

My name is Kim J. Heltemes. I'm the past state commander for the Sons of Union Veterans of the Civil War. During the last 22 years I've been replacing or getting headstones for Civil War veterans that are unreadable or have never been marked in the past. Finding unmarked Civil War graves is a challenge so when I get new headstones for them it is important. The reason for showing you about this product is to change people's minds on throwing away broken headstones. They can be fixed. Save your ancestors or someone else's headstone from being tossed and lost forever.

This brings me to the current problem. One of the newly received headstones slipped from the tractor and fell, breaking in half, right through the death date. It needed to be fixed. After research on the internet, I decided to try Bonstone. It is a company in Mukwonago, WI. A trip in the area gave me an excuse to stop and talk to them about my problem. After talking to Paul Klees, the sales manager, he hooked me up with "Glacier", an epoxy that is somewhat opaque. It was a perfect fit for the problem.

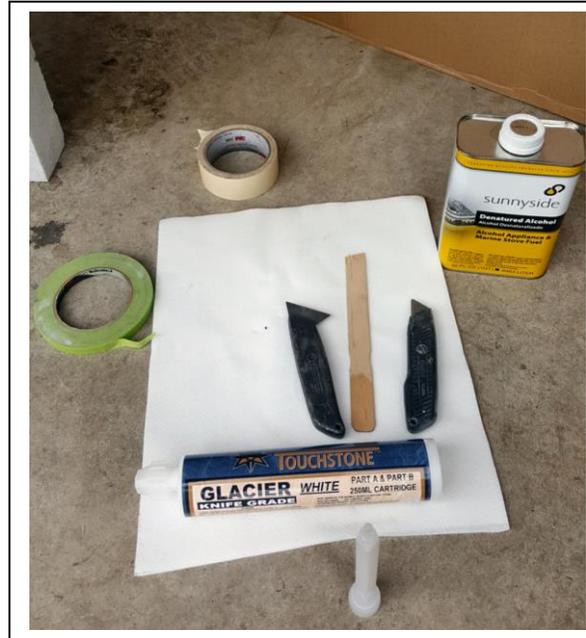
Paul gave me instructions for using the product. They were simple but very helpful. I used the product and took photos so others will be able to reproduce the results I had in the project. Please follow along and see how a new headstone was saved.

**READ THE FULL ARTICLE BEFORE TRYING IT YOURSELF. YOU WILL NOT HAVE TIME TO READ ALONG WHEN USING THE EPOXY. IT SETS UP FAST.**

**Step 1.** Find a level sturdy place to fix the headstone and tape up the edges along the breaks. The top was placed so it could be picked up without too much struggle. The concrete floor gave the job stability.

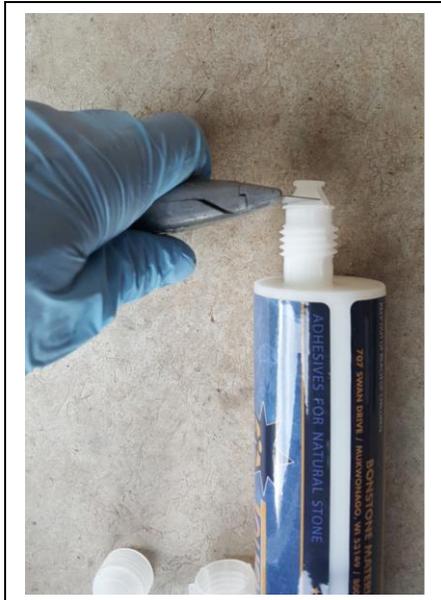
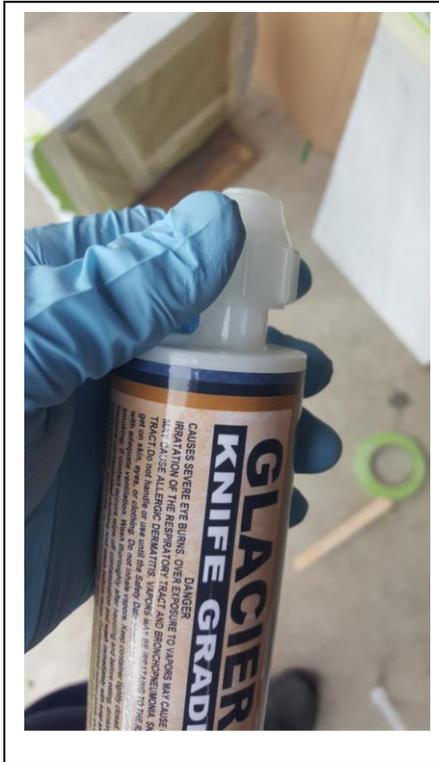


**Step 2.** Clean the open break areas with denatured alcohol. Wiping these areas cleans the dirt, grease, and grime where you want to bond the pieces. In my case, it also loosened very small fractured granules that would not have bonded or would have made the fit unacceptable. They would have displaced when spreading the epoxy getting in the way of a good fit. This is a good time to get your tools ready for the bonding. You have only a couple of minutes once the epoxy is out of the tube so getting ready is important.



What isn't in the photo are gloves and regular size caulk gun. You do not want the product to dry on your hands – it turns as hard as stone. I also used automotive grade lacquer thinner for cleanup. You will need denatured alcohol, tape, a razor knife, and something to spread the epoxy. Paper towels helped with the cleanup.

**Step 3.** Once the break has been cleaned and allowed to dry get the tube of epoxy ready. Install tube into the caulk gun, remove the cap and cut the tip off the tube. Attach the nozzle and cut the tip off of it. It is now ready to apply.



**Step 4.** Squeeze 2 inches out before using the product. You do not want to apply epoxy that hasn't mixed. It will not set up. The nozzle is designed to mix the epoxy by the time it is out but this assures that it is mixed for use. The tube is designed with 2 compartments and the product is pushed out evenly from both compartments.



**Step 5.** Apply the epoxy. I ran the epoxy in 3 lines on the bottom half of the headstone. This resembles the conditions in a cemetery where the top is broken off and the bottom is stuck in the ground yet. I should have applied the epoxy to the top and bottom breaks but in the excitement I forgot to do it. I must have used the right amount by the way it worked.



**Step 6.** Spread the epoxy evenly. I used part of a paint stick to spread the epoxy as even as possible covering the whole face of the broken area.



**Step 7.** Set the top in place. You should try and wiggle the top in place but when I set the top on, it stayed right there. No movement. It is hard to see on the photo but the product squeezed out but this gave me the idea that I used enough product. This is better than not having used enough epoxy.



**Step 8.** Wait about 10 minutes and remove the tape around the break while waiting. Pull the tape away from the seam area. When the excess epoxy feels like rubber you need to trim the excess from the stone. I used a razor blade set sideways in a handle and scraped along the stone flats. It gave a clean finish to the seam.



**Step 9.** Clean the headstone where the excess got on the surface of the headstone. I used automotive grade lacquer thinner very lightly. It cleans fast and evaporates faster. Denatured alcohol can be used also. I had to clean out excess epoxy from a few of the numbers in the death date but if you do it early it isn't a problem to do. As you can see, the fix is almost invisible up close. From 20 feet away it is invisible.

I also had a chip out of the edge of the headstone so it used the Glacier epoxy and filled it, going through the same process. I had to shave it with razor blade to square it up but this too looked almost invisible once it cured.

You can see the finished project below. I hope this encourages you to fix the headstones, not throw them away. Use Bonstone. It worked for me without a problem. It is easy to use and gives great results. Plus there is enough product in a tube of Glacier to do at least 3 headstones. **CALL PAUL TODAY AND TELL HIM I SENT YOU. HIS INFO IS BELOW.**



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