

Instructions for Thermo Scientific ISO SilTite FingerTite® kit

Suitable for the following instruments: Trace GC split/splitless injector; ISQ single quadrapole GC-MS.

Introduction



The SilTite FingerTite® fittings system will allow you to install and remove a column without using a wrench. The SilTite FingerTite system is designed to be self installed, the instructions below are written in easy to follow steps.

Packing list

- 5 x SilTite FingerTite nuts female
- 10 x 0.4 mm SilTite FingerTite ferrules
- 2 x Nut 10-32 UNF
- 1 x Adapter injection port
- 2 x Seal injection port
- 1 x Adapter FID
- 1 x SilTite FingerTite ferrule install tool

Instructions

Injector adapter installation

This procedure is no different than cleaning the inlet or replacing the seal or base plate. Do not lose any of the items that are replaced.

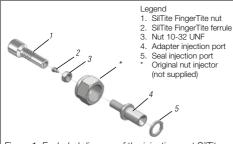


Figure 1. Exploded diagram of the injection port SilTite FingerTite assembly.

- 1. Cool the injector.
- 2. Remove the column and column nut (if attached).
- 3. Remove the thermal insulator at the base of the injector. Unscrew the large nut* assembly at the base of the injector, turn anti-clockwise.
- 4. Remove the seal and capillary adapter assembly. Retain these parts.



Legend

- 3. Nut 10-32 UNF
- 4. Adapter injection port 5. Seal injection port
- Original nut injector (not supplied)

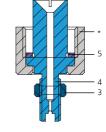


Figure 2. Image of the injector showing the SilTite FingerTite injector adapter assembly.

- 5. Locate the adapter injection port (4), seal (5) and assemble as displayed in Figure 2.
- 6. Insert the adapter injection port into the base of the injector and tighten the nut clockwise.
- Replace thermal insulator using nut (3).

MS adapter installation

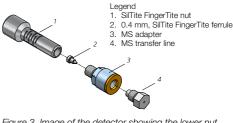


Figure 3. Image of the detector showing the lower nut assembly.

- 1. Make sure the transfer line temperature is cool before you proceed.
- 2. Locate the adapter MS interface (3) and ensure that the seal (3a) is in place. The seal is pre-assembled but may have come loose during transit.
- 3. Using fingers screw the adapter MS interface (3) (brass end - 3b) onto the transfer line until it stops. Using a wrench tighten a further 30° to ensure a good seal. Do not attempt to tighten further as this may damage the mass spectrometer interface.

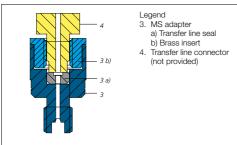


Figure 4. Exploded diagram of the MS SilTite FingerTite assembly.

Column installation





Figure 5. Image of SilTite FingerTite Install tool.

- Slide a SilTite FingerTite nut (1) onto the tubing first, followed by a SilTite FingerTite ferrule (2).
 The flat base of the ferrule aligns with the nut and the cone points to the MS transfer line or injector.
- 2. Using the SilTite FingerTite ferrule install tool displayed in Figure 5, push approximately 20 mm more tubing than required through the install tool. Tighten the nut, using your fingers only to seat the ferrule onto the column there is no need to use excessive force, once the seal is made the tubing will be held firm and will not move. Use a rule to mark the column insertion distance, then cut the column. The distances for column insertion into the injector are in Table 1 and are calculated from the back of the ferrule.

- 3. For MS installation screw the additional MS adapter (3) onto the column installation tool (G1099-20030) supplied with the instrument. With the MS adapter added to the gauge tool it will be the correct length for the modified transfer line. Using the modified column installation tool, push the tube approximately 2 mm past the end of the tool. Tighten the nut, using your fingers only to seat the ferrule onto the column. Alternatively follow the manufacturer's instructions for column insertion without the column installation tool, found in the MDS hardware guide.
- 4. Insert the pre-assembled nut and ferrule into the injector and mass spectrometer and screw in the nut using finger force only – again, there is no need to use excessive force to make a seal. You cannot break the capillary column if you over tighten the ferrule although an over tightened ferrule may stick to the cone of the adapter. To remove an over tightened ferrule, Trajan Scientific and Medical recommends gently levering between the shoulder of the ferrule and the relevant adapter. Under no circumstances are wrenches or pliers to be used on these fittings.

Injector/Detector	Distance (mm)
Detector	7.5 - 9.5
Split	59
Splitless	85

Table. 1 Column measurements for correct assembly.

Information and support

Visit www.trajanscimed.com or contact techsupport@trajanscimed.com

Specifications are subject to change without notice.