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Piano Maintenance

Music Building 206, 1:45 pm

Disclaimer: I'm not a piano technician, so you shouldn't take my word for any of this ;)

The following information has been collected from various online and print sources, as well as personal experience(s).

Piano Tuning

What makes the piano go out of tune?

The most common reason pianos go out of tune is a change in humidity. As the humidity increases during the summer months, the soundboard will absorb water and actually increase in size. This swelling causes the bridge to be pushed further away from the tuning pins, increasing tension and thus forcing the pitch sharp or upwards. The winter months see the opposite with a falling or flattening of the pitch. The piano will usually flatten more than sharpen during the year and so pianos will fall a little further down in pitch from year to year.

How often should a piano be tuned?

A piano should be tuned at least once per year.

Does a piano go out of tune even when it's rarely played?

The piano begins to go out of tune almost immediately after a tuning. Reasons include the piano adjusting to the tension of its strings (typically 38,000 lbs of pressure).

When should a piano be tuned?

The best times are, generally speaking, after the heat is turned on in the fall and after it is turned off in the spring. Conversely, just after the peak of summer and just after the peak of winter (when the piano is out of tune the most) are probably the worst times.

Will a piano be damaged if it doesn't get tuned regularly?

Maybe, but probably not because of the lack of tuning itself. A piano that is tuned regularly is probably better taken care of than one that is not tuned regularly (for example, one is probably less likely to have a piano tuned that sits in the unused back room of an old house or the garage). However, it will require more work (for example a pitch raise) to tune a piano if too much time passes between tunings.

“The real damage is done when a child quits playing piano because it is not a lot of fun to play on an out of tune piano, and the non musical parent ends up being glad that they saved money on tunings.”

What is a Pitch Raise?

If a piano has gone without a tuning for an extended period of time, its pitch may have dropped well below standard pitch, at which it was designed to perform. It may require a procedure called a "pitch raise" or "pitch correction." This is a necessary procedure before a fine tuning can be achieved. When the tension of each string is raised back up to pitch, the additional load on the piano's structure causes the pitch of the previously adjusted strings to change. The only way to achieve a fine, accurate tuning on a piano is to have the tension of all the strings so close to proper pitch that altering one string will not affect the others. Therefore, a piano must be already fairly close to standard pitch to be finely tuned.

How much does it cost to have a piano tuned?

There is a wide range, depending on the location and the qualifications of the tuner. Here are a few statements from various piano technicians:

“A Full Service Piano Tuning is \$150 plus tax. This includes inspection and adjustments as well as minor repairs. It also includes pedal adjustments, tightening the bench and other diagnostic inspections. A pitch raise, if necessary, is an additional \$30. Other repairs (hammers, keys, pedals, etc.) are billed at \$75 per hour. Major repairs, regulation, etc. will require a bid after seeing the piano.”

“Usually there is a "standard tuning fee" which applies to those pianos serviced regularly on a schedule. The range of standard tuning fees in our area goes from a low of about \$135.00 to a high of about \$250.00. Then there is usually an hourly rate applied to things over and above the standard tuning fee.”

“Many piano tuners also offer piano repair and are able to recommend additional services that are needed when they come out for a tuning. If you suspect your piano needs more than just tuning, always confirm whether the tuner also provides repair, as not every tuner does. Piano tuners who also do repairs offer a wide variety of services for various prices. Here are the average national costs for common tuning and repair services:

Pitch correction: \$60

Tuning: \$130

Repairs: \$65 per hour

Voicing: \$175-\$600

Grand action reconditioning and regulation: \$2,500-\$3,500

Vertical action reconditioning and regulation: \$800-\$2,500

Soundboard cleaning: \$100-\$150

Climate control installation: \$450-\$800

Installation of under-covers: \$250-\$350

String cover installation: \$250-\$350

Grand action rebuilding: \$5,000-\$8,000

Vertical action rebuilding: \$4,000

Evaluations: \$100-\$250”

How long does a piano tuning take?

Typically between sixty and ninety minutes, but it may take up to three hours when a pitch raise is required.

Choosing a Piano Tuner

Just like with almost everything else, the first question we ask is probably about the rate. Also, just like with almost everything else, this is what we should be asking:

- How many years have you been a tuner?
- How/where were you trained?
- Are you full-time or part-time?
- How many clients do you service?
- Who may I contact for a recommendation?
- Do you do repairs?

Piano Technicians Guild

RPT stands for Registered Piano Technician, and it is the only accreditation currently available for professional piano tuners. The designation is earned after completing a series of three rigorous tests (one written, one performing practical repairs and one for piano tuning) administered by the Piano Technicians Guild. The test on piano tuning generally takes 5 to 8 hours alone. These tests are usually attempted once someone has significant experience in the field. They are difficult and there are many who are not able to gain a passing mark (which is 80%).

The designation guarantees nothing other than, at one time, this person was skilled enough to succeed on these exams. The designation indicates, however, that this is a professional who is serious about his craft and willing to invest time and effort to better themselves. Many unregistered piano tuners have extensive piano tuning experience and are just as skilled as those who hold the title of RPT. When looking to hire a piano tuner, be sure to research their background, verify they have experience working with your make of piano, and verify that they have positive customer reviews. It's also wise to look for a piano tuning professional who has basic business liability insurance, especially if your piano is an investment piece.

Piano Care

Piano Placement

“The myth of the danger of placing your piano on an outside wall was sound advice (pardon the pun) fifty years ago. When homes were not insulated as they are now, outside walls would be subjected to large temperature (and thus humidity) changes. Nowadays homes are insulated so well that it no longer matters which wall you choose to place your piano against. You can check by feeling the wall with your hand during a cold day. If the wall is noticeably colder than an inside wall, you may not want to place your piano there.”

“You want to choose a spot that is easily accessible. Playing music is scientifically proven to bring joy into your life, 7% more if I recall. If your instrument is clean, maintained, and easily accessed, you are much more likely to use it. Avoid direct sunlight, heat vents and cold air returns if possible. Avoid high humidity areas like the bathroom or kitchen (Yes, I have seen pianos in both). You also want to avoid frequently used doorways. In the winter especially, a blast of cold air from the outside is not friendly to your piano.”

“An ideal range of temperature is between 65 to 72 degrees, and a constant humidity level of close to 42% percent is optimum. Pianos in homes with swamp coolers will often require special attention to humidity concerns.”

“The Piano Technicians Guild recommends positioning your piano away from doors or windows that you leave open regularly. Take care to place your piano away from heating or air conditioning vents. Fireplaces and direct sunlight can also affect the inner workings of your piano. The Piano Technicians Guild suggests avoiding overly wet or dry conditions, as too much moisture can make the piano pitch sharp, while overly dry conditions can cause the piano's pitch to go flat as well as causing the glue joints to weaken in the soundboard. The Piano Technicians Guild recommends maintaining a consistent temperature around 68 degrees Fahrenheit and 42 percent relative humidity.”

Piano Humidifier

Do I need a piano humidity control system?

It depends: they may be more useful in upright pianos because they are enclosed. New pianos may lose their warranty when a piano humidifier is installed. The water may need to be refilled quite frequently (maybe even weekly during dry months. If possible, it is recommended to control the humidity in the entire room.

Piano Regulation

Pianos need to be regulated from time to time (every few years), which can cost several hundreds of dollars. The following are some of the signs that a piano should be regulated:

- having to strike a key harder to get a tone
- not being able to quickly repeat a note
- hearing a double strike when a key is only struck once
- clicks, squeaks or other noises
- uneven piano key height
- the keys don't feel as responsive as they used to or in comparison to other pianos
- not able to play as softly and sensitively as on other pianos

Proper regulation of a piano is crucial. To put it simply, regulation is the adjustment of the mechanical aspects of the piano to compensate for the effects of wear, the compacting and settling of cloth, felt, and buckskin, as well as dimensional changes in wood and wool parts due to changes in humidity and environment. Many piano tuners are able to regulate pianos, but not all.

Broken Strings

Replacing a string is not that difficult for a trained technician; and piano technicians usually carry strings with them. However, expect that a new string may require several tunings. Your tuner may have to come back several times before the string will hold a tune. Sometimes, bass strings will have to be custom ordered, which will require more time.

How do I clean my piano?

“The exterior of any piano, the keys, and inside the cabinets of grands require regular cleaning that you can do. Clean your piano’s finishes and keys with a soft damp cloth (preferably a microfiber cloth). The inside area of a grand piano (above the strings) should be frequently vacuumed.”

Should I get a "free" piano?

"It depends, but probably not."

“Avoid pianos that are "giveaways." They almost always are in need of several hundred if not thousands of dollars of repairs. Yes, pianos can outlive their playability and sometimes just need to be "retired." I have visited many a home of a client that found a cheap piano on KSL classifieds for a very low price and I've had to deliver the news that it needed over a thousand dollars of repairs and even then won't be worth the money they put into it. Far better to spend more on a piano that is still in good condition.”