

# Class I Open Bite

## Suggested Treatment Protocol

Phase	Archwires	Objectives	Duration in Weeks	Interval in Weeks	Notes	Early Light Elastics Begun at Initial Bonding <sup>1</sup>	Guideposts for Next Phase
<b>I. Initial Light-Wire</b>	<b>Damon Optimal-Force Copper Ni-Ti<sup>®</sup></b> .014 U/L  PRN, .013 U/L if crowding is severe or periodontal support is compromised	<ul style="list-style-type: none"> <li>• Begin leveling and alignment</li> <li>• Initiate arch development without RPEs or W-arches</li> <li>• Resolve 90% of rotations</li> <li>• Intrude buccal segments</li> <li>• Begin A/P and vertical correction</li> </ul>	10	10	Always place stops anterior to crowding.  Use composite buildups on buccal cusps of L6s & L7s to intrude buccal segments.	<b>Quail</b> 3/16"; 2 oz – Triangle – U3 to L3 to L4 – Full time	<p>When 90% of rotations are resolved.</p> <p>Do not rush this Phase. It must be possible to insert the first edgewise wires with minimal active engagement. If not, let the current wire work longer. Avoid the use of any wire "icing" product that would apply too high a force when the wire warms.</p>
	.018 U/L		6 – 8	6 – 8			
<b>II. High-Tech Edgewise</b>	<b>Damon Optimal-Force Copper Ni-Ti</b> .014 x .025 U/L 10 weeks into this stage: Take Panorex & reposition brackets. Follow with .018 Cu Ni-Ti if brackets are drastically repositioned.	<ul style="list-style-type: none"> <li>• Complete leveling (of upper arch) while closing bite with elastics<sup>3</sup></li> <li>• Complete alignment</li> <li>• Continue arch development</li> <li>• Resolve remaining rotations</li> <li>• Begin torque control</li> <li>• Consolidate minor spacing</li> </ul>	10	10	Typically use power chain under wire to consolidate minor spaces U/L 3 to 3. If consolidating minor spaces U/L 6 to 6, run wire 7 to 7. If 7s are not erupted, consolidate 5 to 5. Run wire 6 to 6. <sup>4</sup>	<b>Quail</b> 3/16"; 2 oz – Triangle – U3 to L3 to L4 – Full time  Overlay <b>Parrot</b> 5/16"; 2 oz – Reverse Anterior V – L3 over 1s to L3 – Full time	<p>When all brackets and teeth are aligned.</p> <p>It should be possible to insert the working wires with minimal active engagement. If not, the case is not ready for Phase III. Avoid "icing" products.</p>
	.018 x .025 U/L or PRN, .018 x .025 L		6 – 8	6 – 8			
	.017 x .025 Ni Ti <sup>®</sup> with 20° anterior torque U. <sup>2</sup> See Notes. Follow pretorqued wire with same wire in .019 x .025 for 6 to 8 weeks if more torque desired.		8 – 10	8 – 10	Pretorqued wires are useful if anterior teeth are excessively pro- or retroclined.		

<sup>1</sup>In patients with very thin attached tissue, severe crowding or periodontal issues, waiting to start elastics until the second appointment may help prevent labial gingival recession. <sup>2</sup>Allowing staff to engage pretorqued wires is not recommended; wire orientation is critical and it is easy to reverse it inadvertently. <sup>3</sup>Because of the prescribed bracket placement protocol, leveling of the lower arch will always demonstrate a slight curve of Spee. <sup>4</sup>If consolidating space behind canines, keep power chain one tooth forward of end of wire to help prevent rotation.

# Class I Open Bite (continued) Suggested Treatment Protocol

Phase	Archwires	Objectives	Duration in Weeks	Interval in Weeks	Notes	Early Light Elastics Begun at Initial Bonding	Guideposts for Next Phase
<b>III. Major Mechanics</b>	<b>Posted Stainless Steel</b> .016 x .025 U/L  The diligent use of early light elastics may shorten or even eliminate this phase, but if additional posterior transverse width is required, undertake this phase with elastics and expand wires slightly in the posterior.	<ul style="list-style-type: none"> <li>• Take wax bite; coordinate patient-specific arch form</li> <li>• Consolidate any remaining minor spacing</li> <li>• Express majority of remaining torque</li> <li>• Overcorrect vertical</li> </ul>	20 – 30	8 To preclude too much over-correction, do not allow intervals to extend beyond 8 weeks.	<p>When engaging elastics, use the wire posts to distribute forces over the archwire.</p> <p>Once all spaces close, transition from power chain to .008 or .010 wire to lace anteriors together; tie back to 6s to avoid reopening space.</p>	<p><b>Kangaroo</b> 3/16"; 4.5 oz – Triangle – V Post to L Post to L4 – Full time</p> <p>PRN, if bite still open, overlay <b>Zebra</b> 5/16"; 4.5 oz or PRN, <b>Moose</b> 5/16"; 6 oz – Reverse Anterior V – L Post over U1s to L Post until overcorrected with no centric slide</p>	When case is CL I with no centric slide.
<b>IV. Finishing</b>	<b>TMA</b> <sup>®</sup> .019 x .025 U .017 x .025 L	<ul style="list-style-type: none"> <li>• Make final buccolingual, torque and occlusal adjustments.</li> </ul>	15 – 20	4 – 6 until sectioning wire, then 2	<p>To engage elastics, crimp surgical posts onto TMA wires to distribute forces over the archwire.</p> <p>PRN to perfect occlusion, cut upper wire mesial to the teeth that still require better articulation.</p> <p>Adjust posterior interferences with a high-speed handpiece and diamond bur, then polish, PRN.</p>	<p><b>Zebra</b> 5/16"; 4.5 oz – Posterior V – U6 to L5 to U Post if still CL II; U6 under L4/5 to U Post if CL I – Full time for 8 weeks to prevent relapse</p> <p>Overlay <b>Zebra</b> 5/16"; 4.5 oz Reverse Anterior V – L Post over U1s to L Post – Full time until soaked in, then 12 hours daily (after school and nights)</p> <p>PRN, when sectioning wire, maintain Reverse Anterior V at least at night, but switch from Posterior V to <b>Ostrich</b> 3/4"; 2 oz – Spaghetti – U to L 7 to 3 – Twisted in between. In the anteriors, end on U Post mesial to 3s – Full time</p>	

These wire/elastics sequence recommendations have been shown to be effective when treating with Damon System mechanics. They are not a replacement for professional expertise.