Class III Open Bite

Suggested Treatment Protocol

DAMON® SYSTEM
More than straight teeth™

Phase	Archwires	Objectives	Duration in Weeks	Interval in Weeks	Notes	Early Light Elastics Begun at Initial Bonding[1]	Guideposts for Next Phase
I. Initial Light-Wire	**Damon Optimal-Force Copper Ni-Ti®** .014 U/L PRN, .013 U/L if crowding is severe or periodontal support is compromised .018 U/L	• Begin leveling and alignment • Initiate arch development without RPEs or W-arches • Resolve 90% of rotations • Intrude buccal segments • Begin A/P and vertical correction	10 6 – 8	10 6 – 8	Always place stops anterior to crowding. Use composite buildups on buccal cusps of L6s & L7s to intrude buccal segments.	**Quail** 3/16", 2 oz – Shorty CL III U5 to L3 – Full time	When 90% of rotations are resolved. 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.
II. High-Tech Edgewise	**Damon Optimal-Force Copper Ni-Ti** .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. .018 x .025 U/L or PRN, Reverse a .017 x .025 Ni Ti® with 20° anterior torque U/L.[2] See Notes. Follow with same wire in .019 x .025 for 6 to 8 weeks if more torque required.	• Complete leveling and alignment • Continue arch development • Resolve remaining rotations • Begin torque control • Consolidate minor spacing	10 6 – 8 8 - 10	10 6 – 8 8 - 10	Typically use power chain under wire to consolidate minor spaces U/L 3 to 3. If consolidating minor spaces 6 to 6, run wire 7 to 7. If 7s are not erupted, consolidate 5 to 5. Run wire 6 to 6.[3] Monitor lower anterior torque carefully. Pretorqued wires counter effects of CL III elastics to keep upper incisors from proclining; lowers from retroclining.	**Parrot** 5/16", 2 oz – Sling U6 to L3 to U4 – Full time Overlay **Parrot** 5/16", 2 oz Anterior V – U3 under L1s to U3 – Full time After 3 weeks, have patient advance to **Dolphin** 5/16", 3 oz Anterior V – U3 under L1s to U3 – Full time – Maintain Sling	When all brackets and teeth are aligned. 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.

[1]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. [2]Allowing staff to engage pretorqued wires is not recommended; wire orientation is critical and it is easy to reverse it inadvertently. [3]If consolidating space behind canines, keep power chain one tooth forward of end of wire to help prevent rotation.

Class III Open Bite (continued)
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III. Major Mechanics	**Posted Stainless Steel** .019 x .025 U .016 x .025 L The diligent use of early light elastics may shorten or even eliminate this phase. Once CL III is corrected, proceed to Phase IV. If additional posterior transverse width is desired, undertake this phase with elastics and expand wires slightly in the posterior.	• Take wax bite; coordinate patient-specific arch form • Consolidate any remaining minor spacing • Express majority of remaining torque • Overcorrect vertical	20 – 30	8 To preclude too much over-correction, do not allow intervals to extend beyond 8 weeks.	Once all spaces close, transition from power chain to .008 or .010 wire to lace interiors together; tie back to 6s to avoid reopening space. When engaging elastics, use the wire posts to distribute forces over the archwire.	**Zebra** 5/16", 4.5 oz – Sling U6 to L3 to U4 – Full time Overlay **Zebra** 5/16", 4.5 oz or **Moose** 5/16", 6 oz – Anterior V – U Post under L1s to U Post – Full time until overcorrected, then 12 hours daily (after school and nights)	When the case is CL I and has been in an overcorrected position for 8 weeks.
IV. Finishing	**TMA®** .019 x .025 U .017 x .025 L	• Make final buccolingual, torque, A/P and occlusal adjustments	15 – 20	4 – 6 until sectioning wire, then 2	To engage elastics, crimp surgical posts on TMA wire to distribute forces over the archwire. PRN to perfect occlusion, cut lower wire mesial to the teeth that still require better articulation. Adjust posterior interferences with a high-speed handpiece and diamond bur, then polish, PRN.	**Zebra** 5/16", 4.5 oz – Posterior V U6 to L4 to U Post – Full time until socked in, then 12 hours daily (after school and nights) Overlay **Quail** 3/16", 2 oz – Shorty CL III – U5 to L Post – Full time PRN, **Zebra** 5/16", 4.5 oz or **Parrot** 5/16", 2 oz – Anterior V U Post under L1s to U Post – Full Time until overcorrected, then hold for 4 months PRN when sectioning wire, maintain CL III but switch from Posterior V to **Ostrich** 3/4", 2 oz Spaghetti – U to L 7 to 3 Twisted in between. In the anteriors, end on lower Post – Full time	

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.