

# Checklist of Common Machine Troubles

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## Guide C-202

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Little problems with the sewing machine can be very irritating and time consuming. They can happen to even the most experienced seamstress. The next time you have machine troubles, check this list to see if you can determine the cause of the difficulty and correct it. It may save you a service call and save you time as well. If you can't correct the trouble, it is wise to seek professional help.

### *To avoid breaking needles:*

- Use proper size of needles for thread and fabric to be sewn.
- See that the presser foot or attachment is securely fastened to the bar and that the needle goes through the center of the hole.
- Avoid pulling fabric when sewing. The needle may become bent and strike the back of the needle hole.
- Use a needle that is the correct length. If it is too long it will come in contact with the bobbin case and break. If it is too short stitches cannot interlock.
- Be sure needle is tightly fastened in the needle bar. Also be sure presser foot is tightly fastened.
- Sew over pins carefully. Be sure they are perpendicular to the seam and keep the heads of pins away from the stitching line.

### *Cause of stitches looping:*

- Looped stitches are usually caused by improper tension. If the loop is on the upper side, it may be corrected by loosening the top tension or by tightening the lower tension. If the loop is on the under side, it is usually best corrected by adjusting the upper tension. (Note: Some new model machines have factory set bobbins which should not be tampered with. Check your own machine manual).
- Be sure that the upper and lower threading is correct and that the needle is of good quality and the correct size for the thread.
- Looping of stitches is sometimes caused by placing the bobbin in the bobbin case the wrong way. Check your machine manual for directions.

- There may be lint, dirt, or thread between tension discs.

### *Causes of upper thread breaking:*

- Needle is in backwards.
- Machine improperly threaded
- Tension too tight
- Needle bent or having blunt point
- Thread too coarse for size needle
- Burr on needle hole of presser foot (Caused by breaking needle when pulling fabric from machine)
- Needle too long for machine, or not inserted all the way in the needle bar
- Take-up spring bent or broken (Send for adjuster to repair).
- Tension discs worn so that thread works in groove
- Needle too fine for size of thread and fabric to be sewn
- Threads not properly pulled back under presser foot when starting to sew
- Lint or dirt around bobbin case holder
- Irregular sewing speed

### *Causes of lower thread breaking:*

- Improper threading of bobbin in bobbin case
- Tension too tight
- Thread wound unevenly on bobbin in bobbin wound too full
- Spring on bobbin case worn to sharp groove
- Burr on under side of throat plate (sometimes caused by sewing over pins or breaking needle)
- Knot in bobbin thread
- Lint, dirt, or thread under tension spring of bobbin case

### *Causes of puckered seams:*

- Tension is too tight
- Stitch too long for fabric being sewn, especially on fine fabric
- Wrong presser foot used
- Puckered threads across seams are due to a blunt needle or too large a needle.
- Stitch too short for synthetic and easy care fabrics

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- With automatic machines, the use of the plate with wide needle hole may cause straight seams to pucker.
- Upper thread and bobbin threads are of a different size and/or type.
- Pressure too heavy for fabric
- Fabric pushed or pulled while stitching

*Cause of machine not feeding properly:*

- Pressure incorrect for the fabric being sewn
- The feed dog worn smooth. This can be determined by running the finger over the teeth. If they are not sharp, the feed dog should be replaced by a competent adjuster.
- Feed dog clogged with lint
- The stitch regulator may have been turned back so far that the feed is entirely out of action.
- Needle may be bent.
- Spool of thread may jerk and catch if machine is operated too rapidly or at uneven speed.
- Stitch regulator incorrectly adjusted
- Throat plate incorrectly positioned

*Cause of machine working heavily:*

- If the machine works hard after standing, it may be gummed with oil and in need of a general cleaning.
- The belt may be too tight and hence puts excessive pressure on the bearing.

- When the belt is too loose, it slips on the balance wheel.
- Thread jammed in bobbin case

*Cause of skipping stitches:*

- Needle not correctly inserted in the needle bar
- Needle too small for the thread used
- Needle too short for the machine
- Blunt or bent needle
- If zipper foot is used, the edge of the foot is too far away from the needle.
- Needle threaded incorrectly
- Needle hole in throat plate too large
- Pressure too light
- Upper tension too tight
- Upper thread and bobbin thread of different size and /or type

*Cause of stitch length variation:*

- Stitch regulator incorrectly adjusted
- Feed dogs clogged with lint
- Pressure incorrect for fabric
- Tension incorrect for fabric
- Throat plate adjusted incorrectly
- Presser foot loose or not suited for fabric being sewn