

Instructions for-
KENMORE
ELECTRIC
ROTARY
SEWING
MACHINE

IMPORTANT:
READ THIS
BOOK CAREFULLY
BEFORE
OPERATING YOUR
SEWING
MACHINE



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The Object of This Book

—is to provide you with complete directions for operating the Kenmore Rotary Sewing Machine. We are extremely anxious that your investment in this machine returns the utmost in satisfactory service. Therefore, you are urged to read this book carefully and thoroughly, in order to familiarize yourself with the operation of the Kenmore Rotary, even though you may be accustomed to using some other sewing machine. Please pay particular attention to the instructions on pages 9, 10, 11 and 12.



To Mount Sewing Machine Head On Cabinet

Mount head on head hinges (which will be found permanently attached to the cabinet) by inserting the round shank of the head hinge into lug holes on the bed of machine (see Fig. 2), then tip head back and tighten head hinge set screws (see Fig. 2).

Pull bushing up on motor cord as near to the motor as possible and slip motor cord into slot at edge of bed plate and push bushing back into hole in bed plate (see Fig. 30), thereby retaining cord in bed plate.

Be sure the motor pulley is adjusted so it centers on the hand wheel for proper drive; next, connect the three-contact connector plug to motor terminal (Fig. 30); next unwind the long wall plug cord which is inside the cabinet and connect it to any regular electrical outlet.

OILING THE HEAD OF MACHINE

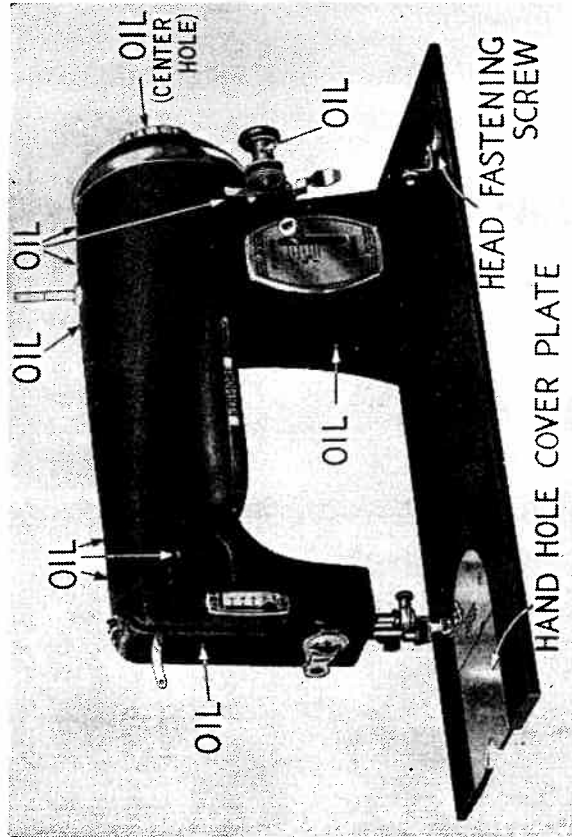


Figure 1

The illustrations above and below show the oiling places on the Kenmore Rotary Head. See next page for proper oiling.

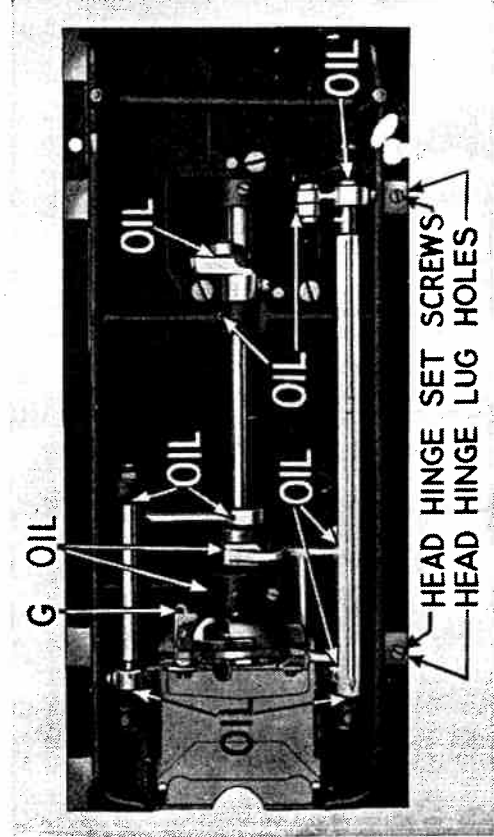


Figure 2

KENMORE ROTARY (Electric)

Time

OILING THE KENMORE ROTARY

A sewing machine, like every other piece of machinery needs oiling to insure easy running and to prevent unnecessary wear of the parts which bear upon each other.

If a machine is used continuously **IT SHOULD BE OILED EVERY DAY**. With moderate use an occasional oiling is sufficient. The pictures on the previous page show by arrows the points where oil should be applied. **ONE DROP OF OIL** at each point is plenty. More than this will retard rather than help the action of the machine. Oil holes are provided in the arm of the machine for parts which cannot be directly reached.

To oil the works underneath the bedplate, turn the head back and apply oil to points as shown in Figure 2.

The head fastening screw (see Figure No. 1) on the bedplate near the base of the arm must be taken out before the head can be turned back for oiling.

IF THE MACHINE RUNS HARD it is due to lack of proper oiling of some bearings. Should the machine become gummed from long standing or poor oil, apply kerosene to all the bearings to remove the gum; then run the machine rapidly, wipe clean and **OIL THOROUGHLY WITH GOOD SEWING MACHINE OIL** before beginning to sew.

Occasionally, place one drop of oil on tip of finger and apply around outer rim of shuttle, race, and centerpin (CP) Fig. 6.

Be sure to use ONLY Kenmore Sewing Machine oil

Three

THREADING THE MACHINE, UPPER THREAD

(See Fig. 3)

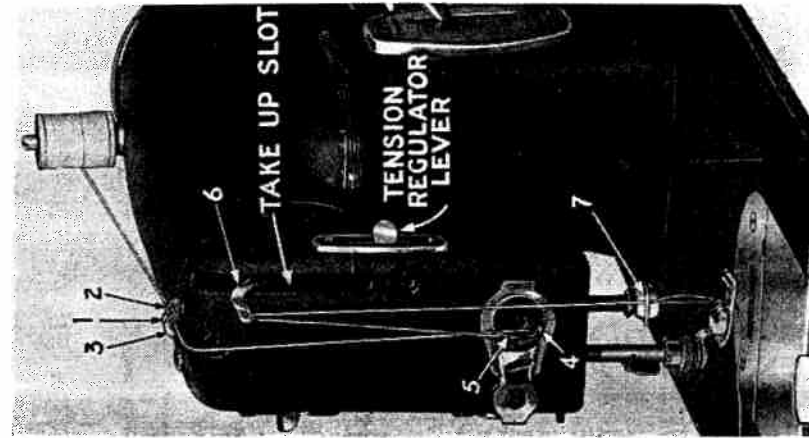


Figure 3

under point (4) from front to back. Next, upward until the thread hooks into spring eyelet (5). Next, into the hole in the take-up lever (6) from back to front. Next, downward and hook thread into needle clamp thread guide (7) from right to left. Next, into the eye of needle from left to right as you face the machine.

Four

TO WIND A BOBBIN KENMORE AUTOMATIC BOBBIN WINDER

(See Fig. 5)

Place the bobbin on bobbin winder spindle as shown. Hold the hand wheel with the left hand and turn the clutch release counter clockwise. This will release the sewing mechanism of the machine. Next, place a spool of thread on the spool pin located on bed of machine directly below the hand wheel. Next, take the end of the thread and pass it between the tension plates on bobbin winder thread guide, and pull thread upward into eye of guide, then run end of thread through hole "B" in bobbin.

Engage the bobbin-winder pulley with the hand wheel by pushing lever "C" downward. Hold end of thread until you have run machine sufficiently to wind the thread around the bobbin several times; then break thread off at hole "B" and continue to run machine and bobbin winder will automatically throw off when proper amount of thread is wound.

After the bobbin is wound and removed; tighten the clutch release by turning it clockwise while holding the hand wheel with your left hand.

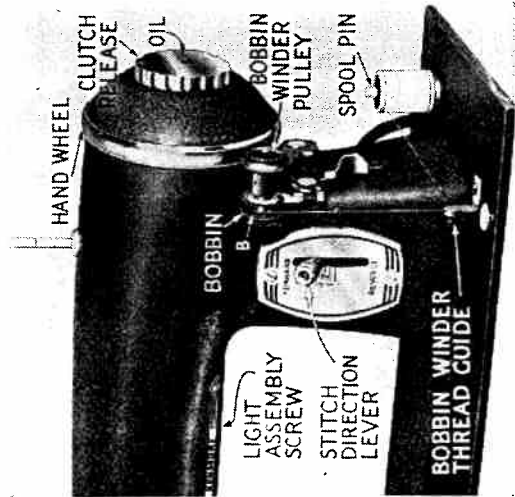


Figure 5

Five

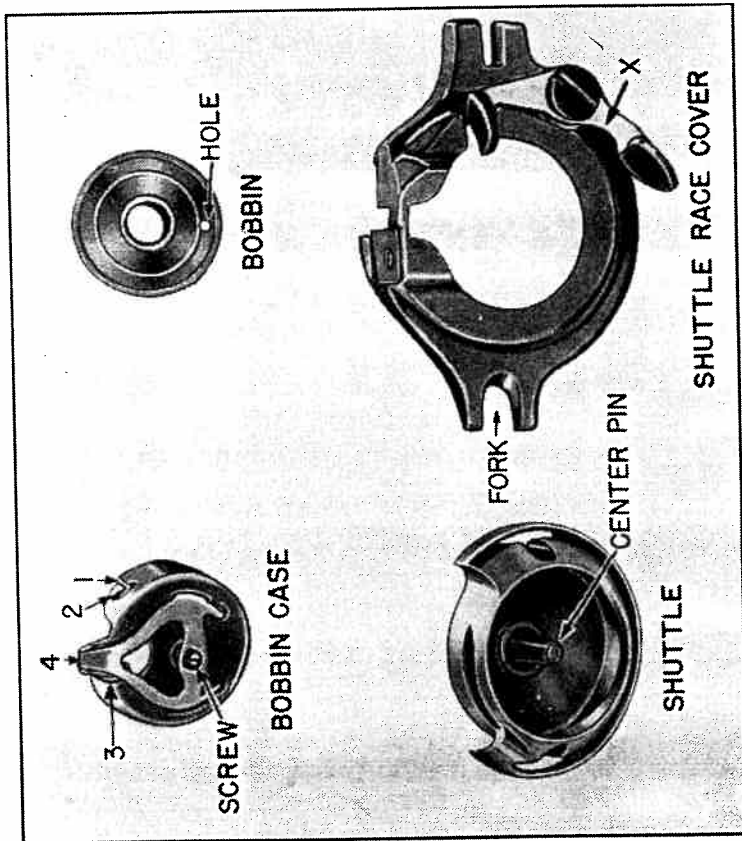


Figure 6

THREADING THE BOBBIN CASE

(See Fig. 6)

To thread the bobbin case, hold it in the left hand with the first finger and thumb at the point marked "screw" on the bobbin case illustration, Fig. 6, then place the bobbin in the bobbin case so that the thread comes from bobbin straight through slotted eyelet No. 1 and continuing on up the slot to point No. 2, then through slot No. 3 and downward holding the thread and the bobbin in the case taut, then pull the thread upward so that the thread hooks under point in lower part of slot No. 3, continuing to pull thread upward and out

between the lip of spring No. 4. Leave between one and two inches of thread projecting.

Caution—Read the instructions on the small envelope included in the box of accessories that contains the bobbin case—threaded as it should be. Note carefully the way the bobbin case is threaded before removing bobbin or unthreading.

TO PLACE AND REMOVE THE BOBBIN CASE IN SHUTTLE

Turn the hand wheel until the take-up (Fig. 3) is at its highest point, then remove the hand hole cover plate (Fig. 1) by lifting it up.

With the thumb and first finger of the left hand clasp the bobbin case as shown in Fig. 7, then with the second finger lift the latch "X" and the bobbin case can be readily removed.

The same operation is the method used for either placing the bobbin case in the shuttle or removing it from the shuttle.

The center spindle on the inside of the bobbin case fits over center pin of the shuttle as shown in Fig. 6.

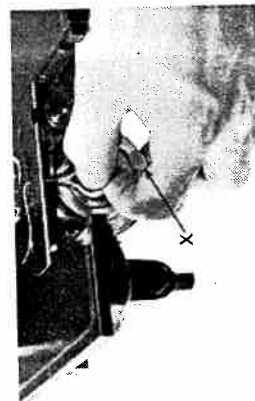
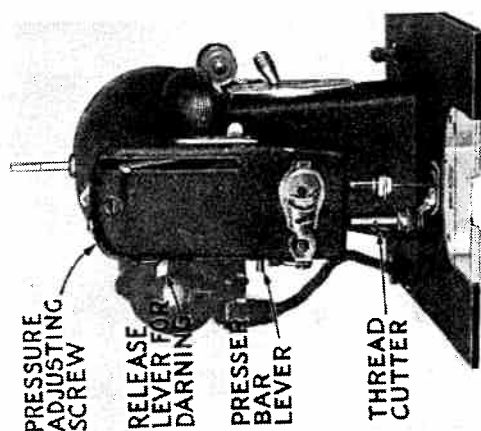


Figure 7

TO REMOVE SHUTTLE FROM THE SHUTTLE RACE

First remove the hand hole cover plate, then remove the head fastening screw (Fig. 1), then the head can be tipped back on its hinges.

Next, remove bobbin case as shown in Fig. 7.

Next, turn the hand wheel just as you would in sewing until the point of the needle is just entering the needle plate hole, then press the rear end of latch "G" as shown in Fig. 9. This operation will release the shuttle race cover which is pictured in Fig. 6—and the shuttle can readily be removed.

Next, to remove the shuttle simply take hold of the center pin (CP) in the shuttle as shown in Fig. 9 and it can readily be taken out **WITHOUT FORCE**.

TO REPLACE THE SHUTTLE

Turn the hand wheel until the point of the needle is just entering the needle plate hole. Hold the shuttle by the center pin "CP", (Fig. 9) between the first finger and thumb of the left hand and place it in the race as illustrated in Fig. 9 so that the driving pins "DP" enter the two holes on each side of the shuttle. The SHARP point of the shuttle is almost directly over the arrow marked "S", and it is very important that it be so placed. It should **not** be necessary to force this shuttle in to place. If in the proper position it will readily enter the race and fit over the driving pins "DP". It is imperative that this shuttle be properly placed in the race, so take care to follow instructions carefully. Then replace shuttle race cover (see Fig. 6) by inserting the fork at left side of shuttle race cover (see Fig. 6) under spring pin "H" (Fig. 9) and snap cover under latch "G".

Eight

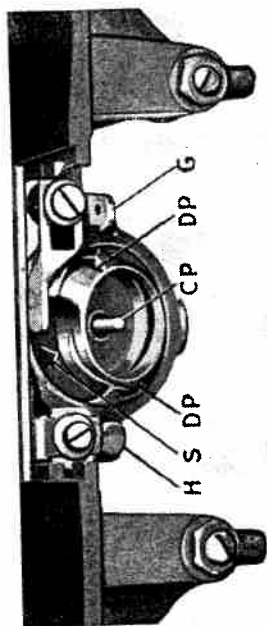


Figure 9

It is well to know how to remove and replace the shuttle as from time to time a certain amount of lint gathers in the race and on the shuttle driving pins which may cause the machine to run hard.

TO PREPARE FOR SEWING

It is essential that both the upper and lower threads are in proper position. To have the lower thread come up through the needle hole, hold the end of the upper thread (which should extend about four inches through eye of needle) loosely with the left hand and with the right hand turn the hand wheel around completely once or twice or sufficient times for the needle and upper thread to go down and pick up the lower thread and bring it up through the needle hole; then pass the upper and lower threads through the fork of the presser foot and towards the back of the machine. Then after you have placed your material under the presser foot, lower the presser bar with the presser bar lever (see Fig. 7).

REGULATING THE TENSIONS

The Kenmore is fitted with an automatic tension release. In other words, when you lift the presser foot with the presser bar lever the upper thread tension is automatically released. The tension regulator lever is located on the face plate of the machine (see Fig. 3). For ordinary sewing this lever should

Nine

be set between figures 2 and 3 on the numbered gauge directly at the side of the lever regulator.

Raise the lever for light tension.

Lower the lever for heavy tension.

To adjust tension of lower thread see illustration of Bobbin Case Fig. 6. For greater tension tighten center or spring screw; to loosen tension loosen screw. In either event a VERY SLIGHT turn of this screw is sufficient.

Tensions should be in balance to get best results—neat, flexible, accurate stitching. Experiment until your stitching is balanced as follows:

If the upper thread is too tight, the upper thread will be drawn straight on the top of the material, thus:



If the lower thread is too tight, the lower thread will be drawn straight on the bottom of the material, thus:



When tensions are properly adjusted the stitching on materials will look the same on both sides, thus:



TO REMOVE THE WORK

The take-up (6 Fig. 3) **must** be at its **HIGHEST POINT** before attempting to remove the work. Failure to do this will result in breaking the thread and unthreading the needle.

Ten

Turn the hand wheel until the take up, Fig. 5, is at its highest point, raise the presser foot with presser bar lever (see Fig. 7) and DRAW THE FABRIC BACK about three inches in a straight line, pass both threads over the thread cutter on the presser bar (see Fig. 7).

STITCH LENGTH REGULATION

To lengthen the stitch loosen the stop nut on the end of the stitch direction lever (Fig. 5) and move the lever up to the desired stitch length position as shown on the numbered sector on the stitch regulator plate, then turn the stop nut until it touches the plate.

Number 1 is the shortest stitch, number 6 the longest.

FORWARD AND REVERSE STITCHING

For reverse stitching pull the stitch direction lever down below the numbered sector until it comes to a stop.

To return to forward stitching move the lever upward.

TO SET THE NEEDLE

The needle bar should be raised to its highest point. Loosen the thumb screw of the needle clamp. This will permit the shank of the needle to pass up between the clamp and the needle bar **as far as it will go** with the flat side of the shank to the right. Then fasten the needle clamp screw securely with a screw driver.

The needle when descending should pass in the center of the needle plate hole from front to rear, but close to right side of needle hole. If it does not the needle is either bent or improperly set.

Eleven

USE CORRECT NEEDLES

IMPORTANT—When buying needles for this machine mention the Kenmore Rotary name and give serial number. The size of the needle to be used will depend upon the size of thread and kind of material being sewed. Consult the table. For ordinary family sewing use size No. 1 needle, which is suitable for thread No. 60 to No. 90.

Following index will show the size of needles to be used with various sizes of thread.

Cotton Thread	Silk Thread	No. of Needle
150 to 300	000	00
90 to 150	00	0
60 to 90	0 & A	1
40 to 60	B	2
30 to 40	C	3
20 to 30	D	4

IMPORTANT—Do not operate the machine without having material under presser foot.

If the machine should be run without sewing and thread gets in the shuttle race making the machine run heavy, take out bobbin case and turn the hand wheel in the wrong direction several times and it will cut the thread out; failing to do so remove the shuttle and clean the race and driving pins. (See Fig. 9)

THE NARROW HEMMER

The Narrow Hemmer is used to finish the edge of ruffles, or any dainty work where one wishes to adhere to sheerness.

The Narrow Hemmer is attached to the machine in the same manner as is the presser-foot. Raise needle to highest point; remove presser-foot; attach Hemmer; tighten screw.

Before inserting material, turn over one-eighth inch of material for a few inches along the edge, then insert between



Figure 10

scrolls in Hemmer, folded edge on top, draw back until end is under needle; lower presser-bar and begin to sew, guiding material with left hand so that neither too much feeds into the scroll—causing wide and uneven hems—nor too little, not allowing for a second turning, thus leaving a raw edge. The scroll should be kept just full.

It is quite helpful, when it is desired to start stitching directly at the selvaged edge, to catch through the material at the folded section of the hem with a needle and thread. The thread can be held on to when drawing the material back preparatory to stitching so that needle will pierce the extreme edge.

HEMMING AND SEWING ON LACE IN ONE OPERATION WITH THE FOOT HEMMER

Our foot hemmer is slotted at the needle hole. This for the purpose of making a fine hem and sewing on lace in one

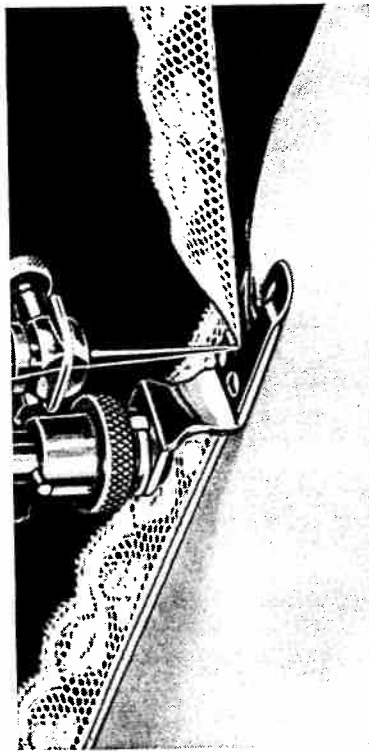


Figure 11

operation. A great time saver. You proceed to make the hem the same as given in the explanation on fine hemming and to sew on the lace with the same operation, simply insert the point of the lace face down at the beginning of the hemming in the slotted hole, carefully guiding the lace with the right hand and proceed slowly to see that the goods properly feeds into the hemmer.

The French application of lace with stitching invisible also calls for the use of the narrow hemmer. Enter material to be hemmed as described for regular hemming, but with right side of material face up. Place lace under Hemmer from the left allowing right side of lace to face right side of material. Feed lace into Hemmer sufficiently so that stitching of hem will enclose and hold lace at the same time. Press hem back on wrong side of fabric and no stitching will appear on right side.

FELLING

Remove the regular presser foot and in its place attach the foot hemmer. A fell is made with the foot hemmer as illustrated here by placing two pieces of goods with the face

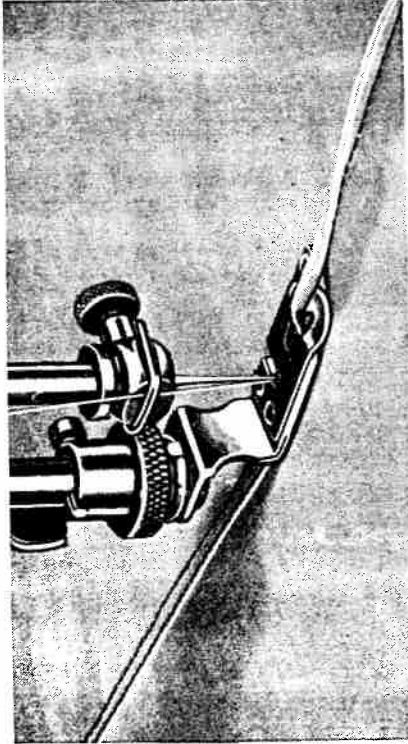


Figure 12

side together. The lower piece of the goods should project towards the right about one eighth of an inch beyond the edge of the upper piece of goods. Then place these pieces under the foot hemmer using the foot hemmer just as you would the regular presser foot and sew a seam about one sixteenth of an inch from the edge of the upper piece of goods. After completing the seam, open out the seam so that the face side of the goods is down or flat on the machine.

If the work has been carefully done no trimming will be necessary but if the edge of the lower piece of goods projects upwards an uneven amount, the high points should be trimmed off. In other words, have a uniform amount of material to make the fell. To start the fell as illustrated above insert the raw edges of the material that are on the upper side, in the foot hemmer as illustrated above. When the work is completed and if carefully done it will be a neat finished fell.

WIDE HEMMING

In the box of attachments you will find an assortment of wide hemmers which may be used for heavier work and wider hems. The principle of using is the same as referred to on the previous page of hemming and felling. No difficulty should be encountered if the hem is started by folding the goods for a short distance preparatory to feeding the goods into the hemmer.

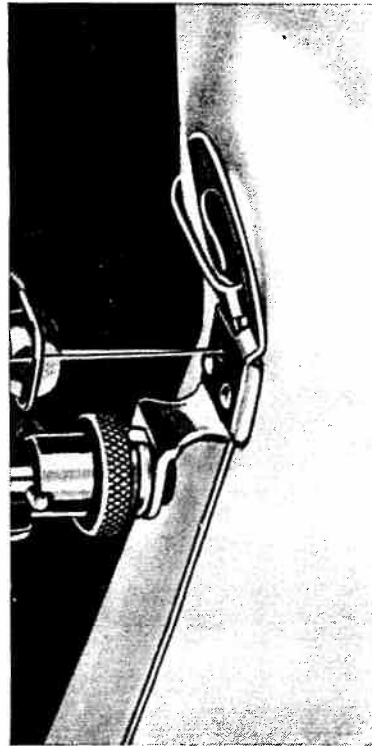


Figure 13

If the stitching is too near the stitched edge of the hem move the hemmer toward the right by merely pushing the hemmer slightly toward the right. If the stitching is too far from the stitched edge of the hem, move the hemmer toward the left.

As material is stitched through the large hemmer a visible turn to edge of material can be noted. Allow the hem to ride freely through the hemmer, never drawing on the edge being turned, but gently retarding the material under the hemmer, using the left hand.

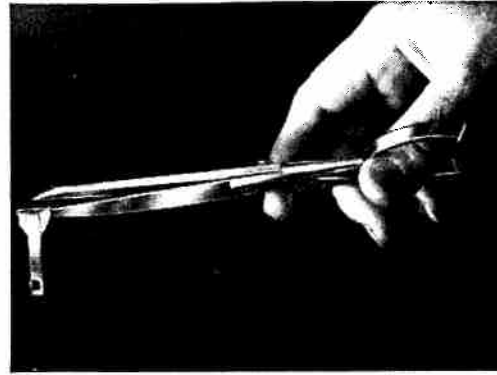
THE CUTTING GAUGE

The Cutting Gauge is used as a guide when cutting bias bands for use as binding; or narrow bands either straight or bias to be used as facings, pipings, cording or narrow ruffling.



The inch and fractions thereof designated on the Cutting Gauge enables one to cut material of any texture perfectly for use with the Binder.

$\frac{7}{8}$ inch or $\frac{15}{16}$ inch is correct for firmly woven materials, 1 inch to $\frac{1}{4}$ inches is for materials that stretch more readily.



Cutting Gauge on Point of Scissors



Guiding Material Through Gauge

It is important that bindings to be used with the Binder be cut on a true bias to produce perfect work. Only a true bias will stretch evenly.

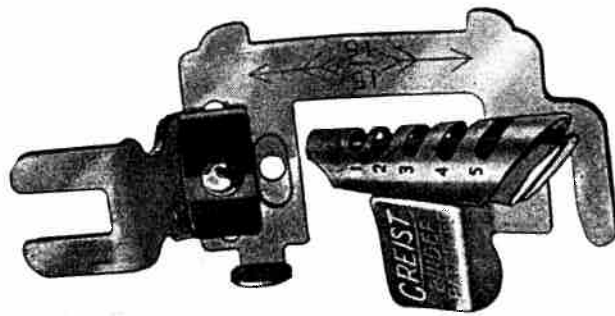
To prepare material for bias bindings fold it so that the warp and the woof are parallel and cut through the fold.

After cutting material into bias strips, the strips should be stitched together at the diagonal ends and the seams pressed flat.

Attach Cutting Gauge to lower point of scissors, move

gauge slide to width of band desired. The gauge slide is adjustable and can be moved to the left or right. Insert the material to be cut between the blades of the Cutting Gauge with the edge of material against the slide, then cut, moving the scissors forward in short even clips.

THE MULTIPLE SLOT BINDER
Attach Binder to Machine in Place of Presser Foot
 The Multiple Slot Binder is designed with slots to accommodate five different widths of commercial binding in addition to the familiar $1\frac{5}{16}$ inch bias cut binding which can be made with the aid of the Cutting Gauge.



When single fold commercial binding is used enter in slot of same size.

Commercial Binding is already folded over at each edge toward the center, slightly more on one side than the other so that when they meet a slightly wider turn appears on one side. The wider side should be the lower side when binding is entered in Binder.

Clip binding to a decided point and draw it through the slot designed for its width by using a strong pin. Draw binding beyond needle and stitch for a few inches to determine where stitching is desired.

The Binder is adjustable sidewise so that stitching can be made to appear properly close to the edge of binding.

Adjust Binder to right or to left so that stitching appears close to folded edge of binding.

BINDING AND PIPING

Using commercially folded binding a garment can be piped and bound in one single stitching. Two bindings of contrasting color and different widths can be entered in their correct size slots. The narrowest width should be entered in its slot first and drawn through to the needle, then the wider binding should be inserted. Set the attachment so the stitching is along the edge of the narrower binding giving the effect of a double reversible binding.

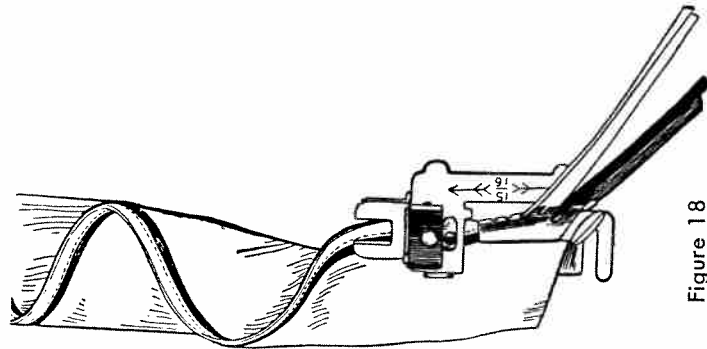


Figure 18

Illustration number 18 shows clearly the detail of two bindings used on a sheet cascade trimming. White Binding size No. 5 acts as the piping and is entered in slot 5. No. 3 red binding is entered in slot 3 and holds the edge of cascade and white binding in one stitching.

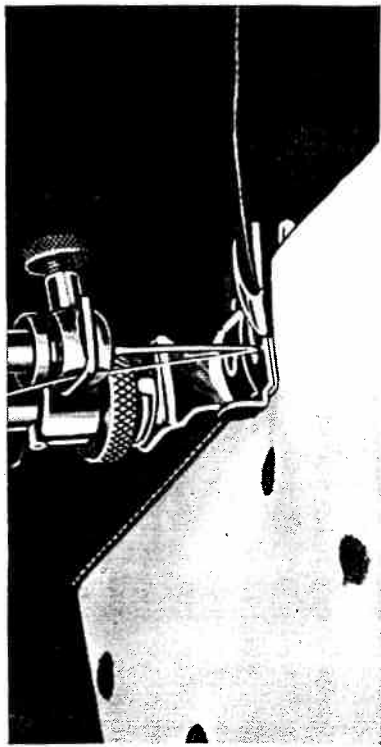


Figure 19

BINDING WITH BIAS CUT BINDING

When using bias binding that has been cut $\frac{7}{8}$ " or $\frac{15}{16}$ " wide it is entered through the scroll of the Binder as shown in illustration, Figure 19.

Adjust binder to right or to left so that stitching appears neatly close to folded edge of binding. Let the binding ride easily through the right hand while guiding material to be bound well into the binder, between the scrolls, with the left hand.

When binding scallops make sure that curved edge of scallop is in the binder, between the scrolls, close to the needle. The smallest scallops can be bound neatly if care is exercised at this point.

To apply additional rows of binding as a trimming, place garment to be trimmed under the binder and as binding is being stitched slightly retard the feeding of garment so that no pucker will appear in garment.

QUILTING

You will find a hole in the presser bar just above the presser foot, loosen the screw in back of this hole and pass the quilter guide through the hole so that it rests to the right of the needle as shown in Figure 20. Set it to the desired space between stitching and high enough to allow

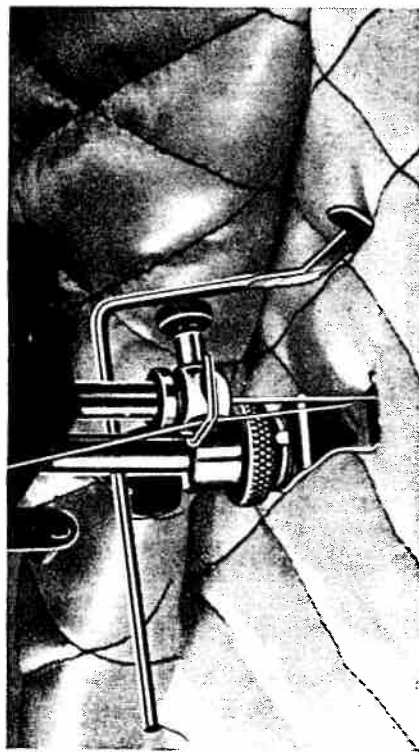


Figure 20

the goods to pass freely under it, then fasten the quilter guide securely by tightening the screw. Replace regular foot with the quilter foot.

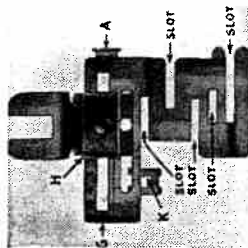
In starting to quilt use the outer edge of the cloth for the first guide or else crease the cloth on the right, then let the quilter guide follow the crease. Quilt the remainder by keeping the guide in a line and over any one row already stitched.

To obtain the very lovely puffed quilting use as many thicknesses of sheet wadding as desired over the fabric. A piece of cheese cloth placed over the wadding helps to insure the even pucker so desirable on comfortables or quilts.

For extremely thick padding release the pressure on the quilter foot by turning the Pressure Adjusting Screw (Fig. 7) with a screw driver several turns to the left.

COMBINATION EDGE-STITCHER, TUCKING GUIDE AND TOP-BRAIDER

The Edge-Stitching Attachment is fastened to the machine in the same manner as the Presser-Foot. There are five different slots, which are shown in the illustration, serving as guides for sewing together laces, insertions, embroideries, sewing in position folded or hemmed edges, bias-folded material or piping.



HOW TO ADJUST THE EDGE-STITCHER

To adjust, move the lug "A" to the right or left until the desired adjustment is obtained. When sewing two pieces of lace together, it is very necessary that the attachment is adjusted to stitch exactly on the edge, so that the edges will not fold over when laundered.

When sewing laces or soft materials together, it is better to hold the edges, slightly overlapped. This will prevent the lace from feeding away from guide.

TUCKING

The numbers 2 to 6 inclusive stamped on the back edge of the sliding guide represent the width of tuck in eighths of an inch. After folding the material for the first tuck, put the folded edge into the guide slot which is nearest the needle. When the left edge of the friction spring "H" coincides with the number 2 on the scale a $\frac{1}{4}$ " tuck results.

In like manner, set the guide at 3 for a $\frac{3}{8}$ " tuck.

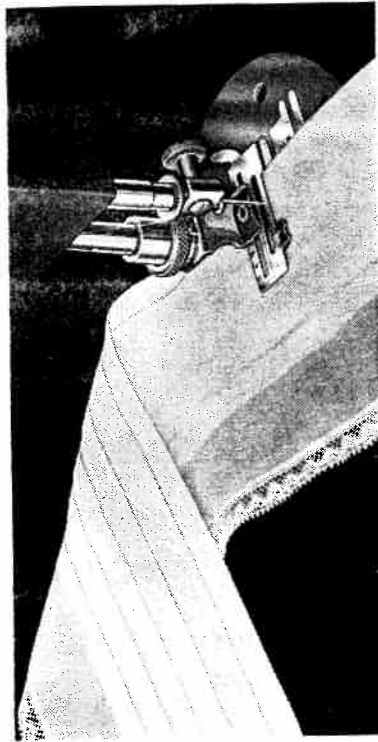
In like manner, set the guide at 4 for a $\frac{1}{2}$ " tuck.

In like manner, set the guide at 5 for a $\frac{5}{8}$ " tuck.

In like manner, set the guide at 6 for a $\frac{3}{4}$ " tuck.

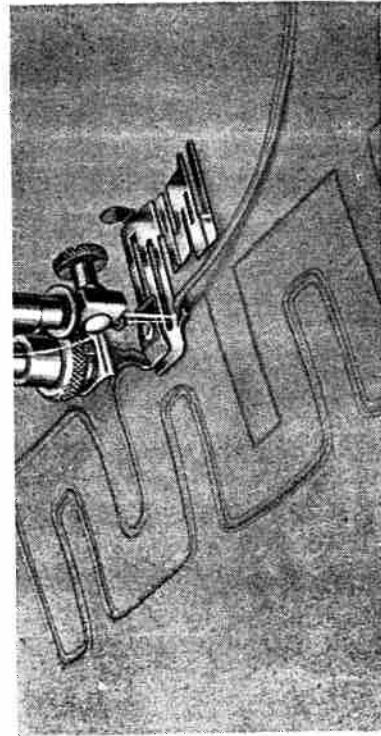
For tucks narrower than $\frac{1}{4}$ " move the guide "G" as far as desired to the left.

Twenty-two



BRAIDING

Move the guide "G" to the right until the braiding guide hole "K" is exactly in line with the needle hole of the attachment. The design to be braided should be plainly marked or stamped on the top or right side of the fabric. Start the soutache braid into hole "K" and stitch along design, being sure that the soutache braid is feeding freely into hole "K" without twisting. To turn a corner, stop the machine **with the needle down through the braid** in the exact corner of the design, raise the presser-bar **just enough** to permit the turning of the fabric in the desired direction, lower the presser-bar and proceed as before.



Twenty-three

RUFFLER

A. Slots to space fullness at number of stitches.

B. Slide lever to regulate depth of pleat.

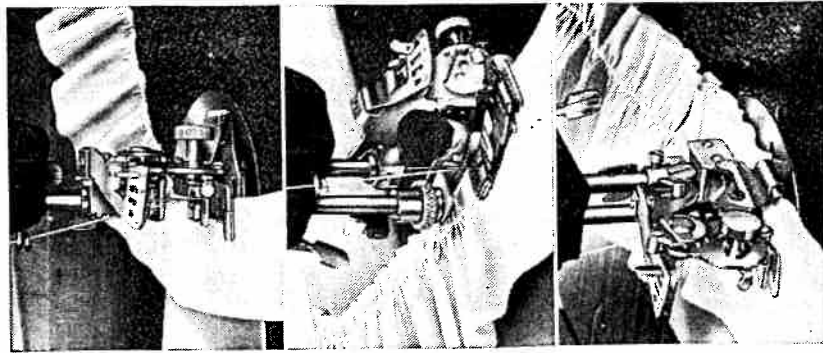
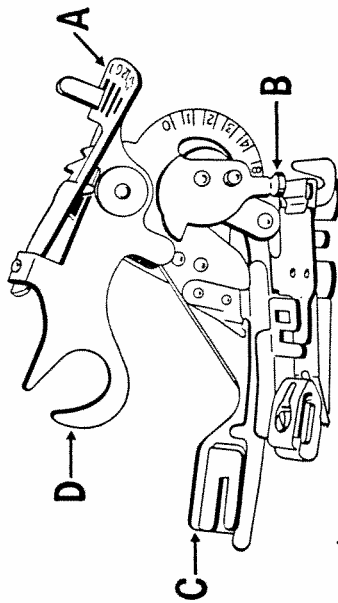
Attach Ruffler by placing the foot C on attachment holder and the fork arm D astride the needle clamp screw.

See that needle goes down in center of needle hole in Ruffler.

RUFFLING

Enter material to be ruffled between blue blades. Edge of material is guided into one of several slots or adjustable guides provided for different widths of seam allowance or headings, as shown in these pictures.

At point A, set pin in opening for gather at every stitch. At point B, loosen screw and set lever for depth of gather. No. 1 makes the finest gather. Length of stitch on sewing machine varies amount of fullness.



Twenty-four

Pleating can be formed in a wide range of effects. The Ruffler can be set for deep or shallow pleats, spaced close together or far apart.

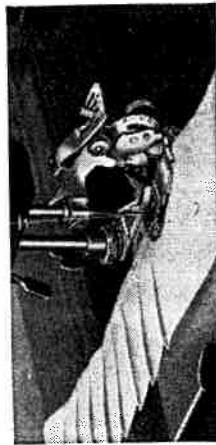
SIX-STITCH PLEATING

At point A set pin in No. 6 opening for pleat every sixth stitch. At point B loosen screw, slide lever down to deepen pleat. Space pleats by length of stitch on sewing machine.



TWELVE-STITCH PLEATING

At point A set pin in No. 12 opening for pleat every twelfth stitch. At point B loosen screw, slide lever down to deepen pleat. Space pleats by length of stitch on sewing machine.



GROUP PLEATING

Set Ruffler for six-stitch or twelve-stitch pleating, as above. Proceed to make first group of pleats. Stop sewing.

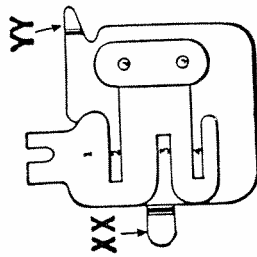
At point A set pin in neutral opening marked star. Stitch without pleating to point where next group of pleats begin. Reset pin at point A to previous pleating position.



Twenty-five

SHIRRING

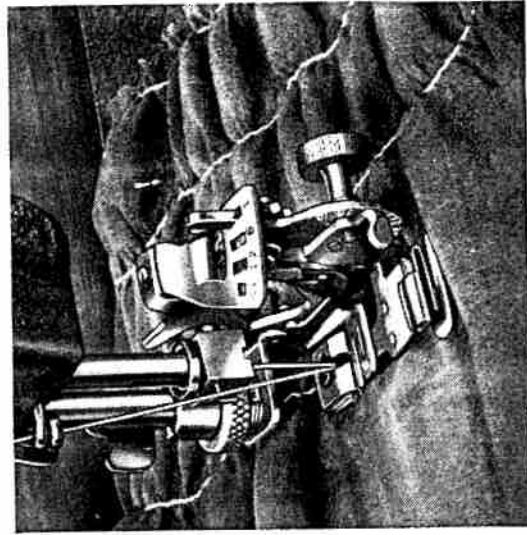
The Shirring Plate is used to make wide ruffles, deep headings on ruffles, and for continuous rows of shirring.



TO USE SHIRRING PLATE:

1. Remove handhole cover. Put Shirring Plate on machine with point YY in screw hole on needle plate. Point XX goes in squared opening of needle plate, and is held in place with handhole cover, replaced at this point.
2. Remove lower blade and heading guide by loosening small screw on right side of Ruffler, and slipping forward. Tighten small screw.
3. Put Ruffler on machine as before.

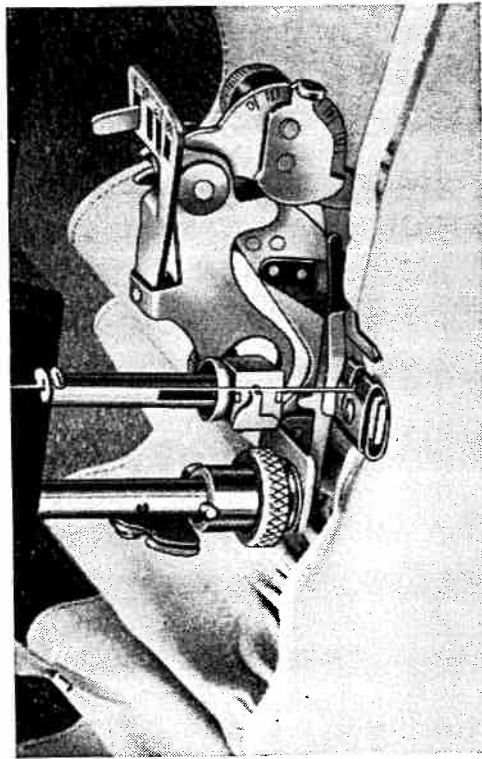
4. Set attachment for ruffling. For several rows of shirring, it helps to use the Quilting Guide for spacing.



Twenty-six

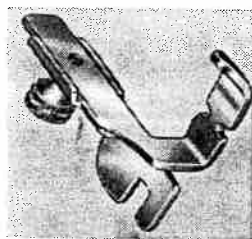
PIPING AND EDGE STITCHING TO RUFFLE

Use Ruffler with Shirring Plate. Enter material to be ruffled between blades from right. Guide into seam-allowance slot of Shirring Plate. Place piping through squared opening on left. Fold under edge of base fabric. Guide folded edge into slot above piping and above blades. To adjust the guide so needle sews on very edge, loosen screw behind needle hole and slide accordingly.



Twenty-seven

THE COMBINATION ADJUSTABLE ZIPPER ATTACHING AND CORDING FOOT



This attachment is designed so it can be adjusted for stitching either left or right side of cording in a seam or for stitching right or left side when attaching a slide fastener. Adjust by loosening thumb screw and sliding foot to desired position on bar.

INSERTING CORDING

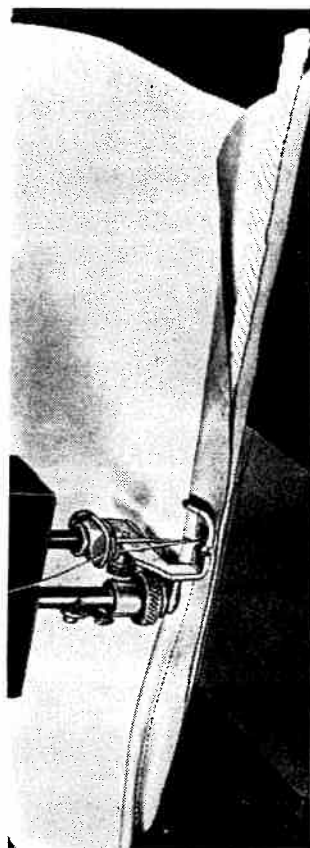


Figure 28

Remove the regular presser foot and attach the Adjustable Combination Attachment in its place. Loosen the thumb screw on the attachment and move the foot to the right if the cording is to be to the left of the needle. See that the needle goes down in center of the needle hole before tightening the thumb screw.

Fold a strip of bias over the cord, right side out, and place under the attachment. Stitch along close to the cord.

Fig. 28 shows the Adjustable Attachment being used to cover cord and join it to a fabric edge in one stitching.

When the fabric is extremely bulky, loosen the Pressure Adjusting Screw slightly to allow the fabric to feed more freely under the Adjustable Combination Attachment.

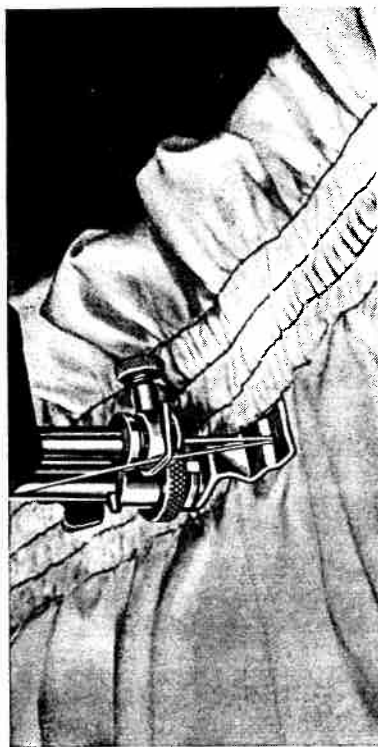


Figure 27

THE SHIRRING FOOT TO GATHER, PUFF OR SHIRR

Rows of shirring can be gathered as close as $\frac{5}{16}$ inches apart with sufficient fullness for any dainty trimming.

In using the shirring foot as shown on Fig. 27, place the goods under the foot the same as in ordinary sewing. For fine gathers regulate your stitch for short stitching, to increase the fullness lengthen the stitch, for still greater fullness slightly tighten the top tension.

Carefully guide the fabric as it is being gathered so that at all times it feeds to the needle singly.

DARNING

Set stitch direction lever (Fig. 5) at No. 1 in numbered sector. Then release all pressure on presser bar by means of the release lever (Fig. 7). Merely press downward on this lever, at the same time moving it out of the notch, and it will automatically spring to the top of the slot. Use a fairly coarse needle for all darning. Move the material back and forth and from side to side while keeping it stretched as tightly as possible. Best results can be obtained by the use of hoops. When the darning is completed, press the release lever downward and into the notch (Fig. 7). Re-establishing the pressure on the presser foot, otherwise the machine will not sew. Re-adjust stitch regulator (Fig. 5) to desired position.

ATTACHING A SLIDE FASTENER

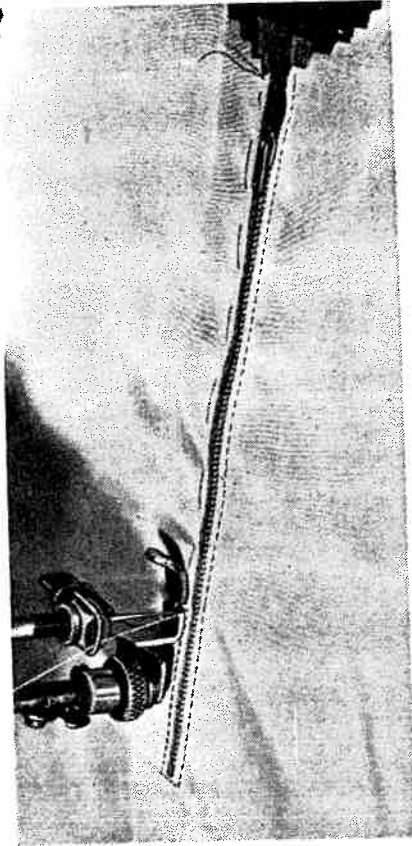


Figure 29

Remove the regular presser foot and attach the Combination Attachment in its place. Loosen the thumb screw on the attachment and move the foot to the right or left as desired. See that the needle goes down in center of the needle hole before tightening the thumb screw.

The needle holes on either side are cut deep enough to allow sufficient space between the metal of the slide fastener and the line of stitching so the fabric will not catch in the slide pull as it is being opened and closed.

Fig. 29 shows a slide fastener being stitched in a garment with the Combination Adjustable Zipper Attaching and Cording Foot positioned to the right of the needle.

TO REPLACE LIGHT

Disconnect wall plug. Remove the one screw that holds complete socket and switch assembly, Fig. 5. Lower assembly sufficiently to replace bulb. Replace assembly and tighten screw with screw driver.

MOTOR PULLEY

Be sure the motor pulley (Fig. 30) is adjusted so it centers on the disk wheel of the machine.

Thirty

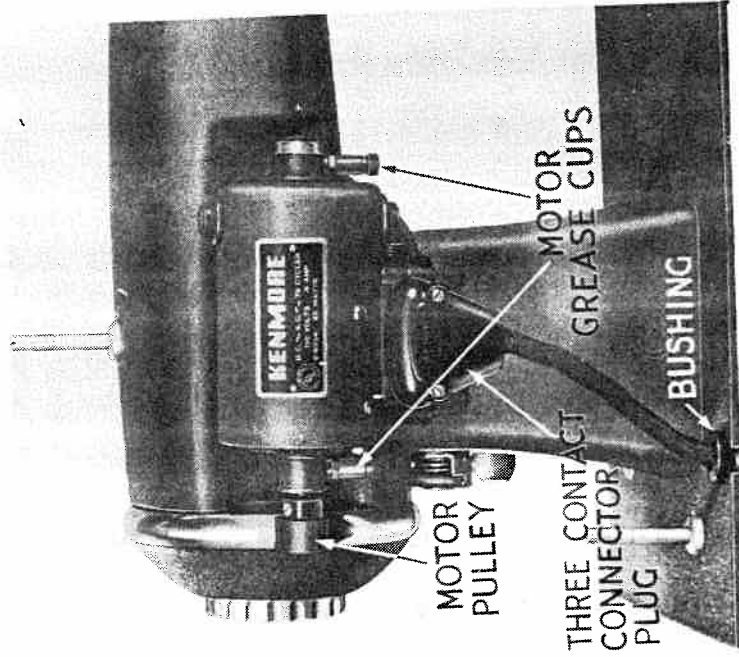


Figure 30

MOTOR LUBRICATION AND CURRENT

Two cups (one at either end of the motor shaft) provide for motor lubrication. Unscrew the caps and fill with special motor lubricant or petroleum jelly approximately every six months, depending upon the amount of use of the machine. The Kenmore motor can be used on either direct or alternating current 110 or 115 volts up to 75 cycles.

SPEED CONTROL

The desired sewing speed is obtained by pressing the knee lever. Increased pressure on the knee lever increases the speed of the machine; removing pressure from the knee lever automatically stops the machine.

Thirty-one

SIMPLE REMEDIES FOR THE

COMMON AILMENTS OF A SEWING MACHINE

Sewing Machines, performing the function of fabricating materials mechanically, call for unusual care and precision in manufacturing. Adjustments and timing of most working parts are permanently fixed at the time of manufacture and are rarely the cause of unsatisfactory operation calling for major adjustments.

Replacement of accessories such as needles, bobbins, shuttles, etc. sometimes interfere with the effectiveness of the machine, particularly if they are not the correct accessories or not properly applied. However, for the most part sewing machine troubles can be remedied by minor adjustments easy to perform.

Following are some easily applied remedies and if user, when experiencing any difficulties will exercise care in checking over these simple corrective remedies your sewing machine should operate properly.

IF IT SKIPS STITCHES

The trouble may be caused by—

1. Crooked Needle:
May be hardly perceptible yet sufficient to cause skipping. Unthread the needle, remove presser foot, turn machine by hand. Needle should maintain a constant position in relation to the needle hole as the needle passes down through the needle plate hole. Replace with a new needle and make certain this is not the cause of trouble.
2. Incorrect Needle—or too fine a needle:
It is very important that you have the correct needle for a Kenmore Rotary. Be certain to follow the index in this instruction book in selecting the proper size needle for size of thread and material being used.

Thirty-two

3. Needle incorrectly set:

The needle **must** be pushed up as far as it will go in to the needle clamp with the flat side of the shank to the right and fastened securely with thumb screw.

IF IT BREAKS THREAD

The trouble may be caused by—

1. Wrong needle being used:
It is important before trying anything else to put a new **straight** needle, for a Kenmore Rotary, in machine.
2. Needle too fine:
Select the proper needle and thread according to the table elsewhere in this instruction book.
3. Hole in the Needle Plate Choked with Stray Threads:
Pull threads from the **underside** of needle plate with screw driver or long needle, or better remove needle plate and clean.
4. Machine Improperly Threaded:
Check over carefully the instructions on threading the machine and observe especially the threading at hook 1 and hook 2 (see Fig. 3).
5. Top Tension too Tight:
Refer to instruction elsewhere in this book on the proper adjustment—both upper and lower tensions.
6. Examine needle hole in needle plate. If it has become rough or burred from needle striking it, needle plate should be replaced with a new one.

Thirty-three

IF IT BREAKS NEEDLES:

The trouble may be caused by—

1. Pulling of the material when sewing will break needles. Guide the material only—**do not pull**.
2. Wrong Needle being used:
Be sure you are using correct needle for a Kenmore Rotary.
3. Needle incorrectly set—too low:
See instructions elsewhere in this book on how to properly set needle and follow instructions carefully.
4. Needle not firmly set:
After being certain needle is properly set be sure it is held tight by needle clamp screw—use a screw driver.

IF PUCKERS ON ORDINARY MATERIAL

The trouble may be caused by—

1. Tensions not in balance:
Reduce the tension on upper thread by moving indicator towards No. 1. Do some testing. If this fails, examine lower tension or bobbin case for proper adjustment and proceed to balance the tensions. See instructions elsewhere in this book on tension adjustment.
2. Blunt Needle—Replace with a new straight needle—examine needle point.

IF PUCKERS ON FINE MATERIAL

The trouble may be caused by—

1. Both tensions may be too tight:
Adjust upper and lower tensions—must be in balance for chiffon and other very light materials, best results are obtained with upper tension set at $\frac{1}{2}$ and the lower tension in balance with that. However, sufficient tension must be maintained to raise the small auxiliary spring (No. 5 shown in figure 3 this book) when machine is in operation.

2. Presser foot loose on Presser bar:

Tighten thumb screw.

3. Blunt Needle:

Replace with new straight needle—examine needle point.

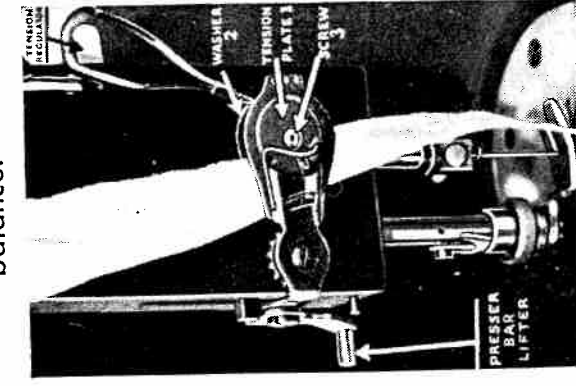
4. Needle Plate:

Bars in this plate might be slightly bent down. Needle plate hole might be rough from needle striking it. In either case a new needle plate is required.

LOOSE STITCHING

The trouble may be caused by—

1. Tension too loose—either top, bottom or both:
See instructions elsewhere on tension adjustment and balance.



2. Upper Tension fails to Operate Satisfactorily:

Lint or stray threads lodged between tension plate No. 1. Raise the presser foot lifter (see illustration). Push the tension regulator to figure No. 1, next cut a piece of **BIAS CLOTH** to a point and draw this strip of cloth through and under tension plate No. 1 and close to screw No. 3 on the side from you as shown in illustration. This cloth should be drawn down through tension plate No. 1 and washer No. 2 (as shown

in illustration), this can be accomplished by holding a tension plate (No. 1) and washer (No. 2) apart with a small screw driver. Be careful to draw the cloth

between plate No. 1 and washer No. 2. When you have this cloth in place, drop the presser bar lifter, move the tension regulator toward No. 8 and pull the cloth up and down a few times which will remove any bits of thread or lint from between tension plate No. 1 and washer No. 2.

IF MACHINE RUNS HARD

The trouble may be caused by—

1. Needs Oiling:

See instructions elsewhere on this requirement. Use only Kenmore sewing machine oil. Do **not** use oil recommended as a rust preventative and furniture polish.

2. Threads in Shuttle Race:

Remove shuttle (see instructions elsewhere in this book on how to remove and replace shuttle) and clean race and drivers. Exercise extreme care to replace shuttle correctly. Sometimes satisfactory results can be had by running machine backwards **without** machine being threaded and **without** goods under the presser foot. If this fails, remove shuttle and clean as above directed.

IF STITCHING IS OUT OF LINE

The trouble may be caused by—

1. Tension too loose:

See instructions elsewhere on tension adjustment.

2. Auxiliary spring not threaded properly.

See instructions elsewhere on proper threading (No. 5, Fig. 3).

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Important: Be sure to state model number of machine. Tilt head and look for name plate attached to front of bed plate flange (immediately beneath bed plate).