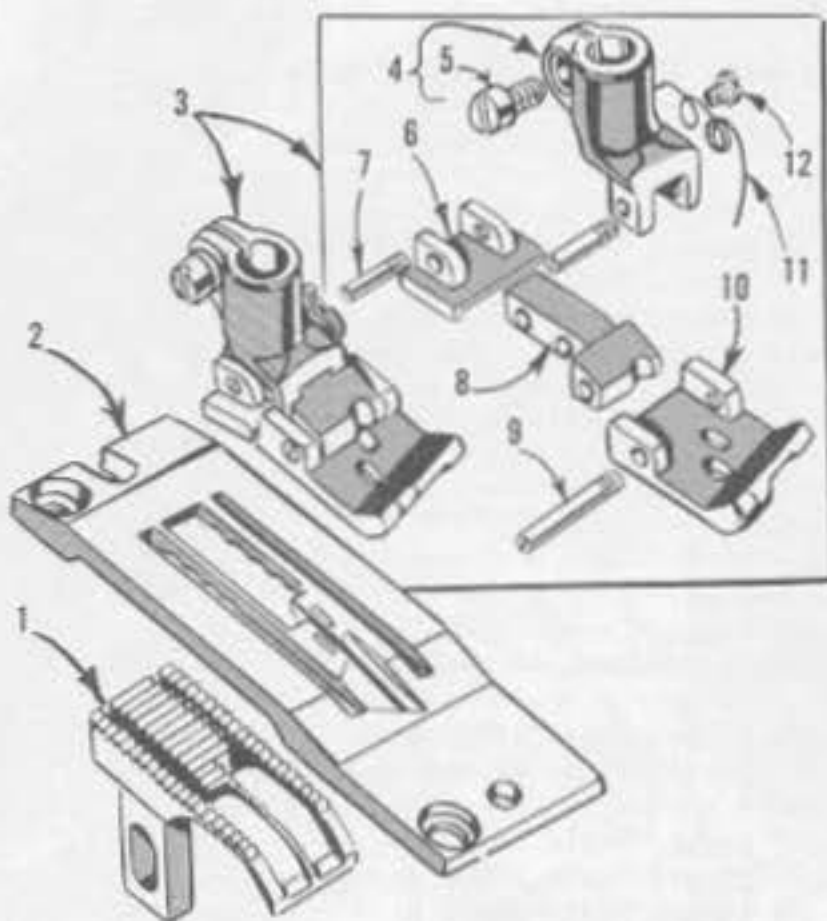
FEED DOGS, THROAT PLATES, PRESSER FEET

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



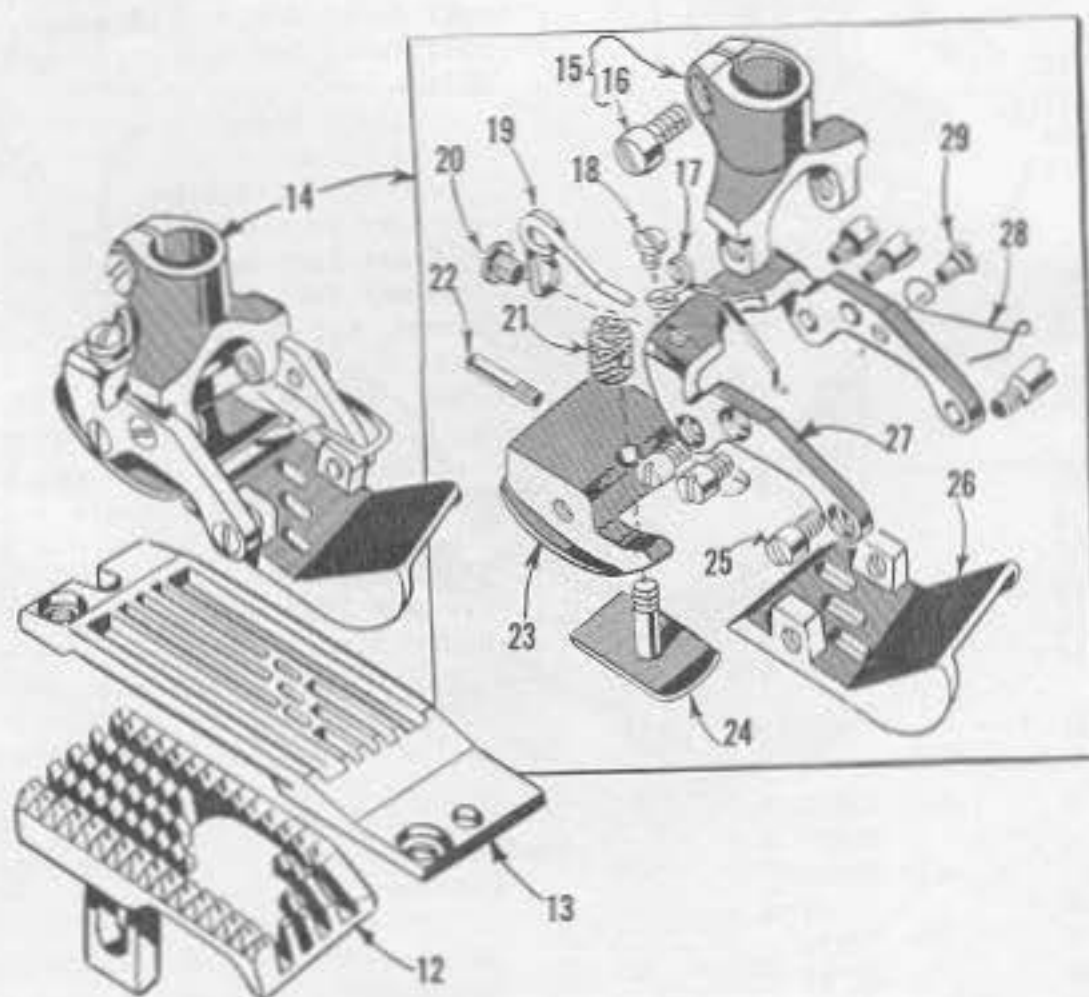
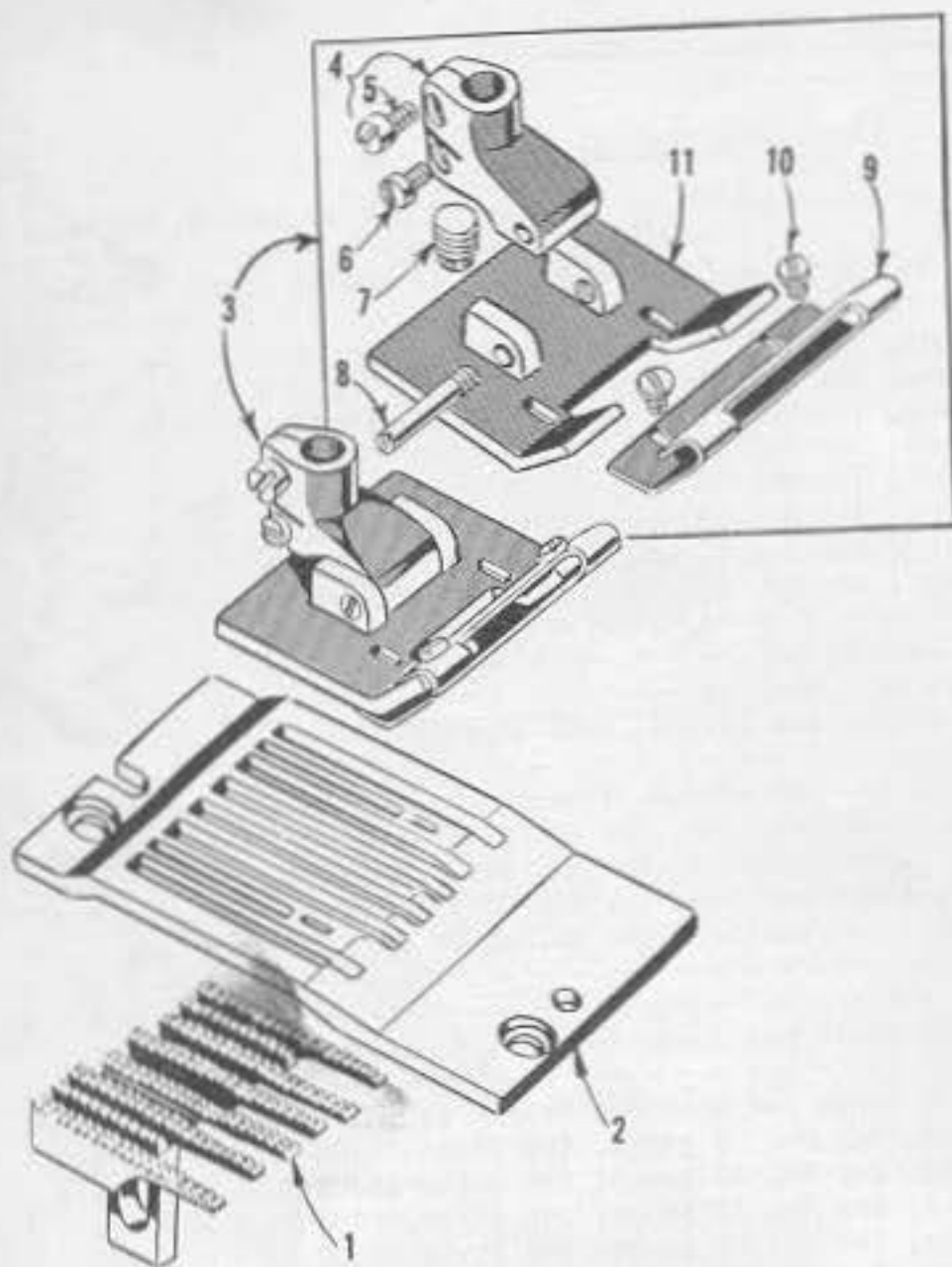
FEED DOGS, THROAT PLATES, PRESSER FEET

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



FEED DOGS, THROAT PLATES, PRESSER FEET

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



FEED DOGS, THROAT PLATES, PRESSER FEET

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	51705-64	Feed Dog, 16 teeth per inch, for No. 64 gauge, Style 56700 J - - - - -	1
	51705-56	Feed Dog, 16 teeth per inch, for No. 56 gauge, Style 56700 J - - - - -	1
2	51724-64	Throat Plate, for No. 64 gauge, Style 56700 J- - -	1
	51724-56	Throat Plate, for No. 56 gauge, Style 56700 J- - -	1
3	51720-64	Presser Foot, for No. 64 gauge, Style 56700 J- - -	1
	51720-56	Presser Foot, for No. 56 gauge, Style 56700 J- - -	1
4	51430	Presser Foot Shank - - - - -	1
5	91	Screw - - - - -	1
6	77	Clamp Screw, lower - - - - -	1
7	22752 B	Adjusting Screw - - - - -	1
8	22799 D	Hinge Screw - - - - -	1
9	51730 A-64	Flexible Toe, for No. 51720-64 presser foot -	1
	51730 A-56	Flexible Toe, for No. 51720-56 presser foot -	1
10	91 A	Screw - - - - -	2
11	51730-64	Presser Foot Bottom, for No. 51720-64 presser foot - - - - -	1
	51730-56	Presser Foot Bottom, for No. 51720-56 presser foot - - - - -	1
12	51905 C-9	Feed Dog, 10 teeth per inch, for No. 9 gauge, Style 56900 J - - - - -	1
13	51924 C-9	Throat Plate, for No. 9 gauge, Style 56900 J - - -	1
14	35820 R-9	Presser Foot, for No. 9 gauge, Style 56900 J - - -	1
15	35830 B	Presser Foot Shank - - - - -	1
16	91 D	Screw - - - - -	1
17	35830 H	Spring - - - - -	1
18	73 A	Screw - - - - -	1
19	35830 D	Spring - - - - -	1
20	22561	Screw - - - - -	1
21	35830 F	Adjusting Nut - - - - -	1
22	22799 L	Hinge Screw - - - - -	1
23	35830 G	Presser Foot Bottom, rear section, marked "G"-	1
24	35830 E	Yielding Section - - - - -	1
25	22845 A	Screw - - - - -	6
26	35830 R-9	Presser Foot Bottom, front section - - - - -	1
27	35830 C	Yoke - - - - -	1
28	35830 K	Spring - - - - -	1
29	22599	Screw - - - - -	1

OIL GAUGE (Continued)

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

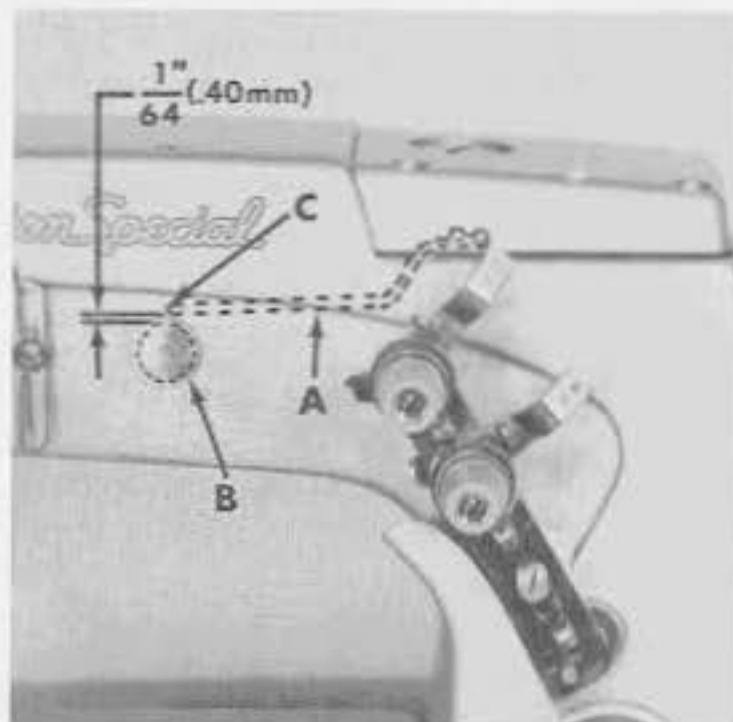


Fig. 3

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

NEEDLE LEVER BEARING OILER

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

ALIGNING THE NEEDLE BAR (TWO AND THREE NEEDLE MACHINES)

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

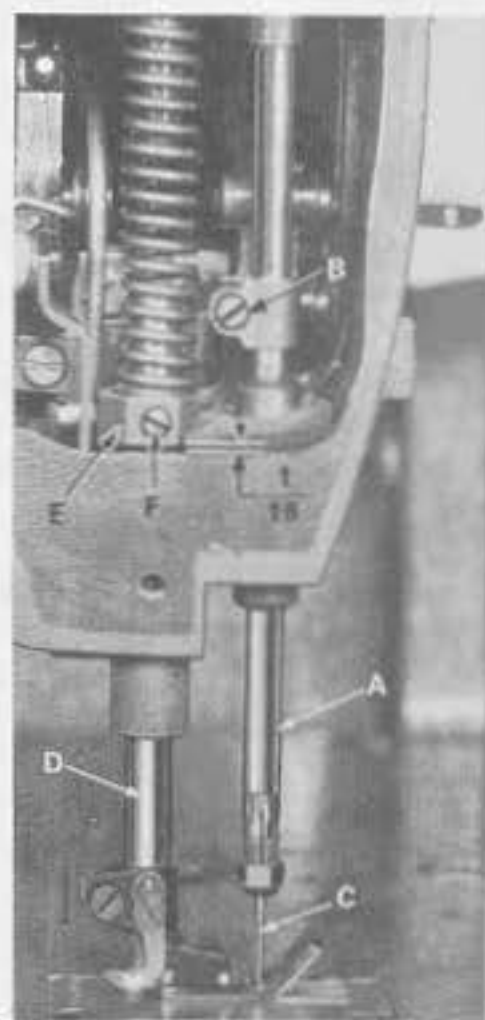
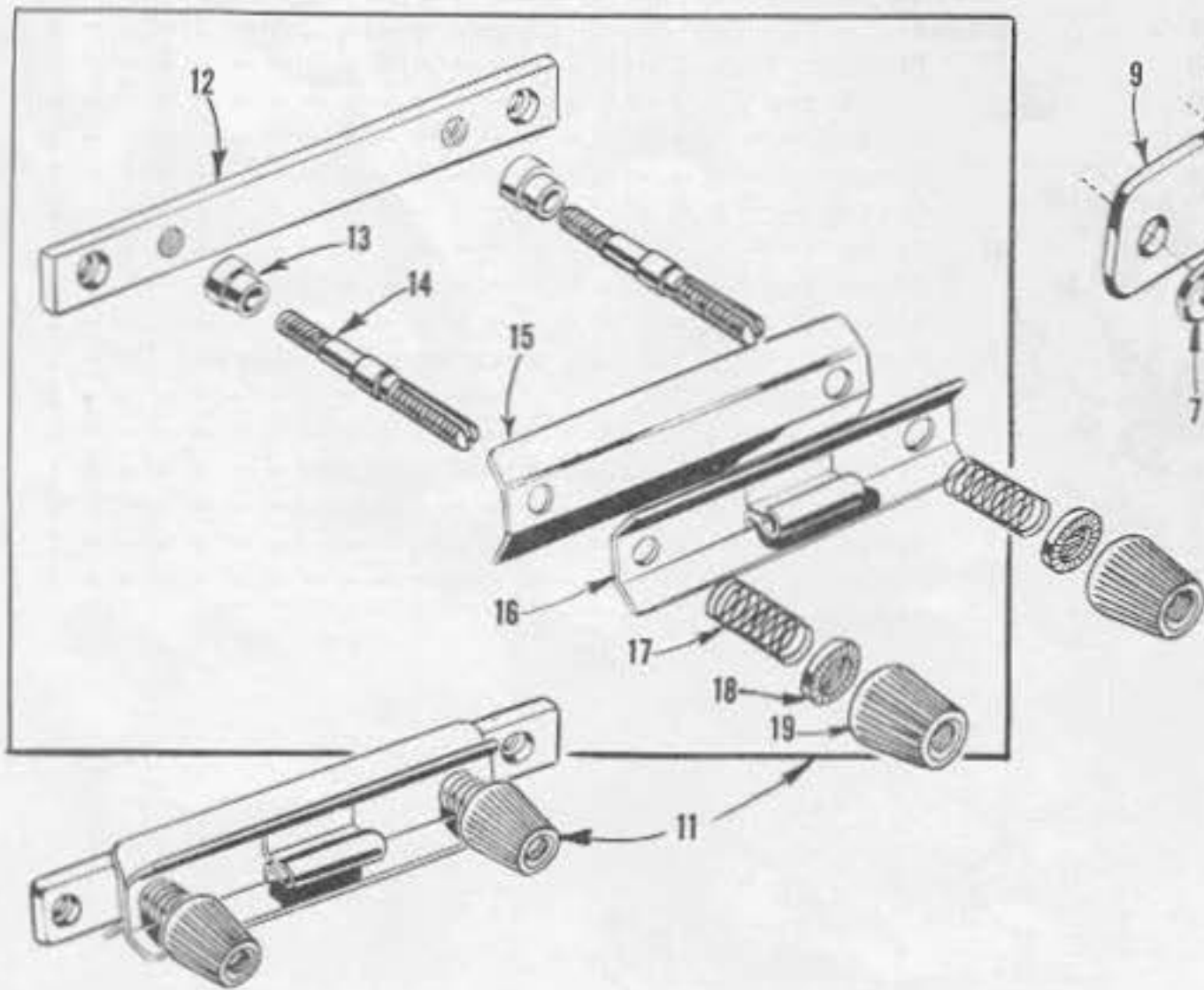
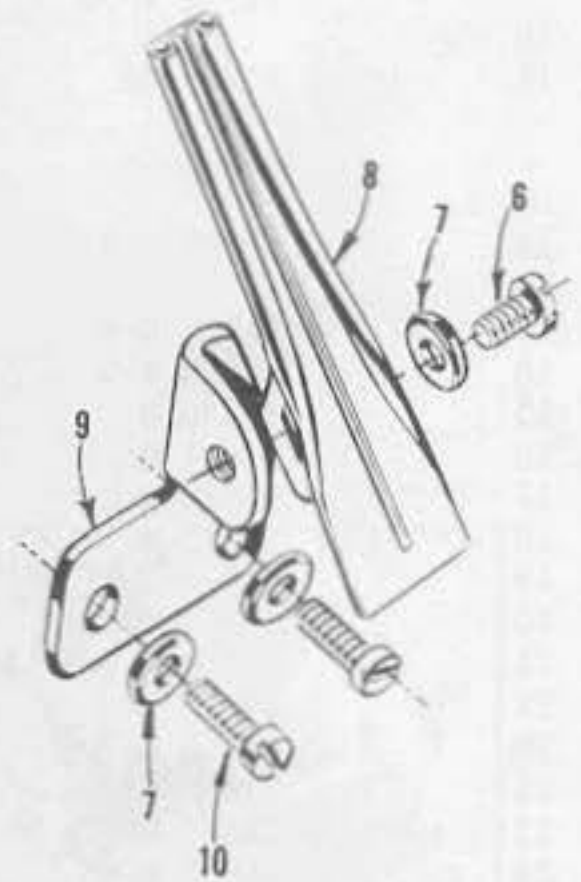
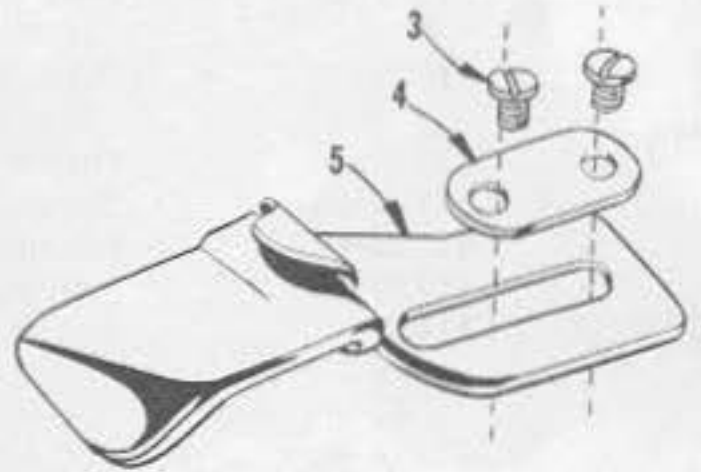
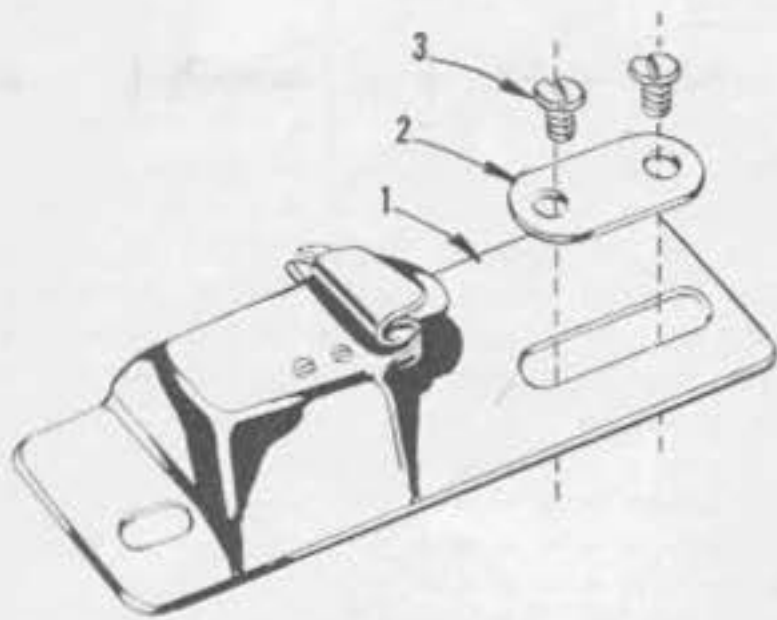
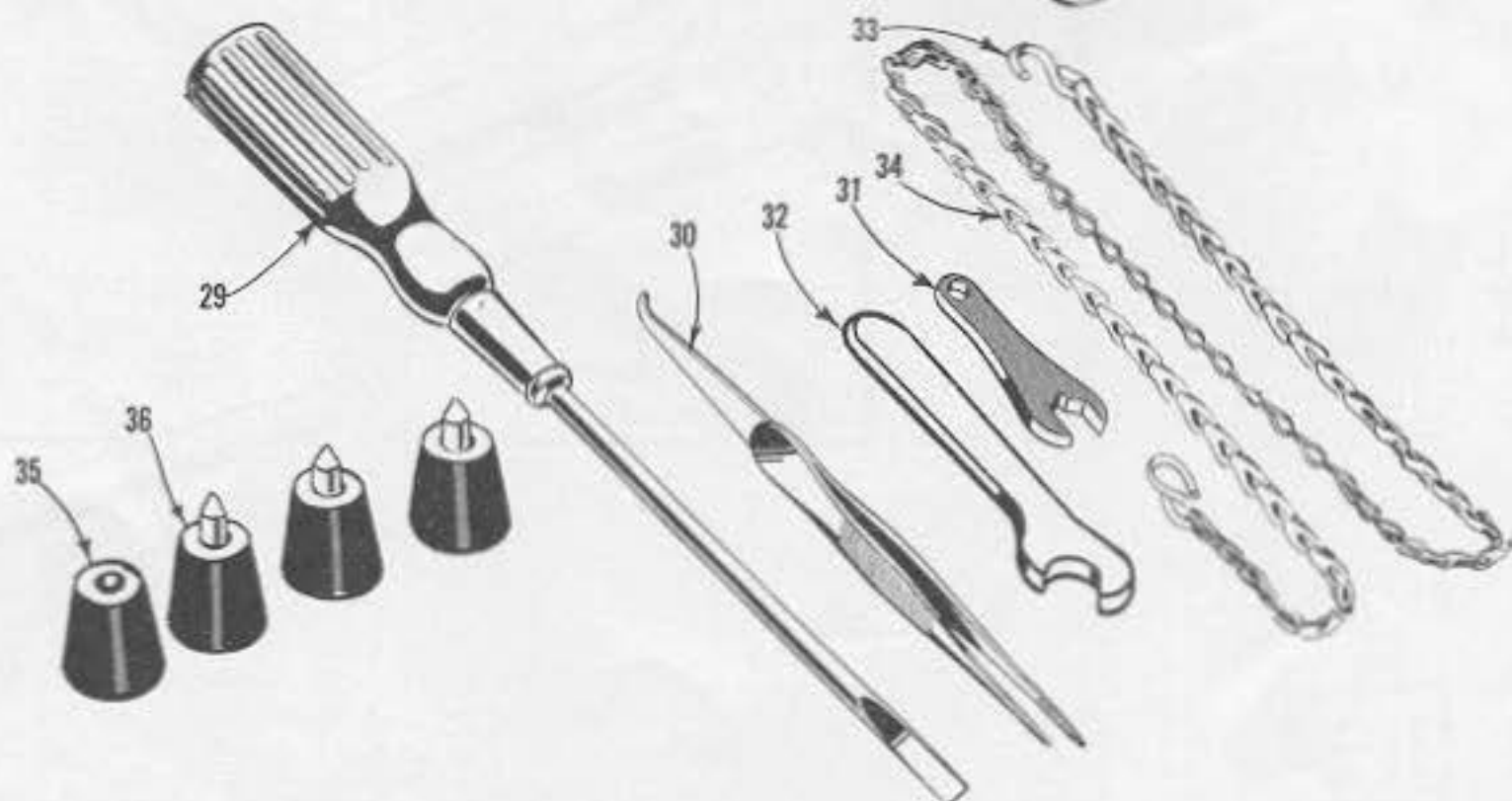
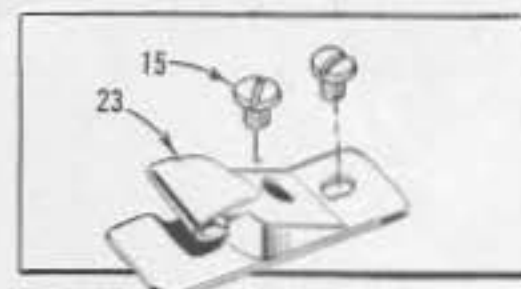
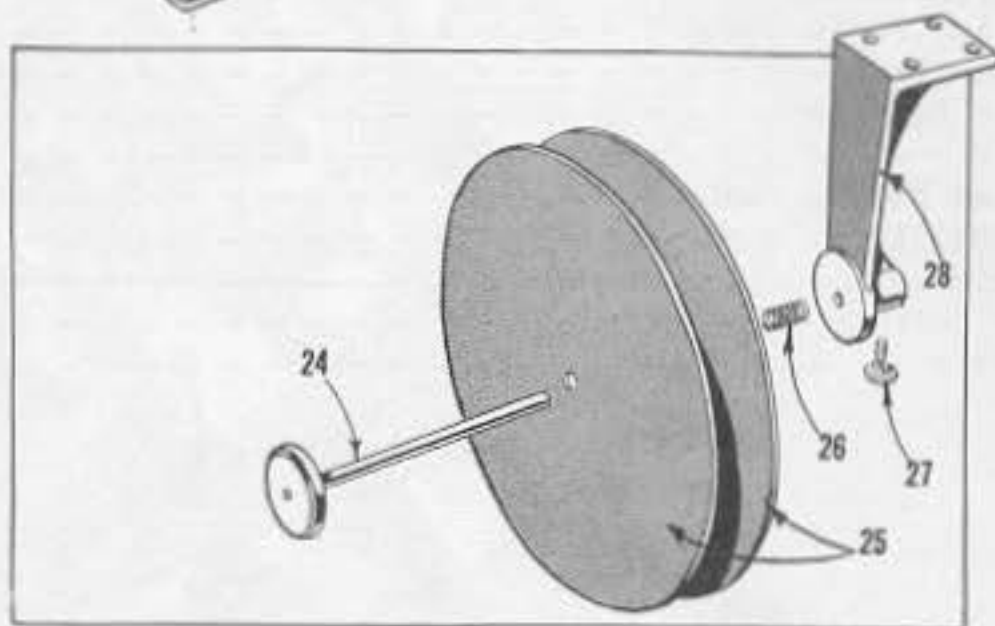
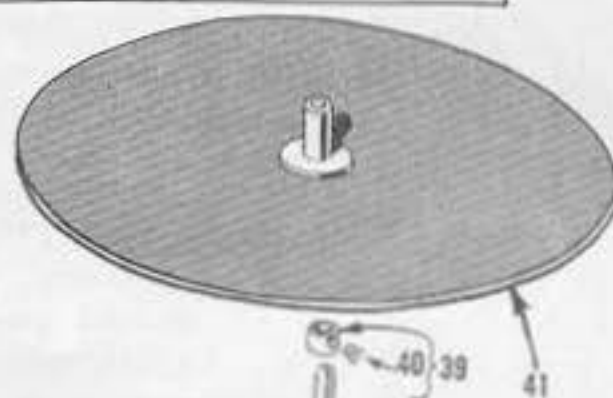
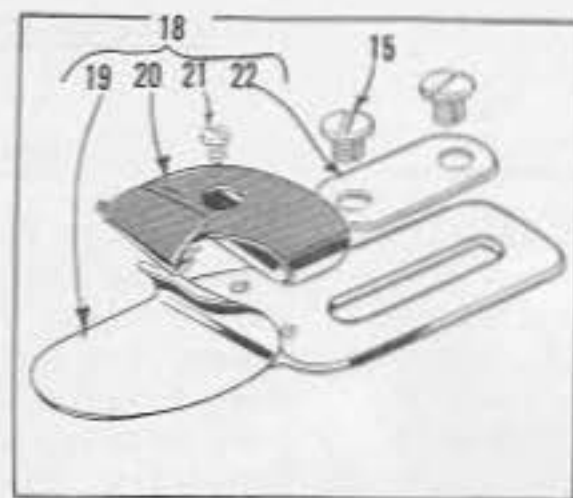
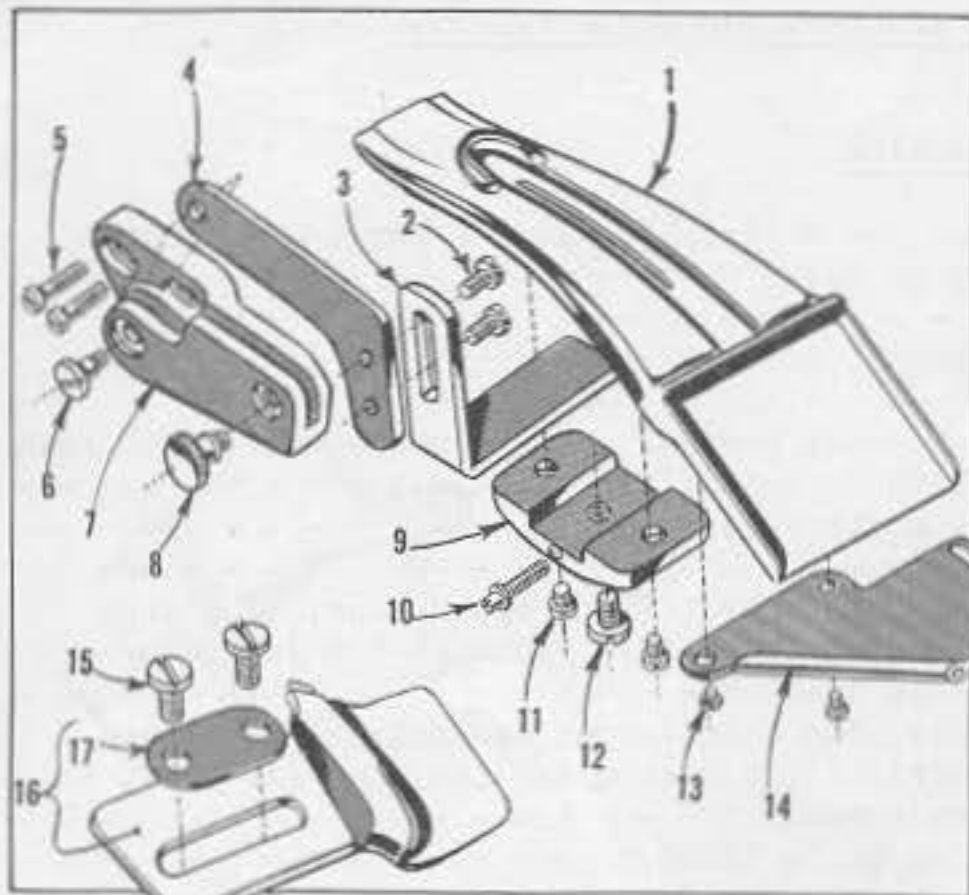


Fig. 4



ATTACHMENTS, BRACKETS AND STRIP TENSION

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



ATTACHMENTS, TAPE REEL AND MISCELLANEOUS ACCESSORIES

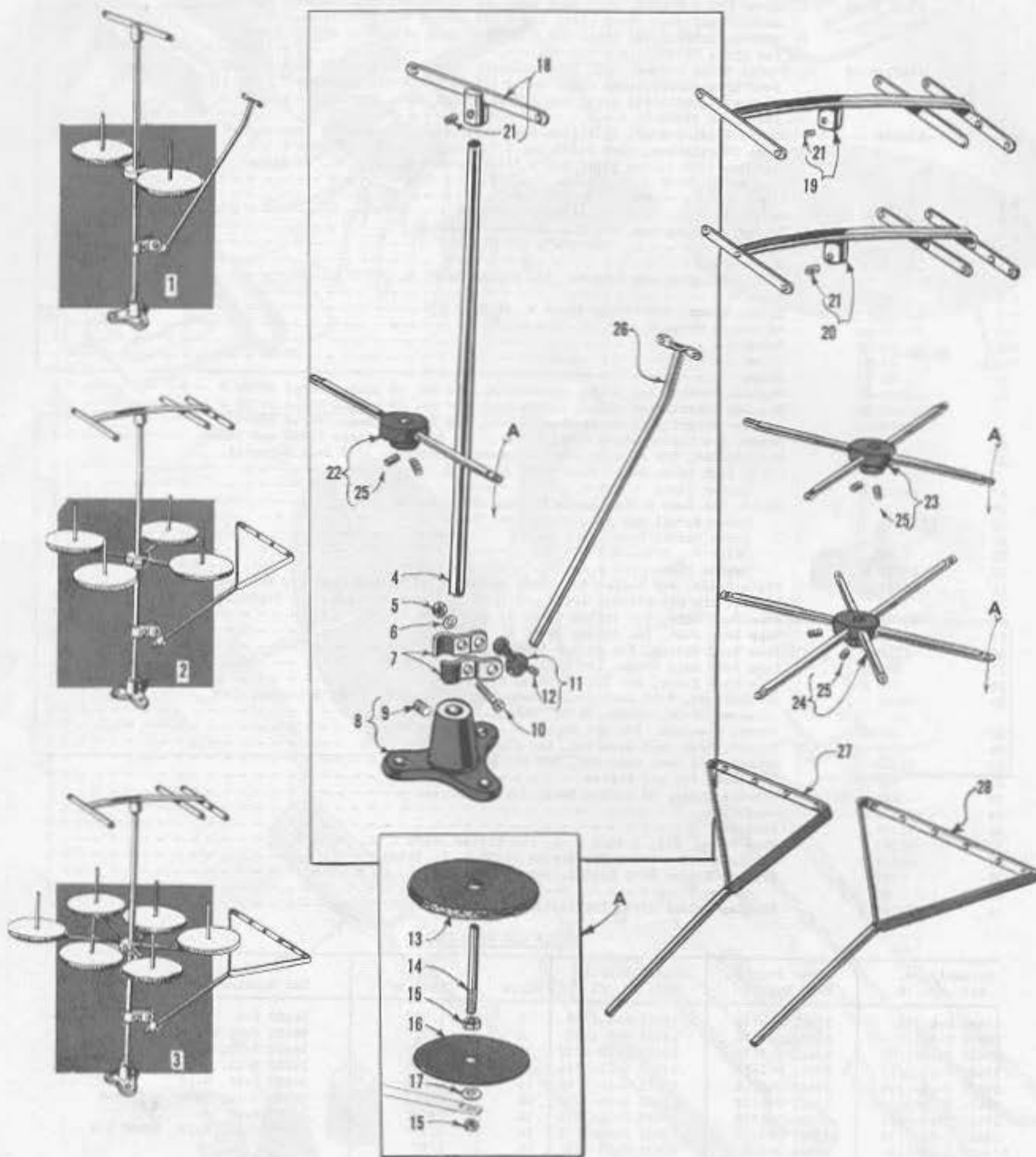
Ref. No.	Part No.	Description	Amt. Req.
1	23401 K-64	Center Plait Folder, 1/32 inch capacity, plait extends 1/4 inch beyond rows of stitches, uses plait cut 2 1/2 inches wide, finishes 1 1/2 inches; interlining strip cut 1 15/32 inches wide, for No. 64 gauge, for Styles 56700 J - - - - -	1
-	23401 K-56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

DOUBLE LAP SEAM FELLER

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

+ Available as an extra send and charge item or on special machines.

* Available complete as part No. 29481 D (Suspended Folder Arm Assembly).



THREAD STAND PARTS

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

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88	35, 55, 59, 61, 73	719	35	21396 BR.	29
88 B	47	1096	51, 53	21657-3	41
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51330 X	55	51491 C	41	52942 W	31
51330 Y	55	51492	39	52942 Y	31
51330 Z	51, 53	51505	63	52943 L	33
51330 AB	51, 53	51505 BR	65	52958 B	29
51330 AD	51	51508 C	49	52958 G	29
51330 AE	51, 53	51508 G	49	53530 E	65
51330 AG	51	51508 H	49	53787	43
51330 AH	51	51508 M	49	55235 D	37
51330 AJ	51	51509 C	49	55235 K	37
51330 AK	55	51518 C-1	47	55244 G	35
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51330 AX	53	51520 BR	65	56205	55
51330 BB	53	51524	63	56224	55
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51330 BD	59	51530	63	56224 H	51
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51405 AD	61	51718 B	47	56320 C	57
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56330 AE	55	56382 K	29	56713	35
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56330 AH	55, 61	56382 N	29	56725	47
56330 AJ	55, 61	56382 X	41	56744	35
56330 AK	55, 61	56383 A	43	56744 A	35
56330 AL	61	56383 D	43	56751	35
56330 AM	61	56383 W	43	56772	35
56330 AN	61	56383 X	43	56782	29
56330 AP	55, 61	56383 Y	43	56913	35
56330 AR	61	56390	31	56917	47
56330 AU	55, 61	56390 A	31	56925	47
56330 AX	55, 61	56390 B	31	56958	33
56334 B	37	56390 E	31	56958 A	33
56334 F	31	56391	29	56992	43
56334 L	37	56392	43	57836 B	31
56334 N	37	56392 B	43	57841	35
56334 P	37	56392 C	43	57841 A	35
56335 D	37	56392 E	41, 71	57842 B	31
56335 G	37	56392 F	41	57882 E	29
56335 L	37	56393 C	29	57954	31
56336	37	56393 D	29	K58337	73
56336 B	37	56393 J	35	61256 G	31
56336 C	37	56393 K	35	61292 C	43
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NOTE: Only the basic part numbers are shown in the index. For various gauges, capacities, etc. available, refer to the listings on pages indicated.

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

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

SYNCHRONIZING LOOPER AND NEEDLE MOTIONS

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

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

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

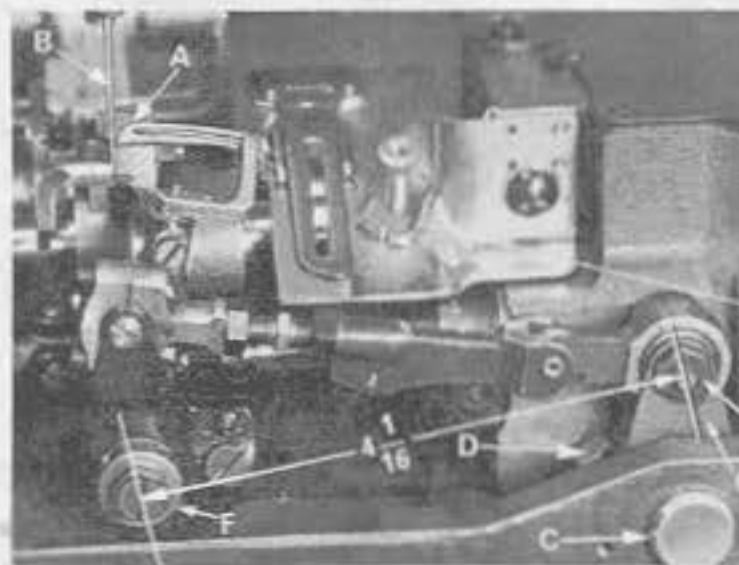


Fig. 5

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

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

SETTING THE LOOPER

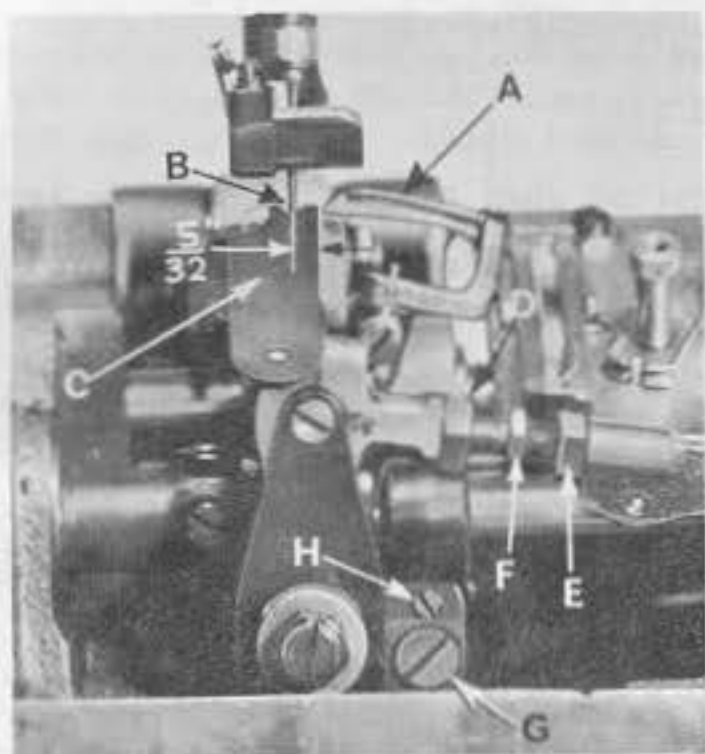


Fig. 6

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

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

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

SETTING THE LOOPER (Continued)

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

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

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

SETTING HEIGHT OF NEEDLE BAR

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

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

SETTING THE FEED DOG

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

On Styles 56300 N, 56300 U, 56300 X, 56300 AH the tips of the teeth must extend $\frac{1}{32}$ inch (.79mm) above the throat plate and the "Grip Feed" presser foot feed dog must line with the lower feed dog left to right, and in-line-of-feed the last teeth of the top and bottom feeds should match tooth point to point.

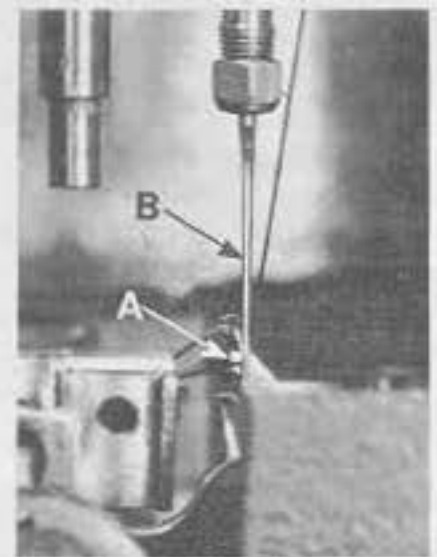


Fig. 7

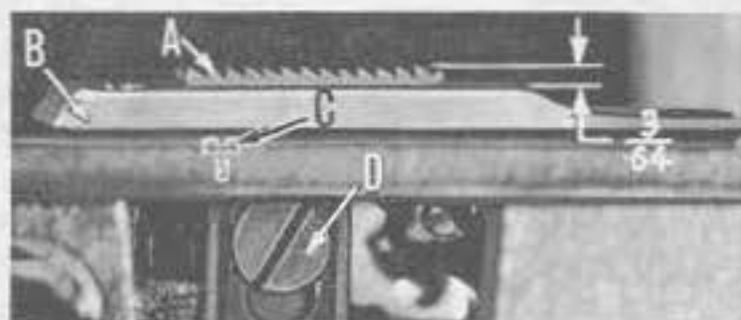


Fig. 8