

**Acrylic Drilling:
WND EZ2 1002**



Please wear the appropriate eye protection when drilling!

Plastics Drill Bit



The first step in working with acrylics is to obtain the proper tools! Conventional high speed drill bits do not work well with hard plastics. They will (ride up) causing a crack in the drilling area. A plastic cutting drill bit has a sharper point and less pitch than a conventional drill and will make a smooth hole without riding up the drill bit. Slow to medium speeds work best when working with acrylics. Most better hardware stores will carry these bits. Another bit you can use is one that has diamond dust bonded to the tip surface. No chipping, cracking or gumming, even on extruded material. Note: 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 extracting 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. Use a cutting fluid (water works well). A water soluble oil is what the pros use. Otherwise your drill will heat up and melt the acrylic and you will get an oversize hole. Also use a smaller diameter drill bit to pilot drill the first hole. A pilot hole will reduce the tendency of your bit to wander. Finally, once you have drilled your hole, use a counter sink to relieve the sharp 90 degree corner from both sides of the hole. This is where the possibility of stress cracks will occur .

Warranty does not cover the use of incorrect tools or procedure.

