

Restorative Manual

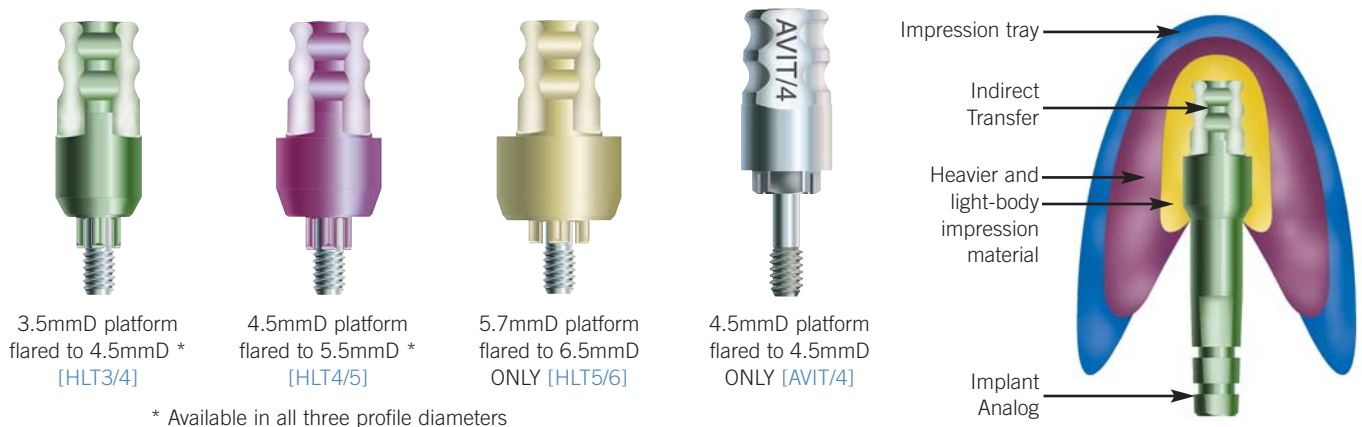
Impression Transfer System



Indirect (closed-tray) transfer technique

Implant-level indirect transfers for closed-tray, transfer impression technique

Designed to transfer the soft tissue profile as well as the implant's position and hex orientation, Indirect Transfers remain attached to the implants when the closed-tray impression is removed from the mouth. The transfer is then retrieved from the implant, mated to the corresponding Implant Analog, and placed into its corresponding impression hole. To fabricate a working cast containing a replica of the implant in the patient's mouth, the impression is poured in dental stone. In areas where a longer transfer is required, the transfer's screw can be replaced by the Transfer Extension Screw (HLTE for internal hex implants), which adds an additional 3mm to the overall length of the transfer.



Exposing the tops of the implants

Tapered Screw-Vent and Screw-Vent Implants:

- Remove the Healing Collars with the 1.25mmD Hex Tool.

AdVent Implants:

- Remove the Surgical Cover Screws [AVSC] with the Hex Tool and Implant Extender [AVE] if present.

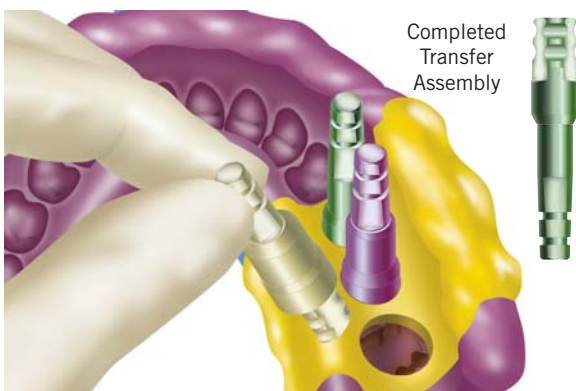
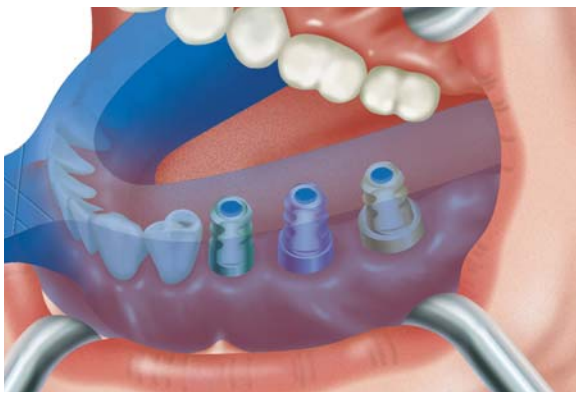


Attaching the transfers

Indirect Transfers are available in various profile diameters to replicate anatomical tissue sulcus in the working cast.

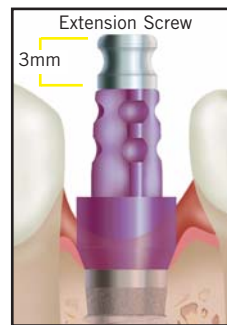
Orient the flat side of the Indirect Transfer [HLT Series or AVIT/4] or Fixture Mount/Transfer, toward the buccal surface, interdigitate its hex with the implant's hex and press the transfer onto the implant. Thread the transfer screw into the implant and finger-tighten with the 1.25mmD Hex Tool.

Indirect (closed-tray) transfer technique



Making the transfer impression

Take a radiograph or use a non-abrading explorer to verify that the Indirect Transfers are fully seated. Block out the hex holes in the tops of the transfer screws with medium of choice to prevent the ingress of impression material. Remove excess material so that the blockout is flush with the ends of the transfer screws. Failure to do so may prevent an accurate transfer procedure.



Verifying the fit of the impression tray

Verify that the Indirect Transfers fit within the confines of the custom tray or the modified stock tray prior to injecting the impression material.

In areas where a greater length of transfer body is required, replace the transfer screw with the extension screw, [HLTE] for two-stage internal hex implants. This will increase the length of the transfer by 3mm and provide another circumferential groove for added vertical retention.

Injecting the impression material

An elastomeric impression material is recommended, such as vinyl polysiloxane. Inject light-body impression material around the transfers and fill the closed tray with heavier body impression material. Make a full-arch impression, and allow the material to set according to the manufacturer's recommendations before removing. Unthread the Indirect Transfers from the implants in the patient's mouth. Make interocclusal records and an impression of the opposing arch. Send the impressions and transfer assemblies to the laboratory for fabrication of the working casts. Replace the Healing Collars on the implants in the patient's mouth.

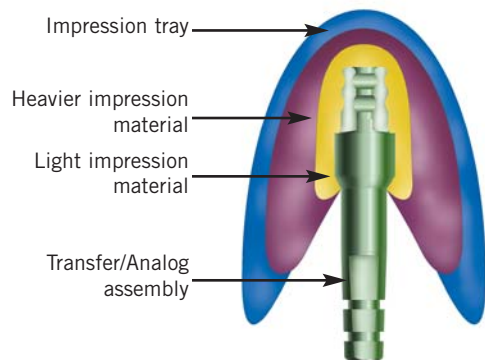
Seating the transfer assembly

Attach the Indirect transfers to corresponding Implant Analogs with the Hex Tool:

- Implant Analog for an internal hex implant, 3.5mmD platform: [IA3](#).
- Implant Analog for an internal hex implant, 4.5mmD platform: [IA4](#).
- Implant Analog for an internal hex implant, 5.7mmD platform: [IA5](#).
- Implant Analog for an AdVent Implant with 4.5mmD platform: [AVR](#).
- Implant Analog for an AdVent Implant with 5.7mmD platform: [IA5](#).

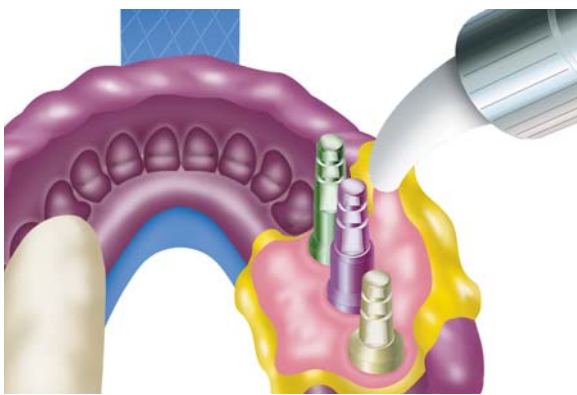
Align the flat side of each transfer with the flat side of its corresponding hole in the impression and insert the transfer assembly into the impression material. A double click will indicate when the assembly has fully seated.

Indirect (closed-tray) transfer technique



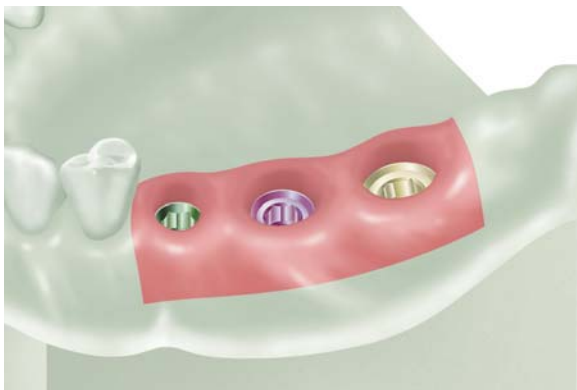
Cross section of transfer impression

From the cross section of the Indirect Transfer impression, note that there is no access to the transfers from outside of the impression tray.



Fabricating the working cast

Place soft tissue replication material around the junctions of the assembled Implant Analogs and the transfers inside the impression. Take care not to cover the retention grooves of the Implant Analogs with the material. After the material sets, pour the impression in dental stone.



Fabricating the working cast

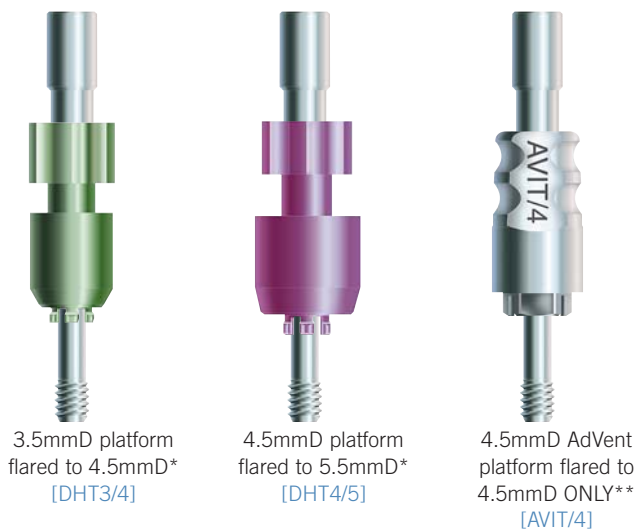
After the dental stone sets separate the cast from the impression. The Implant Analogs will be incorporated within the stone cast with the same hex positions and orientations as the implants in the patient's mouth. Unthread and remove the transfers from the Implant Analogs with the Hex Tool. The soft tissue replication material can be removed for a visual inspection of the abutment/implant analog connections, if desired.

Pour the opposing arch impression in dental stone, then utilize the interocclusal records to articulate the casts.

Direct (open-tray) transfer technique

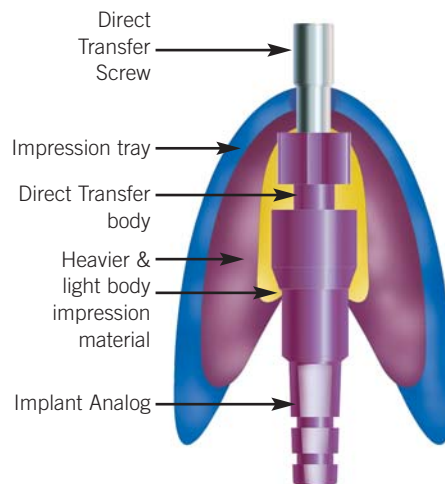
Implant-level direct transfers for open-tray, pick-up impression technique

Designed to transfer the soft tissue profile as well as the implant's position and hex orientation, Direct Transfers are held firmly within the open-tray impression as it is removed from the mouth. Therefore, the central transfer screw must be removed before the impression can be released from the mouth. This transfer procedure requires a custom tray or modified stock tray with screw access holes in the areas occlusal to the implants. The Implant Analog is connected to the transfer embedded within the impression, then the impression is poured in dental stone to fabricate a working cast containing a replica of the implant in the patient's mouth.



*Available in all three profile diameters

**This assembly is obtained with an optional purchase of the [DHTS] open-tray transfer screw



Fabricating a custom tray

Make a full-arch impression of the Healing Collars or Surgical Cover Screws, edentulous areas and remaining dentition. Send it to the laboratory for fabrication of a preliminary cast and custom impression tray. Alternatively, select a stock tray and mold the border with greenstick compound material. The patient's existing, modified prosthesis can continue to be worn during the laboratory phase.

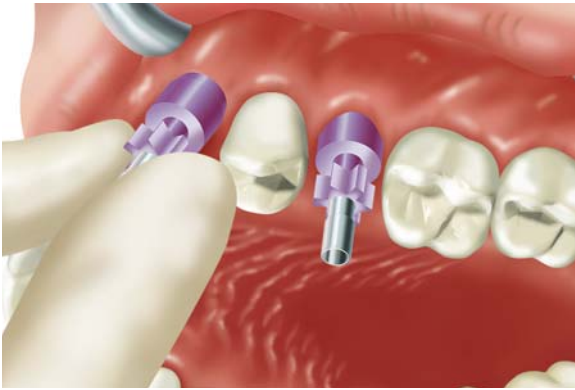


Fabricating a custom tray

Pour the impression in dental stone and separate the preliminary cast after it sets. Block out the areas above the Healing Collars or Surgical Cover Screws with baseplate wax to simulate the positions of the implant transfers that will be used.

Fabricate the custom impression tray with autopolymerizing or light-cure tray resin. Create an opening above the implant areas to allow for access to the Direct Transfer screws.

Direct (open-tray) transfer technique



Removing the healing components

Expose the tops of the implants:

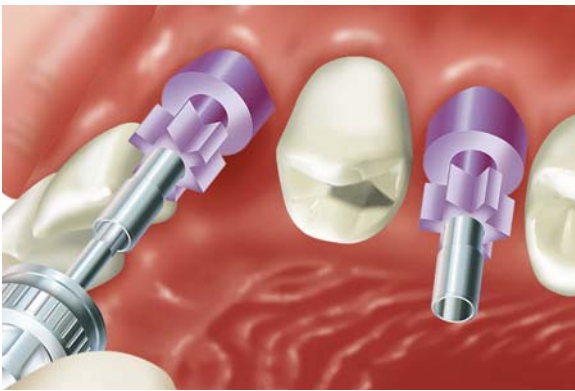
Tapered Screw-Vent and Screw-Vent implants:

- Remove the Healing Collars or Surgical Cover Screws with the 1.25mmD Hex Tool.

AdVent Implants:

- Remove the Surgical Cover Screws with the 1.25mmD Hex Tool. Remove the AdVent Extender [AVE] if present, prior to impression making.

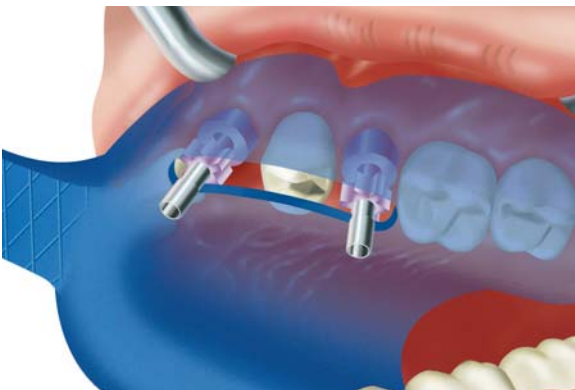
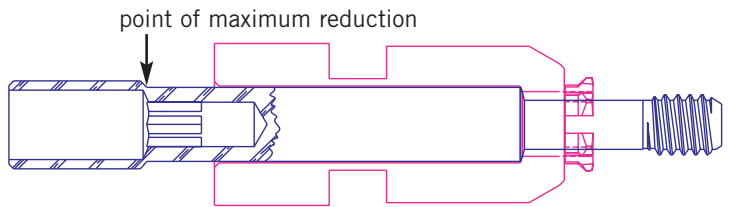
Select the transfers according to the implant platform and the required profile diameters. Place a Direct Transfer onto each implant in the patient's mouth by interdigitating its hex with the hex of the implant.



Attaching the direct transfers

Use the 1.25mmD Hex Tool to thread the transfer screws through the transfer bodies and into the implants, then finger-tighten.

In areas of limited vertical height, the transfer screws can be removed and shortened by 4mm with a cutting disc prior to use.



Verify screw access through the top of the tray

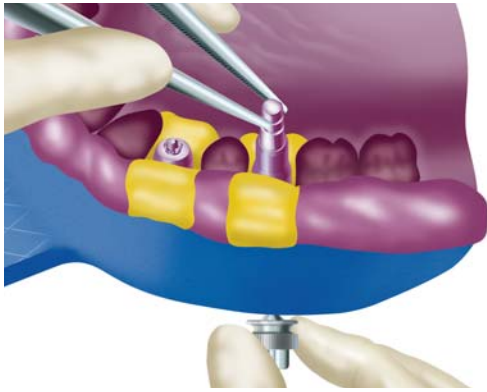
Place the open-access tray over the assembled Direct Transfers in the patient's mouth to verify that the screws penetrate through the top of the tray without hindrance. Remove the open-access tray.



Making the transfer impression

An elastomeric impression material is recommended, such as vinyl polysiloxane. Inject light-body impression material around the Direct Transfers and fill the open-access tray with heavier body impression material. Place the loaded tray into the patient's mouth and allow the screws to penetrate through the access area in the impression tray. Remove excess impression material from the tops of the screws and allow the impression material to set according to the manufacturer's recommendations. Unthread the screws from the transfers with the Hex Tool and remove them from the patient's mouth. Remove the tray from the mouth. The Direct Transfer bodies will be picked up and retained in the impression material.

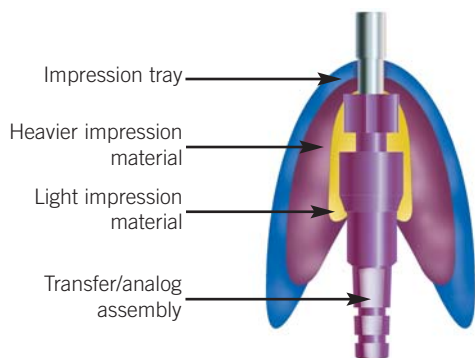
Direct (open-tray) transfer technique



Completing the transfer procedure

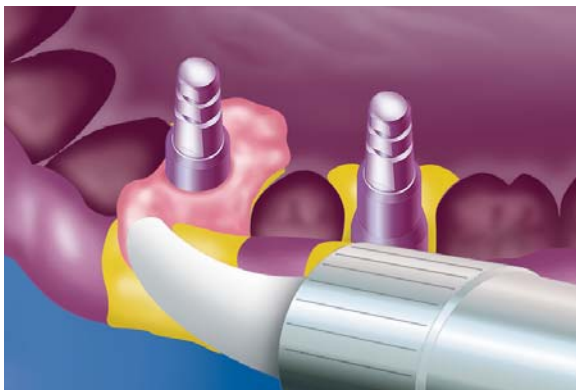
Replace the healing components on the implants in the patient's mouth. Fabricate an opposing arch impression and make interocclusal records. Send the impressions with included transfers to the laboratory for fabrication of the working casts. Stabilize each Implant Analog [IA3, IA4, IA5 and AVR] with forceps to prevent rotation, and insert the screw-receiving end of a corresponding Implant Analog into the base of the transfer body within the impression material.

Attach the transfer screw to the 1.25mmD Hex Tool, and insert it through the respective access hole in the back of the transfer tray. Pass the screw through the embedded transfer body and thread it into the attached Implant Analog to lock the components together.



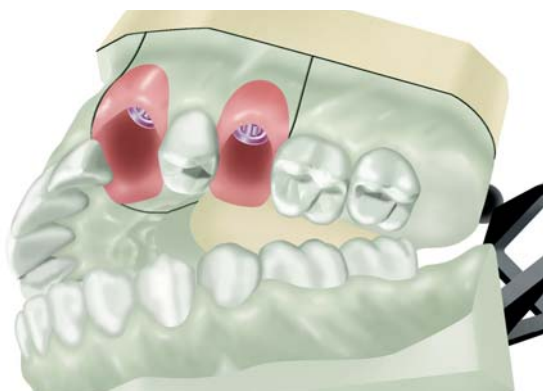
Cross section of transfer impression

From the cross section of the Direct Transfer impression, note that there is access to the transfer screw from outside of the impression tray.



Fabricating the working cast

Place soft tissue replication material around the junctions of the assembled Implant Analogs and the transfers inside the impression. Take care not to cover the retention grooves of the Implant Analogs with the material. After the material sets, pour the impression in dental stone.



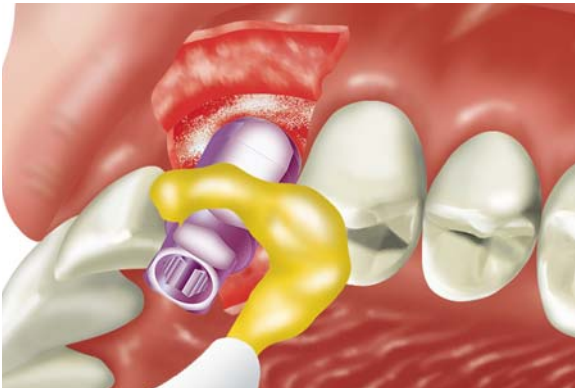
Fabricating the working cast

Use the 1.25mmD Hex Tool to unthread and remove the transfer screws after the dental stone sets. Separate the cast from the impression (the open-tray transfer bodies will remain in the impression). The Implant Analogs will be incorporated within the stone cast with the same hex positions and orientations as the implants in the patient's mouth. The soft tissue replication material can be removed for a visual inspection of the abutment/implant analog connections, if desired.

Pour the opposing arch impression in dental stone, then utilize the interocclusal records to articulate the casts.

Immediate impression transfer technique

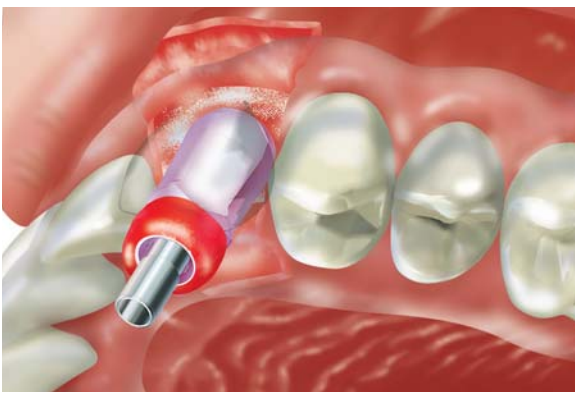
Making an impression at time of implant placement



Option#1: Make an implant level impression

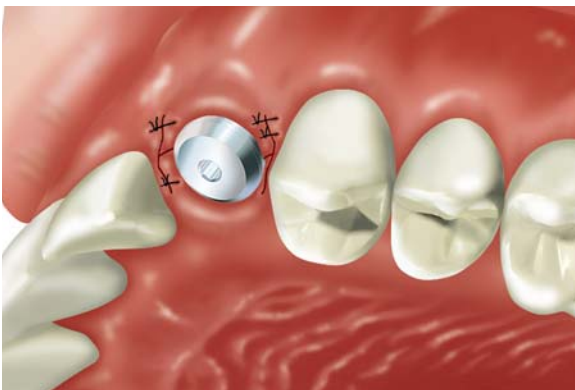
After threaded implant placement, block out the top of the Fixture Mount/Transfer. If implant does not have a transfer, attach transfer of choice with 1.25mmD Hex Tool. Place light body impression material around the transfer and record a full-arch impression with standard body material.

Remove the impression after it fully sets. Remove transfer and forward with impression to the laboratory. If impression is done at the bone level, inform the laboratory. Optional: Long impression screw [DHTS] may be used for open-tray impression technique.



Option#2: Use the surgical guide for indexing

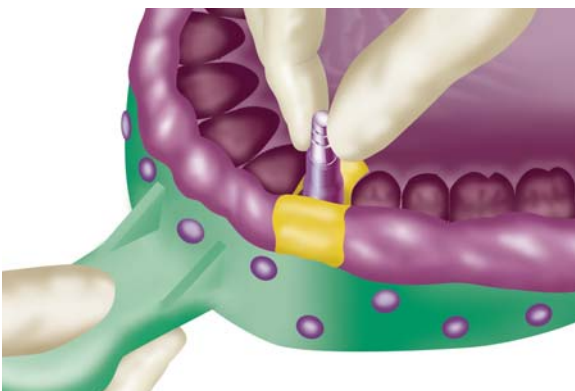
After threaded implant placement, use a long (open tray) impression screw [DHTS] to project through surgical guide. Lute the Fixture Mount/Transfer or transfer post to the surgical guide with resin of choice. Unscrew the transfer and remove the guide with transfer attached. Forward guide and transfer to the laboratory for retrofitting of the preoperative model.



Attach components for healing period

- 1) Place surgical cover screw using 1.25mmD hex tool and then suture for traditional two-stage protocol.
- 2) Attach a healing collar with the corresponding profile and platform diameter for single stage protocol.

Forward the impression, transfer and diagnostic models to the laboratory for fabrication of the working cast.



Fabricating the working cast

Place soft tissue replication material around the junctions of the assembled Implant Analog and the transfer inside the impression. After the material sets, pour the impression in dental stone. Separate the cast from the impression. The Implant Analog will be incorporated within the stone cast with the same hex positions and orientations as the implant in the patient's mouth. Unthread and remove the transfer from the Implant Analog with the 1.25mmD Hex Tool. The soft tissue replication material can be removed for a visual inspection of the abutment/implant analog connections, if desired.

Pour the opposing arch impression in dental stone, then utilize the interocclusal records to articulate the casts.