O-Ring Attachment Instructions

Indications

The Attachment System is designed for use with overdentures or partial dentures, retained in whole or in part by endosseous implants in the mandible or maxilla.

Contraindications

Not appropriate where a totally rigid connection is required.

Sterilization

All components and instruments are supplied NON-STERILE. Implant abutments and metal instruments may be sterilized following standard clinical procedures prior to use.

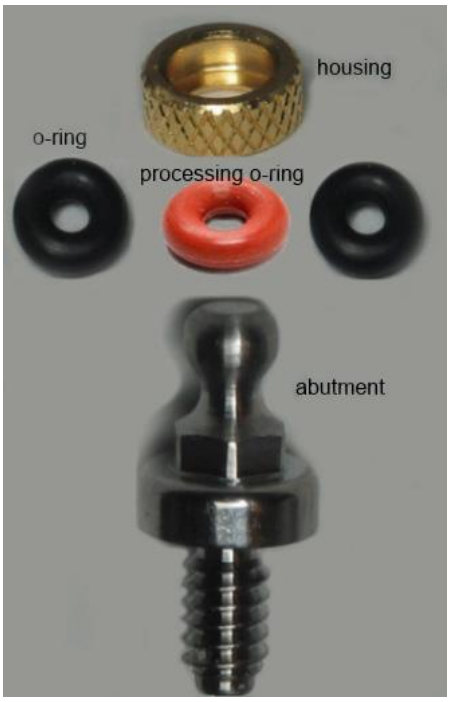
Single-Use Devices

Nylon Males: The inadvertent re-use of nylon males could cause loss of retention for the overdenture due to wear from previous use or damage during removal.

Abutments: The inadvertent re-use of Abutments could contain patient contamination build-up and subsequent wear of the retention bands. This would result in the device to perform with improper fit and function which would result in loss of retention for the prosthesis.

Features

- Low Vertical Height
- Rotational pivoting action: The nylon male allows a resilient connection for the prosthesis without any resulting loss of retention.
- Resilient abutment protecting design



Components

ORing Analog

Abutment Driver

O-Ring Insertion Tool

Placement of the Implant Abutment

- After the secondary gingival healing period is complete, remove the healing cap according to instructions provided by the manufacturer of the implant system being used.
- It is imperative that all bone and soft tissue be removed from the superior aspect of the implant body to guarantee complete seating of the Implant Abutment.
- To select the proper Abutment, determine the type of implant and the diameter being used. Then measure the tissue thickness (height) from the apical rim of the implant body to the crest of the gingiva.
- Therefore, your measurement will be from the top of the implant platform to the crest (or highest) point of the tissue. Order this cuff height.

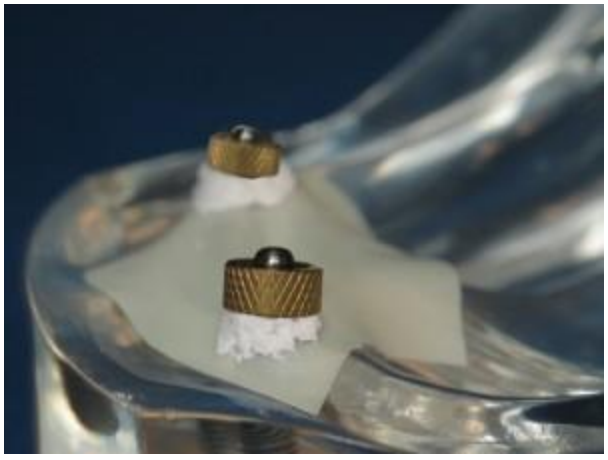
Use the Oring Abutment Driver to thread the Abutment into the implant. The driver fits into a standard latch torque wrench. A maximum seating force 30N-cm will help prevent screw loosening. Ceka Bondfrom PREAT Corporation works well to prevent gradual unthreading.

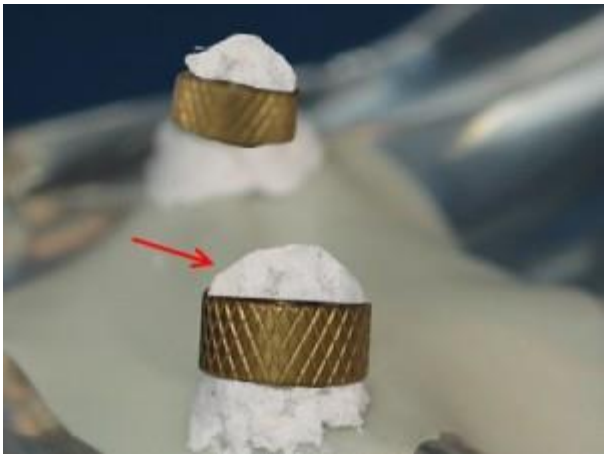
Direct Placement by the Dentist

Insertion of the proper Implant Abutment has been completed.

Blockout

- Place a piece of rubber dam over the ball and surrounding area.
- Place the rubber oring into the housing, and seat on the abutment. Block out any undercuts using Perma Block
- Make sure to blockout the head/post portion of the oring abutment (above the metal housing). The top of the post needs room to rotate and move without making contact with acrylic resin.
- If this area is not blocked out, the post will become a fulcrum and likely fracture the denture when under load.





Pickup

Relieve the denture to receive the Oring housings. Make sure that the denture can fully seat without any premature contact between the housings (and blockout material) 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 can’t, 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.

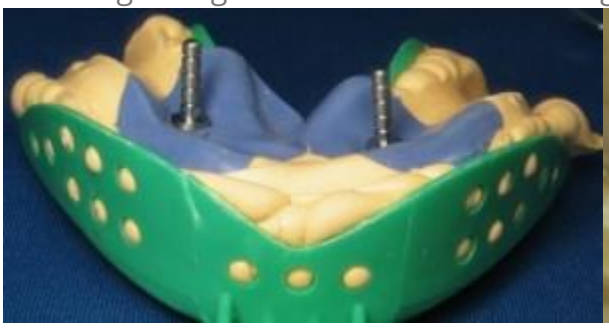
Instruct the patient in the path of insertion. Have the patient insert and remove the appliance several times.

Placement by the Laboratory

- Insertion of the proper Implant Abutment at tissue level has been completed.
- Do not place a female on the abutment. ORing females are designed to pivot and rotate around the abutment. Any movement of the female “impression coping” during the impression will create an inaccurate cast.

- Take an impression using a firm body impression material, exercising caution not to compress the soft tissue. Impress the Implant Abutment itself.
- Take an Implant Abutment Analog and index the Analog into the impression material. Assure that the hex on top of the platform of the Analog lines up with the recess created during the impression of the Implant Abutment.
- Pour the master cast. Upon separation, the Abutment Analog is part of the master cast replicating the position of the Implant Abutment in the oral cavity.

- Set the teeth and wax the appliance. Invest the set-up and boil out the wax. Place the gold plated retainer rings containing the red processing ORings over the analogs. The more open side of the metal retainer is oriented towards the gingiva.
- Use Rubber-Sep or plaster to block out the space between the bottom of the retainer ring and the gingiva. The top of the male analog should also be blocked out.
- Try to close the flask. If it does not close completely, check for interference with the prosthetic teeth and grind the teeth as necessary. Pack and cure the denture. Do not trial pack.
- Finish the overdenture taking care not to damage the retainer rings. Replace the red processing ORings with the white final ORings.




Patient Care

Good oral hygiene is vital to implant success. The Implant Abutment must be thoroughly cleaned daily. The use of a soft nylon bristle or end-tufted toothbrush, and superfloss to polish the abutments should be taught. A non-abrasive gel toothpaste, and an irrigation system is recommended to keep the socket of the Abutment clean.

Soaking the overdenture is not recommended. For patients who soak their dentures, eat a very gritty diet (salads, spinach, etc), or have health issues (like acid reflux), please instruct the patient to brush the attachments with mild dish soap and water. This will keep the nylon attachments smooth and reduce excessive wear on the implant abutments.
Patients should maintain a three to four month recall for cleaning and implant evaluation. Replace nylon males if they have a build-up of abrasive calculus; this will cause premature wear on the implant abutment. Check for a reline; a relined prosthesis provides prosthesis stability and reduces the wear on the attachment.

The sulcus area around the implant abutment is a primary area of concern. Use plastic instruments for scaling the abutments. Do not use metal instruments which may create scratches on the abutment surface. Examine patients for signs of inflammation around the implant abutments, and for implant mobility. Use the Abutment Driver to make sure the Implant Abutment is tight before dismissal.

Reline and Rebase

- Place new nylon attachments into the housings, and lubricate the attachments with petroleum jelly.
- Take a reline impression using the existing overdenture as a tray. The new attachments will engage the Implant Abutments and hold the prosthesis in place while the impression material sets.
- After the impression is withdrawn, snap an Implant Abutment Analogue into each attachment and pour a master model.
- Process the reline following the same steps as outlined in “Placement by the Laboratory.”

For more information, contact Preat at 1-800-232-7732 or visit preat.com