

Schaff Piano Supply Company Presents:

# Refelting the Keybed

## Basic Step-by-Step Procedures

Key Work



By Chuck Behm



## Refelting the Keybed



### -Rationale-

Refelting the keybed of a piano is a good first step for any project involving rejuvenation of the keys or the regulation of the action. Many older pianos have moth or mouse eaten front and center rail punching and backrail cloth. Felt that is damaged provides a unreliable basis for the keys to rest on. By removing the old felt and replacing with new, the technician has paved the way for an accurate regulating job in which the key height and key depth can be accurately set.

Replacing the backrail cloth has the added benefit of providing a soft, yet firm cushion for the keys to fall back on, which often helps to quiet action noise as the piano is played.

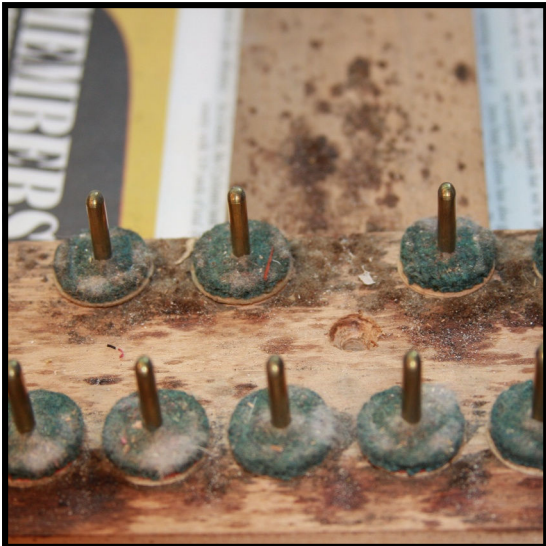
A total replacement of the keybed felt may be done with the keyframe in the piano, but is more conveniently done if the keyframe is removed from the piano and transported to the shop. Other work, such as keytop replacement or key rebushing, may be scheduled at the same time to further improve the playing and appearance of the piano.

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## Key Work / Refelting the Keybed

**Step 1:** Place keyframe on bench. Do initial vacuuming to remove bulk of debris.



**Step 2:** Inspect front rail and center rail punching. Frayed edges and hard felt necessitate replacement. When moth or mouse damage is severe, punchings may be missing altogether, especially in the case of smaller center rail felts.



**Step 3:** Backrail cloth that is hard or coming loose on the front also needs replacement. A properly installed backrail cloth will not have been glued down in the back, so looseness there is to be expected



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**Step 4:** Remove both the front rail felts and the paper punchings used to set the key dip. The exception to this would be that if the piano is not to be fully regulated after the keybed felt is replaced, just remove the felts and not the paper punchings. The easiest way to lift off the old felts and paper punchings is to slip a [jeweler's screwdriver \(Cat. No. 3275\)](#) under one side of the stack of felt and paper, and lift up with both the screwdriver, and the finger of your other hand.

**Step 5:** Repeat the process with the center or balance rail punchings and the underlying leveling papers. Again, if a overall regulation of the piano is not in the plan, you may leave the leveling papers in place, although you still may want to at least relevel the keys by bringing all the keys up to the level of the highest key.

**Step 6:** Remove the backrail cloth. Sometimes the old glue has deteriorated to the point where the strips of felt may be simply pulled off. In this case, a 1" chisel from [chisel set \(Cat. No. 292\)](#) was used as the felt strip was pulled upward.

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**Step 7:** Scrape off the remains of the old glue and felt using a wide chisel, pulling it towards you as shown. If you try pushing the chisel away from you, it's easy to gouge the wood.



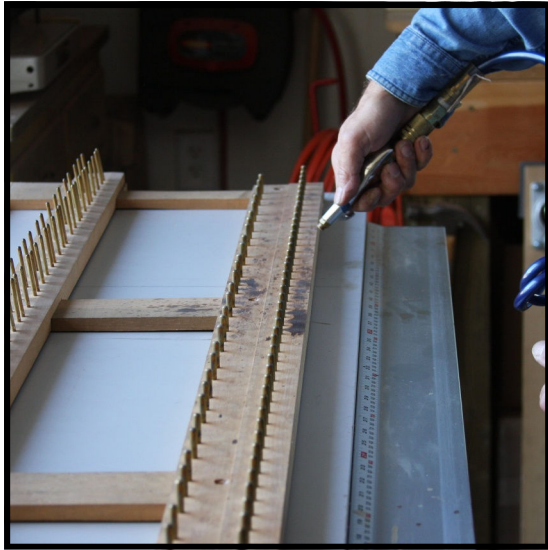
**Step 8:** With all the glue scraped off, finish the job with a sanding block and 60 grit sandpaper.



**Step 9:** Use a stiff brush to clean off as much residue around the front and center rail pins as possible. An effective brush may be made by taking an old varnish brush, and chopping off all but an inch or so of the bristles.



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**Step 10:** Use a stream of compressed air to finish the cleaning process. If front and center rail pins are to be polished, now is the time to do that procedure.

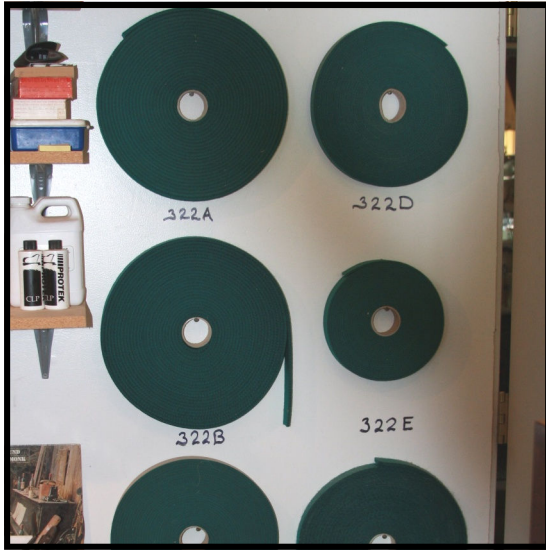


**Step 11:** After measuring the thickness of the old front rail punchings, select new punchings to install. [Front rail punchings](#) in [white cloth](#), (Cat. No. 331), [kelly green cloth](#) (Cat. No. 335) and [dark green cloth](#) (Cat. No. 336 and 336) are available in two widths (3/4" and 7/8") and a range of thicknesses. If you do much of this work, you'll find that it's convenient to have a selection on hand to avoid having to wait to get to a job while supplies are ordered.



**Step 12:** Select and install new center rail punchings to match the punchings that were removed. [Center rail punchings](#) (Cat. No. 332) are available in five thicknesses. Push the new punchings down on the center rail using two thumbs as shown.

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Backrail cloth is also available in three different widths and a range of thicknesses. [Extra wide backrail cloth \(Cat. No. 324 and 325\)](#) comes in single strips. Ordinary width [backrail cloth \(Cat. No. 322\)](#) comes in single strips and also in continuous rolls of twelve strips in five different thickness. Ordering a continuous roll of each thickness will insure that you always have the cloth you need on hand.

**Step 13:** Select the correct thickness of backrail cloth by comparing the thickness of the original cloth with the new. Lay a piece of the old side by side with the end from a new roll to determine which thickness is the best match.

**Step 14:** Use either a [felt cutting knife \(Cat. No. 213\)](#), a [square end knife \(Cat. No. 216\)](#) or a single edge razor to cut the backrail cloth around the notches in the keyframe that fit around the supports for the action brackets. Either knife gives the advantage of a easy-to-grasp handle, that the razor blade does not.



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**Step 15:** With the backrail felt cut to fit on the keyframe, flip the felt over so that the underside is face up, and so that the front of the felt is now in the back.



**Step 16:** Apply a generous layer either **Titebond** (Cat. No 392-16) to the edge of the backrail cloth closest to you.



**Step 17:** With your finger, spread the glue on the half of the felt nearest to you. Do not get glue on the other half of the felt.



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**Step 18:** Carefully turn the felt back over and position into place. Rub the felt out from side to side. (The reason for gluing only the forward half of the felt is to leave the rear half, where the keystick makes primary contact with the felt, without a glue joint to the keyframe, thus lessening the sound transmitted as the keys fall into rest position.)



**Step 19:** Turn the keyframe back around in preparation for returning refelted frame to piano. If shims were removed from between the keyframe and the keybed in the disassembly process, return them to the correct position now and place keyframe back in piano.



**Step 20:** To correctly position the keyframe over screw holes, start by putting the right front screw in the screw hole of the keyframe and twist down by hand until the point protrudes slightly. Lift up the keyframe a bit, and eyeball the point of the screw into position in the hole in the keybed. Turn with a screwdriver a few turns (but not tight) into the hole, then repeat the procedure with the front screw on the opposite side. With the two front side screws in place, all the others will line up correctly.

### Tools and supplies:

For your convenience, all the tools and supplies necessary to complete this procedure are listed with corresponding catalogue numbers.

#### Tools:

Jeweler's screwdriver .....	Cat. No. 327
Chisel set.....	Cat. No. 292
Felt cutting knife .....	Cat. No. 213
Square end knife .....	Cat. No. 216
Titebond.....	Cat. No 392-16

#### Supplies:

Front rail punchings.....	Cat. Nos. 331, 335, 336 and 337 - (available in a range of widths and thicknesses)
Balance or center rail punchings.....	Cat. No. 332 - (available in a range of thicknesses)
Backrail cloth.....	Cat. No. 322, 324 and 325 - (available in a range of widths and thicknesses)



Notes on Procedures