Articulator Instructions

Applicable for items AR100011, 10012, 100021, 10022, 510100, 510200, AR10005, 100006, 100007, 100008

Originally written by:
- Dr. Jorge Ayala Puente, DDS
- Dr. Gonzalo Guietierrez Alvarez, DDS
- Dr. Jose Miguel Obach M., DDS

Translated by:
- Dr. Barbara Fernandez Lubbert, DDS

Edited by:
- Dr. Robert Williams, DDS
Section 1: Articulator Background
The AD2 articulator, like other articulators, reproduces the order mandibular movements and closing arcs, but it also presents several advantages, including:

➢ A standard pattern of construction, which is responsible for it being interchangeable, an important characteristic of this system. This allows the user to evaluate the patient’s occlusion on any AD2 articulator with great precision. This apparently insignificant trait gains importance when more than one articulator is in use in a practice or of cases are being sent to another professional.

➢ Three dimensional curved path analogs of motion that include lateral border, protrusive and curved path Bennett pathways

➢ Side shift activators that retain the upper and lower frames together at all times so handling the articulator is much easier.

➢ A mounting table and bite fork stem (provided in facebow kit) which eliminate needing to send the facebow to the lab when mounting the upper cast.

➢ A centric lock that centers the upper and lower frames to one another.

➢ A centric latch that is magnetically retained to lock the upper and lower frames together during the cast mounting procedure. The latch secures the hinge axis in its place.

➢ A test column that allows the user to periodically check the articulator’s calibration for accuracy.

For a better understanding of the articulator, the following instructions outline the key components and their use.

Section 2: Main Components
1. Upper Frame
2. Lowe Frame
3. DynaLink
4. Incisal Pin module
5. Support Pin
6. Incisal Table
7. Motion Analog
8. Centric latch
9. Mounting Knob
10. Magnetic Base (optional)
**Upper Frame Components**

1. Motion Analog  
2. Centric Latch (partial view)  
3. Analog Thumb Screw  
4. DynaLink Thumb Screw  
5. Mounting Knob  
6. Support Pin Thumb Screw  
7. Incisal Pin Module Mounting Knob  
8. Incisal Pin Housing  
9. Incisal Pin  
10. Incisal Pin Thumb Screw

**Lower Frame Components**

1. Condyle  
2. Centric Latch  
3. Centric Plate  
4. DynaLink  
5. Incisal Table  
6. Horizontal and Vertical Reference Lines  
7. Magnetic Mounting Base (optional)
Other Mounting Components

1. Bite Fork
2. Bite Fork Stem
3. Mounting Table
4. Bite Fork Support

Note that the mounting table (#3) is inserted in the anterior slot in place of the black plastic incisal table (see above picture item #5) when mounting the bite fork support. The thumb screw underneath the mounting table is then tightened after installation.

Section 3: Articulator Use

➢ DynaLinks - To retain the upper and lower frames together, black DynaLinks are used on the left and right hand sides of the articulator. They can be installed and removed by simply grabbing the tab on the upper end of the side shift activator, stretching it slightly and sliding it over the steel pin. When installing it, the side shift activator should be seated in the groove on the steel pin.

➢ Angle of Eminence – A scale is provided on both sides of the upper frame that is used to measure the angle of eminence of mandibular fossa inclination in degrees.
Changing the Angle of Eminence

➢ To change the angle of eminence on the articulator, loosen the small allen set screw on the rear of the articulator with the hex driver provided with your articulator.

➢ Next, loosen the thumb screw on the top center of the articulator. Rotate the motion analog to the desired angle of eminence.

➢ To lock the motion analog in place, tighten the thumb screw, then tighten the allen set screw. Give the thumb screw one final turn and your angle of eminence is now set. Repeat this process for the other motion analog.

Locking/Unlocking Centric

Putting the AD2 articulator in and out of centric on the AD2 articulator is a simple, reliable process using a magnetically retained black centric latch and a steel centric plate. To take the unit of centric:

➢ Using your thumb, depress the black centric latch down until it contacts the magnet and holds the latch in the down position.
Locking/Unlocking Centric (cont)

➢ Once the centric latch is retained in the down position, slide the steel centric plate out of the centric slot in the upper frame until the plate is also in the down position as shown.

➢ Once the centric latch and plate are in the down position, extrusive/protrusive/retrusive movements can be made.

➢ To place the articulator back in centric, use your thumb to guide the centric plate back into the “up” position in the upper frame centric slot.

➢ Once the centric plate is closed, release the centric latch from the magnet. The latch is spring loaded and will self-guide back into the locked “up” position. Your articulator is now back in centric when the centric plate and centric latch are firmly in the “up” position as shown.
Section 4: More AD2 Components

➢ Mandibular Mounting Stand (AR100080) – supports the articulator in an inverted position, which is very useful when mounting lower casts.

➢ Test Column AR100090 and AR100190) – tests the calibration of the articulator and MCD (see below). The test column is created with a new articulator where stone is poured to create a split cast check for the upper and lower frames. It is highly recommended to have one test column on hand (can be used to test multiple AD2 articulators and MCDs.

➢ Anatomic Facebow (FB400000) – our facebow allows for easy capture of the facebow record for transfer to the articulator. Can be used with a traditional nasion relator or with the integrated bubble levels for natural head posture mounting.

➢ MCD (Measures Condyle Displacement) – a dedicated instrument to record the position of the condyle in centric relation (CR) and centric occlusion (CO, teeth in maximum intercuspal position.
  ➢ Has two lateral recording tables for measuring sagittal (anterior-posterior) and vertical condylar displacement.
  ➢ Has a third recording table in the rear center of the lower frame for measuring transverse condylar displacement.