Required Steps for Fiber Optic Connector Mating

Technical Bulletin

Overview

In a study conducted by NTT-Advanced Technology, 98% of installers reported that issues with connector cleanliness were the greatest cause of network failure.

All fiber optic connectors should be inspected with a microscope and cleaned if necessary before being mated (inserted into a patch panel adapter/bulkhead or transceiver).

If a microscope is not available, the connector must be cleaned before being mated.

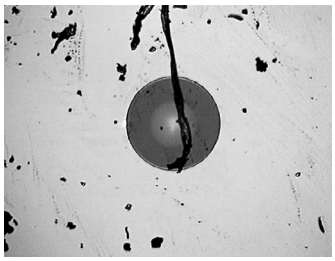
Inspect the Connector with a Microscope If Possible

Attach the correct connector probe tip to a microscope.

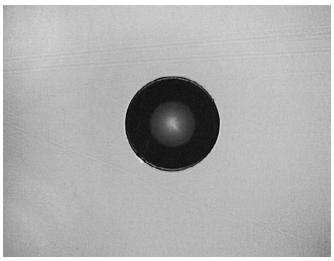
If using a Senko Smart Probe, connect the microscope to the app on the viewing device. Ensure the proper app settings are enabled for the connector type you are inspecting if you would like the software to analyze the endface for defects.

Remove the protective cap from the connector, insert the microscope onto the connector and focus the image.

Review the image displayed and ensure there are no pits, scratches, or contaminants.



Dirty Endface



Clean Endface

Clean the Connector If It Is Contaminated or If No Microscope Is Available

If using a reel-type cleaning cassette, rotate the reel on the cassette so only clean material is showing.

With the protective cap removed, grab the connector housing and orient the connector endface parallel to the cleaning material.

Push the connector endface onto one side of the cleaning material and drag the endface across the cleaning material while maintaining light pressure.

Repeat this process on another unused area of the cleaning material.

Check the connector with a microscope again to see if it is clean. If the connector is not clean then repeat the cleaning and inspection process until it is clean.

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ARIA TECHNOLOGIES, INC.
Fiber Optic Connectivity©

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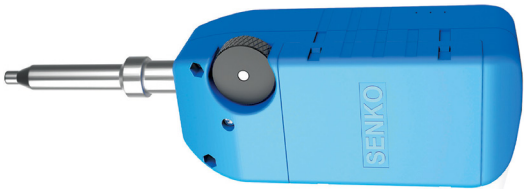
Additional Notes

- Cleaning the connector will not remove scratches or pits from the endface and the cable may have to be replaced if these defects are present.
- Mating a dirty or damaged connector to a clean connector can transfer the contaminants and damage the connector.
- If the connector in an adapter is dirty, additional probe tips will be needed for inspection and a push click type cleaning tool will be needed for cleaning.

Recommended Tools

Cletop Type-A Reel-Type Cleaning Cassette
P/N: 840-5890
6 Replacement Reels P/N: 910-0058

Senko Microscope Probe Tips
SC Adapter P/N: SCK-SPT-SC
SC/APC Adapter P/N: SCK-SPT-SCAPC
SC/APC Connector P/N: SCK-SPT-APC250
LC Adapter P/N: SCK-SPT-LC
LC/APC Connector P/N: SCK-SPT-APC125
Singlemode MPO Adapter P/N: SCK-SPT-MPO-APC
Multimode MPO Adapter P/N: SCK-SPT-MPO
ST Adapter P/N: SCK-SPT-ST
FC Adapter P/N: SCK-SPT-FC
MU Adapter P/N: SCK-SPT-MU
1.25mm Connector (Comes with Probe): SCK-SPT-PC125
2.5mm Connector (Comes with Probe): SCK-SPT-250



Senko Smart Probe Fiber Optic Microscope
Includes Non-APC 2.5mm (SC) & 1.25mm (LC) Connector Tips
P/N: SCK-VM2000-01

WiFi Enabled Android, iOS, or Windows Device with SENKO VUE2 App Installed for Viewing Microscope
App download links at the bottom of the following page:
http://www.senko.com/smartprobe/

US Conec IBC Brand Push Click Type Cleaning Tool
1.25mm (LC) P/N: 920-0307
2.5mm (SC) P/N: 920-0306
MPO P/N: 920-0507

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