

By: Gary 'bogie' Bogolin

After taking over the Mini Beast air horn line in 2013, Custom Dynamics (CD) has continually worked to update the line. Here in 2017, they have once again redesigned the innards of the line to be more robust and even longer lasting. Back in 2010, after reviewing one of the then newer versions of the Mini Beast when Pro Pad was the source; a second was purchased for my wife's bike because she very much wanted the extra protection of a horn that will be noticed in traffic. She has had that same horn now for 7 years and 50,000+ miles on her '04 Fatboy. And she does not hesitate to use it – ever. On the other hand, the Mini Beasts (MB) on my previous '06 Ultra, and now on my '11 Limited, have been upgraded a couple of times - latest in 2014 to the 136dB version (previous review begins on page 2)

At the beginning of the season this year, her horn was taking a bit to 'spool up', i.e. pressing the button didn't give the instant loud blast. The sound level would ramp up eventually. This bothered her. She had more than once made the comment that the newer horn on my bike was louder. Talking to CD about buying repair parts, it was suggested the latest version of the horn would be a better bet. Decided to go with the MB6 in her favorite color – chrome.

The swap of the old MB for the new was almost as easy as the original install. Simply removed the one bolt that holds the horn to the bike, unplugged the connections to the stock horn wiring, removed the single wire going to the battery and reassembled in reverse order with the new MB.



The primary updates to this version of the MB was a stronger mounting plate and better 'marrying' of the compressor to the trumpet. Took the covers off her 2010 MB, the 2014 MB on my Limited and her 2017 MB. The evolution was pretty apparent. Tried getting pics that made sense, but didn't want to completely disassemble. At right is a stock pic of the 2010 and 2014 compressor (cylinder at top) and the trumpets. Notice the compressor is



'snapped' in to the top of the trumpets. In the '10 MB there was a stainless wire tie snaked around the compressor and trumpets to make the connection stronger. The '14, adhesive was visible oozing out around the plastic snap in. The latest version has a bracket molded as part of the trumpets, completely surrounding the compressor, clamping it to the top of the trumpets. Makes it rock solid, increasing the resistance to vibration and making the air flow connection less likely to have any issues. The mounting bracket this compressor/trumpets assembly is mounted to; which, in turn mounts the entire horn assembly to the bike has been updated to be stronger both in terms of holding the compressor/trumpets, steadying the horn when installed and for mounting the cover. The cover has been changed to chromed ABS plastic for weight and appearance factors.

The original MB was rated at 128db – later versions, including this newest, are rated at 136db. In the 2014 review below is a description of how much more intense the increase in dB level really is – a lot!

For another purpose, an inexpensive sound level meter was purchased a while back – had something to do with the sound level of another typically load device on bikes – the pipes. Since the meter was available, took some measurements. Please keep in mind, it's an inexpensive meter that cannot be calibrated and has never been personally compared to a high quality sound metering device. With all that said – the meter can provide relative comparisons. In addition, pretty sure the stated dB ratings are measured on the bench, in ideal conditions, without covers.

Sound measurements were taken of the 2010 horn; while the old MB was off the bike, a stock HD horn from a '14 touring bike was plugged in and measured; then the 2017 MB – all taken outdoors, from about one foot away

- '14 stock HD – 86db (advertised as 5dB more than '13 and prior stock horn which was rated at 86db)
- The 2010 MB from her bike (after it fully spooled up) – 122db
- The 2017 MD now on her bike – 132db

Variation compared to stated ratings likely due to meter quality, difference in measuring technique (i.e. distance from source) and ambient interference.

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After reading the explanation of dB levels below – it'll be evident that the 2017 MB is extremely intense and perceived by this writer, and my wife, as f'in loud. Further, the perception of how loud each horn was follows along with the meter readings (whether specifically accurate or not). The 2010 MB is much, much louder than the '14 stock horn and the 2017 MB is much louder than the 2010 MB.

If you want loud, it is this writer's opinion an air horn is the only way to go. If you want a choice of good looking options, Custom Dynamics and the Mini Beast are the best answer. 3 year warranty and the best customer service in the business makes it an easy choice. If you choose to go with a Mini Beast, be sure to tell 'em 'bogie sent me'.

- bogie, 2017

Presented below is the review of the then new 2014 version of the Mini Beast

Late in 2013, Custom Dynamics (CD) acquired the Mini Beast Air Horn line from Pro Pad, Inc. This was done just after the announcement of the newest in the line of Mini Beast Horns – the 136 decibel (dB) Air Horn. I have done reviews on many of the evolutionary versions of the Mini Beast for Pro Pad, since the first in 2006. Also having reviewed many items for CD, it seemed like a natural fit to review this latest version of the Mini Beast (MB) line, and CD agreed.

Since the beginning in 2006, the Mini Beast has packaged the air compressor and trumpets in its housing. The original housing was a rectangular stainless steel box. The next version was in a chromed plastic box (at right). These first two version only required finding a place to hide a relay somewhere on the bike. Subsequent versions have been offered in many different stylized housings, allowing the rider to pick the one that suited their ride the best. The stylized housing were all designed to also contain the relay, leaving nothing to hide on the bike, save for one wire to the battery.



For the now retired '06 Ultra, the oval contrast fin style was chosen (at left). For the wife's Fatboy, she preferred the oval "Twin Cam 88" style that looks like a slightly smaller version of the air cleaner 'football' (second at right).



The all-in-one housing made each of the horns a three wire and one nut installation. Simply remove the stock 'cow bell' horn; plug two of the MB's wires into the stock horn wiring, allowing the use of the stock handlebar horn button with no modification required; and hang the MB on the stock mounting stud. The third wire is run to the battery to provide full battery power to the instant-on compressor, with the stock wiring and button used to activate the relay to fire up the compressor.

Originally billed as "The Get the HELL Outta MY Way" horn, the original 128dB horn was (and still is) very loud. Blowing (sorry 'bout the bad pun) past the stock HD horn by a mile. Comparable in volume to other manufacturers air horns; but, these other air horns either require finding a place to hide the compressor and route air lines (remember to keep them away from heat sources – don't ask...), or simply hang the air compressor in plain view off the mounting stud. The Mini Beast self-contained horn simply looks better, in my opinion. Now it's even louder.

The current version is rated at 136db. Hmm, that's only 8dB more than the previous version. Ah, you need to understand how the dB scale works. For the geeks, it's a logarithmic scale, like the measure of earthquakes – not a linear measure. For the rest of us bikers, this means while the quoted number doesn't appear to be much higher, the sound level it represents is *significantly* more intense. On the decibel (dB) scale - for each increase in the reading of 10dB the sound is 10 times as intense. So from 90dB to 100dB the sound is 10 times as intense; from 90dB to 110dB is 100 times as intense (warning, math ahead – from 90dB to 100dB is 10 times as intense, from 100dB to 110 dB is 10 times as intense; so from 90dB to 110dB is 10 multiplied by 10 [=100] times as intense). Each increase of 3dB is approximately twice the intensity of the sound wave. So the increase from 128dB to 136dB is somewhere between 7 and 8 times as intense. The scientists say a sound at 130dB is at the threshold of pain; 140 dB is equivalent to a military jet taking off; and 160 dB is instant perforation of the eardrum (ouch!).

I'm sure you noticed I used the word 'intense' rather than 'loud' in the paragraph above. The reason for that is while the 'intensity' of a sound is measurable objectively; the loudness is more subjective. Each person will have factors that affect their perception of how loud something is. Hearing loss, whether by age or environmental exposure, will likely make an

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equally intense sound seem louder to one person than another. The direction of broadcast of the sound also affects the perception. With all that said – it's pretty darn safe to say the more intense a sound (with otherwise equal factors), the louder the sound will be perceived by any one individual; and, likely, in general terms as well.

With less techno-speak – if your horn is rated at a higher dB reading than the next guy – yours will be heard as louder. Compared to the approximately 86dB stock horn – the new MB is an increase of 50dB ($10^5 = 100,000$ times more intense), incredible – think about that next time you get closed in on by traffic! The MB's edge of 8dB compared to other air horn offerings affords sound 8 times more intense – and better looking.

The Mini Beast is offered in 11 styles, each with the choice of two finishes. Six of the styles have LED light kits (with a choice of 7 colors of LEDs) that can be added. For the new-to-me '11 Ultra Limited, the style choice is the "Mini Beast XR Straight Fin" in black contrast cut.



I had planned to take videos to compare the sound of a stock horn, the 128dB MB and the 136dB MB. Both of the video devices I attempted to use (my cell phone and a Cannon video camera) simply could not handle the intensity of the sounds. I was also going to attempt to measure the dB levels – they have an app for that – but, again, the cell phone mic wasn't up to the challenge. The mics on both recording devices are designed for optimal use in the range of the human voice – and the horns are way beyond that. Being only an enthusiast, no access to a true decimal meter. Offered here instead are subjective opinions on the relative loudness of the horns.

A friend's '14 Street Glide and my '06 Ultra were used for stock horn samples. The '14 clearly sounded louder than the '06 (it's not due to use or exposure; this '06 horn was taken off when new, replaced by the first MB, sitting on a shelf in the garage until now). To confirm this perception, got a guy with a '13 Street Glide for its stock horn – the '14 is definitely somewhat louder. All three of those listening concurred. Next the 128dB MB – *significantly* louder (probably an understatement) perception to all.

Finally, the new, 136dB Mini Beast Air Horn. Without a doubt, noticeably louder than any of the previous horns used in the test. Was the difference *as dramatic* as going from stock (either flavor) to the 128dB – no. Was the difference obvious – by all means. Each horn was also listened to while sitting in a truck, windows up, radio on at a reasonable level. All the horns could be heard, but the MB air horns pierced thru much more noticeably.

The first ride of this late starting season took the MB out on a clear, cold day. Only into the second mile – DEER – four of 'em. Hit the horn for a good long blast, followed by several short bursts and they went in 4 different directions. That's the result desired.

In my opinion the Mini Beast 136db Air Horn is:

- A good looking package (with many choices of appearance)
- Very easy to install
- LOUD
- A great safety device to get peoples' and critters' attention when it is necessary
- Great quality at the appropriate price
- Did I mention LOUD?

I would be remiss if I didn't conclude any review of Custom Dynamics products without mentioning their strongest asset – CD understands, and applies, true 'Customer Service'. Contact them by email or phone, you'll get friendly, timely and accurate responses to your questions. Can't beat 'em.

Although used before, the following is more applicable to the new 136dB MD Air Horn – The Mini Beast Air Horn, with the MAXI sound.

Respectfully,
-bogie