

DRILLING INSTRUCTIONS FOR ZERO GRAVITY WINDSCREENS

WARNING: DRILLING, SANDING, CUTTING OR OTHERWISE ALTERING YOUR WINDSCREEN WILL VOID THE MANUFACTURER'S WARRANTY.

THIS IS AN IMPORTANT NOTICE TO THOSE IN NEED OF DRILLING THE MOUNTING HOLES FOR THEIR WINDSCREEN.

The first step in working with acrylics is to obtain the proper tools. **DO NOT** use a conventional high speed drill bit *(like you would use to drill wood or metal)* to drill acrylic plastic. Conventional high speed drill bits have a 120-degree cutting point which applies too much cutting blade surface to the hole being drilled and may "catch" the plastic surface, causing it to crack.

A drill bit designed to drill acrylic plastic, on the other hand, has a

sharper point (60-75 degrees) and less cutting surface than a conventional drill bit and will cut through the plastic without "catching" the acrylic surface. The plastic is much less likely to crack if you use the proper drill bit. Slow to medium speeds work best when working with acrylics.

As an alternative to using a drill bit designed for drilling plastic, a Step-Drill Bit (*such as those made by Unibit*) may be used. They have the added advantage of leaving a beveled edge around the perimeter of the hole.

Another critical factor with acrylic is heat generated from the bit. If the bit is less than sharp then you will have to drill very slowly *(either slow bit speed or retracting the bit often)*. Sharp bits can be drilled quicker but you still have to retract the bit often to let the material cool down. Overheating will result in a crystalline sugar-like melting around the hole. Also try not to punch the bit through the material when you are almost through the material. This may chip the back side of the acrylic. Also, for larger holes (3/8"+) use a smaller diameter drill bit to pilot drill the hole. A pilot hole will reduce the tendency of your bit to wander.

Finally, once you've drilled your hole(s), use a counter sink to relieve the sharp 90° corner from both sides of the hole. This is where the possibility of stress cracks will occur...



See the full warranty language on our website at: https://zerogravity-racing.com/pages/zero-gravity-warranty-info





