

Quilter's Pro

User Guide



Quilter's Pro

Thank you for your purchase of the **Quilter's Pro** Long Arm Quilting System. **Quilter's Pro** offers you the ultimate marriage of affordability and functionality, and comes with a **one-year** electronics and lifetime casting warranty. We will always stand behind our products and any warranty issues will be fixed at no charge.

We view our customers as family, making great strides together to build a community of quilters. Having been in the sewing industry for over 60 years, our experience runs deep. Our customers can expect nothing less than the best. We pride ourselves on customer service and continuing education to better your understanding of the mechanics, and also to unleash your artistic quilting abilities.

As we continue our long arm quilting journey together, please know that we are here, ready to assist you with any questions you may have, from quilting tips, ongoing education, and service assistance.

Quilter's Pro

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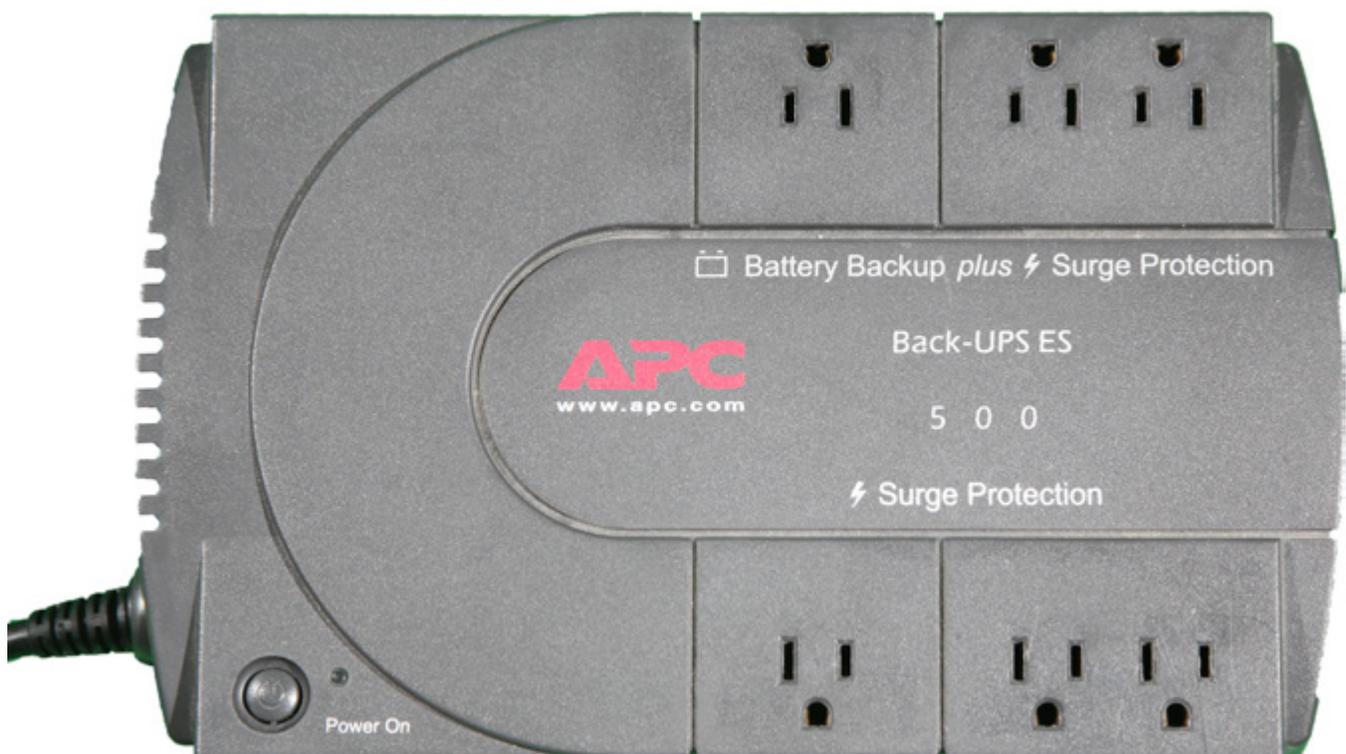
Warranty

We believe that we have designed and are manufacturing the best long arm quilting machine available. As you unpack your machine, be sure to keep the box and packing materials designed to protect the machine during shipping. Should it become necessary for you to return the machine for warranty work, please call us for specific instructions for packing and shipping your machine.

- Your **Quilter's Pro** has a one-year electronics and lifetime casting warranty from the day you receive your machine.
- The machine must be cleaned and oiled regularly according to the instructions in this manual. Failure to properly maintain the machine will void this warranty.
- Your **Quilter's Pro** must be plugged into a surge protected electrical outlet. We highly recommend using an Uninterrupted Power Supply (UPS) also known as a Battery Backup. This helps to ensure that you are getting a regulated 110 volts into your machine. See photo below of UPS Battery Backup.
- Should we mutually decide that your machine cannot be repaired using normal communications we will arrange for machine to be returned to the factory.

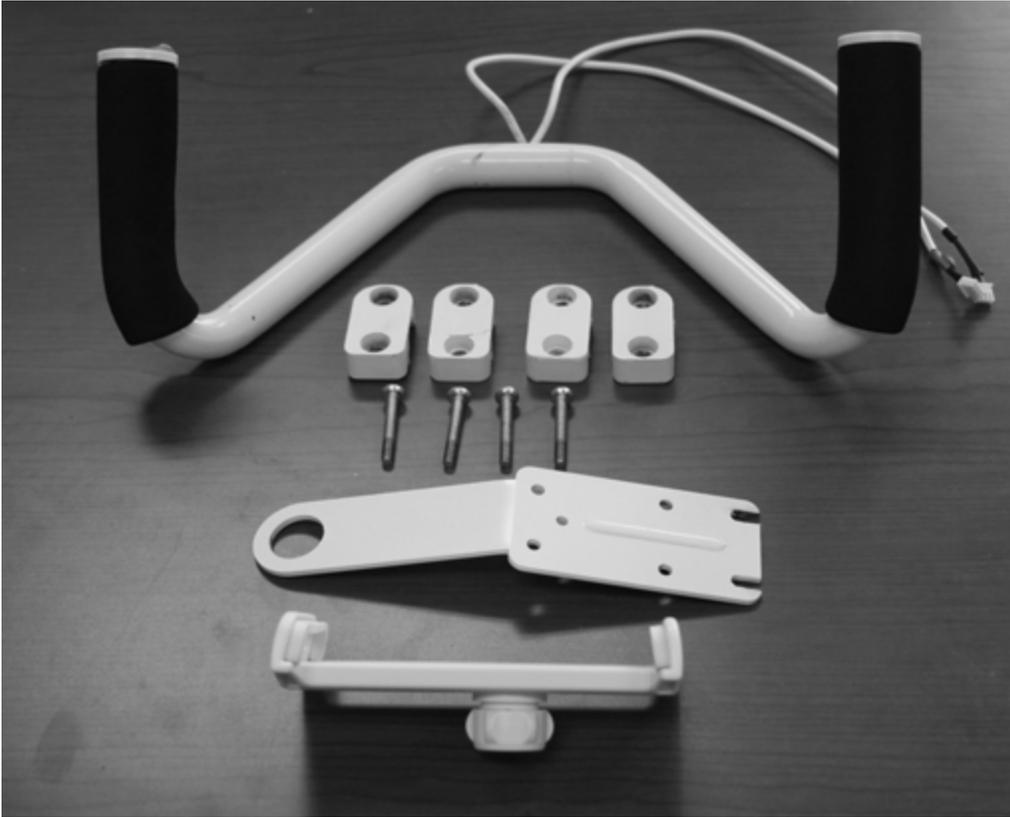
Should You Have a Problem

Please contact your selling dealership. They are also your servicing dealership.



Attaching the Handlebar and Display

Your **Quilter's Pro** comes with handlebar, handlebar mounting knuckles, main display mount, and spring loaded display bracket.



Step 1

handlebar

Mounting knuckles for handlebar

Screws for mounting

Main display mount

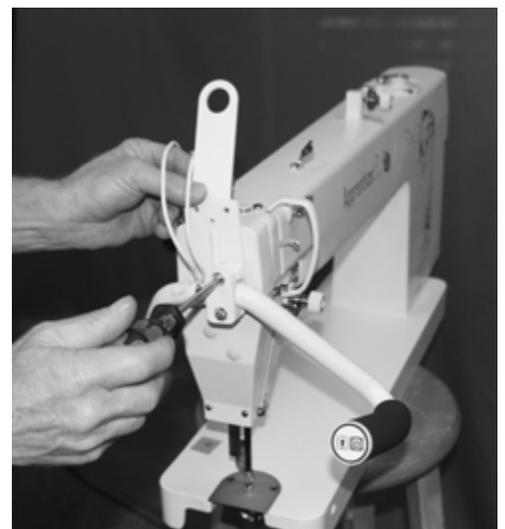
Spring loaded display bracket

Shown without light bar to indicate which parts hold handlebar and display bracket on machine.

Step 1: Locate your set of handlebars and the display mount.

Step 2: Place one set of knuckles around your handlebar and with two screws attach to front of machine with main display mount behind the knuckles against the machine.

Note: The main display mount is behind the knuckle set against the machine with the angle of the mount back toward the machine.



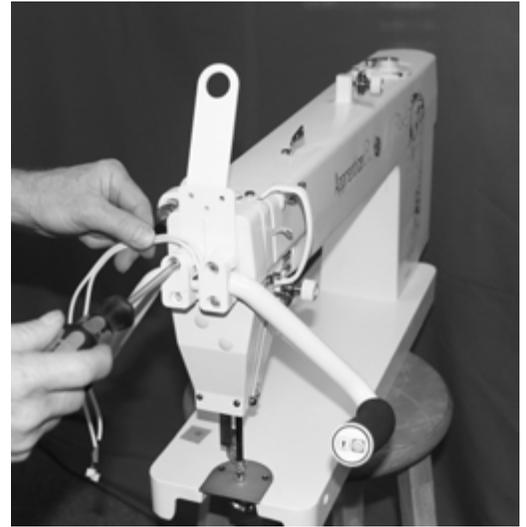
Step 2

Step 3: Place the other set of knuckles around the handlebar and line up with the holes in the front of the machine. Using the other two screws attach to the front of the machine.

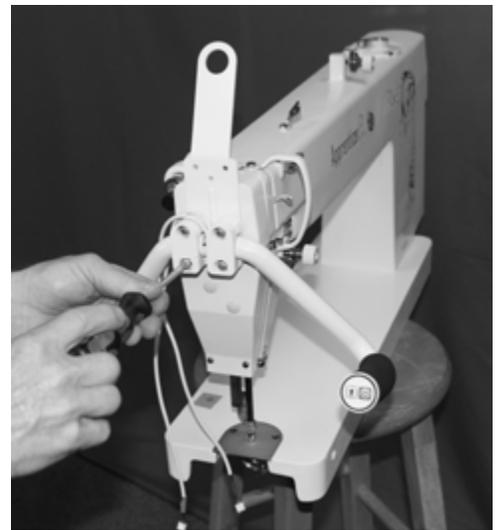
Step 4: Rotate the handlebar so that the handlebar cables are pointing up toward the needle of the machine.

Step 5: With the handlebar cables up, secure the handlebar in place by securing all four screws.

Step 6: Locate the rocker arm cover with PCB



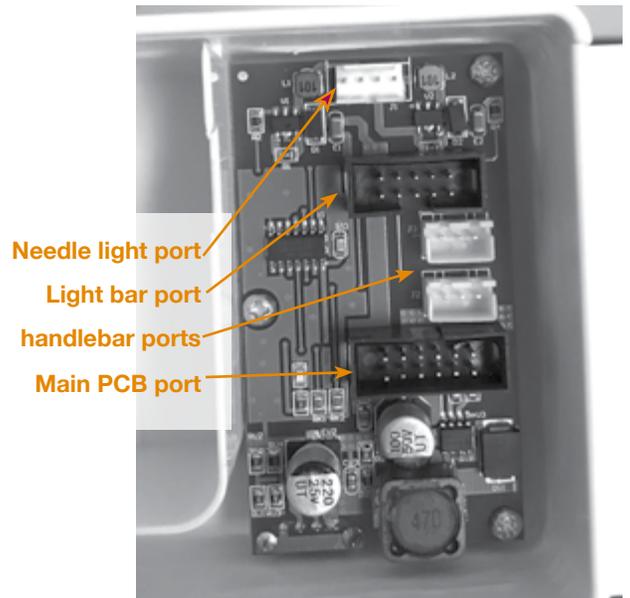
Step 3



Step 4



Step 5



Step 6

Step 7: Connect the right handlebar cable to the upper handlebar port, and the left handlebar cable to the lower handlebar port.

Step 8: Dress the handlebar cables along with the needle light cable toward the front side of the rocker arm cover.

Step 9: Attach the rocker arm cover to the side of the machine.

Step 10: Attach the spring loaded display bracket to the display mount.

Note: If the rocker arm is hitting the cover, adjust cover up.



Step 7



Step 8



Step 9



Step 10



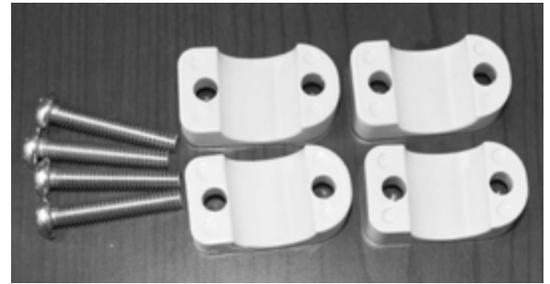
Attaching Your Rear Handlebars

Step 1: Using the clamps with the slotted holes, you will attach your rear handlebars to the back of the machine.

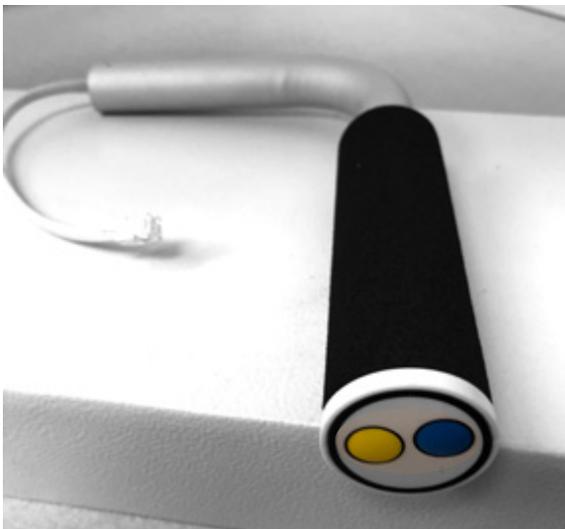
Step 2: Take the left handlebar (blue and yellow buttons) and attach to the left side of the machine when standing in the back.

Step 3: Take the right handlebar (red and white buttons) and attach to the right side of the machine when standing in the back.

Step 4: Set handles for your comfort and tighten in place.



Step 1



Step 2



Step 3

Right handlebar cable →

Left handlebar cable →



Your Thread Stand

Your **Quilter's Pro** comes with a four spool thread stand. This thread stand is connected to the side of your machine and can hold bobbin thread you are using to wind onto your bobbins and the top thread you are using to quilt. You can also have a second spool of thread on the stand if you are using two different threads on your quilt. This 4 spool thread stand has a telescoping thread holder which needs to be all the way up when you are quilting to help the thread come off the spool evenly and smoothly.

Step 1: If the telescoping thread tree is not on the thread stand then you will need to attach it.

Step 2: Slide the telescoping thread tree into the hole provided between the tread holders.

Step 3: Using the supplied screw with washer insert from the bottom side to secure the telescoping thread tree in place.

Step 4: On the left side of your machine (the left side of the machine is the side with the motor) you will see two screws not holding anything on yet.

See figure 15

Step 5: Loosen these two screws. You don't need to take them out but they do need to be loose so that you can slide the thread stand over them.

Step 6: On the thread stand you will see two holes on the underside which can be placed over the two screws and then drop into place.

See figure 16

Step 7: Once you have the thread stand in place over the two screws tighten the screws to hold the thread stand in place.

See figure 17

Remember to pull the telescoping thread tree to the full up position to use. **See figure 18**

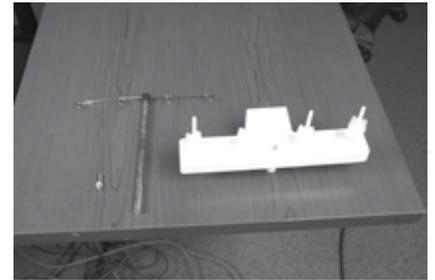


Figure 15



Figure 16



Figure 17



Figure 18

Attaching your Encoders to your Carriage



Lower encoder

Replace the screw holding the carriage wheel on with the new screw and the encoder between the Wheel and the screw.

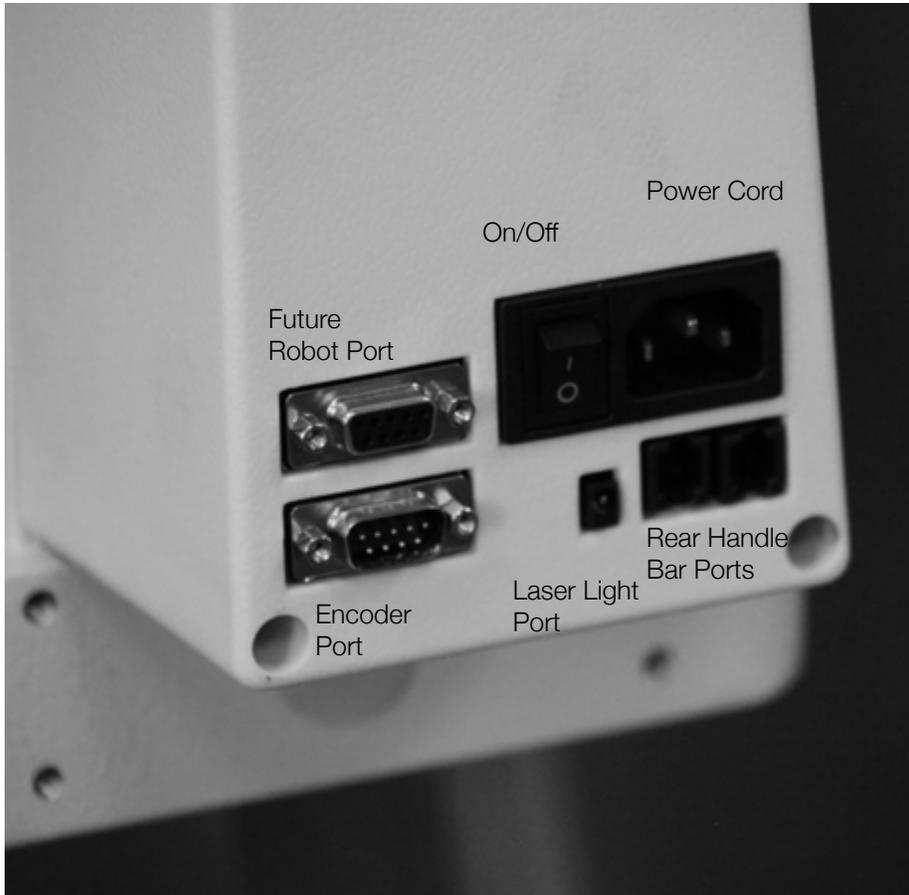


Upper Encoder

Replace the screw holding the carriage wheel on with the new screw and the encoder between the Wheel and the screw.

Connecting your Quilter's Pro to your Carriage Assembly

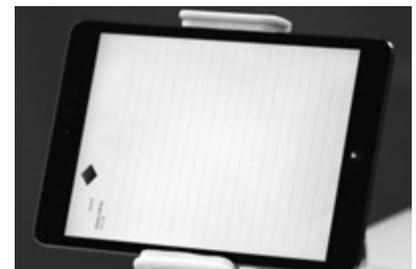
Your Carriage Assembly will need the encoder assemblies attached to the carriage before placing your machine on the carriage. Using the **Quilter's Pro** encoder assembly instructions attach your encoder assembly to the carriage.



Display (controller)



To open the app press this icon.



This screen will open. Press the IE number that matches the IE number on the back of your machine to enter the operation screen.

NOTE: Must download app from the app store and only works with iPad IOS 9.0 or higher. Search "Quilter's Pro" in the app store to find.

Adjust these settings by touching in the bar or sliding your finger in the bar

This blue tooth connection needs to be on for machine operation

This shows your stitch mode



These are your button settings



To set **speed** and **stitches per inch**, touch the number above the sliders and use the number pad to set to your preferences.

Changing the Button Settings



Touch the file folder to open the options



Touch User Profiles on the left side to open the profile management.



In the profile management screen you can touch any of the buttons to open the button menu.

NOTE: User 1 is a default mode and cannot be adjusted.



Select the option you want to use for that button and it will change.

Once you touch one here you will go back to the Profile management screen and the button will be changed.

To save the changes you must touch the save on the top of the profile management.

Resetting the Timers



By touching the timers at the bottom of the main page or file folder and then the advance mode you will be able to reset the timers.



By touching the reset next to the timers you can reset them to zero.

Touching home will return you to the main page for operation of the machine.

What is the Tension Release Lever?

The tension release lever raises the hopping foot and releases the tension on the thread. **See figure 30**

You can watch the tension disc plates open as you lift the lever.

NEVER start sewing with the lever up. There will be no tension on the thread which will result in stitches on the bottom being bad with huge loops and other bad looking stitches.



Figure 30

Adjusting the Height of the Hopping Foot

There are many reasons to adjust the height of the hopping foot. You could be using a thicker batting, quilting a quilt with thicker seams, or just need a little more clearance. You don't want the foot to be too high as that can cause strain on the thread, create flagging of the fabric while stitching, or just be too high if you put a ruler next to it.

To adjust the height of the hopping foot use these steps.

Step 1: Lower the needle into the fabric to get the hopping foot to its lowest position. (close to a seam is a good place then you can tell how high you need to be to clear the seam.)

Step 2: Loosen screw (A) on the side of the hopping foot (B). **See figure 31**

Step 3: Move the foot up or down to adjust for your project.

Step 4: While holding the hopping foot where you want it tighten the screw back down.

Factory setting for this is with needle down a dime should be able to pass below the foot and touch the foot as it passes under. **See figure 32**

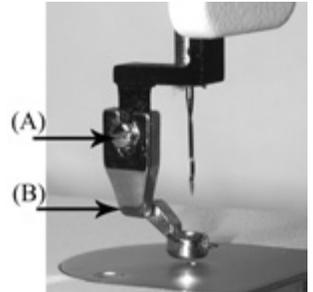


Figure 31



Figure 32

Adjusting the Stroke of the Hopping Foot

Factory setting is in the down position. The reason for less stroke is for better ability working with rulers. Adjustment of stroke is for going over thicker seams.

Step 1: Remove the four (4) screws (A) holding the cover (B) in place front left side of machine. **See figure 33**

Step 2: Using a wrench loosen the bolt (C) on the link adjusting crank (D) slide up to increase the stroke down to decrease the stroke. **See figure 34**

Step 3: Use your wrench to tighten the bolt (C)

Step 4: For your safety replace the cover (B) prior to use. Using the four (4) screws (A)

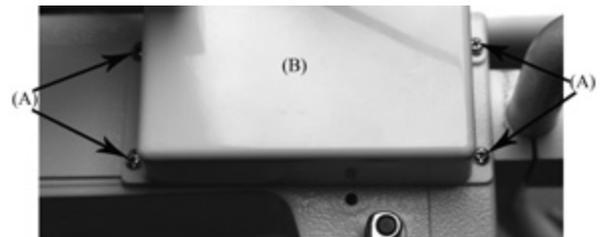


Figure 33

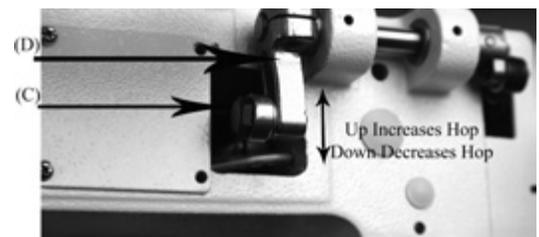


Figure 34

Routine Cleaning and Oiling

Routine cleaning and oiling is very important to the longevity of your quilting machine. Brush out the fuzz from around the hook and foot. Change your needle regularly to avoid thread breakage, tension problems and needle breakage. A worn needle can mean skipped stitches, shredded thread and a weakening of the needle itself. These things can lead to stitch quality issues.

Lint has a tendency to build up in the bobbin case. A tiny amount of lint can cause poor stitches. Check the bobbin case each time you change the bobbin to keep it clean. We suggest using a soft bristle brush to wipe out the bobbin case and the bobbin area. Canned air only blows the lint around. By using a soft bristle brush you collect the dust on the brush. Occasionally, place a drop of machine oil on a cotton swab to wipe out the bobbin case.

Keep your table clean of dust and oil. Clean the bars and carriage deck regularly for smooth movement.

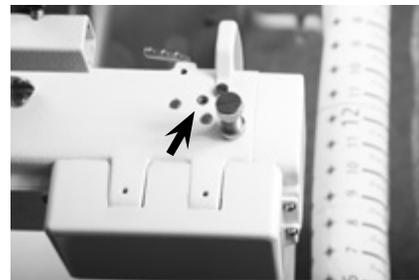
Oiling is extremely important to the longevity of your quilting machine. Failure to oil your machine regularly can void your warranty.

The one oiling spot marked with red arrow is marked with red paint on your machine. An oil bottle is included with your machine. The one oiling spot marked with a blue arrow contains a dip stick. Remove the dip stick by lifting it up with a finger nail or screw driver. Place drops of oil in this same hole if you find no oil on the dip stick.

Recommended oiling:

After every finished quilt place 3 to 4 drops of oil at the location with a red spot towards the front (needle side) of the machine. This is located on the top of the machine. **see figure 35** oil spot on top

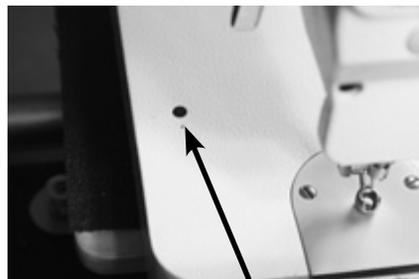
The other location is the oil dip stick found just behind the needle. At this time make sure oil is present on dip stick. If not add 3-4 drops of oil where you pulled the dip stick out. Run machine to lubricate use a clear high grade sewing machine oil. See figures 36, 37, and 38. (Note: the machine pictured here is before complete assembly from factory; your machine has more components attached.)



Oil spot on top Figure 35



Oil dip stick lifted Figure 36



Oil reservoir location Figure 37



Oil dip stick out Figure 38

Bobbin Winder and Bobbins

A bobbin winder is included with your machine. The thread on a properly wound bobbin should be snug and have even layers of thread. A sloppy or mushy wound bobbin will result in poor stitch quality.

How do I wind a Bobbin?

Step 1: Insert an empty bobbin on the bobbin winder spindle.

See figure 39

Step 2: Place a cone of thread on the holder.

Step 3: Bring the thread up through the guide over the cone of thread. **See figure 40**

Step 4: Insert the thread through the top guide hole then around the tension disk and through the bottom thread guide. **See figure 41**

Step 5: Wrap the thread around the bobbin clockwise three or four times

Step 6: Push trip mechanism forward until it snaps into position **See figure 42**

Use step 7 if you plan to quilt while your bobbin is winding. or use step 8 if you are winding bobbins without quilting.

Step 7: Bobbin winder will start winding the bobbin once you press the start/stop key. You can quilt while your bobbin is winding once it is full it will stop.

Step 8: If you wind your bobbin only (When not quilting) ensure that you do not have thread in the needle to prevent jams. Also remove the bobbin and bobbin case to prevent damage. Select Manual stitch mode, then press and release the start/stop button. Once the bobbin is full press and release the start/stop button again to stop the machine.

Note: *The Needle will continue to move up and down while you are filling the bobbin.*

The bobbin will fill until the trip mechanism is pushed out by the thread. It will then disengage the wheel. The bobbin should fill to just below the rim. Having the bobbin too full will cause tension problems.



Figure 39



Figure 40



Figure 41



Figure 42

Check the tension of the bobbin by holding the loaded bobbin case in one hand. With one hand under the bobbin case, hold the tail of thread and watch as the thread flows out of the bobbin case. A slight bounce should cause the bobbin case to slide down the thread. If the thread slides out of the case as you pick it up, it needs more tension. If it barely moves down the thread or doesn't move at all, it needs less tension.

See figure 43

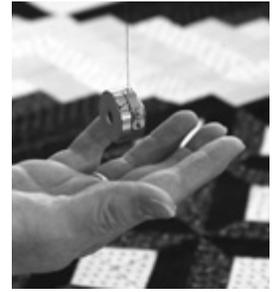


Figure 43

To adjust the tension: See figure 44

Use a small screwdriver to turn the largest set screw on the bobbin case to adjust tension. Make very small adjustments. Be very careful not to remove the screw as it is very small and difficult to find if lost. Remember, righty (clockwise) tighty, lefty (counter clockwise) loosey.

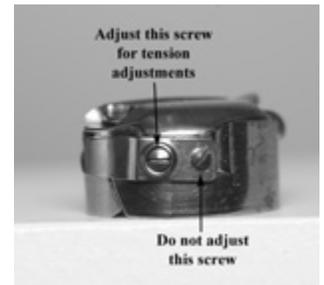


Figure 44

To place the bobbin into the machine:

Step 1: Insert the bobbin into the bobbin case. It does not matter which way you put the bobbin in but once you have it one way just keep doing it that way.

Step 2: Holding the bobbin case pull the thread through the slot.

Step 3: Draw the thread down and under the spring, making sure the thread is in the highest position of the bobbin case.

Step 4: Place the bobbin case in the machine. Always listen for the pop as it engages in the machine. **See figure 45**



Figure 45

We suggest using a soft bristle brush to wipe out the bobbin case and the bobbin area. Canned air only blows the lint around. By using the soft bristle brush you collect the dust on the brush.

Use a business or index card to clean under the tension spring on the bobbin case **see figure 46**



Figure 46

Each day before you start quilting, unthread your machine past the take up lever and remove the bobbin case, place a small drop of oil in the bobbin hook area before you begin quilting. This will clean out the fuzz and lint. Place a drop of oil in the bobbin hook area. Turn your machine on to run at the slowest setting.

TIP: Lint has a tendency to build up in the bobbin case especially with cotton threads. A tiny amount of lint can cause a huge headache! Check the bobbin case each time you change a bobbin to keep it clean.

Threading Overview with Names

This is a diagram of the front side of your **Quilter's Pro**. This is the side that faces the fabric. The back of your machine has the electrical outlet and stitch regulator connectors.

The numbers have been assigned in threading order.

See figure 45

1. Upper Thread Guide
2. Three Hole Thread Guide
3. Tension assembly disc
4. Check Spring
5. Silver Angle Bracket
6. Thread Guide
7. Take Up Lever



Figure 47

8. Thread Guide
9. Thread Guide
10. Thread Eyelet above the needle
11. Needle

Threading Your Quilter's Pro

Your **Quilter's Pro** is capable of sewing with many types of threads. One thing to keep in mind is this machine is an industrial machine so very light threads will be harder to use than the more traditional machine quilting threads. Use of the other threads is alright as long as you adjust the tension and slow down. These machines are test sewn with Superior King Tut thread which has a long staple and is a machine quilting thread. When we are at quilt shows we use the King Tut on top with a Sofine on the bottom. The reason for this is two threads of equal size will ride on top of each other and fight to interlock. When using a smaller thread in the bobbin you can get more thread on the bobbin and the threads will interlock faster and with less fighting as the smaller thread will nestle right down into the twist of the larger thread creating a better locking of the stitches.

Lets get started threading the machine:

Step 1: Place a cone of thread on the thread holder.

Step 2: Pull the thread through eyelet above the cone of thread. Make sure to use the eyelet directly above the cone of thread. **See figure 48**



Figure 48

Step 3: Thread upper thread guide as show in figure 49 (if you use all three holes it will add drag/tension to the thread)



Figure 49

Step 4: Weave thread as shown on the three hole thread guide. (if you use all three holes it will add drag/ tension to the thread) **See figure 50**



Figure 50

Step 5: Take thread between the two tension discs from back to front all the way around. **See figure 51** (release the tension on the tension disc using the tension release lever. This will help to ensure your thread gets between the disc easier.)



Figure 51

Step 6: While holding the thread up over the top of the tension hook the check spring. The tension spring should come down as you pull thread.



Figure 52

Step 7: Thread now need to run under the silver angle bracket **See figure 52** for details.

Step 8: Now bring the thread up to thread guide #6 above the tension assembly. You will be able to slide the thread into this thread guide. **See figure 53**



Figure 53

Step 9: The thread will now be threaded through the take up lever from the back towards the front. **See figure 54**



Figure 54

Step 10: Now bring the thread down the front of the machine snapping the thread into thread guide 8 and thread guide 9 on the way down to the needle. **See figure 55 and figure 56**



Figure 55



Figure 56

Step 11: The thread will now go into the Thread eyelet above the needle. **See figure 57** This is a hole and you will need to thread this spot.

(TIP: Use a dental floss threader to thread the guide above the needle. The threader will also help thread the needle.)



Figure 57



Figure 58

Step 12: Thread the needle from the front to the back of the needle. **See figure 58**

How do I Change the Needle?

A 134RSAN needle (size 18) will be installed on your **Quilter's Pro** from the factory. When it is time to replace the needle you can easily install one. Be sure the power switch is off on the machine. Remove the bobbin case.



Figure 59

To remove the needle use the smaller screwdriver included with your machine.

Step 1: Loosen the screw just above the thread guide on the needle bar; the needle should fall out as you loosen the screw.

Look closely at the needle. Your home sewing machine needle shank (top of the needle) has a flat side. The top of the long arm machine needle is round. On the point end of the needle there is a scarf, or notch, in one side.

The scarf must face the back of your machine.

The long groove at the eye of the needle faces you as you insert the needle.

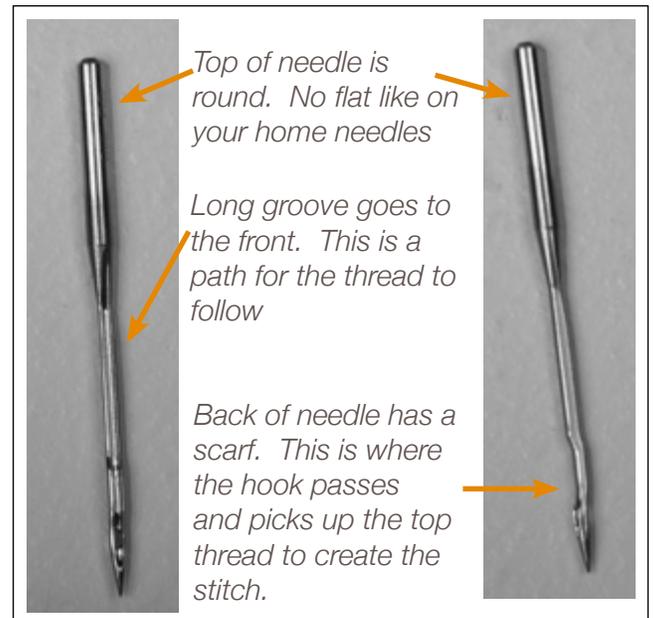


Figure 60

Why does the scarf go to the back of the machine?

When the needle goes down through the fabric into the bobbin case, the hook comes around behind the needle to pick up the thread. The scarf has to be there to provide a way for the hook to get between the needle and the thread in order to pick up the thread.

Step 2: Place the new needle up in the slot, making sure the needle is up in the needle bar as far up as it will go. Make sure the scarf is facing the back of your machine. Tighten the screw on the needle bar while holding the needle up.

TIP: Use the old needle to hold the new needle in place while you tighten the screw. By placing the point of the old needle into the eye of the new needle you can see how straight you are placing the scarf of the needle.

Before you turn your machine on go to the back of the machine and turn the hand wheel a complete turn making sure the needle goes down in the center of the throat plate and the hook in the bobbin area rotates with the needle smoothly. Put the needle down as far as possible. In the bobbin area, you should be able to see you the eye of the needle. When the hook rotates it picks up the thread at the back of the needle then the top thread pulls the bobbin thread up to create a stitch. The scarf must face the back of your machine.

How do I Make Adjustments to Make the Perfect Stitch?

Understanding how your long arm machine makes a stitch will help you make the proper adjustments to make the perfect stitch. The technique all long arm machines use to make a stitch is basically opposite of the home sewing machine. The home sewing machine is designed to press together two layers of fabric and sew while the fabric is held in place by the presser foot. Long arm machines are designed to press and sew multiple layers together while the machine head is moving. The difference is that there is practically no needle deflection on a standard sewing machine and a large amount of needle deflection on the long arm. The higher the tension, the more the needle will deflect. Another cause for the needle to deflect on a standard machine is the type of fabric being sewn. A tightly woven fabric tends to force the needle in different directions as it penetrates the fabric. This type of deflection depends greatly on the type of needle and type of point you use, such as a ball point or sharp point.

Needle deflection, what is needle deflection? What causes needle deflection? How is needle deflection related to the stitches on my quilt?

On a long arm quilting machine a stitch is mechanically created the same as a home sewing machine except the quilter is the feeddog moving the machine head over the fabric. The hopping foot presses the fabric together tighter and quicker than a home sewing machine presser foot because the fabric must be able to slide between the foot and the needle plate as the machine is sewing. This means that the machine is moving while the needle is in the fabric. The worst thing for a needle is to be in the fabric while the machine is moving which bends the needle, creating needle deflection.

Good stitches will interlock in the batting between the quilt top and backing. In real life, this goal is rarely achieved. For this reason, you need to be aware that you will have “pokies” if you use different colors of thread on top and in the bobbin. Pokies are where you can see tiny dots of the contrasting thread where the bobbin catches the top thread. If there is slightly more tension on the top than on the bottom, then you will see the pokies on the top side of the quilt. If the greater tension is on the bobbin, then you will see the pokies on the back of the quilt. If the pokies are objectionable to you, use the same color thread on both top and bottom.

TIP: *A general rule of thumb is that if the stitch looks bad on the top it is the bottom tension. If the stitch looks bad on the bottom it is the upper tension. The upper and lower threads play tug of war with each other.*

Tension, Tension, Tension

This probably causes more problems than anything else. You need correct tension on the top and bottom threads but you also must have correct tension on the quilt held between the bars. You should be able to gently rock the belly bar where the backing fabric is attached. This allows enough movement of your quilt layers for the needle to penetrate and make good stitches.

Before you start making adjustments to your machine ask yourself, “What changed?” If your machine was stitching great and all of a sudden it has loopies on the back or puckers, “What changed?” Did you just change the bobbin? Did you just lift the take up bar? Did you lower the take up bar after finishing your last quilt? Did you recently change the needle? Did you just roll the quilt?

If the take up bar with the quilted portion of your quilt is too high, it will result in poor stitch quality. You need a finger tip space between the quilt and the machine bed. Higher will result in poor stitch quality. Lower and the quilt will create a drag on your machine’s movement.

Look at your bobbin, a sloppy wound bobbin will not create a good stitch. Make sure that the threads on the bobbin are snug and evenly wound. Check to see if there is a piece of lint in the bobbin case.

Tension Trouble shooting checklist

- Is the side tension lever down?
- Have I oiled my machine regularly?
- Is the quilt too tight on the frame?
- Is the thread coming off the cone freely?
- Has your thread jumped out of the tension discs?
- Check your threading. Has anything been missed or has the thread flipped itself around something, increasing your tension?
- Is the hopping foot too high or too low?
- Is your take up bar too high? Did you lower the take up bar after your last quilt?
- Do you need to change your needle?
- Is your needle in properly?

Top Thread Breaking

- Check to see that your thread is coming off the spool freely. The thread guide is centered over the spool and has not developed any burrs or catches.
- Check to see if the thread has looped itself around the spool pin.
- Check to see if the needle is in correctly, with the scarf facing the back of the machine.
- Have you recently changed the needle? Is it as high as it will go in the needle bar?

The Stitch Regulator does not keep up with me? Just like driving your car you need to make controlled starts and stops, practice being consistent in your movements.

Eyelashes

Eyelashes on the back of the quilt can be caused by too little top tension. Turn the thread tension disk clockwise $\frac{1}{4}$ turn. Make small adjustments. Repeat until stitch quality is good. Remember the upper and lower thread play tug of war with each other.

Loose Top Stitch

Is the tension lever handle down? It lowers the hopping foot and applies the tension disk.

Is the bobbin thread inserted in the slot of the bobbin case?

Adjust the tension disk small turns clock wise. Repeat until stitch quality if good.

Quilt Top Puckers

Is your backing fabric stretched too tight? While the backing fabric needs to lie flat and without wrinkles, stretching it too tight can make the quilt top pucker. After stitching and releasing the backing fabric the top will pucker.

The top tension is too tight. Adjust the tension disc small turns counter clockwise. Repeat until stitch quality is good.

Stitches are Skipped

Skipped stitches leave needle holes without thread while large and small stitches in regulated mode means the encoders are not picking-up the signal of your movements because of lint or thread stopping or slowing the reading.

First, check to see that your machine is threaded correctly. Look at the check spring, does the thread lay in the check spring? When properly threaded the check spring will move up and down as the machine is stitching and the thread is flowing freely.

Check the needle. Be sure it is all the way up into the shaft and the scarf is toward the back. If it has been used for some time, replace the needle. A blunt needle will make a popping sound as it penetrates the quilt sandwich.

Machine Drags Making it Difficult to Move

Check to make sure the quilt on the take up bar is not dragging on the bed of the machine. A finger tip distance between the take up bar and the bed of the machine is all that is necessary. Elevating the take up bar too high can cause loopies on the back. Look for lint or thread that might be snagging as you move the machine.

Difficult to Control the Movement of the Machine

Check for lint or other debris on the track and bars. Sometimes the smallest pieces of thread create the biggest headaches.

Check Spring Replacement/Tension Knob

From time to time you may need to replace the check spring. We will use a series of photos to help you.



Figure 61

Tension Assembly with Broken Spring. (old tension knob)



Figure 62

Tension Assembly with good spring (new Tension knob)



Figure 63

Screw on inside of machine loosen only. **DO NOT REMOVE**



Figure 64

Remove assembly from machine
Be careful of release pin



Figure 65

Machine with tension assembly removed

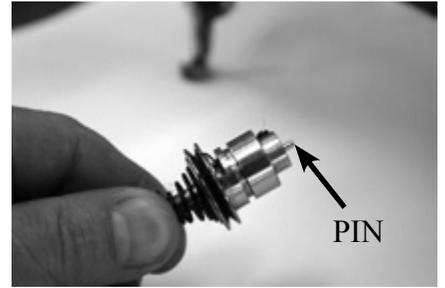


Figure 66

Tension assembly out of machine **DO NOT LOSE PIN**



Figure 67

Loosen screw only
DO NOT REMOVE



Figure 68

Remove tension assembly from barrel



Figure 69

Tension assembly, Barrel



Figure 70

Remove spring



Figure 71

Spring Removal



Figure 72

Spring Removed

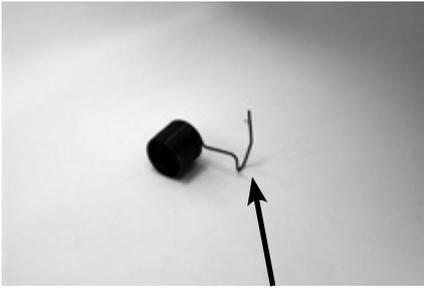


Figure 73

New Spring, This tail is what was broken



Figure 74

Insert the new spring



Figure 75

Twist while inserting the new spring



Figure 76

New spring in place



Figure 77

Insert the tension assembly back into the barrel. REMEMBER DO NOT LOSE THE PIN



Figure 78

Ensure that you are all the way in.



Figure 79

Give the tension assembly a twist until you feel resistance on the check spring



Figure 80

Tighten screw. Make sure the pin is still there.



Figure 81

Place the assembly back into your machine



Figure 82

Once in ensure that your check spring is at 11:00



Figure 83

Press in and notice the tension disk opens



Figure 84

Release and the disk will close; this is the proper place for your tension assembly



Figure 85

Tighten screw on your machine



Figure 86

Tension assembly back in place with new check spring at 11:00



Figure 87

For fine adjustment of check spring insert screwdriver turn clockwise for more tension

Machine Will Not Sew. I Cannot Turn the Hand Wheel

If you find that your machine is stuck chances are that there is a thread or something stuck in the bobbin race. This happens from time to time when the bobbin area has lint build up or thread is not pulled up by the take up arm.

Step 1: Turn the power off

Step 2: At the back of the machine grip the hand wheel and turn to release the item stuck in the bobbin race.

Normal sew rotation if you are standing at the back of the machine looking at the hand wheel is counter clockwise. If you turn the machine counter clockwise you will force what ever is jamming the machine deeper into the bobbin race.

Step 3: Rotate the hand wheel clockwise to back the jam out of the bobbin race. (This may take some work to get it worked free.)

Step 4: Normally when you get it backed up it will fall out and you will be able to make a full rotation with the hand wheel.

Once it feels free take the needle plate off the machine and give it a good cleaning in the bobbin area. Prior to putting the needle plate back on rotate the hand wheel counter clockwise (normal machine rotation)

While rotating the hand wheel by hand ensure that you have free movement of the machine. If everything is working well you can put the needle plate back on and put the belt guard back on, You will be ready to start quilting again.

Figure 89 shows thread caught

Figure 90 show the race



Figure 89

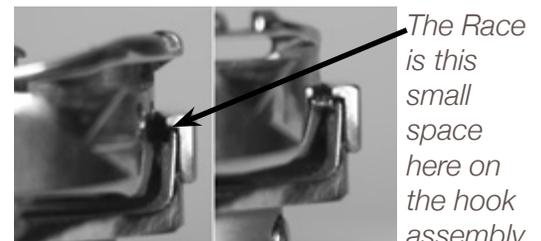


Figure 90

Adjusting the Bobbin Winder Lever (Amount of Fill on the Bobbin)

Step 1: Using your allen wrench loosen the set screw (A) holding the bobbin winder Lever (B) in place. **See figures 98 and 99**

Note: you do not need to pull the bobbin winder out to adjust this setting.

Step 2: Move the bobbin winder lever in for less fill and out for more fill

Step 3: Tighten set screw (A) to prevent bobbin winder lever (B) from moving

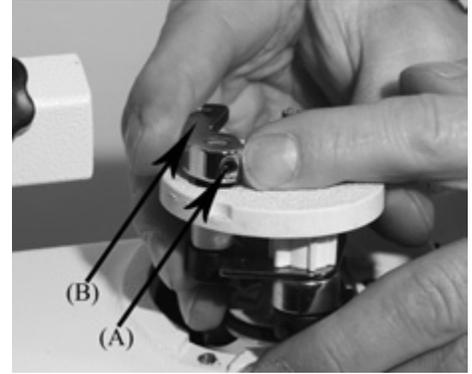


Figure 98

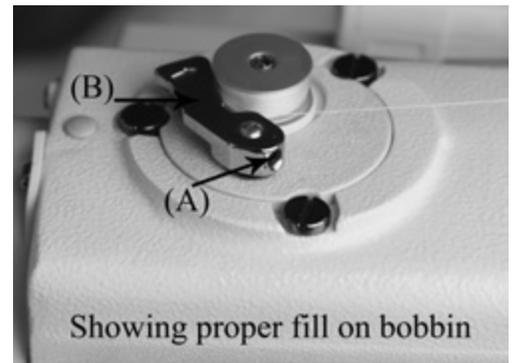


Figure 99

Adjusting the Tension Assembly Thread Guides for Proper Fill

Step 1: Loosen the set screw (D) so that you can adjust the tension assembly thread guides (E). Adjust tension assembly thread guides (E) up and down until bobbin fills evenly top to bottom. **See figure 100**

Step 2: Tighten the set screw.

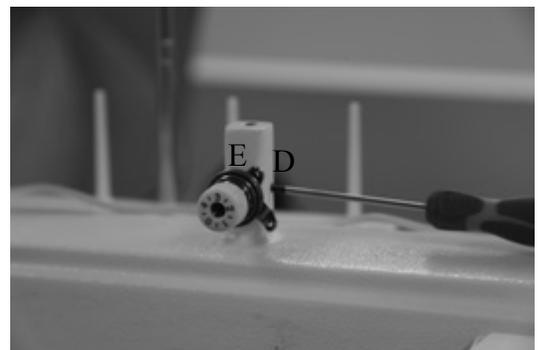


Figure 100

Adjusting Bobbin Winder and Contact with the Shaft

Step 1: Loosen the three (3) screws (A) holding the bobbin winder in place but do not remove them. **See figure 101**

Step 2: Twist the bobbin winder (B) to the right for more contact with the inner shaft or move left for less contact.

Note: When twisting the bobbin winder (B) you need to stand on the side of the machine with the access panel.

Step 3: The bobbin winder disk with the friction ring needs to contact the disk on the upper shaft when engaged. **See figure 102**

Step 4: Once done moving the bobbin winder retighten the screws to hold the bobbin winder in place.

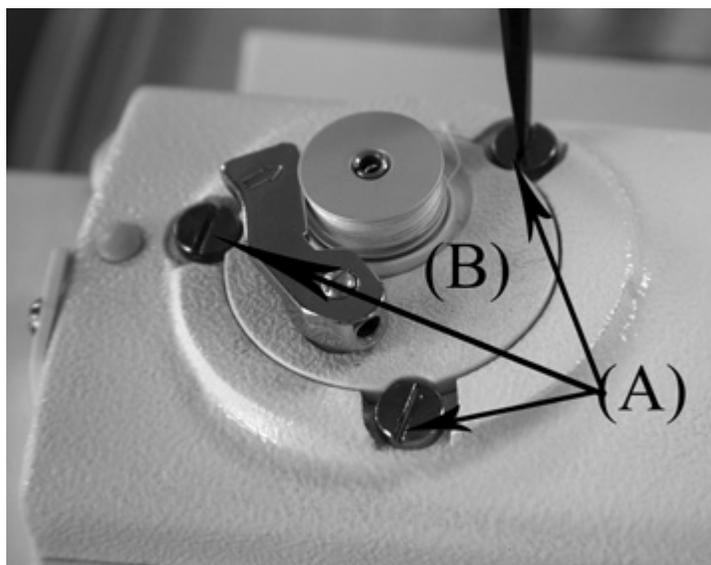


Figure 101

Turning the bobbin winder to the right will move the friction wheel closer.

Turning the bobbin winder to the left will move the friction wheel away.

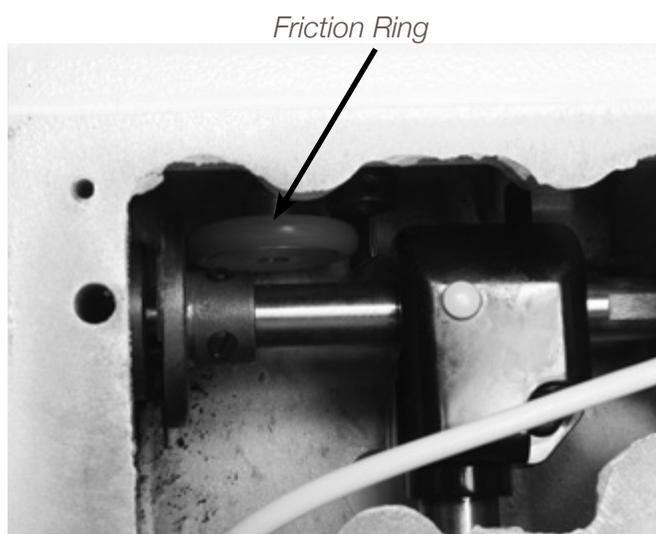


Figure 102