

## TRINITY COLLEGE FOR WOMEN NAMAKKAL

#### DEPARTMENT OF COSTUME DESIGN & FASHION

#### SEWING TECHNOLOGY EVEN SEMESTER

Presented by
Ms. K.P.THEEPIKA
ASSISTANT PROFESSOR
DEPARTMENT OF CDF

http://www.trinitycollegenkl.edu.in/

### **SEWING TECHNOLOGY**

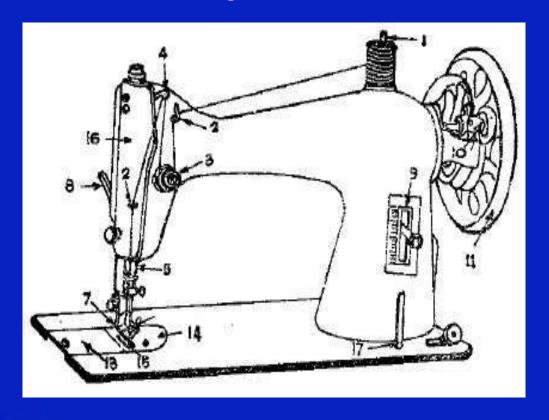


#### **INTRODUCTION**

- Sewing is the craft of fastening or attaching objects using stitches made with a needle and thread.
- Sewing is one of the oldest of the textile arts, arising in the Paleolithic era. Before the invention of spinning yarn or weaving fabric, archaeologists believe Stone Age people across Asia & Europe sewed fur and skin clothing using bone, antler or ivory needles and "thread" made of various animal body parts including sinew, catgut, and veins.
- For thousands of years, all sewing was done by hand. The invention of the sewing machine in the 19th century and the rise of computerization in the 20th century led to mass production and export of sewn objects, but hand sewing is still practiced around the world.
- Fine hand sewing is a characteristic of high-quality tailoring, haute couture fashion, and custom dressmaking, and is pursued by both textile artists and hobbyists as a means of creative expression.

# PARTS & FUNCTIONS OF SEWING MACHINES

The basic structure of sewing machine is the same whether it is hand-operated sewing, treadle sewing machine or electric sewing machine. The basic parts of a sewing are listed below and seen in Fig.



#### PARTS OF SEWING MACHINES

- 1. Spool pin: It is fitted on top of the arm to hold the reel.
- 2. Thread guide: It holds the thread in position from the spool to the needle.
- 3. Tension disc: The two concave discs put together with the convex sides facing each other. The thread passes between the two. The tension of the thread is adjusted by a spring and nut which increases or decreases pressure
- 4. Take up lever: It is a lever fitted to the body of the arm. Its up and down motion feeds the thread to the needle and tightens the loop formed by the shuttle.
- 5. Needle bar: This is a steel rod to hold the needle at one end with the help of a clamp. Its main function is to give motion to the needle.
- 6. Bobbin case: This moves into position to catch the top thread and form the stitch as the needle is lowered into the bobbin chamber.
- 7. Presser foot: It is fixed to the presser bar to hold the cloth firmly in position when lowered.
- 8. Presser foot lifter: A lever attached to the presser bar for raising and lowering the presser foot

- 9. Stitch regulator: This controls the length of the stitch.
- 10. Bobbin winder: A simple mechanism used for winding thread on the bobbin.
- 11. Fly Wheel: When this is made to revolve, it works the mechanism of the motion
- 12. Clutch or Thumb Screw: This is in the centre of the fly wheel and it engages and disengages the stitching mechanism.
- 13. Slide Plate: A rectangular plate, which facilitates the removal of the bobbin case without lifting the machine.
- 14. Needle Plate or Throat Plate: A semi-circular disc with a hole to allow the needle to pass through it.
- 15. Feed dog: This consists of a set of teeth fitted below the needle plate. It helps to move the cloth forward while sewing.
- 16. Face plate: A cover which on removal gives access to the oiling points on the needle bar, presser bar and take-up lever.
- 17. Spool pin for bobbin winding: Spool of thread is placed on this at the time of bobbin winding

## TOOLS FOR SEWING (CLOTHING CONSTRUCTION)

SEWING BOX: First and foremost you should have a box or a basket with compartments for keeping the things you need for sewing. Arrange the contents in such a way that there is a place for everything.

CUTTING TOOLS: Scissors, Dress maker's shears, Pinking Shears, Buttonhole scissors,

**Electric scissors** 

HAND SEWING AND EMBROIDERY TOOLS: Embroidery frame, Embroidery t hread, CC Needl Needle threader, Thimble, Stiletto, Bodkin.

MEASURING TOOLS: Measuring Tape, Yard stick or meter scale, L-scale, Small ruler,

CC Hem gauge, Hem marker

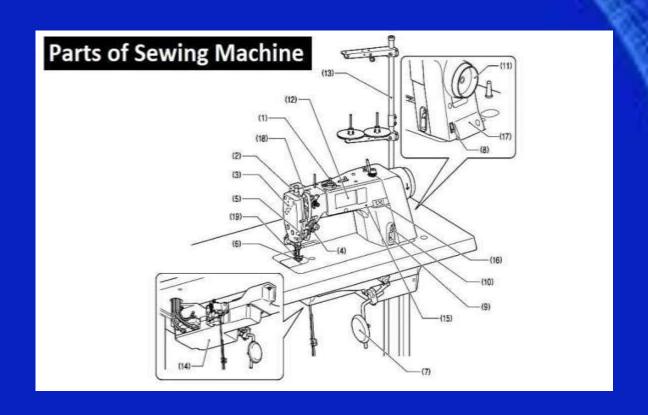
MARKING TOOLS: Dress maker's carbon, Tracing wheel, Tailor's chalk

GENERAL TOOLS: Pins, Pin cushion, Seam ripper, Orange stick, Sewing thread, Cutting

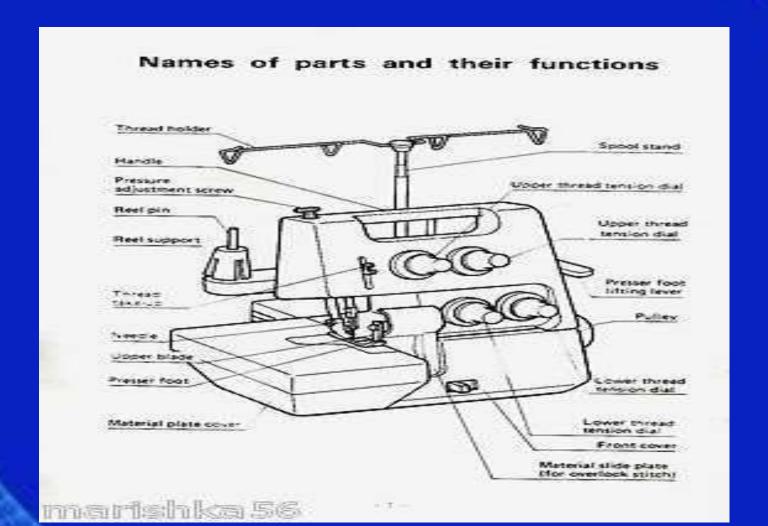
board or table, Mirror, Dress form

### Different Parts of Single Needle Lock Stitch Sewing Machine

- Bobbin Winder
- Thread wiper device
- Lifting lever
- Hand swatch A
- Hand swatch B
- Work Clamp
- Knee lifter plate
- Power stitch
- •Oil gauge window
- Oil feeding pocket
- Machine pulley
- Operation panel
- Cotton stand
- Control box
- Power indicator
- USB port
- Pulley cover
- •The thread takes up cover
- Finger guard



#### **Different Parts of overlock Machine**



### THANK YOU

http://www.trinitycollegenkl.edu.in/