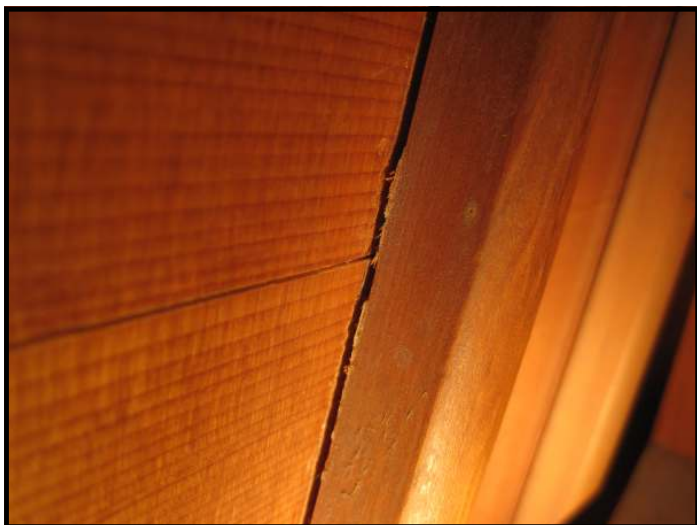


# The Piano Owner's Heads-Up Guide to Important Piano Maintenance

## Focus On: Gluing Loose Ribs Using Soundboard Toggles



Information provided courtesy of:

Free State Pianoworks LLC  
(785) 542-0485  
[www.FreeStatePiano.com](http://www.FreeStatePiano.com)

The ribs glued to the back of the soundboard of a piano provide an essential tension to the soundboard which facilitates its vibration. When the ribs become loose or separate altogether from the soundboard (top photo) both the amplification of sound and the quality of the piano's tone are greatly affected. Loose ribs need to be solidly reattached to the soundboard in order for the piano's tone to be at its potential.

One effective method of fixing the problem is to insert soundboard toggles to serve as clamps so that the ribs may be properly reglued to the soundboard. This repair may be accomplished on site, although more than one visit will be required to allow time for the process to be performed. **The ribs of your piano are loose or separating from the soundboard and need to be repaired in order for the piano to sound its best.**



*Toggle being tightened*



*Dowel inserted in place.*

In order to install toggles, 1/4" holes are drilled through the rib and soundboard at regular intervals from one end of the separation to the other. Woodworking glue is then worked into the space between the rib and the soundboard so that when the toggles are inserted and tightened down, the clamping action of the toggles produces a tight bond.

Once the glue has cured, the toggles are removed and hardwood dowels are glued in each hole. The dowels are then trimmed flush with the rib and sanded. The repair area is finally shellacked to provide protection against moisture.



With the ribs glued firmly back into place, the soundboard of your piano will once again perform as intended .