

HANAU™ WIDE-VUE ARCON ARTICULATOR



INSTRUCTION MANUAL

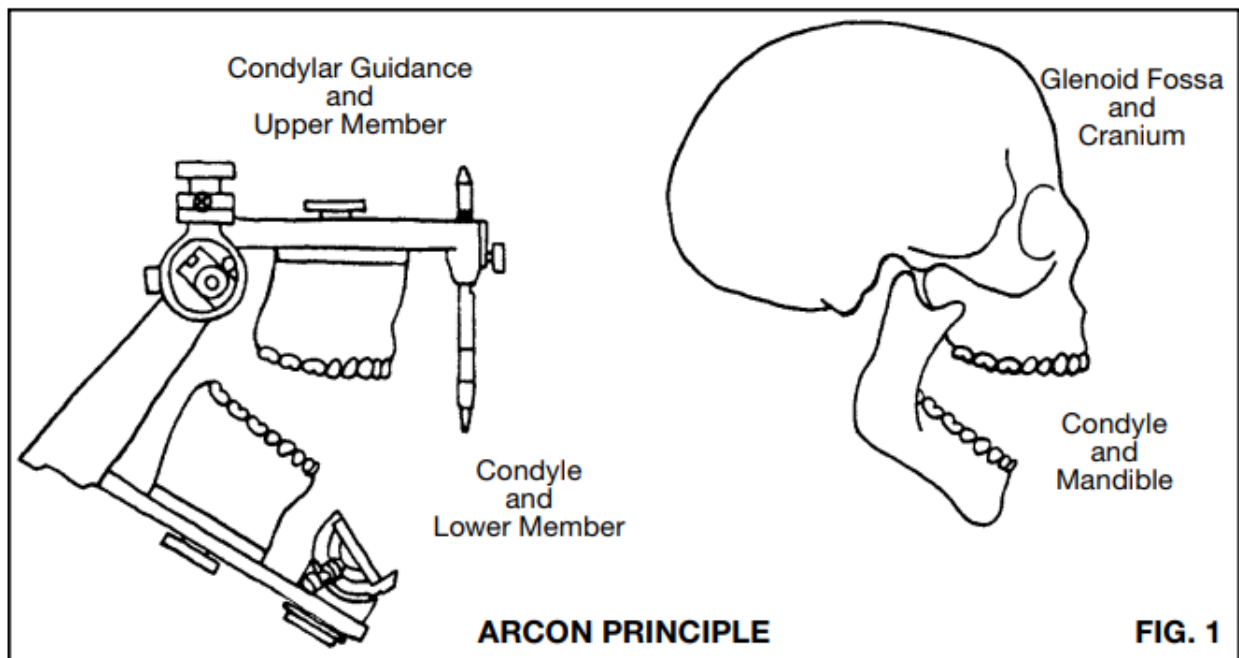
The HANAU™ Wide-Vue Arcon Articulator

Introduction:

The HANAU™ Wide-Vue Articulators are classified as semi-adjustable. They are of Arcon principle, wherein the Condylar Guidances are associated with the Upper Articulator Member, as the patient's glenoid fossa is a portion of the cranium. (*Figure 1*)

The condyle of the articulator is a part of the lower member and functions as the condyle of the patient's mandible.

Articulator movements may be directly related to the anatomical function of the patient.



The Hanau Wide-View comes with the following:

Orbitale Indicator

Dual End Incisal Pin

Adjustable Incisal Guide

Condylar Guidance Closed Track

Swing Stop

Features:

Closed Condylar Track: (Figure 2)

The Condylar Guidance Track rotates in an enclosed housing which stops the Condylar Element, preventing the accidental disengagement of the upper member.



Figure 2

Condylar Guidance:

The condylar guidances are the control centers of the articulator, and they adjustably assimilate the multiple functions of the glenoid fossa. (Figure 3)



Figure 3

The condylar track may be adjustably inclined on the horizontal transverse axis from a “zero” to a plus 60° or to a minus 20°. These inclinations are termed the protrusive inclination and simulate the patient’s superior wall of the fossa. (Figure 4)

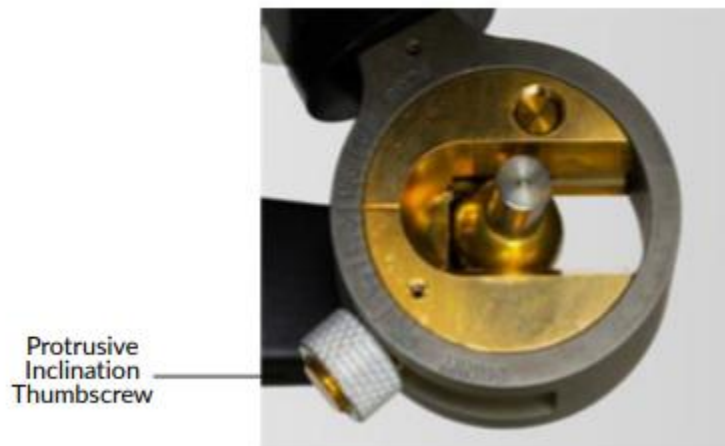


Figure 4

The condylar track may also be adjusted on the vertical axis from a “zero” sagittal to 30°. This angle is termed the progressive Bennett angle and corresponds to the medial wall of the patient’s fossa. (Figure 5)

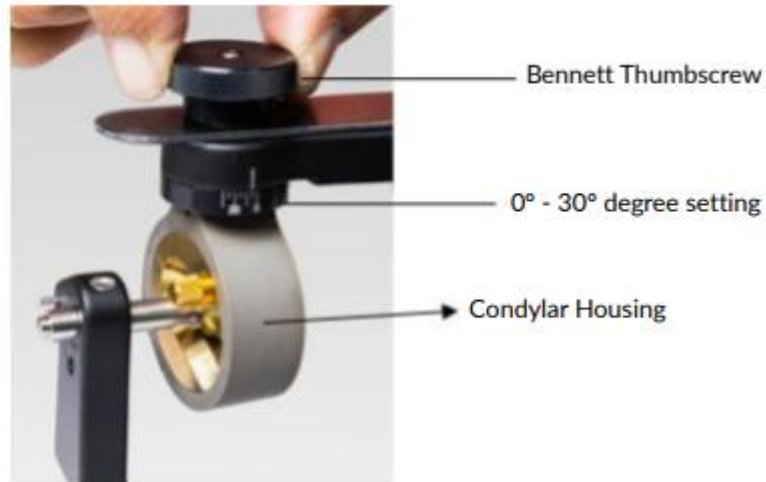


Figure 5

Centric Stop Position:

When the condylar element is moved to the most posterior position, and secured in place using the centric lock, this places the articulator in centric position. This is the point from which the protrusive or Bennett angles both emanate. (Figure 6)

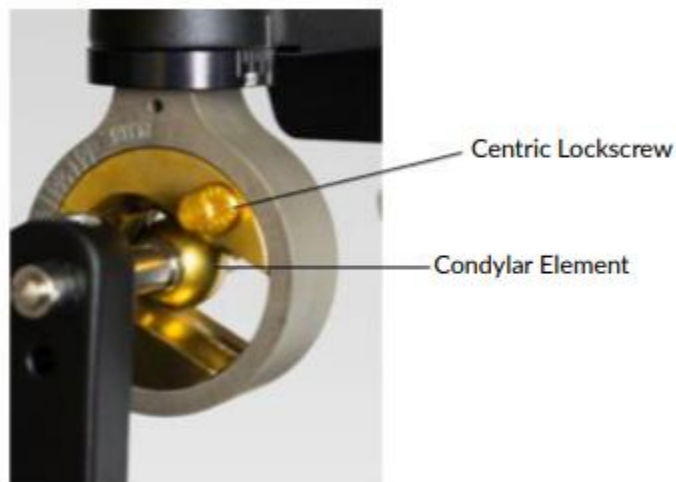


Figure 6

Engagement of a centric lock depresses a centric pin, causing it to arrest the condylar element at the centric position. When locked, the upper member is restricted to an opening and closing movement only. Releasing the centric lock two full turns will disengage the centric pin and return the element’s freedom of movement in the condylar track.

Condylar Shafts:

The condylar shafts adjustably slide in the “wings” of the lower member. They have been factory fixed by setscrews when their brass shoulders rest against the flatted sides of the condylar elements at the “zero” centric position.

A swing stop will protectively stop the upper member and rest against the “wing” of the lower member when fully opening the articulator. (*Figure 7*)

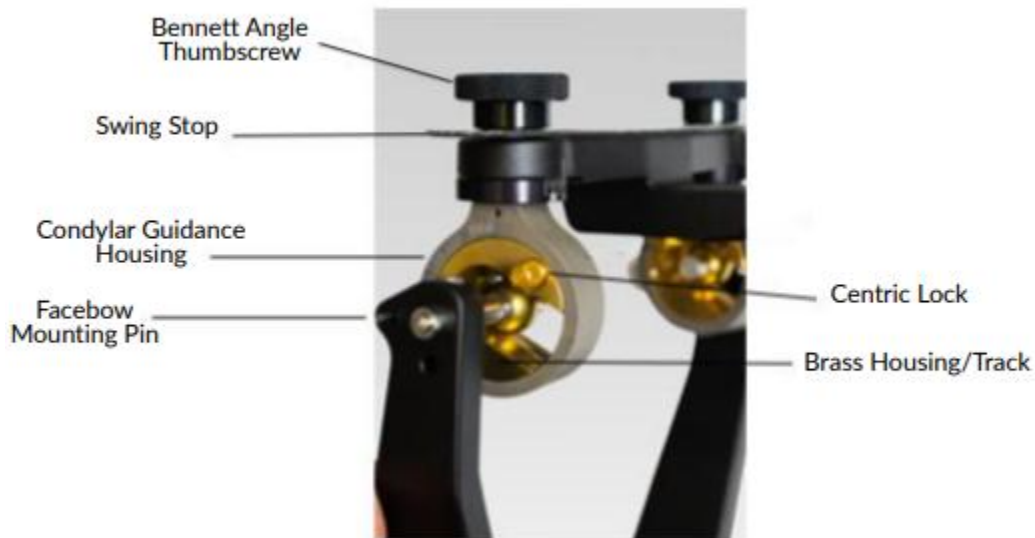


Figure 7

Dual-End Incisal Pin:

Coinciding with these condylar shaft adjustments is an alignment of the chisel edge of the incisal pin with the central table of the Mechanical Incisal Guide.

The incisal pin serves as the forward control of the articulator. It cooperatively maintains a vertical stop and provides stylus contact for the excursive movements of the articulator against the various inclined guiding surfaces of the incisal guide. (*Figure 8.*)

A mid-line groove is cut in the incisal pin about one inch from the spherical tip. Five additional lines calibrated in millimeters extend on either side thereof. These lines are used for recording or altering the vertical dimension.

The incisal pin is inserted into, and the wider mid-line of these metric grooves is aligned with the top edge of the upper member. It is secured by the thumbscrew bearing against the flatted side on the pin. This adjustment places the chisel end at 90° to and in contact with the central table of the mechanical incisal guide and provides a parallelism of the upper member to the lower member. (*Figures 9 and 10*)

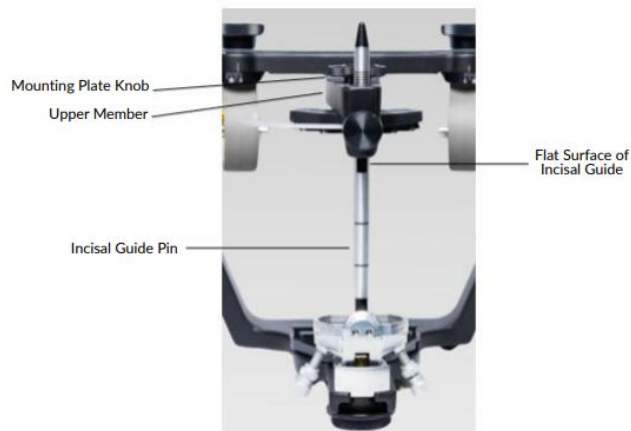


Figure 9

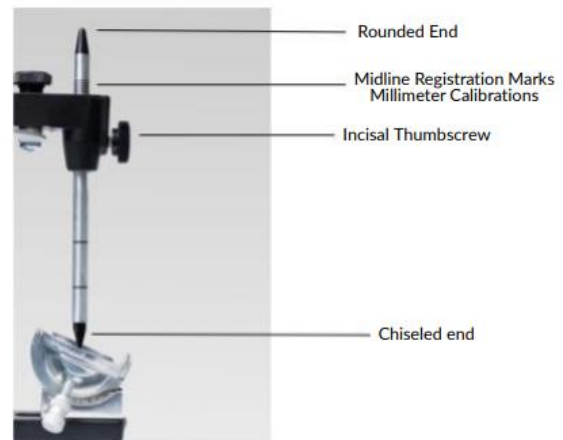


Figure 10

Arbitrary Positioning of Mounted Cast:

Two annular grooves, *Figure 11*, appear on the incisal pin at 37 and 54 mm below the Frankfort Horizontal Plane. These grooves form arbitrary vertical landmarks for alignment of the incisal edge of the maxillary centrals when making a facebow transfer.

The 37 mm line is based in part on the Bonwill Triangle and results in a generally horizontal appearing plane of occlusion.

The 54 mm line forms an average landmark for alignment of the incisal edge of the upper centrals when making a facebow transfer. This reference line is based on the research study by Frank R. Lauciello, D.D.S., and Marc Appelbaum, D.D.S., "Anatomic Comparison to Arbitrary Reference Notch on Hanau™ Articulators," *Journal of Prosthetic Dentistry*, December 1978, Volume 40, Number 6, Pages 676-681.

The incisal pin extends beyond the top of the upper member and provides a third point of stability when inverting the articulator for mandibular cast mounting.

The spherical tip of this incisal pin serves as the dual-end and is useful for fabricating customized acrylic anterior guide tables. The procedural use of this is outlined later.

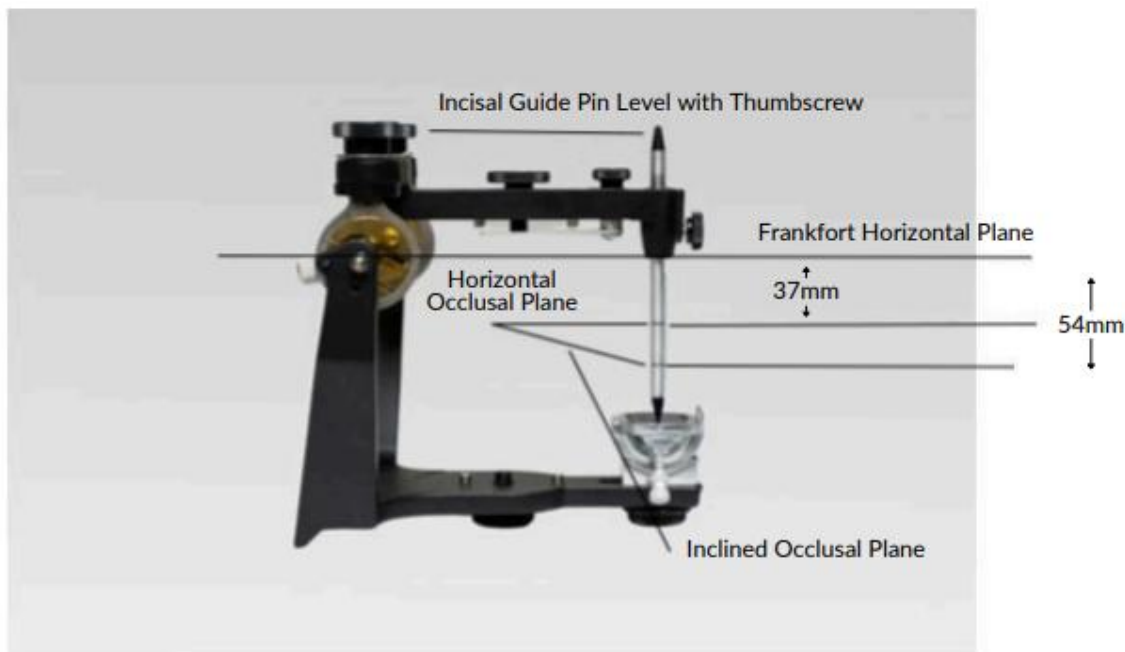


Figure 11

Adjustable Incisal Guide:

The Adjustable Incisal Guide provides an independent adjustment of anterior guidance. It cooperates with the incisal pin and condylar guidances to present a stable, three-dimensional programmed guide pattern for the mounted casts. (Figure 12)

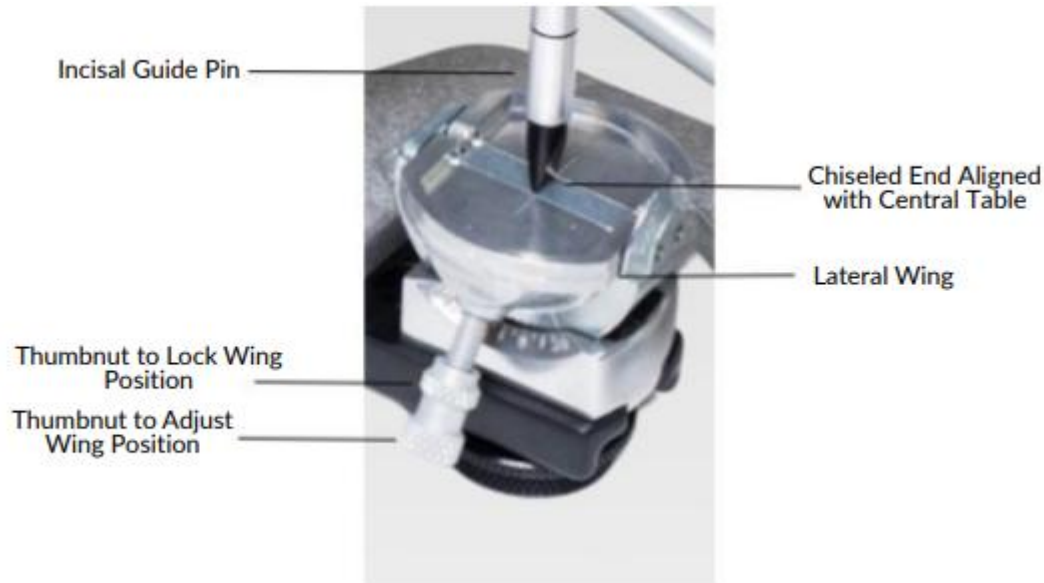


Figure 12

The incisal guide rotates antero-posteriorly from a horizontal “zero” degree to a 60° positive inclination of protrusion which is then secured by the small locknut. (Figure 13)

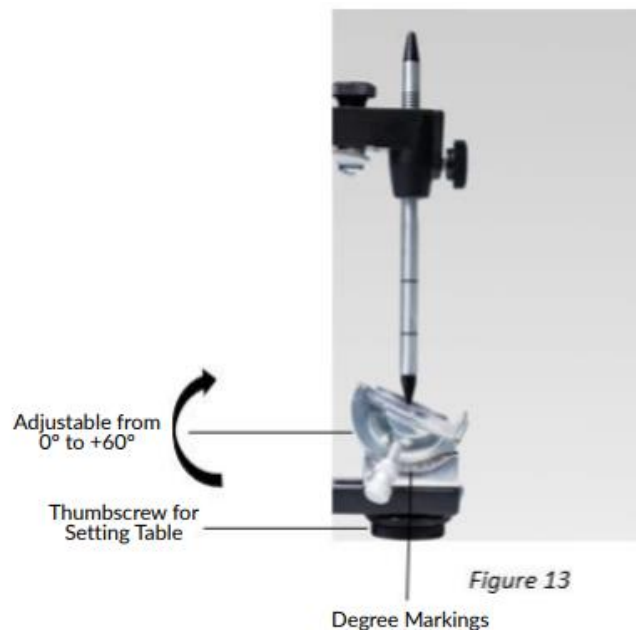


Figure 13

An anterior slot, *Figure 14a*, in the lower member, allows repositioning of the incisal guide. Adjust and lock the guide at a “zero” horizontal and slightly loosen the platform lock screw, (the thicker screw). Slide the platform anterior posteriorly to align the chisel end of the incisal pin with the “zero” indicating line on the lateral wings.

This adjustment will place the incisal pin contact on the rotational center of the guide, thereby maintaining the vertical dimension when adjusting the inclination for protrusion.

Loosening the platform lock screw one turn will allow the incisal guide assembly to be withdrawn from or returned to the anterior slot without any disassembly of parts.

The central guiding table is 5.56 mm wide and forms the inclined surface for the protrusive guidance of the incisal pin. (*Figure 14b*)

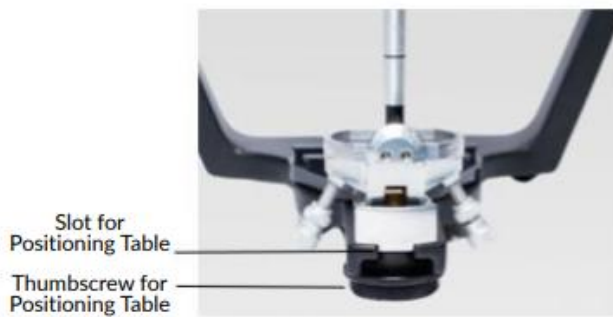


Figure 14a

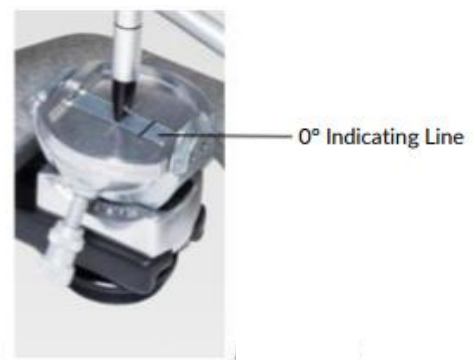


Figure 14b

Separately adjustable lateral wings elevate by a thumbscrew from a “zero” horizontal to a 45° incline and are fixed by a thumbnut. The calibrations are very small and serve only as a reference. (*Figure 15*)

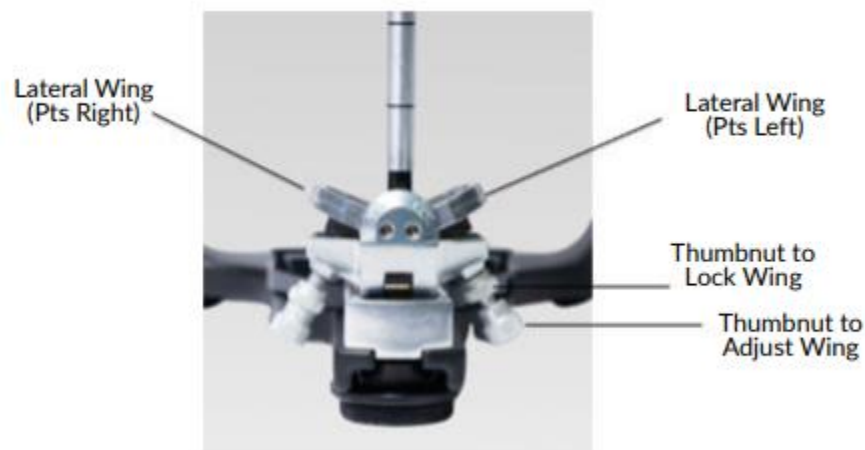


Figure 15

Additional anterior guidance tables may be optionally selected, and their usage is detailed in latter portions of this book under:

Accessories:

Flat Anterior Guide, Item Number 010741-000 (*Figure 16*)



Figure 16

Orbitale Indicator (Figure 17)

Some articulators are equipped with an Orbitale Indicator. This “crescent” represents the patient’s infraorbitale notch and is the anterior reference landmark of the Frankfort Horizontal Plane.

When used with an orbitale pointer on a facebow it provides an anatomical vertical orientation for the upper arch, obviating the use of any average reference lines on the incisal pin.



Figure 17

Disposable Plastic Mounting Plates (Figure 18)

Included with your Wide-View Articulator are 10 disposable mounting plates that are used to attach the upper and lower casts to the upper and lower articulator members by the means of a gypsum material



Figure 18

Metal Mounting Plates (*Figure 19*)

These non-warping contain two elongated and tapering luting slots for a secure adherence of the gypsum mounting. At their center is a domed brass insert which is internally threaded for attachment to the upper or lower member. Longitudinally disposed to the luting slots and on the center plane of the insert is a keyway and a dowel hole which register over two dowels in the upper and lower member.

The dowels cooperatively assist a threaded thumbscrew which securely and accurately attaches the mounting plate. Order additional plates as Item Number 005057-000, Mounting Plates, Pair (2).



Figure 19

NOTE: For mounting instructions for the maxillary cast using a facebow registration, refer to Springbow IFU from the website.

Facebow Transfer

The HANAU™ Wide-View Articulator has the capability of accepting an earpiece type facebow transfers.

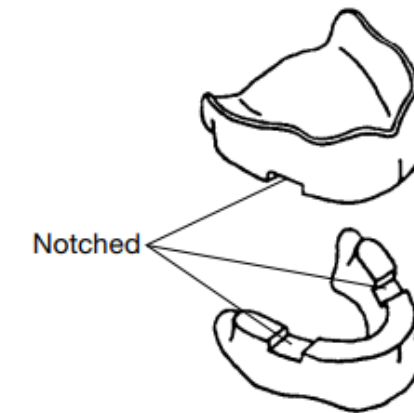
Earpiece type facebow transfers, particularly the HANAU™ 008824-000 suspend their nylon earpieces directly over the auditory pins which are 12 mm posterior to the condyle center.

Operatory Procedure

(**NOTE:** In principle, the procedures outlined in this manual apply to all restorative dentistry with the casts and positional records of the natural dentition substituting for the edentulous casts, the denture bases and the occlusal rims).

Interocclusal Relation Records:

1. The maxillary and mandibular occlusal rims have been prepared and patient adjusted to the correct vertical dimension, the occlusal plane and the desired horizontal overlap. The occlusal surfaces of both rims shall be appropriately notched to accept an interocclusal recording material such as softened wax. (*Figure 20*)



OCCLUSAL RIMS

Figure 20

2. The top of the bitefork or biteplane, the stem at the patient's left, is covered with a triple layer of baseplate wax, *Figure 21*. Heatseal the periphery and soften the wax throughout in a water bath.

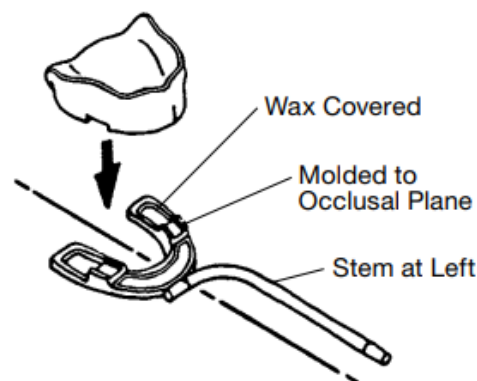


Figure 21

3. The softened wax impression material on the bitefork is seated against the occlusal surface of the upper rim and is hand molded into and around the notches.

NOTE: the stem of the bitefork extends approximately parallel to the sagittal plane and is at the left of the patient.

4. Chill the bitefork index and check to assure removal and accurate replacement of the bite rim.

5. The bitefork may alternately be attached directly to the upper occlusal rim by heating the forks and piercing them fully into the wax rim.

The forks shall be parallel to the occlusal plane and shall not distort the occlusal or notched surfaces. (*Figure 22*)

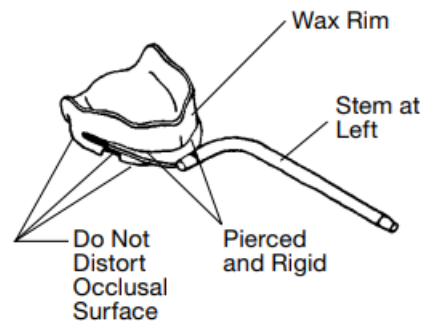


Figure 22

6. Two interocclusal positional records of a terminal relation are required. (*Figure 23*)

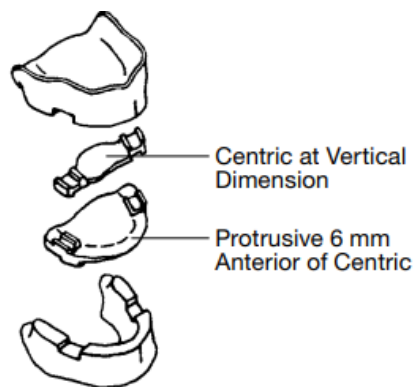


Figure 23

A centric interocclusal relation record is patient recorded at the vertical dimension of occlusion. The material is of choice but must be dead soft when recording and chill rapidly to an unyielding semi brittleness

—and—

A protrusive interocclusal relation record is patient recorded at approximately 6 mm anterior of centric. Closure is made to a near anterior, non-piercing occlusal contact, being certain that the bite rims remain securely seated on their ridges.

Laboratory Procedure

Articulator Preparation

7.A. Adjust the protrusive inclination of both condylar guidances to 30° and tighten the thumbnuts. (*Figure 24*)



Figure 24

NOTE: the calibrations for these angles appear on both sides of the guidance housing and that the right and left can be seen and adjusted from the same side of the articulator.

7.B. Adjust the Bennett Angles of both condylar guidances at 30° and tighten their thumbnuts. (*Figures 25a and 25b*)



Figure 25a

Figure 25b

7.C. Adjust the incisal pin to align the mid-line calibration to the top edge of the upper member. (Figure 26)



Figure 26

7.D. Adjust the incisal guide to a “zero” degree and tighten the small locknut. (Figure 27)



Figure 27

7.E. Slide the platform to align the incisal pin contact over the “zero” indicating line on guidance and tighten platform lock screw. (*Figure 28*)



Figure 28

F. Tighten the centric locks to restrict the articulator to opening and closing movements only. (*Figure 29*)

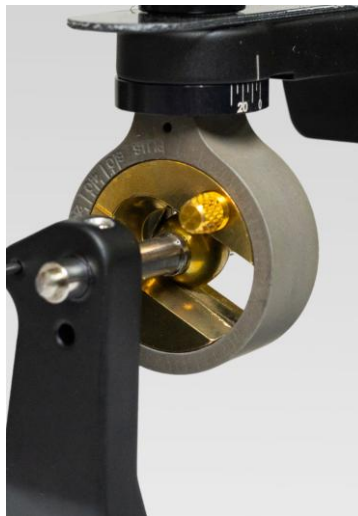


Figure 29

G. Apply a thin coating of petroleum jelly to all surfaces of the articulator that will be exposed to the stone mounting media.

H. Firmly attach a mounting plate to the upper member. (*Figure 30*)



Figure 30

Mounting Maxillary Cast

8. Swing the upper member of the articulator OPEN to the swing stop position. (*Figure 31*)



Figure 31

9. Insert the lower end of the transfer rod/bitefork Index assembly into the socket of the mounting guide, aligning the tapered hole to accept the tapered setscrew in socket. Tighten the thumb screw to center and align the transfer rod. (*Figure 32*)



Figure 32

10. Raise the pivot (cast support) to contact the underside of the bitefork Index and lock in position by the thumbscrew to stabilize and carry the weight of the maxillary cast and the stone mounting media. (*Figure 33*)



Figure 33

11. Securely seat and accurately lute the upper occlusal rim into the occlusal wax index on the bitefork. The upper cast is then seated into and sticky wax spotted to the denture base. (*Figure 34*)

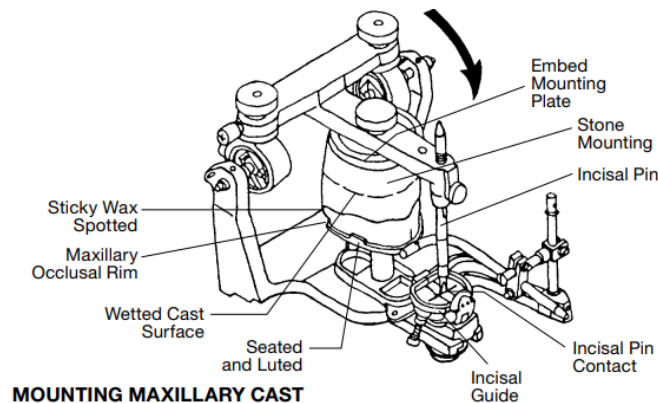


Figure 34

12. A mixture of stone is placed on the wetted mounting surface of the cast. The upper member is then swung forward to embed the mounting plate and to bring the incisal pin into contact with the incisal guide.

The mounting is completed with a wet finger and spatula to expose the top surface of the mounting plate. This permits convenient removal and accurate reattachment of the cast to the articulator.

13. Upon complete set of the mounting, the sticky wax luting is carefully broken from the occlusal rim. The mounting guide and transfer rod/bitefork Index assembly are removed from the lower member. Check that the occlusal rim is intact and that all of the sticky wax has been removed.

Mounting Mandibular Cast, (Figure 35)

14. Invert the Articulator and swing the lower member back to the bench.

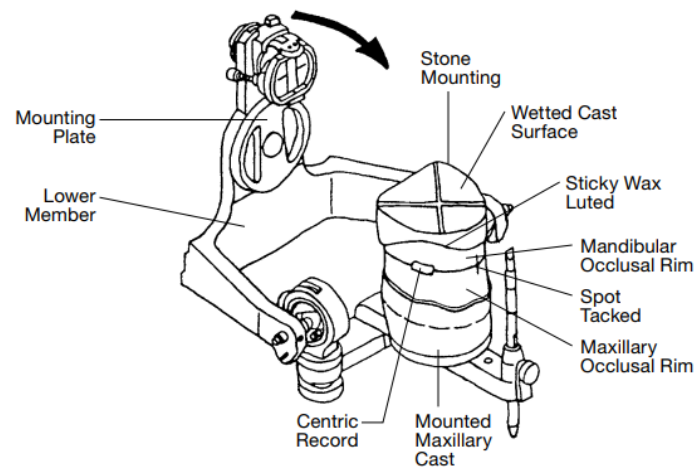


Figure 35

Apply a thin coating of petroleum jelly to all surfaces of the lower member that may be contacted by the gypsum material.

Firmly attach a mounting plate to the lower member.

15. Securely seat the mandibular cast in the bite rim and lute together with sticky wax. The centric interocclusal relation record is then carefully seated between the indexed occlusal surfaces of the upper and lower occlusal rims. Temporarily spot tack the occlusal rims in this centric position.

16. A mix of stone is placed on the wetted mounting surface of the lower cast. The lower member is then swung over to embed the mounting plate into the stone and to bring the incisal pin into contact with the incisal guide. Complete the mounting with a spatula and finger, making certain that the centric locks have been secured.

Adjustment of Horizontal Condylar Guidance (*Figure 36*)

17. Upon complete setting of the mount, the articulator is placed into an upright position. Carefully cut the tacking at the occlusal surface and remove the centric interocclusal relation record.

18. Loosen the centric locks and the thumbnuts for horizontal inclination of the condylar guidances.

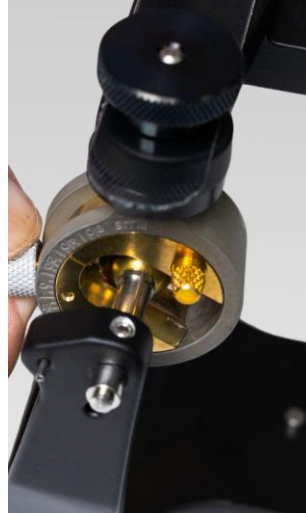


Figure 36

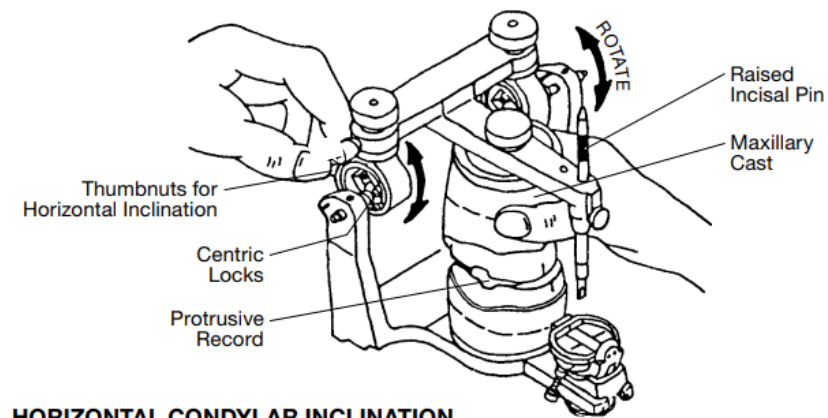
Raise the incisal pin to remove the possibility of mechanical interference with the incisal guide.

Whenever centric locks are loosened, the condyle retainers **MUST** be pushed outward to block the track, barring accidental removal of the upper member.

As a matter of habit, leave the condyle retainer closed except as necessary for required removal of upper member.

19. Seat the protrusive interocclusal relation record onto the lower occlusal rim. Carefully guide the upper member into protrusion, lightly engaging the upper rim into the imprint of the protrusive relation record. Grasp the upper cast to maintain a tactile feel of the cast at the protrusive record.

20. Rotate the right and left guidances back and forth to accurately seat the upper and lower rims into the protrusive relation record. (*Figure 37*)

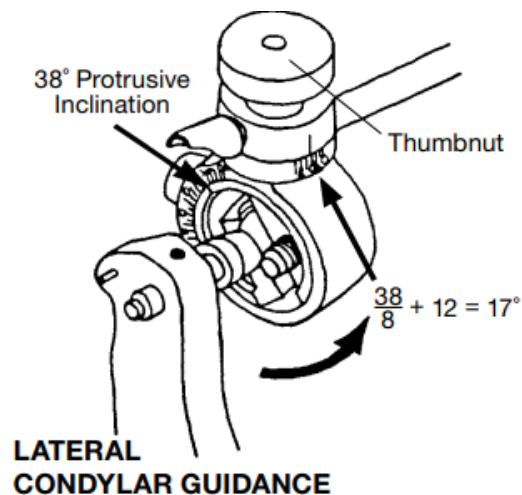


HORIZONTAL CONDYLAR INCLINATION

Figure 37

Observe that the rims seat without rocking in or deforming the record and tighten the thumbnuts for horizontal inclination. The protrusive relation record is then removed

Adjustment of Lateral Condylar Guidance (Bennett Angle), HANAU™ Formula (*Figure 38*):



LATERAL CONDYLAR GUIDANCE

Figure 38

21. The classic HANAU™ Formula, $L = H/8 + 12$ may be used for adjusting the lateral condylar guidance. In this formula, “H” is the Horizontal Condylar (Protrusive) Inclination and “L” is the calculated Lateral Condylar Guidance (Bennett Angle).

EXAMPLE: The right protrusive inclination of 38° is divided by 8 and is accepted as 5, to which 12 is added, totaling 17. The right condylar guidance is then adjusted to a 17° lateral indication at the calibration on the upper member and is locked by the thumbnut.

The same method is used for adjustment of the left lateral – dividing the protrusive inclination by 8 and adding 12 – then setting the left condylar guidance to the computed angle.

NOTE: An alternate method of condylar guidance adjustment utilizing lateral interocclusal relation records is described in a latter portion of this instruction.

Additional aids for establishing centric and lateral border movements are described under the “Optional Accessories” at the end of this instruction.

Arrangement of Anterior Teeth

22. The six upper and six lower teeth are set up in the arrangement dictated by the patient’s esthetic and phonetic requirements.

Incisal Guide Preparation (*Figure 39*):

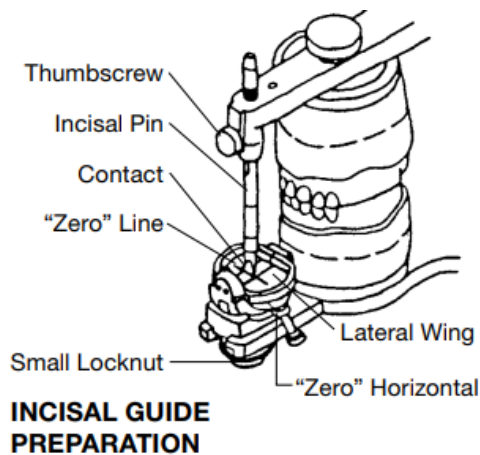


Figure 39

23. Lock the articulator into centric. The occlusal rims are then seated onto their casts at the established vertical and centric relation.

24. Lower the incisal pin into contact with the “zero” horizontal incisal guide, the chisel end of the pin resting crosswise on the center table and lock in position by the thumbscrew. Verify or correct at this time, the alignment of the incisal pin chisel end with the “zero” indicating line on the lateral wings.

Slightly loosen the small locknut for protrusion and disengage the centric locks.

Adjustment of Incisal Guide (Figures 40 - 42):

25. Gently guide the upper cast into a straight protrusion. The lingual edges of the upper central incisors are brought into contact with the incisal edges of the lower incisors. (Figure 40)

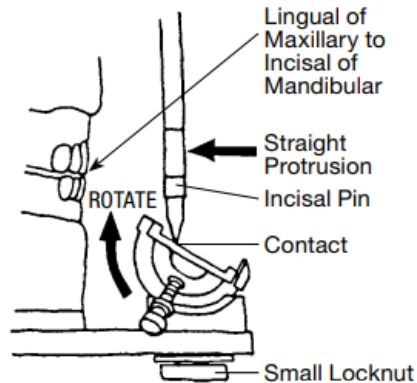


Figure 40

The incisal guide is then rotated anterior posteriorly to make contact with the incisal pin, tightening the small locknut to maintain the angulation.

26. The upper cast is then guided into a right lateral cuspid to cuspid guidance relation by thumb pressure at the right side of the upper cast to assure the Bennett Shift, Figure 41. The lateral wing is then elevated to contact the corner of the incisal pin, and the locknut is tightened to maintain this adjustment.

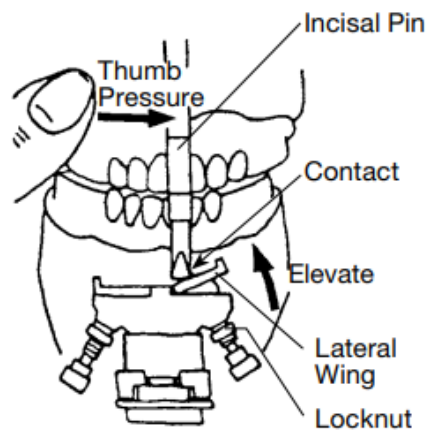


Figure 41

27. Apply thumb pressure at the left side of the upper cast and guide it into a left lateral cuspid to cuspid excursion, *Figure 42*. Adjust the remaining lateral wing to contact the incisal pin and secure the adjustment by tightening the locknut.

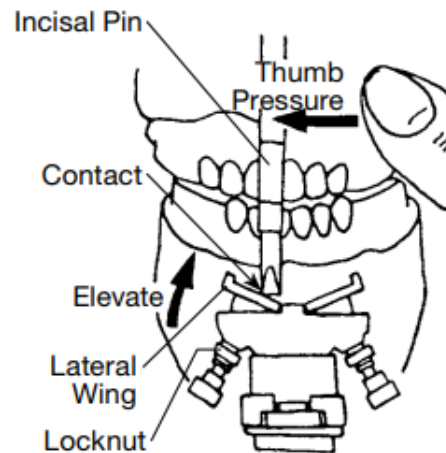


Figure 42

NOTE: incisal guide adjustment for natural dentition as in periodontic or orthodontic studies, occlusal correction, diagnosis, etc., are made in the same manner.

Arrangement of Posterior Teeth

28. The remaining teeth are set into centric occlusion and checked in working, balancing and protrusive excursions.

The incisal pin acts as the vertical stop and must remain in contact with the incisal guide surfaces from centric throughout all excursive movements.

29. The waxed occlusal rims may then be tried in the patient for esthetics, occlusal function and perhaps correction.

The articulation is completed and the gingival and palatal is waxed.

Reseat the completed occlusal rims onto their master casts. Seal the rims to the casts to preserve the tissue surface from plaster or stone seepage during the flasking procedure.

Processing

30. Before removing the master casts/waxed dentures, record the Articulator calibrations for later use.

Record the – Serial Number, R & L Horizontal Inclination, R & L Bennett Angle, and Vertical of Incisal Pin

Alternate Remounting Record

31. If available, a HANAU™ Remounting Record Jig, Item Number **009544-000** or other methods of precise cast reattachment to the articulator have been employed, the waxed dentures on their master casts are removed from their mountings and processed. (*Figure 43*)



Figure 43

32. Remove the lower cast and attach the accessory HANAU™ Remounting Record Jig to the lower member. (*Figure 44*)

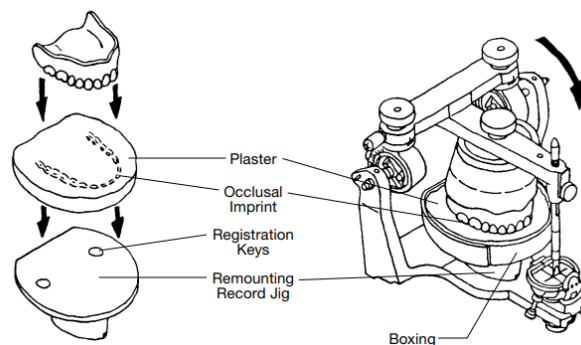


Figure 44

Lubricate the index surface with petroleum jelly. Wrap boxing wax or masking tape around the periphery to form a dam in which to pour plaster sufficiently thick to register the upper occlusal imprint.

Lock the articulator in centric and lower the upper member to bring the incisal pin into contact with the incisal guide and penetrating the upper occlusal cusps in the plaster.

The waxed dentures on their master casts are then removed from their stone or plaster mountings and processed.

Remounting

33. The completed dentures must remain seated on their master casts after processing and deflasking. If dislodged, they must be resealed properly and precisely.

The master casts with their attached dentures are then accurately replaced on the original

34. If a “Remounting Record” has been made, *Figure 44*, the upper denture must be seated in the plaster occlusal imprint and the master cast remounted to the centric locked upper member of the articulator.

The lower complete denture must then be remounted to the lower member at a centric relation.

Centric Occlusion

35. Verify or adjust the articulator to the recorded calibrations for this denture case. With the dentures in place on their original articulator mountings and the articulator at centric, the incisal pin should be in exact contact with the incisal guide.

A space between the incisal pin and the incisal guide indicates that the vertical dimension has opened. The centric occlusion must be restored through the use of articulating paper and selective grinding. The vertical will be restored when the incisal pin again rests upon the incisal guide at a centric relation.

Do not discount the possibility that the incisal pin may contact the incisal guide, but the teeth are not in occlusion. This would indicate a decrease in the vertical due to a processing error and the extent of closure and acceptability can only be determined by you. Release the incisal pin to occlude the dentures and retighten the incisal pin when it rests on the incisal guide.

Milling-In

36. When executing lateral excursions during the milling-in phase, it is essential that constant “toward the operator” pressure be exerted by the hand lightly holding the Incisal Pin or upper cast. This will ensure that the shoulder of the condylar shaft, *Figure 45*, remains in contact with the flat of the balancing condylar element while the working condylar element rests against its centric stop and slides laterally, thereby simulating the Bennett movement.

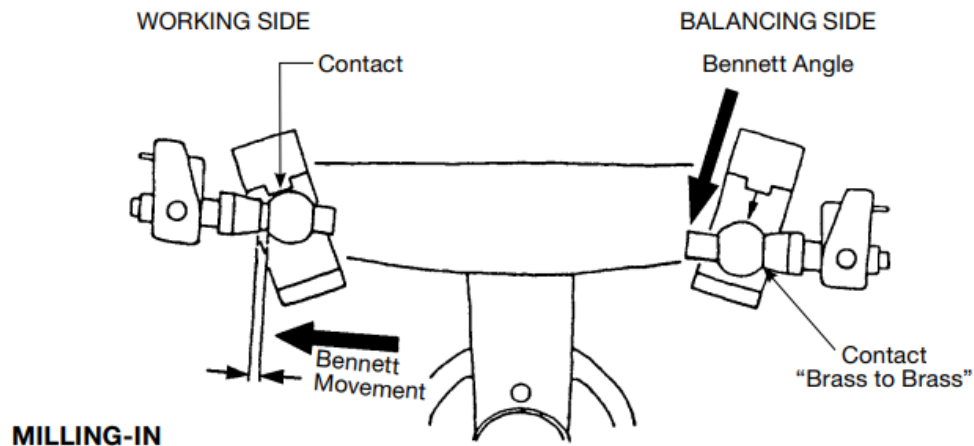


Figure 45

Alternate “Checkbite” Technique ADJUSTMENT OF CONDYLAR GUIDANCES

37. Right and left lateral interocclusal relation records may be elected to adjust the condylar guidances in lieu of a protrusive record and use of the HANAU™ Formula, Steps 18 thru 21.

Concurrent with the patient recording of centric in Step 6 shall be a right and left lateral interocclusal relation record in a material of your choice.

Guide the patient into the softened recording material at approximately 4 to 5 mm lateral of the midline. Assure that the lateral relation is devoid of any protrusion on the working side and that the bite rims remain securely seated on their ridges, without piercing the recording material.

Chill the record, remove, trim and check the right and left interocclusal records against the occlusal rims for accurate and distortion free seating.

Adjustment of Left Condylar Guidance (Figures 46 and 47)

38. Loosen the centric locks, the thumbnuts for condylar inclination and Bennett Angles of both condylar guidances.

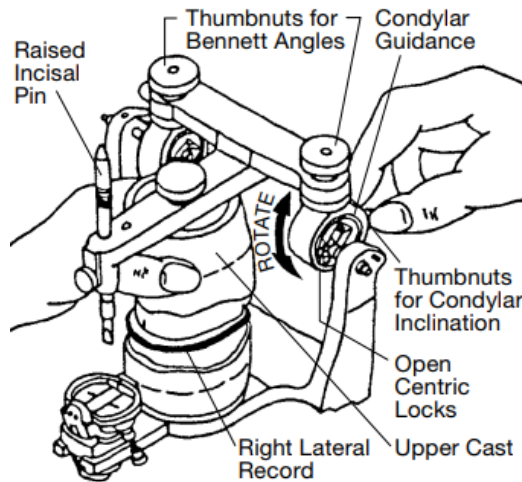


Figure 46

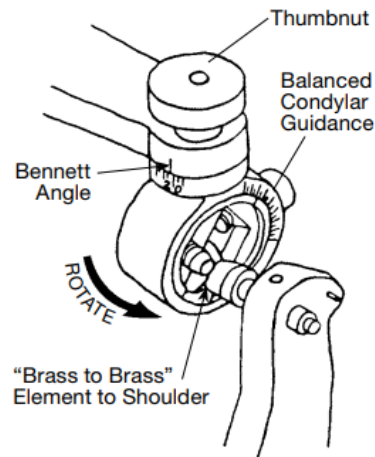


Figure 47

Raise the incisal pin to eliminate possible interference with the incisal guide.

39. Seat the right lateral interocclusal record onto the lower occlusal rim, *Figure 46*. Carefully guide the upper member into a right lateral, lightly engaging the upper rim onto the imprint in the seated right record.

Grasp the upper cast to maintain an unstrained and tactile feel of the casts at this right lateral relation.

Slowly rotate the left condylar guidance back and forth until the upper and lower rims seat into the lateral record.

Observe that the rims seat without rocking in or deforming the record and tighten the thumbnut for this condylar inclination.

40. The lateral of this balancing condylar guidance is then slowly rotated from 30° inward until the flat side of the condylar element contacts the shoulder on the condylar shaft, "brass to brass," *Figure 47*. Tighten the thumbnut to secure this left Bennett Angle.

41. While still maintaining this lateral position in the record, slightly loosen the thumbnut for condylar inclination, *Figure 47*, and reaffirm the record seating by slightly rotating back and forth, then retightening the thumbnut.

Remove the right lateral relation record.

Adjustment of Right Condylar Guidance: (Figures 48 and 49)

42. Seat the left lateral record on the lower occlusal rim, *Figure 48*. Guide the upper member into a left lateral, engaging the upper rim onto the record imprint.

Grasp the upper cast lightly and then slowly rotate the right condylar guidance to seat the rims into the lateral record. The rims must seat without rocking or deforming the record. Secure the thumbnut for this right condylar guidance inclination. (*Figure 49*)

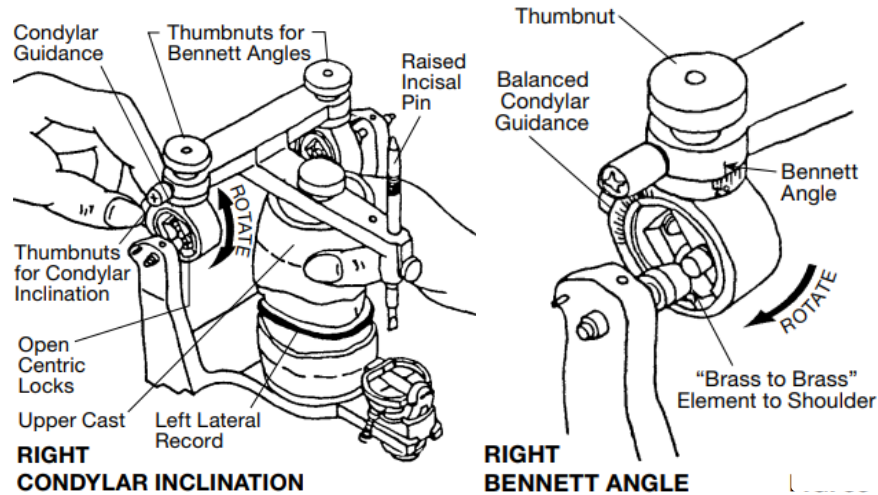


Figure 48

Figure 49

43. The lateral of this non-working condylar guidance is then rotated inward from the 30° setting to contact the shoulder of the condylar shaft with the flat of the condylar element, again – “brass to brass,” *Figure 50*.

Tighten the thumbnut for this right Bennett Angle.

44. While maintaining this left lateral cast position, slightly loosen the thumbnut for condylar inclination, *Figure 50*. Check and perhaps refine the seating of the rims in the record and retighten the thumbnut.

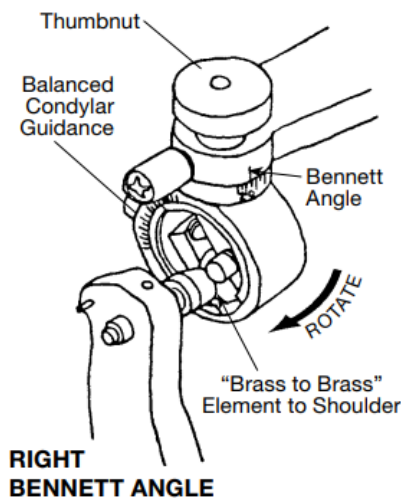


Figure 50

Remove the left lateral relation record.

Additional Options:

Flat Anterior Guide (*Figure 51*)

The Flat Anterior Guide, Item Number 010741-000, is used as a flat, horizontal guidance table, or as a disposable base for fabricating customized acrylic anterior guide tables. It consists of (1) Flat Plastic Anterior Table, Number 010294-000, and (1) Thumbscrew, Number 010717-000.



Figure 51

The secondary purpose of the dual-end incisal pin is for use with these flat anterior guides. The pin is reversed in the upper member with the spherical end in contact with the flat table. (*Figure 52*)



Figure 52

A fine grade of cold cure acrylic is suggested for customizing the anterior table. Contact your local dental distributor for an applicable product.

This is the final step of articulator adjustment, and no modification should be made to the condylar guidance settings or to the vertical dimension without also remaking the customized anterior incisal guidance.

Flat Anterior Guide Preparation (Figure 53):

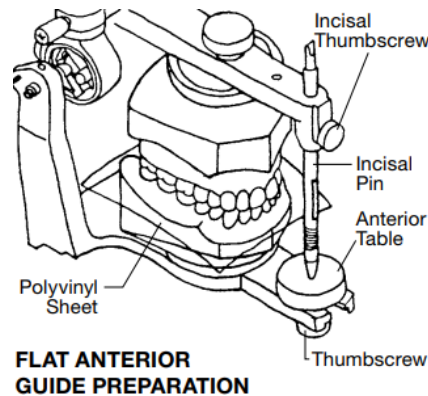


Figure 53

- A.** Enter the two keys on the anterior table into the keyholes adjacent to the anterior slot and secure by the thumbscrew.
- B.** Carefully engage the upper member, bringing the casts into centric occlusion.
- C.** Lower the spherical end of the dual-end incisal pin into contact with the anterior table and tighten the incisal thumbscrew.
- D.** Lubricate the spherical end of pin with petroleum jelly.
- E.** Place a 4" x 4" x approx. .0015" thick polyvinyl sheet between the upper and lower casts to resist abrasion of the stone cusps in natural dentition during the fabrication of the acrylic anterior guide.

Fabrication of a Customized Acrylic Anterior Guide

Acrylic is mixed to a proportion of 2 ml. liquid and 6 gm. powder. Spatulate thoroughly to an almost putty consistency.

Swing back the upper member and lay the putty-like Acrylic onto the DRY anterior table. Mound the acrylic about 3/8" high at the center and do not overflow the edge.

Five minutes after the start of mixing, the upper member is lowered to enter the incisal pin into the Acrylic. Immediately make excursions as described in A, B, and C below;

The Incisal Pin must never be used to make lateral excursions from centric as to do so will negate the Bennett Shift and Bennett Angle, causing the working side condyle to rotate only.

A. Gently guide the upper cast into a full and straight protrusive by applying thumb pressure at the anterior of the upper cast and then promptly return to centric. (*Figure 54*)

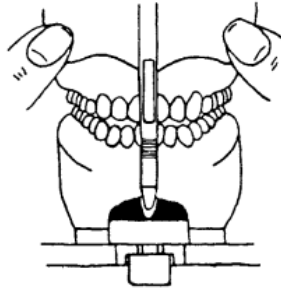


Figure 54

B. From this centric relation, gently guide the upper cast into a full right lateral by thumb pressure at the right side of the cast to ensure the Bennett Shift and then return to centric, *Figure 55*. The Bennett Angle on the nonworking side will be followed automatically.

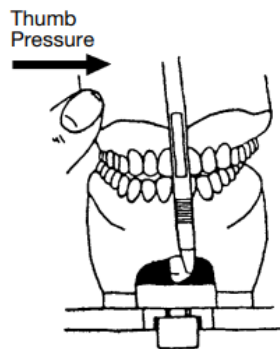


Figure 55

C. The upper cast is then guided through a full left lateral excursion with its return then to centric, *Figure 56*. Thumb pressure at the left of the cast will allow full utilization of the condylar guidance settings.

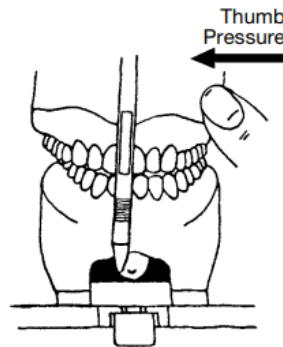


Figure 56

The incisal pin will be observed to displace the acrylic and the three excursions from centric must be repeated as often as necessary until the material has set. Expected working time from mixing to a full set is approximately eight to ten minutes.

Upon complete setting of the acrylic incisal guidance, the frontal area of the acrylic may be relieved with a carbide bur to permit free opening and closing of the upper member at a centric relation.

Always apply thumb pressure at the side of the upper cast during laterals to insure the Bennett Shift on the working side and the Bennett Angle on the nonworking. Pressure at the front of the cast will ensure protrusion.

Upon completion of the case, the thumbscrew is removed and the customized anterior table filed with the patient's casts and recordings – or it is discarded.

A new disposable flat plastic anterior table is then attached for the next usage. Replacements are available as Item Number 009489-000, package of 12 disposable Flat Plastic Anterior Tables.

Flat Anterior Guide, Item Number 010741-000 (Figure 57)



Figure 57

Includes a quick indexing flat plastic anterior table and thumbscrew for accurate repositioning on the articulator.

This flat plastic anterior table may also be used as a disposable carrier for fabricating a customized acrylic anterior guidance in acrylic material.

Replacement disposable anterior tables are available in packages of 12 as Item Number 009489-000.

ADJUSTABLE INCISAL GUIDE, Item Number 010731-000 (Figure 58)

This mechanical anterior guidance may be adjusted to the terminal inclines of protrusion and right and left lateral relations. It is used with the “chisel” end of the dual-end incisal pin furnished with the Wide-Vue.



Figure 58

Orbitale Indicator, Item Number 005052-000 (*Figure 59*)

Represents the patient's infra-orbitale notch as an anatomical third reference point during a facebow transfer to the articulator.



Figure 59

Cast Support, Item Number 003401-000 (*Figure 60*)

Supports the bitefork or biteplane index during a facebow transfer to the articulator preventing vertical displacement by cast weight and gypsum mounting.



Figure 60

Remounting Record Jig, Item Number 009544-000 (Figure 61)

Used for the preparation of a permanent plaster record – accurately relocates the occlusal index for remounting the upper after processing. This precludes taking a second facebow record and transfer to the articulator.



Figure 61

Alcohol Torch, Item Number 000301-000 (Figure 62)

Is ideal for setting-up teeth, for waxing and for numerous other utility uses



Figure 62

Instrument Case, Small, Item Number 015601-000 (Figure 63)

This attractive and durable case has been constructed to contain the articulator and facebow. It provides protective storage and transfer to or from the laboratory. Specify for Wide-View.



Figure 63

Articulator Care and Maintenance:

Your Whip Mix articulator is a precision instrument and requires care and maintenance. Periodic cleaning and lubricating as described below will assure prolonged life and dependable service from the instrument. Failure to follow these instructions will void your warranty.

Cleaning Procedure:

If there is any debris on the device, be sure to remove debris before the cleaning process. Use a soft bristle brush and cold running water to remove any debris. After debris removal follow the guidelines below.

- Use mild soap and water solution with the aid of a soft bristle brush to dissolve accumulations of wax and to wash away carborundum grit then air dry completely. DO NOT use strong detergents, alkalis, gasoline or naphtha as cleaning agents.
- Remove excess stone to prevent corrosion of articulator surfaces.
- (Whip Mix Branded only) Apply a light coating of silicone spray to articulator surface to prevent plaster or stone from sticking.
- (Hanau and Denar only) A thin coating of petroleum jelly must be applied to all articulator surfaces that will be contacted by the gypsum mounting material.
- Lubricate working and bearing components with a thin film of lubricant or silicone to the surface upon which the condylar elements move to provide a smooth action during movements.
- Use lint-free cloth to dry

Storage:

Store the articulator in a clean, dry atmosphere free of plaster and carborundum dust, away from acids, alkalis or corrosive medicaments. Wait a full day after mounting casts before storing the articulator in a carrying case or corrugated carton. Moisture dissipation from the stone in an enclosed area causes alkalinity of the stone mixture which can damage the articulator's surface.

Warranty:

Refer to the website: www.whipmix.com

Symbols and Their Descriptions:

SYMBOL	DESCRIPTION
	Manufacture by
	Medical Device
	Lot number
	Item Number or Model Number
	eIFU- Electronic Instruction For Use
	Unique Device Identifier

Please check online at
www.whipmix.com
for the most current
instructions and parts list.



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