The Bushmaster is a state of the art key rebushing tool that guarantees factory-style bushing. Combined with a an accurate key bushing caul system, the Bushmaster provides the most efficient and accurate way to rebush keys. The function of the Bushmaster is to simultaneously produce a uniform cloth depth and cut. Every mortise will have the same length of cloth. The Bushmaster eliminates all the "guesswork", and does it with incredible speed. Manufactured by Pianotek Supply Company, USA.



THE BUSHMASTER

Features

-Solid Brass/Aluminum construction .

-Disassembles in seconds for blade replacement/cleaning/etc.

-Will fit any size mortise/pin including .088" pin.

-Built in depth position/fast plunge cut.

-Lifetime guarantee/ all parts and labor (except blades).

Instructions

The following sequential photographs and descriptions are designed to give a basic understanding of the Bushmaster and its function when combined with accurate key bushing cauls and correctly dimensioned cloth. The techniques involved are simple to learn and success is guaranteed with the first job. Once mastered, most rebushing jobs can be completed in 1 to 2 hours.

Most photos will be self-explanatory. Please refer to the last page under Helpful Hints for more information.



Clamp keys with packing tape.



Turn over keys and tape underside.



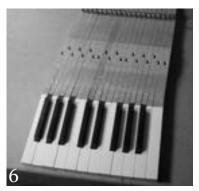
Tape between keys and buttons.



Tape keys in 4 or 5 "packs".



Push keys together tightly.



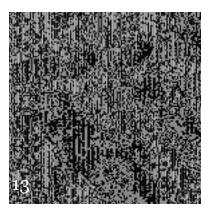
Keys are ready for rebushing.



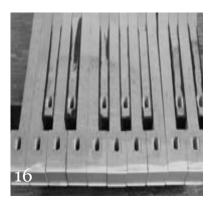
Cauls and cloth ready.



With glue in all the sharp mortises, lay the cloth strip over the mortises.



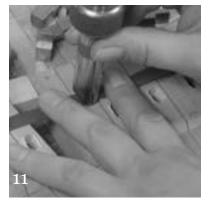
Fingers prevent cloth from "popping" out of the mortise.



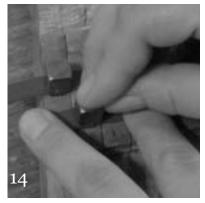
Turn section upside down.



Apply PVC-E or Hide glue to sharp rail first. (Apply glue to all mortises in the section.)



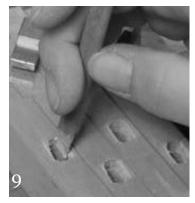
Insert Bushmaster into mortise and hold cloth with fingers.



With fingers still lightly holding felt, insert caul .



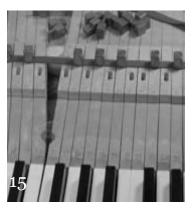
Push naturals away from sharps. Tape will still hold the section together.



Apply glue 1/8" to 3/16" deep.



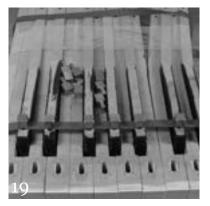
Continue to lightly hold felt with fingers and press plunger to cut.



Completed sharp rail. Repeat procedure with natural rail. Do not trim cloth at this time.



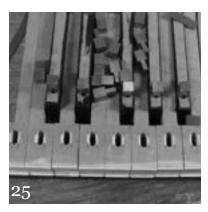
With glue in sharp mortises, lay felt across and cut same as balance rail.



Sharp rail completed. Trim rail before bushing naturals.



Alternate tool for cutting.



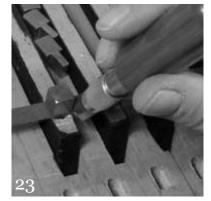
After trimming sharp rail, repeat entire bushing procedure with natural rail.



Position "clamp" over sharp rail.



Tool for trimming cloth.



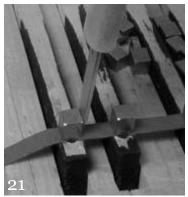
Trimming cloth. As before, use finger to hold caul while cutting.



After trimming naturals, turn section over and press sharps back down.



Add weight for clamping sharp rail and counter weight for front clamps.



Trimming cloth. Use finger to hold caul while cutting.



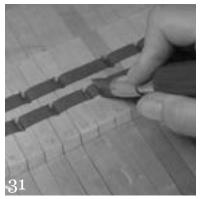
Completed sharp rail.



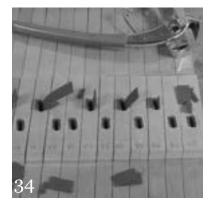
Rest cauls on hard rubber and make sure cauls are straight.



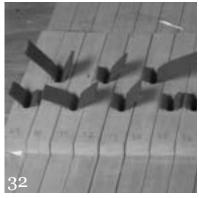
Clamp using 6" Pony clamps. Leave clamped for 10 minutes.



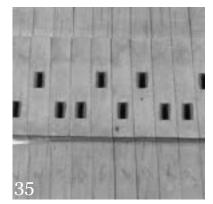
Cut felt between the keys.



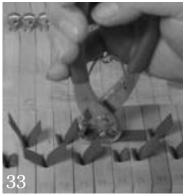
Naturals completed.



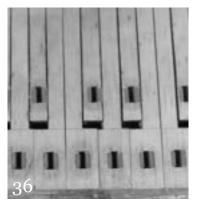
Mortises ready for trimming.



Completed balance rail.



Using flush cut center-pin nippers, trim cloth.



Completed front rail.

Helpful Hints

NOTE: The Bushmaster surgical blade is extremely sharp. Please exercise caution and common sense.

- Photo 1 Use Scotch 3750 packing tape and #122 dispenser for best results
- Photo 3 Squeeze keys together tightly with fingers while applying tape
- Photo 6 Most keyboards will pack up into five sections
- Photo 8 Glue applicator made of 1/4" doweling with tip sanded flat
- Photo 10 Always work the sharp rail first to allow clearance for naturals
- Photo 11 Don't hold the felt too tightly. Finger pressure should be just enough to let the Bushmaster "drag" the felt into the mortise.
- Photo 13 Once the cut is made, the felt will not pop out of the mortise as long as you remember to keep your fingers on the two sides of the mortise.
- Photo 14 Once the caul is in place you can remove fingers and move to the next mortise.
- Photo 15 Don't trim the balance rail at this point. This will be the final step in the process.
- Photo 17 It is nearly impossible to work sharps and naturals on the same level plane. Push the naturals away from the sharps and the tape holds very securely.
- Photo 20 Trim the sharp rail before bushing the naturals.
- Photo 21 You will need to hold the caul down with your finger while cutting.
- Photo 27 Use material that has a slight "give" for front rail clamping.
- Photo 29 Use enough weight to ensure the sharp rail will clamp. Weight also acts as a counter balance for the front clamps. *NOTE: Always put weight on first before clamping naturals*. Leave clamped until next section is completed. Front rail will be perfectly inset avoiding regulation problems.