



Instructions for Installing Single *Arledge* Optimized Piano Strings

A companion video can be viewed from

www.pianostrings.com/installsingle.htm



Watch this video while reviewing these instructions.

GENERAL NOTES

According to the previous instructions in this series, a new replacement string has been ordered and received. The old string is removed and the tuning pin is prepared.

Go to www.pianostrings.com/reviewsingle.htm for a review of these previous steps.

After these previous steps have been performed, the new replacement string is ready to install.

Begin installation by wearing gloves. Never touch the copper with bare hands. Remove the new string from the shipping materials. Inspect the string tag for correctness and whether it denotes "**PRE-CUT**" in green letters.



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If the string is not "PRE-CUT", the string length must be cut to allow 3 full turns around the tuning pin when the string is tuned to pitch. If this step is needed, lay or insert the string along its path under the plate struts and dampers. And then through the upper termination. Put the string loop over the hitch pin. Go to the tuning pin end and pull the string taught. Mark the string at a point that extends approximately 3 ¼ inches past the tuning pin center and cut it.

With the string cut to length or if installing a PRE-CUT string, begin installation by positioning the new string along its path under the dampers and through the upper termination points.

Continue threading the string into its respective tuning pin becket hole until it becomes flush with the outside of the hole.

Use a string hook or fingers to hold pressure against the string in this position. At the point where it enters the tuning pin apply constant pressure against the string while turning the tuning pin clockwise using the ratchet with star tuning tip or a tuning hammer.

Guide the string as it spirals down 2 ¼ turns forming a coil. This amount will allow the string to be loose enough to go over the hitch pin and stay.

Go to the hitch loop end of the string. For standard American counterclockwise strings, rotate the loop in the direction of the winding if needed so that the cut end or barrel tang points upward or in the general direction of the treble end of the piano. For clockwise specified wound strings everything will be reversed. There is no need to put additional turns or twists in Arledge Optimized strings. Simply place the loop over the hitch pin in the manner just described and thread the string through the bridge pins. The string loop should be fully seated around the base of the hitch pin unless an Accu-hitch roll pin type hitch is used. For roll pin type hitch pins, position the string to the original height on the pin.

Return to the tuning pin end to finalize the coil. Using a coil lifter or string hook, lift the coil while loosening the tuning pin ¼ turn or enough that the coil can be lifted. Lift and hold the coil while tightening the string more until the becket points to the 3 o'clock position on grands or the 9 o'clock on uprights. The top of the highest coil should cross



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the center of the becket hole. The coil may need a gentle tap downwards with a brass coil setter tool or a soft annealed flathead screwdriver.

Tighten the string becket bend against the tuning pin with vise grips, compound needle-nose pliers or a becket tightener tool.

Inspect the coil closely and readjust if needed until it is factory perfect.

The stabilization process begins by tuning the string to a pitch higher than the normal pitch. Arledge Optimized strings should be tuned 100 cents sharp or one semitone above normal pitch in one motion, one time only for this new string.

With the string tuned one semitone sharp, return to the loop end of the string. Using slip joint pliers, squeeze the twisted portion of the string loop. Squeeze the pliers tightly and gently wiggle or agitate the loop twist. Wiggling the loop enough will cause the barrel tang to slowly turn down and the pitch will drop about one semitone or near to normal pitch.

Next, retune the string but this time only up to 50 cents sharp or one quarter tone above normal pitch. Wiggle the loop twist again until the pitch drops again near to pitch. 10-15 cents sharp is ideal.

At this stage and at this pitch, use the string hook to pull the string on either side next to the bridge pins. Pull in the direction that will exaggerate the slight angle or bends in the string as it passes through the bridge. Do not pull on the copper portion of the string.

Again, tune the string, but this time only up to 35 cents sharp. Pound the key with hard blows. Retune to 35 cents sharp and pound the key again. Tune and retune until the string becomes stable at 35 cents under repeated hard key blows.

Sometimes it is possible to mute the new string with a rubber wedge so the piano can be played. It can be released during the next visit.

At this stage the initial installation is complete. The string must rest for a minimum of 48 hours.

After this time has passed the third visit will complete the process. Go to the next video. www.pianostrings.com/tunesingle.htm for a video demonstration of the final step.