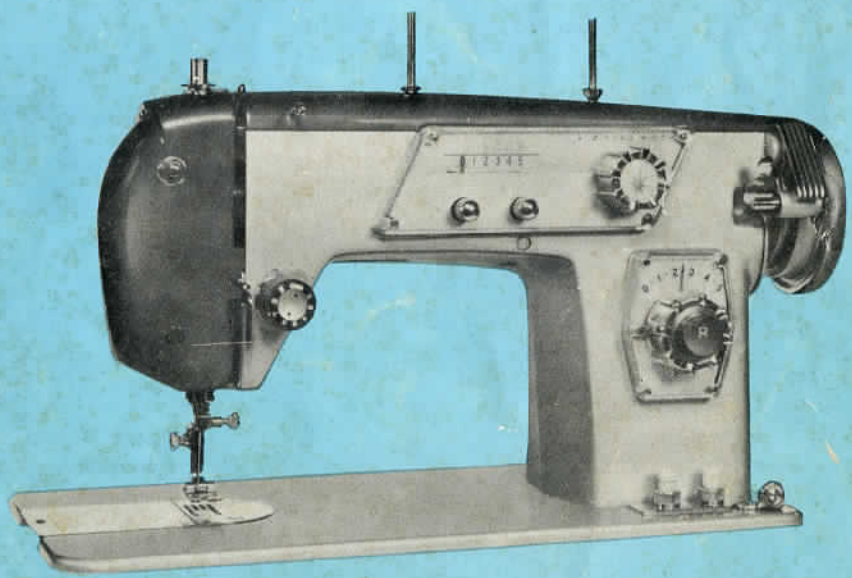
ZIGZAG

ASSOCIATED SEWING CENTERS

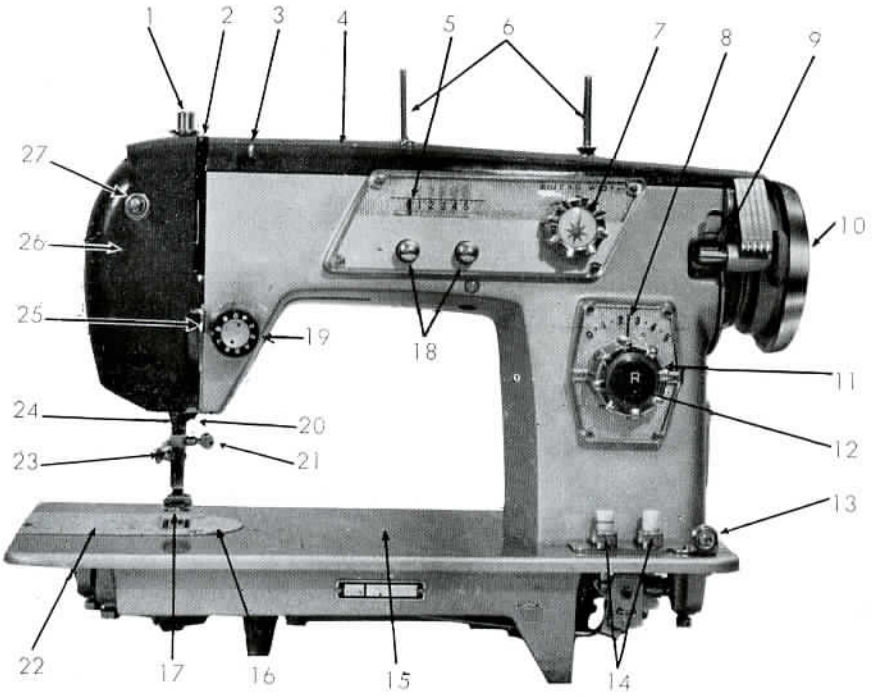
SUPER DELUXE
MODEL 139

SEWING INSTRUCTION BOOK



Contents

Name of Each Part



1. Automatic darner (Pressure regulator)
2. Thread take-up lever
3. Upper arm thread guide
4. Top plate
5. Zigzag width indicator
6. Spool pins
7. Zigzag width regulating dial
8. Stitch length indicator
9. Bobbin winder
10. Hand wheel
11. Stitch length regulating dial
12. Reverse push button
13. Bobbin winder thread guide
14. Drop feed
15. Bed
16. Needle plate
17. Hinged pressure foot
18. Lock screw for zig-zag width regulating dial
19. Tension dial
20. Needle bar
21. Needle clamp screw
22. Bobbin case cover
23. Pressure foot thumb screw
24. Thread cutter
25. Thread guide tension arm
26. Face plate
27. Lamp switch

1. To Wind the Bobbin

1. To wind the bobbin the hand wheel must be disconnected from the stitching mechanism. Hold the hand wheel with your left hand, turn the stop motion knob (Fig. 1) toward you with your right hand. This will permit the hand wheel to turn freely while the needle bar remains motionless. The hand wheel is now disconnected for the bobbin winding operation.

Fig. 1

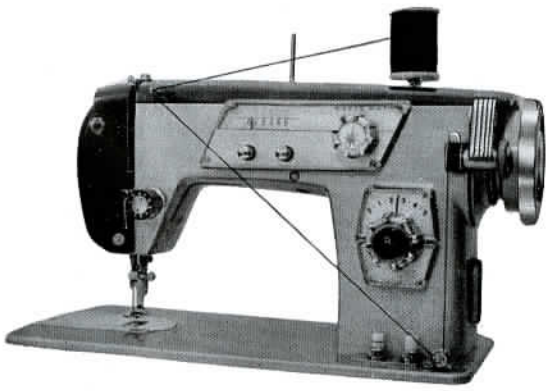


Fig. 2

2. Place a spool of thread on the spool pin. (Fig. 2) Draw the thread from the spool through the upper arm thread guide downward across the machine from left to right.

3. Pass the thread through the bobbin winder thread guide at the right corner of the base of machine.

4. Now wind the end of the thread around an empty bobbin seven or eight times and place the threaded bobbin on the spindle of the bobbin winder.

5. By pressing on the bobbin winder lever, the small rubber wheel is brought into contact with the hand wheel. To lock into position, press the bobbin winder lever until a click is heard. The bobbin winder release latch is in contact with the shaft of the bobbin. It holds the bobbin in place.

6. Now press your foot control or knee control and when the bobbin is completely full, the bobbin winder will be released automatically and stop turning. Detach the bobbin from the spindle. Hold the hand wheel firmly with your left hand, and with your right hand turn the stop motion knob away from you until it can not be moved any further, and the needle bar moves with turning of the hand wheel.

2. To Set the Needle

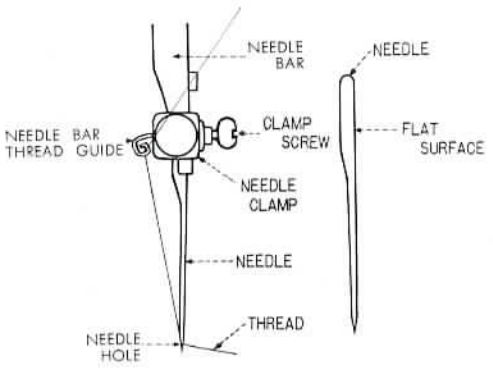


Fig. 3

1. Turn the hand wheel toward you, raising the needle bar to its highest position, and loosen the needle clamp screw.
2. Hold the needle in the left hand with the point down, and insert the needle up into the needle clamp as far as it will go, with its flat surface to the right; then retighen the needle clamp screw (Fig. 3).

Note: Be sure to use the right needle and the right thread for the right cloth as per the table in 3.

3. Right Needle and Thread for Right Cloth

Size of Needles	Cloth	Size of Thread
No. 9	Thin calico, silk, serge, and muslin.	No. 80-100 cotton thread or fine silk thread
No. 11	Thin calico, cotton cloth, crepe de-chine, hosiery, and silk.	No. 60-100 cotton thread or ordinary silk thread
No. 14	Ordinary cotton cloth, thick silk, thin woolen goods, towels & shirting.	No. 40-60 cotton thread or ordinary silk thread
No. 16	Thick cotton cloth, serge and thin woolen goods.	No. 30-60 cotton thread or ordinary silk thread
No. 18	Ordinary woolen goods, trousers, over-coats, thick calico, and children's clothes.	No. 30-60 cotton thread ro ordinary silk thread
2-needle No. 14	Calico, silk, serge, cotton cloth and thin woolen goods.	No. 40-80 cotton thread or ordinary silk thread

NOTE: Use a good quality mercerized cotton thread, it available, to avoid shrinking when laundered.

4. To Thread the Bobbin Case

Before threading the bobbin case, study Figs, 4, 5, & 6, to get a general idea as to how it is done.

1. Hold the bobbin case with your left hand, and put the bobbin into the bobbin case with your right hand, leaving about two inches of the thread unwound (Fig .4). As the bobbin is being inserted into the bobbin case, the thread flow is clockwise.

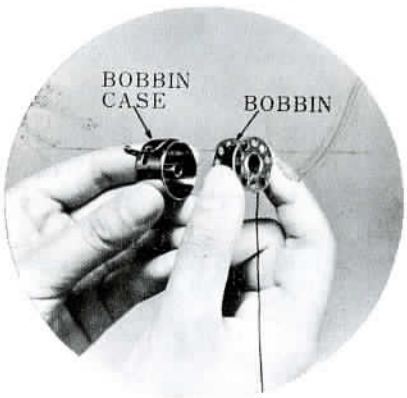


Fig. 4

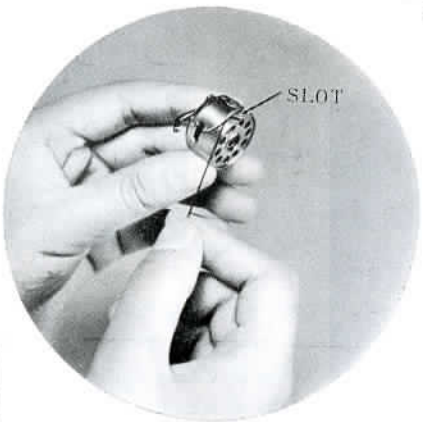


Fig. 5

2. While holding the bobbin case as before, grasp the thread with your right hand, and guide it into the cross slot (Fig. 5).

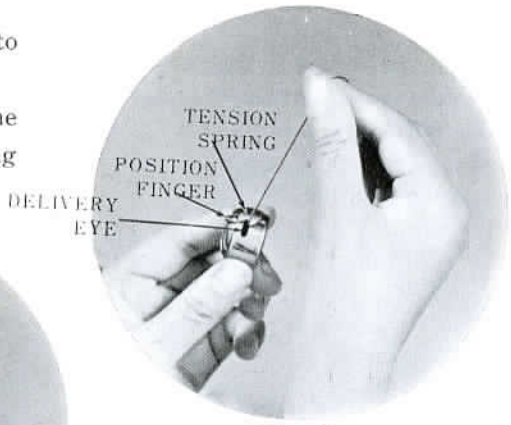


Fig. 6

3. Then pull it through under the tension spring of the bobbin case (Fig. 5) until it enters the delivery eye, and it will come out to the position indicated in Fig. 6 (Fig. 6).

5. To Insert and Remove the Bobbin Case

1. Raise the presser bar by lifting the presser bar lifter.
2. Raise the needle bar to its highest position by turning the hand wheel toward you.
3. Open the bobbin case cover
4. After threading the bobbin case, hold its latch between the thumb and forefinger of left hand (Fig. 7), with its position finger opposite the notch at the top of the shuttle race, place it on the center stud of the shuttle (Fig. 8).

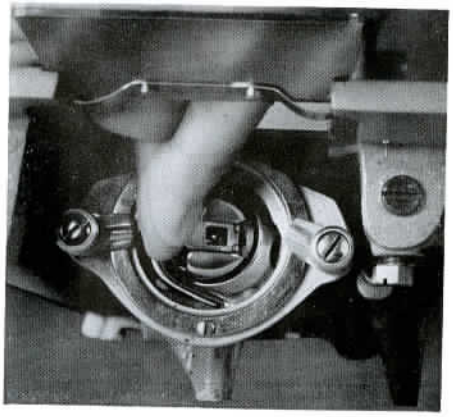


Fig. 8

5. Then release the latch, and press the bobbin case back until the latch catches the groove near the end of the stud.

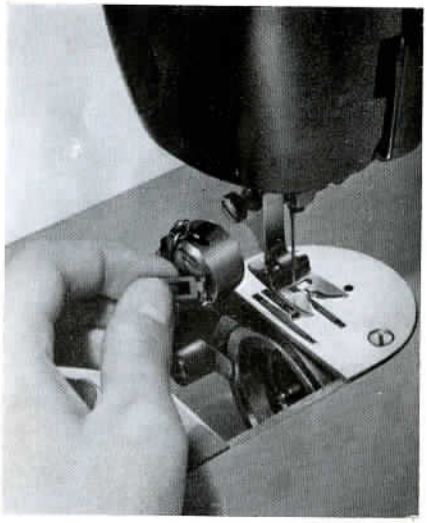


Fig. 7

6. Allow the end of the thread to hang free.
7. Close the bobbin case cover.

To remove the bobbin case do all the above in reverse order.

6. To Clean the Shuttle Race

When the thread is tangled in the race or lint gets into the space between the shuttle and shuttle race, this will cause abrupt heavy running or complete stoppage of the machine.

When this occurs :

1. Raise the needle bar to its highest position and take the bobbin case out.

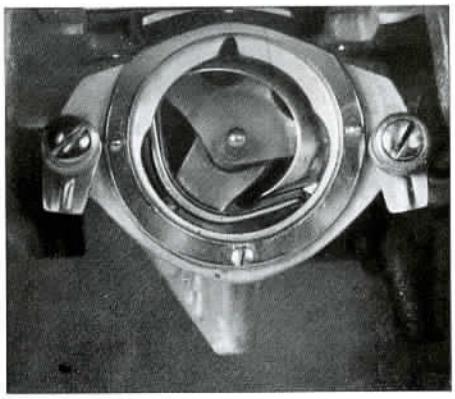


Fig. 10

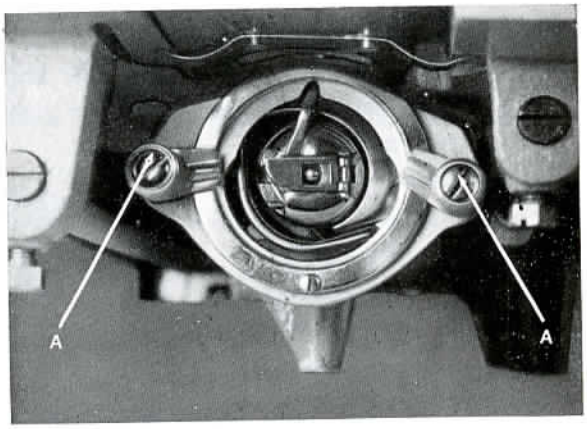


Fig. 9

2. Release the KNOBS (A) on both side of the shuttle race by pulling the knobs aside, then take the outside ring and the shuttle body with your fingers. (Fig. 9, 10)
3. After the shuttle race and the bobbin case have been cleaned, put all of them back in reverse order.

7. To Clean the Feed Mechanism

When you have sewn excessively on any starchy material, lint will accumulate between the feed dog and the needle plate as well as between the feed dog and the open race. In this event, to correct the heavy operation of the machine remove the needle plate and clean the above-mentioned parts.

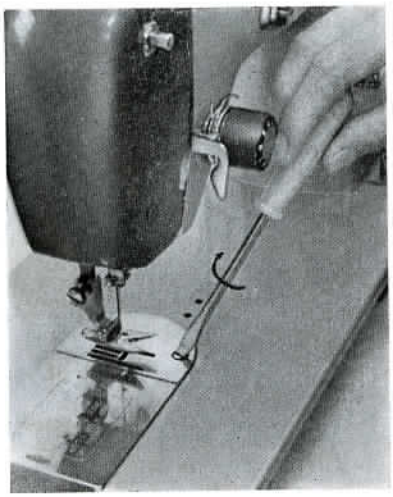


Fig. 11

(a) Unscrew the needle plate screws with a screwdriver and remove the needle plate.

(b) Clean the above-mentioned parts with a brush.

(c) Turn the hand wheel to be sure that everything is operating properly.

(d) Replace the needle plate in its proper location. Be sure to tighten the screws when the needle bar has beed lowered in order that the needle will enter the needle hole correctly.

8. To Thread the Machine & Needle

1. Turn the hand wheel toward you to raise the needle bar (A Fig. 12) to its highest position with the thread take-up lever (B Fig. 12) at the highest point.
2. Place a spool of thread on the spool pin.
3. Lead the thread through the upper arm thread guide (C Fig. 12)
4. Run the thread down through the guide to the tension dial from right to left and up.
   Then draw the thread up through the check spring.
5. Take the thread up, through the thread guide tension arm and run the end through the eye of the thread take-up lever from right to left.
6. Now run the thread down through the face plate guides and then through the loop of the needle bar from the back.
7. Finally, run the end of the thread through the eye of the needle FROM LEFT TO RIGHT, drawing it through about 3 or 4 inches. You are now ready to sew.
   Note: As the face plate is opened to make it easy for you to guide the thread, be sure to close it before you start to sew.

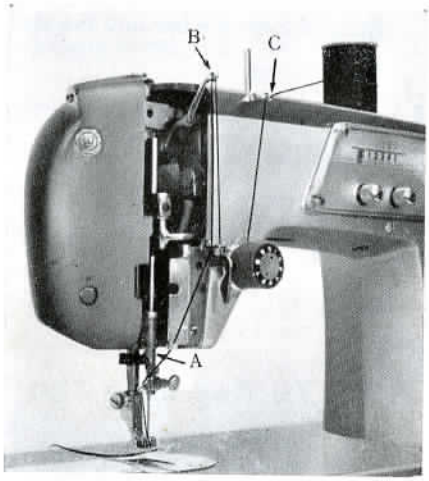


Fig. 12

9. To Prepare for Sewing

1. Hold the end of the upper thread with your left hand, leaving it slack from the hand to the needle.
2. Turn the hand wheel toward you to raise both the needle bar and the thread take-up lever to their highest positions.
3. Pull the thread you are holding, and the lower thread will be brought up with it, through the hole in the needle plate, as shown (Fig. 13).
4. Place both ends of the upper and lower threads to the back of the pressure foot (Fig. 14)

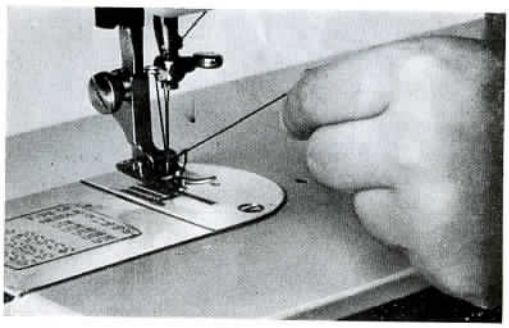


Fig. 13

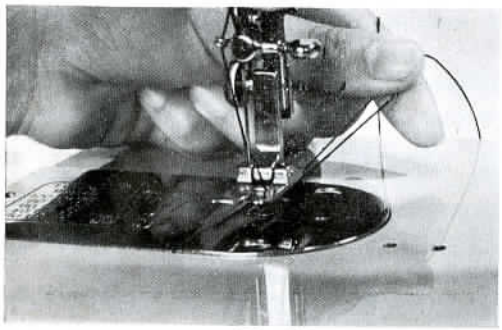


Fig. 13

10. To Commence Sewing

1. Place the fabric to be sewn beneath the pressure foot.
2. Lower the pressure foot by lowering the presser bar lifter.
3. Commence sewing by slowly turning the hand wheel toward you while gradually working the foot or knee control.

Always turn hand wheel toward you and not away fram you.

11. To Remove the Work

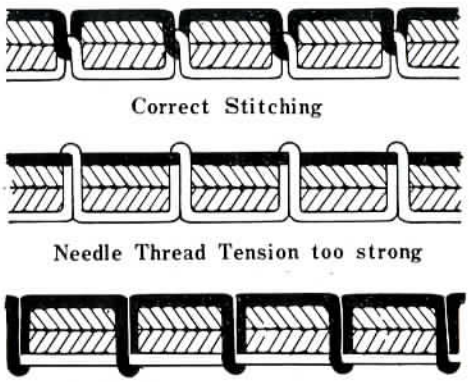
1 Raise the needle bar and the thread take-up lever to their highest positions, by turning the hand wheel toward you.
2. Lift the pressure foot by lifting the presser bar lifter.
3. Move the fabric back to the left, and cut off the thread by passing it over the thread-cutter above the pressure foot.
4. Leave both ends of the thread a few inches long, under and to the back of the pressure foot.

12. To Regulate the Thread Tension

For ordinary stitching the tensions of the upper and lower threads should be equal so as to lock both threads in the center of the material (Fig. 15). If one tension is stronger than the other, imperfect stitching will be the result. Fine materials require low tension, while heavy materials require high tension to obtain perfect stitches.

TO INCREASE the tension, turn the thread tension dial (Fig. 16) to the right.

TO LESSEN the tension, turn the thread tension dial to the opposite direction (When regulating, always have the pressure foot down).



Correct Stitching

Needle Thread Tension too strong

Needle Thread Tension too weak

Fig. 16

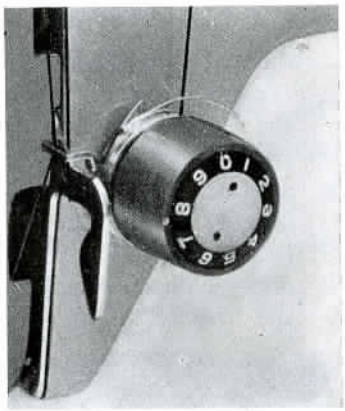


Fig. 16

Fig. 17

As all machines are correctly adjusted before leaving the factory and readjusted before dealers deliver them to you, the lower tension seldom requires to be altered, but, if this becomes necessary, tighten the tension regulating screw in the tension spring on the outside of the bobbin case for more tension, and loosen the screw slightly for lesser tension (Fig. 17).

13. To Regulate the Stitch Length

Set your machine for your desired stitch length, by turning the stitch regulating dial.

(a) The figures on the stitch length indicator window show the stitch length setting.

(b) By turning the stitch length regulating dial (Fig. 18 A), the stitch length indicating bar (Fig. 18B) points to the desired stitch length.

Length of stitch increases as the stitch length indicating bar is moved from 0 to 5. Actually, when the indicator is set at 0, the machine will not feed at all.

To sew in reverse, simply push the reverse push button (Fig. 19C) inside as far as it will go. This will then cause reverse sewing. When the reverse push button is released, the machine will automatically sew forward again.

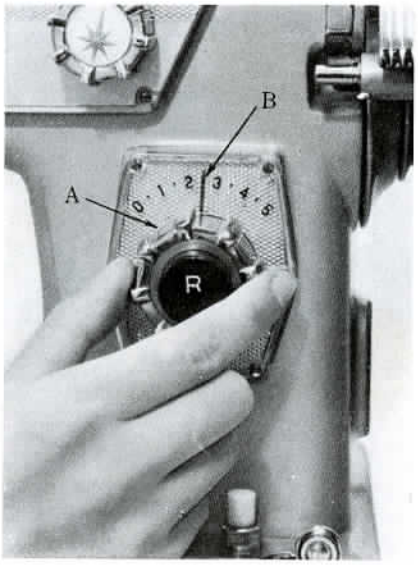


Fig. 18

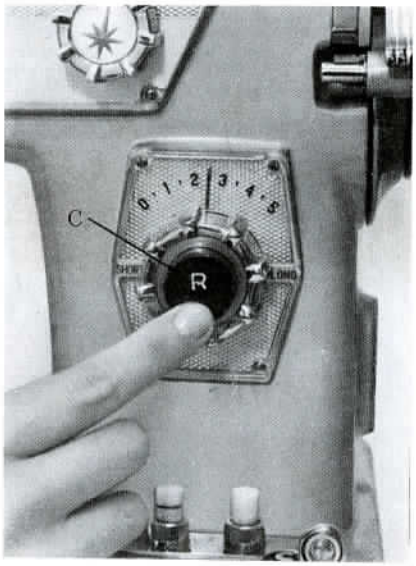


Fig. 19

14. To Use the Drop Feed

The height of the feed dog may be regulated according to the thickness of the material being sewn, by proper setting of the push buttons A and B (Fig. 20).

1. In sewing on thin materials, such as silk, creape, dechine, etc., push the button A marked DARN down as far as the red line.
2. In sewing on thick materials, such as overcoats, push the button B marked SEW down as far as it will go.
3. When it is necessary to turn the work freely as in embroidering and button sewing, push the button marked A as far as it will go.

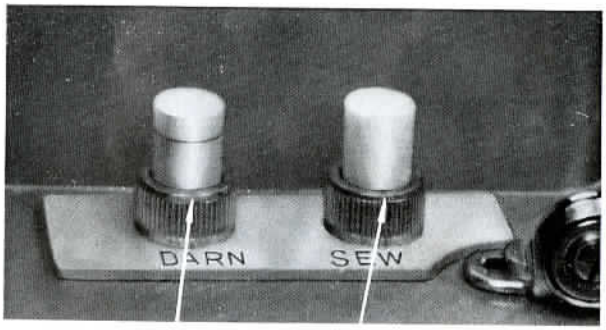


Fig. 20

15. To Regulate the Pressure of the Pressure Foot

For normal sewing, pressure regulation is never required. When sewing silk or very light materials, the pressure is lessened by pressing the snap lock (Fig. 21) which will completely release all pressure, and then pushing down the presser bar (Fig. 22) until the desired pressure is obtained. These adjustments should always be made with the pressure foot down on the material being sewn.

Fig. 21

Fig. 22

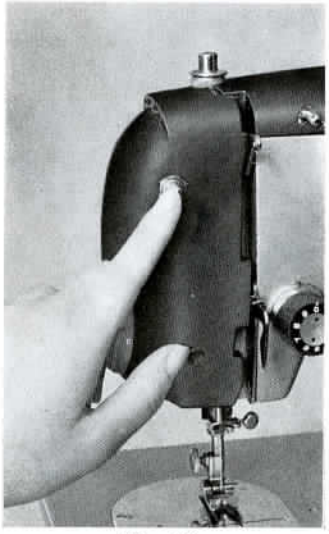


Fig. 23

16. The Built-in Lamp

As shown in Fig. 23, the lamp is encased in the face plate. The Lamp is lighted when the switch is pressed, and when it is pressed again, it is switched off. After the lamp is switched off, open the face plate and replace the old lamp with a new one. (Fig. 24)

17. To Oil Sewing Machine

For free and easy running, proper oiling is of great importance. When in continuous use, the machine should be oiled daily. Moderate use requires only occasional oiling. When the machine has not been used for several weeks, oil before use, as the fine oil used for sewing machines has evaporated.

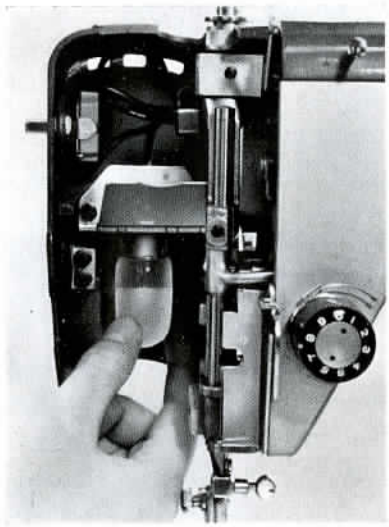


Fig. 24

OILING PROCEDURE

Apply two drops of oil to each point indicated in Figs. 25, 26 & 27. Now tilt the machine back to oil the under-bed mechanism, and oil all parts that move. You can readily note these moving parts, if you move the hand wheel back and forth by hand, to ascertain which parts move. Be sure to oil the shuttle race. The electric motor requires only two drops of oil in each of the holes once every two or three months.

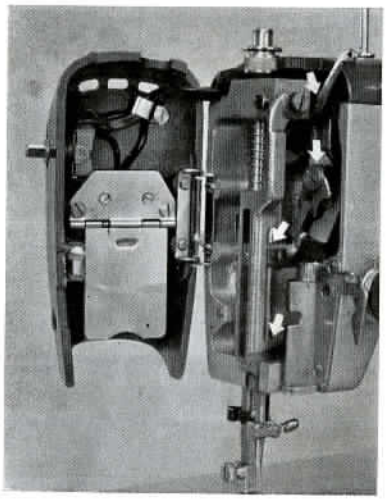


Fig. 26

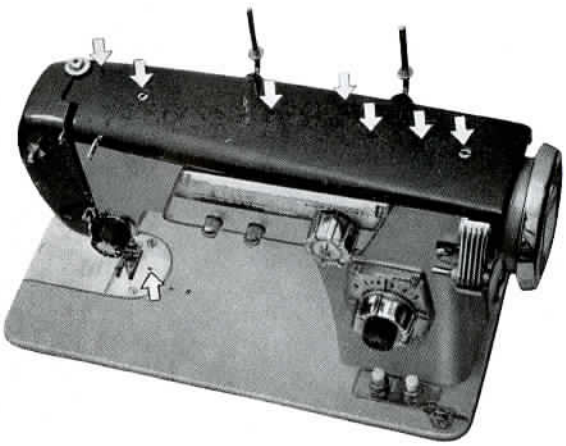


Fig. 25

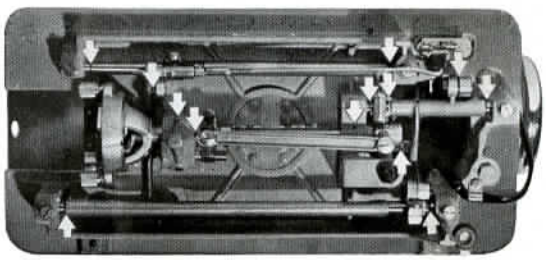


Fig. 27

18. Some Useful Sewing Hints

TO TURN CORNERS:

1. Stop the machine while the needle is still in the material.
2. Raise the pressure foot, and turn the fabric using the needle as a pivot.
3. Lower the pressure foot and resume sewing.

TO SEW ELASTIC FABRICS:

In sewing such elastic materials as flannels, bias cut cloths, etc., it is necessary to sew them with moderately low thread tension, and small stitches. Otherwise, the thread will be broken when the sewn materials are stretched.

TO SEW VERY THIN CLOTH:

When sewing very thin cloth which tends to crumple as you sew, place a sheet of newspaper or of any other thin paper beneath the material and sew with the shortest stitch length possible. This will keep your work from crumpling.

BASTING:

1. Use a lower thread thicker than the upper.
2. Lower the tension of the upper thread (and/or raise the lower thread tension) and employ the longest stitch possible.
3. The stitches may then be easily undone by pulling the lower thread.

TO KEEP YOUR MACHINE IN PERFECT CONDITION:

1. Keep all moving parts of the machine constantly oiled and clean.
2. Always turn the hand wheel towards you.
3. Do not run the machine without cloth on it.
4. When sewing, do not pull the material, otherwise you will bend the needle. The machine is designed to feed itself.
5. Do not operate the machine when the presser bar lifter is raised.

19. Causes of Common Difficulties

BREAKING OF THE UPPER THREAD:

1. Incorrect threading.
2. Upper thread tension too high.
3. Faulty needle, or needle inserted incorrectly.
4. Needle hitting pressure foot or some other attachment.
5. Needle eye too small for thread used.
6. Starting the machine suddenly or with a jerk.
7. Starting the machine with the thread take-up lever at its highest position.

BREAKING OF THE LOWER THREAD:

1. Incorrect threading of the bobbin case.
2. Lower thread tension too high.
3. Bobbin being wound too fully, or not unwinding freely.
4. Rough edge of hole in throat plate caused by improper needle operation

BREAKING OF THE NEEDLE:

1. Pulling the fabric while machine is running; thus causing the needle to hit the throat plate.
2. Using bent needle.

SKIPPING STITCHES:

1. Using bent or blunt needle.
2. Needle inserted incorrectly.
3. Needle threaded improperly.
4. Using wrong sized needle.
5. Pressure of the pressure foot insufficient, especially when sewing heavy material.

UNEVEN STITCHES:

1. Pressure foot not resting evenly on material.
2. Feed dog not being high enough.
3. Too short stitches used.
4. Pulling the cloth while the machine is running.
5. Using a too fine needle with a too coarse thread.

20. For Sewing Zig-Zag

A. Zig-zag indicator window.
B. Zig-zag stitch width indicator.
C. Lock screw for zig-zag width regulating dial.
D. Lock screw for zig-zag width regulating dial.
E. Zig-zag width regulating dial.

Loosen both lock screws C and D (Fig. 28). Turn the zig-zag Dial E all the way to the left. Tighten lock screw D. Now move the Dial E all the way to the left, and tighten lock screw C. Using a medium length of stitch, (see page 9) run the machine. You are now doing ordinary straight sewing. Stop the machine, when the needle has come out of the material, and move the Dial E to the right, and resume sewing. Note that the machine is now zig-zag stitching. The farther the Dial E is moved to the right, the wider the zig-zag stitch will be, and the width of the zig-zag is shown in the indicator window, A. By varying the length of stitch (page 9) the zig-zag stitches of the same width can be brought closer together. By moving the Dial E either fast or slowly, while the machine is running at a constant speed, it is possible to make many attractive patterns.

Swinging the Dial E left and right with such a regular motion as is similar to the pendulum swinging on a clock, will give you one pattern. Rhythmic variations in the way you swing the Dial left and right will create different patterns. For example, with the Dial set at 0, begin counting to yourself, one, two, three, four, slowly. With a steady motion, as you begin counting, start moving the Dial to the right, so that by the time you have counted up to three, the Dial is all the way over to the right the counting is over, bring back the Dial quickly to the left at 0, and repeat. Note that you have now created a different pattern. Variations in the movement of the Dial, will give you just as many variations in patterns, and even these patterns may be varied by using various stitch lengths.

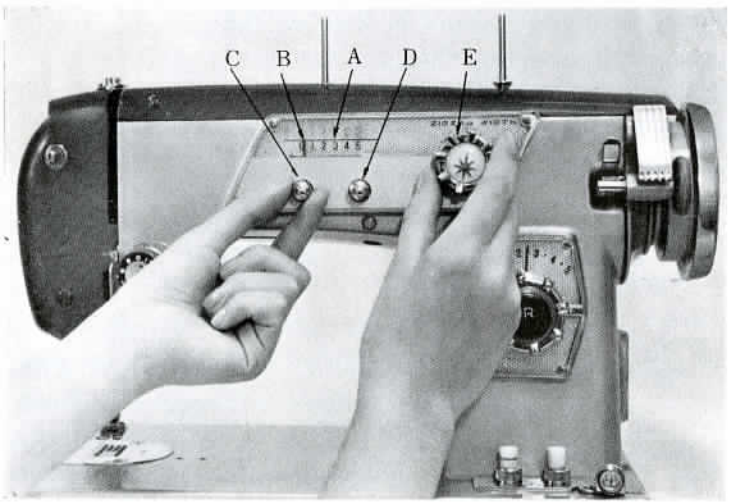


Fig. 28

ZIGZAG STITCH PATTERNS

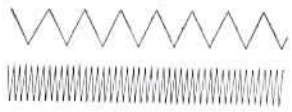
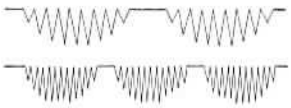
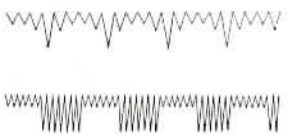
No.	Patterns	Stitch Length	Zigzag Width Regulating Dial.
1		Long Short	Any point from 1 to 5.
2		Long Short	Gradually move from 0 to 5, and return to 0. (Repeat)
3		Long and Short (Repeat)	Any point from 1 to 5.
4		Long Short	Zigzag width can be regulated by zigzag width regulating dial. Turn quickly the dial alternately.

Fig. 29

DIRECTIONS FOR USING ATTACHMENTS

21. Button Sewing

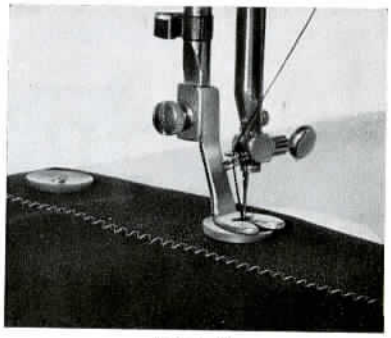


Fig. 30

Turn the hand wheel toward you to raise the needle to its highest position. Raise the pressure bar, remove the regular pressure foot, and attach the button sewing foot shown in Fig. 30. But it is possible to do button sewing without changing feet. In this case, drop the feed dog as required for darning and embroidering. The upper and lower thread tensions remain the same as for ordinary sewing. Place the material or garment with a button under the pressure foot, so that holes in the button line up with the oblong hole in the pressure foot.

Turn the zig-zag width regulating dial "E" (Fig. 28), and adjust the zigzag width to permit the needle to pass through the center of holes in the button. Before sewing with power, turn the hand wheel by hand (toward you) making one stitch into each hole in the button, and be sure that the needle will not hit any hole. Then sew five or six stitches on the button. Turn the zig-zag width regulating Dial "E" to the left and let the needle stitch two or three times through the same hole to lock the thread. Remove the garment from the machine and slip the threads. When attaching a four hole button, first sew one set of two holes, then stitch into the second set of two holes and lock the thread with two or three plain stitches in the last hole in the same manner as is adescribed bove.

22. Making Buttonholes

Replace the regular pressure foot with the button-hole foot. Loosen the lock screws C and D (Fig. 28). Set the zig-zag width regulating Dial (Fig. 28E) so that the indicator in the zig-zag indicating window can be between 1 and 2, and then tighten the lock screw C. Move the zig-zag width regulator dial all the way to the right so that the indicator can be at #4 in the indicator window, and tighten the lock screw D, and return the zigzrg dial back to the position between 1 and 2.

Set the stitch regulator (page 9) for fairly small stitching and proceed to sew a button hole in the desired length. Stop the machine with the needle inserted on the right side of the material. Lift the pressure foot, and turn the material around with the needle as a pivot. Pull the cloth slightly towards you, give one turn to the hand wheel, and shift it to the right side. Lower the pressure foot on the material. Now lift the needle from the material by turning the hand wheel by hand just a trifle, and move the zig-zag width regulating dial to the #4 position. Hold the material firmly to prevent its feeding and make four stitches to complete the first button hole end.

Again lift the needle out of the material, but leave the pressure foot down. Set the zig-zag width regulating dial back at the position between 1 and 2, and sew to finish the other side of the button-hole. When you have sewn a line of zig-zag stitching equal to the first row, stop the machine with the needle pulled out of the material. Move the zig-zag dial all the way to the right and again holding the material firmly to prevent it from moving, make four stitches to complete the buttonhole. Remove the material from the machine, and with a ripper or a razor blade carefully cut the buttonhole at the center.

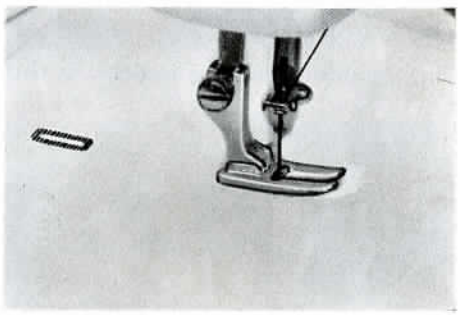
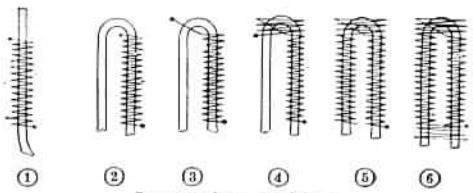


Fig. 31

Upper bar tacking



Lower bar tacking

23. Darning and Embroidering

For darning or embroidering, depress the button A all the way down (See Fig. 20 page 9). Next completely release all pressure on the presser bar by following instructions given at page 10, Fig. 21. Making both of these adjustments will permit easy movement of the material in any direction, without resistance from the feed or pressure foot, and enable you to do darning, patching and embroidering. When darning socks or embroidering, it is advisable to stretch the material or sock tightly in the embroidery hoop to keep the material caught, and thus prevent the material from rising with the needle. IMPORTANT : In resuming regular sewing, be sure to push down button A (Fig. 20) and the presser bar, (Fig. 22).

24. Quilting

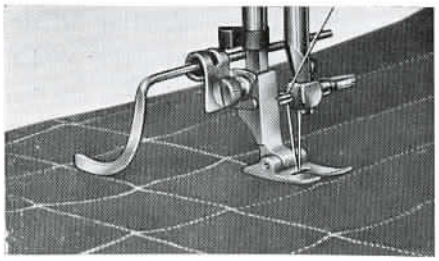


Fig. 32

The quilting attachment (Fig. 32) will enable you to sew equidistant lines on padded fabrics without the necessity of making them in advance. To attach the quilter to the presser bar of the machine, first pull the long wire hook out of the horse-shoe shaped clamp. Loosen the presser bar screw and insert the horse-shoe shaped clamp between the screw and the pressure foot.

Adjust the wire hook to the desired distance from the needle and bring it to press into the fabric. Then tighten the thumb screw extending backward from the horse-shoe shaped clamp to lock the quilting attachment in place. When sewing, the wire hook should follow the preceeding line of stitching.

Zig-zag stitch quilting is done in the same manner as straight stitch quilting.

25. Sewing Braids

Remove the ordinary pressure foot from the machine and attach the braiding foot, as shown in Fig. 33. Introduce the braid through the small hole on the front side of foot. Adjust the width of zig-zag wdth and the stitch length to obtain such a covering of the braid as appears most desirable for the material you are sewing. Using some threads of contrasting colors will enhance the beauty of your braiding.

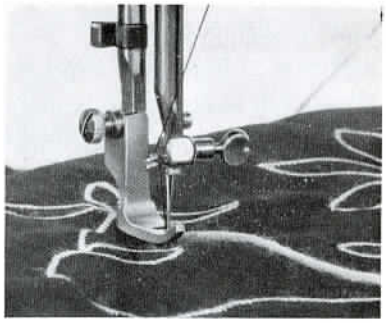


Fig. 33

26. Cloth Guide and Thumb Screw

They are attachments designed as guides for straight stitching when making wide hems, seams or tucks which are wider or deeper than the pressure foot allows. (Fig. 34) They are attached to the machine as illustrated ... a very simple operation.

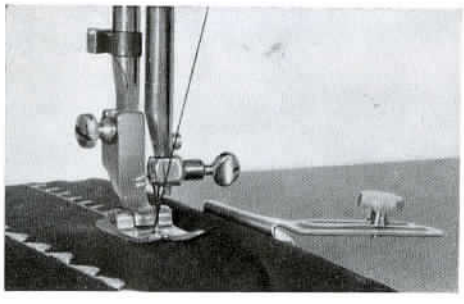


Fig. 34

27. To Use the Narrow Hemmer

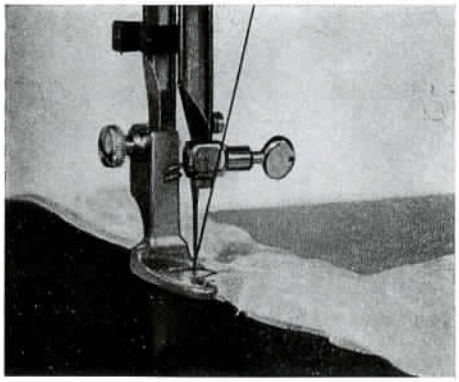


Fig. 35

This attachment is used to finish hems neatly by creasing them three-folds. To attach the narrow hemmer to the machine, raise the needle to its highest position, remove the pressure foot, attach the hemmer and tighten the screw.

For general hemming, cut the right corner of the material to be sewn diagonally, prepare the material so that it can be rolled easily, then insert it into the scroll of hemmer. Pull out the material to the point just beneath the needle, so that it can continue being rolled in the scroll. Then lower the presser bar and sew 2 or 3 stitches slowly and carefully, holding the beginning of the hem between your right thumb and forefinger and sew in order that the edge of material can be scrolled nicely by adjusting, and the sewing result will be as given in the illustration. Be careful not to feed too much or too little material into the hemmer.

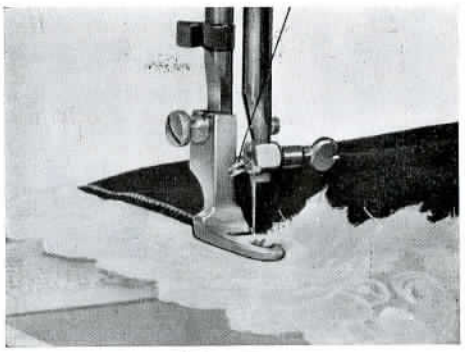
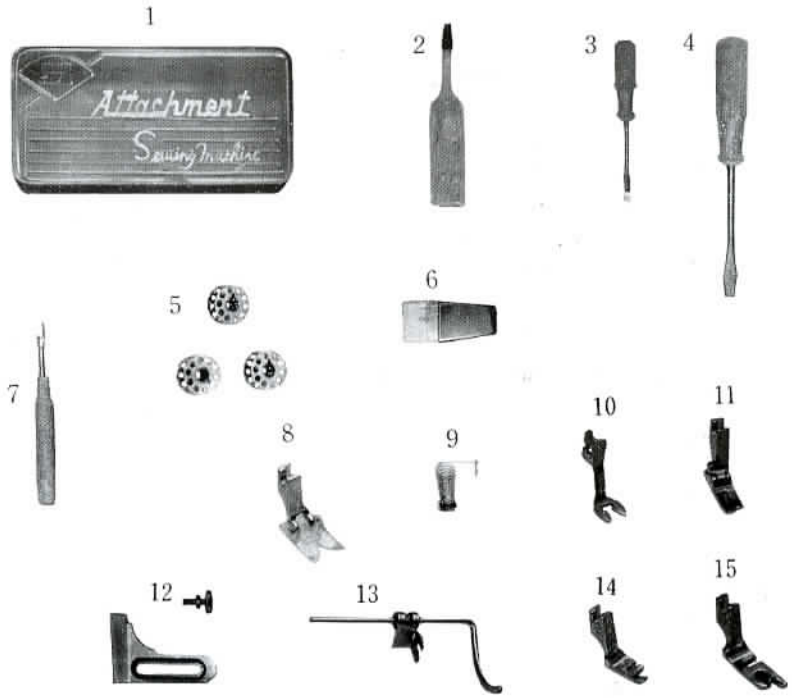


Fig. 36

When hemming and sewing on a lace are reguired in one operation, proceed to make a hem in the same manner as explained above. Insert edge of lace or trimming (be sure the right side is down) into the slot on the right side fo the hemmer. Make sure that the needle pierces it close to the edge just above the turned edge of the hem. Begin to stitch, leading the lace edge into the hemmer's slot with the right hand while guiding the material being hemmed into the scroll of hemmer with the left hand. To apply lace in the "French Manner," insert the fabric to be hemmed as for plain hemming, with the right side up. Insert the lace from the left, with the right side down, and put it on top of the fabric. Then put the lace and fabric combined into the hemmer and the hem can be made to enclose the lace edge in one stitching.

28. Attachments



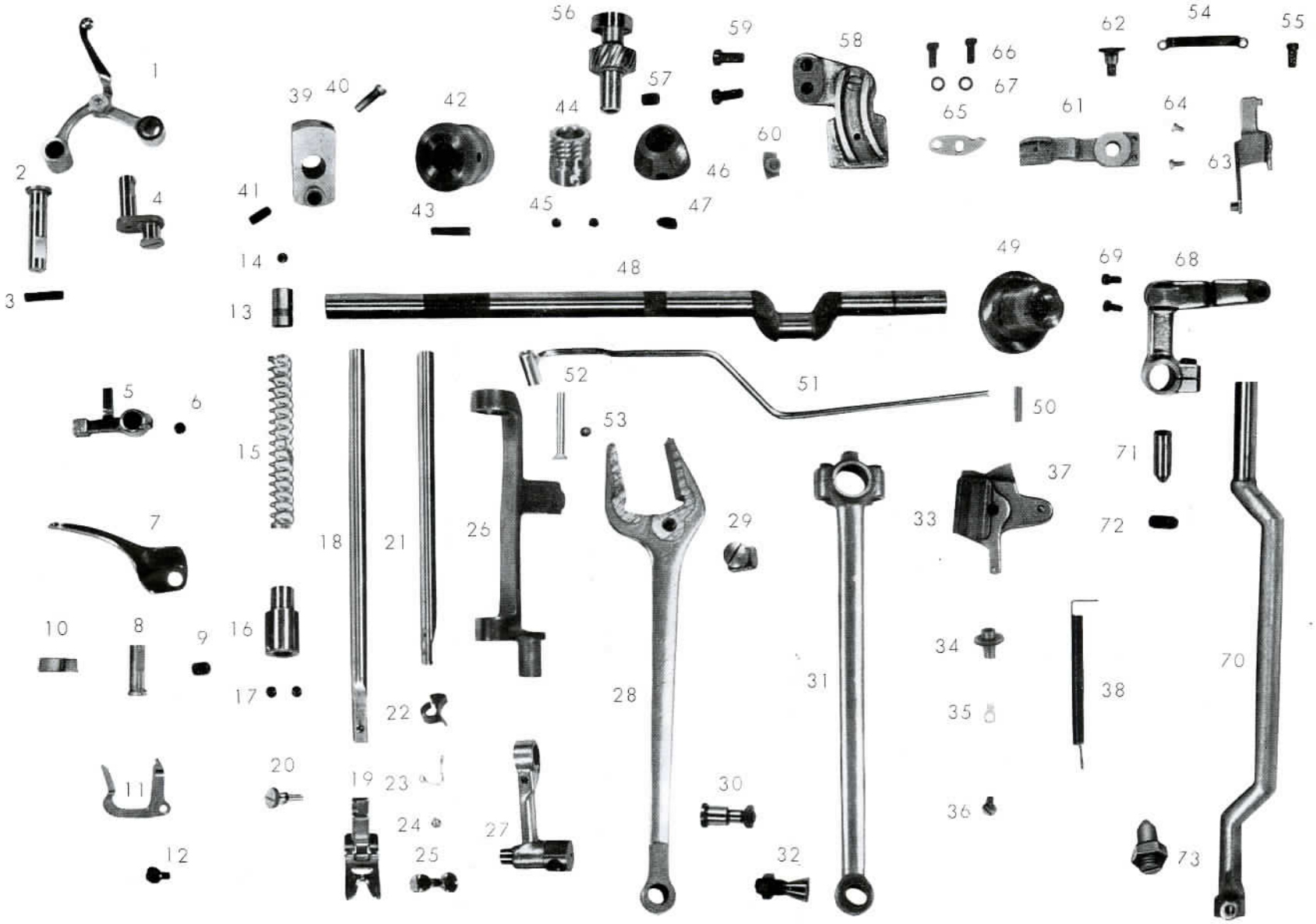
1. Attachments Case
2. Oil Case
3. Small Screw Driver
4. Large Screw Driver
5. Bobbins
6. Package of Needles
7. Ripper
8. Buttonhole Foot
9. Embroidery Spring
10. Button Sewing Foot
11. Hinged Foot for Straight Stitching
12. Cloth Guide & Thumb Screw
13. Quilting Stitching Guide
14. Braiding Foot
15. Narrow Hemmer

Names of Parts

1	Thread Take-up Lever (Complete)	(SAZ-13)
2	Thread Take-up Lever Rod Shaft	(SAZ-14)
3	Thread Take-up Lever Rod Shaft Screw	(SK-14)
4	Needle Bar Connecting Link Pin	(SAZ-7)
5	Presser Bar Spring Bracket	(SAZ-74)
6	Presser Bar Spring Bracket Screw	(45)
7	Presser Bar Lifter	(SL-56)
8	Presser Bar Lifter Hinge Stud	(57)
9	Presser Bar Lifter Hinge Stud Screw	(STR-14)
10	Presser Bar Lifter Metal	(SZB-87)
11	Tension Releaser Link	(SZIII-15)
12	Tension Releaser Terraced Screw	(SR-100-8)
13	Presser Bar Bushing (Upper)	(STB-80)
14	Presser Bar Bushing Screw	(45)
15	Presser Bar Spring	(SK-55-A)
16	Presser Bar Bushing (Lower)	(SAZ-16)
17	Presser Bar Bushing Screw	(SL-102)
18	Presser Bar	(48)
19	Presser Foot	(SAZ-20)
20	Presser Foot Screw	(SK-7-1)
21	Needle Bar	(SK-21)
22	Thread Cutter	(31)
23	Needle Bar Thread Guide	(SL-29)
24	Needle Bar Thread Guide Screw	(30)
25	Needle Clamp W/Screw (Complete)	(27)
26	Needle Bar Bracket	(SAZ-17)
27	Needle Bar Connecting Link (Complete)	(SAZ-6)
28	Forked Rod	(SK-60 A)
29	Feed Connecting Slide Block	(SK-63)
30	Forked Rod Hinged Screw	(SK-62)
31	Crank Rod	(84)
32	Crank Rod Tapered Screw	(SK-86)
33	Feed Regulator	(SZIII-65)
34	Feed Regulator Setting Ais Screw	(SLII-66A)
35	Feed Regulator Washer	(SLII-65-3S)
36	Feed Regulator Washer Screw	(SLII-66-1)
37	Reversible Push Bttton Screw	(SZIII-69-9)
38	Feed Regulator Spring	(SLII-69-1)
39	Hand Wheel Crank	(Z-22)
40	Hand Wheel Crank Screw	(11)
41	Needle Bar Connecting Link Pin	(SL-102)
42	Arm (Upper) Shaft Bushing	(SL-13)
43	Arm (Upper) Shaft Bushing Screw	(SZB-84)
44	Zigzag Sewing Gear	(SAZ-21)
45	Zigzag Sewing Gear Screw	(45)
46	Feed Cam	(SK-58)
47	Feed Cam Screw	(59)
48	Arm (Upper) Shaft	(SAZ-4)
49	Hand Wheel Bushing	(SII-40)
50	Tapered Pin (Large)	(41)
51	Needle Bar Connecting Rod	(SAZ-18)
52	Needle Bar Connecting Rod Pin	(SAZ-19)
53	Needle Bar Connecting Rod Pin Screw	(SL-102)
54	Zigzag Width Regulator Spring	(SZIII-23-7)
55	Zigzag Width Regulator Spring Screw	(SK-116)
56	Zigzag Sewing Cam (Complete)	(SAZ-24)
57	Zigzag Sewing Cam Screw	(45)
58	Zigzag Sewing Cam Box (Complete)	(SAZ-25)
59	Zigzag Sewing Cam Box Screw	(SK-126)
60	Fan-Shaped Sliding Piece (Complete)	(SAZ-28)
61	Zigzag Sewing Width Adjustor Bracket	(SZIII-18)
62	Zigzag Sewing Width Adjustor Roller	(SAZ-33)
63	Zigzag Sewing Width Adjustor Joint	(SZIII-16)
64	Zigzag Sewing Width Adjustor Joint Screw	(SL-311-1)
65	Zigzag Sewing Width Stopper	(SZIII-32-1)
66	Zigzag Sewing Width Stopper Screw	(SK-126)
67	Zigzag Sewing Width Stopper Washer	(SZIII-32-3)
68	Vertical Shaft Bracket (Complete)	(SAZ-37)
69	Needle Bar Connecting Rod Screw	(SK-80)
70	Vertical Shaft	(SAZ-36)
71	Vertical Shaft Center	(SAZ-55)
72	Vertical Shaft Center Screw	(SK-11-2)
73	Screw Center Set	(71)
74	Feed Lifting Shaft	(SK-81-A)
75	Feed Bar	(SK-73)
76	Feed Bar Screw Center Set	(SK-74)
77	Feed Dog	(SAZ-54)
78	Feed Dog Screw	(SK-80)
79	Feed Driving Rock Shaft Crank Roller (Complete)	(SK-82-2-1)
80	Oscillating Rock Shaft	(SK-88-A)
81	Feed Rocking Shaft	(SSZ-68 A)
82	Feed Rocking Shaft Bracket	(SK-76 A)
83	Drop Feed Push Button (Complete)	(SZIII-19)
84	Drop Feed Plate	(SZIII-19-1)
85	Drop Feed Connecting Rod	(SZIII-82-1)

Names of Parts

86	Drop Feed Connecting Rod Terrace Screw	(Z-131-4)
87	Drop Feed Vinyl Washer	(SAZ-73-2)
88	Feed Driving Body (Complete)	(SA-82-2-1)
89	Open Race (Complete)	(SSZ-62-1)
90	Open Race Guide and Screw	(LZB-54)
91	Open Race Guide Shaft	(SAZ-64)
92	Open Race Guide Shaft Screw	(11)
93	Open Race Connecting Rod	(SAZ-65)
94	Open Race Connecting Rod Pin (Front)	(SAZ-66-1)
95	Open Race Connecting Rod Pin (Rear)	(SAZ-66-2)
96	Open Race Connecting Rod Pin Screw	(SL-102)
97	Oscillating (Lower) Shaft	(LZB-55)
98	Shuttle Driver (Complete)	(IZB-52)
99	Oscillating Shaft Collar)	(LZB-57)
100	Oscillating Shaft Collar Screw	(SL-102)
101	Oscillating Rock Crank	(LZB-58)
102	Tapered Pin (Small)	(SK-90)
103	Oscillating Shaft Crank Slide Block	(SAZ-58)
104	Bobbin	(SK-97)
105	Bobbin Case (Complete)	(SZ-100)
106	Shuttle Hook	(SZ-99)
107	Shaft Supporting Center (Small)	(S-77-2)
108	Shaft Supporting Center (Large)	(S-77-1)
109	Shaft Supporting Center (Short & Large)	(S-77-3)
110	Shaft Supporting Center Setting Screw	(SK-78)
111	Face Plate	(SZV-12)
112	Face Plate Spring	(SZIII-14)
113	Face Plate Spring Screw	(SL-311-1)
114	Face Plate Hinge	(SSZ-110-3)
115	Face Plate Hinge Screw	(SSZ-72-3)
116	Face Plate Hinge (Arm Side) Screw	(SSZ-100-7)
117	Lamp Fixing Plate (Complete)	(SZVI-14)
118	Lamp Fixing Plate Screw	
119	Lamp Socket Set Screw	(SL-311-1)
120	Thread Guide Plate	(Z-174)
121	Thread Guide Plate Screw	(SSZ-100-7)
122	Automatic Darner (Complete)	(SK-49-B)
123	Vinyl Wesher	(Z-26)
124	Signal	(SSZ-100-6)
125	Upper Thread Dial Tension Regulator (Complete)	(SSZ-100-A)
126	Upper Thread Dial Tension Regulator Screw	(TK-100-13)
127	Bobbin Case Cover	(SK-34 A)
128	Bobbin Case Cover Spring	(35)
129	Bobbin Case Cover Spring Screw	(36)
130	Needle Plate for Zigzag Sewing	(SSZ-10-1 A)
131	Needle Plate Screw	(33)
132	Arm Cord Fixing Metal Fitting	(SLII-136)
133	Arm Cord Fixing Metal Fitting Screw	(SL-311-1)
134	Top Plate	(SZV-111)
135	Top Plate Screw	(SII-311-1)
136	Spool Pin	(SZIII-20)
137	Spool Pin Screw	(45)
138	Top Plate Thread Guide	(Z-176)
139	Top Plate Thread Guide Nut	(SKII-69-16)
140	Zigzag Width Regulator (Complete)	(SZV-13)
141	Decoration Plate to 142	(SZV-13-8)
142	Zigzag Width Indicator Window	(SZV-14)
143	Bobbin Winder (Complete)	(SZVI-18)
144	Bobbin Winder Sett Screw	(SK-126)
145	Bobbin Winder Friction Ring	(SK-122)
146	Hand Wheel	(SZVI-17)
147	Clamp Stop Motion Clamp Washer	(SK-43 A)
148	Clamp Stop Motion Clamp Screw	(42)
149	Clamp Stop Motion Clamp Stop Screw	(44)
150	Arm Cord Fixing Metal Fitting	(SLII-136)
151	Arm Cord Fixing Metal Fitting Screw	(SL-311-1)
152	Motor Set Screw	
153	Motor Set Screw Washer	(302)
154	Bed Cord Fixing Metal Fitting	(SL-136)
155	Bed Cord Fixing Metal Fitting Screw	(SL-311-1)
156	Bobbin Winder Tension Bracket (Complete)	(SK-127)
157	Bobbin Winder Tension Bracket Screw	(SK-11 A)
158	Reverse Side Square Plate	(SS-6)
159	Reverse Side Square Plate Screw	(7)
160	Bed Rubber Ring	(SK-128 A)
161	Foundation Plate to Feed Regulator (Complete)	(AZVI-13)
162	Decorative Plate to Foundation Plate Screw	
163	Decorative Plate to Foundation Plate	(AZVI-17)
164	Feed Window	(AZVI-19)
165	Feed Window Screw	
166	Reversible Push Button	(AZVI-23)
167	Zigzag Width Regulator Dial	(AZVI-21)
168	Zigzag Width Regulator Dial Screw	(TK-100-13)
169	Hinge Set Screw	(11)
170	Light (Complete)	(AZVI-15,16)
171	Foundation Plate to Feed Regulator Screw	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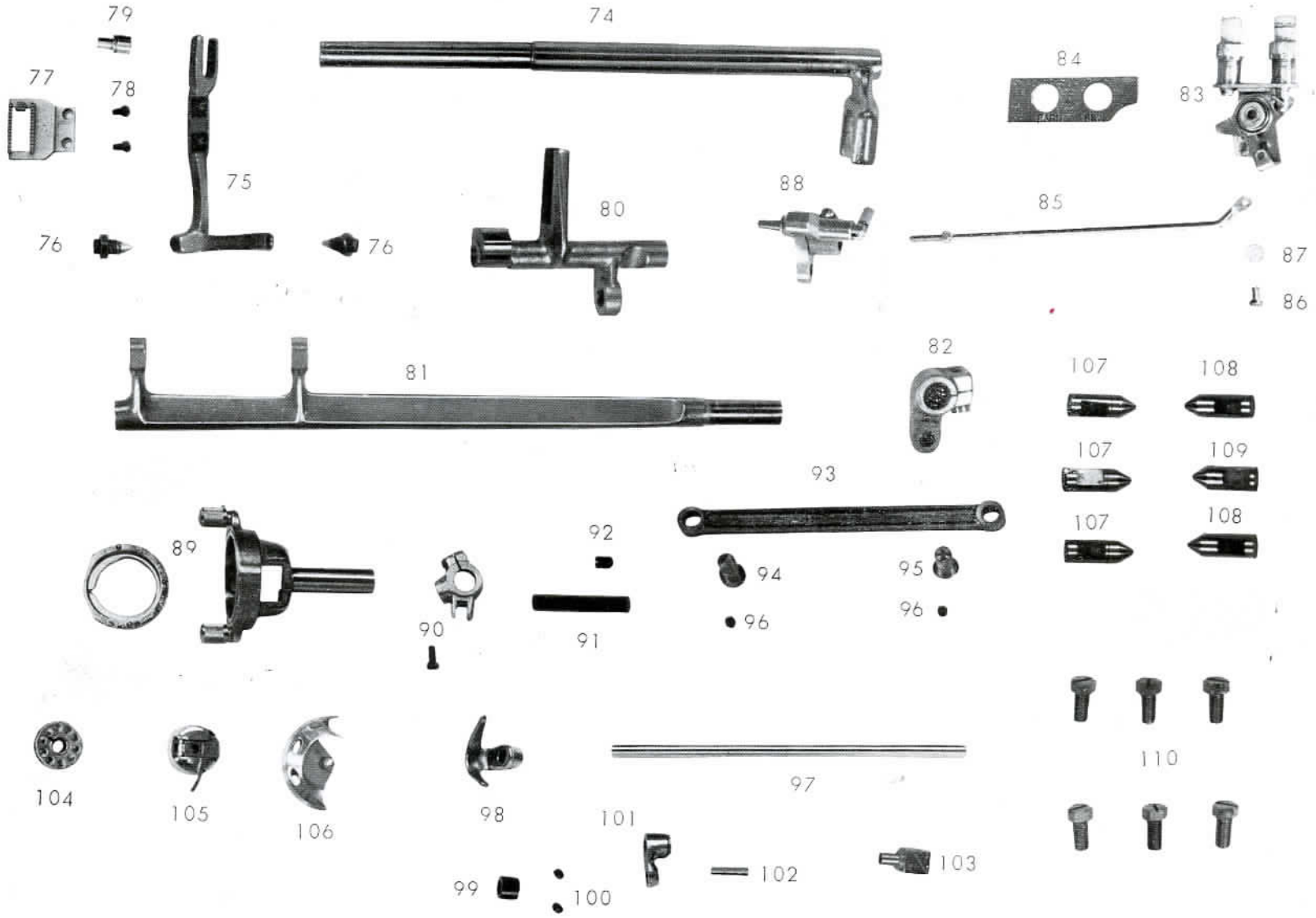
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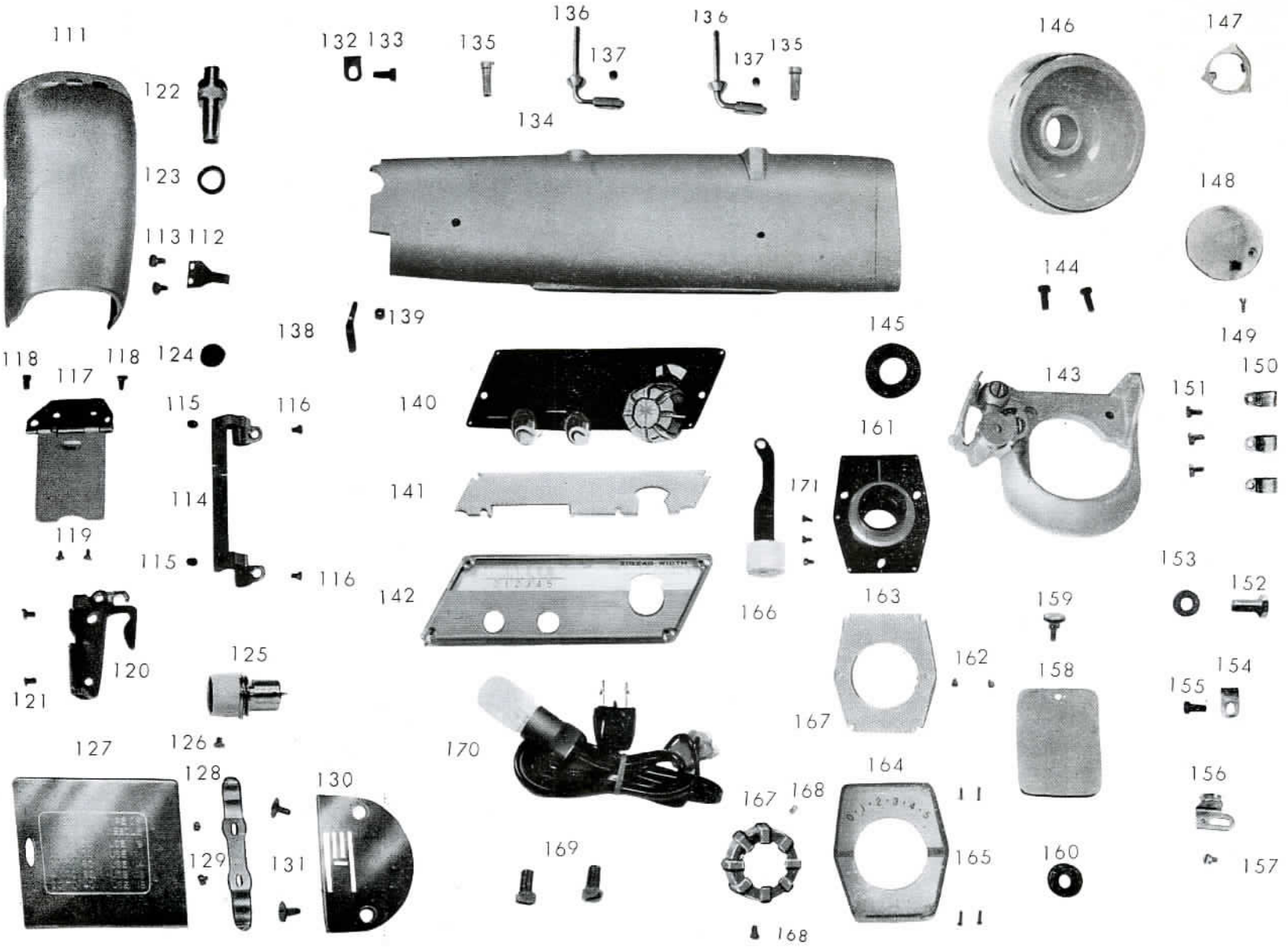
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