

HOW TO TEMPORARILY ASSEMBLE ANCIENT POTTERY

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November 3, 2021

Please read through the entire process before you proceed. Trust me, it will help.

Pottery restoration is the most time-consuming of all artifact restorations. Especially if there are large areas to replace missing pieces. The size and thickness of the pot is a major concern because the material costs can grow quickly. For this reason, any project I agree to take on will require some level of pre-assembly by the client before I can quote the job. It is rare to have a complete assembly of pottery shards. One can only assume what's actually "there" or "not there" prior to pre-assembly.

The following instructions can be used as a guide to accurately re-assemble ancient pottery regardless of the extent of damages. If they are followed patiently, without taking shortcuts, you can learn a valuable process that can help turn a "sack-pot" into a displayable artifact with professional results. I'm going to include every detail I can think of along the way. Don't let that discourage you, the process is actually easier than it looks.

I will describe proven methods I use to assemble these puzzles in two distinct processes: First the pre-assembly, then the final assembly where adhesive is used. Both processes together, and in the proper order will result in an assembly without visible restoration. Your pre-assembled artifact will determine exactly what may be missing and that is where complete restoration begins.

At this point, you can determine if a full restoration is warranted, and if you decide to use my services, I will be able to provide an accurate quote for the work. Be prepared to realize a complete pottery restoration may cost more than the value of the pot. But following these simple processes and a tiny investment on your part (a fresh roll of painters tape) can help you get a lot of satisfaction, and soon you'll be gaining confidence in your efforts.

MATERIALS REQUIRED

Painter's Tape: One Inch wide, Blue, or Green, multi-purpose grade.

NOT REGULAR MASKING TAPE...NOT EVER!

Paper Towel Roll: Any grade.

Bucket, Pan, or Sink: Large enough to totally submerge and soak the entire project in water.

Firm Toothbrush

Pointed Dental Pick or Similar Tool

STEP ONE: SOAKING IN WATER

Soaking will have **no negative effect** on the pottery, its patina, or finish. However, it will help

identify foreign materials such as modern glue or paint. Soaking has two roles to play. One: complete cleaning of surfaces. And Two: Removal of unwanted debris and old adhesives around the edges. Consider yourself fortunate if the adhesive that was used (in prior restorations) turns white after soaking a while. That means it's likely a water-based adhesive and it is easily removed. If water has no effect on the adhesive after a full day of soaking, then the process becomes more time-consuming. *Never use a solvent to dissolve adhesives. It will permanently damage the pottery before it has any effect on the glue.*

Even if a non-water-based adhesive is detected, all is not lost. Prolonged soaking can help release those adhesives since the pottery is somewhat porous and a microscopic water barrier can form between the adhesive and the natural matrix. Shards can often be separated by gently pulling them apart. Be careful not to create MORE shards in the process :)

STEP TWO: CLEANING

Use the toothbrush to clean each shard one at a time while the rest of the pieces remain soaking. Brush all of the edges and rinse them until they are **free of dirt and adhesive**. This step is crucial for a perfect re-assembly. Place each cleaned shard on a surface that is covered with a layer or two of clean paper towels. Spread them out so they do not touch each other. I find it advantageous to place them so the curvature makes as little contact with the paper towel as possible. This helps them dry faster. Also note: Paper towels dry at the same rate as the shards. Using cloth towels in this process only prolongs the drying time because they tend to hold water longer. If you have trouble removing non-water-based adhesives, you may need to use the pick to carefully pry it out. If the adhesives have changed color and are still being stubborn, let the shards soak longer and try again.

Allow the shards to completely dry on the paper towels.

A little bit of air-flow goes a long way.

STEP THREE: ORGANIZE FOR THE ASSEMBLY

Turn all the shards with the outside surfaces facing up. Identify and separate the RIM SHARDS, THE BOTTOM SHARDS and any other recognizable group with similar color and texture. Sometimes, the inside surfaces provide better details. There's no "box top" to reference with these puzzles, so you have to look closely for similarities in color, texture, patterns and thicknesses. You'll get better at it...hang in there.

STEP FOUR: THE JOINING PROCESS

Prepare to begin the joining process by tearing off short pieces of painters tape (about an inch long) and stick them in a row along the edge of your work table. Lots of them! You don't have to count them, but you'll need at least two for every join.. Inside and outside.

Now here's something important to remember... two shards either fit together or they don't.

Pick up two shards that you believe fit together (I usually start with the RIM Shards because they are easily identified and when a rim is complete you can lay it on the table upside down and build on it. If the shards are clean and dry you will be able to “FEEL” the fit. A gentle “rocking” back and forth will “lock” them into position and there won’t be any question if you got it right. You’ll feel it. Don’t force it. If it doesn’t lock...it likely isn’t the right piece.

Now grab a piece of tape and rub half of it down adjacent to the join on one of the pieces. You don’t have to hold them together at this point because you’re just making a good bond with the tape on one piece. Then push them together to a full fit and then rub the tape down across the join while you apply pressure to the join AND the tape. This will keep the pieces locked tight. If they aren’t tight, try again. EVERY JOIN NEEDS TO BE TIGHT. This will assure perfect fits as you move out and away from there. Add another piece of tape on the opposite side in the same manner and there will be little chance of movement as you proceed to the next fit. PRACTICE until you are confident it is as tight as it’s going to get. Develop a strategy for assembling groups of shards. You will quickly realize that sometimes you have to carefully consider which pieces to join first so you don’t have to cram a piece into a “land-locked” opening.

Repeat the joining process exactly as described until you’ve found a home for every piece. (Don’t concern yourself with tiny little pieces unless you find perfect fits for them.) I would likely fill those tiny gaps rather than trying to re-assemble a tiny crumbling mess. They are hardly worth the aggravation.

Remember, there is no adhesive used in this first assembly process. This is going to give you a complete assembly before any commitment with adhesive if you chose to proceed to a permanent assembly. You may find the convenience of the tape provides just enough flexibility to finish the assembly properly, with a perfect fit at the end.

STEP FIVE: THE FINAL ASSEMBLY

Take clear photos of your assembly from different angles, inside and outside. Use them for future references and any quotes for complete restorations moving forward.

Once you are satisfied with the results of your assembled relic, you may wish to make it permanent. The process involves the careful disassembling and reassembling piece by piece and adding adhesive to the joins as you go.

NEVER!...EVER!...USE ANY Gorilla Glue product...ever! That’s just my opinion after doing restorations for 40+ years.

The most important thing to remember in the application of adhesive is this -----> use as little adhesive as humanly possible!!!!

Shards that lock together are forced apart if there is too much adhesive in the join... make sense?

It is NOT necessary to use any kind of waterproof adhesives. A simple wood glue is sufficient. I use wood glue that dries clear, but it really doesn't matter that much since none of it will ever show if it's done properly. If it squeezes out of a joint when I push shards together and rub down the tape, I just remove it immediately with my finger and continue pressing the pieces together until no glue squeezes out. You can cover the entire edge of one shard joint with a tiny amount of adhesive. You should learn quickly just how much you need by how much you have to wipe off.... you should find that happy place where little or nothing squeezes out when strong pressure is applied to the joint. Be sure and check the inside and outside of each joint in the process.

Continue to remove the tape, add the adhesive...then replace the tape on each joint in the project until it stands completed.

Another strategy that may be advantageous is to pull the pre-assembly tape in such a manner to split the assembly in halves and work on them independently, then join them together as the last step.

Give it 12 to 24 hours dry time with the tape in place, then remove the tape and behold your restoration with pride!

MY RESTORATION SERVICES

I will only accept pottery restoration jobs where their completeness can be visually verified prior to the price quote.

A popular option, once verified, is to fill any missing areas and do a complete restoration of the cracks on the outside - leaving the cracks visible on the inside. This usually helps hold down the overall restoration costs.

If your intention is to have me do a full restoration, please do not proceed past the initial pre-assembly stage. Leave the piece taped together in sections WITHOUT any adhesive(it's best for shipping if they "NEST" together) and ship the assembly to me after our agreement on the quote.

As with all my restoration work, it must be pre-paid and be accompanied by one of my restoration forms available on my portfolio website.

I hope these instructions were helpful. And God Luck with your projects!

Scot Stoneking.