## The Piano Owner's Heads-Up Guide to Important Piano Maintenance

## Focus On: Shimming the Cracked Soundboard



Information provided courtesy of: Chuck's Piano Service Office: (515) 432 -1190 behmpiano@gmail.com

Cracks in the soundboard of a piano tend to diminish both the tonal quality and power of the piano. Effective repair may be done only after all loose ribs have been successfully glued tight.

Before shimming, the soundboard is dried for several days by putting the piano on its back, covering it with heavy blankets and placing several 40 watt light bulbs under the piano to gradually warm the board and bring down the moisture content.

Once the board has been dried, the cracks will be at their maximum width. To prepare the cracks for shims, a 'v' tool is used to gouge out the crack so that the sides slant in at an angle that matches the spruce shims which are used (above photo).

The channel which is created is checked frequently as the gouging operation is being done to ensure that a good fit will be obtained (photo top of next column).



After the shims have been fitted, they are glued in place with a special glue with necessary acoustic properties (insert above). The shims are then weighted down and the glue is allowed to cure overnight.

Once the glue has set, the excess height of the shims is trimmed off and the shims are sanded out smooth. .

Although there is no way to guarantee that a century-old soundboard won't develop cracks in the future, the likelihood is they will be much fewer in number and narrower in width. Since the wood is has obviously been cured over time, further shrinkage is unlikely.



Chuck Behm River City Piano Restorations Cell: (515) 212 –9220