

# TECHNIQUE MANUAL

## SATURNO™ O-RING ATTACHMENT

**IMPORTANT:** This document contains the most current instructions for use. Please, read and retain.

**DESCRIPTION:** Universal hinge, resilient attachment for connection to existing O-Ring Ball Abutments and/or O-Ring Ball Implants with sizes of 1.8mm for use of the SATURNO Micro O-Ring Attachment, or 2.25mm for use of the SATURNO Standard O-Ring Attachment.

### PARTS IDENTIFICATION

SATURNO Standard O-Ring Attachment Assembly  
(for 2.25mm Ball)  
**No. 1966**



O-Ring Cap - Titanium Alloy  
O-Ring Race - Tin Coated Titanium Alloy  
O-Ring – Food Grade Buna-N

SATURNO Standard O-Ring Package  
(4.5mm outside diameter)  
**No. 1969**



Food Grade Buna-N

SATURNO Micro O-Ring Attachment Assembly  
(for 1.8mm Ball)  
**No. 1971**



O-Ring Cap - Titanium Alloy  
O-Ring Race - Tin Coated Titanium Alloy  
O-Ring – Food Grade Buna-N

SATURNO Micro O-Ring Package  
(3.5mm outside diameter)  
**No. 1974**



Food Grade Buna-N

O-Ring Insertion Tool  
**No. 8049**



Polysulfone

### INDICATIONS

The SATURNO O-Ring Attachment is appropriate for use with O-Ring Ball Abutments and/or O-Ring Ball Implants in the mandible or maxilla for retaining overdentures or partial dentures.

### CONTRAINDICATIONS

Not appropriate where a totally rigid connection is required, or for use on implants with greater than 15 degrees of divergence. Not for use with other sizes of O-Rings besides the Micro O-Rings (3.5mm outside diameter, 1.8mm Ball) and Standard O-Rings (4.5mm outside diameter, 2.25mm Ball).

### CAUTION

Federal (U.S.A.) law restricts this device to sale by or on the order of a licensed dentist.

## **SINGLE-USE DEVICES**

**SATURNO O-Rings:** The inadvertent re-use of O-Rings could cause loss of retention for the overdenture due to wear from previous use or damage during removal.

## **STERILIZATION**

All components and instruments are supplied **NON-STERILE**.

O-Ring Insertion Tools (**in the disassembled state only**) may be sterilized using a liquid chemical sterilant following manufacturer's recommendations to achieve sterilization.

**Note: Liquid Chemical Sterilant must be approved for Sterilization not just High-Level Disinfection, and must be compatible with polysulfone material.**

**LUBRICATION:** Lubricate the O-Ring Insertion Tool prior to use by dipping each end of the Insertion Tool handle tines into lubricant (Water Based KY Jelly). Insert the Insertion Tool handle tines into the respective ferrule. Slide the ferrule back and forth to lubricate the inside.

### **A. SATURNO O-RING ATTACHMENT PLACEMENT BY THE DENTIST**

1. Insertion of the proper O-Ring Ball Abutment or O-Ring Ball Implant must be completed before beginning the procedure for placement of the SATURNO O-Ring Attachment Assembly.
2. Choose either the SATURNO Standard O-Ring Attachment Assembly (Zest Order No. 1966) for O-Ring Ball size of 2.25mm, or the SATURNO Micro O-Ring Attachment Assembly (Zest Order No. 1971) for O-Ring Ball size of 1.8mm.
3. Insert the SATURNO O-Ring Attachment Assembly onto each O-Ring Ball Abutment or O-Ring Ball Implant.  
**NOTE: It is necessary to block out any undercuts to prevent the added acrylic resin from locking the denture onto the abutment and to keep the attachment from pivoting to an angle while being picked up.**
4. Prepare a recess in the denture to accommodate the SATURNO O-Ring Attachment Assembly. There must be no contact between the denture and the titanium cap. Any contact will cause excess pressure on the implant. Passive placement is essential.
5. Use the Chairside Lightcure Acrylic Resin Syringe Kit (Zest Order No. 9403) to light cure bond the SATURNO O-Ring Attachment Assembly into the denture, or mix a permanent self-curing acrylic and place a small amount in the recess of the denture and around the metal cap of the SATURNO O-Ring Attachment Assembly.
6. Insert the denture into position in the oral cavity. Guide the patient into occlusion, maintaining a proper relationship with the opposing arch.  
**NOTE: Maintain the denture in a passive condition, without compression of the soft tissue, while the acrylic sets. Excessive occlusal pressure during the setting time may cause tissue recoil against the denture base and could contribute to dislodging and wear of the O-Rings.**
7. After the acrylic resin has cured, remove the denture and discard the block-out material. Use a bur to remove excess acrylic, and polish the denture base being careful not to damage the O-Rings.
8. Instruct the patient in the path of insertion. Have the patient insert and remove the appliance several times.

### **B. SATURNO O-RING ATTACHMENT PLACEMENT BY THE LABORATORY**

1. Insertion of the proper O-Ring Ball Abutment or O-Ring Ball Implant must be completed before beginning the impression procedure.
2. Use transfer parts obtained from the manufacturer of the O-Ring Ball Abutment or O-Ring Ball Implant to create a master cast replicating its position in the oral cavity.
3. Choose either the SATURNO Standard O-Ring Attachment Assembly (Zest Order No. 1966) for O-Ring Ball size of 2.25mm, or the SATURNO Micro O-Ring Attachment Assembly (Zest Order No. 1971) for O-Ring Ball size of 1.8mm.
4. Insert the SATURNO O-Ring Attachment Assembly onto each O-Ring Ball Abutment or O-Ring Ball Implant analog.  
**NOTE: It is necessary to block out any undercuts to prevent the denture acrylic resin from locking the denture onto the abutment and to keep the attachment from pivoting to an angle while being processed.**
5. Process the overdenture using standard dental laboratory techniques. Polish the denture base being careful not to damage the O-Rings.

## C. HOW TO CHANGE THE O-RING

1. Use an explorer or similar dental instrument to remove the existing O-Ring.
2. The O-Ring Insertion Tool (Zest Order No. 8049) is designed to insert Micro O-Rings (3.5mm outside diameter, 1.8mm Ball) and/or Standard O-Rings (4.5mm outside diameter, 2.25mm Ball) into the SATURNO O-Ring Attachment titanium caps using the appropriate end of the Insertion Tool.
3. Lubricate the O-Ring Insertion Tool prior to use by dipping each end of the Insertion Tool handle tines into lubricant (Water Based KY Jelly). Insert the Insertion Tool handle tines into the respective ferrule. Slide the ferrule back and forth to lubricate the inside.
4. Place the appropriate O-Ring (Micro or Standard size) on a flat surface. Remove the O-Ring Ferrule (Micro or Standard size) and place the ferrule over the O-Ring, pressing gently (Figure 1). The O-Ring should be seated flat in the ferrule as shown in (Figure 2).



Figure 1

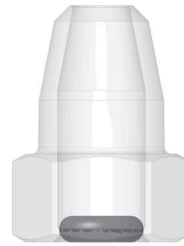


Figure 2

5. Place the loaded O-Ring Ferrule onto its respective end of Insertion Tool handle (spinning the handle as it goes in keeping the O-Ring flush with the end of the tool), and lock it onto the handle. The O-Ring will be advanced toward the tip of ferrule (Figure 3).



Figure 3

6. The O-Ring is ready to be inserted into the SATURNO O-Ring Attachment Cap in the denture. Place the tip of the O-Ring Insertion Tool into the Cap located in the denture (Figure 4).

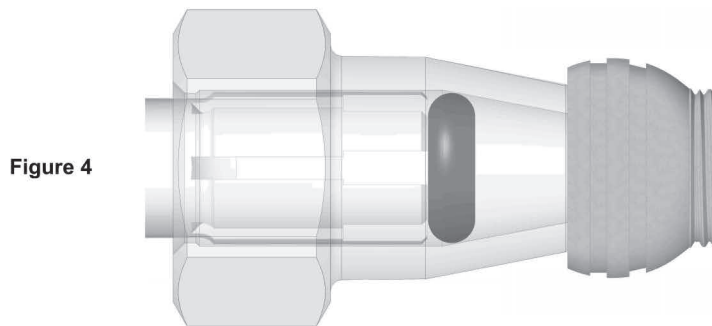


Figure 4

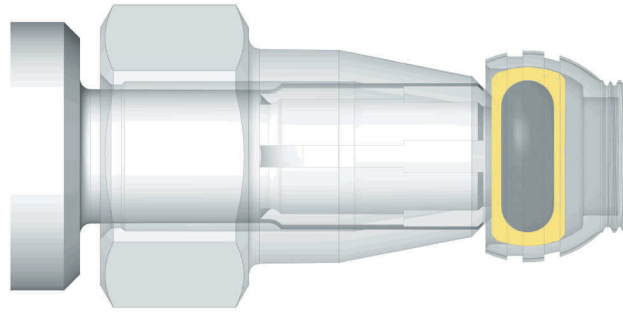
O-Ring Insertion Tool Ferrule

SATURNO O-Ring Attachment Cap



7. Push the Insertion Tool handle to insert O-Ring into SATURNO O-Ring Attachment Cap in denture (Figure 5).

Figure 5



8. Once the O-Ring is fully inserted into the SATURNO O-Ring Attachment Cap, remove the O-Ring Insertion Tool from the Cap in denture.

#### D. PATIENT CARE

Good oral hygiene is vital to attachment success. The O-Ring Ball Abutments and SATURNO O-Ring Attachments must be thoroughly cleaned each day to prevent wear of the abutments due to buildup of abrasive plaque. The use of a soft nylon bristle or end-tufted toothbrush and non-abrasive gel toothpaste to clean the attachment and superfloss to polish the abutments should be taught. An irrigation system is recommended to flush out debris from the inside of the SATURNO O-Ring Attachment.

Patients should maintain a three to four month recall for cleaning and attachment evaluation. The inside of the SATURNO O-Ring Attachment and the sulcus area around the O-Ring Abutment are the primary areas of concern. Use plastic instruments for scaling the abutments. Do not use metal instruments which may create scratches on the abutment surface.

#### RETURN POLICY

Check with your Distributor for their policy on returns.

#### WARRANTY

Zest Anchors, LLC provides a limited warranty for its products, to the original purchaser, to be free from defects in workmanship and materials under normal use for a period of one year from the date of purchase. Zest Anchors, LLC will, at its option, substitute any returned product that proved to be defective with a similar product, free of charge.

Zest Anchors, LLC continually strives to improve its products, and therefore, reserves the right to improve, modify or discontinue products and components at any time without notice or incurring obligation. Purchaser assumes all risks and liability resulting from the use of Zest Anchors, LLC products, whether used separately or in combination with other products not of Zest Anchors, LLC manufacture.



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L8018-TM REV. A