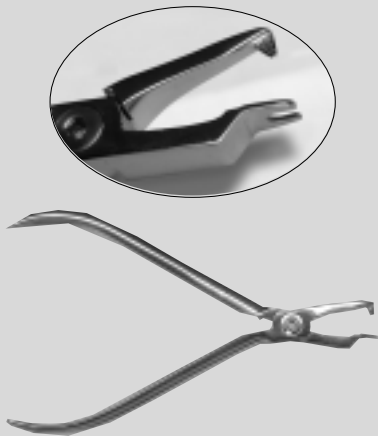


PLIERS:



**Undercut Enhancer
#82510**

EASY AS 1...2...3

Heating pliers with Essix plastics:
Essix A® = 175° • Essix C+® = 200°

1. HEAT TIP OF PLIERS



2. CHECK FOR CORRECT TEMP



3. SQUEEZE



TECHNIQUE: INCREASE RETENTION

A precision fit is essential in any Essix application — not only on initial placement, but as long as the appliance is worn. A well-fitting Essix appliance has two characteristics: it clicks into place, and cannot be sucked off by the patient, since the negative pressure of the suction makes it adhere more tenaciously. The fit depends on the adaptation of the retentive undercuts gingival to the contact points (Fig. 1). If they are not well defined, the appliance will be too loose; if they are excessive, it will be too tight.

An Essix appliance can be quickly adjusted at chairside simply by increasing or reducing the depth of the undercuts in the plastic. This will keep it at maximum efficiency without the need to fabricate a new appliance.

If the Appliance is Too Loose

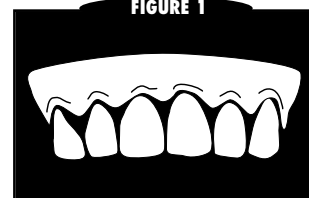
Hilliard Undercut Enhancing Thermoplier (Fig. 2) can tighten any Essix appliance within 10 seconds; a hex-screw adjustment in the plier handle is used to precisely control the amount of adaptation. The technique is as follows:

1. Heat the wedge tip of the plier for four or five seconds in an APT II dental burner (Fig. 3).
2. Verify the correct thermoforming temperature (200-215°) with a Hakko digital thermometer (Fig. 4).
3. Squeeze the handles of the plier together to enhance a few of the undercuts gingival to the contact points (Fig. 5). This should tighten the fit of the appliance.

If the Appliance is Too Tight

An Essix retainer should gently flex in and out of the gingival undercuts. If undue force is needed to remove the appliance, it is usually because the undercuts were not adequately blocked out on the working cast prior to thermoforming. Any tightness can be relieved by using a scalpel to cut off the tips of the plastic indentations, thus making the appliance easier to seat (Fig. 6). The undercuts should be altered one at a time, with a try-in after each adjustment, to avoid making the appliance too loose.

FIGURE 1



Retentive undercuts gingival to contact points

FIGURE 2



Undercut Enhancing Hilliard Thermopliers with hex-screw adjustment.

FIGURE 3



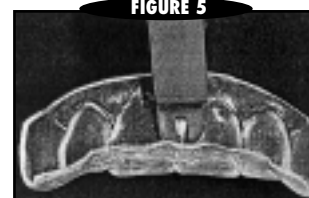
APT II dental burner heating wedge end off Hilliard Thermopliers.

FIGURE 4



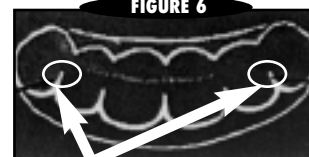
Hakko digital thermometer used to verify wedge temperature.

FIGURE 5



Hilliard Thermopliers used to reinforce retentive undercut gingival to contact point.

FIGURE 6



Tightness relieved by reducing excessive interproximal plastic with scalpel.