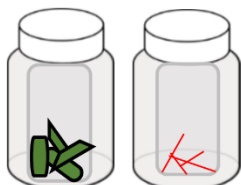


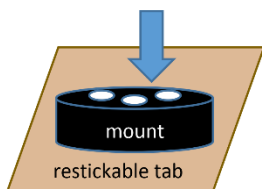
How to make a polished standard mount

Cathleen Brown and Timothy Gooding, NMNH

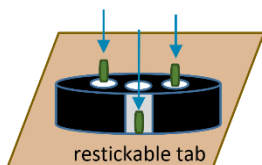
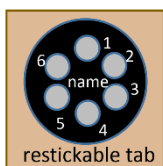
1. Look over vials of standards. Separate standard vials into two groups: **1-larger chips** and **2-tiny shards**.



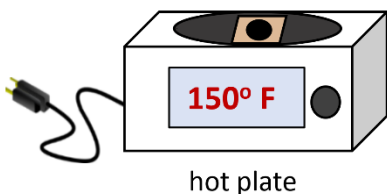
2. Press a < 3mm thick Bakelite (or phenolic-based compound) mount onto sticky side of a 1" x 1" piece of Scotch® Restickable tab (Catalog # R100).



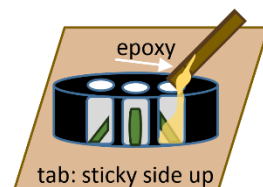
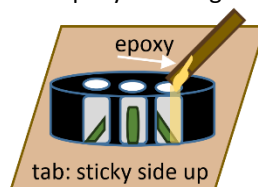
3. Using a pencil, name mount and number holes to make a key for the mount. Then fill holes with standards that have **larger chips** of material by pressing them gently against the Restickable tab.



4. Set hot plate to **150 °F**. Put mount plus sticky tab onto hot plate.



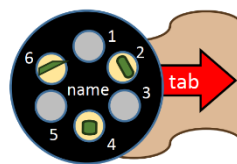
5. Drip epoxy (for example, EPO-TEK® 301) down the edge of the hole and down the wall of the hole. In this manner, the hole will gradually fill with epoxy avoiding air bubbles.



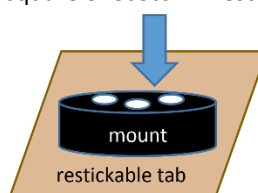
6. Let cure (harden) for 24 hours.



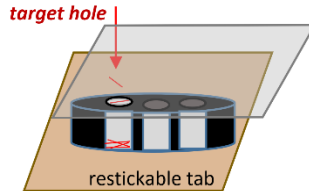
7. Remove tab and grind on **600-1200 grit** paper to expose grains.



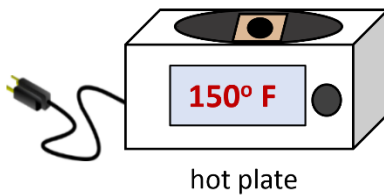
8. Press ground side of mount onto a 1" x 1" square of Scotch® Restickable tab.



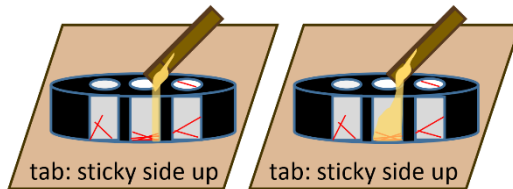
9. Fill each unfilled hole with standard **shards** pressing them gently against the Restickable tab. It is useful to cover all but **target hole** with a paper or metal cover to avoid dropping chips into other holes.



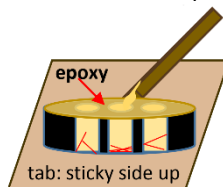
10. Place the mount plus sticky tab onto a hot plate set at **150 °F**.



11. Drip down the edge of the hole and down the wall of the hole. In this manner, the hole will gradually fill with epoxy avoiding air bubbles.



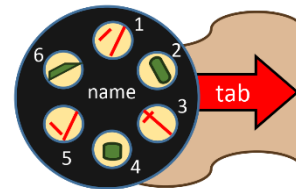
12. After all holes are filled with epoxy, continue to cover entire top of mount.



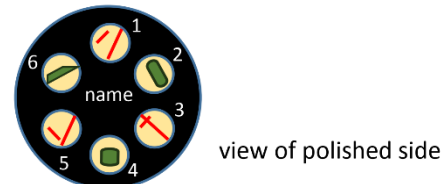
13. Let cure (harden) for 24 hours.



14. Slowly remove tab from mount.



15. Cautiously, grind mount on **600-1200 grit paper** to expose **shard** (tiny grain) **surfaces**. **Be careful** not to grind away all the **shards**.



16. Put final polish on mount.

