

# Pianotek

## SUPPLY COMPANY

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### USING THE KEY EASING IRON

The following quotation is taken directly from "A Treatise on the Art of Pianoforte Construction" by Samuel Wolfenden, page 114:

"The usual methods of easing bushing mortices are very uncertain and wasteful of time. By the use of a warm, almost hot, metal broach, adjusted to the correct thickness, the work may be done in very much shorter time than that otherwise required, and with far more regular and permanent results.

The writer's own way of using this method is for the broach to be a horizontal fixture, heated by the flame of a spirit lamp, the heat of the effective part being adjusted by the distance of the flame from it, and the keys are then applied to it, several being held in the hands at a time ...

When one has had a little practice with this mode of easing it can be done with such regularity as to eliminate the need for trial of individual mortices, and moreover, the results are much more permanent, not being dependent upon mere compression with pliers or wedge."

This was written in 1916. This method, though very effective, is obviously somewhat antiquated for our use today. Plus, with all the different makes of pianos we deal with today, several sizes of broaches are necessary, not to mention a convenient and controllable method of regulating the temperature.

The KEY EASING IRON consists of brass broach tips that fit into a 40-watt soldering iron, using an in-line dimmer or Dial-Temp control to regulate the temperature. DO NOT use this tool without temperature control.

The most effective operating temperatures range from 150°F to 200°F. This can be determined by placing a drop of water on the end of the broach tip, and slowly turning the temperature control up until the water begins to boil. Mark this point on your control. It is then easy to regulate the temperature slightly below this point to achieve the desired result.

You must choose the appropriate broach tip to achieve the desired result. It will not take long for you to determine which broach works best for the particular job. If you're not sure, start with a small broach and work up.

It does not take long to permanently affect the key bushing. About one second of complete contact is usually all that is necessary. We usually insert it, hold it for almost a second, pull it out, and then quickly insert it again (to feel the difference and verify that we did the job), and **immediately** pull it out again, going on to the next key. It takes about 5 minutes to treat an entire rail when they are all taped or clamped together, a little longer if you pick up a handful of keys at a time. There is no need to try each key on the pin (after you decide which broach to use). They will all be quite uniform.

You will also find that there is a significant reduction in friction after application of the KEY EASING IRON to the bushings. For this reason, we recommend following up every key rebushing job with the KEY EASING IRON, even if the keys already fit perfectly on the pins. Use the broach to *polish* the cloth rather than compress it. Also, many new pianos suffer from tight bushings that can be very quickly and easily corrected with the KEY EASING IRON (in about 15 minutes). Some inexpensive pianos are bushed with thick spongy cloth which becomes "nested" around the pins, causing sluggishness that is nearly impossible to relieve with pliers. The KEY EASING IRON solves this problem quite well.

Please note: This tool is not designed to do massive key easing. It is designed primarily to put the finishing touch on an otherwise properly bushed (or rebushed) set of keys. If you are going to try to ease more than .010", turn the heat down a bit so as to be able to leave the tip in contact with the bushing for several seconds without scorching. In extreme cases, pliers may be necessary.

WARNING: As with any tool, the Key Easing Iron can be used or abused. Keep this and all tools out of the reach of children. Be careful not to lay it down on a combustible surface while it is hot! Pianotek Supply Co. assumes no liability for use or misuse of this tool. Use it intelligently at your own risk.