



For new products, manuals and technical information, call 1-866-DTE-INFO or visit our web site @ [www.dentalez.com](http://www.dentalez.com).

### Limited Warranty

StarDental® Titan® Straight Nose Cone, Motor-to-Angle Adaptor and Torque Multiplier are warranted against defects in material and workmanship for 6 months from date of purchase. This warranty is subject to the following conditions:

The product must not be abused and must have been operated in accordance with procedures detailed in this manual.

Any replacement parts must be genuine StarDental® parts.

Warranty validation card must be completed and returned within 15 days of purchase.

StarDental® will, without charge, repair or replace (at its sole discretion) any defective part(s) covered in this warranty, providing above conditions are met and the product is returned through an authorized StarDental® dealer. You must have a copy of your original invoice to qualify.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE.



DentalEZ (GB) Ltd.,  
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0344  
Product complies  
with MDD 93/42/EEC

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## Titan®

### Straight Nose Cone, Motor-to-Angle Adaptor & Torque Multiplier

Instruction Manual

EFFICIENCY IN DENTISTRY®

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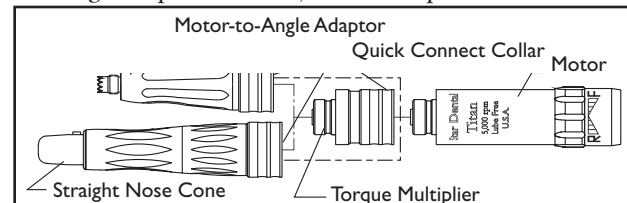
## Features

- LubeFree
- Smooth-running, low-friction performance
- Easy maintenance
- Long-term reliability
- Quick-disconnect mechanism

## Installation

**CAUTION:** To prevent injury, always remove bur or cutting tool from the straight nose cone before installing or disconnecting the straight nose cone.

1. Assemble straight nose cone or motor-to-angle adaptor to torque multiplier or motor by retracting the quick connect collar with fingers while placing straight nose cone or motor-to-angle adaptor on motor; release the quick connect collar.



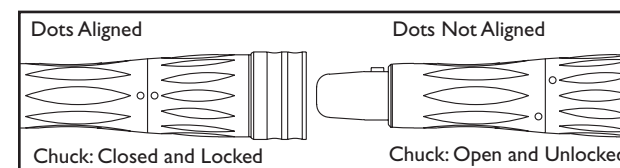
2. To remove straight nose cone, motor-to-angle adaptor or torque multiplier, reverse the above procedure.

**Note:** Never use force to connect or disconnect the straight nose cone, motor-to-angle adaptor or torque multiplier.

## Straight Nose Cone Operation

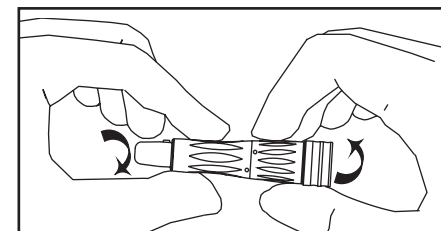
The torque multiplier, StarDental Titan 3 Part #258443 or TitanT Part # 263944, fits between the motor and either the straight nose cone or motor-to-angle adaptor. Use the torque multiplier to reduce speed four to one and increase torque by a multiple of four.

When used with the 20K motor, low speed capability expands to perform low speed, high torque procedures: prophylaxis, pin placement, endodontics, caries removal, and operations where higher torque is required.



Engraved on the sleeve and chuck locking collar of the straight nose cone are two dots. Aligned dots indicate chuck is closed and locked. When dots are not aligned, chuck is open and unlocked.

To open chuck, grasp the chuck locking collar with one hand, the sleeve with the other, and rotate counterclockwise until a 'click' is heard.



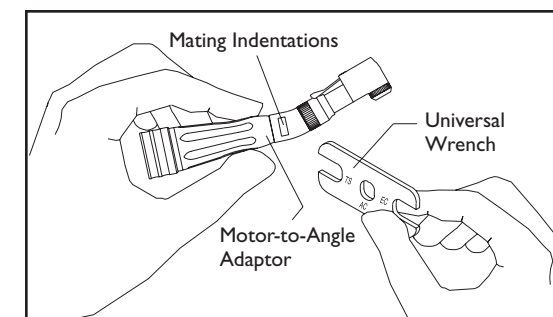
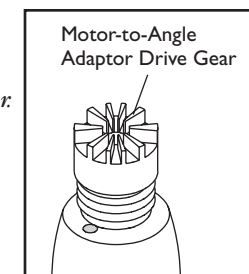
With the chuck open, insert a .0925" (2.350 mm) shank bur, Doriot angle or disposable prophylaxis angle the full length of the chuck. Close chuck and lock by reversing the opening procedure.

**CAUTION:** Operate the straight nose cone with a bur, Doriot angle or disposable angle in chuck. Operating either with the chuck open or without a bur, Doriot angle or disposable angle installed will damage the chuck.

## Angle Installation

1. Thread contra angle attachment of choice onto the motor-to-angle adaptor, StarDental Titan 3 Part #203297 or Titan T Part # 263943, by hand. Seat completely.

**CAUTION:** If angle is not seated completely on adaptor, gears are not meshing. Remove angle; spin motor-to-angle adaptor drive gear. Repeat Step 1.



2. Fit universal wrench, StarDental Part #203048, furnished with every angle, to mating indentations on angle neck; tighten securely.

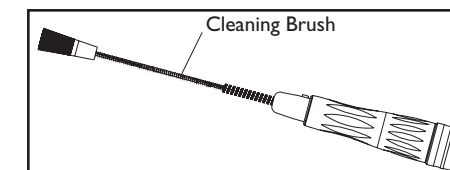
## Cleaning & Lubricating

### CLEANING the Straight Nose Cone

Remove straight nose cone from motor. Close chuck (dots aligned). Insert round end of brush provided, StarDental Part #203043, straight into chuck and withdraw.

**Note:** Do not rotate brush while inserting or removing. After removing brush, tap nose of chuck to expel debris.

**CAUTION:** Do not adjust, disassemble or lubricate straight nose cone.

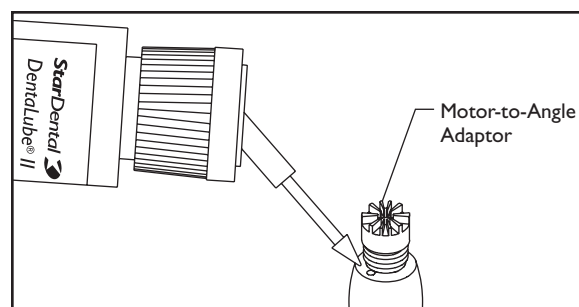




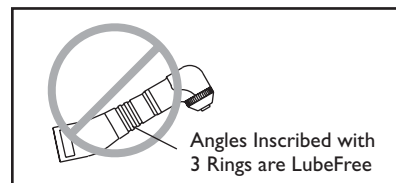
## Cleaning & Lubricating (cont.)

### LUBRICATING the Motor-to-Angle Adaptor

The straight nose cone, torque multiplier and motor-to-angle adaptor are lubefree and, therefore, do not require lubrication. Should the motor-to-angle adaptor exhibit noise during operation, place one drop of DentaLube® II, StarDental® Part #262539, as shown.



Note: **StarDental** produces both lubricated and lubefree angles. If angle requires lubrication follow instructions provided with the angle.



## Sterilization

1. Wear puncture-resistant gloves to prepare the motor and attachments for sterilization.
2. Remove bur, disc or prophyl cup from angle attachment.
3. Disconnect straight nose cone, torque multiplier or angle and motor-to-angle adaptor from motor.
4. Disconnect angle from motor-to-angle adaptor.
5. Clean all external surfaces of attachments and angles using a small brush and isopropyl alcohol.
6. Dry thoroughly.
7. Place motor and attachments in a sterilization bag; use paper or paper/plastic bags only. Follow the sterilization guidelines as stated by the manufacturer of your sterilizer.
8. Remove motor and attachments from sterilizer after the drying cycle and allow to cool in bag.

The motor and attachments must be cleaned and sterilized between patient use.

A **wrapped** motor or attachment should be steam sterilized at 132° C for a minimum of 10 minutes or at 121° C for a minimum of 50 minutes. Do not exceed 135° C.

An **unwrapped** motor or attachment should be steam sterilized at 132° C for a minimum of 8 minutes or at 121° C for a minimum of 30 minutes. Do not exceed 135° C.

Note: An **unwrapped** motor or attachment needs to be used **immediately** or **sterility is not maintained**.

Do not exceed the sterilizer manufacturer's guidelines for load capacity.

**CAUTION: Use steam sterilization exclusively for complete sterility. Never dry heat sterilize, ultrasonically clean, expose to chemical disinfection or cold sterilization by:**

- Immersion techniques
- Surface wipes, hand soaps or detergents
- Surface spray
- Handpiece pouches that contain disinfectants.

## Troubleshooting

Problem: **LOW POWER**

Cause: Crimped tubing

Correction: Straighten tubing inside and outside delivery head.

Cause: Debris build-up in attachment

Correction: Clean and lubricate attachment (see *Cleaning & Lubricating*) and motor (refer to *Titan Motor Instruction Manual*, StarDental Part #62283).

Cause: Straight nose cone, motor-to-angle adaptor or torque multiplier mechanism is worn

Correction: Verify speed by attaching an alternate attachment. If alternate attachment shows better performance, send attachment to factory for repair through your authorized dealer.

Cause: Air pressure

Correction: Verify proper motor air pressure (refer to *Titan Motor Instruction Manual*, StarDental Part #62283).

Problem: **BUR LOCKS IN AUTOCHUCK**

Cause: Use of non-ISO burs

Correction: Always use ISO burs.

Problem: **BUR SLIPS IN AUTOCHUCK**

Cause: Debris build-up in chucking mechanism

Correction: Aerate with syringe air.

Note: Always use ISO files to prevent locking and slipping of files. If a problem persists, contact dealer for further assistance or **StarDental** Customer Service at 1-866-DTE-INFO.



## Replacement Part Numbers

Always insist on **StarDental** parts for best performance.

| Description                             | Item   |
|---|--------|
| Titan 3 Straight Nose Cone.....         | 257506 |
| Titan T Straight Nose Cone .....        | 263942 |
| Straight Nose Cone Cleaning Brush ..... | 203043 |
| Straight Nose Cone Tip .....            | 257504 |
| Titan 3 Motor-to-Angle Adaptor .....    | 203297 |
| Titan T Motor-to-Angle Adaptor.....     | 263943 |
| Titan 3 Torque Multiplier .....         | 258443 |
| Titan T Torque Multiplier.....          | 263944 |
| DentaLube II.....                       | 262539 |
| Universal Wrench .....                  | 203048 |

### Important Notice About Returning Product To The DentaleZ Group

Anyone wishing to return any DentaleZ Group product to a DentaleZ facility **MUST** obtain the proper RETURN AUTHORIZATION NUMBER from the Customer Service Department. The RA Number **must** appear clearly marked on both the outside and inside of the returned product carton. When calling for a return authorization number you will be asked to provide the following information:

To Obtain A Return Authorization Number Call **1-866-DTE-INFO**

- Product Name, Model Number or Part Number
- Serial Number of Product
- Dealer Return Purchase Order Number
- Reason For Return
- Copy of Invoice Showing Purchase

Items will be evaluated. Return Authorization Number is not a guarantee for credit. Your cooperation with this procedure will help us expedite processing of any returns.