2000 Series
Articulator System

Models 2240 and 2340
Instruction Manual
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Introduction

Whip Mix articulators are designed to enable the user to quickly and easily mount casts of a patient’s dentition on a mechanical device that will reproduce their natural relationship and movements with an acceptable degree of accuracy. The simplicity and speed with which the necessary registrations are obtained and transferred to a Whip Mix articulator enable the operator to accomplish corrective and restorative dentistry with much greater precision than has ever before been possible without the use of expensive equipment and time consuming techniques.

Being arcon type instruments, Whip Mix articulators are ideal for the study of occlusion and the movements of the temporomandibular joints. With the condyle located on the lower member and the guidance on the upper member, Whip Mix semi-adjustable articulators have become the preferred choice of many teaching institutions.

Features

The 2000 Series Articulator System Features:

Protrusive Condylar Inclination:

- **Model 2240** adjustable 0 – 70 degrees with FB position
- **Model 2340**

Progressive Side Shift:

- **Model 2240** fixed 7½ degrees
- **Model 2340** adjustable 0 – 30 degrees

Immediate Side Shift:

- **Model 2240** 0 – 3mm
- **Model 2340** fixed

Fossa:

- **Model 2240** ¾ inch (19mm) curved eminentia
- **Model 2340** Straight fossa

Elastics:

- **Model 2240** Bilateral elastics function to hold the upper and lower members of the articulator together during excursive movement when secured

Fixed intercondylar distance:

110 mm (the same as the M setting found on other Whip Mix articulators)

“Accumount” system of interchangeability which allows accurate transfer of casts between articulators

Ergonomic design with wide lingual access and ample interframe distance

Easily positioned centric latch provides a quick way to return to centric position

Non-skid rubber feet for stabilizing articulator when open
2000 Series
Articulator System

Articulator Manipulations
To attach or remove the incisal guide pin, loosen or tighten the incisal guide pin screw.
The upper and lower frames are made parallel by aligning the top of the pin boss with the dark line which completely encircles the pin.

Centric Latch Operation
Engage the centric latch on the articulator to keep the condyles in contact with the posterior and superior walls of the condylar guides.

Elastics
Model 2240 Attach the elastics to the lower frame.
Articulator Adjustments

Protrusive Condylar Inclination: the angle of the fossa in relation to the occlusal plane.

**Model 2240  Model 2340** The inclination of the protrusive condylar path can be adjusted by loosening the large black clamp knob. The protrusive condylar path inclination scale is on the side of the upper member and is calibrated in increments of 5 degrees. The protrusive adjustment range is 0 – 70 degrees.

**Note:** Set each condylar guide to the “FB” (facebow) marking on the condylar inclination scale in preparation for attaching the facebow assembly to the upper frame of the articulator.

Progressive Side Shift: the path the orbiting condyle follows on the medial wall of the fossa as it orbits around the rotating condyle.

**Model 2340** To set the progressive side shift, loosen the side shift guide locking screw and move the side shift guide until it touches the side of the condyle element. The scale for the progressive side shift adjustment is beside the adjustment side shift guide and is calibrated in 5 degree increments. The progressive side shift range is 0 – 30 degrees.

Immediate Side Shift: a mandibular side shift in which the orbiting condyle moves essentially straight medially as it leaves centric relation.

**Model 2240** To set the immediate side shift, loosen the thumbscrew below the scale and align the marks of the upper scale with the single mark on the lower scale. The immediate side shift range is 0 – 3 mm.
Mounting Casts on the 2000 Series Articulators

In addition to a facebow record, the only records needed for complete programming of the 2000 series are:

- Lateral bite records
- Protrusive bite record

Indirect Mounting the Maxillary Cast

Place the Transfer Base Assembly on the articulator. Secure the Transfer Base Assembly with the mounting plate screw, metal disc or fork support if using magnetic mounting system.

Note:

- Model 2240 Set each condylar guide to the “FB” markings on the inclination scale for articulators with immediate side shift.
- Model 2340 Set each condylar guide to 30 degrees for articulators with progressive side shift.

Set immediate or progressive side shift guides to the “0”.

Place the vertical rod of the transfer assembly into the transfer base and lower it until the bottom of the vertical rod contacts the transfer base. Tighten with clamp screw.

Place the upper member of the articulator onto the lower member with the incisal guide pin set to the zero mark to keep the members parallel.
Position the maxillary cast into the bite registration.

**Note:** A fork support may be used to steady the bite fork.

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**Mounting the Mandibular Cast**

Engage the Positive Centric Latch and secure the elastics to the lower member.

- **Model 2340**  
  Set both progressive side shift guides to the “0” position.

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Invert the articulator. Position the mandibular cast on the CR or MI bite registration.

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Complete the mounting of the casts.
Direct Mounting the Maxillary Cast

Remove or sufficiently raise the incisal guide pin so the upper member of the articulator will be able to rest on the horizontal crossbar of the facebow.

Note:

Model 2240 Set each condylar guide to the “FB” markings on the inclination scale for articulators with immediate side shift.

Model 2340 Set each condylar guide to 30 degrees for articulators with progressive side shift.

Set immediate or progressive side shift guides to “0”.

Position the facebow’s mounting pin located on the outer edge of the condylar guides into the hole on the medial side of each plastic earpiece of the facebow.

Allow the anterior end of the upper member of the articulator to rest on the horizontal crossbar of the facebow. Make sure the articulator with attached facebow is stable. You may want to use a facebow fork support to stabilize the maxillary cast during mounting procedures.

Position the maxillary cast into the bite registration.

Mounting the Mandibular Cast

Follow procedure on page 7.
Accessories

**Whip Mix® Indirect Mounting Facebow**
This facebow provides a convenient, quick and accurate method of securing an arbitrary hinge axis location without the use of expensive equipment and time-consuming techniques. Once the registration is obtained, the transfer assembly is removed for mounting, freeing the facebow for the next patient.

**Maxillary Fork Support**
The adjustable “T” supports the bitefork and maxillary cast when mounting the facebow record on the articulator. Versions available for both magnetic and screw type mounting.

**Universal Occlusal Stand**
Allows you to mount the working casts at Bonwill’s Equilateral Triangle. Includes two interchangeable tables – flat and curved. The flat table accepts the Kois index tray.

**FlexiMount™ Universal Mounting Support**
Quickly and easily provide dynamic stability when mounting the lower cast without glue, paper clips or accelerants.
Whip Mix® Verification Gage
Verify and calibrate articulators in the field to factory settings. With articulators in calibration, you can transfer the casts between compatible articulators.

Adjustable Guide Table
May be moved anteriorly or posteriorly which minimizes having to adjust for the “x” dimension. Incline may be adjusted and locked from 0 to 40 degrees protrusive. Adjustable lateral wings establish the degree of incisal freedom from 0 to 45 degrees.

Interchangeability
All 2000 Series Articulators feature the Accumount Mounting System. The Accumount System makes it possible for the dental practitioner and the dental laboratory to interchange casts without exchanging articulators. This will reduce instrument damage caused by shipping the articulator.
Care and Maintenance

Your Whip Mix articulator is a sturdily constructed instrument that will provide many years of service with reasonable care. Both the upper and lower members are made of cast aluminum. All aluminum parts are anodized to prevent corrosion or staining. Each condyle element consists of a stainless steel and the condylar guide assemblies are made of chrome-plated silicone bronze.

- Avoid getting wax or stone in the screw holes which may damage the threads.
- Tighten screws snugly, but not too tightly. Overtightening the retaining screws can strip the threads.
- It is a good idea to use a carrying case when the articulator is transported. Dropping the articulator may result in bent or broken parts which may affect the articulator’s ability to accurately reproduce a patient’s mandibular movements.
- A thin film of lubricant or silicone spray applied to the surfaces upon which the condylar elements move will provide a smooth action of these parts.
- Failing to remove excess stone, or not keeping the articulator clean may result in corrosion of articulator surfaces.
- Every couple of months, place a drop or two of hand piece oil inside the latch assembly to ensure optimum movement.
- Apply silicone spray to articulator frame to prevent plaster or stone from sticking to surfaces.

Failure to follow these instructions will void your warranty.

Warranty

Whip Mix Corporation warrants the articulator system 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 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 and manufacturing method of its products, 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.