



Stop those Dogs from Howling!

“Monster Harmonica Workbench” with Kinya Pollard,
www.harmonicassessions.com

December 2003

How many times, after just a few hours of playing (and occasionally right out of the box), have you experienced the disappointment of playing an “out of tune” harmonica?

In past issues, attention was directed towards improving the performance of “stock” harmonicas. But as any Gear-Head knows all too well, even the best Hot Rods will be “parked” if the spark plugs go foul. Playing an out-of-tune harmonica is a sure way not to get invited back to the next gig! Restoring your harmonica’s playability is inexpensive and easily attainable. This issue will focus on the subject of reviving *marginally* out of tune harmonicas.

Definitions:

- *Marginally* out of tune (a reed’s pitch flattened no more than a half step, or one semi-tone.)
- *Severely* out of tune (a reed’s pitch flattened greater than a half step, or one semi-tone.)

Anatomy of Tuning

- To raise the pitch of a *flattened* reed, material must be removed from the “free” (vibrating) end. This will lighten the weight and enable the reed to vibrate faster.
- To lower the pitch of a *sharpened* reed, material must be removed from the “fixed” (riveted) end. Conversely, this will weigh down the free end and result in a slower vibration of the reed.

The tuning modalities of *Tuning by Ear* and *Tuning by Chromatic Tuner* will be discussed and demonstrated over two issues. The first procedure of *Tuning by Ear* is good for quick fixes and emergency repairs. The materials required will be:

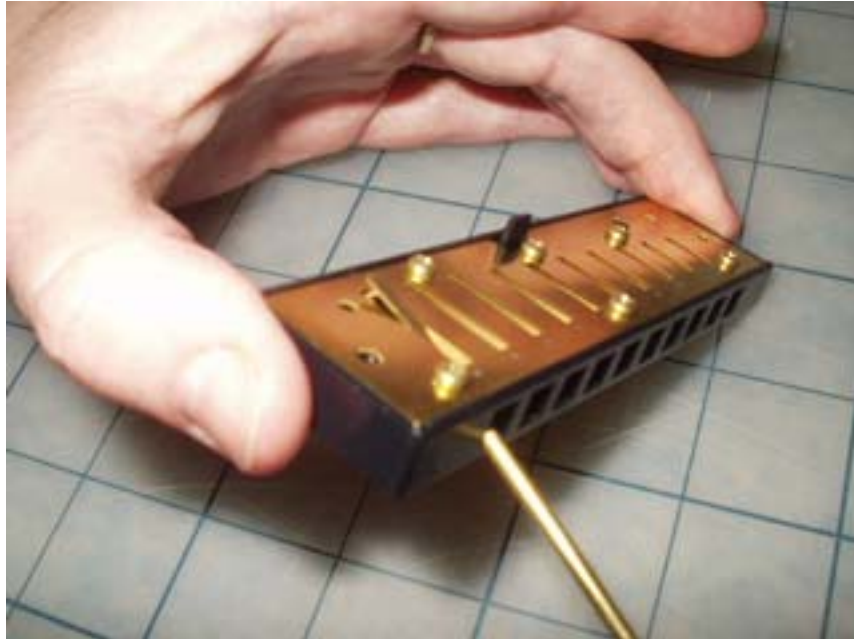
- Lee Oskar Tool Kit (or equivalent)
- Jewelers flat head screwdriver
- Lint-free swab
- A tuned instrument as a reference pitch (piano, guitar, etc.)



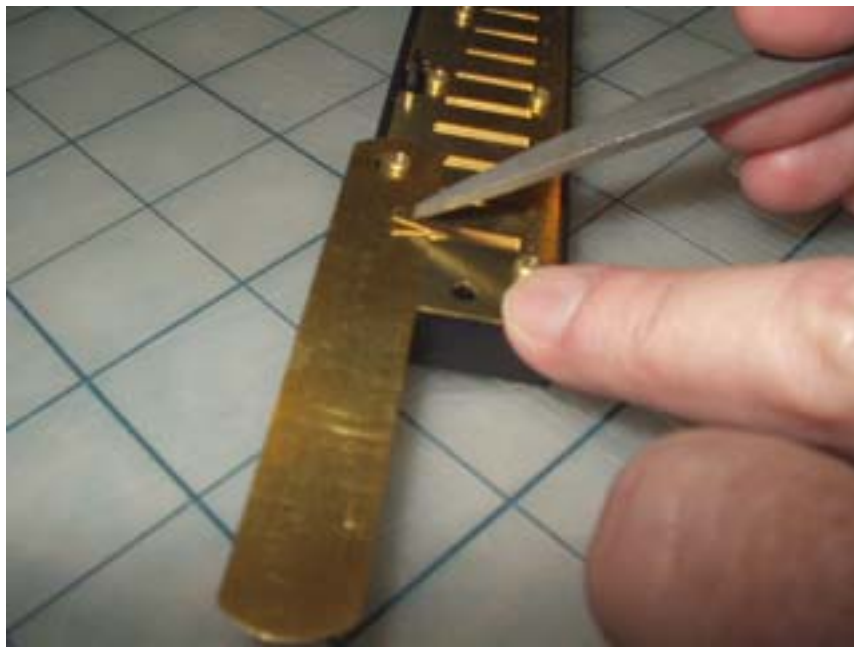
1. Begin by blowing a *continuous* breath into hole #1, then check to hear if the note matches the reference pitch (for experienced players, use tongue blocked octaves). If you hear a pulsating “beat” -- reed #1 is out of tune. Write down #1-Blow on a memo pad. Repeat this procedure throughout the Blow side of your harmonica.
2. Repeat the above procedure on the 10 holes of the Draw side.
3. Expose the reed plates by removing the two cover plate screws, then pulling the cover plates away from the comb. Without the cover plates as a reference, I recommend marking the Blow reed plate with a pencil.



4. As a point of reference (working from Left to Right, just above the reed), with a pencil write the number of that reed directly onto the reed plate. Draw a circle around the number of the reed(s) that was identified as being out of tune. Repeat this procedure with the Draw reeds.
5. For the Blow side, insert the hook end of your reed offset tool into the chamber of the out of tune reed. Gently twist upward until the reed pops through its slot. Next, slide the reed support tool under the exposed reed and carefully remove the reed offset tool.



6. With your fine chisel (moving from back to front) make three to six small scratches (approximately $3/16$ each) near the free end of the reed. Wipe off debris with swab.



7. Slide the reed support tool away and allow the reed to “plink” its way back into the slot.
8. Alternate between Steps #1 and #6 until the pulsating “beat” disappears and the pitch sounds true.
9. For the Draw side, the procedure will take less effort. Simply use the flat side of the reed offset tool to lift the identified reed and provide clearance for the reed support tool.



10. Alternate between Steps #1 and #6, until the pulsating “beat” disappears and the pitch sounds true.

Keep in mind that the reed plates are a fine and delicate component of your harmonica that requires a Jeweler’s touch and patience. I recommend practicing and experimenting on a “throw away” harmonica until you acquire this touch.

“You miss 100% of the shots you don’t take”
- Wayne Gretzky

Stay tuned for the upcoming issue of Monster Harmonica Workbench where we will tackle Tuning by Chromatic Tuner.

Kinya Pollard
the “Harpsmith”