

Mounting

The laboratory procedure of attaching the maxillary or mandibular cast to an articulator or similar tool.

The significant of mounting are:

1. To maintain of the vertical dimension of occlusion
2. To keep horizontal centric jaw relation.
3. To ease arrangement of artificial teeth

Preparation of articulator before mounting procedure:

In case of using value type articulator (Class II) with fixed condylar, path and incisal incline the articulator should be:

1. Clean from any remnant of previous plaster.
2. The incisal pin positioned (Level) with the top of upper member of articulator to give zero reading.
- 3- The mounting table properly fixed to the articulator member.

For **Dentatus articulator** the maxillary model (with its record base and occlusion rim that secured to the cast accurately by wax) mounted first on upper member by using of the face bow, which supported upper occlusion rim to its accurate position during mounting.



Class II articulator with mounting table



Dentatus articulator with face bow

Preparation of the casts to mounting on the articulator

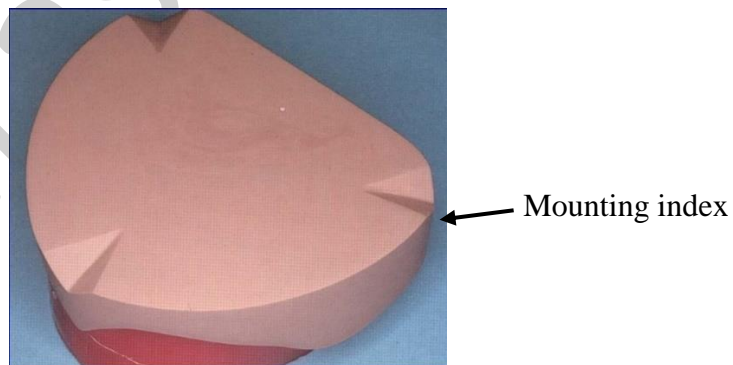
The mounting procedure is accomplished in the following steps:

1. Determine the midline of the cast through the middle of incisive papillae and mid-palatal raphe to continue posteriorly to the end of cast.



2. By using the plaster knife or by laboratory handpiece with metal round bur to make 3-4 (V) shape cuts on the base of upper and lower casts that used as mounting index to facilitate the remounting after construction final denture.

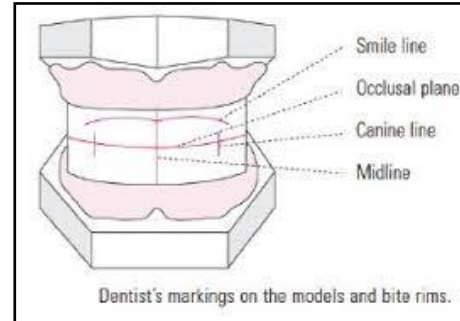
The index cuts should be approximately 1/4 inch in depth and 1/2 inch in width. Then lightly coated the base of the casts and the cuts with Vaseline or any separating medium.



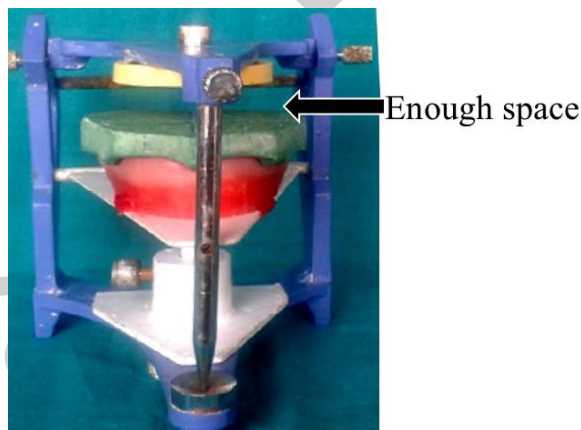
4. The base plate with occlusion rims sealed to the cast by wax.



5. Alignment of the midline of the upper occlusion rim to the center of the cross midline which found on the mounting table anteriorly and posteriorly, so that the cast will be centralized to the mounting table and the occlusal rim fixed to the mounting table by wax.



6. Enough space should be present between the base of the cast and the upper member of the articulator to accommodate for the plaster material over the cast. If there is no enough space, trimming should be done to the cast base.

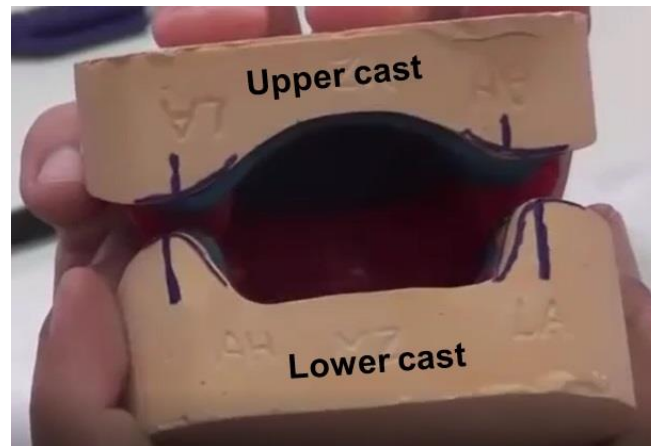


6. Plaster is mixed according to the correct w/p ratio and mixed following the manufacturer instruction. Then the plaster is poured over the base of the cast and the upper member is closed until the incisal pin touch the incisal table.
7. Smoothing and polishing of the plaster is done. The mountings should be cleaned and any debris removed from the articulator and mounting table.



Mounting the lower cast:

1. The centric relation is taken from patient mouth.
2. The lower occlusion rim should be well secured to the lower cast with it record base by the using of the wax, also sealing should be done between the upper and lower occlusion rims.
3. Care should be taken that there is no posterior interference between the upper and lower casts.



4. Plaster is mixed and poured over the base of the lower cast and the articulator is closed until the incisal pin touch the incisal table then the plaster should be smooth and polished.

After setting of plaster, the following points should be check:

1. The midline of upper cast should be coincide with the midline of lower cast and midline of articulator.
2. Centralization of upper cast with upper member of articulator then the centralization of lower cast, which depend on accuracy of the upper cast.
3. Incisal pin checked if it does not touch the incisal table.
4. Healer`s area checked if there is any contact.

Errors occurred during mounting:-

1. The record base is not properly secured to the cast.
2. Interference of the casts posteriorly.
3. The incisal pin is not properly screwed.
4. The incisal pin not touching the incisal table.

5. Wrong transference of the midline of the articulator with that of the casts (shifting of the midline).
6. Movement of the casts during mounting.
7. Upper and lower occlusal rims are not properly fixed for orientation.
8. Dimensional changes in the plaster.
9. Face-bow record defected.

Dr. Firas A. Farhan