Your Sewing Machine

CARE AND ADJUSTMENT

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The instruction book that comes with each sewing machine should be kept for help in adjusting the machine and in using the attachments. The information in this bulletin is intended to supplement that found in the instruction book.

The sewing machine must be in good running condition in order to do a good piece of sewing. A good sewing machine will last from 50 to 60 years with periodic cleaning and occasional adjustment.

CLEANING AND OILING

The use of the machine determines the frequency with which it should be cleaned and oiled. Sewing machines used continuously all day require daily oiling and cleaning. If used moderately, a few hours a day, oiling and cleaning once or twice a week is sufficient.
sewing machine, like all other machinery, will not give satisfactory service if the working parts are allowed to become dirty, dry, or gummed. A sewing machine that has not received the proper care will run hard, and energy is wasted by using a machine in this condition. Always remove dust, lint, and bits of thread before oiling any part of the machine or stand.

**OIL**

Oil that is not suitable for sewing machines causes some of the common difficulties. A poor grade of oil or general-purpose oil often leaves a gummy residue that is difficult to remove.

Only oil that is prepared especially for sewing machines and recommended by a sewing machine company should be used.

**CLEANER**

Kerosene is a satisfactory cleaner to cut the gummy substance that collects on the mechanical parts of a machine.

Cleaning solvent or gasoline will also cut the dirt and hardened oil. *If either of these is used, the work must be done out-of-doors.*

Paint or varnish remover will quickly remove difficult spots of collected and hardened oil. It should be used sparingly and with care, for a drop on a painted section will remove the finish.

**DIRECTIONS FOR CLEANING AND OILING**

Place the sewing machine in good light and cover the floor underneath with layers of newspapers. If the weather permits, it is preferable to work out-of-doors or on an open porch. Work *must* be done out-of-doors if cleaning solvent or gasoline is used.

Assemble cleaning supplies. Good screw drivers, kerosene or other cleaner, a small brush, a stilleto, a wire hairpin or similar article, a pie tin, old cloths, several small dishes, a good grade of sewing machine oil, a sharp knife, a pair of scissors, sewing thread, and scraps of material are necessary.

An oil can of pint or quart size from which to squirt kerosene or other cleaner into the working parts, a pair of pliers, and wing feathers from chickens or turkeys are desirable. Proceed as follows:

1. Remove the thread, needle, presser foot, bobbin, and shuttle. Remove the bed slide, the throat plate, and the face plate. (See Figure 1.)

   In some machines the needle bar is removed with the face plate. In this instance, observe carefully the position of any loose parts in order to avoid difficulty in reassembling.

2. With a stilleto, hairpin, toothpick, or other small instrument, remove the lint and dust that usually collects under and around the feed and shuttle mechanism.

3. Place a pie tin under the left arm of the machine. Brush kerosene over all the mechanism exposed by the removal of the face
plate; or if an oil can filled with kerosene is available, squirt a generous amount into each oiling place and on each moving part.

4. Run the machine for a moment to work the kerosene into the working parts.

5. With a brush or an old cloth, vigorously clean all the parts in and about the needle bar housing.

The bobbin winder may be removed and soaked in a dish of kerosene while cleaning the other parts of the machine.

6. Next tip the head of the machine back. Remove all lint, especially around the feed dog and shuttle race. (See Figure 1.)

Hold the pie tin under the mechanism; brush and clean with kerosene from the underside.

Use varnish remover for stubborn spots of hardened oil.

Some oscillating shuttle machines have a piece of red flannel in the shuttle case for oiling the race. The flannel should be removed, cleaned, and replaced.

If the mechanical parts are badly gummed, the head of the machine may be removed from the stand and soaked overnight in a dishpan or other flat container of kerosene.

The head is first stripped of the parts mentioned under step 1, plus any rubber parts such as the ring on the bobbin winder.

This method requires more cleaner, but saves time and effort and reaches inaccessible parts.

7. Proceed to the stand and remove all thread wrapped around the large band wheel bearings.

With brush and kerosene clean the bearings in the treadle, the pitman rod, and the band wheel.

8. With a clean cloth wipe dry all parts of the machine.

9. Allow several hours for all kerosene to evaporate. This much may be done one day and the oiling on the following day.

10. Oil the machine as you put it back together. Ordinarily one drop of oil in each oil hole is enough, but after a thorough cleaning several drops are needed.

Oil should be put into each oil hole and wherever two moving parts make contact. These points may be located by turning the hand wheel slowly. This also helps to distribute the oil over the mechanism. Wipe away any excess oil.

Note: Use care in reassembling machines with a flat needle bar such as the New Home or Domestic. It is easy to overtighten the screws at the back of the outer arm. If the hand wheel turns hard in spots, loosen these screws, then tighten those of the face plate.

11. When all parts are replaced and thoroughly oiled, stitch on scraps of goods to take up excess oil and to make adjustments.

**ELECTRIC SEWING MACHINES**

The care and adjustment for electric machines with few exceptions is the same as that for treadle machines.
The electric machine is usually run at a higher speed than the treadle and, since it is motor-operated, one is not at once aware of the hard running indicative of dirt, lack of oil, or gummed oil. Because of this the care of the electric machine should be systematic.

The motor requires periodic lubrication. Consult the instruction book for frequency and kind of lubrication. Oil is required for some motors and grease for others.

**COMMON SEWING MACHINE TROUBLES**

Frequently difficulty is caused by using a machine needle not suitable to that particular make of machine.

If the last good needle for an old machine is broken, be sure to save the pieces so they may be compared with needles purchased later. To identify a needle compare the length, size of shank, and distance from end of shank to eye of needle.

**SKIPPED STITCHES**

The needle is not accurately set, is too short, is blunt, or is too small for the thread used.

**LOOPED STITCHES**

The threading is not correct, the bobbin is in wrong, or the tension needs adjusting. Adjust top tension first, then if necessary adjust lower tension.

**UPPER THREAD BREAKS**

Machine is improperly threaded, tension is too tight, thread is too coarse for size of needle, the needle is set with flat side facing wrong direction, or there is a rough place on needle hole in throat plate.

**PUCKERED MATERIAL**

One or both tensions are too tight, the needle is dull or blunted, or the stitch is too long for fine material.

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**Figure 2. Adjustment screws for lower tension.**

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