

QUICK TECHNIQUE

An Alternative to Cutting or Splitting Crowns That Actually Works!

The WAMkey Crown & Bridge Removal System



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In my practice, I have historically cut or split crowns with a bur in a high-speed handpiece, which can be a time-consuming procedure that can put wear on your handpiece and use several expensive burs. Let's face it—removing a crown or bridge is not likely your favorite procedure.

When a crown or bridge needs to be removed, we have to physically destroy the porcelain or PFM. Monolithic zirconia crowns create an entirely different problem. Sectioning the crown can result in damage to the underlying tooth structure, and depending on the forces used, it can affect the periodontal health of the tooth.

A product I recently evaluated, the WAMkey, has completely changed

how I approach the removal of crowns and bridges for the better. It is the easiest to use and most effective crown and bridge removal system on the market I have tried. I thought it sounded too good to be true, but I gave it a try after peer recommendations and reading some product reviews. The rest is history, and I find myself now recommending WAMkey to others.

The WAMkey Intro Kit contains 3 keys in oval-shaped heads (sizes small, medium, and large), 3 burs, and an instructional DVD offering valuable suggestions for proper use. The technique is relatively simple and in my experience comprises 4 steps, listed below, which will be explained through a clinical case. (In the case of multiple crowns or a bridge, these steps would have to be repeated for each crown being removed.)

Step 1: Create a small window in the crown (Figure 1). Create a window that is approximately one to 2 mm in diameter where the preparation/crown occlusal interface is assumed to be located. The opening



Figure 1. When making the initial "window," the appropriate bur should be used based on the crown material to avoid damaging the crown or wasting burs. The window can be made on the buccal or lingual aspect of the crown, wherever you have better access. Please note that this system will not work well on lower anterior teeth.



Figure 2. When channeling into the center, it is recommended that on a vital tooth, to avoid all risk of pulpitis, use a water syringe for irrigation purposes in addition to the contra-angle handpiece spray.

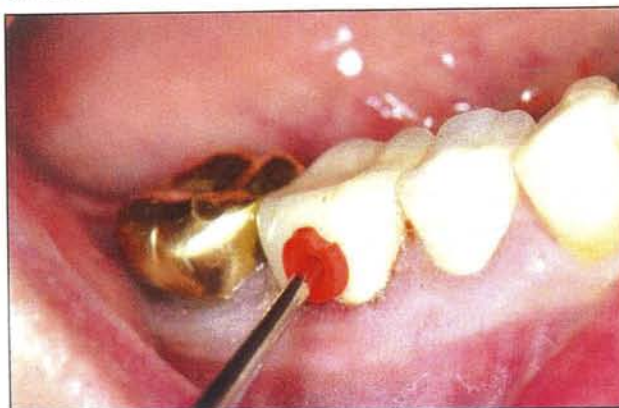


Figure 3. The instrument is not leveraged with your wrist or arm; you simply allow its head to "stand" upward and act as the lever. Allow the instrument to do the work.

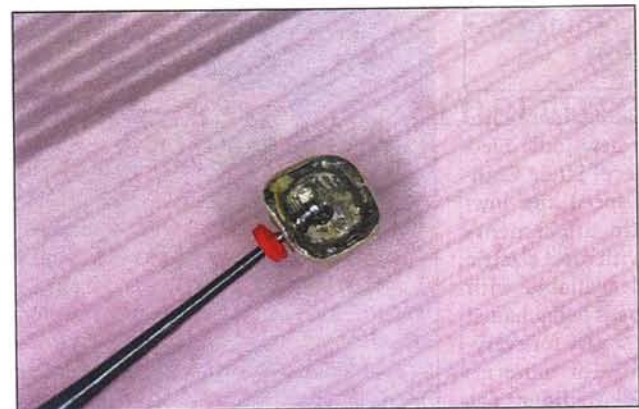


Figure 4. In general, the crown's most important parts are not altered with this technique. If the abutment's margin isn't modified, and the crown still fits, then a simple repair will allow the crown to fulfill its original functions.

should be made closer to the occlusal surface for metal crowns and generally about halfway between the occlusal surface and the margin for porcelain or PFM crowns.

Step 2: Locate the crown occlusal interface. In most cases, the interface is located in Step 1, but if not, the opening made in Step 1 would have to be progressively enlarged until the cement seal becomes visible. Visual assistance devices such as a surgical loupes or a microscope can be extremely helpful in this process. It is critical that you are working in the cement layer.

Step 3: Create a tunnel between the preparation's occlusal surface and the inner side of the crown (Figure 2). Using a cylindrical bur (approximately 1.2 mm in diameter is recommended), an oval-shaped tunnel between the preparation's occlusal surface and the inner side of the crown is made. The difference in hardness between the dentin and the crown's structure will help the dentist ascertain the bur's position with regard to the dentine.

Step 4: Insert WAMkey into the tunnel and rotate with fingers to loosen the crown (Figures 3 and 4). Simply insert the key all the way to the end of the tunnel drilled in Step 3 and rotate it with a quarter turn with your fingers. If the tunnel was properly drilled, this movement should occur in the long axis of the preparation (Figure 5). Once the crown or bridge is removed, it can be used as a temporary or placed permanently (Figure 6).

For more WAMkey information, call **Golden Dental Solutions** at (877) 987-2284 or visit golddentalsolutions.com.



Figure 5. Verify the depth of the tunnel using a rubber stop inserted onto the smallest WAMkey (size No. 1). It is essential to achieve maximal proximity to the center of the preparation to work as close as possible to the long axis of the preparation during the removal procedure.



Figure 6. In this case, the crown used was used a temporary, which I found to be an efficient result of the WAMkey technique that preserves the crown. If a bridge becomes loose on one abutment without posing any particular adjustment issues, reusing it can be a worthwhile alternative and compromise for the patient.