

**Not just meaningless marketing – real reasons** why the Renegade airbrush series' design and Renegade airbrushes surpass the quality and performance of any airbrush design and/or airbrush that precedes them.

There is a lot of fancy schmancy marketing terms being used for the Renegade airbrushes – big deal it's just marketing, right? WRONG! It's not just marketing. Those feature titles describe real and new airbrush features, airbrush design improvements, and airbrush manufacturing innovations. Those features, design improvements, and innovations are real reasons the Renegade airbrushes are superior to other airbrushes. The following feature explanations should help everyone, especially those wondering what the Renegade airbrush series feature titles mean, understand and realize the benefits of the Renegade Airbrush Series' features.

### **“Tensionsense” trigger technology.**

What this feature title refers to is the new trigger spring material and the custom trigger tension setting of the Renegade airbrush series. The material and spring grade being used on the trigger springs in the Renegades are not the same as those previously used by airbrush manufacturers. The type of trigger springs previously used were limited based on a cost and function performance standard that made certain spring materials less desirable for airbrush manufacturing. On the Renegades Badger, in coordination with its spring supplier, was able to work with a spring design and material used for aerospace design functions. This material has greater longevity in its tension memory and is less prone to coil bending. Additionally, the design of the Renegade airbrushes lets the user adjust the trigger's tension by turning the needle assembly deeper or shallower into the airbrush body. These design features in combination are what “Tensionsense” trigger technology is.

### **“Pointperfect” carbide polished needles.**

Ever meet an artist who polishes their needles? Many if not most professionals do. Why? A needle is a turned part – meaning it is formed by a machined turning process that cuts it into its desired shape and specification. As part of this turned part process the machine cuts thousands and thousands of grooves into the airbrush needle. No matter how finely it is made an airbrush needle has these microscopic grooves. In many airbrush applications this may not be a notable factor in the spray pattern performance of the airbrush, but in finite detail at low pressures the effect of these microscopic grooves can be detected in microscopic skips of the line an airbrush creates. To most it may not be detectable, but to the trained elite artist if these grooves cause any skipping, no matter how minute, it is evident. This is why many artists polish their needles – to remove the grooves. As part of the needle manufacturing process for the Renegade airbrush needles Badger has incorporated a carbide stone polishing process to remove the grooves at the end of the airbrush needle and ensure an absolutely perfect paint flow from the needle and absolutely perfect fine line spray ability in the tightest of detail applications. Carbide is a very hard material and is considered the best material for polishing stainless steel, which is what the Renegade needles are made of.

### **Exact taper micro-precise paint tips.**

What this refers to is the design of the Renegade paint tip. This design was intended to combine the ease of maintenance of a drop in tip design with the notably greater fineness and minimized overspray of a micro-tip. Airbrushes have two types of tips: larger “cone” style tips like on Badger Anthems, Thayer & Chandler Vegas, and Iwata Eclipses, or “micro-tips” like on Badger 100s or Iwata HPs and Microns. While cone type tips provide far easier maintenance and good general purpose spray patterns they certainly do not provide the detail abilities of micro-tips. On the other hand, micro-tips provide notably superior detail and line fineness, but changing these type tips can be an expensive and often cumbersome process (ask anyone who's ever stripped the threads on an Iwata CM paint tip). Through a patented design Badger has enabled the creation of a micro-precise drop in tip, so both the ease of maintenance and superior spray fineness and line detail are present on the Renegade airbrushes. The patented feature is actually a part called the hold down ring that actually takes the threads from the paint tip and places them on the hold ring. When assembled the hold down ring actually sets the micro-tip into the nozzle post, centering it perfectly via the matching tapers on the paint tip and the nozzle post.

### **“Smartcenter” nozzle assemblies.**

A lot of this is actually explained in the above subject, but the additional benefit in the tapered micro-tip design is that it creates a perfectly centered alignment because of its matching taper with the nozzle post. The nozzle post is what the needle passes through before reaching the tip, thus it aligns the needle in the tip. The mating assembly design of the needle, the nozzle post, and the micro-tip facilitates an exact and perfect centering of the needle in the paint tip ensuring a true and accurate spray from the airbrush.

### **“Stopset” trigger control handle.**

You'd be correct this is not new technology, but it is new to Badger in this simple of a form. Although we have a very elaborate trigger memory system on the SOTAR airbrush, it actually enables line settings to a thousandth of an inch, this is our first simple trigger pull restricting handle. Many artists like the feature of being able to limit the pull on the airbrush trigger, especially in controlled detail applications. So Badger added the stopset trigger feature to the handle of the Renegade airbrushes.