

Lesson 2.5

Lockstitch: Change Needle



Using a damaged, blunt, or incorrect needle will cause defective sewing and affect the quality of the product. It is your responsibility as a skilled production sewing machinist to identify when the needle needs to be replaced. You should be able to recognise the need to change your needle as a bent, dull, broken or incorrectly inserted needle will cause:

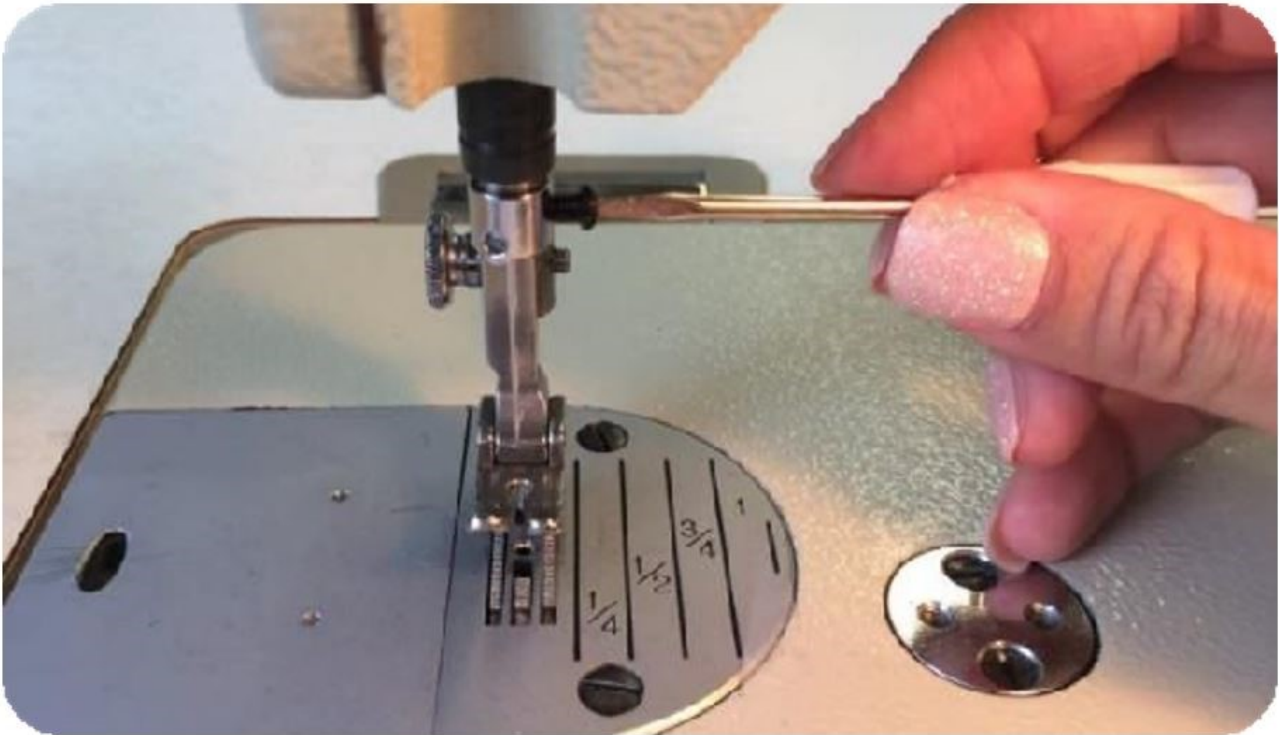
- popping sound when stitching
- frequent thread breaks during
- stitching skipped stitches no sew
- bunched /tangled thread

To remove and replace the needle follow the step-by-step guide below:

- 1. Turn the machine off** and remove the old needle. (Remove needle guard if required)
- 2.** Dispose of the needle following the companies broken needle procedure. Information on Needles Procedures can be found in Section 2.11
- 3.** Check the new needle – is it the correct needle type and size? Ensure it is not damaged i.e., blunt, bent, broken
- 4.** You can check the needle and thread compatibility, by threading the needle with a short length of thread. Hold the thread taut at each end in vertical position. The needle should spin slowly down and around the thread. If it slides too quickly or does not slide at all, try a different size needle or select another thread type/density.



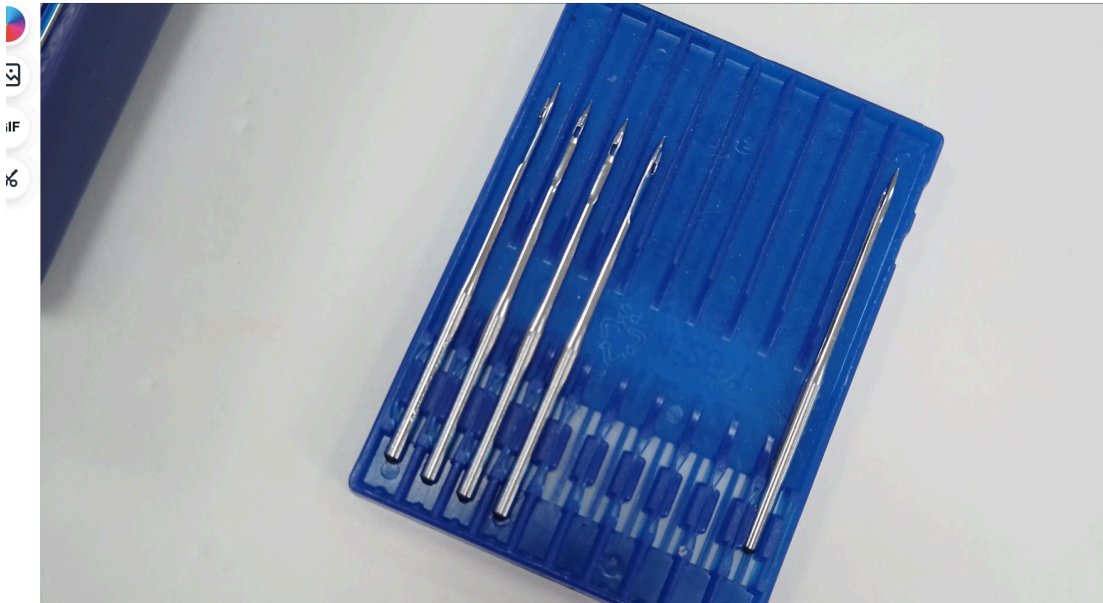
- 5.** Locate the long groove on the needle (see image)
- 6.** Hold the new needle between your right thumb and forefinger at the base of the shank where the groove begins.



- 7.** Insert the needle as high as possible into the needle bar with the long groove on the left
- 8.** Tighten the needle bar screw and rethread the machine
- 9.** Check the needle position by lowering the needle slowly using the balance wheel
- 10.** Replace the needle guard
- 11.** Test sew on scrap fabric, if the needle is positioned correctly, there will be no skipped stitches and no unexpected noise.

Watch this video to see further details on needles and needle change.

For more information on needles see Lesson 2.11



Unit 2.5 Lockstitch Machine Change Needle

<https://vimeo.com/580209181>

Knowledge Challenge 2.12

1. From the list below identify four key things that will indicate that the needle is bent, damaged, or blunt
 - Popping sound when stitching
 - Smooth, even balanced stitch
 - Frequent thread breaks during stitching
 - Skipped stitches
 - Smaller stitches than usual
 - No sew
 - Tight stitches that bunch up the cloth
 - Bunched /tangled thread

Knowledge Challenge 2.13

1. Put the needle changing process into the correct order by numbering the actions below from 1 to 8.
 - Check the needle position by lowering the needle slowly using the balance wheel
 - Check the new needle for type, size and damage
 - Turn the machine off and remove the old needle.
 - Dispose of the old needle following the companies broken needle procedure.
 - Insert the needle as high as possible into the needle bar with the long groove on the left
 - Check the needle and thread compatibility
 - Tighten the needle bar screw and rethread the machine
 - Test sew on scrap fabric

The next lesson 2.6 is all about how to maintain your machine and keep it in good working order.