



SAILRITE®

Est. 1969



# LEATHER CRAFT PACKAGE FOR **FABRICATOR®**

USE & INSTALLATION GUIDE



## Sew Leather Like a Pro

Master sewing leather on your Fabricator® Sewing Machine with this unique assortment of leather sewing essentials. This comprehensive package contains accessories and sewing basics for both beginner and experienced leatherworkers. With items like specialty presser feet, small leather tools, needles and thread, and more, you have everything you need to get started on your leather crafting journey.

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# Speed Reduction System (#124058, #120580)

This motor pulley and timing belt gear down the Workhorse® Servo Motor, giving you incredible slowness and precision while you sew. The system is easy to install and does not require you to change the motor position.

The charts show the Fabricator's top-end sewing speeds with the machine's original pulley and belt system compared to the Speed Reduction System in this package.



\*Speed Setting x 100 = RPM at motor shaft

With Original Pulley & Belt		Speed Reduction System	
Speed Setting*	Maximum SPM	Speed Setting*	Maximum SPM
5	123	5	70
6	148	6	84
7	172	7	98
8	197	8	112
9	222	9	126
10	246	10	140
11	271	11	155
12	296	12	169
13	320	13	183
14	345	14	197
15	370	15	212
16	394	16	226
17	419	17	240
18	443	18	254
19	468	19	268
20	493	20	282
21	517	21	296
22	542	22	310
23	567	23	324
24	591	24	338
25	616	25	353
26	640	26	367
27	665	27	381
28	690	28	397
29	714	29	412
30	739	30	426
31	764	31	440
32	788	32	454
33	813	33	469
34	837	34	483
35	862	35	497
36	887	36	511
37	911	37	518
38	936	38	540
39	961	39	546
40	985	40	553
41	1010	41	582
42	1035	42	588
43	1059	43	611
44	1084	44	625
45	1108	45	640



## Speed Reduction Installation

Tilt the machine back. Slip the belt off the balance wheel. Remove the belt cover on the Workhorse Servo Motor and fully remove the belt. Remove the current pulley and replace it with the 12-tooth pulley. Use existing pulley hardware to reinstall (the key from the original pulley and lock washer are not needed). Install the new 42-inch belt and reattach the motor belt cover.



Scan to watch a video on how to install the pulley and belt.

# Choosing Thread & Needle Sizes

Sailrite offers a wide variety of needle and thread types and sizes. Included in this package are the most common thread and needle sizes for general leatherwork. Visit [Sailrite.com](#) to find our full offering of threads and needles.

When sewing leather, the thread size is generally selected for its aesthetic look. In such cases, simply match the needle to the thread using the chart below. If the needle or thread breaks during sewing, go up in size on both. If you cannot achieve proper tension (knot shows on the bottom), the thread and needle could be too large.

THREAD SIZE	NEEDLE SIZE
Tex 90	#18-#20
Tex 135	#20-#22

View our full range of needle and thread recommendations by searching #300032XHT at [Sailrite.com](#).

## Needle Size



## Thread Size



# Needle Installation

Fabricator needles are round on top, unlike home sewing machine needles. As a result, proper installation must be exercised carefully. The needles have two sides: the long channel side with a groove running the needle length and the side with a short scarf (A) (i.e., a carved-out area) above the needle eye.

1. Push the needle all the way up into the needle bar (B).
2. Rotate needle so the scarf (A) faces the right as you face the front of the machine.
3. Tighten the needle screw (C).

**CAUTION:** Improperly installed needles result in thread breaking, skipped stitches and more.

- A Scarf
- B Needle bar
- C Needle screw



Scan to watch a video on how to install a needle.



# How Do Leather Sewing Needles Work?

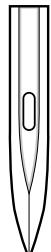
Leather needles have sharp tips that cut clean, permanent stitch holes in leather. The needle tips come in different shapes and produce stitches with different appearances.

Note: Shop all sewing machine needle sizes and types at [Sailrite.com](https://Sailrite.com).



## DI Needle (#100799)

DI needles have large, diamond-shaped cutting points that easily sew heavy, dry and hard leather. They produce straight seams with recessed stitches. These needles are best for sewing medium to long stitches.



## Triangular Point Needle (#123834)

Triangular Point needles have sharp, three-sided cutting points that easily sew thick or hard leather. They produce seams with slightly elevated stitches. These needles are best for sewing medium to long stitches.



# How Often Should You Change a Needle?

Sewing machine needles are consumable items intended to be replaced often. They will dull after repeated use and can bend slightly over time or get nicked if they hit a metal component. When a needle is compromised, your stitching quality will suffer, resulting in skipped stitches, thread breakage and more. Our recommendation is to switch to a fresh needle for each new project.



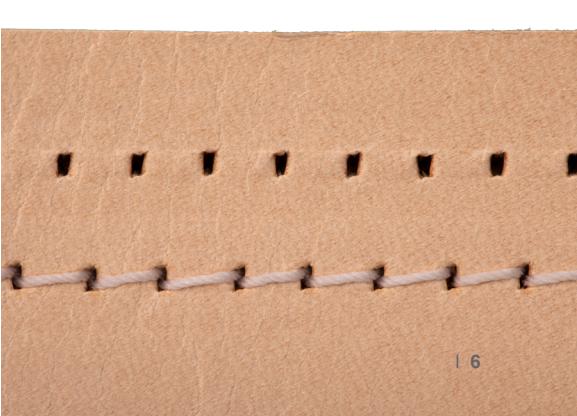
## Twist Point Needle (#123831)

Twist Point needles have oval-shaped cutting points that are twisted 45 degrees from the needle eye. They are best for sewing short to medium stitches in light to medium-hard leather. These needles produce decorative seams of slanted, slightly elevated stitches that closely mimic the look of hand stitching.



## Perpendicular Point Needle (#123835)

Perpendicular Point needles have wide, flat cutting points that are perpendicular to the direction of sewing. They can sew very strong seams in light to heavy leather. They produce decorative seams of slanted, recessed stitches. These needles are best for sewing very short to short stitches.



## Leather Presser Feet

The Fabricator can accommodate different presser feet to sew a variety of materials. For leatherworkers, the best options are smooth feet and zipper feet.

### Smooth Leather Foot Set (#400212)

The Smooth Leather Foot Set is specially designed without teeth to avoid scuffing or marring leather when sewing. This set includes an outside foot, a center foot and a feed dog. The center foot has an open channel in front of the needle to make it easy to follow stitch lines/grooves in leather.

### Left Zipper Foot (#400311)

The Left Zipper Foot is an outside foot. This foot does not have a right toe, leaving the right-hand side of the center foot exposed. This allows you to sew close to zipper teeth or leather edges while keeping most of the project materials on the outside of the machine. The bottom of the zipper foot is smooth and won't scuff or mar leather. Use this foot with the center foot and feed dog from the Smooth Leather Foot Set.



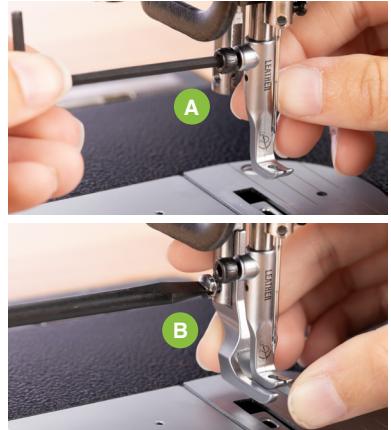
## Foot & Feed Dog Installation

Scan to watch a video on how to install the presser foot set.

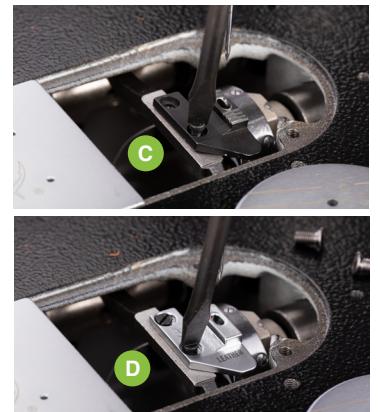


### How to Install Center & Outside Feet

- With the foot raised, unscrew and remove the center and outside feet currently on the machine.  
Note: If installing a feed dog, jump to "How to Install a Feed Dog" before proceeding to step 2.
- Place the center foot on the presser bar right behind the needle and push it all the way up. Make sure the needle is lined up in the center of the hole. Tighten the screw (A).
- Install the outside foot between the metal prongs on the rear presser bar by sliding it in from the back. Line up the holes, insert the screw and loosely tighten (B).
- Lower the foot. Make sure that the center foot is on the upward rotation of its walk, then finish tightening the screw.



### How to Install a Feed Dog



- With feet removed, remove the needle plate. Move the slide plate to the left to expose the feed dog screws. Remove the current screws and feed dog (C).
  - Place the new feed dog. Line up the screw holes, then insert and loosely tighten the feed dog screws (D).
  - Reinstall the needle plate.
  - Rotate the balance wheel to raise the feed dog through the opening in the needle plate. Use a screwdriver or other small tool to move it left or right as needed to center it.
  - Fully tighten the feed dog screws. Move the slide plate back into place.
- Note: Follow steps 2-4 of "How to Install Center & Outside Feet" to reinstall the center and outside foot.



## Swing Gauge Sewing Fence (#100439)

The Swing Gauge Sewing Fence is the easiest way to sew straight lines a set distance from the edge of your leather assembly. Swing it out of the way when you don't need it. When you're ready to use it again, swing it in place and the gauge is still set where you want it for consistent edge stitching and seam allowances. Plus, the gauge has two faces so you can set two seam allowances for even more convenience and productivity.

## Swing Gauge Installation

1. Move the swing gauge arm out of the way during installation. Place the screw slot over the two holes in the Fabricator bed.
2. Place a washer onto each screw and loosely install by hand (A). The swing gauge can be adjusted along the track as desired.
3. Make sure your gauge is straight on the machine bed, then use the included hex key to tighten fully (B).
4. Loosen the thumbscrew on the gauge arm. Use a measuring guide to set your swing gauge your desired distance from the needle (C). Tighten the thumbscrew to secure the gauge arm in place.

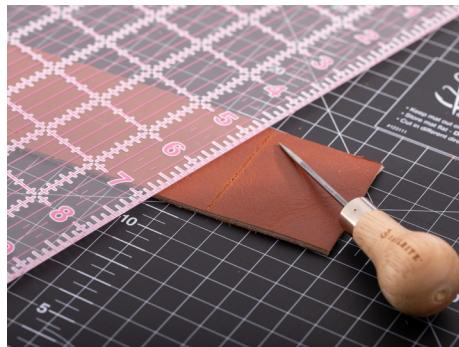


Scan to watch a video  
on how to install  
the swing gauge



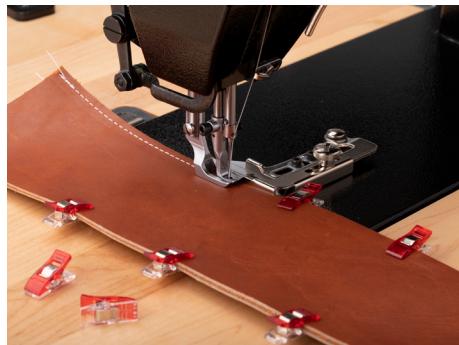
# Sewing Accessories & Tools

Included in this package are three must-have tools and accessories that you should keep on hand at all times. They'll help you elevate the quality and consistency of your leather goods.



## Sailrite® Scratch Awl (#123270)

A scratch awl is a simple, multiuse tool that will help you produce clean, precise stitching. Use a scratch awl with a ruler or straightedge to score straight stitch lines and mark even seam allowances. The Sailrite Scratch Awl has a contoured wooden handle that will sit nicely in your hand, giving you ultimate control over the tool and its capabilities.



## Small Fabric/Leather Clips (#123121)

Fabric/Leather clips are an absolute necessity for holding leather assemblies together before sewing. They're quick and easy to put on and take off, and they're strong enough to hold several layers together. Best of all, they won't leave permanent marks or holes in your leather like pins would. They are also great for holding leather together while glue cures.

## Sailrite® Battery Operated Thread Burner (#122432)

Forget using a lighter to seal cut thread ends. This thread burner has a precision tip to deliver heat right where you need it, melting synthetic threads without the risk of burning or singeing your leather. With this easy-to-use, handheld tool, you won't have to worry about your thread ends unraveling. This tool comes with one replacement tip, and more are available at Sailrite so you can always give the seams on your leather goods a clean and professional-looking finish.



## How to Use the Sailrite Thread Burner

1. Insert three AA batteries.
2. Slide the safety switch to "On" and press the red button to heat the tip.
3. Use the thread burner's fine tip to melt loose synthetic thread or twine ends down very close to the leather's surface.
4. Press the melted thread down into the leather with your thumb or a tool to seal it.



## Service & Support

The quality items included in this Leather Craft Package for Fabricator® were chosen with utmost consideration and thought. We stand behind our quality products and we're constantly improving our product offerings to bring our customers the best, most useful sewing accessories. Please email [info@sailrite.com](mailto:info@sailrite.com) or call **260-244-4647** with any questions or concerns about this package.

Our knowledgeable support crew is here to help!

**Sailrite.com**

Equipping you to sew

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Instructions for Fabricator Leather Craft Package

Qty: 1

Version 9-22      Original manual in English