

# QUICK START GUIDE

### CLASS II & CLASS III APPLIANCES



**Carriere® Μοτιοκ 3D™** Class III Appliance Class II Appliance CLEAR + COLORS

The New Movement In Orthodontics™







### The SAGITTAL FIRST<sup>™</sup> Philosophy is a

time-tested approach that standardizes, simplifies, and shortens Class II and Class III treatment times. It employs the *Carriere Motion 3D* Appliance to treat the AP dimension at the beginning of treatment before placing brackets or aligners.

By resolving the most difficult part of treatment first, you can achieve a Class I platform in 3 to 6 months, shortening total treatment time by a minimum of 6 months.<sup>1</sup> You know how excited patients and parents become when you mention shorter treatment times!



Carriere Мотюм 3D Class II & Class III Appliances

"The Μοτιον 3D has changed the way that we practice orthodontics. By implementing SAGITTAL FIRST protocols with the Μοτιον 3D Appliance, bite correction is addressed more elegantly and with improved treatment efficiencies. We are seeing fewer complications and treatment times decreased by as much as 50%."

#### - Dr. Jep Paschal

1 "Treatment Effects of the Carriere Distalizer (Morion 3D) Using Lingual Arch and Full Fixed Appliances", Journal of the World Federation of Orthodontists, May 2014

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# MOTION 3D Class II VS Class III





**CLASS II APPLIANCE** 

**CLASS III APPLIANCE** 

Design	2-piece	1-piece
Method of Correction	<ul> <li>De-rotation and uprighting of molars</li> <li>Distalizing the posterior as a segment</li> <li>Change of the occlusal plane</li> </ul>	<ul> <li>Counterclockwise change in the occlusal plane by:</li> <li>Intruding the lower molars while extruding the canines</li> <li>Distalizing the mandibular posterior segment, from canine to molar, as a unit</li> </ul>
Bonding Protocol	Bond the molar (6) first, then the canine (3)	Bond the canine (3) first, then the molar (6)
Elastics Protocol	Force 1 & Force 2 elastics	Force 1 elastics only
Opposing Arch Anchorage Options	<i>Essix®</i> Retainer/Aligners (~90%), Lingual Holding Arch (10%), Clear Aligners	<i>Essix</i> Retainer (~50%), Brackets (~50%)
Remove Wisdom Teeth	Not necessary	Yes



### AN ELEGANT AND MINIMALLY INVASIVE SOLUTION FOR:

- Treating Class II dental relationship to a Class I platform in patients of all ages
- Correcting Class II malocclusions faster than any other appliance on the market today<sup>\*</sup>
- Treating bilateral, unilateral, and mixed dentition cases
- Reducing overall treatment time
- Enhancing office efficiency and productivity

\* Treatment effects of the Carriere Distalizer (Μοτιον 3D) using lingual arch and full fixed appliances — Journal of the World Federation of Orthodontists, May 2014

# Мотюм 3D Class II Appliances Key Features



provides excellent strength and durability

or discolor

for excellent bond strength and retention

The *Motion 3D* Class II Appliance is used to employ the *SAGITTAL FIRST* Philosophy to achieve an ideal Class I platform at the beginning of treatment (prior to placing brackets or aligners) when there are no competing forces operating and patient compliance is at its highest.

#### Setup:

- Appliance is bonded from the upper first molar to the canine or premolar
- Sidekick Bondable Hook or molar tube is bonded to the lower first or second molar
- Elastics connect the appliance to the Sidekick Bondable Hook or molar tube
- Essix-type retainer, clear aligner, or lingual arch provides anchorage for mandibular arch

Using gentle, uniform forces, the *Morion 3D* Appliance achieves ideal Class I occlusion by simultaneously:

- Rotating the maxillary first molars around the palatal root
- Uprighting the maxillary first molars
- Distalizing the maxillary posterior segment

   from canine or first premolar to first molar, as a unit

### **Results from Motion 3D**



↑ BEFORE Motion 3D
↓ AFTER Motion 3D





↑ BEFORE Motion 3D
↓ AFTER Motion 3D



- 1. Upper first molars rotate into correct position
- 2. AP corrected Class I molar and cuspid relationships achieved
- 3. Anterior crowding resolved (with extra space!)
- 4. Overjet and overbite deep bite corrected
- 5. Movement averages from 3 mm to 6 mm

### INDICATIONS

- $\rightarrow$  Class I, Crowding
- → Class II, Division 1
- $\rightarrow$  Class II, Division 2
- $\rightarrow$  Class II, Open bite
- $\rightarrow$  Class II, Deep bite
- → Class II, Blocked out upper canines
- → Class II, Subdivision, left or right (unilateral)
- $\rightarrow$  Mixed Dentition (Phase 1)



The *Motion 3D* Class II Appliance uses a unique ball and socket design that mimics the human body's mechanics to provide natural but controlled forces during treatment.



# Мотюм 3D Class II Appliances Biomechanics



### **BEFORE TREATMENT**

- 1. Excessive overbite
- 2. Anterior crowding
- 3. Mesially rotated molars



### **AFTER TREATMENT**

- 1. Molars are rotated and uprighted
- 2. Space is gained to resolve crowding without extractions
- 3. Molars and cuspids move into Class I relationship





# Мотюм 3D Class II Appliances Preparing the Mandibular Arch



- The Morrow 3D Appliance will be placed on the maxillary arch. A solid and consistent source of anchorage on the mandible must be selected to avoid protrusion of the lower incisors.
- 2. Possible sources of anchorage can be selected based on an orthodontist's preference. The recommended source of anchorage is the lower *Essix* Appliance with *Sidekick* Bondable Hooks or direct bonded tubes on lower molars.
- 3. The recommended *Essix* material is A+ with .040" (1 mm) thickness. If the 2nd lower molars (L7) are fully erupted, it is preferred to use them to place the *Sidekick* Bondable Hooks or buccal tubes, instead of the 1st molars that will be used to stretch the elastics from the molars to the canines or premolars.





# Motion 3D Class II Appliances Measurement and Selection

#### 1. Measuring the Maxillary Segment

Using a *Motion 3D* Ruler, measure from the midpoint on the facial surface of the maxillary 1<sup>st</sup> molar buccal groove (U6) to the mesial 3<sup>rd</sup> of the facial surface of the maxillary canine (U3).



#### 2. Appliance Selection

Select the correct length *Motion 3D* Appliance for treatment by using the measurement described above. When the measurement is between 2 sizes (i.e. in between 24 mm and 25 mm) select the correct appliance based on the amount of rotation desired:

- More molar rotation: select the smaller size
- Less molar rotation: select the larger size



Motion 3D Ruler (10/pk) - 424-9RULER-10



# Мотюм 3D Class II Appliances Preparing and Aligning

### **PREPARING TO BOND**

#### 1. Prep the teeth for light-cure bonding:

- A. Clean: Clean upper 1st molar and upper cuspid (or upper 1st bicuspid) using non-fluoride prophy paste.
- B. Rinse and dry: Rinse teeth thoroughly with water and air dry.
- **C.** Etch: Etch the surface of the molar and upper canine (or upper 1st premolar) as appropriate for the adhesive selected.
- D. Rinse: Rinse teeth thoroughly with water.
- **E.** Dry: Apply brief air burst to surface of etched canine and molar. Ensure that the entire isolated area is dry.
- **F.** Prime: Apply a uniform coating of primer onto the surface of the upper 1st molar and upper canine (or upper 1st premolar), for maximum tensile bond strength.
- 2. Generously apply the light-cure adhesive to both pads.

### PREPARING AND ALIGNING

#### 1. Placement

- A. Using the *Motion 3D* Placement Instrument or a locking hemostat, forceps or tweezers, grab the arm of the *Motion 3D* Appliance, and position the appliance onto the teeth.
- **B.** Position the molar pad first on the molar, then position the canine pad onto the mesial 3rd of the canine (or 1st premolar). The vertical groove on the posterior pad of the *Morion 3D* Appliance should be positioned in the center of the buccal surface of the molar. The occlusal edge of the molar pad on the appliance should be parallel with the molar cusp tips.

#### 2. Alignment

A. Position the *Morrow 3D* Appliance onto its optimal position by aligning both pads onto the tooth surface. The canine pads should be positioned the same vertically on left and right to avoid creating an occlusal cant.

#### HOW TO IDENTIFY THE RIGHT AND LEFT APPLIANCES

- > The color dots on the appliance: 2 dots = Right, 1 dot = Left
- > The color of cap on the tube the appliance is packaged in: Red = Right, Black = Left
- The small, molded in R and L on the molar caps











# Мотюм 3D Class II Appliances Bonding

- **1.** Remove excess adhesive using your hemostat, forceps, or tweezers, from tooth surface while maintaining alignment of the *Morion 3D* Appliance.
- 2. Fully cure the molar pad first.
- 3. Fully cure the canine (or premolar) pad.



### DO YOU HAVE THIS HELPFUL INSTRUMENT?

#### Carriere Мотюм 3D Placement Instrument - 201-507

This reverse action tweezer includes a notch on each side of the tip which fits around the edges of *Motion 3D* Appliances. This allows the *Motion 3D* Appliance to be held securely, without rotating or shifting. This instrument can be used for placing all *Motion 3D* Appliances (CLEAR, COLORS, and Class III).

CARRIERE® MotionTM



# Мотюм 3D Class II Appliances Bonding Clear Appliances





# The Simple Bonding Technique by Dr. Dave Paquette



- 1. Prepare teeth to be bonded using standard etch, rinse and dry protocols.
- Apply a thin layer of plastic conditioner or primer to the Carriere Morion 3D CLEAR<sup>™</sup> anterior pad using the standard protocol. TIP: Recommended products include Reliance<sup>®</sup> Plastic Conditioner (Item number: PL) and Parkell<sup>®</sup> Add&Bond<sup>™</sup> Adhesive Composite Primer.
- 3. Apply an ample amount of adhesive on the *Motion 3D* CLEAR <u>molar pad</u>, and using the *Motion 3D* Placement Instrument, position the molar pad on the tooth. Press firmly. <u>Light cure</u> immediately (Fig.1).

**TIP:** The molar pad should be bonded horizontally relative to cusp tips.

 Lift the Moτιon 3D CLEAR arm and apply <u>ample</u> adhesive directly on the tooth surface (canine or premolar) (Fig.2).

**TIP:** As the *Motion 3D* CLEAR <u>anterior pad</u> has deep grooves, use up to 2X to 3X the amount of adhesive normally used on a mesh pad.

- 5. Press the *Morion 3D* CLEAR <u>anterior pad firmly</u> into the adhesive using a ligature director or similar instrument (Fig.3). TIP: If sufficient adhesive has been used, excess will be expressed along the occlusal and gingival edges of the appliance. This excess can be "rolled" over the occlusal and gingival edges to add additional mechanical retention.
- 6. <u>Light cure</u> immediately while continuing to apply firm pressure with a ligature director against the *Morion 3D* CLEAR Appliance (Fig.4).



# Мотюм 3D Class II Appliances Sidekick Placement and Activation

### PLACEMENT

- Sidekick Bondable Hooks are bonded to the first or second molars. If the second molar is available, and there is enough crown surface, we recommend placing on the second molars. The force vectors are more favorable when using the second molar as compared to using the first molar. However, with either, the first or second molar, movement will still happen.
- Sidekick Bondable Hooks should be bonded to the mesial cusp of the molar. The base of the Sidekick Bondable Hook is slightly concave, not flat.
- The hook should be positioned/orientated along the same line as the elastic when stretched to the Morion 3D Appliance hook when the patient is biting down
- This placement facilitates easy engagement and superior performance of the *Motion 3D* Elastics.
- The Motion 3D Sidekick bonding procedure is the same as bonding Motion 3D Appliances and other metal brackets and auxiliaries.





### ACTIVATION

- With the lower *Essix* placed, attach an elastic at the lower 1st (or 2nd) molar tubes and then stretch and attach it to the hook of the maxillary canine pad of the *Μοτιο* 3D Appliance.
- **2.** Refer to the Elastics Protocol on the following page for full details on elastics sizing and strengths.
- 3. Schedule the next appointment 4 to 6 weeks after placement, and then following at 6-week intervals until the desired treatment outcome is reached. Appointment checks should only take a few minutes-observe treatment progress, explain the progress to the patient, and praise and/or encourage compliance.



# Мотюм 3D Class II Appliances Sidekick Bondable Hook

Engineered to partner seamlessly with *Morion 3D* Appliances, the *Morion 3D Sidekick* Bondable Hook further simplifies the *SAGITTAL FIRST* Philosophy. The *Sidekick* Hook bonds to the first or second molar with its hook orientated along the same vector as the hook of the *Morion 3D* Appliance when the patient's mouth is closed. This placement facilitates easy engagement and superior performance of the Force 1 and Force 2 intraoral elastics.





for enhanced bond strength

channel eu euges

for easy debonding from any angle

Carriere Motion 3D Sidekick Bondable Hook (10/pack) - 430-003

# Мотюм 3D Class II Appliances Selection of Elastics

Achieving a Class I platform in 3-6 months is made possible by using the correct force elastics. Be sure to use the *MOTION 3D* Force 1 and Force 2 Elastics, which are designed to optimize the features of *Motion 3D* Appliances.

The patient should wear their elastics 24 hours per day, except while eating, and also replace them every 4 hours.

### **ELASTIC OPTIONS**

#### **Natural Latex**

- Force 1: 6 oz, 1/4" (424-9F1)
- Force 2: 8 oz, 3/16" (424-9F2)

Clear (not made with natural rubber latex)

- Force 1: 6 oz, 1/4" (424-8F1)
- Force 2: 8 oz, 3/16" (424-8F2)



MOTION 3D'	MOTION 3D"
	ORAL ELASTICS
kalensin perpendisidan darahan perpendisidan	1 Alexandre
	NATURAL LATEX Force 1 $1/4^{*} - 6 \text{ oz.}$ Force 2 $3/16^{*} - 8 \text{ oz.}$
MUTOR NY Castighter	CLEAR (Not made with natural rubber lates)
WELCOME TO	3/10 - 502.
REVOLUTION	
Carierdysian.com	

### PATIENT INSTRUCTIONS MADE EASIER

#### Мотюм 3D Elastic Protocol for Patient (Pk 50) - 999-293

This prescription notepad is used to clearly communicate the elastic protocol with patients. Clinicians can circle and select the recommended elastic wear instructions. The prescription sheet also provides basic instructions for patients to follow while wearing the *Motion 3D* Appliance. Each notepad contains 50 individual prescription sheets.



# Мотюм 3D Class II Appliances Elastics Protocols

### **STANDARD PROTOCOL**

#### Motion 3D Upper 3 to 6 with Tube on Lower 7

- 1st month: Force 1 elastics (6 oz, ¼")
- After 1st month: Force 2 elastics (8 oz, 3/16") thereafter



#### Motion 3D Upper 3 to 6 with Tube on Lower 6

- 1st month: Force 1 elastics (6 oz, 1/4")
- After 1st month: Force 2 elastics (8 oz, 3/16") thereafter



### **BLOCKED-OUT CANINE STANDARD PROTOCOL**

Due to blocked-out, high, or buccally-displaced cuspids

- *Мотюм 3D* Upper 4 to 6 with Tube on Lower 7
- 1st month: Force 1 elastics (6 oz, 1/4")
- After 1st month: Force 2 elastics (8 oz, 3/16") thereafter



#### Motion 3D Upper 4 to 6 with Tube on Lower 6

■ 1st month and thereafter: Force 2 elastics (8 oz, 3/16")



### **MIXED DENTITION PROTOCOL WITH DECIDUOUS CANINE**

#### Motion 3D Upper 3 to 6 with Tube on Lower 7

■ Force 1 elastics (6 oz, 1/4") throughout the treatment



#### Motion 3D from Deciduous Canine with Tube on Lower 6

■ Force 1 elastics (6 oz, 1/4") throughout the treatment



### **ADULT PATIENTS WITH HIGH-BONE DENSITY**

If there is no movement after three months following the standard protocol in Class II, Division II, high-bone density patients, boost the case by proceeding with the following:

#### Мотюм 3D 3 to 6 with Tube on Lower 7

- 4<sup>th</sup> month-night: double up Force 1 and Force 2 elastics (6 oz, 1/4" & 8 oz, 3/16")
- 4<sup>th</sup> month-day: single wear of Force 2 elastics (8 oz, 3/16")
- 5<sup>th</sup> month and thereafter: revert to single wear of Force 2 elastics (8 oz, 3/16")



#### Motion 3D 3 to 6 with Tube on Lower 6

- 4<sup>th</sup> month-night: double up Force 2 elastics (8 oz, 3/16")
- 4<sup>th</sup> month-day: single wear of Force 2 elastics (8 oz, 3/16")
- 5<sup>th</sup> month and thereafter: revert to single wear of Force 2 elastics (8 oz, 3/16")





# Motion 3D Class II Appliances Signs of Compliance



The *Motion 3D* Class II Appliance is used at the beginning of treatment and utilizes patient compliance when it is at its highest. At each appointment you will monitor the patient's progress with their *Motion 3D* Appliance. Here are a few examples of what to assess:

- Canine mobility and extrusion
- Lower molar extrusion and possible mobility
- Spaces (upper anteriors)
- Bite opening
- Patient can easily attach their elastics





Let patients know what is expected to happen to manage their expectations

# Motion 3D Class II Appliances Transition to Brackets

### TRANSITIONING FROM THE MOTION 3D APPLIANCE TO BRACKETS

- 1. Once the Class I platform has been achieved using the *Carriere Morion 3D* Appliance, the patient is ready to move on to treatment with brackets.
- 2. Remove the *Motion 3D* Appliance.
- 3. Bond upper and lower brackets 4-4.
- 4. Bond bite pads if needed.
- 5. Insert wires.
- Schedule an appointment to bond the remaining posterior brackets in 4-6 weeks.



Initial



**Progress Photo: 14 weeks** Removed *Morion 3D* Appliance and bonded upper and lower *SLX*®3DBrackets 4-4



Progress Photo: 4 months Bonded posterior brackets at 4-month appointment

Case provided by Dr. Dave Paquette



# Мотюм 3D Class II Appliances Transition to Aligners



### TRANSITIONING FROM THE Motion 3D APPLIANCE TO ALIGNERS

- Once the Class I platform has been achieved using the Carriere MoπoN 3D Appliance, the patient is ready to move on to treatment with Henry Schein<sup>®</sup> aligners.
- 2. To transition from the *Motion 3D* Appliance to the aligners, first remove the appliance and clean any residual bonding material from the teeth surface.
- 3. You may leave the *Sidekick* Button on for continued elastic wear. For a mild case, it can be removed.
- 4. The *Motion 3D* Appliance must be taken out before creating the records as it cannot be virtually removed without affecting the accuracy of the teeth anatomy. This is essential to achieve the precision fit of *Henry Schein* aligners.
- 5. Create the records required to submit for the aligner case: an intraoral scan or a PVS impression and photographs of your patient.
- 6. After you remove the *Morion 3D* Appliance, create a vacuum-formed retainer, such as an *Essix* ACE retainer, to hold the maxillary arch in place during the manufacturing time of the clear aligners.
- 7. If usage of the *Motion 3D Sidekick* or other buttons is continued, cut two elastic slits on the retainers.
- 8. In this case, the patient should wear light elastics while they sleep to maintain the correction in between the *Morrow 3D* Appliance treatment and the clear aligners treatment.
- **9.** Depending on the specifics of their case, the patient might have to continue wearing elastics for part or all of their treatment with aligners.
- **10.**When creating and submitting the case in DDX, inform the lab technicians that the patient has already been treated with the *Carriere Μοτιοκ 3D* Appliance.
- **11.** The default option is providing cut-outs for the aligners, but you will be able to request a different approach.
- **12.**Our expertly trained lab technicians will optimize the aligners treatment plan when you indicate the patient has used the *Μοτιον 3D* Appliance.













# Мотюм 3D Class II Appliances Debonding



- Remove any excess adhesive around the canine or 1st premolar pad, utilizing a tapered flame burr. A slight concave channel should now be formed around the parameter of the pad.
- 2. Have the patient bite on a cotton roll placed perpendicular to the canine or premolar to provide stability to either the canine or premolar tooth.
- 3. Instrumentation for removal options:
  - A. Bracket Debonding Pliers (PN 204-219)
  - B. Angulated Debonding Pliers (PN 204-220XL)
  - C. Micro Mini Pin & Ligature Cutter (PN 204-107 or 107XL Long Handle)
- 4. Take one of the recommended removal instruments and place the tip ends at the adhesive interface (concave channel) between the *Μοτιον 3D* Appliance canine pad and the tooth surface. Orient the instrument toward the mesial aspect of the canine or premolar pad in an occlusal/gingival aspect. Gently squeeze, applying increased continuous pressure, without any twisting or pulling until the bond fails.
- 5. Once the canine pad is debonded, have the patient bite on a cotton roll placed in the molar region and then remove the molar pad.
- 6. Take one of the debonding instruments and place it toward the mesial aspect of the molar pad. Gently squeeze the instrument with increased continuous pressure until the molar bond disengages.
- 7. Use a burr or adhesive removing pliers (PN 204-206) to remove any excess adhesive from the molar and cuspid, or bicuspid, tooth surface.
- 8. Polish the teeth to a fine, smooth finish.



Remove cement from distoincisal portion of the pad, where the bar attaches.



Remove cement from the distogingival portion of the pad, where the bar attaches.



Remove cuspid pad first. Have patient bite firmly on a cotton roll. Place pinchers of the debonding tool at the area where you removed the cement with a bur. Quickly squeeze the pliers to bring the pincher ends together. If the appliance does not remove, reposition and try again.



Remove molar pad. Place over the molar socket and quick rotation of the wrist down towards the occlusal surface. If it doesn't come loose, reposition and try again.

# MOTION 3D CLASS III APPLIANCE

# AN ELEGANT AND MINIMALLY INVASIVE SOLUTION FOR:

- Treating dental Class III cases to a balanced and optimal Class I occlusion.
- Treating a high percentage of skeletal Class III cases to a Class I occlusion (for patients who do not want surgery).
- Treating lower anterior crowding at the beginning of treatment (without brackets).

No springs, push rods, bands, or crowns to complicate matters for you, your staff, or your patients.

# **Мотюм 3D Class III Appliance Key Features**

Universal (L/R) appliance in eight sizes, color-coded for easy identification and inventory.



grooves for excellent bond strength and retention

and gentle repositioning /uprighting of the molar

grooves for excellent bond strength and retention



# Мотюм 3D Class III Appliance Biomechanics



# Counterclockwise change in the occlusal plane by:

- 1. Intruding the lower molars while extruding the canines
- 2. Distalizing the mandibular posterior segment, from canine to molar, as a unit



Before







After







**Total Treatment Time: 18 Months**  *MoτιοN 3D*: 3.5 months *SLX Brackets: 14.5 months* 

Case provided by Dr. Luis Carriere





## Мотюм 3D Class III Appliance Preparing the Maxillary Arch

The choice of anchorage can help clinicians reach certain treatment goals associated with facial harmony and balance. The following are two preferred sources of anchorage:

### **Option 1: Clear Aligner**

- Recommended when the desired outcome is to maintain the patient's soft tissue characteristics (angle, fullness, etc...), as the clear aligner will prevent additional protrusion of the upper lips and surrounding soft tissues.
- A clear aligner (*Essix* 0.4, A+) is placed in the upper arch at the onset of treatment when the *Morion 3D* Appliance is placed on the lower arch.
- A direct-bonded buccal tube is placed on the upper molars. Bonding to the upper 2nd molars is preferable (if available).





### **Option 2: SLX 3D Self-Ligating Brackets**

- Recommended when the desired outcome is to protrude the patient's upper lip & soft tissue between the subnasal, labial superior, and stomion points.
- Prior to using the Motion 3D Appliance, SLX 3D Brackets are placed on the upper arch along with a round wire.
- Once the upper arch is level and aligned, transition to a .014 x .025 archwire and place the *Morion 3D* Appliance on the lower arch.



# Мотюм 3D Class III Appliance Measurement and Selection

#### 1. Measuring the Mandibular Segment

Using a *Motion 3D* Ruler, measure from the midpoint on the facial surface of the mandibular 1st molar buccal groove (L6) to the mesial 3rd of the facial surface of the mandibular canine (L3) or first premolar. Be sure to measure both sides, as some patients may need a different appliance size on each side. Individual sizes are sold separately to accommodate unevenness.



#### 2. Appliance Selection

Select the correct length *Motion 3D* Appliance for treatment by using the measurement found and described above. When the measurement is between 2 sizes (i.e. in between 25 mm and 27 mm) select the longer size.



#### NOTE:

This appliance is universal/interchangeable between right and left.

Motion 3D Ruler (10/pk) - 424-9RULER-10



# Мотюм 3D Class III Appliance Preparing, Placing and Aligning

### **PREPARING TO BOND**

- 1. Prep the teeth for light-cure adhesion per the following:
  - A. Clean: Clean the lower 1st molar and lower canine or lower 1st premolar using non-fluoride prophy paste.
  - B. Rinse and dry: Rinse teeth thoroughly with water and air dry.
  - **C.** Etch: Etch the surface of the 1st molar and lower canine (or lower 1st premolar) as appropriate for the adhesive selected.
  - D. Rinse: Rinse teeth thoroughly with water.
  - **E.** Dry: Apply brief air burst to surface of etched canine and molar. Ensure that the entire isolated area is dry.
  - **F.** Prime: Apply a uniform coating of primer onto the surface of the lower 1st molar and lower canine (or lower 1st premolar), for maximum tensile bond strength.
- 2. Holding the *Morrow 3D* Appliance by the arm, dispense a generous amount of light-cure bonding material, completely covering each pad.

### PLACING AND ALIGNING

#### 1. Placement

- A. Using the *Motion 3D* Placement Instrument or a locking hemostat, forceps, or tweezers, grab the arm of the *Motion 3D* Appliance, and position onto the teeth.
- **B.** Position the molar pad first on the molar, then position the canine pad onto the mesial 3rd of the canine (or 1st premolar). The vertical groove engraved in the posterior pad of the *Motion 3D* Appliance should be positioned in the center of the buccal surface of the molar, however it can fall before or after (+/-1 mm) if necessary.

#### 2. Alignment

A. Position the *Motion 3D* Appliance onto its optimal position by aligning both pads onto the tooth surface. The occlusal edge of the molar pad on the appliance should be parallel with the molar cusp tips.







# Мотюм 3D Class III Appliance Bonding and Activation

### BONDING

- Start first by positioning the canine pad onto the lower mesial third of the crown of the canine (or 1st premolar). Place some light pressure with a finger near the canine pad. Remove excess adhesive around the canine pad. Snap cure (2 to 5 seconds) the *MoτιοN 3D* Appliance's pad on the canine, so that the *MoτιοN 3D* Appliance stays in place properly when light-curing the molar pad.
- 2. Place the tips of the tweezers on the *Motion 3D* Appliance's molar pad Instrument Channel to position the molar pad. Press gently until it becomes in full contact with the vestibular surface of the molar crown. Remove any excess of adhesive around the molar pad. While keeping pressure, proceed to light-cure without releasing the pressure.
- **3.** Now that the *Motion 3D* Appliance is well aligned, complete the light-cure step on the canine pad.



### ACTIVATION

- With the upper *Essix* placed, attach an elastic at the upper 1st (or 2nd) molar buccal tube and then stretch and attach it to the hook of the mandibular canine pad on the *Motion 3D* Appliance.
- **2.** Refer to the Elastics Protocol on the following page for full details on elastics sizing and strengths.
- 3. Schedule the next appointment 4 to 6 weeks after placement, and then following at 6 week intervals until the desired treatment outcome is reached. Appointment checks should only take a few minutes-observe treatment progress, explain the progress to the patient, and praise and/or encourage compliance.



# Мотюм 3D Class III Appliance Elastics Protocols

Achieving a Class I platform in 3-6 months is made possible by using the correct force elastics. Be sure to use the *MOTION 3D* Force 1 and Force 2 Elastics, which are designed to optimize the features of *MOTION 3D* Appliances.

The patient should wear their elastics 24 hours per day, except while eating, and also replace them every 4 hours.

### **ELASTIC OPTIONS**

#### **Natural Latex**

- Force 1: 6 oz, 1/4" (424-9F1)
- Force 2: 8 oz, 3/16" (424-9F2)

**Clear** (not made with natural rubber latex)

- Force 1: 6 oz, 1/4" (424-8F1)
- Force 2: 8 oz, 3/16" (424-8F2)

### **STANDARD PROTOCOL**

Elastic will run from lower cuspid to upper molar

#### Motion 3D Lower 3 to 6 with Tube on Upper 6

■ Use Force 1 (6 oz, 1/4") elastics throughout the treatment



### **"SHORTY" CASES PROTOCOL**

Elastic will run from 1st lower bicuspid to upper 1st or 2nd molar

#### Motion 3D Lower 4 to 6 with Tube on Upper 6

■ Use Force 2 (8 oz, 3/16") elastics throughout the treatment



### PATIENT INSTRUCTIONS MADE EASIER

#### Мотюм 3D Elastic Protocol for Patient (Pk 50) - 999-293

This prescription notepad is used to clearly communicate the elastic protocol with patients. Clinicians can circle and select the recommended elastic wear instructions. The prescription sheet also provides basic instructions for patients to follow while wearing the *Morrow 3D* Appliance. Each notepad contains 50 individual prescription sheets.

#### Motion 3D Lower 3 to 6 with Tube on Upper 7

■ Use Force 1 (6 oz, 1/4") elastics throughout the treatment

CARRIERE

Appliance

CARRIERE



#### Motion 3D Lower 4 to 6 with Tube on Upper 7

■ Use Force 1 (6 oz, 1/4") elastics throughout the treatment





MOTION 3D

→ Force 1 1/4" - 6 oz. → Force 2 3/16" - 8 o

→ Force 1 1/4" - 6 oz.

₩ Force 2 3/16\* - 8 or

ORAL

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**ELASTICS** 



# Мотюм 3D Class III Appliance Signs of Compliance



The *Motion 3D* Class III Appliance is used at the beginning of treatment and utilizes patient compliance when it is at its highest. At each appointment you will monitor the patient's progress with their *Motion 3D* Appliance. Here are a few examples of what to assess:

- Canine mobility and extrusion
- Upper molar extrusion and possible mobility
- Spaces (lower anteriors)
- Bite opening
- Patient can easily attach their elastics

Let patients know what is expected to happen to manage their expectations







# Мотюм 3D Class III Appliance Debonding

- Remove any excess adhesive around the canine, or 1st premolar pad, utilizing a tapered flame burr. A slight concave channel should now be formed around the parameter of the pad.
- 2. Have the patient bite on a cotton roll placed perpendicular to the canine or premolar to provide stability to either the canine or premolar tooth.
- 3. Instrumentation for removal options:
  - A. Bracket Debonding Pliers (PN 204-219)
  - B. Angulated Debonding Pliers (PN 204-220XL)
  - C. Micro Mini Pin & Ligature Cutter (PN 204-107 or 107XL Long Handle)
- **4.** Take one of the recommended removal instruments and place the tip ends at the adhesive interface (concave channel) between the *Μοτιον 3D* Appliance canine pad and the tooth surface. Orient the instrument toward the mesial aspect of the canine or premolar pad in an occlusal/gingival aspect. Gently squeeze, applying increased continuous pressure, without any twisting or pulling until the bond fails.
- Once the canine pad is debonded, have the patient bite on a cotton roll placed in the molar region and then remove the molar pad.
- 6. Take one of the debonding instruments and place it toward the mesial aspect of the molar pad. Gently squeeze the instrument with increased continuous pressure until the molar bond disengages.
- 7. Use a burr or adhesive removing pliers (PN 204-206) to remove any excess adhesive from the molar and cuspid, or bicuspid, tooth surface.
- 8. Polish the teeth to a fine, smooth finish.





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