

SEWING NEEDLE TROUBLESHOOTING GUIDE

Important Points to Remember

- Needles DO NOT last forever, they should be replaced approximately every 8 hours
- The eye of the needle should be 40% larger than the diameter of the thread
- When going to a larger size of thread, a larger needle should be used
- Use the appropriate needle for the type of fabric being sewn

Problem	Causes	Solutions
Upper Thread Breaks	Incorrect threading Knots or twists in thread Tension too tight Damaged/old needle Needle too small	Rethread machine properly Replace thread Reset bobbin and top thread tension Replace needle Use correct needle for thread and application
Bobbin Thread Breaks	Bobbin case incorrectly threaded Bobbin case incorrectly inserted Bobbin does not turn smoothly in bobbin case Lint in bobbin case Bobbin tension too tight	Remove bobbin and re-thread with bobbin turning clockwise Remove and re-insert bobbin case Check that bobbin case and bobbin are in “round”; replace if necessary Clean bobbin case and surrounding machine area Check and reset bobbin tension
Skipped Stitches	Thread tension too tight Needle damaged Needle wrong size Sewing machine out of adjustment	Reset top and bobbin tension Replace needle Use correct needle size Have sewing machine adjusted for timing; hook to needle clearance; needle bar height
Frayed Stitches	Needle too small Tension too tight Damaged thread	Increase needle size Reset tension Replace thread
Thread Loops on Bottom	Thread not in top tension Machine incorrectly threaded Top tension too loose Burr on hook mechanism	Rethread machine with presser foot “up” Rethread machine incorporating take up lever Reset top tension Remove burr
Irregular Stitches or Malformed Stitches	Wrong needle size Incorrect threading Upper tension too loose Operator pulling fabric	Ensure correct needle for fabric & thread Un-thread machine and carefully rethread

Fabric Puckers

Bobbin wound unevenly	Reset lower and upper thread tension Check presser foot pressure Rewind bobbin Decrease stitch length
Excessive stitch length	Change needle often
Needle point is blunt	Check bobbin and upper tension
Excessive thread tension	Use stabilizer
Fabric is too soft	Decrease field density; scale embroidery designs; increase stitch length
Thread displacement — too much thread in a small area	Check presser foot, needle plate, feed dogs
Fabric not feeding	