

## OPTIC-3 and -4 Column Installation Instructions

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Installing the analytical capillary column in the OPTIC inlet should be done in the correct way. The column part that is inserted into the inlet should have the correct length and the column end should be cut properly. The general column installation procedure is depicted in Fig. 1 below.

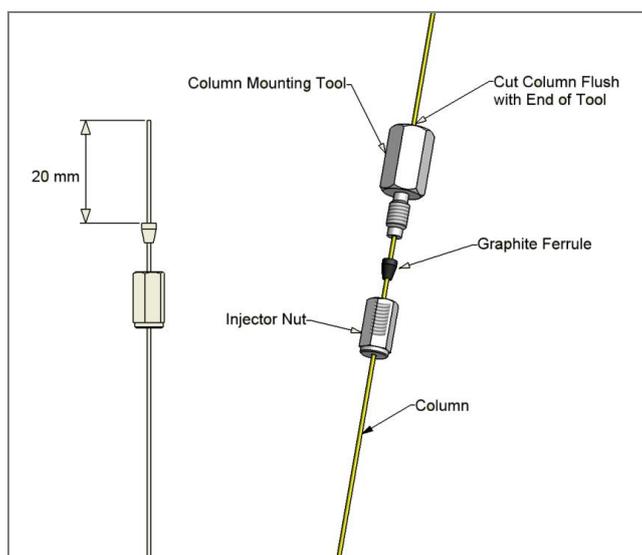


Fig. 1 Column Installation Overview

The column cutting can be done with a ceramic column cutter or with the Shortix Column Cutter (Fig. 2).



Fig. 2 Ceramic Column Cutter (left) and Shortix Column Cutter (right).

Install a column using proper ferrule, nut and the column mounting tool. Push the column through the inlet nut and ferrule (Fig. 3). **The cone of the ferrule should go into the nut!** Avoid the use of the Vespel ferrules as these are causing leaks with the OPTIC inlet.

In the case you have only a **ceramic cutter**, insert the column into the column mounting tool so that it protrudes approx. 15 mm from the end. Tight the nut and cut the protruding end of the column flash with the end of the tool. Use two wrenches - the OPTIC wrench supplied and an adjustable one. Remove the nut with the capillary column from the tool.

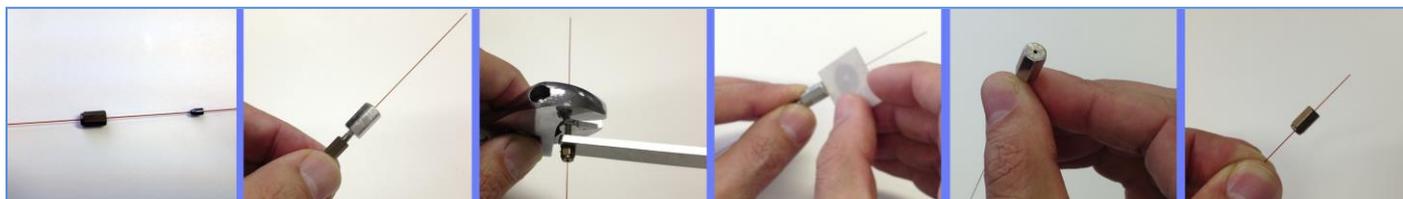


Fig. 3 Column Installation Preparation with Ceramic Cutter

In the case you have a **Shortix cutter**, insert the column into the column mounting tool and push it through in order to have enough length to cut the column with the Shortix cutter. Read the Shortix user guide before installation. After cutting the column retract the column so that the column end is flush with the end of the tool and tighten the ferrule around the column. Remove the nut with the capillary column from the tool.



Fig. 4 Column Installation Preparation with Shortix Cutter

Insert the column into the inlet and secure it by hand tightening the nut. Use the wrench supplied to turn it additional half turn.

When installation is completed, all connections should be leak tested with an electronic gas leak detector (e.g. [LD-239](#))

#### CAUTIONS!



**Do not to tighten the inlet base nut excessively. It is very fragile and can be damaged easily.**

**Under no circumstances should a soap solution or similar be used for a leak detection, as this may contaminate the inlet and the column.**

#### NOTE!

**Use a nut for metal ferrules in case a metal ferrule is used.**

**Never use Vespel ferrules to install a column on the OPTIC.**

<b>Part number</b>	<b>Description</b>
2406-2039	OPTIC 3 and 4 Column Mounting Jig (standard supplied with OPTIC-4)
2406-2048	Key for OPTIC Inlet Bottom Nut (standard supplied with OPTIC-4)
2406-1003	OPTIC Graphite Ferrule for 0.53 mm ID Column, pk/10
2406-1004	OPTIC Graphite Ferrule for 0.1 - 0.32 mm ID Column, pk/10
2406-2047	OPTIC Stainless Steel Inlet Bottom Nut, pk/5 (one supplied with OPTIC-4)
2406-2049	OPTIC Inlet Bottom Nut for Metal Ferrule, pk/5
2406-1005	OPTIC Inlet Metal Ferrule, Column ID 0.25mm, pk/10
2406-1006	OPTIC Inlet Metal Ferrule, Column ID 0.32mm, pk/10
2406-1007	OPTIC Inlet Metal Ferrule, Column ID 0.53mm, pk/10
1010-41136	Ceramic Column Cutter, 1 piece
A200040	Shortix Column Cutter