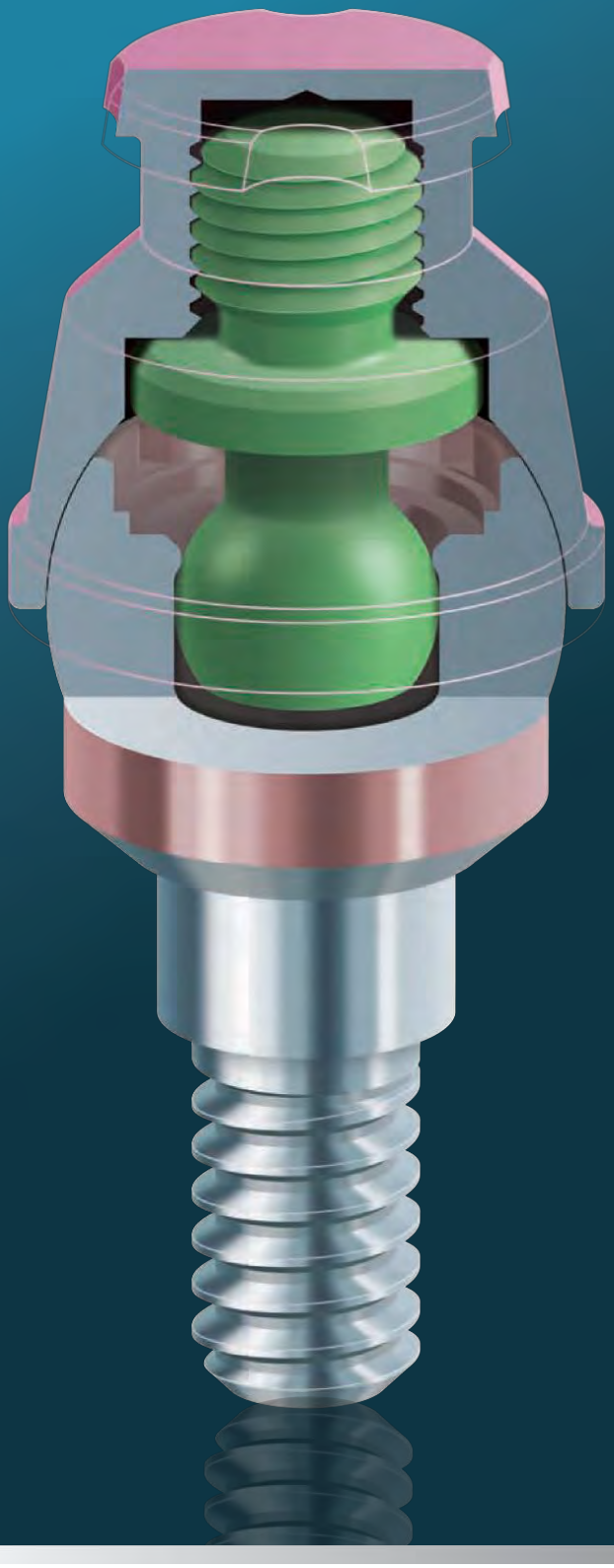
LOCATOR F-Tx™
FIXED ATTACHMENT SYSTEM



LOCATOR F-Tx™ FIXED ATTACHMENT SYSTEM

TECHNIQUE MANUAL

ZEST DENTAL SOLUTIONS™

ZEST | DANVILLE MATERIALS | PERIOSCOPY

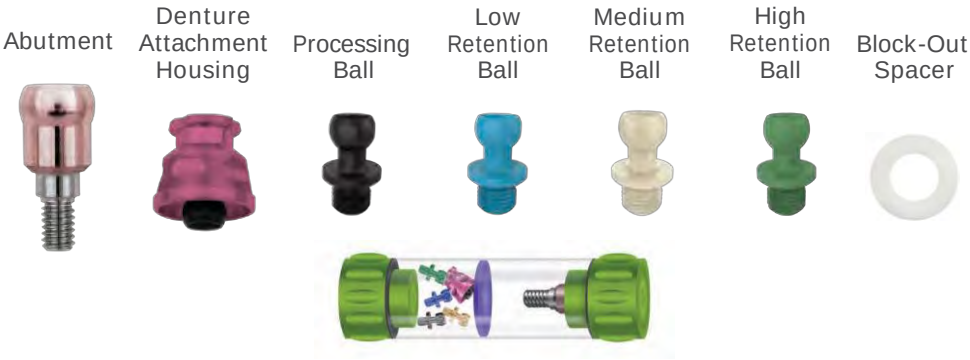
TABLE OF CONTENTS

IMPORTANT: This document is designed to serve as a reference guide for dental clinicians using ZEST DENTAL SOLUTIONS Products. It is not intended to be a substitute for professional training and experience. Please refer to the instructions for use for further information.

LOCATOR F-Tx™ COMPONENTS REFERENCE

PACKAGED WITH:

- Abutment
- Denture Attachment Housing with pre-inserted Processing Ball
- Extra Processing Ball (Black)
- Low Retention Ball (Blue)
- Medium Retention Ball (Tan)
- High Retention Ball (Green)
- Block-Out Spacer (2x)



Denture Attachment Housing
10041

Impression Coping
10043

QTY 2

Processing Cap
10030

QTY 2

Polishing Cap
10039

QTY 2

Processing Ball
10032

QTY 2

Block-Out Spacer
08514

QTY 20

Waxing Cap
10040

QTY 2

Abutment Analog
10037

QTY 2

Low Retention Ball
(5 Lbs)
10033

QTY 2

Medium Retention Ball
(10 Lbs)
10034

QTY 2

High Retention Ball
(20 Lbs)
10035

QTY 2

Healing Cap
10036

QTY 2

Abutment Driver
10028 - Manual

10029 - Latch

Retention Ball Driver
10042

LOCATOR F-Tx PROSTHESIS REMOVAL SYSTEM

INFLATION DEVICE

10080

LOCATOR F-Tx PROSTHESIS BOOSTER

BOOSTER CUSHIONS

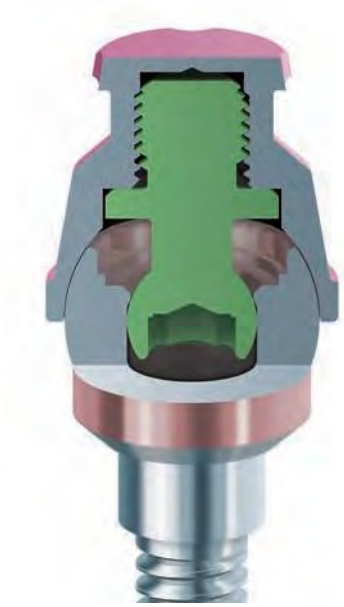
2 x 8mm
1 x 10mm
Option 1

10045

2 x 6mm
1 x 8mm
Option 2

10044

INTRODUCING LOCATOR F-Tx™. THE FIRST FIXED FULL-ARCH RESTORATION WITHOUT COMPROMISE.



SECURE SNAP-FIT DESIGN

This revolutionary, patent-pending retention system works similar to a ball and socket, allowing the Denture Attachment Housing to securely snap into place and then pivot to the desired position. Once in place, it's fixed for the patient, and can easily be removed by the clinician during hygiene and maintenance visits.

REVOLUTIONARY PROSTHESIS REMOVAL SYSTEM

Removing the LOCATOR F-Tx Prosthesis is quick and easy by using simple hydraulic displacement to disengage the prosthesis from the LOCATOR F-Tx Abutments.

Denture Attachment Housing pivots 20 degrees in any direction allowing for the Housing to be positioned into the ideal location for the prosthesis.

SIMPLIFIED ANGLE CORRECTION/STRESS FREE PASSIVE FIT

- The LOCATOR F-Tx Abutment features a unique, spherical coronal geometry which allows the Denture Attachment Housing to rotate in any direction and correct up to 40 degrees of convergence/ divergence between two implants eliminating the need for angled abutments.
- Chair side processing procedures at final prosthesis delivery ensures a stress free passive fit.

Prosthesis Booster cushions inserted under the prosthesis between the prosthesis and soft tissue.

Prosthesis Booster cushions filled with water, and hydraulic displacement applied.

Prosthesis disengages from the LOCATOR F-Tx Abutments.

INTRODUCING LOCATOR F-Tx™. THE FIRST FIXED FULL-ARCH RESTORATION WITHOUT COMPROMISE.

DENTURE ATTACHMENT HOUSING

- Denture Attachment Housing is threaded internally to accept a PEEK Retention Ball that snaps into the LOCATOR F-Tx Abutment.
- Features an anodized pink finish for improved esthetics.
- Aggressive grooves and flats limit vertical and rotational movement.
- Denture Attachment Housing is passively picked-up in the prosthesis via a chair side technique.

RETENTION/PROCESSING BALLS

- PEEK Retention Balls are available in low, medium and high retention levels based on the needs of the case.
- A Processing Ball comes pre-inserted with the Denture Attachment Housing, and an additional Processing Ball is included, both are used for provisionalization and laboratory procedures.

LOW MEDIUM HIGH PROCESSING

ABUTMENT

- Spherical Abutment geometry allows the Denture Attachment Housing to pivot in any direction to align the Housings and create a more parallel draw for the prosthesis.
- DuraTec™ Coating provides a hard, smooth and wear-resistant abutment exterior with an esthetically pleasing gingival tone.

ALL-IN-ONE PACKAGING

- LOCATOR F-Tx features all-in-one packaging that is sterile and includes everything you need. Abutment (with cap to deliver the abutment to the implant site), Denture Attachment Housing with pre-inserted Processing Ball, an extra Processing Ball, as well as one Blue (Low), Tan (Medium), and Green (High) Retention Balls to be used with the final restoration.

PRE-SURGICAL AND PROSTHETIC PLANNING

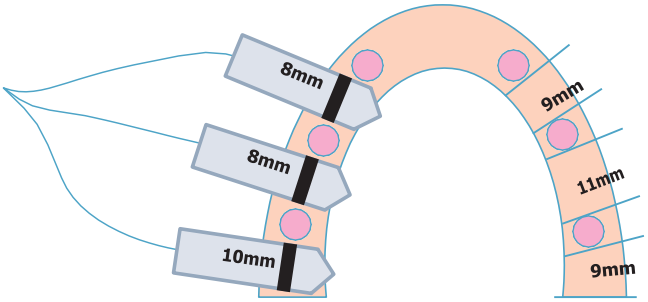
When planning to restore a patient with the LOCATOR F-Tx Fixed Attachment System, specific surgical guidelines that outline quantity and spacing between implant sites must be followed in order to ensure that the system functions as indicated.

ZEST DENTAL SOLUTIONS believes that the LOCATOR F-Tx Fixed Attachment System is most suited to cases involving 4-6 implants in an arch. When eight (8) or more implants are used, there may be insufficient space between the implants to insert LOCATOR F-Tx Prosthesis Removal System Boosters. The implants must be positioned across the arch allowing for optimum support of the prosthesis while limiting the cantilever to one time (1x) the anterior/posterior spread.

INTERPROXIMAL ABUTMENT SPACING: Two (2) 9mm, and one (1) 11mm interproximal Abutment/cantilevers are required per quadrant for the removal of the prosthesis. Fig. A

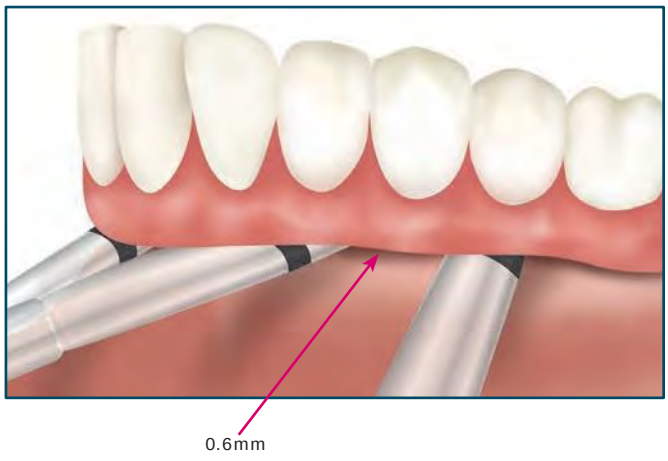
BOOSTER CUSHIONS SPACING: 0.6mm of clearance between the prosthesis and soft tissue is recommended to allow for the Boosters to slide under the prosthesis when its removal is performed. Fig. B

Fig. A



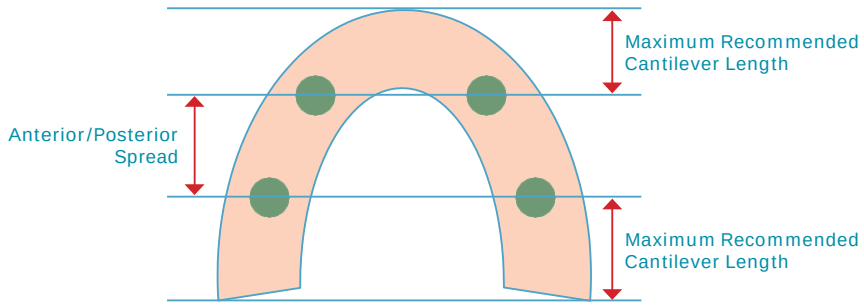
Required Interproximal Abutment/Cantilever Spaces For the Booster Cushions 8/8/10mm.

Fig. B



CANTILEVER GUIDELINES: A cantilever counts as One (1) space and must not be more than one (1x) time the anterior/posterior spread. It can be anterior or posterior. Excessive cantilevers could result in the dislodgement of the prosthesis. Fig. C

Fig. C



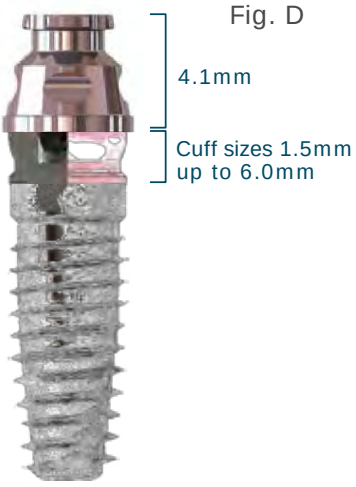
Cantilevers may be either Anterior or Posterior

Cantilevers and A/P Spread Guideline is 1x A/P Spread. Posterior Cantilevers require higher Retention Balls to be placed in the most anterior abutments to offset the loads. Anterior Cantilevers require higher Retention Balls to be placed in the most posterior abutments to offset the loads.

PRE-SURGICAL AND PROSTHETIC PLANNING (CONTINUED)

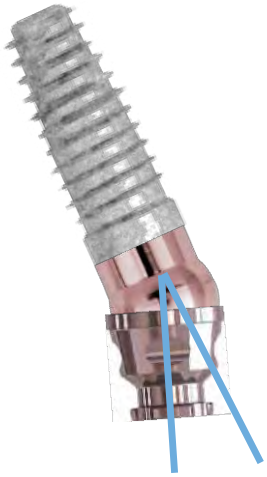
PROSTHETIC CLEARANCE: The minimum attachment height requirement is 5.6mm. This dimension is needed from the abutment implant interface to the top of the Denture Attachment Housing. Therefore, the proper selection of the cuff size is imperative when pre-planning a case. Also, the choice of restorative material may require more vertical clearance. Fig. D

Fig. D



ALIGNMENT CORRECTION: The design of the LOCATOR F-Tx Abutment allows for 20 degrees of pivot of the Denture Attachment Housing. The pivot will correct up to 40 degrees of convergence/divergence between implants without affecting the performance of the F-Tx Fixed Attachment System. Fig. E and Fig. F

Fig. E



20 Degrees Correction From The Vertical

Fig. F

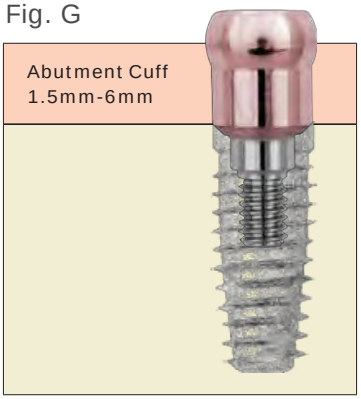
40 Degrees Correction Between Implants

PRE-SURGICAL AND PROSTHETIC PLANNING (CONTINUED)

CUFF HEIGHT SELECTION: If a LOCATOR F-Tx Abutment cuff height is chosen where more than the top half of the Abutment sphere is visible supragingivally, it can create a situation during the pick-up of the Denture Attachment Housing (DAH) where a channel of material is formed between the intaglio of the prosthesis and the bottom rim of the DAH. This is generally not an issue when the implants are quite parallel, but in cases of convergence/ divergence, this channel restricts the ability for the DAH and Retention Ball to seat properly. Fig. G

To avoid this potential complication, choose an Abutment cuff height where no portion of the bottom half of the abutment sphere is visible above the tissue. If the proper cuff height is not available, use a block out material to restrict the flow of material below the midpoint of the Abutment sphere.

Fig. G



Supragingival DAH Interface

PROSTHESIS REMOVAL SYSTEM GUIDELINES: All three Cushions of the LOCATOR F-Tx Prosthesis Removal System Boosters must be deployed for prosthesis removal. The use of fewer Cushions will limit the disengagement capacity of the LOCATOR F-Tx Prosthesis Removal System. Three (3) 0.6mm areas of clearance must be present in designated interproximal/cantilever spaces to allow for the Booster Cushions to be under the prosthesis to help remove the prosthesis from the mouth.

RETENTION BALL CRITERIA AND SITE SELECTION: The chart below indicates the maximum number of High Retention Balls (Green) that can be used in a quadrant given the total number of implants that will be used in the arch.

- As an example, in a six (6) unit case, the clinician can use a maximum of two High Retention Balls (Green) per quadrant and must use Medium (Tan) or Low (Blue) Retention Balls for the remaining single units.
- Where red is indicated, the clinician must only use Medium (Tan) or Low (Blue) Retention Balls on all abutments.

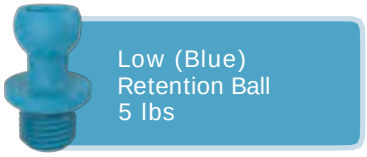
NOTE: The use of any High Retention Balls (Green) is contraindicated in seven (7) unit cases and higher as the retention force will exceed the limits of the LOCATOR F-Tx Prosthesis Removal System.

RECOMMENDED NUMBER OF HIGH (GREEN) RETENTION BALLS PER QUADRANT

High Retention Ball	4 Implants	5 Implants	6 Implants	7 Implants	8 Implants
0	✓	✓	✓	✓	✓
1	✓	✓	✓	✗	✗
2	✓	✓	✓	✗	✗

RECOMMENDED RETENTION BALLS COMBINATION SELECTION

Long Cantilevers Require Higher Retentive Balls. In order to minimize dislodgment, higher Retention Balls must be used on the opposite end of the cantilever.



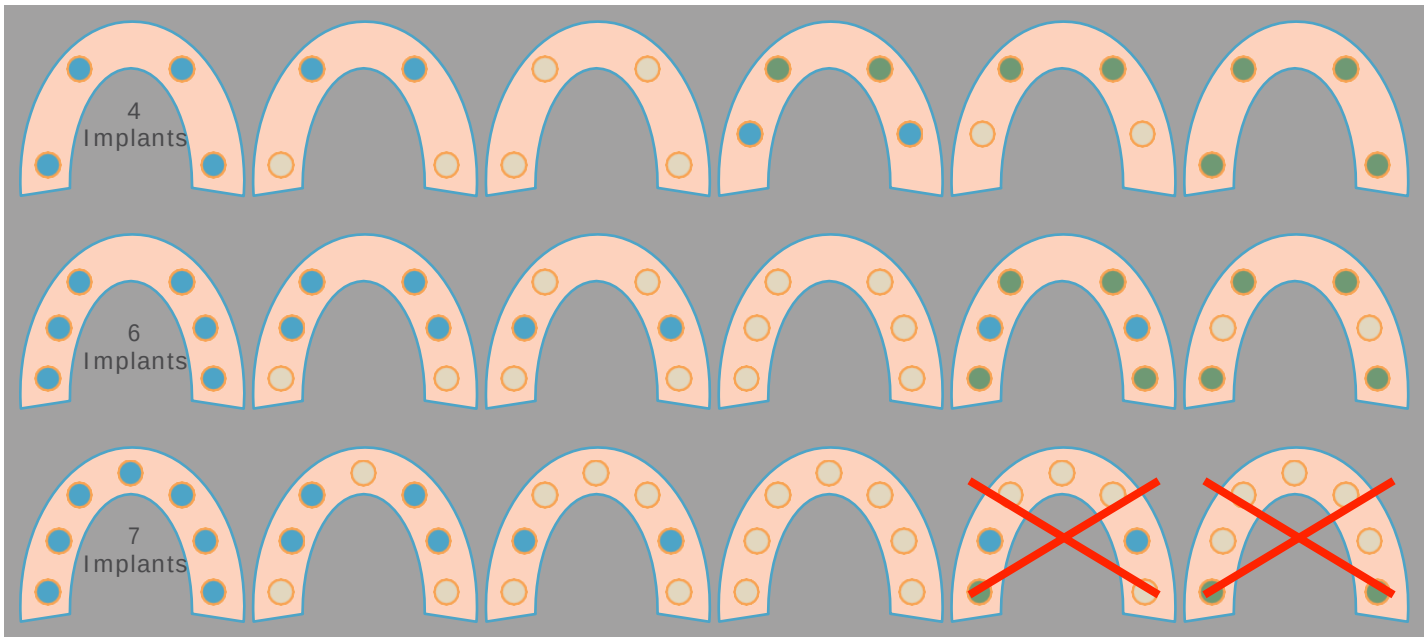
Low (Blue)
Retention Ball
5 lbs

Medium (Tan)
Retention Ball
10 lbs

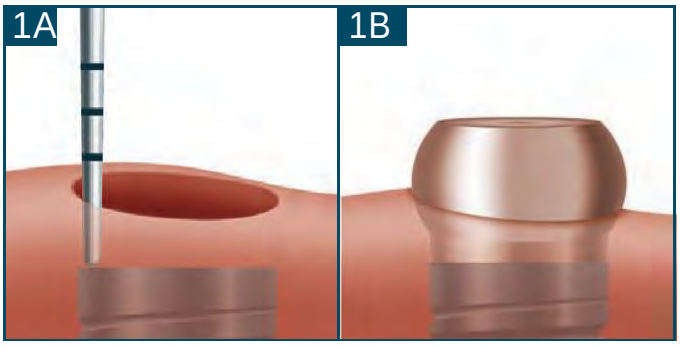
High (Green)
Retention Ball
20 lbs

Maximum 2 High Balls per Quadrant

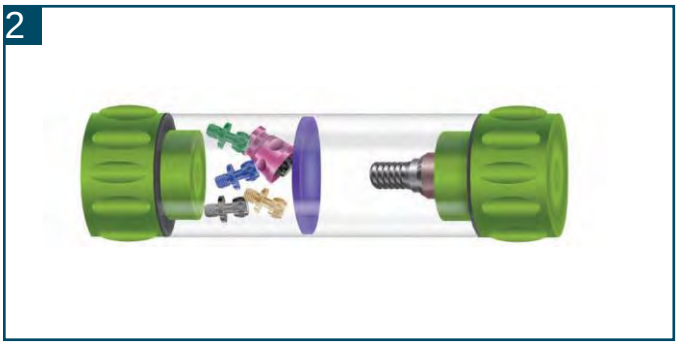
MINIMUM ⟷ MAXIMUM



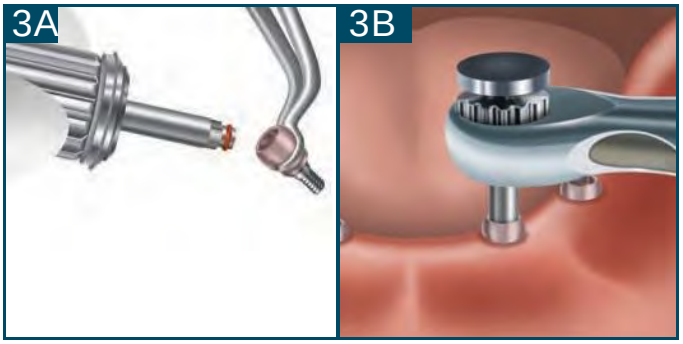
NO GREEN HIGH RETENTION BALL ON 7 OR MORE LOCATOR F-Tx ABUTMENTS IN A SINGLE ARCH



1A-1B Using a periodontal probe, measure the height of the gingiva and select the appropriate Abutment cuff size based on that measurement. The cuff size should match the tissue height, as this will place the prosthetic finish line right at the gingival height and maximizes the retention surface of the Denture Attachment Housing in the prosthesis. The cuff margin is at the widest portion of the sphere (midpoint of the Abutment sphere). For sub-gingival finish line, choose a shorter cuff size.

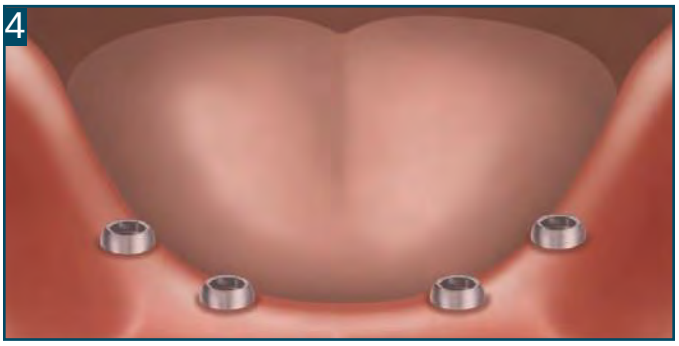


2 The LOCATOR F-Tx Fixed Attachment System comes in an all-inclusive package that contains an Abutment, a Denture Attachment Housing with a pre-assembled Black Processing Ball, an extra Black Processing Ball, one each of Retention Balls; Low (Blue), Medium (Tan) and High (Green) and two Block-Out Spacers. All components contained in the vial are provided sterile. The Block-Out Spacers are packaged outside the vial and provided clean but not sterile.



3A-3B Using the LOCATOR F-Tx Abutment Driver, engage the LOCATOR F-Tx Abutment and seat the Abutment onto the implant. Torque each Abutment according to the implant manufacturer's recommendations using a calibrated Torque Wrench and confirm seating.

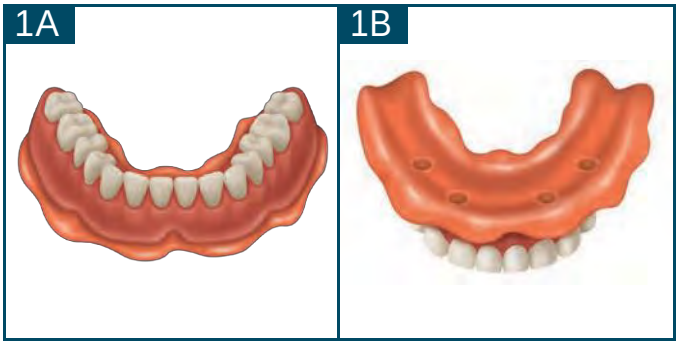
NOTE: The use of higher torque values than recommended could cause fracture of the LOCATOR F-Tx Abutment. Prior to starting the case, the clinician should ensure that the proper Abutment Drivers are available to seat the LOCATOR F-Tx Abutments to their recommended torque. Some torque wrenches will use a square-drive mechanism for insertion while others will accept a latch-lock. Zest Dental Solutions offers both types of drivers for LOCATOR F-Tx Abutments.



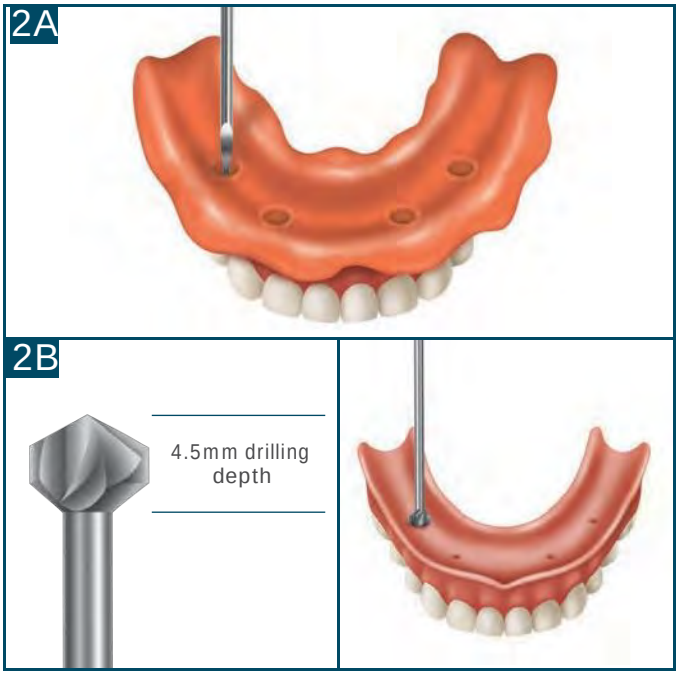
4 A direct or indirect technique may be used for processing the Denture Attachment Housings into the prosthesis. Please refer to page 9 for direct and page 15 for indirect processing technique.

PROCESSING LOCATOR F-Tx™ ATTACHMENT HOUSINGS

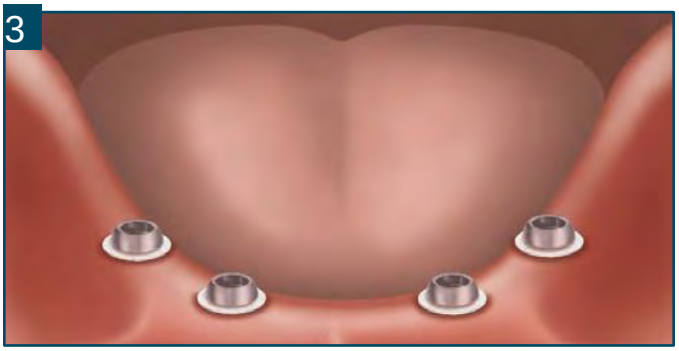
DIRECT TECHNIQUE - CONVERSION OF AN EXISTING DENTURE



1A-1B After seating of all the LOCATOR F-Tx Abutments, apply fit check marking paste on the intaglio surface of the denture and insert it into the mouth in position over the F-Tx Abutments to mark the areas where the prosthesis will need to be relieved. This will allow space for the Denture Attachment Housings to be picked up.



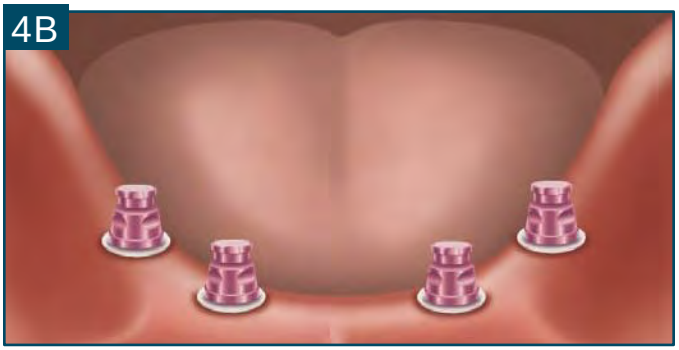
2A-2B Using the CHAIRSIDE® Vent Bur, mark the center of the Abutments in the denture. Peel away the marking paste and use the Recess Bur to relieve the marked areas to the minimum depth of 5.0mm. Use slight pressure and a small rocking motion to get the tip of the bur started followed by a straight downward motion to create the desired recess sites.



3 Place a White Block-Out Spacer around each LOCATOR F-Tx Abutment pressing it down to contact the soft tissue. The Spacer is necessary to minimize the possibility of locking the prosthesis onto the LOCATOR F-Tx Abutment's undercut areas during the pick-up technique. If an additional Block-Out Spacer is needed, the LOCATOR F-Tx Fixed Attachment System package includes one extra spacer.

4A

4B



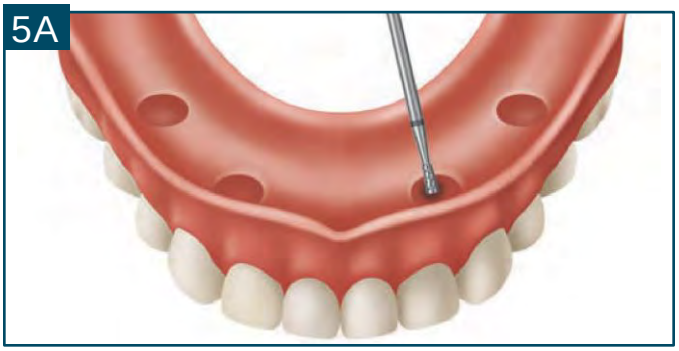
4A-4B Before seating the Denture Attachment Housings with black Processing Ball onto the LOCATOR F-Tx Abutments, it is recommended to verify that the black Processing Balls are seated and finger tight. It is possible that the black Processing Balls can loosen during transit or during repeated insertion/removal from the Abutments.

Do not over tighten as the hex in the Processing Balls can strip. This component only needs to be finger tight. In the event a black Processing Ball becomes stripped, it can be grabbed and unthreaded with the use of the dedicated Retention Ball Driver or hemostat.

Seat the Denture Attachment Housings onto the LOCATOR F-Tx Abutments and align the Housings to be as parallel to one another as possible and still fit within the confines of the prosthesis. There must be no contact or interference of the Denture Attachment Housings with the relief area created in the prosthesis. The LOCATOR F-Tx Fixed Attachment System allows 20 degrees of angle correction from the vertical and up to 40 degrees of divergence/convergence between implants.

NOTE: It is very important for the Denture Attachment Housings to be clean and dry during the processing procedures. To accomodate this, use a rubber dam over all the Denture Attachment Housings to prevent blood, saliva and other fluids from contacting the surface of the Denture Attachment Housings. The Denture Attachment Housings can be cleaned with gauze and air dried prior to processing.

5A



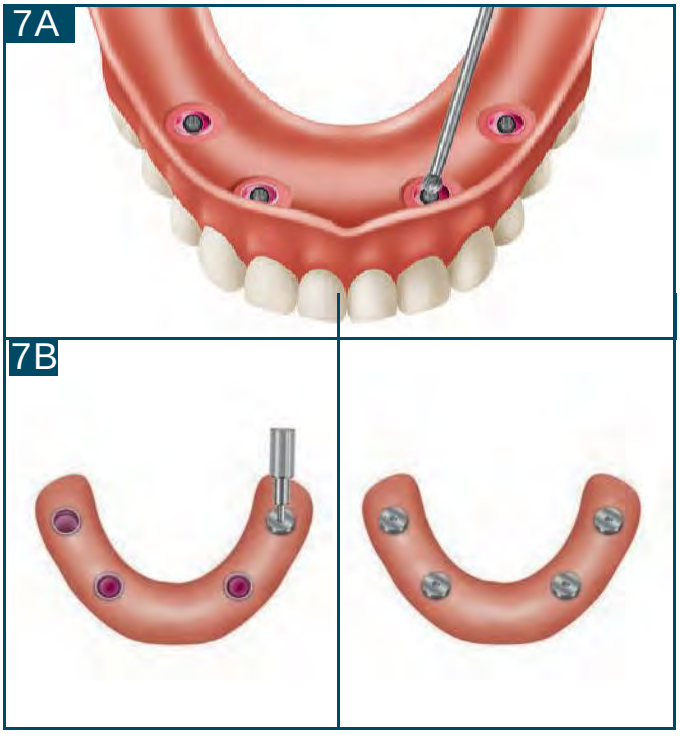
5B

5A-5B Use the CHAIRSIDE® Undercut Bur to cut an undercut around the circumference of the relief areas for mechanical retention. The prosthesis must fully seat onto the tissue and over the Denture Attachment Housings without any interference. It is recommended to cut vent windows in the prosthesis with the CHAIRSIDE Vent Bur to visualize full seating and for all excess material to vent.

6 Apply a small amount of CHAIRSIDE Attachment Processing Material around the circumference of each Denture Attachment Housing and into each recess. Seat the prosthesis over the Denture Attachment Housings and have the patient close into light occlusion and hold in that position while the CHAIRSIDE Material sets. For accelerated curing time, the use of a curing light is recommended (See Chairside Attachment Processing Material IFU for additional information).

No excess CHAIRSIDE Attachment Processing Material should be placed on top of the Denture Attachment Housings or inside the denture recesses. Doing so will cause hydraulic pressure preventing full seating of the prosthesis into the Denture Attachment Housings.

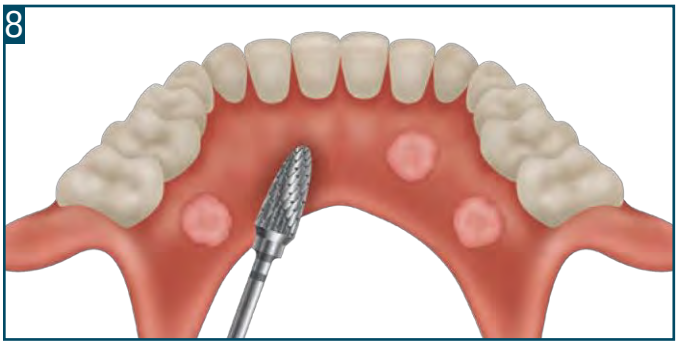
NOTE: Avoid tipping the Denture Attachment Housings and altering the alignment during insertion of the prosthesis.



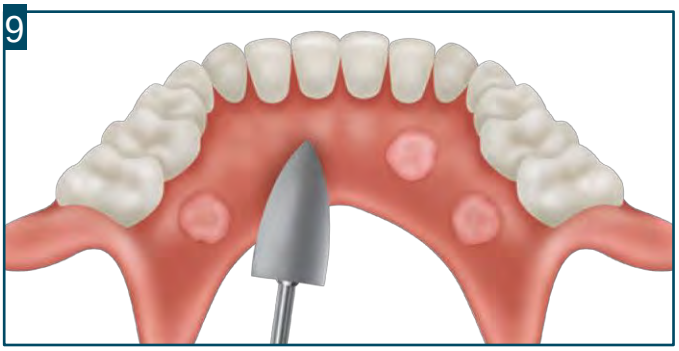
7A-7B Once the material has set, disengage the prosthesis from the LOCATOR F-Tx Abutments and remove it from the mouth. Verify that the Denture Attachment Housings have been securely processed into the prosthesis. Fill any voids and light cure as needed.

Prior to modifying the overdenture, replace the Processing Balls with Polishing Caps using the dedicated Retention Ball Hex Driver to protect the Denture Attachment Housing from possible damage.

Use the CHAIRSIDE® Grind Bur to remove any excess acrylic material.

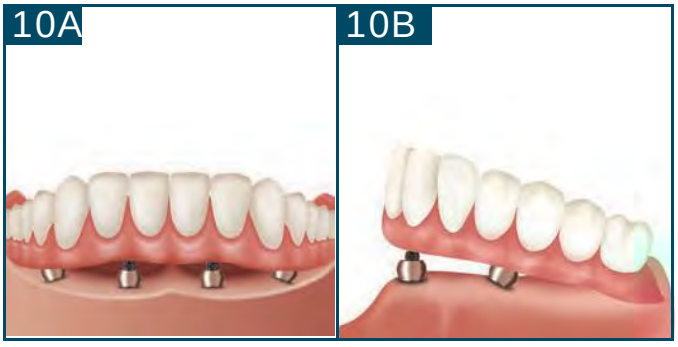


8 Use the CHAIRSIDE Trim Bur to remove any excess acrylic material remaining on the prosthesis and to make any needed modifications to the prosthesis.



9 Use the CHAIRSIDE Polish Bur to create a smooth finish of the prosthesis.

NOTE: Three (3) 0.6mm areas of clearance must be present in designated Abutment interproximal/cantilever spaces to allow for the Boosters to be inserted under the prosthesis, up to the designated black mark, to help remove the prosthesis from the mouth.



10A-10B Unscrew the Polishing Caps and replace with the black Processing Balls. Re-seat the prosthesis by aligning at least two (2) Denture Attachment Housings with the black Processing Balls on top of the LOCATOR F–Tx Abutments and pressing down to engage the black Processing Balls. Pivot the prosthesis to engage the rest of the Abutments. This step will line up the prosthesis directly over the Abutments. Verify the fit, comfort, esthetics and occlusion.

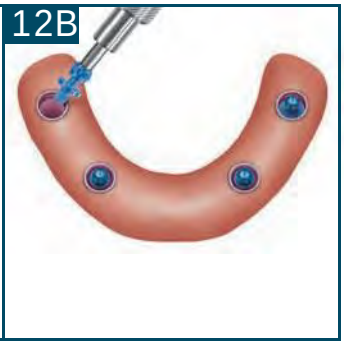
NOTE: When highly angulated abutments are present, engage them first before engaging the rest of the Abutments.

11A

11B

12A

12B



The removal of a prosthesis with medium or high Retention Balls prior to complete implant integration could negatively impact the implants.

11A-11B Once all functional and aesthetic requirements are met, proceed by removing the prosthesis from the mouth and grind the denture flanges to convert the denture into a hybrid/high water prosthesis with sufficient space for hygiene and maintenance. Three (3) 0.6mm areas of clearance must be present in designated interproximal/cantilever spaces to allow for the Booster Cushions to get under the prosthesis to help remove the prosthesis from the mouth.

Finish and polish.

NOTE: Cantilevers must be minimized to 1x the Anterior/Posterior spread. Excessive cantilevers could result in the dislodgement of the prosthesis.

12A-12B As a final step prior to final delivery, choose the most appropriate Retention Balls for the patient. Using the dedicated Retention Ball Hex Driver, unscrew the black Processing Balls and replace them with the appropriate Retention Balls. Refer to the Retention Ball chart on page 14.

- For an immediately loaded transitional prosthesis, the use of the Low (Blue) Retention Balls is recommended.
- For permanent delayed loading prosthesis, select the most appropriate Retention Balls based on quantity, tooth position, cantilevers length and occlusal scheme.

NOTE: The Retention Balls are intended to be screwed with light finger pressure using the dedicated Retention Ball Hex Driver. Use care when screwing the Retention Balls into the housings to avoid stripping of the hex or cross-threading.

13A-13B Firmly seat the prosthesis in place by carefully placing the prosthesis over the LOCATOR F-Tx Abutments, taking care not to bend or damage the Retention Balls. Align two visible Retention Balls over the LOCATOR F-Tx Abutments, and engage these into the Abutments. Pivot the prosthesis over the rest of the Abutments and ensure that all Retention Balls are aligned within the Abutment cavities.

NOTE: When highly angulated Abutments are present, engage these first before engaging the rest of the Abutments.

Firmly snap the prosthesis into place, ensuring that each Denture Attachment Housing is fully seated onto each Abutment. An audible snap should be heard when the Retention Balls engage the Abutments and the patient should confirm the fit. Have the patient bite on cotton rolls or on a bite stick for further confirmation that the Retention Balls are fully seated.

The use of an X-Ray is helpful in determining the fit of the Housings onto the Abutments. There should be no gaps between the Denture Attachment Housings and the spherical outer surface of the Abutments.

Instruct the patient on proper home care maintenance and recommended recall visits.

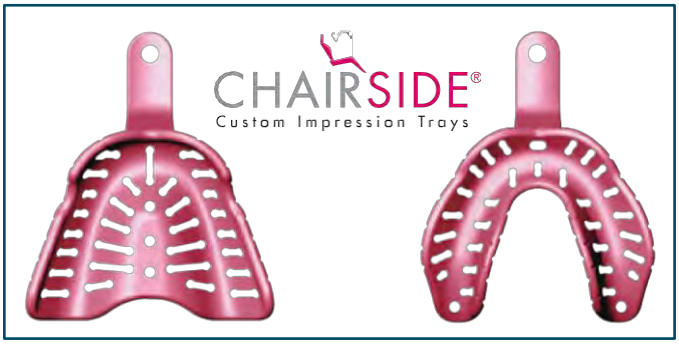
NOTE: When more than four (4) implants are used, a maximum of four (4) High (Green) Retention Balls is recommended per arch. Two (2) as close to the midline as possible and two (2) as posterior as possible to maximize retention and minimize the cantilever effect. All remaining Retention Balls must be Medium (Tan) or Low (Blue) Retention.

FOR ANY CASE OVER SIX (6) IMPLANTS, ZEST DENTAL SOLUTIONS RECOMMENDS USING MEDIUM (TAN) OR LOW (BLUE) RETENTION BALLS ON ALL LOCATOR F-Tx ABUTMENTS.

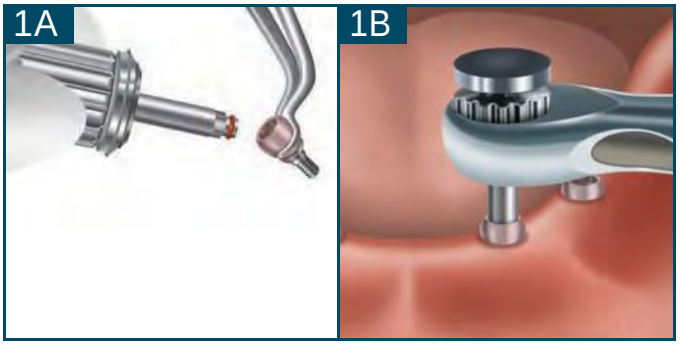
RECOMMENDED NUMBER OF HIGH (GREEN) RETENTION BALLS PER QUADRANT

High Retention Ball	4 Implants	5 Implants	6 Implants	7 Implants	8 Implants
0	✓	✓	✓	✓	✓
1	✓	✓	✓	✗	✗
2	✓	✓	✓	✗	✗

INDIRECT TECHNIQUE/LABORATORY PROCESSING

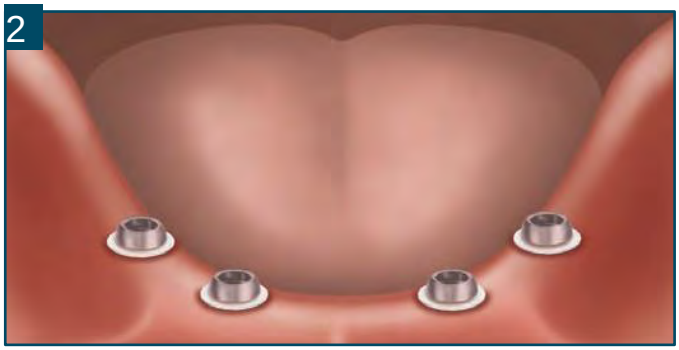


NOTE: Being that the LOCATOR F-Tx attachment system relies heavily on the accuracy and passive fitting of the prosthesis, ZEST DENTAL SOLUTIONS recommends the use of a custom impression tray for this procedure.

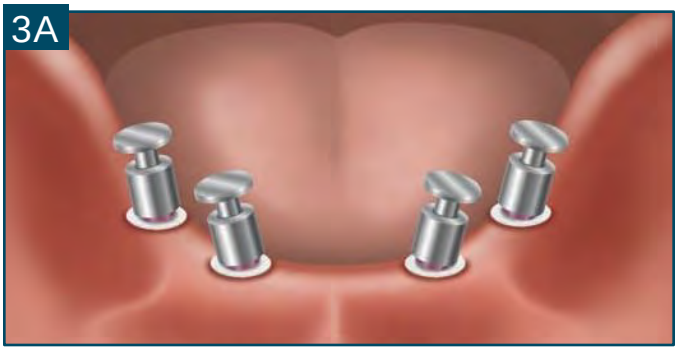


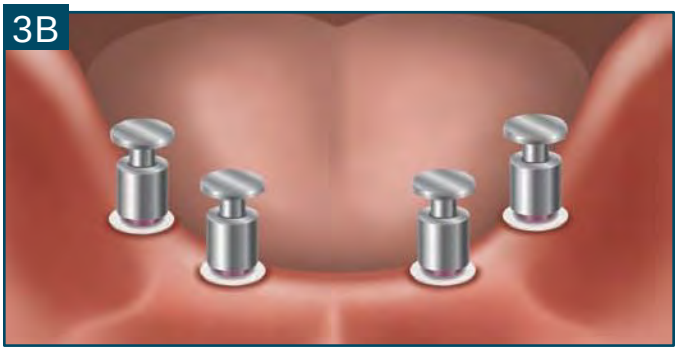
1A-1B Using the LOCATOR F-Tx Abutment Driver, engage the LOCATOR F-Tx Abutment and seat the Abutment onto the implant. Torque each Abutment according to the implant manufacturer's recommendations using a calibrated Torque Wrench and confirm seating.

NOTE: The use of higher torque values than recommended could cause fracture of the LOCATOR F-Tx Abutment.

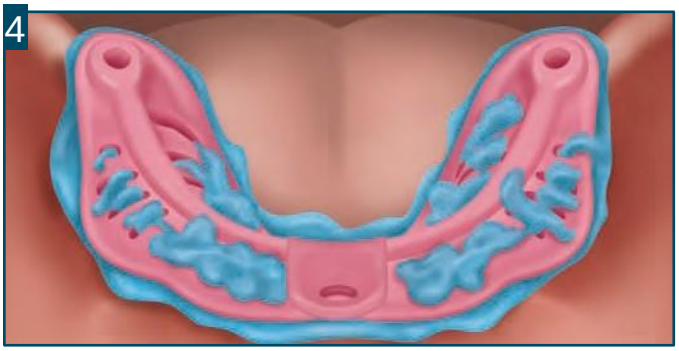


2 Place a White Block-Out Spacer around each LOCATOR F-Tx Abutment pressing it down to contact the soft tissue. If an additional Block-Out Spacer is needed, the LOCATOR F-Tx Fixed Attachment System package includes one extra spacer. If the two Block-Out Spacer are not sufficient, a block-out material can also be used.



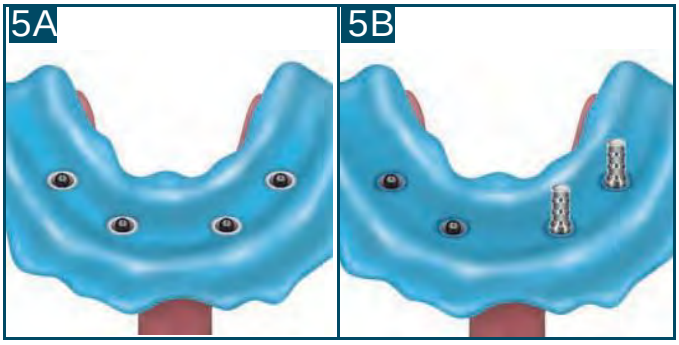


3A-3B Seat Impression Copings with the black Processing Balls onto each LOCATOR F-Tx Abutment. Align the Impression Copings as parallel to one another as possible and still fit within the confines of the final prosthesis. The LOCATOR F-Tx Fixed Attachment System allows up to 20 degrees of angle correction per implant and 40 degrees of divergence/convergence between implants.



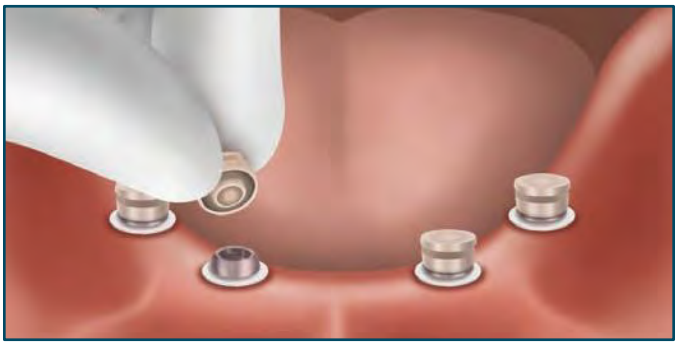
4 Syringe a light or medium body impression material around the circumference of each Impression Coping and fill the custom impression tray with a medium or heavy impression material and take an impression. After the impression material has set, remove the impression tray from the mouth.

NOTE: Avoid hitting the Impression Copings during insertion of the impression tray to prevent tilting/tipping and loss of alignment.



5A-5B The Impression Copings will get picked up in the impression. Remove the Block-Out Spacers from the Impression before seating the Analogs. Snap a LOCATOR F-Tx Abutment Analog onto each Impression Coping ensuring that these are seated properly and pour a working model.

AT THIS STAGE, THE CLINICIAN HAS THREE (3) CHOICES:



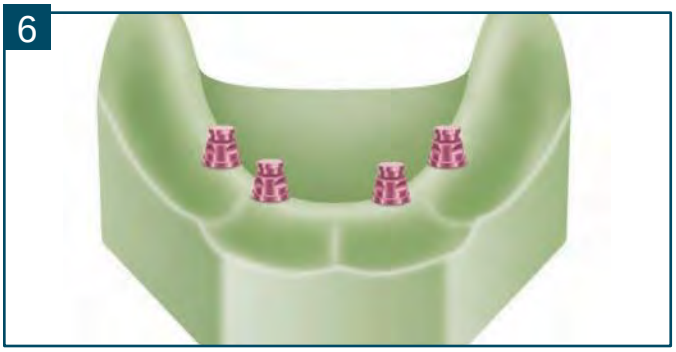
A. Reseat the provisional prosthesis back on the LOCATOR F-Tx Abutments.

B. Unscrew the LOCATOR F-Tx Abutments from the mouth and place the implant manufacturer's Healing Abutments back on the implants.

C. Seat a LOCATOR F-Tx Healing Cap onto each LOCATOR F-Tx Abutment to protect the tops of the Abutments. This will require creating recesses in the existing prosthesis that allow full seating with no interferences with the Healing Caps.

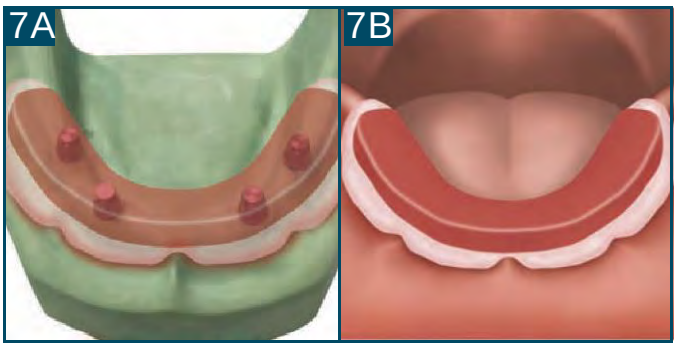
NOTE: If desired, add soft reline material in the recesses to eliminate the inadvertent loading of the Abutments. A slight engagement of the undercut area on the Healing Cap will be noticed while seating or removing the prosthesis due to the soft reline material interference.

PROSTHESIS FABRICATION:



6 Impressions of both arches are completed and models are poured. Fabrication of the prosthesis can begin.

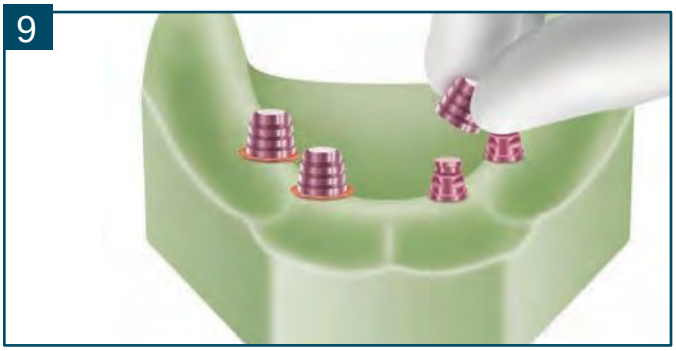
Replace the Impression copings with the Denture Attachment Housings.



7A-7B The Denture Attachment Housings with the black Processing Balls may be processed into the baseplate to provide stabilization during bite record and try-in.

8 After the bite registration has been recorded, start the fabrication of the prosthesis teeth set up. Have the patient try the teeth set up and approve the fit, function, aesthetics, phonetics and occlusion. Always ensure that the black Processing Balls are snug in the Denture Attachment Housings.

Removal of the Denture Attachment Housings from the model is recommended prior to finalizing the wax up and flasking the denture for processing. Simply remove by pulling them in an upward direction. Separate the flask and remove all the wax. Place the Denture Attachment Housings with the black Processing Balls back on the LOCATOR F-Tx Abutment Analogs and press down firmly to ensure that they are fully seated.



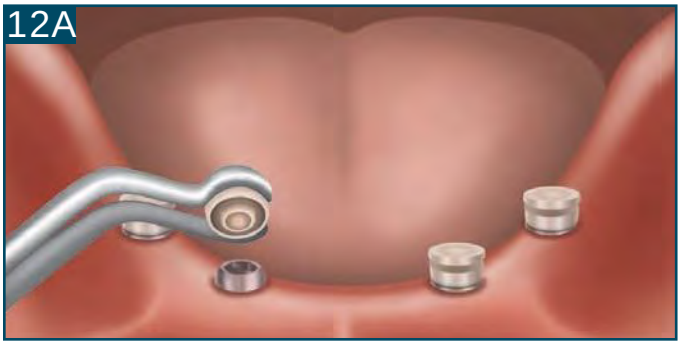
9 Apply a small amount of VPS impression material or Rubber-Sep® in the Processing Caps and seat them on top of the Denture Attachment Housings. Wipe the excess and let the material set. This will keep the Processing Caps in place over the Denture Attachment Housings during the processing technique and prevent dislodgement.

Place the cast back into the flask and verify that there is no contact of any part of the Processing Caps with the denture teeth. Close the flask and process the denture.

10 Remove the prosthesis from the flask, finish, and polish. Ensure that a 0.6mm gap between the prosthesis and soft tissue is maintained in areas where the Booster Cushions will be placed for the removal of the prosthesis.

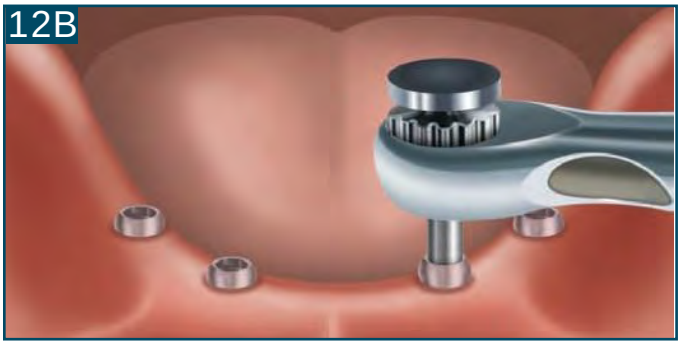
DELIVERY

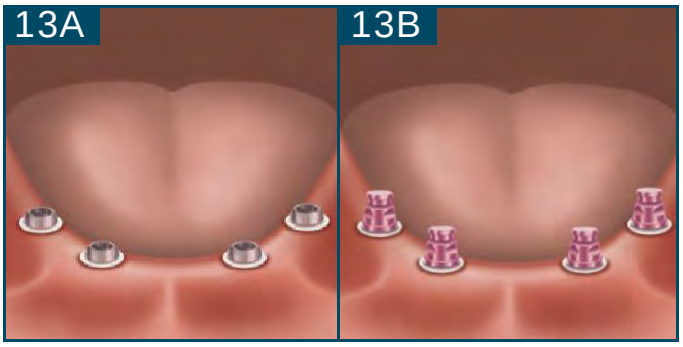
11 Prior to seating the prosthesis intra-orally, practice proper insertion and seating of the prosthesis on the working model. This step will help ease the final seating and eliminate any misalignment and possible damage of the Retention Balls.



12A-12B Remove the provisional prosthesis, Healing Caps, or Healing Abutments depending upon the situation. If not already in place, torque each Abutment according to the implant manufacturer's recommendations using a calibrated Torque Wrench and confirm seating.

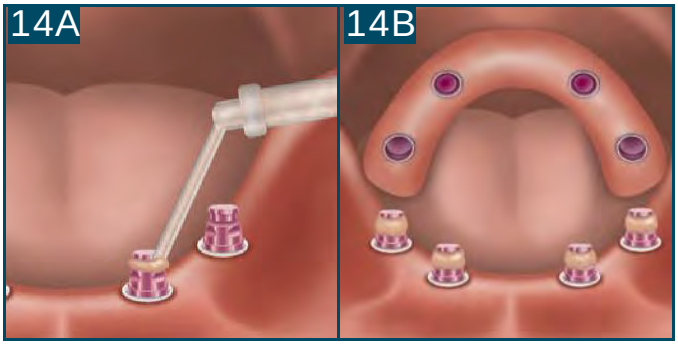
NOTE: The use of higher torque values than recommended could cause fracture of the LOCATOR F-Tx Abutment.



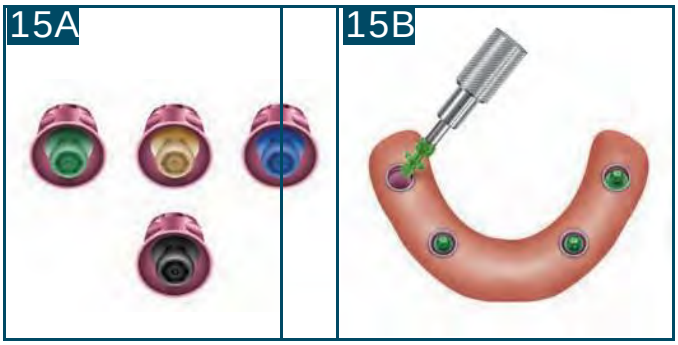


13A-13B Use Block-Out material or Block Out spacers on all visible undercuts of the LOCATOR F-Tx Abutment cuff to prevent locking the prosthesis on the Abutments.

Seat the Denture Attachment Housings with new black Processing Balls onto each of the LOCATOR F-Tx Abutments. Place the Hybrid/High water prosthesis in the mouth. The milled recesses will help align the proper path of insertion of the prosthesis onto the Denture Attachment Housings. It also provides the correct vertical occlusal stop. Have the patient approve the fit, function, aesthetics, phonetics and occlusion. If everything fits and the patient is satisfied, cementation of the Denture Attachment Housings to the milled recesses can begin.



14A-14B Add CHAIRSIDE® Attachment Processing Material or choice of cement to the undercut area and sides of the Denture Attachment Housings and Processing Caps and seat the prosthesis in place. No excess CHAIRSIDE Attachment Processing Material or metal to metal cement should be placed on top of the Denture Attachment Housings or inside the Processing Caps. Doing so will cause hydraulic pressure preventing full seating of the prosthesis into the Denture Attachment Housings. Have the patient bite into light centric occlusion until the cement or acrylic is set. Remove the prosthesis and proceed to delivery procedure.



15A-15B As a final step prior to final delivery, choose the most appropriate Retention Balls for the patient. Using the dedicated Retention Ball Hex Driver, unscrew the black Processing Balls and replace them with the appropriate Retention Balls. Refer to the Retention Ball chart on page 21.

NOTE: The Retention Balls are intended to be screwed with light finger pressure. Use care when screwing the Retention Balls into the housings to avoid stripping of the hex or cross-threading.

16A-16B Carefully place the prosthesis over the Abutments, taking care not to bend or damage the Retention Balls. Align two visible Retention Balls over the Abutments, and engage these into the Abutments. Pivot the prosthesis over the rest of the Abutments and ensure that all Retention Balls are aligned within the Abutment cavities. Firmly seat the prosthesis in place and verify that all the Retention Balls have been seated properly onto the LOCATOR F-Tx Abutments.

NOTE: When highly angulated Abutments are present, engage these first before engaging the rest of the Abutments.

An audible snap should be heard when the Retention Balls engage the Abutments and the patient should confirm the fit. Have the patient bite on cotton rolls or on a bite stick for further confirmation that the Retention Balls are fully seated.

The use of an X-Ray is helpful in determining the fit of the Housings onto the Abutments. There should be no gaps between the Denture Attachment Housings and the spherical outer surface of the Abutments.

Instruct the patient on proper home care maintenance and recommended recall visits.

NOTE: When more than four (4) implants are used, a maximum of four (4) High (Green) Retention Balls is recommended per arch. Two (2) as close to the midline as possible and two (2) as posterior as possible to maximize retention and minimize the cantilever effect. All remaining Retention Balls must be Medium (Tan) or Low (Blue) Retention.

FOR ANY CASE OVER SIX (6) IMPLANTS, ZEST DENTAL SOLUTIONS RECOMMENDS USING MEDIUM (TAN) OR LOW (BLUE) RETENTION BALLS ON ALL LOCATOR F-Tx ABUTMENTS.

RECOMMENDED NUMBER OF HIGH (GREEN) RETENTION BALLS PER QUADRANT

High Retention Ball	4 Implants	5 Implants	6 Implants	7 Implants	8 Implants
0	✓	✓	✓	✓	✓
1	✓	✓	✓	✗	✗
2	✓	✓	✓	✗	✗

PROCESSING LOCATOR F-Tx™ ATTACHMENT HOUSINGS

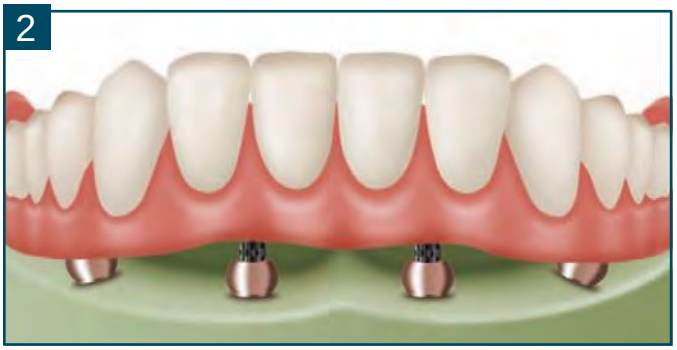
MILLED FRAMEWORK

SCANNING PROCEDURE: Please refer to Impression Technique on page 15 prior to proceeding.

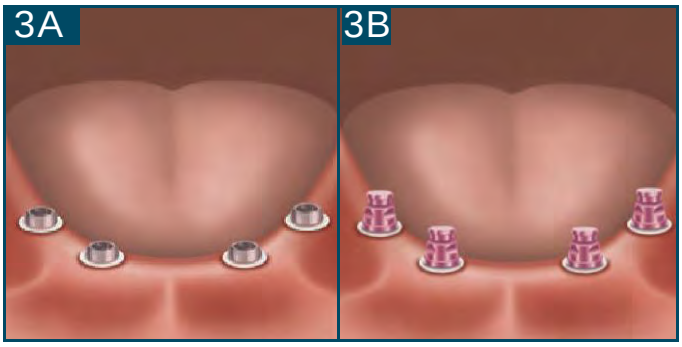
1 After the model has been poured, verify that the Denture Attachment Housings are properly seated on the LOCATOR F-Tx Abutment Analogs. Spray the Denture Attachment Housings with powder scan spray and proceed with scanning the model for the fabrication of a milled framework of choice. Proceed with the fabrication of the desired prosthesis.

NOTE:

- When designing the framework, ensure that there is a minimum relief area of 0.2mm around each of the Denture Attachment Housings to allow for cement space of the framework to the Denture Attachment Housings.
- It is recommended that small undercuts are created in the framework to increase luting strenghth of the Denture Attachment Housing to the framework.
- Maintain a very small gap (0.6mm) between the soft tissue and the framework to give the LOCATOR F-Tx Prosthesis Booster Cushions the required space to be inserted for removal and maintenance of the prosthesis.

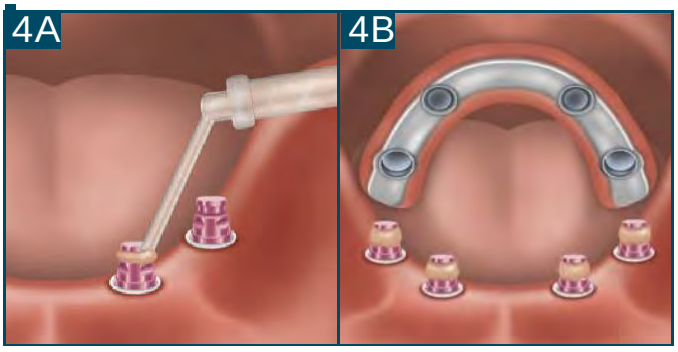


2 Prior to seating the prosthesis intra-orally, practice proper insertion and seating of the prosthesis on the working model. This step will help ease the final seating and eliminate any misalignment and possible damage of the Retention Balls.

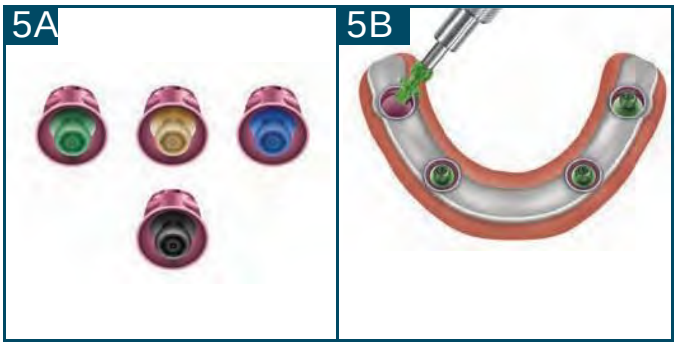


3A-3B Use Block-Out material or Block Out spacers on all visible undercuts of the LOCATOR F-Tx Abutment cuff to prevent locking the prosthesis on the Abutments.

Seat the Denture Attachment Housings with new black Processing Balls onto each of the LOCATOR F-Tx Abutments. Place the Hybrid/High water prosthesis in the mouth. The milled recesses will help align the proper path of insertion of the prosthesis onto the Denture Attachment Housings. It also provides the correct vertical occlusal stop. Have the patient approve the fit, function, aesthetics, phonetics and occlusion. If everything fits and the patient is satisfied, cementation of the Denture Attachment Housings to the milled recesses can begin.

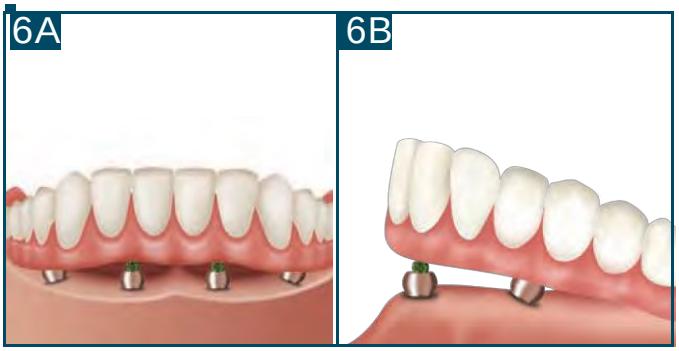


4A-4B Add CHAIRSIDE® Attachment Processing Material or choice of metal-to-metal cement to the undercut area and sides of the Denture Attachment Housings. Seat the prosthesis in place. No excess CHAIRSIDE Attachment Processing Material or cement should be placed on top of the Denture Attachment Housings or inside the framework. Doing so will cause hydraulic pressure preventing full seating of the prosthesis into the Denture Attachment Housings. Have the patient bite into light centric occlusion until the cement or acrylic is set.



5A-5B As a final step prior to final delivery, choose the most appropriate Retention Balls for the patient. Using the dedicated Retention Ball Hex Driver, unscrew the black Processing Balls and replace them with the appropriate Retention Balls. Refer to the Retention Ball chart on page 24.

NOTE: The Retention Balls are meant to be screwed with light finger pressure. Use care when screwing the Retention Balls into the housings to avoid stripping of the hex and cross-threading.



6A-6B Firmly seat the prosthesis in place and verify that all the Retention Balls have been seated properly into the LOCATOR F-Tx Abutments. Carefully place the prosthesis over the Abutments, taking care not to bend or damage the Retention Balls. Align two visible Retention Balls over the Abutments, and engage these into the Abutments. Pivot the prosthesis over the rest of the Abutments and ensure that all Retention Balls are aligned within the Abutment cavities.

NOTE: When highly angulated Abutments are present, engage these first before engaging the rest of the Abutments.

An audible snap should be heard when the Retention Balls engage the Abutments and the patient should confirm the fit. Have the patient bite on cotton rolls or on a bite stick for further confirmation that the Retention Balls are fully seated.

The use of an X-Ray is helpful in determining the fit of the Housings onto the Abutments. There should be no gaps between the Denture Attachment Housings and the spherical outer surface of the Abutments.

Instruct the patient on proper home care maintenance and recommended recall visits.

PROCESSING LOCATOR F-Tx™ ATTACHMENT HOUSINGS
MILLED FRAMEWORK (CONTINUED)

NOTE: When more than four (4) implants are used, a maximum of four (4) High (Green) Retention Balls is recommended per arch. Two (2) as close to the midline as possible and two (2) as posterior as possible to maximize retention and minimize the cantilever effect. All remaining Retention Balls must be Medium (Tan) or Low (Blue) Retention.

FOR ANY CASE OVER SIX (6) IMPLANTS, ZEST DENTAL SOLUTIONS RECOMMENDS USING MEDIUM (TAN) OR LOW (BLUE) RETENTION BALLS ON ALL LOCATOR F-Tx ABUTMENTS.

RECOMMENDED NUMBER OF HIGH (GREEN) RETENTION BALLS PER QUADRANT

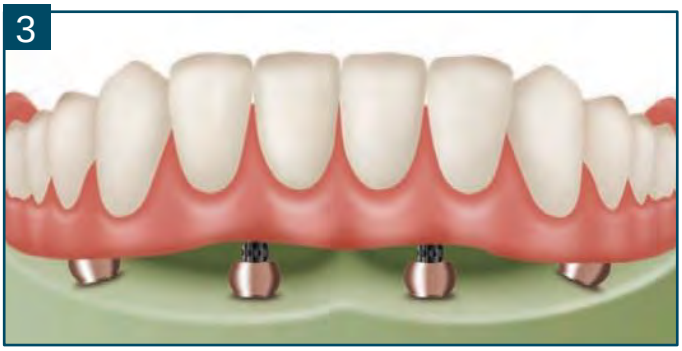
High Retention Ball	4 Implants	5 Implants	6 Implants	7 Implants	8 Implants
0	✓	✓	✓	✓	✓
1	✓	✓	✓	✗	✗
2	✓	✓	✓	✗	✗

PROCESSING LOCATOR F-Tx™ ATTACHMENT HOUSINGS
CAST FRAMEWORK

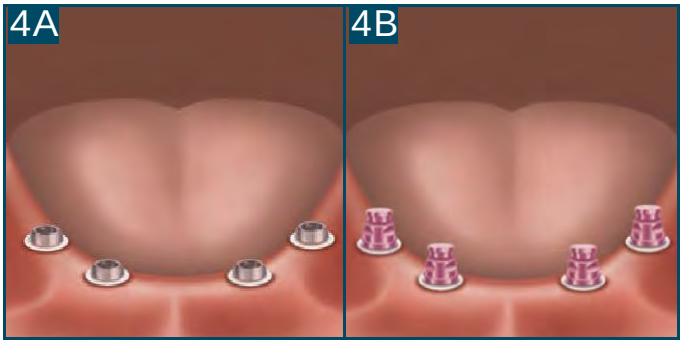
WAXING OF FRAMEWORK: Please refer to Impression Technique on page 15 prior to proceeding

1 After the model has been poured, verify that the Denture Attachment Housings are properly seated on the LOCATOR F-Tx Abutment Analogs. Seat a Waxing Cap onto each Denture Attachment Housing and reduce the height of the post extension as required by the occlusion. Wax the desired framework, invest and cast using standard laboratory techniques.

2 Divest and finish the fabrication of the prosthesis as needed. The prosthesis is delivered to the patient with the new black Processing Balls. Have the patient approve fit, function, aesthetics, phonetics and occlusion. If everything fits and the patient is satisfied, cementation of the Denture Attachment Housings to the framework can begin.

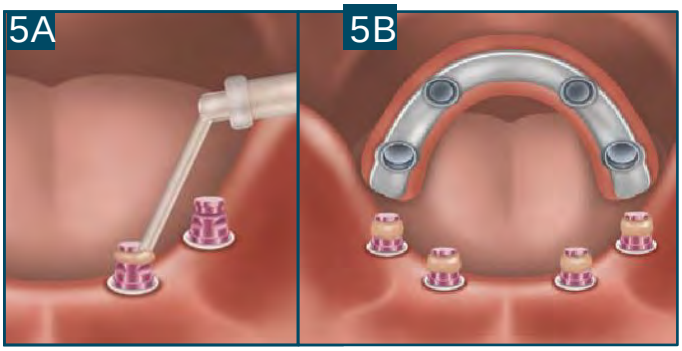


3 Prior to seating the prosthesis intra-orally, practice proper insertion and seating of the prosthesis on the working model. This step will help ease the final seating and eliminate any misalignment and possible damage of the Retention Balls.

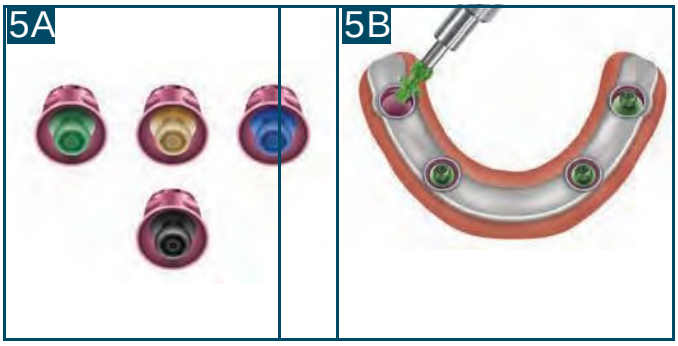


4A-4B Use Block-Out material or Block Out spacers on all visible undercuts of the LOCATOR F-Tx Abutment cuff to prevent locking the prosthesis on the Abutments.

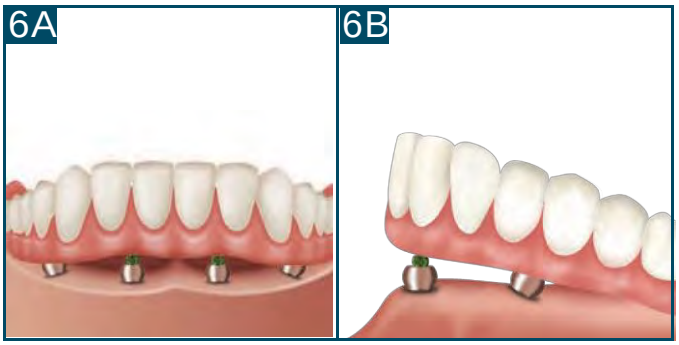
Seat the Denture Attachment Housings with new black Processing Balls onto each of the LOCATOR F-Tx Abutments. Place the Hybrid/High water prosthesis in the mouth. The milled recesses will help align the proper path of insertion of the prosthesis onto the Denture Attachment Housings. It also provides the correct vertical occlusal stop. Have the patient approve the fit, function, aesthetics, phonetics and occlusion. If everything fits and the patient is satisfied, cementation of the Denture Attachment Housings to the milled recesses can begin.



5A-5B Add CHAIRSIDE® Attachment Processing Material or choice of metal to metal cement to the undercut area and sides of the Denture Attachment Housings only and seat the prosthesis in place. No excess CHAIRSIDE Attachment Processing Material or cement should be placed on top of the Denture Attachment Housings or inside the framework. Doing so will cause hydraulic pressure preventing full seating of the prosthesis into the Denture Attachment Housings. Have the patient bite in light centric occlusion until the cement is set.



5A-5B As a final step prior to final delivery, choose the most appropriate Retention Balls for the patient. Using the dedicated Retention Ball Hex Driver, unscrew the black Processing Balls and replace them with the appropriate Retention Balls. Refer to the Retention Ball chart below.



6A-6B Firmly seat the prosthesis in place and verify that all the Retention Balls have been seated properly onto the LOCATOR F-Tx Abutments. Carefully place the prosthesis over the Abutments, taking care not to bend or damage the Retention Balls. Align two visible Retention Balls over the Abutments, and engage these into the Abutments. Pivot the prosthesis over the rest of the Abutments and ensure that all Retention Balls are aligned within the Abutment cavities.

NOTE: When highly angulated Abutments are present, engage these first before engaging the rest of the Abutments.

Firmly snap the prosthesis into place, ensuring that each Denture Attachment Housing is fully seated onto each Abutment. An audible snap should be heard when the Retention Balls engage the Abutments and the patient should confirm the fit. Have the patient bite on cotton rolls or on a bite stick for further confirmation that the Retention Balls are fully seated.

The use of an X-Ray is helpful in determining the fit of the Housings onto the Abutments. There should be no gaps between the Denture Attachment Housings and the spherical outer surface of the Abutments.

Instruct the patient on proper home care maintenance and recommended recall visits.

NOTE: When more than four (4) implants are used, a maximum of four (4) High (Green) Retention Balls is recommended per arch. Two (2) as close to the midline as possible and two (2) as posterior as possible to maximize retention and minimize the cantilever effect. All remaining Retention Balls must be Medium (Tan) or Low (Blue) Retention.

FOR ANY CASE OVER SIX (6) IMPLANTS, ZEST DENTAL SOLUTIONS RECOMMENDS USING MEDIUM (TAN) OR LOW (BLUE) RETENTION BALLS ON ALL LOCATOR F-Tx ABUTMENTS.

RECOMMENDED NUMBER OF HIGH (GREEN) RETENTION BALLS PER QUADRANT

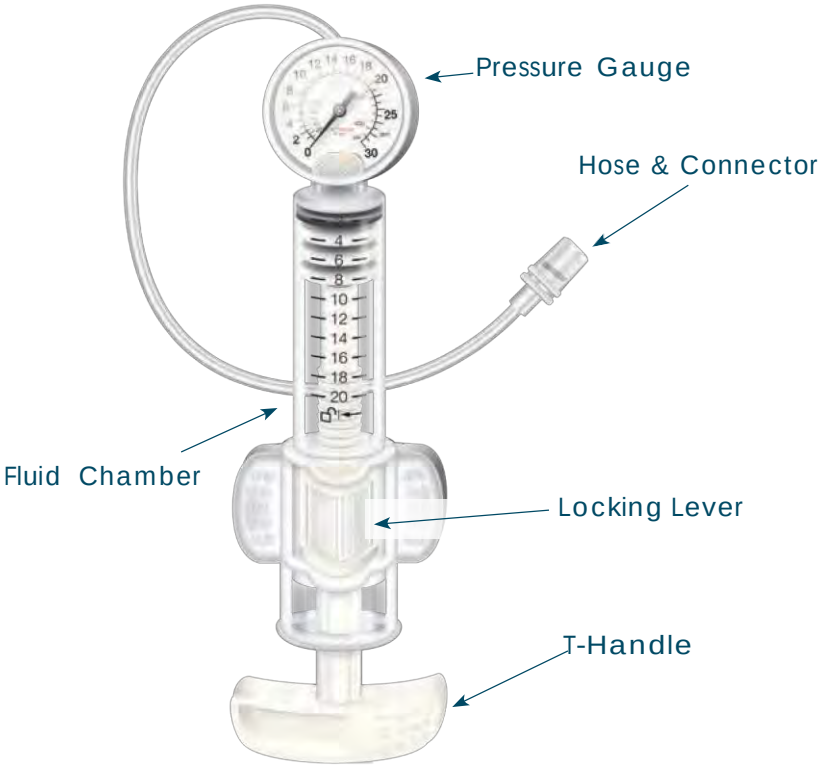
High Retention Ball	4 Implants	5 Implants	6 Implants	7 Implants	8 Implants
0	✓	✓	✓	✓	✓
1	✓	✓	✓	✗	✗
2	✓	✓	✓	✗	✗

DESCRIPTION OF LOCATOR F-Tx™ PROSTHESIS REMOVAL SYSTEM

The LOCATOR F-Tx Prosthesis Removal System engages a prosthesis and produces the lifting force required for disengagement of the Retention Balls from the LOCATOR F-Tx Abutment. The system is comprised of an Inflation Device and Prosthesis Booster.

LOCATOR F-Tx PROSTHESIS REMOVAL SYSTEM

INFLATION DEVICE



10080

LOCATOR F-Tx PROSTHESIS BOOSTER

Booster Cushions

10045		10044	
2 x 8mm 1 x 10mm	Option 1	2 x 6mm 1 x 8mm	Option 2

REMOVAL PROCEDURE

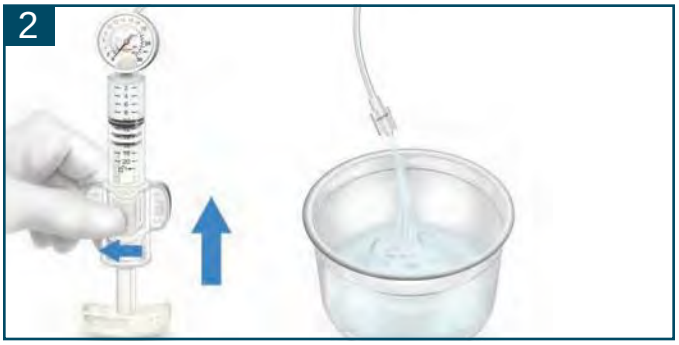
Required Materials

- Prosthesis Removal System
- Minimum 20cc water. Deionized or Sterile water recommended to prevent hard water deposits that could affect gauge performance
- Bowl

SYSTEM ASSEMBLY AND PREPARATION

1 Fill bowl with at least 20cc of water. With the Inflation Device Connector under water, press the Locking Lever to release the T-Handle and pull back to fill the Inflation Device with 20cc of water. Release the Locking Lever.

Face the Gauge and place the Inflation Device upright with the T-Handle on a hard surface.

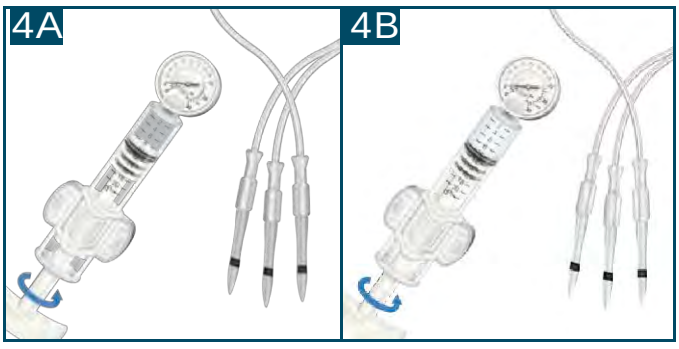


2 Empty water from the Fluid chamber to the 10cc mark by pressing the Locking Lever and pushing down on the T-Handle at the same time.

NOTE: Verify no large air bubbles are trapped in the Fluid Chamber or Hose. If any large air bubbles are visible, drain the water from Fluid Chamber and repeat steps above.

3 Insert and twist the Prosthesis Booster Connector to the Inflation Device Connector.

AIR ELIMINATION



4A-4B While holding the Booster Cushions upside down with the tips facing downward, turn the T-Handle of the Inflation Device clockwise to fill the Cushions with water. Water will start to fill the tips of the cushions.

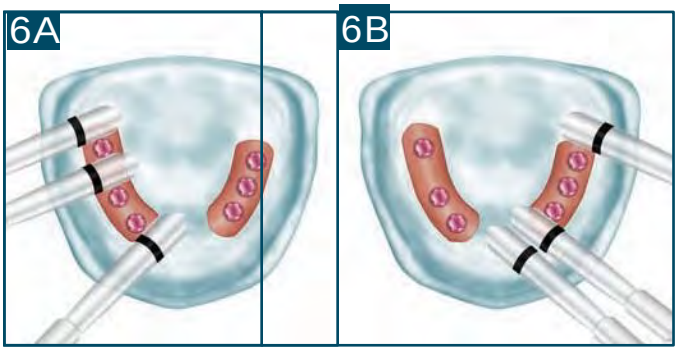
Fill all three cushions.

SYSTEM PRESSURE CHECK

5A-5C To flatten the Booster Cushions, pull the T-Handle while pressing the Locking Lever. Also, squeeze the Cushions flat in preparation for insertion.

Use of all three (3) Cushions is recommended for the most effective prosthesis removal and all Cushions should be placed as close to each other as possible to most effectively combine removal forces.

Optional: Local anesthetic is recommended in areas where the cushions will be placed when the patient expresses discomfort.



6A-6B When the prosthesis is closely adapted to the tissue, it can be hard to see the gaps between Abutments. If a stone study model has been produced for the case, it can be used to identify implant/abutment positions and suggest the best spots for insertion of the Booster Cushions.

SYSTEM PRESSURE CHECK

7

7 Place the Cushions under the prosthesis by holding the proximal end and maneuvering the tip between the prosthesis and soft tissue. Insert up to the Black line on the Booster Cushion.

A small amount of Vaseline may be applied to the Booster Cushions to assist with insertion between the underside of the prosthesis and the patient's tissue.

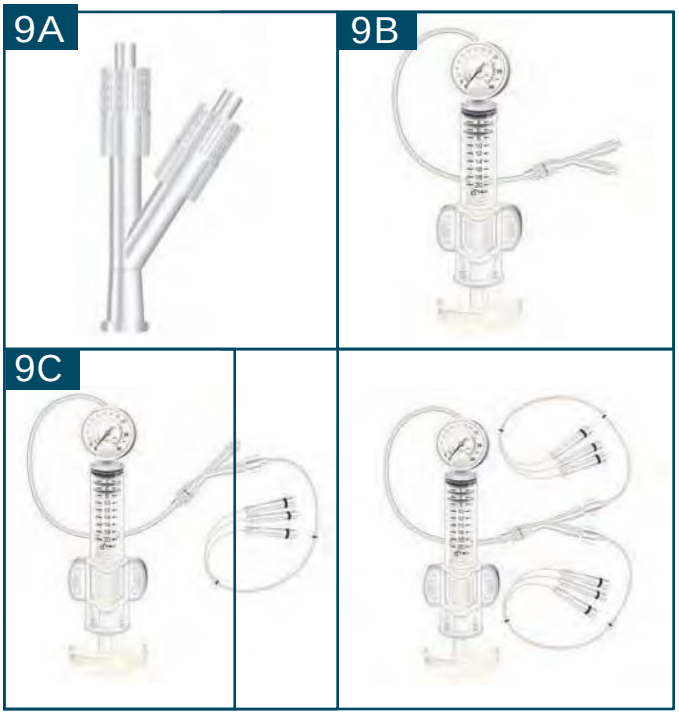
Avoid kinking the thin tubing.

8A

8A-8B Gently release the T-Handle while pressing the Locking Lever. Turn the T-Handle clockwise to quickly build lifting pressure in the Booster Cushions.

Prosthesis should disengage from the Abutments. If the pressure causes excessive discomfort to the patient, quickly turn the T-Handle counter clockwise to relieve the pressure.

8B



9A-9B-9C NOTE: If 250psi has been reached and the prosthesis fails to disengage from the Abutments, or patient discomfort becomes a concern, a second Booster set should be used to facilitate the removal of the prosthesis while minimizing pressure. This will require the "Y" connector to be attached to the Inflation Device Connector and the two sets of Boosters connected to the "Y". Place all Booster Cushions under the prosthesis as close to each other as possible and repeat the removal steps.

10 Press the Locking Lever and pull the T-Handle to release the pressure.

Repeat the removal procedure until the prosthesis is completely disconnected from all LOCATOR F-Tx Abutments.

NOTE: Hold the prosthesis when disengaging the final Abutments, as the prosthesis can spring off the Abutments.

* Please refer to page 35 for more information about Multi-Use Devices, Disassembly and Disinfection of Prosthesis Removal System.