Instructions

Indications

- The Locator Implant Attachment System is designed for use with overdentures or partial dentures, retained in whole or in part by endosseous implants in the mandibular 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

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

**Locator Abutments:** The inadvertent re-use of Locator 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

- **Lowest Vertical Height:** The total height of the lowest Locator Attachment (abutment plus male) is only 3.17mm on an externally hexed implant, and 2.73mm on a non-hexed implant.
- **Locating Design:** Self Locating design allows a patient to easily seat their overdenture without the need for accurate alignment of the attachment components.
- **Retention inside and outside:** The unique Dual Retention innovation provides the LOCATOR attachment with greater retention surface area than ever before available with other attachments. A combination of inside and outside retention ensures the longest lasting performance.
- **Use with non-parallel implants:** Angle correction nylon inserts allow easy correction of divergent implants.
- **Rotational pivoting action:** The design of the pivoting LOCATOR male allows a resilient connection for the prosthesis without any resulting loss of retention. The retentive nylon male remains completely in contact with the female socket while its metal denture cap as a full range of rotation movement over the male.
Placement of the Locator Implant Abutment

1. To select the proper Locator Implant Abutment, determine the type of implant and the diameter being used. Then measure the tissue thickness from the apical rim of the implant body to the crest of the gingiva. The implant female MUST be at least 1.5mm above the highest tissue point for full seating of the male. This 1.5mm is built in to all cuffs, ie a 2mm cuff height is 3.5mm (2 + 1.5). 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.

Choose the closest corresponding abutment tissue cuff height available.
2. After the secondary gingival healing period is complete, remove the healing cuff according to instructions provided by the manufacturer of the implant system being used.

3. 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 Locator Implant Abutment.

4. A special Locator Abutment Driver is designed to engage the inside diameter of the Locator Abutment and thread it into the implant. You may use either the Gold Abutment Driver #8390 from the Locator Core Tool with an .050 hex (FIG 1, or the Direct square or latch drive abutment driver (FIG 2).

The new #8394 Locator Abutment retaining sleeve goes over the end of the Gold Abutment Driver and holds the abutment in place when taking the abutment to the mouth.

**NOTE**: A torque wrench with a .050 (1.25mm) hex insert will fit into the back side of the Abutment driver. The torque wrench is used to achieve the maximum seating force 30N-cm that will help prevent screw loosening. Ceka Bond from PREAT Corporation works well to prevent gradual unthreading.

5. When placing multiple attachments, snap a Parallel Post into each seated Locator Abutment to make sure the parallelism between implants is within 10° of each other.

**NOTE**: if the divergence is greater than 10°, use the #8547 Green Male, #8915 Orange, or #8548 Red Male insert to correct divergence.

**Locator Male Placement by the Dentist**

1. Insertion of the proper Locator Implant Abutment at tissue level has been completed.
2. Place a White block-Out Spacer over the head of each Locator Abutment (FIG 3). The spacer is used to block out the area immediately surrounding the abutment. The space created will allow the full resilient function of the pivoting metal denture cap over the LOCATOR male.

3. Insert a Locator Cap with Black Processing male into each Locator implant abutment, leaving the White Block-Out Spacer beneath it. The Black Processing Male will maintain the overdenture in the upper limit of its vertical resiliency during the processing procedure. The black male is 0.2mm taller than the standard retention inserts.

4. Prepare a recess in the denture to accommodate the protruding Locator Male (FIG 4). There must be no contact between the denture and the stainless steel cap. If the denture rests on the metal cap, excess pressure on the implant will result.

**Alternative Technique Using the #8569 Processing Spacers**

The #8569 Processing Spacer is designed to create the exact space in the denture to allow ease of Dentist chairside pickup of the Locator Cap Processing Male.

In the normal processing of the denture base, before waxing and processing, place the Processing Spacers over the LOCATOR® Female Analogs in the master cast.

Set the teeth and wax the appliance. Proceed with boil-out technique. When the denture is complete, the spacers can be removed with the Locator Core Tool.

Place the Locator Core Tool, Male Removal End into the Processing Spacer cavity just as if you were going to remove a nylon male, but instead of pulling at an angle, **pull straight** up with the Core Tool, to remove each Processing Spacer.

To discard the processing spacer from the tip on the Core Tool; point the tool down and away from you and
tightly the Male Removal Tool clockwise back onto the Core Tool. This will activate the removal pin and dislodge the Processing Spacer from the tip end of the Male Removal Tool.

5. Light cure bond the Locator Denture Cap Male into the denture (FIG 5 & 6) 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 Processing Cap Male.

NOTE: It is always recommended that a vent, or "escape vent", is cut into the lingual side of the prosthesis to allow any excess acrylic to escape.

6. Insert the denture into position in the oral cavity. Guide the patient into occlusion, maintaining a proper relationship with the opposing arch. 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 nylon males.

7. After the acrylic resin has cured, remove the denture and discard the white spacer. Use a bur to remove excess acrylic and polish the denture base before changing to the final male.

8. Use the LOCATOR Male Removal Tool to remove the Black Processing Male from the metal denture cap. Loosen the new (8397) Male Removal Tool a full 3 turns counter clockwise (you will see a visible gap). Insert the new tip into the cap/male assembly and push straight in to the bottom of the nylon male. Tilt the tool so that the sharp edge of the tip will grab hold of the male and pull it out of the
Discard the nylon male by pointing the tool down and away from you and thread the new Male Removal Tool clockwise back onto the Core Tool. This will activate the removal pin and dislodge the nylon male from the tip (FIG 7).

9. The LOCATOR Male Seating Tool is used to firmly push a LOCATOR Replacement Male into the empty metal denture cap. The replacement male must seat securely into place, level with the rim of the cap.

NOTE: The replacement male will not stay on the tool when it is turned upside down due to the varying sizes of males available. It is best to hold the denture with the base side down and snap the male into the metal denture cap.

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

**Locator Male Placement by the Laboratory**

**In the Operatory:**

**Option A: Using the Impression Copings:**

1. Insertion of the proper Locator Implant Abutment at tissue level has been completed.

2. Place a LOCATOR Impression Coping with Black Processing Male onto each Locator Abutment (FIG 8). These require 4.5mm of height.

A low profile alternative is using the metal housings.

3. Take an impression using a firm body impression material, exercising caution not to compress the soft tissue. The Locator Impression Coping is designed with minimum retention to be picked up with the impression material.

4. Snap a LOCATOR Abutment Analogue onto each Impression Coping in the impression. The analogue must not fall off when turned upside down with vibration (FIG 9).
**Option B: Using the Metal Housings instead of impression coping:**

2. Insert a LOCATOR Cap with Black Processing Male into each cemented female—or if you choose the #8505 impression analogue (FIG 1). The built in spacer of the Black Processing Male will maintain the overdenture in its upper limit of vertical resiliency during the processing procedure.

3. Take an impression using a firm body impression material, exercising caution not to compress the soft tissue (FIG 2). When the impression is withdrawn, the Processing Cap Males will remain in the cemented females.

4. Remove the Processing Cap Male from each female and snap it into a LOCATOR Female Analogue (FIG 3) #8516. Reposition this assembly back into the impression making sure it is fully seated (FIG 4). Do not use the blockout spacers in this step.

**In the Laboratory:**

5. Pour the master cast. Upon separation, the Locator Abutment Analogue is part of the master cast replicating the position of the Locator Implant Abutment in the oral cavity.
6. Before waxing and processing the appliance, place a LOCATOR Cap with Black Processing Male into each Abutment Analogue in the master cast (above). Make sure the male is fully seated.

7. Set the teeth and wax the appliance. Proceed with the processing technique of your choice through the boil-out step.

8. After the boil-out, remove the Processing Cap male. Place a White Block Out Spacer over the head of each Abutment Analogue (FIG 11). The spacer is used to block out the immediate area surrounding the Locator Implant Abutment. The space created will allow the full resilient function of the pivoting metal denture cap over the LOCATOR male.

9. Re-insert the LOCATOR Black Processing Cap Male into each Abutment Analogue, leaving the White Block Out Spacer beneath it. The Black Processing Male will maintain the overdenture in the upper limit of its vertical resiliency during the processing procedure.

10. Complete the processing and discard the white spacer. Avoid damaged to the final male by polishing the denture base before changing to the final male.

8. Use the LOCATOR Male Removal Tool to remove the Black Processing Male from the metal denture cap. Loosen the new (8397) Male Removal Tool a full 3 turns counter clockwise (you will see a visible gap). Insert the new tip into the cap/male assembly and push straight in to the bottom of the
nylon male. Tilt the tool so that the sharp edge of the tip will grab hold of the male and pull it out of the cap.

Discard the nylon male by pointing the tool down and away from you and thread the new Male Removal Tool clockwise back onto the Core Tool. This will activate the removal pin and dislodge the nylon male from the tip (FIG 7).

12. Use the LOCATOR Male Seating Tool is used to firmly push a LOCATOR Replacement Male into the empty metal denture cap (FIG 18). The replacement male must seat securely into place, level with the rim of the cap (FIG 19).

NOTE: The replacement male will not stay on the tool when it is turned upside down due to the varying sizes of males available. It is best to hold the denture with the base side down and snap the male into the metal denture cap.

Patient Care

Good oral hygiene is vital to implant success. The Locator 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 Locator 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 Locator Abutment Driver to make sure the Locator Implant Abutment is tight before dismissal.

How to change the Locator Male

1. The Locator Core Tool, which contains a Locator Male Removal Tool and Locator Male Seating Tool, is used to remove the existing nylon male from the metal denture cap and replace it with a new Locator Replacement Male.

2. Use the Male Removal Tool to remove the nylon male from the denture cap.

3. The Male Seating Tool is used to firmly push a Replacement Male into the empty metal denture cap. The replacement male must seat securely into place, level with the rim of the cap.
NOTE: The replacement male will not stay on the tool when it is turned upside down due to the varying sizes of males available. It is best to hold the denture with the base side down and snap the male into the metal denture cap.

**Reline and Rebase**

1. Remove each existing nylon male from its metal denture cap following the steps in "How to Change the Locator Male." Replace them with Black Processing Males. The built in spacer of the Black Processing Male will maintain the overdenture in its upper level of vertical resiliency during the reline process.

2. Take a reline impression using the existing overdenture as a tray. The Black Processing Males will engage the Locator Implant Abutments and hold the prosthesis in place while the impression material sets.

3. After the impression is withdrawn, snap a Locator Abutment Analogue into each Black Processing Male and pour a master model.

4. Process the reline following the same steps as outlined in "Locator Male Placement by the Laboratory."

5. After processing the reline and polishing the denture base, replace the Black Processing Males with the final Locator Replacement Males.