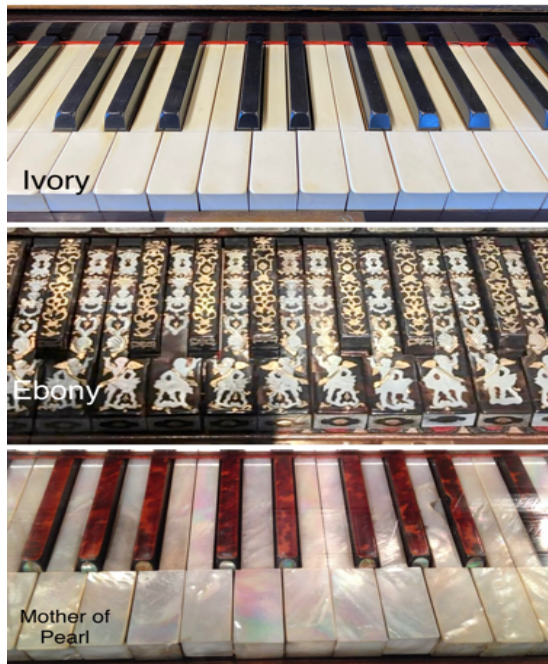


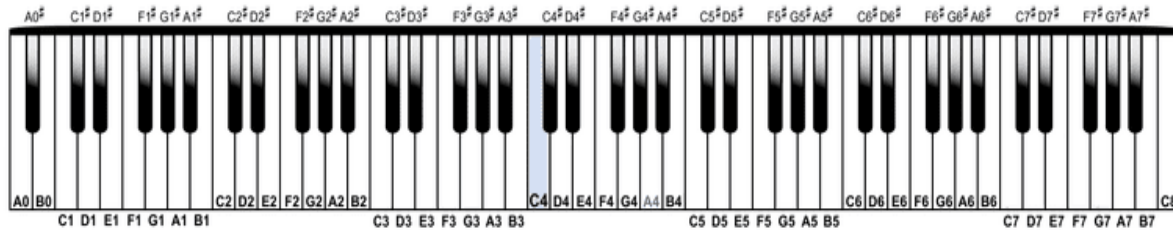
Not Your Keys, Not Your Piano



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The piano's keys are what connect the player to the instrument. If the key has problem, then the connection between the player and the piano becomes distorted and the music suffers. One could say the keys are the most important part of the piano, because without them, there is no user interface to interact with the instrument to bring the inner mechanism to life. The keys are also one of the most attractive parts of the piano. They are what gives it its iconic toothy grin. Piano keys over the centuries have been made of many different materials, in many different sizes and lengths, and in a number of different shapes.

It must be noted that what shows on the front of the piano is only the front end of the key. The key shank, the piece of wood beneath the white or black covering, extends deep into the piano. The middle of each key rests on a rail that runs across the piano. Pins protrude from this rail that the key is set onto to keep it in place. There are special screws and other parts on the inside end of the key that interact with the rest of the piano action's parts. Lead weights are used to balance the front of the key with the back of the key. If the keys are not well balanced, the piano may feel too light or too heavy to play comfortably, though there are other factors that can contribute to this as well. The front of the key also rests on a rail with pins to keep them in alignment so the keys don't swivel uncontrollably while being played. Tiny pieces of felt known as "bushings" surround the holes in the keys that the pins go through so they do not click or wiggle. If your keys wiggle back and forth a lot and even click, they likely need new key bushings.



Over time, many different materials have been used to cover the front end of the key. Harpsichords often used a thin sheet of ebony wood for the “white keys” (naturals) and ivory for the “black keys” (sharps). Keys from a square grand, pictured above, had an ebony bass, and gold and ivory inlay. Some high quality grands were graced with Mother of Pearl keytops paired with an exotic wood for the sharps. Most pianos used ivory for the naturals and ebony for the sharps until the mid 1900s when plastics became available and the ivory trade was looked down upon. Ivory was banned completely in 1980 and it is currently illegal to sell a piano with ivory keys in New Jersey. Because of the ban, other materials such as mammoth tusk ivory (mammoths have been extinct for some time meaning no poaching occurred to obtain the ivory) or some sort of animal bone. Synthetic ivory is a popular substitute and can be found on higher quality pianos. Modern pianos usually employ an acrylic keytop for both naturals and sharps.

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Pianos have not always had 88 keys; there was a progression of music complexity that forced the keyboard to grow over time. Harpsichords and older square grands had somewhere between 4-6 octaves totaling around 48-72 keys. By the time we get to the late 1800s, we find many pianos with 85 keys. After 1900, we see mostly 88 key pianos. Young Chang made a small console with 85 keys in the 1970s, but this is an anomaly. Some mini pianos with 65 keys were made during WWII when new supplies were unobtainable, and Pearl River has recently taken up this design to make new mini pianos sized for children. The Wurlitzer butterfly grand also had 65 keys, but that was a conscious design choice to match its uniqueness. Bösendorfer decided to be cheeky and made the imperial model with 97 keys that extend down to “C” in the bass. These extra keys have been known to disorient pianists therefore Bösendorfer occasionally will make the extra naturals black to match the case while leaving the standard naturals white.

When discussing notes on a piano keyboard, the most prevalent system in America is pictured above. When speaking to a piano technician from America, you will be understood if you refer to the keyboard in this manner. “Middle C” is pictured on the diagram as “C4” and all other keys can be identified by this reference.

Keep your keys clean (Issue #33) and in good shape to get the most out of your piano.