

PROTECTING YOUR SUUNTOS

By Marc Ohms

The latest models of Suunto's compass and clinometer have a much thinner plastic capsule than previous models. At Wind Cave National Park we have had eight instruments break within a year and I have heard from many others that they have had this same thing happen. The plastic is very thin and cracks very easily. I wrote the company but all I heard back was the typical "*thank you for your concern...*" Getting nowhere with the company I decided to strike out on my own and devise a way to protect the instruments.

On my first attempt I purchased plexiglass in a thickness of .1" and had the store (Lowe's) cut it into 2 inch squares. I then used a silicone epoxy to attach the square to the top of the instrument. The square fit perfectly except for the two upper corners which hung over the edge a bit. I simply used a file to round the edges flush with the instrument. On my second attempt I used a drill with a 2 inch hole bit to cut circles, which fit perfectly and did not require any filing.

After allowing the epoxy to dry overnight I moved on to the next step, which Mike Yocum came up with in 1995. I purchased Plasti-Dip (*there are several brands of this and go by several names*), which is the stuff you cover tool handles and such with. The container for the Plasti-Dip is just wide enough to allow you to dunk an instrument. Before dunking into the dip, I thoroughly cleaned the instrument. Next I stuck a cork into the eyepiece so the dip will not run into it. I then dunked the instrument into the dip then hung to dry. Depending on the temperature and humidity this may take minutes to hours. I repeated two more times for a total of three dunkings and allowed this to dry overnight. When it was dry I took an Exacto knife and cut around the cork, then removed the cork. Although they make the dip in clear, I could not find it. If you use the clear, then you are done at this point, as enough light should pass through to illuminate the instrument. If you are like me and could not find the clear (*or simply want pretty colored instruments*) then you will need to cut a piece of the coating from the window. I used a spool of thread to trace around with the Exacto knife and removed the middle. Presto! I just dramatically extended the life of my instruments. They are as bombproof as they can be. We used two different colors for different instruments. We used red for compasses and yellow for clinometers. Even in the cave you can easily determine which instrument is which.

The dip protects from the bangs, knocks, and clanging they receive while being drug through the cave and used during a survey. You can buy the prefab plastic sleeves or for the same price buy enough dip to coat 5 sets of instruments. Plus the dip provides additional protection from water and dirt that the sleeves do not. I have only dipped the KB-14 model and have not attempted the tandem or models with the focusable eye piece, but I am sure both are doable with a little ingenuity.

Protecting your instruments from damage and destruction not only protects your investment but protects your survey accuracy as well. Every bang and knock your

instrument receives can be damaging and result in errors in your survey. Even if you do not see exterior damage the insides can be getting damaged.

Yocum, Mike. 1995. PROTECTING SUUNTO INSTRUMENTS. *Compass & Tape*, v. 12, no. 1, p. 9-11.