GUIDE FOR SETTING UP TEETH ON F / F DENTURES

SETTING ANTERIOR TEETH
SETTING THE MAXILLARY ANTERIOR DENTURE TEETH

STEP 1. Set up the left central incisor using the midline and the occlusal plane as a guide. The mesial of the central incisor is set against the midline and the incisal edge is set on the occlusal plane.
Left central incisor set against the occlusal plane.

**STEP 2.** Set up the right central incisor using the midline and the occlusal plane as a guide. The mesial of the right central incisor is set against the mesial of the left central incisor (the midline) and the incisal edge is set on the occlusal plane.
Take note of the midline (arrow) and occlusal plane to which the two central incisors have been set. The incisal edges of the central incisors are parallel to and in contact with the occlusal plane.

Take note of the labial view of the long axis of the two central incisors. The maxillary central incisor is placed so that the long axis shows a slight distal inclination to the perpendicular.
Take note of the labial contour of the central incisors. The neck of the central incisors is not sticking out.
STEP 3. The lateral incisors are now set. The mesial of the left lateral incisor is set against the distal of the left central incisor following the labial contour and the incisal edge is approximately ½ to 1mm off the occlusal plane with a slight distal inclination. The mesial of the right lateral incisor is set against the distal of the right central incisor following the labial contour and the incisal edge is approximately ½ to 1mm off the occlusal plane with a slight distal inclination.

Take note of the labial view of the long axis of the lateral incisors – the lateral incisor is positioned with a slight distal inclination in relation with the central incisor.
Take note of the distal view of the long axis of the lateral incisors and is positioned slightly above the occlusal plane (½ to 1 mm).

Take note of the occlusal view of the incisors – they follow the curvature of the labial contour.
STEP 4. The canines are now set. The mesial of the right canine is set against the distal of the right lateral incisor and the labial aspect of the long axis of the right canine has a slight distal inclination from the perpendicular and the incisal tip touches the occlusal plane (arrow).

Take note of the sagittal axis of the canines – it is perpendicular to the occlusal plane (yellow line). The facial surface of the canine however, is canted inward and appears “toed-in” (red line) due to the prominence of the cervical area of the tooth (yellow arrow).
Occlusal view of the canines – yellow denotes the mesial plane and red denotes the distal plane. The canine is the turning tooth on the denture.

Labial view of the maxillary anterior teeth set in the correct position. When viewed from the anterior only the mesial plane of the canines should be visible.
Note the labial contour of the maxillary anterior teeth set in the correct position.

Note the inclination of the teeth
GUIDE FOR SETTING THE MAXILLARY POSTERIOR DENTURE TEETH

Once the maxillary anterior teeth are set up correctly, we now start setting up the maxillary posterior teeth.

Before we start setting the maxillary posterior denture teeth, we first need to mark the crest of the ridge of the mandible. We mark the crest of the ridge firstly on the model (see image below) and then transfer the marks onto the plastic occlusal plane.
The crest of the ridge lines are now transferred from the model to the plastic occlusal plane by inscribing the plastic.

These two lines (yellow lines), inscribed on the plastic plane, indicate the crest of the alveolar ridge. These lines will be used to position the posterior denture teeth to ensure that the mandibular posterior teeth are centred over the ridge.

The 1st and 2nd premolars are now set up with their long axis perpendicular to the occlusal plane and the buccal and lingual cusp tips should touch the occlusal plane. Arranging the premolars in this way ensures that the adjacent marginal ridges will be on the same level. This is an important factor when setting the opposing premolars.
Both the buccal and lingual cusp tips of the maxillary premolars should contact the plane of occlusion. The lingual cusp tips should also contact the line inscribed on the plastic occlusal plane indicating the crest of the mandibular ridge. This will ensure that when the opposing mandibular denture teeth are properly positioned and in centric occlusion, their central fossa will be centred over the mandibular ridge.

The lateral curve and the anterior-posterior compensating curve begin in the 1st molar region. The mesial lingual cusp tip of the 1st molar contacts the occlusal plane the buccal cusp tips and the disto-lingual cusps are elevated about 0.5mm off the occlusal plane.
The set up viewed buccally. Note that the mesio-lingual cusp tip touches the plane of occlusion (yellow line) along with the buccal and lingual cusps of the premolars. The compensating curve (red line) begins at the 1st molar.

The anterior-posterior compensating curve is continued by elevating the 2nd molar off the occlusal plane as shown. The 2nd molar is elevated to an even greater degree than the 1st molar, about 20 degrees in the average patient. When viewed from the distal it is set, like the 1st molar, with a slight lateral curve.
GUIDE FOR SETTING THE MANDIBULAR POSTERIOR DENTURE TEETH

Once the maxillary anterior and posterior teeth have been set, we now proceed to set the mandibular posterior teeth.

The mandibular 2nd premolar is set first. The buccal cusp tip should engage the embrasure between the maxillary 1st premolar and 2nd premolar. The adjacent marginal ridges of the maxillary premolars must be at the same level for the lower 2nd premolar in order to properly engage them.

The mandibular 1st molar is now set. The mesio-buccal cusp tip should engage the embrasure between the maxillary 1st molar and 2nd premolar. The adjacent marginal ridges of the maxillary 1st molar and 2nd premolar must be at the same level for the lower 1st molar to properly engage them.
Check the relationship from the lingual side. Make sure that the maxillary lingual cusp tips of the 1st molar engage the central fossa of the mandibular 1st molar. Using a clear plastic ruler and the marks on the cast check to ensure that the mandibular 1st molar is perfectly centred over the crest of the ridge. Make sure the central fossa of the molar is properly aligned over the ridge. If the central fossa is either buccal or lingual to the ridge make the appropriate adjustments.

The central fossa of the mandibular 2nd premolar and the 1st premolar are over the crest of the ridge. The teeth need to be set over the crest of the ridge so that we maximise denture stability and support.
Position the mandibular 2nd molar now in centric occlusion. Inappropriate positioning and angulation of the mandibular 2nd molar can cause destabilisation and/or dislodgement.

Check lingual centric occlusion. Make sure that the lingual cusps of the maxillary 2nd molar occlude properly with the central fossa of the mandibular 2nd molar.
The mandibular 1\textsuperscript{st} premolar is now set to complete the mandibular posterior teeth. The buccal cusp of the mandibular 1\textsuperscript{st} premolar should engage the mesial marginal ridge of the maxillary 1\textsuperscript{st} premolar.

Check lingual centric occlusion. Make sure that the lingual cusp of the maxillary 1\text{st} premolar occludes properly with the distal marginal ridge of the mandibular 1\textsuperscript{st} premolar and the mesial marginal ridge of the mandibular 2\text{nd} premolar.
GUIDE FOR SETTING THE MANDIBULAR ANTERIOR DENTURE TEETH

Once the maxillary anterior and posterior teeth and the mandibular posterior teeth have been set, we now proceed to set the mandibular anterior teeth.

We now begin to set the mandibular central incisors. The mesial surfaces of the mandibular central incisors should be on the midline.

In most patients, the labial surface of the mandibular incisors should be perpendicular to the occlusal plane.
We set the mandibular anterior teeth with a 1mm Overbite and a 1mm Overjet.
Once the two mandibular central incisors have been set, we continue to set the mandibular lateral incisors and canines.

The mandibular lateral incisors follow the curvature of the maxillary anterior teeth and height of the mandibular central incisors, maintaining a 1mm overbite and overjet.

The mandibular canines are now set following the curvature of the maxillary anterior teeth and height of the mandibular central and lateral incisors, maintaining a 1mm overbite and overjet.
We have now successfully set up a F / F Plane line case in centric occlusion.