

# The Owner's Guide to Piano Repair



## Focus On: Bridle Strap Replacement

Information provided courtesy of:

**Lee Gordon / The Piano Shop**

**Member: Piano Technicians Guild**

**P.O. Box 22958**

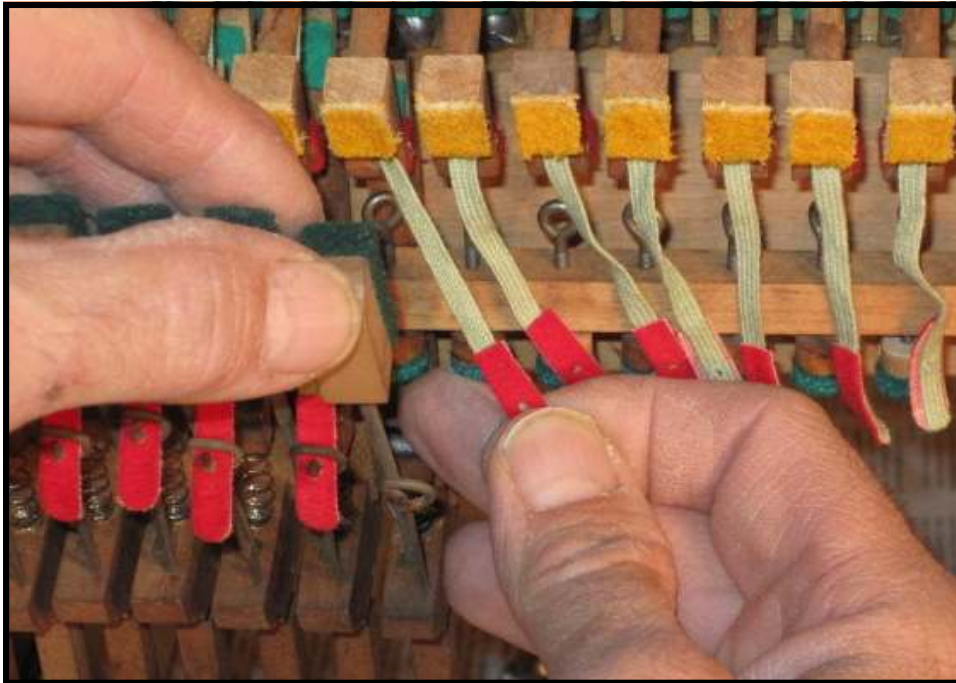
**Honolulu, HI 96823-2958**

**Phone: (808)722-0618**

**Email: [thepianoshop@hawaii.rr.com](mailto:thepianoshop@hawaii.rr.com)**

**Web: [www.hawaiipianoshop.com](http://www.hawaiipianoshop.com)**

One repair which at some point needs to be performed on your piano is the job of **bridle strap replacement**. For this job, the action (removable working mechanism) of the piano would need to be removed and transported to my shop. I would be glad to work with you to find a convenient time to schedule the work in order to complete the job.



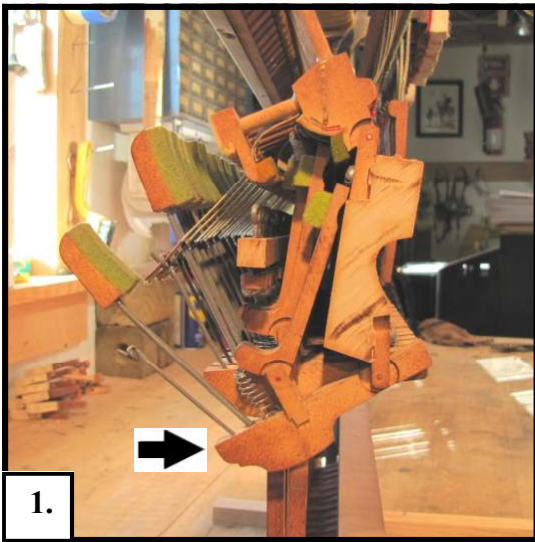
**The following commonly asked questions have been answered to give you the information you need in order to decide whether or not to have me complete this repair.**

### **What are bridle straps and what function do they perform?**

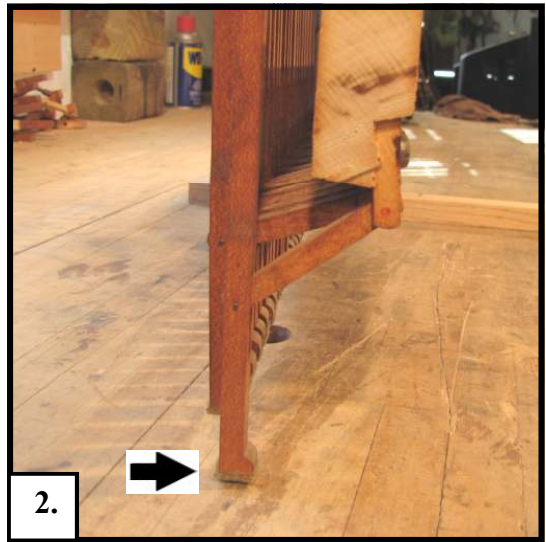
Bridle straps have a primary and a secondary purpose. One function of the bridle strap is to assist the hammer assembly in coming back to rest position after a note is played. Although this is a redundant feature, in that there is a part called the hammer butt spring that ensures that the hammer returns to rest position, it does become important in instances where a spring has slipped out of place, or is weakened or broken. When the hammer does not return to rest position, the hammer will likely misfire when the key is pressed.

The most important function of bridle straps, however, is that they help to hold the action of the piano together so that it may be removed and replaced in the piano without damage. If bridle straps are missing, servicing the action is a real problem, in that removal and reinstallation of the action may easily result in broken parts when the action is put back into place.

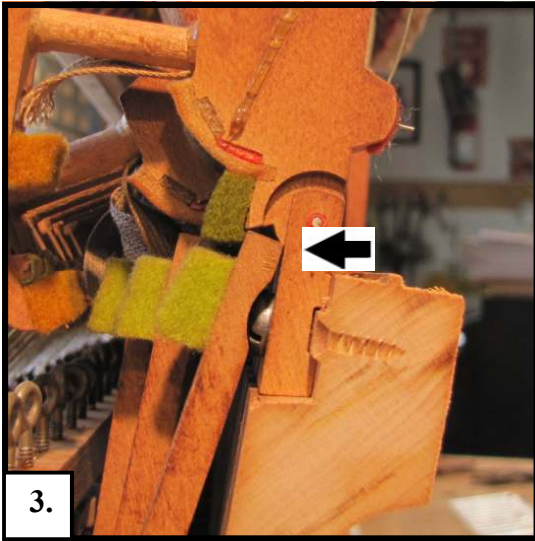
**The next page illustrates the problem involved:**



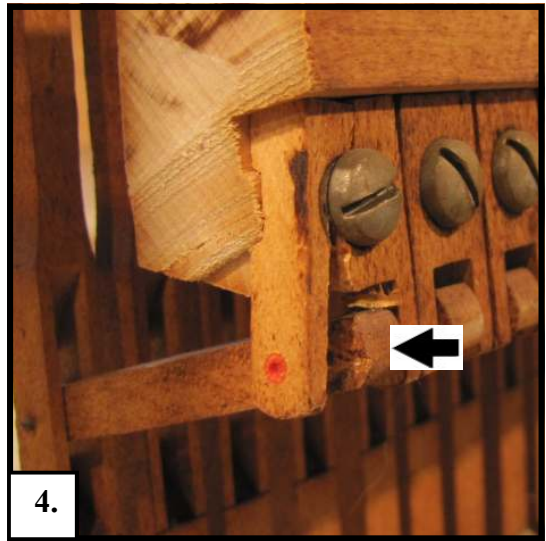
If the action of an upright piano is removed for servicing and a bridle strap is broken or missing, the lower portion of the mechanism (the wippen) will swing down.



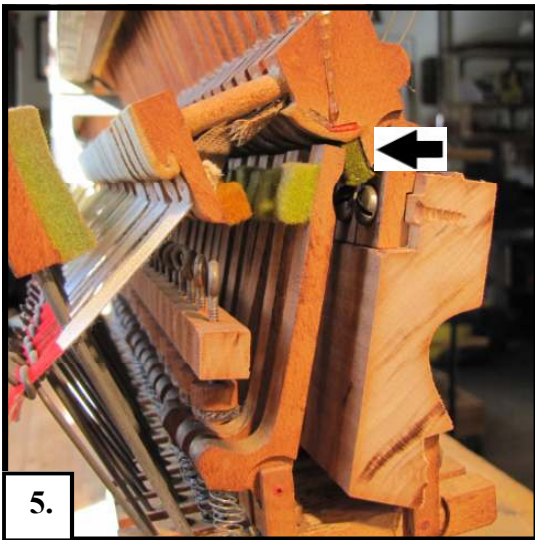
At the same time the portion of the action which rests upon the key will also swing down too far, as shown in the above photo. This is where trouble can occur.



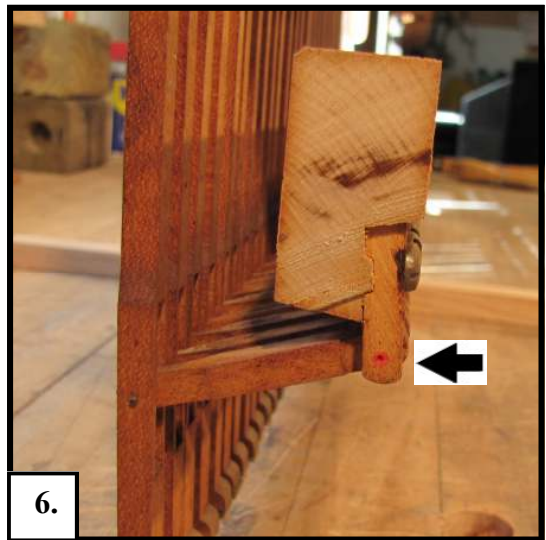
When a bridle strap is missing and the action is returned to the piano the jack (the vertical part shown in the above photo) is prone to jamming up against the underside of the hammer butt.



In such a situation, if the action is pushed into place with a bit too much force the lower flange can easily break from the excess pressure, necessitating replacement.



With new bridle straps installed, removing the action for necessary maintenance doesn't cause a problem, in that the wippen is held correctly in position



The lower flange is not exposed to undue stress when the action is returned to the piano, saving the time and expense of unwanted repairs.

### **If only some of the original bridle straps are broken or missing, must the entire set be replaced?**

While it is not absolutely necessary to replace all the straps once they start breaking, it does make a lot of sense. When the braiding that the original straps were made from deteriorates to the point where they start to break, all of them will be prone to breakage in the future if they are not replaced. By having the old bridle straps removed entirely and replaced with a new set, you've made sure that the piano action may be properly serviced for decades to come. Plus, you won't end up with a mismatched set of straps that is the result of a number of different technicians replacing a few broken straps at a time.

### **Is this a job I could do on my own?**

This would not be a repair which the owner would be wise to tackle. The piano action is a complicated mechanism involving thousands of individual parts, where more things can easily go wrong than right for the average DIY'er. Needing just a few broken parts replaced would easily exceed the cost of having new bridle straps professionally installed.



*Too many parts to break if you don't know exactly what you're doing.*

As a professional, I have the tools and the experience to do the job right the first time. Once this job is done, by the way, it will be good for decades into the future. Replacement bridle straps (both cork and spring clip) are the finest quality available anywhere.



### **How will the repair be accomplished?**

The old braid straps will first be removed to prevent them from interfering in the operation of the action. Depending on the type of action your piano has, either cork, spring clip, or original braided bridle straps will be installed.

Once the new set of straps is in place, adjustments will be made to ensure that the action is held together correctly, therefore preventing unnecessary damage to the action when removed and replaced for needed servicing.

**Please advise me when you wish to have this repair professionally done.**

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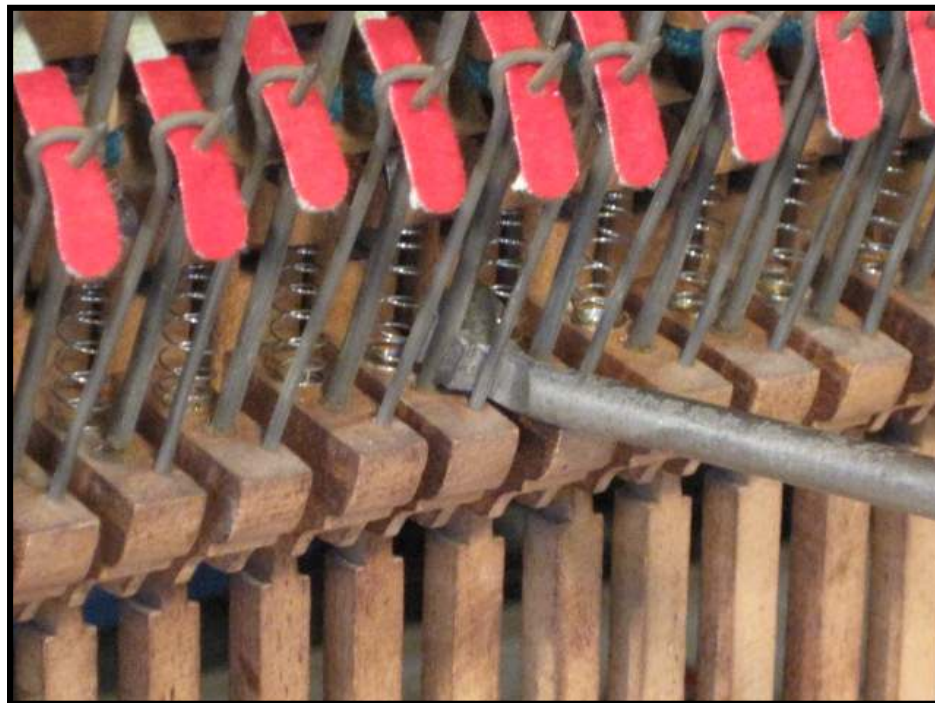
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**Let me turn this:**



*Mismatched or incomplete set of bridle straps.*

**Into this:**



*New set of bridle straps as final adjustments are being made.*