

StarDental® Instrument Solutions

430 Torque Instructions for Use and Maintenance

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

Indications for Use

The 430 Torque High-Speed Handpieces are used by trained dental professionals for a variety of procedures including but not limited to caries and amalgam removal, restorative work and crown preparations.

Specifications

430SWL® Torque and **430SW™ Torque** High-Speed Handpieces are designed to fit a **StarDental® 360°** quick disconnect swivel. The 430SWL Torque handpiece connects to both StarDental and standard 4/6-Line ISO fiber optic (F.O.) tubing. The 430SW Torque connects to standard 4 hole tubing.

430SWL & 430SW Torque

Type:	High-speed fiber optic with a swivel and replaceable autochuck turbine
Operating Air Pressure:	38 to 43 psi
Air Consumption:	1.9 SCFM @ 43 psi
No Load Speed:	395,000 rpm @ 43 PSI
Stall Torque:	.26 oz.-in @ 43 PSI
Average Power:	20 watts
	(Max Power > 25 watts @ 43 psi)

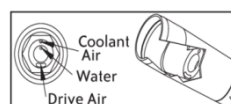
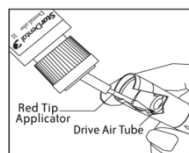
LUBRICATED Ceramic Bearing Turbine

Lubricate handpiece daily with **DentaLube II, StarDental®** Part #262539, and **prior** to each sterilization procedure.

- Disconnect handpiece.
- Assemble the conical red tip applicator, **StarDental** Part #202954, into the DentaLube II bottle cap.
- Find drive air tube at rear of handpiece and place three drops of DentaLube II.
(See illustrations for more detail).

Note: Never operate handpiece without bur in place.

- With bur in place connect handpiece to tubing, operate for 20 seconds to expel excess lubricant.



LubeFree Handpieces contain a LubeFree ceramic bearing turbine. The turbine uses a sophisticated ceramic bearing design and, therefore, requires no lubrication. To ensure the life of and to prevent damage to this turbine - do not lubricate it. If it gets lubricated even once, it **MUST** then continue to be lubricated for the rest of its life.

Cleaning & Sterilization

- Clean and sterilize handpieces and burs as soon as practical before first use and after each patient.
- Repeated processing has minimal effect on this handpiece. End of life is normally determined by wear and damage due to use.

Dental Advisor reference: Yapp, R., Cowen, M., & Powers, J. (2016). *Handpiece Torque vs. Speed Performance (Rep.)*. Anne Arbor, MI: The Dental Advisor Microbiology Research Center. On file with StarDental.

StarDental[®] Instrument Solutions

CAUTIONS	<p>Do not exceed 135°C To prevent damage to the bur, use an autoclavable bur block.</p> <p><u>Do not use</u></p> <ul style="list-style-type: none"> • dry heat sterilizer • cold sterilizers • ultrasonic cleaners • chemical disinfectors • surgical milk • surface wipes • hand soaps • detergents • immersion techniques • sterilizer bags • surface sprays combining disinfectants 		
INSTRUCTIONS			
1. Cleaning	<p>Automated washer-disinfectors are not recommended.</p> <p><u>Cleaning Handpieces:</u></p> <ul style="list-style-type: none"> • Remove debris from external surfaces using a small brush and isopropyl alcohol. • Clean internal surfaces of the handpiece at the swivel connection location using a small brush and isopropyl alcohol. • Optical surfaces can be cleaned with a cotton swab soaked in isopropyl alcohol. • Dry thoroughly. Repeat after each patient. <p><u>Cleaning Diamond Burs:</u></p> <ul style="list-style-type: none"> • After each use, clean the diamond bur by running it against a wet diamond cleaning stone. • To mechanically clean, the diamond bur should be held in a solution of either enzymatic presoak, Sparkl[®] Dental Instrument Cleaner StarDental[®] Part# 205472, or water. • Rinse the bur thoroughly and allow it to dry, then sterilize – see sterilization section. 		
2. Lubrication	<p>Lubricate - For Lubricated Handpieces ONLY - See 'Lubrication' instruction section</p>		
3. Packaging	<p>Single: A standard sterilization packaging material must be used. Ensure that the pack is large enough to contain the handpiece without stressing the seals.</p> <p>In sets: Handpieces 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.</p>		
4. Wrapped Instrument Sterilization	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Gravity Type Autoclave:</u></p> <ul style="list-style-type: none"> • Minimum of 15 minutes at 132° C • Minimum of 30 minutes at 121° C • Do not exceed 135° C </td> <td style="width: 50%; vertical-align: top;"> <p><u>Pre-Vacuum Autoclave:</u></p> <ul style="list-style-type: none"> • Minimum of 4 minutes at 132° C • Do not exceed 135° C </td> </tr> </table>	<p><u>Gravity Type Autoclave:</u></p> <ul style="list-style-type: none"> • Minimum of 15 minutes at 132° C • Minimum of 30 minutes at 121° C • Do not exceed 135° C 	<p><u>Pre-Vacuum Autoclave:</u></p> <ul style="list-style-type: none"> • Minimum of 4 minutes at 132° C • Do not exceed 135° C
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5. Drying	<p>Dry the handpiece for 30 minutes minimum using the sterilization dry cycle and allow the handpiece to cool to room temperature in bag prior to use. If moisture is present, increase your sterilizer dry cycle appropriately.</p>		
6. Storage	<p>Store in bag after sterilization until ready to use.</p>		
MAINTENANCE			
Instructions	<p>Use Junk-Out™ High-Speed Chuck Cleaner Kit (263790) once a week prior to sterilization to ensure optimum working condition of the chuck. Instructions for cleaning the chuck are included in the Junk-Out kit.</p> <p>See Turbine Replacement section of this manual for additional information.</p>		