TAKING A PROPER CONSTRUCTION BITE

Have you ever had a patient sit down for their first fitting of a new splint or repositioning appliance, only to discover that the device doesn’t fit correctly? This costly mistake wastes the patient’s time and yours.

When the lab receives a set of models without a Construction Bite, the models are carefully hand-articulated in maximum intercuspation on a hinge-axis articulator, or with the centric wax wafer bite if one is provided.

When the bite is then opened on the articulator quite often the mandibular model “drops-away from” the maxillary model on a different trajectory than it does in reality when the patient opens naturally. This difference results in a finished occlusal bite plane that does not uniformly contact the opposing dentition when the appliance is placed in the mouth. In fact, any pre matures that exist are generally found at the posterior-most teeth on the arch, leaving the teeth further anterior, and usually out of occlusal contact.

Avoiding the mistakes that cause this is relatively simple if you follow eight simple steps for taking an accurate Construction Bite. These steps are to be performed after you have taken and poured up accurate working models, free of large bubbles on the occlusal surfaces. For information about accurate alginate impressions please see our Practice Building Bulletin on the subject.

Section - I. Functional and Repositioning Bites

1. Select either the 2mm (blue) or the 4mm (white) Per-Fect Bite depending on the prescribed appliance. Utilizing the 3 slots on the bite fork, place the patient’s upper anterior centrals in the proper slot: Slot - # 1 retruded, # 2 edge-edge, #3 protruded

2. While holding the Per-Fect Bite in place with the upper centrals in the desired notch gently guide the patient’s mandible into the large notch, making sure that the midlines are lined up. Have the patient practice closing into the desired position 4 to 5 times; this will help the patient locate this position at a later stage when you add the bite registration material.

**3. Soften a sheet of base plate wax in a hot water bath at 160° Wrap each arm of the Per-Fect Bite with the softened wax. Then, place the Per-Fect Bite back into the patient’s mouth while the wax is still soft (reflatten the wax if necessary). When the patient is fully closed back to the desired position, press the protruded wax from between the posterior teeth onto the buccal segment. After this is done, cool the wax with an air syringe. Note: The wax may be substituted with blue mousse or poly vinyl if desired.

**4. Remove the bite from the patient’s mouth and chill it in cool water. Then, recheck the completed Per-Fect Bite in the patient’s mouth and on an accurate working model (see the Practice Bulletin – Accurate Alginate Impressions) before sending them to the laboratory for appliance fabrication.

Section- II. Centric and Vertical Relation Construction Bites:

In order to obtain a proper centric or vertical relation bite, you must first modify the Per-Fect Bite by re-
moving the 3 notches. This is easily done with a laboratory acrylic carbide bur.

NOTCH UP so that the upper centrals engage the notch. Have the patient bite into centric occlusion or centric relation so the lower anteriors index into the acrylic strip. Once this is done, dip the Per-Fect Bite into a hot water bath in order to fully cure the acrylic.

After this, follow steps 3 and 4 under Section I, Functional and Repositioning Bites. **Note: As with all construction bites, be sure that the patient is biting into the Per-Fect Bite so that the midline is lined up. Note: The vertical and AP position as provided by the Per-Fect Bite can always be modified by grinding a custom notch on the Per-Fect Bite.

SUPPLY LIST
- Per-Fect Bites 2mm, pack 12*
- Per-Fect Bites 4mm, pack 12*
- Hot Water Bath*
- Base Plate Wax*
- Lab Knife*
- Carbide Barrel Bur*
- Acrylic*
- Dapen Dish*
- Disposable Spatula*

*Available as a kit from Success Essentials; for ordering and price information call 800-423-3270

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