

Cleaning Procedure for Expanded Beam (EB) Connectors and Inserts

Instruction Sheet

PRO BEAM Series EB Cable Plug and Bulkhead including styles M83526/20, M83526/21, and MFOCA



38999 Series III Type



Blind-Mate EB Insert used in General Purpose Rectangular (GPR) ARINC 600 & 404, and VITA 66.3



Figure 1

1. INTRODUCTION

This instruction sheet covers the cleaning procedure for the EB connectors shown in Figure 1, which includes the 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.



Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

2. DESCRIPTION

For optimum performance of the connector, it is important that the optical interface of the connector be 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.

3. CLEANING PROCEDURE

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

- clean water
- dish washing liquid
- TEXWIPE TX759B (large) and TX770E (small) MicroAbsorbant swabs or equivalent
- clean dry air
- isopropyl alcohol (99%) or acetone

Clean the connector according to the following:



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

- 1. If the connector is covered with excessive dirt and debris, wash the connector using clean water. If oil or grease is present, wash the connector using dish washing liquid and clean water. Rinse clean using clean water.
- 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, clean water, and small swabs until clean. Refer to Figure 2. Rinse with clean water. Blow dry with clean dry air.
- 3. Moisten the tip of a large swab with the isopropyl alcohol (or acetone), then using a back-and-forth or swirling motion, wipe the guide pin(s), optical path lenses, raised rim inside the EB insert, any exposed threads, and if applicable, the front seal. Refer to Figure 2.



Cleaning the optical path lenses is similar to cleaning eyeglass lenses.



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

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- 4. Moisten the tip of a small swab with the isopropyl alcohol (or acetone), then using a backand-forth or swirling motion, wipe the guide pin hole(s). Refer to Figure 2.
- 5. Blow clean dry air over the optical path lenses until remaining solvent and stray particles are removed.
- 6. Visually inspect the optical path lenses and guide pin hole(s) to make sure any contamination is removed. If necessary, repeat Steps 3, 4, and 5 until the optical path lenses and guide pin hole(s) are clean.



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.

7. Re-install the protective cap or mate the connectors immediately to prevent contamination to the optical interface.

4. REPLACEMENT AND REPAIR

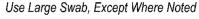
Kit components are not repairable. DO NOT use any damaged or defective components. DO NOT attempt to re-use the crimp support, crimp sleeve, or ferrule assembly by removing the fiber.

Order replacement parts through your TE Connectivity representative, or call 1-800-522-6752, or use the LIVE CHAT on the www.te.com website.

5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated document to current corporate logo requirements
- Modified Figure 1 reference to M83526 connector styles and added MFOCA style



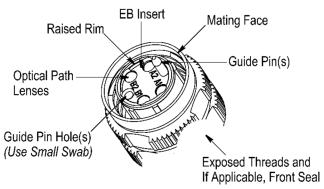


Figure 2