



Altered States

Cover Plate Modification

“Monster Harmonica Workbench” with Kinya Pollard,
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Standing in front of a classroom of eager Harmonicats, feeling more like a Magician than a Musician, I hold up two Hohner Marine Band harmonicas – both in the key of A. I selected the harmonica in my left hand, grabbed the bullet mic, and played a few bars of “Horton’s Swing”. While the notes still lingered in the air, I switched to the second harmonica and played the progression verbatim. Immediately, my students heard the obvious variations.

I held up the first harmonica and asked the student body to describe what they heard (my amazing rendition of Horton Swing notwithstanding). Responses like: *acoustical, bright, reedy, thin, and brassy* were shouted. I then held up the second harmonica, and almost in perfect unison, the class yelled out: *electric, muted (brown), bassy, fat, and in your face!*

The second harmonica had all the positive tonal attributes that my students were desperately striving to achieve. How could the same Marine Band model sound so different? Was it my technique?.. was it my equipment?.. or was it the harmonica? A closer examination of both Marine Band harmonicas revealed that it was not Voodoo, but simply that I had “altered” the cover plates (outer shell of the harmonica).

The design of the cover plates makes a significant impact on the audible characteristics of the instrument.

The first harmonica had stock Hohner Marine Band cover plates (virtually unchanged since Mathias Hohner patented the Marine Band in 1896). Trademark of the Marine Band are the two “vents” (slots) cut into the sides of each of cover plates.

The second harmonica had Hering Master Blues cover plates retrofitted on top of the Marine Band harmonica. The Hering Master Blues cover plate is identical in shape of the Marine Band with no vents!

Harmonicas fitted with non-vented cover plates capture the bass frequencies within the “tone chamber” and enables the player to broadcast 100% of their sound through the back of the instrument. Conversely, harmonicas with vented cover plates exhausts pressure out the sides of the instrument, and “thins” out the bass frequencies (allowing more of the treble tones to be heard).

Recently I spoke to living harmonica legend, Rod Piazza about his Marine Band harmonica holding techniques. Rod confirmed that when he wants to “fatten” his tone, he would wrap his hands around the sides of the Marine Band to seal off any leakage. In fact, Rod recalled that when he was performing with the late great George “Harmonica” Smith, George would come up behind him and squeeze his grip tighter onto the harmonica and bullet mic.

The message here is that, if you feel comfortable with vented cover plate type harmonicas, but desire a fatter tone: (a) modify your technique or (b) alter the cover plates:

- ❖ **Hohner Marine Band harmonicas:** (1) partially insert a quarter into the back opening (nearest the sides), (2) then twist the quarter until the cover plate pops off. Discard the four nails. (3) lay up the Hering Blues Master cover plates onto the harmonica and mark the centers of both holes, (4) to avoid debris entering the harmonica, carefully cover the reeds plates and mouthpiece with a low tack masking tape, (4) safely clamp the harmonica, then drill through the comb, two 3/32" holes, dust off the debris, (5) carefully remove the masking tape, then reassemble the Hering Blues Master onto the Marine Band, using Special 20 cover plate nuts and bolts. *Note: The Hohner Special 20 harmonica is the plastic comb version of the Hohner Marine Band (the reed sets are identical). Although the shape is different, the cover plates are non-vented and tuned for an "out of the box" muted sound.*
- ❖ **Hohner Big River (MS Marine Bands) harmonicas:** (1) remove vented cover plates and replace with any of the following; Blues Harp, Cross Harp, Pro Harp, or Meisterklasse cover plates.

Next addition I will be addressing how the shape of the cover plates influences your sound. Until then, keep tinkering and remember:

"If you think you can or can't ... your probably right.

Henry Ford

Kinya Pollard,
the "Harpsmith"