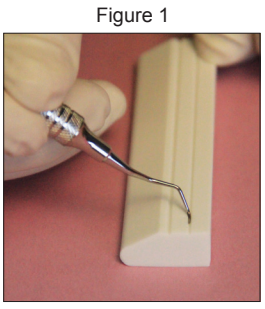
Cutting Edge Technology LLC

205 Washington Avenue, Endicott, New York 13760
607-757-0664 / 1-800-478-5616 / Fax 607-757-0256
www.cetllc.com / E-mail:info@cetllc.com

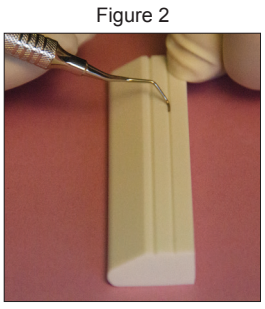
Cutting Edge Technology® Honing Channel® White and Chocolate Bio-Edge™ Sharpening System

Figure 1



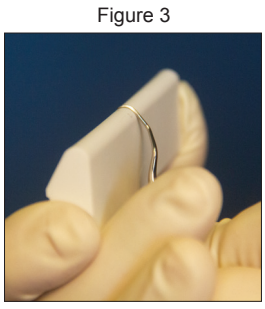
Seating the instrument with the cutting edge in the narrow Honing Channel® of the Bio-Edge™ Sharpening Stone

Figure 2



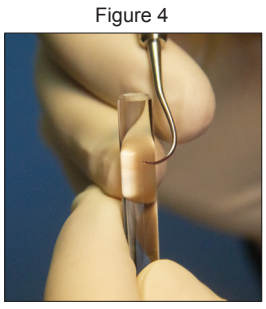
Drawing the instrument through the Honing Channel® during the sharpening stroke

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 Acrylic Test Stick

INTRODUCTION

The Honing Channel® Sharpening System consists 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™ and the Clearance™ White and Chocolate Honing Channel® 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™ finishing of the tooth root surface.

This extremely sharp, highly refined, smooth Bio-Edge™ 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 Honing Channel® 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® Bio-Edge™ Sharpening Stones are geometrically the same. The White and Chocolate Honing Channel® Bio-Edge™ 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® 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® 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® 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® Sharpening Stones.

It is highly recommended that you begin by watching the online instructional videos before using the Honing Channel® 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. or CETLLC.com.

PROPER USE of the CET™ White & Chocolate Honing Channel® Bio-Edge™ Sharpening Stones

1. Begin by using the **Chocolate Honing Channel® Bio-Edge™ Sharpening Stone first** to accelerate the sharpening process as it is especially effective in reshaping and sharpening improperly worn or damaged instruments.
2. 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.
3. Hold and place the stone on a flat surface such as a counter top. For those instruments that do not fit easily in the narrow channel, use the wider channel (Figure 6). Either of the side walls found in each of the two channels can be used for sharpening. **Sickle Scalers** and wider cutting blades can be sharpened using the wider channels of either the White or Chocolate Bio-Edge™ Sharpening Stones.
4. **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 cutting blade of the curette or scaler to be sharpened must rest parallel and engage either wall of each channel (Illustration E, Figures 1, 6).
5. **Rotate** the instrument so that the entire length of the cutting edge is in **firm, steady** contact while **hugging** the channel wall – **tipping** the entire cutting edge of the blade of the curette or scaler against the channel wall at least to the angle of activation or greater (Illustration E). This **rotating or tipping** of the entire cutting edge against the channel wall would be similar to when one activates the cutting edge against the root of a tooth (approx. 80°, Illustration C). In addition, this tipping of the instrument will ensure that the cutting edge is inside and against the abrasive portion of the channel wall (Illustration E).
6. With firm steady **pressure, draw** the instrument and its entire cutting edge in the direction of the instruments heal maintaining firm, steady contact while hugging the channel wall, (as demonstrated in Figures 1, 2, 6) with either the White or Chocolate Bio-Edge™ Stones. The cutting edge of the blade must be inside the channel and be in contact with the channel wall for proper shaping and sharpening. With 'universal' curettes and scalers each cutting edge must be sharpened separately. The channels were designed so that only the immediate surface area of the cutting edge of the blade can make contact with the channel wall at any time and no excess metal is taken from the lower portion of the lateral surface of the blade or the back of the blade of your instrument.
7. **Draw** the instrument through one of the channels of the **Chocolate Honing Channel® Bio-Edge™** stone 1-3 strokes maintaining firm steady contact while hugging the channel wall.

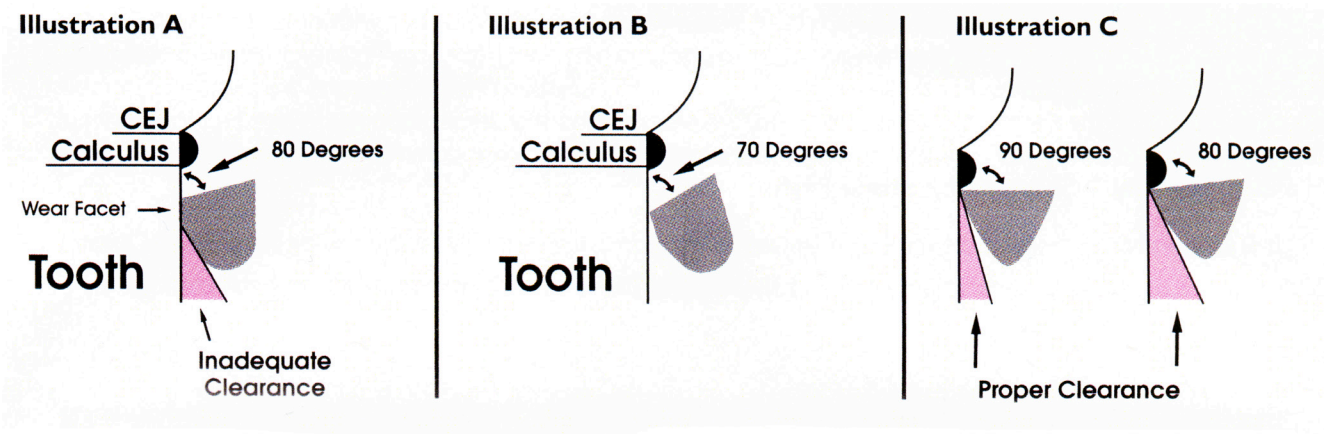
Continued on other side

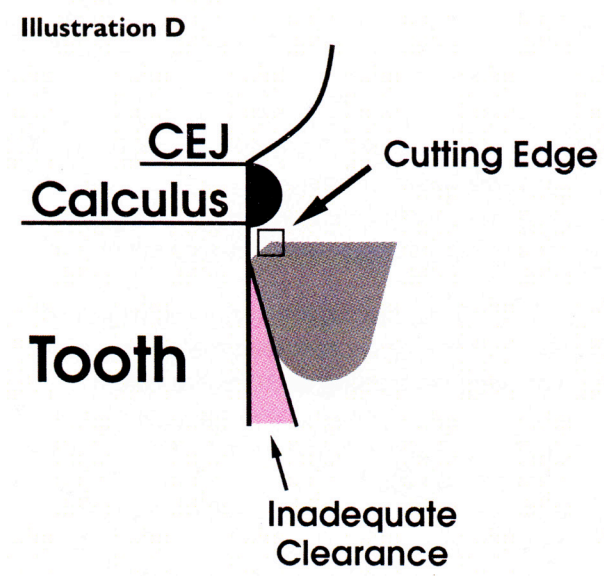
If you experience any problems or difficulties or have a question regarding the use of our CET™ Products, please contact us toll free at 1-800-478-5616 or E-mail : info@cetllc.com.

8. Check the instrument for sharpness using the enclosed plastic test sticks. Hold the test stick **vertically** and then place the instruments cutting edge against the test stick at the angle of activation (approx. 80°) similar to when one activates the cutting edge against the root of a tooth for scaling or root planing (Illustration C & Figure 4). When properly reshaped and resharpened, the cutting edge will bite into the plastic test stick with minimal pressure (Figure 4).
9. Once you have achieved a perfect cutting edge with adequate clearance, you can now finish and further refine the cutting edge using the **White Honing Channel® Bio-Edge™ Sharpening Stone. Repeat steps 1 through 8 as necessary**.
10. 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.
11. If the cutting edge still does not bite into the plastic of the test stick at the normal angle of activation (approx. 80°, Figure 4), as described in line 8 above in the directions, 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® Bio-Edge™ Stones as instructed above, 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. **Minor deficiencies in clearance** are corrected with the Honing Channels® of either the White or Chocolate Bio-Edge™ Sharpening Stones.

MAJOR DEFICIENCIES IN CLEARANCE can now easily be corrected if needed with the NEW CUTTING EDGE TECHNOLOGY® HONING CHANNEL® WHITE AND CHOCOLATE CLEARANCE™ SHARPENING STONES.
Go to www.youtube.com Cutting Edge Technology L.L.C. or CETLLC.com.

12. **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.





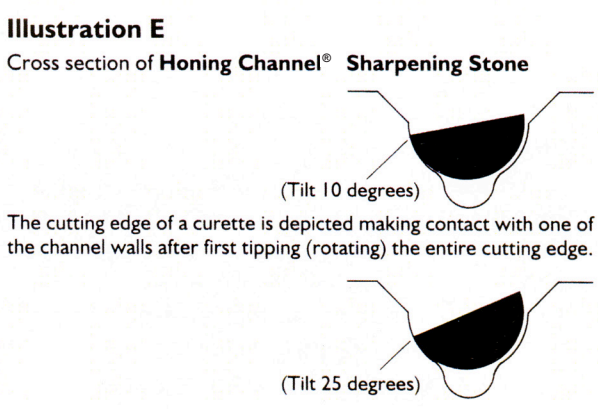
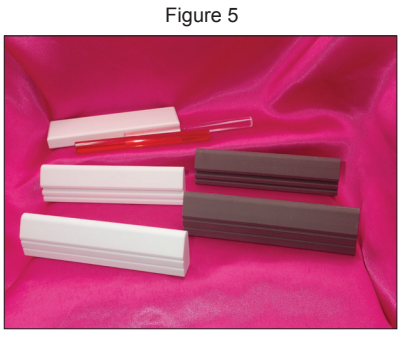
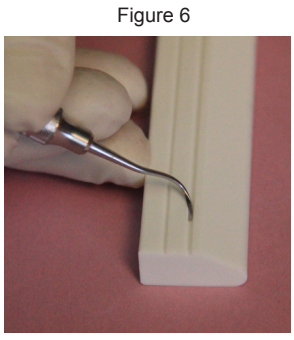


Figure 5



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

Figure 6



Setting the instrument with a wider cutting edge in the wider Honing Channel® of the Bio-Edge™ Stone.

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.