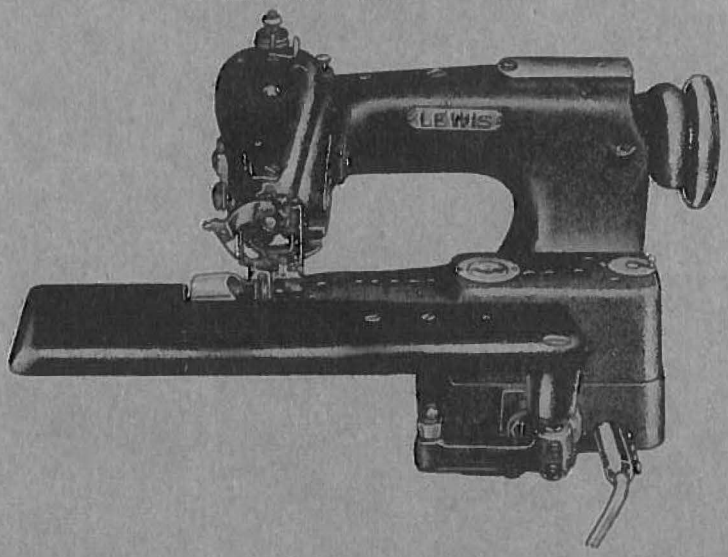
LEWIS



PARTS and INSTRUCTIONS

CATALOGUE 194-1

MODELS

150-2	150-32
150-3	150-33
150-4	150-34

PRODUCT OF

UNION SPECIAL CORPORATION

CHICAGO, ILL.

400 N. Franklin St. Chicago, Ill. 60610

PRINTED IN U. S. A.

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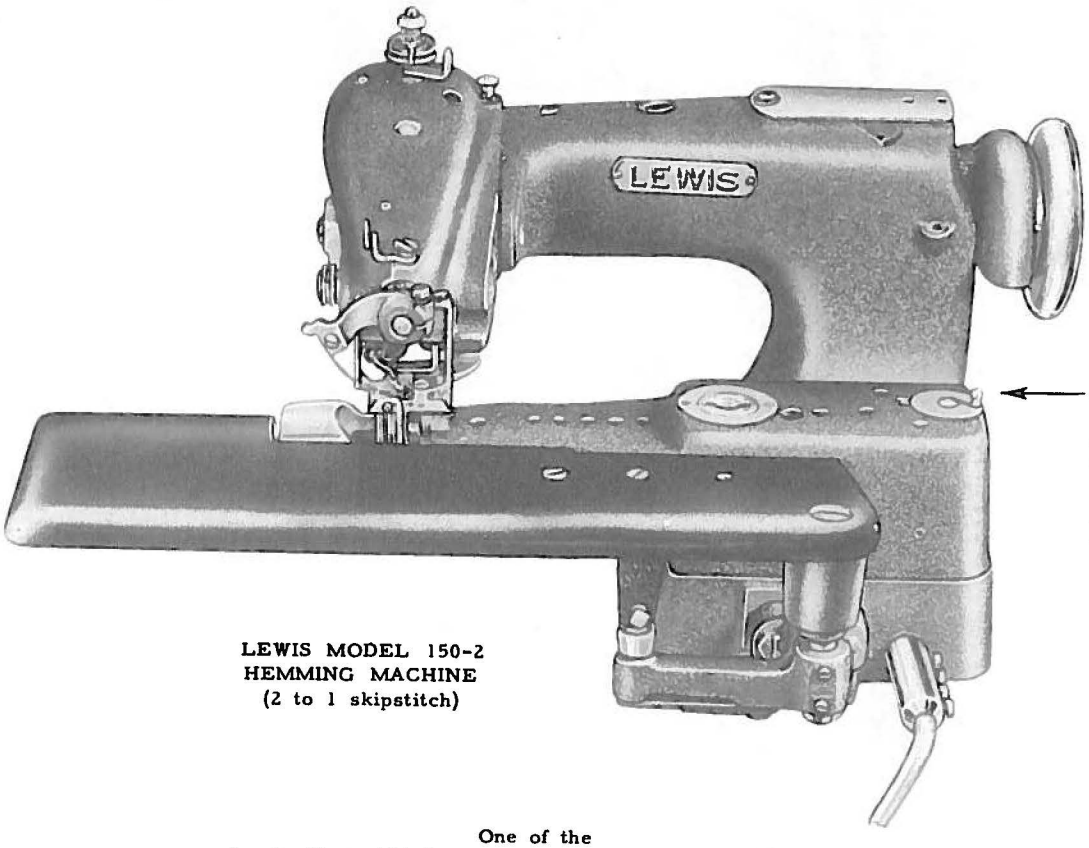


By turning this selector dial to non skip position the machine will sew the hem and garment on each stitch.

LEWIS MODEL 150-2
HEMMING MACHINE
(2 to 1 skipstitch)

One of the
Lewis Class 150 Single Thread Chain Stitch Sewing Machine

May, 1979

This catalogue covers the following models:

150-2	150-32
150-3	150-33
150-4	150-34

Models 150-2, 150-3 and 150-4 have been designed for hemming operations such as

Dress Bottoms
Sleeves
Blouses
Undergarments
Bottoms of Ladies' open lined
Coats, with or without
seam binding.

Models 150-32, 150-33 and 150-34 are designed specifically for hemming draperies.

Models 150-2 & 150-32 can produce a two to one skipstitch.

Models 150-3 & 150-33 can produce a three to one skipstitch.

Models 150-4 & 150-34, can produce a four to one skipstitch.

By switching a selector handle, models 150-2, 150-3 and 150-4 will also produce a one to one stitch which means that the needle will penetrate and sew the body fabric or base lay on every stitch.

INSTRUCTIONS FOR USING CATALOG

TO ORDER PARTS

To find a part needed, refer to assembly drawings Plates 2 thru 9, pages 20 thru 27. After locating number of desired part, check description of part in the parts list, pages 28 thru 37.

The Model Number is located on top of the head of the machine.

* * * * * * * * * * * * * * * * * * * *

The Serial Number of each machine is stamped in the arm under the top cover.

* * * * * * * * * * * * * * * * * * * *

State Model Number and Serial Number of machine when ordering parts.

We reserve the right to change specifications or designs at any time without incurring the obligation to install such changes on machines previously manufactured.

GENERAL INSTRUCTIONS FOR INSTALLATION, ADJUSTMENT, AND OPERATION

UNPACKING MACHINE

To remove the machine from the box, take off the cover and remove the nails and screws that hold the brace blocks in position. Use a nail puller to avoid breaking the machine. These blocks are held by nails or screws driven through the outside of the box. The knee lifter is attached to the side of the box, and the other small parts will be found wrapped in a package. Be sure to look carefully through the material used for packing before destroying it, so that you will find all the parts and equipment that goes with the machine. Lift the machine out of the box very carefully to avoid breaking the tension studs as these parts project beyond the head of the machine.

Set up the machine; clean away accumulated lint and dust, especially from the looper.

Place the machine on the bench with the pulley lined up with the transmitter, and, assemble the knee lift lever to the machine. The machine should be set on the table so that the knee lift lever is 1/2" from the edge of the table.

Mark the three holes for the machine screws and bore for the screw holes; bore the hole for the belt; place the felt pad under the machine and fasten the machine to the table, using the three machine bolts that were used to hold the machine into the packing case.

The machine may be run three thousand revolutions per minute; it is suggested, however, that the machine first be operated at about 2500 RPM - until the operator becomes used to the machine and then step up the machine to increase the speed.

HAND WHEEL

The top rim of hand wheel turns, when facing the pulley, away from the operator or clockwise. The pulley is 2" diameter at the pitch line of the belt groove.

THREADING

From the spool stand, pass the thread through the eyelet just back of the tension disc, then between the tension disc

on the left side, then lift thread over the pin which passes through the tension discs; then through the pig-tail eyelet over the needle bar, then through the hole in the needle clamp, then through the eye of the needle.

REMOVING WORK

See that the needle is out of the cloth. Lower the feed plates and retract the disc and give the work a quick jerk which will break the thread.

NEEDLE SIZES

The needles are furnished in the following sizes. Order by number:

Sharp Point 15° Front Scarf
29 BL-065/025
29 BL-075/029
29 BL-090/036
29 BL-100/040
29 BL-110/044

Ordinarily, sizes 29 BL-090/036 and 29 BL-100/040 will serve the purpose. A full range of needle sizes is, however, available to meet all requirements.

Use only genuine UNION SPECIAL needles. The needles are packaged under our brand name *Union Special®*.

THREAD

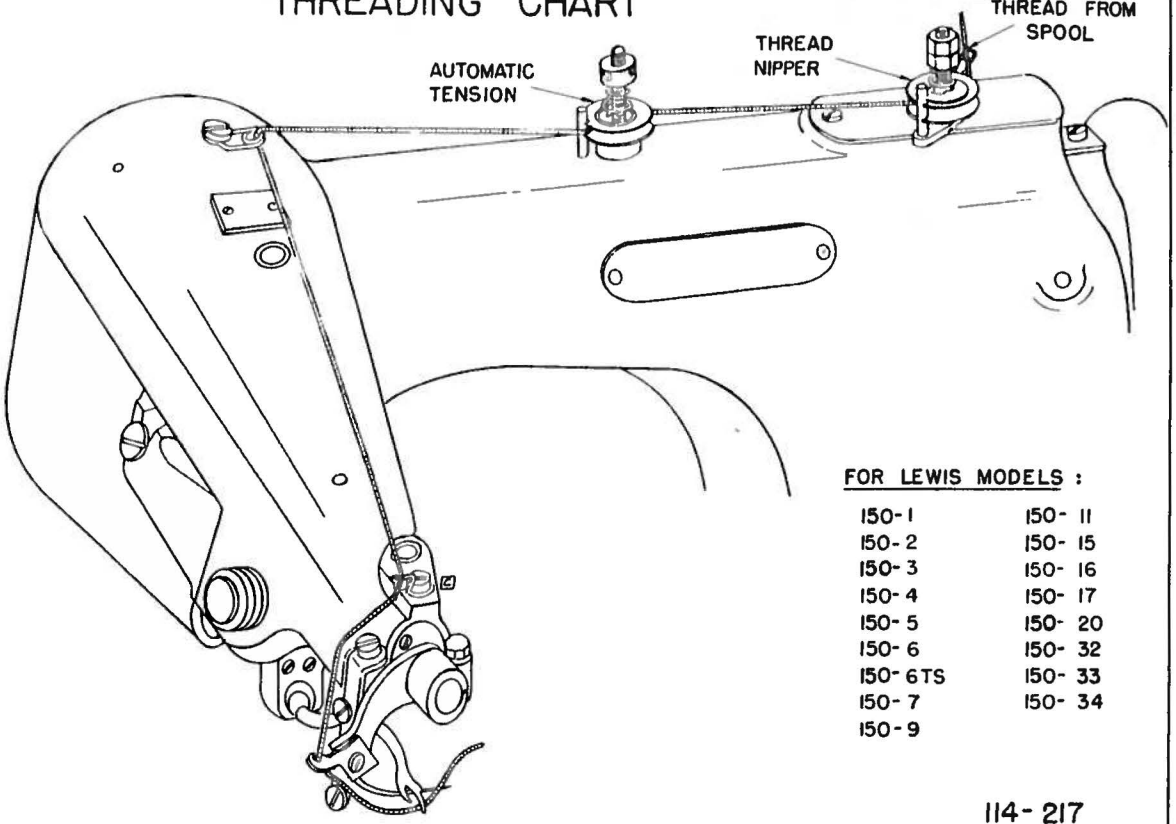
Use any good grade of left-twist three cord hard finish cotton thread in sizes 70 to 100. If silk thread is used, select either "00" or "000".

REGULATING DEPTH OF NEEDLE PENETRATION

The needle penetrating adjustment is located on top of the cylinder base of the machine and is a dial with graduations, showing the word "More" and indicates the direction in which to turn for raising the ridge forming disc for a deeper penetration and the word "Less" which indicates the direction to turn the dial to obtain less needle penetration in the work.

THREADING CHART

PL114-217



FOR LEWIS MODELS :

150-1	150-11
150-2	150-15
150-3	150-16
150-4	150-17
150-5	150-20
150-6	150-32
150-6TS	150-33
150-7	150-34
150-9	

114-217

SKIPPING STITCHES

Examine point of needle to see if it is blunt or turned over. Replacing needle will generally remedy skipping of stitches.

REPLACING NEEDLE

Insert needle into needle carrier as far as possible and tighten the set screw. Needle should bear slightly on the needle guide.

IMPORTANT! - - OIL MACHINE DAILY

SPEED

The LEWIS Class 150 machines can be operated up to 3000 stitches per minute. A speed of 1800 to 2200 stitches per minute is recommended in starting a new machine or with a new operator. Speed may be increased to suit operator or type of work.

TIMING

All basic driving parts are properly timed with spot screws.

PRESSER FOOT

Replace needle carrier with gauge No. 7-14 against the stop collar. Rotate counter-clockwise and move forward to present inside left corner of gauge thru needle guide. Adjust presser foot to gauge.

Note: This gauge is not applicable for the presser feet No. 405-529.

RIDGE FORMING DISC (Refer to Plates 1 and 1A

The disc must be adjusted to be in the center of the slot in the presser foot, and so that the nose of the disc is set in relation to the needle.

Before setting the disc be sure that there is no end play to the cradle No. 140-11. Any end play can be taken up by adjusting the pivot bearing screw No. 18-869. Set screw No. 1003 L must first be loosened and the tension of spring No. 21-377 released. Adjust pivot screw No. 18-869 just enough to take up play, but the cradle must move very freely. Check by moving cradle by hand, then lock pivot screw in place by tightening set screw No. 1003 L to lock No. 18-869 in place.

Adjust tension spring No. 21-377 with nut No. 20-120. Normal setting is when the end of screw for adjusting tensions No. 18-909 is about 3/32 inch from the end of nut No. 20-120.

Before making any adjustment of the ridge forming disc, turn the machine over by hand several times and observe closely the action of the disc. It is to be noted that the disc oscillates back and forth but that it does not always come forward to the same place. When the disc is in its extreme forward position, a penetrating stitch is made. On the following stitch, the disc does not come as far forward, and a skip stitch is made (see Figs. 8, 9, Plate 1). Please note that the machine should be in the skip stitch position before making the adjustments on the ridge forming disc. After the adjustments have been completed and after tightening all screws, again turn the machine over by hand and check to see that the disc lines up with the needle on all strokes.

To adjust the disc to the slot in the presser foot, loosen set screw No. 1022 L in collar No. 39-118 and clamp screw No. 1158 L in crank No. 448-131 and set disc to center of opening in presser foot; at the same time set the disc so that when the point of the needle is at the center of the slot in presser foot and at center of the disc, the point of the needle will pass over the lower step of the disc. This setting is made when the disc is on the skip stitch stroke. Tighten clamp screw No. 1158 L in crank No. 448-131 and set screw No. 1022 L in collar No. 39-118 and set the collar to take up all end play in the ridge forming disc shaft. When using disc No. 44-304, the needle position should be equalized between the front and back steps on the disc.

To remove the ridge forming disc, depress the left hand feed plate holder, remove the nut No. 20-80 on end of disc shaft and remove the washer No. 40-144 and disc. When re-assembling the disc, care must be taken that the key in flange No. 107-44 engages the slot in the disc. Assemble the washer No. 40-144 and nut No. 20-80 and tighten firmly.

RIDGE FORMING DISC REGULATOR (Refer to Plate 1A)

The dialed regulator located on top of the Cylinder Base raises and lowers the ridge forming disc to get the correct needle penetration in the work being done to form a blind stitch. The word "More" indicates more depth and "Less" indicates less depth of needle penetration.

The regulator also limits the amount that the disc can be raised in order to protect the needle point from striking the ridge forming disc. The adjustment is made by turning the regulator in the "More" direction as far as possible to stop pin inside of the regulator.

A needle must be in the needle carrier and in contact with the needle guide and point of needle over the ridge forming disc.

Now remove the set screw 18-924 (See Plate No. 1A) and adjust screw 18-923 that contacts the cradle 140-11 in which the ridge forming disc shaft is mounted and adjust so that the ridge forming disc will lift the needle off of the needle guide .010" which is equivalent to two thicknesses of newspaper. Reassemble the 18-924 screw and set tightly to lock screw 18-923 in place. These two screws are located inside of the main hexagon headed adjusting screw 18-922.

The adjustment for the spring tension for correct pressure of ridge forming disc is made by turning nut 20-120, located in front of cylinder base, turn in clockwise direction to get more tension and in reverse direction for less tension. See second Paragraph on Page 9 for standard setting.

FEED

The feed is adjustable relative to the presser foot by loosening the two binding screws holding the feed, and turning over the machine, away from you, until the feed motion is at the lowest point, then set the feed so that it is 1/32" below and parallel with the bottom of the presser foot, for light and medium weight materials; for heavy work, the feed must be brought below the presser foot about 3/64".

The feed is adjustable from three to eight stitches per inch.

FEED PLATES

The Feed Plates press the work against the bottom of the presser foot and feed, when on its feeding stroke, by two springs.

There must be enough pressure applied to hold the work from moving when the needle penetrates the material, for if the material moves with the needle, a loop will not be formed for the looper, resulting in missed stitches.

Check to see that Feed Plates clamp a piece of newspaper before point of needle penetrates material.

ADJUSTING LENGTH OF STITCH

The stitch is regulated by the knob No. 426-47 (Plate 3), located on top of the arm of the machine near the head. First open the top cover of machine to observe the feed indicator on the shaft, with numerals which indicate number of stitches per inch. Press down the feed knob located on top of the machine, which will engage a slot in the feed mechanism. Now, turn the handwheel over and away from you while holding the knob in the slot to lengthen stitch, and toward you to shorten stitch. Observe through the opening in the top of arm the numbers on the feed disc as you turn until the numeral, indicating stitches per inch, is directly under the indicator.

CYLINDER BASE PARTS AND THEIR ADJUSTMENT (See Plate 1A)

The parts in the cylinder base and base of arm operate the ridge forming disc, depress the feed plate and retract the disc to insert and remove the work from the machine.

Parts in the cylinder base, where possible, are held in position with spot screws and a timing mark has been milled in the bracket No. 50-222. Parts assembled in this bracket that have timing marks that must match the timing mark in the bracket are eccentric No. 433-151 and gear No. 27-165.

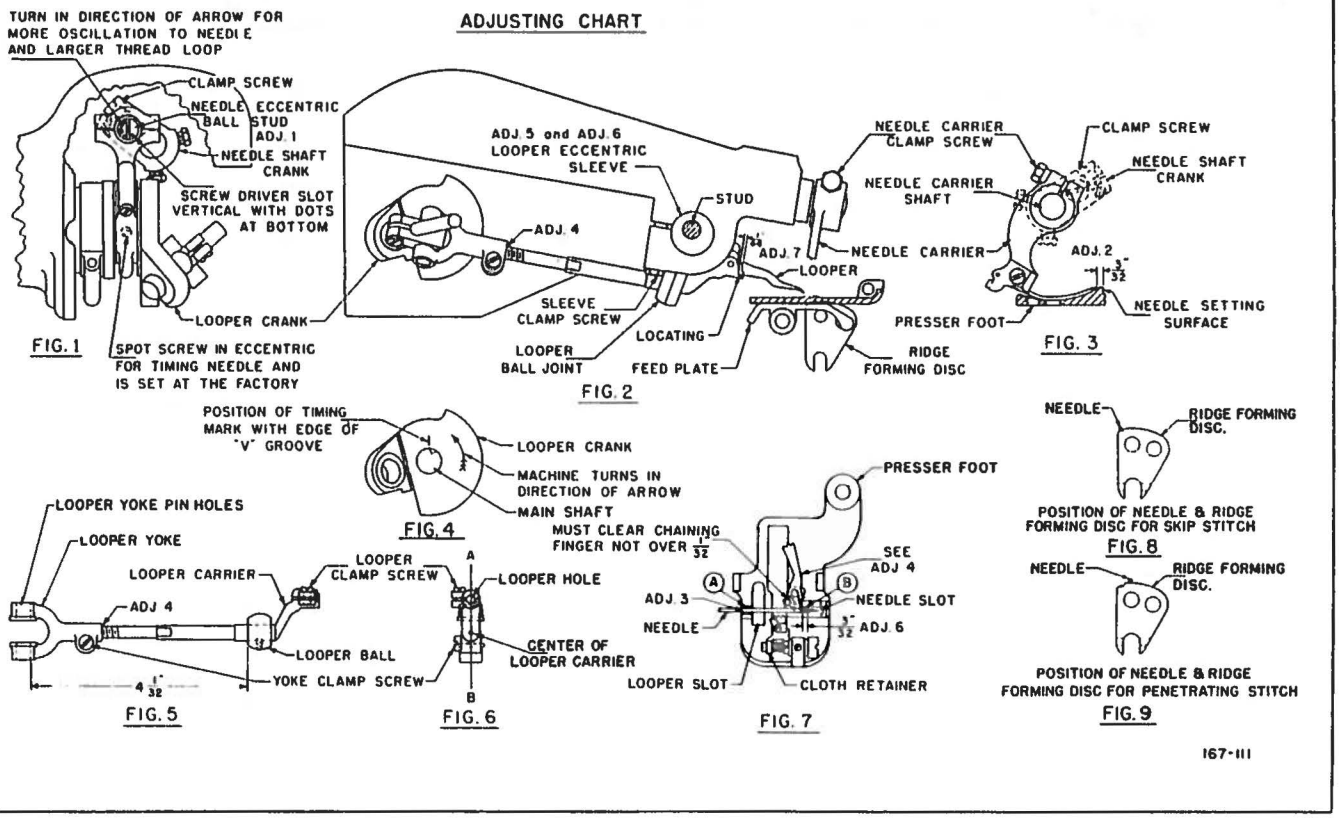
Bracket No. 50-222 can be removed from the machine by removing stud No. 17-145 which will disconnect the end of connecting rod No. 447-118 from lever No. 45-352. Next remove the three screws No. 18-664 and take bracket from the base by slipping the headless bearing stud No. 865 L out of the hole in ball joint No. 4124-51.

Gear No. 27-166 and eccentric No. 433-151 are held on to the shaft No. 14-431 by the set screws Nos. 1025 L and 18-624, therefore when assembling, if the gear teeth are engaged so that the timing marks all coincide, the machine will function properly.

Crank No. 448-131 is clamped to the disc shaft and is used to adjust the ridge forming disc. (See Plate 1A)

Crank No. 48-127 is for adjusting shaft No. 14-429 for depressing feed plates. The adjustment is made through a hole in front of cylinder base. Loosen screw No. CS331 in crank No. 48-127 and with feed plates in contact with presser foot, adjust surface (A) of 14-429 so that two thicknesses of newspaper will just pinch against the contact surface of feed plate holders (A, Plate 1A). Be sure feed plates are in contact with bottom of presser foot.

ADJUSTING CHART



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TIMING & ADJUSTING CHART
LEWIS CLASS 150 SINGLE THREAD MACHINE

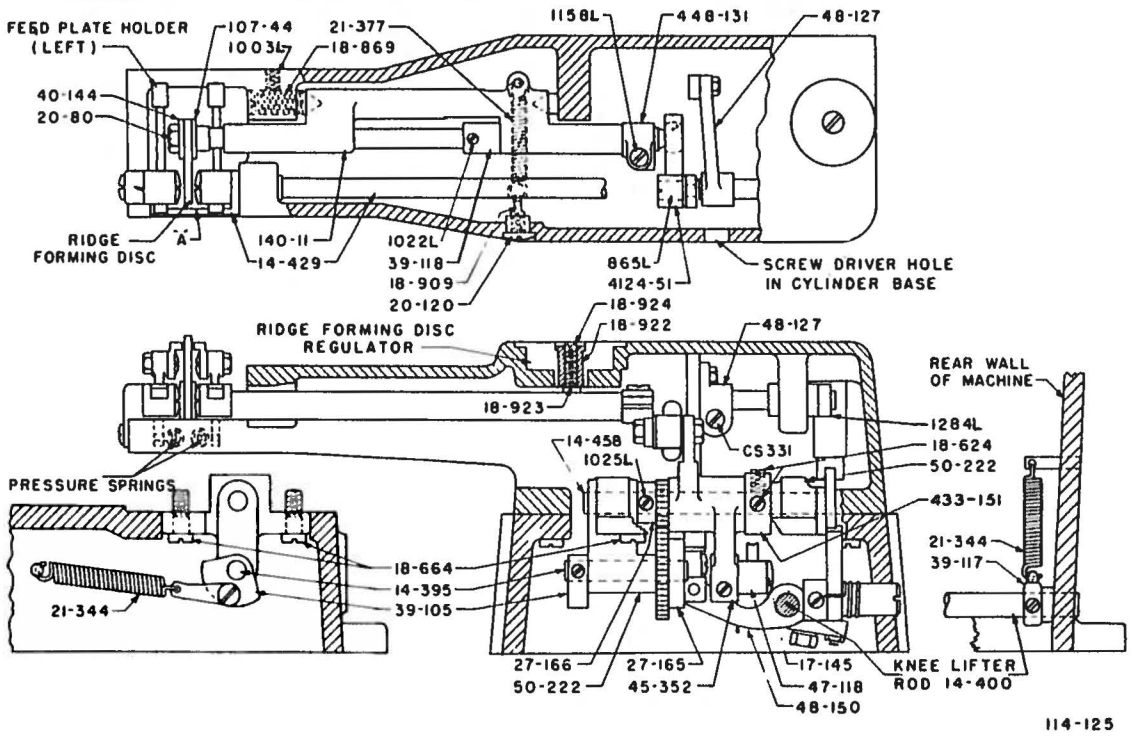


PLATE 1A

101454 102153 2950

Check the above setting by depressing the feed plates as far as possible, and turn over handwheel to see that crank No. 48-127 turns without interfering with adjacent parts.

Crank No. 48-150 is for adjusting the position of the knee lifter in best position for operator.

Collar No. 39-105 is used for taking up end thrust of shaft No. 14-395 and setting tension of spring No. 21-344 for returning ridge forming disc and feed plates to sewing position.

Collar No. 1284 L is used for taking up end thrust of shaft No. 14-429.

Collar No. 39-117 is used to take up end thrust of knee press shaft No. 14-400 and for setting tension of spring No. 21-344 for holding knee lifter out of contact with depressing lever.

TIMING THE MACHINE

Needle:

A No. 4 taper point needle should be used when adjusting the needle position.

To secure the correct adjustment for the needle swing the following steps must be taken and settings made. (See adjusting chart, Plate 1).

Adjustment 2

To set the point of the needle in the correct position when the needle is at the extreme end of its stroke toward the handwheel, the following steps must be taken: Turn the machine over until screwdriver slot in needle eccentric ball stud is straight up and down with the two dots at bottom (See Fig. 1). With the machine in the above position, loosen needle carrier clamp screw and move needle carrier so that the point of needle is 1/16 to 3/32 inch from the edge of needle setting surface (Fig. 3). Tighten the needle carrier clamp screw.

Adjustment 3

To set the needle in correct position in needle slot (See Fig. 7) the following steps and setting must be made: Loosen the needle carrier clamp screw and move the needle carrier (See Fig. 2) in or out so that the rear side of the needle will just clear the needle slot at "A" (See Fig. 7) and clear the needle shoulder of the presser foot at "B" about .005 inch. Check to see that the setting for the needle point still is

1/16" to 3/32" from the needle setting surface of presser foot. Tighten the needle carrier clamp screw.

LOOPER

The correct setting of the looper is of the greatest importance. (See adjusting chart). Plate 1.

The looper is mounted in the looper carrier assembly - allow 1/64" space between looper shoulder and end of looper carrier - See Figure 2 - and the correct assembling of this unit must be understood in case for any reason it is necessary to remove or replace this assembly.

The looper carrier assembly consists of:

Looper Yoke - in which are the looper yoke pin holes
Clamp Screw
Looper Ball
Looper Carrier

The looper carrier and looper yoke are set before assembling these parts into the machine. Now, the looper ball is positively located on the shaft of the looper carrier by a spot screw. The looper carrier is assembled to the looper yoke so that the distance from the edge of the looper yoke pin hole nearest the looper ball, to the side of the looper ball nearest to the looper yoke, will be 4-1/32". See adjusting chart - Figures 5 and 6.

The looper has means for the following adjustments, which, for reference to the drawing, are numbered as follows:

Adjustment 4

Means for adjusting the looper position on the right hand side or when the looper is taking the loop from the needle.

Adjustment 5

Means for adjusting the looper position on the left hand side or when the needle is between the prongs of the looper.

Adjustment 6

Means for adjusting the position of the looper from left to right or right to left.

Adjustment 7

Means for adjusting the looper in and out.

Before setting the looper, the looper carrier assembly must be in accordance with instructions for Figure 5 and Figure 6 and the needle setting must be as described in adjustments 1, 2 and 3.

The looper is and can be timed at only one place.

TIMING THE LOOPER

Timing the looper is relative to the needle. Loosen the two set screws on the looper crank. To time the looper, turn the machine over by the hand wheel by turning the hand wheel towards the rear of the machine until the screw driver slot in the needle eccentric ball stud is straight up and down with the two dots at the bottom - See Figure 1, adjustment 1.

There is a "V" notch cut in the main shaft of the machine which will be at the top of the shaft.

There is a timing mark on the looper crank - See Figure 4.

Turn the looper crank until the timing mark on the crank coincides with the left hand edge of the "V" on the main shaft. This timing mark will not vary more than 1/32" plus or minus relative to the edge of the "V".

Clamp the looper crank to the main shaft of the machine with the two set screws.

ADJUSTING AND SETTING THE LOOPER

To secure the correct adjustment of the looper, the following steps should be taken and in the same sequence as here given:

The looper is first adjusted as the looper is taking the loop from the needle.

The position for the long prong of the looper is to have the point of this prong 3/32" from the inner end of the needle eye and the point of the long prong just clearing the scarf of the needle.

To secure this setting, the following steps and adjustments are taken and made:

Turn the hand wheel in clockwise direction; that is, the top of the hand wheel will be moved away from the operator very slowly until the long prong of the looper is over the center line of the needle.

Loosen the looper yoke olamp screw - See Adjustment 4, Figures 2 and 5 - and roll the looper until the long prong of the looper just clears the scarf of the needle.

Loosen the sleeve clamp screw - See Figure 2 - this permits the looper eccentric sleeve to be moved from left to right - and slide the looper eccentric sleeve - Figure 2, adjustment 6, until the long prong of the looper is 3/32" from the inner end of the needle eye.

Check to see that point of the long prong of the looper just clears the scarf of the needle. Tighten the looper yoke clamp screw - See Figure 5, and the looper eccentric sleeve clamp screw - See Figure 2.

Continue to rotate the hand wheel in clockwise direction, until the short prong of the looper is at nearest point when passing chaining finger, if foot has chaining finger, not exceeding 1/32" - See Figure 7. If the short prong does not clear the chaining finger, or if the clearance is greater than 1/32", then the previous adjustments have not been correctly made, and these should be re-made.

Continue to rotate the hand wheel in clockwise direction until the short prong of the looper has passed the edge of the looper slot in the foot. If the short prong of the looper does not enter the looper slot in the foot, adjust so that the short prong will clear the edge of the looper slot in the foot by moving the looper eccentric sleeve - Adjustment 6, Figure 2. Move the looper eccentric sleeve the least amount possible so that the short prong clears the edge of the looper slot.

Care must be taken now as the needle may strike the crotch of the looper when the needle should be entering between the prongs of the looper.

Continue to turn the hand wheel in clockwise direction until the point of the needle should enter between the prongs but instead of so doing strikes the crotch of the looper - the following corrective steps are required:

Loosen the two set screws on the looper crank - See Figure 4, and turn crank slightly in a clockwise direction until the needle does not strike the crotch. Tighten the set screws.

The needle must enter between the prongs of the looper, clearing the two prongs about an equal amount.

In case the needle should not enter about midway of the two prongs - to correct this, loosen the sleeve clamp screw - Figure 2, and turn the looper eccentric sleeve - Adjustment 5, Figure 2, until the prongs of the looper are about an equal distance from the needle. When this setting has been made, tighten the sleeve clamp screw - See Figure 2.

Continue to rotate the hand wheel in a clockwise direction until the point of the long prong of the looper is over the center line of the needle. Check to see that the point of the long prong of the looper is 3/32" from the inner end of eye of the needle and that the point of the long prong just clears the scarf of the needle. In case the above conditions do not exist, they must be corrected - this is done as described in the fifth to tenth paragraphs inclusive under the heading "ADJUSTING AND SETTING THE LOOPER". Be sure to roll the looper - Adjustment 4, Figure 5. Do not turn the looper eccentric sleeve.

The machine, as far as the looper and needle are concerned, is now ready to sew. Different material or different threads may cause a slight variation from the above adjustments. However, these adjustments will give the best results when padding or hemming the more heavy materials. When hemming silks and cotton, however, it may be advisable to set the point of the needle 1/16" from the needle setting surface on the presser foot - Figure 3, instead of 3/32", without changing the looper position by re-adjusting the needle ball stud - Adjustment 1, Figure 1 - the timing dots on the ball stud should be turned in direction towards the hand wheel to obtain slightly more throw to the needle resulting in a larger thread loop.

RETAINER OR CLOTH CLAMP

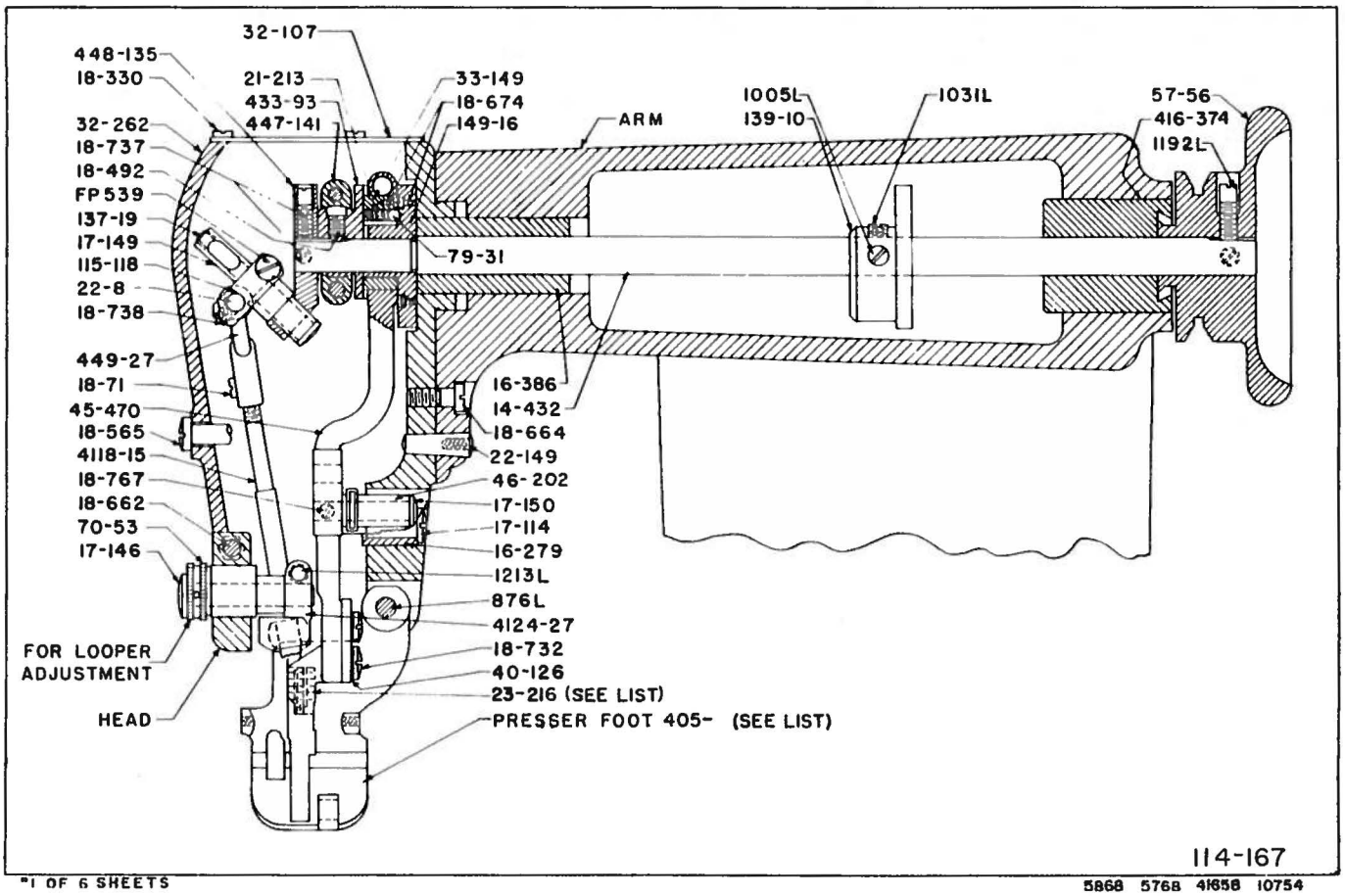
The Cloth Retainer located in the cloth opening of the presser foot must at all times be adjusted as close to the needles as possible and set relative to the ridge forming disc to firmly hold the work on to the disc while the needle is penetrating the material. If the work is carried along with the needle, no loop will form, resulting in missed stitches.

When sewing hems, ribbon hems, and knit materials, special care must be taken to adjust the retainer close to the needle, lined up with the ridge forming disc, and with enough spring pressure to clamp the work firmly against the disc to overcome the thrust of the needle when piercing the material.

TIMING SKIP STITCH GEARS - See Plate 7

The timing of the skip stitch gears is relative to the ridge forming disc eccentric. The gear driven pin 22-126 has a line marked on it. This line when it is at its highest position and directly over the center of the main shaft should be in line with the spot screw 18-700 in the eccentric which is spotted on the main shaft. The timing is made through the small gear on the main shaft.

Skip stitch LEWIS models may be set to sew so that the needle penetrates the base lay of the work on every stitch by setting the stitch selector located on top of the cylinder base.



*1 OF 6 SHEETS

5868 5768 41658 10754

PLATE 2

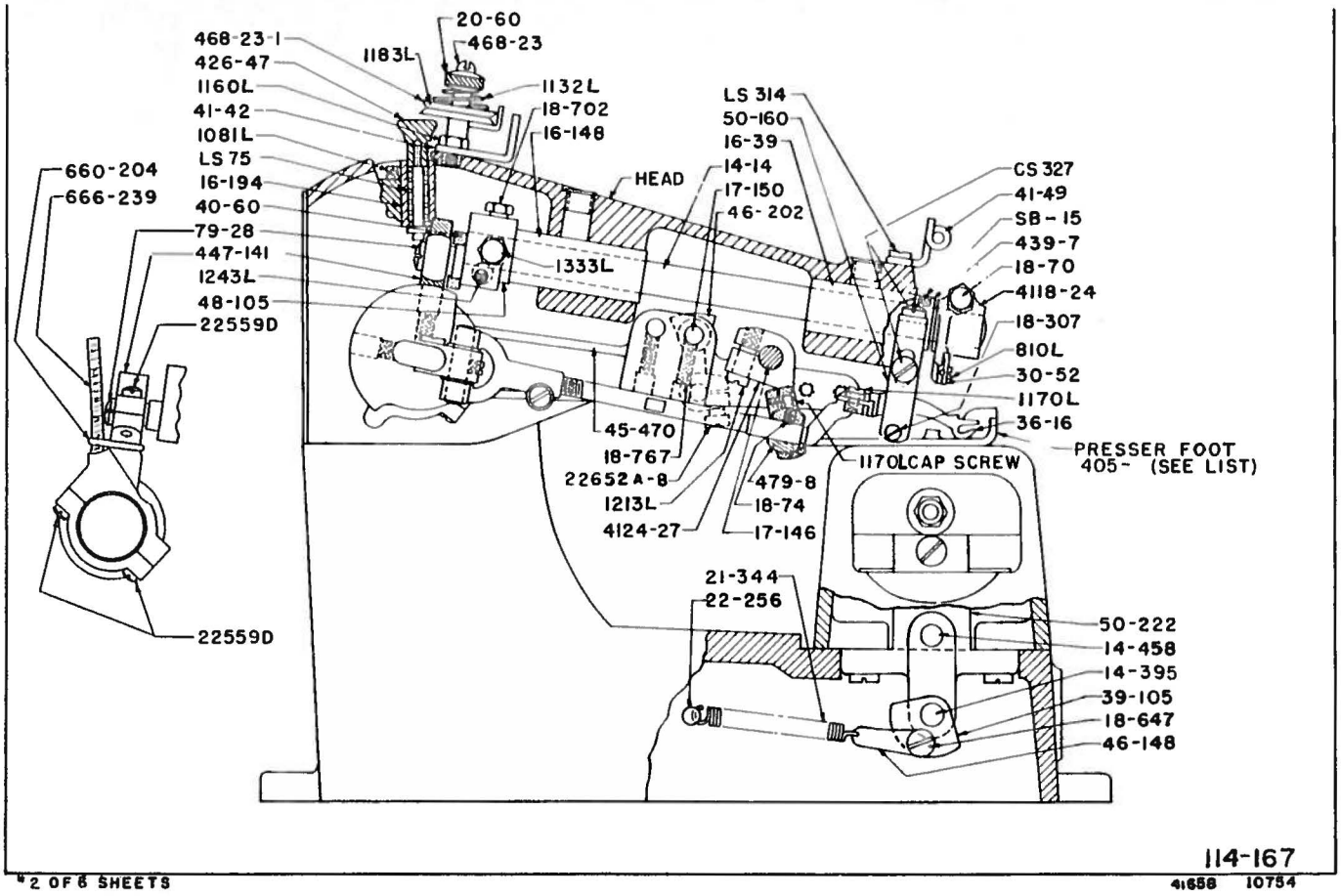
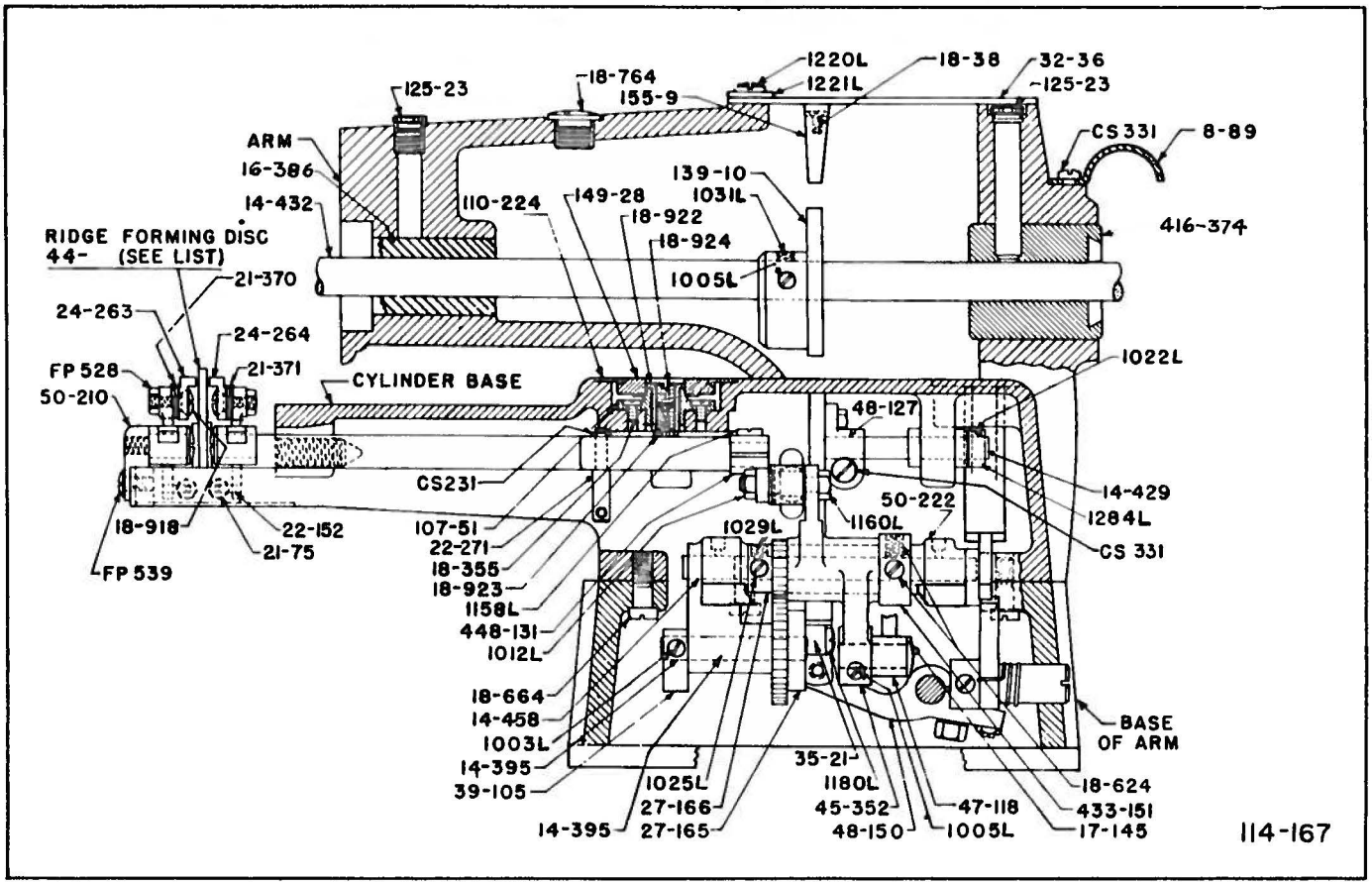


PLATE 3

114-167

*2 OF 6 SHEETS

41658 10754



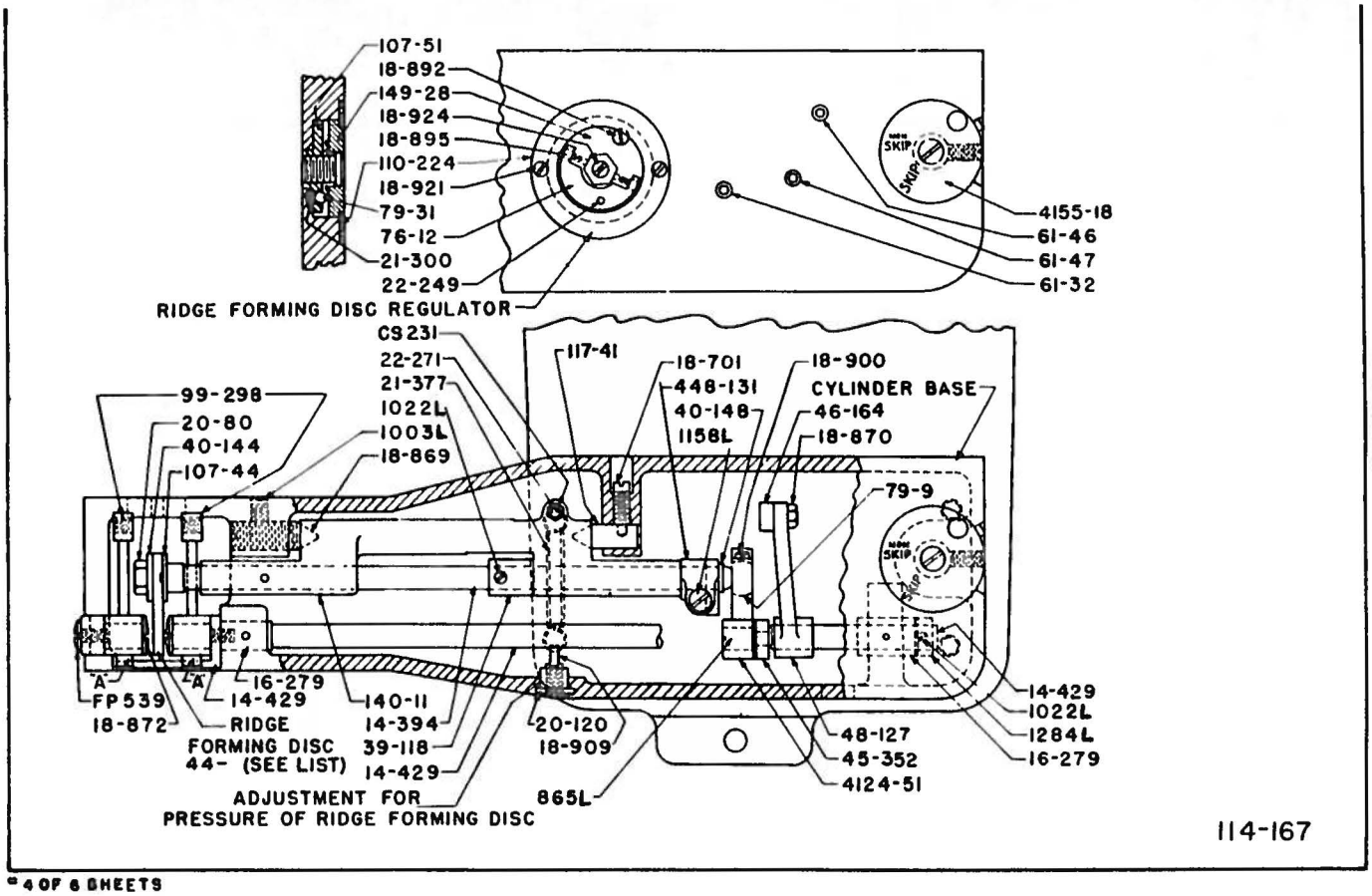


PLATE 5

23

4 OF 6 SHEETS

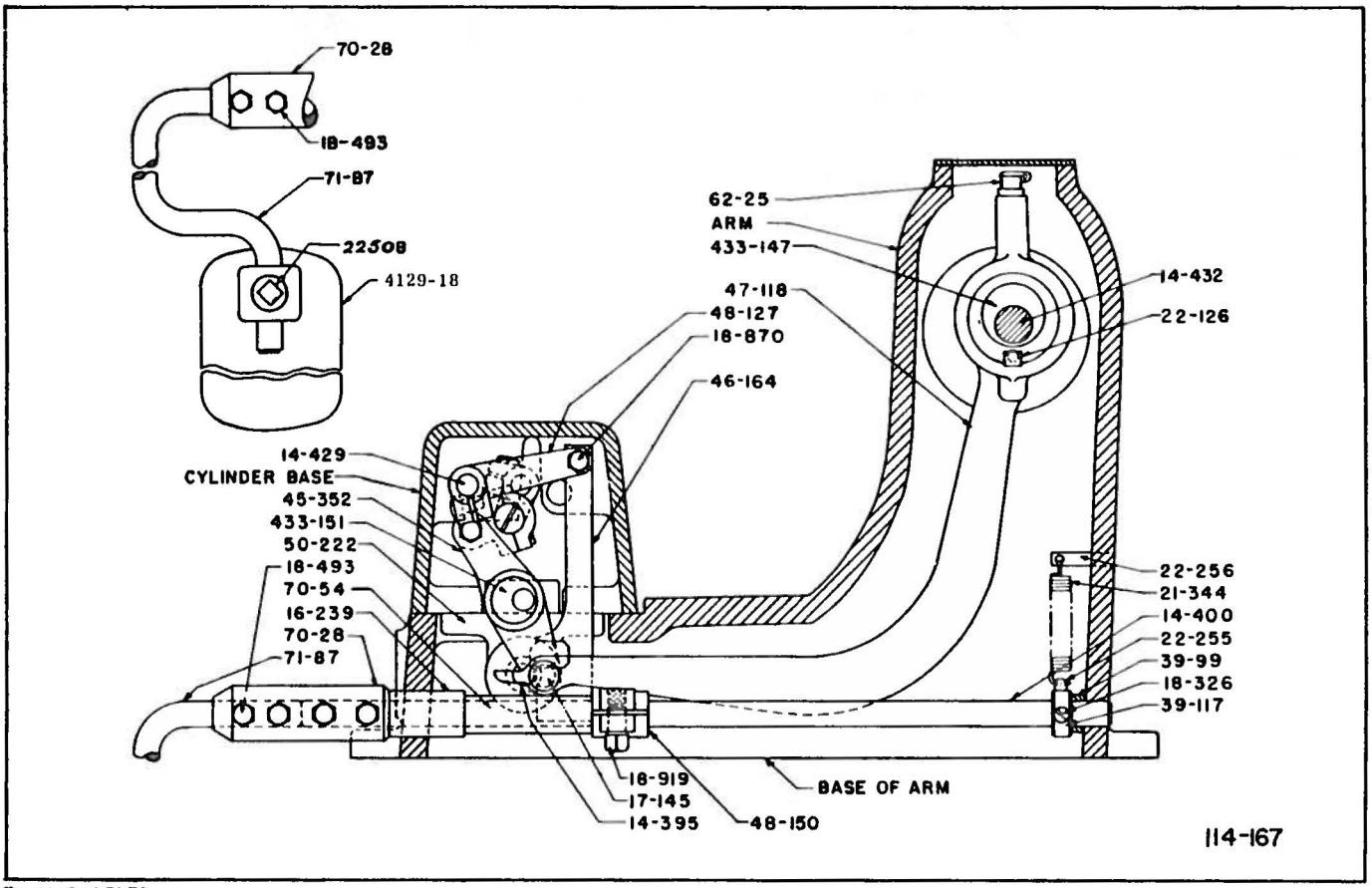
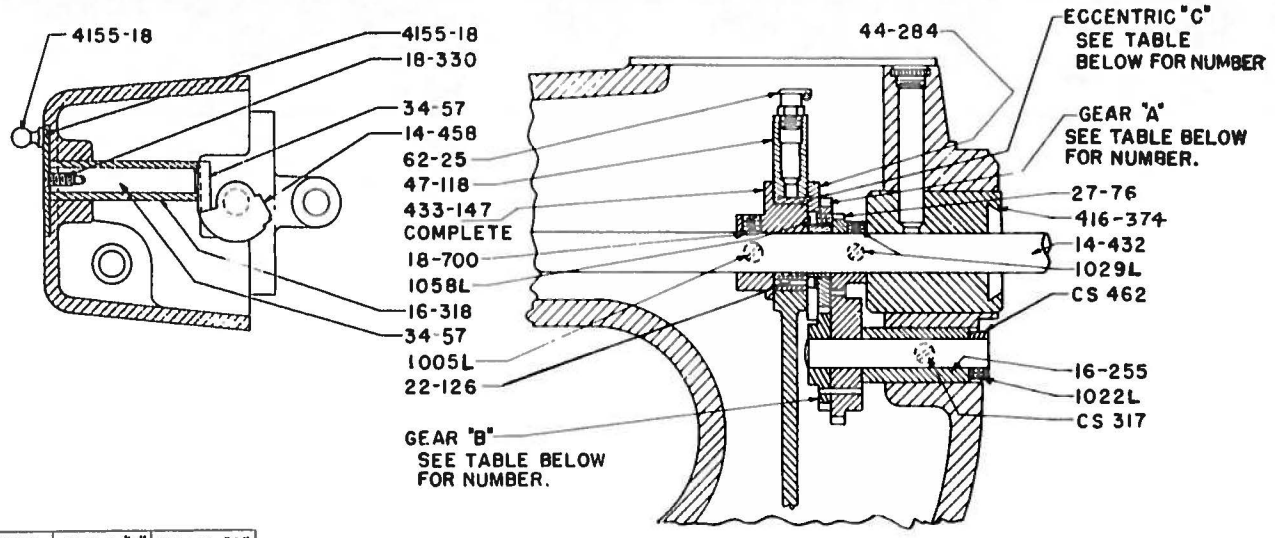


PLATE 6



MODEL No.	GEAR "A" No.	GEAR "B" No.
150-2	27-77	427-122
150-3	27-117	427-123
150-4	27-111	427-124
150-32	27-77	427-122
150-33	27-117	427-123
150-34	27-111	427-124

MODEL No.	ECCENTRIC "C" No.
150-2	33-145
150-3	33-145
150-4	33-145
150-32	33-145
150-33	33-145
150-34	33-146

114-106

PLATE 7

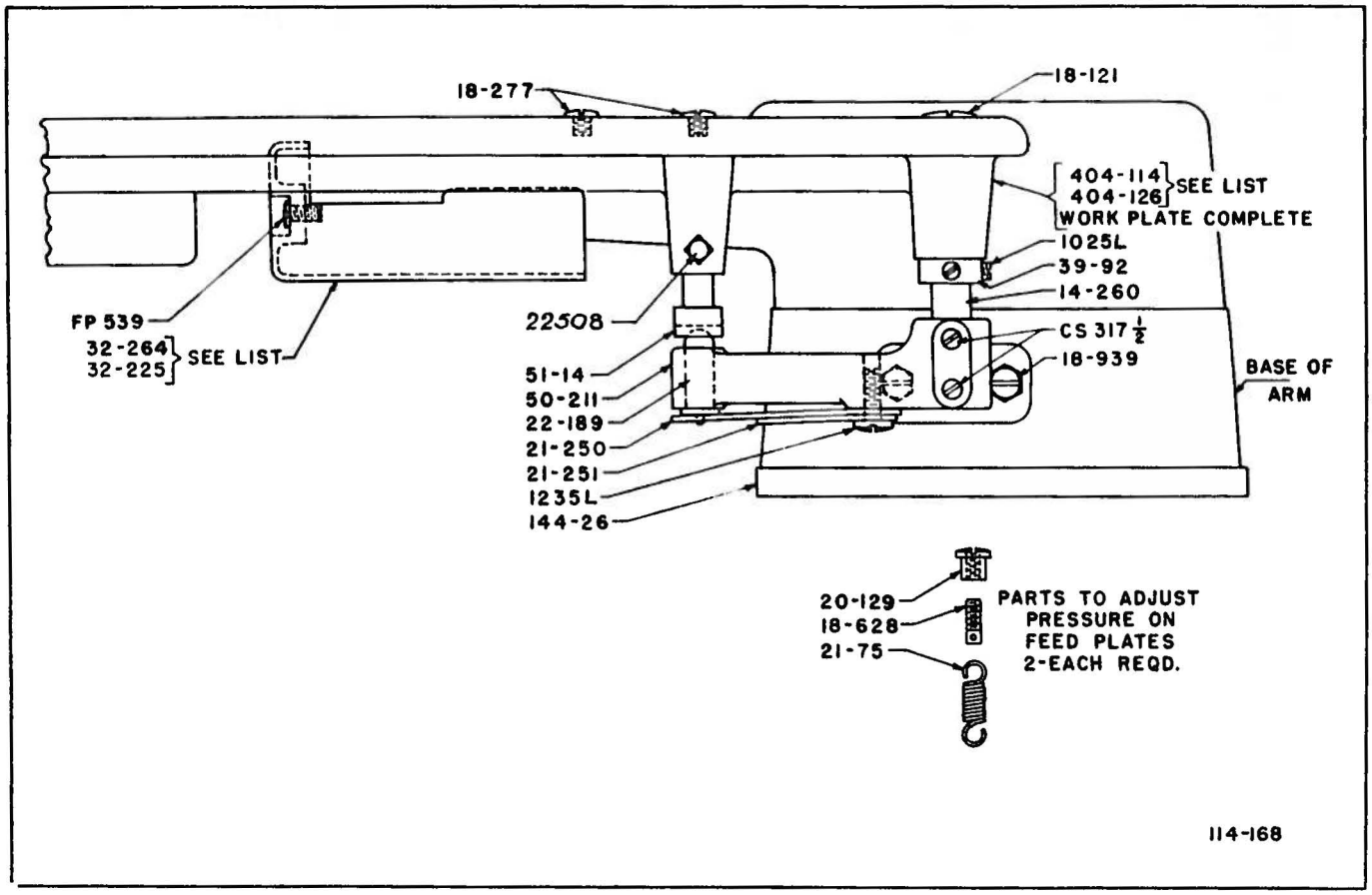


PLATE 8

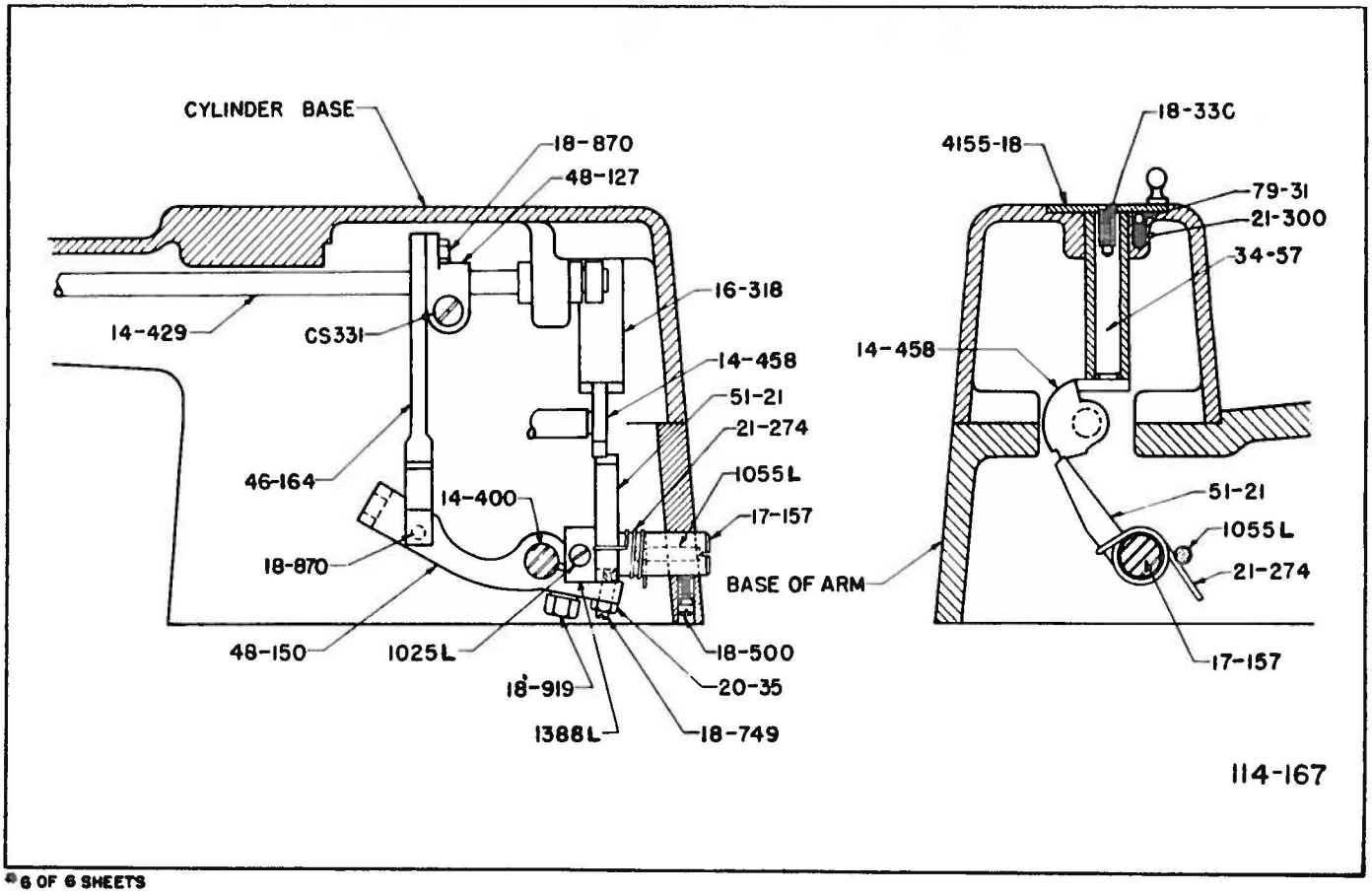


PLATE 6

6 OF 6 SHEETS

PARTS LIST

Part No.	Plate	Description
4-C114	*	Work Plate (large) in 404-114. Models 150-32, 150-33, 150-34
4-126	8	Work Plate (swing type) in 404-126 when end cover 32-264 is used. Models 150-2, 150-3, 150-4
6-56	10	Needle Guide
8-89	4	Belt Guard
14-14	3	Shaft, for needle carrier 4118-24
14-260	8	Shaft, in bracket 50-211, for swinging work plate 4-126
14-394	5	Shaft, for ridge forming disc in cylinder base
14-395	3, 4, 6, 7	Shaft, in base, for gear 27-165
14-400	6, 9	Shaft, for knee press
14-429	4, 5, 6, 9	Shaft, in base, to depress feed plates
14-432	2, 4, 6, 7	Main Shaft
14-458	3, 4, 7, 9	Shaft, in base, for oscillating disc lever 45-352
SB15	3	Set Screw, for collar 439-7 in head
16-39	3	Needle Shaft Bushing, front end of head
16-148	3	Needle Shaft Bushing, rear end of head
16-194	3	Bushing, in arm, for 26-47 to change length of stitch
16-214	10	Bushing, in presser feet, for adjusting cloth retainer
16-239	6	Bushing, in base, for knee lift rod
16-255	7	Bushing (eccentric), in arm, for adjusting gears
16-279	2, 5	Bushing, in head, for eccentric stud 17-114, for adjusting height of feed, and in cylinder base for 14-429
16-318	7, 9	Bushing, in base, for skipstitch cam 34-57
16-386	2, 4	Bushing, for main shaft 14-432, head end of arm
17-87	10	Eccentric Stud, in bushing 16-214, for adjusting cloth retainer
17-114	2	Eccentric Stud, in head, for link 446-118
17-145	4, 6	Stud, in lever 45-352, for connecting rod 47-118
17-146	2, 3	Stud, for looper ball joint sleeve 70-53
17-149	2	Stud, in looper drive crank 48-135, for looper bearing
17-150	2, 3	Stud, for feed lever in head
17-157	9	Eccentric Stud, for adjusting latch, for disc locking mechanism
18-38	4	Screw, for indicator 155-9
18-70	3	Clamp Screw, for needle carrier 4118-24

PARTS LIST

Part No.	Plate	Description
18-71	2	Clamp Screw, for looper yoke 449-27
18-74	3	Spot Screw, in 479-8, to locate on looper carrier 4118-15
18-121	8	Screw, in shaft 14-260, for work plate
18-270	10	Screw, in end of eccentric stud 17-87
18-277	8	Screw, in work plate, for holding folder
18-292	10	Screw, for holding chaining fingers to presser feet
18-307	3	Screw, for holding presser foot to bracket 50-160
18-326	6	Screw, for clamping 39-117 collar to knee lift shaft in base of arm
18-330	2, 7, 8, 9	Screw, for cover 32-107 on head, for skipstitch selector 4155-18 and for cylinder base cover 32-225
18-355	4	Screw, for 107-51 ridge forming disc regulator flange, in cylinder base
18-416	10, 11	Screw, in bushing 16-214 for holding eccentric stud 17-87 in presser foot and for stop collar 39-87
18-492	2	Spot Screw, for eccentric 433-93 in head
18-493	6	Screw, for 70-28 sleeve for knee press
18-500	9	Set Screw, in base, for locking eccentric stud 17-157
18-565	2	Screw, for aluminum head cover 32-262
18-609	10	Screw, for edge guide 75-222
18-623	10	Screw, for cloth retainer stop on presser foot
18-624	4	Screw, for eccentric 433-151, in cylinder base
18-628	8	Screw, for feed plate spring 21-75
18-643	10	Screw, for needle guide 6-56 on presser foot
18-647	3, 7	Screw, for spring link 46-148 in cylinder base
18-662	2	Screw, for clamping looper adjusting sleeve 70-53 in head
18-664	2, 4, 7	Screw, to hold head to arm, cylinder base to arm and bracket 50-222 to bottom of cylinder base
18-674	2	Screw, in stitch regulator 149-16 in head
18-700	7	Spot Screw, for ridge forming disc eccentric 433-147 in arm
18-701	5	Spot Screw, for pivot bearing 117-41 in cylinder base
18-702	3	Hexagon Head Spot Screw, for needle drive crank 48-105 in head
18-732	2	Screw, for feed
18-737	2	Screw, for looper driving crank 48-135 in head
18-738	2	Screw, for pin shaft 22-8 in looper yoke 449-27
18-749	9	Adjustable Screw, in crank 48-150, for latch 51-21
18-764	4	Screw, on top of arm to plug tension release hole
18-767	2, 3	Screw, for clamping stud 17-150, for feed lever in head

PARTS LIST

Part No.	Plate	Description
18-869	5	Pivot Bearing Screw, for disc cradle 140-11 in cylinder base
18-870	5, 6, 9	Hexagonal Shoulder Screw, in link 46-164 to connect cranks 48-127 and 48-150 in base
18-872	5	Shoulder Bearing Screw, for feed plate holder in cylinder base
18-892	5	Stop Screw, for regulator 149-28 on top of cylinder base
18-895	5	Hinge Screw, for regulator handle 76-12 on top of cylinder base
18-900	5	Screw, for cap of ball joint 4124-51 in cylinder base
18-906	*	Flat Head Screw, (4 used) to fasten work plate 4-C114 to bracket
18-909	5	Screw, for adjusting spring tension for cradle 140-11 in cylinder base
18-918	4	Taper Bearing Screw, for feed plate in cylinder base
18-919	6, 9	Hexagonal Clamp Screw, for crank 48-150 in base of arm
18-921	5	Flat Head Screw, for regulator dial plate 110-224 on top of cylinder base
18-922	4	Adjusting Screw, in regulator 107-51 to adjust depth of needle penetration
18-923	4	Adjusting Screw, in 18-922 screw to limit height that disc can be raised
18-924	4, 5	Set Screw, in regulator to lock 18-923 in place
18-939	8	Hexagonal Screw, for work table bracket 50-211 and 50-227
18-955	*	Screw, for holding machine to bench
18-974	11	Screw, for 41-48
20-31	*	Nut, for looper carrier 4118-15
20-34	11	Nut, for automatic tension release staff. Models 150-2, -3, -32, -33
20-35	9	Nut, for screw 18-749 in cylinder base
20-60	3, 11	Nut, on head to adjust thread tension
20-79	*	Nut, on plunger 426-47 in head, for changing length of stitch
20-80	5	Nut, for locking ridge forming disc on shaft in cylinder base
20-120	5	Nut, to adjust pressure of ridge forming disc in cylinder base
20-129	7, 8	Adjusting Nut, for applying tension to feed plate
20-142	11	Adjusting Nut, for 68-21 (2 used)
21-75	4, 7, 8	Spring, for feed plate holder
21-193	10	Spring, for cloth retainer on presser foot
21-213	2	Spring, for ball 79-31 in stitch regulator 149-16 in head
21-250	8	Long Spring, on bracket 50-211 for pin 22-189 in work plate assembly 404-126
21-251	8	Short Spring, on bracket 50-211 for pin 22-189 in work plate assembly 404-126
21-274	9	Spring, for latch 51-21 for locking disc
21-300	5, 9	Spring, for ball 79-31 in ridge forming disc regulator on top of cylinder base, and for skip-stitch selector 4155-18

PARTS LIST

Part No.	Plate	Description
21-344	3, 6, 7	Spring, for collars 39-117 and 39-105 in base of arm
21-370	4	Spring, to balance left hand feed plate
21-371	4	Spring, to balance right hand feed plate
21-377	5	Spring, for cradle in cylinder base
21-422	11	Thread Nipper Spring
21-426	11	Tension Release Plunger Spring
22-8	2	Pin, for looper yoke 449-27 in head
22-9	*	Pin, for needle carrier 4118-24
22-126	6, 7	Pin, in disc 44-284 for driving eccentric sleeves 33-145, 33-146
22-149	2	Taper Pin, for locating head on arm
22-152	4	Spring Pin, for feed plate holder in cylinder base
22-189	8	Spring Pin, in bracket 50-211 for retaining swing work plate 404-126
22-249	5	Stop Pin, in 107-51, for ridge forming disc regulator 149-28 on top of cylinder base
22-255	6	Spring Pin, in collar 39-117 for spring 21-344 in cylinder base
22-256	3, 6, 7	Spring Pin, in base of arm, for spring 21-344
22-271	4, 5	Pin, for spring 21-377 in base
22-314	11	Automatic Tension Release Pin
23-216	2	Feed, 3/32 inch pitch. Models 150-2, 150-3, 150-4, 150-34
23-335	*	Feed, knurled. Models 150-32, 150-33
24-263	4	Feed Plate, left
24-264	4	Feed Plate, right
26-47	3	Plunger, in arm for adjusting length of stitch (See 426-47)
27-76	7	Gear, on main shaft for driving gears 427-122, 427-123, 427-124
27-77	7	Gear, 2-to-1, on disc 44-284 for driving eccentric 33-145 in arm. Models 150-2, 150-32
27-111	7	Gear, 4-to-1, on disc 44-284 for driving eccentric 33-146 in arm. Models 150-4, 150-34
27-117	7	Gear, 3-to-1, on disc 44-284 for driving eccentric 33-145 in arm. Models 150-3, 150-33
27-165	4	Gear, large, for rolling back ridge forming disc in base of arm
27-166	4	Gear, small, for rolling back ridge forming disc in base of arm
30-52	3	Needle Clamp
32-36	4	Cover, for top of arm
32-107	2	Cover Plate, rear, for aluminum head cover 32-262
32-225	8	Cover, for end of cylinder base. Models 150-32, 150-33, 150-34
32-262	2	Cover, aluminum, for head

PARTS LIST

Part No.	Plate	Description
32-264	8	Cover, for end of cylinder base. Models 150-2, 150-3, 150-4
32-292	11	Cover, for top of arm
33-145	7	Skipstitch Eccentric Sleeve, on 433-147 in arm. Models 150-2, 150-3, 150-4, 150-32, 150-33
33-146	7	Skipstitch Eccentric Sleeve, on 433-147 in arm. Model 150-34
33-149	2	Eccentric, for feed lever to adjust length of stitch in head
34-31	11	Automatic Tension Release Pin Raising Cam
34-57	7, 9	Cam, for changing from 1-to-1 stitch to skip-stitch, on top of cylinder base
35-21	4	Roll, for turning gear 27-165 to roll back ridge forming disc in base of arm
36-16	3	Looper, in head
39-87	11	Stop Collar, for nipper rod
39-92	8	Collar, on main shaft and in swinging work table 404-126
39-99	6	Spacing Collar, on shaft 14-440 in base of arm
39-105	3, 4, 7	Collar, on shaft 14-395 in base of arm
39-117	6	Thrust Collar, on shaft 14-400 in base of arm
39-118	5	Collar, on ridge forming disc shaft 14-394 in cylinder base
40-60	3	Fiber Slap Washer, on ball 79-28 in head
40-126	2	Lock Washer, on feed screw in head
40-144	5	Washer, for nut 20-80 in end of ridge forming disc shaft in cylinder base
40-148	5	Spacing Washer, for ball 79-9 in crank 448-131 in cylinder base
41-42	3	Thread Guide, under tension staff 468-23-1 on head
41-48	11	Thread Guide
41-49	3	Thread Guide, on needle end of head
42-13	10	Stop, for cloth retainer on presser foot 405-529-1
42-24	10	Stop, for cloth retainer on presser feet 405-393-1, 405-394-6, 405-394-7, 405-395-2, 405-395-4
44-268	10	Ridge Forming Disc, step. Skipstitch models 150-2, 150-3, 150-4
44-284	7	Disc, on main shaft for driving eccentric sleeves 33-145, 33-146
44-304	10	Ridge Forming Disc. Models 150-32, 150-33, 150-34; special disc for hard finished materials on models 150-2, 150-3, 150-4. Use with cloth retainer 4137-136

PARTS LIST

Part No.	Plate	Description
45-352	4, 5, 6	Lever, for oscillating ridge forming disc in base of arm
45-457	11	Nipper Rod Lever
45-470	2, 3	Feed Lever, in head for Class 150 machines
46-148	3, 7	Link, for spring 21-344 in base of arm
46-164	5, 6, 9	Link, connecting crank 48-150 to crank 48-127 in base of arm
46-202	2, 3	Feed Link, complete with screw 18-751
47-118	4, 6, 7	Connecting Rod, for oscillating ridge forming disc in arm
48-105	3	Crank, for driving needle shaft in head
48-127	4, 5, 6, 9	Crank, on shaft 14-429 for depressing feed plate in cylinder base
48-150	4, 6, 9	Crank, on shaft 14-400 to depress feed plate and roll back ridge forming disc in base of arm
50-160	3	Brackets, for both sides of presser feet on head
50-210	4, 7	Bracket, on end of cylinder base for feed plate holder
50-211	8	Bracket, for swing work table 404-126
50-222	3, 4, 6, 7	Bracket, fastened to bottom of cylinder base
50-227	*	Bracket, for work support plate 4-C114
50-281	11	Nipper Rod Guide Bracket
51-14	8	Latch, for swinging work table 404-126
51-21	9	Latch, for locking disc mechanism
57-56	2	Handwheel
62-25	6, 7	Oil Cup, for connecting rod 47-118
68-21	11	Thread Tension Staff
70-28	6	Sleeve, for connecting knee press rod to shaft 14-400 in base of arm
70-53	2	Sleeve, in head for adjusting looper ball joint 4124-27
70-54	6	Sleeve, on shaft 14-400 to locate lever 48-150 in base of arm
70-72	11	Automatic Tension Staff Sleeve
71-87	6	Rod, for knee press 4129-18
71-105	11	Nipper Rod
LS75	3	Spring, for stitch adjusting plunger 426-47 in head
75-210	10	Edge Guide, for presser foot
75-222	10	Edge Guide, on cloth retainer
76-12	5	Handle, of regulator 149-29, for adjusting ridge forming disc on top cylinder base
79-9	5	Ball Stud, for 4124-51. Sold in 4124-51

PARTS LIST

Part No.	Plate	Description
79-28	3	Ball Stud, in 447-141 ball joint for oscillating needle shaft in head. Sold in 447-141
79-31	2, 5, 9	Ball, in stitch adjusting regulator 149-16 in head; in penetration dial in base, and for skipstitch selector 4155-18
99-298	5, 7	Holder, for feed plate
107-44	5	Flange, for driving ridge forming disc on shaft 14-394 in cylinder base
107-51	4, 5	Flange, for ridge forming disc regulator 149-28 on top of cylinder base
110-224	4, 5	More-or-Less Penetration Dial, for ridge forming disc regulator on top of cylinder base
115-118	2	Bearing Block, for looper yoke 449-27 in head
117-41	5	Pivot Bearing, for cradle 140-11 in cylinder base
122-35	10	Chaining Finger, on presser feet 405-393-1, 405-394-6, 405-394-7, 405-395-2, 405-395-4
122-39	10	Chaining Finger, on presser foot 405-529-1
137-19	2	Oil Wick Retainer, without hole
139-10	2, 4	Counterweight, graduated for stitch length, on main shaft in arm
140-11	5	Yielding Cradle, for ridge forming disc shaft in cylinder base
144-26	8	Felt Pad, for sewing machine table
149-16	2	Regulator, for adjusting length of stitch, on main shaft in head
149-28	4, 5	Regulator, for adjusting ridge forming disc, on top of cylinder base
155-9	4	Indicator, for setting length of stitch to figures, on 139-10 in arm
164-9	10	Shim, for adjusting height of cloth retainer stop on presser foot
CS231	4, 5	Nut, for cradle spring pin 22-271
LS314	3, 11	Screw, for thread guides 41-48 and 41-49
CS317	7	Set Screw, for bushing 16-255 in arm
CS320-1/2	8	Set Screw, for bracket 50-211 for work table 404-126
CS327	3	Screw, for holding presser foot bracket 50-160 on head (4 used)
CS331	4, 9, 11	Clamp Screw, for crank 48-127 in base of arm, holding main shaft bushing in arm, clamping belt guard 8-89 and for nipper rod lever 45-457

PARTS LIST

Part No.	Plate	Description
416-374	2, 4, 7	Bushing, for main shaft, handwheel end of arm
CS462	7	Collar, for jack shaft 14-272
FP528	4	Nut, for feed plate screw 18-918 in cylinder base
FP539	2, 4, 5, 7 8, 11	Screw, for bracket 50-210, 32-264 on end of cylinder base, clamp screw in bearing block, looper yoke 115-118, in head, and for 50-281
652-16	*	Washer, for 18-939, 18-955
660-204	3	"O" Ring, for 447-141
666-82	*	Oil Wick Pad, for 447-118 in head
666-170	*	Oil Wick, in 17-149
666-239	3	Oil Wick, in needle drive eccentric 447-141
810 L	3	Screw, for needle clamp
865 L	5	Bearing Screw, for ball joint 4124-51 in cylinder base
876 L	2	Screw, for holding presser foot to head
1003 L	4, 5	Set Screw, for pivot bearing screw 18-869 and two for collar 39-105
1005 L	2, 4, 7	Set Screw, for lever 45-352 in cylinder base, counterweight 139-10 in arm, and 433-147
1012 L	4	Nut, for ball screw 79-9 in cylinder base
1022 L	4, 5, 7, 10	Set Screw, for collars 39-118, 1284 L, CS462; Screw in foot for 16-214
1025 L	4, 8, 9, 11	Set Screw, for gear 27-166 in cylinder base for 1388 L, for cam 34-31, two for work table 404-126
1029 L	4, 7	Set Screw, for gears 27-76 and 27-166
1031 L	2, 4	Spot Screw, for counterweight 139-10 on main shaft in arm
1055 L	9	Pin, for spring 21-274 in base
1058 L	7	Screw, for fastening disc 44-284 to gears 27-77, 27-111, 27-117 in arm
1081 L	3	Screw, in head for holding stitch adjuster 426-47
1132 L	3, 11	Spring, for adjusting thread tension on top of head
1158 L	4, 5	Clamp Screw, for crank 448-131 in cylinder base
1160 L	3, 4	Nut, for thread guide 41-42 on top of head, for bearing stud 865 L for 4124-51 in cylinder base
1170 L	3	Clamp Screw, for ball cap on looper ball joint 4124-27 in head and for looper 36-16 in looper carrier 4118-15
1180 L	4	Shoulder Bearing Screw, for roll 35-21 in cylinder base
1183 L	3, 11	Disc, for thread tension on top of head
1192 L	2	Screw, for handwheel 57-56
1213 L	2, 3	Clamp Screw, for looper ball joint 4124-27 in head
1220 L	4	Screw, for top cover plate
1221 L	4	Washer, for screw 1220 L
1235 L	8	Screw, for clamping springs 21-250 and 21-251 to bracket 50-211 on swing work table 404-126
1243 L	3	Screw, in needle driving crank 48-105 for clamping eccentric ball 79-28 in head
1284 L	4, 5	Collar, on shaft 14-429 in cylinder base
1333 L	3	Hexagon Head Set Screw, for needle drive crank 48-105 in head
1351 L	10	Screw, for edge guide 75-210 on presser foot

PARTS LIST

Part No.	Plate	Description
1388 L	9	Collar, for eccentric stud 17-157 in base
1442 L	11	Tension Staff Stop Pin, for 1183 L
22508	6, 8	Screw, for knee press pad 4129-18 and for latch 51-14 in 404-126
22559 D	3	Screw, for ball connecting rod on 447-141
22652 A-8		Screw, in link 46-202, to clamp eccentric stud 17-114 in head
61292 H	11	Tension Release Washer
404-114	8	Large Work Table, Models 150-32, 150-33, 150-34, complete with bracket 50-227
404-126	8	Swing Work Table, when using 32-264 end cover. Models 150-2, 150-3, 150-4
405-393-1	10	Presser Foot, 7/32 inch opening, complete, for light work. Models 150-2, 150-3, 150-4
405-394-6	10	Presser Foot, 1/4 inch opening, complete, for medium work. Standard foot models 150-2, 150-3, 150-4
405-394-7	10	Presser Foot, 1/4 inch opening, complete, for drapery work. Models 150-32, 150-33, 150-34
405-395-2	10	Presser Foot, 9/32 inch opening, complete, for heavy work. Models 150-2, 150-3, 150-4
405-395-4	10	Presser Foot, 9/32 inch opening, complete, for heavy drapery work. Models 150-32, 150-33, 150-34
405-529-1	10	Presser Foot, 9/32 inch opening, complete, for extra heavy work. Models 150-2, 150-3, 150-4
426-47	3	Stitch Adjusting Plunger, complete, on top of head
427-122	7	Gear Assembly, in arm, 2-to-1 ratio, complete, with jack shaft 14-272. Models 150-2, 150-32
427-123	7	Gear Assembly, in arm, 3-to-1 ratio, complete, with jack shaft 14-272. Models 150-3, 150-33
427-124	7	Gear Assembly, in arm, 4-to-1 ratio, complete, with jack shaft 14-272. Models 150-4, 150-34
433-93	2	Needle Driving Eccentric, in head
433-144	2, 4, 7	Eccentric, for oscillating ridge forming disc on main shaft in arm
433-147	6, 7	Eccentric, for oscillating ridge forming disc on main shaft in arm
433-151	4, 6	Eccentric, on shaft 14-458 for lever 45-352 in base of arm
439-7	3	Collar, complete, with screws SB15, on needle shaft 14-14 in head
447-141	2, 3	Ball Connecting Rod, complete with ball 79-28, for driving needle in head
448-131	4, 5	Crank, with screw 1158 L on ridge forming disc shaft 14-394 in cylinder base
448-135	2	Crank, with bushing 16-321 for driving looper on main shaft in head
449-27	2	Looper Yoke, with screw 18-71 in head
468-23	3	Tension Staff, with pin guide on top of head
468-23-1	3	Tension Staff, complete, composed of 20-60, 1132 L, 1160 L, (2) 1183 L and 468-23 on top of head
479-8	3	Ball, with screw 18-74 in looper ball joint 4124-27 in head

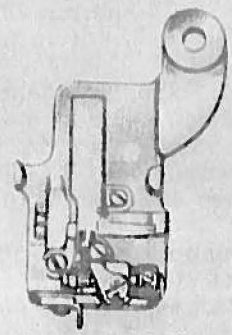
PARTS LIST

Part No.	Plate	Description
4118-15	2	Looper Carrier, with screw 1170 L in head
4118-24	3	Needle Carrier, with screw 18-70 and pin 22-9
4124-27	2, 3	Ball Joint, complete with ball 479-8, for looper carrier
4124-51	5	Ball Joint, complete with ball 79-9, to connect crank 448-131 to lever 45-352 in cylinder base
4129-18	6	Knee Press Pad, complete with screw 22508
4137-133	10	Cloth Retainer, complete, composed of 18-609, 75-222, 137-133. Used on feet 405-394-6, 405-395-2 and 405-529-1
4137-135	10	Cloth Retainer, complete, composed of 18-609, 75-222, 137-135. Used on foot 405-393-1
4137-136	10	Cloth Retainer, complete, composed of 18-609, 75-222, 137-136. Used on feet 405-394-7 and 405-395-4
4137-149	11	Tension Disc Retainer, complete
4155-18	7, 9	Skipstitch Selector, with handle, on top of cylinder base

* Not Identified on Picture Plate.

PLATE 10

MODEL 150-2,-3,-4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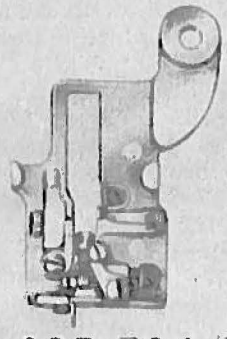
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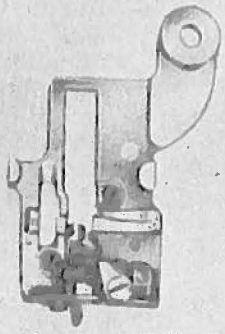
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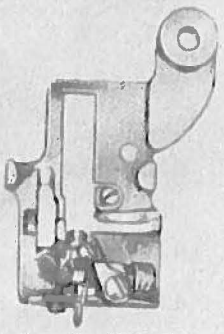
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4137-135


44-268


4137-133

PARTS COMMON TO ALL FEET ON THIS PAGE


164-9


6-56

18-270


21-193


17-87


16-214


42-13
42-24


122-35
122-39


18-643


1022L

18-416


18-623

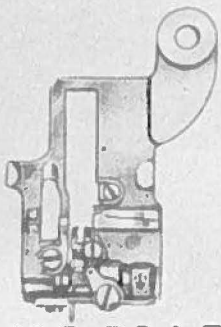

18-292


75-210


1351L


75-222


18-609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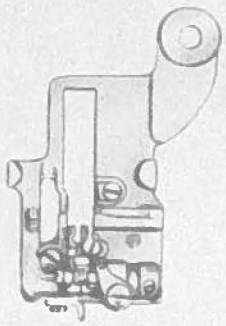
4137-136


44-304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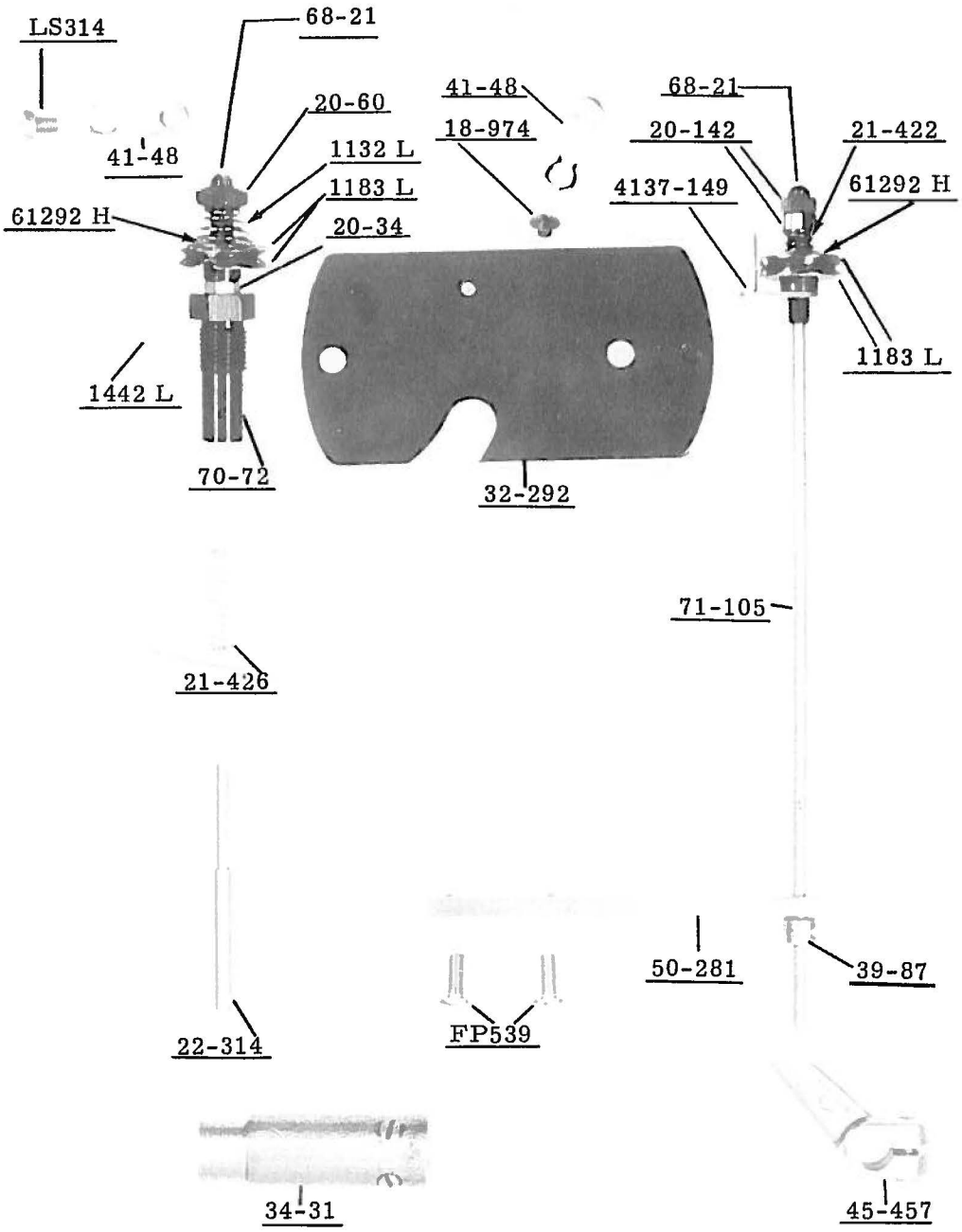
MODEL 150-32,-33,-34

PLATE 11



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