

# Micropacked Column Adaptor Kits

Convert a capillary GC split/splitless inlet for use with 1/16" micropacked columns

- For use with Agilent 5890 or 6890 GCs.
- For use with 1/16" OD micropacked columns.
- Sample pathways deactivated for ultimate inertness.

## Installation of a 1/16 inch Micropacked Column Adaptor Kit into an Agilent 5890/6890 split/splitless injector, using a Micropacked Column Adaptor Kit for Split/Splitless Injection. Cat. # 22424 or 22426.

1. Remove the existing inlet adaptor from the injection port, as it will not be required.
2. Remove the replacement inlet adaptor from the kit (Figure 1). Place the supplied inlet seal (Figure 2) into the adaptor (conical side facing down). **Note: The inlet seal incorporates a Vespel®/graphite sealing ring on each side, to eliminate the need for a metal washer.**
3. Thread the inlet adaptor onto the injector until it seats against the bottom of the injector. Using a ½ inch wrench, tighten the adaptor 1/8th of a turn.
4. Straighten approximately four inches of the column end by holding the column securely in one hand, and with the other hand sliding your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16 inch nut (Figure 3) onto the column, followed by the supplied 1/16 inch Vespel®/graphite ferrule (Figure 4). **Note: Point the end of the column downward when placing the ferrule onto the column, to prevent any ferrule shards from entering the column.**
5. Install the column into the injector, using the identical insertion distance specified for a standard capillary column. Tighten the 1/16 inch nut finger tight, then tighten an additional ½ turn, using a 5/16 inch wrench.
6. Remove the weldment from the top of the injector and install the glass inlet liner (Figure 5). You may use the supplied glass inlet liner, or another of your choice. **Make sure you do not use a liner with a restriction at the bottom, such as a gooseneck or Uniliner® liner, as this can damage the liner.** Re-install the weldment and tighten securely.



Figure 1  
Inlet Adaptor



Figure 2  
Large-Bore Dual Vespel® Ring  
Inlet Seals



Figure 3  
Nut



Figure 4  
1/16" Vespel®/  
Graphite Ferrules



Figure 5 4mm Splitless Liner

## Installation of a 1/16 inch Micropacked Column Adaptor Kit for on-column injection in an Agilent 5890/6890 split/splitless injector. Cat. # 22425 or 22427.

1. Remove any adaptor from the injection port, as it will not be required.
2. Remove the replacement inlet adaptor from the kit (Figure 1). Place the supplied inlet seal (Figure 2) into the adaptor (conical side down). **Note: The inlet seal incorporates a Vespel®/graphite sealing ring on each side, to eliminate the need for a metal washer.**
3. Thread the inlet adaptor onto the injector until it seats against the bottom of the injector. Using a ½ inch wrench, tighten the adaptor 1/8th of a turn.
4. Remove the weldment from the top of the injector to facilitate installation of the Siltek® Treated Metal Liner Installation Guide (Figure 3). Place the 'O' ring on the sleeve near the conical end. Insert the guide into the injector with the conical end facing upward. Re-install the weldment and tighten securely.
5. Straighten approximately four inches of the column end by holding the column securely in one hand, and with the other hand sliding your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16 inch nut (Figure 4) onto the column followed by the supplied 1/16 inch Vespel®/graphite ferrule (Figure 5). **Note: Point the end of the column downward when placing the ferrule onto the column, to prevent any ferrule shards from entering the column.**
6. Measure 101mm from the end of the column and make an identifying mark on the column. This will be the insertion distance into the injector.
7. Insert the column into the injector until the identifying mark nears the bottom of the inlet adaptor. Slide the 1/16 inch nut and ferrule into contact with the inlet adaptor. Finger tighten the nut, followed by an additional ½ turn using a 5/16 inch wrench. The identifying mark should be slightly visible below the 1/16 inch nut, indicating proper insertion. **Note: If resistance is encountered while inserting the column into the injector, remove the column and be certain there are no significant bends.**



Figure 1  
Inlet Adaptor



Figure 2  
Large-Bore Dual Vespel® Ring  
Inlet Seals



Figure 3  
Siltek®-Treated Metal  
Liner Installation Guide



Figure 4  
Nut



Figure 5  
1/16" Vespel®/  
Graphite Ferrules

**Micropacked Column Adaptor Kit for FID connection.  
(For use with Cat. # 22424, 22425, or 22428)**

1. Remove the existing fitting from the detector (if present).
2. Remove the replacement FID adaptor (Figure 1) from the kit. Slide the supplied ¼ inch nut onto the FID adaptor, followed by the supplied ¼ inch Vespel®/graphite ferrule (Figure 1). Insert the adaptor into the detector and finger tighten, followed by an additional ¾ turn using a 9/16 inch wrench.
3. Straighten approximately three inches of the column end by holding the column securely in one hand, and with the other hand sliding your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16 inch nut (Figure 2) onto the column, followed by the supplied 1/16 inch Vespel®/graphite ferrule (Figure 3). **Note: Point the end of the column downward when placing the ferrule onto the column, to prevent any ferrule shards from entering the column.**
4. Insert the column into the detector until the end of the column stops against the bottom of the FID jet. Pull the column back approximately 1mm. Finger tighten the nut, followed by an additional ½ turn using a 5/16 inch wrench.
5. Turn on the carrier gas and check all fittings for leaks, using an electronic leak detector.



**Figure 1**  
Large-Bore FID Adaptor,  
1/16" SS Nuts, 1/4" SS Nut,  
1/4" Vespel®/Graphite Ferrule



**Figure 2**  
Nut



**Figure 3**  
1/16" Vespel®/  
Graphite Ferrules

**Replacement Parts**

**Replacement Inlet Seals for Micropacked Column Adaptor**

Dual Vespel® Ring Inlet Seals, large hole (2)      2-pk.      22429

**Replacement Metal Liner Installation Guide for On-Column Injection**

Siltek®-treated metal liner installation guide      ea.      22430

**Replacement 4mm Splitless Liner**

ea.      20772

**For questions, problems, repair services:**

**Within the USA:**

Call Restek Technical Service at 800-356-1688 or 814-353-1300, ext. 4

**Outside the USA:**

Contact your Restek representative

**Call Technical Service at 800-356-1688 or 814-353-1300, ext. 4 (or your Restek representative)  
if you have any questions about this product or any other Restek product.**



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**Restek U.S.** • 110 Benner Circle • Bellefonte, PA 16823 • 814-353-1300 • 800-356-1688 • fax: 814-353-1309 • [www.restek.com](http://www.restek.com)  
**Restek France** • phone: 33 (0)1 60 78 32 10 • fax: 33 (0)1 60 78 70 90 • e-mail: [restekfr@club-internet.fr](mailto:restekfr@club-internet.fr)  
**Restek Ireland** • phone: 44 2890 814576 • fax: 44 2890 814576 • e-mail: [restekeurope@aol.com](mailto:restekeurope@aol.com)  
**Thames Restek U.K. LTD** • phone: 44 1494 563377 • fax: 44 1494 564990 • e-mail: [sales@thamesrestek.co.uk](mailto:sales@thamesrestek.co.uk)  
**Restek GmbH** • phone: +49 (0) 6172 2797 0 • fax: +49 (0) 6172 2797 77 • e-mail: [info@restekgmbh.de](mailto:info@restekgmbh.de)