

Airway Metrics Getting Started

GETTING STARTED-SNORE SCREENER (SS):

A first-hand experience is the best. Be your first patient. Make a good oral snore sound for your own baseline and assign the loudest snore a #5. Snore sound level decreases from #5, #4, #3, #2, #1, #0 (none) in 20% increments.

To start the screening, insert the 4mm end of the SS between your centrals so the upper centrals are against the vertical stop as shown below (Fig.1) to evaluate the A-P influence at a 4mm vertical. Position your lower centrals at a starting position of your choice, beginning with a relaxed A-P centric, or use the subtle groove on the bottom edge for an End to End (E/E) position. Snore and assign it a number. Slide your lower centrals along the bottom from your selected starting point at intervals you select as your protocol position and assign the sound a number. To assess the vertical influence of the snoring, repeat the A-P increments at the 8 and 12mm levels. Through your mouth, breath deep and slow at each position to compare its impact and comfort as a guide for the **Anterior/Posterior Vertical (APV) Positions**. It is advised that you, or a trained staff member, position and hold the SS for the patient during this process for best results. The elimination of the snore sound has an instant, positive impact on a patient. You may also, create your own metric intervals as you use the system. The SS identifies an optimum general position that usually only requires 3-4 of the Mandibular Position Simulator (MPS) units to select the ultimate treatment target position.

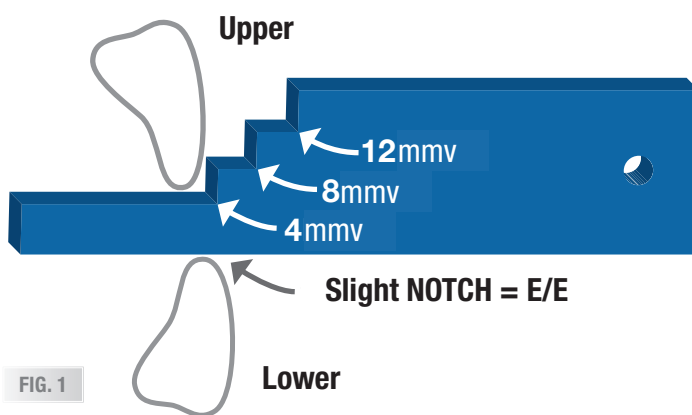


FIG. 1

MANDIBULAR POSITIONING SIMULATOR (MPS):

NOTE: the upper and lower notches enable 50+ mandibular positions, by placing the incisal edges of the upper and lower central incisors into the appropriate notches. Inserting the 2-3 MPS with #2 notch (Figs 2, 3) towards the patient creates a mandibular position 2mm anterior to the maxillary incisal edges. Reverse the MPS end for a 3mm forward position. For easy selection the MPS is arranged from right to left in 2mm vertical increments from 4-12mm as labeled on the base. The A-P distances are in vertical rows. The left row A-P is 2 or 3mm from 4-12mm vertical. The middle row A-P is E/E, 4mm, 6mm from 4-12mm V and the right row is E/E, 5mm, 7mm from 4-12mm V. For patients with greater OJ dimensions, turn the MPS upside down and note that it advances

the mandible between habitual occlusion to EE within the OJ space. Your patient quickly becomes a participant with this interactive process as they place the MPS between their teeth as you instructed. Working forward from a smaller vertical and less protruded position builds their confidence and awareness of how the mandibles position influences their upper airway and comfort.

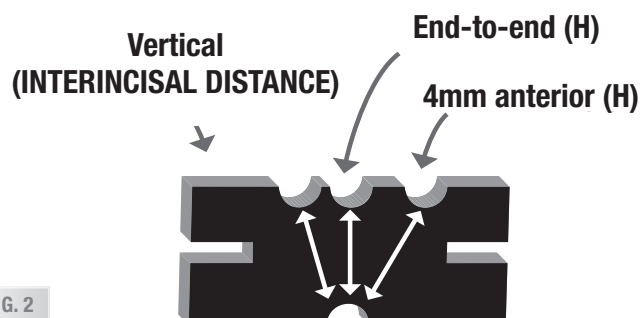


FIG. 2

ANATOMICAL POSITIONING PROCEDURE:

The MPS rapid and repeatable placement makes it simpler to incorporate dental sleep medicine into a dental practice. The patient can report their comfort and perceived airway flow at any MPS position.

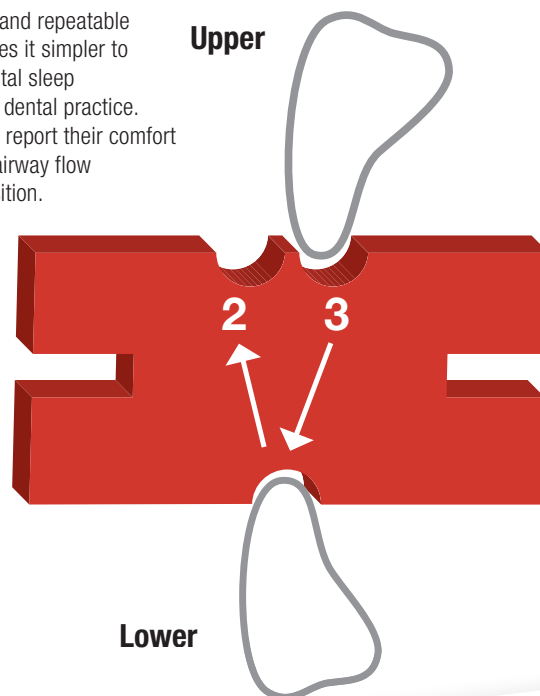


FIG. 3

Check out all videos at
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DEVICE SELECTION:

Determine device selection. This system was created as a simple, efficient method for identifying a pre-treatment target airway position, initial positioning and a final titration for any oral sleep device to the extent that the device design allows.

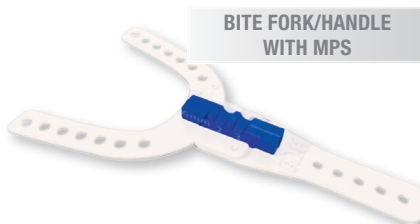
SPECIAL SITUATIONS:

Reemphasizing prior comments about significant over-jet (OJ) = 4mm by turning the MPS edges upside down with the multiple notches on the bottom, enables mandibular positioning, within an A-P dimension that is less than E/E.

SNORE SCREENER/ MANDIBULAR POSITIONING
SIMULATOR SYSTEM

BITE REGISTRATION:

a) Select MPS **b)** insert fork and handle in appropriate end slots **c)** visually identify patient mid line when occluded. If not quickly referenced, place a fine vertical felt marker line where it is easily referenced anywhere between upper and lower laterals) **d)** insert bite fork assembly and have patient bite into selected notches, check mid line, fork alignment with dental arches, and the space between fork and upper and lower teeth for inserting bite registration. If alignment and spaces are adequate, inject the bite registration". MPS spaces usually allow only a single injection. When inter-occlusal space is wider, it may require a two stage injection to manage the mid line reference; remove, inspect, trim excess material, mark midline on anterior of set paste for midline confirmation, reinsert and re-check **e)** if satisfied with the registration, complete any final trimming, remove the MPS and handle from the bite fork registration for the laboratory. NOTE: 1. For posterior edentulous situations, extreme occlusal curves, and significant overbites that create excessive inter-occlusal space the MPS/fork/handle registration assembly will enable you to improvise as you would with any similar situation. 2. Felt mark on teeth or gums is quickly removed with small amount of alcohol on a cotton roll.



BITE FORK/HANDLE
WITH MPS

ACCESSORIES:

Nine Vertical Titration Keys (VTKs) simplify and expedite final vertical titration in 1mm increments for any device that opens similar to a Herbst, SomnoMed or Suad. Position your selected Key between the upper and

lower units in the anterior using the same protocol as MPS. Titrate the final A-P position, as allowed by the device design, and modify the device vertically (if indicated.)



VERTICAL TITRATION KEY LOCATED IN DEVICE

HELPFUL FOR STANDARD ANATOMICAL REFERENCES AND STARTING POINTS

Overjet (OJ): The A-P (Horizontal) distance between the labial faces of upper and lower incisors with posterior teeth closed naturally. Overbite (OB): The vertical overlap of upper over the lower incisors with posterior teeth closed naturally.

Calculating Anatomical from Simulated or Treatment Positions

Inter-incisal distance (IID):
The V distance between incisal edges when the mouth is open wider than an end-to-end tooth contact. End-to-End (E/E) is when U/L incisor edges contact. So if OB is 6mm and there

is 5mm between the incisal edges of the incisors then IID(5) + OB(6) = 11mm V. Calculating (H) when using a 4mm (V) simulator with upper incisors in #2 notch facing patient and lower incisors in solo lower notch: 4mmV + 7mm OB = 11mm V. 3mm OJ + 2mm. notch = 5mm A-P (H). Anatomical = 11mm (V) and 5mm Anterior (H).

SHOULD BE COLD STERILIZED,
CROSSTEX SANITEX PLUS™, RINSE &
SPRAY WITH MOUTHWASH THEN DRY.

HELPFUL FORMULAS:

The Anatomical Position is the base-line reference. For the mandible, it starts with posterior teeth in their natural occluded position. The upper and lower incisors provide a reference. Recording OJ/OB (H/V) prior to and at the start of treatment requires simple calculations to maintain anatomical references for any device throughout treatment.

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