

# Brass Rail Repair Promo Set Preview





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

## Focus On: Brass Rail Repair



*Broken butt plate*



*Replacement butt plate*

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**Upright pianos built early in the last century which have brass rails and flanges are by this time often having problems which necessitate repair.** Breakage of any of the component parts of a brass rail system will result in notes being put out of commission. **The brass rail / flange system of your upright piano has reached the point where repair is necessary if the piano is to be enjoyed without the inconvenience of notes which suddenly stop working.**

In a piano action with a brass rail each hammer assembly (consisting of a hammer, hammer butt and hammer shank) pivots on a brass center pin held in place between a 'tongue' of the brass rail itself, and a small rectangular brass part called the butt plate. The repairs needed the most often are replacement of broken butt plates, and repair of broken tongues on the brass rail itself. Sometimes when a number of tongues are broken, it makes sense duplicate and replace the entire brass rail.

Individual butt plates may be replaced, but if more than a couple have broken the most practical repair may be to replace the complete set while the action is out of the piano. Once done this problem area will be taken care of for the foreseeable future.



*Repair clip for broken tongue being installed.*

If a tongue of the brass rail has broken, a brass repair clip may be installed (above photo). **Note: If upon inspection the total replacement of the brass rail seems advisable (due to a large number of broken tongues) you will be consulted.**

**Heads-Up Preview**

# About This Preview Packet

The 24 main topics available for your free personalized promo or newsletter set all come in 2 versions—heads-up and full-length, both of which are shown in this preview packet.

**Heads-up versions** (see example on previous page) are always 1 page in length and as such are very direct and to the point. These shorter versions work especially well for pianos which have a number of repair issues in that a packet of them can be included with an estimate without creating a perceived overload of information for the owner. For my own business, I print multiple copies of heads-up for every topic covered thus far and carry several of each with me in my briefcase on tuning rounds in case I need to put a packet together. I spend a little more on printing expenses to have them produced on heavy-weight card stock, but the extra expense is well worth it, at least in my opinion—the promos have a very substantial 'feel' about them on the heavier-weight paper.

With a written estimate accompanied by relevant heads-up promos, a well-informed decision can be made more easily at the owner's leisure. This is especially helpful when the decision (to repair or not to repair) involves a discussion between joint owners of the piano—a husband and wife for example. The couple can sit down at the kitchen table together and go over the materials in an informed manner. Also, heads-up promos are great for any situation involving committees. If a half dozen repair topics are involved in a proposed restoration of a church piano, for example, the heads-ups can be passed around among committee members for everyone to become involved in the discussion and decision making.

**Full-length versions** (see example on following pages) go into enough detail that even your most discriminating customer will be satisfied. For my own use, I've printed off a single copy of each full-length version that I have in a binder which I also carry in my briefcase. Occasionally, I get my binder out if the customer wants more information on the spot. More frequently, however, are situations in which I ask my customer if they would like me to send the full-length copies of the topics concerned via email for further reading and consideration. Quite often customers do opt to see the in-depth materials.

Whichever version of the promos are put to use, the fact is that they work! In my own business, since I have begun giving out promos with estimates, the percentage of clients having recommended repairs done has increased steadily. In 2011, over 90% of the estimates which I gave were followed through with. Before promos, those types of numbers were way beyond what I ever saw. Other users of promos (see testimonials) have experienced similar results. Technicians have reported back that because of the promos, their businesses are doing better than ever before.

But enough about my own experiences and those of other technicians. Try a promo set out for yourself! Pick out a topic for your free promo set, and let us help you start building upon your own success story! Best wishes to your future!

# **Full-Length Preview**

## **The Owner's Guide to Piano Repair**



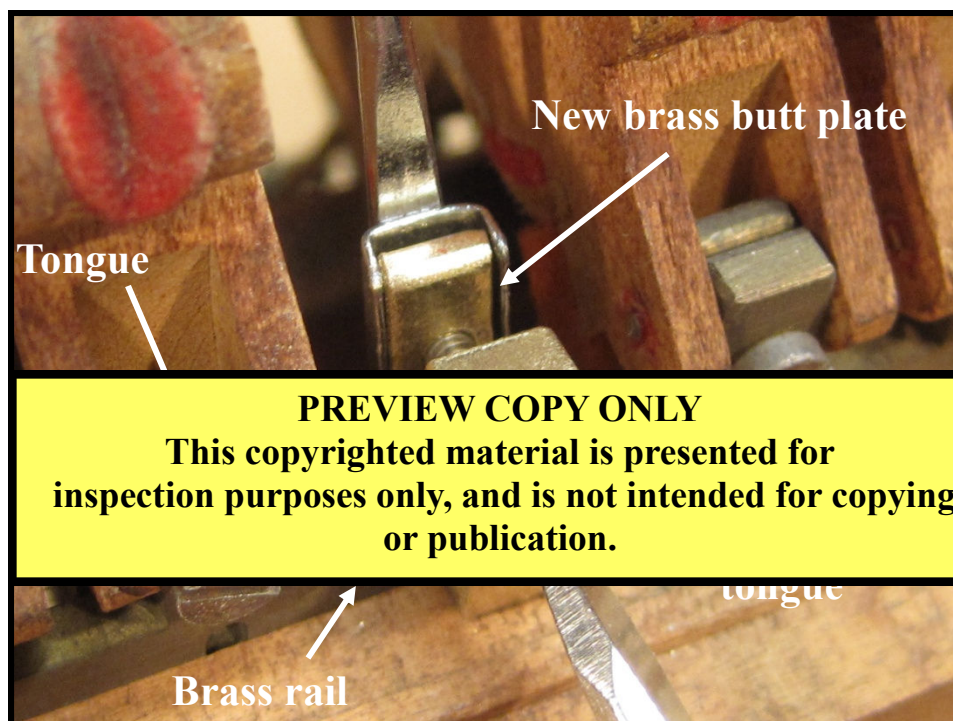
### **Focus On: Brass Rail Repair**

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**Upright pianos built early in the last century which have brass rails and flanges are by this time often having problems which necessitate repair.** Breakage of any of the component parts of a brass rail system will result in notes being put out of commission. **The brass rail / flange system of your upright piano has reached the point where repair is necessary if the piano is to be enjoyed without the inconvenience of notes which suddenly stop working.**



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*Repair being made to broken brass rail.*

**The following questions have been answered to give the information needed to help you decide whether or not to have repairs done to the brass rail / flange system of your piano:**

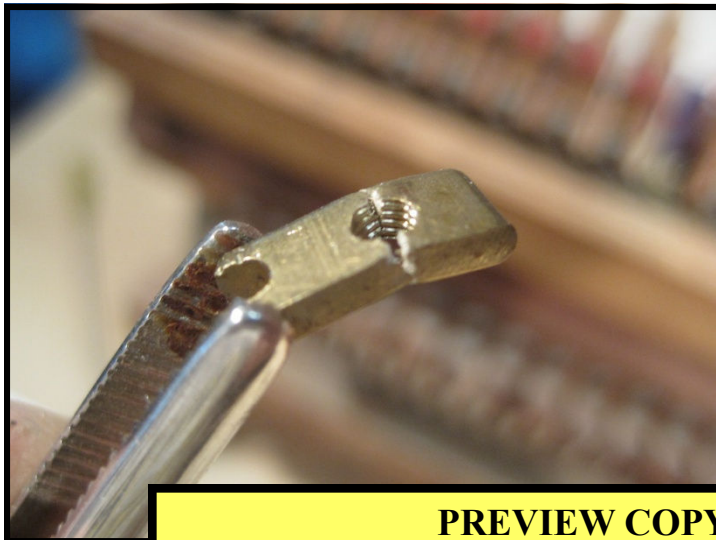
**What exactly is a brass rail, how does it work, and why do things go wrong?**

In a piano action with a brass rail each hammer assembly (consisting of a hammer, hammer butt and hammer shank) pivots on a brass center pin held in place between a 'tongue' of the brass rail itself, and a small rectangular brass part called the butt plate. When everything is in good condition this system works very efficiently, with hammers tracking straight and true.

Unfortunately, both the tongues of the brass rail itself and the brass butt plates are eventually susceptible to metal fatigue—although it often takes a century or so for problems to develop. Breakage is most likely to occur at the screw holes drilled into the brass butt plates and the tongues alike, and also at the channel in each tongue which allows room for the center pins. When a break does occur, the corresponding hammer butt no longer is held in check and the note will quit working, making repair work necessary (see photo above).

## What is the most common problem to occur with a brass rail assembly?

Oftentimes, brass rail pianos will first begin to have problems with brass butt plates breaking. Fortunately, this is a relatively easy problem to diagnose and repair.

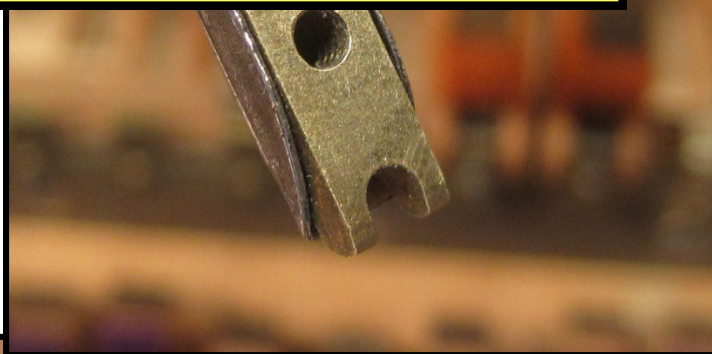


When a butt plate breaks, the break is nearly always in line with the threaded hole which is intended for a machine screw to affix the butt plate to a tongue of the brass rail. Typically, the break begins as a hairline crack (signaled by a loose or wobbly hammer assembly). When the break is complete, the hammer is no longer held in place.

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To plate (or section to small part in place while the machine screw is inserted through the tongue and into the plate. (Note: The action must be removed so that the replacement may be done from the back side of the action).



If more than a couple of brass butt plates have broken or if a number of wobbly notes are discovered (an indicator of future breakage), the most sensible repair may be to replace the complete set of butt plates while the action is out of the piano. Once done this problem area will be taken care of for the foreseeable future.

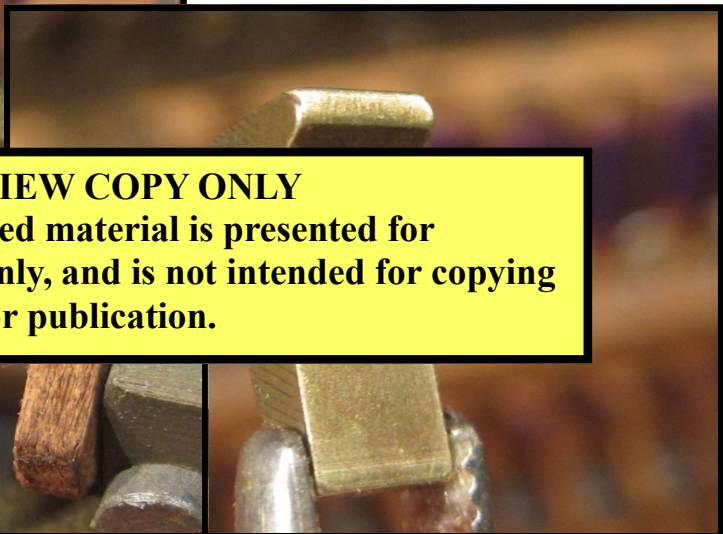


### **If a tongue of the brass rail itself is broken, is it possible to fix it?**

Yes. Each tongue of a brass rail has a channel which keeps the center pin of the hammer butt in place. If that's where the break has occurred, a repair clip may be installed which takes the place of the upper portion of the channel. In the photo



to the left, the bottom half of the channel (facing away from the camera) is still intact. The brass repair clip shown in the photos below will be used to make the tongue functional once again.



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When the screw is pushed through the clip and the remaining portion of the tongue (above photo), the profile on the opposite side matches an unbroken tongue (right photo). Each screw will be driven into a brass butt

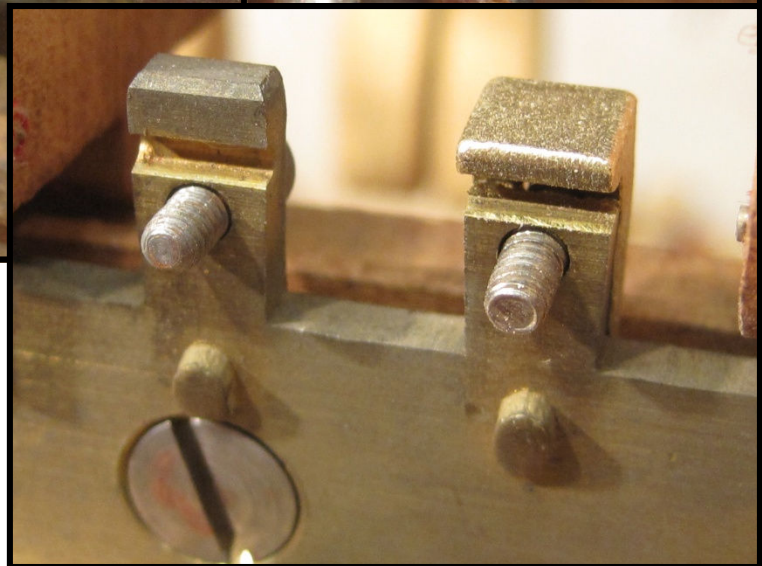
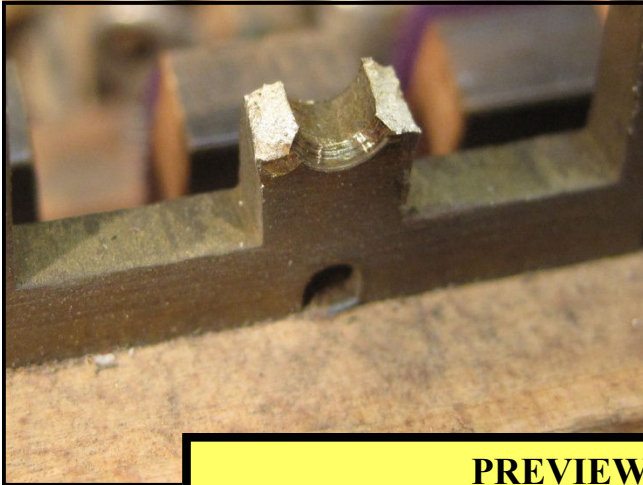


plate. Before the plate is tightened down, the center pin of the corresponding hammer butt will be slipped into place in the channel provided. **Note: If a number of tongues are broken, a more appropriate repair might be the duplication and replacement of the entire brass rail.**

### **What if the tongue breaks at the screw hole, instead of along the channel?**

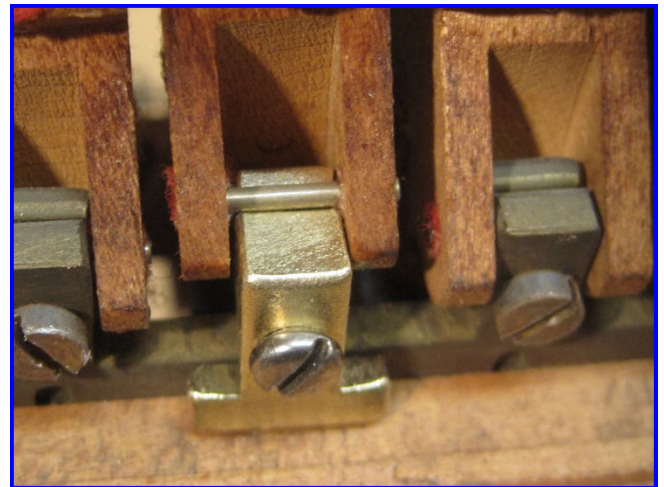
A special brass repair clip is used in this situation which replaces both sides of the channel. It also features a wider base for additional stability, since the original screw hole isn't completely intact.



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in place with an insertion tool



Before the butt plate is drawn down tight, the center pin of the corresponding hammer butt is slipped into place (above photo). Once in place, the plate screw is tightened down. As long as the stub of the tongue is solid, this will be a permanent repair to the action.



**Is this work that can be accomplished on-site, or is it necessary the repairs be done in the workshop?**

That depends on the severity of the problem. If just one or two butt plates are to be replaced, that can be accomplished by removing the action, doing the replacement on-site, and then reinstalling the action. If a more thorough job is to



be done, it would be better to take the action to the workshop. While the action is on the bench, the dampers (and hammer assemblies if needed) can be removed to facilitate repair work and to allow for a thorough inspection of the entire brass rail / flange system.

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With way (right photo), and the accumulation of dust removed (below photo) the individual tongues and butt plates may be carefully inspected for hairline cracks.

**Note: If upon closer inspection the replacement of the brass rail seems advisable, you will be consulted.**



While the action is in the workshop, it would also be the ideal time to perform any other overdue maintenance work. If the hammers need to be filed or replaced, for example, or a new set of bridle straps is called for, this would be the perfect time to have that work scheduled as well. Once your piano action is rejuvenated and reinstalled in your piano, you will be able to more fully enjoy your instrument once again.



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*Brass rail with multiple problems being removed for duplication.*

**"In business to bring your piano to its full potential."**

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