LIGHT SOURCE SYSTEM DESCRIPTION

The Johnson-Promident light source system is a complete installation designed to provide high intensity pure white light for use with ISO-B (5 Hole) style air driven dental handpieces. The light is generated by a ultra-high pressure (UHP) lamp module that is connected directly to the back end of the handpiece. The lamp module has very specific electrical characteristics that are matched to the power supply. Under NO circumstances should a lamp module be used that is not an original manufacturer’s part.

The power supply consists of a power pack and a wall transformer. The power pack is capable of operating a single tubing connected to one handpiece. If multiple handpieces are to be used, contact Johnson-Promident to inquire about power packs that are capable of operating up to four handpieces. The power pack is voltage regulated and factory set to the proper voltage to operate the UHP lamp module. Other power supplies are NOT compatible with this lamp module and should NOT be used under any circumstances.

Likewise, the wall transformer is specific to this system and should never be replaced with any other device even if an alternate device seems to have the same output specifications as the original transformer. To do so would most likely over or under power the UHP lamp which requires exact electrical criteria in order to provide high light output and maximum life expectancy.

Also part of the light source system is the four hole dental tubing that connects to the handpiece. The tubing contains two small diameter electrical wires that provide power transmission to the UHP lamp module. The wires have a certain resistance that is an important factor to proper lamp voltage. During installation, NEVER shorten the electrical wires. Equally important, NEVER substitute any other tubing in place of the original style supplied.

5 HOLE HANDPIECE INSTALLATION

This system is used for connections to any brand of 5 hole style fiber optic handpiece or handpieces that have swivel couplers that have a 5 hole configuration.

ULTRA SIMPLE INSTALLATION (2 Minutes)

Please note: we have already assembled most of the system for you. There are thin wires already connecting the tubing, power pack, and transformer, so carefully cut the zip tie while holding these items together and follow steps 1-3.

SIMPLE INSTALLATION (Less than 5 minutes)
(follow if any wires come apart when opening package or during assembly)

Step 1: The light source is supplied with tubing that on one end has an Interface Fitting (IF) – see picture. The Interface Fitting is used to connect the new light source tubing to the existing dental unit tubing. Just outside the dental unit, use scissors to cut the existing tubing 1-2 inches below the point that it exits the bottom of the enclosed unit.

Step 2: Push the four Interface Fitting barbs onto the end of the old tubing that was just cut. To ease installation, ONLY warm water or alcohol may be used as a lubricant. If components are disassembled or come apart when opening packaging, there will be two electrical wires and a clear air sensing tube that will be still left hanging from the Interface Fitting after connecting the tubes.

Step 3: Locate the power pack in a convenient position that is within the reach of the tubing wires and air sensing tube. Remove self-adhesive backing and mount power pack on smooth surface. Be sure there is a functional outlet from which the 14-foot wall transformer cord may be routed.

Step 4: Following the connection diagram below, connect the two wall transformer wires, two tubing wires and the air sensing tube to the power pack. There is no necessary orientation to the transformer or tubing wires, but they must be connected to the proper labeled terminals as shown. Insure that all connections are secure and plug the wall transformer into an outlet.

Slide the light source tubing connector nut back to expose the lamp module. Plug in a UHP lamp module (included). Be sure the module is correctly aligned to avoid bending the electrical pins. Plug the handpiece into the lamp module carefully aligning air and water tubes. Slide the connector nut over the module and tighten securely on the handpiece. Activating the handpiece will now activate the light. After stopping the handpiece, a delay of 10 seconds will be noticed before light will automatically deactivate.