



OPERATION AND MAINTENANCE INSTRUCTIONS

For Professional Use Only

Please read and follow these simple instructions so that you may enjoy years of dependable service.

PROMETHEUS Couplers



#PRO-KLEDQDS:

Self Contained LED Swivel Coupler for Kavo

#PRO-SLEDQDS:

Self Contained LED Swivel Coupler for Star

#PRO-NLEDQDS:

Self Contained LED Swivel Coupler for NSK

#PRO-4HLEDQDS:

Self Contained LED Coupler Adapts 4 hole tubing to 5 Hole Handpiece

#PRO-2HLEDQDS:

Self Contained LED Coupler Adapts 2/3 hole tubing to 5 Hole Handpiece

OPERATION INSTRUCTIONS

Product Specifications:

This LED coupling is an accessory to a dental handpiece, designed for coupling the supply hose to compatible fiber optic dental handpieces. Follow the handpiece manufacturer's directions for air supply pressure, but do not exceed 40 psi as it could cause damage to internal components. Use an air pressure gauge to adjust the pressure to the appropriate psi as recommended in the specific handpiece manual.

Installation and Operation:

All models of the Prometheus fiber optic LED coupler are designed to connect to any ISO-B (4 hole), ISO-B (5 hole) and ISO-C (6 pin) type tubing (except PRO-2HLEDQDS which is designed for ISO-A (2/3 hole) tubing). The coupler and handpiece must be supplied with a clean and dry air supply. Moist and/or dirty air from the compressor can damage internal components.

Before first use and after each use prepare and sterilize the device if needed.

Connect Tubing, Coupler and Handpiece:

Connect: Align and insert tubes of coupler into the connector holes of tubing and screw the coupler onto the handpiece hose. **IMPORTANT:** firmly tighten the coupler onto the tubing to avoid water leakage and to ensure proper functioning.

For Kavo and Star type connections, firmly press handpiece onto coupler until it clicks into place. For NSK type connections, pull back locking ring and insert handpiece into coupler. The locking ring should spring back fully into place around the handpiece. The handpiece must be fully locked onto coupler in order to avoid handpiece release during treatment. For fixed back 5 hole style handpieces, screw the coupler nut onto the handpiece until it firmly stops. Pull on the handpiece before treatment to ensure a secure lock between coupler and handpiece.

Note: The coupler tubing connection may loosen over time, resulting in water leaks and/or loss of power. Check for tightness periodically. For NSK and Star type, the couplers have threaded joints in the middle that can loosen over time, and should be kept firmly screwed together at all times.

CLEANING AND CARE



Your Prometheus Coupler has high precision internal parts. Incorrect maintenance and care can shorten the life of this product.

External Cleaning

Remove coupler from handpiece and tubing and clean the external surface thoroughly with a sponge or gauze using warm tap water. **DO NOT IMMERS**E COUPLER. Wipe dry with a clean cloth or use syringe air.

Clean Internal Surface

Use an aerosol spray lubricant like Johnson-Promident DCL-90 to spray into the back end of the coupler in the exhaust tube (the largest tube) for 2-3 seconds. Run the coupler for 20 seconds so that all excess fluid is expelled. This ensures internal moving parts of coupler are cleaned and lubricated. Daily lubrication will ensure the smooth consistent operation of your coupler.



Sterilization

Note: The device must be sterilized before the first use and after every use.

132° C

Place coupler into autoclave bag or pouch. Cycle per autoclave manufacturer's instructions. Couplers should be processed in an autoclave set at 132°C for a minimum of 15 minutes. DO NOT EXCEED 275°F (29 psi)/ 135°C (2 bar) and/or 20 minutes. Allow coupler to cool down to room temperature before use.

Troubleshooting: If your coupler is leaking, clogged or will not light up, please use the following guide:

Problem: Water is leaking around coupler

Solution: Check to be sure coupler is tightly threaded onto tubing to ensure gasket seal. Check all O-rings and gasket for wear or brittleness and replace. Seals wear with use and must be replaced periodically.

Problem: Little or no water spray

Solution: Check to see if water sprays out of coupler without handpiece attached. If so, handpiece water line is clogged. If water sprays from tubing directly but not through coupler, then coupler water spray tube is clogged and can be cleared by inserting thin wire in and out of water spray hole to dislodge debris.

Problem: Light has become dim or yellowish

Solution: Check that fiber optic bundles on handpiece are clean and in good condition by holding handpiece up to light and making sure fiber optic is clear. You can use a cotton swab with a very small amount of isopropyl alcohol to carefully clean light

source on coupler. Be sure that the coupler is firmly seated onto tubing and that all O-rings and gaskets are in place so that no air is leaking and that air pressure is set properly.

Problem: No light

Solution: Make sure coupler is firmly attached to tubing and that adequate air pressure is flowing (32-40 psi). **A handpiece must be attached to the coupler for light to function.** Repeat lubrication process and ensure adequate and thorough lubrication. The LED chip is not user-serviceable and must be sent to Johnson-Promident for service.



CAUTION

DON'T immerse instrument in water or use ultrasonic cleaner.

DON'T use any type of disinfectant, chemical or soap on instrument. Use of chlorine products, aldehydes, etc. will damage coupler and void all warranties.

DON'T exceed 275°F (29 psi)/ 135°C (2 bar) in autoclave.

DON'T dry heat or heat transfer sterilize.

Limited Warranty

Johnson-Promident warrants couplers for 1 year from date of purchase. O-rings and seals are specifically excluded from this warranty. Warranties cover manufacturing defects only and do not cover defects and their consequences that arise from improper handling, cleaning or maintenance, natural wear, improper handling, or non-compliance with operating, maintenance or installation instructions, calcination or corrosion, contaminated air or water supplies or chemical factors deemed impermissible in accordance with instructions. Liability is limited to repair or replacement of the defective product at our sole discretion.



Johnson-Promident

618 Corporate Way Unit 1
 Valley Cottage, NY 10989
P: 845-589-0210 **F:** 845-589-0211
 info@johnsonpromident.com

Revision 1 October 2015