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## **Sewing Machine Maintenance** with Fancy Tiger

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### **Chapter 1 - Introduction**

#### Overview

(upbeat music) - I am Jaime, from Fancy Tiger Crafts, a craft supply shop in Denver, Colorado, that also teaches tons of classes. Today I'm gonna teach you about sewing machine maintenance, so that you can confidently learn how to take care of your own sewing machine, which is gonna make sewing such a pleasure. I'm gonna show you how to clean your machine, oil your machine, troubleshoot problems, adjust tension, and decide when it's time to take your machine in to have a professional look at it. (sewing machine part clanks) Yes! I'm also gonna give you tips ^to know what to look for when buying a new machine. ^It's like new. (upbeat music)

### **Chapter 2 - Materials**

#### Materials

- These are the things that I like to have in my maintenance tool kit and they're some of the things you will need for this class. The first, of course, is your sewing machine and very importantly is your sewing machine manual. If you don't have a sewing machine manual you can look online and it's often very easy to find one for almost any make or model. So, I would recommend doing a little bit of research before you get started. The other things you're going to need are screwdrivers. These are two screwdrivers that come with sewing machines and this is another one that just in case I need a Phillips-head screwdriver. Sewing machine oil. Your brush, which also should have come with your sewing machine and if you've lost it you can always get a new one at your sewing machine store. A simple emery board. The type you'd use on your nails and you want a flimsy one that you can easily cut with a pair of scissors. You're also going to need some tweezers. Any pair of tweezers will do. That's all.

### **Chapter 3 - Taking Care of Your Machine**

#### Basic machine maintenance

- Before you begin, you wanna unplug your machine from your power source. I'm gonna demonstrate cleaning this older Kenmore model, which is a pretty basic machine. I'm gonna pull this off to expose the bobbin case, this has a front-loading bobbin case, as you know, if you have this type of machine, so I'm just gonna go ahead and pull the bobbin out, and you can see that that's already looking pretty dirty, which is amazing. And next, I'm gonna take the throat plate off, which is this part right here. You wanna use the screwdriver that came with your machine, and just unscrew the two screws. This is going to expose the feed dogs, which is this part right here, and that's what moves your fabric through the machine. And you'll just pull the throat plate off. Yeah! There's a lot of really amazing lint in here, and this is what we're gonna clean out. Before we do so though, we're gonna take out the rest of this bobbin case, so there's two little arms right here, that are holding it on, just gonna push them off to the side, and this whole bobbin case is gonna come out. So now, you just wanna use your brush, and you wanna brush off any lint that you see. You definitely wanna get the lint that's built up here, in these feed dogs. This is also where your tweezers can come in handy if there's pieces of lint that you need to get in there and grab. You never wanna blow into the machine, because that can just blow the lint further into the machine. I'm just gonna keep brushing until I can't see any more lint fuzz, and it looks like I've gotten all of it out. You can see right here,

that there's some black, old oil building up inside, so I'm just gonna use a Kleenex or any clean cloth, and just wipe that clean, and I'm gonna wipe all around this ring. I'm gonna do the same thing wiping out the bottom of this bobbin case. It is deeply satisfying to clean out a machine. This machine is gonna run so much better than it was before, and now it's time to put it together. But before we put it back together, I'm gonna put some oil on this bobbin case. Whenever you're oiling, a little bit goes a long way, and I'm gonna put one over there, and one over here, those are gonna kind of seep in, I'm also gonna oil this metal part where that bobbin case is gonna fit into. Now I'm gonna put the bobbin case back together. Alright, and at this point, if you want to move your hand wheel, that'll just get that oil moving around inside there, which your machine loves. The throat plate can get nicked like this from a lot of different reasons, but the main one that I've seen, is if you push or pull the fabric through the machine instead of letting the feed dogs move the fabric along, and what that does is it creates, the needle is gonna hit when it's not ready to, and it'll hit right into this metal, and when your throat plate gets nicked like this, it can catch your thread, and that can cause loops of thread underneath your fabric, so it can cause a lot of problems for you when you're sewing. I'm gonna use this emery board to file the throat plate smooth, and this is a trick that my sewing machine repair guy taught me, and I like to do it all the time, so the first thing is I need to cut this emery board so that it'll fit in there, so I'm just gonna cut it in half. And then I'm just gonna stick the emery board in, and start filing this away. It usually doesn't take too long to file it down. And I'm gonna do it from the back as well. And that looks way better already. The nick that I just filed away, is this one that is right here, and that was the one that was causing problems, because the thread is moving up and down in this hole. You can see that there's another nick right here on the surface of the throat plate, but that doesn't pose such a problem, that's just a cosmetic issue. Filing with an emery board is a pretty quick fix, and I've found that it can fix a lot of problems, but if your throat plate gets really damaged, this is a part of your machine that you can always replace, you can just reorder it from the company that made your machine, and get a brand new one. Now I'm just gonna put the bobbin case back on. Now we're gonna clean up here, this opens up, and you can see that there's some lint buildup up here as well, so I'm just gonna use my brush, and I'm gonna clean all the lint that I see, from the top part of the machine. For this machine, this is where the light bulb is, and light bulbs can go out in sewing machines, and it's pretty easy to replace. There's a little hook here, so you're just gonna move the light bulb, so that you can pull it out, and then you can buy a new light bulb at any sewing machine supply store, and put a new light bulb in your machine. There are some joints up here that are metal on metal, you can see when I move the hand wheel, this is moving and it's a metal piece, so I'm gonna put a little bit of oil right there, just a drop, and then I'm gonna move the hand wheel some more to get that oil moving down and through the machine. There's one more joint right here that's moving a lot, so I'm gonna give this a drop of oil. If you have your manual, it's best to check your manual to see all of the points in your machine that need oil, but if you don't have your manual, a good rule of thumb is that if it's a metal on metal joint, it's probably gonna need a drop of oil, every once in a while. And I think we're done with this one. Now I'm gonna show you the same process on a different machine, which is a Janome Sewist 500, and it's pretty similar, but there's a couple differences, so I'm just gonna go through and clean this machine. This machine has recently been serviced, so it's actually pretty clean, so we're not gonna get to see as much lint, which is gonna be a little sad. So first thing, we're gonna take off the throat plate, this machine only has one screw. This throat plate looks really nice, so I'm not gonna do any filing, but this is the area that you would look for, for any nicks. For this machine, it has a bobbin case that can be removed like that, and then you want to clean all of the lint that is in here. And it's pretty clean.

For this machine, I can also take off the bottom, and check for more lint on the bottom of the machine, so I'm gonna put it down. There are six screws holding this bottom plate onto the machine, one, two, three, four, five, six, so I'm gonna unscrew all of these, and then pull off this bottom plate. This machine is really clean. When I take the bottom panel off on the sewing machines at Fantutag Aircrafts in our studio, I often find all sorts of things down here, such as half-needles, pieces of fabric, random bits of thread, a lot of stuff gets stuck down here, so it's good to take this off and clean it out every once in a while. If this machine were dirty, there would be a lot of lint buildup right around here, that you would just want to clean off with your brush, and as you're cleaning, you can move the hand wheel, to expose more lint and clean it off. You do wanna be careful, this plate is here protecting pieces of the machine that you shouldn't touch. You also wanna be careful and try not to touch that part of the machine, those are little screws that control the button hole, and you could definitely mess some things up. This machine looks pretty clean, so I'm gonna put the bottom plate back on. Now I'm gonna put the bobbin case back in, it goes in like that, and it should, a little bit of movement is normal, and then the throat plate back on with the one screw. Last, I'm gonna show you how to open up the front part of this machine, the first machine that we worked on had a hinge which made this open up really easily, but this one's a little bit more complicated, so I'll show you how it works. This little white piece right here is hiding a screw, I'm just gonna pop this piece of plastic off. There's a screw deep inside there. Now that the screw's off, I'm gonna pull this off and it can be kind of hard the first time you've done it. Oh God. (chuckles) Yes! (giggles) Okay, so this is very similar. This is where your light bulb is, which as you can see, comes out and goes back in the exact same way, and you can also see that when you move this machine, you can see moving parts inside. Again, this machine is really clean, but if it had a lot of lint, you would use your brush and just brush away any lint that you saw on this part of the machine. I'm gonna pop this case back on, goes on way easier than it came off, and don't be afraid to take apart your machine, this machine makes it a little bit difficult to get into that compartment, but if your light bulb goes out, that's a really easy fix that you can take care of yourself, so there's no reason to take a machine in for service just to change a light bulb. And I'm gonna put the screw back in. And then this little white piece. Just like new. When your machine is not in use, it can help to keep your machine covered, which is gonna keep dust from getting all over your machine. I like to clean our machines at work at least once a month, they get used every day, so they get a lot of use from a lot of different people. At home, you might clean your machine every 3-6 months, depending on how much you're sewing, and always consult your manual because it will give you more tips and tricks of where to clean your machine, and where to put oil, and oiling machines should also happen every six months to one year, and just remember, whenever you oil a machine, just one or two drops is plenty on your oiling points, you don't need to have a ton of oil. Also, when you're finished cleaning your machine, and if you've put oil into your machine, it's a good idea to sew with some scrap fabric or muslin, a little bit just in case there's any oil that might get on your fabric to run through the machine.

### Troubleshooting problems

- Now that I've shown you how to take care of and clean your machine, I'm going to go over some tips for troubleshooting problems. The most usual problems that you'll find when your sewing, is that your stitches are not looking right. Thread can bunch up underneath your fabric, thread can break. These are all types of things that can be fixed pretty easily. I have three golden rules to help you troubleshoot any problem that you're having sewing. The first thing that I would recommend if you're having any problems is to completely re thread your machine. Most of the problems are

going to come because your thread, your bobbin is not threaded properly or your top thread is not threaded properly. So, take all of your threads out, put them back on, make sure you're putting them on the correct way and try it again. And I'm just going to show you a quick little diagram that's on most machine to make sure that you're putting your bobbin thread in the right way. For this machine, the diagram is right here on your bobbin case. And you want your bobbin to be put in this way. If you put it in this way, that is going to be incorrect and that's going to effect how your machine sews. So, for this machine, this is going to be the correct way. For this machine, there is another diagram right here on top of the machine, showing which way the bobbin thread needs to be. Obviously, this is very important for the machine to be working properly, since they've taken the time to put diagrams right on top of the machine. So, this one is going to look like a P, as you drop it in. Just like the diagram. My second tip for trouble shooting any problems that are going wrong with your machine is to try changing your needle. Needles get dull and can even get bent as you're sewing and a dull or bent needle is not going to sew properly. So, changing the needle is something that should happen pretty regularly, every two or three projects. Just to make sure that you have a nice sharp needle that's going to work properly. So, try changing the needle and see if that's what your problem is. To change the needle it's really easy. Most machines just have a screw and you unscrew that enough to pull the needle out, get a new needle and put it right in. The needles have a flat part on one side. And just pay attention to how your needle came out of the machine. Usually the flat part is towards the back but sometimes it can be towards one side. For this machine, the flat part of the needle is towards the back. So, you just slide it in. You want to insert it all the way until you feel resistance and then tighten the screw again. You also when you put a new needle in want to make sure that you have the correct needle for your project. There are different needle sizes and different needle types and if you have the wrong needle that could be causing you problems. So, if you're sewing with very thick fabrics or a lot of fabrics are going to need a larger gauge needle. If you're sewing with fine silks you're going to need a much finer needle. And if you're sewing with jersey you're probably going to need a ballpoint needle. You can even get a leather needle for sewing with leather. So, just make sure that you have the correct needle for your project. After you've re threaded your machine, changed your needle and made sure that you have the correct needle for your project, if you're still having problems I would try cleaning your machine. You want double check that your throat plate doesn't have any nicks in it, like I showed you earlier. And make sure there aren't any large pieces of lint that are stuck in your bobbin case that can be effecting how smoothly your machine is able to sew. Once you've done these three things, if you're still having problems there's a few other things you can do to trouble shoot them. One of the problems could be that you're having tension issues. It's pretty rare to need to change the tension on your machine but sometimes you do need to change it. So, I'll give you some examples of what it looks like when your tension is too tight or too loose and how to fix it. Your upper thread tension dial for this machine is right here. As you can see some of these numbers have boxes around them. Those are the normal places where you want this to be for almost all of your sewing projects. By moving the tension up to a higher number, that is going to tighten your upper thread tension. Moving it down to a lower number is going to loosen it. So, I'm going to turn it up and then show you what it looks like when your tension is too tight. And to demonstrate I have a neon thread on the bottom and a dark brown thread on top. And if you, you can see that the neon bobbin thread is showing on the top of the fabric. So, that indicates that your tension is too tight. When you're sewing and you have good tension, the top threads should be on the top of your fabric and bottom threads should be on the bottom of your fabric and they shouldn't be pulling to either side. Where they inter meet,

interconnect, is going to happen in between the layers of the fabric that your sewing and you really shouldn't see it at all. So, if you're seeing the top thread on the bottom of the fabric, that is tension that is too loose and if your bobbin thread is on top, your top tension is too tight. Let me show you what that looks like. Now I'm going to turn this down and show you what it looks like with tension that's too loose on the top. So, it looks pretty good on the top of the fabric but on the back it looks really bad. As you can see the top thread is looping on the back and this bobbin thread isn't being held into place at all and I just pulled it out. So, that was tension that was too loose. That's not going to work out for you. Now, I'm going to demonstrate what it looks like to have good tension and I'm going to move my tension back into the mid zone that's recommended for the machine. This is the new one that I just sewed and as you can see there is a lot less bobbin thread showing, it's mostly just the dark top thread. And it's much better than this one where my tension was too tight and on the back it looks even better. So, pretty good tension. Adjusting your tension is not something you're going to do very often and is probably going to be one of the last things that you attempt if your machine is not sewing properly. I usually just adjust my tension if I'm sewing with very thick fabrics or a lot of layers of fabric or if I'm trying to gather a neckline where I would purposely want a really tight tension. These are all the tips and tricks that I have for fixing your machine. Once you've gone over all of these things, if your machine still having problems, it might be time to take it to a professional. And it's a good idea to take your machine in every one or two years depending on how much you sew. Just for a tune up because your professional is going to open up the machine and clean it out much deeper than what I've shown you here today. And that's necessary every once in a while to keep your machine going for a long time. Other reasons that you might need to take your machine in to a professional could be exposed wires on your machine that need to be replaced. I wouldn't attempt fixing anything like that at home. Also, with a lot of newer models of machine that are, have computers in them and are digital, like this Brother. If you have computer problems that is a reason to take it in and have a professional look at it. After you've looked at all of these things on your machine, at some point you might decide that it's just time that you need a new machine. I have some tips and tricks to help you figure out what's the best machine for you to buy. First of all, when looking for machines you want to make sure that your machine has some weight to it. It should be a little bit heavy when you pick it up. And the reason for this is even though this is a plastic machine, inside this machine it's all metal. It's a metal body and that's important because when the sewing machine is working, there's a lot of moving parts and the metal is going to be sturdy and not change. Which is good for when you're sewing for years and years to come. These days there are new machines being made that are plastic on the inside and they're very light weight and I would stay away from these machines. They're just not going to hold up to where, the way you want your sewing machine to and it's probably going to make you not love sewing because it's not going to do a great job. So, just pick it up and make sure it feels like there is metal inside. The other thing you want to think about is the type of sewing that you're going to be doing. If you're going to be doing a lot of garment sewing you don't need a ton of fancy stitches. Mostly you're just going to be doing straight sewing, some zigzag sewing for finishing your edges and that's about it. So, a pretty simple machine like this, that doesn't have a lot of bells and whistles is probably going to be just fine for a lot of garment sewing. If you're going to quilting, you might look for a machine that has a bigger area here, that can accommodate a lot more fabric, as you might have if you were trying to quilt a larger quilt project. And you might want more decorative stitches. Once you get into a digital machine, you get a few more things that can be really awesome if you sew a lot. This Brother has some really cool features, it's a little bit higher end digital model and these are pretty

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common these days in a lot of higher end machines. One feature that I really love is the speed setting. You can change the speed here and no matter how much your pushing your sewing pedal, your foot pedal, the speed is not going to change. If you have it on slow and you put the foot pedal all the way down, it's only going to stitch at a very slow speed. That's really nice when you're doing a really tricky corner, to have it able to sew at a very slow speed. Or if you're ready to go fast and you just are doing a long straight line you can move it up to the fast speed. The other thing that this machine can do that I love is it has this little button, which is a thread cutting button. So, when you're done sewing you just push this and it clips your threads right at the end of the seam. So, you don't really have to use your thread cutter anymore and that's really nice. Also, this is really awesome, it's a needle, up needle, down button. So, when you have this engaged the machine stop sewing with the needle in the down position or the up position, depending on what you want it to do. So, these are all just features that usual come with a slightly high end machine. So, if you think you are going to be sewing a lot for a really long time, it might be investing in a machine that has a few of these more special features. This machine can also change stitches, very easily with just the push of a button, to go to a zigzag stitch or to a button whole. It's very easy to change the stitch setting. Those are some of the things that you get when you pay a little bit more money for a higher end machine. I've shown you a lot about taking care of your sewing machine today. I've shown you how to take it apart and clean it more than most manuals are going to tell you. I've shown you how to fix a broken throat plate. I've shown you how to troubleshoot problems that can arise. And I've gone over some tips and tricks about what to look for if you need to buy a new machine. I hope that all of this information is help to give you the confidence to take care of your sewing machine and it's going to last forever.