

Instructions for Thermo Scientific DSQ/DSQII SilTite FingerTite® kit

Suitable for use with Thermo Scientific DSQ/DSQII; Mass Spectrometer with either Trace GC (not for 1300 injector) or Focus GC.

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
- 2 x Adapter MS assembly
- 2 x MS blanking ferrules
- 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.

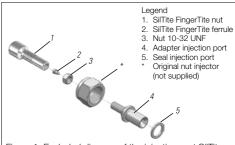


Figure 1. Exploded diagram of the injection port SilTite FingerTite assembly.

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

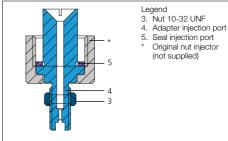


Figure 2. Image of the injector showing the SilTite FingerTite injector adapter assembly.

- 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.
- 7. Replace thermal insulator using nut (3).

MS adapter installation

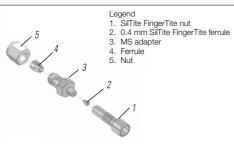
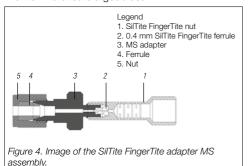


Figure 3. Exploded diagram of the MS SilTite FingerTite adapter assembly.

- Remove the original MS adapter by unscrewing the nut at the back of the fitting, then sliding the fitting, ferrule and nut off the 1/8" tube. Retain these parts.
- 2. Locate the SilTite FingerTite adapter MS assembly. Locate the MS adapter interface (3) and put the nut (5), then Graphite Vespel® ferrule (4) onto the 1/8" tube then using fingers screw the MS adapter interface (3) onto the transfer line until it stops. Using a wrench tighten a further ½ turn to ensure a good seal.



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.
- Using the SilTite FingerTite ferrule install tool displayed in Figure 5, push approximately 20 mm more tubing than required through the ferrule 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 firmly and will not move. Use a rule to mark the column insertion distance, then cut the column. The distances for column insertion into the Thermo Scientific injector are in Table 1 and are calculated from the back of the ferrule.

Injector/Detector	Distance (mm)
Split	59
Splitless	83

Table. 1 Column measurements for correct assembly.

- Insert the pre-assembled nut and ferrule into the injector and screw in the nut using finger force only – again, there is no need to use excessive force to make a seal.
- 4. For MS installation attach the additional SilTite. FingerTite MS adapter interface (3) to the gauge tool supplied with the instrument. Remove the Swagelok adapter from the Thermo Scientific Gauge tool, note the gauge tool ferrule will not come off. Install the MS adapter onto the opposite end of the gauge tool, nut (5) first, ferrule (4) then the adapter interface (3). With the MS adapter added to the gauge tool it will be the correct length for the modified transfer line. Using the modified gauge tool, push the tube approximately 10 mm past the end of the 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 firmly and will not move. Cut the column to the length of the gauge tool, the column can now be inserted into the MS interface. The kit also contains two blanking ferrules that fit the SilTite FingerTite MS adapter interface for your convenience.

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 we recommend 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.**

Information and support

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

Specifications are subject to change without notice.