

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

## Focus On: Polishing Capstans



Information provided courtesy of:

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The "capstans" are a part of the working mechanism of your piano which must be kept super-slippery to maximize performance on the one hand and minimize wear and tear on the other. Capstans are made of brass and are located at the very back of each key. They are what the felt cushions at the bottom of the main part of the action (known as the 'wippens') rest upon, and the point at which the power from your fingertips is transferred to the action.

When the surface of the capstans are polished to a shine, practically no energy is lost in this transfer of motion. However, if they become badly tarnished or corroded (see photo above), the drag produced may diminish the power of the action. Excessive wear and tear on the felt located at the underside of the wippen may also result.

**The capstans of your piano are either tarnished or corroded to the point where a professional polishing is in order.**



*Note at rest*



*Note being played*

The above photos show why wear and tear on the felt cushion at the bottom of the wippen occurs when brass capstans become corroded. As a note is played the back end of the key rises up with the capstan transferring the power to the wippen. While the motion is primarily up and down, there is at the same time a front to back motion as well as the felt cushion slides over the capstan (note reference line). When the surface of the brass is tarnished or corroded, the felt will gradually be worn thin. This will decrease performance and throw essential adjustments off.



With the capstans of your piano polished as in the above photo, wear and tear on the corresponding felts will be at a minimum, and performance will be at a maximum.

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