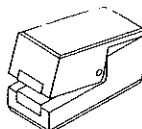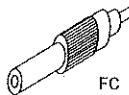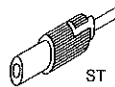# Newport

# Bare Fiber Adaptor Kit

## Kit Contents

Each kit includes an Adaptor Body, Vial of Clean-out Wire, FC, ST & SC Connector Modules, Universal Mating Sleeve and a Universal Fiber Stop. *The Universal Mating Sleeve will link together any 2.5mm ferrule or ST, FC,SC, DIN & E2000 connectors in any combination. See "Alternative Set Up" on the other side of this sheet for use with the Bare Fiber Adaptor. The Fiber Stop is designed to assist in aligning a bare fiber flush with the end of the face of a fiber optic connector.*
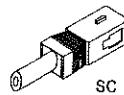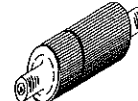


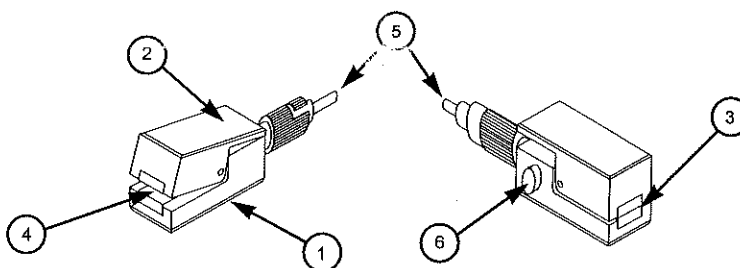Adaptor Body     FC, ST & SC Connector Modules     Universal Mating Sleeve     Fiber Stop

## Part Identification

*1. Adaptor Body, 2. Pressure Foot, 3. Foam Padding, 4. Fiber Entry Hole, 5. Connector Module(s) (Tip), 6. Thumb Screw*



## Assembly

*To assemble your Bare Fiber Adaptor, remove the adaptor body from the case. Insert a connector module into the end of the adaptor body. Tighten the thumb screw to secure the connector module in adaptor body.*

## Instructions

**CAUTION**    *Always use protective eye wear when working with Bare and Active Fiber.*

**1.** Break fiber out to 900uM or less. Strip buffer and cleave fiber leaving approximately .55" / 14 mm of exposed glass. **NOTE:** *The use of a quality cleaver will result in a better temporary connection and prevent the possibility of fiber end damage.*

**2.** Clean fiber with alcohol or cellophane tape to remove any debris/dust. Open end of the Bare Fiber Adaptor by pushing down on the **pressure foot**. Insert fiber into **entry hole** and push through until fiber comes out the end of the connector (Figure 1). Pull fiber back slowly until *flush with connector face. *See Fiber Stop accessory on back if having difficulty getting fiber flush.*
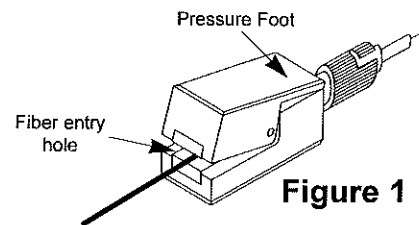


Pressure Foot

Fiber entry hole

**Figure 1**

**3.** Slowly release the pressure foot on the Bare Fiber Adaptor securing the fiber between the foam pads. Connect to apparatus. CAUTION: To reduce the possibility of fiber end damage or damaging test equipment, be sure fiber is not protruding from connector face when connecting to apparatus (Figure 2 & 3).
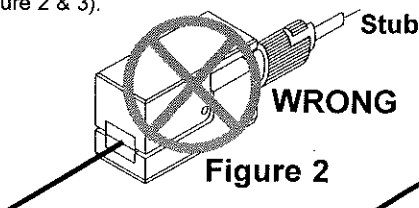


Stub     Flush
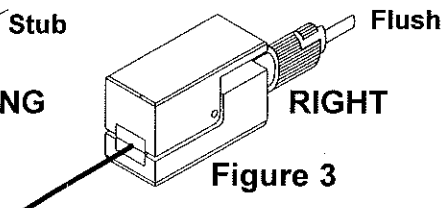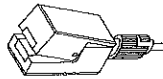
**WRONG**     **RIGHT**

**Figure 2**     **Figure 3**

## Alternative Setup

Connect the Bare Fiber Adaptor to a jumper/patch cable using the Universal Mating Sleeve enclosed in the kit. Connect and disconnect the end of jumper cable to test apparatus. This setup allows for the flexibility of multiple connections of one cleaved fiber, connecting to OTDR's and is also useful when connecting to hard to reach connector ports.

Connect to end of patch/jumper cable, then connect other end of patch/jumper cable to apparatus.
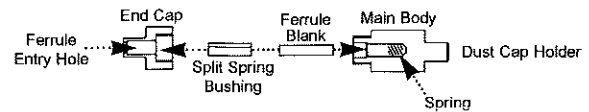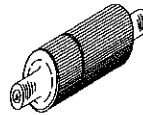
## Fiber Stop

In certain environments it can be difficult to determine if a fiber is flush with the end of the connector face of a Bare Fiber Adaptor. The flushness of the fiber is one of the determining factors associated with the quality of the connection. In some cases if the fiber is protruding from the ferrule, damage could result to the fiber end and possibly to the detector or lens of the test equipment. The Fiber Stop is an accessory used with the Bare Fiber Adaptor to assist in aligning the fiber flush with the connector ferrule.

Follow step 1 on the other side. Then, open the end of the Bare Fiber Adaptor by pushing down on the pressure foot. Insert fiber into entry hole and push through until fiber comes out of the end of the connector (Figure 1 on other side). Pull fiber back approximately 1/2 the length of the ferrule. Release the pressure foot to secure the fiber.

Remove dust cap from the **Fiber Stop** enclosed in the kit. Slide the **Fiber Stop** onto the ferrule of an ST, FC, SC or DIN Bare Fiber Adaptor until it stops. Press down on the pressure foot and slowly push the fiber forward. Once the fiber stops release the pressure foot securing the fiber between the foam pads.

Remove the **Fiber Stop** from the Bare Fiber Adaptor and replace the dust cap over the ferrule entry hole. Connect the Bare Fiber Adaptor to apparatus.

## Clean-out

To clean-out a broken fiber or debris, unscrew the thumb screw and remove the connector module from the adaptor body. Using the clean out wire supplied, insert the wire into the connector tip, see below, until you can push it all the way though the connector. Sometimes tapping the side of the connector shaft after running the wire through will assist in clearing the connector module. Place the connector module back into the adaptor body and tighten the thumb screw.

◄·········· **Insert Clean-out Wire into ferrule end.**

Clean foam pads and face of connector after each use if needed. Remove all debris or gel if used. Keep connector ferrule covered when not in use. Do not leave fiber in adaptor when not in use.

## Fiber Diameters

Color Code located on connector shaft.
YELLOW:   Singlemode
BLACK:    Multimode

*The identification dot is usually aligned with the key mark on the connectors.*

## Troubleshooting

**FIBER DOES NOT COME OUT END OF CONNECTOR**
❑ Make sure dust cap is removed.
❑ Check the length of your bare fiber. At least .55" / 14 mm of bare fiber should be exposed after cleaving.
❑ Make sure connector module is not clogged with debris. Remove connector module from adaptor body. Try inserting the fiber directly into the connector module. If fiber still does not go through, clean connector module out with clean-out wire. Refer to "Clean out" (above) for proper cleaning instructions.
❑ Verify fiber size. (Singlemode vs. Multimode)

**GETTING HIGH LOSS OR NO READING WHEN CONNECTING TO APPARATUS.**
❑ Check to make sure fiber is flush with connector face. If you are unable to get flush, try using the Alternative Setup (shown above) using the Universal Mating Sleeve and a patch cable or the Fiber Stop.
❑ You may have a bad cleave. Recleave your fiber and try again. The majority of problems are directly associated to the quality of the cleave.
❑ Make sure the end of your fiber is free of dust and/or debris as well as the connector port on the apparatus. MAKE SURE FIBER IS NOT ACTIVE WHEN INSPECTING FIBER ENDS. ALWAYS WEAR PROTECTIVE EYE WEAR!

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