



Slidematic Facebow with Quick Lock Toggle Assembly

Instruction Manual



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I. Rationale for Development

The Slidematic Facebow with Quick Lock Toggle was designed to satisfy the following requirements:

- An accurate earbow that moves straight horizontally for different facial widths, unlike the caliper type that moves off the vertical axis.
- A minimal number of parts and finger screws to permit a facebow registration to be taken in less time.
- The ability to send the bitefork assembly (without the measuring bow) to the laboratory, preventing damage to the bow in transit.
- Ease of mounting the maxillary cast by not having to transfer the measuring bow to the articulator.
- The capability of taking multiple facebow records at the lowest possible cost through the use of only one measuring bow and different bitefork assembly for each case.

II. Benefits and Features

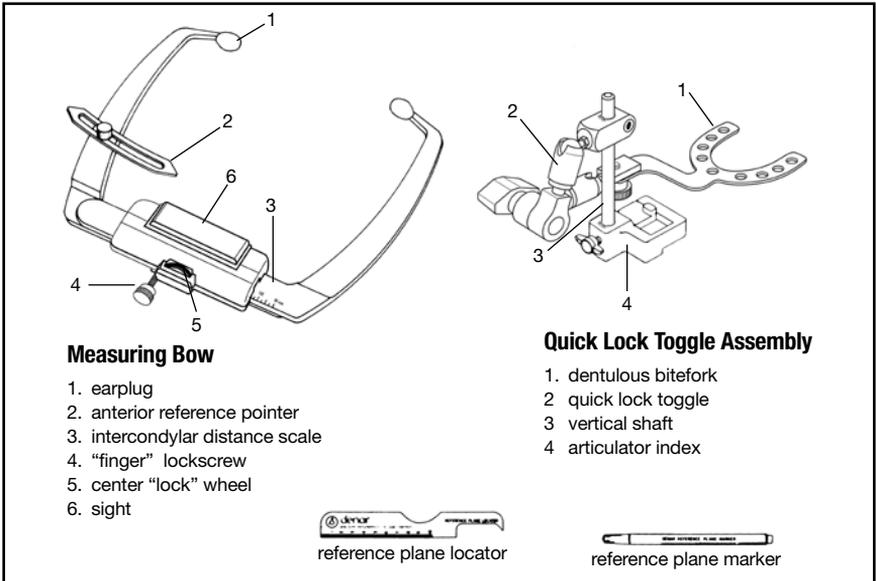
Facebow Transfer

The facebow transfer procedure establishes the relationship of the maxillary dentition to the horizontal reference plane so that the maxillary cast may be mounted on the articulator in the correct anatomical position. The Slidematic Facebow provides a fast, easy and extremely accurate means of transferring the proper anatomical relationship to the articulator.

Benefits and Features

- The precision manufacturing of the unique “speed-slide” gear mechanism makes it very easy to assemble the bow on the patient.
- The right and left arms of the measuring bow are geared to precise equidistant movement from the center of the bow.
- The scale on the measuring bow represents the patient’s intercondylar distance (not the interbow distance) for ease in setting articulators having this adjustment.
- The Slidematic Facebow can be used on all Denar® articulators. It also adapts for use with Whip Mix®, and Hanau™ articulators.
- The bow uses the external auditory meatus reference point for determining the arbitrary hinge axis location.

- The built-in reference pointer aligns the bow with the horizontal reference plane.
- The built-in sight can be used to view the anterior reference point.
- The measuring bow cannot be mounted on the articulator during the transfer procedure. The bow, when detached from the vertical shaft, can be used again immediately with the additional transfer jigs (vertical shaft, bitefork assembly and articulator index). In this manner, the maxillary casts may be mounted any time.
NOTE: Follow guidelines for cold sterilization of measuring bow before reusing (see care and maintenance).
- In one step the bitefork assembly is secured to the articulator index and the maxillary cast can be mounted to the articulator.
- All finger screws are easily accessible from the front.
- The procedures can be readily delegated to auxiliary personnel.
- The quick lock toggle allows you to easily place the bite fork adaptor while preventing rotation of the bite fork.
- The quick lock toggle reduces the chance of torquing the facebow to an absolute minimum.



Sterilize bitefork before each use.

III. Slidematic Facebow Procedure

Mark the anterior reference point on the patient's right side using the Reference Plane Locator and Marker. The point is 43 millimeters above the incisal edge of the right central or lateral incisors (Figure 1). On an edentulous patient, measure up from the lower border of the upper lip when it is in repose.

Cover the bitefork with a bite registration material of your choice. Place the bitefork in the mouth, aligning the patient's midline with the index notch, so that it is parallel with the patient's coronal and horizontal planes (Figure 2). Be certain to obtain a light indexing of the patient's maxillary arch and then ask the patient to hold the bitefork in place or place a cotton roll between the bitefork and the mandibular teeth.

NOTE: The bitefork can be used with the arm on either the right or left side of the vertical shaft.

Ensure the arm of the ball fits inside the slot of both sleeves on the quick lock toggle assembly. This ensures the quick lock toggle assembly has the fullest range of movement anteriorly/posteriorly (Figure 3).

Attach the vertical shaft to the measuring bow with the flat side of the shaft closest to the patient (Figure 4). Tighten with the finger screw on the front of the measuring bow. The upper sleeve of the quick lock toggle will be parallel to the shaft with the black #2 knob either to the right or left of the shaft. It is necessary to tighten the finger screw on the measuring bow to secure the vertical shaft and also to avoid movement.



Figure 1



Figure 2



Figure 3

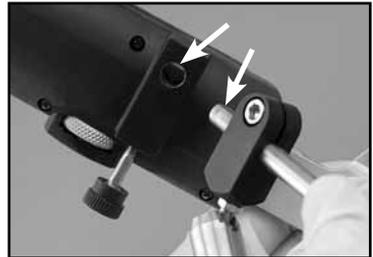


Figure 4

We encourage you to rehearse the following steps with the patient so they can become familiar with the procedure and offer assistance as needed.

Loosen knob #1 slightly so that it will easily slide over the arm of the bitefork. With your thumb, loosen the center wheel on top of the measuring bow and slide the bow open to accommodate the width of the patient's face. Place the earpieces in the patient's auditory meatus and hold in place with a firm forward pressure (Figure 5). Tighten the center wheel on the measuring bow.

With one hand holding the measuring bow or with the patient's assistance holding the bow, attach the quick lock toggle assembly to the bitefork, with the #1 knob facing down. Lock into place using the #1 knob (Figure 6).

Loosen the screw on the anterior reference pointer. Raise or lower the bow so that the pointer or sight aligns precisely with the anterior reference point marked earlier. Lock the quick lock toggle assembly by tightening knob #2 located at the center of the toggle assembly (Figure 7).

Check to ensure that the measuring bow is parallel to the horizon, either using a bubble level or with visual verification. Ensure the quick lock toggle assembly is firmly locked in place (Figure 8).

The patient's intercondylar distance is the measurement indicated on the scale. Record this measurement if using an articulator with this adjustment (Figure 9).

Loosen the center wheel on top of the measuring bow, slide the bow open, and remove the entire facebow from the patient.



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

Detach the measuring bow from the quick lock toggle assembly by loosening the finger screw on the front of the measuring bow. Having completed the procedures involving the patient, the quick lock toggle assembly may be labeled with the patient's name and set aside while the measuring bow may be used with an additional quick lock toggle assembly for the next patient (Figure 10).



Figure 10

Note: The metal bitefork and earpieces can be sterilized in an autoclave. DO NOT autoclave the measuring bow with levels attached.

Sterilize bitefork before each use.

IV. Mounting Procedure

A benefit of using the Denar® Slidematic Facebow is that multiple quick lock toggle assemblies may be used with only one measuring bow. In some cases the mounting of the maxillary cast can be delegated to the laboratory, involving no loss of accuracy and no period of time without facebow transfer capability in the dental office. The laboratory can attach an articulator index to its own Denar® articulator and mount the maxillary cast using only the quick lock toggle assembly from the dental office. Each articulator index positions the quick lock toggle assembly on any Denar® articulator so that the relationship with the condyles recorded on the patient is accurately reproduced on the articulator.

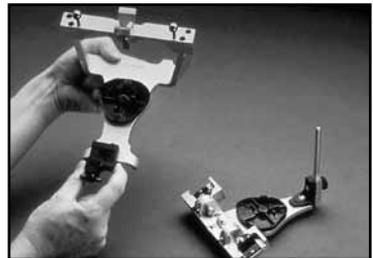


Figure 11

Mounting The Maxillary Cast

Replace the incisal table on the articulator with the articulator index (Figure 11). With the clamp on the vertical shaft at the top of the shaft, secure the lower part of the vertical shaft in the hole of the articulator index. Tighten the finger screw on the front edge of the index (Figure 12).



Figure 12

Attach a mounting plate to the upper bow. Be sure that the incisal pin is at the zero

position and that the upper bow is level and parallel to the table top.

Your articulator comes with a standard incisal pin guide. When using standard incisal pins, the incisal pin should set on top of the movable slide insert on the articulator index (Figure 13). When using the incisal pin with the long centric adjustment the pin should rest on the lowest point of the articulator index.

Tip: To avoid confusion and in cases where the standard pin is utilized exclusively, lock the slide insert in the correct position with a drop of wax or acrylic.

Place the maxillary cast in the bite registration index on the bitefork, close the articulator, and mount the cast with mounting stone to the mounting plate (Figure 14). It is recommended that you use a maxillary cast support to prevent flexing of the bite fork during the cast mounting procedure. Once the stone has hardened, remove the transfer jig and replace the incisal table in the articulator.

Mounting The Mandibular Cast

Attach a mounting plate to the lower bow. A centric relation bite record is used to mount the mandibular cast. With the maxillary cast attached to the articulator and the centric latch engaged, invert the articulator and place the centric relation bite record between the maxillary and mandibular casts (Figure 15). Stabilize the position of the casts with one of the following: glue gun, coat hanger wire, large paper clips. Adjust the incisal pin to accommodate the increased vertical distance caused by the thickness of the centric relation bite record. Double check to be certain that the condyles are seated against the rear and tops of the fossae, and using mounting stone, proceed to mount the mandibular cast to the mounting plate on the articulator (Figure 16).

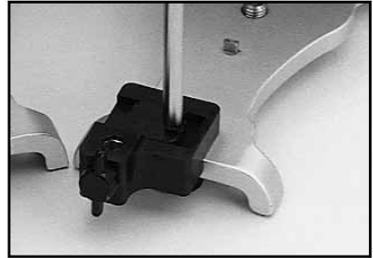


Figure 13



Figure 14

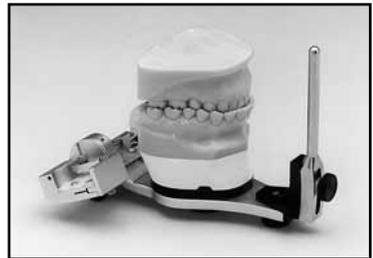


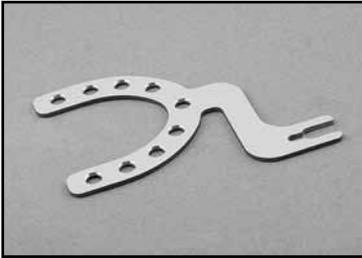
Figure 15



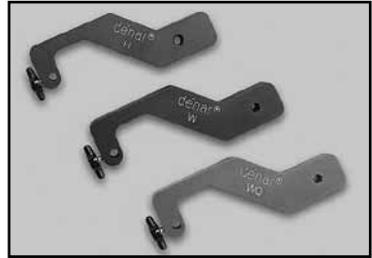
Figure 16

V. Slidematic Accessories

The Slidematic Facebow can be used with other articulators and indexes are available for the Hanau™ and Whip Mix® models.



Standard Bitefork



Indexes

VI. Reordering

Standard Biteforks

Part No. 200038 Dentulous

Articulator Indexes

Part No. 200080 Denar®
200082 Hanau™
200088 Whip Mix®
200088Q Whip Mix® QuickMount

Other

Part No. 200018-1 Quick Lock Toggle Assembly
200008 Bitefork/Shaft Assembly
003401-000 Maxillary Cast Support

Denar® and Whip Mix® are registered trademarks and Hanau™ is a trademark of Whip Mix Corporation.

VII. Warranty

Whip Mix Corporation warrants the Slidematic Facebow to be free from defects in material and/or workmanship for a period of one year. In the event of a defect, please notify the factory in writing of the defect prior to returning the instrument. Whip Mix Corporation will, at its option, either repair, replace or issue credit for such defects.

Because Whip Mix Corporation is continually advancing the design of its products and manufacturing methods, it reserves the right to improve, modify or discontinue products at any time, or to change specifications or prices without notice and without incurring obligations.

VIII. Care and Maintenance

1. The metal bitefork can be sterilized in an autoclave. Since the bite fork is made out of metal and is the only part used inside the oral cavity it should be sterilized before each use. Due to the availability of several different models of sterilization and autoclaving equipment on the market it is important that you follow their recommendations for time and temperature for the materials being sterilized, but do not exceed 375° F or 30 minutes. Cold sterilize the ear pieces.
2. The quick lock toggle shaft assembly should be cleaned with an EPA-registered hospital disinfectant with low to intermediate-level (tuberculocidal claim) activity. Do not autoclave or run this shaft assembly through a dishwasher.
3. Clean and properly disinfect the facebow apparatus before each use. Do not autoclave the bow with level attached.
4. A finger cot placed over each earpiece will help facilitate proper disinfection of the facebow.



RESTORATIVE ORAL HEALTH

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