Helpful Hints for using Coble Balancer to create a more ideal denture occlusion.

The stability, function and comfort of the dentures are greatly enhanced by accurately balancing the occlusion. This is not possible by simply using articulating paper in the mouth. The problem with adjusting the occlusion in the mouth with articulating paper is you cannot account for the premature first contact that will shift the dentures(hit and slide). With the Coble Balancer the first contact is the tracing pin which is positioned dead center and therefore no hit and slide. Now when the dentures are mounted on the articulator and the Coble Balancer is removed the first contact is revealed while the dentures are secure and stable on their remount base.

Make sure denture base is securely seated in remount base to prevent movement or rocking



Roughen lingual surface of lower denture in area anterior to first molar to allow compound to adhere to denture base



Heat compound and add to lingual of lower denture



Use lower positioning index to mount lower striking plate with compound keeping parallel with lower occlusal plane



These slides show before and after positioning index. Make sure the lower plate of the coble balancer is in the center of the denture preferably anterior to the first molar and level with the lower occlusal plane. The anterior wings on the lower plate may have to be reshaped/reduced with a high speed carbide bur on narrow lower arches.





Upper device with tracing pin shown with positioning bracket to allow the upper device to be mounted perpendicular to lower plate. Make sure tracing pin is screwed up so it does not touch the lower plate as seen in photo.



Add heated compound to the upper device and palate of denture to achieve proper adhesion of upper device to denture.



Place upper denture on lower in MIP and allow compound to cool before separating.



After allowing the compound to harden, remove upper denture and upper positioning bracket as seen in photo to right still attached.



After removal of upper positioning bracket, the upper and lower should appear like photos to the right.

Now you will need to turn the tracing pin counter clockwise to lower it. The only contact when the dentures are inserted will be the tracing pin to the striking plate.





Insert lower metal striking plate and use thick black marker to color in center to prepare for tracing intraorally. If lower plate is loose, it may be necessary to add compound or wax to edges of plate to stabilize. Ask patient to move ¼ inch forward and back and left and right. All teeth have to be in disclusion during all movements to allow for proper seating of condyles.



Gothic arch tracing from anterior-posterior movements and excursive movements. Anterior portion/point of arrow is CR.



When using MIP to mount coble balancer, pin may be off center and not exactly perpendicular to lower striking plate. After this bite registration has been mounted on articulator, remount upper member of coble balancer using the articulator and upper positioning bracket to achieve more centered pin that is PERPINDICULAR to avoid any deflection from CR.

NOTE: The pin in this photo is angled slightly to the right.



Upper pin not being parallel with lower striking plate resulted in lower jaw deflecting to the patients right resulting in an inaccurate CR mounting.



Pin perpendicular and centered to avoid patient from sliding left or right to achieve more accurate CR bite registration.

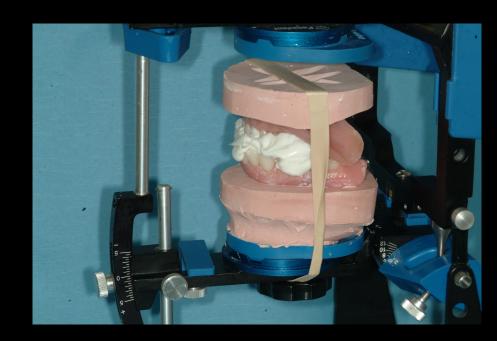
Attention to detail to make sure pin is perpendicular is a must!



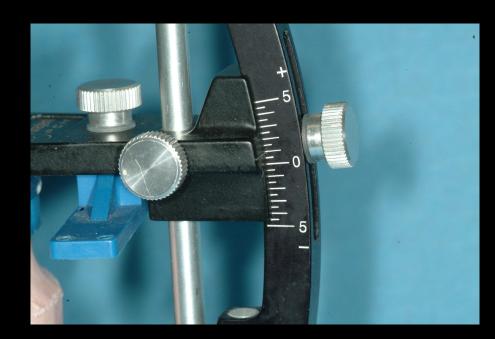
Mount the upper model with a facebow transfer.



Thick rubber bands useful in helping hold the lower model tight with the upper to achieve accurate mounting



Place pin on +2 degrees before mounting lower to compensate for open vertical bite registration.



Mounted case in CR.



Equilibrate posterior teeth on the articulator to achieve bilateral equal intensity contacts with lingualized occlusion. Most adjustments will be performed by deepeningng the lower fossae. The initial stage of adjustment are done with articulating paper and the final is done with shimstock to increase accuracy.



Verify occlusion in the mouth by using occlusal indicator wax on the lower arch slightly warmed, while having the patient eat peaches.

