



Venting Hohner Special 20 Cover Plates “Monster Harmonica Workbench” with Kinya Pollard

Mel Bay’s HarmonicaSessions® eZine
February 2008

Don’t you sometimes feel the need to vent? The pressure to get that rhythmic message out to the crowd is so palpable and pounding, that you feel like you’re going to explode! I can’t speak for your harmonicas, but as for mine, I believe they feel the same pressure.

If those harmonicas with enclosed, non-vented cover plates could talk, I’m certain they will tell you that they feel the same pressure.

For you Hohner Special 20 fans out there seeking a “new sound” but not prepared to invest into another set of harmonicas, this installment will be of great interest to you.

Long time readers of *Monster Harmonica Workbench* know that I am a big fan of swapping cover plates from different manufactures and models to customize the “voicing” of my harmonicas.

Harmonicas fitted with vented cover plates, such as the Hohner Marine Band, enable the player to experience greater resonance and richness from their instrument.

Today I will demonstrate how to open the backs and *cut* in factory perfect vents into your Special 20 cover plates.

Tool List

- Architect’s template
- ½” wide masking tape
- Xacto knife #11
- Center punch
- Small ball peen hammer
- Pen
- Drill press
- 1/8” metal drill bit
- 7/64” metal drill bit
- Machinist vise with rubber jaws
- Small block of wood measuring 3/4” W x 3 1/4” L x 1/4” D
- Jeweler’s rat tail file
- Jeweler’s flat file
- Polyurethane hammer
- PVC Cutting board



Hohner Special 20 (#560) with non-vented cover plates.



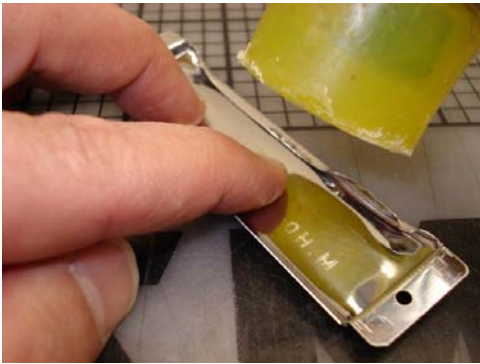
A rear view of the Special 20. Note the metal folds from the top and bottom cover plates that restricts the air flow. Our first customizing procedure will rectify this situation.



Remove the cover plates



The width of the fold measures at .141 inches. Multiply this number times the length of the cover plate at 2.81 inches, and then double that for two plates. Your conclusion should match mine. Over 3/4" of metal will block your sound.



Impact roll (Terminology: Johnny O!) the fold, starting from top to bottom. Use a 12oz polyurethane hammer over a PVC type cutting board for scratch-free results.



The fold now measures only .059 inches.



For comparisons, a stock cover plate was laid on top of a modified one.

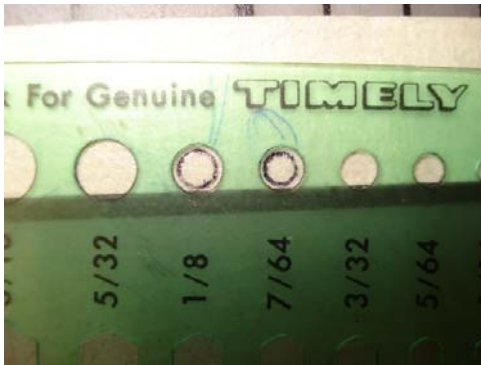


With the back of the harmonica opened up, the volume will increase without any extra effort from the player. As a *rule of thumb*, you should be able to see your reed plates.



With the back of the cover plates completed, we will now work on the sides.

I used a Hohner Marine Band as my reference for the desired size of slot that will be cut into the Special 20 cover plates.

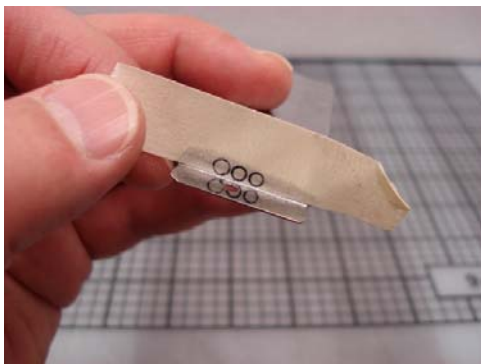


Using an architect's template, draw 1/8 inch and 7/64 inch circles onto a piece of 1/2 inch wide masking tape.

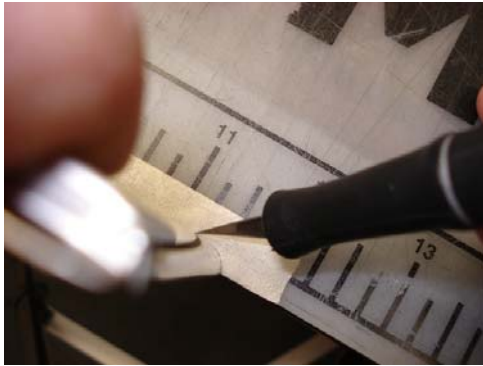
Please note that the 1/8 inch hole will be closest to the mouthpiece. This is important because you will be creating two left side and two right side templates.



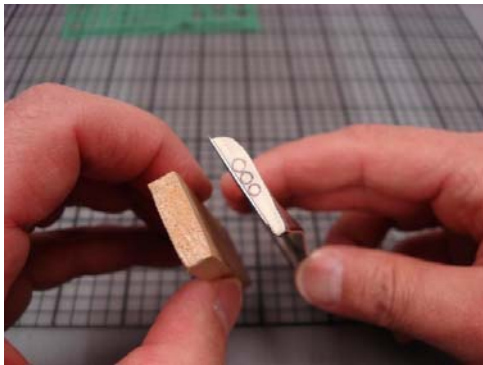
When completed, you will have one 1/8 inch circle and two 7/64 inch circles along the edge of the masking tape.



Apply the template onto the cover plate. Align the center template hole with the cover plate hole.



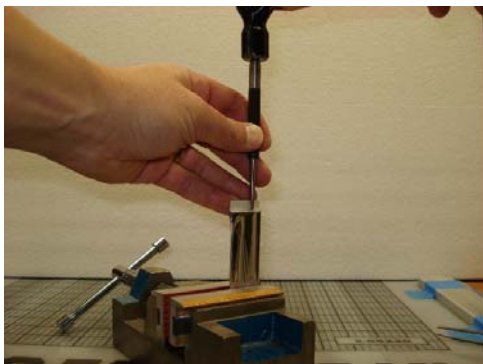
Trim off excess masking tape from cover plate.



Insert a small wooden block inside the cover plate to serve as a backing to prevent collapsing when clamping and drilling.



Carefully insert cover plate into rubber jawed vise. Center-punch each hole in preparation for drilling.





Drill hole #1 using a 1/8 inch bit. Holes #2 and #3 will be 7/64 inches. Notice the piece of masking tape on the flat portion of the cover plate. This will prevent the drill bit from scratching the surface.



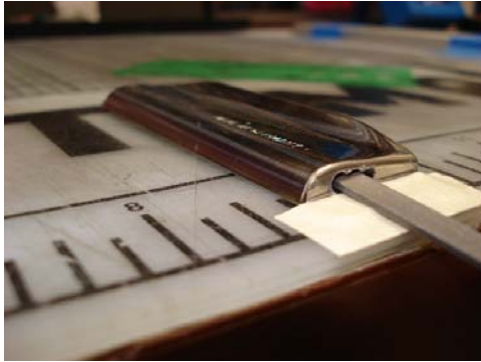
The masking tape will also help contain the metal shavings and prevent tearing – a common occurrence when drilling thin metal.



Remove the cover plate and wooden block from the vise and inspect the three holes (yes I know the middle one looks funky).



Using a Jeweler's rat tail file, file away the excess metal between the holes.



Apply masking tape to clamp down (and protect flat portion) the cover plate. Begin shaping the slot by using a Jeweler's flat file.



Turn over the cover plate and shape the top portion of the slot.



SWEET ... now that's perfection!



Assemble your customized cover plates onto your Special 20 harmonica.

Now go out and make some beautiful music!

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The HarpSmith