

StarDental Instruments  
**Titan® Five Star LubeFree Propphy Angle**  
 Instruction Manual

Caution: Federal law restricts this device to sale by or on the order of a dentist.

Non-Sterile

StarDental®  
 1816 Colonial Village Lane  
 Lancaster, PA 17601 U.S.A.  
 Printed in the U.S.A.  
 ©2018 DentalEZ, Inc.

StarDental®  
 Emurgo Europe  
 Prinsessegracht 20  
 2514 AP The Hague  
 The Netherlands

DentalEZ  
 INNOVATED SOLUTIONS  
 CE 0344

866.DTE.INFO (383.4636)  
 www.DentalEZ.com

062731, J. Date of Issue 2018-03-01

**DO NOT USE FOR ORAL SURGERY**

**BEFORE OPERATING THE PROPHY ANGLE, CAREFULLY READ AND FOLLOW ALL OF THESE INSTRUCTIONS. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE AND OBSERVE ALL WARNINGS AND CAUTIONS.**

**Indications For Use**

Used intraorally by trained dental professionals for drilling and preparation of dental cavities for restoration, such as fillings, disking, cavity and crown preps, polishing, post and pin drilling and pin setting.

**WARNING** Under normal operating conditions, air is exhausted from the back of the head of this handpiece. If air is directed into an open soft tissue wound or beneath the mucosa or dermis, injury to the patient could result from air emphysema or air embolism.

**WARNING** This angle has no internal air or water cooling capabilities. External water for cooling may be required.

**Contents**

- Features
- Installation and Operation
- Safety Rule
- Cleaning & Sterilization
- Troubleshooting
- Cartridge Replacement
- Replacement Part Numbers
- Warranty

**Features**

Rated for use with StarDental Motors and Attachments

Titan LubeFree Five Star Propphy Angle:

**StarDental®** Titan 3 Part #265801 or Titan T Part #265802

Controlled Speed Reduces Propphy Paste 'Spin-off'

Field Replaceable Cartridge

Quick, Easy Cleaning

Compatible with Titan 3 and Titan T Systems

Steam Sterilization: 135° C

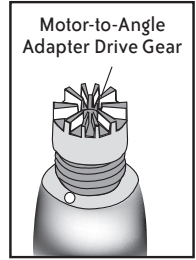


| Motor | Accessories             | Ratio | Max Allowable RPM |
|-------|-------------------------|-------|-------------------|
| 5K    | MTA                     | 1:1   | 5,000             |
| 20K   | Torque Multiplier & MTA | 4:1   | 5,000             |

**Installation and Operation**

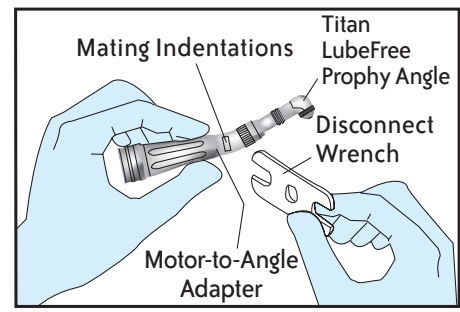
**Propphy Angle Installation for Titan 3 or Titan T Systems**

1. For the Titan 3 or Titan T systems thread angle onto motor-to-angle adapter, **StarDental** Titan 3 Part #264073 or Titan T Part # 263970, by hand. Seat completely.



**NOTE:** When angle does not seat on adapter, gears are not meshed correctly. Remove angle; spin motor-to-angle adapter drive gear and repeat step one.

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

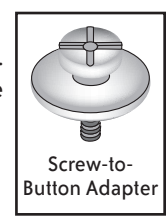


**Propphy Cup Installation**

The propphy angle uses either a screw-on or a snap-on type polishing cup. When using a snap-on type cup, use the screw-to-button adapter, **StarDental** Part #258950.

Thread the screw-to-button adapter, or polishing cup, with a clockwise rotation until snug into the hollow cartridge shaft of the propphy angle.

**CAUTION** Operate the Titan motor in the forward direction only. If the Titan motor is operated in reverse direction, the propphy cup will separate from the propphy angle.



**Propphy Cup Removal**

Unthread the adapter, or polishing cup, counterclockwise. If the screw-to-button adapter is difficult to disengage, remove the propphy cup, and use a small screwdriver to loosen the screw-to-button adapter.

**SAFETY INSTRUCTIONS**

**PLEASE OBSERVE SAFETY RULE**

Before use, verify concentric rotation by operating the handpiece outside the oral cavity in a safe place.

**Cleaning & Sterilization**

|                               |  |
|-------------------------------|--|
| <b>CAUTION</b>                | It is the responsibility of the user to use only FDA compliant sterilizing equipment and accessories that are capable of meeting the manufacturers recommendations below.  |
| <b>CAUTION</b>                | Do not exceed 135°C<br><b>Do not use:</b> • dry heat sterilizer • cold sterilizers • ultrasonic cleaners<br>• immersion techniques • sterilizer bags containing disinfectants<br>• detergents • surface wipes • surface sprays<br>• chemical disinfectors • hand soaps • surgical milk |
| <b>Limits on Reprocessing</b> | Repeated processing has minimal effect on these angles. End of life is normally determined by wear and damage due to use.  |

**INSTRUCTIONS**

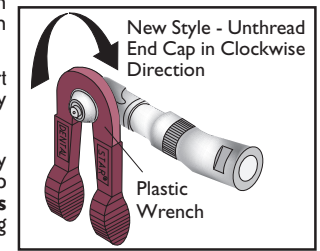
**WARNING** The angle must be cleaned and sterilized before first use and between patient use.

**Containment & transportation:** It is recommended that angles are reprocessed as soon as is reasonably practical following use.

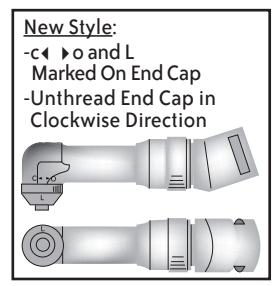
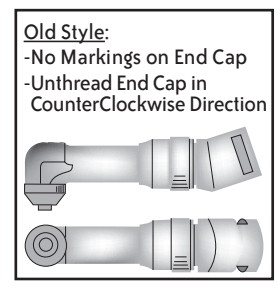
**Preparation for cleaning:** Wear puncture resistant gloves to prepare the propphy angle for sterilization. Remove propphy cup or screw-to-button adapter from propphy angle. Remove angle from motor-to-angle adaptor.

**Cleaning Automated:** Washer-disinfectors are not recommended.

- Cleaning Manual:**
1. Clean and inspect once before first use and after each patient.
  2. Clean all external surfaces with isopropyl alcohol and a lint-free cloth or brush.
  3. Use the plastic wrench, **StarDental** Part #258953, to unthread the end cap by turning clockwise. **See illustration:**



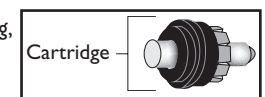
**Note:** Older style angle - denoted by having no marking on the end cap of the angle (**See illustrations below**) - will unthread by turning counterclockwise.



**NOTICE**

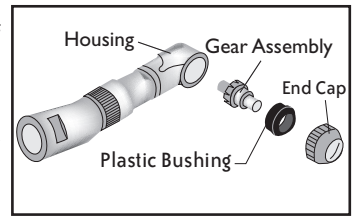
4. Remove the cartridge per instructions in 'Cartridge Replacement' and inspect as follows:

Do not use pliers on the plastic bushing, damage to the bushing might occur.



5. If propphy paste is not found on the cartridge, internal cleaning is not necessary. Simply wipe off with lint-free cloth.

6. If propphy paste is found on the cartridge, clean off the paste manually. The gear assembly and end cap may be ultrasonically cleaned.



|   |   |                         |                       |                                   |                                  |                                   |  |
|---|---|-------------------------|-----------------------|-----------------------------------|----------------------------------|-----------------------------------|--|
| <b>Cleaning Manual Continued:</b>         | <b>NOTE:</b> Only the Gear assembly and end cap may be cleaned ultrasonically.  |                         |                       |                                   |                                  |                                   |  |
|   | <p>7. When prophy paste is consistently found in the cartridge, install a new cartridge, <b>StarDental</b> Part #262719, which includes the plastic bushing. Replacing the cartridge renews the seal and protects the gear and bushing from abrasive paste.</p> <p>8. Wipe the inside of the housing with a lint-free cloth or cotton swab.</p> <p><b>Note:</b> Do not immerse head in solvent.</p> <p>9. Reassemble by guiding the shaft of the gear assembly through the center of the plastic bushing. Install cartridge into angle housing.</p> <p>10. Turn end cap counterclockwise and hand tighten to secure. Use wrench to fully seat – 30° rotation maximum.</p> |                         |                       |                                   |                                  |                                   |  |
| <b>NOTICE</b>                             | Do not overtighten as poor performance and damage to angle may result.  |                         |                       |                                   |                                  |                                   |  |
| <b>Lubrication:</b>                       | Lubricate - Lubrication is not needed. Prophy angle is Lube Free.   |                         |                       |                                   |                                  |                                   |  |
| <b>Disinfection:</b>                      | Use steam sterilization exclusively for complete sterility as outlined below.   |                         |                       |                                   |                                  |                                   |  |
| <b>Maintenance:</b>                       | Angle should be routinely maintained, checked for corrosion, worn parts, etc. and should be replaced on an as needed basis.   |                         |                       |                                   |                                  |                                   |  |
| <b>Inspection &amp; function testing:</b> | See Installation, Operating Recommendations, and/or Troubleshooting sections of this manual.  |                         |                       |                                   |                                  |                                   |  |
| <b>Packaging:</b>                         | Single: A standard sterilization packaging material must be used. Ensure that the pack is large enough to contain the item without stressing the seals.   |                         |                       |                                   |                                  |                                   |  |
| <b>Wrapped Instrument Sterilization:</b>  | <table border="0"> <tr> <td>Gravity Type Autoclave:</td> <td>Pre-Vacuum Autoclave:</td> </tr> <tr> <td>• Minimum of 15 minutes at 132° C</td> <td>• Minimum of 4 minutes at 132° C</td> </tr> <tr> <td>• Minimum of 30 minutes at 121° C</td> <td></td> </tr> </table> <p>Do not exceed 135° C</p>  | Gravity Type Autoclave: | Pre-Vacuum Autoclave: | • Minimum of 15 minutes at 132° C | • Minimum of 4 minutes at 132° C | • Minimum of 30 minutes at 121° C |  |
| Gravity Type Autoclave:                   | Pre-Vacuum Autoclave:   |                         |                       |                                   |                                  |                                   |  |
| • Minimum of 15 minutes at 132° C         | • Minimum of 4 minutes at 132° C  |                         |                       |                                   |                                  |                                   |  |
| • Minimum of 30 minutes at 121° C         |   |                         |                       |                                   |                                  |                                   |  |
| <b>Drying:</b>                            | Dry the prophy angle for 30 minutes minimum using the sterilization dry cycle and allow the prophy angle to cool to room temperature in bag prior to use. If moisture is present, increase your sterilizer dry cycle appropriately.   |                         |                       |                                   |                                  |                                   |  |
| <b>Storage:</b>                           | Store in bag after sterilization until ready to use.  |                         |                       |                                   |                                  |                                   |  |
| <b>Additional Information:</b>            | Do not exceed the sterilizer manufacturer's guidelines for load capacity. Use only paper or paper/plastic bags.   |                         |                       |                                   |                                  |                                   |  |
| <b>Manufacturer Contact:</b>              | See first or last panels of this manual.  |                         |                       |                                   |                                  |                                   |  |

## Troubleshooting

Problem: LOW POWER

Cause: Air leak at motor

Correction: Replace gasket;  
refer to Titan Motor Instruction Manual.

Cause: Debris build-up

Correction: Refer to Cleaning.

Cause: Faulty angle

Correction: Replace cartridge.

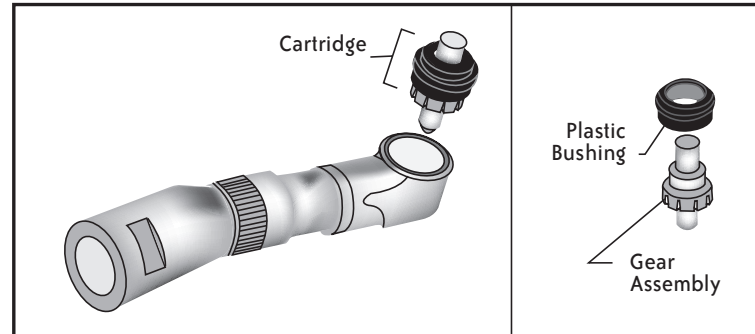
**Note:** If a problem persists, contact dealer for further assistance;  
or, contact **StarDental** technical service at:  
1-866-DTE-INFO (1-866-383-4636)

## Cartridge Replacement

1. Remove the end cap using the plastic wrench to turn it clockwise. (See illustration under Cleaning.)

**NOTICE** Do not use pliers on the plastic bushing, damage to the bushing might occur.

2. Pull plastic bushing to remove cartridge from prophy head as shown below. If cartridge is not removable by hand, thread a prophy cup or a screw-to-button adapter in the cartridge and tug on it.



3. Separate gear assembly from the plastic bushing by pulling apart as shown above.

4. If gears are worn, replace cartridge, StarDental Part #262719. If not, simply wipe clean with a lint free cloth.

5. Wipe the inside of the housing with a lint free cloth or cotton swab, barely dampened with isopropyl alcohol.

**Note:** Do not immerse head in solvent.

6. Guide the shaft of the gear assembly through the center of the plastic bushing. Install the assembled cartridge into the angle housing.

7. Position end cap and turn counterclockwise. Hand tighten to secure. Use wrench to fully seat – 30° maximum.

**NOTICE** Do not overtighten as poor performance and damage to angle may result.

## Replacement Part Numbers

Always insist on StarDental Parts for best performance.

| Description  | Item Number |
|--|-------------|
| Titan® LubeFree Five Star Prophy Angle   |             |
| Titan 3 .....  | 265801      |
| Titan T .....  | 265802      |
| Titan LubeFree Five Star Prophy Angle Cartridge (includes cartridge and plastic bushing) ..... | 262719      |
| LubeFree Transmission Gear Assembly.....   | 262724      |
| Titan Knuckle .....  | 263241      |
| Prophy Angle End Caps (Package of 2) .....   | 265805      |
| Screw-to-Button Adapter.....   | 258950      |
| End Cap Wrench (Plastic).....  | 258953      |
| Angle Disconnect Wrench.....   | 203048      |
| Titan 3 Motor-to-Angle Adapter .....   | 264073      |
| Titan T Motor-to-Angle Adapter .....   | 263970      |

## Important Notice About Returning Product To The DentaleZ Inc.

Anyone wishing to return any DentaleZ Inc. 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



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

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.

### Limited Warranty

O-Rings and Seals are specifically excluded from this warranty. DentaleZ® warrants the Titan® LubeFree Five Star Prophy Angle to be free of defects in material and workmanship, under normal usage, under the following terms:

**StarDental Products:** LubeFree Five Star Prophy Angle  
**Warranty Period\*:** 1 Year from date of purchase  
Please note the following additional terms of our warranty and return policy:

- Warranties cover manufacturing defects only and do not cover defects resulting from abuse, improper handling, cleaning, care or maintenance, normal wear and tear or non-observance of operating, maintenance or installation instructions. **Failure to use authorized parts or an authorized repair facility voids this warranty.**
- **Liability is limited to repair or replacement of the defective product at our sole discretion. All other liabilities, in particular liability for damages, including, without limitation, consequential or incidental damages are excluded.**
- **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO EMPLOYEE, REPRESENTATIVE OR DEALER IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR TO GRANT ANY OTHER WARRANTY.**

\* Provided conditions in warranty are met.

