

Keytop Repair

Kenn Wildes

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Kenn has been working on the art of restoring ivories. He has a 7'4" Kawai with one-piece ivories that are absolutely perfect. The problem is that they have turned yellow, possibly because of a smoker, aging, or darkness. He used food-grade hydrogen peroxide, which is 35%. This is an extremely strong solution. A gallon will last forever, and costs about \$77.

Ivory Whitening

Luis Arrazola

1. Make sure to put on thick gloves and goggles. This will burn your skin immediately and bring pain. Do not touch your face or phone for any reason. Touch it and it will turn your skin white, and it will hurt for a while.
2. Remove all white keys from the piano. Clean all excess dirt and stains on the keys before bleaching.
3. Evaluate the condition of the keyboard. If the head-tail joints are spaced, the glue will come apart. If the ivory head is coming off, peroxide will get underneath and warp the keytop. Every single set of ivory keys behave and react differently. Proceed with caution. Some are easy and some can be hard.
4. Also, if an excessive amount of peroxide is used, it will drip down and destroy the bushings. If this happens, you will have to redo the front rail and center rail bushings because the peroxide will deteriorate the wood and glue.
5. Make a base with a towel so excess is not spilled everywhere.
6. Sand the ivories with 1000 grit to break the surface.
7. With a spray bottle, apply evenly up and down the ivory piece. Cover everything and let it set under UV light.
8. Touch-ups over time matter a lot, depending on how yellow the keys are.
9. If it is not even and not attended to, the results will appear spotty; these spots can damage the keytop even further, as the spots can be very uneven.
10. Let the keys sit under UV light for several hours to purge as much yellowing as possible. Grow lights work well.
11. **IMPORTANT:** This concentration of Peroxide oxidizes immensely; it is an exothermic reaction, so it releases heat while it oxidizes. Under the right dry circumstances, it will catch fire.
12. After leaving it overnight under the UV, clean it up with a rag and water. Proceed to wet sand imperfections with 800 to 1000 grit.
13. Some keytops will misbehave, depending on the type of ivory, age and condition. The ivories can come off, flake, decompose, warp and break.
14. Do not ever bleach ivories without their being glued on the keys. The ivory pieces will warp and crack beyond repair if not glued flat.
15. Clean with Windex. Decide whether and how you would like the finish of the keys: high gloss, brushed, or matte.
16. If you have chips to repair, do this work after using the peroxide; otherwise, the Acrylikey will turn pink.

Brushing, rubbing, buffing:

- Brush with Scotch-Brite
- Soft buffing wheel is just right.
- A buffing wheel can burn the plastic.
- Sometimes it works best to hand-rub buffing compound.

Gluing on ivories:

- White primer spray paint.
- Titanium dioxide mixed in cold hide glue.
- Cloth glue-impregnated wafers
- CA glue, applied smoothly
- CPVC glue, clamped, or it will warp

Black Keys

- Black spray enamel is preferred.
- Acrylic lacquer can work.
- Use an old key frame as a key rack to hold the keys while spraying.
- Scrub with burgundy Scotch Brite almost down to the wood, then spray several light coats, and a final heavy coat.
- Order new ebonies for about \$60-\$100. Remove the old ones and install all new.
- When the sharps are in really nice condition, keep them. Rub it out with steel wool so it looks the same.
- If ebony has been painted, use stripper and polish the original ebony. Clean off the stripper, buff them, and then spray a final clear coat on the bare wood.

Useful Notes and Comments:

- Bill Smith got hydrogen peroxide at a beauty supply place. He would wet a paper towel with the peroxide and lay it on a keyboard, and then set it out in the sun.
- Joe left some ivories in a drawer and they turned brown. Joe put the ivories in a jar of peroxide and didn't look at them again for four months. When he took them out a few days ago, they had turned white.
- Maybe normal drugstore 3% will work. Try 8%.
- Ivorine plastic keys will turn yellow. Ken has not tried peroxide on plastics.
- Separate Steinway ivories from all other ivories, because Steinway heads are longer.
- African ivory is stronger than Asian ivory.
- The nerves in the female tusks are more symmetrical and go down the center, whereas the nerves on the male elephants tend to wander.
- Weak ivories can crack and chip.

Resources:

- JCBritw LED Grow Light Panel 2 ft Full-Spectrum with UV IR, 100 W Pro B, Plant Growing Lamp Bulb (Amazon)
- Buffing compounds (ask Kenn)
- Peroxides: 3%, 8%, 35%