Taking Records for Mandibular Advancement Appliances such as the Panthera D-SAD Using a George Gauge

Type of Impression

We will need maxillary and mandibular full arch impression. You can use whatever impression material you would prefer to get the best results. Panthera recommends that you use a PVS type impression material; however, you can use an alginate substitute or high quality alginate material, provided it is poured in a reasonable amount of time.

Bite Registration

The George Gauge allows the clinician to capture a protrusive bite registration and vertical opening of the mandible while eliminating guesswork. It's an easy to use tool which provides an extremely accurate way of recording a protrusive bite registration for all Mandibular Advancement Appliances.

Panthera recommends you take the bite registration in full (maximum) protrusion.

First place the George Gauge (without the bite fork) in the patient’s mouth. Center the lower incisor notch over the lower anterior teeth. Cinch up the lower incisor clamp to firmly grip these teeth, and tighten the lower thumb screw to secure.

Remove the instrument from the mouth. Insert the bite fork into the body of the gauge, and slide it until the indicator end is at the 0 point on the millimeter scale (this will give an end-to-end bite position). It is recommended that you use the shorter 2 mm bite fork. You can modify the groove, with a carbide bur, where the maxillary central incisors would go, if the teeth are not straight and do not fit into the groove.

Return the instrument to the mouth with the lower incisor notch centered over the lower midline. Instruct the patient to close into the upper incisor notch with the midline indicator between the central incisors.

Have the patient slide into maximum protrusion. You may wish to have the patient practice this a few times prior to locking the George Gauge into position, as the first few times the patient may not know exactly what you are looking for and will not advance their mandible fully.
When you feel the patient understands the position their mandible should be in (in maximum protrusion), with the George Gauge in place, have them slide their mandible into maximum protrusion and lock the bite fork in position by tightening the thumb screw. Now remove the George Gauge from the mouth, liberally inject your bite registration material on the bite fork, and then reinsert the George Gauge ensuring the mandibular and maxillary central incisors fit back into the grooves, as they were prior to the bite registration material application.

With the George Gauge inserted, you may wish to inject additional bite registration material along the buccal surfaces of the posterior teeth to ensure a solid registration is captured.

By taking the bite registration in maximum protrusion, any lateral deviations with be captured. The software used to design the Panthera D-SAD will automatically place the mandible back to a 60% protrusion prior to fabricating the device.

Some dentists may choose alternate types of bite registrations, such as a Phonetic Bite or a 60% Maximum Protrusive Bite. The appliances can be fabricated to whatever bite you prefer. Please specify on the lab prescription what type of bite registration you have provided. It is not necessary to record the range of movement from retrusion to protrusion.

If the patient’s maxillary and mandibular midlines do not correspond, it is not necessary to have them shift their mandible to fit their maxillary incisors into the bite fork groove. It is better to record their bite in a non-manipulated protrusive movement. It doesn’t matter if the patient’s mandible deviates to the left or right in full protrusive. It is recommended that the bite registration be taken in maximum protrusion to record these deviations if they do exist.

If you are looking for a high quality bite registration material, that does not slump or run when using a George Gauge, we recommend Acu-Flow Bite Registration Material. We currently are a distributor of Acu-Flow Bite Registration Material. You can find more information on our website.

Also, it is advisable when prescribing mandibular advancement devices, such as the Panthera D-SAD, that a Bite Repositioning Appliance be made. You can find more information on these on our website.

The George Gauge can be purchased through our laboratory or you can "try before you buy" as we have a George Gauge that we will gladly loan to you.

Always looking for ways to improve the quality of our work is just another way we are, “Working Harder and Smarter for your Practice!”