

Needle Troubleshooting Guide

Problems	Possible Causes	Solutions
Upper Thread Breaks	<ul style="list-style-type: none"> • Incorrect threading • Knots or twists in thread • Tension too tight • Needle too small • Damaged/old needle 	<ul style="list-style-type: none"> • Check tension disc for cuts • Rethread machine properly • Reset thread & bobbin tension • Replace needle for correct size for thread/application • Check for thread stuck inside foot
Bobbin Thread Breaks	<ul style="list-style-type: none"> • Bobbin case incorrectly inserted • Bobbin does not turn smoothly • Lint in bobbin case • Bobbin tension too tight 	<ul style="list-style-type: none"> • Remove & re-insert bobbin with bobbin turning clockwise • Check that bobbin case is not out of shape • Clean out bobbin case/tension spring • Check & reset bobbin tension
Skipped Stitches	<ul style="list-style-type: none"> • Thread tension too tight • Needle damaged • Needle wrong size • Sewing machine out of adjustment 	<ul style="list-style-type: none"> • Clean out bobbin case and oil • Replace needle with correct needle size • Adjust machine timing, hook to needle clearance, needle bar height
Frayed Stitches	<ul style="list-style-type: none"> • Needle too small • Tension too tight • Damaged thread 	<ul style="list-style-type: none"> • Increase needle size • Reset tensions • Check for burrs in thread guides • Replace thread
Thread Loops on Bottom	<ul style="list-style-type: none"> • Thread not in to tension • Machine incorrectly threaded • Top tension too loose • Burr on hook mechanism 	<ul style="list-style-type: none"> • Rethread machine with presser foot “up” and use the take up lever • Clean out tension discs • Remove burrs • Reset top tension
Irregular stitches or Malformed Stitches	<ul style="list-style-type: none"> • Wrong needle size • Incorrect threading • Upper tension too loose • Operator pulling fabric • Bobbin wound unevenly 	<ul style="list-style-type: none"> • Ensure correct needle for fabric & thread • Carefully rethread machine • Reset lower & upper tension • Check presser foot pressure • Rewind bobbin or replace
Fabric Puckers	<ul style="list-style-type: none"> • Excessive stitch length • Needle point is blunt • Excessive thread tension • Fabric is too soft • Thread displacement-too much thread in a small area • Fabric not feeding 	<ul style="list-style-type: none"> • Decrease stitch length • Change needle often • Check bobbin & upper tension • Use stabilizer • Decrease field density; increase stitch length • Check presser foot; needle plate; feed dogs

Important: Needles **DO NOT** last forever, they should be replaced at the least every 8 hours. When going to a larger size of thread, a larger needle should be used. Information primarily provided by Schmetz Needle Company with some updates.

