

Orthodontic Instruments

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Many of the instruments used for orthodontic treatment are unique to the discipline of orthodontics. Knowledge of these instruments and their uses is important for all dental students before commencing orthodontic treatment on patients. What follows is an introduction and brief description of some of the more commonly used instruments for treating an orthodontic patient.



Mirror

A dental mirror, while not specific to orthodontics, is used for visualization and retraction during procedures.

Straight Probe

A straight probe aids in the positioning of orthodontic brackets, and is used in the removal of excess composite from around brackets, as well as for the removal of elastomeric ligatures from brackets.

Cotton Pliers

Cotton pliers are used for the placement of cotton rolls for isolation, as well as for the retrieval of small objects intra-orally.

Howe Utility Pliers

Howe utility pliers have two long beaks with pads at the ends that are used to hold archwires during placement and removal.

Wire Cutter/Pin and Ligature Cutter

A wire cutter, or pin and ligature cutter, has two tapered beaks with sharp cutting terminal ends. The tip of the sharp end is used for cutting small diameter wires, less than 0.015 inches, and for cutting stainless steel ligatures.

Distal End Cutters

Distal end cutters have two cutting surfaces at right angles to the long axis of the instrument. These are used for intra oral cutting of the terminal end of a ligated archwire. They will also catch and hold the cut end of the archwire, thus preventing the loose end of the wire from injuring the patient.

Mathieu Plier

The Mathieu plier has a quick release locking and unlocking mechanism which is used for the placement of elastomeric ligatures.

Bird Beak or 139 Plier

The bird beak or 139 plier has pyramidal and conical beaks used for making bends in orthodontic wires.

Separating Pliers

Separating pliers are reverse action pliers with tips at the ends to hold the separating modules. Separators are placed on the ends of the pliers and the handles are then squeezed together to stretch the separators for placement on the teeth.

Band Pusher

A band pusher is a long handled instrument with an angled rectangular serrated tip which is used for fitting and positioning an orthodontic band on a tooth.

Bite Stick

A bite stick is a long handled nylon instrument with serrated tip, which can be of various shapes. This is used for placing and seating orthodontic bands using the patient's biting force.

Band Burnisher

A band burnisher is similar in appearance to the band pusher except that the working end is flatter. This is used to adapt and contour an orthodontic band to fit the patient's tooth.

Posterior Band Remover

The working end of the posterior band remover has a nylon tipped beak and a flat beak which has a slight curve at the tip. This is used for the removal of orthodontic bands on posterior teeth.

Plastic Filling Instrument

This instrument is used to place composite onto the mesh pad of an orthodontic bracket prior to bonding of the bracket.

Bracket Holder or Bracket Tweezer

A bracket holder or bracket tweezer is a reverse action instrument with two fine angled tips used to hold and place orthodontic brackets.

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