

## Why The Silencer<sup>®</sup>

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In the early 1990's I developed this product to resolve my own battle with obstructive sleep apnea. Since that time I along with dentists across North America and the world have used this product to assist their patients.

In July of 2012 we released a new version of the Halstrom Hinge™. This new version incorporates all of the key existing features but now allows for one millimeter advancements rather than the two millimeter increment historically available in our precision titanium attachment.

Typically dentists who use The Silencer<sup>®</sup> list the combination of vertical adjustability, precision, durability, and comfort achieved through lateral movement, as the biggest reasons to use the product. One of our dentists perhaps put it best when he stated that "I use The Silencer<sup>®</sup> for my patients because I simply feel that it provides me with the best possible chance of providing effective long term therapy".



An issue that comes up with respect to the design of the Halstrom Hinge™, is patient adjustability. I believe that the optimal amount of advancement is the least amount possible to achieve effective therapy. The Silencer<sup>®</sup> treatment protocol does not recommend continued forward adjustment until the patient reports, or a sleep study confirms success. Our typical adjustment steps are to start treatment at a position equal to 50% of the range of motion from centric relation. If we do not have treatment success, we advance forward by 1mm or 2mm depending upon patient comfort. If the patient still reports that their symptoms are neither resolved or resolving, then we may open up the vertical dimension by 1mm. The vast majority of our patients reach effective treatment within those steps. Sometimes it will take patients more time to anatomically react to a certain level of advancement, premature and aggressive advancement can occur when the patient has the ability to make changes at will. Should you prefer to have the patient make adjustments, as the clinician you have the option of providing the patient with the adjustment wrench. My personal clinical experience indicates that with the multi-dimensional adjustments of The Silencer<sup>®</sup>, I often can achieve treatment success with less advancement than would otherwise have been possible.

It is important to know where the patient is positioned, both at the beginning and throughout the time of treatment. The Halstrom Hinge™ allows you to know precisely where the mandible is positioned at all times. When simply looking at the appliance itself, you are able to determine

exactly how much advancement has been made. This is particularly helpful when the clinician has allowed the patient to make adjustments to the appliance.

In addition to being effective, a device must be safe. An important consideration is illuminated by the typical inclusion of a **"risk of aspiration"** within standard informed consent forms. All oral appliances will fail over time, either at the point of the connecting mechanism or the body of the device. By design there are no parts of the titanium Halstrom Hinge™ connecting mechanism that can fracture and become loose in the mouth.

With our **GAT™ Gothic Arch Tracing** device you start the process with a detailed examination of both the protrusive range and lateral excursions. This information not only can impact device design and therapy protocol, but does as well serves as a important record. Our GAT™ Gothic Arch Tracing / Bite Registration is something that can be advantageous no matter which appliance you are using.



The issue of bite change is something that both patients and dentists have to acknowledge. It is not something to be frightened of, but we must be aware and understand the issue. At this point in time within the industry we can neither predict nor prevent bite change from occurring. There are various techniques that seem to mitigate or repair some of the change however. When a permanent bite change occurs, or an issue with the TMJ arises, there are some obvious questions that come up: where is the patient positioned now - where has the patient been positioned throughout the treatment, was there a pre-existing TMJ issue, what was the device adjustment protocol, the bite has changed - but from where to where? It is preferable to have good answers to these questions. When returned from the dental laboratory, you may elect to keep the GAT device as a permanent record of the patients bite prior to commencement of therapy.

Durability, is something that has both treatment and financial implications. From a treatment standpoint certainly many of our patients rely on the device to keep the sleep partner happy, but as well their health can sometimes be measurably at risk without the device. From a financial standpoint, most patients who are covered by Medicare or health insurance can only be reimbursed once every three to five years. The Halstrom Hinge™ comes with a five year warranty.

I do hope that I have touched on several issues that help you understand why our many dedicated dentists, and their patients, have chosen The Silencer since its introduction almost twenty years ago. In my opinion The Silencer® delivers a level of value and performance unmatched by other devices relying on springs, gears, elastics, and hooks. I trust this information will be useful. Please visit our website [www.the-silencer.com](http://www.the-silencer.com), and contact us at your convenience with any questions.

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