

Tone Regulation as a Part of Everyday Service  
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Our industry over-emphasized tuning. Is tuning really what people want? Do they even know what they want or what are the possibilities. The high-quality ETDs are so sophisticated. A tenth of a cent is inconsequential. The tuning is about windows of tolerance, not absolute pitch. You can spend 90 minutes fine tuning using an ETD and end up with a ouabi tgat  
Are we building a chicken coop and measuring it with a micrometer? Tones drift more often than people realize. Even a few days after a tuning, the temperature and humidity can change what we worked so hard on. What is good enough? The PTG test standards are a good benchmark. A passing tuning is not considered a great tuning, but it is good. There is a 1.8 cents window in the middle, and you can be 5 or even ten cents off in the top octave. In the top octave, a cent and a beat is practically the same. We need to focus most of our attention in the middle.

Voicing is not difficult. It is surprising how seldom technicians voice pianos. Voicing should be done in every day work. To tune pianos, you need patience, a healthy ear, and a love for the instrument. If you have little or no experience it can be intimidating ND ABSTRACT. Your listening skills and judgement will get better and better with more practice. Like playing the piano, developing voicing skills takes years of practice.

### **The Importance of the Practice Piano**

- No shortage of free instruments to experiment on and develop skills. Then sell it and get another!
- Attend workshops and conferences. Hire or shadow a mentor.
- Start looking for voicing opportunities on everyday jobs.

#### Disadvantages

- You may undermine your ability to sell a more complete job.
- It takes more time, thus requires charging more which may turn some clients off.
- Risk of client's not liking the results, and a possible call=back.

#### Advantages:

- The added challenge makes the appointments more interesting and rewarding
- A greater mastery of voicing though ongoing focus and practice.
- The ability to keep your client's pianos working at a higher performance level
- Possible charge a higher fee
- The increase in your reputation as clients enjoy the results of your labor
- Well voiced pianos sound in tune longer.

#### Darrell's Rules:

Rule 1: Every tuning should include some voicing, even if it is just one note.

One bad note can ruin a tuning.

Word choice is an essential tool.

Prepping the client: Always tell them any voicing work needs a play in period = this is important psychologically. Tell them it may be disconcerting at first, but they will like it once they get used to it. Demonstrate with your voice.

Talk about nasally tone” and what conspires to make pianos more nasal

- Impure unisons
- Poor hammer to string fitting
- Flat, grooved hammers
- Hard hammers

Likewise, clean unisons, good string fit, smooth rounded shape, and not overly rigid hammers are prerequisites for good tone.

Special case of hearing aids.

They make the piano sound tinny.s – a displeasingly thin, metallic sound

- You may have to mellow w3d5ion eo2n mo43 5hqn you lik3
- Rull SErciuce vs. Tune & Run
- “My mother took perfect care of this piano.”
- Look at it and there are all kinds of issues.

The Cliff vs. the Zig Zag

Demonstrates just tuning & no maintenance over 50 years vs. full service with each tuning

Step 1: Triage

- Where’s the tuning at”
- Let-off
- Aftersound enough key to p to allow close let-off

Finding the Time to do the work

Consider floating the pitch

Advertise the catch-up service

Encourage clients to tune the same time of year

Focus more on unisons and octaves. Avoid screaming 6ths, 10ths 7 17ths.

Consider promoting humidity control

Rule: Float the Pitch

I personally feel comfortable with a piano being at 439 at the end of winter and at 442 at the end of summer. Often the low tenor is the culprit. A

Are you doing the client any favors by tuning their piano from 439.6 to 440?

Floating the pitch will save you times.\

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Rule:” Get your voicing tool out before you tune.

Piano Forte Supply

130320 voicing chalk

130230 ring voicer, brass

130232 ring voicer, aluminum

`130210 retractable chopstick voicer  
Pianotech: Japanes upright Pianotech JBP-2 or Schaff V-UP

The mighty shank hook  
Pull the grand hammer up to the string to check the fit.  
Shaff 8" #91B

Adjusting as close as pos has the following effects: Let-off increases control over very soft playing. Notes won't drop out  
Increases rep by decreasing after tout  
Increases power and the feeling of a greater dynamic range  
Increases the effectiveness of the quiet pedal  
The main concern with let-off too close is bobbling hammers  
There is a tendency for let-off to creep forward after playing in  
Compressing the let-off button cushions the

Describing Let-Off to clients

- Makes the hammers feel more like they are connected to your fingers
- Use

Improving the let-off tool

I love my let-off tool. It's an old hale tool that is no longer made. It allows adjustment at an angle without stressing the screw.

You can

If an eye breaks, I have had some luck turning it with 2 permagrit paddles. Or you can file or sand away some of the felt punching.

For spade type, the Pianotek l JCH 19 is sold as a jack too, but works great for let-off.

Tip: Practice in low risk situations, like churches, schools, & nursing homes

Priorities:

Focus on the mid-range

Be aware of heavily used notes

You can be very aggressive in upper bass, low tenor. You need to be careful once you get into octave 5. Try working between string imprints.

Sometimes one deep jab in the middle works.

Rule: Be Aggressive!

50 grit sandblaster purple sanding belt.

Tear off 9/16 strips. They last a long time but fresh strips cut very fast. Use a gentle touch.

The hammer iron: an essential tool

Use the iron to replace the fine grit

Ironing helps the hammer maintain its shape longer, and it's quick. Busby uses wide paddles.

The whole treble section takes only 5/10 minutes.

One of my most important voicing tools that doesn't have needles, pliers, sandpaper or heat.

Use a vacuum cleaner.

Simplicity "Sport"

Riccar "Supraquick"

Sjuper FastVac 500

Crucial Swirl appears to be exactly the same.

It is available at Amazon for \$85.99

Get the actual cloth bags

Give a personal touch & give the customer the message that you care.

Movie:

50-grit paper with blank back side of paddle for fingers

Start with strike point, then do front & back.

Refine

Iron

Vacuum

Sanding stick of plexiglass paddle

50 grit belt sander on one side

400-600 grit wet dry on other side

This strip of 220 along edge of paddle

2.030 needle on top edge for plucking and needling

The needle can be used for lifting felt by inserting needle beneath unorbunt you want to lift. The 220 strip

BBQ your shanks to align side-by-side

Voicing the Una Corda

One of the most helpful techniques with hammers that lack clear imprints is to mark the strings with graphite. I prefer a stick to carbon paper

On Yamaha/Renner hammers I find it best to voice the una corda before voicing for non-shift.

Needles have a large area of effect on these hammers.

On Steinway/lacquered/old hammers; the area of effect is much smaller so una corda can be voiced with little or no effect on non-shift voicing.

Chop-stick tool

Ways to listen: Flushing out the outliers

Play arpeggios with the pedal. Try accenting notes.

Play chromatically with pedal depressed. The wash of sound will help show which notes stand out

I find it always helps to play real music on the piano. Have a variety of pieces in different keys

I like to go back and forth between tuning and voicing so I don't get too tired out. Also, good to get used to using your left hand use a two-hand technique with the ring voicer in order to assist pushing the needle in.

I use the hair oil “diaper pin” method to facilitate needle going deep into felt.

What happens if you overdo it?

“Burnish it” against the strings

“Pound the snot” out of it while damping strings

1000 grit drag between hammers and strings

File and iron

Chemical voicing

Anecdotes

Burnishing and pounding over-voiced hammers

Drag 1000 grit paper between hammers and strings

Avoid stress to your hand.

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The top octave: in defense of the 2:1 octave

There is a misconception that the 2:1 are not stretched enough. They are actually stretched a lot.

There is a lot of inharmonicity at the top of a piano.

Consider the 2:1 as a voicing technique.

The 2:1 seems to create the optimal tone due to sympathetic resonance with the second partial of the octave below This is especially true if the octave below is undamped and free to vibrate.

The easiest way to tune a pure 2:1 is using an ETD using “manual override.”

For example, have the machine listen at A7 while playing A6. Stop the display. Use that as the optimal pitch for A7.

Listen for a swell in clarity.

The most accurate way to tune the high treble is electronically.

Within the past few years I had the opportunity to observe and listen to one of the world’s top piano technicians tune a Steinway D. He did