

When it works properly, the Juki Chain Stitch in C714 is one of the coolest, most useful, most kick-ass, prettiest machines since the iPod. When it doesn't, it's a total douchebag.

The usual reason this machine stops working is that it is incorrectly threaded. In a perfect world, everybody would graciously change the thread on this machine using the tie-off method, leaving it in the exact same state it was in when one of our life-saving technicians threaded it before them.

This is not a perfect world. Threads break. The technicians don't live at FIT (although I'm sure we'd all be willing to pitch in for them to work 24/7). And, sometimes, well-meaning but misguided FIT students spend hours frustrating themselves and everybody around them performing brain surgery on a machine that might as well be a jet engine.

With that, I give you the much needed...

How to Thread the Juki Chain Stitch Machine

by Nadia Raghei

You will need...

- Merrow Wire
- Tweezers (ideally the long ones with the bent nose)
- Mood Music (I recommend (Can't Get My) Head Around You by the Offspring or F*ck You by Lily Allen)

The chain stitch uses two threads, which we'll call the upper and lower threads because I don't know their real names.

You can really use any thread on the chain stitch, but to avoid issues it's best to use something with no chance of catching on the spool, like either of the ones in the picture at the right.



The Upper Thread

We'll start by threading the upper thread, which goes through the needle, because it's the easier one.

Step 1: the first thread guide and tension dial



The thread goes through the first whole from the back, straight down to the second one below it, and then back the other way through the third hole.

Then, it goes vertically down through the hole in the guide above the tension dial, and TO THE RIGHT through the tension disks.

Step 2: the second thread guide

This one's easy: through the first whole from right to left, then loop around the guide and through the second hole on the bottom from right to left.



Step 3: the third thread guide and tension thing

A little trickier - you may want to use a merrow wire for this one.

The thread goes through one of the two holes on the right side of the guide straight through to the hole on the left side (from right to left, obviously.)

It's pretty hard to get a picture of both holes on this guide since it lives behind a big metal guard, so I've shown you the thread's journey from right to left through the two holes.



to this one on the other side



The thread then goes behind the right side of the tension plate behind the screw.

Step 4: the last thread guide and tension dial

Next, the thread takes a trip straight down from the last thread guide into the hole above the smaller tension dial above the needle.

After the hole, it goes right to left behind the tension disk (between the tension disk and the metal plate of the guide).

We're almost done with the upper thread!



Step 5: the needle

This last part looks almost like a regular industrial Juki sewing machine.

The thread goes through the hole above the needle (front to back), then straight through the eye of the needle (front to back again.)

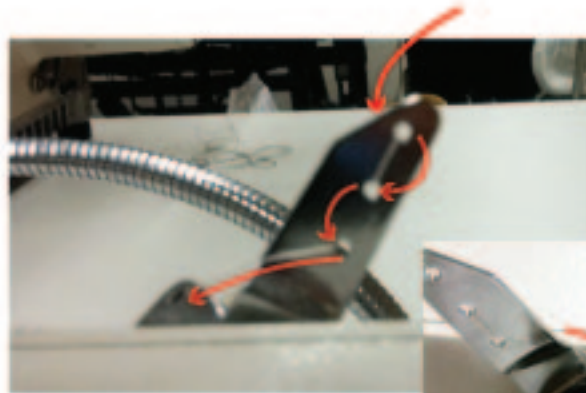
Raise the foot, stick that thread it, and we've successfully threaded the upper thread!

The Lower Thread

The upper thread was pretty straight forward. The pesky lower thread is where we run into trouble, because most of the action for this part happens either in the back of the machine or in its innards, where it can't be seen.

Step 1: the first thread guide and tension dial

Just like the first thread guide on the upper thread, the thread goes through the first hole from the back, then straight through the second hole from the front, and through the third hole from the back.



Next, it goes through the first hole on the tension dial below the thread guide.

Then, take the thread through the tension disks LEFT TO RIGHT, and straight down through one of the holes on the small thread guide below the tension dial.



Close up



the channel

Step 2: the channel

See that weird long black strip on the bed of the machine? That's another thread guide: we'll call it The Channel.

Before you start, go ahead and remove the silver throat plate by pulling back on the black switch on the right side. Don't worry, it will pop right back into place.

Bring the thread straight down from the last thread guide and and take it through the first hole on the little thread guide right in front of the channel.

On the back side of the channel is a slit that runs along its entire length - pull your thread up from the thread guide so it's taut, then just slide it into the slit and under the plate of the channel until the thread comes out on the other side.

Once it's out, the thread will meet...another thread guide! Put it through the either hole in this guide.



the throat plate

the switch



the slit



Step 3: the doozie

This is the part where most threading mistakes happen. Pay attention, every step is important. At this point you'll need the merrow wire and tweezers.

Pull back the black switch so that the weird-looking thread guide pops up. Using the merrow wire, pull the thread through the back hole on the first arm of the guide, then through the back hole on the second arm of the guide.

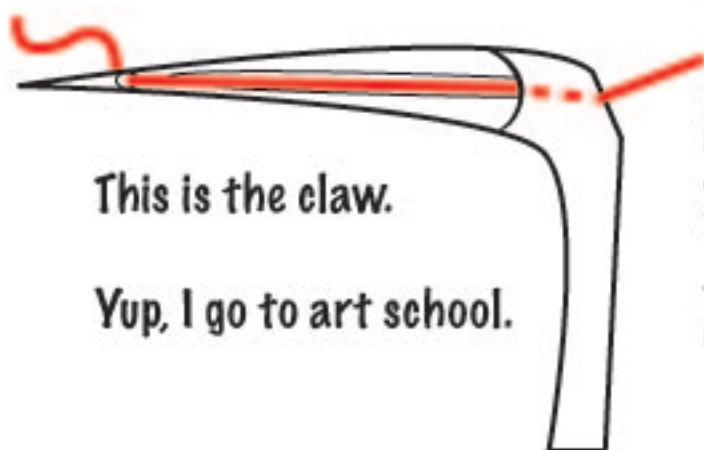
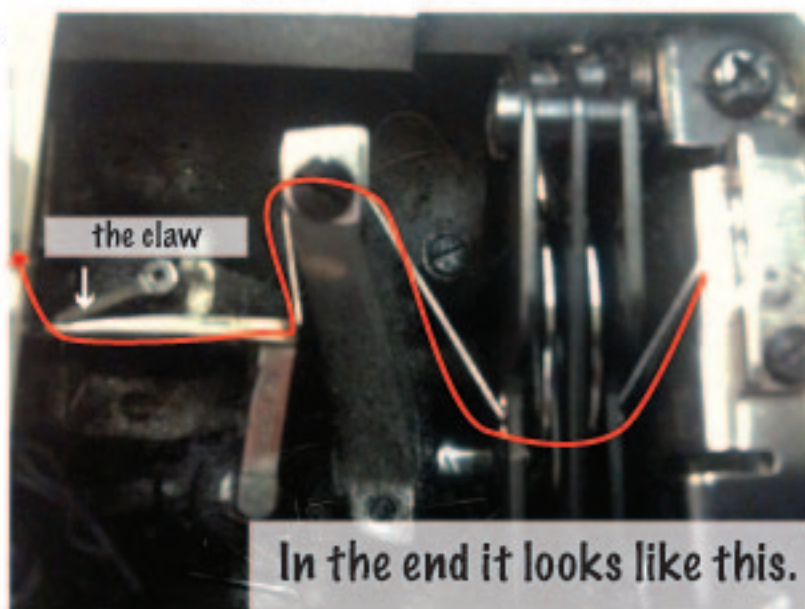
Push the weird thread guide back down so it clicks into place, then bring the thread into the big hole in the metal prong to the left of it.

The Claw: Some variation of this claw shows up in pretty much all of the non-lockstitch machines in C714, so get to know it and master threading it especially.

It's hard to get a good picture of this thing from the front, so please enjoy my mad Adobe Illustrator skills below, with the thread shown in red.

You may need to bring the claw a little more into view using the pedal and the handwheel. Make sure the what you've already threaded doesn't get tangled.

Using the merrow wire, bring the thread through the first hole on the right (right to left), through the channel on the claw itself, then through the hole on the pointy end of the claw (front to back).



Step 3: the end

Finally, pull the thread up through the middle hole between the feed dogs. You can either do it like you would on a regular machine, by holding the upper thread and turning the hand wheel until it picks up the lower thread.

The other way it to just stick the merrow wire into the hole and picking up the thread that way until you

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The other way is to just stick the merrow wire into the hole and pick up the thread that way. This way is a little less orthodox and somewhat tricky to pull off since you have to make sure nothing tangles, but the other way also runs a greater risk of tangling if the thread doesn't catch the first time.



And that's how you do it.