

# Why Your Sewing Machine Is Trying To Ruin Your Fun

## A Simple Troubleshooting Guide



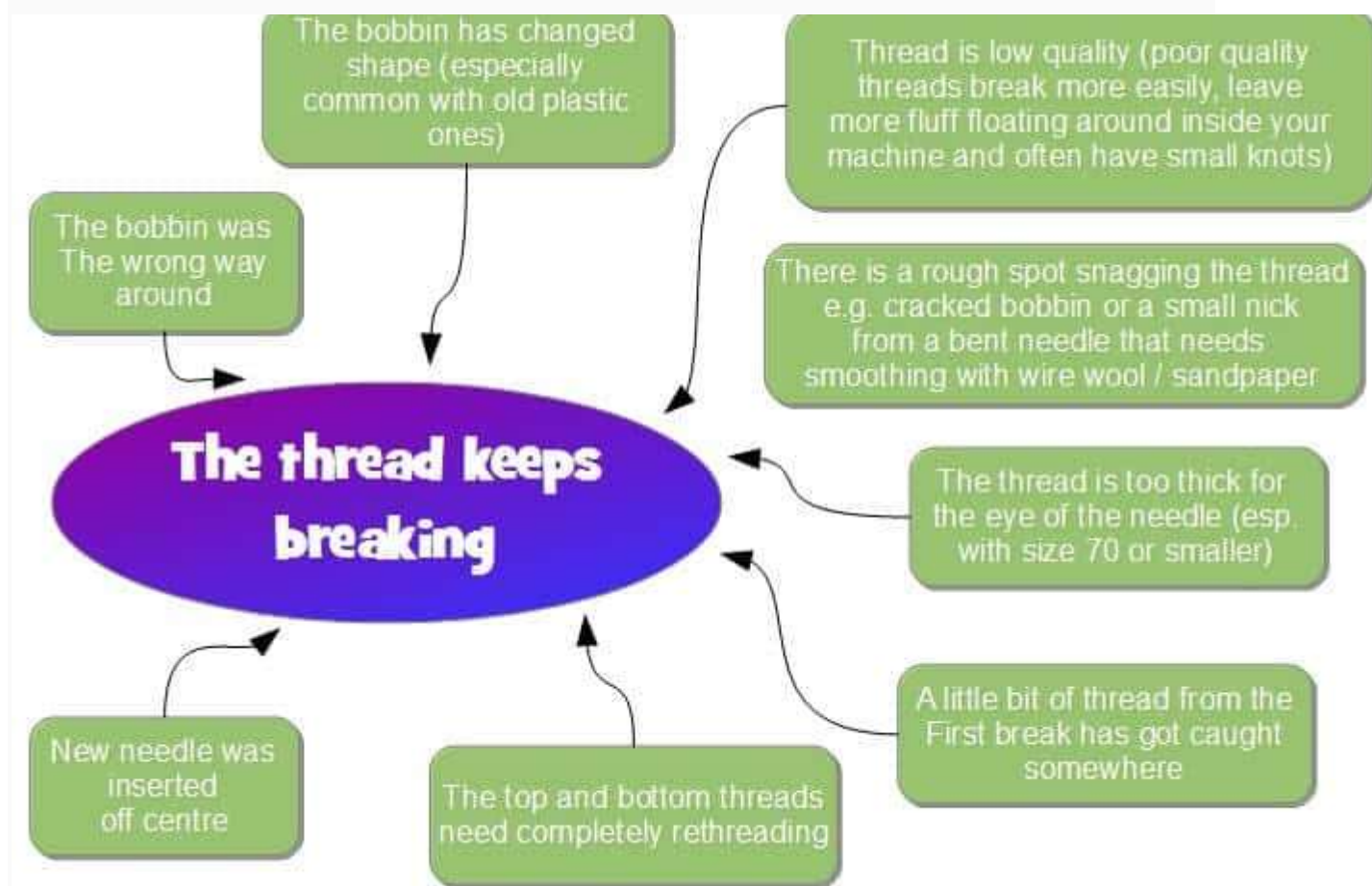
Sewing machines are fantastic when they are playing nicely but somehow seem to have the power to turn even the mildest of mannered people into enraged lunatics when they keep breaking. So, here's some of the most common sewing machine problems your most likely to come up against, and the most likely ways to fix them. This advice is meant as guidance and troubleshooting only. If in doubt, please consult a trained sewing machine repair person.

### The Top Thread Keeps Breaking

This is probably the most common sewing machine annoyance. It can happen for lots of reasons. Cheap nasty fluffy thread that has a tendency to shed fibers and have tiny knots in is often the main reason a lot of beginners unknowingly blame themselves for. Another rookie mistake is using a thick thread (this often includes some decorative or most heavy duty threads) with a needle that is size 70 or smaller. The eye of the needle is also smaller so the fatter thread hits more friction as it is being pulled through resulting in.... SNAP!

The frustrating thing when you are reasonably new to machine sewing and trying to figure out why your top thread is breaking, is that it isn't always the part breaking that is where the problem is! If the bobbin has been put in the casing the wrong way around, or the plastic bobbin is getting old and a little misshapen or cracked, then as the top thread is pushed around underneath, it can get caught and snagged. If the needle was inserted slightly off center, it will also catch as the thread goes around the bobbin.

Always rethread the top thread and bobbin thread after a breakage as it can affect the thread positioning which can then cause tension problems and cause your thread to snap again as soon as you start to sew again. Check for bits of fluff or thread as you are rethreading them, as loose bits can get caught up, causing either tension problems or knots which make the thread snap again. It is very unusual, but very occasionally when a needle breaks, it can cause a slight rough spot around the needle plate where the needle goes down towards the bobbin. If this happens, the thread will seem to repeatedly snap regardless of what you do. It can usually be sorted with gentle use of a bit of wire wool or sandpaper to get rid of the rough edge.



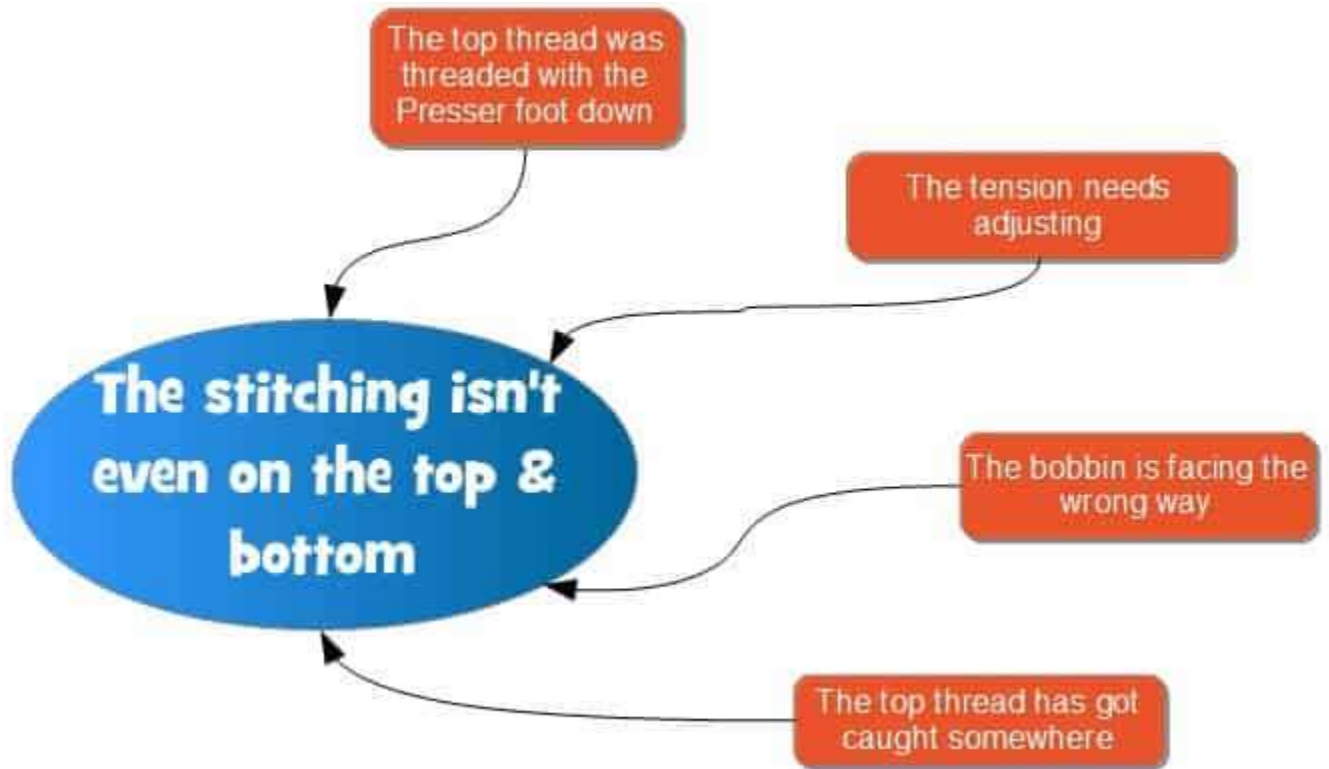
The Stitching Isn't Even Between The Top And Bottom Of The Fabric

The stitching here doesn't look pretty. The stitch length might not look right and the bobbin thread is obviously showing on the top or the top thread looks more like it's trying to stitch underneath. This one is a tension issue. There are a few things that can cause tension problems with thread. The most obvious being the tension dial on the top of the machine. Most cottons will happily stitch with the tension in the center (this is usually about 5 if you have numbers on your dial) However, fabrics that are stretchier generally sew a bit better with a stretch stitch and slightly less tension, whereas upholstery fabrics tend to sew better with a longer stitch length and higher tension. Have a play on a scrap piece and see what makes the stitches look even above and below.

Bobbin tension generally isn't an issue unless you've fiddled with it before, dropped the bobbin casing or you are trying to use a thicker thread in your bobbin such as when Shirring with elastic thread, or when using decorative threads / ribbons when doing bobbin work ([explained on this page](#)). Small adjustments on bobbins make big differences so always take a note of your starting screw position (e.g. with a dot with a permanent marker pen or sticker) before you start fiddling!

Your starting tension can be affected if you threaded the sewing machine with the presser foot down. This is because lifting the presser foot changes the position of the tension discs allowing free thread movement through them, whereas if you thread it while they are down, you would have to force the thread through.

If the top thread is getting caught somewhere, then this will also cause tension problems. The most common reasons are that it just needs rethreading, or you need to de-fluff inside your machine - top and bottom!



## A Bird's Nest Of Thread Has Appeared Instead Of Nice Stitches

The most common rookie mistake causing this one is trying to start sewing too close to the edge of the fabric. If you really need to sew right from the very edge, you have 3 bird's nest - free options: Butt another piece of fabric next to it and sew from this piece onto the edge of the piece you want your real stitches to begin, start further in then carefully backstitch towards the edge or just start at the other end and stitch to the edge when you get there!

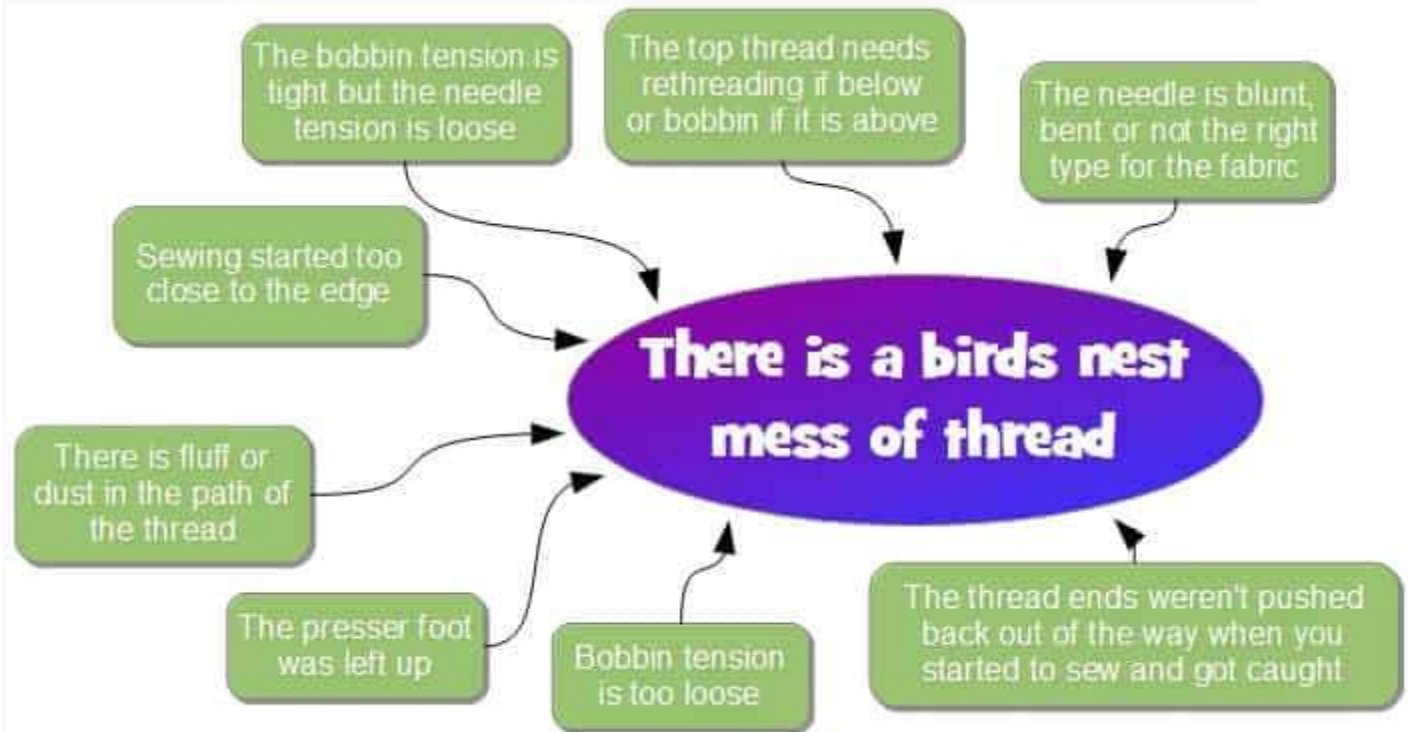
The other newbie or having a daft moment cause is just trying to sew without remembering to lower the presser foot first. I do this on a fairly regular basis! Oops! Also if your threads weren't pushed backwards and out of the way when you started to sew, then they can get caught up underneath having the same effect.

Dust or fluff in the path of the thread can cause the thread to tangle so a good clean every so often, especially when you work with fabrics that shed fluff helps to avoid this.

If your bird's nest of thread is above the fabric, then usually it is the bobbin's fault. If it is below the fabric, then it is usually the top thread's fault.

Bobbin tension problems can cause this. Usually you should never have to adjust your bobbin tension, and if you do, I would only ever adjust small amounts at a time, and make a note of your starting position for the screw, as a small change can make a big difference. If for example you wanted to do something like bobbin work embroidery ([as explained as part of our free motion foot tutorial](#)) then I would recommend getting a

spare bobbin casing to play with, as it's usually far too big a headache to faff around getting the perfect bobbin tension after making large adjustments! As a general rule, you can use the "drop test" for checking bobbin tension. If you drop the bobbin inside the bobbin case holding on to just the thread end, it should drop down slowly and smoothly to the floor. I would highly recommend you just try rethreading the bobbin and top thread first!



## The Needle Won't Bring Up The Bobbin Thread

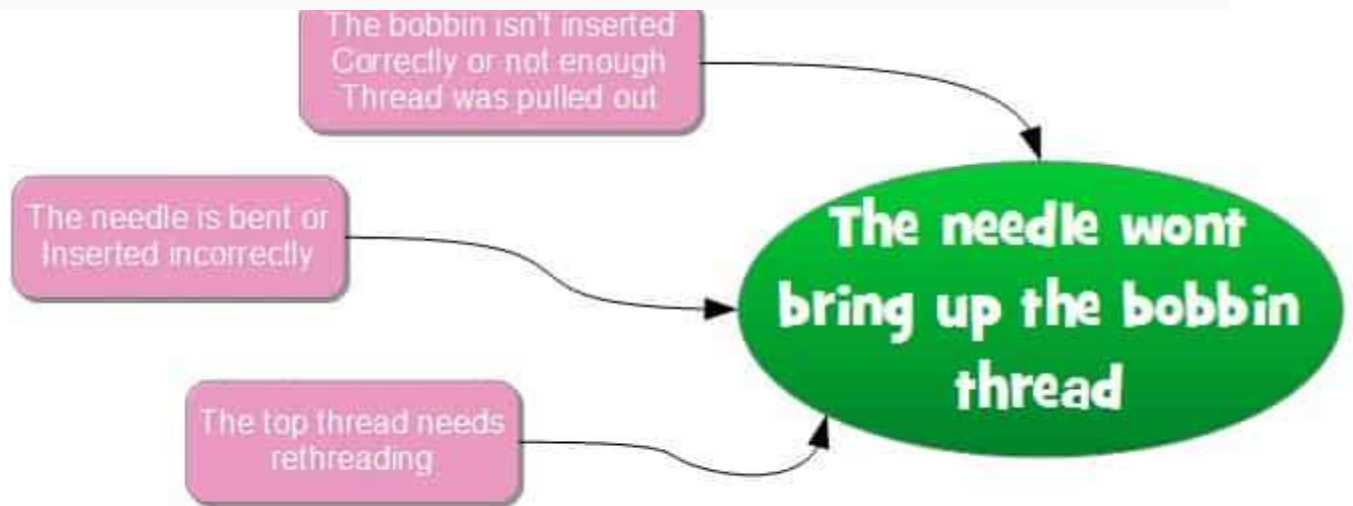
The most common beginner sewing reason for this one is that when you threaded the top, you didn't leave a long enough tail behind. As you wind the needle down, the thread shoots up and pings back out of the needle, leaving you with no thread in the needle, so always leave yourself a few inches and keep a hold of your thread end. Any other threading issue up top can also change the way it moves around the bobbin case, so if in doubt, rethread it.

If the needle is bent or inserted incorrectly (check the flat edge is lined up correctly and it's right the way up) then it will change the angle the thread is fed through at, which means it may not move correctly around the bobbin case.

If you haven't put the bobbin in the right way around, fully in, or not clipped the bobbin case in properly on a side loading machine then the top thread will just get caught rather than moving smoothly around it. Lastly, if you haven't left enough thread sticking



out of the bobbin to easily reach above the feed dogs, then don't expect to see it magically appearing there!

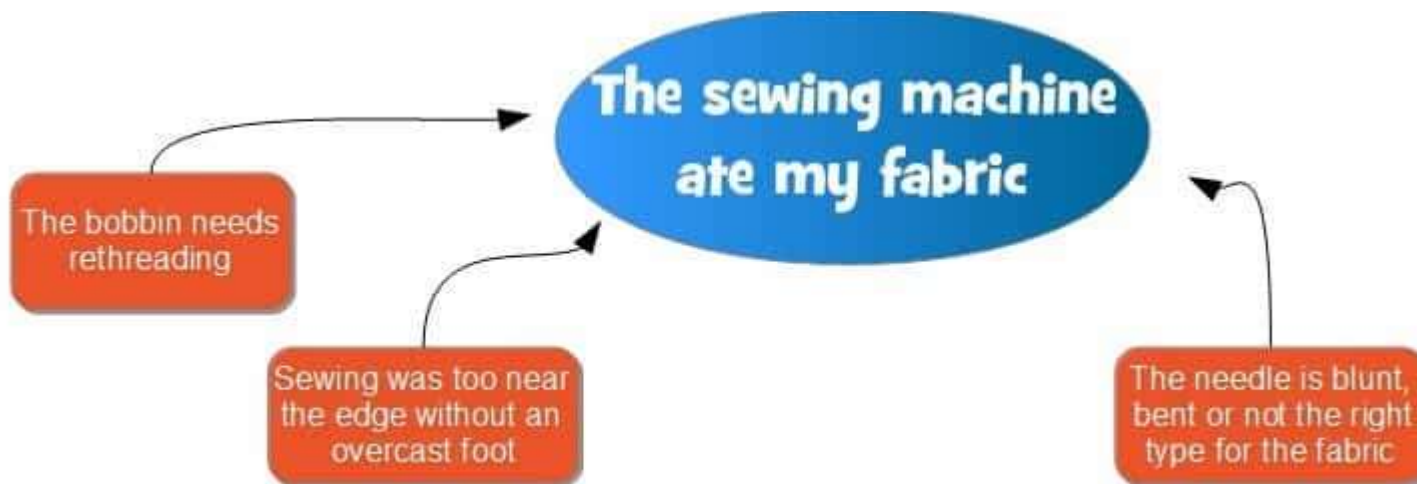


## The Sewing Machine Has Eaten The Fabric

From time to time, sewing machines get peckish and decide to swallow a small chunk of fabric down the little hole that the needle goes through. Don't panic too much though. Unless it's a sheer fabric that develops holes easily, you should be able to rescue it. It's usually relatively easy to retrieve despite appearing well and truly stuck. Take out the bobbin (you may need to snip a couple of threads around it to get it free - I actually use dental surgery scissors as the are easy to get into small spots and snip right up against fabric without risking damaging it with your scissors). Then, gently ease the fabric back up as you move the needle slowly up and down by rocking the manual needle dial forward and back.

So why did it ruin your sewing anyway? Usually because you drifted too close to the edge of the fabric without using an [overcast foot](#) to maintain the thread tension as you sew over the edge (find out more about how to use an [overcast foot here](#)).

It can also happen when the bobbin thread has slightly slipped out of alignment and needs rethreading or the needle has become blunt or bent. If you aren't using the correct needle for your fabric, then rather than passing cleanly through, it can push the fabric down as it tried to piece it. This is especially common if you don't use a ballpoint needle for knit fabrics or you try using a large needle for sheer fabrics. Using tissue paper or a stabilizer under the fabric (especially under extra stretchy fabrics) can also help prevent it from being pulled down.



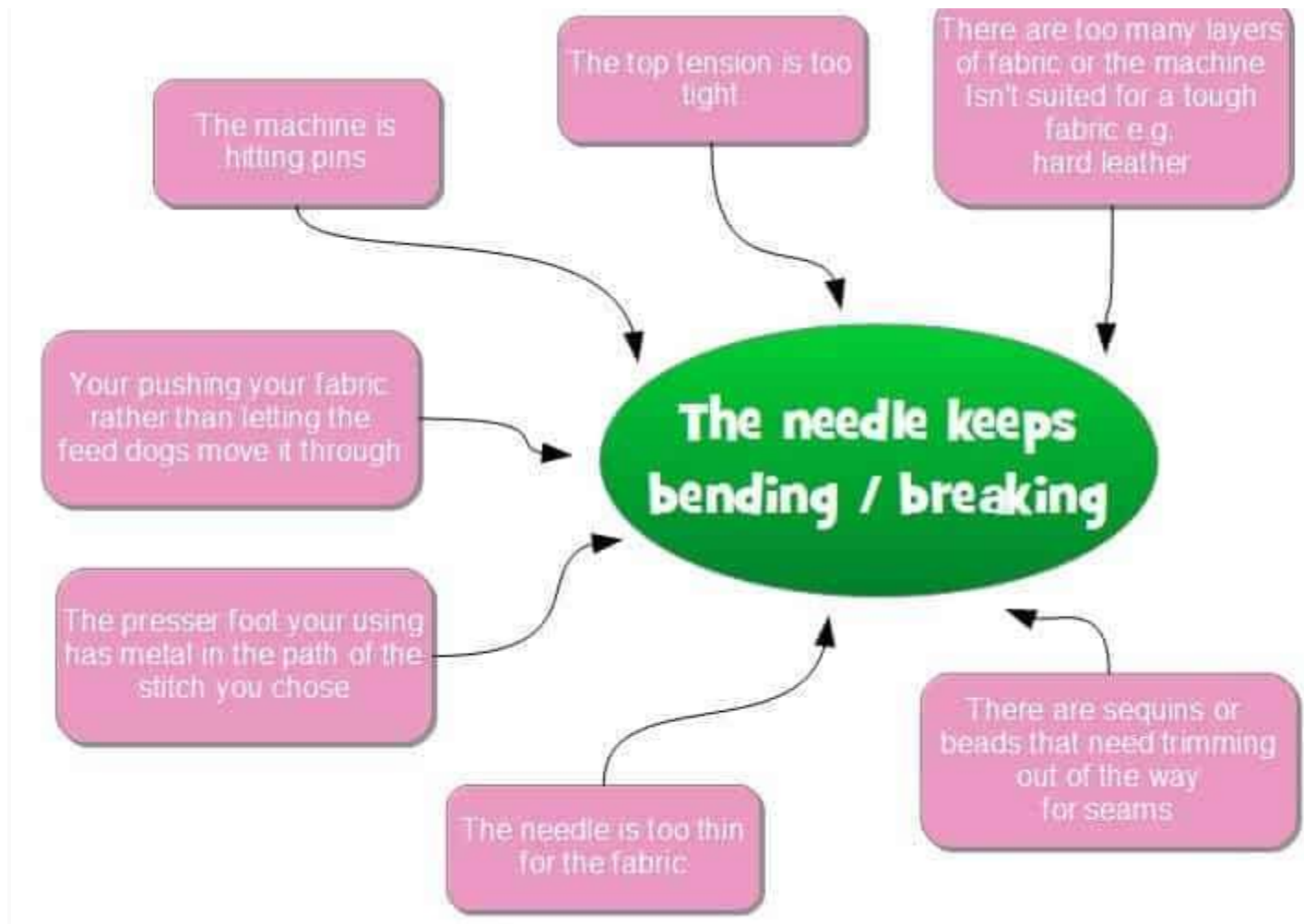
## The Needle Keeps Bending / Breaking

Personally, I think sewing over pins is like Russian roulette for your sewing machine needle. Hit one dead on and you will blunt / bend / break your needle. If you want to do it, then just make sure you have a few spare ones on hand, but I personally think it can create more problems than it's worth. Same goes for fabrics with sequins or beads in - be prepared with spares, and where possible trim them out of your seam lines first!

The feed dogs (the little teeth that pull the fabric through underneath) are designed to move the fabric as the needle lifts up. If you try to help it a little bit too enthusiastically by pushing or pulling the fabric through, then chances are, your timing isn't quite as accurate as the feed dog. So if you pull it too hard as the needle is down, it will break the needle. Instead, try to guide the fabric rather than forcing it. If it's not going through easily, then maybe you want to consider using a walking foot / [knit foot](#) / [roller foot](#). When the top thread tension is too tight it has a similar effect and causes the needle to bend following the fabric as it is pulled through. This happens even more as you try to go faster.

Now this reason for needle breakages, I have done so many times - forgotten which of my [sewing machine feet](#) was attached to the sewing machine as I got ahead of myself thinking of what I need to sew next then picked a different stitch which is not compatible with the foot attached. Then instead of manually dropping the needle slowly and checking for clearance, I've got carried away and hit the pedal only for the needle to break off as it's struck metal on the foot... whoops!

Lastly is the needle itself. If you have a thin needle designed for leaving as little marks as possible on delicate fabrics and your trying to jab it into several layers of denim, then it is not going to last long! Make sure the needle is fit for purpose and you aren't trying to sew beyond the capabilities of your sewing machine e.g. sewing hardened leather or trying to force layers under the presser foot.



## The Fabrics Started The Same Length But Ended Up Different

This happens when fabrics are stretched or not pulled through equally. This can happen with non-stretchy fabrics if you are sewing something with a bit of weight to it e.g. a quilt, where the weight of the large fabric pulls the pieces, or with slippery fabrics sliding around - the layers move out of alignment as you sew making them look uneven.

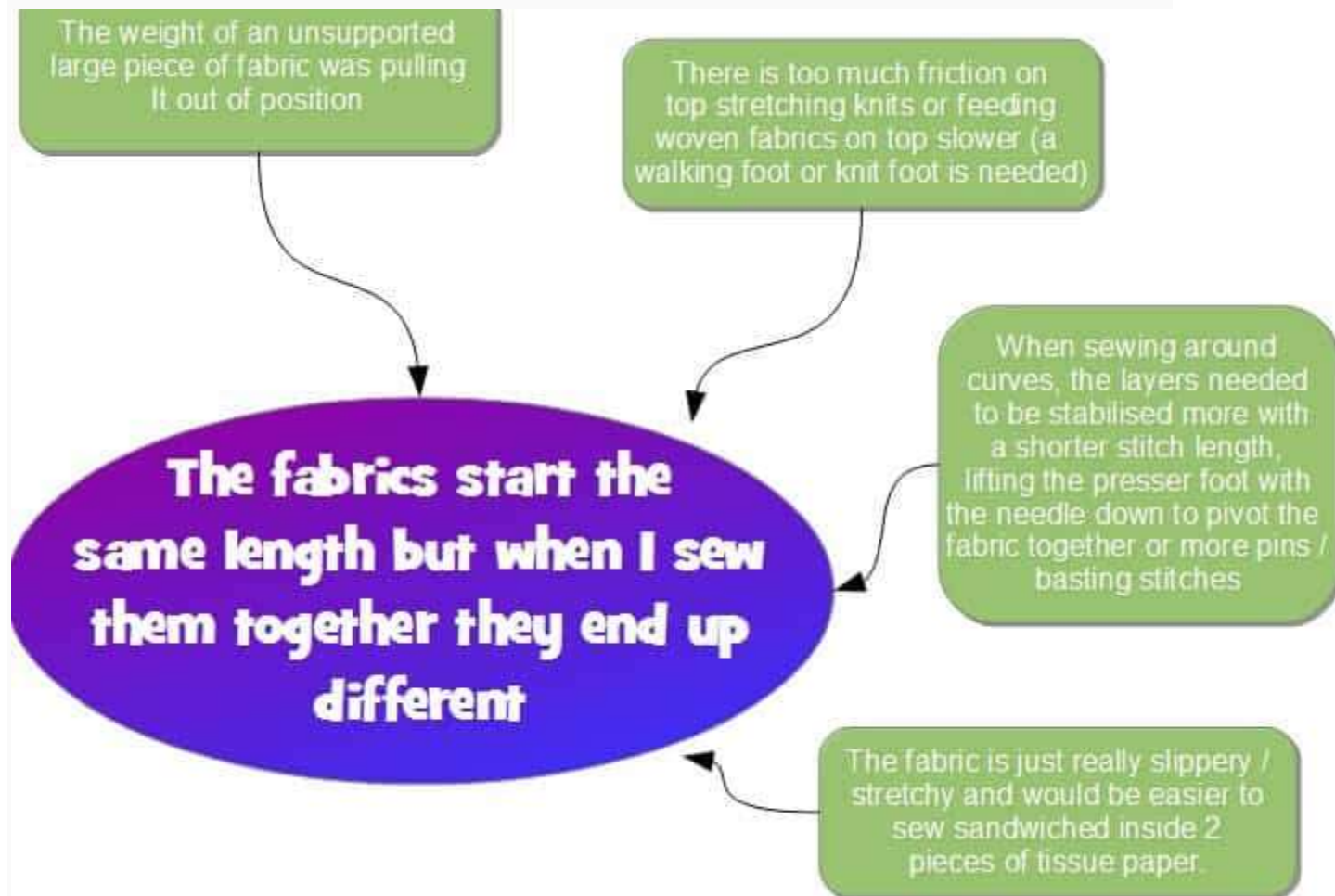
When sewing stretch fabrics, the friction from the presser foot means the top piece is slightly stretched in comparison to the bottom piece that is being moved through at a faster speed by the feed dogs.

To help the fabric move through, you may want to consider using a [roller foot](#) that reduces the resistance from above, or a [knit foot](#) that grips the fabric as the needle goes down then lifts off the fabric between every stitch, or a [walking foot](#) which is effectively like having feed dogs working above and below to feed the fabric through between every stitch.

When sewing either, if you try to go around curves and corners too quickly then the pieces tend to shift. Instead, move slowly, use more pins and stop when needed with

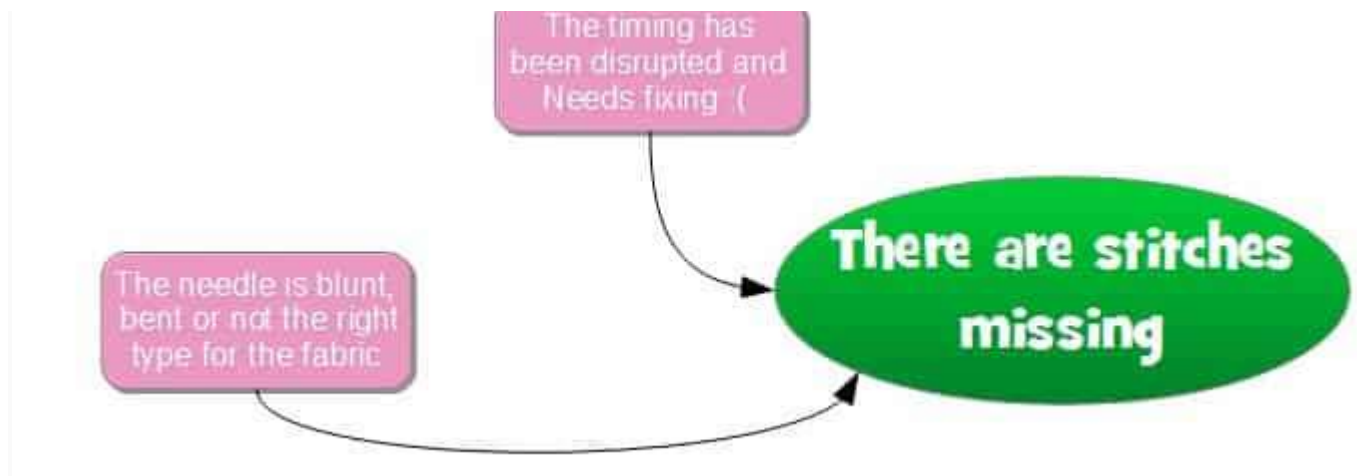


the needle down to lift the presser foot and move the fabric. Shorter stitch lengths and hand basting stitches prior to sewing will also add more precision here.



## Stitches Are Missing

Cross your fingers that your needle has gone blunt or that you just aren't using the right type of needle for the job - especially the case if you don't use a ballpoint needle on stretch fabrics... There is an outside chance there is some dirt or fluff in the way that is causing the thread to move erratically so a good clean wont do it any harm, but otherwise this is likely to be a timing problem... time to go get friendly with a sewing machine repair man. Timing problems are usually best left to the experts to fix.



## The Fabric Wont Feed Through The Sewing Machine

So you put your fabric under your presser foot and start to sew but the fabric isn't pulling through. It could be because you forgot to lower the presser foot so it hasn't pushed the fabric down to catch the little teeth underneath called the feed dogs - or on some machines these can be lowered down out of the way, so it could just be they aren't currently up. The other silly thing that stops you going anywhere is if you forget to turn the machine back off bobbin winding mode.

The more annoying reasons why your fabric isn't going anywhere is if it has snagged on something. For example - you tried to start sewing too close to the fabric edge and either the sewing machine has eaten a corner of your fabric or there is a birds nest of thread underneath stopping anything from going anywhere. When you start sewing, if you don't pull the threads backwards and out of the way of the presser foot, then occasionally a little bit can get caught around the foot and cause everything to get stuck here too. More unusually is if there has been some damage to the metal needle plate - for example a broken needle has caused a small sharp spot. This could catch the fabric and cause it to get stuck. Try smoothing it with wire wool or sandpaper.

The other cause of fabric not moving is the fabric itself. For example if the fabric is too thick for your sewing machine or presser foot, or you have chosen a fabric that needs a bit more help to move through the sewing machine like oilcloth or fur. In these cases, consider whether you want to use something like a [roller foot](#) or [walking foot](#). You may also want to sandwich your fabric between a couple of sheets of tissue paper so the feed dogs don't mark your oilcloth and slide through more easily.

If the presser foot is tipped (especially with the part closest to you facing upwards, or tipped with 1 side up), then it disrupts the ability to push it towards the feed dogs to pull the fabric through. This is especially common when you are trying to sew around bulky seams. The really simple fix for this is to just use a piece of folded cardboard to even out the presser foot before you start sewing again. Sometimes, if it is just a very small spot, you may also get a better result by sewing backwards over it. Possibly have an experiment with a scrap piece first as different fabrics act differently as you sew.



## The Needle Keeps Falling Right Out

This one is vibration related so it is much more likely to start happening when you are using a [ruffler foot](#) or a [walking foot](#) as the extra moving parts create a lot more vibration.

Usually, the screw that holds the needle in place can be hand tightened, however if you are going to add a bit extra vibration, then I would recommend gently tightening it a little further with the small screw driver which is normally supplied with the sewing machine. If that doesn't do it, then there is an underlying problem - either with the needle or the screw.

The threading on the screw that holds the needle in place is wearing down meaning it will loosen at a faster rate – Needs a new screw to fix, but may be temporarily improved if your sewing machine allows for the screw to be placed either side of the hole.

At some point a replacement screw was fitted to hold the needle in place that was slightly too short (NB. Too long may increase chances of thread breakages)

The flat side of the needle has not been correctly lined up on inserting the needle

The screw isn't being undone enough on inserting the needle meaning it hasn't gone all the way in, so it drops out easier

## **The needle keeps dropping out - especially when using a Ruffler / Walking foot**

The screw isn't tight enough. Although most of the time hand tightening is often sufficient, the extra vibration on a walking or ruffler foot means that a gentle tighten with a screwdriver is often needed

Bent needles are more likely to snag and pull loose reduce the chance by using the correct needle for the fabric and avoiding sewing over pins or sequins etc. where possible.

Rough edges (burrs) may have occurred inside the screw and left small metal splinters. Take the screw right the way out, right the way back in, then all the way back out again before using again to try to improve it.