



STEINWAY & SONS



USED STEINWAY VS. NEW STEINWAY? A GUIDE FOR BUYERS

In the discussion of the choice in purchasing a piano, the consideration of older instruments often comes up among pianists. Whether purchasing new or used, price compared to value is important in making the correct purchasing decision. When considering older pianos, there are numerous important factors to keep in mind in relation to the longevity of the instrument, the value of the purchase price, and the quality of touch and tone. The opinion is sometimes stated that older pianos are desirable as they have supposedly “aged” into producing finer tone than when they were first manufactured. However, when one knowledgeably considers the design of the components of the instrument and the stresses under which these components are continually subjected, it becomes apparent that age introduces compromises to an instrument’s performance and functionality.

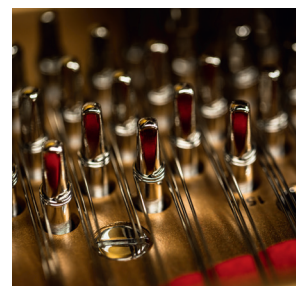
Soundboard

For example, the soundboard is under tremendous stresses from the time it is installed in the piano and strings are installed. Many hundreds of pounds of pressure are constantly forced downward upon the soundboard by the strings due to the necessary downbearing against the bridges. While these downbearing forces are beneficial, and indeed necessary, to the tonal output, they result in the slow deterioration of the ability of the soundboard to resonate to its fullest. The soundboard slowly becomes fatigued, resulting in diminished sustain, clarity, dynamic range, and tonal color. This of course takes decades in a fine instrument such as a Steinway & Sons piano, but deterioration is the inevitable result of age and stress. This is particularly the case when coupled with the exposure to climate changes over the years, which also contributes to soundboard fatigue.



Wrestplank (Pinblock)

The wrestplank or pinblock is another important component in the piano that is subjected to constant wear. Each string in a piano constantly exerts approximately 170 pounds of pull on each tuning pin with some strings exceeding two hundred pounds. This eventually results in a loss of tuning pin torque. Sufficient torque is necessary to ensure that a piano will properly stay in tune. As tuning pin torque decreases over the years due to this wear, the piano slowly loses the ability to stay in tune. Tuning stability is a prerequisite for a piano to be a functional instrument.



Strings

Along with the wrestplank, the strings themselves suffer long-term from this tension. Metal fatigue slowly encroaches upon the strings' ability to resonate to their fullest. Shorter sustain and a less vibrant sound are common characteristics of strings that have deteriorated over time. In addition, the exposure of the strings to humidity changes through the seasons will introduce the formation of corrosion, which also impedes the strings' musical qualities.



Bridges

As mentioned earlier, the individual strings that comprise the piano scale are under tremendous tension. This tension is shared with the design and function of the bridges over which the strings cross on the soundboard. Each string is held in its precise correct position by two bridge pins. These pins are inserted into a hardwood, such as the maple that is used in Steinway & Sons pianos. Each string exerts a sideward force on each bridge pin, which can result in a slow enlargement of the bridge pin holes. Maple is an extremely stable wood and is an excellent choice for its contribution to the tone of the instrument, but even maple wood is vulnerable to wear and tear. As these bridge pin holes enlarge over time, they lose some of the ability to efficiently transfer the energy of the strings to the soundboard, thus resulting again in a reduction of performance attributes of the instrument.



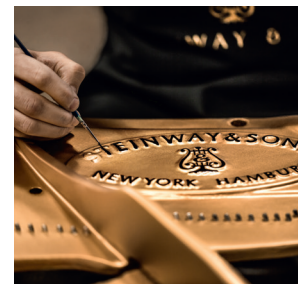
Action Components

When considering the aspects of age on a piano, the components that comprise the action are particularly important. Many of these parts are manufactured to a few thousandths of an inch of tolerance (approximately the diameter of a human hair) to function with expected control. Normal wear imparted by playing the piano will naturally compromise these tolerances, which results in a loss of control and tonality. These components also utilize felt bushings to reduce noise and maintain proper functionality. These felt bushings wear over time and introduce excess motion, which contributes to a further loss in both control and consistency of touch. This wear also introduces unwanted action noise that distracts from the performance of the music.



Appearance

Other components are subject to the wear of age and environment. The coatings that provide the beautiful patina of a new piano degrade with time and exposure. While perhaps not a consideration in the instrument's functionality, they play an important role in the aesthetics and the perceived value of the piano. Faded finishes, chips and dings, and cracking in the finish coatings are common as pianos age. This can necessitate extremely costly repairs or a total refinish to restore the luster of the appearance.



In Summary

All of the items within this document can of course be replaced, rebuilt, or repaired, but experience has taught that any restoration is only as good as what is left undone, and it is almost impossible to restore every component of the piano that has suffered due to time, exposure, and usage. When these factors are weighed together, it can be difficult to find a compelling reason other than cost-savings to consider a used piano. When the aspect of real value is introduced into the considerations of cost-savings, a new piano functioning at its peak is often indeed the best real value for the money.