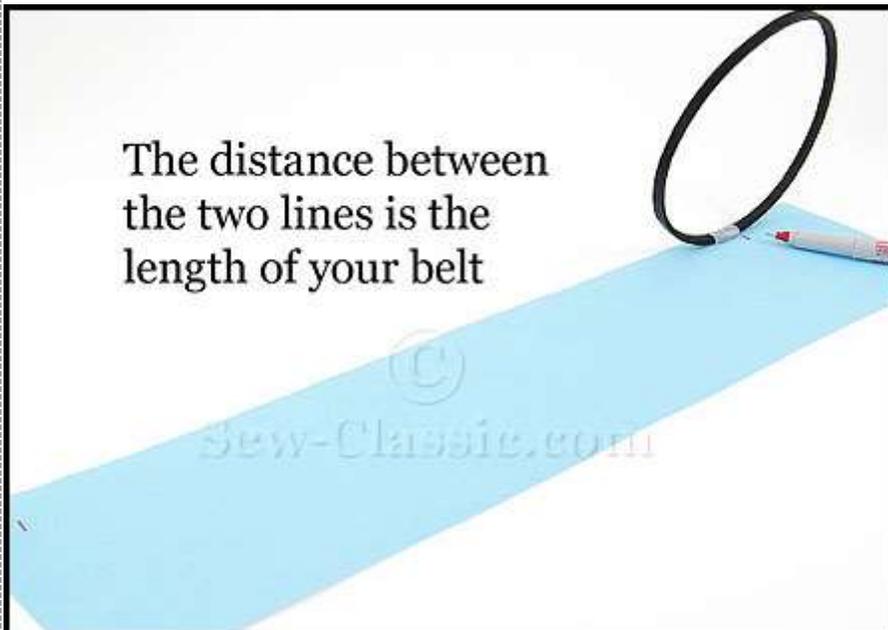


## How to Replace and Adjust a Sewing Machine Belt

All Rights Reserved Copyright 2008-2014 Sew-Classic LLC <http://www.shop.sew-classic.com/main.sc>

This tutorial applies to most external motor, belt driven sewing machines. You can purchase a wide variety of Sewing machine belts through the [Sew-Classic on line Shop](#).

### HOW TO DETERMINE BELT SIZE:



To measure an existing belt (non-stretch):

1. Place a piece of tape around the belt. The leading edge of the tape will be the measuring point.
2. Set the belt down on the paper (newspaper works well since it's so large) and draw a mark on the paper at the edge of the tape.
3. Roll the belt in a straight line along the paper and when you get to the leading edge of the tape, put another mark on the paper.
4. Measure the distance between the marks- this is the length of your belt

If you purchase a replacement belt that is too small, it will be difficult to install using the method shown above, and you may not be able to obtain the proper adjustment. However, due to the adjustment factor, a slightly larger or slightly smaller than original belt can often work fine.

The solid black v-belts look most like the original and are the most attractive. The orange-ish cogged v-belts may not look as nice, but their design makes them more flexible, and I actually prefer the

performance of this type.

The rubber stretch belts are for circumstances when you don't know or have the exact right size. The stretch belts put constant tension and more strain on the motor bearings/bushings. Although these types of belts can be handy to have in a pinch and are easier to install, they are less than ideal.

**If you are missing the belt completely**, just set the motor bracket at the end spot on the slot (putting the motor pulley at the *farthest* point from the hand-wheel), and wrap a long strip of paper 3/16" wide around the hand-wheel and motor belt pulley. Mark where the paper overlaps and use this measurement to estimate the actual (not nominal) belt size and measure the distance



#### **STEP ONE:**

Loosen the screw/ bolt that fastens the motor bracket to the back of the machine.



### **STEP TWO:**

Lift the motor and bracket upwards so that you can easily slip the old belt off of the motor pulley and then off of the hand wheel.



### **STEP THREE:**

Slip the new belt over the hand wheel and into the groove on the hand wheel.



#### **STEP FOUR:**

With the bolt still loose, and the motor slid up all the way, slip the new belt onto the motor pulley.

Do NOT force the belt. Unless you are installing a stretch belt, do NOT attempt to stretch the belt. If the solid or cogged v-belt won't fit, then get one that is a slightly larger size.



#### **STEP FIVE:**

Allow the weight of the motor to take up some of the slack in the belt. Adjust the vertical position of the motor bracket so that the belt is just barely tight enough so it grips the hand wheel and motor pulley and the parts are engaged and turning. The idea is for it to be just tighten enough so that the belt isn't slipping. Tighter is not better. Over tightening the belt will strain the motor, slow down performance, and eventually damage the motor bushings/bearings.

Tighten the mounting bolt and check belt tension one last time. Again-do NOT over tighten.



### Just a few more tips:

If a stretch belt was previously used on the machine, make certain that any melted rubber bits have been removed from the hand wheel belt groove and the motor pulley groove. You want these areas to be clean and oil-free.

When do you need a new belt?

- If you have a stretch belt on the machine- look to get a solid or coggled v-belt of the correct size.
- If the belt is cracking or shiny/smooth on the sides.
- If the belt is too small or too large for proper adjustment.

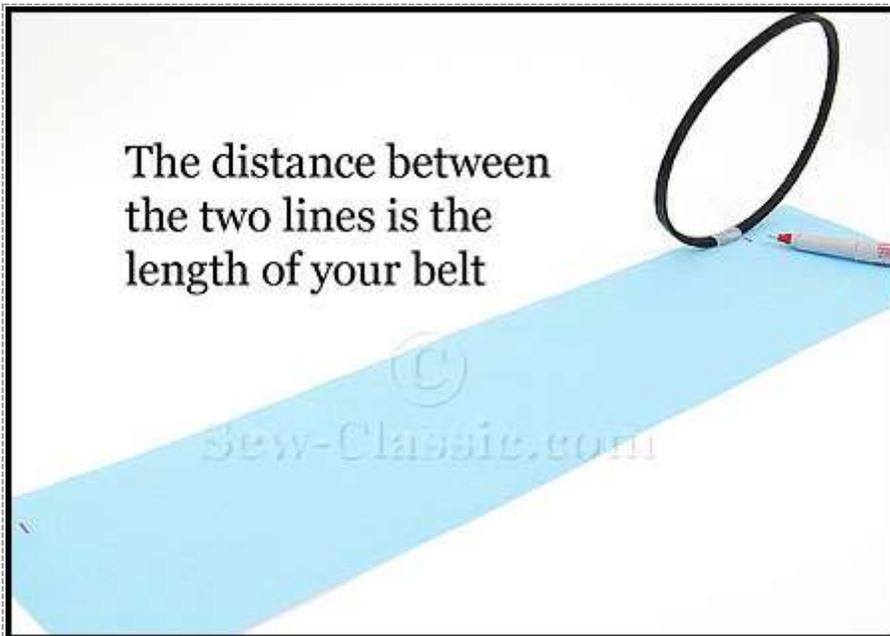
### HOW TO DETERMINE BELT SIZE:

To measure an existing belt (non-stretch):

5. Place a piece of tape around the belt. The leading edge of the tape will be the measuring point.
6. Set the belt down on the paper (newspaper works well since it's so large) and draw a mark on the paper at the edge of the tape.
7. Roll the belt in a straight line along the paper and when you get to the leading edge of the tape, put another mark on the paper.
8. Measure the distance between the marks- this is the length of your belt



If you purchase a replacement belt that is too small, it will be difficult to install using the method shown



above, and you may not be able to obtain the proper adjustment. However, due to the adjustment factor, a slightly larger or slightly smaller than original belt can often work fine.

The solid black v-belts look most like the original and are the most attractive. The orange-ish cogged v-belts may not look as nice, but their design makes them more flexible, and I actually prefer the performance of this type.

The rubber stretch belts are for circumstances when you don't know or have the exact right size. The stretch belts put constant tension and more strain on the motor bearings/bushings. Although these types of belts can be handy to have in a pinch and are easier to install, they are less than ideal.

**If you are missing the belt completely**, just set the motor bracket at the end spot on the slot (putting the motor pulley at the *farthest* point from the hand-wheel), and wrap a long strip of paper 1/4" wide around the hand-wheel and motor belt pulley. Make certain the paper is NOT folding. Mark where the paper overlaps and use this measurement to **estimate** the actual (not nominal) belt size. We cannot guarantee this will always net you the exact size you need due to the potential variables in execution of this technique.