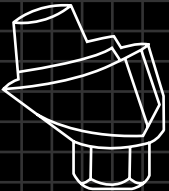


SCREW RETAINED RESTORATION

TRAINING MANUAL

03



AB

Superior Implant Technology

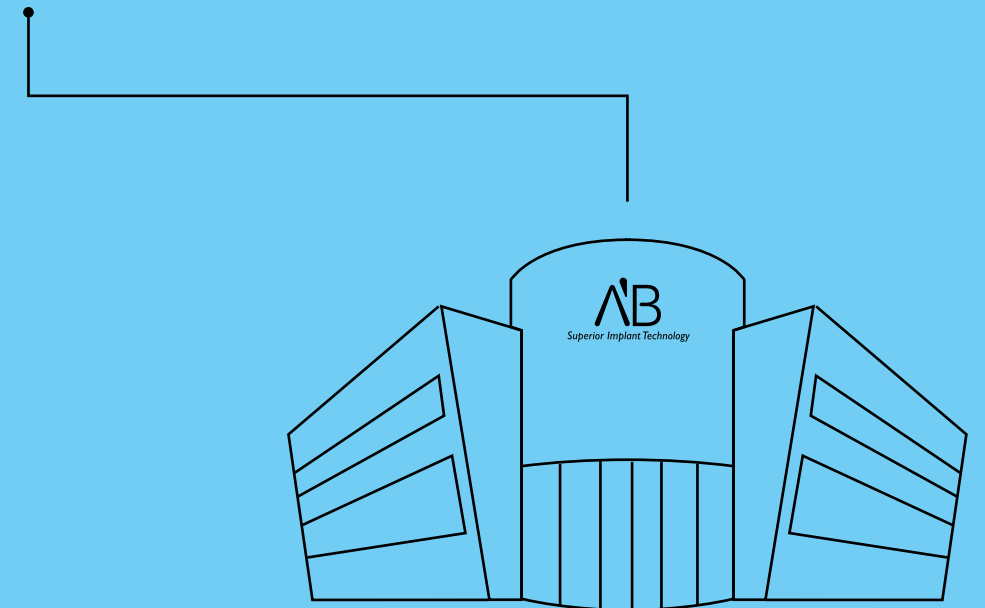
A.B. DENTAL

A.B. Dental is proud to present this screw retained internal hex implant reconstruction procedures for both temporary and permanent restorations.

This manual explains, step by step, the procedure while using A.B. Dental components.

A.B. Dental scientists and R&D department are committed to the continued innovative approach in both products and advanced technologies.

Our commitment extends beyond providing safe and high precision dental products & services to passing on procedural information through training and instruction.



SCREW RETAINED RESTORATION

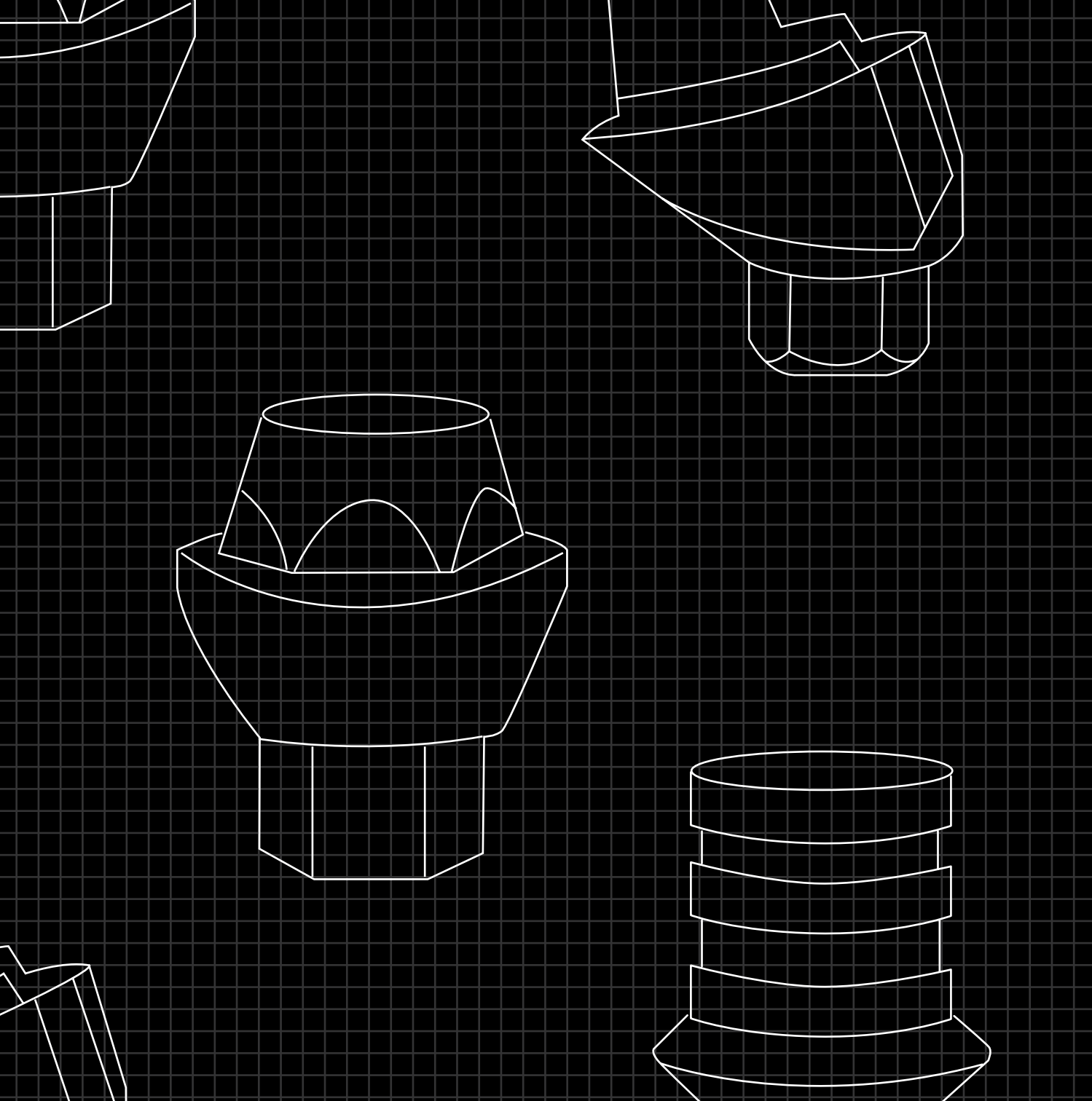
Screw-retained restorations are favored by many dentists because it affords easy retrievability of the restoration. It is indicated for all restorations, especially when the inter-arch space is limited. The restoration is screwed to the abutment through an occlusal opening in the finished restoration.

ADVANTAGES:

- Wide and standard Implants platforms can be used
- Easier to retrieve for servicing, revisions and hygiene maintenance
- Avoids undesirable cement accumulation subgingivally

DISADVANTAGES:

- Requires splinting the restorations on implants with divergent angles greater than 10° (for A.B. patented solutions in these cases, please refer to the section follows).
- May restrict optimal occlusion when used for crown & bridge affecting the esthetic outcome.
- May necessitate double impression procedures: the first one, an implant level impression procedure, for constructing a study model for selecting the proper abutments. The second one, after abutment connection intraorally, an abutment level impression procedure for constructing the working model.



STEP 01

EXPOSE

A.

Remove healing cap from the implant(s) and by using a probe measure the gingival height surrounding every implant.

B.

Choose the proper abutment gingival height according to these measures.



STEP 02

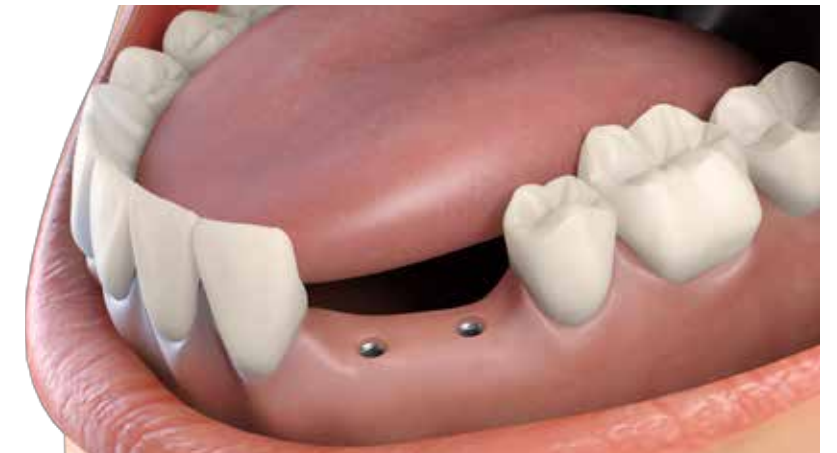
IMPRESSION TAKING

A.

Take an impression of the selected implants using the open or closed tray technique.

B.

Take an impression of the opposite jaw and a bite registration and send to the laboratory.



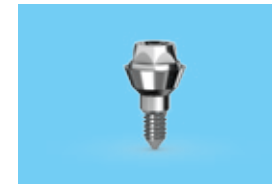
STEP 03

CHOOSING THE PROPER ABUTMENT

In the laboratory the dental technician pours the impression and creates a stone study or working model. Next, the proper abutments for screw retained restoration have been chosen according to the specified gingival height of every implant angulation, aesthetic demands and anti rotation requirements (P6H aesthetic abutment with hex, P7 anti-rotation aesthetic abutment, P16 straight adaptor, P14 angular adaptor, P24 one-piece angular adaptor, P64 angular adaptor single unit).

In case of severe non-parallel implants the P12 flat connection abutment (an A.B. Dental unique patented device for screw retained restoration on non-parallel implants) is being chosen.

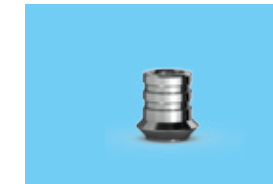
OPTIONAL ABUTMENTS



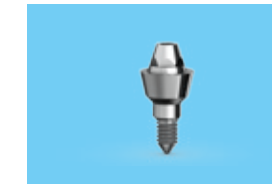
P6H
Aesthetic abutment
with hex



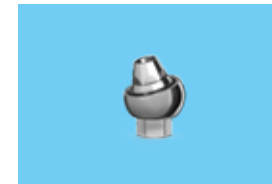
P7
Anti-rotation
aesthetic abutment



P12 | ISSUED PATENT
Flat connection
abutment



P16
Straight adaptor



P14 | ISSUED PATENT
Angular adaptor



P24 | ISSUED PATENT
One-piece angular
adaptor



P64
Angular/straight
adaptor single unit

STEP 04

ABUTMENT LEVEL IMPRESSION

In case where the abutments will be permanently engaged over the implants a second, abutment level, impression procedure with the open tray technique should be performed. This procedure necessitates an abutment level impression transfers and an abutment analogs.

STEP 05

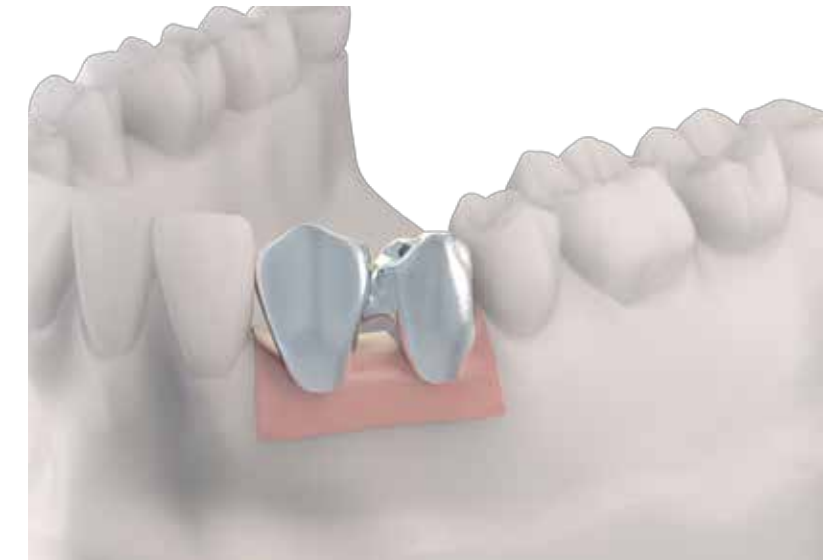
WORKING MODEL

Over the working model of choice (implant level or abutment level), using the metal casting technique for fabrication of the framework, the proper plastic sleeve (with or without hex, with or without metal base) which will be part of the metal framework, is being fitted to the abutment (or abutments analogs). The framework is being casted and prepared according to standard laboratory techniques.

Alternatively, using the CAD/CAM technology for creating the framework, the abutments, fitted over the dental implants analogs, are been scanned using the "A.B. Dental" scanning abutments/bases. The fabrication of the framework over the selected abutments is carried out using the computer aided milling technique.

Depending on the dentist preference, a temporary restoration is constructed over the selected abutments. This will afford permanent and final engagement of the abutment over the implant(s) without any need to disassemble the abutments after each appointment.

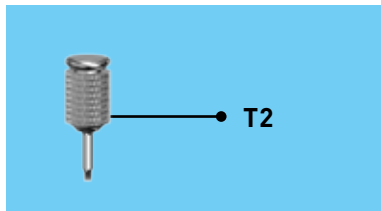
The permanently fitted abutments should be covered by a suitable healing cap or a temporary restoration.



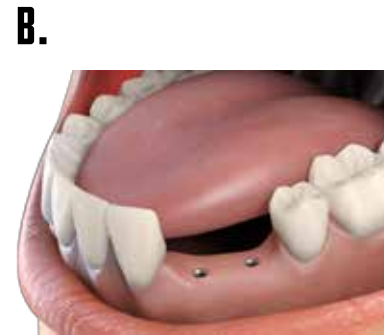
STEP 06

TRY-IN PROCEDURE

COMPONENTS:



After receiving the framework back from the lab a try-in procedure is carried out.

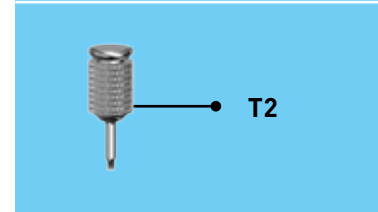
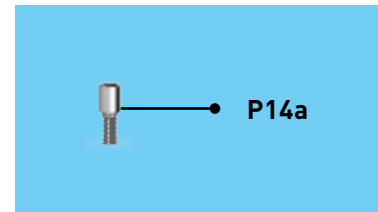


Remove the temporary restoration or the healing cap from the implant/abutments.

STEP 07

CHECKING THE FRAMEWORK

COMPONENTS:

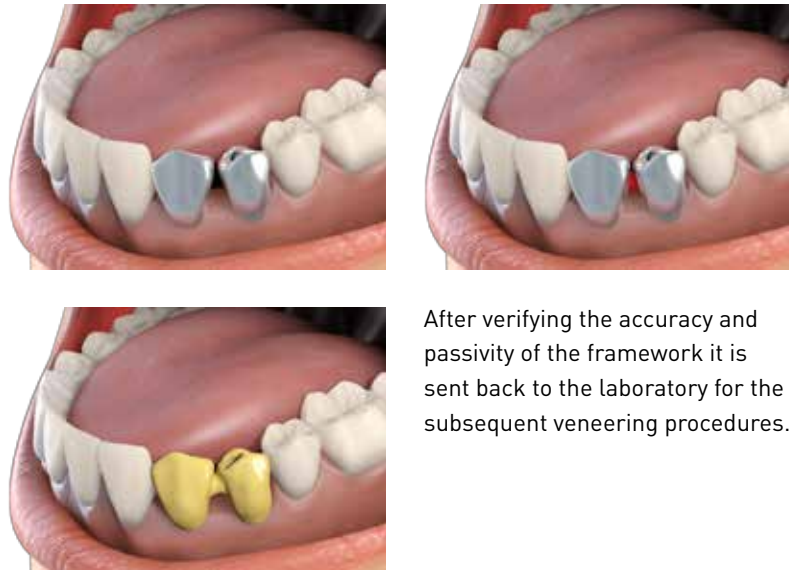
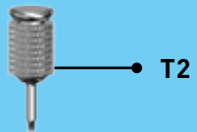


Try the framework over the abutment without screwing it in place. Make sure it fits perfectly and passively to the abutments. While checking the framework for multiple units' restoration, make sure it sits correctly over all the abutments, placing one screw at the time until all screws are in place. A perfectly passive fit framework will ensure a smooth screwing procedure without any noticeable disturb.

STEP 08

VERIFYING THE FRAMEWORK ACCURACY

COMPONENTS:



After verifying the accuracy and passivity of the framework it is sent back to the laboratory for the subsequent veneering procedures.

USEFUL TIP:

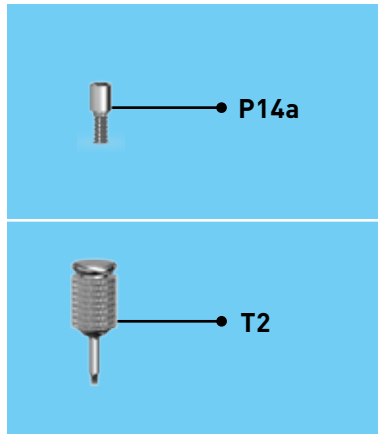
When the metal framework doesn't fit precisely over the abutments, the dentist will have to section the bridge and adapt each piece individually in the patient's mouth. Then the pieces are cold-soldered intraorally using pattern resin, composite or plaster of paris and the framework returned to the lab for definitive soldering.

STEP 09

FRAMEWORK TRY-IN

After receiving the framework with the porcelain built-up back from the lab:

COMPONENTS:



Remove the temporary restoration or the healing cap from the abutments.

Try the framework over the abutments without screwing it in place. Make sure it fits perfectly and passively on the abutments.

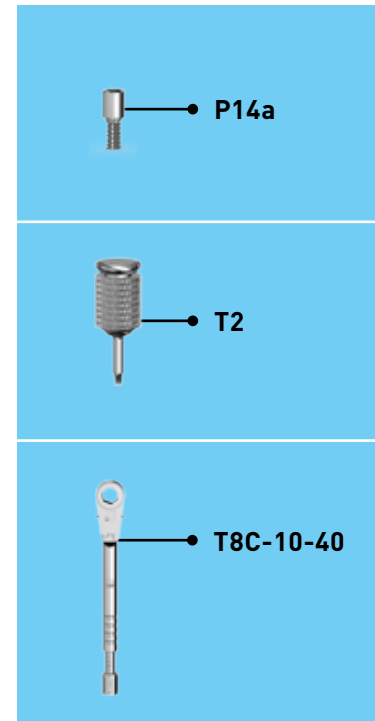


Check the proximal contacts. After verifying the accuracy and passivity of the framework screw it to the abutments screwing one screw at a time. The screws should fit in smoothly without any disturbance.

STEP 10

TIGHTENING THE SCREW

COMPONENTS:



Tighten the screw using fingers only. Check the proximal contacts, margin integrity and occlusion. Finish tightening the screw. Use the torque wrench, applying 30 Ncm of torque to finish tightening the screw.

STEP 11

ALLOWING A FUTURE ACCESS



In order to allow a future access to the prosthesis screw, put a cotton pellet, wax or Teflon tape into the hole of the screw before filling the access hole with composite. Check the occlusion.



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