

# Quick Start Guide

## Quick Start Guide

### Impressions

Video (10 mins): <https://www.youtube.com/watch?v=5llamU9Zqa0>

If using alginate choose a high quality material, e.g. Xantalgin. Use well supported impression trays, metal Rimlock are ideal, or if necessary, add wax support to stock trays. Alternatively use silicone putty wash ideally in a metal tray, or a disposable impression tray with a fixative.

The following anatomical areas are particularly important:

- Occlusal surfaces of all teeth, no bubbles, no blemishes, no defects
- Full recording of the terminal molars – place impression material here before seating the impression. Ask the patient to close the jaw slightly when seating the upper impression so that the corinoid process is cleared.
- The lower labial sulcus to accommodate the Somnowell labial connecting bar.

**Ensure that the impression is fully set (alginate usually takes two minutes) before removal from the mouth.** The impression must be fully supported.

Alginate impressions should ideally be cast within 24 hours using a very hard stone e.g. Crystacal R and vacuum mixed.

### Postured Bite

Video (10 mins): <https://www.youtube.com/watch?v=DouuV94K9Kk>

### Clinical Stages

1. Set up:

Modelling wax or rapid set silicone, wax knife and wax heater or warm water.

2. Clinical assessment:

Seat the patient and recline the backrest sufficient to enable you to stand and view the face from in front, above and behind.

a. From the front of the patient: establish the patient's mid facial plane and this relation to upper dental midline (in most cases these are coincident).

b. Record the intercuspal jaw relations i.e. incisor relationship, overjet and overbite. Record the centreline relations in the intercuspal position.

c. Recording the non laterally displaced position:

Move to the back of the patient:

Lift the upper lip and locate the patient's upper dental midline in relation to the mid-facial plane. If the teeth have tilted across the midline or migrated then record this and make an allowance for this.

Ask the patient to open the jaws 4—5 mm so that the teeth are discluded. Visually locate the lower dental centre line and its relative position to the upper dental midline assuming this aligns with the mid-facial plane. If there is a missing incisor, the teeth are tilted or have migrated laterally then record this.

In most instances with the teeth apart, the centre lines will be coincident with each other and with the facial plane.

This non-occluded jaw relation is in most instances the non-displaced jaw relation. As the teeth come into occlusal contact, the proprio-receptor mechanisms come into play and the jaw displaces to avoid premature contacts.

With the patient at rest with jaws slightly apart, ask the patient for their impression with special reference to the TM Joints and associated muscles.

### 3. Test Run:

Having established the non-laterally displaced comfortable jaw position, guide the jaw forward to its comfortable limit whilst maintaining the non-displaced transverse jaw relation. Measure the reverse overjet with a ruler. This is the patient's maximum postured jaw position at this point in time.

Ask the patient to hold the forward posture and try slight vertical opening and closing and see which the patient feels is more comfortable.

These two measures will give you an idea of the range of jaw movement that can be achieved.

These two measures will give you an idea of the range of jaw movement that can be achieved.

In practice you are aiming for a 4—5 mm jaw advancement and 3—4 mm vertical opening.

### 4. Taking the bite:

a. Seat the softened wax on the upper teeth and mark the mid facial plane (usually coincident with the dental upper centre line with a spatula or wax knife).

b. Advance the lower jaw guiding the patient into the wax.

c. Place your fingers on the canines so that the lower centre line is coincident with the mid-facial plane whilst the jaw is postured forward.

d. Close the jaw sufficient to mark the wax but do not allow the lower teeth to touch the upper.

e. Mark the lower centre line in the wax and the mid-facial plane.

f. Before removing the wax, check the lower centre lines as this relates to the mid-facial plane ask the patient if the TM Joints feel comfortable. Even ask them to try snoring and if it is any easier for them to breath, i.e. less posterior pharyngeal airway resistance.

## Facebow

Video (7 mins): [https://www.youtube.com/watch?v=tOH\\_7-F5FIQ](https://www.youtube.com/watch?v=tOH_7-F5FIQ)

Follow the Denar instructions for recording the facebow. Use wax, silicone or Gutter Percha bite tabs for the maxillary jaw registration on the facebow. Ensure that the facebow locking nuts are firmly closed to avoid alteration of the bite fork and transfer jig in transit.

1. Mark the anterior reference point on the patient using the reference plane locator and marker, (corresponds to 43 mm above the incisal edge of the right lateral incisor). This measure only serves to place the upper model in the middle of the Denar articulator).
2. Place bite registration paste or pink modelling wax or composition on the upper surface of the bite fork. The upper surface is flat and has a small midline notch.
3. Ensure the bite fork arm is on the patient's right and place the bite fork and registration in the mouth, aligning the bite fork with the patient's mid facial plane and the notch on the upper surface of the bite fork. Ensure the bite fork is parallel with the patient's horizontal ( a line drawn across the eye pupils is usually a good guide) and coronal planes.
4. Have the patient hold the bite fork in place using two thumbs or index fingers.
5. Assemble the facebow on the patient. Put the ear bow in the patients external auditory meatus (L & R) and pull the face bow horizontally forward. Tighten the centre wheel on the measuring bow and loosen the finger screw on the anterior reference pointer.
6. Slide the bite fork arm through the hole in clamp number 2 on the transfer jig assembly.
7. Attach the vertical shaft to the measuring bow via the clamp marked number 2 on the patient's right and tighten the finger screw. Raise or lower the bow so that the pointer or sight aligns precisely with the anterior reference point. Tighten clamps number 1 and 2 taking care not to displace the bow to either side. The numbers on clamps 1 and 2 should be facing you.
8. Loosen the finger screw on the measuring bow, slide the bow open and remove the entire facebow from the patient.
9. Detach the measuring bow from the transfer jig by loosening the finger screw at the front of the measuring bow.
10. The transfer bite fork and jig should not be adjusted and must be transferred to the technician.

### Common errors:

- The numbers on clamps 1 and 2 are not facing forward, therefore the transfer will not work.
- The facebow is not aligned with the mid-facial plane or the facebow is placed asymmetrically and not fully seated nor drawn forward in the ears.
- The clamp screws are loose.
- Patient does not keep bite fork still.
- The registration material becomes detached from the bite fork.