

JOB ROLE – SEWING MACHINE OPERATOR

Sector – Apparel, Made-Ups and Home Furnishing
(Qualification Pack Code: AMH/Q 0301)



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UNIT 4: CARE AND MAINTENANCE OF SEWING MACHINE

Session 1: Cleaning, Oiling and Handling of Sewing Machine

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Session Objectives

The students will be able to:

- Explain cleaning procedure of sewing machine
- Demonstrate cleaning procedure of sewing machine
- State points to be remember while cleaning of sewing machine
- Describe oiling procedure of sewing machine
- Demonstrate method for oiling of sewing machine
- State points to be remember while oiling of sewing machine
- Describe handling of sewing machine
- Explain handling of material, tools and equipment

Introduction

The care and maintenance of sewing machine helps to improve its working. This consists mainly of cleaning, oiling and right handling of sewing machine and good quality production. Care and maintenance is also necessary in order to operate the machine smoothly and for its long term use. A clean, well-oiled sewing machine is essential for good output and safety. The maintenance of sewing machine is also important in preventing stitching faults. When not in use, keep the machine covered with a suitable cover to prevent dust from settling on it.

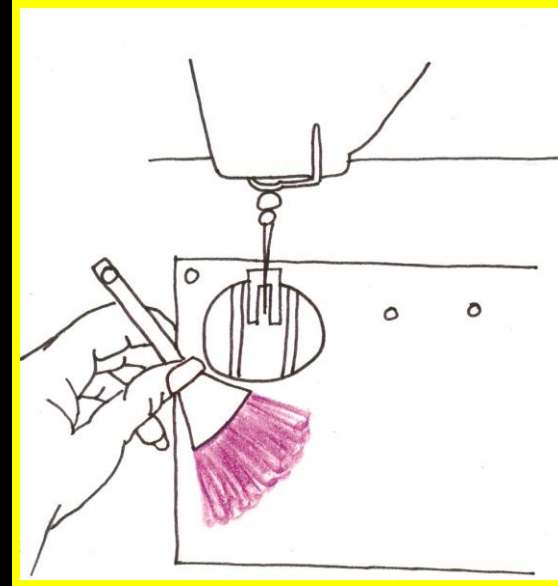
Cleaning of Sewing Machine

While cleaning the machine, pay attention to the various parts and attachments of the sewing machine. Before attempting to clean the machine, it is wise to remove the needle to avoid the danger of sewing into the finger during the cleaning process.

Material Required:

- Flat paintbrush ($\frac{1}{2}$ " to $\frac{3}{4}$ " wide)
- Cleaning solvent or fluid
- Soft disposable cloth
- Screwdriver
- Sewing machine manual
- Small handy vacuum cleaner

All dust and dirt can be removed by wiping the part out carefully with the cloth, but if the machine is clogged, a more careful cleaning is necessary.



Points to be considered while cleaning:

- Turn off the sewing machine
- Open the slide plate, remove the throat plate also remove the face plate from the left end of the head.
- Any lint, dust or loose threads in the area around the feed dog and rotary hook, shuttle may be brushed or blown away.
- Use a soft, thin and clean cloth to remove any lint on the machine parts.
- Wipe away any excess oil or dust, if you have oiled the machine, sew on few scraps to remove any excess oil. Wash hands after cleaning and oiling the machine.
- If there is lint between the tension discs and in the thread guide, use thread to floss the tension discs.

- It is good to clean one area at a time. Remove only those parts that are detachable, and keep in mind the position and direction of each part that is removed for cleaning.
- Remove all the parts that is, the needle, presser foot, slide plate, throat plate, bobbin case, and the face plate. Put them in the tray and soak in cleaning fluid.
- Wrap the motor to protect it from oil and cleaning solvent.
- To clean the feed dog, needle plate and brush off all lint deposits to different parts.
- To clean the shuttle case, remove all the screws, take out the shuttle case and wipe its groove free of dirt, and thread bits.

- Use a cloth or small brush to clean near the needle and feed dog.
- The bobbin case can be removed from the sewing machine easily. Use a dry brush to clean out all lint. Remove any thread that may be wound up around the hook shaft.
- Clean the hand wheel, washer, and the shaft. Lubricate the shaft with two drops of sewing machine oil and place a small amount of grease on all gears. Reassemble the hand wheel and clutch.

Note:

- Turn the hand wheel manually to expose any areas that might have been hidden initially. Brush again.
- Carefully tilt the machine head back until the head rests on the post on the back of the table.
- Do not use anything hard such as a screwdriver or scissors points, to remove the lint. Instead, carefully use a pointed instrument like a needle or pointed tweezers/ plucker to pick out bits of thread and lint that cannot be brushed out.
- When using a screwdriver, apply pressure on the screw, if a screw does not loosen easily. Soak it in a good quality cleaning fluid available in the market for the sewing machine. Petrol or kerosene can also be used as cleaning fluids.

- Check the needle to be sure it is clean and the eye is not clogged, replace the needle, if necessary.
- After properly cleaning these areas, reassemble all the parts of the sewing machine and run it. Put a piece of fabric under the foot, lower the presser foot, cover the machine, and pick up any trash.

Oiling of Sewing Machine

Always keep your sewing machine well oiled. Use good quality sewing machine oil. Always remove lint deposits, dust and thread bits before oiling any part of the machine. In order to operate the machine smoothly, it essential to oil it repeatedly.

Material required:

- Sewing machine manual
- Sewing machine oil
- Soft disposable cloth

Points to be remember while oiling the sewing machine:

- Before oiling, ensure that the sewing machine is turned off.
- Locate oil holes of the sewing machine.

- Before oiling, ensure that the sewing machine is turned off.
- Locate oil holes of the sewing machine.
- Put one to two drops of oil into each hole.
- Wipe off all dust and excess oil from the machine or table; clean up any spilled oil immediately.
- Excess oil is a major problem that can spoil and damage the fabric. Sew on a few scraps to remove any excess oil.

Note:

- Oil the machine using the directions given in the machine manual. If a manual is not available, oil the machine as per the directions of the teacher/instructor.
- Too much oil will clog the machine.
- Wash hands after oiling the machine.

Method for oiling:

The frequency of oiling of sewing machine depends on its use, and sometimes on the material sewn. To oil thoroughly, remove the upper thread, needle plate, face plate, bobbin case, and needle and presser foot. Put sewing machine oil in all oil holes and joints where one part rubs against another. One or two drops of oil are enough for each point. It is necessary to oil the shuttle case.

When the machine has been completely oiled, wipe away excess oil, reassemble the machine and run it slowly for 2-3 minutes on a waste piece of material.

Note:

- If the sewing machine becomes gummed and dirty with oil, put a drop of kerosene or petrol in each oil hole and at joints, and run it rapidly for 1-2 minutes. Then wipe off the oil that oozes out with a soft cloth and re-oil the machine.
- Check the machine instruction booklet/manual to determine the types of oil lubricant to use and where to use them. Do not oil the tension discs, the hand wheel release or the belts and rubber rings in any machine.

Handling of Sewing Machine

Safe handling procedure of sewing machine:

The safe handling procedure of the sewing machine involves:

- (a) Setting up of the sewing machine
- (b) Adopting safety measures before starting sewing
- (c) Adopting safety measures during sewing

(a) Setting up of the sewing machine:

- (i) Position the machine on a hard flat surface.
- (ii) Select and install the needle securely into the needle bar.
- (iii) Select the suitable thread according to the type of fabric to be used.
- (iv) Wind the thread into the bobbin.

- (v) Following the thread guide, thread the machine from the spool pin to the needle.
- (vi) Set the machine of required stitch length.
- (vii) Balance the thread tension on the sewing machine (adjust the upper tension in relation to the lower tension).

(b) Adopting safety measures before starting sewing:

- (i) Cord must be in good condition. After every use, turn the machine off or unplug it.
- (ii) Lighting should be proper
- (iii) Keep the feet off the treadle when setting or threading the needle.
- (iv) Use the hand wheel to move the needle to its highest position while the fabric is placed for sewing.

(c) Adopting safety measures before starting sewing:

- (i) Practise on a scrap material to check against oil stains, etc.
- (ii) If the sewing machine makes some abnormal sounds or seems louder than usual, get it checked by a technical expert.
- (iii) Sew at a slow, steady pace and use a needle guard to protect the fingers.

Handling of Material, Tools and Equipment

Handling of Material:

- (i) Select appropriate needle, thread and stitch length suitable for the different type of fabrics.
- (ii) Make a trial stitch on the waste fabric to avoid oil stains.
- (iii) Take care to set the presser foot in a way so as hold the fabric in place.
- (iv) While sewing slippery fabrics it is advisable, use lining to give firmness to the slippery fabrics.

Care and handling of tools and equipment:

- i. Measuring Tape: The tape should be clean to check the accuracy of the markings. After each use, the measuring tape should be rolled or wrapped and kept in a clean box.

- ii. Sewing Gauge: It is a sliding marker helps to keep the measurements uniform. Do not allow the metal gauges to get bent.
- iii. Pin cushions: Select a standard pin cushion filled with fine sand, so that the abrasion of fillers may prevent the pins from dust and getting rusted.
- iv. Hand sewing needles: It is advisable to purchase hand sewing needles of good quality stainless steel material to prevent them from rusting. The needle should always be kept in a dry and clean case. To avoid damage to the point of the needle, it should not be pressed or pricked on a hard surface.

- v. Sewing needle threader: It is used for threading needle easily and quickly. Being very small, it should be kept carefully in a small box to avoid any damage.
- vi. Seam ripper: It is used to remove the fine stitches and to pick out single threads. Keep the seam ripper sharp and clean, and use it only for sewing tasks. Keep it covered when not in use.
- vii. Dressmaking shears: Use the shear for cutting fabrics and soft material only. Keep the blades sharp and clean.

- viii. Pressing cloth: A press cloth is essential to protect the fabric from direct contact with a hot iron. It should always be clean and oil free for protecting the garment from oil and dust.
- ix. Hams and sleeve rolls: They are wonderful for pressing curves. They should always be clean and oil free.

Summary

In this session, you have learnt about the cleaning and oiling of sewing machine, handling of machine & handling and care of material, tools and equipment.

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