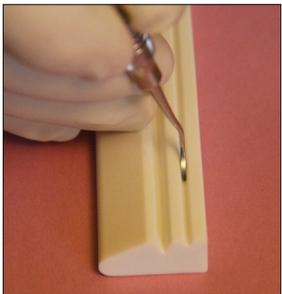


## Cutting Edge Technology<sup>®</sup> Honing Channel<sup>®</sup> White and Chocolate Clearance<sup>™</sup> Sharpening System

Figure 1



Seating the Curette in the Narrow Honing Channel<sup>®</sup> of the White Clearance<sup>™</sup> Stone

Figure 2



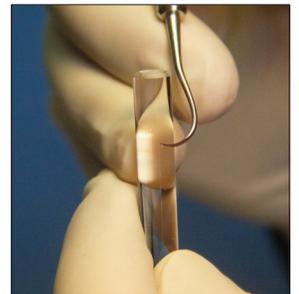
Drawing the instrument through the Narrow Honing Channel<sup>®</sup> White Clearance<sup>™</sup> Stone during the sharpening stroke

Figure 3



Using the conical side to easily reshape and smooth the facial surface of the instrument from heel to toe

Figure 4



Checking the curette for sharpness with the enclosed Test Stick

### GENERAL INTRODUCTION TO BOTH THE BIO-EDGE<sup>™</sup> AND CLEARANCE<sup>™</sup> SHARPENING SYSTEMS

The Honing Channel<sup>®</sup> Sharpening Systems consist of high-strength, custom designed, manufactured aluminum oxide stones for sharpening, shaping and finishing of dental curettes and sickle scalers, (**made Worldwide**), based upon patented technology invented by a **Board Certified Periodontist**. Improperly worn and damaged instruments can be reshaped and resharpened **with both** the Bio-Edge<sup>™</sup> and the Clearance<sup>™</sup> White and Chocolate Honing Channel<sup>®</sup> Sharpening Stones (as shown in Figure 5). Clinicians and their patients need sharp uniform curettes and scalers to be used during their treatment procedures to achieve optimal scaling and root planning effectiveness and controlled-surface<sup>™</sup> finishing of the tooth root surface.

This extremely sharp, highly refined, smooth Bio-Edge<sup>™</sup> created on a curette and scaler will be replicated on the root surface creating a very smooth root surface finish and minimize the repopulation of microorganisms on the tooth root surface. This very smooth created tooth root surface will help arrest active periodontal diseases and prevent new periodontal infections as well as dental root caries.

The Bio-Edge<sup>™</sup> Honing Channel<sup>®</sup> was designed so **only** the cutting edge will be in contact with the stone at any time during the sharpening stroke. In addition, there is less chance of personal injury as the cutting edge is sharpened in the channel below the surface of the stone. The channels of the White and Chocolate Honing Channel<sup>®</sup> Bio-Edge<sup>™</sup> Sharpening Stones are geometrically the same. The White and Chocolate Honing Channel<sup>®</sup> Bio-Edge<sup>™</sup> Sharpening Stones are designed to help recreate the original curvilinear geometric shape of the lateral surface of the cutting blade as seen with brand new manufactured instruments (Illustration E).

The more abrasive Chocolate Honing Channel<sup>®</sup> Sharpening Stones have an average particle size of 10 to 15 microns (finer than the Arkansas Sharpening Stone) and will quickly sharpen any curette or sickle scaler in one to three strokes, even worn and damaged instruments. The White Honing Channel<sup>®</sup> Sharpening Stones have an average abrasive particle size of 1 to 5 microns that minimizes instrument wear (conserving metal). The stone's fine grit smooths and polishes the instrument's working edges, eliminating all deficiencies and leaving no wire edges. Root surfaces will then be smoother and biologically cleaner – A pre-requisite for successful periodontal therapy.

For those professional offices that sharpen their instruments infrequently, and/or with other sharpening systems and/or have instruments with significant wear and damage, **we recommend using the Chocolate Honing Channel<sup>®</sup> Sharpening Stones first**. For those professional offices that sharpen their instruments frequently, preferably, for each patient **during** the treatment appointment, we recommend sharpening with the White Honing Channel<sup>®</sup> Sharpening Stones.

**It is highly recommended that you begin by watching the online instructional videos before using the Honing Channel<sup>®</sup> Sharpening System. This is essential in order to help master the art and science of instrument sharpening. Go to [www.youtube.com Cutting Edge Technology L.L.C.](http://www.youtube.com/CuttingEdgeTechnologyL.L.C) or [CETLLC.com](http://CETLLC.com).**

### PROPER USE of the CET<sup>™</sup> White & Chocolate Honing Channel<sup>®</sup> Clearance<sup>™</sup> Sharpening Stones

1. Major deficiencies in clearance can now be easily corrected using the **White and Chocolate Honing Channel<sup>®</sup> Clearance<sup>™</sup> Sharpening Stones**.
2. If the cutting edge does not bite into the plastic test stick at the normal angle of activation (approx. 80°, Figure 4), then the problem is now not at the cutting edge, but one of **inadequate clearance** on the lateral side of the cutting blade below the cutting edge as shown (Illustration A). **Clearance** is the space developed between the tooth and the side of the blade immediately behind the cutting edge when it is in function (Illustration C). **Proper clearance** is essential if the cutting edge is to make contact against the surface of the tooth with enough pressure, control and precision. Although the instrument's cutting edge is now sharp from using the channels of either the White or Chocolate Honing Channel<sup>®</sup> Bio-Edge<sup>™</sup> Stones, it will not bite into the test stick at the normal 'clinical' angle of activation of 80° (as shown in Illustration A) unless one further rotates or tips the cutting edge against the tooth to an angle of activation of 60-70° (Illustration B). This will enable the clinician to once again engage the cutting edge and overcome any interference from large metal projections developing on the lateral side of the cutting edge from normal instrument use with progressive wear (Illustration B). Therefore, with normal clinical use, this excessive faceting seen with progressive wear below the cutting edge on the lateral side of the blade hampers your ability to engage the cutting edge against the root of a tooth (Illustration D). Therefore, one only needs to now restore proper clearance.
3. Lubricate the channels with gauze soaked in water or any water based product to help keep the metal filings of the instrument from clogging the channel. **DO NOT USE ANY OIL**. Flat surfaces of the stones can be used wet or dry.
4. Hold the **White Honing Channel<sup>®</sup> Clearance<sup>™</sup> Sharpening Stone** firmly on a hard surface such as a counter top. There is less chance of personal injury as the cutting edge is sharpened in the channel below the surface of the stone. For those few instruments that do not fit the narrow channel, use the wider channel. The **wider channel** was designed to accommodate **ALL** wider scalers and curettes.

- Seat** the working end of the instrument at the far end of the channel with the toe pointing away from you. The side of the curette blade must rest parallel to the channel walls. **Keeping the face of the curette or scaler blade at even keel and without pitch or tipping, horizontal and level, will assure that the channel wall will create the proper clearance angle as shown in the diagrams as the "Y" axis. Figures 1 and 2 and Illustrations F, G, H).**
- Draw** the cutting edge of the instrument so that the entire length of the cutting edge is in contact with the channel wall in the direction of the instrument's heel maintaining **firm and steady contact pressure** with the adjacent channel wall on average 7-8 times. If needed, one can use the more abrasive **Chocolate Honing Channel® Clearance™ Sharpening Stone**, which was designed to accelerate the sharpening process and is especially effective in quickly sharpening improperly manufactured or damaged instruments in 1-3 strokes.
- REMINDER:** With either the White or Chocolate Honing Channel® Clearance™ Sharpening Stones **no tipping** of the blade is needed in either the wide or narrow channels, unlike with the Bio-Edge™ Sharpening Stones as described earlier.
- A unique advantage** of the White and Chocolate Clearance™ Stones is that **both** cutting edges on the blades of universal curettes and scalers can now be sharpened at the same time pulling through the channels (as shown in Illustrations H, I).
- The **conical side of the stone** is designed to reshape and smooth the facial surface of the blade from heel to toe (Figure 3). The face of all curettes should be smoothed, initially, when they come from the manufacturer, and occasionally, when there is a need, during the life of the instrument to correct any flaws incurred in usage. Place the face of the blade flush on the conical edge, using firm downward pressure, draw the instrument back and forth approximately 2 to 4 millimeters several times. Be sure not to rock the instrument as you move it back and forth to avoid bevels that could form on the face of the blade.
- CLEANING** – Because of the impervious nature of the stones, the fine metal filings produced by the sharpening process stay on the surface of the stones and do not interfere with the sharpening or honing process. These can easily be removed by scrubbing with gauze or cloth soaked in water, cold sterilizing solution, or any water soluble household cleaner. A scouring powder and a nylon dish pad, nylon brush, or wash cloth can also be used. **To clean the channels** – use firm pressure to sandwich a thin piece of wet cloth or gauze between the channel needing the cleaning and a dental curette or scaler. Draw the curette with the wet cloth or gauze through the stone channel. Repeat as needed during the sharpening process. The sharpening stones are fully autoclavable. The plastic test sticks are cold sterilizable.

Illustration A

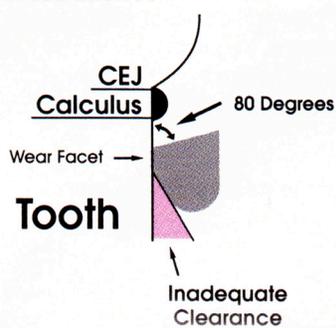


Illustration B

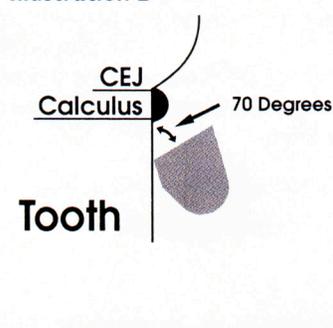


Illustration C

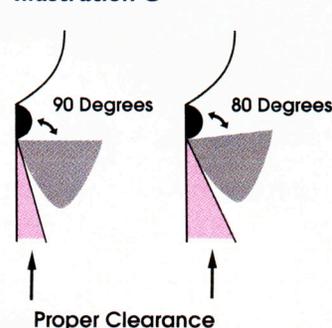


Illustration D

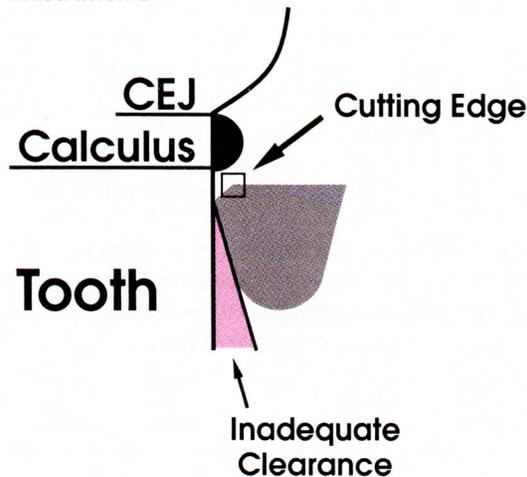


Illustration E

Cross section of Honing Channel® Bio-Edge™ Sharpening Stone

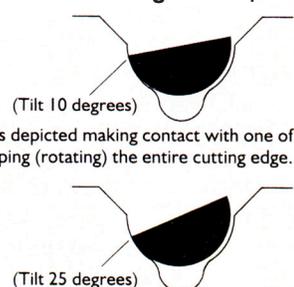


Figure F

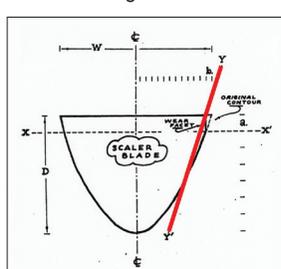


Figure I

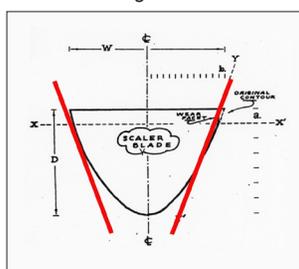


Figure G

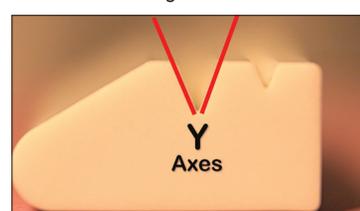


Figure H

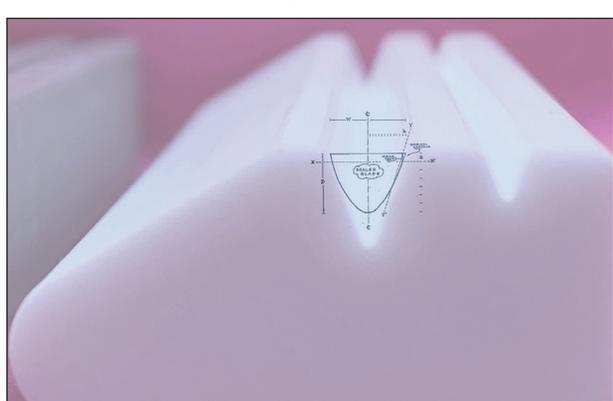


Figure 5



Family of CET™ Sharpening Stones and Test Sticks. All made in the USA.

**SET...SLIDE...SIMPLE...™**

**SIMPLE SOLUTIONS FOR COMPLEX PROBLEMS™**

If you experience any problems or difficulties or have a question regarding the use of our CET™ Products, please contact us toll free at 1-800-478-5616 or E-mail : info@cetllc.com.

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