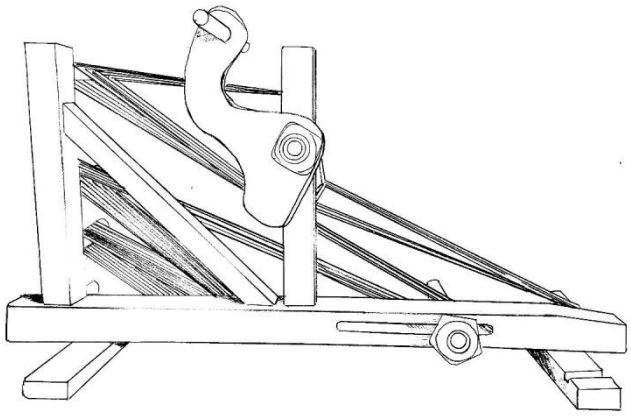
Kairos Inkle Looms



Weaving With Your Kairos Inkle Loom

Getting Started

QuickStep Guide

1/27/2024

(www.KairosInkleLooms.com)

Patent Pending Notice

The Kairos **"Fingers Free" Loom Shed Opener** is patent pending. All rights and restrictions that apply to this device specified as 'patent pending' are retained in full by Kairos Inkle Looms LLC.

Copyright Notice

Welcome!

Welcome to the Kairos Inkle Loom experience. We'll guide you through learning about how to start to weave on your new Kairos Inkle Loom, with its game-changing Fingers Free shed opener.

These very detailed instructions are for new inkle weavers, but experienced inkle weavers may find some helpful tips, as well.

Your Kairos Inkle Loom is already pre-warped (Threaded) – you'll notice that your band has been started for you and that your shuttle is attached to continue weaving.

These are the instructions that you will follow, given that the band has already been started.

These full instructions are also available as a PDF for you to print, on our web site, linked through our Learning Center page (***https://www.kairosinklelooms.com/learning-center***).

Scope of Material Covered

The steps in this Guide will walk you through weaving your first band, starting with the pre-warped initial weaving done for you. This guide ends with how to remove your completed band from our loom.

More Help at our Website

For instructions on **how to start another band**, including how to '**warp up**' your warp threads, please go to our website's Learning Center. We have several videos that will sequentially lead you through a live example of how to warp up all future bands (***https://www.KairosInkleLooms.com/Learning-Center***).

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Section 1: First Steps

When Your Box Arrives

Packing, shipping and delivery of your loom

First things first:

We have made every effort in our packing and shipping your new loom to ensure that it arrives to you undamaged, and complete with every item you are supposed to get. That includes either Gail or Richard personally inspecting every single loom we sell as we put it into a shipping box, to make sure that it is complete and undamaged.

That being said, we are not in control of the actual transport of your box between ourselves and your front door.

It is **VERY IMPORTANT** that you **inspect the loom** inside the box the same day you receive it, especially if there are any signs of damage to the outside of the box itself.

What you do in case the shipper delivers the goods in damaged condition:

On the rare occasion that your box arrives with signs of loss or damage, we strongly recommend opening the box while the driver is still present. The reason is that if the loom or other included items were damaged, the shipper's delivery person would be there to confirm the damage with you.

A claim procedure depends on the specific courier company. We ship all our looms using UPS Ground. We offer customer support for submitting complaints to the shipping service provider.

Even though we are not responsible for the damage as we don't handle your packages directly, we will guide you through the procedure free of charge. The only thing you have to keep in mind is to notify us within 48 hours of receiving your package. To notify us of any damage, please do the following:

- Write a detailed description of the damage, plus specific date of the delivery.
- Take a picture of all damage to the shipping box.
- Take a picture of the damage to the loom.
- Within 48 hours of receiving your loom, send us an email with the detailed description of the damage, and with the pictures attached.

If any items are missing in the box:

Following this information you'll find a list of everything that is intended to be in the box you receive. If you find anything missing, please let us know right away by either email (Richard@KairosInkleLooms.com) or call us directly (**206-909-6660**) and tell us what is missing, and if the box is damaged or appears to have been opened during shipment.

We will immediately rectify our mistake, and get the missing item out to you – with our strong apology!

We are very diligent in ensuring all items are in the box. However, we are human, and although we hope never to mess up, you need to know that we will make it right.

What Comes in Your Box

Your Loom Comes:

- Fully constructed frame, with feet, 'Fingers Free' shed opener and tensioner knob to be remounted
- All wood surfaces coated with a hard finish
- Pre-warped with warp-anchoring heddles
- Approximately first 1"-2" of band is pre-woven

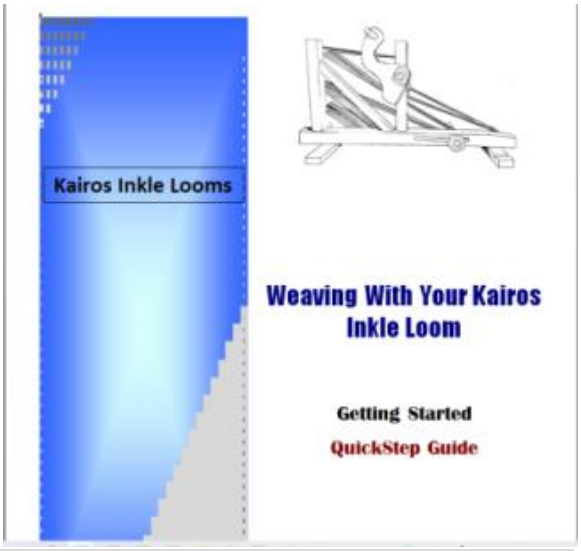
Shuttle:

IMPORTANT! Do not remove the attached shuttle just yet – we will want you to keep the shuttle attached to the loom so that you will have it in the right place when we start to guide you to weave.

Your shuttle – included in your purchase – is already connected to the weft (horizontal thread), and the shuttle is attached to your loom for transport.

QuickStart Guide:

You received a printed guide – you are reading it right now – that will take you step-by-step through weaving your first band.



Extra Heddles (Linen):

Heddles are those loops of thin thread that are anchored one end to a peg, looped over every other warp thread, and the other end of the loop also anchored to that same peg.

Some of the heddles we include in your purchase are already attached to the loom, and holding about 50% of warped yarns in place.

The rest of included heddles are in a clear zip lock bag for your future use when you create wider warps.

Extra Weft Weaving Yarn:

We've included a zip lock bag that contains sufficient additional weft yarn to be mounted to the shuttle for you to finish your first band. It matches the pre-woven weft (horizontal) yarn.

We include instructions in this QuickStep Guide on how to connect this extra weft yarn to the weft yarn with which you have been weaving.

Loom Hold-Down Clamps:

We have also included a set of two hold-down clamps that when fitted into the provided slots in the front foot will let you clamp down into place the loom. When used, this will restrict the loom from sliding, especially when pulling on the tensioner to re-tension the warp threads.

Extra Shed Opener Shims (washer):

To ensure that the shed opener pivots freely – does not bind on the wood upright part – a thin metal shim (washer) must be slid onto the pivot bolt, one on each side of the shed opener.

These shims can be pesky, and might fall away whenever you remove the shed opener, and make a run for dark corners – never to be found again.

Assuming this might happen – and these are not found at your local hardware store – we have automatically included one extra washer, just in case.

NOTE: If it should so happen that you use more shims after running out of the one we've included here, simply contact us and we'll send you a couple more, free of charge.

Heddle Tying Jig:

A set of heddles serve to separate the warp threads into two layers by anchoring one set, allowing you to move only the other set, to create a shed opening to pass your shuttle and weft yarn through.

Inkle looms typically use string loops as heddles.

The wider your band warp, the more heddles you will need to hold the '**Heddled'** (anchored) warp threads in a fixed position.

You may find that you need more heddles than come with your Kairos Inkle Loom (some pre-installed, the rest in a plastic bag in the shipping box.

You can create more heddles. Just be aware that they must be a very precise overall length in order to allow the shed opener to open the Upper and Lower shed openings equally.

To make it easier for you to make properly sized heddles, we have included a **special heddle tying jig** whose pegs are precisely distanced so that when you loop around them and tie off, the resulting loop will be correctly sized.

NOTE: We did this differently than any other inkle loom's method of creating extra heddles. All others require you to make them using two of the pegs on the loom itself. We – instead – provide you with a separate heddle tying jig.

The advantages to our method?

1. What if you want to make more heddles when a passenger in a car? Won't work with the loom-dependent method. With our method, easy peasy to use this small, but effective, jig.
2. What if you are warping for a new band and discover that you need more heddles to finish the warp? Won't work easily as you already have started to take up space on the pegs.

Introduction

Goals & Your Preparations

Our goals for you:

So, you are possibly new inkle loom weaving. Might even have wished for an experienced person to be at your side to help you get started – and to avoid the inevitable, "*What do I do now*" hesitation because, after all, you've not done this before.

Our goal for this instruction is to lead you step by step through how to get started weaving. We'll walk you through each step to weave and complete your first band!

1. To make your first weaving less intimidating, we at Kairos purposely did all we could to reduce any possible '*fear factor'* by giving you a fully put-together loom, that is fully warped (all the yarn threads wound around all those pegs).
2. AND we weaved the first inch or so that you can:
    a. can see what the unwoven yarns will look like after you weave.
    b. see how the width of the woven section is narrower than the unwoven yarns (the yarns are pulled together as you weave).
    c. actually see and touch the edges (selvedges) as an example of what a straight edge will look and feel like – helps with you understanding what your ultimate goal will be for future edges.
3. You can jump right into the step-by-step instructions in this handout, and start to weave with Kairos right at your elbow – at least in writing and pictures – to be that experienced person at your side.

Let's start weaving!

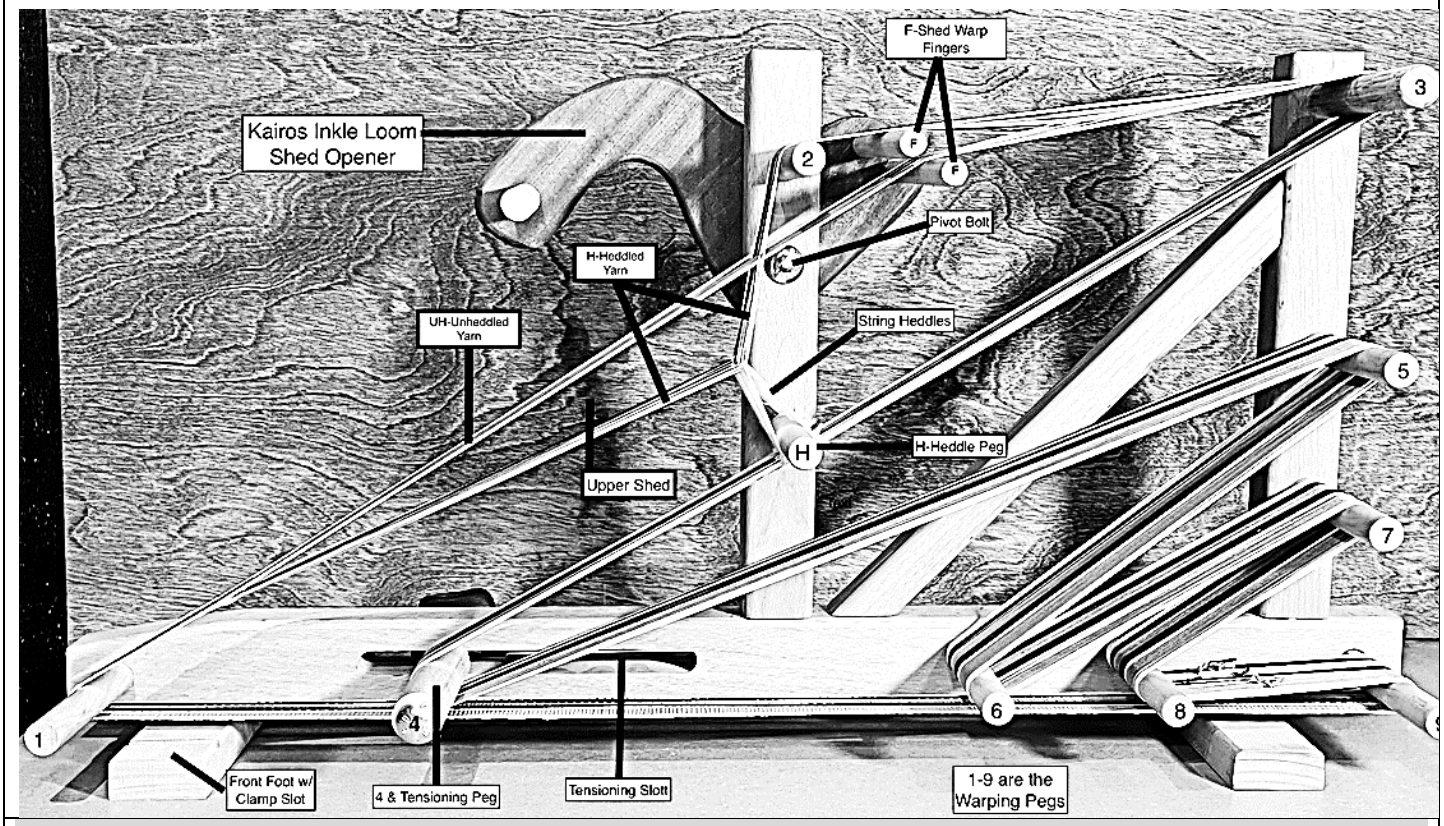
The Kairos Inkle Looms team

Supporting Videos Available

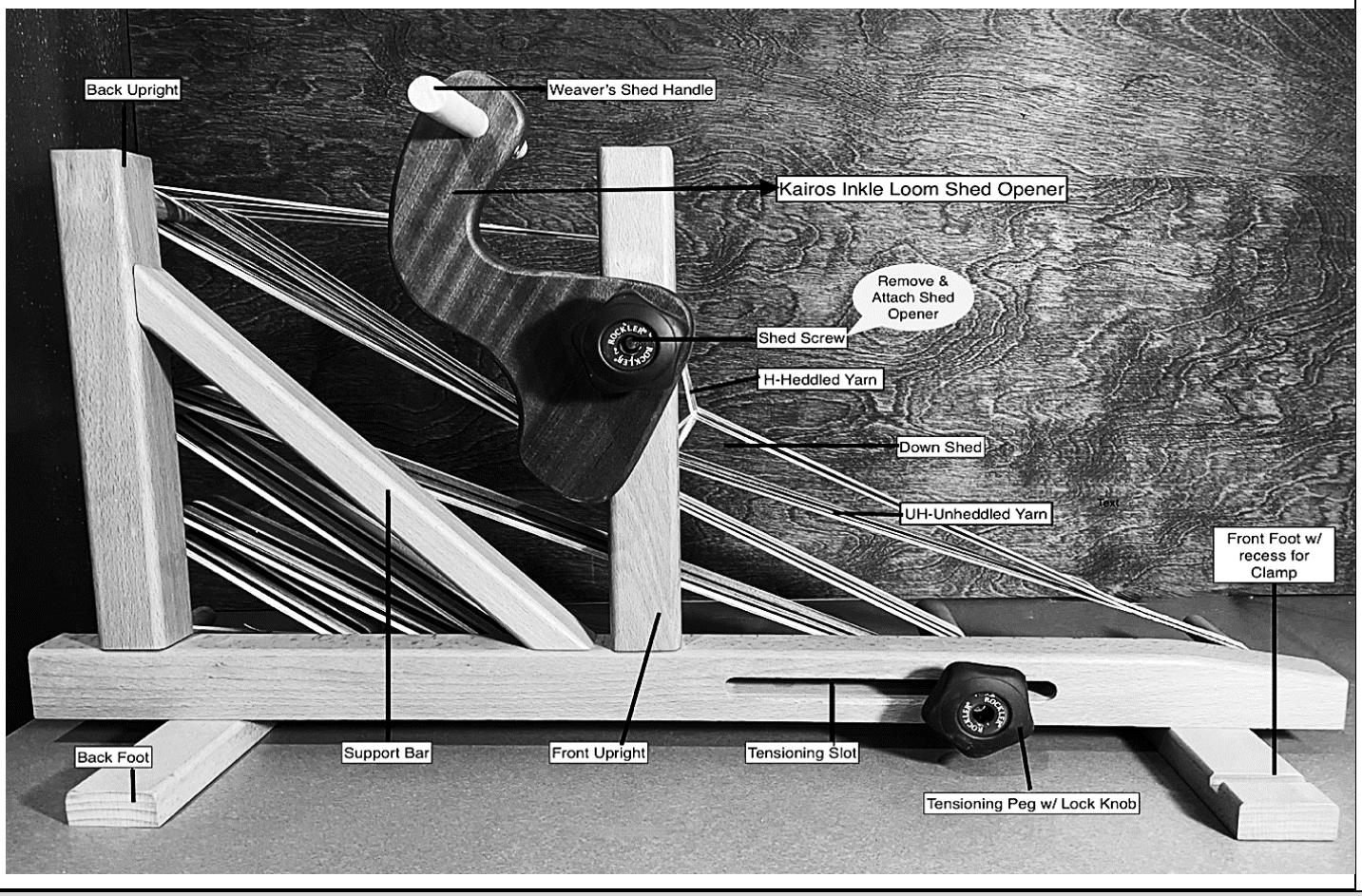
You can also go to our **Learning Center** page at **https://www.kairosinklelooms.com/learning-center** to find a collection of videos that walk – and talk – you through this same process.

Parts of Your Loom

Right side of loom:



Left side of loom



Key Words to Remember

Why learn these key words?

Every hobby has its own set of buzz words, and inkle weaving is no exception. To make it easier for you to understand and do these initial basic weaving steps, let's become a bit familiar with key words that you will encounter in your instructions.

NOTE: A more complete weaving words list can be found in our Learning Center at our website – page at ***https://www.kairosinklelooms.com/learning-center***.

NOTE: The following list is **arranged alphabetically**, to help you re-find a word.

Bar

Another word for a **warping peg**.

Beat

To beat is the firm pushing of a just-woven weft thread into position in the warp, snugly against the previous pick (weft thread). The thin edge of the shuttle is the most typical instrument for beating.

Draft

A draft is a colored grid-based drawing whose picture identifies the color pattern you will use to warp up each row of yarn. When first starting to weave with an inkle loom, you may just pick out which yarns and colors that look good to you. Later, you may want to create a colored sketch of which colors to include. Consider it a color palette or template.

Fell

Fell is the last weft row (pick) woven. It is also considered the imaginary line that separates the last woven weft row from the start of the unwoven warp threads.

Heddle

A set of heddles serve to separate the warp threads into two layers by anchoring one set, allowing you to move only the other set, to create a shed opening to pass your shuttle and weft through.

Inkle looms typically use string loops as heddles.

An individual heddle may also be called a **leash**.

Your loom comes with a set of exactly sized heddles; some are pre-installed on your loom as part of the pre-warping we did for you, and the rest are in a plastic zip lock bag in the box.

Heddled threads- (H)

These are those warped yarns which pass through the loops of heddles, which anchors the individual heddle yarns to a peg to keep it from moving. (alternates every other time with unheddled threads).

Hold-Down Clamp Slots

These 3/8" deep slots are located on **top of the loom's front foot**, on both sides of the loom body. Each slot allows the top right angle of the **metal hold-down clamp** to be fitted into the foot at this point so that it is out of the way of the warp threads when clamping the loom onto a table.

Lower Shed (aka DOWN shed)

The shed opening that is created by lowering the unheddled (unanchored) threads downward, creating a gap between the heddled (anchored) warped threads and the lowered unheddled threads.

NOTE: See '**Upper Shed'** to understand the opposite shed opening.

Pegs # 1-10

Pegs 1 through 10 are the dowel rods which protrude from the frame and are what the warp threads are wound around.

- **#1 -Starting Warp Peg** – The one peg in the front of the loom where you begin warping
- **#2 – Top/Front Warping Peg** – heddled warp threads go over the top of this peg.
- **H - Heddle Peg** – The one peg (bar) to which the string heddles are affixed
- **#3 - Back bar** – The one where all warps meet and continue onto the same path after either alternately going through a heddle and under the top bar, and or going unheddled over the top bar.
- **#4 – Tensioning Peg** – That part of the loom which slides to allow you to adjust the warp tension. It is the peg which moves back and forth in the slot in the base
- **#5 thru 9 – Warping Pegs** – Any or all of these will be used to hold the warping threads and allow you to have a shorter or longer warp

Locked (Locked In) Weft:

A weft (horizontal) row becomes '**locked' in** when the shed has been changed right after the weft row has been pulled through the shed opening from one side of the band to the other. That shed change results in the two sets of parallel warp threads crossing each other, trapping the weft row, and preventing that weft row from sliding back. It is 'locked' in place within the band.

A locked row is further '*anchored'* because after changing the shed you will then use your shuttle to 'beat' (push) the point where the warp threads cross each other, until that now-locked weft row is snugged tightly against the previous weft pick (row).

Pick

A single row of weft weaving created by one pass of the shuttle/weft through the shed opening. Also called a '**shot'**. If that row is the last one woven, it is also called the "**Fell"**.

Rib Protector

A unique Kairos-provided wearable rib protector whose neck strap you can adjust so the protector hangs in line with where the front of the loom would push – which protects your ribs.

Rounds 1 & 2

Rounds are the weaving world's way to identify the two alternating pathways that the warp threads take around the pegs of the loom – one round identifies the **unheddled** (free to move) threads, the other round identifies the **heddled** (anchored) threads. These rounds are repeated as many times as the **draft** (design sketch) calls for.

Think of these two separate sets of yarns as those that make a loop 'a-**Round'** the pegs.

Selvedges

Right and left edges of a band.

Shed

The controlled opening between the two layers of warp threads where you pass the weft through.

Also called the '**shed opening**'.

Shed Opener

The Kairos patent pending levering mechanism that lets you create the opening between the two layers of warp threads (heddled and unheddled) where you pass the weft through by raising or lowering the unheddled (unanchored) warp threads – while the heddled (anchored) warp threads remain in fixed position.

Shed Opener Fingers

These fingers are the 2 pegs coming out from the Shed Opener, on the right side of the loom, which trap the unheddled (unanchored) warp threads between those pegs. When the shed opener is rotated, these two fingers lift and push down on the unheddled threads, forming the **Upper** (UP) shed and the **Lower** (DOWN) Shed, respectively.

Shed Opener Pivot Bolt

The Shed Opener Pivot Bolt is the pivot point of the shed opener, which raises and lowers the unheddled threads. The Bolt is mounted right-to-left through the front upright, followed by 1 washer, then the Shed opener, then another washer, and then the black lock knob that screws onto the other end of the pivot bolt, which in combination holds the shed opener securely to the front upright.

Shuttle

(Also sometimes called a **stick shuttle** or **belt shuttle**) Tool used to hold the weft thread and pass it through the shed opening from one side to the other of the warp threads during weaving. Usually made of a thin wedge-shaped flat piece of wood with notches in both ends (to hold the loops of weft yarn). If the shuttle has one tapered-to-thin edge it can also be used to "**beat**".

Take-up

The percentage of the overall warp length which shortens during the weaving process. The heavier the threads used, the greater the take up.

The reason the finished band is shorter than the original warp length is due to those warps using up some of the total length having to go over and under every other weft thread.

Tension

This is the degree to which the warp is tightened and stretched during weaving. The greater the tension, the tighter the band weaving.

Tensioner

That part of the loom which moves to allow you to adjust the warp tension. The tensioner is the tensioning assembly (peg, bolt, lock knob) which slides back and forth in the slot in the base.

1. Loosening – within the tensioner slot cut into the base, you slide the tensioning Peg toward the back of your loom, loosening your warp so it can be advanced.

2. Tightening – within the tensioner slot cut into the base, you pull the Tensioner toward the front of your loom. When quite tight you are ready to weave.

NOTE: Our looms all come with a separate metal tube that fits over the tensioner bolt, and automatically slips into the tensioning slot, to prevent the bolt metal threads from chewing on the wood slot.

Tensioning Slot

This slot is the horizontal 7" slot cut in the base of the Loom. It is where the tensioning peg bolt goes through the loom. This slot allows the tensioner (Tensioning peg, bolt, and lock knob) to slide the length of the Slot to maintain good warp tension.

Unheddled (Open) threads- (U)

Those warps which *do not* pass through heddles (alternates with heddled threads). This set of threads (yarns) are designed to be raised and lowered – using the Shed Opener – to open the Upper and Lower shed opening.

Upper (UP) Shed

The shed opening created by lifting the unheddled (unanchored) threads upward, creating a gap between those unheddled threads and the heddled (anchored) threads.

NOTE: See '**Lower Shed'** to understand the opposite shed opening.

Warp

These are the yarns (threads) you put on your loom when setting your inkle loom up to weave. These same yarns run in a continuous loop around the loom pegs. The longer the warp threads, the longer your woven belt can be.

Warp-faced weaving

A woven fabric or band in which only the warp (not the weft) shows as part of the design. Inkle looms are made to create warp-faced bands

Weft

The weft is the thread (normally wound around a shuttle) which you pass back and forth through the shed openings during weaving. When used in combination with the changing of the shed opening, traps the warp threads. This produces your weaving.

How the Kairos 'Fingers Free' Shed Opener Works

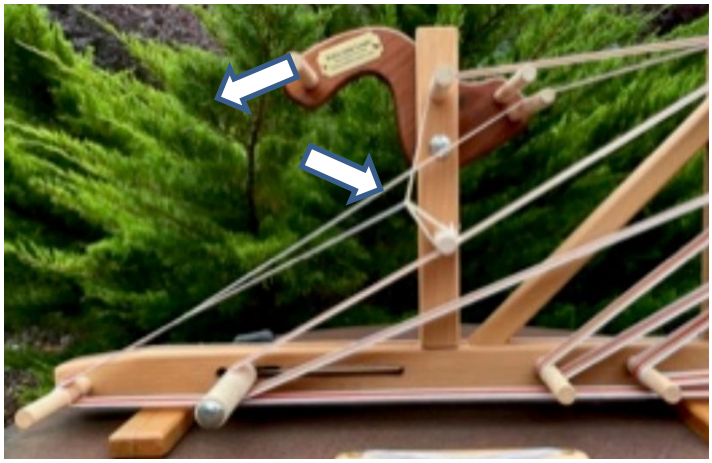
Why we invented our levering shed opener

With the Kairos Fingers Free Shed Opener (patent pending), on your portable tabletop inkle loom you will find that you will no longer need to use your hands and fingers to reach into the loom to manually push one set of threads up or down to create the opening between the heddled and unheddled threads normally required to create a weaving action. (this opening is called the shed).

Instead, our Fingers Free Shed Opener's levering action accomplishes the same result as that manual method, without the strain on the arms, hands and fingers.

To change the sheds to the UP or DOWN position, you simply pivot the shed opener handle up or down to change shed opening.

How to open the Upper (UP) shed opening

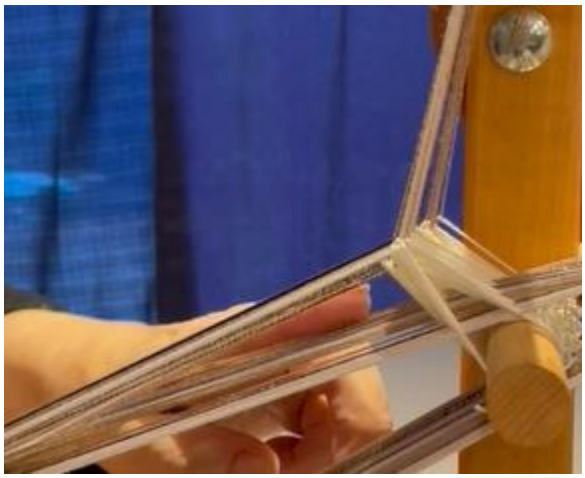


To change the shed to the UP opening, you simply pivot the shed opener handle **down** to change shed opening.

This action creates a shed opening ABOVE the anchored heddled yarns.

Give it a try!

How to open the Lower (DOWN) shed opening



To change the shed to the DOWN opening, you simply pivot the shed opener handle **UP** to change shed opening.

This action creates a shed opening BELOW the anchored heddled yarns.

Give it a try!

Preparing to Weave – Take Notice

Heddles we've provided

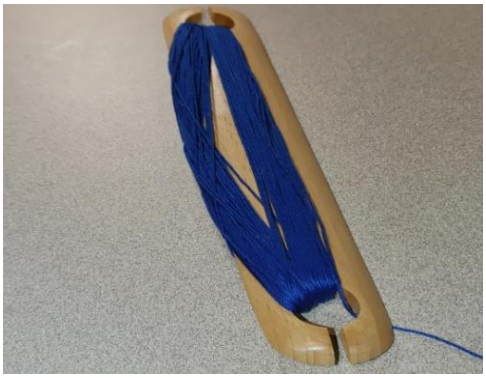
We have provided you with starter heddles already mounted on the loom, plus some extras in a bag, just in case. These are reusable, but you will want to make more so that wider inkle bands can be made.

Your Shuttle

The shuttle carries the weft thread through the open sheds and is what creates the weaving action.

You will notice in the picture at the right that we have already wound the weft thread onto the shuttle so that you can start weaving on your Kairos Inkle Loom, right out of the box.

Notice how the weft yarn is wound onto the shuttle as to become familiar with the recommended pattern - what it looks like.



Taking the shed opener off & putting back on

About the shed opener:

The shed opener is your means to simply create either the Upper or Lower shed opening.

This shed is quickly removable, for such situations as you are putting on a new warp, or you use this loom for card (tablet) weaving. Takes only 10 to 15 seconds to remove it.

Removing the shed opener does not in any way affect your current warp, so you can relax about that possibility.

NOTE: Removing and re-mounting the shed opener does **not** affect the unheddled yarns in any way, so if you feel frisky right now, you can follow the next instructions to take the shed opener off, and put it back on.

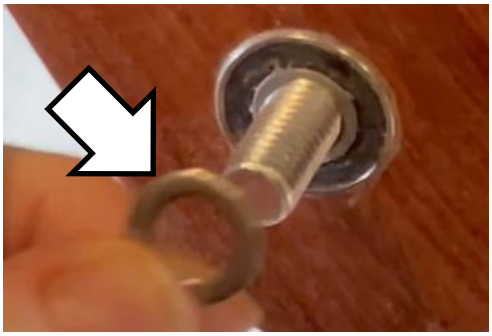
Taking the shed opener off

1. Spin off the rubberized shed opener lock knob.

   NOTE: if you have our **Skagit model**, the knob is threaded onto the associated pivot bolt approximately 1 inch.

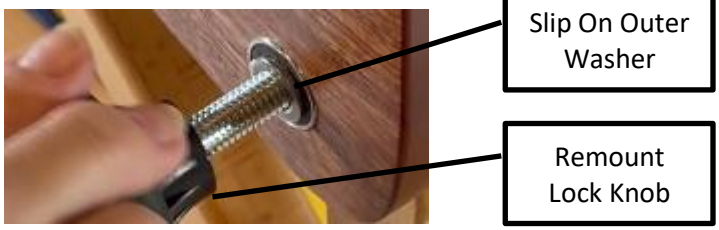
   NOTE: If you have our **Inkle Pro** model, the knob is longer, and yet still threaded onto the associated pivot bolt the same as for the Skagit model.

2. **IMPORTANT – Remove the 1st thin washer** that is on the pivot bolt, that fits between the lock knob and the shed opener! This washer is essential for the shed opener to work properly.
3. Simply slide the shed opener off its pivot bolt.
4. **IMPORTANT – Leave in place the 2nd thin washer** that is on the pivot bolt, that fits between the shed opener and the wood loom upright! This washer is also essential for the shed opener to work properly.
5. For safe keeping, **slide** the previously removed 1st thin washer back onto the pivot bolt.
6. **Spin the rubberized lock knob** back onto the pivot bolt a sufficient way to ensure it does not come off (and will also keep both thin washers from getting lost!!).



Putting the shed opener back on

1. Confirm that the black lock knob is still threaded onto the shed opener pivot bolt at its left end.
2. Confirm that the thin washers – both of them – are still on the pivot bolt, between the lock knob and the loom wood upright.
3. Remove the lock knob.
4. **Remove just one** of the two thin washers on the pivot bolt.
5. Position the shed opener so that the shed opener's **two long fingers trap** the unheddled warp threads.
6. Without losing the two long fingers' trapping position, slide the shed opener onto the pivot bolt, and push it up against that thin washer that is now against the wood upright.
7. Re-install the remaining – **outer – thin washer** over the pivot bolt, and push it up against the shed opener itself.
8. **Thread the rubberized lock knob** back onto the pivot bolt, spin it up until it is against the shed opener.
9. Tighten the lock knob just enough so it is **lightly snug** against the shed opener, which itself is against the wood upright. Never any need – and nothing to be gained – by over-tightening.
10. You are now ready to continue with your next weaving task.



Using the Warp Tensioner

About the warp tensioner:

Once the full warp has been mounted (warped) onto the warp pegs, and before you can start to do any weaving, you must put the warp threads under tension.

WHY: The looser your warp, the more open and looser your woven band will be. Additionally, when weaving, a loose warp will be more likely to slide off the pegs, causing you to develop an increased vocabulary.

ABOUT TENSION: There is no standard degree of tension. Some prefer just enough to take the slack out of the warp. Others crank it down until you could play the strings like a fiddle. The problem with too much tension is that it can stretch and weaken many types of less strong warp yarns.

CAUTION: If your warp tension is too loose or too tight, the band edges – the selvedges – can be uneven.

OUR RECOMMENDATION: Until you become more experienced and able to make your own decision about tension, we recommend the 'Goldilocks' approach – not too loose, not too tight – just right. Start by pulling the tensioner towards you until all obvious slack in the warp is removed. Then, give it a snug fit – ¼" distance (a little more or less). Will this be perfect? Probably not. But for a beginner, you want to be safe, and this will give you a good beginner's safe start.

Releasing warp tension:

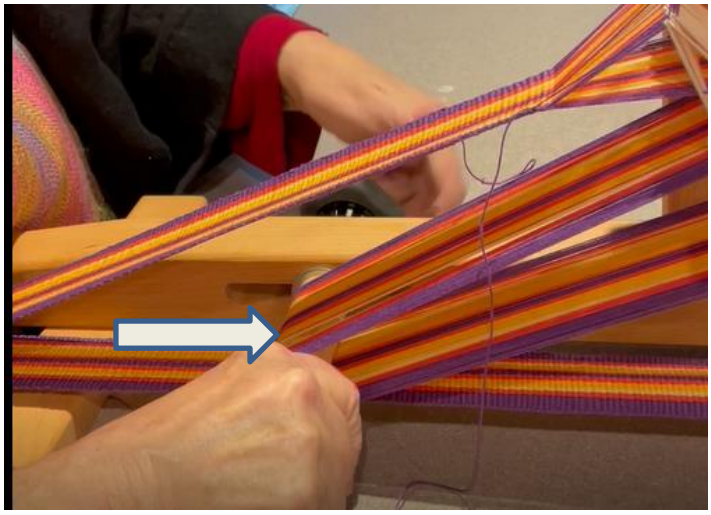
1. Loosen the rubberized lock knob on the left end of the tensioner.

   Only loosen the lock knob until the tensioner is able to slide with little effort; less loosening makes re-tightening quicker and easier.

2. Manually slide the tensioner forward until you see obvious looseness in the warp threads.

   Avoid over-loosening; too loose and your warp threads could slide off the pegs.

3. Re-tighten the lock knob to prevent the tensioner from accidentally sliding further forward – and running the risk of the warp sliding off the pegs!

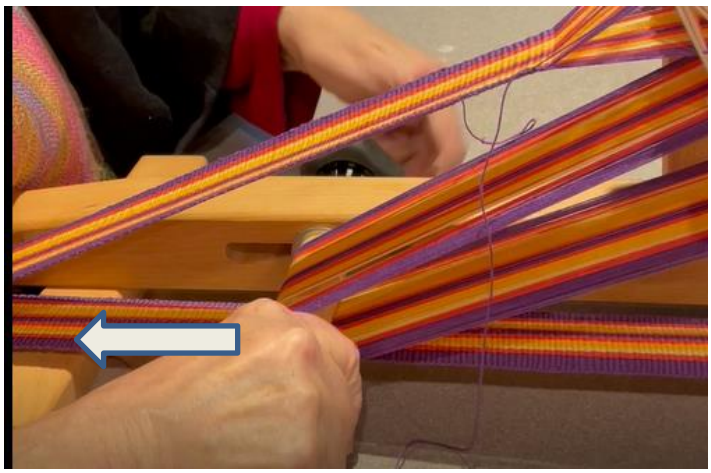


Go ahead – practice it now!

Re-apply tension to warp

This is basically a reversal of the steps to release warp tension.

1. Confirm that the tensioner is slightly loosened, and the lock knob has been re-tightened.
2. Place left hand on the rubberized knob, and right hand on the end of the tensioner peg itself.
3. Loosen the lock knob just enough to be able to slide the tensioner in its slot.
4. Pull back evenly until you feel a firm tension (resistance to more pulling towards yourself).
5. Twist the rubberized handle clockwise until it is quite snug.



NOTE: For our recommendation, go back up to the '**About the warp tensioner'** introductions and read, "**Our Recommendation**."

Go ahead – practice it now!

How to Position Yourself to Your Loom

Tips on working at your loom:

- The front of your loom is at Peg #1, and as you are sitting, the loom front will fall somewhere in your torso area depending on the height of your table, chair and how tall you are.
- You will want to adjust your chair/table to the height that seems most comfortable for you.
- **Note** - As you start weaving you will start to learn what is best for you and make needed adjustments.
- **Note** – the next block of information will show you your foot hold-down clamps, and how to use them to keep the loom from sliding into you when you are 'beating' each weft (horizontal) row.

Color change in your warp

About your color changes:

- Your inkle loom is designed to show only your warp threads; your weft threads are buried in the band.
- If you never change the color of your loops of warp thread, you will produce a single-color band.
- More likely, you will want for some of the 'end' yarns (a single loop of yarn) to show a different color – such as a band with red, white and blue 'stripes' as the pattern.
- When you want to change color you must always tie the new color yarn to the existing mounted color yarn, right at the first (starter) peg, so that the entire length of your band will have that color in that 'end'.

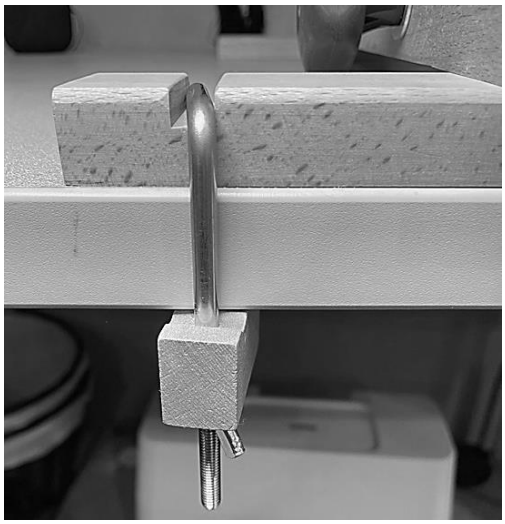
Putting on the foot hold-down clamps

Why clamps are included with every Kairos loom:

Two clamps are enclosed with your loom and are used to keep your loom from moving around while you weave.

How to put the hold-down clamps on:

1. When you are ready to start weaving, insert the metal horizontal bars of the clamps into the grooves on either side of the Front Foot.
2. Slip the wood part of the clamp under your table and screw the wing nut down tight.



Section 2: Weave Your 1st Band!

Summary First

What you will be doing to continue weaving pre-warped band

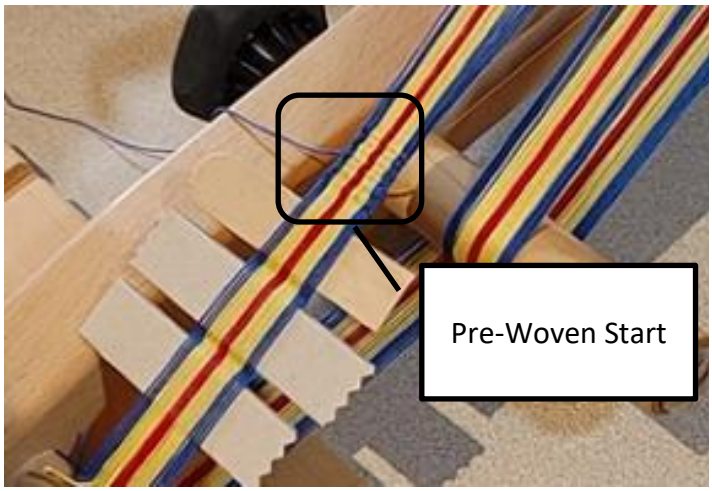
Here are the learning and weaving practices that you will be doing to help you weave your very first band:

1. **Weave initial practice rows** (picks), learning and using our Core Weaving Cycle – including actions to maintain consistently even row widths.
2. **Advance the warp** as your first practice to move past the part of the warp threads that you've already woven.
3. **Continue weaving**, using our Core Weaving Cycle method.
4. **If necessary, load more weaving weft** yarn onto your shuttle, and connect that yarn to the weft yarn woven into your band.
5. **Weave the rest** of your first band.
6. **Take your band off** the loom.
7. **Finishing** your woven band.

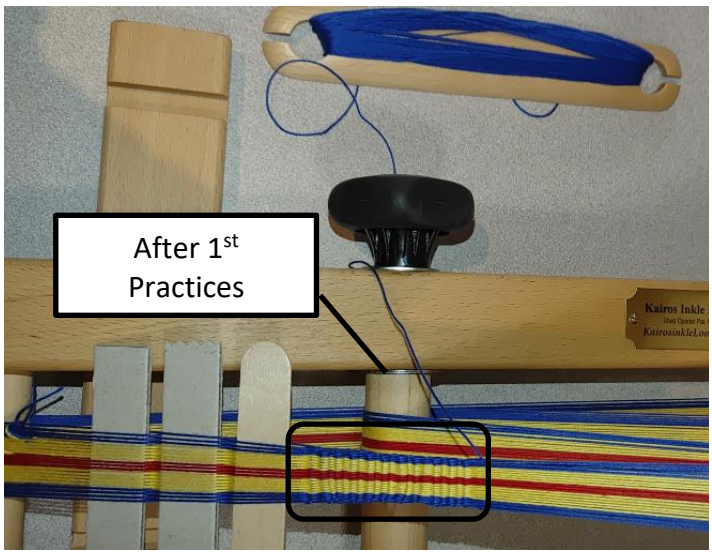
Preview - What Your Weaving Will Look Like

To start:

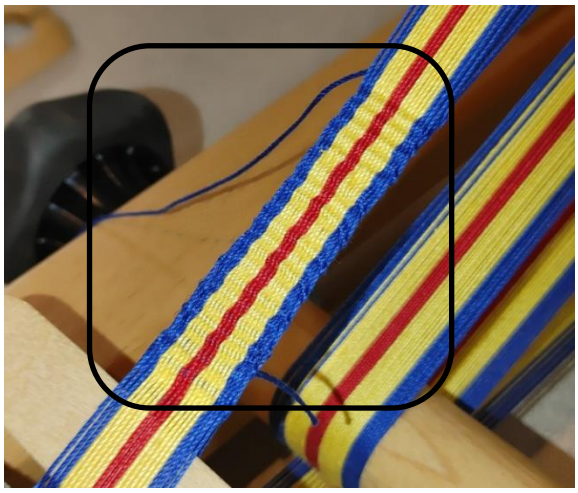
Notice the three cardboard 'inserts' at the very start of the weaving. This is a typical method to get your weaving started tight and square to the warp threads. Once you have woven a few inches of your band, it is ok to remove these three cardboard pieces, and with their removal it will make easier your 'advancing the warp' to reveal more open warp weaving area.



After Core Weaving Cycle practice done:



After weaving several more picks (rows):



Practice – Core Weaving Cycle

Spoiler Alert – Core Weaving Cycle!

What we mean by the '**Core Weaving Cycle'** are steps that are the basis for all your future weaving.

Just as many people have their own recipe for making chicken soup, so too do different inkle weavers have their own methods of weaving rows in their band creations. **The method in our step-by-step practices is simply our method** – one that for us produces a consistent and quality band. It does follow a very accepted general multi-step process; it's just that we incorporate our own wrinkles within that broad weaving framework.

Once you have woven a couple bands using our metho, start to explore more of the inkle weaving world to find out how other variations work.

Reminder – If you are new to inkle band weaving

Everything you do will be completely new and unknown to you. So rather than jumping right in and trying to understand the entire weaving process, we want to have you break up the full weaving process into smaller pieces. This will let you experience - and get more comfortable with - each step that will get a little more complex as you work through this entire step-by-step weaving process.

About this weaving practice

NOTE: This is your first weaving action - which starts right after the pre-woven section of the warp we did for you.

NOTE: As part of our pre-weaving preparations, we did change the shed opening to the **DOWN** position so that the last weft row we wove is now trapped in the band.

Your full practice goal:

You will repeat this core weaving cycle, resulting in six 'elemental' weft rows (picks).

Getting ready:

1. You have taken your inkle loom out of the box, and placed it on a flat surface such as on a table top.
2. You have optionally used the foot hold-down clamps to secure your loom to a flat surface.
3. You are comfortably positioned at the front of the loom.
4. Notice the **shuttle and attached weft yarn** have been pulled completely through the warp as part of our pre-warping preparations for you, and to **outside the left side of your band** …
5. Free up your shuttle (and attached weft yarn) from its shipping position attached to the body of your loom.
6. Position the shuttle at the **left side of the band**.
7. Remove the **rubber bands** from the ends of every peg. These rubber bands were temporarily added for shipping to prevent the possibility that the warp might slip off a peg during shipment.
8. **IMPORTANT**! If, due to some practices by you, the shed opening is **NOT** in the DOWN position, push the shed opener handle up, which will open the shed in the **DOWN** position.

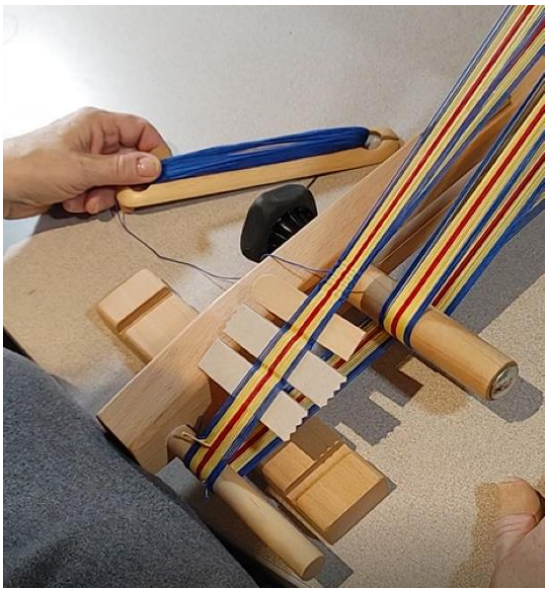
Core Weaving Cycle – Starting Position

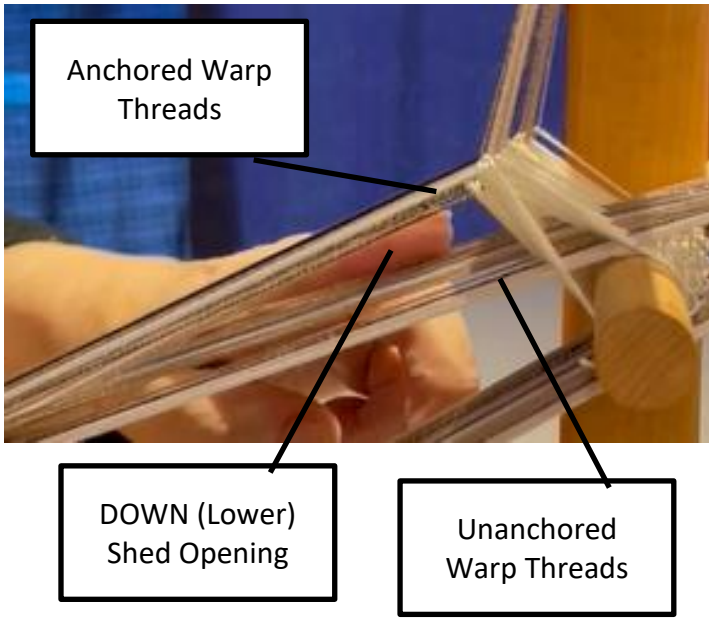
Your starting position:

Notice that we have pre-weaved the last pick (row) for you, ending up with the shuttle and attached weft (weaving yarn) **on the left**.

Shed Opener is parked in the **DOWN** position – make sure it is in the **down position before starting**. That is necessary to avoid unlocking (unweaving) the last row we – pre-wove for you.

NOTE: By **DOWN** (Lower) position, we mean that the shed opener handle is up, which has created a DOWN opening between the anchored warp yarns and the set of unanchored (movable) warp yarns, with the movable warp yarns **BELOW** the anchored warp yarns (see picture at lower right).



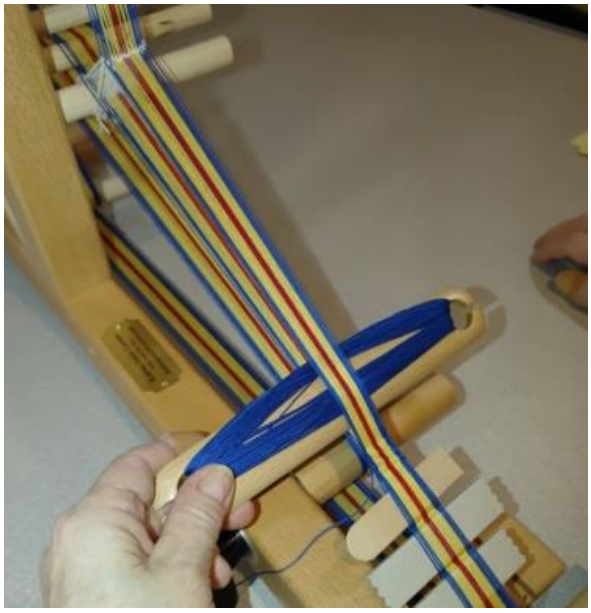


Core Weaving Cycle – Initial Fully Guided Steps

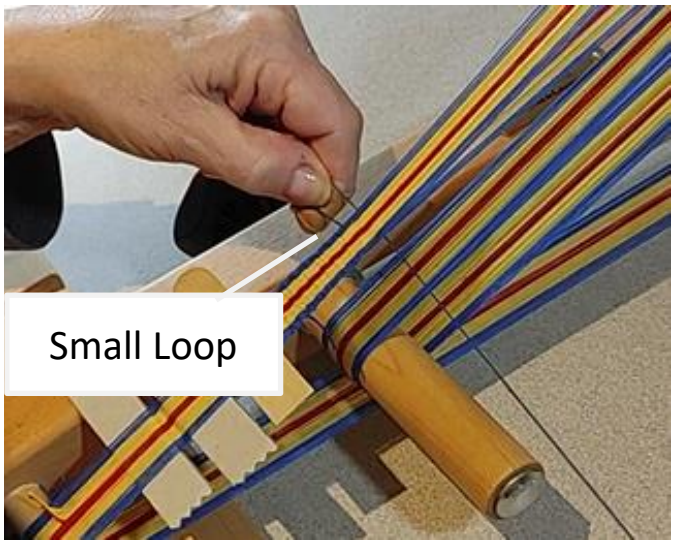
First Pick (Row)

1. Push the shuttle **left-to-right, completely** through the **DOWN shed opening**, and out the right side of the band.

   WHY: This adds a new row in your weaving.

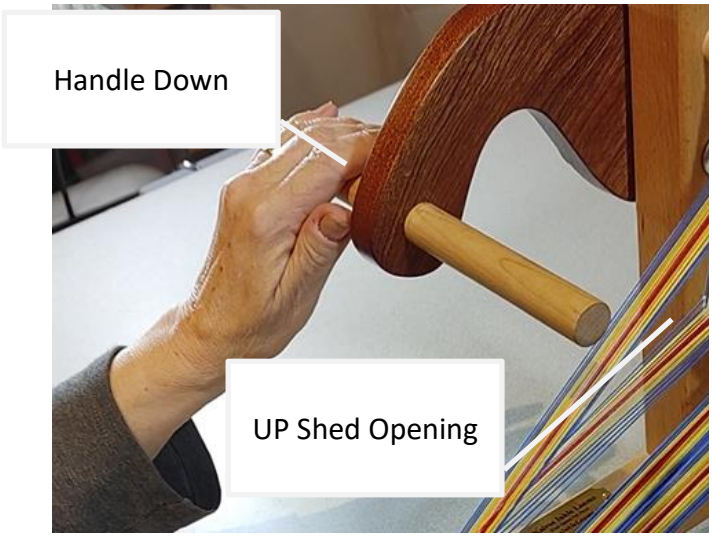


2. **Pull the weft thread** (shuttle end) to the right, until you have just a ½" – 1" weft loop at the left side of the band.



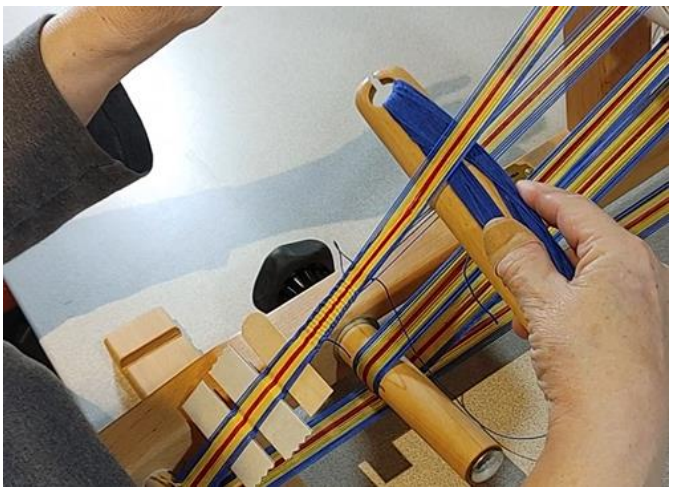
3. **Change shed to UP opening** (pull shed opener handle down).

   WHY – This traps and locks in the new weft pick (row) you just pulled through.



4. Push the shuttle back, from **right to left**, but **stop half way** through the shed opening.

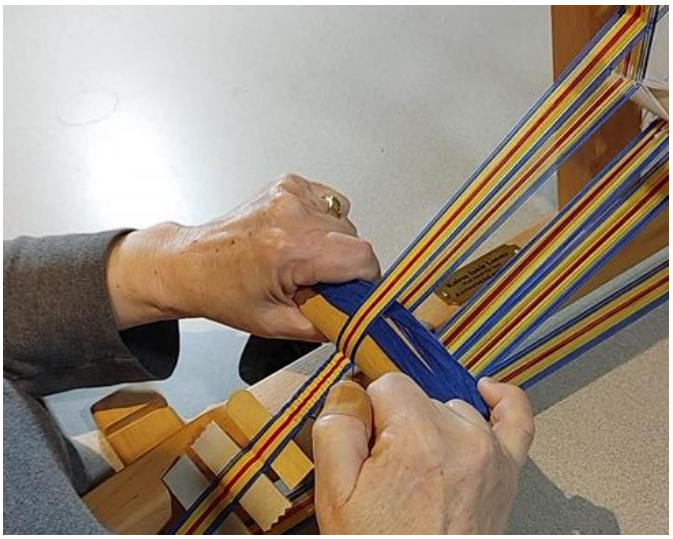
   WHY – This positions the shuttle right where it needs to next '*beat*' that new weft pick (row) – to pull it against the previous pick.



5. **Gently BEAT** the new pick (row).

   Use the shuttle's thin edge against that trapped weft row, **to gently pull the new pick towards you, and against** the previous – trapped - row, pushing it against the previous row.

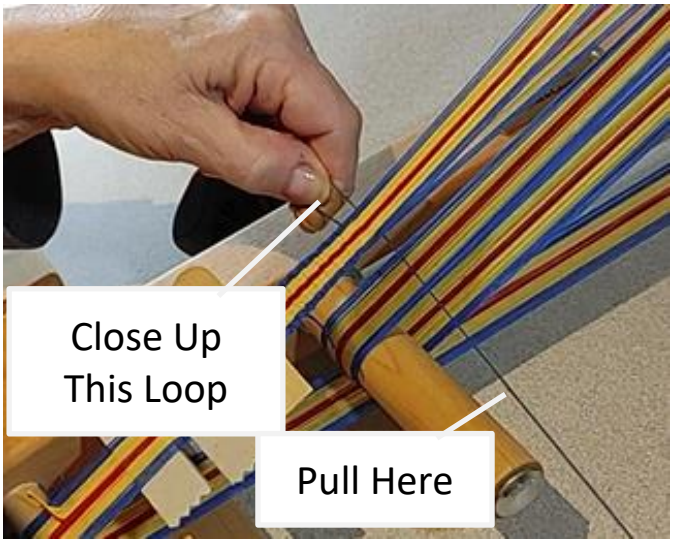
   WHY – This sets your new pick (row) softly against the previous row, and helps to keep your new row parallel to all previous rows.



6. **Close up the ½" – 1" loop.**

   With the new pick (row) now gently in position, with your right hand, **pull the trapped weft thread until the 1/2" – 1" loop closes up completely**, snugged against the leftmost edge of the band.

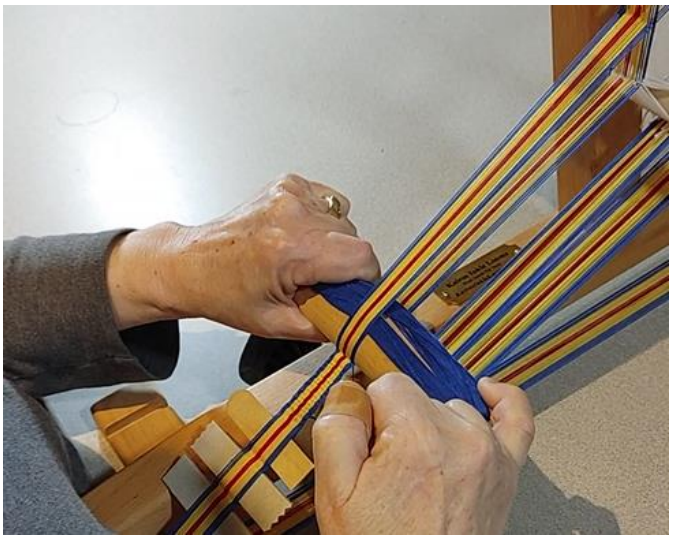
   NOTE: if you continue pulling after the loop has closed up you will most likely pull the selvedge (edge yarn) in tighter than the previously woven rows, creating an unevenness in the outer edge – aesthetically not pleasing.



7. **HARD BEAT the new pick.**

   With the shuttle's thin edge still against that trapped weft row, pull the shuttle towards you 'beat' again so the shuttle more firmly pushes the trapped new row against the previous row, removing any final space between it and the previous row.

   WHY – this step is important as this is where you control the distance between multiple rows. Uneven distances between rows will not be aesthetically pleasing.



2nd Pick

1. **Change shed to DOWN opening** (move shed opener handle up).
2. Push the shuttle **right-to-left, completely** through the **DOWN** shed opening, and out the right side of the band.

   WHY: This adds a new row in your weaving.
3. **Pull the weft thread** (shuttle end) to the left, until you have just a ½" – 1" weft loop at the right side of the band.
4. **Change shed to UP opening** (pull shed opener handle down) - locks that new row (pick) in.
5. Push the shuttle from **left to right**, but **stop half way** through the shed opening.

6. **Gently BEAT** the new pick.

   Use the shuttle's thin edge against that trapped weft row, **to gently pull the new pick against** the trapped row against the previous row.

7. **Close up the ½" – 1" loop.**

   With the new pick (row) now gently in position, with your right hand, **pull the trapped weft thread until the 1/2" – 1" loop closes up completely**, snugged against the leftmost edge of the band.

8. **HARD BEAT the new pick**

   With the shuttle's thin edge against that trapped weft row, pull the shuttle towards you so it firmly pushes the trapped new row against the previous row.

3rd Pick

1. Push the shuttle **left-to-right, completely** through the **UP** shed opening, and out the right side of the band.
2. **Pull the weft thread** (shuttle end) to the right, until you have just a ½" – 1" weft loop at the left side of the band.
3. **Change shed to DOWN opening**
4. Push the shuttle from **right to left**, but **stop half way** through the shed opening.
5. **Gently BEAT** the new pick.

   Use the shuttle's thin edge against that trapped weft row, **to gently pull the new pick against** the trapped row against the previous row.

6. **Close up the ½" – 1" loop.**

   Pull the trapped weft thread until the 1/2" – 1" loop closes up completely, snugged against the leftmost edge of the band.

7. **HARD BEAT the new pick.**

   With the shuttle's thin edge against that trapped weft row, pull the shuttle towards you so it **firmly** pushes the trapped new row against the previous row.

4th Pick

1. Push the shuttle **right-to-left, completely** through the **DOWN** shed opening, and out the right side of the band.

   WHY: This adds a new row in your weaving.

2. **Pull the weft thread** (shuttle end) to the left, until you have just a ½" – 1" weft loop at the right side of the band.

3. **Change shed to DOWN opening** (move shed opener handle up).

4. Push the shuttle from **left to right**, but **stop half way** through the shed opening.

5. **Gently BEAT** the new pick.

   Use the shuttle's thin edge against that trapped weft row, **to gently pull the new pick against** the trapped row against the previous row.

6. **Close up the ½" – 1" loop.**

   With the new pick (row) now gently in position, with your right hand, **pull the trapped weft thread until the 1/2" – 1" loop closes up completely**, snugged against the leftmost edge of the band.

7. **HARD BEAT the new pick.**

   With the shuttle's thin edge against that trapped weft row, pull the shuttle towards you so it firmly pushes the trapped new row against the previous row.

5th Pick

1. Push the shuttle **left-to-right, completely** through the **UP** shed opening, and out the right side of the band.

2. **Pull the weft thread** (shuttle end) to the right, until you have just a ½" – 1" weft loop at the left side of the band.

3. **Change shed to UP opening**

4. Push the shuttle from **right to left**, but **stop half way** through the shed opening.

5. **Gently BEAT** the new pick

   Use the shuttle's thin edge against that trapped weft row, **to gently pull the new pick against** the trapped row against the previous row.

6. **Close up the ½" – 1" loop**

   Pull the trapped weft thread until the 1/2" – 1" loop closes up completely, snugged against the leftmost edge of the band.

7. **HARD BEAT the new pick**

   With the shuttle's thin edge against that trapped weft row, pull the shuttle towards you so it **firmly** pushes the trapped new row against the previous row.

6th Pick

1. Push the shuttle **right-to-left, completely** through the **UP** shed opening, and out the right side of the band.

   WHY: This adds a new row in your weaving.

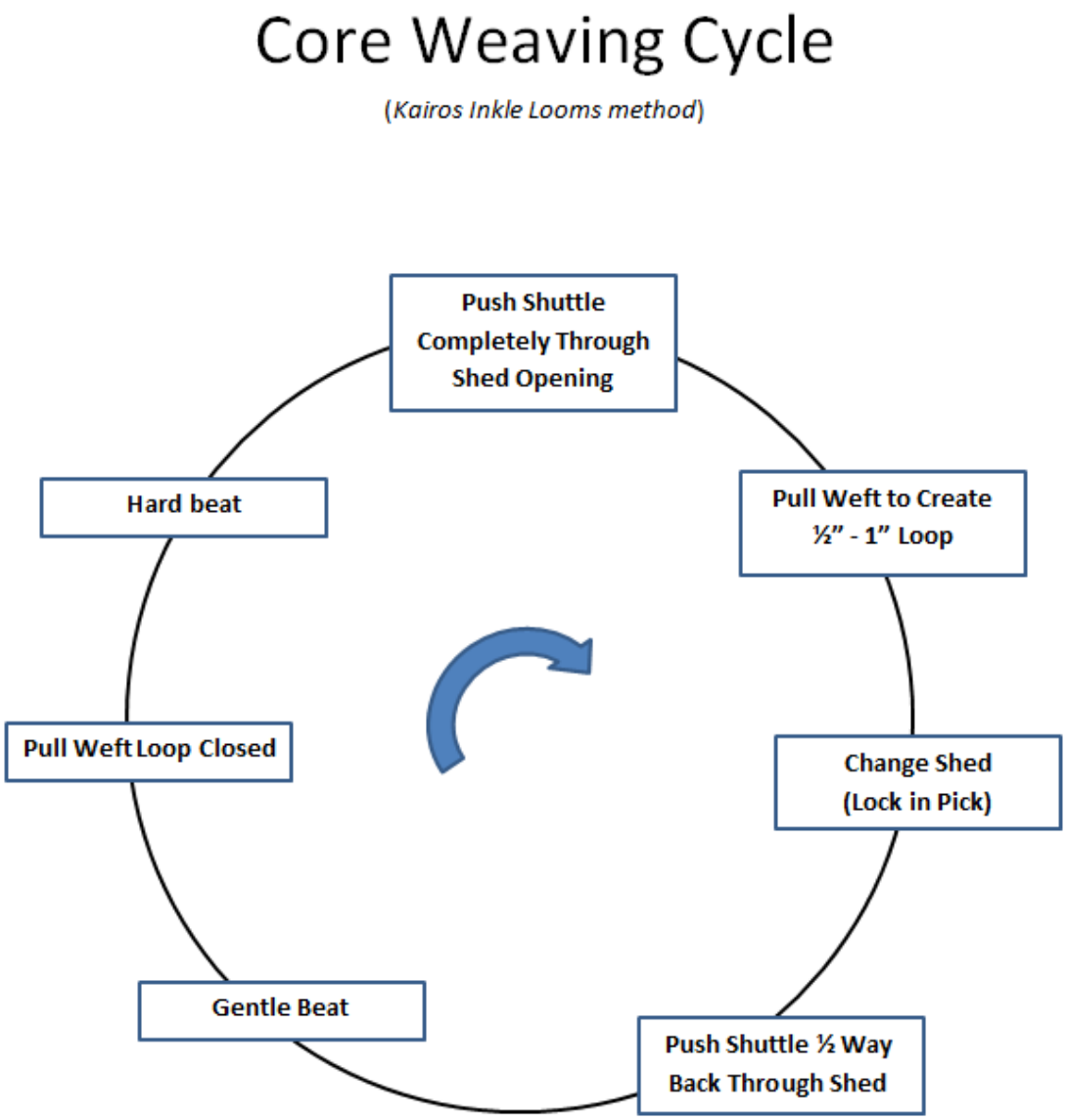
2. **Pull the weft thread** (shuttle end) to the left, until you have just a ½" – 1" weft loop at the right side of the band.
3. **Change shed to DOWN opening** (move shed opener handle up).
4. Push the shuttle from **left to right**, but **stop half way** through the shed opening.
5. **Gently BEAT** the new pick
6. **Close up the ½" – 1" loop**
7. **HARD BEAT the new pick .**

Continue With Independent Weaving

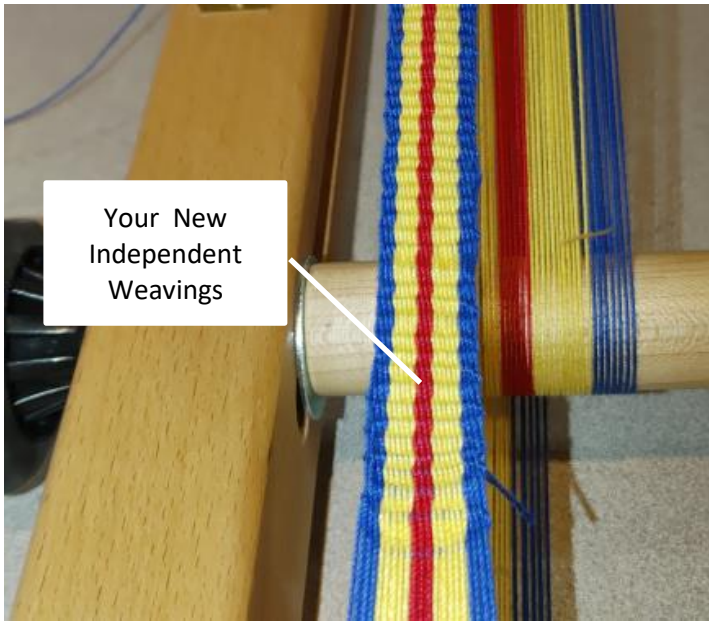
To help you with learning – and remembering – the 7 step Core Learning Cycle method without having to keep going back to the previous step-by-step details, we've included a sort of '**cheat sheet'** below. The circle – and its steps – are shown in the order in which you continue to weave.

We hope it won't be confusing that there is no regular starting point, because it all depends on where you last left off.

To use this circle diagram, identify the last step you completed, then continue weaving with the next step (going clockwise) – round and round you go, weaving your band!



1. Repeat the previous **Practice** for as many additional picks (rows) as you want to weave in your practices band.



Actions to Complete Your Band

Advancing the Warp

Why you need to advance the warp?

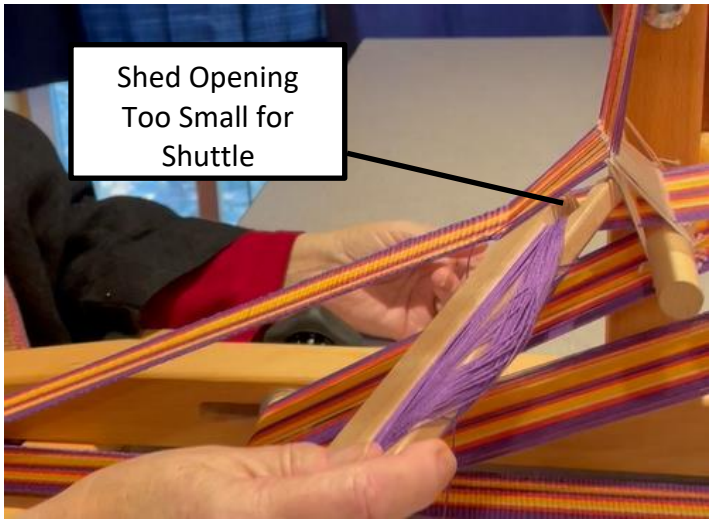
After you have woven 8”-10” on your Kairos inkle loom, you will typically need to advance your warp to continue weaving.

NOTE: Advancing the warp means pulling the entire warp itself towards you, moving the just-woven section around and under Peg #1

Why? The reason is that as you weave you fill in the current shed opening with weft threads, slowly weaving closer and closer to the heddles. At some point, the shed opening will become too short to conveniently fit passing the shuttle back and forth.

What to do?

Answer - This will position a new section of unwoven warp threads in perfect position for you to continue weaving.



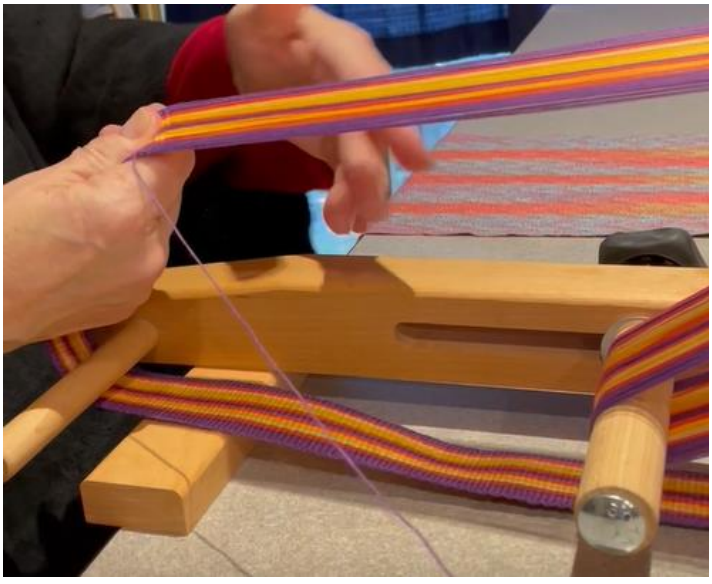
Steps to advance the warp:

1. Loosen your tensioning lock knob on the left side of the loom (attached to the #4 peg – which itself is on the right end of the tensioner).
2. Slide the tensioner sufficiently toward the back of the loom (away from you) for the warp to loosen, but not flopping all around (could come off the warping pegs).

3. Temporarily re-tighten the tensioning lock knob to keep the tensioner assembly from sliding back and forth, and to prevent the warp slipping off the pegs.

4. Now grab hold of the heddled and unheddled warps - together as one - and pull the entire warp in toward your body.

   Pull until you have about 2" of woven band showing over the top of Peg #1 (Starting Peg), and the entire open shed weaving space available for you to continue to weave. See pictures to the left and lower left.



5. Now loosen the tensioner lock knob so that you can next re-tension the warp.
6. Slide the tensioning assembly towards yourself until you have firm tension on the warp.
7. Re-tighten the tensioner lock knob to lock in your newly set tension.

ATTENTION: Make sure that when you pull the warp toward you that the woven rows are still 90 degrees to the warp. (You may have to massage your warp into its horizontal position).

8. Now notice that the position of the tensioning peg is farther towards the rear from where it was before you advanced the warp.

WHY - This is because the warp has also shortened because of take up in the weaving process.

TAKE UP? – As you weave, the warp threads end up not going in a straight line. Instead, they are forced over, then under, each progressive weft pick. This means that the warp thread has to travel a greater distance. This actually shortens the possible length of your band, which keeps pulling your tensioner deeper into its slot. The longer the slot, the longer your fully woven band will be.

(Tensioner position in slot before re-tensioning

(Tensioner position in slot after re-tensioning)

You are now ready to continue weaving.

But … since this is your first hands-on experience, now would be a good time to first learn how to both reload your shuttle with more weft thread, AND, how to connect your new shuttle thread to the end of the last of your previous weft thread that you have woven into the band.

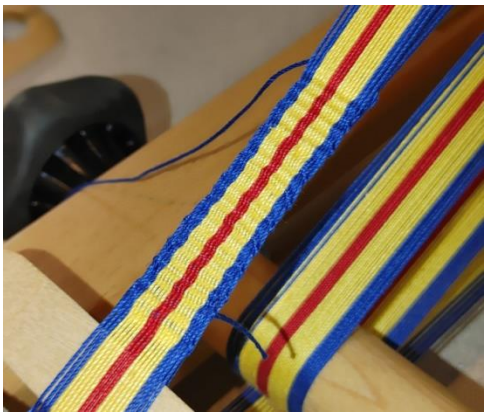
Reloading the Shuttle & Connecting New Weft to Old Weft

You start to run out of weft yarn on the shuttle

One load of weft thread on your shuttle will not be enough to weave an entire band – unless you are making a very short band.

You will need to expect – and to be prepared – to reload your shuttle with additional weft thread.

NOTE: The next step will walk you through reloading the shuttle with weft yarn.



About your shuttle & new weft:

In inkle weaving, the shuttle usually doubles as the "beater" and is ideally tapered along one side to get a nice snug 'beat' – snug the current row (pick) against the previous pick.

It is also the 'carrier' of all the weft yarn you will use to weave – moving back and forth between alternating shed openings.

Thread color when reloading your shuttle:

Using the same thread that matches the borders of your warp design, begin to wind onto your shuttle around the center between the two slots.

NOTE: We've provided you with more of the same warp yarn that was wound onto the shuttle. This in a plastic bag that came in the shipping box.

TIP: Your choice of weft thread color affects the appearance of your band's selvedge (visible edges).

* If you use weft thread whose color matches the outer edge warp threads then the weft thread – where it transitions from one pick to another – the weft will blend in with warp threads.

* If you use weft thread whose color DOES NOT match the outer edge warp threads then the weft thread – where it transitions from one pick to another – the weft will create a separate color with warp thread at the edges.

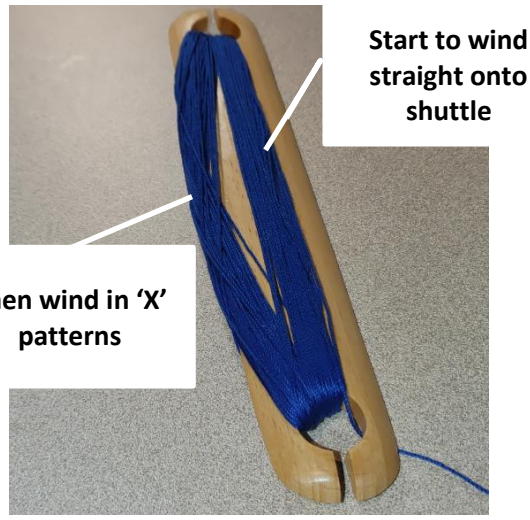
(Extra Weft yarn in bag included in shipping box)

Preparations for this practice:

Even though you most likely will still have a fair amount of weft thread on your shuttle, unwind the unused yarn from the shuttle … and trim the yarn going into the band so that there is only about 4" to 6" of a 'stub' to attach your

Reloading your shuttle:

1. Wind the new weft yarn onto your shuttle as shown in the picture at the right..
2. When the weft thread starts to fatten up around the center, distribute some of the bulk by also winding in an "**X**" around the un-tapered edge of the shuttle.
3. Keep going, shifting from the center to the edge as needed to keep the bulk as evenly distributed as you can, until you see that it is starting to approach the size of the shed. (You don't want it to be so thick that it rubs against the threads of the shed)



Connect the new weft onto the old weft:

1. You'll start this process by confirming that you have also just finished pushing the shuttle completely through the shed opening – in this example, right to left.
2. NOTE: You earlier separated the old weft from your shuttle – leaving the extra length of old weft extended away from the band.
3. Start with your now reloaded shuttle and position it at the outside of the band shed, with a couple inches of the starter end stretched out, away from the band.
4. Confirm at this point that you have your extra length of new weft hanging out one side of the open shed and the extra ending length of the old weft hanging out the other end.
5. Push the shuttle completely through the shed opening – **you will end up with a double-stranded pick**.
6. Continue as though you have one newly lengthened weft – when in actuality you have the end of the old weft and start of new weft together.

NOTE: Leave the extra ends of the old and new weft threads until you finish weaving your band – when you will trim them back to the edges.

Finish Weaving Your First Band

Continue to repeat the Core Weaving Cycle steps until you reach a band length at which you want to stop.

NOTE: The following section provides you with some tips and tricks to keep in mind as you continue to weave this first band.

Section 3: Weaving Tips & Tricks

How to Tell If You Need to Change Your Shed

Why this tip:

Here is the scenario – you have been weaving, the phone rings, or you need to go make lunch, or some other distraction presents a problem when you return to your inkle weaving – do I push my shuttle through the shed opening, or do I need to first change the shed?

If you guess wrong, and figure you don't need to change the shed, then you may find as soon as you have pushed the shuttle through the shed that you just undid your last pick! That's because the last weft was not locked in – wasn't trapped between changed warp threads.

If you guess wrong, and figure you DO need to change the shed, after you change to another shed opening, then you may also find as you have pushed the shuttle through the shed that you just unlocked your last pick, that was locked!

So is there a solution to this potential dilemma? Yes. And it is quick and fairly easy to do. Read the tip that follows.

Here is the tip:

1. Try to mildly slide the last pick up between the heddled and the unheddled warp threads, towards the heddles.

   If that pick slides back and forth between the 2 layers of threads, you will need to

   a. slide the thread back into place;

   b. change the shed with the shed opener to lock in that last pick;

   c. beat;

   d. then start with your next pick..

2. If the weft thread doesn't slide, it is locked into place already because of shed change; you can start with your next pick without needing to change the shed opening.

How to Obtain Even Selvedge (aka 'Selvege)

Why this tip:

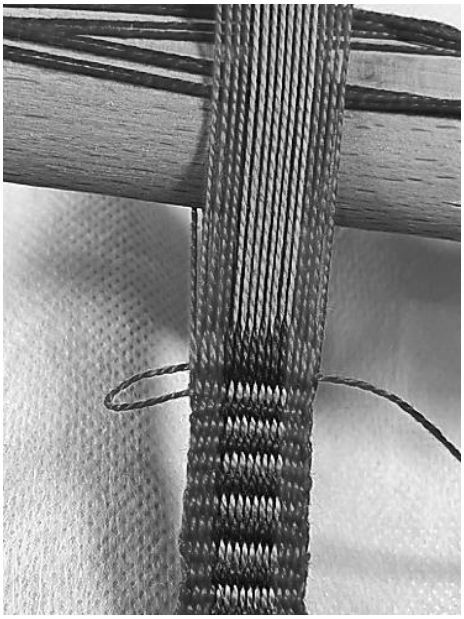
The bane of all weavers is developing the skill of even selvedges (even edges). After weaving your first practice rows, you may see that your selvedges are uneven and rough or you may have a little loop showing. Don't despair: here are several weaving tips to keep this from happening in the future.

NOTE: If you spot uneven selvedges, do not attempt any repairs. First, this is just a practice band to get you started, so you must expect there will be rough spots in it. Second, oftentimes – at least when weaving your first bands – any attempt to 'go back' and fix will more often than not create even more confusion and problems.

1. As you are pulling your weft through the shed and you are a little over an inch from the end, leave a loop of weft hanging out the side, change your shed, put your shuttle in as though you are beating. Gently pull the weft the rest of the way so that it snuggles up to the warp edge so that it doesn't show and then firmly push the weft down to place.

2. Do this after every beat and soon it will be a habit in your weaving cycle.

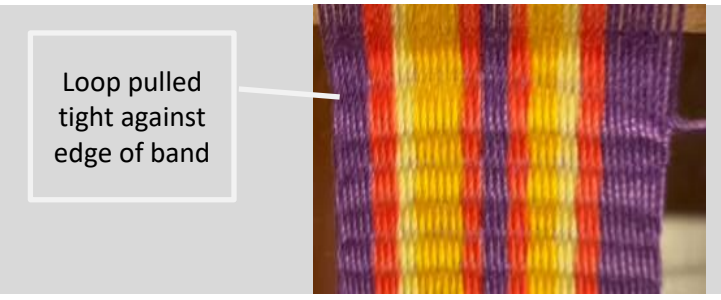
3. You may see that one selvage is thicker that the other and it is often the opposite of your dominant hand That happens because one side of the weft in the selvage is tighter than the other. Now that you are aware of this you can start to pull the weft evenly on both sides of the selvage. I could also be result of an uneven warp tension, which will be covered under Warping.



It does take practice and patience and you will get there.

Completely closing the weft loop

1. To finish the step for the weft loop, you will need to pull its other end until the loop opening completely disappears – snugged up against the band edge – but not so tight as to create an indentation in the edge.

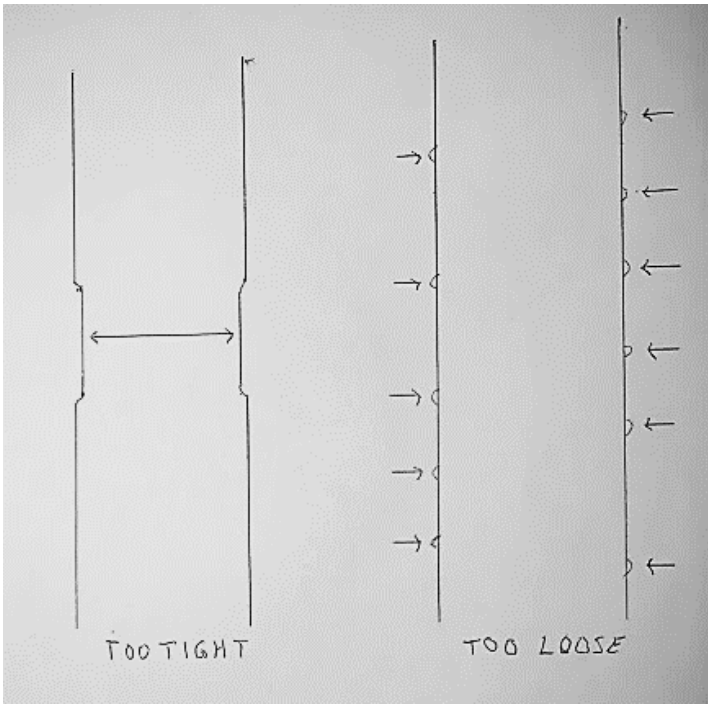


Signs of Weaving Selvedges Too Tight or Too Loose

Weaving too tight:

You can spot too tight weaving because the width at points will be noticeably narrower. The band will also be noticeably stiffer.

Problem is just that when taking up the slack where you have that weft loop – right after you put the shuttle through the shed opening – you pulled too hard on the free end of the warp. In other words, you took up all the slack, and with more pulling you started to compress the individual warp yarns together.



Weaving too loose:

This is the opposite of a too tight warp. You'll typically see slight openings at the edges where the weft was not snugged up against the outer warp thread. The band will also be much more loose and flexible.

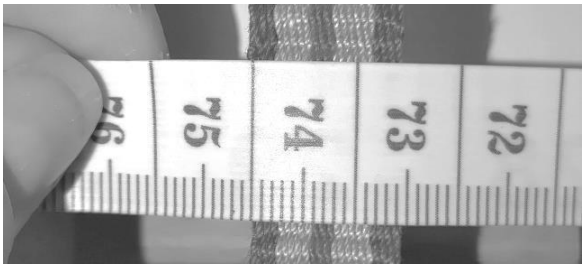
Solution would be to go slower and carefully when taking up the slack formed by the loop as you change directions with your shuttle and weft thread.

Using a Measuring Tape

Keep a measuring tape nearby so that you can frequently check the width of your band to make sure it is the same width throughout the length of the weaving.

WHY – uneven width is an indication that your edges (selvedges) need to be more consistent in the force you use to close the loops where the weft comes back up and over the edge warp threads.

You would want to measure at least at two points in your band; (1) in the middle of your weaving, and, (2) at your last completed pick.



Section 4: Finishing Your Band

Getting Near the End of Your Warp

Things to Know

- You know you're getting close to the end of you warp when you start to see the knots from the beginning of your weaving coming over the upper back peg (Peg #3).
- Your warp may be getting quite tight at this point, so beat gently but still firmly.
- Continue weaving as far as you can up to the Front Peg (#3). The remainder of the unwoven warp will become your fringe if you choose it.
- You are now ready to cut your band off the loom.

Taking Your Band off the Loom

Steps to Remove Your Finished Band

Steps to remove your finished band:

1. **To prepare** to cut the band off the loom, release some of the tension on the tensioning peg, maintaining some slack in the warp thread.
2. **Cut the warp** just in the back of the original knots where you changed yarn colors - as close as you can.
3. Leaving the heddles on, carefully lay the band out on a table and proceed to cut in the front of the knot.
4. **Slide the heddles** off their loom peg, to be reused for the next band you weave.

Finishing Your Band

How to Finish Band Fringes

Depending on how you will be using your band will dictated how you will finish the fringes. Here are some possibilities…

- **Trim to be sewn onto another fabric -** Sew a zig zag stich over the end of the woven part of the band, cut the fringe off and hem.
- **Braid the fringe -** Divide the warps into even groups and braid.
- **Twist the fringe** - If you have a fringe twister, you can twist the groups of thread and knot at the ends
- **Macramé fringe techniques** - Macramé your fringe into an interesting design.

Section 5: Care of Your Loom

- Your loom has a polyurethane finish on it and needs very little care.
- Even though your loom has a UV protective finish on it, you should not store in direct sunlight.
- Any dyed fibers on your loom will always be subject to UV rays from the sun and should not be stored in direct sunlight.
- You can dust your loom, as needed with a dry dust cloth.

Go to our website's **Resource Section** at **https://www.kairosinklelooms.com/resources-list** to find great resources for finishing your weaving.

Be sure to see our *What can you make with an Inkle Loom*? In our Learning Center at **https://www.kairosinklelooms.com/learning-center**. This section will continually expand, so you might want to come back fairly often just to check in to see what might have been added since your last visit.

Section 6: Appendices

Make Your Own Heddles

About heddles for our Kairos inkle loom

Because our loom uses our Fingers Free Shed Opener, the length of each heddle is critical to creating the properly sized Upper and Lower shed openings.

To ensure your maximum satisfaction with our loom, we have included a pre-assembled **heddle making jig** to ensure each heddle you make in the future will be the right length.

SECURING THE JIG: We have made the jig's base sufficiently long that you could use a clamp to secure the jig to a flat surface so the jig does not move when you make up your heddles.

NOTE: Another benefit of having a small and separate heddle tying jig is that it is so small and portable you can use it in the car, watching TV, or simply relaxing. You are not dependent on having to use a loom's pegs whenever you want to tie heddles.

Cording for your heddles

Not all cording works well for heddles. The heddles will be under constant tension due to the amount of tension on your warp, which in turn they pull against the heddles.

The most common problem we've noticed is that in the middle of weaving a band, **a heddle knot comes undone**! Yikes. Tying each heddle ends together with either a double square knot or a surgeon's knot will typically eliminate a knot coming loose.

RECOMMENDATION: **First choice** would be a **linen thread**; it can be hard to find. The heddles we provide with your Kairos inkle loom are made of linen. **Second choice** would be #8 cotton.

Before making lengths of thread for heddles:

1. First figure out **how many additional heddles** you will need to make the band width you want to start with.

   You will need **one heddle for every other thread** in your warp. so if your band warp will be made up of 80 threads, you would need 40 heddles.

   NOTE: Remember that **we include** 50 heddles with your loom (75 if you purchased the Inkle Pro model)! And we only used 25 heddles for your pre-warped first band, so you have another 25 (or 50) on hand before you need to make more. You may not need to make more for quite some time.

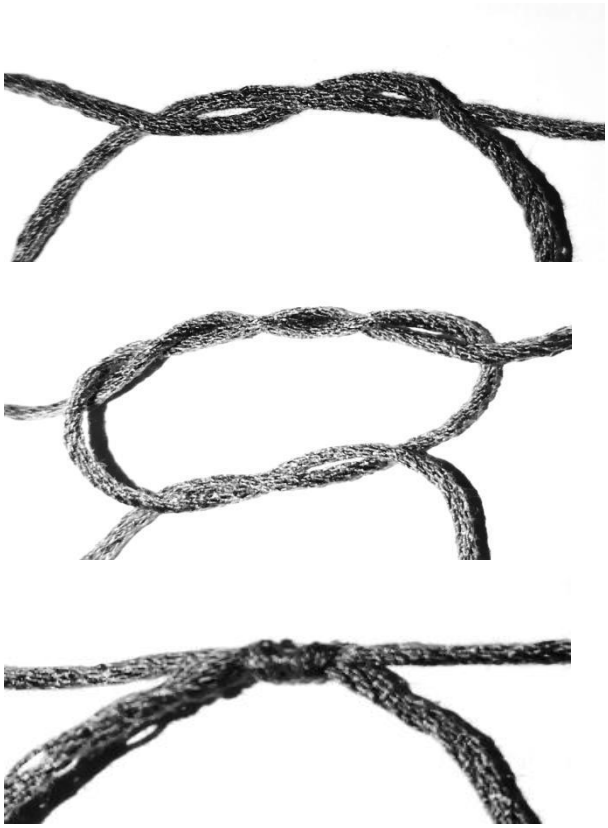
2. You are now ready to make your heddles.

NOTE: Our method involves working continuously from a single ball of thread. Other inkle weavers may prefer to cut their heddle thread into separate pieces before tying up. We prefer our method only because there is less thread waste.

How to make a surgeon's knot:

NOTE: a surgeon's knot starts out like a regular square knot, but the second '**knot'** includes a doubled knot that dramatically increases the knot's holding power.

1. First, tie a regular single knot.
2. When tying the second knot, **go twice around** rather than once around (as you did for the first knot).
3. Pull the full knot tight together.
4. Finish it off with a 'granny' knot – not a square knot. The reason is that a square knot, when one of the 'legs' of the knot is pulled in one particular direction, the square knot is transformed into 'two half-hitches', which can pull apart.



How to Make your own heddles:

1. Start with your assembled jig on a convenient flat surface.
2. Wrap heddle thread one length around both jig pegs – keep the length the same height up in the peg, to get a consistent knotted length for each heddle.
3. Tie a surgeon's knot (see previous instruction on how to tie it.
4. To lock in the knot, now tie a 'granny' knot rather than a square knot. (do a Google search for GRANNY KNOT for directions on how to tie it if you haven't tied one before).
5. Cut the tied heddle from the ball of thread.
6. Slide the completed heddle up and off the jig pegs.

   NOTE: In reality, we tie many heddles, one at a time, and push each down until we have a stack of them, which we then remove as a single group. Faster than removing each one after each is done.