

# Retainer Positioner

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## ABSTRACT

Several techniques are used to keep the retainer wire in the proper position during direct bonding, of lingual bonded retainers. Proper placement helps prevent occlusal wear of the composite over the retainer wire, thus reducing the risk of breakage. This article describes a new chairside time saving retainer positioner which allows accurate placement and direct bonding of all types of fixed lingual retainers, with solid or multistranded wires.

**Keywords:** Direct bonding, Lingual retainer, Retainer positioner.

**How to cite this article:** Sahu SK, Jayam BK, Barik AK. Retainer Positioner. J Ind Orthod Soc 2012;46(1):53-54.

## INTRODUCTION

Direct bonding of lingual and palatal retainers have to be done in a precise manner to get a proper adaptation and position. Stabilization of the retainer wire can be done, with a finger,<sup>1</sup> dental floss,<sup>2-4</sup> orthodontic elastics,<sup>5-7</sup> ligature wires, wires tack-welded to the retainer wire<sup>1,8</sup> or inlay pattern resin,<sup>9</sup> and rare earth magnet.<sup>11</sup> Applying finger or plier pressure to hold the retainer wire for curing carries the risk of contamination and any slight movement can weaken the bond.

A wire jig<sup>12</sup> has the disadvantage of the circular retentive tag coming in contact with the bonding surface and different length of this jig have to be made for every individual tooth. Also, the flat surface of the jig does not adapt properly to the devised lingual surfaces and hence does not hold the wire tightly.

A simple retainer positioner has been developed which allows accurate placement and direct bonding of all types of fixed lingual retainers, with solid or multistranded wires. This retainer positioner can be prefabricated and used in any patient.

## Fabrication of the Retainer Positioner

The retainer positioner looks like a modified Kesling separator and is made of .016" Australian AJ Willcock special plus wire. In this positioner (Fig. 1), the smaller leg is shorter by 2 mm and is positioned labially. The longer leg has two offsets to keep the positioners away from the lingual mucosa. The incisal offset holds the retainer wire in position.

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Received on: 24/8/11

Accepted after Revision: 14/10/11



Fig. 1: Retainer positioner

## Bonded Lingual Retainer Placement Procedure

1. Take an alginate impression of the anterior teeth and pour it in hard stone.
2. Adapt the selected retainer wire to the lingual contours of the teeth on the cast. It is important to keep the wire just above the cingulum to avoid the calculus formation that usually occurs if the retainer is placed more gingivally.
3. Isolate the teeth to ensure optimal moisture control with a saliva ejector and cotton rolls.
4. After pumicing the lingual surfaces of the teeth to be bonded for 10 to 15 seconds, etch them for 30 seconds.
5. Rinse the teeth and carefully dry them with moisture- and oil-free air. A typical frosting pattern should be seen on the lingual surfaces.
6. Position the retainer against the teeth with a pair of tweezers and stabilize the retainer wire with at least 3 or 4 retainer positioner as shown (Fig. 2). Placing these retainer positioners are similar to placing the Kesling separators with the longer leg inserted lingually (Fig. 3) to secure retainer wire and shorter leg tags labially in the

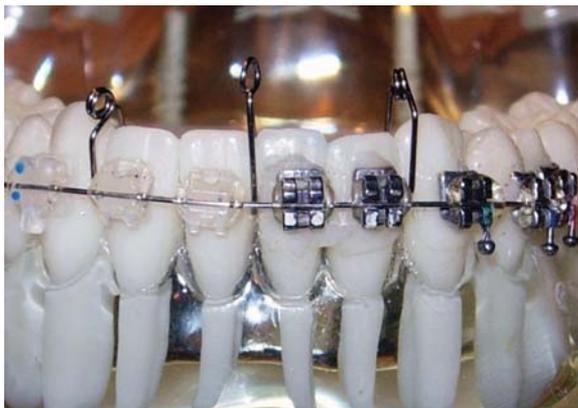


Fig. 2: Labial placement



Fig. 5: Lingual placement of retainer positioner



Fig. 3: Lingual placement of retainer positioner



Fig. 6: Final position of lingual retainer



Fig. 4: Lingual placement in a patient

interproximal area (Figs 2 and 4). Mild adjustment can be done by changing the retainer positioner occlusogingivally, so that the retainer wire can be stabilized in an ideal position.

7. Affix the retainer wire with a light-cured composite (Fig. 5) and after it has been stabilized the retainer positioner is removed by pulling it occlusally after the stabilization of retainer (Fig. 6).

## DISCUSSION

Proper placement helps prevent occlusal wear of the composite over the retainer wire, thus reducing the risk of breakage.<sup>10</sup> Use of retainer positioner improves stability of retainer wire, reduces

chairside time and can be used either prior to debonding or after debonding of the fixed appliance.

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