Locator® abutment overdenture: chairside pick-up using existing denture
full-arch restorations

Locator abutment overdenture: chairside pick-up using existing denture

Use this technique for chairside pick-up of the Locator caps into an existing denture. Locator abutments are designed for use with overdentures or partial dentures retained in whole or in part by dental implants in the mandible or maxilla. They offer multiple levels of retention and low vertical profile. The self-aligning design enables patients to easily seat their dentures.

Component options

- Locator abutments
- Locator core tool
- Locator square drive tool
- torque wrench
- Locator male processing package

1. Select the Locator abutments

Select the proper Locator abutment based on the prosthetic platform and the tissue height. Measure the tissue thickness from the top of the implant to the crest of the gingiva at its highest point.

Choose the abutment cuff height that exactly equals the tissue height or is slightly taller. This will position the functioning 1.8 mm of the Locator abutment above the surrounding tissue.

Note:
Due to tissue depth variations, the abutment heights you choose may vary.

2. Remove the healing abutments

Remove the healing abutments using an .050” (1.25mm) hex driver. Confirm that the prosthetic platforms are free of bone debris and soft tissue. Irrigate the internal connection of the implants and dry.

Helpful Hint:
When working with multiple implants, remove one healing abutment at a time and replace it immediately with a Locator abutment. This helps to prevent the possibility of soft tissue collapsing onto the implant.
Locate abutment overdenture: chairside pick-up using existing denture

3 Place the Locator abutments

Place the Locator abutment onto each implant using the Locator hand driver with a Locator abutment holder. Hand tighten.

Take a radiograph along the long axis of the implants to ensure the abutments are seated completely onto the implants.

Note:
The X-ray tube must be positioned perpendicular to the implant prosthetic platform.

Tighten each Locator abutment to 30 Ncm using a calibrated torque wrench and the Locator square drive tool. Alternatively, use an .050" (1.25mm) hex driver inserted into the core tool hand driver.

4 Place the white block-out spacers and denture caps

Place a white block-out spacer over the head of each Locator abutment. This blocks out the area immediately surrounding the abutment allowing the full resilient function of the pivoting metal denture cap over the Locator male.

Place a Locator cap with a black processing insert onto each Locator abutment.

Note:
If the white block-out spacer does not completely fill the space between the tissue and the metal denture cap, block out any remaining undercuts with a material of choice to prevent the acrylic resin from locking the denture onto the abutment.
Locator abutment overdenture: chairside pick-up using existing denture

5 Modify the denture

Place a transferable mark on the top of each Locator abutment with an indelible pencil and seat the denture to determine the ideal location for the denture caps in the denture.

Prepare recesses in the denture to accommodate the protruding Locator males. There must be no contact between the denture and the titanium caps. If the denture rests on the metal cap, excess pressure on the implant will result.

Make lingual vent holes for the escape of any excess acrylic.

6 Apply the acrylic

Use either a chairside light cure acrylic resin or a permanent self-curing acrylic to bond the denture caps to the denture.

Place a small amount of a material of choice into the recessed area of the denture and around the denture caps.

7 Seat the denture

Insert the denture. Guide the patient into occlusion, maintaining a proper relationship with the opposing arch.

Maintain the denture in a passive position without compressing the soft tissue while the denture material sets.

Important:
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 male.

8 Remove the denture

After the acrylic has cured, remove the denture and discard the white spacer. Fill in any voids with acrylic and remove excess acrylic from around the denture cap and the lingual vent-hole. Polish before changing to the final male retentive insert.
Locator abutment overdenture: chairside pick-up using existing denture

9 Remove the black insert

Use the Locator male removal tool to remove the black processing male from the metal denture cap.

Note:
Before inserting the tool, rotate the tool counterclockwise so the plunger on the end is positioned inside the tool. There will be a visible gap.

Insert the male removal tool end into the cap assembly and push straight down into bottom of the nylon male. Tilt the tool so the sharp edge grabs the black insert and pull it out of the cap. To discard the insert from the tool, point it down and away from you and tighten the male removal tool clockwise back onto the core tool. The insert will dislodge from the tip of the tool.

10 Place the male retention insert

Use the Locator core tool to firmly push a Locator male retention insert into the denture cap. The retention insert must seat securely into place, level with the rim of the cap.

Note:
The Locator core tool does not retain the replacement male. It is best to hold the denture with the occlusal side down and snap the male into the metal denture cap.

11 Deliver the denture

Remove the provisional prosthesis and seat the overdenture onto the Locator abutments. Modify the occlusion and the tissue side of the denture as necessary and polish after making adjustments.

Verify the patient’s ability to remove and seat the denture properly. If the denture has too much or too little retention, select an insert with different retention.

Instruct the patient on the proper insertion and removal of the prosthesis. This includes inserting the denture using their fingers and not biting the denture in to place. When removing the denture, it should be lifted as evenly as possible.
This prosthetic technique module may contain references to the complete Prosthetic Manual (L02015).
To download the full Prosthetic Manual, please visit www.biohorizons.com