

INVISALIGN® TECHNIQUE: PRESCRIBING PRECISION CUTS

PURPOSE

To show the steps involved in prescribing Precision Cuts to facilitate the use of buttons and elastics for anchorage control when treating Class II & III patients with Invisalign. Also included are treatment considerations for planning and executing these treatments.



PROCEDURE

- 1** PRESCRIBE the A-P correction and Precision Cuts on prescription form (available with Invisalign Full or Teen treatment options)
In the "Anterior - Posterior (A-P) Relationship" question...

Select one of the two choices for the patient's right and/or left side:

- "Improve canine & molar relationship up to 4mm"
- "Complete correction to Class I (canine & molar)"

Select the button "Tooth movement options"

Select one or both of the following: (see [DEFINITIONS](#) above)

- "Class II/III Correction Simulation (Elastics required)"
- "Distalization (Elastics recommended)"

Select "Yes" button under "Precision cuts" for each of the previous choices selected.

- 2** SPECIFY the type of Precision Cuts you want, and on which teeth you want them placed. This Specification may be done during prescription submission within Clinical Preferences, but if deferred to ClinCheck review, the impact on other features and movements can be more clearly assessed.

SPECIFY WITHIN CLINICAL PREFERENCES

- Open Clinical Preferences
- Click the "Precision Cuts Interface" link
- Within the "Precision Cuts Interface," drag-and-drop the specific cuts desired onto the desired tooth surface

SPECIFY IN CLINCHECK REVIEW - RECOMMENDED

- Open ClinCheck treatment plan
- Click the "Changes" tab
- Click on the blue link "Precision Cuts" on the "Changes" tab
- Within the "Precision Cuts Interface," drag-and-drop the specific cuts desired onto the desired tooth surface
- The same process can be used to modify Precision Cuts during ClinCheck review

DEFINITIONS

- **Class II/III Correction Simulation** – A single-stage shift in the ClinCheck model that simulates an A-P bite correction with elastics. This option is selected for a change in A-P relationship in which an entire arch will be treated with the use of elastics.
- **Distalization** – A multi-stage sequential movement of the posterior teeth within one arch as a means of changing the A-P relationship of the upper and lower arches. This option is selected when an improvement in A-P malocclusion is desired with or without the use of elastics.

Specify within Clinical Preferences



Specify in ClinCheck® Review - RECOMMENDED



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TREATMENT CONSIDERATIONS WITH PRECISION CUTS

AVAILABLE PRECISION CUT FEATURES

Elastic Hook - Designed to secure elastics directly to the aligner, and available for buccal placement on cuspids, bicuspid, and molars.

Button Cutout - Designed to facilitate the use of pre-made buttons, bonded to the tooth, for anchorage control with elastics, and available for buccal or lingual placement on cuspids, bicuspid, and molars.

BONDING BUTTONS

Bond buttons as gingival as possible. It is recommended that you insert the aligner when bonding the buttons on teeth to ensure aligner clearance, leaving a 1 millimeter margin between the button and the aligner for button cutout variability. Please do not send buttons bonded prior to PVS impressions or intraoral scan.

TYPICAL PRECISION CUT CONFIGURATIONS

Class II - Elastic Hooks on the upper cuspids and Button Cutouts on the lower first molars

Class III - Elastic Hooks on the lower canines and Button Cutouts on the upper first molars

DELAYING PRECISION CUTS

This can be done by adjusting your Clinical Preference “Stage to Start Precision Cuts”

OPTIMIZED ATTACHMENTS WITH PRECISION CUTS

Precision Cuts can coexist with Optimized Attachments for Rotation and Extrusion provided there is sufficient room. Precision Cuts cannot co-exist with Optimized Root Control Attachments.

Options to consider when a conflict occurs:

- Request a conventional attachment on the canine on which you wish to place the Precision Cut.
- Switch Precision Cut from canine to first bicuspid.
- Remove Optimized Attachment and place only Precision Cut, then plan to address movement requiring Optimized Attachment in a subsequent phase of treatment (e.g. refinement).

MIDLINE SHIFTS

The combination of Class II elastics on one side and Class III elastics on the opposite side is typically used to shift the midline.

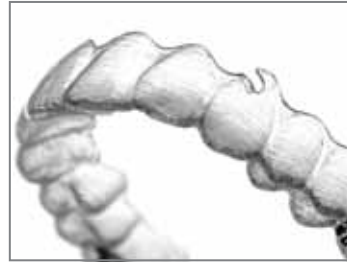
MINIMIZING ALIGNER BREAKAGE

Instruct patients to remove their aligners differently each time so aligner is stressed differently (left to right, then right to left)

PASSIVE ALIGNERS

If interarch elastics are needed over the full duration of treatment, passive aligners can be requested through Clinical Preferences.

Elastic Hook



Button Cutout



Class II Configuration



CONTINUING EDUCATION

To learn more about improving A-P relationships with Invisalign go to: www.aligntechinstitute/AP

ANCILLARY PRODUCTS

Available from Align Technology, Inc. (not in all countries)

ELASTICS (Other equivalent products can be used where appropriate)

TYPICAL APPLICATION	SIZE DIAMETER	FORCE AT 3X DIAMETER	PART #
Extrusion	1/8 inch, (3 mm)	Medium, 4.5 oz, (128 g)	20175
Class II/III (canine to 1st molar)	3/16 inch, (5 mm)	Medium, 4.5 oz, (128 g)	20227
Class II/III (canine to 1st molar)	1/4 inch, (6 mm)	Medium, 4.5 oz, (128 g)	20174
Class II/III (canine to 2nd molar)	5/16 inch, (8 mm)	Medium, 4.5 oz, (128 g)	20226

BUTTON KIT

DESCRIPTION	PART #
Button Kit	76012
Composite Adhesive Kit	76014
Button, Composite, Qty 10	20170

PRECAUTIONS

- Precision Cuts may compromise aligner strength and durability.
- To minimize the impact to aligner strength and durability, no more than one Precision Cut per quadrant is recommended.
- Prescribing Precision Cuts on teeth with conventional attachments may compromise the performance of both features.