

Swivel Connectors
(Non HiFlo and Non Fiber Optic)

Instruction Manual

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

Non-Sterile
Medical Device



EC REP

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

Indications For Use

Swivel connectors are used to adapt the handpiece to the dental unit delivery tubing. Drive air, coolant air, water and as applicable fiber optic lighting are supplied through the swivel.

NOTICE Any serious incident occurring from the use of this device should be reported to StarDental immediately. If incident occurred in a EU Member State the competent authority must be notified.

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Specifications

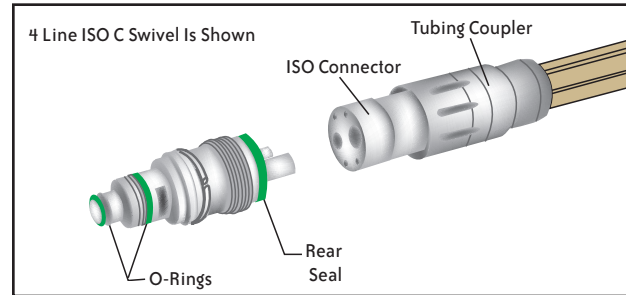
Swivel P/N	Description	For Use With
260152	2/3-Line	Titan® Motor
260144	4-Line	Titan Motor
261550	2/3-Line	430 SW™ , Titan SW Sonic Scalers
261547	4-Line	430 SW , Titan SW Sonic Scalers

135°C SSS	Sterilizable up to 135°C
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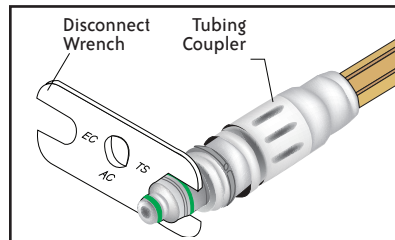
Swivel Installation

Note: Use an air pressure gauge to adjust the pressure to the appropriate psi as recommended in the specified handpiece manual. It is recommended to use air pressure gauge, **StarDental®** Part #262591. Handpiece must be connected prior to taking pressure reading.



1. Slide tubing coupler back until the end of the ISO connector is exposed.
2. Align and insert fittings of the swivel into the ISO connector holes of the tubing.
3. Slide tubing coupler forward and thread clockwise until hand tight against the swivel.
4. Use the disconnect wrench, **StarDental** Part #203048, to tighten the swivel to the tubing coupler. Be sure to turn the tubing coupler while holding the swivel in place. **DO NOT OVERTIGHTEN.**
5. Adjust water volume at delivery head to obtain a satisfactory spray mist.
6. Snap handpiece onto the swivel.

Note: The swivel tubing connection may loosen over time, resulting in water leaks and/or loss of power. Check for tightness periodically.



Cleaning & Sterilization

CAUTION	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.
CAUTION	Do not exceed 135°C Do not use: <ul style="list-style-type: none"> • dry heat sterilizer • ultrasonic cleaners • surgical milk • hand soaps • sterilizer bags • surface sprays containing disinfectants • cold sterilizers • chemical disinfectors • surface wipes • detergents • immersion techniques
Limits On Reprocessing	Repeated processing has minimal effect on this swivel. End of life is normally determined by wear and damage due to use.
INSTRUCTIONS	
WARNING	Clean and sterilize swivels as soon as practical before first use and after each patient.
Containment and transportation:	It is recommended that swivels are reprocessed as soon as is reasonably practical following use.
Preparation for cleaning:	Remove swivel from tubing. No further disassembly is required.
Cleaning - Automated:	Washer-disinfectors are not recommended.
Cleaning - Manual:	The following steps apply only to swivels with a water tube: StarDental Part #s 261547 and 261550. For peak performance, clean swivel and mating parts daily or as needed. Do not attempt to disassemble swivel. <ol style="list-style-type: none"> 1. Disconnect handpiece from swivel; disconnect swivel from tubing. Depress foot control, verify water exits tubing. 2. Connect swivel to tubing. Depress foot control again. If almost no water exits front of swivel, clean as follows.

Cleaning - Manual: Continued	<ol style="list-style-type: none"> 2a. Remove swivel and find water tube on front face of swivel. 2b. Insert cleaning wire, StarDental Part #256719, into water tube of swivel. When wire will not insert, move wire back and forth to loosen debris at blockage. 2c. Remove wire and apply a blast of syringe air into water tube. <p>To optimize operation of the swivel connector, swab all internal surfaces of the handpiece with a cotton swab soaked in isopropyl alcohol until clean. Dry using syringe air. (See the following illustration.)</p> <div style="text-align: center;"> </div> <p>Clean area around the bearing/spring assembly at rear of swivel using isopropyl alcohol and a toothbrush. Dry using syringe air.</p>
Lubrication:	Lubrication is not applicable for swivels.
Disinfection:	Use steam sterilization exclusively for complete sterility as outlined below.
Maintenance:	Swivel should be routinely maintained, checked for corrosion, worn parts, etc. and should be replaced on an as needed basis. See replacement parts section of this manual.
Inspection & function testing:	See Troubleshooting section of this manual.
Packaging:	Single: A standard sterilization packaging material must be used. Ensure that the pack is large enough to contain the swivel without stressing the seals. In sets: swivels may be loaded into dedicated instrument trays or general purpose sterilization trays. Ensure that cutting edges are protected and do not exceed the tray manufacturer's limit per tray. Wrap the trays using appropriate packaging materials and methods.
Wrapped Instrument Sterilization:	<p>Gravity Type Autoclave:</p> <ul style="list-style-type: none"> • Minimum of 15 minutes at 132° C <p>Pre-Vacuum Autoclave:</p> <ul style="list-style-type: none"> • Minimum of 4 minutes at 132° C <p>Do not exceed 135° C</p>

Drying:	Dry the swivel for 30 minutes minimum using the sterilization dry cycle and allow the swivel to cool to room temperature in bag prior to use. If moisture is present, increase your sterilizer dry cycle appropriately.
Storage:	Store in bag after sterilization until ready to use.
Additional information:	Do not exceed the sterilizer manufacturer's guidelines for load capacity.
Manufacturer contact:	See front or back panels of this manual.

Troubleshooting

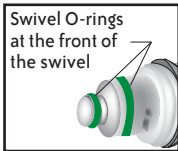
Problem: WATER LEAKAGE

Cause: Brittle swivel silicone rubber rear seal

Correction: Replace silicone rubber seal:
StarDental® Part #202897 for 4-line
StarDental Part #203103 for 2/3 line.
 (Refer to O-Rings & Rear Seal Replacement.)

Cause: Swivel O-ring worn

Correction: Replace both O-rings at the front of any swivel with **StarDental** Part #259884.
 (Refer to O-Rings & Rear Seal Replacement.)



Problem: SWIVEL WILL NOT DISENGAGE FROM HANDPIECE

Cause: Buildup of debris

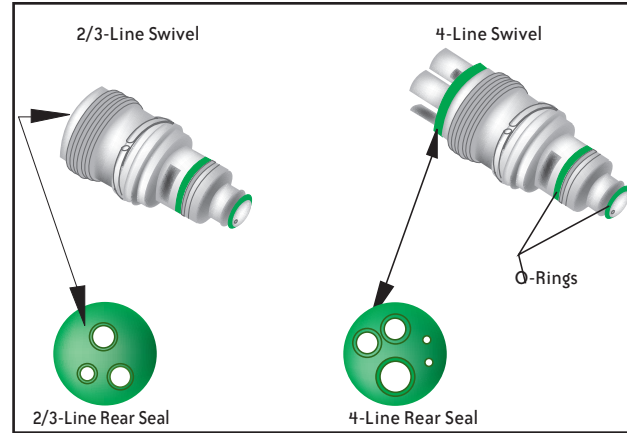
Correction: Place a few drops of **DentaLube II**, **StarDental** Part #262539, into threaded area of the bearing/spring assembly to disengage handpiece. (Refer to Cleaning.) To prevent reoccurrence, clean swivel/handpiece connector.

Note: If a problem persists, contact dealer for further assistance; or, contact **StarDental** Technical Service at 1-866-DTE-INFO.

O-Rings & Rear Seal Replacement

Periodically replace the O-rings with **StarDental** Part #259884.

Seals wear with repeated use. Once a year or as needed, replace the rear seal for the 2/3-line swivel with **StarDental** Part #203103, the 4-line with **StarDental** Part #202897.



Replacement Part Numbers

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

Description	Item
Swivel, 2/3-Line for Titan ® Motor	260152
Swivel, 4-Line for Titan Motor	260144
Swivel, 2/3-Line for 430 SW ™ and Titan SW Sonic Scalers	261550
Swivel, 4-Line for 430 SW and Titan SW Sonic Scalers.....	261547
Disconnect Wrench	203048
Cleaning Wire (Gauge: 0.008, Pkg. of 2)	256719
Silicone Rubber Rear Seal, 2/3-Line (Pkg. of 3)	203103
Silicone Rubber Rear Seal, 4-Line (Pkg. of 3).....	202897
O-Rings (2 Large, 2 Small) for all Swivel Connectors.....	259884
Air Pressure Gauge for 4/6-Line.....	262591
DentaLube II.....	262539

Important Notice About Returning Product To 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

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



For new products, manuals and technical information, call **1-866-DTE-INFO** or visit our web site @ www.dentalez.com.

Limited Warranty

O-Rings and Seals are specifically excluded from this warranty. DentalEZ® warrants Swivel Connectors for 1 year from the date of purchase*.

Please note the following additional terms of our warranty 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.

WARRANTY REGISTRATION

 PLEASE VISIT THE WEBSITE BELOW TO REGISTER YOUR STARDENTAL PRODUCT. THIS WILL ENSURE PROPER REGISTRATION AND PROMPT AND ACCURATE SERVICE SHOULD ANY OF YOUR PURCHASES NEED EVALUATION OR REPAIR DURING THE WARRANTY PERIOD.

 StarDental® Products: www.dentalez.com/warranty