

To maintain the correct maxillary-mandibular relationship during restorative treatment, it's important to exercise care in transferring the bite from the orthotic. Use of an LVI orthotic (fixed or removable) should be utilized for at least three months or longer for final stabilization of the joint and condyle. Once the patient's occlusion is stable, transfer the final bite to the laboratory, so a bite registration sent can be fabricated for the creation of restorations and diagnostic wax-up.

The following steps outline how to create a transfer bite from both a removable and a fixed orthotic.

ITEM CHECKLIST



Kerr Occlusal
Indicator Green Wax



TENS Unit



Unmounted lower model
Mounted upper model



Bite registration



Articulator



Boley gauge



Removable Orthotic

REMOVABLE ORTHOTIC TRANSFER BITE

1. Take anterior and posterior vertical measurements and record on the prescription prior to removing orthotic from the patient's mouth.
2. TENS patient.
3. Place green Occlusal Indicator Wax (Kerr) on top of the right and left sides of the orthotic shiny side down. Have the patient bite into their final bite position or TENTS them into the bite until the wax is perforated.
4. Remove the orthotic with the green wax and place on the lower un-mounted model of patient.
5. Hand mount the lower model with orthotic and wax to an upper mounted model.
6. Use either hot glue, sticky wax, or rubber bands to keep models together.
7. Mount lower model to the mounting plate with stone and let set.
8. Remove orthotic and return to patient.
9. Take bite registration material and place a bead on entire lower arch model and close articulator and let set.
10. Once set, you may take the bite registration and place in the patient's mouth. Verify vertical measurements of the anterior and posterior left and right.
11. Send mounted models and bite registration to Protech for bonded orthotic fabrication or wax-up.

FIXED / BONDED ORTHOTIC TRANSFER BITE

1. Take a CO bite of the patient's new bite (polyvinyl is preferred).
2. Measure the anterior and posterior vertical measurements and record numbers on the prescription.
3. Take an impression of the lower bonded orthotic and place aside for later use for construction of a new orthotic.
4. TENS patient.
5. Remove the anterior segment to create an anterior jig. If the LVI Orthotic only covers the posterior teeth, then this is not necessary. Place some rigid quick setting PVS bite material (e.g Affinity) in the area of the removed anterior segment (front four incisors) and have the patient close into the orthotic bite. Let the material set up.
6. Start to remove the fixed / bonded orthotic in sections leaving your most posterior stop.
7. Place the PVS bite registration material only to the area where the orthotic was removed. Have the patient TENS or lightly elevate into that bite. Do not have them bite down as the disc may decompress if the posterior stop is lost. Measure to ensure the anterior / posterior vertical measurements have remained the same.
8. Repeat this process (step 6) for the other side of the arch.
9. If you think it's necessary, you can remove the 2 remaining posterior stops on either side of the arch and add to the bite registration. Most of the time it is not necessary to reline once the second molar stops have been removed.
10. Place this bite between the upper and lower pre-op models and check if the vertical measurements have remained the same. Send these models with the new bite registration, vertical measurements, and any other important information to the laboratory for the full mouth wax-up.
11. Take the impression that was taken in (step 3) and load it with a temporary acrylic and fabricate a new bonded orthotic in the patient's mouth. After the flash is cleaned up, re-measure the anterior and posterior vertical measurements to ensure your patient's bite has not changed. (NOTE: Ideally, the impression can be poured with a quick set stone at the beginning of the bite transfer. A siltec stent then can be created to fabricate the orthotic. Often if the impression is used to create the orthotic, it does not peel off as with the siltec stent.)