

# Introduction to Sewing Machine class

## Agenda - General Intro / Information

- Manual
- Machine Parts
- Thread
- Needles
- Bobbins
- Tension
- Accessories
- Basic Operation
- Safety
- Troubleshooting
- Maintenance
- Serger

## Manual

- All machines are different – keep manual handy, refer to it for guidance
- All Spark machines have manuals available

## Machine Parts

- Power Switch (if applicable)
- Light
- Hand Wheel – turn toward you
- Take Up Lever – moves the thread through the machine
- Presser Foot Lever – up to place / remove fabric, down to sew
- Tension Dials – upper tension – adjust as needed for thread, fabric, stitch, etc
- Feed dogs – move the fabric through the machine
- Throat Plate
- Thread Guides – support the thread along the machine
- Thread Cutter
- Bobbin case & bobbin – front / side, top / bottom (impacts needle as well)
- Needle – various types, sizes dependent on project / fabric. Eye of needle faces bobbin housing
- Stitch Settings & Reverse – variety of settings, generally reverse at beginning and end of seam

## Thread

- Generally use Polyester or Cotton (or blend) All-Purpose thread
- Don't use the really "cheap" stuff or old thread
- Specialty thread (quilting, upholstery, embroidery, metallic, etc) requires changes in needle and other settings

## Needles

- Size dependent on fabric type & thickness
- Most domestic machines take the same type of needle
- Ball point (knits) vs. regular point (woven fabrics)
- Generally use Universal point, size 10-14
- Make sure needle isn't nicked or bent and is sharp

- Changing the needle – change often (generally after a couple of projects / 8 hours of sewing time or if you have hit something and damaged the point)
- Groove on needle shaft on front, ‘scarf’ on the back
- Direction of needle eye corresponds to location of bobbin
- Sharps disposal

### **Bobbins**

- Don’t use purchased, pre-wound bobbins – poor quality, likely issues
- Bobbin location (front or side)
- Generally – bobbin to spin clockwise (unless manual says otherwise)
- Bobbins - style / size (refer to manual)
- Winding a bobbin

### **Tension**

- Don’t adjust bobbin tension
- As needed adjust top tension (some newer machines don’t have)
- What a properly adjusted tension looks like on fabric
- Tension setting will vary based on fabric, thread, stitch, etc

### **Accessories - guides, feet,**

- Different feet – straight, zigzag, zipper, gathering, buttonhole, LOTS of others
- Seam guides

### **Basic Operation - speed, stitches**

- Select stitch setting – straight, zigzag, etc. Make sure you are using an appropriate throat plate.
- Select stitch length – long for basting, medium for general use
- Select stitch width – 0 for straight stitching, various others for different stitches
- Lift presser foot to place fabric – this opens the top thread tension discs
- Lower presser foot before stitching - this closes the top thread tension discs
- Moderate, rhythmic speed
- Generally reverse at beginning and end of seam to secure it
- End with needle / thread take up lever at HIGHEST position to free thread and allow removal of fabric
- Lift presser foot to remove fabric
- Leave 4” thread tails

### **Safety**

- DO NOT stitch over pins or other objects
- Keep stitch speed moderate
- Do not operate while under the influence of substance
- Keep body parts away from moving needle
- Unplug or turn off prior to changing needle or otherwise working with the machine
- Keep dangling hair, jewelry, clothing, etc. away from moving parts on machine

### **Troubleshooting (in no particular order)**

- Check to verify plugged in and light turned on (and if applicable power turned on)
- Check to verify machine is threaded properly and threaded with proper thread

- Check to verify bobbin is properly wound and correctly seated, no thread tails binding in the bobbin case
- Check needle – large enough for thread thickness, properly installed, not nicked or bent and is sharp
- Check to verify tension is properly set
- Check to verify machine is clean and oiled
- Report issues

#### Maintenance

- Using compressed air, blow away dust and lint
- Use a soft brush to sweep away any remaining dust or lint
- Refer to manual for oiling instructions. Apply ONLY sewing machine oil to moving points of contact or oil points (if applicable)
- Replace needle frequently – not just when it breaks

#### Serger

- Raise the thread guide pole
- VERIFY that thread isn't obstructed in ANY way
- Leave a long chain of stitching to prevent accidentally unthreading machine
- Does NOT have a reverse
- Don't adjust tension
- Report issues

#### Additional Notes: