

# Micropacked Column Inlet and FID Adaptor Kits

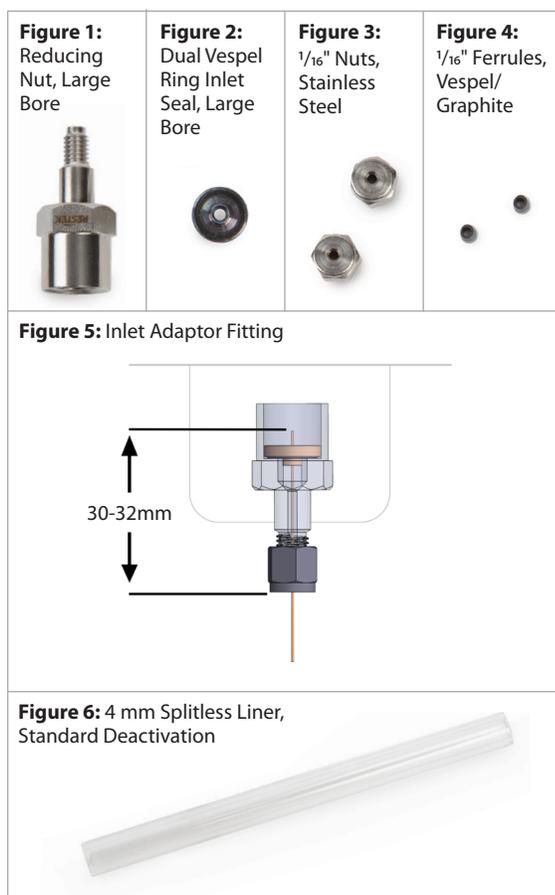
## Convert a capillary GC split/splitless inlet for use with 1/16" micropacked columns.

- For use with Agilent 5890, 6890, and 7890 GCs.
- For use with 1/16" OD micropacked columns.
- Sample pathways deactivated for ultimate inertness.

## Installation of a 1/16" Micropacked Column Adaptor Kit in an Agilent 5890/6890/7890 Split/Splitless Injector (cat.# 22424 or 22426).

1. Remove the existing reducing nut from the injection port; it will not be required.
2. Remove the replacement reducing nut from the adaptor kit (Figure 1). Place the supplied inlet seal (Figure 2) into the reducing nut (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 (Figure 2).
3. Thread the reducing nut onto the injector until it seats against the bottom of the injector. Using a 1/2" wrench, tighten the adaptor ~ 1/8<sup>th</sup> of a turn. Do not overtighten.
4. Straighten approximately four inches of the column end by holding the column securely in one hand, and with the other hand, slide your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16" nut (Figure 3) onto the column, followed by the supplied 1/16" 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. Insert the GC column through the 1/16" column sealing nut and a standard 1/16" graphite or graphite-Vespel capillary ferrule.
6. Make a clean cut across the GC column and install it into the adaptor 30–32 mm from the bottom of the 1/16" sealing nut (Figure 5). This places the column end a few millimeters above the bottom of the inlet seal. An installation gauge (cat.# 21399) can help with setting the correct depth.
7. Remove the weldment from the top of the injector and install the glass inlet liner (Figure 6). 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 tapered or Uniliner liner, as this can damage the liner.** Reinstall the weldment and tighten securely.
8. Turn on the carrier gas and check all fittings for leaks, using an electronic leak detector (cat.# 28500).

Note: For FID adaptor, see next page.



## Installation of a 1/16" Micropacked Column Adaptor Kit for On-Column Injection in an Agilent 5890/6890/7890 Split/Splitless Injector (cat.# 22425 or 22427).

1. Remove the reducing nut from the injection port; it will not be required.
2. Remove the replacement reducing nut from the adaptor kit (Figure 1). Place the supplied inlet seal (Figure 2) into the reducing nut (conical side down). Note: The inlet seal incorporates a Vespel/graphite sealing ring on each side to eliminate the need for a metal washer (Figure 2).
3. Thread the reducing nut onto the injector until it seats against the bottom of the injector. Using a 1/2" wrench, tighten the adaptor ~ 1/8<sup>th</sup> of a turn. Do not overtighten.
4. Remove the weldment from the top of the injector to allow installation of the Siltek-treated metal liner installation guide (Figure 3). Place the "O" ring on the liner near the conical end. Insert the guide into the injector with the conical end facing upward. Reinstall 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, slide your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16" nut (Figure 4) onto the column followed by the supplied 1/16" 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 101 mm 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 reducing nut. Slide the 1/16" nut and ferrule into contact with the reducing nut. Finger-tighten the nut, followed by an additional 1/4 to 1/2 turn using a 5/16" wrench. The identifying mark should be slightly visible below the 1/16" 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.
8. Turn on the carrier gas and check all fittings for leaks, using an electronic leak detector (cat.# 28500).

Note: For FID adaptor, see next page.



### Convert a Capillary FID for Use with Micropacked Column

- For use with Agilent 5890, 6890, and 7890 GCs.
- For use with 1/16" OD micropacked columns.

#### Micropacked Column Adaptor Kit for FID Connection (cat.# 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 1/4" nut onto the FID adaptor, followed by the supplied 1/4" Vespel/graphite ferrule (Figure 1). Insert the adaptor into the detector and finger tighten, followed by an additional ~ 1/2 turn using a 9/16" wrench.
3. Straighten approximately three inches of the column end by holding the column securely in one hand, and with the other hand slide your fingers toward the end of the column, gripping it firmly. Slide the supplied 1/16" nut (Figure 2) onto the column, followed by the supplied 1/16" 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 1 mm. Finger-tighten the nut, followed by an additional ~ 1/4 turn using a 5/16" wrench.
5. Turn on the carrier gas and check all fittings for leaks, using an electronic leak detector.

**Figure 1:** FID Adaptor, Large Bore; 1/4" Ferrule, Vespel/Graphite; 1/4" Nut, Stainless Steel; 1/16" Nut, Stainless Steel; 1/16" Ferrule, Vespel/Graphite



**Figure 2:** 1/16" Nuts, Stainless Steel



**Figure 3:** 1/16" Ferrules, Vespel/Graphite



Description	qty.	cat.#
<b>Replacement Parts</b>		
Replacement Inlet Seals for Micropacked Column Adaptor Dual Vespel ring inlet seals, large bore (2)	2-pk.	22429
Replacement Metal Liner Installation Guide for On-Column Injection, Siltek Treated	ea.	22430
Replacement 4 mm Splitless Liner	5-pk.	20773
Restek Electronic Leak Detector	ea.	28500



22429



22430

20773



28500

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