Preliminary and Initial Attachment Procedures

Phase 1: Always refer to the Preliminary and Initial Attachments Procedures, page 8. Only this will guarantee a successful restoration.

Description: The use of Set Screws dates back to the 1960’s when telescopic operator removable restorations were first made. The use of the small precision Set Screws has provided new alternatives to the technician and dentist. The three sizes and relative ease of use make them an excellent choice for operator removable cases.

Note: Use precious or semi-precious alloy if casting to a pre-cast or machined threaded metal tube.

CONSIDERATIONS

The new titanium Set Screws require threads in the secondary structure unlike regular screws, where the thread is in the primary. The Set Screws can only be used from the lingual or buccal area and must be perpendicular or between 90 degrees (A) and 105 degrees (B) to the primary coping, bar or custom implant abutment. The Set Screw engages a dimple prepared into the primary structure after the secondary structure is finished. The thread diameter and pitch of the 1.4mm and 1.6mm Set Screws are identical to that of the regular Tube & Screw system. The 2.0mm Swiss Set Screw has a fine pitch thread.

Note: The thread length should be a least 1.5 times the thread diameter.

Phase 2: TECHNICAL

1. Pre-tap the plastic housing with the proper tap. If a semi-precious alloy (high Palladium) is being used the hole of the plastic housing should be enlarged before tapping using the proper reamer. Tap the plastic housing and cut off the handle segment. (C)

2. Wax secondary casting. Place a pre-tapped plastic housing horizontally into the wax-up flush to the primary unit. The tapped housing is positioned between 90 to 105 degrees horizontally. (D)

   Alternative: The plastic housing may also be pre-cast in metal. The metal tube would then be re-tapped and then cast-to in the secondary. (E)

3. Sprue, invest and cast in precious or semi-precious alloy.

4. Use the appropriate tap to clean out the cast threads. Seat secondary casting over the primary casting to verify the fit.

5. Remove the segments and apply marking liquid to the area on the primary casting where the Set Screw will contact. Seat the two units and insert the Set Screw to create the mark. Remove the segments and drill a small dimple into the primary segment. Reseat segments again and adjust the screw length as necessary.

The procedures discussed in this manual are only guidelines. Many alternatives exist for the completion of a successful attachment or implant restoration.