Mounting

Mounting: is the laboratory procedure of attaching a cast to an articulator.

It is the procedure of attaching the maxillary and mandibular casts to the articulator in their recorded jaw relation. It is also called articulation. **The maxillary cast is first articulated**, and then the mandibular cast is recording the vertical and centric jaw relations.

We have 2 types of mounting

1- Arbitrary Mounting

2- Mounting using Face bow

Preparation of articulator

For mean value articulator (class II)

1- The articulator should be clean from any remnant of previous plaster.

2- The incisal pin should be flushed (leveled) with the top of the upper member of articulator to give zero reading.

3- The mounting table should be properly fixed to the articulator.



Mounting table



- The mounting table **used to** support the **maxillary cast** with its record base and occlusion rim in its accurate position during mounting which **first mounted on articulator** then mount the lower cast after taking centric jaw relations from patient.

For semi-adjustable articulator (class III)

1- The articulator should be clean from any remnant of previous plaster.

2- The incisal pin should be put at zero reading.

3- The incisal guidance put at (zero degree) (anterioposteriorly and laterally).

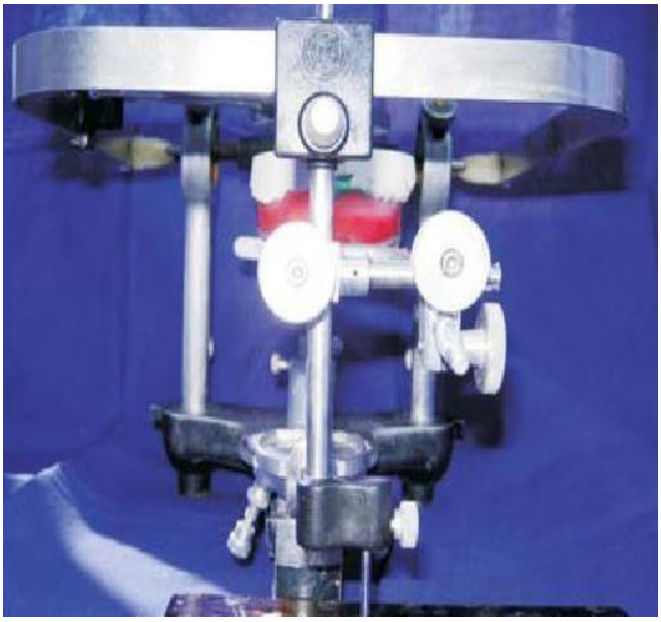
4- Set the condylar guidance and lateral guidance at zero degree bilaterally.

❖ The maxillary cast with its record base and occlusion rim (which should be secured to the cast accurately by wax) is mounted first ***by means of the face bow*** to support

the accurate position of upper occlusion rim during mounting.

- ❖ Mount the lower cast after taking centric jaw relation.
- ❖ Take protrusive record from the patient and adjust the articulator (incisal, condylar, and the lateral guidance) according to protrusive record and Hanau's formula.





Preparation of the casts and mounting the upper cast on class II articulator

1- Determine the midline of the cast according to midline of incisive papillae and continue this line posteriorly all around the cast.

2- With laboratory knife, form 3 or 4 (V) shape cuts on the base of upper and lower casts, so as to facilitate the laboratory remounting. The cuts should be approximately **¼ inch deep and ½ inch wide**, then lightly coated the base of the casts and the cuts with **Vaseline or any separating medium.**

3- The base plate with occlusion rim should be sealed to the cast by wax.

4- Alignment of the midline of occlusion rim (upper) 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.

5- 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 not enough space trimming should be done to the base of the cast.

6- Plaster is mixed according manufacturer instructions then the plaster is poured over the base of the cast and the upper member is closed until the pin touch the incisal table.

7- Smoothing and polishing of the plaster is done. The mounting should be cleaned and any debris removed from the articulator and the mounting table.





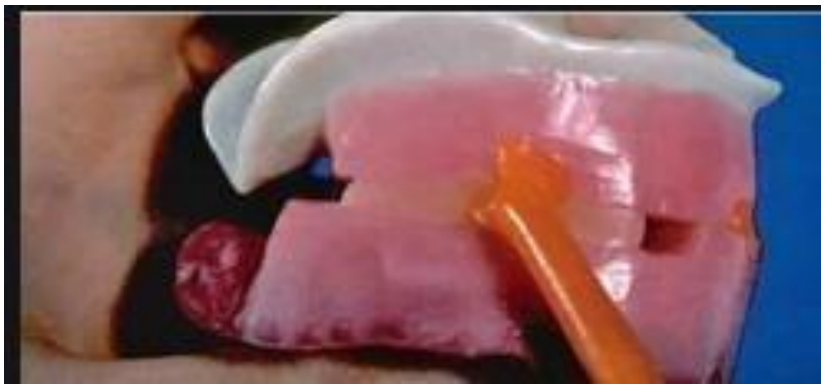
Mounting the lower cast

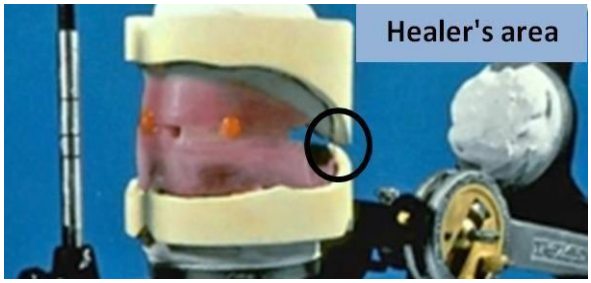
1- The centric relation is taken from the patient mouth.

2- The lower occlusion rim should be well secured to the lower cast with it record base by 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 **(Healer's area).**

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 mounting should be checked for

1- The midline of upper cast should be coinciding 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.

8- Dimensional changes in the plaster.

9- Face bow record defected.