



Your Sewing Machine



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KNOW YOUR SEWING MACHINE

The modern homemaker must know her sewing machine. She works with many new fabrics and fiber combinations used today in clothes. New and different textures and fabric weights have come on the market.

Threading of machine and tension must be correct.



Fig. 1. Both Tensions Correct



Fig. 2. Tight Upper Tension



Fig. 3. Tight Lower Tension

When the upper and lower tensions are drawn into the fabric equally you have a perfectly locked stitch. See figs. 1, 2 and 3.

ADJUST TENSION

The bobbin and top tensions on many sewing machines are often adjusted tighter than need be for any fabric. Keep both upper and lower tension adjusted on the loose or easy side. Then adjust to changes for differences in weight, texture and fiber content of the various fabrics. To prevent uneven tension in stitching make sure bobbin is wound evenly. When bobbin winds to one side adjust bobbin winder.

REGULATE LENGTH OF STITCH

About 12 to 15 stitches to the inch are desirable for ordinary sewing. Very long stitches are used for machine basting. That is 6 to 8 stitches to the inch. For a tailored buttonhole or pocket use a medium stitch such as 14 to 16 stitches to the inch. For curved seams that are trimmed very close a shorter stitch, such as 16 to 20 stitches to the inch gives strength. Stitching to produce gathering requires a long stitch, or 6 to 8 stitches to the inch. It varies with the texture of the fabric.

CHECK NEEDLE AND THREAD

Correct needle and thread are important. Change your needle and thread to suit your fabric. Consult chart on how to sew synthetics. Be sure the needle is right for your machine. Set the needle properly. If the needle is not set properly your machine may skip stitches or the needle may break. Always sew with a sharp, straight needle.

THE PRESSER FOOT

With the increased use of man-made fibers as well as new fabric finishes, correct pressure, suited to each fabric is important.

Pressure on the presser foot should be regulated to accommodate the texture, finish and thickness of the fabric being sewn.

Note: When adjusting the machine to different weight texture or finish, adjust the pressure along with the tension and stitch length.

Test: Stitch on the lengthwise grain on two strips the same length and width. If all adjustments are correct, there will be no slipping either in length or width and the seam will be free from puckers.

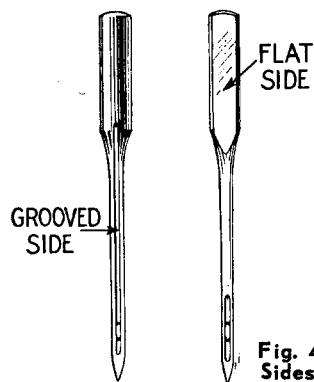
SEWING TROUBLES

If the thread breaks:

1. Have you checked threading of machine?
2. Do you have proper needle for your machine?
3. Do you have the proper size needle for the thread and fabric?
4. Is the needle set properly?
5. Are the eye and point of the needle in good condition? A rough or burred eye will fray and break the thread. A blunt point may do the same.
6. Is the needle hole in the throat plate smooth?
7. Is the presser foot smooth on the under side? A roughened presser foot will prevent proper feeding of the fabric into the machine and may snag the fabric.
8. Check all thread handling parts. Even a slight roughness in any part through which the thread passes may fray or break the thread.
9. Are your bobbins wound evenly and smoothly and not too full?
10. Are you stopping each line of stitching properly; with i.e., the needle up and the take-up-lever at its highest point?
11. Do you carefully keep the thread ends out under and back to the left side of the presser foot when you start to stitch?
12. Are the tensions right for the fabric you are stitching?
13. Have you checked the bobbin case or shuttle to see that it is free from lint and dust?

If the needle breaks, check for:

1. Improper size needle.
2. Pulling material as you sew.
3. Needle striking improperly fastened foot or attachment.
4. Crossing very thick seams with too small a needle. See fig. 4.



You will note that the side of the needle with the flat on the shank has a short groove at the eye while the other side has a long groove. On all machines, the needle is threaded from the long groove side. If the needle is not placed correctly in the machine, it will not sew.

Fig. 4. Flat and Grooved Sides of Needle (Enlarged)

If the machine skips stitches check:

1. Is needle the proper length for your machine?
2. What is the position of needle?
3. What is the condition of needle? Is it blunt or bent? See fig. 5.
4. What is the size of needle in relation to thread?
5. Is threading of machine correct at top and bottom?
6. What is the condition of needle hole in throat plate?
Does it rub against side of presser foot as you sew?

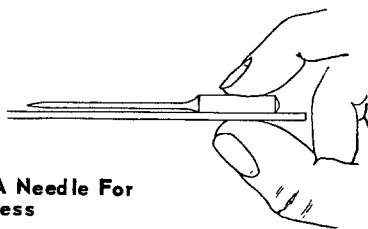


Fig. 5. Testing A Needle For Straightness

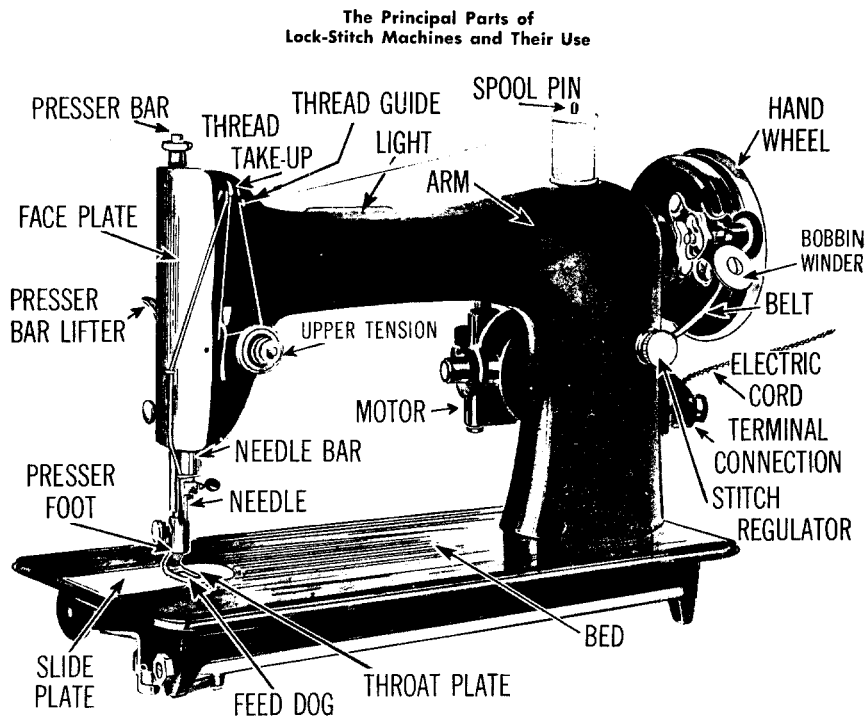
CLEANING AND OILING

A sewing machine will not function properly if the working parts are allowed to become dry or gummed with a poor grade of oil.

For best results purchase oil recommended by a sewing machine manufacturer.

- a. Remove throat plate, bobbin, bobbin case, needle and presser foot. Clean and oil the shuttle case.

- b. Take off face plate to give access to the oiling points on the needle bar, presser bar and thread take up. Put one drop of oil into each oil hole and joint.
- c. Tilt the head back to reach the oiling points on the under side. Turn balance wheel and observe all working parts. A single drop of oil at each bearing oil hole is sufficient.
- d. The motor and gears require a lubricant or grease made especially for this purpose. It comes in tubes. The lubricant is squeezed directly into the gear and into cups on the motor. Again a small amount goes a long way.



Principal Parts of the Head

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