

The Piano Owner's Heads-Up Guide to Important Piano Maintenance

Focus On: Tying Broken Strings



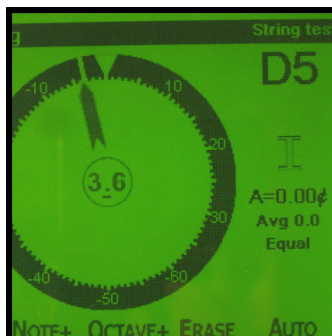
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A fact of life with pianos (especially older instruments that have been allowed to drift flat from years of neglect) is that strings occasionally will break during tuning. By far the most common spot on a piano string for a break to occur is where the string leaves the coil which is wrapped around the tuning pin. When a piano is being brought up to pitch it is at this point that a string is subjected to maximum tension since it is here that the pin is pulling up on the string and drawing it up over several friction points simultaneously. A lot of stress on an old string!

Many times the ideal fix for such a broken string is not to replace the entire string but rather to tie a knot (see above photo). The old string is thus spliced to a short piece of new string on which a new coil has been wrapped. **Since your piano has strings which have broken (or may possibly break during tuning), I would recommend that whenever possible, a splice be made to avoid having to replace an entire string.**



Tied String



New String

That this is a wise choice is illustrated in the above photos. In a test situation, two adjacent notes were brought up to standard pitch. One note (D5) had a string which had been spliced as if it had been broken and repaired. The other note (D#5) had been given a new string. After an hour the tied string had settled only 3.6 cents in pitch, while the new string had fallen 35 cents! New string stretches. The tied string has mere inches of new string while the other string is entirely new. By tying a knot, several repeat visits to stretch a string back up to pitch are avoided.



To splice a string, a new coil is first produced as shown in the above photo. A tuner's knot is then tied, splicing the new wire together with the old. This knot, when done correctly, will be a permanent fix.

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