AMS EVO X WIDEMOUTH DOWNPIPE: Don’t Be Fooled By Knock-offs

Since the AMS EVO X Widemouth Downpipe was brought to market, there have been attempts by a few retailers to sell poorly made copies of it as exclusive name-brands to the public. These retailers either claim this as “their” design (knowing it will be sold under other brand names) or are told they have sole rights to the design by a dishonest manufacturer. Whatever the case, the retailer has absolutely no role in the design of the downpipe, yet claim it as their own.

Unfortunately, neither the retailer nor the manufacturer understands the engineering process involved in a quality design. So in the end, they either do not see or do not care that flaws in their copy will ultimately have an adverse effect on the performance of your vehicle.

For whatever reason you buy a product, AMS understands it is your choice. However, when a retailer publicly claims the quality of their knock-off copy is “just as good” and the performance is “the same as AMS”, it is important for us to dispel any myth behind such claims and ensure that our customers are truthfully informed.

The Comparison
The image below compares the cast AMS EVO X Widemouth Downpipe to a competitor’s cast copied downpipe. To make this copy less blatant, the copy is altered (shown below with blue arrow) by welding a tubular steel pipe from their cast section to the flex section. The welding of this tube defeats the purpose of having a cast stainless section in the first place. The smooth physical and thermal transitioning of exhaust gasses is now disrupted due to a massive internal lip as well as a variation in heat-retaining properties of cast steel to thin-walled tubular steel.
In addition, the material used in their tube shows magnetic properties so it is most likely not 304 grade stainless steel like the AMS EVO X Widemouth Downpipe. You must be aware that not all stainless is the same. Manufacturers may use a 400 grade stainless because it is less expensive. When subjected to the elements, it will not last much longer than aluminized steel found in the exhaust systems of vehicles sold today. We use 304(marine grade) stainless because it will last more than twice as long. This includes all materials such as the cast pieces, flex section and most importantly, the weld material.

Outside the fact that the competitor cast O₂ section (area above the blue arrow) matches the geometry of the AMS cast section, we know the design was copied and not engineered by them as they claim because they incorporated our unique mounting points (arrows in red) that we designed for a heat shield that has not been brought to the general public. We kept this design in any event we needed to provide our sponsored drivers or various race teams additional heat protection. To date, it has not been necessary, but it certainly was not designed to match up to a stock heat shield as stated by the retailer.

More Obvious Differences
The downpipe is considered one of the most important exhaust modifications on the Evolution X because it has the most room for improvement over the OEM piece, yet the manufacturer neglected this notion in order to cut costs. As seen below, the copy is made to look presentable to the public as a unique quality piece while cutting corners and using poorer quality materials. Unfortunately, the changes and materials only sacrifice the performance and longevity of the piece.

Unlike the copy, the AMS EVO X Widemouth Downpipe provides optimal flow throughout without the rough transition into a smaller diameter pipe. If the rough transition on the copy is not apparent, the image on the following page will surely illustrate that it is.
Here you can see the competition took an inferior approach. Rather than spending the extra cost to completely cast the bellmouth section, they decided to slip a pipe into the mouth and weld it to keep costs down. This was a bad choice as they added another weld which greatly compromises strength on a part that has to endure extreme heat/cooling cycles and stress.

The pipe of the copy protrudes ½” into the bellmouth section trapping exhaust gas; obstructing proper exhaust flow. Not only does this severely disrupt the performance of a high performance vehicle like your Evolution X, it traps moisture and corrosive elements that will eat away at the weld and pipe much quicker than if it were an entire solid cast piece.

Seen above, the AMS downpipe offers completely smooth flow. There is no obstruction or a need to worry about premature corrosion. Our materials show no magnetic properties which indicate that it’s made of cast 304 grade stainless steel. Our pipe was truly “designed to last the lifetime of your vehicle”.

The O₂ bungs also protrude into the path of exhaust flow creating additional turbulence and yet another area for corrosion to prematurely take effect. If you compare the image of our downpipe’s lower section with the competitor’s lower section, you will notice that ours is still cast and smooth throughout.

Yes, the cost associated with engineering, tooling, the use of high grade materials, expert fabrication and the finishing of a superior product is indeed higher than the alternative in question here. However, the alternative clearly shows evidence these manufacturers are not engineers and will cut corners; using cheaper materials and fabrication methods as long as the product looks decent from the outside. Our case in point . . . do not forget the reason why you are switching out your O₂ housing and factory downpipe in the first place. Essentially, when you bargain shop for a very inexpensive copy like this, you are downgrading from OEM quality and performance rather than making an improvement.