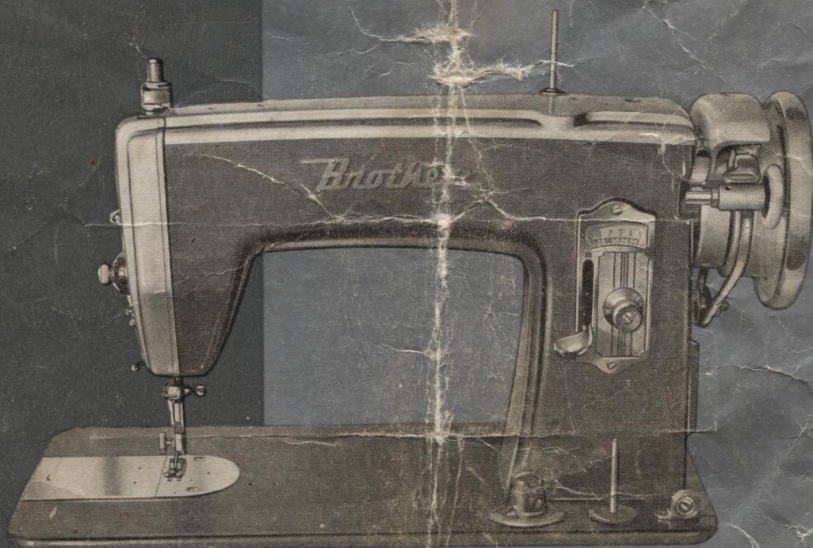


How to enjoy and use your

Brother

WINDOW-MATIC*



The Modern Way to Easy Sewing

Welcome

... welcome to the growing family of happy owners of the new Window-Matic Stitch Regulator sewing machine. Your Machine is one of the finest full-size sewing machines made, and it incorporates all these wonderful features:



Read your **BROTHER Window-Matic Instruction Booklet**. It has been written to fully acquaint you with every phase of this new **BROTHER Sewing Machine**. Before using your Window-Matic, please carefully read these instructions.

**BROTHER INTERNATIONAL CORPORATION
(EUROPE) LTD.**

Head Office and Factory:
SANTRY, DUBLIN, IRELAND.

BROTHER INTERNATIONAL CORPORATION (EUROPE) LTD.
1-2 ALFRED PLACE, LONDON, W.C.1

1. **WINDOW-MATIC STITCH REGULATOR** with its large window dial stitch-length indicator.
2. **BUILT-IN SEWLIGHT** that floods your work with a non-glare light.
3. **INSTANT REVERSE-SEWING** by just flicking a lever
4. **DROP-FEED** for embroidery and darning
5. **NUMBERED THREAD TENSION DIAL**
6. **AUTOMATIC BOBBIN WINDER.** Self-adjusting
7. **HINGED PRESSER FOOT** that rides over pins, seams, etc
8. **AUTOMATIC TENSION RELEASE**
9. **NOTCHED SHUTTLE HOOK** that prevents thread from tangling
10. **SNAP-OUT RACE** for convenience in cleaning

Your machine is precision-built for a lifetime of sewing pleasure. It will require a minimum amount of servicing and will give the maximum satisfaction. Needles, bobbins and other parts are interchangeable with other machines of first class manufacture.

This manual provides all the information needed to operate the machine and to care for it properly. Hence, read through the book thoroughly so that you may become familiar with the behaviour and operation of the machine. Follow all instructions closely.

**Follow the instructions and enjoy
sewing with your
BROTHER WINDOW-MATIC**

- Keep the machine cleaned and well oiled
- Adjust tensions, etc. properly
- Use correct size needles

**NEVER ATTEMPT TO USE A
BENT NEEDLE, NOR ONE
WITH A BLUNT POINT.**

**WHEN PURCHASING NEEDLES
FOR THIS MACHINE ASK
FOR 15 x 1 NEEDLES ONLY.**

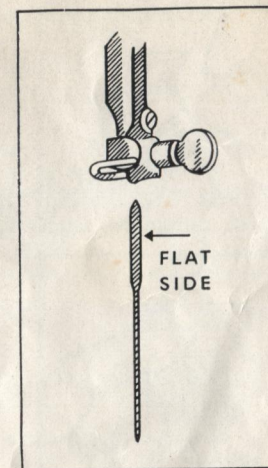
Sizes and Grades of Needles	Type of Fabric and Work to be Done	SIZE OF THREAD		
		Cotton	Silk	Linen
11 (Medium-Fine)	Nylons and Plastics, Medium and light-weight and summer-time fabrics. For house dresses, children's dresses, washable cotton dresses, aprons, curtains.	80 to 100		
14 (Medium)	Dress silks and cottons, light-weight woollens, draperies, fabric furnishings. For general household sewing, fine men's shirts, smocks, window draperies and fabric decorations.	60 to 80	0 A & B Twist	
16 (Light-Heavy)	Heavy cretonne, madras, muslin, brocades and quilts. For men's work shirts, sturdy smocks and aprons, heavy quilting and fabric furnishings.	40 to 60	Twist C	
18 (Medium-Heavy)	Heavy woven coating, light-weight canvas, bed ticking, upholstery and awning materials, slipcover fabrics. For work on sports uniforms, suits made of strong linen or cotton fabrics, awnings, slip covers and mattresses.	24 to 30	Twist D	60
	Heavy woven suiting, coating, duck, ticking, drilling, canvas and sacking. For heavy wash uniforms, bedding supplies for hospitals, hotels and camps.		Twist E	to 80

In general sewing, use the same size thread in the bobbin as used on top

To Set the Needle

Raise needle to its highest point by turning the balance wheel towards you by hand. Loosen the needle-clamp screw on the right hand side of the needle bar. Remove the old needle and slide new needle up—**FLAT SIDE TOWARDS BALANCE WHEEL**—until it hits the stop. Then tighten the needle-clamp screw securely.

For best results change needles frequently.



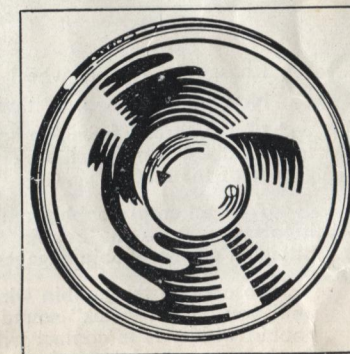
The Balance Wheel

WHEN SEWING, WINDING BOBBINS, OR CHANGING NEEDLES, ALWAYS TURN THE BALANCE WHEEL TOWARDS YOU.

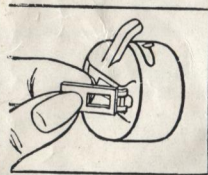
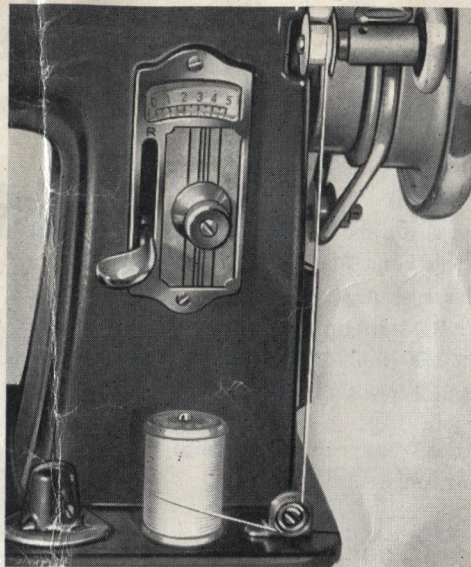
The balance wheel is provided with a stop-motion device which allows the balance wheel to run freely so that bobbins may be wound without operating the needle.

To loosen the wheel, hold it tightly with the left hand and, with the right hand, turn the stop-motion knob towards you. See arrow.

To tighten the balance wheel, turn stop-motion knob away from you.



To Wind the Bobbin



First remove the bobbin case as follows: Turn the balance wheel toward you until the needle bar is at its highest point. Move the slide plate to the left, and with two fingers grasp the hinged-latch on the bobbin case and remove the case.

The bobbin will remain in the case as long as you hold on to the hinged-latch. Close the latch and the bobbin will fall out.

Loosen the balance wheel (as explained on Page 5).

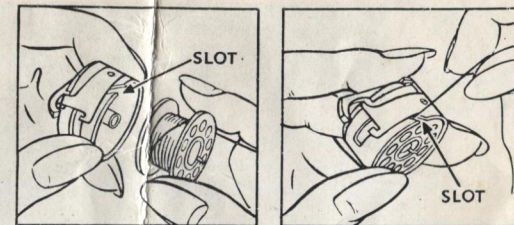
Now place a spool of thread on the spool pin, see picture. Take the end of the thread from the spool and pass it through the bobbin winder tension discs from beneath. The tension discs are located at the right hand corner of the machine.

Take an empty bobbin and wind seven or eight turns of thread around it to start. Press the bobbin on the stud of the bobbin winder until the little slot on the bobbin engages the pin on the stud.

To operate the bobbin winder, merely press it down with your thumb until you hear a "click" sound which means that the rubber wheel of the bobbin winder is in contact with the hub of the balance wheel. Now turn the balance wheel towards you a few times and gently step on the foot pedal. This will cause the bobbin winder to operate. When the bobbin is fully wound it will automatically spring back and stop. Break the thread and remove the bobbin from the bobbin winder stud.

To re-engage the balance wheel, hold it with your left hand. With your right hand turn the stop-motion knob away from you until it is quite tight. See page 5

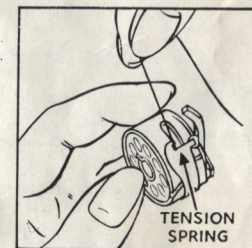
Threading the Bobbin Case



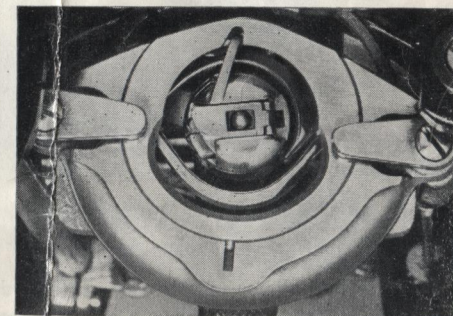
Hold the bobbin case between the thumb and forefinger of your left hand with the slot in the edge facing up.

Hold the wound bobbin between the thumb and two fingers of your right hand with the thread on top leading away from you (see pictures).

Insert the bobbin into the case, pull the thread into the slot, then down under the spring until it enters the delivery eye.



Inserting the Bobbin Case



(Be sure the needle is at its highest point).

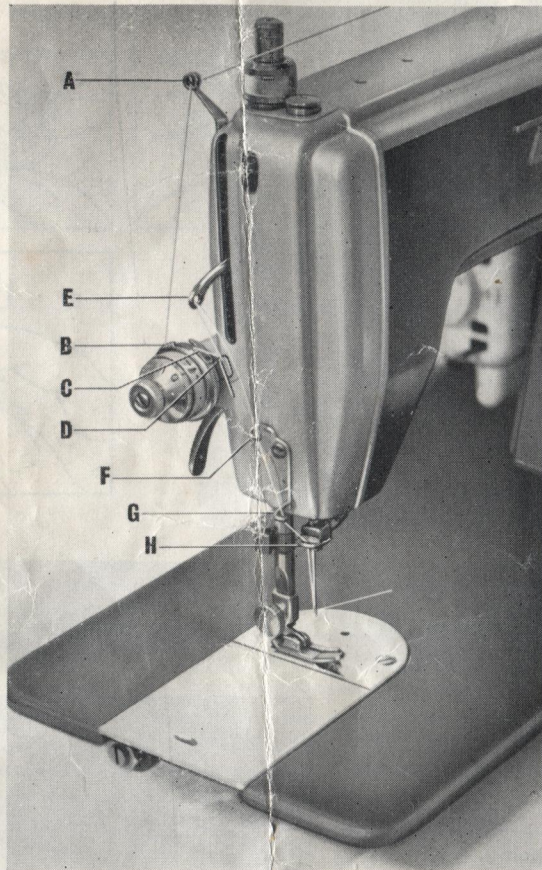
Hold the bobbin case with your left hand by the hinged-latch with the metal finger of the case pointing up and in line with the notch at the top of the bobbin raceway.

Release the hinged-latch and, fitting the centre of the bobbin over the centre-pin protruding from the raceway, press the bobbin gently into position making sure that the metal finger fits into the notch of the raceway.

The 5 or 6 inches of thread hanging freely from the case will be brought up later through the hole in the centre of the needle plate.

Close the slide plate.

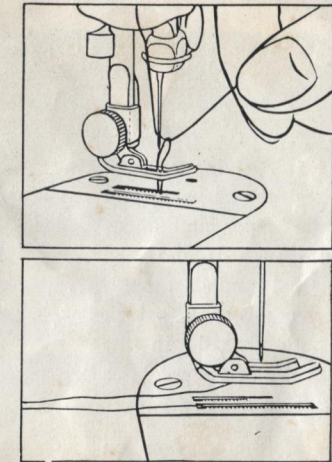
Threading the Machine



Turn the balance wheel by hand towards you until the take-up lever (e) is at its highest point. Place a spool of thread on the spool pin on the top right of the machine. Pass the thread through the notch (a) on the back left of the machine; then down and behind thread tension disc (b) bringing the thread through eyelet (c); then down into the hook of the take-up spring (d) and up through the hole in the end of the take-up lever (e) from the back. Now down through eyelets (f) and (g) in front of the faceplate and into the wire thread guide (h) at the lower end of the needle bar and finally from left to right through the eyelet of the needle. Draw about 6" of thread through the eyelet of needle with which to commence sewing.

To Prepare for Sewing

Pick up the thread as follows: hold the loose end of the needle thread in your left hand, turn the balance wheel towards you by hand until the needle moves down and up again to its highest point. Pull the needle thread gently, and the bobbin thread will come up with it in the form of a loop through the needle hole. With your finger, pull this loop until the end of the thread appears. (If the bobbin thread does not rise, check to see if at least 5 or 6 inches of bobbin thread is hanging loosely from the bobbin case). Then draw both ends of the thread back under the presser foot and through the toes of the presser foot.



Place the material to be sewn beneath the presser foot, and lower the presser foot lever. Insert needle into material by turning the balance wheel towards you, from top down, by hand. Regulate stitch to desired size and start sewing.

Do not try to help the feeding of the work by pulling the material, as this may bend the needle and cause it to become blunt or break. As the machine feeds without any assistance, it is sufficient merely to guide the fabric gently by hand in the direction you want it to be sewn.

IT IS ADVISABLE TO TEST THE TENSION AND THE STITCH LENGTH ON TWO PIECES OF SCRAP MATERIAL BEFORE STARTING TO SEW THE ACTUAL GARMENT.

IMPORTANT NOTICE. *Never operate the machine without material under the presser foot. If this is not strictly adhered to your machine will lock, and cannot be operated until the thread is cleaned out of the race.*

To Remove the Work

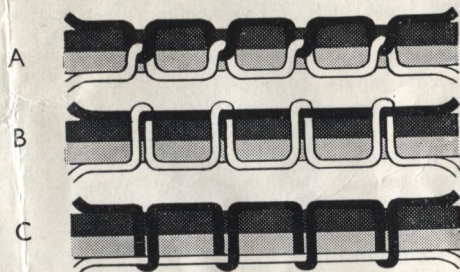
To remove the work, stop the machine with the needle at its highest point. Raise the presser foot and draw the fabric back and to the left passing the thread cutter and pulling down lightly to cut them.

Regulating the Stitch Formation

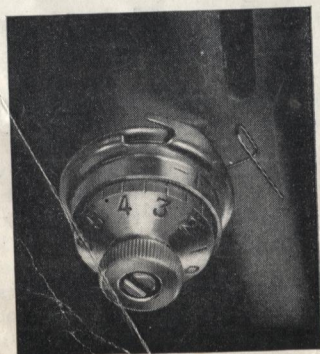
For ordinary stitching the tension on the upper and under threads should be equal and just sufficiently strong to lock both threads in the centre of the work, as shown above (A).

If the tension on the needle is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material thus making an imperfect stitch, as shown above (B).

If the tension of the bobbin thread is too tight, or if that on the needle is too loose, the bobbin thread will be straight along the under side of the material, thus making an imperfect stitch, as shown above (C).



Regulating the Tension



A correct stitch can usually be obtained by varying the tension on the needle thread.

All adjustments should be made while the pressure foot is down, since the automatic release does not permit adjustments to be made while the presser foot is up.

To increase the tension, turn the thumb nut on the tension spring toward you, toward "+" mark on dial. To lessen the tension, turn the nut in the opposite direction, toward "-" mark. The thumb nut should not be turned abruptly, but regulated little by little, until the desired tension is obtained.

The quality of sewing depends on the thread. Hence, it is necessary for the user to become fully familiar with the correct tensions, through practice.

To Regulate the Length of the Stitch

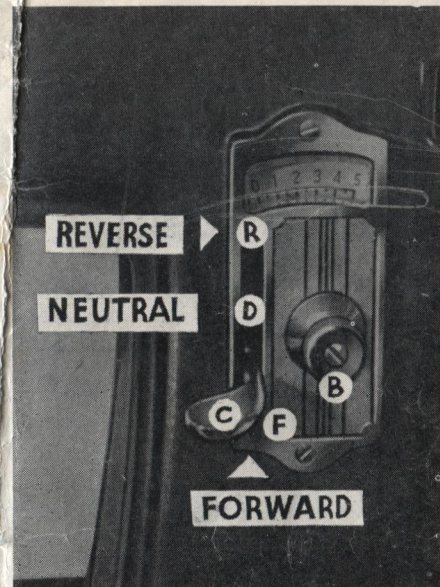
The NUMBERED DIAL in the WINDOW is your stitch length guide. While the chart shows numbers from 0 to 5 and graduations by halves, adjustments are made by the quarter-marks. Hence, you have a full range of stitch lengths for all weights of fabrics.

The higher the number the longer the stitch. For silks, nylons and thin materials use the low numbers. For slip covers, draperies, sheets, dresses, etc., use numbers 3 to 4. For heavier fabrics, set the dial at 4 to 5.

To regulate the stitch, proceed as follows: First move the Lever (C) to its Neutral position (D). Then turn the Knob (B) until the red arrow under the numbers points to the stitch length you want. Each click of the Knob is a different stitch length.

Next, LOWER THE LEVER ALL THE WAY DOWN.

If you find after the first few stitches that you want to CHANGE the STITCH LENGTH, bring the Lever back to neutral position; make the change; and then LOWER the Lever.



To Reverse Sew

When reverse stitching is wanted for tying or tacking seams, just push the Lever (C) all the way UP.

The stitch length will remain the same because this is controlled automatically by the WINDOW-MATIC mechanism.

NEVER SEW OR USE THE MACHINE *with the lever in the NEUTRAL position.*

TO ADJUST THE BOBBIN TENSION. All sewing machines are correctly adjusted before leaving the factory, and it is therefore seldom necessary to alter the bobbin tension. Should it become necessary to do so, however, due to using certain kinds of materials, the adjusting screw in the tension spring on the outside of the bobbin case can be tightened so as to increase the tension, or loosened slightly in order to lessen the tension.

For Darning and Embroidery

When sewing different materials, it is best to have the proper feed. Therefore, adjust the feed according to the material you are sewing. Remember that the extreme right position is the strongest feed for normal weight materials, whilst the centre position should be used for lighter weight materials.



In conjunction with the above, remember the lighter the material the lighter the pressure required, the heavier the material the heavier the pressure. This is regulated by releasing or adding pressure to the quick-release button, as illustrated.



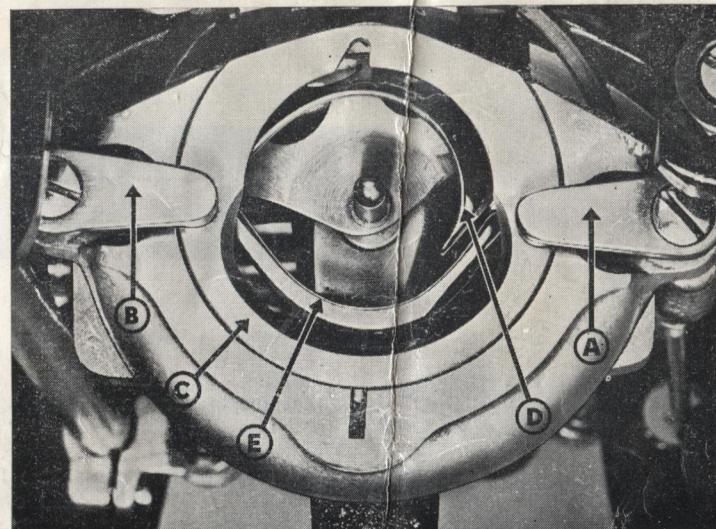
For darning and embroidery, release the pressure on your quick-release button, make sure that your drop feed is at the central position. Now lower your pressure foot and, holding the cloth taut, commence sewing.

It is advisable that you practice with a scrap of material before attempting any major repair, so that you will learn to control the stitching evenly. Be sure to keep the material constantly moving, as permitting the cloth to remain in one place while sewing may cause your thread to break.

It is advantageous to use the darning attachment supplied and a hoop for such type of work. In this instance, you remove the normal foot replacing this with the darning attachment—make sure that your drop feed is at the extreme left position, lower your pressure foot and you are ready to sew once again.

TO REGULATE PRESSURE OF THE PRESSER FOOT IN REGULAR SEWING. Always maintain just enough pressure to keep the cloth moving and to permit the machine to make a straight seam. When material does not feed through the machine properly, there may be too much pressure of the presser foot. Adjust this by allowing the darning device to rise slightly. Test the new adjustment before sewing. Alternatively, heavier fabrics may be sewn by adjusting the Drop-Feed.

To Remove Accumulated Lint or Thread from "Easy Clean" Race

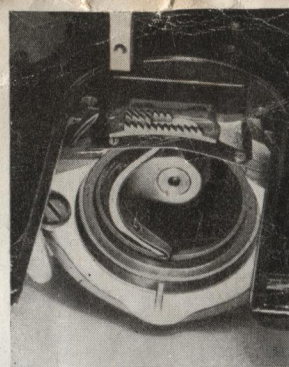


1. Turn the balance wheel by hand until needle is at its highest point.
2. Remove bobbin and bobbin case.
3. Turn clip (A) one half turn towards you.
4. Turn clip (B) one half turn towards you.
5. Remove retaining ring (C) and hook (D) by holding axle of hook (D).
6. Remove accumulated lint and thread from retaining ring, hook and race body.
7. Replace hook (D) in race body, with axle facing out, to form a perfect circle with Driver (E).
8. Replace retaining ring (C) polished side out so that both grooves are under knobs (A) and (B).
9. Lock retaining ring with knobs (A) and (B).
10. Replace bobbin and bobbin case and commence sewing.

DO NOT ATTEMPT TO FORCE ANY OF THE ABOVE OPERATIONS

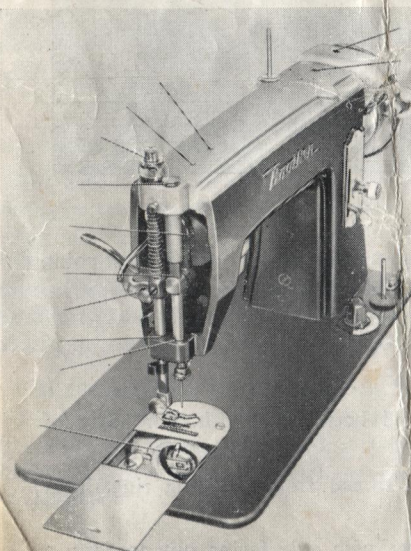
TO REPLACE THE BULB

Lower the left end of the shade. Turn the bulb $\frac{1}{4}$ -turn to the left and the bulb will drop out. Please note: this bulb uses the "bayonet and socket" type base. Take the burnt-out bulb to your dealer to be certain you get the right bulb. It is also advisable to keep a spare bulb on hand.



Lint, dust and threads collecting in the machine will cause it to become sluggish. To clean the machine, first disconnect the electric cord. Then remove the needle, presser foot, slide plate and throat plate. Also remove the bobbin and bobbin case. Brush the exposed parts thoroughly. Remove any packed lint with a stout darning needle. Clean the inside of the bobbin case and under the spring. Also clean the raceway as instructed on Page 12. (Leave the machine in this condition for oiling.)

Oiling the Machine



- Use only a good grade of oil. Inferior oils may cause the machine to become sluggish.
- Use only oil specified "for Sewing Machines."
- If you use the machine frequently it should be oiled every day, preferably when putting the machine away. When not in constant use oil the machine just before using.
- Use ONE drop of oil on bearings, and wherever one part rubs against another, or turns within another part.
- Some such parts are visible to the eye; others are hidden inside the castings so look for all oil holes in the castings as indicated by arrows in the picture. Insert the oil can nozzle well into the oil hole.

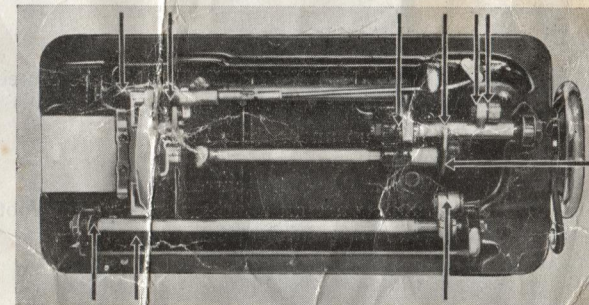
Before oiling the oil hole to the RIGHT of the spool-pin on top of the machine, turn the balance

wheel until the needle is DOWN at its lowest point, and look into the oil hole to see that the oil receptacle on the shaft is in position.

Also remove the face plate by loosening the screw near the top and lifting the face plate up and off. Turn the balance wheel slowly by hand and watch the mechanism under the face plate to see which parts move and require oil.

Next, put three drops of oil in the bobbin raceway after the race has been removed. (See illustration at top of Page 15.)

The machine is also to be oiled from the back. Loosen the screw holding the metal plate, move the plate out of the way, and tighten the screw to hold it there. Turn the balance wheel slowly in order to see which parts move and require oil.



Now tilt the machine back and again turn the balance wheel slowly to locate the bearings and other moving parts. Here, too, you will find some oil holes in the castings.

Wipe away all excess oil from all parts of the machine. Run the machine rapidly for a minute to allow the oil to penetrate into the bearings.

Finally, sew some scrap material to be sure that no oil will drip from the needle bar on to your material.

TO OIL THE MOTOR

One drop of oil in the motor bearings every six months is sufficient to enable your motor to last many years. Oil holes are located at accessible points. We suggest a heavier oil (such as SAE-20 grade).

If your machine has been standing idle for many months it will require a thorough cleaning and oiling. This is best done by your sewing machine dealer.

SKIPPED STITCHES. May be caused by a bent or blunt needle; or by incorrect setting of the needle; or the wrong size needle; or by a thread too heavy for the size of the needle.

SEE THAT THE PRESSER FOOT is snug against the presser bar and securely clamped by the screw so that the needle will pass through the opening in the foot without any interference.

BREAKING NEEDLES. Usually due to pulling on the work, causing the needle to get out of line and striking the throat plate thus breaking or bending the needle. This may be due to presser foot or attachments not being securely fastened to presser bar. Be sure to use correct size needle and thread for material.

BREAKING THE UPPER THREAD. May be caused by:

- (1) Incorrect thread.
- (2) Not bringing up under thread correctly.
- (3) Upper tension too tight.
- (4) Needle imperfect, or set incorrectly.
- (5) Needle rubbing against attachments or presser foot.
- (6) Needle eye too small for thread.
- (7) Starting the machine at full speed.
- (8) Starting without take-up lever at highest point.

BREAKING THE LOWER THREAD. May be caused by:

- (1) Incorrect threading of bobbin case.
- (2) Too tight a tension.
- (3) Bobbin wound too full to revolve freely.
- (4) Not bringing up under thread correctly.
- (5) Hole in the needle plate becoming rough, caused by needle striking the plate.
- (6) Dust or lint in bobbin.

UNEVEN STITCHES. May be caused by:

- (1) Presser foot not resting evenly on material.
- (2) Feed not high enough.
- (3) Too short a stitch.
- (4) Pulling the cloth.
- (5) Too fine a needle with too coarse (or poor) a thread.