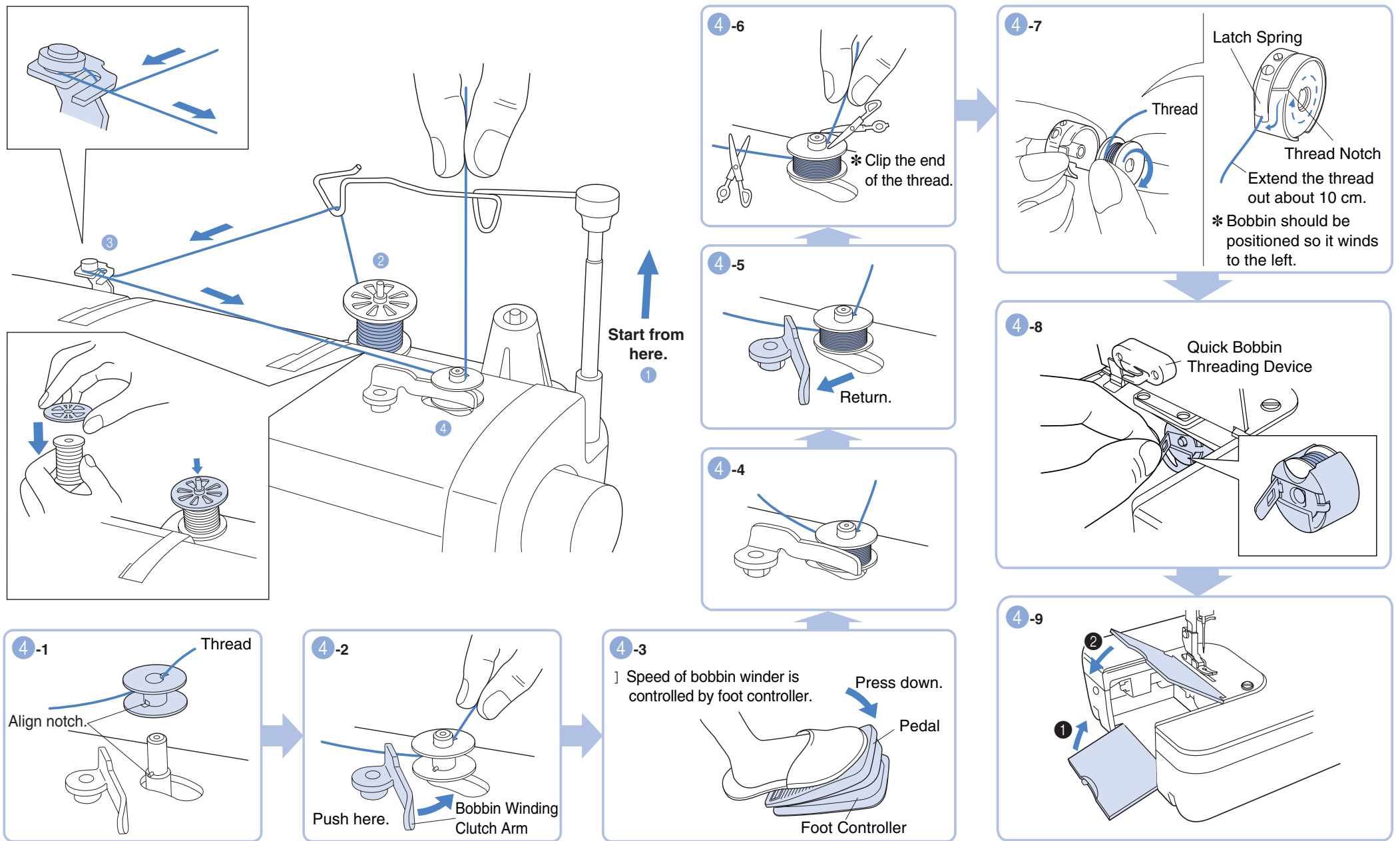
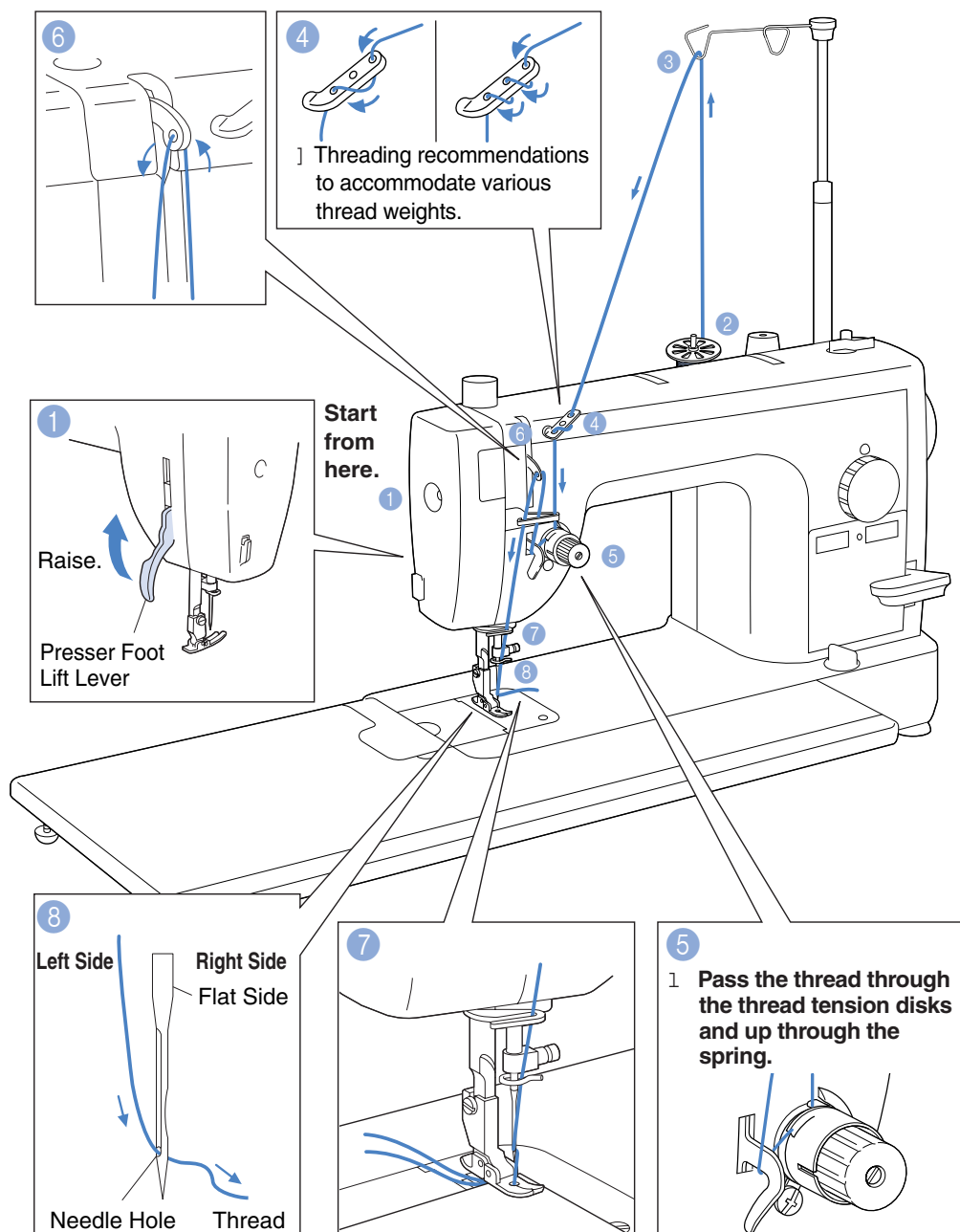


# Quick Reference Guide

## 1. Winding the bobbin thread 1 Please start from here. 1

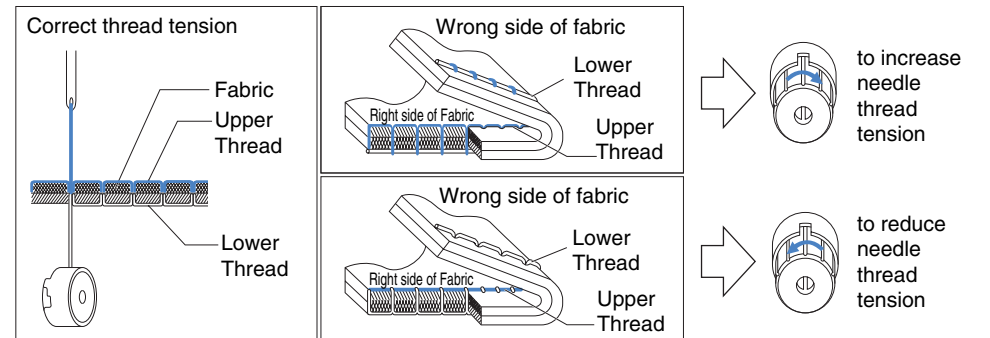


## 2. Upper Threading



## Thread Tension

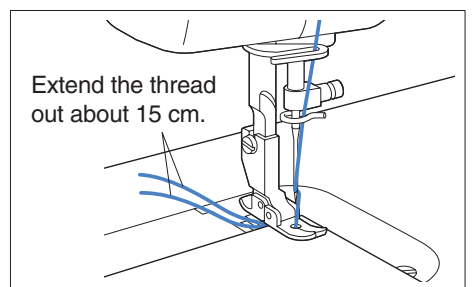
1 Adjust bobbin thread to match that of upper thread.



Incorrect thread tension can lead to such undesirable results as loose upper or lower stitches, puckered seams and thread breakage.

## Stitch Samples

1 Raise the needle, place the fabric under the presser foot, lower the holder, then test sew.



1 **Selecting the proper needle for use with the fabric and thread you are working with**

1 The following chart applies to many different fabric, thread and needle combinations.

	Fabric - Thread - Needles		
	Cloth	Thread	Needle (HLX5)
☒ Special fabric	Velvet	Silk, Polyester #30 - #50	#11 - #14
	Quilt	Polyester #20 - #50	
	Synthetic Suede	Polyester #20 - #50	#11 - #16
	Knit	Polyester #20 - #50	
Light weight fabrics	Coating	Polyester #50	#11 - #14
	Lawn	Cotton #80	
	Tricot	Polyester #60	#9
Middle weight fabrics	Silk Georgette	Silk #50	
	Wool Georgette	Silk, Polyester #50	#11
	Gingham	Cotton #60 - #80	#11 - #14
Heavy weight fabrics	Lightweight Jersey	Polyester #60	#11
	Gabardine, Flannel	Silk #50	
	Denim	Cotton #20 - #50	#14 - #18
	Jersey	Polyester #20 - #50	#11 - #16
	Tweed	Silk #20 - #50	