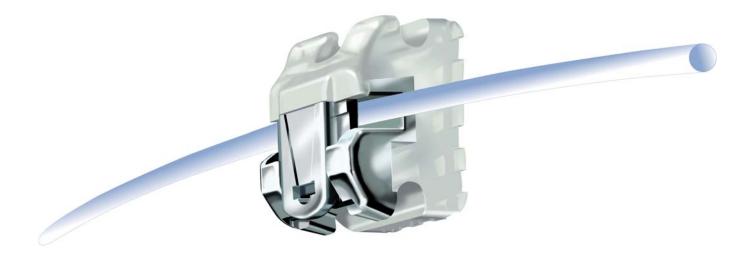


# **Quick Start Guide**



Includes tips on:

- Bonding
- Wire selection and sequencing
- Wire placement
- Archwire stops
- Troubleshooting Guide





# For Aesthetic Brackets

# **Technique Guide**

### **Tooth Preparation**

**Etch** approximately 30 seconds per tooth (one arch at a time).

**Rinse** thoroughly for a minimum of 5 seconds per tooth with a forceful air/water spray and suction using a high-speed evacuator.

**Dry** etched enamel with clean, dry air. Inspect to ensure a uniform, dull, frosty appearance.





### Step 1



Apply **very thin** coat of Ortho Solo<sup>™</sup> to the prepared tooth.

# Step 2



Extrude small amount of blügloo adhesive paste onto the bracket pad.

### Step 3



(A) Immediately place bracket, (B) position, (C) press lightly, (D) remove excess adhesive. Note: Finalize position and begin light curing within 1 minute. Blue color will disappear when adhesive approaches body temperature.



### **Technique Guide**

### Step 4

Light Cure: 10-15 seconds for clear brackets 20 seconds for metal brackets 30 seconds for molars due to increased pad size.

### Step 5

Place Archwire immediately after curing.

#### Step 6

To easily see and remove any remaining blügloo adhesive after debonding, cool the adhesive with short blasts of air or water to revert it back to its original blue color.

#### Step 7

Remove remaining blügloo adhesive with high or lowspeed carbide burs followed by sandpaper discs and a polishing cup or paste.





### Step 6





Step 7





## **Bonding Day**

### **Tooth Preparation**

- Etch each tooth 30 seconds (one arch at a time)\*.
- Rinse thoroughly for a minimum of 5 seconds per tooth.
- Dry the etched enamel with clean, oil-free, dry air.

\*or per manufacturers recommendation

### Bond Upper/Lower 7 to 7 (No more bands)

- Apply thin coat of Ortho Solo<sup>™</sup> to all teeth.
- Extrude small amount of blugloo adhesive onto the base of the bracket pad.
- For best results, "butter" adhesive into the base of the bracket pad.
- Place, position, press lightly to express adhesive and remove excess.
- Finalize position and begin light curing within <u>1 minute</u>.
- Light cure as per manufactures recommendation

### **First Archwire**

- Always use .014 Damon Copper Ni-Ti on U/L arches (.013 Damon Copper Ni-Ti for extremely crowded cases).
- Crimp preloaded stops anterior to the crowding.
- Cut both archwires distal to the 6s to minimize wire poking.

### **Deep-Bite Cases**

• If lower anterior brackets are likely to be in occlusion, use Bite Turbos, posterior composite buildups, or bond lowers at next appointment.

### Leave NO teeth behind. Bond half-brackets to partially blocked-out teeth.

### 10-week appointment intervals during the first phase of treatment.

# To allow posterior arch development, do not use any appliance that will bind the molars together, such as RPEs, TPAs, or Headgear.

### First Recall Appointment (minimum of 10 weeks out)

- Remove archwires.
- Check for permanent deformations and replace with new archwire if necessary.
- Have patient brush and rinse.
- Insert original or new archwire as indicated.



(PHA		Light Round Wire	
Archwire	Duration	Objective	10 week
.014 Damon Copper Ni-Ti® (U/L)	10-20 Weeks	<ul> <li>Level and align.</li> <li>Initiate arch development.</li> <li>Resolve 90% of rotations.</li> </ul>	Intervals

Archwire	Duration	Objective	8 week appointment intervals
.014 x .025 Damon Copper Ni-Ti (U/L)	10-20 Weeks	<ul> <li>Complete leveling and aligning.</li> <li>Resolve remaining rotations.</li> <li>Begin torque control and anterior space consolidation.</li> <li>Continue arch development (without the assistance of RPEs or W-arches).</li> </ul>	week
.018 x .025 Damon Copper Ni-Ti (U) (.017 x .025 or .019 x .025 Damon Reverse Curve Ni-Ti is often used in deep-bite, div. 2 cases.)	4-6 Weeks	<ul> <li>Express additional torque control as needed.</li> <li>Continue anterior space consolid and arch development.</li> </ul>	appointment intervals

PHASE III Major Mechanics				
Archwire	Duration	Objective 6 week appointment		
Posted stainless steel .019 x .025 (U) .019 x .025 (L)*	20-30 Weeks	<ul> <li>Finish torque control.</li> <li>Consolidate posterior space.</li> <li>Adjust buccal/lingual and A/P.</li> <li>Coordinate patient-specific arch form.</li> </ul>		
*.016 x .025 is frequently used.				

PHASE IV Finishing			
Archwire	Duration	Objective week appointment	
Posted stainless steel .019 x .025 (U) .016 x .025 (L)	10 Weeks	Complete case with any remaining detailed archwire bends.	

\* As suggested by Dr. Damon when using Damon System braces and treatment protocols to treat nonextraction cases with mild to moderate crowding. Individual patient responses may vary and be influenced by age, gender, patient compliance etc.



To close Damon brackets, the archwire must be inserted into the slot so that it is not obstructing the slide. Ordinarily, archwires can be inserted with the fingertips and the slides will close easily, either with a finger (Damon3) or with a Damon Universal Plier (Damon2). Here are some alternative techniques for wire insertion and slide closure:

### Damon Cool Tool™

(Part #866-4003) The Cool Tool can be used to seat archwires to make closing brackets easier. Cooling the



instrument will temporarily "soften" the Copper NiTi wires and is useful for severe rotations.



### **Ligature Director**

In cases with severely rotated teeth, a ligature director may be an ideal tool to seat the archwire.

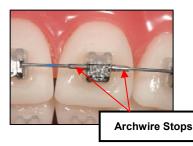
### Damon Closing Tweezer<sup>™</sup>

(Part#801-2100) Use the top part of the tweezer to seat the wire in the slot (similar to the Cool Tool), and simply squeeze the tweezer to close the bracket slide.

# Instructions for Using Damon<sup>™</sup> Optimal-Force Copper Ni-Ti<sup>®</sup> with Preloaded Stops

- Cut the Copper Ni-Ti archwire to proper length.
- Position the archwire stops at the desired location, typically at or near the midline (anterior to crowding). The most common placement is on either side of a central.
- Insert the archwire into the brackets.
- Close the bracket slides.
- Gently crimp the stop(s) occluso-gingivally with a utility plier, such as an arch-bending instrument (Part #800-0810). Birdbeak pliers and cutters are not recommended. They may distort or permanently deform the archwire.
- For the initial round wire, cut archwire(s) distal to the 6s.







# Closing & Opening Techniques for **DAMON**, **DAMON**, and **SL**BUCCALTUBE

Using the Damon3 Opening Instrument (Part #866-4010)

### To Close:

 Simply press the slide up with your finger. There should be an audible click to confirm slide is closed. If archwire is severely deflected and difficult to insert into the bracket slot, see the Wire Placement Guide.

### To Open:

 Place the tip of the opening instrument directly on the slide release button at a <u>90° angle to the face of the bracket</u> as shown. Ensure that the instrument tip is submerged in the slide release button, and apply a small amount of downward pressure.

Note: The tip of the instrument must be held perpendicular to the slide face.





Note: Less than 150 grams of force is required to open the bracket.



# **Closing & Opening Techniques**

Using the Damon Universal Pliers (Part #866-4006)

### To Close:

 Place the instrument at a <u>90° angle</u> (straight on), and apply light force to close. The Damon Cool Tool<sup>™</sup> may be used to ensure that the wire does not obstruct the slide.

### To Open:

- Place the lower jaw of the pliers between the tie-wings of the underside of the bracket.
- Angle the instrument at a <u>60° angle</u> such that the lower jaw of the instrument rests on the bracket and the upper jaw grabs the edge of the slide.
- Gently close plier handles to open slide.
- Do not roll the instrument. This may debond or damage the bracket.

### Hot Tip:

- Examine the pliers for broken tips or worn serrations.
- Send Damon Universal pliers to Ormco for free repair or replacement if needed.



Hold pliers at 90° angle and close with light force.









# Bonding

Problem	Likely Cause	Solution	Note
Failure at enamel/adhesive interface	Positioning bracket too long after adhesive application.	Place bracket on tooth, finalize position and begin light curing within 1 minute.	
	Insufficient etch, insufficient drying, or moisture contamination after etching.	Review tooth preparation instructions on page 2.	
Failure at bracket/adhesive interface	Did not use Blūgloo with Damon 3 brackets.	Use Blūgloo adhesive for 150% greater bond strength.	Blūgloo is formulated with a chemical affinity for Damon 3 brackets.
	Adhesive not fully penetrated in bracket base.	"Butter" adhesive into base during application.	This technique can also reduce the amount of flash to remove.
	Too much time elapsed for final positioning.	Finalize bracket position and begin light curing within 1 minute.	
Bracket is skating on the tooth surface	Low-viscosity adhesive and/or too much Ortho Solo on the tooth surface.	When using a low-viscosity adhesive, make sure a very thin coat of Ortho Solo is applied to the tooth surface.	

## **Opening/Closing Brackets**

Problem	Likely Cause	Solution	Note
Damon2 brackets are difficult to close.	Damon2 opening/closing instrument is not at the correct angle to the bracket face.	Place instrument at 90° angle to bracket face, and apply light force to close.	Do not roll wrist.
	Wire is not fully inserted in the slot (blocking the slide).	Use the Damon Cool Tool <sup>™</sup> or ligature director to push archwire into the slot OR use a smaller wire.	Review the wire sequence and selection chart for guide to wire selection throughout treatment.
	Adhesive is on the slide or in the bracket.	Closely inspect the bracket for adhesive or debris. If present, debond and replace with new bracket.	
Damon2 brackets are difficult to open.	Damon2 opening/closing instrument is not at the correct angle to the bracket face.	Angle the instrument at 60° such that the lower jaw of the instrument rests on the bracket and the upper jaw grabs the edge of the slide.	
	Damon2 opening/closing instrument is worn or damaged – top serrations worn or tip is broken.	Send instrument to Ormco for refurbishment or replacement.	
Damon2 brackets debond when trying to open them	Using too much force to open bracket or rolling wrist to open bracket.	Once in the correct position (see above), the plier should be squeezed lightly and never rolled.	



# **Opening/Closing Brackets (cont'd)**

Problem	Likely Cause	Solution	Note
Damon3 brackets are difficult to open.	Damon3 opening instrument is not at the correct angle to the bracket face.	Place instrument at 90° angle to bracket face, and fully submerge instrument tip into the slide release button to release the spring, then gently open.	Opening Damon3 brackets should take little to no force. If greater force is needed to open, there may be a technique issue.
	Not submerging Damon3 opening instrument tip before opening.	Fully submerge instrument tip into the slide release button to release the spring, then gently open.	
	Debris or adhesive may be blocking the slide from opening.	Check bracket for any excess adhesive blocking slide. If present, replace with new bracket. If calculus is blocking slide, have patient brush with diluted baking soda, then try to open slide again.	
Damon 3 brackets are difficult to close.	Wire not inserted into bracket (blocking the slide).	Closely inspect the bracket for adhesive or debris. If present, debond and replace with new bracket.	

## Wire Sequencing

Problem	Likely Cause	Solution	Note
Next wire won't fit in the brackets.	Trying to progress too soon.	Ensure that treatment stage objectives have been met before progressing to next phase. See wire selection chart to ensure that wire is not too large for this # treatment stage.	Initial archwire can be left in for 10-20 weeks. If you would like to see the patient more frequently, make sure to remove and inspect the archwire. If deformed, replace with a new wire of the same size.
Tooth movement less than expected at first recall appointment.	Insufficient time has elapsed to initiate tooth movement.	Schedule next recall appointment 10 weeks out.	Variability in the amount and rate of tooth movement is normal and should be expected.
	Wire(s) have taken permanent set.	Inspect wire(s) and replace if necessary.	
	Incorrect wire selection.	Refer to wire selection chart and/ or Damon System Workbook.	
	Archwire stops placed incorrectly.	Wire stops should be placed anterior to the crowding - typically at the midline.	
	Molars and/or bicuspids have been bound together with anchorage or expansion devices.	Appliances that bind the molars together are not recommended for most cases in the Damon System.	Refer to the Damon System Workbook for more information on this topic.

