# Vintage STEINWAY Pianos

# K&W Meyer Factory Restoration An Inside Look!





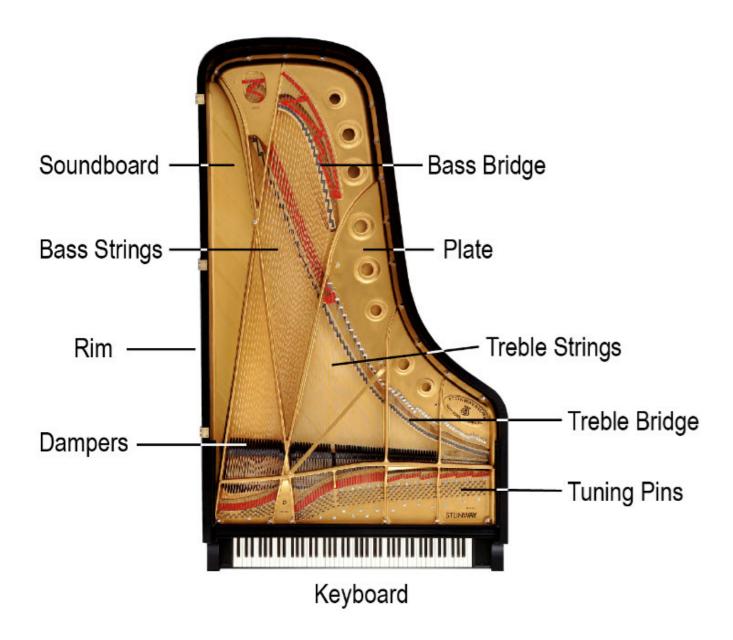
"Anything originally crafted by skilled hands made of superior uncompromised materials can be dis-assembled into its component parts for restorations or replacements only to be re-assembled by equally skilled hands to its as-new condition."

# Vintage STEINWAY Pianos

Every K&W Meyer Restored Vintage Steinway Grand Piano is Re-manufactured by Experienced Hands to Re-introduce Each Instrument in its Original As-New Condition

# **Restoration: From the Top**

This is how a drone would see a grand piano from above if the top lid of the piano was removed. The list on page 2 will explain how KW Meyer restores each of the Steinway Piano parts shown in this aerial view.



# Refer to piano diagram on page 1.

#### Bass Bridge - Original

Transfers the vibrations of the long copper strings on the left side of the piano down into the soundboard.<sup>1</sup>

## Bass Strings - New

The long copper wound strings that produce the "low" tones of the Steinway sound.

#### Dampers - New

Stops a string from "singing" the moment a key is released by the finger.

#### Keyboard - New

52 white and 36 black keys comprise the 88-note piano keyboard. All keys replaced with new surfaces. <sup>2</sup>

## Plate - Original

The ubiquitous iron casting that helps to resist over 20 tons of tension exerted by all of the wire strings.<sup>3</sup>

## Rim - Original

The foundation of the piano made of hardwood maple to produce the power of sound exclusive to Steinway.<sup>1</sup>

## Soundboard - Original

The voice of the Steinway sound. Meyer exclusive: re-construct and re-season the original soundboard. 1

## Treble Bridge - Original

Transfers the vibrations of the middle and upper piano strings down into the soundboard.<sup>1</sup>

#### <u>Treble Strings - New</u>

The silver strings that produce the middle and high tones of the Steinway piano.

#### Tuning Pins - New

The silver steel pegs adjusted by the piano tuner to hold each string at exact tension to produce concert pitch.

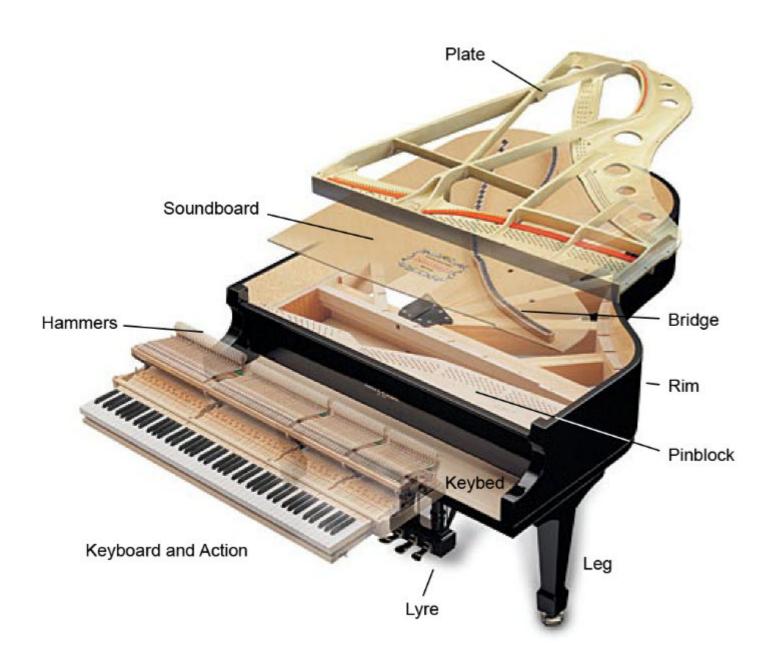
<sup>&</sup>lt;sup>1</sup> These four parts of the piano create the world-famous Steinway voice of delicate harmonies at all volume levels. The sound-board is the heart of the Steinway voice and is not available to third-party repair / re-building shops. K&W Meyer takes the time to re-construct the original soundboard, ribs and bridges to re-introduce the as-new sound of each individual Steinway Grand Piano. There is widespread agreement that the woods in vintage Steinways have a sweeter sound compared to contemporary wood supplies. Think: Stradivarius Violin.

<sup>&</sup>lt;sup>2</sup> Each of the 88 keys are re-surfaced using the original key "blanks", the inside of the key that is made of European spruce. The key is re-mated to its corresponding action, hammer and damper assembly (see page 6). Every key is individually balanced to the international concert standard of fingertip touch response as demanded by every concert pianist.

<sup>&</sup>lt;sup>3</sup> The plate is removed from the piano in order to restore and re-calibrate the soundboard and bridges located under the plate. While outside of the piano the plate is stripped of original coatings and paint, sanded and filled back to a smooth surface. These steps are followed with the application of a rich lacquer coating that is polished to a new and beautiful luster.

# Restoration: From the Inside Out

This diagram illustrates and identifies the major "building blocks" of a Steinway grand piano. All of these parts were originally put together by hand thereby making it possible to disassemble, restore or replace piano parts, and then re-assemble the piano by the same hand crafting process.



# Refer to piano diagram on page 4.

#### Plate - Original

A cast iron assembly, formed to the piano, joined to the piano rim to build a superstructure of durability. 1

# Soundboard - Original

The very heart of the Steinway sound and is not be replaced with an after-market soundboard. <sup>2</sup>

## Bridge - Restored

This is the wood assembly that transfers the delicate vibrations of each piano string down into the soundboard.

#### Rim - Original

Made of hardwood maple that frames the entire piano assembly, designed to hold its shape for generations.

#### Pinblock - New

A multi layered assembly of hardwood that holds the tuning pin of each string at its proper musical pitch.

#### Keybed - Original

Hardwood maple, suspends the critical elevation of the 88 key and hammer assemblies under the strings.

#### Hammers - New

Transfers the mechanics of a finger striking a key into the precision contact with a string (see pg. 6).<sup>3</sup>

## Keyboard - Original

The wood interior of each key is resurfaced to new while maintaining the original Steinway piano touch.

#### Action - New

The mechanism to transfer key strokes of a finger into the controlled contacts of hammer-to-string (see pg. 6).

#### Lyre - Restored

New brass foot pedals and refinished wood assembly used to control the sound and tonality of the piano.

#### Legs - Restored

New brass casters installed to complete the new appearance of the Steinway piano from the bottom up!

<sup>&</sup>lt;sup>1</sup> The original plate is removed and stripped to the bare surface. Next, all mountings and surfaces are re-calibrated to the original factory specifications to assure the perfect fit and position within the piano. Four coats of lacquer are applied, hand rubbed and polished between each coat. The restored plate is re-mounted as the piano is re-assembled.

<sup>&</sup>lt;sup>2</sup> The Steinway Company does not sell replacements of their proprietary soundboard, nor can other wood manufacturers replicate it. K&W Meyer devotes whatever time and resources are necessary to RESTORE the original soundboard of the piano back to its qualities of tone, resonance and power. This is one of many steps in the K&W Meyer piano restoration process that distinguishes a K&W Meyer Vintage Steinway Piano form other Steinways that have been repaired, re-built, etc.

<sup>&</sup>lt;sup>3</sup> Piano hammers ignite the energy stored within the strings as the first of many reactions that ultimately create the sounds of the piano. The most critical part of the hammer assembly is the "head", made of two layers of wool. The density of the wool, the shape of the wool that contacts the strings along with many other details determine the accuracy of the fingertip energy into the string. K&W Meyer installs new hammers made by the Abel (Germany) Company. Abel is recognized around the world as the preeminent manufacturer of piano hammers. Abel hammers are also installed in new Steinway Pianos manufactured in Hamburg, Germany.

# S T E I N W A Y P I A N O S

K&W Meyer Factory Restoration Examples





