

PerkinElmer MS SilTite™ FingerTite KIT

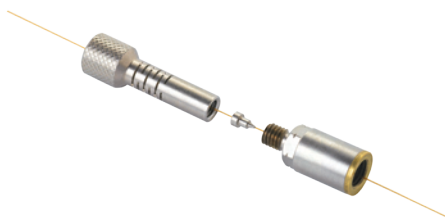
Installation Instructions – PN 073623

Congratulations! You have purchased the latest innovation in GC capillary column connections by SGE Analytical Science. The SilTite™ FingerTite fittings system enables you to install and remove a column without using a wrench and is designed to be self installed using this installation manual.

Suitable for the following PerkinElmer Mass Spectrometers: Turbomass & Clarus 500, 600

KIT CONTENTS

- 2 x Adapter (MS Transfer-line and injector)
- 1 x Spare Adapter (can be used on measuring jig)
- 5 x SilTite™ FingerTite Nuts - Female Re-order P/N 073636
- 10 x 0.4 mm, SilTite™ FingerTite Ferrules Re-order P/N 073630
(Re-order P/N 073631 pk 10 for 0.5 mm ferrules)
- 2 x MS Blanking Ferrules
- 1 x SilTite™ FingerTite Ferrule Install Tool



Injector Adapter Installation

Cool all areas that will receive the new FingerTite adapters including the injector and the transfer-line. Vent the Mass Spectrometer per the manufacturer's instructions.

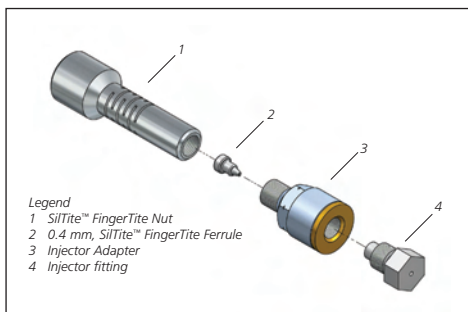


Figure 1. Diagram of the SilTite™ FingerTite assembly.

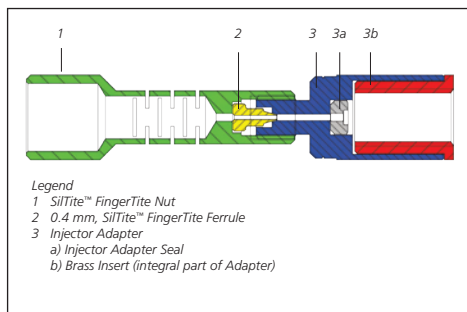


Figure 2. Detector showing the lower nut assembly.

1. Locate the Adapter Injector Interface (3) and ensure that the seal (3a) is in place. The seal is pre-assembled but may have come loose during transit.
2. Using fingers screw the Injector Adapter (3) (brass end – 3b) onto the Injector 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 Injector interface.

Install MS Adapter

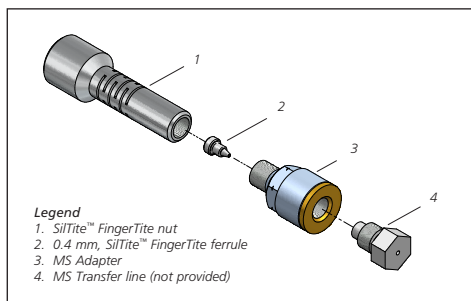


Figure 3. Exploded diagram of the MS SilTite™ FingerTite assembly.

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 your 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.

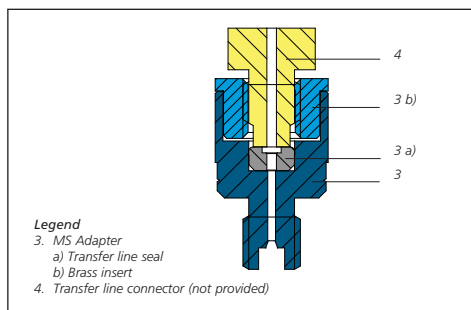


Figure 4. Image of the MS detector interface showing the SilTite™ FingerTite adapter assembly.

Column Installation



Figure 5. SilTite™ Ferrule Install tool

1. 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 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 firm and will not move. The distances for column insertion into the injector are in Table 1, and are calculated from where the cone of the ferrule has collapsed onto the capillary column.
3. For MS installation screw the additional MS adapter (3) onto the column fitting jig supplied with the instrument. With the MS Adapter added to the fitting jig it will be the correct length for the modified transfer line. Using the modified column fitting jig, 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. Cut the column flush with the end of the column fitting jig. The column can now be inserted into the MS interface.
4. Insert the pre assembled nut and ferrule into the injector/MS interface 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 we simply recommend gently levering between the shoulder of the ferrule and the relevant adapter (please refer to SGE's web site www.sge.com/siltitefingerite for the recommended method of removing an over tightened SilTite™ FingerTite ferrule). **Under no circumstances are wrenches or pliers to be used on these fittings.**

Injector	Distance
Cap Injector	46 - 55 mm
PSS Injector	40 - 46 mm

Table 1. Column measurements for correct assembly

AUSTRALIA & PACIFIC REGION

SGE Analytical Science Pty Ltd
Toll Free: 1800 800 167
Tel: +61 (0) 3 9837 4200
Fax: +61 (0) 3 9874 5672
Email: support@sge.com

JAPAN

SGE Japan Inc
Tel: +81 45 222 2885
Fax: +81 45 222 2887
Email: japan@sge.com

EUROPE

SGE Europe Ltd
European Head Office
Toll Free: 00800 2790 8999
Toll Free Fax: 00800 2626 2609
Tel: +44 1908 568 844
Fax: +44 1908 566 790
Tel France: +33 1 69 29 80 90
Fax France: +33 1 69 29 09 25
Tel Germany: +49 (0) 6155 / 60746 0
Fax Germany: +49 (0) 6155 / 60746 50
Email: europe@sge.com

UNITED STATES OF AMERICA

SGE Incorporated
Toll Free: (800) 945 6154
Tel: +1 512 837 7190
Fax: +1 512 836 9159
Email: usa@sge.com

 **SGE Analytical Science**
www.sge.com