



NOYES[°] DFS1 Adapter Tips: How do I change adapter tips?



Introduction

AFL

A DFS1 Digital FiberScope consists of the probe body and an adapter tip. A wide variety of adapter tips enables the DFS1 to be used with the many types of fiber optic connectors in use today.

The most common DFS1 user issue occurs during an adapter tip change. It is easy for a user to forget that it is the adapter tip **locknut that turns**, and not the adapter tip, in a different direction than one might expect when installing or removing them on the probe. Others have struggled by turning the locknut in the wrong direction and then found it so tight that tools are required to undo the locknut.



This sales brief describes the correct way to remove and attach DFS1 adapter tips.



Test and Inspection

Application Note

Overview of the DFS1 tips

Removing tips

The first step is to remove the Probe Dust Cover. Probe tips are held in place with a knurled locknut. If another probe adapter tip is already installed and must be replaced, remove the installed adapter tip as follows:

• Holding the probe with the tip facing up, turn the captive knurled knob at the base of the adapter tip (A) in the clockwise direction. (The **tip cannot rotate**, only the locknut, barrel, or collar, on the probe can be turned.) Once the knurled knob is fully unscrewed from the adapter tip, it will be free to slide down the probe base.

NOTE: Do NOT use tools on the collar. If you think you need a tool you are doing it wrong!

- Remove the adapter tip by pulling it gently straight off the probe base.
- Now that the tip is removed, this is a good time to inspect the lens that is in the end of the probe. It should not normally be necessary to clean the lens. If the lens has somehow become contaminated, use canned air if it's a dust type of contamination, or alcohol and a cleaning swab if something is stuck on it. Avoid using anything abrasive which might scratch the lens or anything that might cause corrosion.

Installing tips

This is the most important part of this process. All tips have a slot **B** and fit into the alignment key **C** at the top of the probe. While holding the unit with the probe facing up, note the alignment key on probe base, and then rotate the adapter tip to be installed until its keying slot is aligned **D** with the key on the probe base. Now gently slide the adapter tip onto the probe base. While holding the adapter tip in place with one hand, use the other hand to push up and turn the threaded locknut counter-clockwise onto the threads at the base of the adapter tip. **Do not over tighten; gentle pressure is the key**.

The DFS1 is now ready for use with an AFL M-Series OTDR (M210, M310, M700), a C-Series OTDR or Certification Tester (C840, C850), on the FOCIS inspection system, or a PC running SimpleView software.

Takeaway points

- The DFS1 tips screw on in the opposite direction from what most people are used to doing
- It just takes a gentle effort to install or uninstall the tips
- Make sure the key is aligned before turning the locking knurled ring to secure the tip
- Do not over tighten the adapter tip locknut
- The Tips neither screw on or off. The locknut, barrel, or collar is the only part of the probe that turns!

NOTE: Each adapter tip is engraved to help identify the type of connector it is designed to be used with. Consult the <u>DFS1 Adapter Tip Selection Guide</u>, available from the <u>DFS1 web page</u> on <u>www.AFLglobal.com</u>, for a list of available adapter tips and the identifying engraving found on each.





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