screw-retained crown using the Laser-Lok® Easy Ti temp abutment
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Use this technique for the fabrication of long-term single or multi unit, screw-retained, temporary restorations. The abutment has Laser-Lok microchannels for connective tissue attachment and is TiN coated for esthetics.

Laser-Lok has been shown to create a biologic seal by establishing a physical, connective tissue attachment to the abutment. Use this technique at the time of implant placement, implant uncovery or when a Laser-Lok healing abutment has been used to establish and maintain the biologic seal.

Important:
For ideal results, Laser-Lok components should be used throughout the healing, temporization and final abutment phases. When a Laser-Lok component is temporarily removed for impression making or other restorative procedures, keep the removed Laser-Lok component in sterile saline until reinserting into the mouth.

component options
- Laser-Lok Easy Ti temp abutments
- .050” (1.25mm) hex driver
- torque wrench
- Laser-Lok protective sleeve
- direct coping screws

1 Remove the Laser-Lok healing abutment
Remove the Laser-Lok healing abutment using an .050” (1.25mm) hex driver. Make sure the prosthetic platform is free of bone and soft tissue.

2 Seat the Easy Ti temp abutment
Seat the Easy Ti temp abutment, engaging the hex of the implant. Hand tighten the abutment screw using an .050” (1.25mm) hex driver.

3 Mark the abutment
Evaluate inter-occlusal dimensions, angulation, and tissue contour. Mark the abutment for the required vertical reduction.

Important
Maintain at least 3mm of abutment height to avoid damaging the abutment screw.
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4 Modify the abutment
Remove the marked Easy Ti abutment and secure it to the end of the Laser-Lok protective sleeve marked “Full Ti” using an .050” (1.25mm) hex driver and hand tighten. Modify the abutment for vertical clearance using a carbide bur or a cut-off disk. Do not modify the margin where the Laser-Lok zone is located.

Note:
Replace the healing abutment immediately to prevent soft tissue collapse over the implant.

5 Seat the modified Easy Ti temp abutment
Remove the healing abutment. Verify the implant prosthetic platform is free of bone and soft tissue. Place the modified Easy Ti temp abutment onto the implant using the abutment screw and an .050” (1.25mm) hex driver. Hand tighten.

6 Try in shell crown and create access hole
Try in the appropriate poly-carbonate/shell crown and modify as needed. Remove the abutment screw using an .050” (1.25mm) hex driver and replace it with the direct coping screw. Finger tighten the screw using the knurled top or hand tighten using an .050” (1.25mm) hex driver. Create a screw-access hole through the shell crown allowing the direct coping screw to pass through.

Important:
Gently place an appropriate size non-impregnated retraction cord at the margin of the abutment to minimize the risk of contaminating the Laser-Lok zone with acrylic during the next step of the temporization process.
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7 Fill the shell crown
Mix acrylic or another material of choice and place inside the shell crown. Position the shell crown over the direct coping screw onto the modified Laser-Lok Easy Ti temp abutment.

Note:
Undercuts on adjacent teeth should be blocked out prior to this reline procedure.

8 Remove and polish the crown
Remove the direct coping screw and the relined shell crown/abutment using an .050” (1.25mm) hex driver. Remove the retraction cord.
Place the screw-retained temporary crown onto the Laser-Lok protective sleeve using the abutment screw. Fill in any voids, contour, and polish the crown.

Note:
Replace the healing abutment immediately to prevent soft tissue collapse over the implant.

Important:
Laser-Lok abutments must be ultrasonically cleaned after they have been modified in order to remove particulate from the Laser-Lok zone.

9 Deliver the temporary crown
Remove the healing abutment. Make sure the implant prosthetic platform is free of bone and soft tissue. Irrigate the internal connection of the implant and dry. Try in the prosthesis to confirm fit and contour. Modify as necessary and polish after making adjustments.
Re-seat the crown onto the implant and hand tighten the abutment screw using an .050” (1.25mm) hex diver.

Note:
Take a radiograph along the long axis of the implant to ensure the abutment is seated completely onto the implant.

Important:
Laser-Lok abutments must be ultrasonically cleaned after they have been modified in order to remove particulate from the Laser-Lok zone.
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10. **Check and modify occlusion**
   
   Check the occlusion and contacts. There should only be light contact in centric occlusion and no contact in lateral excursions. Modify as necessary and polish after making any adjustments.

11. **Tighten the abutment screw**
   
   Tighten the abutment screw to 30Ncm using a calibrated torque wrench and an .050” (1.25mm) hex driver.

   **Note:**
   
   Tightening the abutment screw to 30 Ncm is not recommended if the temporary is placed at the time of surgery.

12. **Fill the screw access channel**
   
   Place a resilient material of choice (gutta-percha, silicone or temporary filling material) into the screw access channel. This allows for easy access to the abutment screw in the future. Fill the remainder of the channel using a composite resin material of choice.

   Take an x-ray for temporary prosthesis delivery records.
notes