



Small Shop - Big Results Refinishing Sharps – Part 2

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In the last issue of the Journal I outlined my typical procedure for refinishing ebony sharps, which might be labeled the “minimalist” approach. Strip, clean, polish, and leave it at that. However, what if a technician wanted the sharps to turn out jet black and the natural color of the ebony was more grey or reddish than black? What if an opaque finish was desired which revealed nothing of the grain of the wood? What if the technician desired to clear-coat the sharps? At what point should the technician throw in the towel, and simply order either new plastic or ebony sharps to replace the old set entirely? Good questions, all. Questions which should be answered.

Desiring to present more than just my own approach in answering these questions, I decided that research was in order. How do other technicians deal with these issues? To find out, I posted a query on the Pianotech and Piano World e-mail listservs, basically asking for advice on how to refinish sharps. As usual with this website, technicians were generous in sharing their knowledge. A variety of procedures were proffered.

Variety was indeed the key word for the advice that was given. No two technicians who responded had identical protocols for refinishing sharps! So many different suggestions for products to use were given, in fact, that I ended up going to more than a dozen different stores (plus ordering some items on-line) before I found everything I needed for testing the methods which had been submitted. Photo 1 shows cornucopia of products that were recommended.



Photo 1: If I've left something out, don't call me – I'll call you

Added all together, with recommendations for products to use in cleaning the sharps, dyeing or painting the sharps, and clear-coating or polishing the sharps, I had a total of 25 items to purchase. My intent in buying everything which was recommended is

to conduct testing off all the products recommended by everyone who responded to my query on the websites. That way, the performance of all the products can be compared with all the others. Otherwise, if actual testing is not conducted, it's a case of individual technicians just making claims for the product they use and endorse (which I realize I'm as guilty of as anyone), without an unbiased comparison.

But here I'm guilty of putting the cart before the horse. Before looking at specific product recommendations, the question of whether to refinish an old set of sharps, or whether to simply replace should be addressed. After all, the methodology used to refinish sharps is an unimportant point if the sharps are not worth the effort. On some instruments, the sharp keys are either of such poor quality or have been worn down to the point where replacement with either a new set of plastic or ebony sharps makes more sense than bothering with the old.

To begin with, not all sharps are created equal. As you would expect, lower quality pianos often have sharp keys which are not top-of-the-line. When corners are cut in producing a cheap piano, using poor quality sharps is one way to do it.



Photo 2: It's what's inside that counts.

As the cross-sections in photo 2 plainly show, when it comes to sharp keys, not everything that looks black on the outside is necessary black on the inside. Only the key on the right is the real thing. The middle two keys had been lacquered black. The key the right of center is clearly some sort of white wood, looking very much like yellow pine. The example to the left of center, while darker in color, has a very spongy, porous look to it that is clearly something other than ebony. I'm fairly sure that it came from a tree (as opposed to a bush), but I'm not at all sure from what species.

The sample key on the left side is more of a chameleon. On the outer surface, it still appears black after stripping, but only because it had been dyed (ebonized) before lacquering. This way, when the lacquer begins to wear through, at least the wood underneath is still black. Even the bottom of the key shows evidence of the dye penetrating the wood, making it very hard to tell from the outer color alone. Its density is more along the lines of ebony as well, giving it more of the heft of the real thing. My

guess would be pear wood (compare to insert in photo above), which puts it a cut above the center two samples (pear wood is valued by wood-workers – it turns well and polishes well), but still not ebony.

I guess the point is if I'm going to spend the better part of a day stripping, cleaning and refinishing a set of sharps, knowing what I'm working on would be helpful. I would be far more willing to invest my time on a set of genuine ebony sharps, or even the pear wood "faux" sharps, than on the cheap imitators that were simply painted black.

So, how does one tell the difference without cross-sectioning a sample key? With some inferior types of wood which have been simply lacquered black, it's obvious once the original finish is stripped off. In both color and texture, they are dissimilar to ebony. With some dyed sharps, however, the wood still gives the appearance of ebony even after the lacquer is stripped. With the ebonized pear wood sample in Photo 2, even a fairly aggressive sanding of the key would not have revealed the lighter wood interior, as the dye used had penetrated for some depth into the structure of the wood.

If in doubt, one needs to take a look at the wood inside the key. To do so without damaging the appearance of the key, first remove a sample sharp from its keystick. The easiest and most reliable way to do this is to place the sharp in a woodworking vise (line the jaws with cork), so that the keystick pops off of the sharp when rapped from the side with a mallet. The secret is to have the sharp placed in the vise so that the line between the keystick and the sharp is exactly flush with the top of the jaws of the vise, as shown in Photo 3.



Photo 3: I need to buy a new mallet for these photos!

Done carefully, this almost always works. Once in a great while, a bit of the wood of the keystick will adhere to the bottom of the sharp, and even more rarely, a bit of the sharp will still be attached to the keystick, but far more often the break is clean, with the sharp and keystick undamaged in any way.



Photos 4a and 4b: Core samples.

With the sharp key upside down on your drill press table, drill a core sample (a 1/4" Forstner bit works well) to verify the species of wood. (Set the depth gauge on your drill press short to avoid going through the key!) The scattering of chips in Photo 4a reveal that the sharp is in fact ebony (or at least a close relative such as a dark rosewood) and in 4b that it is not. Once done, reglue the sharp onto the keystick and return to frame.



Photo 5: An issue of degree.

A second factor to consider before deciding whether to refinish or replace is the amount of wear-and-tear that the sharps have been subjected to. If the edges (facets) of the sharps are not clear-cut, no amount of elbow grease is going to make them amount to much. The trouble with this decision is that, unlike the question of whether the sharp is ebony or not, the amount of wear is more of a continuum. Where do you draw the line between what is acceptable and what is not? In Photo 5 above, the sharp on the right is salvageable. The sharp on the left clearly is not. What about the sharp in the center? One could argue either way whether to save it or replace it.

Making things more complicated is the fact that the amount of wear will vary depending on which portion of the keyboard the sharp comes from. The keys from the center will usually have fared worse than the keys on either end. Clearly it can be a difficult decision to make.

Will all of those factors in mind, I set about planning for test which I hope will at least give the technician something to go on in deciding on methods and materials to use, when refinishing is the chosen course of action.

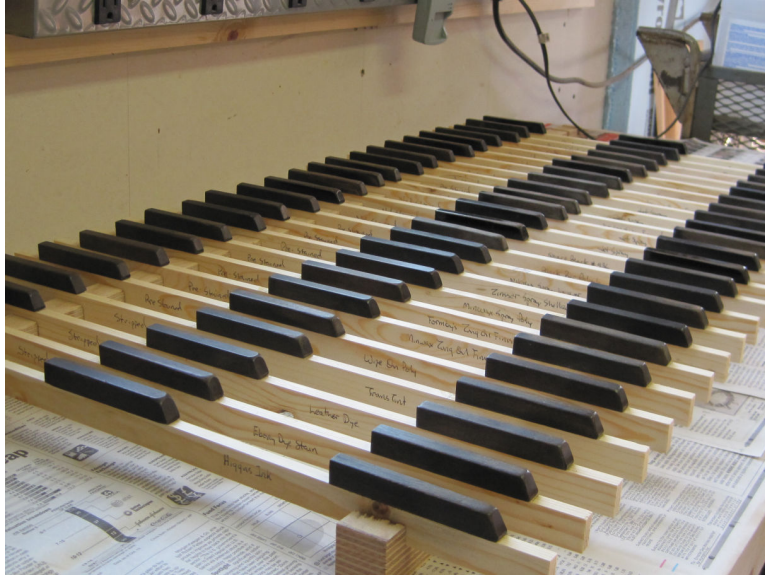


Photo 6: Let the testing begin!

To accomplish this goal, I've got a testing table set up and ready to go, and will be hard at work for some time trying out the 25 products I've purchased. After an in-depth look next month at the properties of ebony which make it so useful in key making, I'll be ready to report back on my findings in the products and procedures testing.

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