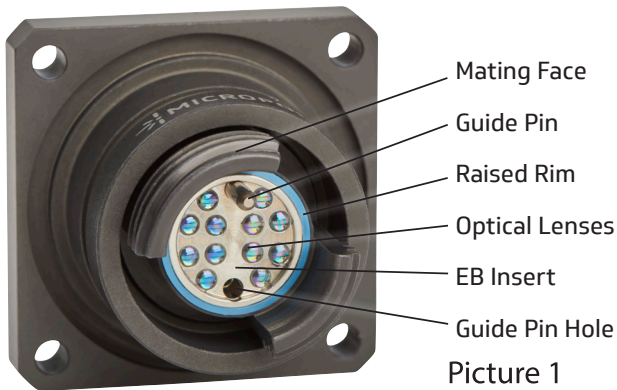


# EXPANDED BEAM - CLEANING & SAFETY INSTRUCTIONS



## 1. INTRODUCTION

This instruction covers the cleaning procedure for the expanded beam (EB) connectors and its optical interface (mating face, optical path lenses, EB insert and alignment features).

These connectors are non-contacting; therefore, mating the connector without cleaning first typically will not cause permanent damage to the optic interface.

## 2. DESCRIPTION

For optimum performance of the connector, it is important that the optical interface of the connector is clean and dry.

The optical interface of the connector should be cleaned when it is touched, or otherwise contaminated with dirt, oils, grease, or moisture.

A microscope is not needed for the cleaning procedure.

### NOTE



NOTE! Cleaning the optical lenses is similar to cleaning eyeglass lenses.

### CAUTION



To avoid scratches on the optical lenses, use only light pressure when wiping them.

### DANGER



To avoid personal injury, NEVER look into the end of terminated or unterminated optical fibers. Laser radiation is invisible but can damage eye tissue.

Never inspect or look into the end of a fiber when optical power is applied to the fiber. The infrared light used, although it cannot be seen, can cause injury to the eyes.

## 3. CLEANING PROCEDURE

The following materials are recommended for the cleaning procedure. Follow the safety guidelines packaged with the materials.

- Fresh water
- Dish washing liquid
- Cleaning wiper
- Clean dry air
- Fiber Optic Splice & Connector Cleaner (POC3M)

Clean the connector according to the following:

1. If the connector is covered with excessive dirt and debris, wash the connector using fresh water. If oil or grease is present, wash the connector using dish washing liquid and fresh water. Rinse clean using fresh water. If used in salt water, rinse the connector with fresh water after each exposure.
2. Remove the protective cap from the connector to expose the optical interface. Then:
  - a. If the optical interface appears relatively clean, proceed to Step 3.
  - b. If the optical interface is contaminated with excess dirt, oil, or grease, wash the optical interface including the guide pin and guide pin hole using dish washing liquid, fresh water, and small swabs until clean. Refer to Picture 1. Rinse with fresh water. Blow dry with clean dry air.
3. Moisten the tip of a large swab with the Fiber optic Splice & Connector Cleaner (POC3M), then using a back-and-forth or swirling motion, wipe the guide pin(s), optical lenses, raised rim inside the EB insert, any exposed threads, and if applicable, the front seal. Refer to Picture 1.
4. Moisten the tip of a small swab with the Fiber Optic Splice & Connector Cleaner (POC3M) then using a back-and-forth or swirling motion, wipe the guide pin hole. Refer to Picture 1.
5. Blow clean dry air over the optical lenses until remaining solvent and stray particles are removed.
6. Visually inspect the optical lenses and guide pin hole to make sure any contamination is removed. If necessary, repeat steps 3, 4 and 5 until the optical lenses and guide pin hole are clean.
7. Re-install the protective cap or mate the connectors immediately to prevent contamination to the optical interface.

## 4. REPLACEMENT AND REPAIR

DO NOT use any damaged or defective components.  
DO NOT attempt to re-use the crimp support, crimp sleeve, or ferrule assembly by removing the fiber.

