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Preci Clix Instructions for Ball Retained Overdenture Attachments

Dentist Direct Placement Technique

In one appointment, an existing removable partial denture may be converted to a Preci Clix retained overdenture.

Benefits

- **Economical:** Inexpensive components; no lab fees.
- **Efficient:** Simple and Easy to fabricate and service.
- **Small Size:** 2.25mm Ø sphere -- total vertical space required is 4.0mm
- **Reduced Wear:** easy insertion and removal with the ability to parallel the females with non-parallel males.



*1227, 1228, 1229 burs
to prepare root*



1291C titanium Post



*RE H2
seating and impression
tool*



*RE H14
female analogue*



Screwdriver for male



1206C Male



Large Tin Spacer



1251B Space Maintainer



1222 Insertion Tool



Female Retention Caps

*Yellow=standard
White = reduced
Orange = increased*



Metal Housing for female retention caps



Ceka Bond Adhesive to prevent gradual unthreading of males.

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Preparing the Root and Placing the Post:

Following the endodontic treatment, the canal is prepared with the 1227 predrilling bur (**Fig 1**). The 1228 cavity bur is used next to prepare the canal for the base of the 1291 post (**Fig 2**). Finally, the 1229 precision reamer is used to calibrate the canal for the diameter of the 1291 post (**Fig 3**). When using the burs, proceed at slow speeds, avoiding horizontal forces.

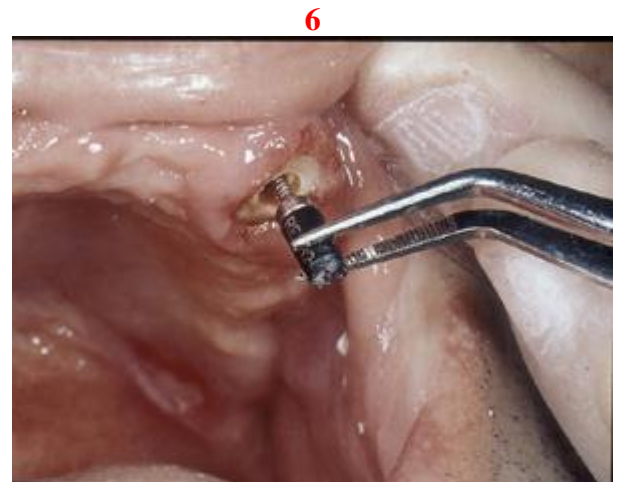


Figure 4 shows the prepared root. Thread the **RE H2** impression tool into the **Preci Clix** post (**Fig 5**) Using the **RE H2** seating and impression tool as a handle, place the Preci Clix post into the canal and check the fit (**Fig 6**).



Sandblast the Preci Clix Post prior to cementation. The **RE H2** tool will protect the threads from cement (**FIG 7-8**). Cover the post and root surface with bonding composite. Seat the post. After the composite is set, polish the root surface with a fine sandpaper disk. Topical fluoride is often used to prevent decay (**Fig 9**).

Laboratory Processing of the Female Attachments



Taking Impression:

Leave the **RE H2** in the cemented post, and make final impression. The **RE H2** (**Fig 1**) will make an index in the impression. Unthread the REH2 from the post, and thread it in to the **RE H14** model analogue (**FIG 2**). Index the **RE H2/RE H14** in the impression (**Fig2**) and pour the master model (**FIG 3**).



3



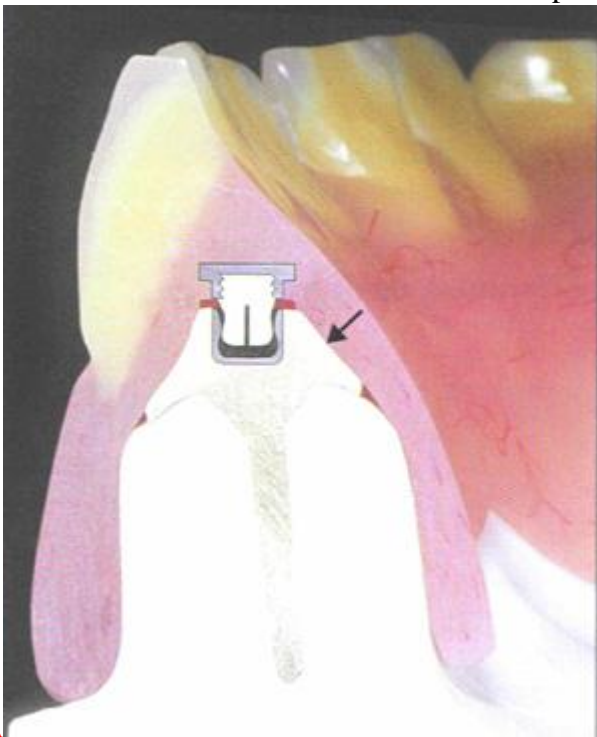
4

Processing the Female:

The RE H14 will be indexed in this model--exactly where the post and basering is in the mouth. (Fig3). Unthread the RE H2 from the RE H14 that is indexed in the stone model. Use the Preci Clix screwdriver to thread the titanium Preci Clix 1206C threaded ball into the RE H14 (Fig4).

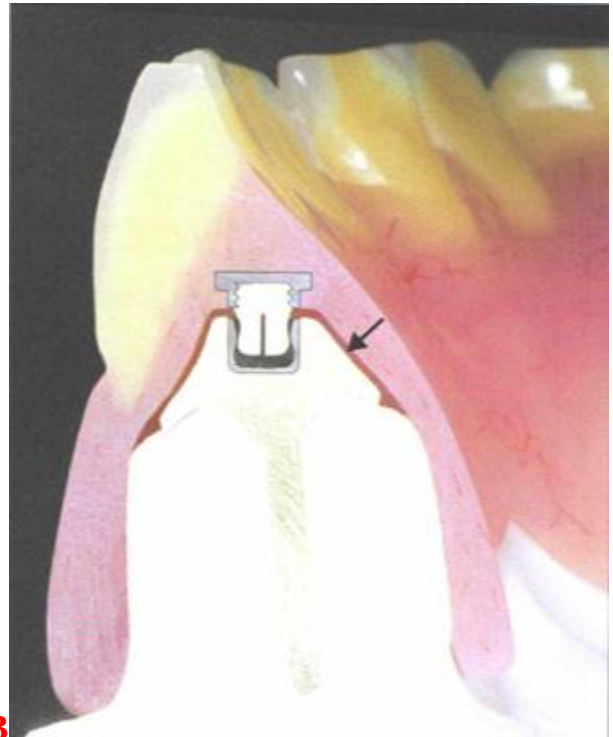
Important: Use the large tin spacer

The large tin spacer is used over the attachment during processing to block out excess acrylic from locking in the attachment. The **main reason** for using the big spacer may be understood by viewing figures A and B. A Ceka overdenture attachment is used as an example.



A

Ceka attachment used for example



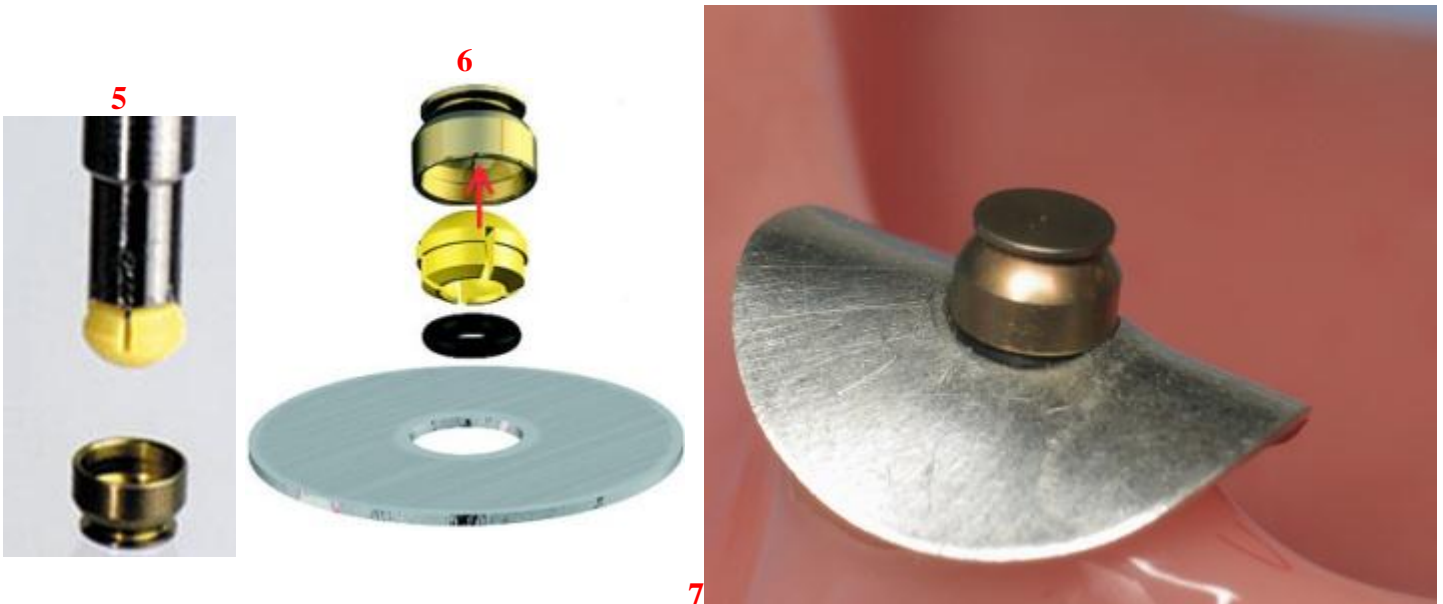
B

Ceka attachment used for example

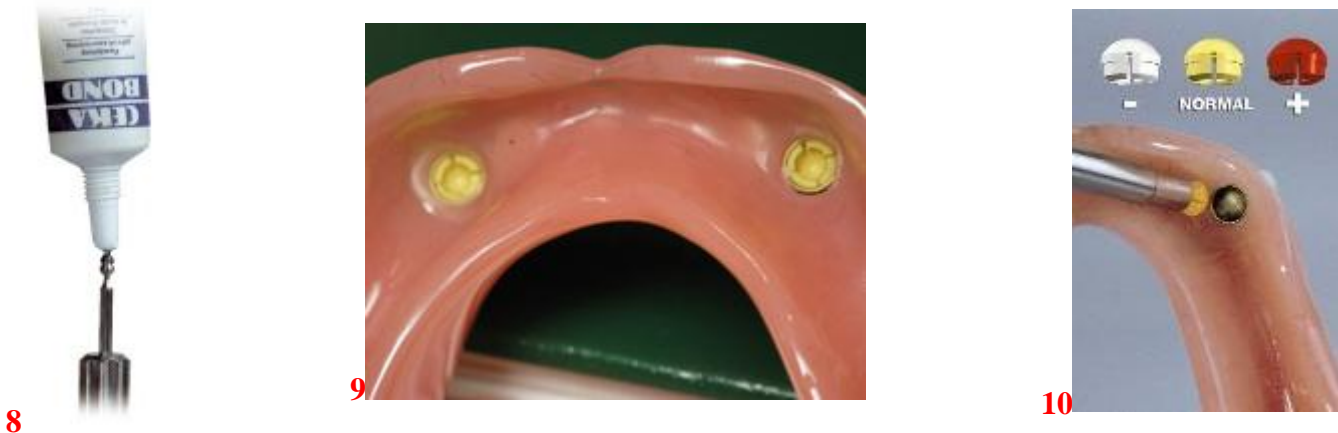
Figure A is an overdenture fabricated without the large spacer. This eliminates all movement of the prosthesis--it is a **rigid** attachment. As you can see, the denture base is in direct contact with the post and attachment (**arrow**). Forces are directed to the post and attachment.

Figure B is the same overdenture, only this time the large spacer was used. Using the large spacer allows for

movement of the prosthesis--it is now a **resilient (tissue bearing)** attachment. During processing, the large spacer creates a free space between the prosthesis and the post and attachment to allow this free movement, and direct forces to the tissue. The greater the area the forces are spread over, the less force that is generated on the abutment.



Place the tin spacer over the male. Next place the **1251B black rubber space maintainer** over the large tin spacer and Preci Clix 1206C Ball on the model (**Fig 7**). **Figure 5** shows the placement of the Preci **Clix female** into the **Clix housing** using the **1222 Clix insertion tool**. Placing the metal housing upside down on a flat surface makes seating the female easier. Place the complete female unit onto the Clix ball on the model (please note the 1251B space maintainer--**Fig 6**). Block out any undercuts. Process the Clix female into the denture.

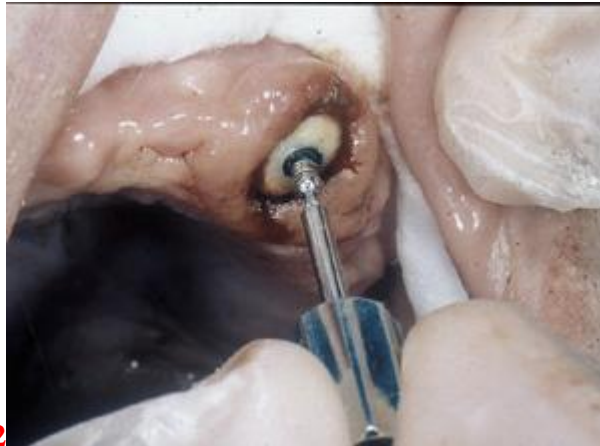


Remove both the large tin spacer and black rubber spacer. Remove the Preci Clix **threaded male** from the model using the **Clix screwdriver**. Send the prosthesis, screwdriver, and Clix threaded males to the Dentist.

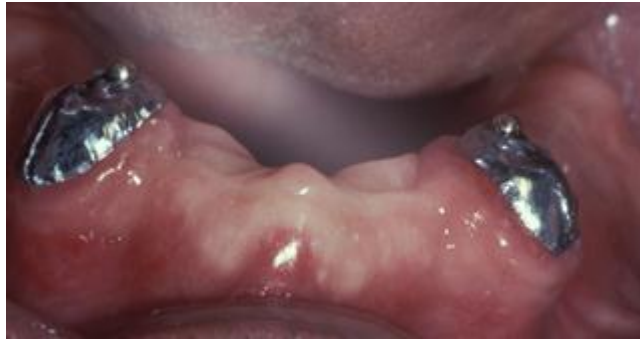
In the operatory, put a drop of **Ceka Bond** on the male threads before threading it into the **Clix Post** (**Fig 8**). This will prevent gradual unthreading of the threaded male. **Figure 9** shows the finished prosthesis. **Figure 10** shows the 3 different retentions of Preci Clix females: standard retention (yellow), decreased retention (white), and increased retention (orange).

Option 2: Chairside Pick-Up of the Female Attachments

Direct Placement by the Dentist



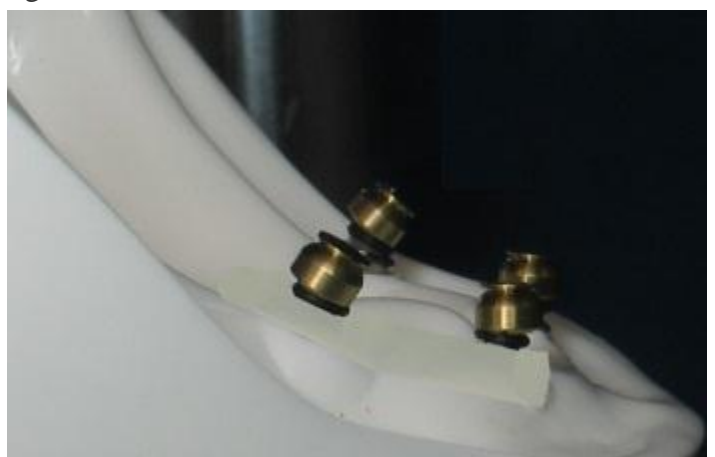
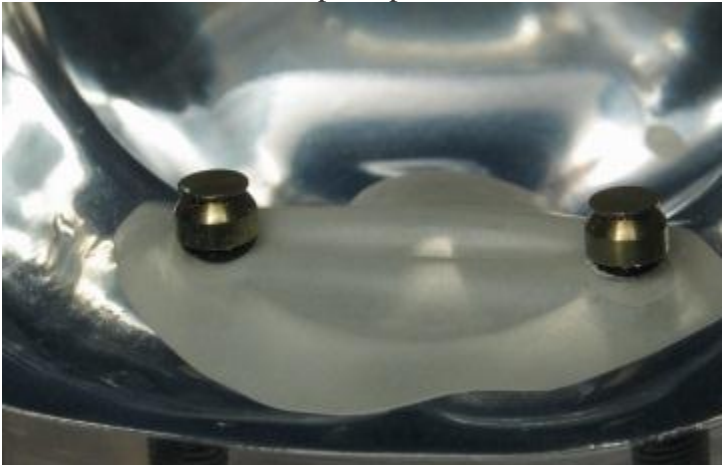
Put a drop of **Ceka Bond** on the male threads before threading it into the **Clix Post**. This will prevent gradual unthreading of the threaded male. Thread the ball in to the post in the mouth.



Blockout

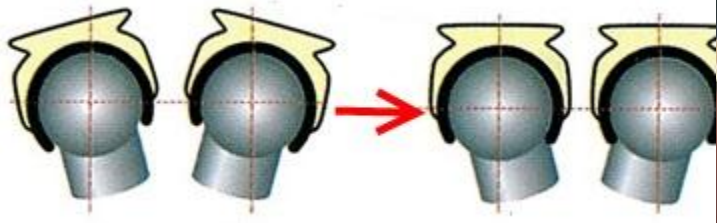
Option 1, Tin Spacer: Place a large tin spacer over the ball and contour the pliable tin spacer around the ball and gingiva. You may need to cut a slot in the tin spacer for easier adaptation.

Option 2, Rubber Dam: place a piece of rubber dam over the ball and surrounding area. Place the small black spacer over the ball, and seat the complete female (housing and plastic insert). Use the Clix insertion tool to snap the plastic insert into the housing.



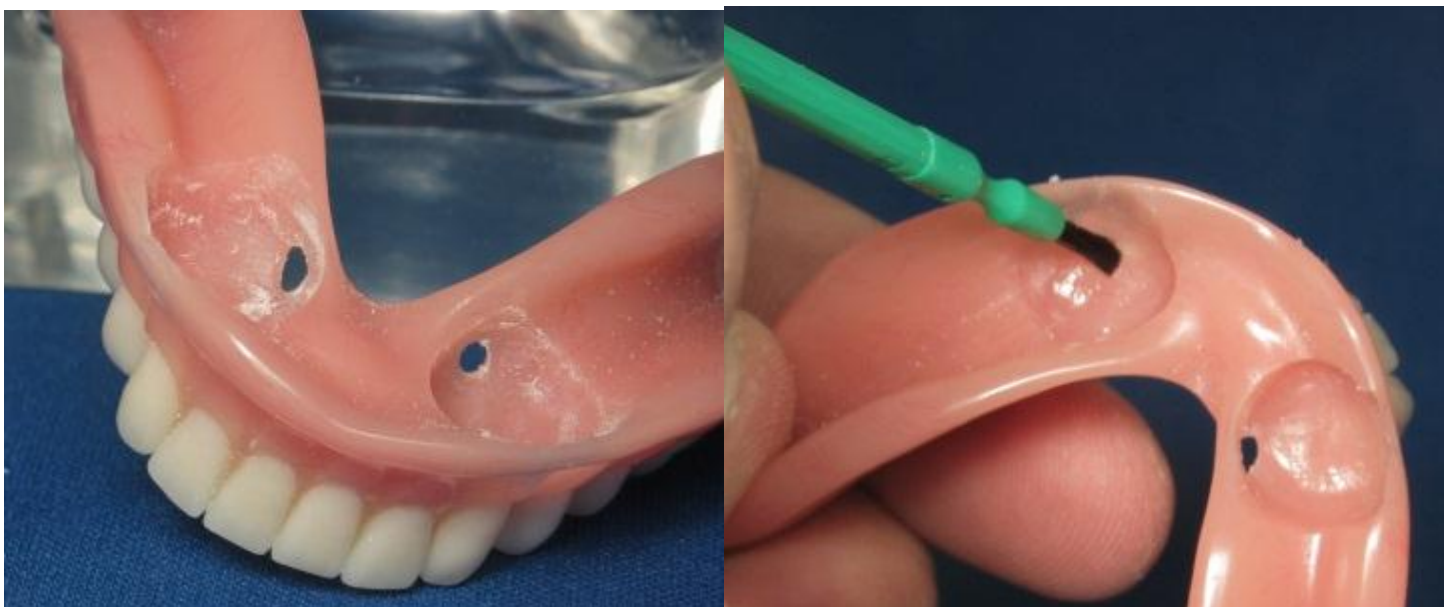
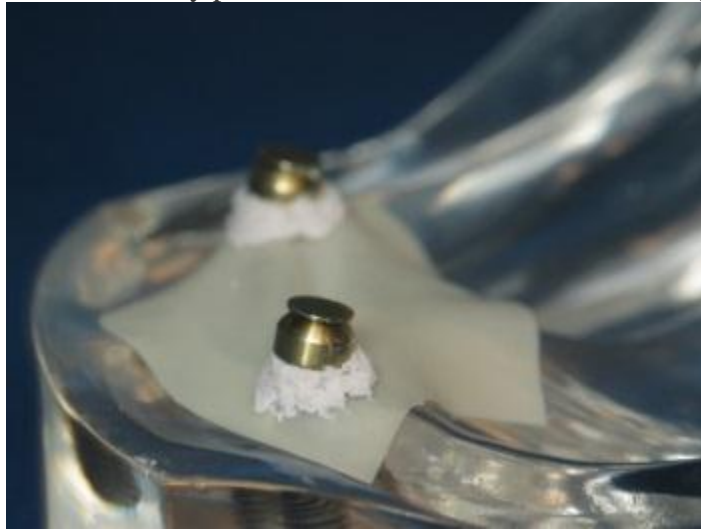
Parallel

To compensate for divergent abutments, it is simple to parallel the Clix females. Rotate the housing around the sphere until the flat top of the housings have the same draw. This can be done chairside with any flat instrument, like a tongue depressor, or in the Laboratory with the Clix Female Paralleling Mandrel.



Pickup

After setting the Clix housings in a parallel position, blockout any additional undercuts with material of choice, such as Perma Block. Relieve the denture to receive the Clix housings. Make sure that the denture can fully seat without any premature contact between the housings and the denture.



Use a small round bur to cut escape vents from the relieved area out to the lingual of the denture. These lingual escape vents will eliminate the lifting or hydraulic effect of autopolymerizing acrylic resin, as well as provide an "escape" for any excess acrylic.

It is preferable that excess acrylic flows to the lingual instead of underneath the attachments! After cutting the lingual escape vents, prime the existing acrylic with monomer.



Place a low viscous mix of self curing acrylic resin into the relieved area of the denture, and seat the denture with finger pressure only on the attachment area. Do not have the patient come into full occlusion and displace soft tissue in the saddle area. This will cause the prosthesis to cant, or rotate anterior to posterior, and take the attachments out of alignment.

The prosthesis is seated in the mouth for approximately 6 minutes, or what the acrylic resin manufacturer indicates. Remove any excess resin as well as the tin spacer and black rubber spacer. Finish and polish. The female may be easily changed in the metal housing to adjust retention.

Instruct the patient in the path of insertion. Have the patient insert and remove the appliance several times.

