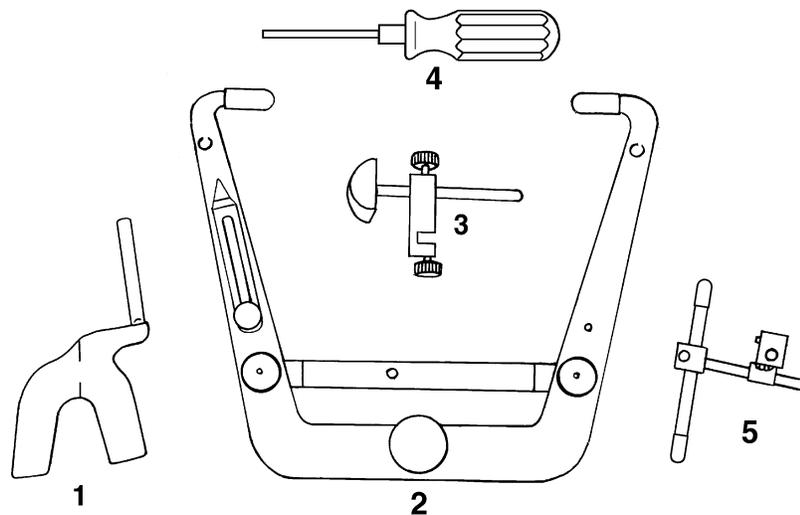


## Axis Mounting System Instructions

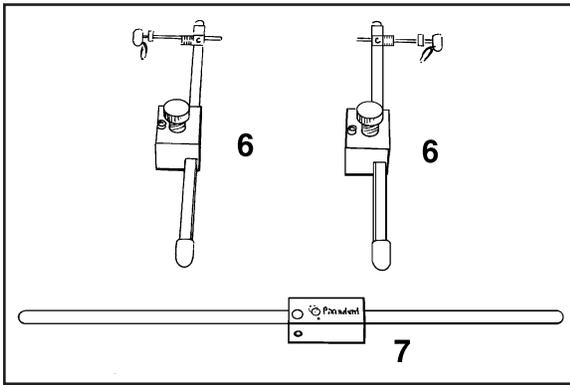


### Pana-Mount Face Bow Components

- |                   |                            |
|-------------------|----------------------------|
| 1) Bite-Fork      | 4) Hex Wrench              |
| 2) Face Bow       | 5) Bite-Fork Stem Assembly |
| 3) Nasion Relator |                            |

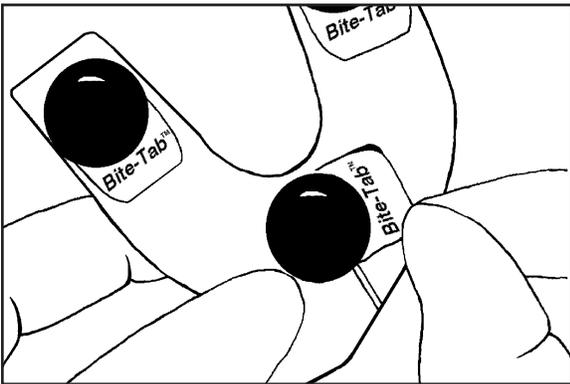
## AXIS MOUNTING ACCESSORIES

1



Side arms (6) are used for hinge axis transfer in conjunction with the Panamont face bow and axis mounting cross bar and clamp (7).

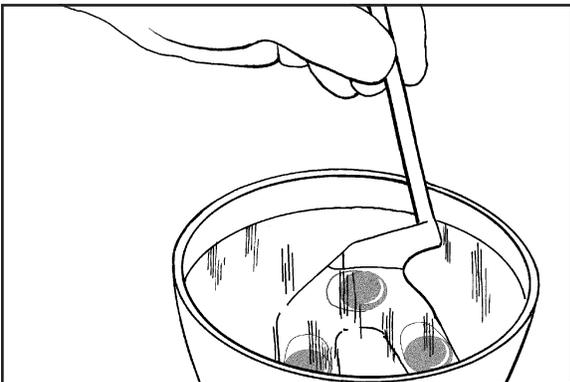
2



Press a *Bite-Tab* strip on each of the following areas: left molar, right molar, and incisor areas (six tabs) on both sides of clean, dry bite fork. (Do not cover midline mark on bite-fork.)

Refer to Bite-Tab Instructions.

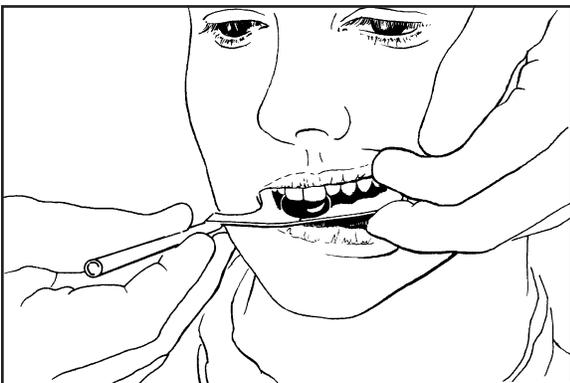
3



Hold bite fork in hot tap water (125°F or 40°C) for about one minute to soften Bite-Tab compound.

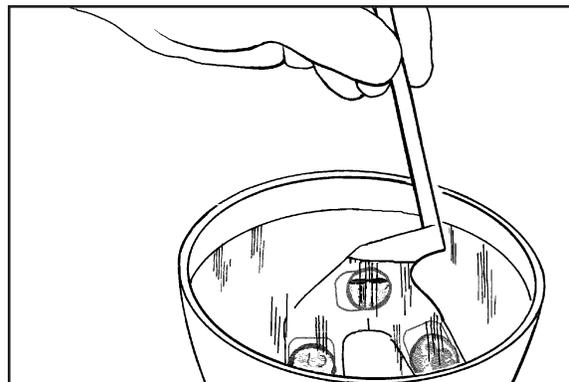
**ATTENTION:** *Do not place bite fork in water-bath because wax residues in bath may prevent Bite-Tab adhesion to bite fork.*

4



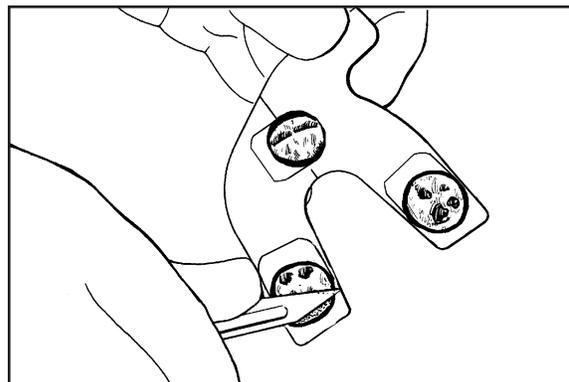
Have patient bite slowly into soft Bite-Tab compound to obtain maxillary and mandibular occlusal imprints about 1mm deep. (Avoid occlusal contacts with bite fork.)

Remove bite fork from patient's mouth and place fork in cold water to quickly harden or cool compound with compressed air.



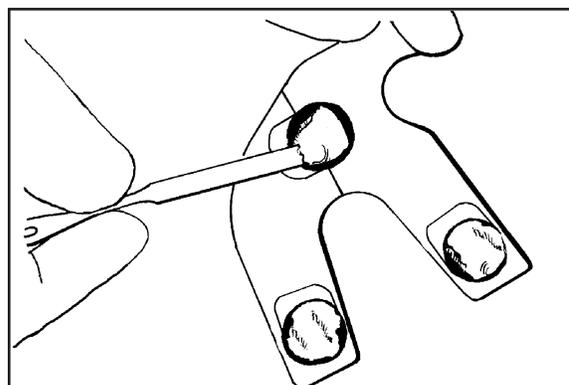
5

Dry compound with compressed air. Cut excess compound away leaving about 1mm deep tooth or ridge imprints.



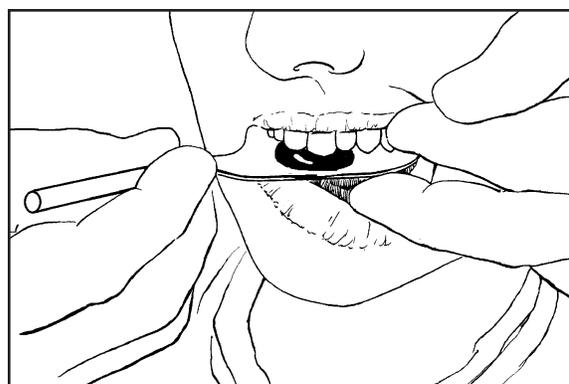
6

For highest accuracy, place small amount of bite registration paste on three compound pads on maxillary side only. (Include distal extension edentulous areas, if present.)



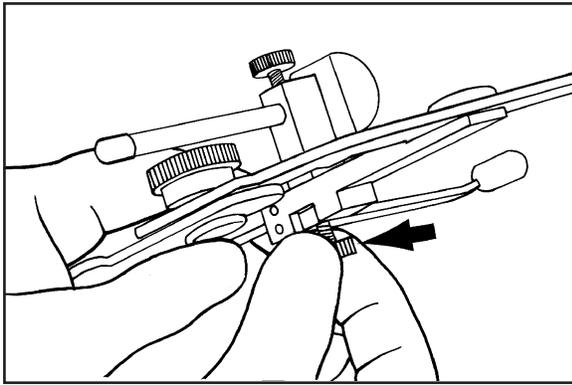
7

Replace bite fork against patient's upper teeth. Have patient close lower teeth into original indentations using lower jaw to support fork until bite registration material hardens.



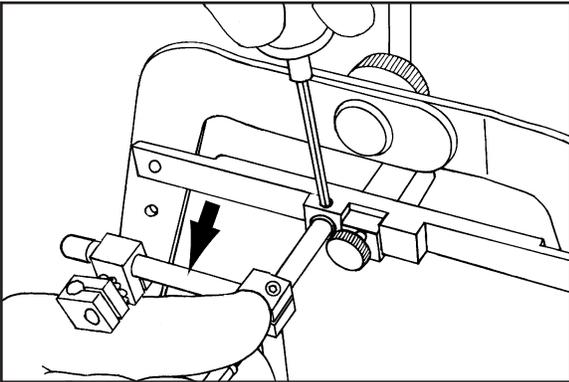
8

9



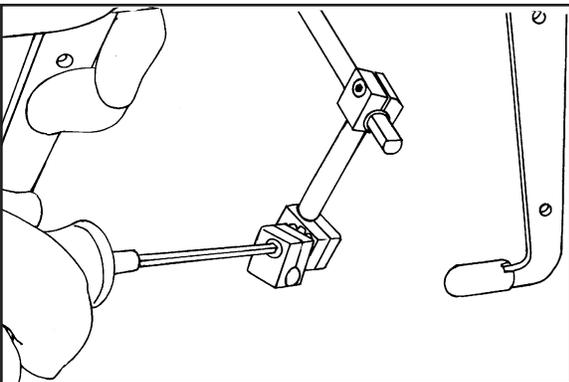
Lock nasion relator to cross bar of face-bow with thumb screw (arrow).

10



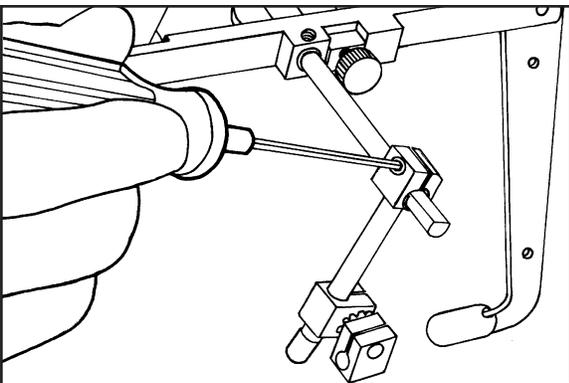
Orient bite fork attachment assembly so that horizontal slide bar is on patient's right side (arrow). Insert "short end" of vertical attachment post into cross bar of face-bow completely to ring stop (upper end of post should be flush with upper surface of cross bar). Rotate attachment post until flat end of post faces toward set screw. Tighten set screw to lock vertical attachment post to cross bar of face-bow.

11



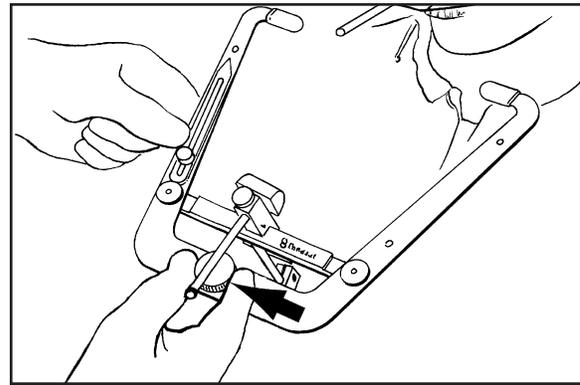
Loosen double toggle clamp with hex wrench so both members of clamp are completely free to move.

12



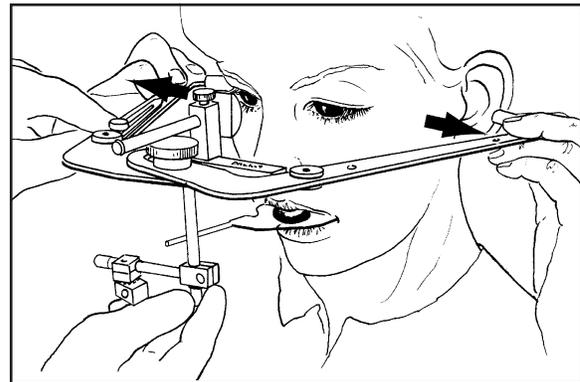
Loosen single toggle clamp with hex wrench so that clamp slides freely up and down vertical attachment post.

Slightly loosen ( $\frac{1}{2}$  turn) large thumb screw at anterior end of face-bow (arrow).



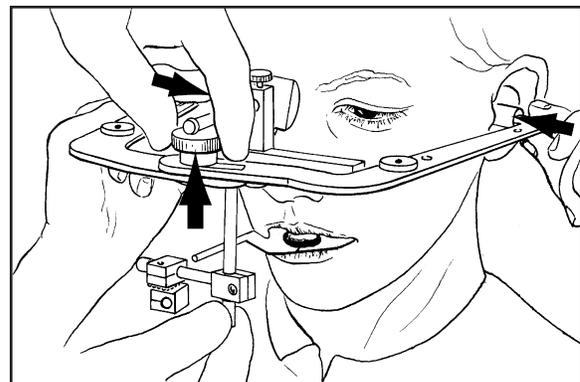
13

Have patient grasp side arms of bow and extend them to maximum width bilateral to face (arrows).



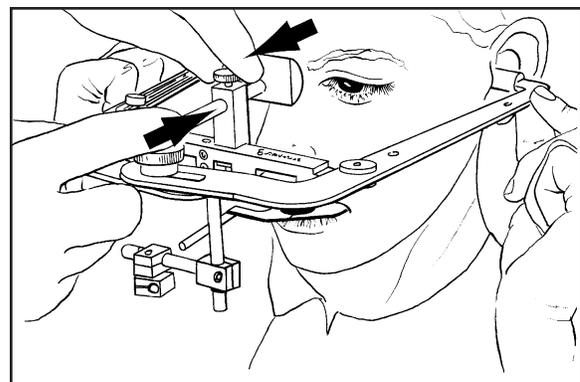
14

Instruct patient to contract side arms and place ear pieces firmly in auditory meatuses (horizontal arrows). While patient keeps side arms firmly contracted, tighten large thumb screw (vertical arrow) to lock face-bow width.



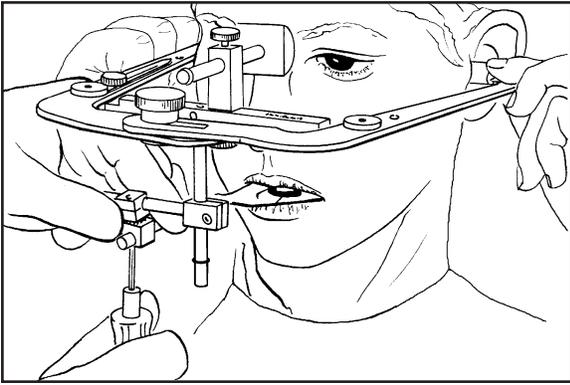
15

While patient continues to hold side arms, adjust bow vertically until nasion relator makes contact with the patient's nasion. Push firmly back with finger of one hand on end of nasion relator shaft (arrow #1) while concurrently pulling face-bow (arrow #2) forward with fingers of other hand on nasion post. Lock nasion relator in firm contact against patient's nasion.



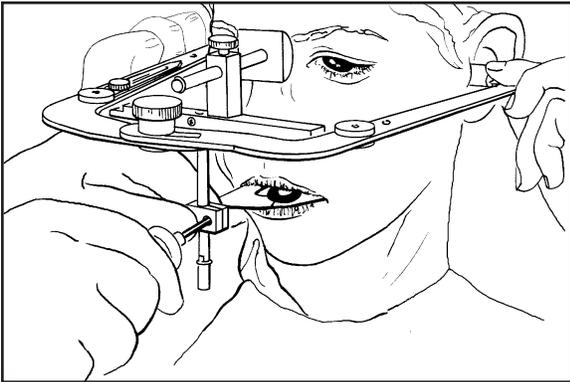
16

17



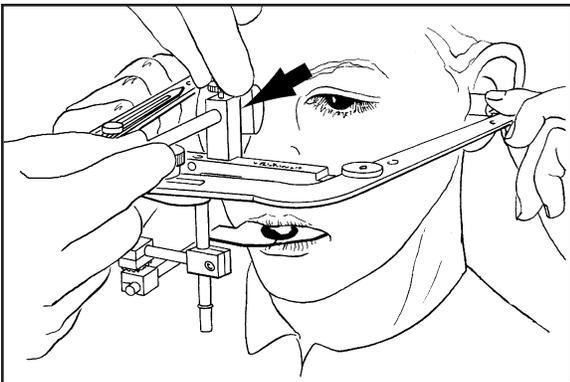
While patient continues to firmly hold side arms, slide double toggle clamp over protruding end of bite fork. Grasp double toggle clamp (to offset torque) and tighten clamp securely to stem of bite fork with hex wrench.

18



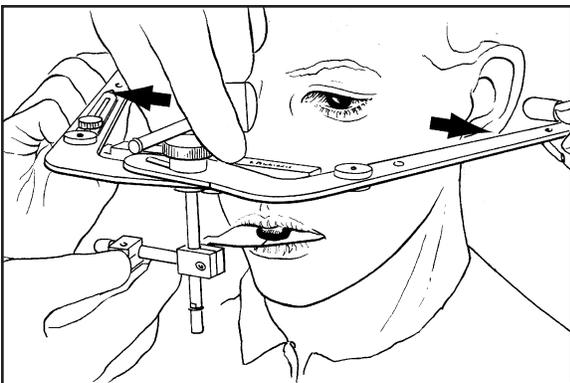
While patient continues to hold face-bow, grasp single toggle clamp tightly (to offset torque) and tighten clamp securely to vertical attachment post with hex wrench.

19



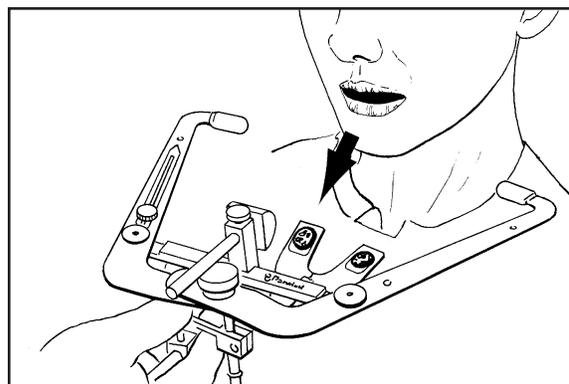
Loosen nasion relator thumb screw. Retract and lock nasion relator away from patient's face (arrow).

20



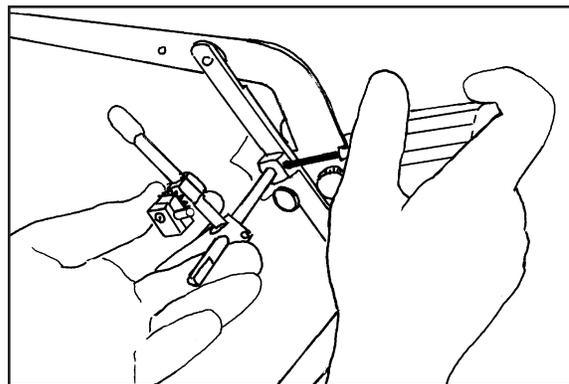
Slightly loosen ( $\frac{1}{2}$  turn) large locking thumb screw and have patient retract side arms away from ears (arrows). Re-tighten large locking screw to hold retracted position of face-bow.

Instruct patient to remove hands from face-bow and open mouth. Remove face bow downward and forward from patient's face (arrow).



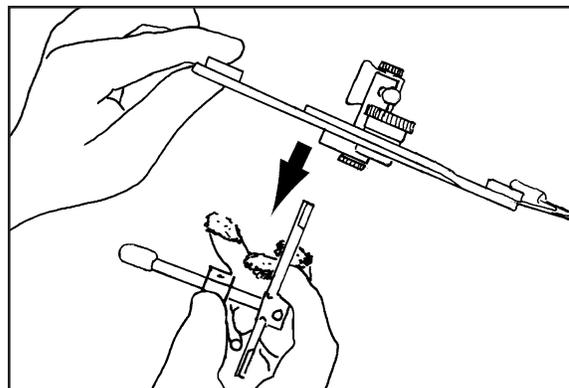
21

Loosen hex head set screw ( $\frac{1}{2}$  turn only) on cross bar of face-bow in preparation for removing bite fork assembly.



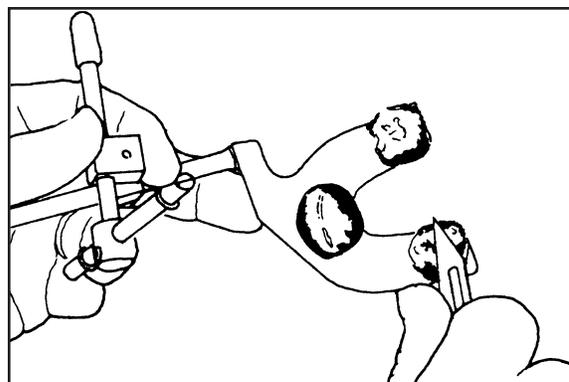
22

Remove bite fork assembly downward (arrow). By having extra bite fork assemblies, the face-bow can immediately be used for other patients.



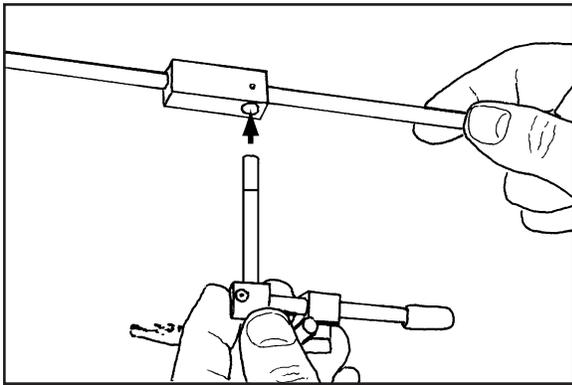
23

Cut back excess relined material on maxillary side of bite fork.



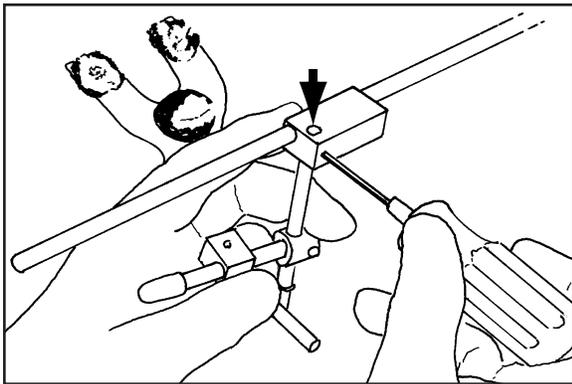
24

25



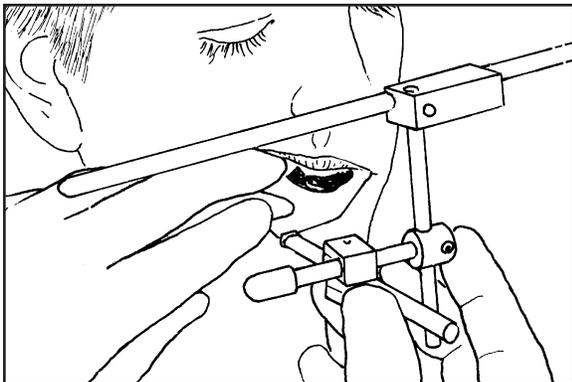
Insert upper end of *bite-fork* assembly into vertical hole in clamp of cross rod (arrow).

26



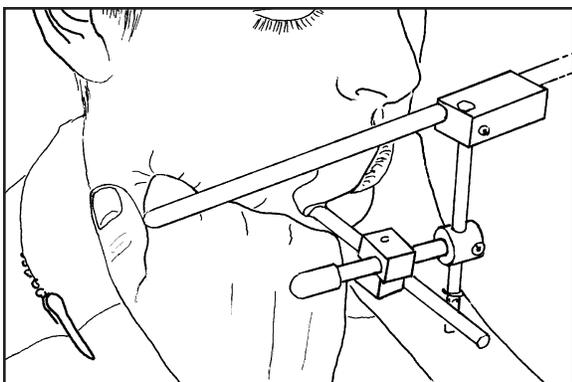
Position upper end of *bite-fork* post even with superior surface of clamp (arrow). Tighten flat head set screw against flat area of vertical *bite-fork* post.

27



Replace *bite-fork* between patient's teeth.

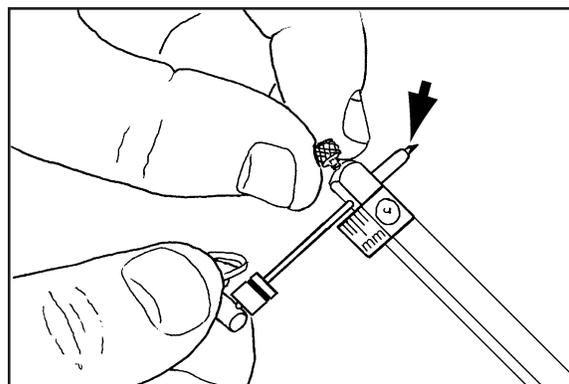
28



Have patient sit straight up and, make fists with hands and place under mandible to support mandible and bite fork.

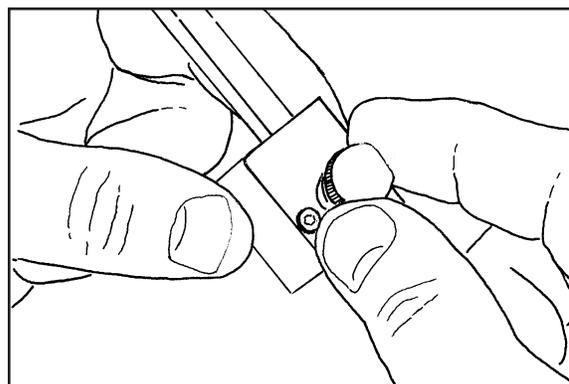
Insert and lock stylus pins into adjustable side arms. Have only beveled end of point protruding beyond support tubing (arrow).

**Note:** *You can adjust stylus to protrude 6mm toward face, using Bennet ring + 6mm ruler — This makes it easier to see point of stylus on axis mark.*



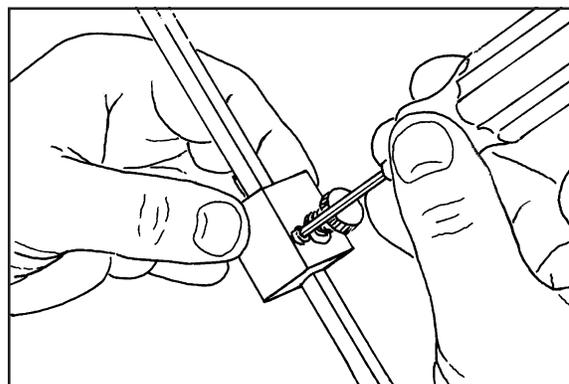
29

Loosen thumb screw of clamp completely.



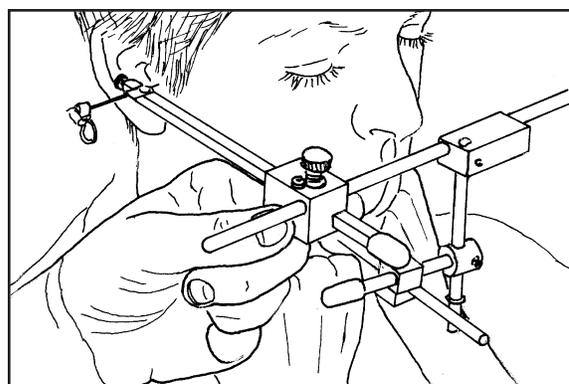
30

Loosen lock screw of clamp completely.



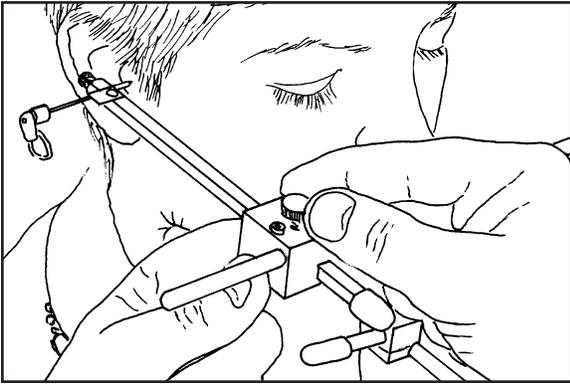
31

Slide side arm clamps on to cross rod and bring axis-pin point close to axis mark on skin on right side.



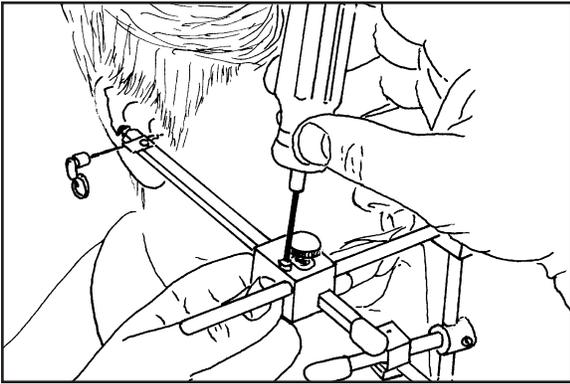
32

**33**



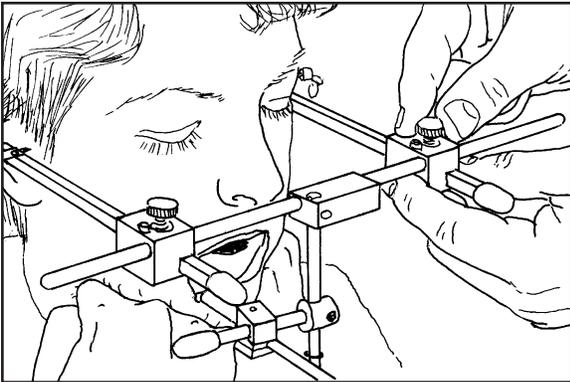
Tighten thumb screw completely, then loosen approximately 1/2 turn.

**34**



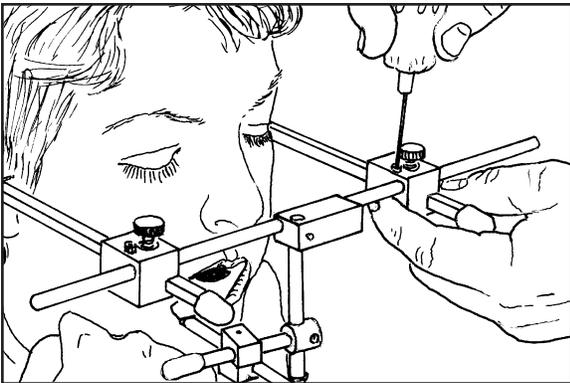
Make final adjustments of side arm to place axis pin on skin mark, then tighten lock screw with moderate pressure with hex wrench.

**35**



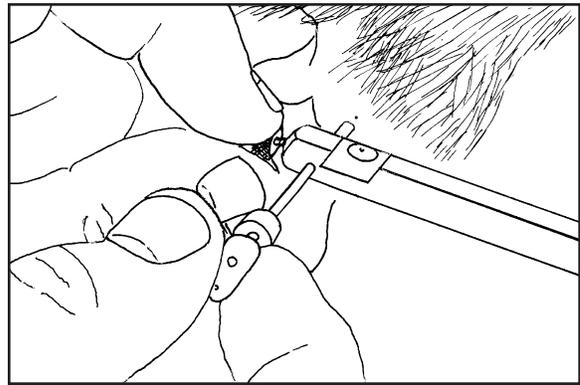
Place left side arm, tighten thumb screw, and adjust arm to place axis pin on skin mark.

**36**



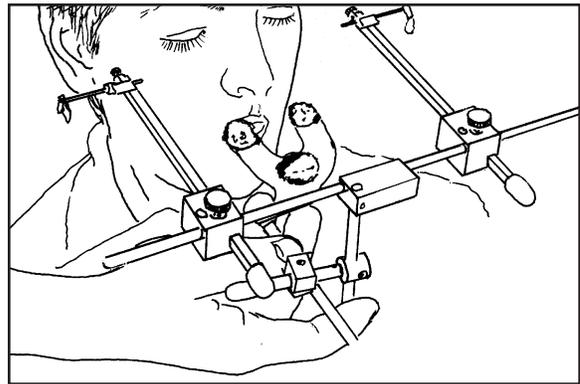
Tighten lock screw with finger pressure only on hex wrench.

Retract and lock right and left axis pins away from patient's skin.



37

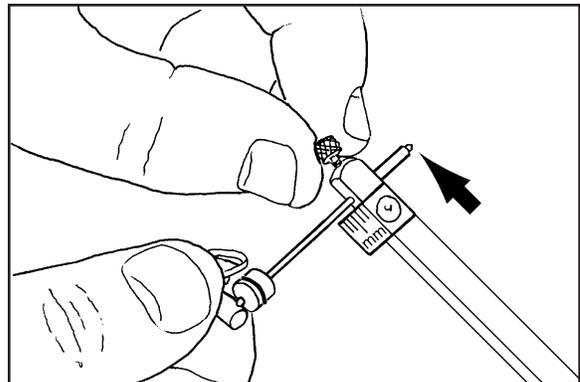
Have patient open mouth. Remove true hinge axis transfer bow with attached *bite-fork* assembly forward and away from patient's face.



38

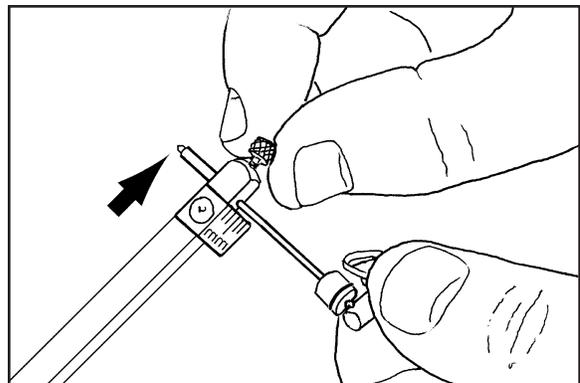
Loosen right side lock screw and reposition right axis pin with only beveled end of point protruding beyond end of tubular housing (arrow).

**Note:** You can protrude stylus back so Bennet ring contacts adjustable arm.



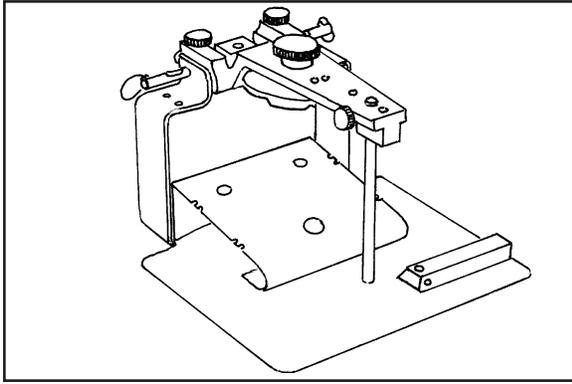
39

Loosen left side lock screw and reposition left axis pin with only beveled end of point protruding beyond end of tubular housing (arrow).



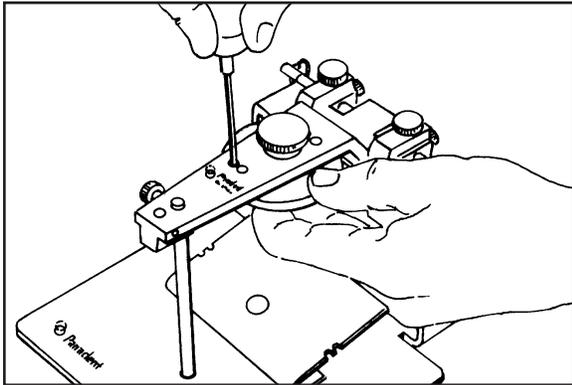
40

41



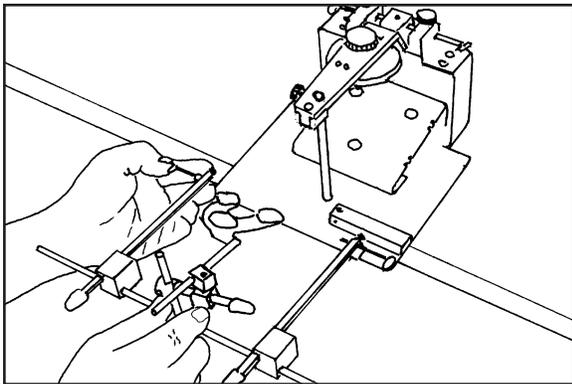
Axis Mounting Stand

42



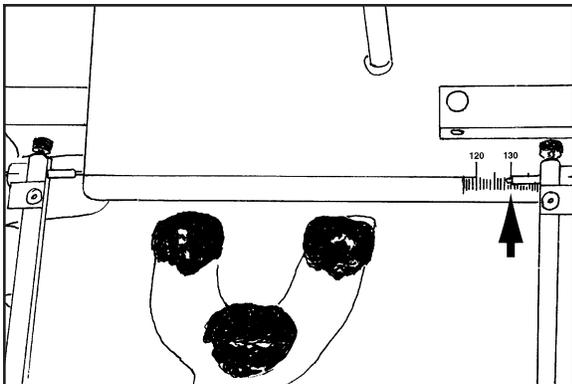
Attach standard mounting plate or Magna-Split II mounting plate with two cap screws to maxillary frame.

43



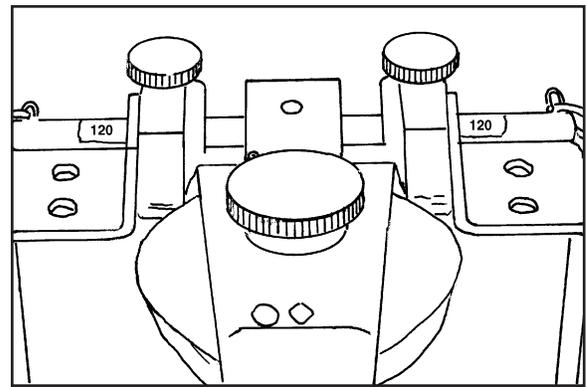
Place axis mounting stand on counter with the anterior end of base extending approximately 1-2" over edge of counter.

44



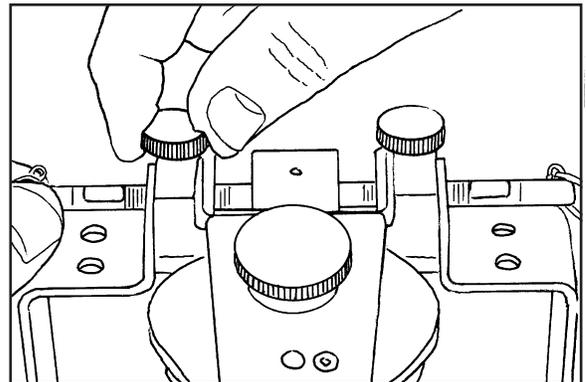
Place right side axis pin against left edge of mounting stand base and measure the distance between axis pins using mm scale located on right side of mounting stand (arrow).

When axis mounting shafts extensions are contracted to their minimum, distance between lateral ends of shaft is 120 mm.



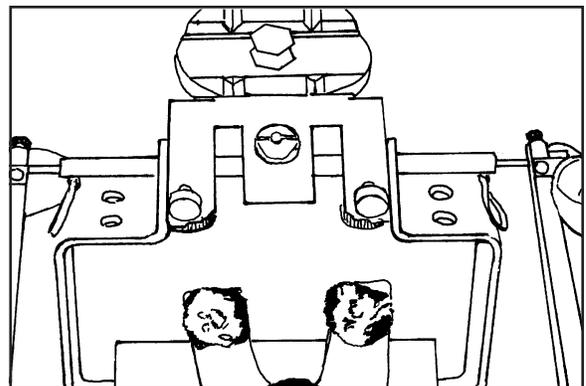
45

Subtract 120 mm from facial width measured between axis pins and divide by 2 to determine how far to extend mounting shafts to meet axis pins of mounting bow. Add 1 mm per side on mounting shafts to allow for engagement of axis pins into dimple of axis shafts.



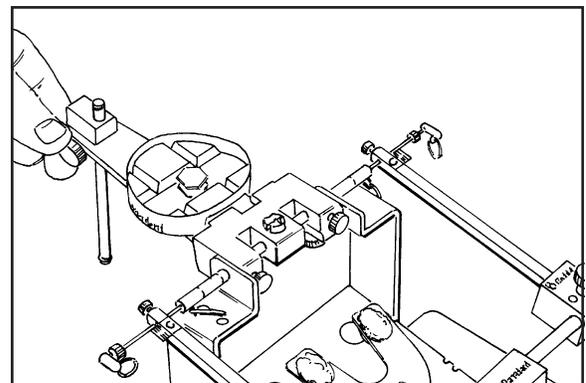
46

Engage left side axis pin into dimple of axis shaft. Flex side arms of mounting bow slightly (1 mm) to engage right side axis pin into dimple.



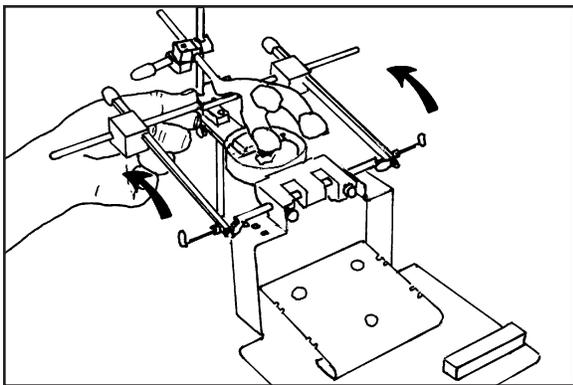
47

Hinge maxillary frame of articulator back 180°. Adjust post for support.



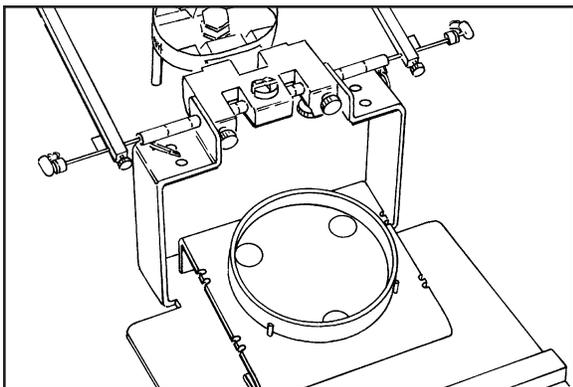
48

**49**



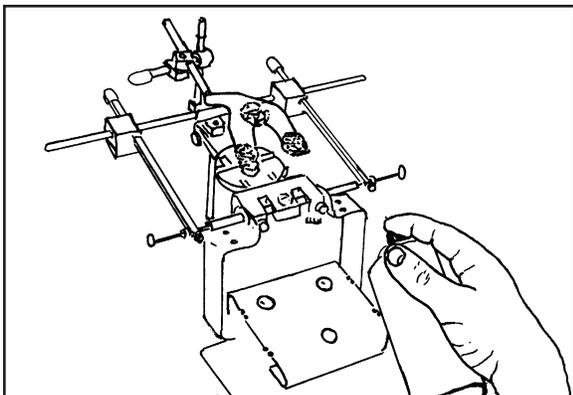
Hinge axis transfer bow back 180° (arrows).

**50**



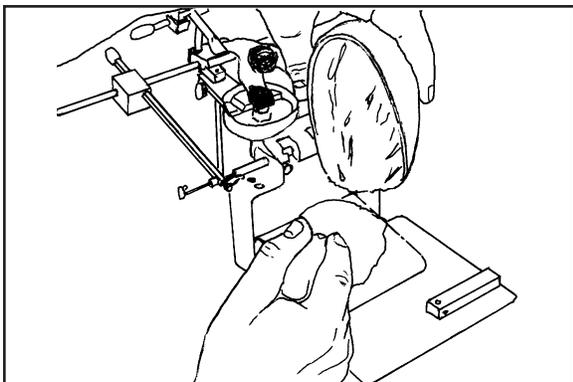
Position plastic plaster dam against dowel pins on indexing remount surface.

**51**



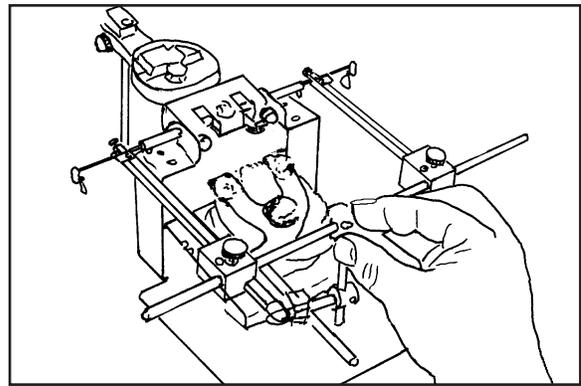
Spray mounting platform with silicone lubricant spray.

**52**



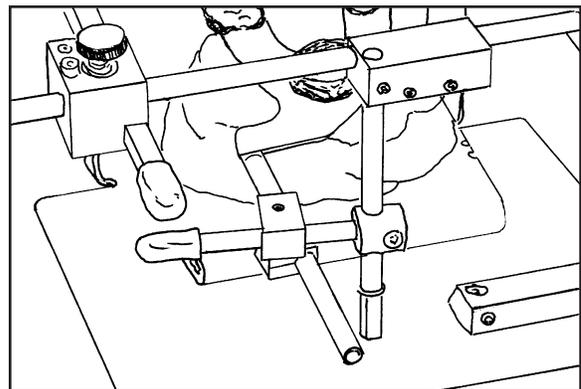
Mix mounting plaster to a consistency of soft whipped cream. Place enough plaster on platform to engage with bite fork.

Hinge axis transfer bow forward so that *bite-fork* is imbedded into soft plaster.



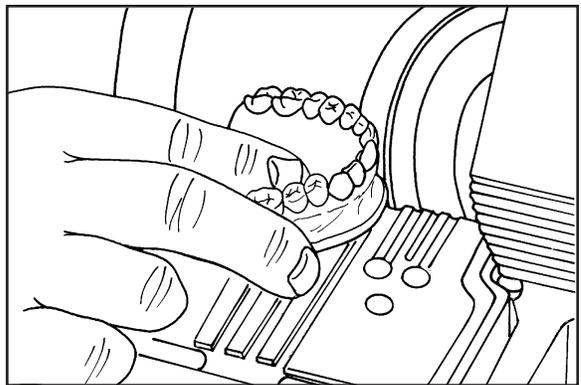
53

Make sure that inferior end of *bite-fork* attachment post contacts base of mounting stand. Allow plaster to harden.



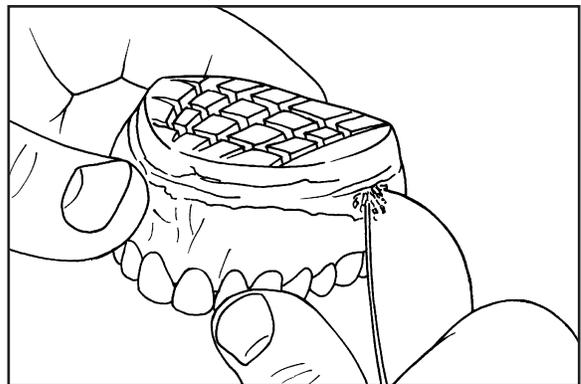
54

With model trimmer, first grind maxillary mounting surface of cast parallel to occlusal plane of teeth. Next, grind perimeter of cast with approximately 10-15° bevel to depth of buccal and labial vestibules. Avoid touching teeth or buccal and labial gingival areas with trimmer wheel.



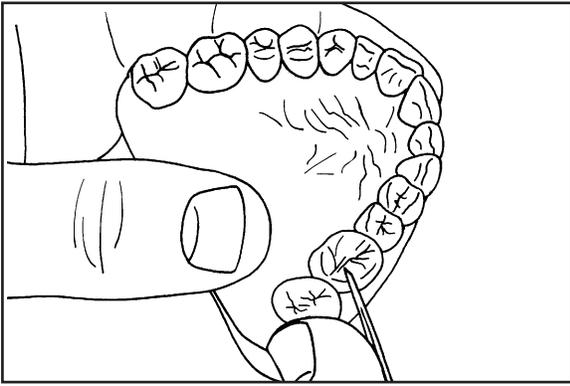
55

Score superior mounting surface and beveled areas of cast with laboratory knife or carborundum disc for retention of mounting plaster.



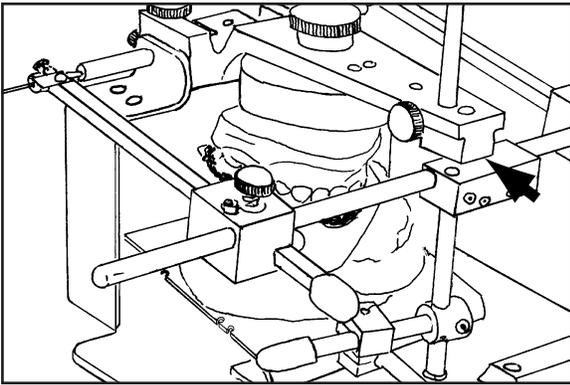
56

57



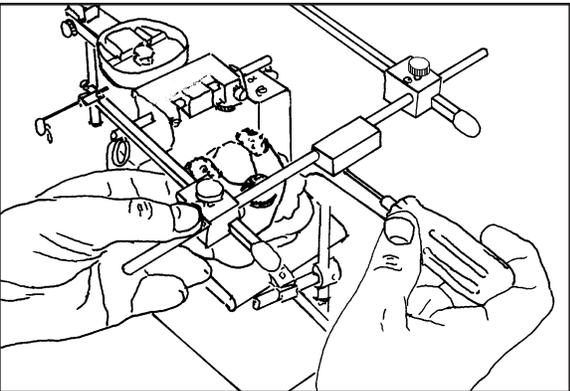
Remove all bubbles or impression defects from occlusal and incisal areas of cast with hand instruments such as disscoid-cleoid carver.

58



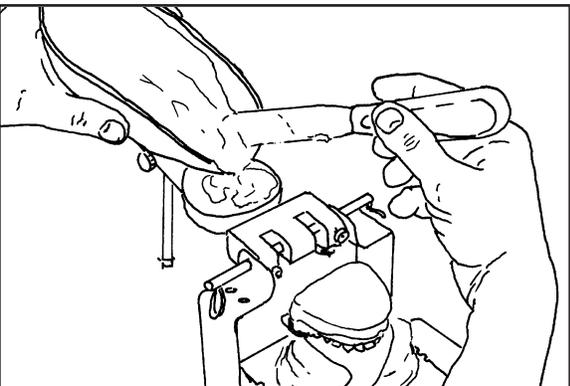
Seat cast carefully into *bite-fork* registration and verify fit. Close maxillary frame over cast until anterior end of maxillary frame contacts cross bar of face bow (arrow) to determine quantity of mounting plaster needed. Grind cast so there is at least 5 mm space between cast and mounting plate.

59



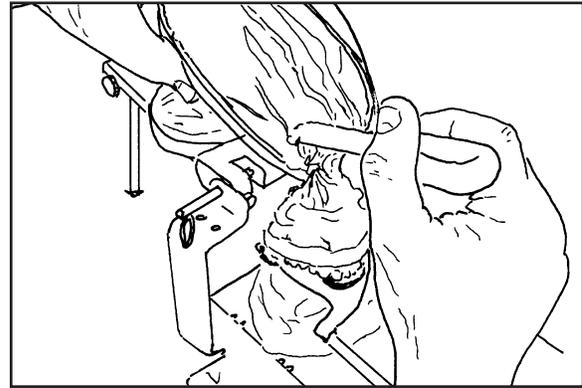
Loosen set screw on cross bar clamp with hex wrench and remove axis transfer bow assembly.

60



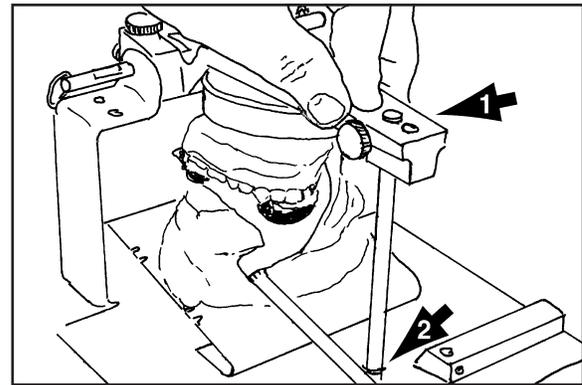
Mix mounting plaster (very soft) and place onto mounting plate.

Place portion of soft plaster on flat mounting surface of maxillary cast.



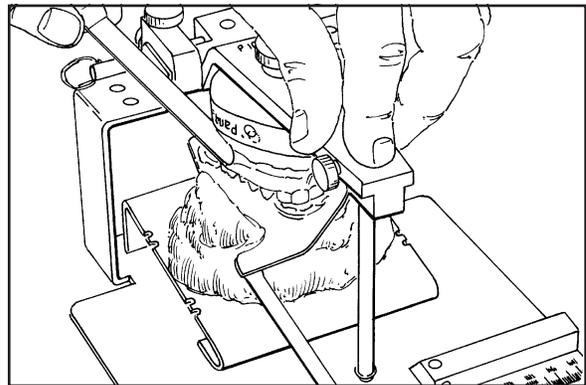
**61**

Rotate maxillary frame forward over cast until anterior support pin contacts surface of mounting stand. Support pin should be all the way down with c-clip touching maxillary frame (arrow #1). Make sure end of support pin touches mounting stand base (arrow #2).



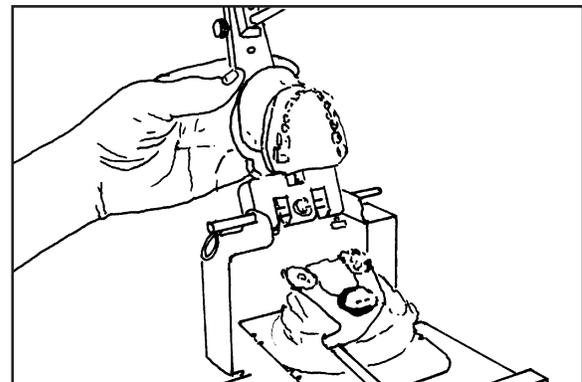
**62**

Quickly remove any overhanging portions of soft plaster with spatula or finger (mounting plaster should not extend beyond perimeter of Mounting Plate and vestibule of cast). Leave cast undisturbed until plaster has completely hardened.



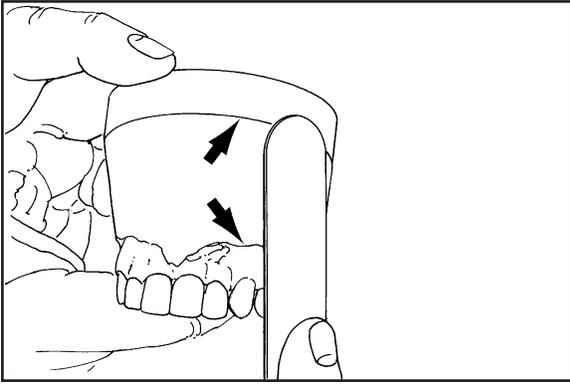
**63**

After plaster has completely hardened, rotate maxillary frame backward with cast attached.



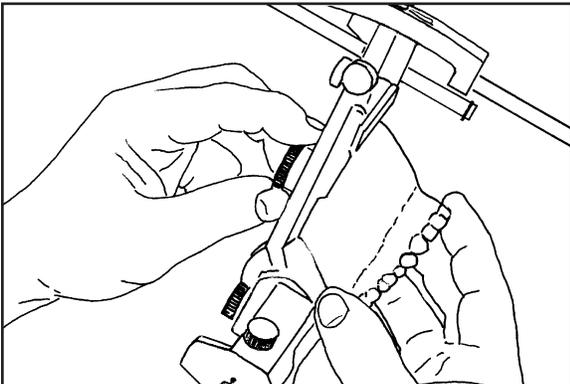
**64**

65



Remove mounted cast from Axis Mounting System and add more stone, using edge of mounting plate and cut edge of cast as guides for spatula (arrows).

66



Attach cast to maxillary frame of articulator.

Refer to Interocclusal Record Instructions and  
Mandibular Mounting Instructions.