

# Fiber-Optic Connector Cleaning Instructions



#### **CAUTION:**

Proper operation of this equipment requires clean optical fibers. Dirty fibers will adversely affect performance. Proper cleaning is imperative.

The proper procedure for cleaning optical connectors depends on the connector type. The following describes general instructions for fiber-optic cleaning. Use your company's established procedures, if any, but also consider the following.

Cleaning fiber-optic connectors can help prevent interconnect problems and aid system performance. When optical connectors are disconnected or reconnected, the fiber surface can become dirty or scratched, reducing system performance.

Inspect connectors prior to mating, clean as needed, and then remove all residue. Inspect connectors after cleaning to confirm that they are clean and undamaged.

## **Recommended Equipment**

- CLETOP or OPTIPOP ferrule cleaner (CLETOP Type A for SC, Type B for LC)
- Compressed air (also called "canned air")
- Lint-free wipes moistened with optical-grade (99%) isopropyl alcohol
- Bulkhead swabs for LC or SC type connectors (choose appropriate type)
- Optical connector scope

# Tips for Optimal Fiber-Optic Connector Cleaning

- Do not connect or disconnect optical connectors with optical power present.
- Always use compressed air before cleaning the fiber-optic connectors and when cleaning connector end caps.
- Always install or leave end caps on connectors when they are not in use.
- If you have any degraded signal problems, clean the fiber-optic connector.
- Advance a clean portion of the ferrule cleaner reel for each cleaning.
- Turn off optical power before making or breaking optical connections to avoid microscopic damage to fiber mating surfaces.

## To Clean Optical Connectors



### Warning:

- Avoid personal injury! Use of controls, adjustments, or procedures other than those specified herein may result in hazardous radiation exposure.
- Avoid personal injury! The laser light source on this equipment (if a transmitter) or the fiber cables connected to this equipment emit invisible laser radiation.
- Avoid personal injury! Viewing the laser output (if a transmitter) or fiber cable with optical instruments (such as eye loupes, magnifiers, or microscopes) may pose an eye hazard.
- Do not apply power to this equipment if the fiber is unmated or unterminated.
- Do not stare into an unmated fiber or at any mirror-like surface that could reflect light emitted from an unterminated fiber.
- Use safety-approved optical fiber cable to maintain compliance with applicable laser safety requirements.

**Important:** Ensure that no optical power is present prior to this procedure.

Turn optical power off to the connector.

Using an optical connector scope, inspect the connector for scratches, burns, or other signs of damage.

**Note:** If the connector is damaged, replace the jumper.

If the connector requires cleaning, swipe it across the face of the appropriate ferrule cleaner several times. This will remove dust and some films.

**Note:** You may hear a slight "squeak" while cleaning the connector, indicating that it is clean.

Inspect the connector again. If the connector requires further cleaning, clean it using 99% isopropyl alcohol and a lint free wipe.

Swipe the connector across the face of the appropriate ferrule cleaner several more times to remove any film left by the alcohol.

Repeat all the steps above as needed until the connector i



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