mitchellpianoservice@gmail.com (415) 994-1030

Used Pianos – Buyer Beware

It's surprising how often I get a call from someone saying what a great deal the just found on an old used piano. These are frequently 100-plus year-old pianos that have been sitting in someone's garage (or worse) that they would like to sell for a few hundred dollars. (Truth be told, the seller is usually happy if someone will just move the piano out of the house, even if they get nothing).

From the start, the strongest advice is to have the piano evaluated by a qualified technician before you write the check (or agree to take a piano) so that you really know what you're getting. Although you may be paying the owner next-to-nothing, it can *easily* cost hundreds of dollars just to get the instrument playable. Far too often, buyers are swayed by beautiful woodwork and smooth-talking sellers without investigating the true condition of the piano.

Just about anything inside a piano can be repaired – whether it is cost-effective given the age, brand and condition is another matter. On more than one occasion I've told a potential buyer something to the effect of, "This was a mediocre piano when it was made. It's going to cost you at least $800 to get the piano to a playable condition and even then it will still only be a mediocre piano. Why not take that money and put it towards something better?" Although it may only be for the kids to get started playing on, you don't want something in such poor condition that they quickly give up.

A thorough purchase evaluation will examine a piano in these basic areas:

- Structural: Condition of the cabinet, beams, casters and legs, including the finish.
- Sound cavity: Condition of the plate, ribs, soundboard, bridges and strings.
- Action[1]: All the parts should be properly aligned and regulated, and not bind or show excessive wear, especially the hammers.
- Tuning Pins: Is the pinblock gripping the pins tight enough to hold a tuning?
- Keys: Condition of the keytops (e.g. ivory) and key alignment (are the tops even and are the keys evenly spaced?)
- Pedals & Trapwork

[1] The "action" is the mechanical assembly which translates the downward motion on a key into a hammer striking a string, including the dampers.

Not to set too negative a tone since many fine older pianos *are* worth restoring. A thorough purchase evaluation will identify problems along with a cost estimate from which you are able to make an informed decision. (It's not possible to list all the things that could possibly be wrong with an older piano in a short article. This will just highlight the most common problems.)

The balance of this article will then mainly address "sub-premium" pianos that are usually not worth putting a lot of money into. So things to definitely avoid include:

- deteriorated bridges or soundboard
- very wobbly legs or a decaying cabinet
- heavily rusted or corroded strings
- extremely loose tuning pins
- heavily grooved hammers that don't have enough material left to reshape
- severe effects of rodent or moth infestation (e.g. chewed bridges, felts, buttons, etc)

Sad to say, but pianos with multiple conditions should probably be given "last rites" and hauled off to the dump.

Assuming the piano is free of these serious issues, the following are typical of problems found on older instruments.

Worn key bushings. There are "front" and "balance rail" pins for each key that hold the key in position. Small felt bushings line the holes that these pins occupy. The bushings wear down during playing resulting in keys that that rattle and knock against each other. This creates a "loss of control" feeling to the pianist. The problem is corrected by replacing the bushings with new cloth felt.

Missing, loose, cracked or chipped ivory keytops. If there are only a few problem keys (and the ivories are still around) then repair is usually not cost prohibitive. However, a full replacement with modern plastics needs to be considered if the damage is more widespread. (Note that ivory keytop repair is trickier than it looks. Ivory is very porous and tends to curl when glued. Please leave this work to a qualified technician.)

Worn out Bridal Straps. (uprights only) The Bridal Straps are thin cloth tapes that hold the mechanical systems in place when the action is removed.

Ironically, a piano can play just fine without them, but it's nearly impossible to service the piano action if they are worn out. So these will need to be replaced if any other repairs are needed to the action (e.g. hammer filing).

"Tubby" bass sound. Bass strings are wound with copper to increase their mass. Over time, dirt and corrosion can build up in the windings causing a "tubby" sound (imagine the sound produced when you strike a galvanized tub on the side). Some improvement comes with cleaning the strings and reinstalling with added twist, though this is not a guaranteed result.

Worn or grooved hammers. Hammers are made of compressed, layers of wool that are glued and (sometimes) stapled to a wooden core. Ideally, a hammer should have a roughly diamond shape with a rounded tip at the strike point. Over years of playing, the hammers will develop flat grooves that match the strings. These grooves or other shape deformities can seriously degrade the tone of the piano. Assuming enough material remains, hammers can usually be filed and shaped to restore much of the tonal quality.

Loose tuning pins. The tuning pins are held in place by the pinblock – a block of wood either underneath or behind the plate. Over time, the wood fibers deteriorate and the pinblock loses its grip on the pins, resulting in piano that won't hold a tuning. A CA-treatment has proven to be very effective in rescuing aging pinblocks.

Missing hammers. Hammers are mounted on shanks which can break off. These are fairly easy to repair, especially if the hammer head is still lying in the piano.

Broken strings. Strings can be readily spliced or replaced. However, be aware that one broken string may indicate many more on the verge of failure.

Key "stuck" or won't play (assuming the hammer and strings are okay). Any given key may not work due to wide variety of mechanical failures. Most of these are readily solvable.

Piano is very low in pitch. Pianos that haven't been serviced in years are usually extremely flat – as much as a semitone or more. Bringing these pianos up to standard pitch (440Hz) requires two or more passes (called a Pitch Raise) and increases the risk for string breakage.

Regulation. This is the process of making the 10-20 adjustments *per key* that are required for a piano to play at peak performance. Regulation is frequently ignored on older pianos, but this can result in problems such as a very heavy touch, lack of power or sluggish repetition (to name a few). A Touch-Up regulation can make an enormous difference in the performance of an older piano.

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To wrap up, the following is an example of the repair bill that might be incurred in bringing an older piano to playable condition. Actual costs may vary widely and will depend on the particular piano and situation.

Rebush Keys	$260
Replace Bridal Straps	120
Tuning Pin Treatment	110
Splice 1 Broken String	75
Bass String Cleaning	340
Pitch Raise (tuning)	150
Total	**$1,055**

With all the facts, the buyer can determine if this is the right piano for them.

For more information or to request an appointment, visit www.mitchellpianoservice.com