

# Enigma Tooth Set-up Guide

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A professional guide to setting up  
natural looking Enigma cosmetic dentures



## **Introduction**

Throughout the evolution of the Enigma Denture System, one of the principal objectives has been: by imitating Nature to maintain patients' 'prosthodontic privacy'. Essentially this means that the denture wearer who wishes it can confidently expect to be seen as someone who has retained his or her own natural teeth.

To this end great efforts have been made to ensure that the Enigma teeth themselves look natural, in shape, colour, translucency, etc., that the posterior teeth articulate well in various relationships and that an internal variegated gum tinting system is available to avoid the usual unreal monochrome pink. But the setting of the teeth themselves in complete dentures requires care if they are to maintain the naturalism and the function. This manual is designed as a guide to such placement.

Many tooth setting systems follow rigid geometric rules, with reference to anatomical landmarks on the residual ridges, in which appearance is a secondary concern. The Enigma System is more flexible in its focus on individual dental naturalism and neuromuscular compatibility. It starts with lip support and the face (using the Alma Gauge) not with the teeth on the gums. Front and back teeth are no longer wedged in a single occlusal scheme - the anteriors can be put where they look nice, the posteriors so that they mesh well. As a result not only will the dentures be a better expression of each patient's individuality, but the adaptation required in controlling them will be less.

**Dr John Besford**

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## Planning tooth positions (normal buccal overjet)

The occlusal rims are mounted on an articulator (fig 1); a simple hinge axis is not recommended. Any average value, to semi-adjustable or fully adjustable articulator may be used corresponding to the level of information given by the clinician. The correct lip support and the upper occlusal plane have been established in the mouth by the clinician's modifying

the rim. This information is recorded by fabricating a putty index (fig 2). When given by the clinician the mid and canine lines are recorded on the cast.

It is important that the occlusal plane has been recorded in the clinic with reference to the patient's face, especially if the clinician has not set the front teeth in the mouth. The anterior teeth should be placed so as to follow the information recorded with the occlusal rim. Alma Gauge readings (horizontal and

vertical) together with a tracing of the upper rim outline will provide a permanent reference of dimensions in the lab notes (fig 3).

**Note:** Often the occlusal plane height is set by the level of the upper central incisors. However, in Class II/div. 2 arrangements, the occlusal plane height will lie between the upper & lower incisal edges (Fig 50, page 19).



1. Upper and lower rims on articulator.



2. Silicone putty index.



3. Schottlander Alma Gauge reading.

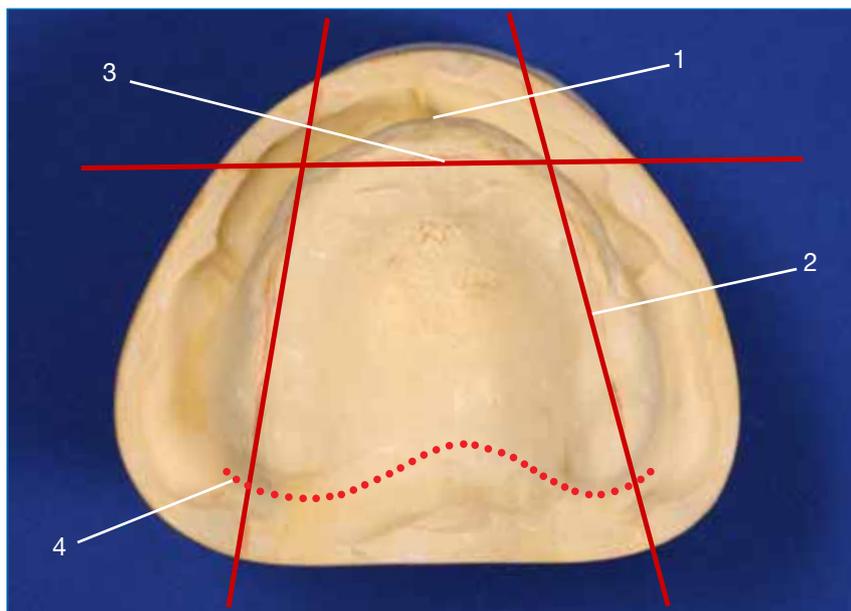


4. Evaluate ridge relationship. Models on articulator.



After mounting, evaluate the ridge relationship to see whether a normal upper buccal overjet relationship is suitable (fig 4). If the upper arch is very small compared to the lower, then a posterior tooth cross bite may be indicated (see page 16). Marking anatomical landmarks onto the cast will help to visualize this (fig 5 & 6). The articulation of the occlusal rims can also give an indication as to how far buccally the upper teeth can be set to maintain a normal relationship without compromising the aesthetics. Maintaining the original buccal corridors will avoid compromising the natural appearance.

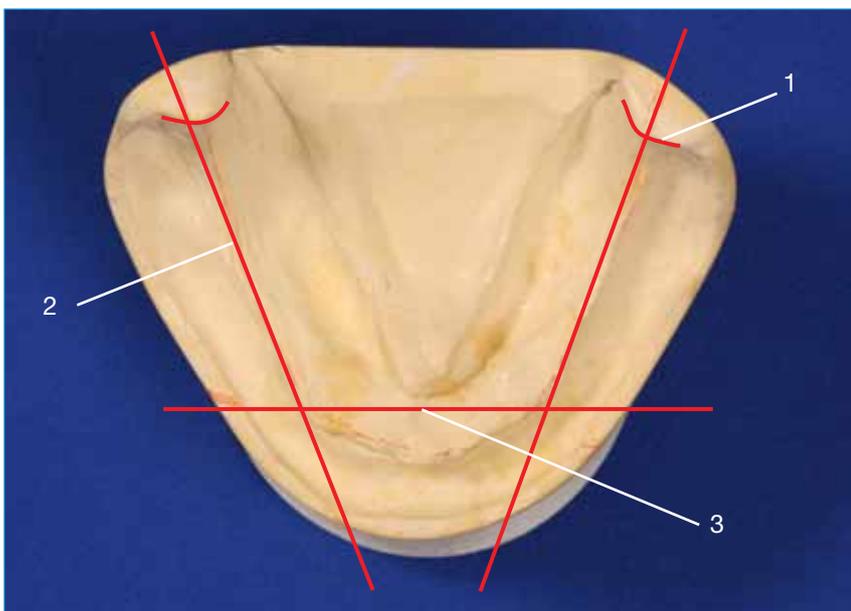
Adequate lip support is an essential element of the aesthetics provided by the Enigma System and is provided mainly by the teeth, not the flanges. The arch shape of the upper anterior teeth is set by following the occlusal rim. The exact orientation of each anterior tooth can be judged from photographs, if provided. The lower anteriors are set on the ridge for stability, their angulation to be modified at the chairside when checking speech.



5. Anatomical landmarks upper.

**Anatomical landmarks upper (fig 5)**

1. Incisive papilla
2. Bisected centre of alveolar ridge (posterior)
3. Bisected centre of alveolar ridge (anterior)
4. Palatal vibrating line



6. Anatomical landmarks lower.

**Anatomical landmarks lower (fig 6)**

1. Retromolar pad
2. Bisected centre of alveolar ridge (posterior)
3. Bisected centre of alveolar ridge (anterior)

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