

A Simplified Means of Engaging the Outrigger Appliance

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Since its introduction in 2000, the Outrigger* has proven to be an effective means of encouraging elastic wear in non-compliant patients. It features two labially extending hooks that swing down incisally into more comfortable positions when Class II elastics are engaged. Patients are compelled to wear the elastics to hold the hooks down in these positions (Fig. 1).

Some orthodontists have elected not to use the Outrigger because of the difficulty of engagement and activation. Removal and reinsertion of the base archwire was required to thread the Outrigger coils over the archwire (Fig. 2). An entirely new archwire often had to be fabricated without hooks or loops so that the Outrigger could be placed over it. In addition, careful adjustments were required to ensure that the Outrigger would not become locked into the incisally oriented position.

A simplified approach to engaging the Outrigger was recently developed to ensure successful activation with minimal adjustments.

Procedure

In the new technique, the elastomeric ties are removed from the maxillary incisor brackets, and the Outrigger is loosely engaged under the

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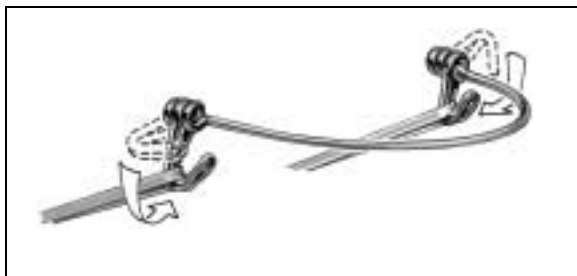


Fig. 1 Outrigger Appliance.

incisal tie wings using Bi-Level Pins* (Fig. 3), with the tails of the pins bent just enough to hold them in place. Of course, the brackets must have vertical slots to accommodate these pins. An elastomeric ligature is tied over the bracket's gin-

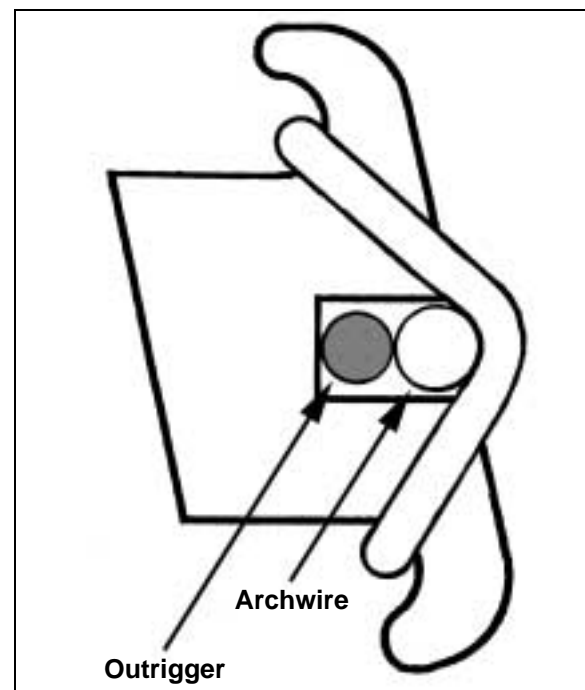


Fig. 2 Original Outrigger Appliance engaged under base archwire.



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gival tie wing and the “tie wing” of the Bi-Level Pin (Fig. 4). At this point, the labial hooks should extend labially. With the Class II elastics engaged, the hooks should easily swing down into their incisally directed positions.

When the Outrigger is first placed, the parents should be brought in for an explanation of the appliance. The clinician should emphasize that the Outrigger is not going to hurt the patient, but that it will serve as a minor nuisance to remind the patient when the elastics are not engaged. The parents are usually relieved to find that the burden of monitoring elastic wear has been lifted, at least partially, from their shoulders.

The Outrigger usually lasts for one or two appointments before breaking. Another can easily be placed at that time, but more often than not, the patient has already developed the habit of wearing the elastics.

Conclusion

This approach offers several significant



Fig. 3 Bi-Level Pin.

advantages over the technique previously used. It eliminates the need for archwire removal and reinsertion to engage the Outrigger, as well as the need to fabricate a new archwire so that the Outrigger can be threaded over it. The potential for the Outrigger to lock in either an incisal or labial position is eliminated, because it can spin freely under the tie wing without binding against the main archwire. Little, if any, later adjustment is required.

The entire process of selection, engagement, and activation of the Outrigger can now be easily delegated to auxiliary personnel. □

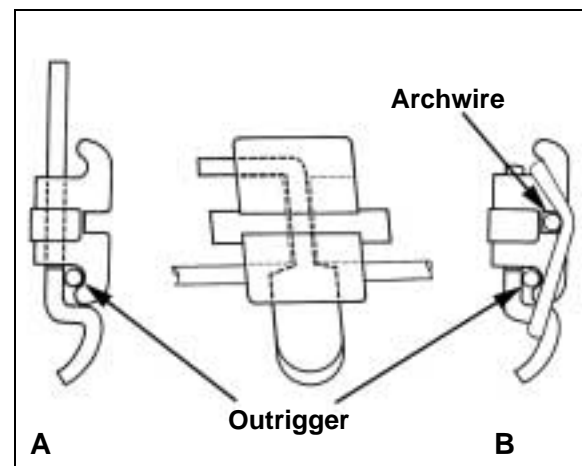


Fig. 4 A. Outrigger in new position under incisal tie wing of incisor bracket. B. Bi-Level Pin inserted in vertical slot and ligated in place to hold Outrigger under incisal tie wing.